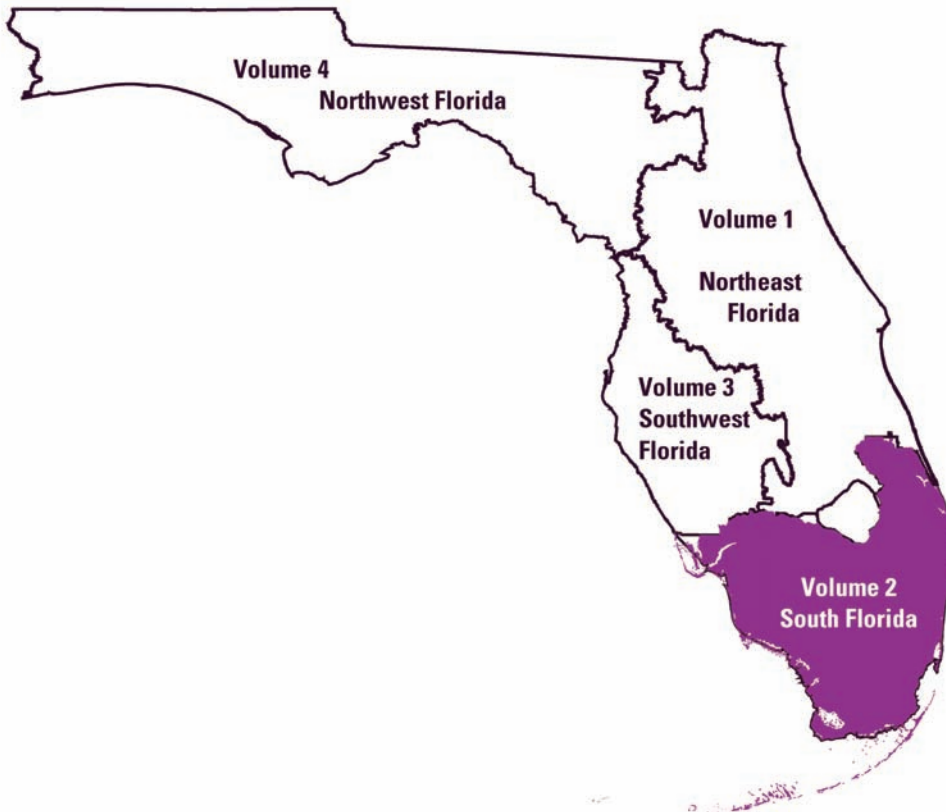


Prepared in cooperation with the State of Florida and other cooperative agencies

Water Resources Data Florida Water Year 2004

Volume 2A
South Florida Surface Water



Water-Data Report FL-04-2A

Calendar for Water Year 2004

2003

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													

2004

January							February							March						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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4	5	6	7	8	9	10	8	9	10	11	12	13	14	7	8	9	10	11	12	13
11	12	13	14	15	16	17	15	16	17	18	19	20	21	14	15	16	17	18	19	20
18	19	20	21	22	23	24	22	23	24	25	26	27	28	21	22	23	24	25	26	27
25	26	27	28	29	30	31	29							28	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
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4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12
11	12	13	14	15	16	17	9	10	11	12	13	14	15	13	14	15	16	17	18	19
18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26
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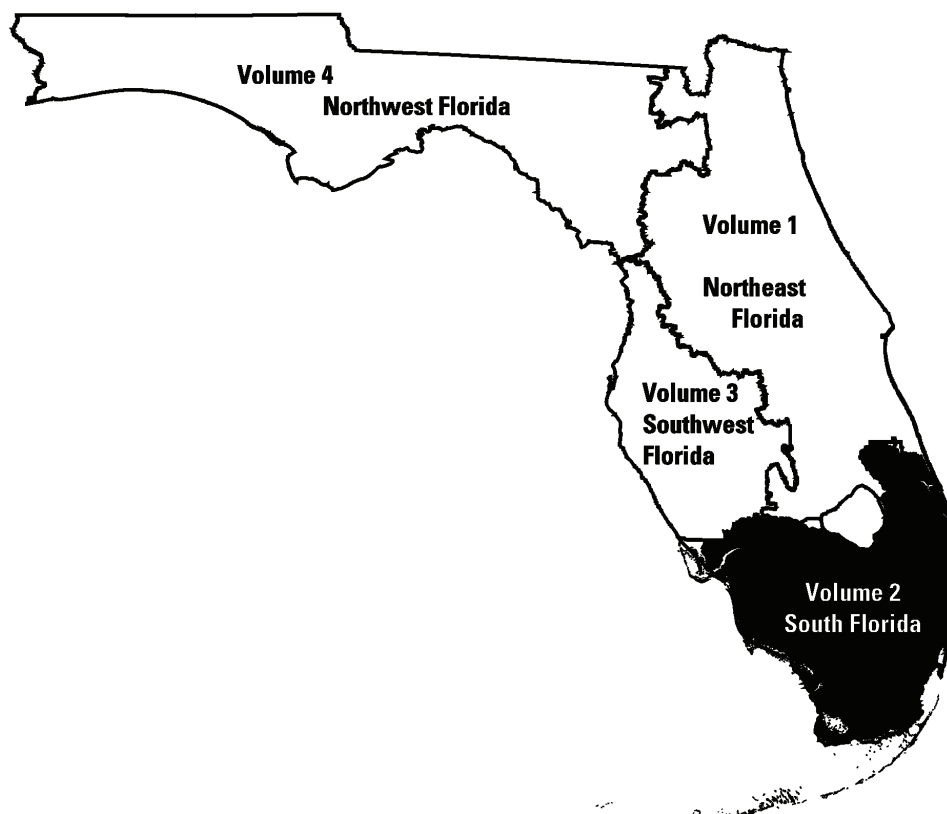
July							August							September						
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4	5	6	7	8	9	10	8	9	10	11	12	13	14	5	6	7	8	9	10	11
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Water Resources Data Florida Water Year 2004

Volume 2A. South Florida Surface Water

By C. Price, J. Woolverton, K. Overton

Water-Data Report FL-04-2A



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

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



U.S. Department of the Interior

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2005

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VOLUME 2A: SOUTH 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. Figure 1 shows the area covered by Volume 2A.

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

ACKNOWLEDGEMENT

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data. This report was prepared for publication by the Hydrologic Records Section under the supervision of M. H. Murray, K. Overton, J. Woolverton, E. C. Price, and S. Prinos; and by the Hydrologic Studies Section under the supervision of B. Howie, E. Patino, C. D. Hittle. Sheila Guevara, Carolyn Price, Eleanor Seymore, Jose Agis, and Bruce Irvin, were the primary persons responsible for the compilation of the data report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data

Florida Integrated Science Center - Water and Restoration Studies

Jose Agis	Elizabeth Kozma	Scott Prinos
Andres Alegria	Gene Krupp	Michelle Regon
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This report was prepared in cooperation with the State of Florida and with other agencies listed under COOPERATION on page 2.

Hydrologic data for south Florida are contained in two volumes

Volume 2A: Surface Water
Volume 2B: Ground Water

VOLUME 2A: SOUTH FLORIDA

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13. ABSTRACT (Maximum 200 words) Water resources data for 2004 water year in Florida consists of continuous or daily discharge for 405 streams, periodic discharge for 12 streams, continuous or daily stage for 159 streams, periodic stage for 19 stream, peak discharge for 30 streams, and peak stage for 30 streams, continuous or daily elevations for 14 lakes, periodic elevations for 23 lakes, continuous ground-water levels for 408 wells, periodic ground-water levels for 1188 wells, quality of water data for 140 surface-water sites, and 240 wells. The data for South Florida included continuous or daily discharge for 86 streams, continuous or daily stage for 54 streams, no peak stage discharge for streams, 1 continuous elevation for lake, continuous ground-water levels for 257 wells, periodic ground-water levels for 226 wells, water quality for 39 surface-water sites, and 149 wells. These data represent the National Water Data System records collected by the U.S. Geological Survey and cooperating local, State, and Federal agencies in Florida.				
14. SUBJECT TERMS *Florida, *Hydrologic data, *Surface Water, *Ground Water, *Water Quality, Flow rate, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperatures, Sampling sites, Water levels, Water analyses, Elevations, Water wells.			15. NUMBER OF PAGES 392	
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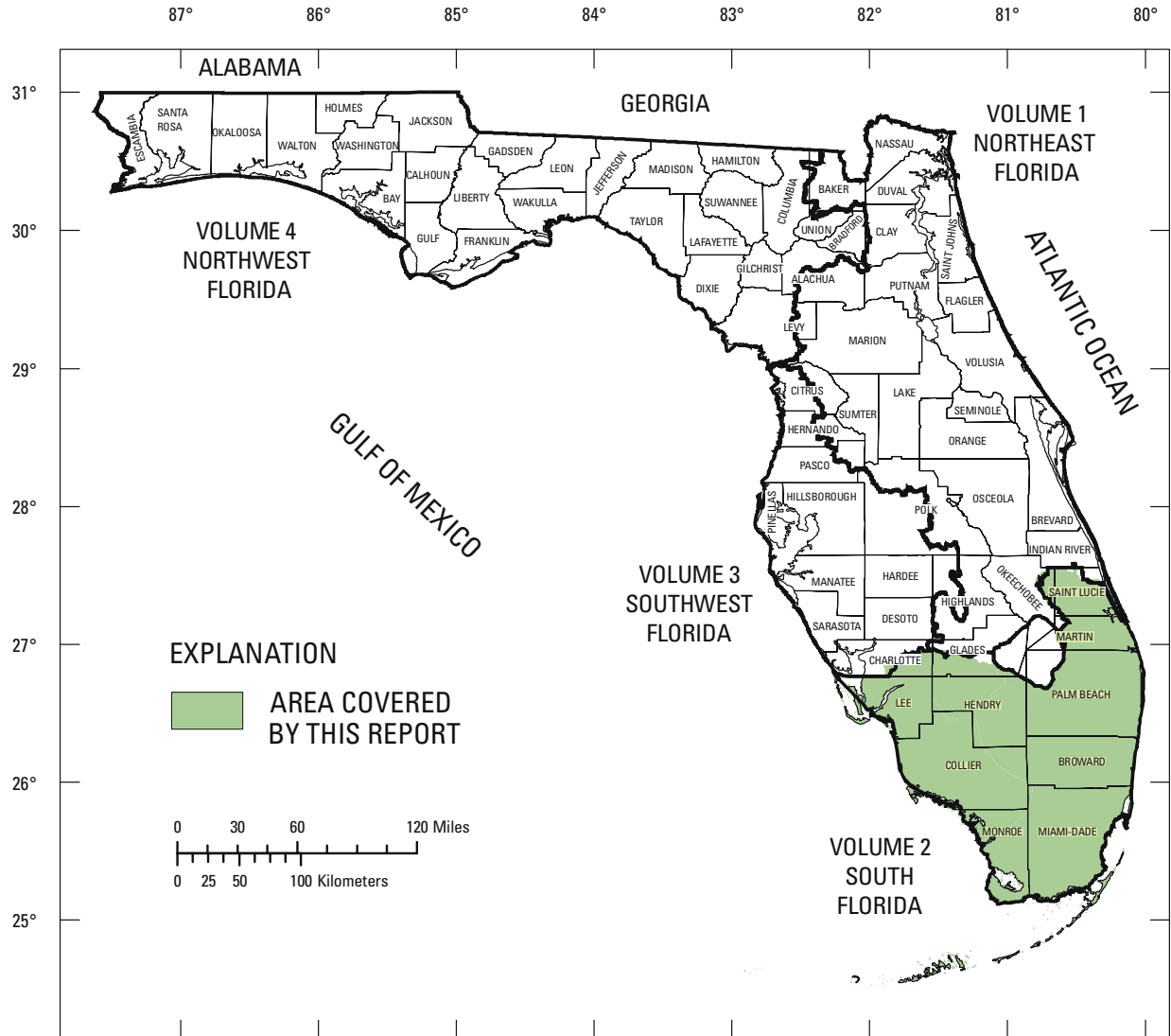


Figure 1. Geographic area covered by this report.

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

The following list shows the surface water sites where streamflow, stage, lake elevation, or daily water quality data are collected. [Letters after station names designate type of data collected: (d) discharge, (e) elevation, (g) gage heights, (s) salinity, (t) temperature]

STATION	PAGE NUMBER
EVERGLADES AND SOUTHEASTERN COASTAL AREA	
Five Mile Canal Above S-29-1-4 Nr Ft. Pierce, FL (d,g)	.27252408022180041
St Lucie River:	
St. Lucie River at Midway Rd. near Port St. Lucie, FL (g,s,t)	.27222908020340045
St. Lucie River at Prima Vista Rd. near Port St. Lucie, FL (g,s,t)	.27192908019590052
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N. Fork St. Lucie River at Veterans Pk., St. Lucie, FL (g,s,t)	.0227657559
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Loxahatchee River at Boy Scout near Hobe Sound, FL (g,s,t)	.26591208008290091
Loxahatchee River at Mile 9.1 near Jupiter, FL (g,s,t)	.26590608009350097
Cypress Creek Canal below Gulfstream Bridge, FL (d,g)	.265818080111900103
Hobe Ditch Tributary to Loxahatchee River 0.5 mile above mouth. FL (d,g)	.265708080093700107
Loxahatchee River near Jupiter, FL (d,g)	.02277600111
Loxahatchee River at Coast Guard Dock near Jupiter, FL (g,s,t)	.265651080045500115
Loxahatchee River at Pompano Drive near Jupiter, FL (g,s,t)	.265645080055900126
West Palm Beach Canal at S352, at Canal Point, FL (d,g)	.02278000134
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Levee 8 Canal at West Palm Beach Canal, near Loxahatchee, FL (d,g)	.02278550145
West Palm Beach Canal below S-5A-E near Loxahatchee, FL (d,g)	.02278600147
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Plantation Road Canal at S-33, near Fort Lauderdale, FL (d,g)	.02283200168
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North Loxahatchee Conservation Area No. 1 near Boynton Beach, FL (g)	.263537080211400173
Site 7 in Conservation Area No. 1 near Shawano, FL (g)	.263180080205001174
Site 8T in Conservation Area No. 1 near Boynton Beach, FL (g)	.263050080145001175
Site 8C near L-40 in Conservation Area No. 1 near Boynton Beach, FL (g)	.263000080120001176
Site 9 in Conservation Area No. 1 near Boynton Beach, FL (g)	.262750080175001177
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STREAM AND LAKE GAGING STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME
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DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

The following continuous-record surface-water stage and discharge stations in South Florida have been discontinued. Daily streamflow or stage records were collected and published for the period of record, expressed in water years, shown for each station. Discontinued project stations with less than 3 years have not been included. Information regarding these stations may be obtained from the subdistrict office at the address given on the back side of the title page of this report. Drainage area is indeterminate for all of the stations listed below. [Letters after station names designate type of data published: (d) discharge, (e) elevation or gage heights, (g) gage heights, (q) water quality]

Station name	Station number	Period of record water years published
Airplane Prairie near Monroe, FL (e)	260345081053500	1979 - 1980
Angelfish Creek near Florida City, FL (e)	.02290757	1971
Barnes Sound at Key Largo, FL (e)	.02290784	1971
Barnes Sound near Florida City, FL (e)	.02290760	1967 - 1968
Big Cypress Swamp at Everglades Parkway, near Sunniland, FL (d)	.02288830	1970 - 1971
Big Cypress Swamp at Training Airport, near Miami, FL (d)	.02288970	1970 - 1974
Big Cypress Swamp below Training Airport, near Miami, FL (e)	.02288971	1970 - 1974
Big Cypress Swamp Pinelands near Monroe, FL (e)	.255737081043200	1979 - 1980
Big Cypress Watershed at Everglades Pky, nr Big Cypress Indian Reservation, FL (d)	.02289033	1970 - 1971
Billy Creek at Ft Myers, FL (e)	.02293200	1944 - 1955
Biscayne Bay at Coconut Grove, Miami, FL (e) (formerly published under station number 02290755)	.02290540	1963 - 1981
Biscayne Bay at Elliott Key, near Homestead, FL (e)	.02290737	1967 - 1968
Biscayne Bay at Key Biscayne, near Miami Beach, FL (e) (formerly published under station number 02290753)	.02290543	1964, 1967 - 1968
Biscayne Bay at North Miami, FL (e)	.02290750	1963 - 1981
Biscayne Bay near Homestead, FL (e) (formerly published under station number 02290760)	.02290732	1963 - 1981
Biscayne Bay at Ragged Key No. 5 near Florida City, FL (e)	.02290705	1971
Biscayne Canal at Red Road, near Opa-Locka, FL (e)	.02286320	1963 - 1979
Biscayne Canal at North Miami, FL (e)	.02286330	1963
Biscayne Canal at S-28, near Miami, FL (d)	.02286340	1962 - 1985
Black Creek near Richmond Heights, FL (e)	.02290707	1971 - 1979
Black Creek Canal below S-21 near Goulds, FL (e)	.02290711	1971
Broad River near Everglades, FL (d) (period of record published in 1967 volume 2A)	.02290880	1962 - 1965
C-1 Canal near Jupiter, FL (q)	265631080132500	1989 - 1998
C-2 Canal above S-4 near Deerfield Beach, FL (e)	.02281490	1989 - 1993
C-2 Canal below S-4 near Deerfield Beach, FL (e)	.02281491	1989 - 1993
Caloosahatchee Canal at Moore Haven, FL (d,g)	.02292000	1938-2003
Caloosahatchee Canal at Ortona Lock near La Belle, FL (d,g)	.02292480	1971-2003
Camelot Canal at Control at Cape Coral, FL (e)	.02293245	1987 - 1990
Camelot Canal below Control at Cape Coral, FL (e)	.02293246	1987 - 1992
Canal 1 at Indiantown Road and 133 Way near Jupiter, FL (q)	265632080144200	1994 - 1998
Canal 60 at S-140 near Ft. Lauderdale, FL (d)	.02286962	1970 - 1981
Canal 111 above S-197 near Florida City, FL (d)	.251713080263300	1984
Canal 111 at Clv.5 between S-18C and S-197 nr Homest., FL (e)	.251823080294200	1984 - 1985
Canal 111 at U.S. Highway 1, near Florida City, FL (e)	.02290780	1967 - 1969
Canal 111 below S-18-C near Florida City, FL (e)	.02290770	1967 - 1969
C-7 Canal near Jupiter, FL (q)	265352080120400	1989 - 1998
C-18 Canal at G-92 near Jupiter, FL (q)	265437080103200	1989 - 1998
Canal C-18 near Jupiter, FL (d)	.265218080144300	1980 - 1982
Canal M near Mangonia Park, FL (d)	.02277900	1970 - 1977
Card Sound at Angelfish Creek near Florida City, FL (e)	.02290756	1971
Card Sound at Model Land Canal, near Florida City, FL (e)	.02290750	1967 - 1981
Card Sound Canal near Florida City, FL (d)	.02290739	1972 - 1974
Cape Florida Channel near Key Biscayne, FL (e)	.02290590	1970

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

Station name	Station number	Period of record water years published
Ceasar Creek at Adam Key, near Florida City, FL (e)	.02290738	1971
Charlotte Harbor at Bokeelia, FL (e)	.02293340	1990 - 1993
Cocohatchee River Canal near Naples, FL (d)	.02291400	1966
Cocohatchee River Canal near Naples Park, FL (d)	.02291393	1969 - 1984
Comfort Canal at N.W. 29th Avenue, Miami, FL (e) (formerly published as South Fork Miami River at N.W. 29th Avenue)	.02290520	1962 - 1970
Coral Gables Canal at Red Road, Coral Gables, FL (e)	.02290560	1963 - 1970
Coral Gables Canal at Tamiami Canal, near Coral gables, FL (d)	.02290550	1960 - 1963
Coral Gables Canal near South Miami, FL (d)	.02290580	1961 - 1966
Cypress Creek Canal at S-37A, near Pompano Beach, FL (D)	.02282100	1964 - 1985
Cypress Creek near Jupiter, FL (d)	265816080110000	1980 - 1982
E. Tributary N. Fork Loxahatchee River nr Hobe Sound, FL (d)	270036080070500	1980 - 1981
El Rio Canal near Boca Raton, FL (d) gage heights only.	.02281625	1970 - 1972 1973 - 1977
El Rio Canal, SW 18th Street, Boca Raton, FL (e)	261953080054900	1982 - 1985
Equalizing Canal 1 near Greenacres City, FL (e)	.02281419	1970 - 1972
Equalizing Canal 1 near Delray Beach, FL (e)	.02281425	1970 - 1977
Equalizing Canal 3 near Greenacres City, FL (e)	.02281513	1970 - 1977
Equalizing Canal 3 near Delray Beach, FL (e)	.02281532	1970 - 1972
Equalizing Canal 3 near Boca Raton, FL (e)	.02281544	1970 - 1977
Everglades 1-128S near Boynton Beach, FL (e)	.02281282	1974 - 1975
Everglades 1-141S near Loxahatchee, FL (e)	.02281278	1974 - 1976
Everglades 1-142S near Delray Beach, FL (e)	.02281291	1974 - 1976
Everglades 159 south of pump station 6 near Andytown, FL (e)	262300080263501	1977 - 1980
Everglades 160 south of pump station near Lake Harbor, FL (e)	261557080464301	1977 - 1980
Everglades 2B in C-111 Basin near Homestead, FL (g)	251855080283400	1986 - 2001
Everglades 201-NP, near Homestead, FL (e)	.02290861	1975 - 1980
Everglades 202-NP, near Miami, FL (e)	.02290862	1975 - 1980
Everglades 203-NP, near Homestead, FL (e) (formerly published as Everglades P-5S)	.02290832	1974 - 1980
Everglades 204-NP near Homestead, FL (e) (formerly published as Everglades P-145)	.02290829	1974 - 1980
Everglades 205-NP, near Miami, FL (e)	.02290868	1975 - 1980
Everglades 206-NP, near Miami, FL (e)	.02290811	1975 - 1980
Everglades 207 near Homestead, FL (e) (formerly published as "Everglades P-37 near Homestead")	.02290810	1963 - 1980
Everglades 2-111S near Andytown, FL (e)	.02284642	1974 - 1981
Everglades 2-112S near Margate, FL (e)	.02284644	1974 - 1976
Everglades 3-62S near Andytown, FL (e)	.02286960	1974 - 1979
Everglades 3-63S near Andytown, FL (e)	.02286998	1974 - 1979
Everglades 3-64S near Miramar, FL (e)	.02286970	1974 - 1979
Everglades 3-65S near Miami, FL (e)	.02289043	1974 - 1980
Everglades P-33 near Homestead, FL (e)	.02290815	1963 - 1980
Everglades P-34 near Homestead, FL (e)	.02290870	1963 - 1980
Everglades P-35 near Homestead, FL (e)	.02290830	1963 - 1980
Everglades P-36 near Homestead, FL (e)	.02290828	1969 - 1980
Everglades P-38 near Homestead, FL (e)	.02290820	1963 - 1980
Everglades P-103 near Florida City, FL (e)	.02290790	1967 - 1969
Everglades P-104 near Florida City, FL (e)	.02290794	1967 - 1969
Fakahatchee Slough at Janes Road near Copeland, FL (d)	.02291047	1970 - 1972
Faka Union Canal near Copeland, FL (d)	.02291143	1970 - 1984
Faka Union Canal near Deep Lake, FL (d)	260342081312500	1978 - 1984
Faka Union Canal near Sunniland, FL (e)	261616081314400	1978 - 1984
Florida Bay at Flamingo, FL (e)	.02290825	1963 - 1980
Florida City Canal near Florida City, FL (e)	.02290735	1963 - 1967

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

Station name	Station number	Period of record water years published
Garden Cove near Key Largo, Fl (e)	.02290786	1967 - 1968
Gator Hook Strand near Ochopee (e)	254724081111300	1979 - 1980
Golden Gate Canal at Naples, Fl (d)	.02291300	1965 - 1984
Golden Gate Canal near Naples, Fl (d)	261148081401700	1978 - 1984
Golden Gate Canal near Sunniland, Fl (d)	261642081334200	1978 - 1984
Gordon River at Naples, Fl (e)	.02291280	1972 - 1984
Goulds Canal near Goulds, Fl (e) (formerly published under station number 02290715)	.02290711	1963 - 1967
Grand Canal near Florida City, fl (d)	.02290734	1972 - 1974
Gum Slough near Monroe, Fl (e)	254230081022000	1979 - 1980
Harney River near Homestead, Fl (d) (gage heights only 1968 - 1969)	.02290860	1960 - 1967
Henderson Creek Canal near Naples, Fl (d)	.02291270	1968 - 1984
Henry Creek at Henry Creek Lock near Sherman, Fl. (This station was transferred to the Altamonte Springs Office)	.02275705	1993 - 1995
Hillsboro Canal at S-39, near Deerfield Beach, Fl (e)	.02281300	1957 - 1967
Hillsboro Canal in Cons. Area No. 1 at S-6 nr Shawano, Fl (e)	.02281201	1963 - 1968
Hillsboro Canal near Deerfield Beach, Fl (d)	.02281500	1940 - 1991
Hillsboro Canal below Deerfield Locks, Deerfield Beach, Fl (e)	.02281501	1963 - 1991
Hillsboro River at Deerfield Beach, Fl (e)	.02281650	1968 - 1978
Hobe Groves Ditch, near Jupiter, Fl (d)	265907080103000	1980 - 1982
Hollywood Canal at Dania, Fl (d)	.02286150	1962 - 1967
Indian River Lagoon at Sewalls Pt., Stuart, FL(g,s,t)	.02253800	1997-2003
Intracoastal Waterway at Barnes Point, near Florida City, Fl (e)	.02290762	1971
Intracoastal Waterway at Blue Heron Blvd. at Riveria, Beach, Fl (e)	.02277960	1971 - 1977
Intracoastal Waterway at Delray Beach, Fl (e)	.02279520	1971 - 1973
Intracoastal Waterway at Donald Ross Road, nr Juno Beach, Fl (e)	.02277730	1971 - 1973
Intracoastal Waterway at Golden Beach, Fl (e)	.02281670	1970 - 1979
Intracoastal Waterway at Hollywood, Fl (e)	.02286160	1968 - 1978
Intracoastal Waterway at Lauderdale-by-the Sea, Fl (e)	.02282300	1968 - 1978
Intracoastal Waterway at Port Everglades, at Hollywood, Fl (e)	.02286143	1968 - 1978
Intracoastal Waterway at Southern Blvd. at Palm Beach, Fl (e)	.02277994	1971 - 1973
Intracoastal Waterway at SR 706 at Jupiter, Fl (e)	.02277738	1980 - 1981, 1989 - 1992
Intracoastal Waterway at SR 707 at Jupiter, Fl (e)	.02277747	1980 - 1981, 1989 - 1992
L-28 Interceptor Canal South at Collier border, Fl (d,g)	260823080524100	1997 - 1999
L-67A at Conservation Area 3A near Coopertown, Fl (g)	255447080350200	1994 - 1996
L-67C at Conservation Area 3B near Coopertown, Fl (g)	255420080340500	1994 - 1996
Lateral 47 Canal at Boca Raton, Fl (e)	.02281468	1989 - 1991
Lateral Canal at Seminole Road near Loxahatchee, Fl (e)	.02278698	1973 - 1977
Lateral Canal in Acme Drainage District, near Loxahatchee, Fl (e)	.02281297	1973 - 1977
Lateral Canal in Loxahatchee Groves near Loxahatchee, Fl (e)	.02278732	1973 - 1977
Lateral Canal on 130th Ave. North, near Jupiter, Fl (e) (formerly published as Lateral Canal on Hynie Lane Road)	.02277470	1973 - 1977
Lateral Canal on Jupiter Farms Road, near Jupiter, Fl (e)	.02277480	1973 - 1977
Levee 3 Canal near Clewiston, Fl (d) Revised 1978-90 in WRD-2A-96	.02289030	1970 - 1990
Levee 28 Tieback Canal, near Andytown, Fl (e)	.02289027	1970 - 1974
Levee 30 near Miami Springs, Fl	.02289100	1960 - 1964
Levee 31W Canal at S-332, near Florida City, FL (d,g)	252523080352500	1983 - 1998
Levee 67 Extended Canal near Richmond Heights, fl (e)	.02290827	1971 - 1980
Levee 67 Extended Canal at South End near Coopertown, Fl (e)	253735080402100	1977 - 1980
Little River Canal at Palm Avenue, Hialeah, Fl (e)	.02286350	1963 - 1979
Little River Canal at S-27, at Miami, Fl (d)	.02286380	1960 - 1969
Lostmans River near Everglades, Fl (d) (period of record published in 1967 volume 2A)	.02290920	1973 - 1985
Loxahatchee River at Indiantown Road near Jupiter FL (q)	265613080100700	1989 - 1998

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

Station name	Station number	Period of record water years published
Loxahatchee River at Sunshine State Pkwy., nr Jupiter, FL (d)	.265713080095600	1980 - 1982
Loxahatchee River near Hobe Sound, FL (e)	.265916080083500	1977 - 1981
M-1 Canal at Canal M near Royal Palm Beach, FL (e)	.02278760	1975 - 1977
M-2 Canal in Royal Palm Beach Colony near Loxahatchee, FL (e)	.02277750	1973 - 1977
Mackinac Canal at Cape Coral, FL (d,g)	.02293216	1987 - 1996
Manatee Bay at Canal 111, near Florida City, FL (e)	.02290782	1967 - 1969
Main Lake Outlet near Ft Myers, FL (e)	.02291736	1988 - 1989
Matlacha Pass at Indian Field Island near Matlacha, FL (e)	.02293342	1991 - 1993
Matlacha Pass at Matlacha, FL (g,q)	.02293343	1989 - 1997
Matlacha Pass at Parrots Perch near St James City, FL (g)	.02293280	1989 - 1997
Miami Canal above S-8, near Lake Harbor, FL (e)	.02286699	1962 - 1968
(formerly Miami Canal at S-8 (auxiliary) 02286700)		
Miami Canal above S354 and S-3, at Lake Harbor, FL (g)	.02286399	1958 - 1998
(Prior to October 1988, published as Miami Canal at HGS-3 and S-3 at Lake Harbor)		
Miami Canal at broken dam, near Miami, FL (d)	.02287400	1960 - 1968
		1985 - 1989
Miami Canal at N.W. 27th Avenue, Miami, FL (e)	.02290510	1963 - 1979
Miami Canal at Palmetto Bypass near Hialeah, FL (d)	.02288200	1960 - 1981
Miami Canal at Pennsuco near Miami, FL (d)	.02287500	1963 - 1979
Miami River at Brickell Ave., Miami, FL (d)	.02290530	1961 - 1966
Middle River Canal at U.S. Highway 1, near Ft. Lauderdale, FL (d)	.02282800	1964 - 1967
Mid. Tributary N. Fork Loxahatchee R. nr Hobe Sound, FL (d)	.270028080074200	1980 - 1981
Military Canal near Homestead, FL (e)	.02290720	1963 - 1969
Model Land Canal near Florida City, FL (e)	.02290740	1963 - 1969
Model Land Canal below ML-2, near Florida City, FL (e)	.02290746	1963 - 1968
(formerly Model Land Canal at control "auxillary" 02290745)		
Monreve Ranch drainage canal near Stuart FL (d)	.02276984	1959 - 1973
(formerly published under station number 02276800)		
Mowry Canal near Homestead, FL (d)	.02290725	1970 - 1989
		gage heights only published
		1963 - 1970
New River at Ft. Lauderdale, FL (d)	.02286140	1963 - 1967
North Canal near Homestead, FL (e)	.02290730	1963 - 1968
North Line Canal near Miami Springs, FL (d)	.02289900	1960 - 1963
North New River Canal at S-2 and S-351, near South Bay, FL (d,g)	.02283498	1957 - 2003
North New River Canal at S-7 at Terrytown, FL (d,g)	.02284300	1960 - 2003
North New River Canal below S-34, near Ft. Lauderdale, FL (d)	.02284700	1956 - 1967
North New River Canal near Ft. Lauderdale, FL (d)	.02285000	1939 - 1992
North New River Canal below control near Ft. Lauderdale, FL (e)	.02285001	1962 - 1992
(formerly published as 02285000 North New River Canal (auxiliary))		
N.W. Wellfield Canal at Conserv. Area No. 3 nr Pennsuco, FL (d,g)	.02289096	1991 - 1996
N.W. Wellfield Canal near Pennsuco, FL (d,g)	.02288010	1991 - 1996
Okaloacoochee Slough near Sunniland, FL (e)	.261205081200000	1979 - 1980
Pine Channel near Big Pine, FL	.244123081225301	1976
Pinecrest Hammocks near Monroe, FL (e)	.254635080541500	1979 - 1980
Pompano Canal at Pompano Beach, FL (d)	.02282000	1964 - 1969
(Prior to October 1948, published as Cypress Creek Canal at Pompano)		
Pompano Canal at S-38, near Pompano Beach, FL (d)	.02281700	1962 - 1967
Roberts Lake Slough near Monroe, FL (d)	.02290950	1973 - 1980
Rogers River near Everglades, FL (d)	.02290900	1962 - 1965
(period of record published in 1967 volume 2A)		
Sanibel River at Snibel, FL (e)	.02293250	1972 - 1977
Savannahs Drainage Canal at Port St Lucie, FL (d)	.02276568	1976 - 1977
Shark River near Homestead, FL (d)	.02290850	1960 - 1966
(gage heights only 1967 - 1969)		
Site 15 nr L-39 in Conserv. Area No. 2A near Shawano, FL (g)	.262400080250001	1991 - 1997

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

Station name	Station number	Period of record water years published
Site 34 near L-30 in Conservation Area 3B, near Miami, FL (g)	.255215080291000	1993 - 1997
Six Mile Cypress Creek South near Ft. Myers, FL (d)	.02291670	1988 - 1990
San Carlos Bay at St. James, City, FL (e)	.02293288	1990 - 1992
Snake Creek Canal at S-29, at S-29, at North Miami Beach, FL (d)	.02286300	1959 - 1985
Snake Creek Canal at S-30, near Hialeah, FL (d)	.02286180	1963 - 1967
Snapper Creek Canal at Miller Drive, near South Miami, FL (e) (formerly published under station number 02290600)	.02290610	1963 - 1981
Snapper Creek Canal near Coral Gables, FL (d) gage heights only published	.02290600	1960 - 1967 1968 - 1980
Snapper Creek Canal at S-22, near South Miami, FL (d)	.02290700	1959 - 1985
South Fork Miami River at N.W. 29th Avenue, Miami, FL (e)	See Comfort Canal at N.W. 29th Avenue	
South New River Canal in Conservation Area No. 3 at S-9 (e)	.02285399	1963 - 1970
South New River Canal at S-9 near Davie, FL (d)	.02285400	1958 - 1970
South New River Canal at U.S. Highway 27 near Davie, FL (e)	.02285410	1975
Southwest Fork Loxahatchee River at Jupiter, FL (e)	.265635080071900	1980 - 1981
Southwest Fork Loxahatchee River at S-46 (d)	.02277700	1959 - 1965
Stilt City Tidal Station at Indian Field, nr Matlacha, FL (e)	.263935082052501	1990 - 1991
St Lucie Canal at Lock, near Stuart, FL (d,g)	.02277000	1952 - 2003
Tamiami Canal at 40-mile bend, near Miami, FL (e) (formerly published as 02288900 Tamiami Canal at 40-mile bend (auxiliary) : (1960 to 1963 water years published under 02289000, Tamiami Canal Outlets, Miami to Monroe)	.02288990	1961 - 1980
Tamiami Canal at bridge 77, near Carnestown, FL (e) (formerly published as 02288800 Tamiami Canal at bridge 77 (auxiliary))	.02288780	1962 - 1980
Tamiami Canal at bridge 83, near Ochopee, FL (e)	.255327081161300	1979 - 1980
Tamiami Canal at bridge 96, at Monroe FL (e) (twice monthly) (formerly published as 02288900 Tamiami Canal at bridge 96 (auxiliary))	.02288860	1962 - 1980
Tamiami Canal at bridge 115, near Miami, FL (e) (twice monthly) (formerly published as 02288900 Tamiami Canal at bridge 115 (auxiliary))	.02288945	1962 - 1980
Tamiami Canal at Red Road, Miami, FL (e)	.02290500	1963 - 1980
Tamiami Canal at S-355A, near Miami, FL (g)	.254540080361500	2000 - 2003
Tamiami Canal at S-355B, near Miami, FL (g)	.254540080325700	1999 - 2003
Tamiami Canal east of levee 30, near Miami, FL (e) (formerly published as 02289060 Tamiami east of levee 30 (auxiliary))	.02289250	1963 - 1980
Tamiami Canal Outlets, Miami to Monroe, FL (d)	.02289000	1940 - 1963
Tamiami Canal west of levee 30, near Miami, FL (e) (twice monthly) (formerly published as 02289060 Tamiami Canal west of levee 30 (auxiliary))	.02289090	1963 - 1980
Taylor Creek at HGS-6 near Okeechobee, FL (d) (This station was transferred to the Altamonte Springs Office)	.02277503	1992 - 1995
Taylor Slough at Context Road near Homestead, FL (d)	.252948080352700	1976 - 1980
Taylor Slough at Craighead Lake near Homestead, FL (e)	.251148080410300	1979 - 1980
Taylor Slough at Royal Palm near Homestead, FL (e)	.02290803	1970 - 1980
Taylor Slough near Homestead, FL (d)	.02290800	1960 - 1985
Townsend Canal near Alva, FL (d,g)	.02292780	1975 - 1996
Turnpike Borrow Canal above S-46 near Jupiter, FL (q)	.26555208008500	1989 - 1998
U.S. Highway 441 Canal near Deerfiled Beach, FL (e)	.02281435	1968 - 1969
Warner Creek near Jensen Beach, FL (d)	.02277107	1976 - 1977
West Rolling Oaks Feeder Canal Near Davie, FL (e)	.02285420	1975

VOLUME 2A: SOUTH FLORIDA

INTRODUCTION

The U.S. Geological Survey (USGS), 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. To make these data readily available to interested parties outside the USGS, the data are published annually in this report series entitled "Water Resources Data - Florida, Volume 2A: South Florida Surface Water and Volume 2B: South Florida Ground Water".

This report series includes records of stage, discharge, and water quality for streams; stage, contents, and water quality for lakes; and ground-water levels, contents, and water quality of ground-water wells. The data for South Florida include continuous or daily discharge for 86 streams, continuous or daily stage for 54 streams (including stage published at discharge and stage only sites), continuous elevations for 1 lake, continuous ground-water levels for 257 wells, periodic ground-water levels for 226 wells, and quality-of-water data for 39 surface-water sites and 149 wells.

Publication of 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. For the 1975 water year, the report format was modified to one volume presenting data on quantities of surface water, quality of surface and ground water, and ground-water levels. For the 1977 water year, the report format was modified to a two volume set: one volume presenting data on quantity as well as quality of surface water and one volume presenting data on water levels along with quality of ground water.

Prior to introduction of this series and for several concurrent water years, water-resources data for Florida were published in USGS 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 aforementioned Water-Supply Papers may be consulted in the federal repository libraries of the principal cities of the United States and may be purchased from the U.S. Geological Survey, Branch of Information Services, Box 25286, Federal Center, Denver, CO 80115 (telephone: 888-ASK-USGS).

Similar reports are published annually by the USGS for all of the United States. These official USGS 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-xx-2B," where xx represents the current water year. For archiving and general distribution, reports for the 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or 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 (305) 717-5800.

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COOPERATION

The USGS and various Federal, State, and local organizations have had cooperative agreements for the collection of water-resource records since 1930. Organizations that assisted in collecting the data presented in this report through cooperative agreement with the USGS are:

Broward County
City of Boca Raton
City of Cape Coral
City of Ft. Lauderdale
City of Hallandale Beach
City of Hollywood
Everglades National Park
Florida Keys Aqueduct Authority

Lee County
Miami-Dade County Department of Environmental
Resource Management
Seminole Tribe of Florida
South Florida Water Management District
St. Lucie County
U.S. Army Corps of Engineers
U.S. Fish and Wildlife Service

Organizations that provided data are acknowledged in station manuscripts.

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SUMMARY OF HYDROLOGIC CONDITIONS

This section summarizes important hydrologic events that occurred during the 2004 water year (October 1, 2003 to September 30, 2004) as well as significant natural and water-management responses to these events. Figure 2 provides a frame of reference for some of the major land areas of hydrologic significance mentioned in the summary.

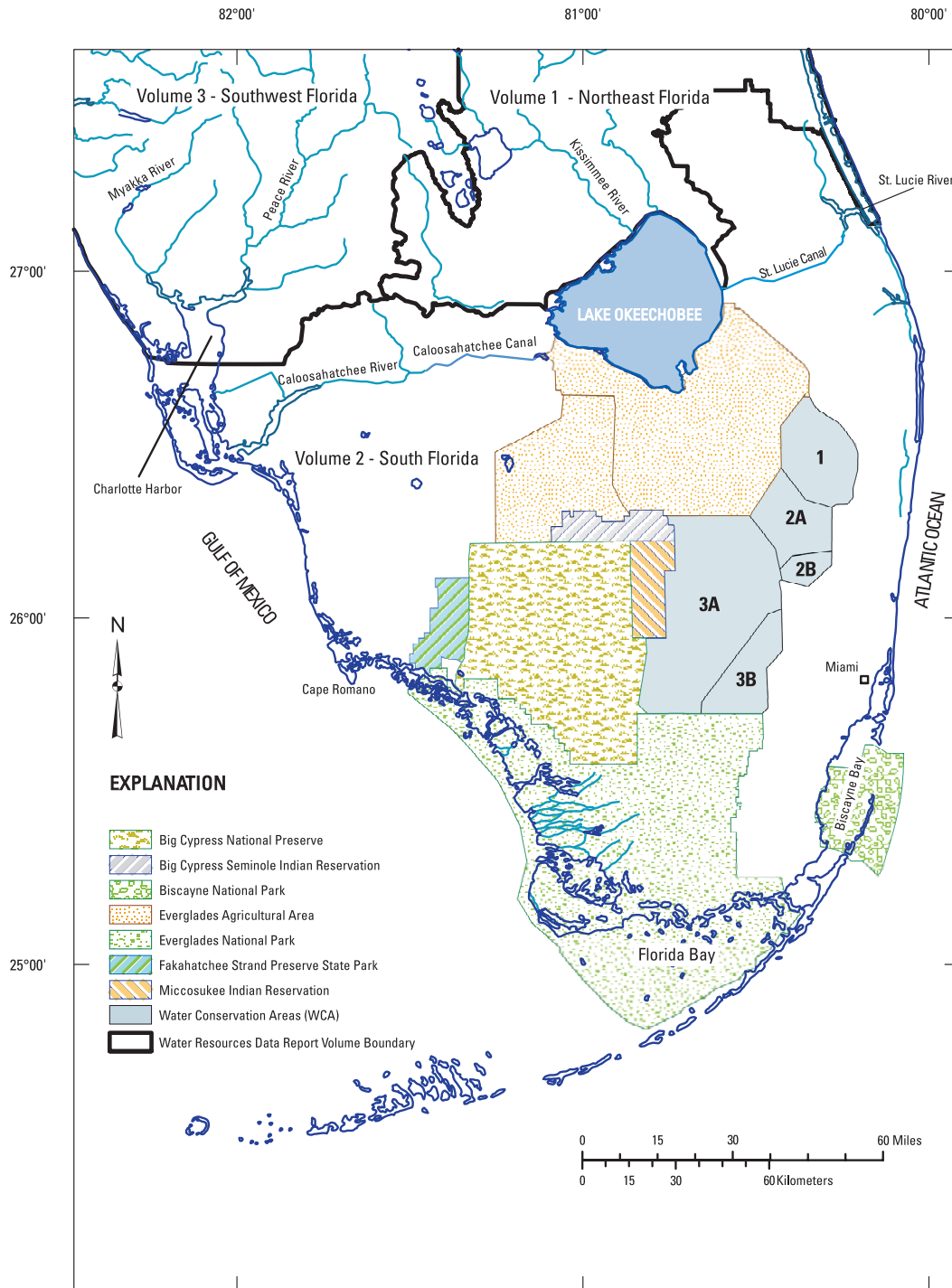


Figure 2. South Florida areas of hydrologic significance

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SUMMARY OF HYDROLOGIC CONDITIONS (continued)

During the 2004 water year, the U.S. Geological Survey (USGS) Florida Integrated Science Center — Water and Restoration Studies (FISC-WRS) monitored 86 continuous discharge stations, 54 continuous stage stations, and 1 lake, and also collected water-quality data at 39 miscellaneous sites in cooperation with various local, State, and Federal agencies.

Data from selected surface water stations

Seven surface water discharge stations and six stage-only sites were selected to depict general surface-water conditions in selected areas for the 2004 water year. St. Lucie Canal at Lake Okeechobee (02276870) (figure 3) is located just downstream of structure S-308, which controls water releases into and from Lake Okeechobee to the St. Lucie Canal. Loxahatchee River Near Jupiter (02277600) (figure 4) monitors discharges in the Loxahatchee River near Lainhart Dam. Miami Canal at S-354 and S-3 (02286400) (figure 5) is located just downstream of structure S-354, which controls water releases into and out of Lake Okeechobee through the Miami Canal. Miami Canal at S-8 (02286700) (figure 6) is located just upstream of pump station S-8, which controls water in the Miami Canal released from the Everglades Agricultural Area (EAA) to Water Conservation Area (WCA) 3A. Miami Canal at NW 36 Street (02288600) (figure 7) is located just upstream of structure S-26 — a salinity control structure that controls water releases from the Miami Canal into the Miami River and ultimately to tide. The Tamiami Canal Outlets, Levee 67 to 40 Mile Bend (02289040) (figure 8) is a combination of flow through structures S-12 A, B, C, and D located along the Tamiami Trail. Together, these structures help control water flow from WCA 3A into Everglades National Park. Caloosahatchee River at S-79 near Olga (02292900) (figure 9) is the westernmost structure on the Caloosahatchee River before water is released to the Caloosahatchee Estuary and ultimately to tide. Northeast Shark River Slough No. 2 (254315080331500) (figure 10) is located 2.7 miles south of the Tamiami Trail and monitors water levels in this area. The last five stations monitor water levels in their respective WCAs: Site 71 in Water Conservation Area No. 3B (255250080335001) (figure 11), Site 99 near L-35A in Water Conservation Area No. 2B (260810080222001) (figure 12), Site 63 in Water Conservation Area No. 3A (261117080315201) (figure 13), Site 17 near L-38, Water Conservation Area No. 2A (262240080258001) (figure 14), and Site 7 in Water Conservation Area No. 1 (263180080205001) (figure 15). Two hydrographs are shown for each discharge site. The upper graph (A) is the 2004 water year monthly mean discharge or gage height compared to the maximum and minimum monthly mean discharge or gage height for the period of record through the 2003 water year, and monthly mean discharge or gage height for the entire period of record through the 2004 water year. The lower graph (B) is the monthly mean discharge or gage height for the 1995-2004 water years. The data tables displayed in this publication do not have monthly mean discharge and/or gage height figures available if data for one or more days in a month are missing. Monthly mean gage height or discharge are deleted in these hydrographs if five or more days of missing record in a month exist.

Rainfall

Rainfall data collected and evaluated by the South Florida Water Management District (SFWMD) during the 2004 water year provide a framework for understanding monthly water level and discharge variations (South Florida Water Management District, 2005). The rainfall data provided by the SFWMD for southern Florida are subdivided into 16 geographic areas. Monthly rainfall totals from individual stations within each area were averaged and compared to historical total monthly rainfall averages. The percentage of average monthly rainfall is computed for each of the 16 geographic areas. This percentage is used throughout the discussion of surface-water conditions for the 2004 water year.

Weekly precipitation anomalies (percentage of 1971 to 2000 normal), are provided by the National Climatic Data Center, National Oceanic and Atmospheric Administration (NCDC-NOAA) (2005), for the years 2003 and 2004. Weekly precipitation anomalies were computed for the entire United States and include two geographic areas in southern Florida. The first geographic area is southeastern Florida from Key Largo to St. Lucie County. The second geographic area includes the rest of southern Florida, south of the northern extent of Lake Okeechobee. Unlike the percentages of average monthly rainfall provided by SFWMD, which are exact values, the weekly precipitation anomalies provided by NCDC-NOAA are divided into seven categories or ranges: very dry (less than 30 percent of average), severely dry (30 to 50 percent of average), moderately dry (50 to 70 percent of average), mid range (70 to 140 percent of average), moderately moist (140 to 200 percent of average), very moist (200 to 330 percent of average), and extremely moist (greater than 330 percent of average). Weekly and monthly precipitation anomalies were used in conjunction with water-level and discharge data to describe hydrologic conditions and management responses during the 2004 water year.

Surface-water conditions during the 2004 Water Year

During October, rainfall was substantially lower than normal (8 to 39 percent of average) throughout southern Florida. Higher than average monthly discharges were released through S-79 on the Caloosahatchee River and the Tamiami Canal Outlets. Discharges through the Miami Canal from Lake Okeechobee to the coast ranged from about average to below average. Discharge through the Loxahatchee River was below average. All water levels in the WCAs were very close to their monthly average for October. Water levels in Northeast Shark River Slough were above average and remained so until June.

Rainfall during the first week of November was between 200 and 330 percent of average. Rainfall during the remaining 3 weeks of November was substantially lower than normal (less than 30 percent of average). Rainfall for the month was 86 to 114 percent of average in southwestern Florida, 98 to 152 percent of average in southeastern Florida, and 59 to 87 percent of average in south-central Florida. The heavy rain during the beginning of November caused the average monthly discharge for the Loxahatchee River to increase from October to November and exceed the November monthly mean for the period of record. Water levels in the WCAs began to decline and generally stayed close to the monthly average. Discharges through the Tamiami Canal Outlets also began to decline. The Miami Canal stations were mostly below their monthly averages. Discharge to the St. Lucie Canal through S-308 was about average and remained so until March.

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SUMMARY OF HYDROLOGIC CONDITIONS (continued)

During the first, second, and fourth weeks of December 2003, rainfall was generally well below normal (30 to 50 percent of average or less). Rainfall during the third week of the month was well above normal (greater than 330 percent of normal in southwestern and south-central Florida, and 200 to 330 percent of normal in southeastern Florida). Rainfall during the month varied spatially from 47 percent of average in the eastern Miami-Dade geographic area to 184 percent of average in the east Caloosahatchee geographic area. Water released to tide through the Caloosahatchee River increased from the previous month. Water was released from Lake Okeechobee through S-354 from late November through the month of December. No releases were made through S-8, and below average discharges to tide were made from the Miami Canal at S-26. Discharges in the Loxahatchee River decreased during the month, although they remained above average. S-12 discharges and WCA water levels continued to decline.

During January 2004, rainfall generally was much lower than normal (less than 30 percent of average). During the last week of the month however, rainfall exceeded 330 percent of average. This heavy, late rainfall resulted in monthly rainfall totals that were slightly above normal despite the prevailing dry conditions that existed during the first three weeks of the month. Monthly rainfall totals varied spatially from 71 percent of average in the eastern Palm Beach geographic area to an estimated 190 percent of average in the Everglades National Park geographic area.

During the first three weeks of February rainfall in southern Florida varied temporally from normal (70 to 140 percent of average) to well below normal (less than 30 percent of average). Rainfall during the last week of the month was much higher than normal (between 200 and 330 percent of average in southeastern Florida, and more than 330 percent of average in southwestern and south-central Florida). Monthly rainfall totals were about normal for southern Florida. Monthly rainfall varied spatially from 65 percent of average in the eastern Broward geographic area to 170 percent of average in the Everglades National Park geographic area. Discharges within the Loxahatchee River increased slightly from the previous month, while discharges from the Miami Canal at S-8 and to tide increased significantly. Discharges from the Caloosahatchee River remained fairly constant compared to the previous month, with minor releases from Lake Okeechobee through S-354. The WCAs in general showed slight average increases due to the wet conditions except for Site 71 in WCA 3B, which showed a significant increase in water level. Discharges through the Tamiami Canal Outlet structures continued to decrease until July.

During March, monthly rainfall ranged spatially from 3 to 37 percent of average throughout southern Florida. All stations showed a decrease in discharge except for S-354, which showed above average discharge releases from Lake Okeechobee into the EAA. All WCA water levels declined and many remained below their average monthly water levels. Discharge from the Caloosahatchee River at S-79 declined from the previous month, although the average trend increased slightly in March.

Rainfall during April was spatially about normal (71 to 124 percent of average). Rainfall was generally lowest in south-central Florida and highest in southwestern Florida. Abundant rainfall (200 to 330 percent of average) occurred during the third week of the month. However, rainfall during the remainder of the month was less than 30 percent of average. Despite late month heavy rainfall totals, monthly mean gage height averages in the WCAs continued to decline. Flow releases from Lake Okeechobee into the EAA continued. Discharges through the Caloosahatchee River, Loxahatchee River, Miami Canal and S-308 continued to decrease and were below the monthly average.

May rainfall showed substantial spatial and temporal variation. During the first week of May, rainfall was 50 to 70 percent of average in southeastern Florida, and 70 to 140 percent of average in south-central and southwestern Florida. During the remaining weeks, very dry conditions prevailed (generally less than 30 percent of average). Rainfall for the month varied spatially from 16 to 50 percent of average. Discharges were increased through S-354 to the EAA and average discharge for the month was well above the mean for May. There were no releases through S-8 and minimal releases to tide from the Miami Canal through S-26. All WCA water levels continued to decline and fell below their monthly averages. Discharges from Lake Okeechobee through S-308 continued to decline.

Rainfall was about normal (70 to 140 percent of average) during the first 2 weeks of June, except in southeastern Florida where rainfall was slightly below normal (50 to 70 percent of average). For the rest of the month, rainfall was lower than normal (30 to 50 percent of average or lower in southeastern Florida). June monthly rainfall totals were slightly below average in much of southern Florida, but substantially lower than average (30 to 55 percent) in the geographic areas of eastern Palm Beach County, eastern Broward County, WCA 1, and eastern Miami-Dade County. Due to below average rainfall, water levels in all WCAs steadily continued to decline. New monthly lows were recorded in WCAs 2A, 2B, and 3A. Dry conditions also affected discharges to the Loxahatchee River, and a new monthly minimum discharge was recorded at the Loxahatchee River station. Monthly discharge was significantly reduced from Lake Okeechobee through S-354, and smaller than average releases were made to the WCAs through S-8. Minimal releases to tide were made from the Miami Canal.

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SUMMARY OF HYDROLOGIC CONDITIONS (continued)

July monthly rainfall totals were generally about average for southern Florida. Rainfall for the month generally varied spatially from 75 to 127 percent of average. Geographic areas that received more than 90 percent of average rainfall were the east and west EAA, WCAs 1, 2A, 2B, 3A, and 3B, Big Cypress Preserve, and eastern Broward County. Rainfall in the eastern Miami-Dade geographic area was slightly above average (127 percent of average) for the period. Rainfall in southeastern Florida was lower than normal (30 to 50 percent of average) during the first week of the month. Rainfall in southwestern and south-central Florida was lower than normal (30 to 50 percent of average) during the second week of the month. Rainfall throughout southern Florida was higher than normal (140 to 200 percent of average) during the last week of the month. Within the Loxahatchee River, discharge was slightly higher than the minimum monthly discharge in July for the period of record but still significantly lower than the mean discharge. Discharge increased from Lake Okeechobee to the Miami Canal through S-354 and increased through S-8 from the previous month. Minimal water was released to tide from the Miami Canal. The S-12 structures remained closed in July, decreasing water levels in Northeast Shark River Slough. Every WCA (except for WCA 1) had new period of record low monthly mean water levels, despite levels in WCA 3B, and WCA 2A rising slightly from the previous month. Monthly mean discharge through S-308 was negative.

August monthly rainfall totals for southeastern Florida were slightly above normal (99 to 135 percent of average). Rainfall in southeastern Florida was well above normal (200 to 330 percent of average) during the first week of the month, below normal (50 to 70 percent of average) during the second and third weeks of the month, and about normal (70 to 140 percent of average) during the last week of the month. August monthly rainfall totals for parts of southwestern and south-central Florida were above average and ranged from 139 percent of normal in the East EAA geographic area to 171 percent of average in the eastern Caloosahatchee geographic area. The greatest rainfall of the month was attributed to Hurricane Charley, which brought more than 5 inches of rain to southwestern Florida on August 13-14, 2004. Discharges at S-8 increased sharply above average in August, the result of increased pumping from the EAA into WCA 3A. Discharge through S-79 increased sharply due to the rainfall from the hurricane. All WCA stages increased, although all with the exception of WCA 2A continued to be below their monthly mean averages for August. The S-12 structures were open during the month, although discharges were below average, and water levels in Northeast Shark River Slough were slightly above average. Discharges to tide from the Miami Canal and Loxahatchee River remained below average, with minimal discharge recorded through S-354. Monthly mean discharges at S-308 remained negative.

September monthly rainfall totals varied spatially from 302 percent of average in the upper Kissimmee geographic area to 60 percent of average in the Everglades National Park geographic area. Monthly rainfall totals were well above normal in the Martin (249 percent of average), eastern Palm Beach (208 percent of average) and lower Kissimmee (217 percent of average) geographic areas. This can be attributed to rainfall associated with Hurricanes Frances (September 5-6, 2004) and Jeanne (September 26-27, 2004), which produced 10 inches and 8 inches, respectively, of rainfall in eastern, central, and northern Florida. Miami-Dade and Broward counties did not receive as much rainfall from these hurricanes as counties further north. Discharge through S-8 and to the Loxahatchee River increased well above their average means and were close to the maximum average for September. Discharge through S-79 to tide continued to increase and was above the average monthly mean, while discharges to tide from the Miami Canal were slightly below average. Discharge through the S-12 structures rose above average and water levels in Northeast Shark River Slough remained constant. WCAs 2A and 3A continued to exhibit below average water levels while WCA 1, 2B and 3B rose above average. Minimal discharge was recorded through S-354 and S-308.

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SUMMARY OF HYDROLOGIC CONDITIONS (continued)

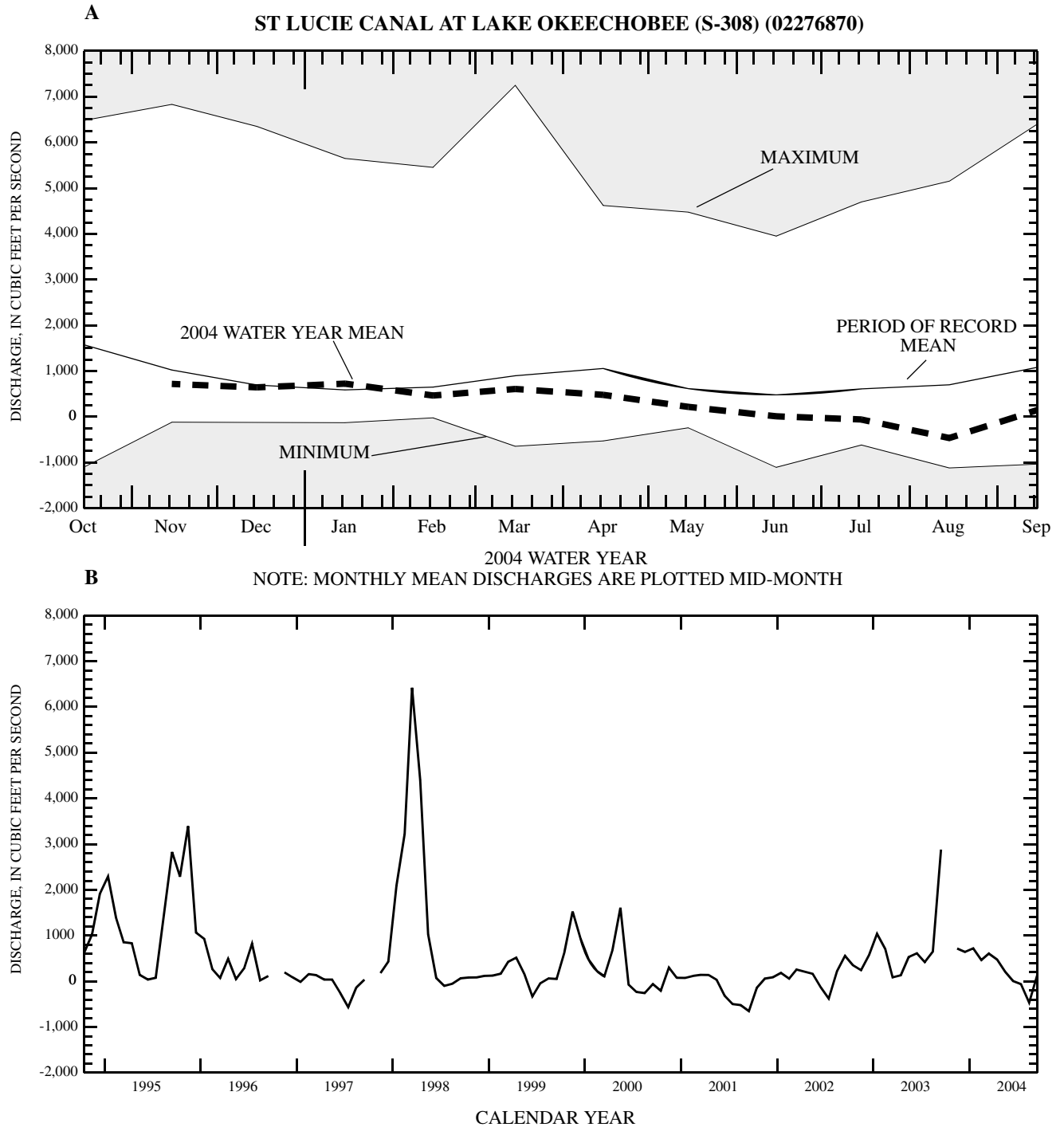


Figure 3. St. Lucie Canal at Lake Okeechobee (A) 2004 monthly mean discharge compared to the maximum and minimum monthly mean discharge for the period of record through the 2003 water year, and monthly mean discharge for the entire period of record; (B) the monthly mean discharge for the period of 1995-2004. Any months that have more than 5 days of missing record are not included in these graphs unless otherwise noted.

SUMMARY OF HYDROLOGIC CONDITIONS (continued)

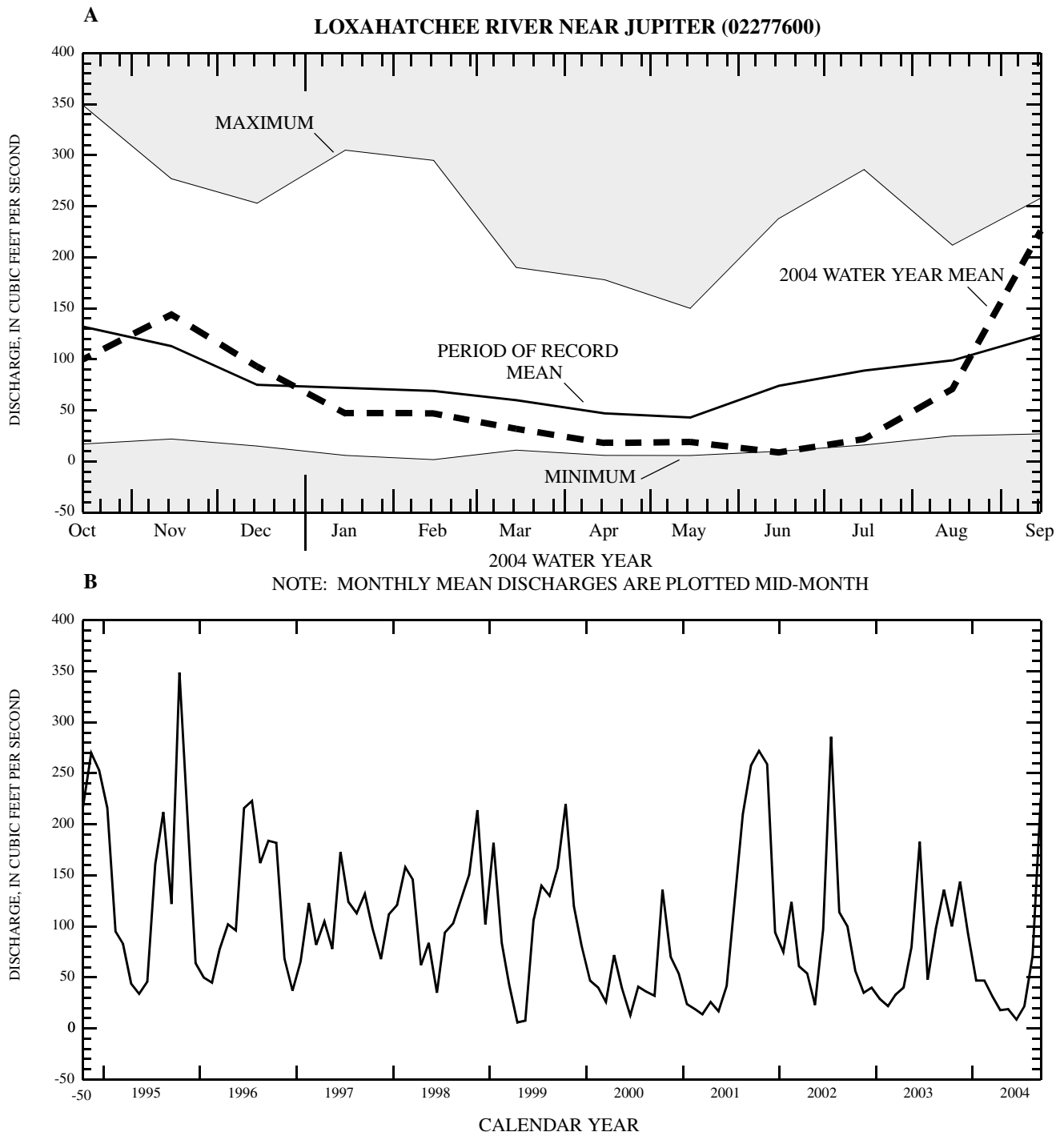


Figure 4. Loxahatchee River near Jupiter (A) 2004 monthly mean discharge compared to the maximum and minimum monthly mean discharge for the period of record through the 2003 water year, and monthly mean discharge for the entire period of record; (B) the monthly mean discharge for the period of 1995-2004. Any months that have more than 5 days of missing record are not included in these graphs unless otherwise noted.

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SUMMARY OF HYDROLOGIC CONDITIONS (continued)

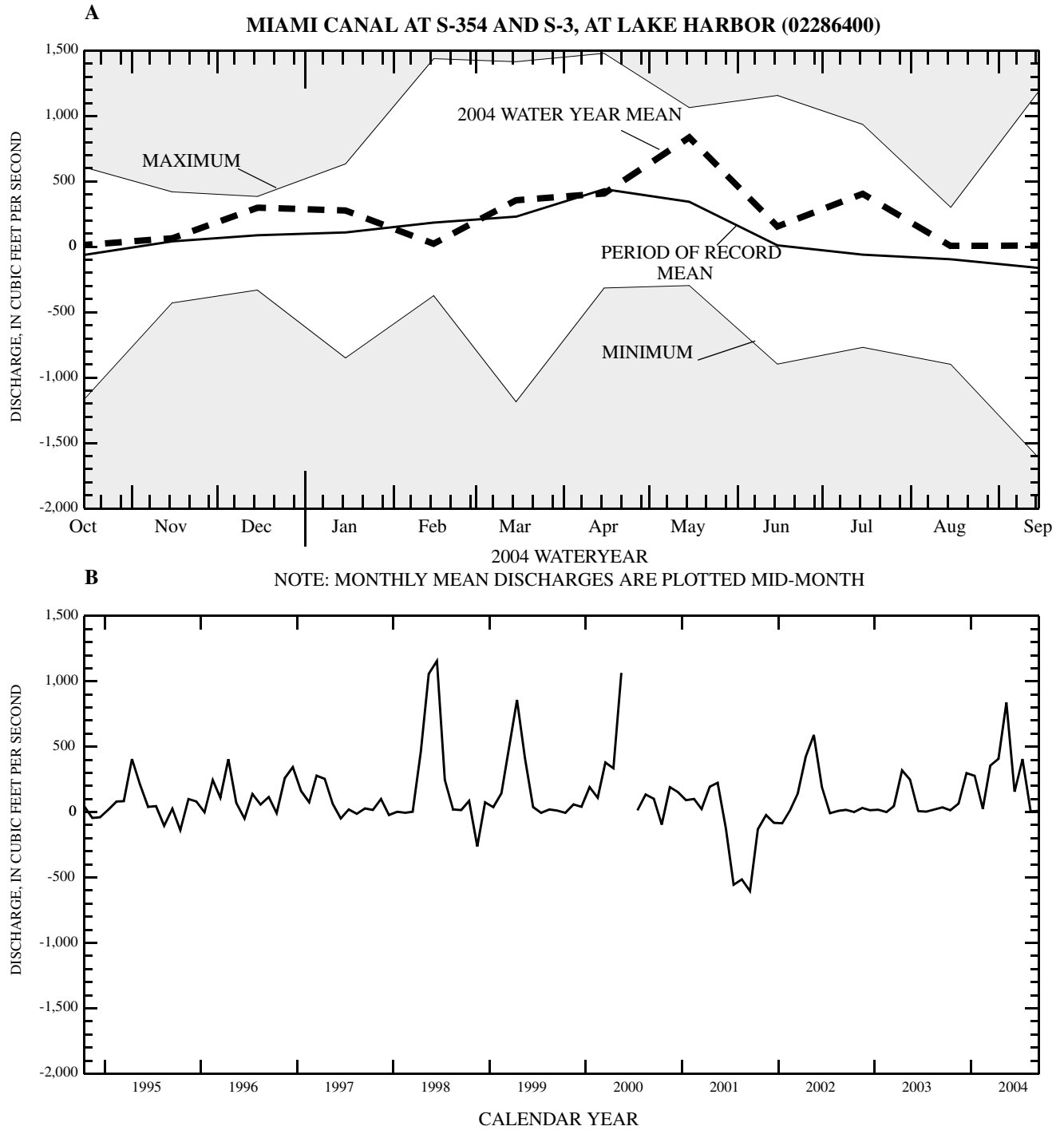


Figure 5. Miami Canal at S-354 and S-3, at Lake Harbor (A) 2004 monthly mean discharge compared to the maximum and minimum monthly mean discharge for the period of record through the 2003 water year, and monthly mean discharge for the entire period of record; (B) the monthly mean discharge for the period of 1995-2004. Any months that have more than 5 days of missing record are not included in these graphs unless otherwise noted.

SUMMARY OF HYDROLOGIC CONDITIONS (continued)

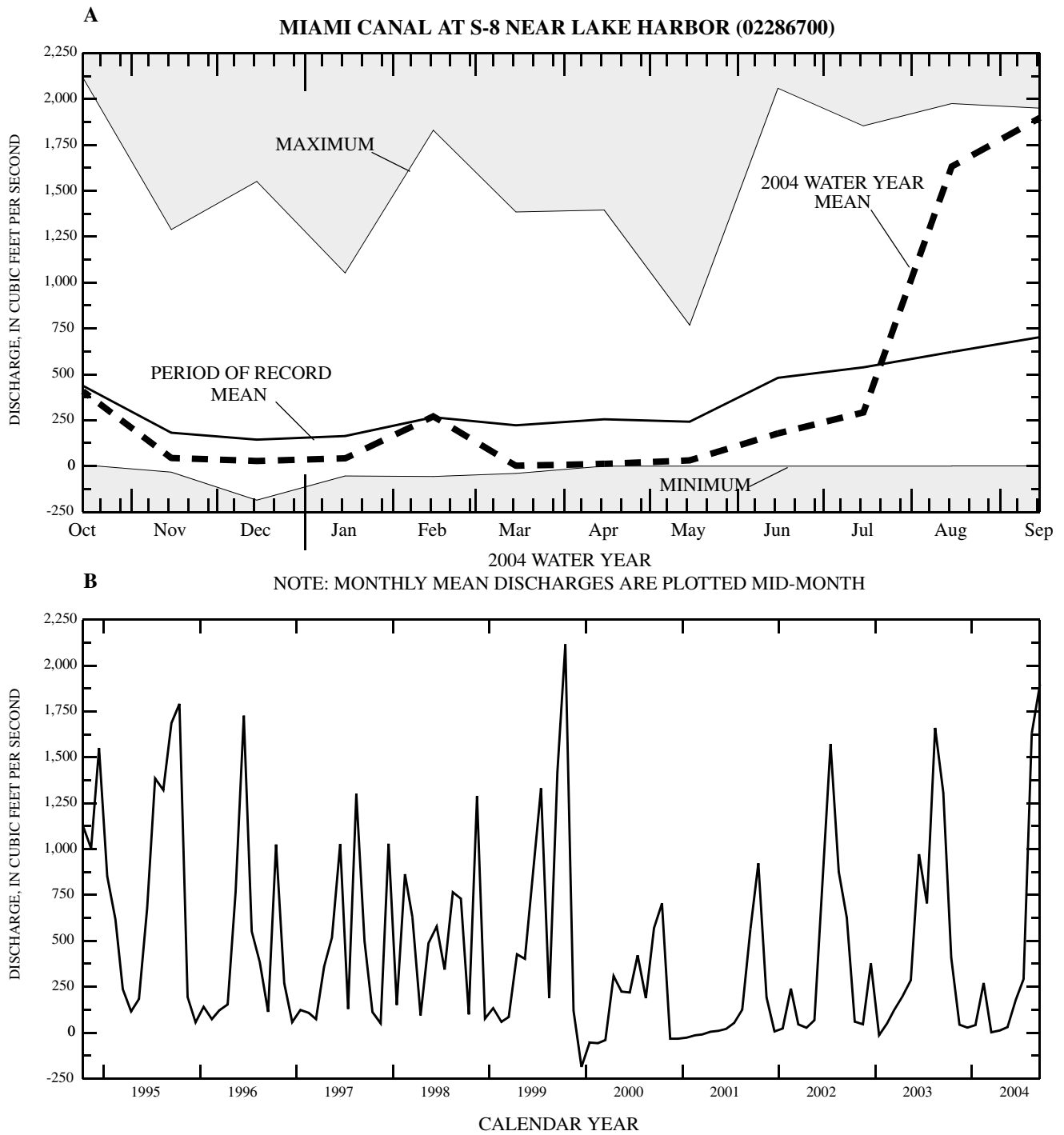


Figure 6. Miami Canal at S-8 near Lake Harbor (A) 2004 monthly mean discharge compared to the maximum and minimum monthly mean discharge for the period of record through the 2003 water year, and monthly mean discharge for the entire period of record;(B) the monthly mean discharge for the period of 1995-2004. Any months that have more than 5 days of missing record are not included in these graphs unless otherwise noted.

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SUMMARY OF HYDROLOGIC CONDITIONS (continued)

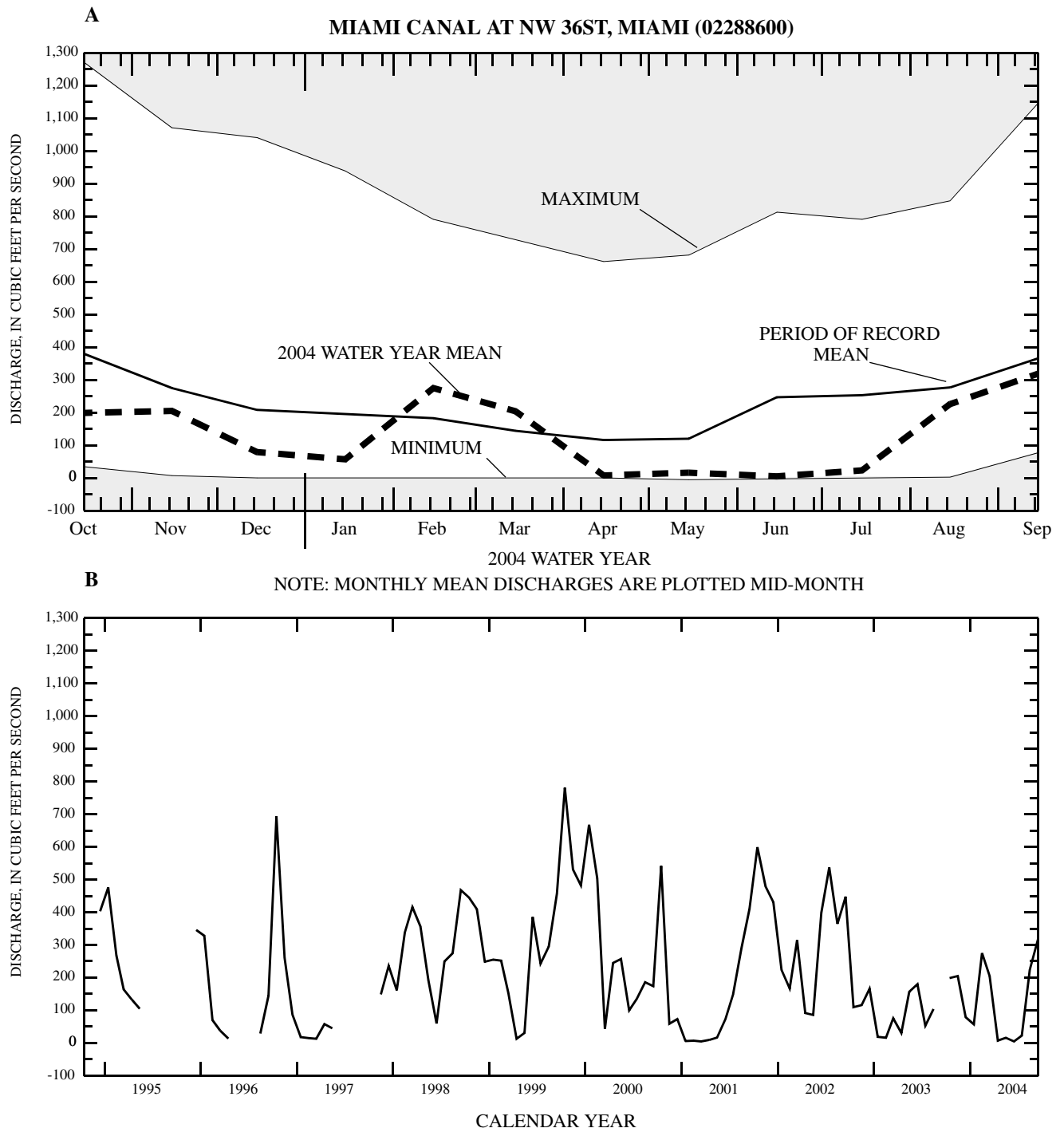


Figure 7. Miami Canal at NW 36 Street, Miami (A) 2004 monthly mean discharge compared to the maximum and minimum monthly mean discharge for the period of record through the 2003 water year, and monthly mean discharge for the entire period of record; (B) the monthly mean discharge for the period of 1995-2004. Any months that have more than 5 days of missing record are not included in these graphs unless otherwise noted.

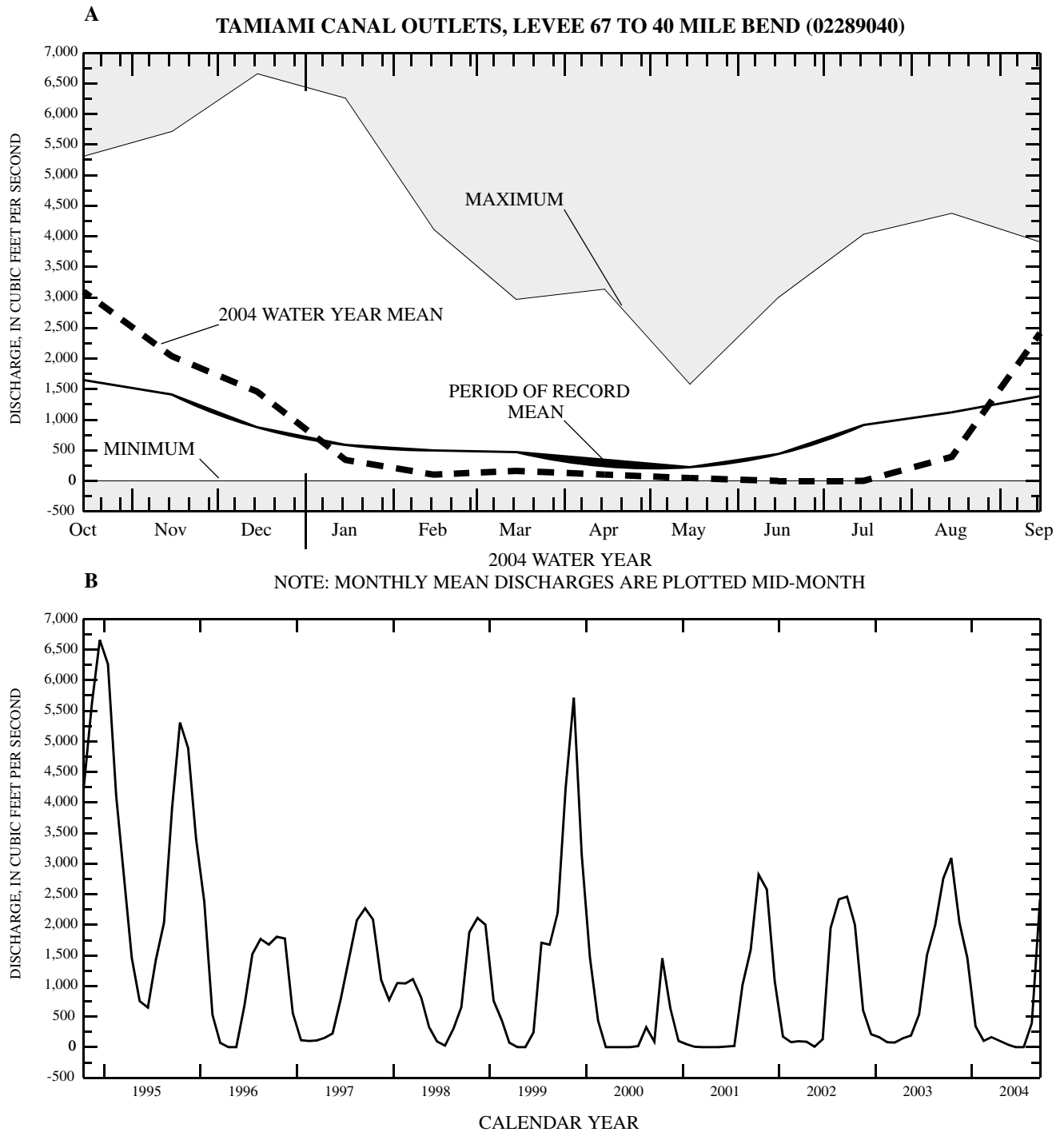


Figure 8. Tamiami Canal Outlets, Levee 67A to 40 Mile Bend (total discharge through S-12A, B, C, D) (A) 2004 monthly mean discharge compared to the maximum and minimum monthly mean discharge for the period of record through the 2003 water year, and monthly mean discharge for the entire period of record; (B) the monthly mean discharge for the period of 1995-2004. Any months that have more than 5 days of missing record are not included in these graphs unless otherwise noted.

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SUMMARY OF HYDROLOGIC CONDITIONS (continued)

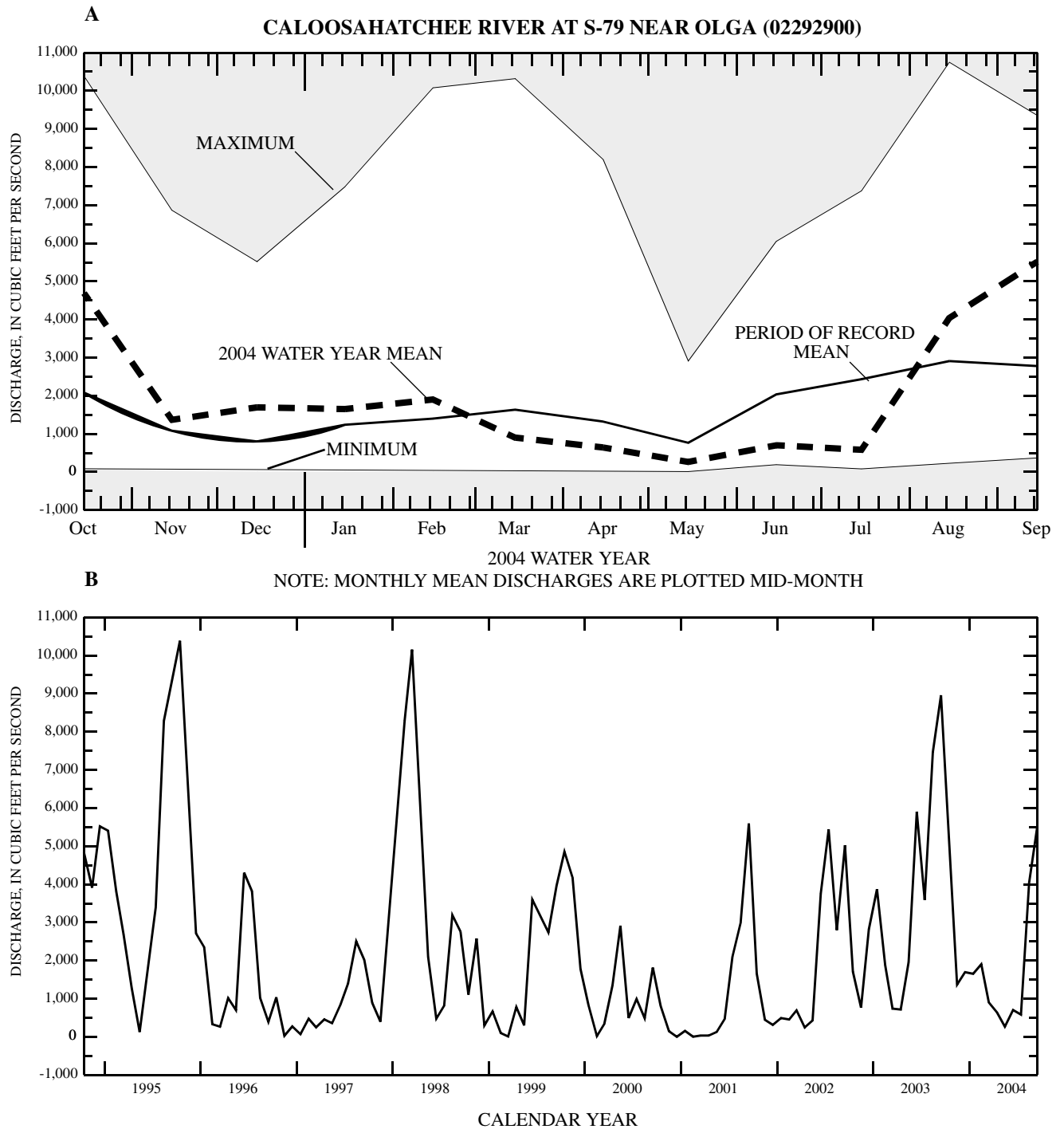


Figure 9. Caloosahatchee River at S-79 near Olga (A) 2004 monthly mean discharge compared to the maximum and minimum monthly mean discharge for the period of record through the 2003 water year, and monthly mean discharge for the entire period of record; (B) the monthly mean discharge for the period of 1995-2004. Any months that have more than 5 days of missing record are not included in these graphs unless otherwise noted.

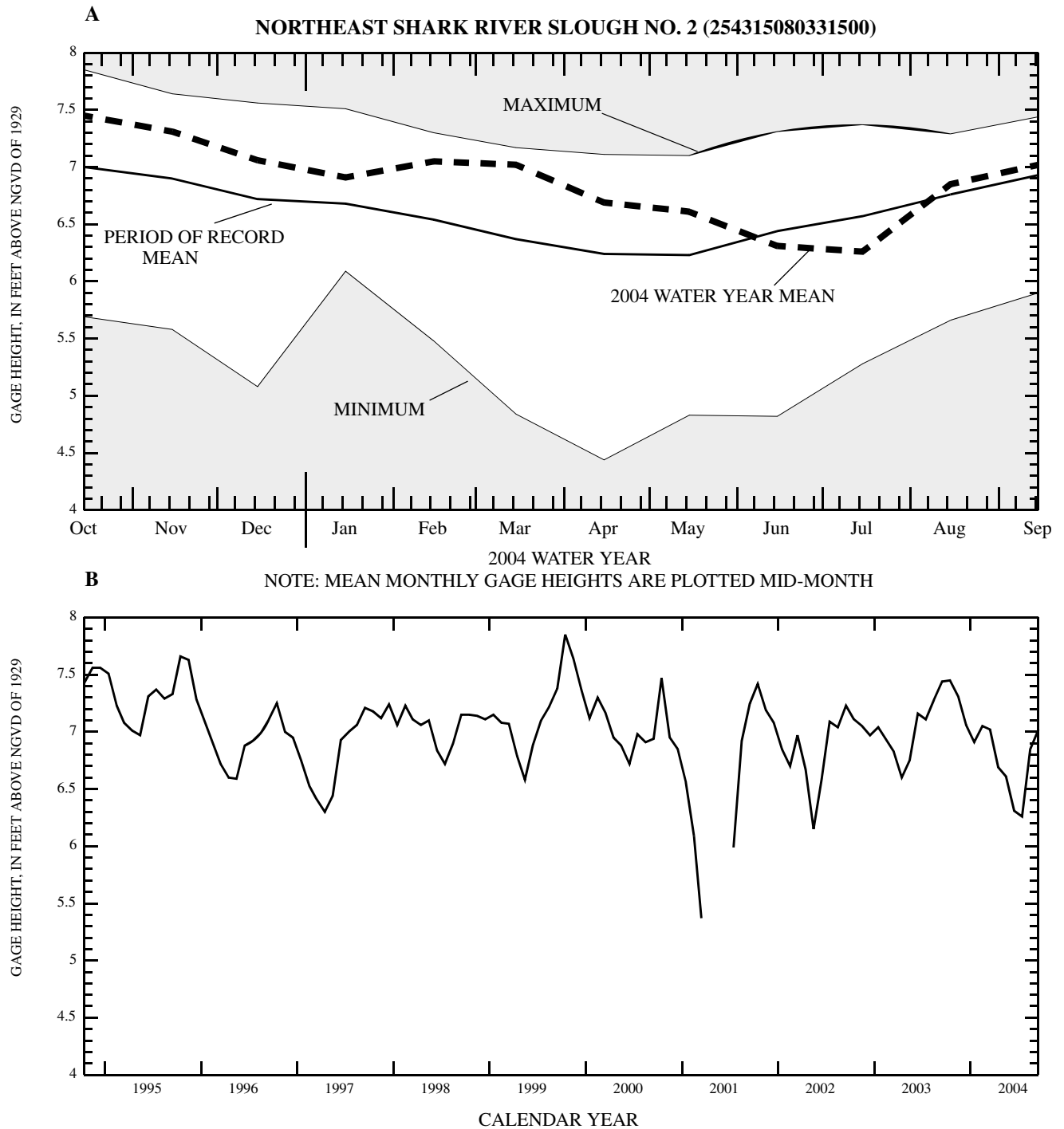


Figure 10. Northeast Shark River Slough No. 2 near Coopertown (A) 2004 monthly mean gage height compared to the maximum and minimum monthly mean gage height for the period of record through the 2003 water year, and monthly mean gage height for the entire period of record; (B) the monthly mean gage height for the period of 1995-2004. Any months that have more than 5 days of missing record are not included in these graphs unless otherwise noted.

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SUMMARY OF HYDROLOGIC CONDITIONS (continued)

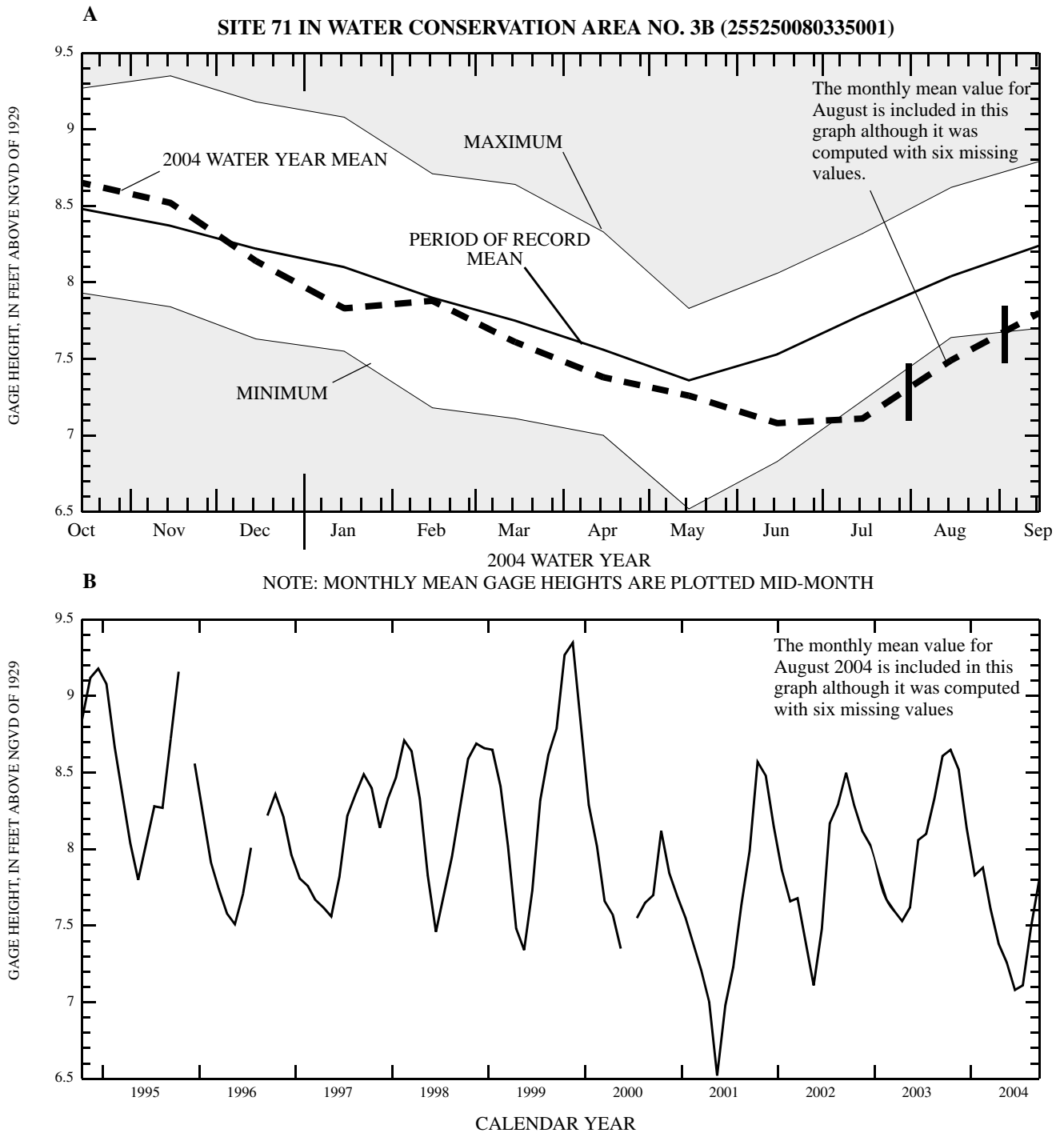


Figure 11. Site 71 in Water Conservation Area No. 3B near Coopertown (A) 2004 monthly mean gage height compared to the maximum and minimum monthly mean gage height for the period of record through the 2003 water year, and monthly mean gage height for the entire period of record; (B) the monthly mean gage height for the period of 1995-2004. Any months that have more than 5 days of missing record are not included in these graphs unless otherwise noted.

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SUMMARY OF HYDROLOGIC CONDITIONS (continued)

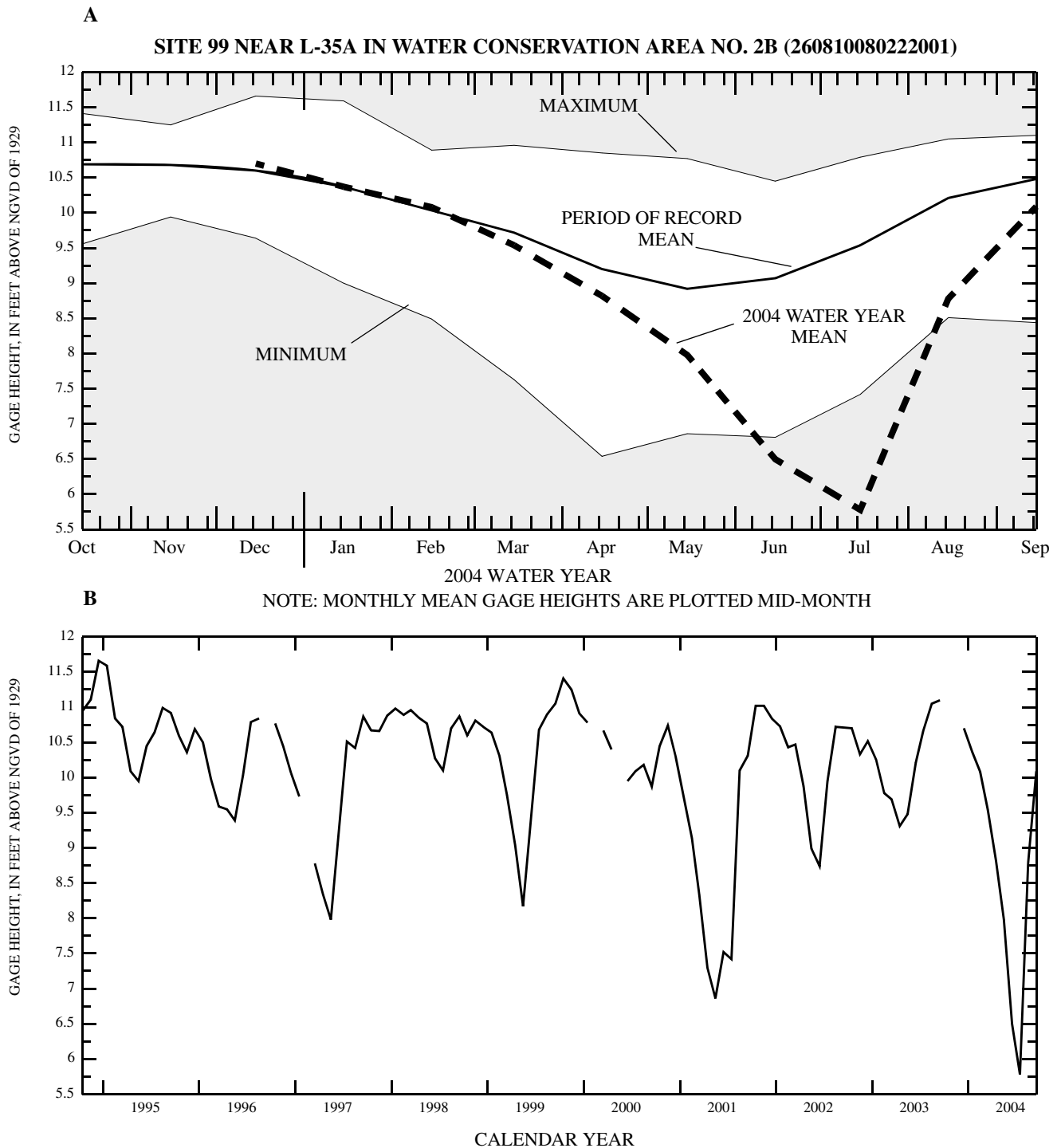


Figure 12. Site 99 near L-35A in Water Conservation Area No. 2B (A) 2004 monthly mean gage height compared to the maximum and minimum monthly mean gage height for the period of record through the 2003 water year, and monthly mean gage height for the entire period of record; (B) the monthly mean gage height for the period of 1995-2004. Any months that have more than 5 days of missing record are not included in these graphs unless otherwise noted.

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SUMMARY OF HYDROLOGIC CONDITIONS (continued)

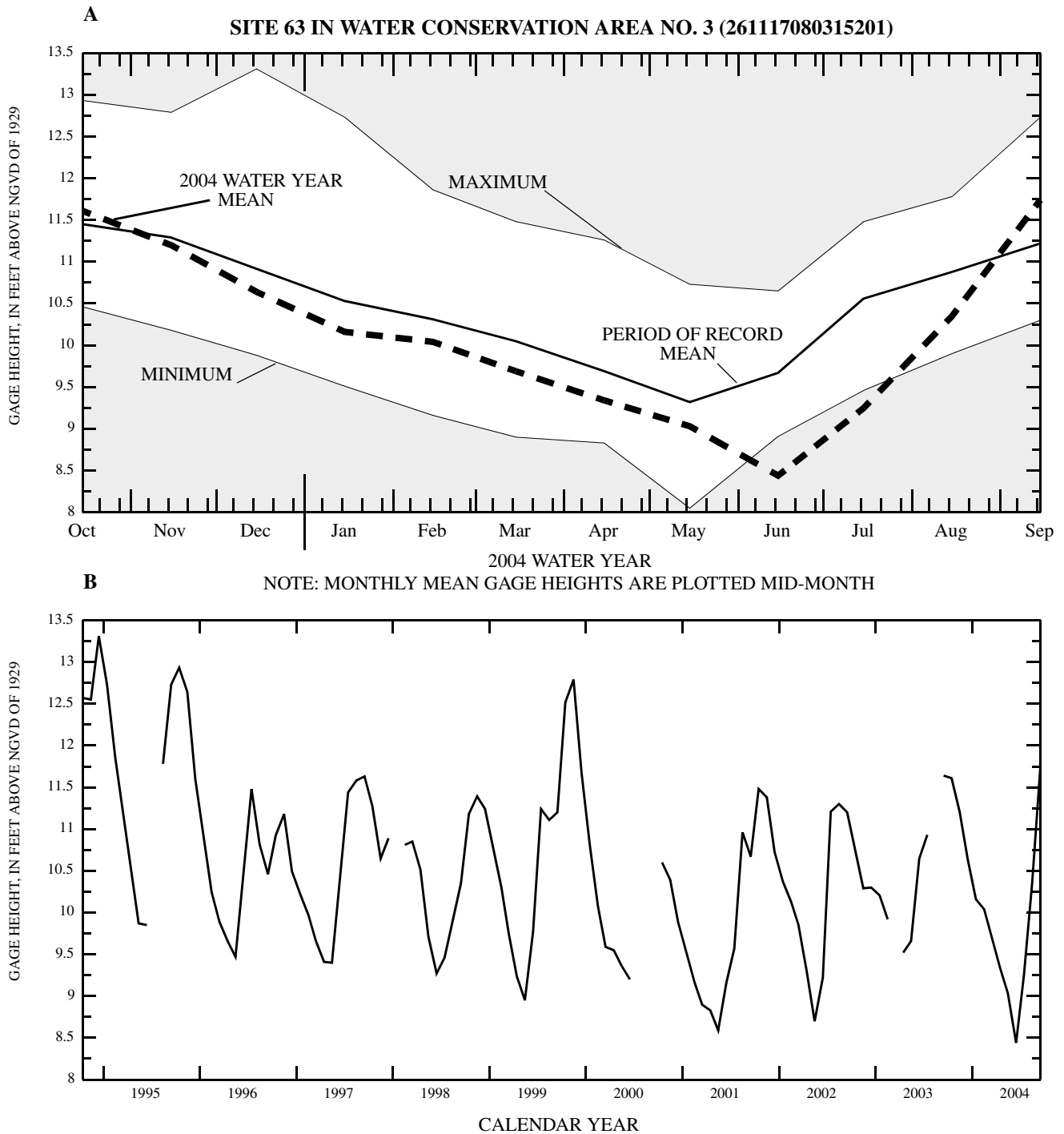


Figure 13. Site 63 in Water Conservation Area No. 3A near Andytown (A) 2004 monthly mean gage height compared to the maximum and minimum monthly mean gage height for the period of record through the 2003 water year, and monthly mean gage height for the entire period of record; (B) the monthly mean gage height for the period of 1995-2004. Any months that have more than 5 days of missing record are not included in these graphs unless otherwise noted.

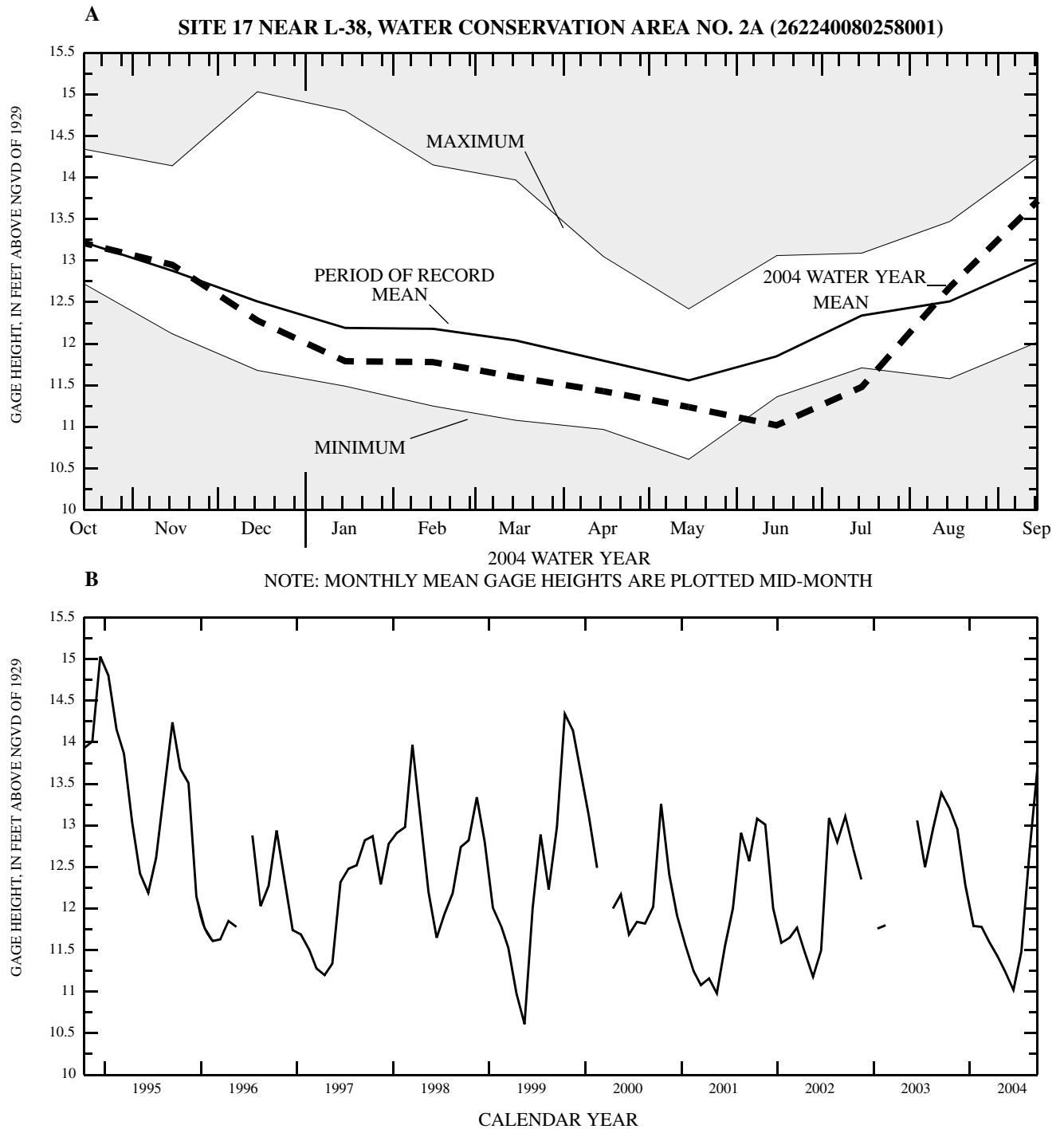


Figure 14. Site 17 near L-38, Water Conservation Area No. 2A (A) 2004 monthly mean gage height compared to the maximum and minimum monthly mean gage height for the period of record through the 2003 water year, and monthly mean gage height for the entire period of record; (B) the monthly mean gage height for the period of 1995-2004. Any months that have more than 5 days of missing record are not included in these graphs unless otherwise noted.

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SUMMARY OF HYDROLOGIC CONDITIONS (continued)

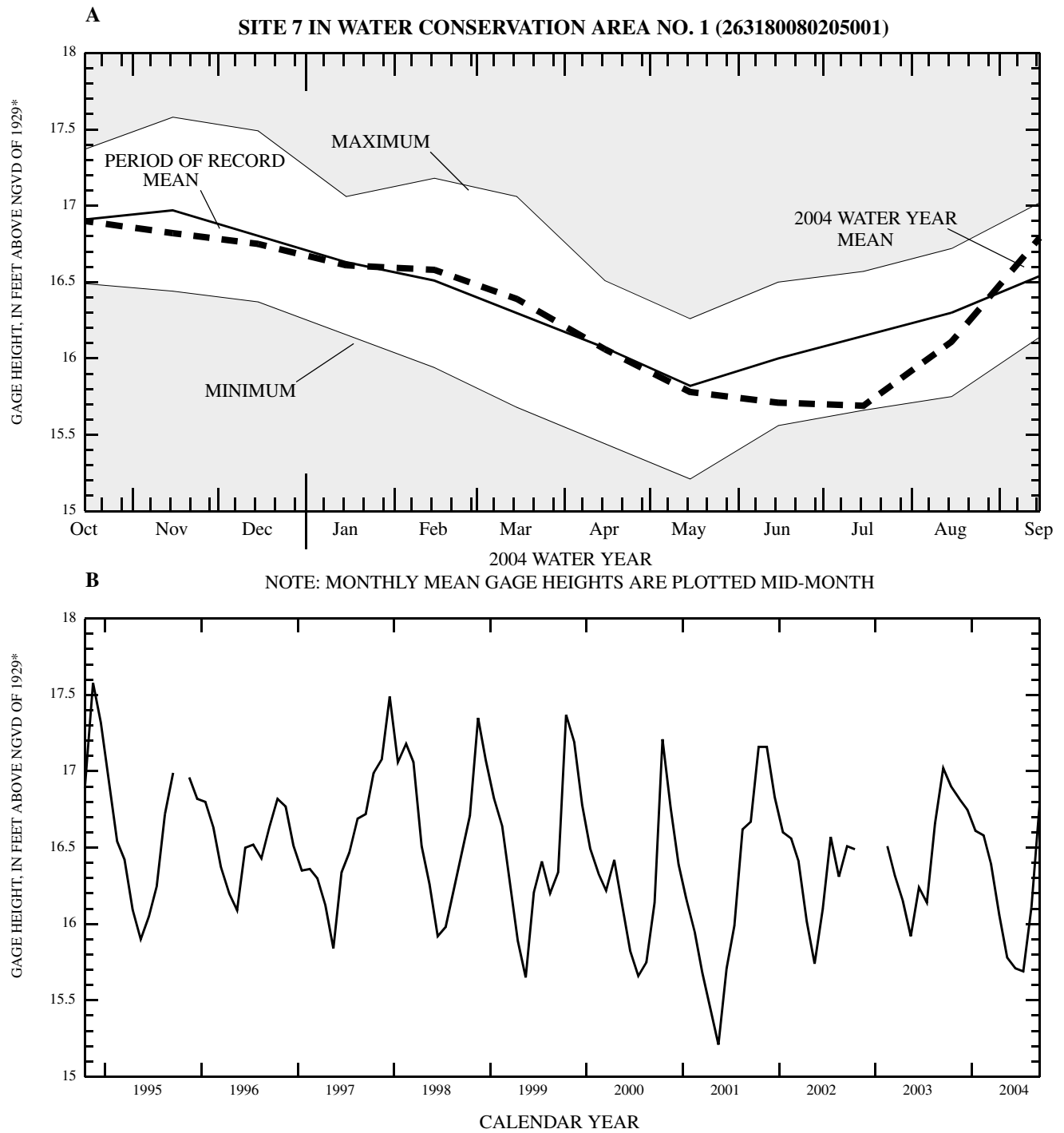


Figure 15. Site 7 in Water Conservation Area No. 1 near Shawano (A) 2004 monthly mean gage height compared to the maximum and minimum monthly mean gage height for the period of record through the 2003 water year, and monthly mean gage height for the entire period of record; (B) the monthly mean gage height for the period of 1995-2004. Any months that have more than 5 days of missing record are not included in these graphs unless otherwise noted. *The datum of gage is NGVD 1929 converted through VERTCON using the NAVD 88 survey levels from a benchmark provided by the Department of Environmental Protection. The data before the 2004 water year is published at a datum 0.102 ft higher than the present datum. All data used for the development of these graphs were converted to the present datum.

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SUMMARY OF HYDROLOGIC CONDITIONS (continued)

Surface-Water Station Functions

The south Florida surface-water data-collection network has various types of stations to meet the needs of water managers and others. These stations are grouped below according to major functions. These groups contain representative stations from the south Florida surface-water data-collection network.

The following USGS stations monitor the release of water into the St. Lucie Canal from Lake Okeechobee and other inflows

02276870 St. Lucie Canal at Lake Okeechobee (S-308)
272524080221800 Five Mile Canal Above S-29-1-4 Nr Ft. Pierce, FL

The following USGS stations at the S-5A complex monitor water releases to and from Lake Okeechobee, the water conservation areas, and the coast:

02278450 West Palm Beach Canal above S-5A, near Loxahatchee (pump - west gate)
02278500 Diversions to Water Conservation Area No. 1 at S-5A and S-5A-S (pump + south gate)
02278550 Levee 8 Canal at West Palm Beach Canal, nr Loxahatchee (east + west + south gate)
02278600 West Palm Beach Canal below S-5A-E near Loxahatchee (east gate only)

The following USGS stations monitor the release of water from Lake Okeechobee into the Everglades Agricultural Area:

265501080364900 Levee 8 Canal near Canal Point
02278000 West Palm Beach Canal at S-352, at Canal Point
02280500 Hillsboro Canal below S-351, near South Bay
02283500 North New River Canal below S-2 and S-351, near South Bay
02286400 Miami Canal at S-354 and S-3, at Lake Harbor
264514080550700 Industrial Canal at Clewiston

The following USGS stations monitor the release of water from the Everglades Agricultural Area into the water-conservation areas:

02281200 Hillsboro Canal at S-6 near Shawano
02286700 Miami Canal at S-8 near Lake Harbor
261533080571600 L-28 Interceptor Canal below S-190 near Clewiston
261543080495000 L-28 Canal above S-140 near Clewiston
02289027 Drainage Canal Below G-136 nr Clewiston
02289031 Levee 3 Canal Below G-155 nr Clewiston
02289032 Levee 4 Canal Below G-88 nr Clewiston
262007080321500 S-150 at Terrytown, FL

The following USGS discharge stations monitor discharges within and into the Loxahatchee River

02277600 Loxahatchee River Near Jupiter
265708080093700 Hobe Ditch Trib To Lox River .5 Mi Above Mouth
265818080111900 Cypress Creek Canal Below Gulfstream Bridge
270022080094600 Kitchings Creek nr Hobe Sound

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SUMMARY OF HYDROLOGIC CONDITIONS (continued)

Surface-Water Station Functions (continued)

The following USGS stations monitor continuous water levels in the water-conservation areas:

02278501 Water Conservation Area No. 1 below S-5 Complex, near Loxahatchee
 263537080211400 North Loxahatchee Conservation Area No. 1 near Boynton Beach
 262528080202700 South Loxahatchee Conservation Area No. 1 near Boynton Beach
 263180080205001 Site 7 in Water Conservation Area No. 1 near Shawano
 263050080145001 Site 8T in Water Conservation Area No. 1 near Boynton Beach
 263000080120001 Site 8C near L-40 in Water Conservation Area No. 1 nr Boynton Beach
 262750080175001 Site 9 in Water Conservation Area No. 1 near Boynton Beach
 262400080250001 Site 15 near L-39 in Water Conservation Area No. 2A near Shawano
 261710080190001 Site 19 in Water Conservation Area No. 2A near Coral Springs
 262240080258001 Site 17 near L-38, Water Conservation Area No. 2A nr Coral Springs
 261117080315201 Site 63 in Water Conservation Area No. 3A near Andytown
 261023080443001 Site 62 in Water Conservation Area No. 3A near Andytown
 260810080222001 Site 99 near L-35A in Water Conservation Area No. 2B near Sunrise
 260037080303401 Site 76 in Water Conservation Area No. 3B near Andytown
 255828080401301 Site 64 in Water Conservation Area No. 3A near Coopertown
 255300080370001 Site 69 in Water Conservation Area No. 3B near Coopertown
 254848080432001 Site 65 in Water Conservation Area No. 3A near Coopertown
 255250080335001 Site 71 in Water Conservation Area No. 3B near Coopertown

The USGS monitors the following stations to determine the discharge into Big Cypress National Preserve and Everglades National Park:

02288800 Tamiami Canal Outlets, Monroe to Carnestown
 02288900 Tamiami Canal Outlets, 40 Mile Bend to Monroe
 02289040 Tamiami Canal Outlets, Levee 67A to 40 Mile Bend (total discharge through S-12A, B, C, D)
 254543080491101182 Tamiami Canal below S-12A (total discharge through S-12A)
 02289019 Tamiami Canal below S-12B (total discharge through S-12B)
 02289041 Tamiami Canal below S-12C (total discharge through S-12C)
 254543080405401 Tamiami Canal below S-12D (total discharge through S-12D)
 02289050 Tamiami Canal above S-333, near Miami
 02289060 Tamiami Canal Outlets, Levee 30 to L-67A
 022907647 Levee 31 North Extension at 1 mile near West Miami
 02290765 Levee 31 North Extension at 3 mile near West Miami
 02290766 Levee 31 North Extension at 4 mile near West Miami
 02290767 Levee 31 North Extension at 5 mile near West Miami
 02290768 Levee 31 North Extension at 7 mile near West Miami
 02290769 Canal 111 above S-18C, near Florida City
 02291000 Barron River Canal near Everglades

The following stations monitor discharge from the Water Conservation Areas to the structures along the east coast.

02281400 Hillsboro Canal near Margate
 02286200 Snake Creek Canal at NW 67th Avenue, near Hialeah
 02287395 Miami Canal East of Levee-30, near Miami
 02287497 N.W. Wellfield Canal near Dade Broward Levee near Pennsuko, FL
 02289500 Tamiami Canal near Coral Gables, FL

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SUMMARY OF HYDROLOGIC CONDITIONS (continued)

Surface-Water Station Functions (continued)

The following USGS stations are representative of continuous surface-water elevations in southern Miami-Dade County:

254315080331500 Northeast Shark River Slough No. 2 near Coopertown
254130080380500 Northeast Shark River Slough No. 1 near Coopertown
254100080402400 L-67 Extended Canal West, near Florida City
254100080402200 Northeast Shark River Slough East of L-67 Extension nr Richmond Heights
253828080391100 Northeast Shark River Slough No. 4, North of Grossman
253753080393600 Northeast Shark River Slough No. 5, South of Grossman
251716080342100 Everglades 5A in C-111 Basin near Homestead
251724080341400 Everglades 5B in C-111 Basin near Homestead
251906080283400 Everglades 2A in C-111 Basin near Homestead
251946080254800 Everglades 1 in C-111 Basin near Homestead
252036080324300 Everglades 4 in C-111 Basin near Homestead
252043080302400 Everglades 3 in C-111 Basin near Homestead

The following USGS discharge monitoring sites are located along the coast in Miami-Dade, Broward, and Palm Beach Counties:

02279000 West Palm Beach Canal at West Palm Beach (S-155)
02282700 Middle River Canal at S-36, near Fort Lauderdale
02283200 Plantation Road Canal at S-33, near Fort Lauderdale
02286100 South New River Canal at S-13, near Davie
02288600 Miami Canal at NW 36th Street, Miami (S-26)
02290710 Black Creek Canal at S-21, near Goulds

The following USGS discharge monitoring sites are located on the southwestern coast of Florida:

02291500 Imperial River near Bonita Springs
02291524 Spring Creek Headwater near Bonita Springs
02291580 North Branch Estero River at Estero
02291597 South Branch Estero River at Estero
02291673 Tenmile Canal at Control Near Estero
02291669 Sixmile Cypress Creek North Ft. Meyers
02292900 Caloosahatchee River at S-79 near Olga
02293214 Meade Canal at Cape Coral
02293230 Whiskey Creek at Ft. Meyers, FL
02293240 Aries Canal at Cape Coral
02293241 San Carlos Canal at Cape Coral
02293243 Courtney Canal at Cape Coral
02293345 Shadroe Canal at Cape Coral
02293346 Horseshoe Canal at Cape Coral
02293347 Hermosa Canal at Cape Coral
264139082022100 Gator Slough at SR 765 near Ft. Myers
264437081550100 Gator Slough at U.S. 41 near Ft. Myers

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SUMMARY OF HYDROLOGIC CONDITIONS (continued)

Surface-Water Station Functions (continued)

The following USGS stations monitor continuous water level and water quality parameters in the Loxahatchee and St. Lucie Rivers

02277100 St. Lucie River at Speedy Point, Stuart, FL
02277110 St. Lucie River at A1A (Steele Pt), Stuart, FL
265645080055900 Loxahatchee River at Pompano Dr. nr Jupiter, FL
265651080045500 Loxahatchee River at Coast Guard Dock nr Jupiter, FL
265906080093500 Loxahatchee River at Mile 9.1 nr Jupiter
265912080082900 Loxahatchee River at Boy Scout Camp near Hobe Sound, FL
265929090091800 Loxahatchee River Outlet at Kitchings Creek
272229080203400 St. Lucie River at Midway Rd. nr Pt. St. Lucie, FL
271929080195900 St. Lucie River at Prima Vista Rd., Pt. St. Lucie

The following USGS stations monitor continuous canal water level only:

255026080231300 Snapper Creek Canal Extension at MW 74th Street, near Hialeah, FL
261150080270001 North New River Canl at S-11-A near Andytown
261200080275001 North New River Canl at S-11-B near Andytown
261300080280001 North New River Canl at S-11-C near Andytown
261952080074500 E-3 Canal, SW 18th Street, Boca Raton, FL
262100080190001 Hillsboro Canal at S-10-A near Deerfield Beach, FL
262200080210001 Hillsboro Canal at S-10-C near Deerfield Beach, FL
262300080220001 Hillsboro Canal at S-10-D near Deerfield Beach, FL
262337080074800 E-3 Canal at NW 51st Street, Boca Raton, FL
262358080055700 E-4 Canal at Clint-Moore Road, Boca Raton, FL

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SPECIAL NETWORKS AND PROGRAMS

Hydrologic Benchmark Network is a network of 61 sites in small drainage basins in 39 States that was established in 1963 to provide consistent streamflow data representative of undeveloped watersheds nationwide, and from which data could be analyzed on a continuing basis for use in comparison and contrast with conditions observed in basins more obviously affected by human activities. At selected sites, water-quality information is being gathered on major ions and nutrients, primarily to assess the effects of acid deposition on stream chemistry. Additional information on the Hydrologic Benchmark Program may be accessed from <http://water.usgs.gov/hbn/>.

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

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) is a network of monitoring sites that provides continuous measurement and assessment of the chemical constituents in precipitation throughout the United States. As the lead Federal agency, the USGS works together with over 100 organizations to provide a long-term, spatial and temporal record of atmospheric deposition generated from this network of 250 precipitation-chemistry monitoring sites. The USGS supports 74 of these 250 sites. This long-term, nationally consistent monitoring program, coupled with ecosystem research, provides critical information toward a national scorecard to evaluate the effectiveness of ongoing and future regulations intended to reduce atmospheric emissions and subsequent impacts to the Nation's land and water resources. Reports and other information on the NADP/NTN Program, as well as data from the individual sites, may be accessed from <http://bqs.usgs.gov/acidrain/>.

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

Assessment activities are being conducted in 42 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents is measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for water-resources managers to use in making decisions and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

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

The USGS National Streamflow Information Program (NSIP) is a long-term program with goals to provide framework streamflow data across the Nation. Included in the program are creation of a permanent Federally funded streamflow network, research on the nature of streamflow, regional assessments of streamflow data and databases, and upgrades in the streamflow information delivery systems. Additional information about NSIP may be accessed from <http://water.usgs.gov/nsip/>.

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EXPLANATION OF THE RECORDS

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 and Station Number

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

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These station numbers are in the same downstream order used in this report. In assigning a station number, 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 composed of both types of stations. Gaps are consecutive. The complete eight-digit (or 10-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. In areas of high station density, an additional two digits may be added to the station identification number to yield a 10-digit number. The stations are numbered in downstream order as described above between stations of consecutive 8-digit numbers.

Numbering System for Wells and Miscellaneous Sites

The USGS well and miscellaneous site-numbering system is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, and the next 7 digits denote degrees, minutes, and seconds of longitude; the last 2 digits are a sequential number for wells within a 1-second grid. In the event that the latitude-longitude coordinates for a well and miscellaneous site are the same, a sequential number such as "01," "02," and so forth, would be assigned as one would for wells (see fig. 11). The 8-digit, downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

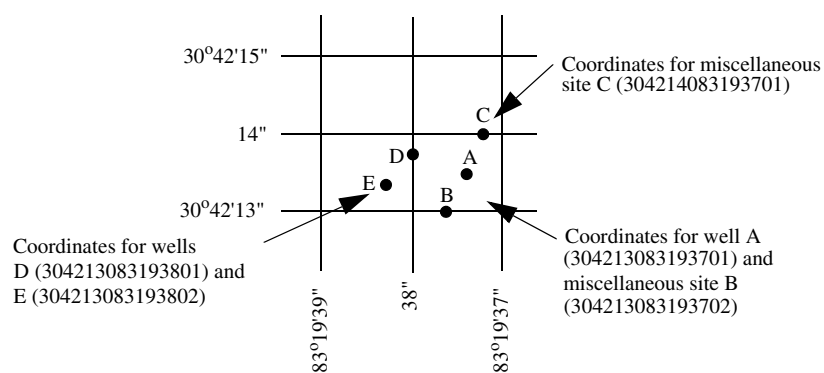


Figure 16. System for numbering wells and miscellaneous sites. (latitude and longitude)

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EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS

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 base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and volume of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from a water-stage recorder that is either downloaded electronically in the field to a laptop computer or similar device or is transmitted using telemetry such as GOES satellite, land-line or cellular-phone modems, or by radio transmission. Measurements of discharge are made with a current meter or acoustic Doppler current profiler, using the general methods adopted by the USGS. These methods are described in standard textbooks, USGS Water-Supply Paper 2175, and the Techniques of Water-Resources Investigations of the United States Geological Survey (TWRIs), Book 3, Chapters A1 through A19 and Book 8, Chapters A2 and B2, which may be accessed from <http://water.usgs.gov/pubs/twri/>. The methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for Standards (ISO).

For stream-gaging stations, discharge-rating tables for any stage are prepared from stage-discharge curves. If extensions to the rating curves are necessary to express discharge greater than measured, the extensions are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, or computation of flow over dams and weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily values. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features of the stream channel, the daily mean discharge is computed by the shifting-control method in which correction factors based on individual discharge measurements and notes by engineers and observers are used when applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the controlling section, the daily mean discharge is computed by the shifting-control method.

The stage-discharge relation at some stream-gaging stations is affected by backwater from reservoirs, tributary streams, or other sources. Such an occurrence 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 at some distance from the base gage.

An index velocity is measured using ultrasonic or acoustic instruments at some stream-gaging stations and this index velocity is used to calculate an average velocity for the flow in the stream. This average velocity along with a stage-area relation is then used to calculate average discharge.

At some stations, 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.

At some stream-gaging stations in the northern United States, the stage-discharge relation is affected by ice in the winter; therefore, computation of the discharge in the usual manner is impossible. Discharge for periods of ice effect is computed on the basis of gage-height record and occasional winter-discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge from other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the volume or contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly changes are computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys, the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some stream-gaging stations, periods of time occur when no gage-height record is obtained or the recorded gage height is faulty and cannot be used to compute daily discharge or contents. Such a situation can happen when the recorder stops or otherwise fails to operate properly, the intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records from other stations in the same or nearby basins. Likewise, lake or reservoir volumes may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

Data Presentation

The records published for each continuous-record surface-water discharge station (stream-gaging station) consist of five parts: (1) the station manuscript or description; (2) the data table of daily mean values of discharge for the current water year with summary data; (3) a tabular statistical summary of monthly mean flow data for a designated period, by water year; (4) a summary statistics table that includes statistical data of annual, daily, and instantaneous flows as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration; and (5) a hydrograph of discharge.

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Station Manuscript

The manuscript provides, under various headings, descriptive information, such as station location; period of record; historical extremes outside the period of record; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments follow that clarify information presented under the various headings of the station description.

LOCATION.—Location information is obtained from the most accurate maps available. The location of the gaging station with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages, given for only a few stations, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

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

PERIOD OF RECORD.—This term indicates the time period for which records have been published for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not and whose location was such that its flow reasonably can be considered equivalent to flow at the present station.

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

GAGE.—The type of gage in current use, the datum of the current gage referred to a standard datum, 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 either will be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily discharge table. (See section titled Identifying Estimated Daily Discharge.) Information is presented relative to the accuracy of the records, to special methods of computation, and to conditions that affect natural flow at the station. In addition, information may be presented pertaining to average discharge data for the period of record; to extremes data for the period of record and the current year; and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, the outlet works and spillway, and the purpose and use of the reservoir.

COOPERATION.—Records provided by a cooperating organization or obtained for the USGS by a cooperating organization are identified here.

EXTREMES OUTSIDE PERIOD OF RECORD.—Information here documents 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 USGS.

REVISIONS.—Records are revised if errors in published records are discovered. Appropriate updates are made in the USGS distributed data system, NWIS, and subsequently to its Web-based National data system, NWISWeb (<http://water.usgs.gov/nwis/nwis>). Users are encouraged to obtain all required data from NWIS or NWISWeb to ensure that they have the most recent data updates. Updates to NWISWeb are made on an annual basis.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because no current or, possibly, future station manuscript would be published for these stations to document the revision in a REVISED RECORDS entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the District Office (address given on the back of the title page of this report) to determine if the published records were revised after the station was discontinued. If, however, the data for a discontinued station were obtained by computer retrieval, the data would be current. 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 stage-capacity table when daily volumes are given.

Peak Discharge Greater than Base Discharge

Tables of peak discharge above base discharge are included for some stations where secondary instantaneous peak discharge data are used in flood-frequency studies of highway and bridge design, flood-control structures, and other flood-related projects. The base discharge value is selected so an average of three peaks a year will be reported. This base discharge value has a recurrence interval of approximately 1.1 years or a 91-percent chance of exceedence in any 1 year.

Data Table of Daily Mean Values

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

Statistics of Monthly Mean Data

A tabular summary of the mean (line headed MEAN), maximum (MAX), and minimum (MIN) of monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those values. The designated period will be expressed as FOR WATER YEARS __-__, BY WATER YEAR (WY), and will list the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station manuscript. The

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designated period will consist of all of the station record within the specified water years, including complete months of record for partial water years, and may coincide with the period of record for the station. The water years for which the statistics are computed are consecutive, unless a break in the station record is indicated in the manuscript.

Summary Statistics

A table titled SUMMARY STATISTICS follows the statistics of monthly mean data tabulation. This table consists of four columns with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, WATER YEARS __-__, will consist of all of the station records within the specified water years, including complete months of record for partial water years, and may coincide with the period of record for the station.

The water years for which the statistics are computed are consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (see line headings below), except for the ANNUAL 7-DAY MINIMUM statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

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

The following summary statistics data are provided with each continuous record of discharge. Comments that follow clarify information presented under the various line headings of the SUMMARY STATISTICS table.

ANNUAL TOTAL.—The sum of the daily mean values of discharge for the year.

ANNUAL MEAN.—The arithmetic mean for the individual daily mean discharges for the year noted or for the designated period.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

90 PERCENT EXCEEDS.—The discharge that has been exceeded 90 percent of the time for the designated period.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first table lists annual maximum stage and discharge at crest-stage stations, and the second table lists discharge

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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 often made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for a 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. This identification is shown either by flagging individual daily values with the letter "e" and noting in a table footnote, "e-Estimated," or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of Field Data and Computed Results

The accuracy of streamflow data 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 observations of stage, measurements of discharge, and interpretations of records.

The degree of accuracy of the records is stated in the REMARKS in the station description. "Excellent" indicates that about 95 percent of the daily discharges are within 5 percent of the true value; "good" within 10 percent; and "fair," within 15 percent. "Poor" indicates that daily discharges have less than "fair" accuracy. Different accuracies may be attributed to different parts of a given record.

Values of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft³/s; to the nearest tenths between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures above 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 discharge values listed for partial-record stations.

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, values 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 Data Records Available

Information of a more detailed nature than that published for most of the stream-gaging stations such as discharge measurements, gage-height records, and rating tables is available from the Florida Integrated Science Center - Water and Restoration Studies (FISC-WRS). Also, most stream-gaging station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the FISC-WRS. (see address that is shown on the back of the title page of this report).

EXPLANATION OF PRECIPITATION RECORDS**Data Collection and Computation**

Rainfall data generally are collected using electronic data loggers that measure the rainfall in 0.01-inch increments every 15 minutes using either a tipping-bucket rain gage or a collection well gage. Twenty-four hour rainfall totals are tabulated and presented. A 24-hour period extends from just past midnight of the previous day to midnight of the current day. Snowfall-affected data can result during cold weather when snow fills the rain-gage funnel and then melts as temperatures rise. Snowfall-affected data are subject to errors. Missing values are indicated by this symbol "---" in the table.

Data Presentation

Precipitation records collected at surface-water gaging stations are identified with the same station number and name as the stream-gaging station. Where a surface-water daily-record station is not available, the precipitation record is not published, but is available in the files of the U.S. Geological Survey.

Information pertinent to the history of a precipitation station is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, period of record, and general remarks.

The following information is provided with each precipitation station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.—See Data Presentation in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

PERIOD OF RECORD.—See Data Presentation in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

INSTRUMENTATION.—Information on the type of rainfall collection system is given.

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

EXPLANATION OF WATER-QUALITY RECORDS**Collection and Examination of Data**

Surface-water samples for analysis usually are collected at or near stream-gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, water temperature, sediment discharge, and so forth); extremes for the current year; and general remarks.

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For ground-water records, no descriptive statements are given; however, the well number, depth of well, sampling date, or other pertinent data are given in the table containing the chemical analyses of the ground water.

Water Analysis

Most of the methods used for collecting and analyzing water samples are described in the TWRI's, which may be accessed from <http://water.usgs.gov/pubs/twri/>.

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 at several verticals to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

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

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum and minimum values (and sometimes mean or median values) for each constituent measured, and are based on 15-minute or 1-hour intervals of recorded data beginning at 0000 hours and ending at 2400 hours for the day of record.

SURFACE-WATER-QUALITY RECORDS

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because discharge data are useful in the interpretation of surface-water quality. Records of surface-water quality in this report involve a variety of types of data and measurement frequencies.

Classification of Records

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

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

Accuracy of the Records

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

Rating classifications for continuous water-quality records

[\leq , less than or equal to; \pm , plus or minus value shown; $^{\circ}\text{C}$, degree Celsius; $>$, greater than; %, percent; mg/L, milligram per liter; pH unit, standard pH unit]

Measured physical property	Rating			
	Excellent	Good	Fair	Poor
Water temperature	$\leq \pm 0.2^{\circ}\text{C}$	$> \pm 0.2$ to 0.5°C	$> \pm 0.5$ to 0.8°C	$> \pm 0.8^{\circ}\text{C}$
Specific conductance	$\leq \pm 3\%$	$> \pm 3$ to 10%	$> \pm 10$ to 15%	$> \pm 15\%$
Dissolved oxygen	$\leq \pm 0.3$ mg/L	$> \pm 0.3$ to 0.5 mg/L	$> \pm 0.5$ to 0.8 mg/L	$> \pm 0.8$ mg/L
pH	$\leq \pm 0.2$ unit	$> \pm 0.2$ to 0.5 unit	$> \pm 0.5$ to 0.8 unit	$> \pm 0.8$ unit
Turbidity	$\leq \pm 5\%$	$> \pm 5$ to 10%	$> \pm 10$ to 15%	$> \pm 15\%$

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

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On-Site Measurements and Sample Collection

In obtaining water-quality data, a major concern is assuring that the data obtained represent the naturally occurring quality of the water. To ensure this, certain measurements, such as water temperature, pH, and dissolved oxygen, must be made on site when the samples are taken. To assure that measurements made in the laboratory also represent the naturally occurring water, carefully prescribed procedures must 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 on-site measurements and for collecting, treating, and shipping samples are given in TWRIs Book 1, Chapter D2; Book 3, Chapters A1, A3, and A4; and Book 9, Chapters A1-A9. Most of the methods used for collecting and analyzing water samples are described in the TWRIs, which may be accessed from <http://water.usgs.gov/pubs/twri/>. Also, detailed information on collecting, treating, and shipping samples can be obtained from the FISC-WRS (see address that is shown on the back of title page in this report).

Water Temperature

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

At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the FISC-WRS office. (see address that is shown on the back of title page in this report).

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 section.

During periods of rapidly changing flow or rapidly changing concentration, samples may be 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 are collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observation, 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

Samples for biochemical oxygen demand (BOD) and indicator bacteria are analyzed locally. All other samples are analyzed in the USGS laboratory in Lakewood, Colorado, unless otherwise noted. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chapter C1. Methods used by the USGS laboratories are given in the TWRIs, Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. The TWRI publications may be accessed from <http://water.usgs.gov/pubs/twri/>. These methods are consistent with ASTM standards and generally follow ISO standards.

Data Presentation

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

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information 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 information in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

DRAINAGE AREA.—See Data Presentation information in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

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

INSTRUMENTATION.—Information on instrumentation is given only if a water-quality monitor temperature record, sediment pumping sampler, or other sampling device is in operation at a station.

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

COOPERATION.—Records provided by a cooperating organization or obtained for the USGS by a cooperating organization are identified here.

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EXTREMES.—Maximums and minimums are given only for parameters measured daily or more frequently. For parameters measured weekly or less frequently, true maximums or minimums may not have been obtained. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.—Records are revised if errors in published water-quality records are discovered. Appropriate updates are made in the USGS distributed data system, NWIS, and subsequently to its Web-based National data system, NWISWeb (<http://waterdata.usgs.gov/nwis>). Users of USGS water-quality data are encouraged to obtain all required data from NWIS or NWISWeb to ensure that they have the most recent updates. Updates to the NWISWeb are made on an annual basis.

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

Remark Codes

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

Printed Output	Remark
E	Value is estimated.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
M	Presence of material verified, but not quantified.
N	Presumptive evidence of presence of material.
U	Material specifically analyzed for, but not detected.
A	Value is an average.

Water-Quality Control Data

The USGS National Water Quality Laboratory collects quality-control data on a continuing basis to evaluate selected analytical methods to determine long-term method detection levels (LT-MDLs) and laboratory reporting levels (LRLs). These values are re-evaluated each year on the basis of the most recent quality-control data and, consequently, may change from year to year.

This reporting procedure limits the occurrence of false positive error. Falsely reporting a concentration greater than the LT-MDL for a sample in which the analyte is not present is 1 percent or less. Application of the LRL limits the occurrence of false negative error. The chance of falsely reporting a non-detection for a sample in which the analyte is present at a concentration equal to or greater than the LRL is 1 percent or less.

Accordingly, concentrations are reported as less than LRL for samples in which the analyte was either not detected or did not pass identification. Analytes detected at concentrations between the LT-MDL and the LRL and that pass identification criteria are estimated. Estimated concentrations will be noted with a remark code of "E." These data should be used with the understanding that their uncertainty is greater than that of data reported without the E remark code.

Data generated from quality-control (QC) samples are a requisite for evaluating the quality of the sampling and processing techniques as well as data from the actual samples themselves. Without QC data, environmental sample data cannot be adequately interpreted because the errors associated with the sample data are unknown. The various types of QC samples collected by this office are described in the following section. Procedures have been established for the storage of water-quality-control data within the USGS. These procedures allow for storage of all derived QC data and are identified so that they can be related to corresponding environmental samples. These data are not presented in this report but are available from the FISC-WRS. (see address that is shown on the back of the title page of this report).

Blank Samples

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

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

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

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

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

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

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

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

Reference Samples

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

Replicate Samples

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

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

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

Split sample—A type of replicate sample in which a sample is split into subsamples, each subsample contemporaneous in time and space.

Spike Samples

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

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Generally, only ground-water level data from selected wells with continuous record from a basic network of observation wells are published in this report. This basic network contains observation wells located so that the most significant data are obtained from the fewest wells in the most important aquifers.

Site Identification Numbers

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is produced for local needs. (See NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES in this report for a detailed explanation).

Data Collection and Computation

Measurements are made in many types of wells, under varying conditions of access and at different temperatures; hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Most methods for collecting and analyzing water samples are described in the TWRI's referred to in the On-site Measurements and Sample Collection and the Laboratory Measurements sections in this report. In addition, TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground-water samples for selected unstable constituents. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRI's Book 1, Chapter D2; Book 3, Chapters A1, A3, and A4; and Book 9, Chapters A1 through A9. The TWRI publications may be accessed from <http://water.usgs.gov/pubs/twri/>. The values in this report represent water-quality conditions at the time of sampling, as much as possible, and that are consistent with available sampling techniques and methods of analysis. These methods are consistent with ASTM standards and generally follow ISO standards. Trained personnel collected all samples. Most of the wells sampled were pumped long enough to ensure 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. Wells that have very long open intervals (generally 20 ft or greater), were sampled using a down hole sampling device that collects a water sample from the bottom of the well.

Water-level measurements in this report are given in feet with reference to land-surface datum, elevation described in feet above or below National Geodetic Vertical Datum of 1929 (NGVD 29), unless otherwise noted. The elevation of the land-surface datum (lsd) above sea level is also given in the well description. Land-surface datum is a datum plane that is approximately at land surface at each well. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (EOM).

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 of water of several hundred feet, the error in 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 hundredth or 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 only to a tenth of a foot or a larger unit.

Accuracy of Ground-Water Level Data

A number of factors affect the accuracy of the ground-water level data published in this report. These factors can be logically separated into those that are related to ground-water level measurement methods (Method-Related Factors) and those that are independent of the methods.

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Method-Independent Factors

Water levels are determined using a specific measuring point (MP) at each well. The elevation of this point for most wells published in this report was determined relative to the National Geodetic Vertical Datum of 1929 (NGVD 1929). Scientific advances in determining vertical elevations have caused the development of the North American Vertical Datum of 1988 (NAVD 1988). The National Geodetic Survey (NGS) has completed an extensive releveling effort that provides elevations referenced to NAVD 1988. The U.S. Geological Survey is currently considering how best to utilize the newer NAVD 1988 and yet maintain the continuity of data in south Florida.

Some stations in this report have been surveyed using a benchmark elevation surveyed in NAVD 1988. In an attempt to publish the elevation of each station within the hydrologic monitoring network in the same datum plane, the elevation of the NAVD 1988 benchmark was converted using the VERTCON or CORPSCON software of the National Geodetic Survey to provide a reference elevation in NGVD 1929. The NGVD 1929 datum determined using VERTCON or CORPSCON is known to differ from the historic NGVD 1929 elevation datum (historic NGVD). Hydrologic model development for some sites has required publication of data in the NAVD 1988 datum. The datum of each station is clearly defined in the DATUM or GAGE section of each station manuscript.

Water levels in wells open to highly transmissive aquifers may be affected by barometric pressure. The water-level data in this publication have not been adjusted for barometric pressure effects. Water levels may also be affected by density differences. For example highly saline water has a greater density than fresh water. Water levels have not been adjusted for density effects.

Method-Related Factors

Water-level data are collected using a number of different methods. Each method has inherent factors that affect the accuracy of measured water levels.

STEEL TAPE AND CHALK -- This generally is the most accurate method of measuring the elevation difference between a reference point and the water level in a ground-water well. When the water level is measured using this method, at least two separate measurements are performed. These measurements must agree to within 0.02 ft before the average value is recorded. The precision of this method, is ± 0.02 ft.

PRESSURE GAGE -- Wells under artesian pressure are monitored using a mechanical pressure gage. These pressure gages are graduated to 0.2 ft. Gages are periodically checked using a pressure manifold to compare gage readings over a range of known pressures. Corrections are applied to the gage readings based on these checks. The reported value is estimated to the nearest tenth of a foot. The precision of this method should be considered to be about ± 0.1 ft.

FLOAT AND RECORDER -- The accuracy of data recorded using this method is affected by friction within the recorder system as well as friction between the float and the well casing. In large-diameter wells (6 in. or greater), where large floats are used, these effects are minimal; however in small-diameter wells (2 to 6 in.) these effects can be substantial. Friction might significantly affect the data where water-surface fluctuations are very small. Every effort has been made to reduce frictional effects to a minimum.

The accuracy of this method may also be affected by slippage of the float tape or wire, leaks in the float, or biological factors (for example, amphibians crawling on the float). The accuracy of the recorder reading is periodically verified using steel tape and chalk measurements. When the difference between these tape measurements and the recorded value is 0.05 ft or greater, the recorder is reset and a gage-height correction is applied to the data. Uncertainty in water levels for wells verified by steel tape measurements is generally no greater than ± 0.05 ft.

PRESSURE TRANSDUCER AND RECORDER -- In wells where artesian pressure, frictional effects, or an extensive range in water levels have made float and recorder systems infeasible, pressure transducers have been installed. Transducers are selected that meet or exceed the float and recorder system accuracy. Water levels may be verified using either steel tape or pressure gage measurements. Uncertainty in those verified by steel-tape measurements is generally considered to be no greater than ± 0.05 ft and uncertainty for those verified using pressure gage readings is generally considered to be about ± 0.1 ft.

The type of method used to collect water-level data is identified in the INSTRUMENTATION section of each station manuscript.

Data Presentation

Water-level data are presented in alphabetical order by county. The primary identification number for a given well is the 15-digit site identification number that appears in the upper left corner of the table. The secondary identification number is the local or county well number. Well locations are shown in figures for each county, each well is identified on the map by an index number that is cross-referenced to its identification number in a location key preceding the map.

Each well record consists of three parts: the well description, the data table of water levels observed during the water year, and, for most wells, a hydrograph following the data table. Well descriptions are presented in the headings preceding the tabular data.

The following comments clarify information presented in these various headings.

LOCATION.—This paragraph follows the well-identification number and reports the hydrologic-unit number and a geographic point of reference. Latitudes and longitudes used in this report are reported as North American Datum of 1927 unless otherwise specified.

AQUIFER.—This entry designates by name and geologic age the aquifer that the well taps.

WELL CHARACTERISTICS.—This entry describes the well in terms of depth, casing diameter and depth or screened interval, method of construction, use, and 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 continuous, monthly, or some other frequency of measurement.

DATUM.—This entry describes the measuring point. The measuring point is described physically (such as top of casing, top of instrument shelf, and so forth).

LAND-SURFACE DATUM.—This is a new section started for water year 2003, to document land-surface datum. The elevation of the land-surface datum is described in feet above National Geodetic Vertical Datum of 1929 (NGVD 29), unless otherwise noted; it is reported with a precision depending on the method of determination.

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REMARKS.—This entry describes factors that may influence the water level in a well or the measurement of the water level, when various methods of measurement were begun, and the network (climatic, terrane, local, or areal effects) or the special project to which the well belongs.

PERIOD OF RECORD.—This entry indicates the time period for which records are published for the well, the month and year at the start of publication of water-level records by the USGS, and the words “to current year” if the records are to be continued into the following year. Time periods for which water-level records are available, but are not published by the USGS, may be noted.

EXTREMES FOR PERIOD OF RECORD.—This entry contains the highest and lowest instantaneously recorded or measured water levels of the period of published record, with respect to land-surface datum or sea level, and the dates of occurrence.

Water-Level Tables

A table of water levels follows the well description for each well. Water-level measurements in this report are given in feet with reference to either sea level or land-surface datum (lstd). Missing records are indicated by dashes in place of the water-level value.

For wells not equipped with recorders, water-level measurements were obtained periodically by steel or electric tape or pressure gage. Tables of periodic water-level measurements in these wells show the date of measurement and the measured water-level value.

Hydrographs

Hydrographs are a graphic display of water-level fluctuations over a period of time. In this report, current water year and, when appropriate, period-of-record hydrographs are shown. Hydrographs that display periodic water-level measurements show points that may be connected with a dashed line from one measurement to the next. Hydrographs that display recorder data show a solid line representing the mean water level recorded for each day. Missing data are indicated by a blank space or break in a hydrograph. Missing data may occur as a result of recorder malfunctions, battery failures, or mechanical problems related to the response of the recorder's float mechanism to water-level fluctuations in a well.

RECORDS OF BULK ELECTRICAL CONDUCTIVITY

Bulk electrical conductivity is the combined electrical conductivity of all material (including pore water) within an approximately 8- to 40-inch doughnut-shaped area surrounding an electromagnetic induction probe (McNeill and others, 1990). Bulk electrical conductivity is affected by different physical and chemical properties of the material including the dissolved-solids concentration of the pore water, and the lithology and porosity of the rock. Polyvinyl chloride (PVC) casings do not interfere with these measurements; however, for those wells where a steel or galvanized iron casing extends part way down the well, the probe cannot sense the materials outside of the casing. As the probe is lowered down the well and out of the influence of a metallic casing, a spike is usually created in the data. Metal well centralizers can also affect the data collected and can cause very large spikes in the data at the depths where the centralizers are installed. These spikes are much different than the changes in bulk electromagnetic conductivity caused by natural lithologic or pore water variations and as such are readily recognizable. As the probe passes through different layers of rock, the different physical properties will cause variation in the recorded conductivity values. A clean sand or sandstone will generally produce lower conductivity values than clay or mudstone. Although the properties of the rocks or well construction will remain constant from year to year, those of the pore water may change due to saltwater intrusion. Conductivity values from freshwater-saturated rocks typically are less than 25 mS/m, whereas conductivity values from saltwater-saturated rocks are typically greater than 67 mS/m (Hittle, 1999). Therefore, electromagnetic induction logging can be used to assess increases or decreases in the conductivity of pore waters caused by movement of the saltwater interface.

Data Collection and Computation

Measurements generally are made during the period of lowest aquifer water levels, in April of each year. However, some wells may have additional logs. During periods of decreased water levels, saltwater intrusion into a freshwater aquifer is likely to be at a maximum. In wells where saltwater is detectable, the graphic representation of data from successive years will show any vertical movement of the saltwater-freshwater interface. Measuring this vertical movement of the interface is the primary use of the bulk electrical conductivity logs published in this report. Upward movement of the interface between freshwater and saltwater in a monitoring well indicates that saltwater intrusion is increasing in that area. Downward movement of the interface indicates recession of the saltwater front near the monitoring well.

In the bulk electrical conductivity graphs of some of the wells logged for this report, the interface position can be seen as the point where low values of conductivity increase suddenly to values generally above 67 mS/m (usually near the bottom of the well). However, the interface position is not as apparent in other wells, and in some, there is no interface. Some locations have been identified where saltwater contamination of the aquifer is occurring above the base of the aquifer as a result of seepage of saline from canals. The bulk electrical conductivity logs detect the changes in fluid conductivity that occur as a result of this seepage.

In wells selected for electromagnetic induction logging, a water sample may be collected and analyzed as a check of the level of salinity. Because bulk electrical conductivity is a function of fluid conductivity, lithology, and porosity, the relationship between the electromagnetic induction logs and the chloride samples may not be as obvious as is the general relationship between fluid conductivity and chloride concentrations. If the rock is not very porous, then the change in bulk electrical conductivity caused by changes in the salinity of the pore water may be smaller than might be expected. Nonetheless, the long-term changes in the bulk electrical conductivity logs are sufficient to assess upward or downward movement of the interface. To aid in interpretation of the bulk electrical conductivity logs, the chloride concentration is shown on the graph of bulk electrical conductivity if water samples have been collected.

The instrument used to collect data for this report is calibrated prior to each field session. The calibration procedure establishes a mathematical constant (calibration factor) that is used to convert raw instrument readings in counts per second (cps) into values of bulk electrical conductivity in millisiemens per meter (mS/m). When data were graphed for the 2000 annual water resources data report, offsets and amplitude differentials occurred in the calibrated values of bulk electrical conductivity for each well between successive years. Investigation revealed that some of the observed offsets and amplitude differentials were caused by differing calibration factors between years. Most calibration factors differed because of temperature and humidity differences during calibration. The calibration procedures adopted during the 2000 water year were designed to minimize the influence of variable temperature and humidity. Before calibrating, the electromagnetic induction probe was lowered into a well and allowed to equilibrate in the water column. The probe was then removed from the well and the instrument immediately calibrated.

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Factors other than variable temperature and humidity also have caused offsets and amplitude differentials. One such example occurred with data collected for the 2000 water year. Prior to logging for the 2000 water year, the instrument firmware and software was updated. After logging, it was found that the data had been truncated at the decimal point. Errors in calibration have also been identified and corrected (see Accuracy of Bulk Electrical Conductivity).

Accuracy of Bulk Electrical Conductivity

There are two components that affect the quality of the electromagnetic induction logs published in this report: (1) vertical or depth accuracy, and (2) accuracy and precision of measured bulk electrical conductivity. Vertical accuracy, which affects the determined interface position, is the most critical factor in this monitoring effort. A quality control program sets the velocity of the probe at 12 ft/min (feet per minute) while logging. Before logging begins, a spot on the probe, 3.32 feet above the sensing head, is aligned with the measuring point of the well. Where possible, the data recorded as the probe was moved up the well were used to produce the graphs for this report. Depth values from successive water years were adjusted, if needed, to coincide at one or more specific conductivity peak recorded from an upper part of the well. Depth values were interpolated to the nearest tenth of a foot. The precision of depth determinations using this reporting method should be considered to be about ± 0.1 foot.

The accuracy and precision of measured bulk electrical conductivity are a function of both the inherent accuracy of the electromagnetic induction probe and its calibration. The inherent precision of the probe is considered by the manufacturer to be ± 5 percent of the full scale. For the logs collected, the electromagnetic induction probe was set to a full scale of 1,000 mS/m. This translates into a precision of ± 50 mS/m at full scale. Analysis indicated that the offsets caused by the effects of temperature and humidity on calibration were generally within this range.

In the 1998 water year and for all water years after 2001, the electromagnetic induction probe was calibrated using standards of 0 and 345 mS/m. There are a number of monitoring wells where the measured bulk electrical conductivity exceeds 345 mS/m. For these wells, a calibration standard of 345 mS/m was still used. This is because the probe would have to be set to a full scale of 10,000 mS/m in order to be calibrated using the next available standard (1,301 mS/m). This value would greatly exceed the normal range in bulk electrical conductivity expected. The 345 mS/m calibration constant was also considered to be acceptable because within the range 0 to 1,000 mS/m, the response of the probe is considered to be linear; therefore calibrating the probe to this standard should not significantly reduce accuracy.

In the water years prior to 2002 (excluding 1998), the electromagnetic induction probe generally was calibrated using a 1,301 mS/m standard even though the full scale of the probe was 1,000 mS/m. This caused a calibration error in the data collected. To correct this error, a multiplier of 0.7686 was applied to all of the affected data.

Accuracy of data collected during the 2000 water year may have been affected by the firmware or software update in December 1999. The data collected using this new software and firmware was considerably offset relative to previous electromagnetic induction logs. In addition, the final values were truncated at the decimal point, whereas those collected prior to the update were recorded to the thousandths decimal place. These final values are the result of a multiplication of the raw data from the instrument and a calibration factor. It is unknown whether or not the raw values were truncated at the decimal point. If so, the resulting error could be on the order of 5 mS/m too low. Because the offset data from the 2000 water year are often 5 mS/m lower than the data from other years, truncation of the raw data probably is the explanation.

Data Presentation

Records of conductivity are published individually on the page immediately following the well manuscript. Data for conductivity are identified by well number. Each record consists of a single graph representing conductivity, a lithologic log, and a brief explanation.

RECORDS OF GROUND-WATER QUALITY

Records of ground-water quality in this report differ from other types of records in that, for the salinity network sites, they consist of a limited set of measurements for the water year. The quality of ground water ordinarily changes slowly; therefore, for most general purposes, a small number of samples except for a few samples taken seasonally 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 saltwater intrusion. 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 ground-water-quality data in this report were obtained mostly as a part of the Florida Integrated Science Center, Center for Water and Restoration Studies salinity network or as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some wells within a county but not 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 National Field Manual for the collection of Water-Quality Data and the "Laboratory Measurements" sections in this data report and are also described in the TWRI, which may be accessed from <http://water.usgs.gov/pubs/twri/>. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRI, Book 1, Chapter D2; Book 5, Chapters A1, A3, and A4 and Book 9, Chapters A1-A6. Also, detailed information on collecting, treating, and shipping samples may be obtained from the FISC-WRS office. (See address that is shown on the back of the title page of this report.)

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. These methods are consistent with ASTM standards and generally follow ISO standards. All samples were obtained by trained personnel. The wells sampled were pumped long enough to assure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

Laboratory Measurements

Analysis for sulfide and measurement of alkalinity, pH, water temperature, specific conductance, and dissolved oxygen are performed on site. All other sample analyses are performed at the USGS laboratory in Lakewood, Colorado, unless otherwise noted. Methods used by the USGS laboratory are given in TWRI, Book 1, Chapter D2; and Book 5, Chapters A1, A3, and A4, which may be accessed from <http://water.usgs.gov/pubs/twri/>.

VOLUME 2A: SOUTH FLORIDA**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.

ACCESS TO USGS WATER DATA

The USGS provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry and historic daily mean and peak-flow discharge data for most current or discontinued gaging stations through the World Wide Web (WWW). These data may be accessed from <http://water.usgs.gov>.

Water-quality data and ground-water data also are available through the WWW. In addition, data can be provided in various machine-readable formats on various media. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each Water Discipline Office (See address that is shown on the back of the title page of this report.)

DEFINITION OF TERMS

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, may be accessed from http://water.usgs.gov/ADR_Defs_2004.pdf. Terms such as algae, water level, and precipitation are used in their common everyday meanings, definitions of which are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting English units to International System (SI) Units. Other glossaries that also define water-related terms are accessible from <http://water.usgs.gov/glossaries.html>.

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SELECTED REFERENCES

- American Public Health Association, and others, 1965, Standard methods for the examination of water and waste-water, 12th edition: American Public Health Association, New York, 769 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.
- Hittle, Clinton, D., 1999, Delineation of saltwater intrusion in the Surficial Aquifer System in eastern Palm Beach, Martin, and St. Lucie counties, Florida, 1997-1998: U.S. Geological Survey Water-Resources Investigations Report 99-4214, Sheet in pocket.
- 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.
- McNeill, J.D., Bosnar, M., and Snelgrove, F.B., 1990, Resolution of an electronic borehole conductivity logger for geotechnical and ground water applications, Technical note TN-25: Geonics Limited, Mississauga, Ontario, Canada, 28 p.
- National Climatic Data Center, National Oceanic and Atmospheric Administration, 2005, U.S. Weekly climate monitoring, weekly products: Available from World Wide Web <<http://www.ncdc.noaa.gov/oa/climate/severeweather/rainfall.html>> (accessed February 16, 2005).
- 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.
- Prinos, S.T., Lietz, A.C., and Irvin, R.B., 2002, Design of a Real-Time Ground-Water Level Monitoring Network and Portrayal of Hydrologic Data in Southern Florida. U.S. Geological Survey Water-Resources Investigations Report 01-4275, 108 p.
- Rose, Arthur and Elizabeth, 1966, The condensed chemical dictionary: Reinhold Publishing Corporation, New York, 7th ed., 285 p.
- South Florida Water Management District, 2004, District wide rainfall maps: Available from the World Wide Web <<http://www.sfwmd.gov/curre/rainmaps/rainfall.html>> (accessed February 16, 2005).
- 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.
- 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.

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STAGE, DISCHARGE, AND WATER QUALITY OF STREAMS

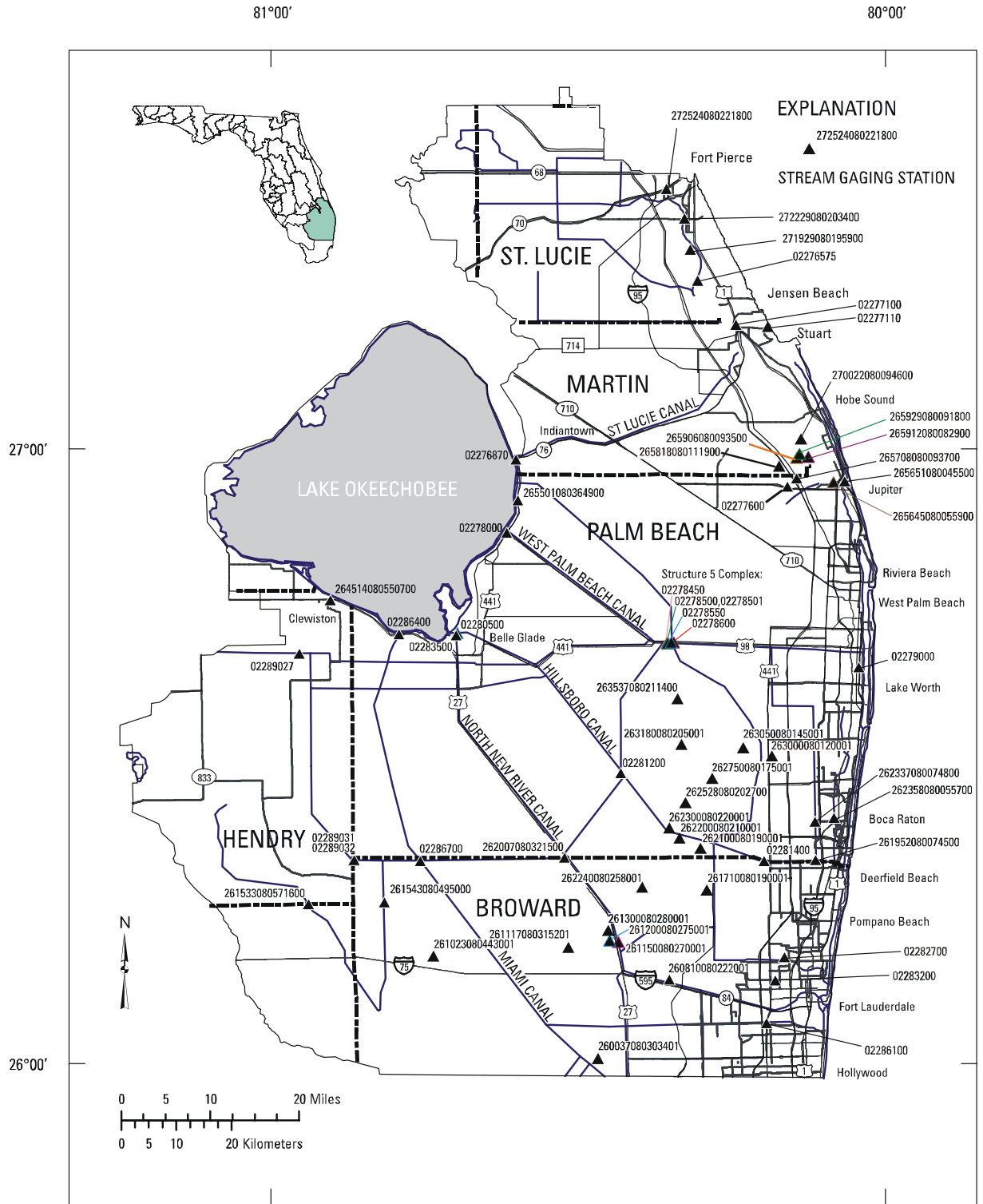


Figure 17. Location of gaging stations in the portion of the Everglades and the southeastern coastal area north of latitude 26 degrees.

272524080221800 FIVE MILE CANAL ABOVE S-29-1-4 NEAR FT. PIERCE, FL

LOCATION.--Lat 27°25'24", long 80°22'18", in SE 1/4 NE 1/4 sec.19, T.35 S., R.40 E., St. Lucie County, Hydrologic Unit 03090202, on west bank of Five Mile Canal above structure S-29-1-4, 2.2 mi east of U.S. Interstate 95.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 2002 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Datum of gage is National Geodetic Vertical Datum of 1929 (from engineering as-built drawings for structure S-29-1-4).

REMARKS.--Records poor. Flow regulated by vertical lift gates at structure S-29-1-4 located 250 feet downstream of station and agricultural pumping. Discharge computed from relations between stage vs. area and index velocity vs. mean channel velocity.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 1 complete water year of discharge (2004).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 15.28 ft Sept. 26, 2004; minimum, 2.98 ft Oct. 22, 23, 2003.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 15.28 ft Sept. 26; minimum, 2.98 ft Oct. 22, 23.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	9.43	9.90	---	---	---	9.25	9.43	6.59	6.39	4.23
2	---	---	9.39	10.06	9.68	---	9.32	9.54	9.43	7.11	6.40	4.56
3	---	---	9.39	9.98	9.64	---	9.29	9.46	9.45	7.17	6.69	4.08
4	---	---	9.40	9.64	9.56	9.59	9.43	9.48	9.79	7.27	6.89	4.73
5	---	---	9.44	9.71	9.63	9.41	9.49	9.22	10.05	6.72	---	6.40
6	---	---	9.46	9.73	9.53	9.32	9.56	9.27	9.77	6.60	7.38	6.73
7	---	---	---	---	9.60	9.36	---	9.28	9.46	5.01	6.78	---
8	---	---	---	---	9.51	9.32	---	9.33	9.58	3.08	---	5.15
9	---	---	9.59	9.76	9.59	9.43	9.68	9.33	9.79	4.01	6.90	3.87
10	---	---	10.07	---	9.54	9.30	9.73	9.40	8.61	6.00	10.93	4.08
11	---	---	9.95	---	9.60	9.47	9.58	9.46	6.93	6.29	8.95	4.41
12	---	---	9.67	---	9.60	9.51	9.34	9.18	6.21	8.27	6.96	4.54
13	---	---	9.92	9.72	9.54	9.45	9.47	9.03	6.46	9.18	4.71	4.44
14	---	---	---	---	9.50	9.39	9.30	9.07	6.54	8.53	6.26	4.16
15	---	---	---	9.73	9.44	9.45	9.37	9.20	6.46	8.45	6.58	3.71
16	---	---	---	9.72	9.49	9.60	9.67	9.28	6.42	8.49	5.55	3.45
17	---	---	---	9.63	9.62	10.16	9.54	9.24	6.41	7.69	5.40	---
18	---	---	9.62	9.54	9.60	10.02	9.56	9.34	---	6.50	6.69	3.63
19	---	---	9.46	9.51	9.58	10.02	9.51	9.32	6.49	6.32	9.10	---
20	---	---	9.60	9.55	9.59	9.85	9.53	9.41	6.56	6.34	9.31	3.37
21	---	---	9.70	9.62	9.73	9.78	9.39	9.42	7.43	6.43	7.60	3.30
22	---	---	9.65	9.76	9.67	9.72	9.34	9.45	9.00	6.38	5.07	3.26
23	---	---	9.60	9.61	9.70	9.72	9.41	9.49	7.83	6.66	6.07	3.24
24	---	---	9.59	9.59	9.22	9.73	9.42	9.52	6.99	6.63	7.57	3.22
25	---	---	10.14	9.55	8.71	9.96	9.32	9.64	6.41	8.59	6.14	3.28
26	---	---	9.91	9.60	---	10.21	9.81	9.55	6.35	8.97	4.71	3.70
27	---	9.42	9.78	---	---	9.93	9.74	9.69	6.62	7.03	4.40	4.56
28	---	9.47	9.66	---	---	9.74	9.50	9.73	6.69	6.15	4.81	6.15
29	---	---	9.60	9.61	---	---	---	9.71	6.96	6.24	4.81	6.72
30	---	9.42	9.53	9.58	---	---	9.07	9.14	6.66	6.48	4.17	7.21
31	---	---	9.52	---	---	---	---	9.48	---	6.58	4.08	---
TOTAL	---	---	---	---	---	---	---	290.91	---	211.76	---	---
MEAN	---	---	---	---	---	---	---	9.38	---	6.83	---	---
MAX	---	---	---	---	---	---	---	9.73	---	9.18	---	---
MIN	---	---	---	---	---	---	---	9.03	---	3.08	---	---

EVERGLADES AND SOUTHEASTERN COASTAL AREA

272524080221800 FIVE MILE CANAL ABOVE S-29-1-4 NEAR FT. PIERCE, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	47	e14	---	e24	8.4	4.4	34	18	24
2	---	---	---	72	21	---	2.4	14	6.3	67	18	29
3	---	---	---	62	16	---	-1.4	6.7	6.2	68	33	25
4	---	---	---	16	13	12	3.8	8.9	40	71	46	37
5	---	---	e1.5	23	16	5.2	2.9	2.7	70	40	e47	74
6	---	---	e3.1	26	13	1.7	7.9	4.6	29	34	80	84
7	---	---	e0.02	e24	15	3.2	e1.9	2.3	8.2	---	73	e82
8	---	---	e3.4	e25	7.0	0.96	e6.3	6.8	11	---	e50	38
9	---	---	e9.0	28	10	2.6	14	4.4	29	3.3	114	15
10	---	---	e57	e28	11	3.2	21	4.2	66	6.2	331	20
11	---	---	e54	e29	14	7.9	13	10	25	4.3	180	29
12	---	---	e26	e21	17	6.6	2.7	5.1	6.4	8.6	94	30
13	---	---	34	23	13	4.3	5.3	5.9	13	18	34	29
14	---	---	e45	e26	8.8	2.0	1.7	4.8	17	26	73	24
15	---	---	e36	25	7.4	5.8	3.4	8.4	12	29	76	15
16	---	---	e30	26	10	11	16	4.9	13	17	51	11
17	---	---	e21	17	18	50	4.4	3.3	12	39	47	e13
18	---	---	11	8.6	9.4	46	6.2	3.2	e11	28	112	13
19	---	---	5.3	6.4	8.2	43	2.9	3.0	13	17	213	e9.7
20	---	---	13	9.3	8.2	28	5.0	5.8	16	18	215	9.4
21	---	---	13	16	23	19	2.9	7.3	57	22	128	8.9
22	---	---	14	32	18	15	-0.78	5.5	159	18	42	8.6
23	---	---	13	13	19	16	1.4	7.6	104	34	104	7.6
24	---	---	12	13	6.5	17	1.9	7.5	56	32	131	7.1
25	---	---	89	10	0.53	22	4.5	14	27	145	71	7.7
26	---	---	49	14	e1.2	55	42	10	20	175	35	12
27	---	---	32	e7.3	e1.3	31	25	16	33	82	33	28
28	---	---	13	e15	e0.87	15	5.3	18	38	32	39	59
29	---	---	11	14	---	e11	e3.1	121	57	15	37	74
30	---	---	10	10	---	---	16	38	38	27	26	96
31	---	---	9.3	e8.9	---	---	---	8.9	---	30	24	---
TOTAL	---	---	---	695.5	320.40	---	244.72	371.2	997.5	---	2,575	920.0
MEAN	---	---	---	22.4	11.4	---	8.16	12.0	33.2	---	83.1	30.7
MAX	---	---	---	72	23	---	42	121	159	---	331	96
MIN	---	---	---	6.4	0.53	---	-1.4	2.3	4.4	---	18	7.1
AC-FT	---	---	---	1,380	636	---	485	736	1,980	---	5,110	1,820

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2003, BY WATER YEAR (WY)

MEAN	---	---	---	22.4	11.4	---	8.16	12.0	33.2	---	83.1	30.7
MAX	---	---	---	22.4	11.4	---	8.16	12.0	33.2	---	83.1	30.7
(WY)	---	---	---	(2003)	(2003)	---	(2003)	(2003)	(2003)	---	(2003)	(2003)
MIN	---	---	---	22.4	11.4	---	8.16	12.0	33.2	---	83.1	30.7
(WY)	---	---	---	(2003)	(2003)	---	(2003)	(2003)	(2003)	---	(2003)	(2003)

e Estimated

272524080221800 FIVE MILE CANAL ABOVE S-29-1-4 NEAR FT. PIERCE, FL-Continued

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.73	5.90	5.95	5.92	6.81	5.96	5.88	5.88	5.88	5.91	5.88	5.14
2	3.84	5.92	5.94	5.90	6.93	6.00	5.87	5.88	5.84	5.91	6.03	4.51
3	3.74	6.27	5.94	5.88	6.52	6.03	5.88	5.88	5.84	5.91	5.98	4.40
4	3.62	6.72	5.93	5.88	6.41	5.98	5.88	5.88	5.84	5.91	6.09	6.38
5	3.47	7.22	5.94	5.88	6.20	5.97	5.88	5.87	5.86	5.91	6.36	13.80
6	3.33	7.63	5.94	5.88	6.34	5.97	---	---	5.86	5.91	6.11	14.27
7	3.24	6.91	5.94	5.88	6.44	5.98	5.88	5.87	5.85	5.91	6.33	12.65
8	3.19	6.71	5.93	5.88	6.27	---	5.87	5.86	5.92	5.91	6.53	11.07
9	3.17	6.84	5.93	5.88	6.23	6.10	5.87	5.86	5.88	5.91	6.24	9.96
10	3.18	6.75	5.93	5.89	6.23	6.04	5.87	---	5.86	5.90	6.37	9.17
11	3.39	6.51	5.93	5.88	5.72	6.03	5.87	---	5.94	5.89	6.60	8.62
12	3.46	6.17	5.92	5.87	6.27	6.02	6.79	5.86	5.97	5.91	6.38	7.98
13	3.42	5.98	5.93	5.88	6.30	6.00	6.76	5.88	5.88	5.91	4.82	7.15
14	3.28	6.08	6.03	5.88	6.24	5.99	5.95	5.87	5.87	5.90	4.36	5.53
15	3.16	5.96	6.15	5.89	6.28	5.96	5.94	5.87	5.86	5.90	4.97	5.12
16	3.07	5.95	6.32	5.91	6.19	5.95	5.88	5.88	5.86	---	5.37	4.81
17	3.04	6.01	6.16	5.92	5.91	6.01	5.87	5.87	5.86	6.10	5.43	4.82
18	3.03	6.06	6.08	6.16	5.90	5.96	5.87	5.86	5.86	5.90	6.38	4.94
19	3.03	6.05	6.02	6.42	5.90	5.91	5.87	5.88	5.87	5.92	6.17	4.75
20	3.68	6.05	5.98	6.34	5.90	5.90	5.87	5.87	5.96	5.95	6.37	6.66
21	3.32	5.99	5.94	6.11	5.90	5.90	5.87	5.87	5.90	5.91	6.39	13.70
22	3.00	5.97	5.97	6.01	5.89	5.90	5.87	5.87	5.94	5.88	6.54	12.26
23	3.86	5.95	6.10	5.96	5.90	5.89	5.86	5.86	5.91	5.87	6.79	10.52
24	5.85	5.94	6.03	5.93	6.06	5.89	5.86	5.86	5.90	5.88	7.64	9.01
25	5.90	5.93	5.97	5.92	7.30	5.88	5.86	5.86	5.90	5.88	7.52	7.80
26	---	5.93	5.94	5.90	7.64	5.90	5.86	5.86	5.90	5.90	7.50	14.93
27	6.22	5.92	5.94	5.91	6.58	5.89	5.89	5.85	5.90	5.90	7.21	13.95
28	6.07	5.93	5.95	5.92	6.00	5.89	5.89	5.84	5.90	5.90	6.86	12.08
29	---	5.95	5.98	5.91	5.97	5.89	5.87	5.84	5.90	5.89	6.81	10.75
30	5.91	5.95	5.97	5.91	---	5.88	5.87	5.84	5.90	---	7.07	9.96
31	5.90	---	5.92	6.01	---	5.89	---	5.84	---	5.89	6.70	---
TOTAL	---	187.15	185.60	184.51	182.23	---	---	---	176.61	---	195.80	266.69
MEAN	---	6.24	5.99	5.95	6.28	---	---	---	5.89	---	6.32	8.89
MAX	---	7.63	6.32	6.42	7.64	---	---	---	5.97	---	7.64	14.93
MIN	---	5.90	5.92	5.87	5.72	---	---	---	5.84	---	4.36	4.40

272524080221800 FIVE MILE CANAL ABOVE S-29-1-4 NEAR FT. PIERCE, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	2.5	2.8	5.5	51	5.9	3.6	2.2	1.4	-1.7	5.6	54
2	15	5.1	3.2	3.5	58	5.8	3.1	2.8	-2.3	2.7	10	43
3	14	16	3.6	5.7	32	7.7	3.5	-0.52	-1.3	-2.8	-0.88	40
4	12	45	3.9	4.9	25	7.1	3.9	2.9	3.7	3.0	-0.83	94
5	11	78	4.5	4.2	14	6.0	2.7	2.9	-0.53	0.30	12	348
6	10	101	1.6	2.7	24	4.6	e3.0	e3.7	2.5	-1.1	3.6	444
7	8.9	54	3.8	1.6	26	5.2	4.8	1.8	2.8	0.42	17	376
8	8.3	40	3.6	3.0	17	e6.3	2.6	-0.13	0.12	-1.5	21	281
9	8.0	50	3.7	3.1	15	9.5	4.5	3.3	1.1	2.3	9.9	231
10	e8.3	45	3.8	2.5	15	7.0	2.3	e2.7	5.0	-5.4	13	204
11	e10	28	2.2	1.5	9.4	7.1	3.7	e0.63	-0.54	4.2	19	190
12	11	11	4.2	1.4	20	7.6	63	0.07	2.7	8.1	25	170
13	11	6.2	3.4	2.4	18	6.6	52	1.4	-0.33	-0.51	26	133
14	10	8.5	7.6	2.3	17	7.9	4.7	-1.5	-1.1	-0.70	26	70
15	8.3	4.8	11	2.6	18	6.0	4.8	0.38	3.4	1.0	29	62
16	6.5	5.3	17	2.8	12	5.6	3.3	-0.83	-0.36	e0.53	30	57
17	6.0	7.4	11	5.0	4.2	7.9	1.8	-2.2	0.14	6.9	32	58
18	5.6	8.8	7.6	14	2.7	6.0	2.3	1.4	0.99	0.98	36	61
19	5.7	6.7	4.9	27	2.9	3.8	2.1	1.3	2.2	3.3	32	57
20	14	5.2	5.1	22	2.4	2.4	3.2	-0.43	0.19	0.02	20	116
21	10	4.9	4.0	11	2.5	2.9	3.0	2.2	-1.6	-1.4	26	380
22	5.3	4.8	5.3	6.8	2.6	3.9	2.7	-0.41	0.92	0.88	38	330
23	2.1	5.9	11	4.5	4.8	3.4	2.2	0.22	-1.2	0.51	43	241
24	4.0	4.4	8.0	4.3	8.7	2.9	3.1	0.16	-4.5	3.6	56	189
25	5.9	4.9	5.2	4.7	100	3.6	2.4	1.9	2.2	-0.94	47	141
26	e4.4	5.0	5.2	3.3	119	4.3	3.5	-1.9	-2.1	-1.0	43	390
27	20	4.7	4.4	3.9	38	4.3	2.9	1.8	-0.57	0.28	43	421
28	10	3.6	5.5	3.3	5.9	4.4	1.2	-2.2	3.6	3.1	30	347
29	e4.8	1.8	6.0	5.7	5.7	3.8	0.48	1.7	-3.0	1.2	29	269
30	3.5	3.8	5.9	4.2	---	3.8	1.1	1.2	-0.98	e0.42	36	222
31	3.6	---	5.1	7.2	---	3.9	---	0.45	---	3.6	72	---
TOTAL	309.2	572.3	174.1	176.6	670.8	167.2	197.48	26.99	12.55	30.29	828.39	6,019
MEAN	9.97	19.1	5.62	5.70	23.1	5.39	6.58	0.87	0.42	0.98	26.7	201
MAX	52	101	17	27	119	9.5	63	3.7	5.0	8.1	72	444
MIN	2.1	1.8	1.6	1.4	2.4	2.4	0.48	-2.2	-4.5	-5.4	-0.88	40
AC-FT	613	1,140	345	350	1,330	332	392	54	25	60	1,640	11,940

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2004, BY WATER YEAR (WY)

	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004
MEAN	9.97	19.1	5.62	14.1	17.4	5.39	7.37	6.42	16.8	0.98	54.9	116
MAX	9.97	19.1	5.62	22.4	23.1	5.39	8.16	12.0	33.2	0.98	83.1	201
(WY)	(2004)	(2004)	(2004)	(2003)	(2004)	(2004)	(2003)	(2003)	(2003)	(2004)	(2003)	(2004)
MIN	9.97	19.1	5.62	5.70	11.4	5.39	6.58	0.87	0.42	0.98	26.7	30.7
(WY)	(2004)	(2004)	(2004)	(2004)	(2003)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)

SUMMARY STATISTICS

ANNUAL TOTAL
ANNUAL MEAN
HIGHEST ANNUAL MEAN
LOWEST ANNUAL MEAN
HIGHEST DAILY MEAN
LOWEST DAILY MEAN
ANNUAL SEVEN-DAY MINIMUM
ANNUAL RUNOFF (AC-FT)
10 PERCENT EXCEEDS
50 PERCENT EXCEEDS
90 PERCENT EXCEEDS

FOR 2004 WATER YEAR

9,184.90
25.1
444 Sep 6
-5.4 Jul 10
-0.98 Jun 21
18,220
54
4.7
0.05

WATER YEARS 2003 - 2004

25.1
25.1 2004
25.1 2004
444 Sep 6, 2004
-5.4 Jul 10, 2004
-0.98 Jun 21, 2004
18,180
54
4.7
0.05

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

eEstimated

272229080203400 ST. LUCIE RIVER AT MIDWAY ROAD NEAR PORT ST. LUCIE, FL

LOCATION.--Lat 27°22'28", long 80°20'34", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$, sec.4, T.36 S., R.40 E., St. Lucie County, Hydrologic Unit 03090202, on the St. Lucie River, Port St. Lucie, off of Midway road 1.0 mi west, .5 mi east of 25th Street.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--

GAGE HEIGHT: October 2002 to September 2004. Discontinued.

SALINITY: October 2002 to September 2004. Discontinued.

WATER TEMPERATURE: October 2002 to September 2004. Discontinued.

GAGE.--Satellite data collection platform with water-stage shaft encoder and water-quality monitor. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Maximum and minimum salinity record rated good for the 2003 water year. Maximum and minimum salinity record rated excellent for the 2004 water year except for the period of July 12-20, Aug. 15-17 and Sept. 1-4, when record was rated good. Maximum and minimum temperature rated good for the 2003 water year. Maximum and minimum temperature record rated good for the 2004 water year. Elevation of the salinity-temperature sensor is -3.37 ft NGVD, Oct. 18, 2002.

EXTREMES FOR PERIOD OF RECORD.--

GAGE HEIGHT: Maximum gage height, 6.08 ft Sept. 26, 2004, may have been higher during period of missing record; minimum, -1.12 ft Jan. 6, 2004, may have been lower during of missing record.

SALINITY: Maximum recorded, 1.8 ppt June 8, 2004, may have been higher during period of missing record; minimum recorded, 0.2 ppt, Sept. 21-25, 2004, may have been lower during period of missing record.

WATER TEMPERATURE: Maximum recorded, 31.2°C June 28, 2004, may have been higher during period of missing record; minimum recorded, 11.9°C Jan. 25, 2003, may have been lower during period of missing record.

EXTREMES FOR CURRENT YEAR.--

GAGE HEIGHT: Maximum gage height, 6.08 ft Sept. 26; minimum, -1.12 ft Jan. 6.

SALINITY: Maximum recorded, 1.8 ppt June 8, may have been higher during period of missing record; minimum recorded, 0.2 ppt Sept. 21-25, may have been lower during period of missing record.

WATER TEMPERATURE: Maximum recorded, 31.2°C June 28, may have been higher during period of missing record; minimum recorded, 13.3°C Dec. 21, may have been lower during period of missing record

271929080195900 ST. LUCIE RIVER AT PRIMA VISTA ROAD NEAR PORT ST. LUCIE, FL

LOCATION.--Lat 27°19'23", long 80°19'59", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$, sec.22, T.36 S., R.40 E., St. Lucie County, Hydrologic Unit 03090202, on the St. Lucie River, Port St. Lucie, 0.5 mi west of U.S. Highway 1, 2.9 mi east of Florida Turnpike, 3.4 mi north of Port St. Lucie Boulevard.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--

GAGE HEIGHT: October 2002 to September 2004. Discontinued.

SALINITY: October 2002 to September 2004. Discontinued.

WATER TEMPERATURE: October 2002 to September 2004. Discontinued.

GAGE.--Satellite data collection platform with water-stage shaft encoder and water-quality monitor. Datum of gage is National Geodetic Vertical Datum of 1929 converted through CORPSCON using the NAVD 88 survey levels from a benchmark provided by City of Port St. Lucie.

REMARKS.--Salinity maximum and minimum record rated good for the 2003 water year. Salinity maximum and minimum record rated excellent for the 2004 water year except for the period of Dec. 13-15, June 24, 30 and Sept. 4 when record was missing. Temperature maximum and minimum rated good for the 2003 water year. Temperature maximum and minimum record rated good for the 2004 water year. Elevation of the salinity-temperature sensor is -2.05 ft NGVD, Oct. 30, 2002.

EXTREMES FOR PERIOD OF RECORD.--

GAGE HEIGHT: Maximum gage height, 6.51 ft Sept. 26, 2004, may have been higher during period of missing record; minimum, -1.04 ft Feb. 16, 2003, may have been lower during of missing record.

SALINITY: Maximum recorded, 5.7 ppt Dec. 7, 9, 2002, may have been higher during period of missing record; minimum recorded, 0.1 ppt, Sept. 21, 26, 29, 2004, may have been lower during period of missing record.

WATER TEMPERATURE: Maximum recorded, 33.7°C June 20, 2004, may have been higher during period of missing record; minimum recorded, 12.3°C Jan. 25, 2003, may have been lower during period of missing record.

EXTREMES FOR CURRENT YEAR.--

GAGE HEIGHT: Maximum gage height, 6.51 ft Sept. 26; minimum, -1.03 ft Jan. 6.

SALINITY: Maximum recorded, 5.2 ppt June 16, may have been higher during period of missing record; minimum recorded, 0.1 ppt Sept. 21, 26-29, may have been lower during period of missing record.

WATER TEMPERATURE: Maximum recorded, 33.7°C June 20, may have been higher during period of missing record; minimum recorded, 14.6°C Dec. 21, 22, may have been lower during period of missing record.

02276575 NORTH FORK ST. LUCIE RIVER AT VETERANS PARK NEAR PORT ST. LUCIE, FL

LOCATION.--Lat 27°16'27", long 80°19'16", in NW ¼ SE ¼ NE ¼, sec.10, T.37 S., R.40 E., St. Lucie County, Hydrologic Unit 03090202, on the St. Lucie River, Port St. Lucie, at Veterans Memorial Park, .05 mi south of North Fork of St. Lucie bridge 2.0 mi west of U.S. Highway 1, 2.2 mi east of Florida Turnpike.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--

GAGE HEIGHT: August 1997 to October 2000, September 2002 to September 2004. Discontinued.

SALINITY: August 1997 to October 2000, September 2002 to September 2004. Discontinued.

WATER TEMPERATURE: August 1997 to October 2000, September 2002 to September 2004. Discontinued.

GAGE.--Satellite data collection platform with water-stage shaft encoder and water-quality monitor sensors. Datum of gage is National Geodetic Vertical Datum of 1929 converted through CORPSCON using the NAVD 88 survey levels from a benchmark provided by the City of Port St. Lucie.

REMARKS.--Maximum and minimum salinity record rated good for the 2003 water year. Maximum and minimum salinity record rated excellent for the 2004 water year. Maximum and minimum temperature record rated good for the 2003 water year. Maximum and minimum temperature record rated good for the 2004 water year. Elevation of the salinity-temperature sensor is -1.98 ft NGVD.

EXTREMES FOR PERIOD OF RECORD.--

GAGE HEIGHT: Maximum gage height, 6.07 ft Sept. 26, 2004, may have been higher during period of missing record; minimum, -0.84 ft Apr. 20, 1998, may have been lower during period of missing record.

SALINITY: Maximum recorded, 23.2 ppt Mar. 28, 1999, may have been higher during period of missing record; minimum recorded, 0.0 ppt Sept. 9, 1997, may have been lower during period of missing record.

WATER TEMPERATURE: Maximum recorded, 34.1°C June 24, July 27, 1998, may have been higher during period of missing record; minimum recorded, 12.2°C Jan. 25, 2003, may have been lower during period of missing record.

EXTREMES FOR CURRENT YEAR.--

GAGE HEIGHT: Maximum gage height, 6.07 ft Sept. 26; minimum, -0.81 ft Jan. 6, Aug. 14.

SALINITY: Maximum recorded, 17.4 ppt June 11, may have been higher during period of missing record; minimum recorded, 0.1 ppt Sept. 27-30, may have been lower during period of missing record.

WATER TEMPERATURE: Maximum recorded, 33.5°C June 28, July 13, 15, may have been higher during period of missing record; minimum recorded, 15.1°C Dec. 22, may have been lower during period of missing record.

02276870 ST. LUCIE CANAL AT LAKE OKEECHOBEE, FL

LOCATION.-- Lat 26°59'00", long 80°03'70", in sec.22, T.40 S., R.37 E., Martin County, Hydrologic Unit 03090202, 0.5 mi downstream of control structure 308, directly beneath the U.S. Highway 441 overpass, just north of U.S. Highway 76 and 24 mi upstream of control structure 80.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--April 1931 to September 1952, October 1981 to current year. Prior to October 1946, published as St. Lucie Canal at lock 1, at Lake Okeechobee. Previously published as station number 02276500. All published data stored under current station number. Canal stage previously published under 02276871 has been moved to the current station number 02276870 for publication. Lake and canal stage at Lock Structure S-308 discontinued September 30, 1998.

REVISED RECORDS.--WDR FL-00-2A, 1999; WRD FL-03-2A, 2002.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Satellite data collection platform with water-stage shaft encoder and acoustic velocity meter until October 19, 2001, when it was removed. The acoustic velocity meter and acoustic doppler velocity meter were run in tandem for the period of May 17, 2001 to October 19, 2001. This acoustic velocity meter station is located 0.5 mi downstream of S-308 and is stored under 02276877 in the files of the U.S. Geological Survey. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to January 17, 1934, staff gage at site 0.4 mi downstream at different datum. January 17, 1934 to March 15, 1951, water-stage recorder at site 0.8 mi downstream at datum 1.56 ft lower. March 16, 1951, to September 1952, water-stage recorder at bridge on U.S. Highway 441 at present datum. January 17, 1934, to September 1952, auxiliary water-stage recorder 10.9 mi downstream. Prior to April 24, 1992, canal stage data obtained with digital water level recorder. August 1, 1986 to June 20, 1989, electromagnetic velocity meter and canal stage recorder 1200 ft downstream of S-308. April 4, 1992 satellite data collection platform installed at S-308 for lake and canal stages. May 1994, satellite data collection platform with water-stage shaft encoder for canal stage and acoustic velocity meter with cross path installed 0.5 mi downstream of S-308. This data was not used until October 1, 1996, to determine the discharge from S-308. The discharge is computed under station number 02276877, then stored under 02276870 for publication. Prior to October 1, 1998, satellite data collection platform with water-stage shaft encoders for lake and canal stages in control house of S-308.

REMARKS.--Records poor. Flow regulated by control structure 308 gates and lock at Lake Okeechobee. Flow frequently reversed during and after periods of heavy rainfall by pumpage into the canal from agricultural lands in the Everglades (negative figures indicate reverse flow towards Lake Okeechobee). Discharge computed from relations between discharge, head, gate openings, and slope prior to October 1, 1996. Flow is determined by relationship between the mean cross-sectional velocity and an average index line velocity (from the cross path index line velocities) measured with the acoustic velocity meter, from October 1, 1996 to August 13, 2001, acoustic doppler velocity meter, August 14, 2001 to present. Extreme lake stages for the current year no longer published due to the discontinuation of the U.S. Geological Survey equipment at S-308.

COOPERATION.--Canal stage record provided by U.S. Army Corps of Engineers.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 36 complete water years of discharge (1932-52, 1982-88, 1990, 1993-1996, 1999-2000, 2002).

EXTREME LAKE STAGES FOR PERIOD OF RECORD (1931-1998).--Maximum gage height, 19.63 ft Mar. 9, 1998; minimum, 9.63 ft June 22, 1990.

EXTREME CANAL STAGES FOR PERIOD OF RECORD.--Maximum gage height, 18.87 ft Sept. 26, 2004; minimum, 8.66 ft May 22, 2001.

EXTREME CANAL STAGES FOR CURRENT YEAR.--Maximum gage height, 18.87 ft Sept. 26; minimum, 11.72 ft Sept. 24.

02276870 ST. LUCIE CANAL AT LAKE OKEECHOBEE, FL-Continued

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.44	---	14.42	14.12	14.20	14.30	14.20	13.86	12.79	12.66	12.61	13.73
2	14.50	---	14.05	14.09	14.52	14.11	14.22	13.89	12.67	12.65	12.61	13.68
3	14.58	14.59	14.20	14.16	14.57	14.10	14.14	13.95	12.58	12.63	12.70	13.66
4	14.73	14.63	14.13	14.26	14.34	14.50	14.36	13.89	12.61	12.62	12.68	14.00
5	14.72	---	14.11	---	14.32	14.26	14.30	13.88	12.66	12.59	12.81	15.48
6	14.74	14.28	14.18	---	14.42	14.37	14.35	13.82	12.65	12.57	12.91	14.60
7	14.76	14.05	14.15	---	14.55	14.22	14.31	13.80	12.68	12.60	12.85	14.70
8	14.73	---	---	---	14.37	13.96	14.27	13.76	12.70	12.56	12.81	14.69
9	15.05	---	14.11	---	14.46	14.33	14.35	13.68	12.71	12.50	12.77	14.31
10	15.09	14.07	---	14.55	14.38	14.38	14.34	13.64	12.78	12.43	12.77	13.73
11	14.84	14.50	---	14.43	14.26	14.30	14.30	13.64	12.83	12.44	12.81	12.80
12	14.72	14.22	14.36	14.39	14.24	14.37	14.41	13.58	12.85	12.43	12.87	12.67
13	14.83	14.12	14.41	14.39	14.14	14.51	14.31	13.47	12.83	12.42	12.88	13.06
14	14.58	---	14.58	14.29	14.36	14.54	14.31	13.43	12.83	12.42	13.04	13.27
15	14.56	14.01	14.62	14.28	14.18	14.43	14.34	13.37	12.83	12.39	13.14	13.64
16	14.29	14.07	14.64	14.24	14.40	14.41	14.25	13.37	12.78	12.38	13.22	14.05
17	14.23	14.02	14.49	14.19	14.39	14.44	14.19	13.33	12.69	12.38	13.20	14.40
18	14.34	14.03	---	14.45	14.44	14.43	14.17	13.30	12.74	12.44	13.22	14.55
19	14.52	14.21	---	14.24	14.37	14.44	14.16	13.30	12.83	12.54	13.28	14.55
20	14.17	14.48	---	14.35	14.33	14.43	14.19	13.25	12.88	12.53	13.27	14.38
21	13.99	14.13	---	14.37	14.34	14.30	14.15	13.21	12.90	12.48	13.28	15.20
22	14.50	14.55	14.36	14.40	14.10	14.22	14.11	13.20	12.92	12.40	13.32	15.39
23	14.74	14.27	14.38	14.34	14.12	14.38	14.05	13.15	12.87	12.40	13.39	13.98
24	14.76	---	---	14.61	14.10	14.37	14.04	13.10	12.82	12.38	13.51	12.74
25	14.65	14.18	14.25	14.34	14.33	14.52	14.10	13.08	12.79	12.38	13.58	12.34
26	14.49	14.19	14.33	14.34	14.14	14.59	14.00	13.06	12.77	12.42	13.70	16.83
27	14.28	14.30	14.34	14.30	14.16	14.47	14.02	13.04	12.75	12.43	13.82	17.15
28	---	14.42	14.40	14.12	14.21	14.43	13.85	13.00	12.73	12.44	13.76	16.25
29	---	14.51	14.36	14.22	14.35	14.36	13.82	12.91	12.73	12.40	13.72	14.66
30	---	14.57	14.30	14.38	---	14.23	13.87	12.87	12.69	12.36	13.77	14.93
31	---	---	14.26	14.53	---	14.31	---	12.85	---	12.49	13.73	---
TOTAL	---	---	---	---	415.09	445.01	425.48	415.68	382.89	386.76	408.03	429.42
MEAN	---	---	---	---	14.31	14.36	14.18	13.41	12.76	12.48	13.16	14.31
MAX	---	---	---	---	14.57	14.59	14.41	13.95	12.92	12.66	13.82	17.15
MIN	---	---	---	---	14.10	13.96	13.82	12.85	12.58	12.36	12.61	12.34

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02276870 ST. LUCIE CANAL AT LAKE OKEECHOBEE, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	e1,220	484	643	214	224	381	90	303	1.7	-77	-378
2	---	e1,690	621	633	77	355	290	166	387	28	-36	-353
3	---	1,420	644	519	244	616	881	231	358	-20	23	-356
4	---	1,010	620	604	371	1,190	1,070	-29	363	-48	3.7	-451
5	---	e830	548	e558	237	852	1,240	82	152	-10	-330	---
6	---	690	465	e592	890	999	1,120	221	114	84	-725	e-2,380
7	---	739	443	e535	1,190	434	993	197	184	63	-508	-1,430
8	---	e753	e551	e464	1,350	689	849	31	-138	-101	-332	41
9	---	e743	639	e1,410	1,210	796	780	66	41	26	-305	233
10	---	800	e392	1,440	765	523	441	363	-104	-3.7	-201	440
11	1,090	538	e566	1,220	680	322	415	406	-335	-25	-298	369
12	1,470	557	373	1,400	515	440	45	458	-226	-147	-439	346
13	1,790	583	318	1,100	637	643	-8.8	515	-161	-108	-301	615
14	1,190	e625	369	644	212	902	122	364	-19	-133	-389	422
15	939	667	517	648	314	983	60	143	-165	-107	-848	1,040
16	951	585	1,250	447	114	671	379	140	-127	63	-891	1,310
17	773	701	1,050	605	178	210	511	181	-69	-63	-590	2,080
18	884	748	e1,080	233	153	363	494	314	80	-85	-500	1,150
19	771	546	e604	330	434	389	646	239	-64	-72	-520	488
20	859	531	e931	317	817	417	466	126	-147	-147	-435	177
21	911	730	e702	867	551	224	448	234	28	-221	-349	-139
22	1,410	573	470	1,180	505	459	455	86	-96	-128	-355	0.42
23	2,010	577	256	1,690	476	359	495	-2.0	-77	-60	-272	713
24	2,070	e644	e164	1,190	450	743	260	353	51	-75	-383	781
25	1,500	589	169	585	297	1,310	137	331	27	-54	-611	373
26	1,090	626	778	770	102	1,210	256	393	-84	-180	-908	-3,040
27	919	553	1,120	464	164	673	272	385	-78	-118	-1,150	-651
28	e889	421	1,330	604	139	481	227	303	89	-116	-939	333
29	e719	445	968	398	183	409	342	119	-23	-85	-608	1,410
30	e918	372	846	144	---	519	259	54	-24	7.2	-643	1,090
31	e677	---	629	140	---	372	---	134	---	-33	-492	---
TOTAL	---	21,506	19,897	22,374	13,469	18,777	14,325.2	6,694.0	240	-1,866.8	-14,408.3	---
MEAN	---	717	642	722	464	606	478	216	8.00	-60.2	-465	---
MAX	1,690	1,330	1,690	1,350	1,310	1,240	515	387	84	23	---	---
MIN	372	164	140	77	210	-8.8	-29	-335	-221	-1,150	---	---
AC-FT	---	42,660	39,470	44,380	26,720	37,240	28,410	13,280	476	-3,700	-28,580	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2004, BY WATER YEAR (WY)

MEAN	1,575	1,042	706	613	650	914	1,077	616	479	636	760	1,100
MAX	6,480	6,831	6,350	5,649	5,453	7,246	4,620	4,474	3,949	4,697	5,152	6,403
(WY)	(1948)	(1948)	(1948)	(1948)	(1948)	(1983)	(1983)	(1931)	(1931)	(1947)	(1947)	(1949)
MIN	-1101	-120	-138	-130	-24.1	-647	-531	-242	-1,107	-618	-614	-1,036
(WY)	(1988)	(1988)	(1986)	(1986)	(1991)	(1989)	(1991)	(1991)	(1994)	(1989)	(1985)	(1989)

SUMMARY STATISTICS

ANNUAL MEAN
HIGHEST ANNUAL MEAN
LOWEST ANNUAL MEAN
HIGHEST DAILY MEAN
LOWEST DAILY MEAN
ANNUAL SEVEN-DAY MINIMUM
ANNUAL RUNOFF (AC-FT)
10 PERCENT EXCEEDS
50 PERCENT EXCEEDS
90 PERCENT EXCEEDS

WATER YEARS 1931 - 2004

899
3,511 1948
-49.6 1986
8,150 Feb 26, 1983
-4,280 Sep 14, 1985
-2,980 Aug 7, 1985
650,900
3,700
185
0.00

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02277100 ST. LUCIE RIVER AT SPEEDY POINT, STUART, FL

LOCATION.--Lat 27°12'07", long 80°15'32", in SW ¼ NW ¼ NE ¼, sec.5, T.38 S., R.41 E., Martin County, Hydrologic Unit 03090202, middle of Roosevelt Bridge, 2.7 mi west of Atlantic Ocean, 0.4 mi northwest of Stuart.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--

GAGE HEIGHT: August 1997 to current year.
 SALINITY (TOP, BOTTOM): August 1997 to current year.
 WATER TEMPERATURE (TOP, BOTTOM): August 1997 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and water-quality monitor with top and bottom sensors. The data prior to October 1, 2001, is available in the U.S. Geological Survey Open-File Report 2004-1265. Prior to October 1, 2002, only the mean daily gage height, salinity, water temperature and discharge records are available in the files of the U.S. Geological Survey. Prior to October 1, 2002, data was published at a datum 0.02 ft lower than current datum. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Salinity (top) record (maximum and minimum) rated excellent except for November 19-30, December 1-9, May 10, 11, June 17-20, September 16, 17, which is rated good. Salinity (bottom) record (maximum and minimum) rated excellent except for May 11-31, June 1-9, 17-20, September 16, 17, which is rated good. Temperature (top and bottom) (maximum and minimum) record rated good. Elevation of top salinity-temperature sensor ranged from -1.6 to -1.17 ft NGVD. Elevation of bottom salinity-temperature sensor -8.6 ft NGVD.

EXTREMES FOR PERIOD OF RECORD.--

GAGE HEIGHT: Maximum gage height, 5.32 ft Sept. 5, 2004; minimum, -1.01 ft July 26, 2003.
 SALINITY (TOP): Maximum recorded, 32.3 ppt Feb. 24, 2002, but may have been higher during period of missing record; minimum recorded, 0.0 ppt Mar. 12, 1998, Nov. 3, 1999.
 SALINITY (BOTTOM): Maximum recorded, 31.8 ppt Apr. 30, 2001, but may have been higher during period of missing record; minimum recorded, 0.1 ppt Apr. 14, 1998, Oct. 17-23, 1999, Aug. 6, 2001, Sept. 23, 24, 26-30, 2004, but may have been lower during period of missing record.
 WATER TEMPERATURE (TOP): Maximum recorded, 33.9°C July 16, 2002, but may have been higher during period of missing record; minimum recorded, 11.4°C Jan. 25, 2003, but may have been lower during periods of missing record.
 WATER TEMPERATURE (BOTTOM): Maximum recorded, 33.7°C Aug. 2, 1998, but may have been higher during period of missing record; minimum recorded, 12.0°C Jan. 25, 2003, but may have been lower during periods of missing record.

EXTREMES FOR CURRENT YEAR.--

GAGE HEIGHT: Maximum gage height, 5.32 ft Sept. 5; minimum, -0.94 ft Jan. 25.
 SALINITY (TOP): Maximum recorded, 27.4 ppt July 27; minimum recorded, 0.1 ppt Sept. 23, 24, 26-30.
 SALINITY (BOTTOM): Maximum recorded, 27.7 ppt July 12; minimum recorded, 0.1 ppt Sept. 23, 24, 26-30.
 WATER TEMPERATURE (TOP): Maximum recorded, 33.2°C Aug. 23; minimum recorded, 14.3°C Dec. 21.
 WATER TEMPERATURE (BOTTOM): Maximum recorded, 32.5°C July 3, 15; minimum recorded, 14.6°C Dec. 21, 22.

REVISIONS.--Revised figures of gage height for the 2002 and 2003 water year, due to revised datum correction superseding those in the report for 2002 and 2003 are provided below. Extremes for the period of record for minimum gage-height have been revised. Extremes for the current year for water year 2002 and 2003 have been revised.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.96	1.65	0.51	0.57	-0.07	0.90	0.40	0.20	0.93	0.28	0.43	---
2	1.71	1.54	0.43	0.62	---	0.69	0.43	0.13	0.85	0.51	0.77	0.97
3	1.46	1.39	0.59	0.53	---	0.14	0.44	-0.08	0.75	0.58	0.89	1.36
4	1.41	1.37	0.81	0.60	0.38	-0.02	0.40	-0.24	0.77	0.52	0.82	1.50
5	1.30	2.04	1.03	0.82	0.55	0.28	0.59	-0.16	0.94	0.40	0.85	1.30
6	1.11	2.25	1.04	0.56	0.49	0.46	1.03	0.20	0.92	0.53	1.02	1.15
7	0.92	1.64	0.81	0.10	0.19	0.28	1.10	0.34	0.78	0.62	1.28	1.23
8	1.41	1.28	0.78	0.07	0.13	0.39	0.90	---	0.78	0.70	1.51	1.26
9	1.99	---	0.70	0.08	0.44	0.32	0.62	0.11	0.92	0.79	1.58	1.37
10	1.68	---	0.77	-0.09	0.39	---	0.30	-0.12	1.23	0.65	1.53	1.42
11	1.56	---	0.79	-0.23	0.25	---	0.25	-0.14	1.20	0.49	1.51	1.14
12	1.31	---	0.84	-0.17	---	---	0.52	-0.04	1.01	0.53	1.30	1.01
13	1.32	---	0.85	-0.15	---	0.27	0.48	-0.06	0.84	0.55	1.06	0.74
14	1.14	---	0.73	-0.01	0.48	0.22	0.48	-0.10	0.74	0.52	0.96	0.81
15	1.06	---	0.60	-0.20	0.70	0.16	0.34	0.29	0.63	0.45	0.86	0.57
16	1.37	2.02	0.70	0.00	0.68	0.04	0.25	---	0.54	0.46	0.66	0.44
17	1.74	---	0.71	-0.03	0.70	-0.06	0.25	---	0.66	0.48	0.50	0.45
18	1.98	---	0.53	-0.10	0.78	-0.15	0.23	0.06	0.81	0.59	0.45	0.56
19	1.77	---	0.69	-0.10	---	-0.22	0.30	0.05	0.82	0.56	0.42	0.77
20	1.53	---	0.62	-0.24	0.59	-0.06	0.30	0.53	0.87	0.42	0.49	0.93
21	1.42	0.99	0.81	-0.27	0.25	-0.13	0.32	1.05	0.86	0.36	0.51	1.02
22	1.29	0.99	0.89	-0.18	0.26	0.24	0.33	1.24	0.75	0.46	0.53	1.19
23	1.33	0.96	0.82	-0.02	0.70	0.64	0.51	1.63	0.57	0.49	0.66	1.31
24	1.30	0.87	0.56	-0.09	1.09	0.61	0.77	1.43	0.49	0.49	0.76	1.33
25	1.18	0.69	0.75	-0.28	---	0.48	0.76	0.99	0.46	0.37	0.62	1.21
26	1.24	0.69	0.85	-0.26	---	0.38	0.39	0.84	0.42	0.19	0.43	1.03
27	1.55	0.78	0.79	0.06	0.84	0.43	0.36	0.82	0.41	0.16	0.42	0.75
28	1.75	0.76	0.68	0.21	0.78	0.68	0.38	0.75	0.36	0.17	---	0.69
29	1.77	0.69	0.43	0.11	---	0.75	0.27	0.95	0.23	---	---	0.74
30	1.77	0.56	0.34	0.06	---	0.64	0.26	1.03	0.24	0.26	0.54	1.07
31	1.73	---	0.50	0.00	---	0.55	---	1.02	---	0.30	0.56	---
TOTAL	46.06	---	21.95	1.97	---	---	13.96	---	21.82	14.11	---	---
MEAN	1.49	---	0.71	0.06	---	---	0.47	---	0.73	0.46	---	---
MAX	1.99	---	1.04	0.82	---	---	1.10	---	1.23	0.79	---	---
MIN	0.92	---	0.34	-0.28	---	---	0.23	---	0.24	0.16	---	---

REVISED

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02277100 ST. LUCIE RIVER AT SPEEDY POINT, STUART, FL-Continued

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER
1	2.02	0.53	1.83	0.51	1.05	-0.35	1.14	---	0.99	-0.61	1.29	-0.19
2	1.95	0.54	1.97	0.58	1.15	-0.42	1.20	-0.64	1.09	-0.43	1.18	-0.24
3	1.87	0.50	2.10	0.61	1.28	-0.46	1.22	-0.40	0.99	-0.41	1.30	-0.19
4	1.85	0.46	1.99	0.34	1.42	-0.35	1.30	-0.42	0.63	-0.64	1.24	0.00
5	1.82	0.42	1.96	0.16	1.25	-0.45	1.33	-0.18	0.48	-0.78	1.15	-0.15
6	1.86	0.38	1.46	-0.10	1.48	-0.29	1.39	-0.11	0.72	-0.40	0.94	-0.50
7	2.06	0.44	1.52	-0.35	1.70	0.00	1.31	-0.03	0.67	-0.70	0.66	-0.70
8	2.06	0.37	1.69	0.02	1.50	0.02	1.12	-0.04	0.51	-0.45	0.64	-0.34
9	2.06	0.37	1.61	0.04	1.58	0.08	---	---	0.79	-0.46	1.02	-0.23
10	2.13	0.45	1.58	0.17	1.42	0.29	0.79	-0.38	0.63	-0.87	1.18	0.05
11	2.07	0.42	1.27	0.01	1.47	0.28	0.78	-0.31	0.37	-0.85	1.30	-0.13
12	1.85	0.37	1.07	-0.21	1.35	0.26	0.82	-0.28	0.66	-0.48	1.08	-0.38
13	1.93	0.40	1.33	0.03	1.37	-0.03	1.22	-0.09	0.67	-0.60	0.94	-0.36
14	2.32	0.78	---	---	1.05	-0.09	---	---	0.73	-0.77	0.96	-0.39
15	2.54	1.18	1.59	0.54	1.11	-0.21	1.31	-0.04	0.64	-0.75	1.34	-0.17
16	2.53	1.31	1.58	0.39	1.08	-0.20	1.31	-0.21	0.66	-0.88	1.61	-0.01
17	2.40	1.28	1.29	0.00	1.12	-0.35	1.04	-0.41	0.71	-0.78	1.83	0.25
18	2.18	1.05	1.20	-0.28	1.22	-0.36	1.10	-0.47	1.05	-0.65	1.77	0.15
19	2.20	1.02	1.35	-0.06	1.40	-0.27	1.09	-0.49	1.15	-0.28	1.79	0.28
20	1.93	0.80	1.65	0.00	1.28	-0.25	0.90	-0.54	1.08	-0.39	1.69	-0.07
21	1.81	0.60	1.68	0.14	1.07	-0.62	0.72	-0.73	1.14	-0.22	1.48	-0.44
22	1.66	0.37	---	---	1.03	-0.47	0.77	-0.63	1.27	-0.36	1.22	-0.31
23	1.72	0.30	---	---	1.01	-0.53	0.71	-0.46	1.01	-0.64	1.25	-0.19
24	1.80	0.42	1.31	-0.09	0.96	-0.40	1.04	-0.12	0.75	-0.80	1.47	-0.01
25	1.82	0.44	1.21	-0.26	0.64	-0.54	1.28	-0.36	0.66	-0.79	1.48	-0.01
26	---	---	1.15	-0.24	0.88	-0.40	1.07	-0.52	0.82	-0.69	1.36	-0.07
27	1.86	0.57	1.19	-0.11	1.01	-0.28	0.80	-0.52	1.07	-0.47	1.45	-0.07
28	1.66	0.38	---	---	1.03	-0.28	1.18	-0.46	1.06	-0.48	1.33	-0.01
29	1.51	0.15	---	---	1.24	-0.20	1.03	-0.48	---	---	---	---
30	1.38	0.02	1.40	-0.04	1.30	-0.33	0.93	-0.71	---	---	---	---
31	---	---	---	---	1.33	-0.34	0.83	-0.73	---	---	---	---
MONTH	2.54	0.02	2.10	-0.35	1.70	-0.62	1.39	-0.73	1.27	-0.88	1.83	-0.70
1	1.45	0.23	1.55	-0.01	0.90	-0.74	1.01	-0.54	0.59	-0.69	1.35	-0.19
2	1.16	-0.22	1.46	0.01	0.79	-0.62	0.97	-0.63	0.75	-0.50	1.29	-0.27
3	0.81	-0.65	1.49	0.04	0.83	-0.48	0.76	-0.74	0.91	-0.38	1.22	-0.36
4	0.65	-0.61	1.46	0.01	0.90	-0.57	0.55	-0.74	1.00	-0.45	1.28	-0.34
5	0.71	-0.61	1.48	0.04	0.88	-0.46	0.53	-0.64	0.96	-0.54	1.40	-0.27
6	0.67	-0.58	1.39	-0.18	0.87	-0.43	0.63	-0.59	0.90	-0.68	1.28	-0.34
7	0.72	-0.64	1.11	-0.34	0.83	-0.48	0.65	-0.59	0.80	-0.77	1.70	-0.08
8	0.54	-0.44	0.96	-0.35	0.68	-0.48	0.64	-0.73	0.85	-0.86	1.90	0.31
9	0.89	-0.28	0.90	-0.41	0.92	-0.42	0.76	-0.76	0.96	-0.80	2.02	0.50
10	0.94	-0.21	0.75	-0.41	1.02	-0.45	0.83	-0.83	0.97	-0.62	1.99	0.60
11	1.28	-0.21	0.71	-0.46	1.18	-0.39	1.05	-0.66	0.96	-0.72	2.14	0.70
12	1.43	-0.03	0.66	-0.62	1.16	-0.46	0.90	-0.76	0.90	-0.59	2.15	0.89
13	1.40	0.12	1.16	-0.51	1.13	-0.63	0.92	-0.72	1.18	-0.27	2.15	0.82
14	1.32	-0.01	1.41	-0.24	1.04	-0.69	0.92	-0.67	1.45	0.12	1.98	0.64
15	1.66	0.05	1.29	-0.36	0.99	-0.71	0.88	-0.65	1.19	-0.15	1.85	0.56
16	1.90	0.19	1.19	-0.62	1.00	-0.58	0.93	-0.49	1.19	-0.11	2.06	0.64
17	2.02	0.25	1.09	-0.60	1.08	-0.45	1.01	-0.41	1.14	-0.12	2.22	0.87
18	2.06	0.19	1.21	-0.48	1.12	-0.35	0.87	-0.50	0.97	-0.39	2.63	1.40
19	1.90	0.01	1.23	-0.32	1.12	-0.34	0.59	-0.60	0.85	-0.36	1.91	0.76
20	1.68	0.15	1.31	-0.02	0.99	-0.41	0.38	-0.75	0.90	-0.39	1.64	0.22
21	1.90	0.48	1.60	0.11	0.74	-0.41	0.45	-0.78	1.08	-0.28	1.63	0.18
22	2.00	0.37	1.49	-0.04	0.86	-0.30	0.53	-0.74	1.08	-0.28	1.90	0.45
23	1.80	0.50	1.08	-0.24	1.11	-0.19	0.35	-0.80	1.15	-0.29	1.84	0.36
24	2.03	0.67	0.89	-0.27	1.19	-0.13	0.25	-1.00	1.13	-0.37	1.90	0.41
25	1.88	0.63	1.06	-0.13	1.21	-0.25	0.41	-1.01	1.20	-0.37	2.20	0.59
26	1.79	0.47	0.99	-0.22	1.28	-0.21	0.60	-0.85	1.51	-0.19	2.32	0.83
27	1.52	0.29	0.86	-0.39	1.38	-0.07	0.70	-0.81	1.56	0.00	2.33	0.80
28	1.50	0.28	1.04	-0.42	1.33	-0.15	0.78	-0.75	1.51	-0.14	2.42	0.70
29	1.60	0.22	1.21	-0.32	1.21	-0.39	0.77	-0.67	1.30	-0.09	2.52	0.88
30	1.64	0.27	1.20	-0.28	1.12	-0.46	0.77	-0.91	1.31	-0.06	2.56	0.85
31	---	---	1.18	-0.58	---	---	0.45	-0.86	1.40	-0.08	---	---
MONTH	2.06	-0.65	1.60	-0.62	1.38	-0.74	1.05	-1.01	1.56	-0.86	2.63	-0.36
YEAR	2.63	-1.01										

REVISED

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02277100 ST. LUCIE RIVER AT SPEEDY POINT, STUART, FL-Continued

TOP
SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH						
1	1.3	0.2	12.5	4.7	20.9	14.0	10.6	5.4	14.5	8.4	14.0	11.1
2	2.8	0.2	10.9	3.0	22.1	14.8	11.3	6.2	15.2	10.2	12.6	10.8
3	3.6	0.6	12.6	2.3	21.6	16.0	11.2	7.6	15.2	9.2	12.2	10.4
4	3.2	0.9	7.7	4.3	20.7	15.4	11.1	8.5	15.1	10.4	12.2	9.6
5	2.5	0.6	6.8	3.1	19.6	13.8	11.9	8.4	16.4	11.6	11.4	7.5
6	2.2	0.5	6.4	3.2	22.0	15.0	13.4	8.9	15.0	11.4	10.5	5.6
7	1.6	0.5	6.2	2.6	23.6	17.3	17.5	11.4	13.4	6.9	13.5	6.6
8	2.0	0.3	5.7	2.4	22.8	16.7	17.5	12.2	15.5	4.3	16.6	7.6
9	3.5	0.4	7.4	2.6	21.5	15.2	16.8	10.5	13.4	4.0	16.8	7.6
10	4.2	0.6	12.4	3.7	22.5	17.1	17.0	8.2	10.5	4.0	17.6	8.9
11	4.0	0.9	10.2	4.5	22.6	17.1	17.3	5.9	11.3	4.2	19.1	10.7
12	4.3	1.0	8.1	4.0	23.2	17.2	13.4	4.7	12.3	5.6	19.3	8.6
13	4.5	1.0	7.6	3.0	22.2	16.6	12.0	5.5	13.5	7.6	18.3	10.0
14	4.6	1.0	10.9	4.4	21.8	17.7	13.3	7.6	15.1	7.8	17.9	7.8
15	6.0	1.3	9.8	4.1	22.4	16.9	16.1	6.3	14.6	7.5	15.6	7.8
16	6.5	1.8	10.7	4.4	19.4	9.1	16.7	6.6	16.3	9.0	13.5	7.8
17	5.6	1.8	10.0	5.3	15.5	8.0	17.3	7.6	18.9	11.3	15.1	7.5
18	8.0	2.3	10.5	6.3	14.3	6.3	17.0	8.8	21.4	12.8	15.4	8.5
19	10.1	2.7	11.4	6.0	14.7	6.1	17.6	8.2	21.6	14.1	16.5	8.9
20	10.0	3.0	15.4	6.5	16.1	5.6	19.1	10.4	18.6	10.5	18.4	12.7
21	10.2	2.9	15.6	7.4	17.7	7.0	20.4	10.4	17.9	9.7	16.3	10.3
22	11.8	4.3	15.8	7.6	16.1	6.8	16.3	7.7	17.9	9.5	18.2	11.5
23	12.1	3.6	15.8	8.8	18.6	8.6	15.9	5.2	16.8	9.8	19.2	14.6
24	9.9	2.9	16.8	9.7	18.1	11.0	14.2	5.4	16.1	10.8	19.2	14.7
25	9.5	3.5	18.4	10.1	19.3	12.6	13.8	5.8	16.8	10.2	20.0	11.2
26	7.0	2.8	19.6	10.1	20.2	10.2	12.2	7.2	16.1	10.2	17.3	9.5
27	8.1	2.5	18.4	11.7	17.5	6.7	12.0	8.5	15.8	12.0	14.0	6.9
28	8.4	3.3	19.1	11.5	13.5	5.1	15.4	11.0	17.9	12.4	12.7	6.6
29	11.8	4.0	22.6	14.1	11.2	6.4	15.3	9.3	16.7	11.5	14.9	9.4
30	13.2	6.6	20.2	14.8	9.1	6.1	14.3	9.0	---	---	17.3	7.4
31	12.7	5.5	---	---	10.0	6.0	15.6	8.5	---	---	18.5	7.6
MONTH	13.2	0.2	22.6	2.3	23.6	5.1	20.4	4.7	21.6	4.0	20.0	5.6
	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER						
1	18.4	8.9	21.0	16.0	25.2	20.1	23.7	16.6	24.9	19.6	10.4	4.1
2	20.3	13.3	20.7	16.3	24.6	20.0	24.0	17.5	24.9	20.0	9.2	3.7
3	19.8	13.0	20.7	16.1	24.4	19.2	24.7	18.2	24.8	19.0	10.5	4.3
4	19.6	11.8	23.0	15.6	23.9	20.0	24.7	18.8	25.0	18.3	24.0	5.4
5	19.0	9.5	22.9	15.9	24.2	20.5	25.1	19.3	23.8	15.0	24.3	1.6
6	---	---	23.0	16.5	23.7	19.0	24.8	18.7	20.2	11.9	1.8	0.3
7	18.2	9.9	22.7	16.7	23.4	20.0	24.7	19.2	19.3	10.7	0.4	0.2
8	18.1	10.1	21.4	17.1	24.1	20.0	25.5	19.4	17.5	10.4	0.2	0.2
9	18.8	12.9	22.0	17.8	24.0	20.2	25.6	20.3	17.1	9.8	0.2	0.2
10	20.4	12.8	22.1	18.3	---	---	25.8	20.7	16.7	9.5	0.2	0.2
11	20.7	13.0	22.9	19.1	---	---	26.1	21.2	14.8	9.0	0.2	0.2
12	20.2	15.4	23.5	19.4	---	---	25.8	19.6	14.3	7.9	0.2	0.2
13	20.7	13.8	23.6	19.1	---	---	26.0	19.5	11.5	5.9	0.2	0.2
14	19.4	13.2	23.1	19.4	---	---	25.9	20.0	9.4	5.6	0.3	0.2
15	20.3	14.0	22.7	19.5	---	---	25.9	20.4	9.6	3.6	0.3	0.2
16	20.9	14.3	22.9	19.1	---	---	25.4	21.2	9.0	2.7	0.3	0.2
17	20.3	13.9	23.3	19.0	26.4	22.0	25.3	21.4	8.2	2.4	0.5	0.2
18	19.6	11.9	23.1	18.8	26.2	21.6	25.9	21.9	9.1	3.3	1.6	0.2
19	19.2	10.7	23.3	18.4	25.2	20.8	25.6	21.7	7.3	3.0	1.9	0.3
20	18.1	9.3	23.1	18.3	25.7	19.8	25.4	21.2	7.6	3.0	7.3	0.9
21	17.6	10.3	23.1	18.3	---	---	25.6	20.3	8.1	3.2	5.6	0.4
22	17.9	11.5	22.3	17.5	---	---	25.2	20.1	9.4	3.4	0.5	0.2
23	16.8	12.6	22.5	18.3	---	---	25.8	20.6	9.1	3.0	0.3	0.1
24	18.1	12.2	22.6	18.9	---	---	26.1	20.9	9.1	2.8	0.2	0.1
25	19.1	13.9	22.7	18.1	---	---	25.6	21.2	10.2	3.2	4.3	0.2
26	18.0	14.1	23.0	18.0	---	---	26.7	20.9	10.5	3.5	---	---
27	19.4	13.9	22.8	17.7	---	---	27.4	21.5	10.8	3.1	0.2	0.1
28	21.2	15.9	24.6	18.7	---	---	26.1	20.6	13.7	4.6	0.1	0.1
29	22.8	16.8	24.1	18.8	23.8	17.4	24.8	17.9	14.3	5.7	0.1	0.1
30	21.3	16.4	25.0	19.6	23.6	15.7	24.6	20.1	13.4	6.0	0.1	0.1
31	---	---	25.2	19.9	---	---	24.8	19.2	11.7	5.5	---	---
MONTH	22.8	8.9	25.2	15.6	26.4	15.7	27.4	16.6	25.0	2.4	24.3	0.1
YEAR	27.4	0.1										

02277110 ST. LUCIE ESTUARY AT A1A (STEELE PT), STUART, FL

LOCATION.--Lat 27°11'58", long 80°12'25", in NW ¼ SE ¼ NE ¼, sec.2, T.38 S., R.41 E., Martin County, Hydrologic Unit 03090202, middle of Evans Cray Sr. Bridge footing, 2.7 mi west of Atlantic Ocean, 3.4 mi southeast of Stuart.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--

DISCHARGE: August 1997 to September 2000.

GAGE HEIGHT: August 1997 to current year.

SALINITY (TOP, BOTTOM): August 1997 to current year.

WATER TEMPERATURE (TOP, BOTTOM): August 1997 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and water-quality monitor with top and bottom sensors. Prior to October 1, 2000, an acoustic doppler velocity meter. Datum of gage is National Geodetic Vertical Datum of 1929 (NGVD) converted through VERTCON using the NAVD 88 survey levels from a benchmark provided by Florida Department of Environmental Protection (FDEP). Gage height data prior to water year 2003 are 0.07 ft lower than current datum. Operated by U.S. Geological Survey Project Section personnel prior to October 1, 2001.

REMARKS.--Gage height record rated poor due to obstructed stilling well intakes until March 4, when a new stilling well was installed. Maximum and minimum daily values - salinity (top) record rated excellent except the following periods: Jan. 14 to Feb. 9, Mar. 5-16, May 19 to June 4, 19-21, Aug. 25 to Sept. 23, which is rated good; June 5-14, 22, 23, which is rated fair; June 24 to July 13, which is rated poor. Maximum and minimum daily values - salinity (bottom) record rated excellent except the following periods: Jan. 14 to Feb. 9, maximum daily values only, May 21 to June 9, July 23 to Aug. 11, Aug. 26 to Sept. 23, which are rated good. Maximum and minimum daily values - temperatures (top and bottom) records are rated good. Elevation of the top salinity-temperature sensor ranged from -1.6 ft to -1.9 ft NGVD, bottom salinity-temperature sensor -6.8 ft NGVD. Data ratings for salinity (top) from Dec. 10 to Jan. 7, 11, 12, Jan. 25 to Feb. 12, has been revised to good in the 2003 water year.

EXTREMES FOR PERIOD OF RECORD.--

DISCHARGE: Maximum positive discharge, 48,900 ft³/s Aug. 31, 1997; minimum negative, 44,600 ft³/s July 24, 2000.

GAGE HEIGHT: Maximum gage height, 5.47 ft Sept. 25, 2004; minimum, -1.21 ft Apr. 28, 1998.

SALINITY (TOP): Maximum recorded, 37 ppt May 31, 2004; minimum recorded, 0.01 ppt Apr. 7, 1998.

SALINITY (BOTTOM): Maximum recorded, 38 ppt Mar. 22, 1999, Mar. 11, 31, 2002, but may have been higher during period of missing record; minimum, 0.0 ppt Mar. 20, 21, 26, Apr. 1, 1998.

WATER TEMPERATURE (TOP): Maximum recorded, 33.8°C Aug. 18, 1998, but may have been higher during period of missing record; minimum recorded, 12.0°C Jan. 25, 2003.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 33.4°C Sept. 1, 1998, but may have been higher during period of missing record; minimum recorded, 12.4°C Jan. 25, 2003.

EXTREMES FOR CURRENT YEAR.--

GAGE HEIGHT: Maximum gage height, 5.47 ft Sept. 25; minimum, -1.03 ft Apr. 23

SALINITY (TOP): Maximum recorded, 37.0 ppt May 31; minimum recorded, 0.1 ppt Sept. 27-30.

SALINITY (BOTTOM): Maximum recorded, 37.6 ppt May. 31; minimum recorded, 0.1 ppt Sept. 27-30.

WATER TEMPERATURE (TOP): Maximum recorded, 32.5°C June 15, 29, 30, July 1, 15, Aug. 23; minimum recorded, 14.7°C Dec. 22.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 32.1°C July 15; minimum recorded, 15.1°C Dec. 21.

EVERGLADES AND SOUTHEASTERN COASTAL AREA

270022080094600 KITCHINGS CREEK NEAR HOBE SOUND, FL

LOCATION.--Lat 27°00'57", long 80°09'10", in SE ¼ SE ¼ SE ¼ sec.5, T.40 S., R.42 E., Martin County, Hydrologic Unit 03090202, in Jonathan Dickinson State Park, near left bank on foot bridge, 1.75 mi upstream from mouth, 2.1 mi south of State Road 707, and 3.25 mi southwest of Hobe Sound.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--December 1979 to March 1982, October 1984 to current year.

GAGE.--Electronic data logger and collector tube rain gage recorder. Rainfall data is available in the files of the U.S. Geological Survey. Elevation of gage is 6 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good, except estimated records, which are poor.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 19 complete water years of discharge (1981, 1985-88, 1990, 1992-2004).

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height 7.46 ft (estimated) Sept. 26; minimum 1.45 ft July 14, 15.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.69	2.64	2.63	2.24	2.47	2.35	1.77	---	1.57	1.51	1.68	1.98
2	3.52	2.66	2.58	2.22	2.52	2.32	1.76	---	1.57	1.51	1.63	1.95
3	3.44	2.85	2.54	2.20	2.49	2.28	1.74	---	1.57	1.54	1.66	1.93
4	3.24	3.07	2.51	2.18	2.43	2.23	1.72	---	1.62	1.53	1.64	2.27
5	3.10	4.29	2.49	2.16	2.40	2.19	1.71	---	1.67	1.53	1.80	5.06
6	2.97	5.10	2.48	2.15	2.37	2.14	1.69	---	1.66	1.53	1.82	5.87
7	2.86	5.16	2.44	2.14	2.33	2.10	1.69	---	1.68	1.54	1.76	5.70
8	2.78	4.96	2.41	2.12	2.28	2.06	1.68	---	1.77	1.53	1.73	5.63
9	2.71	4.82	2.38	2.11	2.24	2.03	1.67	---	1.70	1.51	1.71	5.71
10	2.64	4.68	2.36	2.11	2.21	2.00	1.67	---	1.69	1.49	1.77	5.58
11	2.56	4.56	2.33	2.09	2.18	1.98	1.66	---	1.68	1.49	1.81	5.55
12	2.53	4.40	2.30	2.07	2.16	1.96	1.81	---	1.66	1.50	1.81	5.71
13	2.69	4.24	2.28	2.06	2.13	1.94	1.84	---	1.64	1.50	1.83	5.60
14	3.62	4.09	2.32	2.05	2.16	1.92	1.85	1.56	1.61	1.48	1.81	5.52
15	3.62	3.95	2.37	2.05	2.16	1.90	---	1.70	1.60	1.48	1.81	5.43
16	3.44	3.82	2.37	2.03	2.14	1.93	---	1.82	1.59	1.50	1.88	5.33
17	3.34	3.70	2.40	2.02	2.12	2.03	---	1.73	1.58	1.50	1.89	5.23
18	3.21	3.58	2.39	2.09	2.10	2.04	---	1.71	1.59	1.54	1.88	5.24
19	3.13	3.48	2.37	2.21	2.07	2.02	---	1.84	1.57	1.62	1.96	5.17
20	3.13	3.40	2.34	2.21	2.05	1.99	---	1.85	1.56	1.59	1.97	5.17
21	3.31	3.30	2.31	2.20	2.03	1.97	---	1.84	1.55	1.57	1.95	6.14
22	3.36	3.20	2.29	2.19	2.01	1.94	---	1.80	1.56	1.57	2.06	6.22
23	3.31	3.11	2.39	2.16	1.99	1.92	---	1.76	1.54	1.55	2.22	5.99
24	3.23	3.03	2.46	2.13	1.97	1.89	---	1.73	1.53	1.53	2.23	5.89
25	3.14	2.95	2.45	2.11	2.16	1.88	---	1.69	1.52	1.52	2.24	---
26	3.05	2.89	2.43	2.09	2.42	1.86	---	1.67	1.56	1.51	2.22	---
27	2.97	2.84	2.40	2.09	2.45	1.82	---	1.65	1.54	1.59	2.18	---
28	2.89	2.79	2.37	2.08	2.43	1.81	---	1.63	1.52	1.57	2.15	6.84
29	2.83	2.73	2.33	2.06	2.40	1.81	---	1.62	1.52	1.55	2.11	6.70
30	2.76	2.67	2.30	2.07	---	1.81	---	1.60	1.51	1.53	2.07	---
31	2.68	---	2.27	2.25	---	1.80	---	1.58	---	1.63	2.02	---
TOTAL	95.75	108.96	74.29	65.94	64.87	61.92	---	---	47.93	47.54	59.30	---
MEAN	3.09	3.63	2.40	2.13	2.24	2.00	---	---	1.60	1.53	1.91	---
MAX	3.69	5.16	2.63	2.25	2.52	2.35	---	---	1.77	1.63	2.24	---
MIN	2.53	2.64	2.27	2.02	1.97	1.80	---	---	1.51	1.48	1.63	---

270022080094600 KITCHINGS CREEK NEAR HOBE SOUND, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	6.7	6.6	2.8	4.6	3.6	0.57	e0.12	0.18	0.08	0.43	1.8
2	20	6.9	6.2	2.7	5.0	3.3	0.54	e0.09	0.17	0.08	0.34	1.6
3	19	9.1	5.8	2.5	4.7	3.0	0.48	e0.19	0.17	0.12	0.41	1.5
4	15	12	5.5	2.4	4.2	2.7	0.44	e1.5	0.24	0.11	0.37	3.9
5	13	38	5.3	2.3	4.0	2.5	0.41	e1.2	0.35	0.10	0.86	61
6	11	64	5.2	2.2	3.7	2.2	0.38	e1.0	0.32	0.11	0.92	81
7	9.2	66	4.8	2.1	3.5	1.9	0.36	e0.87	0.35	0.11	0.71	69
8	8.2	58	4.5	2.0	3.2	1.7	0.33	e0.74	0.59	0.10	0.63	65
9	7.4	53	4.2	1.9	2.9	1.6	0.32	e0.59	0.39	0.08	0.59	71
10	6.7	49	4.0	1.9	2.7	1.4	0.31	e0.49	0.38	0.07	0.80	62
11	6.0	45	3.8	1.8	2.5	1.3	0.29	e0.39	0.36	0.07	0.92	61
12	5.6	40	3.5	1.7	2.4	1.2	0.27	e0.31	0.32	0.08	0.95	71
13	7.8	35	3.3	1.6	2.2	1.2	0.24	e0.16	0.27	0.08	1.0	63
14	21	31	3.7	1.6	2.3	1.1	0.23	e0.19	0.23	0.06	0.99	59
15	21	28	4.1	1.5	2.3	1.0	e0.75	0.57	0.21	0.06	0.99	55
16	18	25	4.0	1.5	2.3	1.1	e0.74	0.77	0.18	0.08	1.3	51
17	16	23	4.2	1.4	2.1	1.6	e0.62	0.51	0.17	0.08	1.3	47
18	14	20	4.1	1.9	2.0	1.6	e0.54	0.46	0.19	0.12	1.3	48
19	13	19	4.0	2.5	1.8	1.5	e0.46	0.86	0.15	0.24	1.7	46
20	13	17	3.7	2.5	1.7	1.4	e0.39	0.85	0.13	0.18	1.8	46
21	16	15	3.5	2.4	1.6	1.3	e0.33	0.79	0.13	0.16	1.6	115
22	16	14	3.3	2.3	1.5	1.2	e0.27	0.68	0.14	0.16	2.3	119
23	16	12	4.1	2.2	1.4	1.0	e0.24	0.57	0.12	0.14	3.3	95
24	14	11	4.6	2.0	1.3	0.94	e0.19	0.48	0.10	0.12	3.4	86
25	13	10	4.5	2.0	2.5	0.89	e0.15	0.40	0.10	0.12	3.5	e128
26	12	9.6	4.3	1.9	4.1	0.82	e0.10	0.35	0.14	0.10	3.3	e323
27	11	8.9	4.1	1.9	4.4	0.72	e0.13	0.31	0.12	0.23	3.0	e266
28	9.5	8.3	3.8	1.8	4.2	0.67	e0.29	0.28	0.10	0.20	2.8	206
29	8.8	7.7	3.5	1.7	3.9	0.68	e0.24	0.25	0.09	0.17	2.6	183
30	8.0	7.0	3.2	1.7	---	0.66	e0.18	0.22	0.09	0.16	2.3	e210
31	7.2	---	3.0	2.8	---	0.64	---	0.19	---	0.36	2.0	---
TOTAL	400.4	749.2	132.4	63.5	85.0	46.42	12.27	16.38	6.48	3.93	48.41	2,695.8
MEAN	12.9	25.0	4.27	2.05	2.93	1.50	0.41	0.53	0.22	0.13	1.56	89.9
MAX	24	66	6.6	2.8	5.0	3.6	0.78	1.5	0.59	0.36	3.5	323
MIN	5.6	6.7	3.0	1.4	1.3	0.64	0.10	0.09	0.09	0.06	0.34	1.5
AC-FT	794	1,490	263	126	169	92	24	32	13	7.8	96	5,350

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2004, BY WATER YEAR (WY)

	MEAN	233	(WY)	MIN	(WY)	MEAN	124	(1995)	MIN	(1982)	MEAN	43.7	(1993)	MIN	(2001)	MEAN	50.1	(1996)	MIN	(1985)	MEAN	29.0	(1997)	MIN	(1981)	MEAN	16.8	(1998)	MIN	(1981)	MEAN	41.9	(1997)	MIN	(1981)	MEAN	51.8	(2002)	MIN	(2004)	MEAN	104	(2001)	MIN	(1990)	MEAN	31.0	(2004)	MIN	(2000)
MEAN	42.9	233	(1996)	0.78	(1989)	24.9	124	(1995)	0.88	(1989)	12.7	69.5	(1995)	0.29	(1982)	8.92	52.8	(1993)	0.54	(2001)	9.89	29.0	(1997)	0.13	(1981)	5.74	16.8	(1998)	0.08	(1981)	7.10	41.9	(1997)	0.15	(1981)	13.9	51.8	(2002)	0.13	(2004)	24.0	104	(2001)	0.25	(1990)	31.0	89.9	1.08	(2000)	

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1980 - 2004

ANNUAL TOTAL	2,894.64	4,260.19	
ANNUAL MEAN	7.93	11.6	17.4
HIGHEST ANNUAL MEAN			39.9
LOWEST ANNUAL MEAN			0.99
HIGHEST DAILY MEAN	66	323	1,230
LOWEST DAILY MEAN	0.36	0.06	0.01
ANNUAL SEVEN-DAY MINIMUM	0.43	0.07	0.05
MAXIMUM PEAK FLOW		338	1,800
MAXIMUM PEAK STAGE		7.46	11.00
INSTANTANEOUS LOW FLOW		0.04	0.00
ANNUAL RUNOFF (AC-FT)	5,740	8,450	12,640
10 PERCENT EXCEEDS	22	29	51
50 PERCENT EXCEEDS	3.4	1.8	4.5
90 PERCENT EXCEEDS	0.64	0.14	0.38

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

265929080091800 LOXAHATCHEE RIVER AT OUTLET OF KITCHINGS CREEK, FL

LOCATION.--Lat 26°59'29", long 80°09'18", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$, sec.16, T.40 S., R.42 E., Martin County, Hydrologic Unit 03090202, on the Loxahatchee River, Jupiter, Fl, 3.67 mi west of State Road 811 Alternate (A1A), 2.2 mi east of U.S. Interstate 95.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--

GAGE HEIGHT: December 2002 to current year.

SALINITY: December 2002 to current year.

WATER TEMPERATURE: December 2002 to current year.

GAGE.--Electronic data logger with water-quality monitor sensor. Datum of gage is arbitrary.

REMARKS.--2003 Water Year: Salinity record rated excellent except May 10-12, which is rated good. Temperature record rated good for the entire water year.

2004 Water Year: Salinity record rated excellent except for September 4-15, which is rated good. Temperature record rated good for the entire water year.

EXTREMES FOR PERIOD OF RECORD.--

GAGE HEIGHT: Maximum gage height, 4.65 ft Sept. 5, 2004; minimum, -1.55 ft July 1, 2004.

SALINITY: Maximum recorded, 17.3 ppt June 5, 2004; minimum recorded, 0.0 ppt Apr. 8, 2003, Sept. 26, 30, 2004.

WATER TEMPERATURE: Maximum recorded, 33.3°C June 28, 2004; minimum recorded, 12.8°C Jan. 25, 2003.

EXTREMES FOR 2003 WATER YEAR.--

GAGE HEIGHT: Maximum gage height, 3.01 ft Sept. 28; minimum, -1.49 ft July 30.

SALINITY: Maximum recorded, 15.7 ppt Feb. 14; minimum recorded, 0.0 ppt Apr. 8.

WATER TEMPERATURE: Maximum recorded, 32.7°C July 9; minimum recorded, 12.8°C Jan. 25.

EXTREMES FOR CURRENT YEAR.--

GAGE HEIGHT: Maximum gage height, 4.65 ft Sept. 5; minimum, -1.55 ft July 1.

SALINITY: Maximum recorded, 17.3 ppt June 5; minimum recorded, 0.0 ppt Sept. 26, 30.

WATER TEMPERATURE: Maximum recorded, 33.3°C June 28; minimum recorded, 13.7°C Dec. 21.

265912080082900 LOXAHATCHEE RIVER AT BOY SCOUT CAMP NEAR HOBE SOUND

LOCATION.--Lat 26°59'12", long 80°08'29", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$, sec.15, T.40 S., R.42 E., Martin County, Hydrologic Unit 03090202, in Tanah-Keeta Boy Scout Camp, 4.65 mi northwest of Jupiter, 5.26 mi northwest of the mouth of Loxahatchee River, 2.92 mi east of U.S. Interstate 95.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--

GAGE HEIGHT: October 2002 to current year.
SALINITY (TOP): October 2002 to current year.
SALINITY (BOTTOM): June 2003 to current year.
WATER TEMPERATURE (TOP): October 2002 to current year.
WATER TEMPERATURE (BOTTOM): June 2003 to current year.

GAGE.--Electronic data logger with water-quality monitor with top and bottom sensors. A second salinity and temperature sensor was installed in June 13, 2003. Datum of gage is National Geodetic Vertical Datum of 1929 survey levels from a benchmark provided by National Geodetic Survey.

REMARKS.--Salinity record (top) rated excellent from Oct. 1 to Apr. 1, Apr. 23 to Sept. 9; rated good from Apr. 2-22, Sept. 10-30. Salinity record (bottom) rated excellent from Oct. 1-24, Nov. 20 to Aug. 9; rated good Oct. 25 to Nov. 19, Aug. 10 to Sept. 30. Temperature records (top and bottom) are rated good for the entire water year.

EXTREMES FOR PERIOD OF RECORD.--

GAGE HEIGHT: Maximum gage height, 4.63 ft Sept. 5, 2004; minimum, -1.54 ft July 1, 2004.
SALINITY (TOP): Maximum recorded, 27.6 ppt Apr. 5, 2004; minimum recorded, 0.1 ppt Sept. 26-30, 2004.
SALINITY (BOTTOM): Maximum recorded, 28.5 ppt Feb. 28, 2004; minimum recorded, 0.1 ppt Sept. 22, 23, 26-30, 2004.
WATER TEMPERATURE (TOP): Maximum recorded, 34.1°C June 29, 2004; minimum recorded, 15.0°C Dec. 21, 22, 2003.
WATER TEMPERATURE (BOTTOM): Maximum recorded, 33.6°C June 28, July 1, 2, 2004; minimum recorded, 15.0°C Dec. 22, 2003.

EXTREMES FOR CURRENT YEAR.--

GAGE HEIGHT: Maximum gage height, 4.63 ft Sept. 5; minimum, -1.54 ft July 1.
SALINITY (TOP): Maximum recorded, 27.6 ppt Apr. 5; minimum recorded, 0.1 ppt Sept. 26-30.
SALINITY (BOTTOM): Maximum recorded, 28.5 ppt Feb. 28; minimum recorded, 0.1 ppt Sept. 22, 23, 26-30.
WATER TEMPERATURE (TOP): Maximum recorded, 34.1°C June 29; minimum recorded, 15.0°C Dec. 21, 22.
WATER TEMPERATURE (BOTTOM): Maximum recorded, 33.6°C June 28, July 1, 2; minimum recorded, 15.0°C Dec. 22.

265912080082900 LOXAHATCHEE RIVER AT BOY SCOUT CAMP NEAR HOBE SOUND, FL-Continued

BOTTOM
TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH						
1	28.3	26.5	25.8	24.3	21.7	19.6	21.8	19.8	20.4	19.3	21.5	19.7
2	28.2	26.8	26.3	24.7	22.0	19.4	22.3	20.4	21.4	19.8	21.3	20.1
3	28.4	26.7	26.3	25.2	21.8	19.9	22.5	20.8	22.2	20.2	22.6	20.9
4	28.8	26.9	26.1	25.3	21.1	20.1	22.8	21.2	22.4	20.3	23.5	21.9
5	29.3	27.1	25.8	25.2	22.2	20.6	22.9	21.4	22.9	21.0	23.7	22.3
6	29.2	27.4	25.6	25.0	22.7	19.9	23.3	21.5	23.2	21.6	24.4	22.8
7	28.8	27.3	---	---	22.3	19.1	23.2	21.2	23.2	22.2	25.4	23.7
8	29.0	27.2	26.3	25.1	20.6	18.4	22.1	20.1	22.8	20.4	25.3	24.0
9	29.0	27.3	26.6	25.6	20.2	18.1	21.0	19.7	21.0	19.8	24.6	22.7
10	28.8	27.4	26.6	25.8	19.7	18.5	20.8	19.5	21.7	19.7	23.2	21.6
11	28.8	27.4	26.2	25.2	20.4	18.8	20.5	17.8	22.1	20.4	22.1	20.2
12	28.7	27.3	25.8	24.6	20.4	18.3	19.1	17.9	23.0	20.8	22.2	20.4
13	28.9	27.5	25.3	24.1	20.7	18.7	19.2	17.4	23.6	21.6	22.6	20.0
14	29.0	27.5	25.3	23.5	20.9	19.1	19.4	17.3	24.6	22.7	22.4	20.7
15	28.9	27.3	24.7	22.9	21.4	19.0	20.0	17.1	24.2	22.5	23.7	21.6
16	28.9	26.4	24.0	22.8	21.3	19.3	20.5	17.6	23.6	21.8	23.6	22.7
17	27.9	25.4	24.3	22.9	21.2	19.2	20.3	18.1	23.2	21.2	24.4	22.9
18	27.6	25.4	24.4	23.3	21.0	17.9	20.3	18.4	22.1	19.8	25.0	23.1
19	27.6	25.9	24.4	23.7	20.0	16.8	21.1	18.4	20.9	19.0	25.3	23.4
20	---	---	24.9	22.8	18.9	15.9	21.3	19.1	20.5	19.3	24.8	23.3
21	---	---	24.2	22.3	17.8	15.3	20.5	18.5	21.5	19.1	25.0	23.2
22	27.6	24.9	23.4	21.8	17.3	15.0	20.5	18.5	22.2	19.6	25.1	23.4
23	27.5	25.0	23.0	21.6	18.1	15.9	19.9	17.8	22.5	20.2	24.2	22.8
24	27.1	25.0	22.9	21.5	19.5	17.3	19.6	16.9	23.2	20.9	22.9	21.5
25	26.0	24.8	23.4	21.8	19.8	18.1	19.1	16.5	23.1	21.5	22.1	20.9
26	25.9	24.6	23.9	22.1	20.0	18.0	19.7	17.1	23.0	21.3	22.7	20.6
27	26.0	25.1	23.9	22.3	20.1	17.9	20.6	18.6	23.0	21.3	23.2	21.1
28	26.1	25.0	23.9	22.0	20.0	18.2	21.3	18.2	23.0	21.6	23.6	22.1
29	26.7	25.3	24.0	21.0	20.0	18.5	21.2	19.8	21.9	20.2	23.8	22.9
30	26.5	24.9	23.0	20.0	20.7	18.9	20.6	19.6	---	---	23.7	23.1
31	25.9	24.4	---	---	21.2	19.3	20.3	19.4	---	---	24.2	23.2
MONTH	29.3	24.4	26.6	20.0	22.7	15.0	23.3	16.5	24.6	19.0	25.4	19.7
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	24.3	22.7	28.4	26.5	32.4	30.5	33.6	31.4	30.9	29.5	31.4	29.2
2	24.0	22.2	28.7	26.7	32.4	30.0	33.6	31.1	30.2	28.7	31.5	29.3
3	23.7	22.1	28.2	26.9	32.3	29.4	32.5	31.2	30.1	28.2	30.8	29.2
4	23.5	21.9	27.3	26.3	30.6	29.2	32.3	30.8	30.0	28.4	30.4	26.5
5	23.7	21.8	27.3	25.9	29.7	28.7	32.3	30.5	29.2	28.2	26.5	25.1
6	23.7	21.9	27.2	25.4	30.3	27.8	31.7	30.4	29.9	27.7	26.7	25.1
7	24.1	22.0	27.2	25.3	30.7	28.1	31.4	29.8	30.0	28.4	28.1	26.4
8	25.0	22.6	27.2	25.0	31.2	28.4	32.0	29.5	30.8	28.9	28.7	27.6
9	25.2	23.5	27.7	25.2	31.2	29.0	32.6	30.0	30.9	29.6	28.8	27.6
10	26.4	24.1	27.1	25.5	30.6	29.4	33.2	30.6	30.6	29.4	30.6	28.3
11	27.3	24.9	28.0	25.6	30.7	29.0	33.3	31.2	30.2	29.0	30.8	28.6
12	26.6	25.0	27.6	26.1	31.5	29.6	32.8	31.4	29.8	28.6	30.3	28.9
13	25.9	24.4	28.0	26.0	32.2	30.2	32.8	31.5	29.9	28.3	29.7	28.7
14	25.2	23.1	28.3	26.3	32.9	30.9	33.1	31.4	30.4	28.7	29.3	28.4
15	24.3	22.2	28.7	26.7	32.8	31.5	33.3	31.3	30.3	29.1	28.7	27.8
16	24.1	22.4	28.3	26.7	32.5	31.5	32.9	31.3	30.9	28.8	29.5	27.9
17	24.5	22.7	29.0	26.9	32.4	30.7	32.1	30.5	30.9	29.1	29.3	28.5
18	24.4	22.9	28.4	27.0	32.6	30.7	31.8	30.3	30.6	28.8	29.8	28.3
19	24.7	22.8	28.9	26.9	32.7	30.9	31.3	29.8	30.2	28.3	29.8	28.7
20	25.6	23.1	29.2	27.1	32.8	30.6	30.5	28.9	30.3	28.3	29.2	27.8
21	26.0	23.7	29.6	27.2	32.5	30.8	31.0	28.9	31.7	28.8	28.1	26.2
22	26.8	24.0	30.0	27.5	32.0	30.4	31.5	29.1	31.1	29.2	27.0	25.8
23	27.7	24.6	30.2	27.6	32.9	30.1	31.5	29.7	31.2	28.6	27.6	26.3
24	27.6	25.2	30.0	27.9	33.2	30.5	32.2	29.6	31.3	28.5	27.8	26.5
25	28.2	25.8	30.1	27.7	32.9	30.8	32.1	30.0	30.7	28.2	27.1	26.0
26	28.4	26.6	30.4	27.8	32.4	31.0	32.2	30.2	30.8	27.8	26.0	24.6
27	27.8	27.0	30.6	28.4	33.2	30.6	32.1	30.4	32.0	28.3	27.2	25.4
28	27.6	27.1	31.5	29.0	33.6	31.4	31.6	29.9	31.7	29.2	28.5	27.1
29	27.5	26.0	31.5	29.5	33.5	31.8	32.2	29.9	31.6	29.4	28.5	28.0
30	27.8	26.1	31.8	29.7	33.4	31.6	32.4	30.3	31.2	29.4	28.6	27.8
31	---	---	32.2	30.3	---	---	31.9	30.6	31.1	29.4	---	---
MONTH	28.4	21.8	32.2	25.0	33.6	27.8	33.6	28.9	32.0	27.7	31.5	24.6
YEAR	33.6	15.0										

265906080093500 LOXAHATCHEE RIVER AT MILE 9.1 NEAR JUPITER, FL

LOCATION.--Lat 26°59'06", long 80°09'37", in NE $\frac{1}{4}$ NE $\frac{1}{4}$, sec.20, T.40 S., R.42 E., Martin County, Hydrologic Unit 03090202, on the Loxahatchee river, Jupiter, 4.1 mi west of State Road 811 Alternate (A1A), 1.65 mi east of U.S. Interstate 95.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--

GAGE HEIGHT: October 2003 to current year.

SALINITY (TOP): October 2003 to current year.

SALINITY (BOTTOM): October 2003 to current year.

WATER TEMPERATURE (TOP): October 2003 to current year.

WATER TEMPERATURE (BOTTOM): October 2003 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and water-quality monitor with top and bottom sensors. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Salinity (top) record rated excellent except Sept. 5-30, which are rated good. Salinity (bottom) record rated excellent except July 28 to Aug. 10, which are rated good. Temperature (top and bottom) record rated good for the entire water year.

EXTREMES FOR CURRENT YEAR.--

GAGE HEIGHT: Maximum gage height, 4.81 ft Sept. 26; minimum, -1.56 ft July 1.

SALINITY (TOP): Maximum recorded, 10.0 ppt June 5; minimum recorded, 0.1 ppt Nov. 9-19, Sept. 6-8, 22, 26-30.

SALINITY (BOTTOM): Maximum recorded, 13.3 ppt Apr. 1; minimum recorded, 0.1 ppt Nov. 9-19, Sept. 6-8, 22, 26-30.

WATER TEMPERATURE (TOP): Maximum recorded, 33.2°C June 28, 29; minimum recorded, 14.3°C Dec. 21.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 32.1°C June 28, 30; minimum recorded, 14.2°C Dec. 21.

265818080111900 CYPRESS CREEK CANAL BELOW GULFSTREAM BRIDGE, FL

LOCATION.--Lat 26°58'18", long 80°11'19", in SW 1/4 SW 1/4 SW 1/4, sec.19, T.40 S., R.42 E., Martin County, Hydrologic Unit 03090202, north bank of Cypress Creek Canal below Gulfstream Citrus Bridge, 0.5 mi west of U.S. Interstate 95, 7 mi northwest of Jupiter.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 2002 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Datum of gage is National Geodetic Vertical Datum (NGVD) of 1929 converted through VERTCON using the NAVD 88 survey levels provided by the South Florida Water Management District (SFWMD).

REMARKS.--Records poor. Flow regulated by stop-log structure located 0.25 mi downstream. The cross-section at this site is variable due to the buildup of debris in front of the bridge piling. Discharge computed from relationships between stage vs. area and index velocity vs. mean channel velocity.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 1 complete water year of discharge (2004).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 15.26 ft Sept. 26, 2004; minimum, 6.48 ft Mar. 11, 12, 2003.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 15.26 ft Sept. 26; minimum, 6.61 ft Apr. 21.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	7.60	7.78	7.71	7.36	7.43	---	8.40	9.00	7.95	7.78	8.49
2	---	7.69	7.77	7.74	7.34	7.50	7.59	8.40	8.85	7.99	7.69	8.64
3	---	7.71	7.75	7.73	7.23	7.57	7.53	8.35	8.78	8.05	7.89	8.80
4	---	7.69	7.73	7.70	6.85	7.57	7.53	8.27	9.04	8.12	8.36	---
5	---	7.64	7.72	7.69	7.22	7.47	7.68	8.17	9.08	8.11	8.62	---
6	---	7.59	7.72	7.66	7.49	7.46	7.72	8.05	9.47	8.13	8.52	9.25
7	---	7.55	7.73	7.68	7.27	7.50	---	8.03	9.39	8.12	8.47	---
8	---	---	7.63	7.75	7.15	7.49	---	8.09	9.21	8.07	8.49	9.17
9	---	7.55	7.64	7.71	7.30	7.42	7.74	8.10	9.64	7.99	8.56	9.05
10	---	7.55	8.26	7.68	7.28	7.11	7.89	8.03	9.34	7.90	8.76	8.94
11	---	7.56	8.19	---	7.04	6.65	7.70	8.01	9.03	7.80	8.99	8.83
12	---	7.77	8.06	7.67	7.11	6.63	7.65	7.99	8.80	7.70	8.88	---
13	---	8.06	7.96	7.66	7.09	---	7.57	7.80	8.58	7.79	8.74	---
14	---	---	8.03	7.68	7.08	7.49	7.47	7.79	8.54	7.83	8.89	8.54
15	---	---	7.89	7.68	7.07	7.41	7.50	7.89	8.49	7.84	9.15	8.49
16	---	---	7.84	7.62	7.10	7.24	7.77	7.77	8.42	7.83	9.08	8.47
17	---	8.12	7.81	7.64	7.94	7.89	8.09	7.65	8.27	7.83	8.97	---
18	---	8.18	7.80	7.62	7.60	8.01	7.95	7.70	---	7.80	9.01	8.51
19	---	7.88	7.84	7.61	7.34	7.74	7.85	7.67	8.31	7.78	9.29	---
20	---	7.82	7.93	7.55	7.25	7.69	7.83	7.67	8.38	7.80	9.12	---
21	---	8.22	8.15	7.54	7.28	7.66	7.83	7.59	8.35	7.82	9.04	8.58
22	---	---	8.06	7.50	7.35	7.62	7.87	7.70	8.31	7.72	8.96	8.57
23	---	---	7.95	7.47	7.45	7.67	7.88	8.16	8.28	7.75	8.89	8.55
24	---	7.99	7.84	7.67	7.58	7.70	7.77	8.56	8.22	7.77	8.81	8.47
25	---	7.92	7.87	7.86	7.89	7.64	7.76	8.61	8.17	7.76	8.74	8.43
26	---	7.89	7.84	7.72	7.64	7.57	8.20	8.57	8.14	7.82	8.70	8.45
27	---	7.88	7.75	7.41	7.52	7.64	8.43	8.75	8.10	7.77	8.68	8.53
28	---	8.01	7.73	7.19	7.41	8.25	8.36	9.43	8.05	7.85	8.58	8.57
29	---	---	7.70	7.25	---	---	---	9.46	8.00	7.76	8.53	8.76
30	---	7.79	7.67	7.36	---	---	8.45	9.29	7.96	7.76	8.51	9.08
31	7.65	---	7.66	7.36	---	---	---	9.13	---	7.88	8.47	---
TOTAL	---	---	243.30	---	205.23	---	---	255.08	---	244.09	269.17	---
MEAN	---	---	7.85	---	7.33	---	---	8.23	---	7.87	8.68	---
MAX	---	---	8.26	---	7.94	---	---	9.46	---	8.13	9.29	---
MIN	---	---	7.63	---	6.85	---	---	7.59	---	7.70	7.69	---

265818080111900 CYPRESS CREEK CANAL BELOW GULFSTREAM BRIDGE, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	33	41	37	22	27	e21	81	179	61	37	80
2	---	37	39	37	22	29	19	80	161	65	32	101
3	---	38	38	36	21	33	17	77	125	70	45	119
4	---	38	39	35	17	33	15	81	158	72	81	e130
5	---	35	39	35	24	29	20	71	176	73	100	e149
6	---	32	35	31	30	29	26	61	237	71	88	200
7	---	30	38	32	23	29	e24	59	199	69	78	e196
8	---	e30	33	37	19	29	e21	58	177	63	79	177
9	---	---	34	36	24	24	26	59	265	58	86	164
10	---	---	86	36	23	16	33	53	210	54	112	147
11	---	---	70	e37	19	11	22	51	164	46	140	133
12	---	---	59	33	19	12	18	56	133	36	125	e115
13	---	---	51	32	19	e19	14	39	108	42	108	e100
14	---	---	55	33	18	29	12	34	105	45	128	91
15	---	---	53	34	17	25	15	46	94	44	155	86
16	---	e35	47	30	19	19	30	40	92	43	146	80
17	---	69	45	33	60	69	81	32	80	41	127	e93
18	---	74	45	33	29	62	65	36	e80	40	133	83
19	---	47	45	32	18	34	50	32	89	39	166	e75
20	---	47	55	29	17	23	49	32	96	36	146	e77
21	---	77	71	27	18	16	48	25	99	35	138	94
22	---	---	64	28	20	15	57	38	89	28	126	92
23	---	---	56	27	22	20	e61	87	81	30	115	90
24	---	55	49	39	31	22	49	132	79	39	102	82
25	---	49	50	50	45	21	48	127	72	38	93	80
26	---	46	48	39	37	18	64	109	60	38	90	81
27	---	46	43	22	31	24	86	137	73	32	90	88
28	---	e57	41	18	26	87	72	225	66	41	89	90
29	---	e49	38	18	---	---	e68	252	61	34	86	115
30	---	43	38	21	---	---	87	229	61	35	83	165
31	---	---	37	22	---	e25	---	209	---	43	79	---
TOTAL	---	---	1,482	989	690	---	1,218	2,648	3,669	1,461	3,203	3,373
MEAN	---	---	47.8	31.9	24.6	---	40.6	85.4	122	47.1	103	112
MAX	---	86	50	60	87	252	265	73	166	200		
MIN	---	33	18	17	12	25	60	28	32	75		
AC-FT	---	---	2,940	1,960	1,370	---	2,420	5,250	7,280	2,900	6,350	6,690

e Estimated

265818080111900 CYPRESS CREEK CANAL BELOW GULFSTREAM BRIDGE, FL-Continued

GAGE HEIGHT, FEET
 WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	8.13	8.05	7.69	7.95	7.85	7.47	7.44	7.46	7.32	7.47	7.43
2	---	8.18	8.11	7.67	7.84	7.84	7.43	7.36	7.36	7.33	7.50	7.40
3	8.85	8.51	8.09	7.67	8.08	7.81	7.29	7.34	---	7.34	7.58	7.36
4	8.77	---	8.05	7.68	7.98	7.84	7.33	7.75	7.45	7.37	7.97	7.64
5	8.72	8.68	7.88	7.70	7.81	7.81	7.33	7.61	7.59	7.45	8.11	10.51
6	8.62	9.13	7.98	7.70	7.76	7.78	7.27	---	7.59	7.53	8.28	11.42
7	8.50	9.57	7.94	7.70	7.76	7.80	7.30	7.41	7.54	7.60	8.19	10.69
8	8.40	9.49	7.92	7.68	7.72	---	7.20	7.31	7.48	7.56	7.89	10.26
9	8.44	9.78	7.89	7.65	7.67	7.79	7.12	7.26	7.45	7.45	7.71	10.07
10	8.48	9.70	7.89	7.63	7.63	7.73	7.20	---	---	7.39	7.69	9.50
11	8.44	9.54	7.87	7.59	7.65	7.75	7.49	---	7.43	7.39	7.65	9.11
12	8.49	9.42	7.82	7.57	7.74	7.68	7.69	6.93	7.43	7.46	7.31	8.82
13	8.46	9.40	7.79	7.56	7.79	7.67	7.73	7.05	7.38	7.87	7.51	8.58
14	8.47	9.29	7.89	7.63	7.74	7.72	7.55	---	7.47	8.42	7.44	8.37
15	8.34	---	8.03	7.70	7.69	7.75	7.46	7.27	7.45	8.09	7.45	8.28
16	8.23	9.08	7.89	7.71	7.67	7.78	7.42	7.46	7.42	7.86	7.75	8.16
17	8.15	8.99	7.91	7.69	7.66	7.80	7.38	7.52	7.42	7.63	7.76	8.15
18	8.11	---	---	7.80	7.62	7.71	7.32	7.45	7.44	7.66	7.67	8.05
19	8.04	8.88	7.80	8.01	7.61	7.62	7.18	7.39	7.45	7.86	8.02	7.98
20	8.12	8.85	7.79	7.74	7.60	7.57	6.83	7.27	7.42	7.83	7.84	8.31
21	8.49	8.74	7.80	7.67	7.59	7.55	6.87	7.17	7.38	7.72	7.71	10.00
22	---	8.67	7.82	7.64	7.57	7.53	7.36	7.25	7.43	7.60	7.65	11.23
23	8.36	8.62	8.01	7.61	---	7.50	7.18	7.24	7.42	7.54	7.69	10.09
24	8.32	8.55	7.99	7.62	7.52	7.50	6.97	7.18	7.39	7.44	7.70	9.34
25	8.29	---	7.85	7.63	---	7.41	7.07	7.15	7.36	7.44	7.78	9.26
26	---	8.37	7.80	7.61	8.30	7.38	7.35	7.25	---	---	7.64	14.83
27	8.23	8.33	7.77	7.57	8.03	7.25	7.39	7.26	7.39	---	7.60	14.71
28	8.21	8.28	7.74	7.57	7.93	7.45	7.42	7.07	7.45	7.46	7.57	14.04
29	---	8.21	7.73	7.52	7.88	7.47	7.49	7.03	7.41	7.51	7.55	13.46
30	8.24	---	7.72	7.51	---	7.36	7.53	7.21	7.38	7.47	7.52	12.75
31	8.18	---	7.70	7.91	---	7.41	---	7.39	---	7.46	7.46	---
TOTAL	---	---	---	237.63	---	---	219.62	---	---	---	238.66	295.80
MEAN	---	---	---	7.67	---	---	7.32	---	---	---	7.70	9.86
MAX	---	---	---	8.01	---	---	7.73	---	---	---	8.28	14.83
MIN	---	---	---	7.51	---	---	6.83	---	---	---	7.31	7.36

265818080111900 CYPRESS CREEK CANAL BELOW GULFSTREAM BRIDGE, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	147	53	49	33	44	36	21	17	18	13	9.6	63
2	e143	57	55	31	33	32	20	16	16	13	12	63
3	130	88	56	31	49	34	17	17	e15	14	11	62
4	122	e88	51	30	43	35	17	30	18	12	25	87
5	113	104	39	30	33	35	17	24	21	14	28	391
6	102	170	40	33	31	30	17	e20	19	17	36	504
7	86	234	40	34	32	33	18	17	18	16	31	437
8	76	220	45	30	30	e37	16	16	16	16	17	402
9	80	267	39	27	25	33	16	16	15	14	12	385
10	82	245	41	31	24	29	16	e15	e17	13	14	325
11	79	213	37	28	25	31	21	e11	14	13	36	282
12	88	196	34	27	30	27	34	13	14	13	52	249
13	86	195	34	23	35	26	30	14	15	28	74	220
14	86	181	39	29	31	29	23	e15	16	55	74	195
15	73	e169	48	33	28	31	20	16	16	36	76	184
16	63	157	38	32	26	34	20	20	16	25	85	171
17	55	145	40	31	27	35	20	18	16	16	76	167
18	53	e135	e39	39	24	29	19	18	16	17	98	157
19	46	130	36	51	25	27	16	16	15	23	124	149
20	55	127	34	31	24	25	13	15	16	20	99	183
21	91	111	35	27	23	24	13	14	15	17	85	370
22	e77	103	39	27	22	23	19	15	17	13	78	512
23	68	100	53	28	e22	23	16	15	15	13	84	393
24	66	88	49	26	20	24	13	12	15	10	85	325
25	65	e75	38	28	e40	20	13	12	15	10	93	317
26	e60	72	34	26	71	21	15	13	e14	e10	79	1,020
27	57	70	36	26	50	18	16	13	14	e10	74	1,100
28	54	63	33	28	43	21	18	13	15	11	72	1,070
29	e56	58	32	24	37	22	19	12	14	9.9	70	975
30	60	e52	33	25	---	18	20	14	14	9.4	68	874
31	59	---	32	47	---	20	---	15	---	8.4	66	---
TOTAL	2,478	3,966	1,248	946	947	862	553	492	475	509.7	1,843.6	11,632
MEAN	79.9	132	40.3	30.5	32.7	27.8	18.4	15.9	15.8	16.4	59.5	388
MAX	147	267	56	51	71	37	34	30	21	55	124	1,100
MIN	46	52	32	23	20	18	13	11	14	8.4	9.6	62
AC-FT	4,920	7,870	2,480	1,880	1,880	1,710	1,100	976	942	1,010	3,660	23,070

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2004, BY WATER YEAR (WY)

MEAN	79.9	132	44.0	31.2	28.7	27.8	29.5	50.6	69.1	31.8	81.4	250
MAX	79.9	132	47.8	31.9	32.7	27.8	40.6	85.4	122	47.1	103	388
(WY)	(2004)	(2004)	(2003)	(2003)	(2004)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)	(2004)
MIN	79.9	132	40.3	30.5	24.6	27.8	18.4	15.9	15.8	16.4	59.5	112
(WY)	(2004)	(2004)	(2004)	(2004)	(2003)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)

SUMMARY STATISTICS

	FOR 2004 WATER YEAR		WATER YEARS 2003 - 2004	
ANNUAL TOTAL	25,952.3			
ANNUAL MEAN	70.9		70.9	
HIGHEST ANNUAL MEAN			70.9	
LOWEST ANNUAL MEAN			70.9	
HIGHEST DAILY MEAN	1,100	Sep 27	1,100	Sep 27, 2004
LOWEST DAILY MEAN	8.4	Jul 31	8.4	Jul 31, 2004
ANNUAL SEVEN-DAY MINIMUM	9.8	Jul 26	9.8	Jul 26, 2004
ANNUAL RUNOFF (AC-FT)	51,480		51,370	
10 PERCENT EXCEEDS	151		151	
50 PERCENT EXCEEDS	31		31	
90 PERCENT EXCEEDS	14		14	

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

265708080093700 HOBE DITCH TRIBUTARY TO LOXAHATCHEE RIVER .5 MI ABOVE MOUTH, FL

LOCATION.--Lat 26°59'08", long 80°09'37", in NE ¼ NE ¼ NE ¼, sec.18, T.40 S., R.42 E., Martin County, Hydrologic Unit 03090202, in the Gulfstream Citrus Orange Grove on Hobe Ditch, 50 ft above Moonshine Creek, 0.75 mi east of U.S. Interstate 95, 3.2 mi northeast of State Road 706 bridge crossing over the Loxahatchee River, 6.2 mi northwest of Jupiter.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 2002 to present.

GAGE.--Electronic data logger. Datum of gage is National Geodetic Vertical Datum of 1929. (South Florida Water Management bench mark).

REMARKS.--Record poor, discharge affected regularly by tidal backwater. Flow regulated by operation of control structure 0.2 mi upstream.

ANNUAL MEAN and ANNUAL SUMMARY STATISTICS.--Figures represent 1 complete year of discharge (2004).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 11.70 ft Sept. 26, 2004; minimum, 1.78 ft Mar. 11, 2003.

EXTREME STAGES FOR 2003 WATER YEAR.--Maximum gage height, 5.06 ft Aug. 13; minimum, 1.78 ft Mar. 11.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 11.70 ft Sept. 26; minimum, 1.95 ft July 2.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	2.17	1.87	2.04	2.11	2.22	2.92	2.02	2.51	2.70
2	---	---	---	2.17	1.86	2.04	2.08	2.22	2.41	2.03	2.45	2.94
3	---	---	2.37	2.16	2.06	2.01	1.97	2.21	2.16	2.13	2.61	3.39
4	---	---	2.36	2.14	1.88	2.00	1.90	2.19	2.13	2.35	3.08	3.95
5	---	---	2.38	2.13	1.95	1.92	1.96	2.07	2.13	2.33	3.17	3.91
6	---	---	2.38	2.12	1.96	1.87	2.00	1.91	2.46	2.32	3.30	3.88
7	---	---	2.36	1.97	1.97	1.85	---	1.92	2.80	2.14	3.07	3.56
8	---	---	2.33	1.83	1.96	1.84	---	1.91	2.76	2.10	3.19	3.37
9	---	---	2.35	1.83	2.06	1.84	1.86	1.90	2.82	2.07	3.18	3.22
10	---	---	2.52	1.96	2.09	1.82	1.88	1.88	2.83	1.99	3.35	3.08
11	---	---	2.46	2.06	2.01	1.80	1.86	1.88	2.77	2.00	3.52	2.67
12	---	---	2.44	2.08	2.05	1.82	1.87	1.88	2.69	2.00	3.37	2.36
13	---	---	2.47	2.07	1.99	2.36	1.86	1.86	2.60	2.53	3.70	2.34
14	---	---	2.48	1.97	1.95	2.50	1.86	1.87	2.51	2.75	3.05	2.44
15	---	---	2.44	1.82	2.28	2.44	1.91	1.86	2.44	2.83	2.96	2.50
16	---	---	2.41	1.83	2.50	2.28	1.97	1.84	2.39	2.69	3.31	2.53
17	---	---	2.39	1.83	2.82	2.43	2.05	1.83	2.29	2.61	3.19	2.74
18	---	---	2.14	1.82	2.72	2.54	1.99	1.85	2.05	2.58	3.21	2.71
19	---	---	1.94	1.83	2.63	2.52	1.96	1.92	2.35	2.46	3.79	2.60
20	---	---	2.03	1.81	2.53	2.35	1.93	2.01	2.34	2.37	4.24	2.55
21	---	---	2.16	1.82	2.45	2.31	1.94	2.10	2.37	2.37	3.66	2.64
22	---	---	2.16	1.83	2.51	2.25	1.94	2.17	2.43	2.20	3.25	2.61
23	---	---	2.17	1.89	2.55	2.23	1.90	2.47	2.44	2.18	3.03	2.55
24	---	2.69	2.18	2.14	2.46	2.22	1.93	2.75	2.36	2.12	2.93	2.52
25	---	---	2.20	2.24	2.28	2.17	1.93	2.95	2.26	2.27	2.92	2.58
26	---	---	2.17	2.33	2.16	2.14	1.99	3.10	2.19	2.95	2.89	2.77
27	---	---	2.16	2.35	2.10	2.18	2.01	3.34	2.25	2.78	2.86	2.80
28	---	---	2.15	2.32	2.06	2.26	2.13	4.23	2.22	2.56	2.81	2.83
29	---	---	2.14	2.28	---	---	2.20	3.88	2.22	2.50	2.74	3.26
30	---	---	2.15	2.12	---	---	2.21	3.48	2.10	2.45	2.66	3.16
31	---	---	2.15	2.06	---	---	---	3.11	---	2.52	2.63	---
TOTAL	---	---	---	62.98	61.71	---	---	72.81	72.69	73.20	96.63	87.16
MEAN	---	---	---	2.03	2.20	---	---	2.35	2.42	2.36	3.12	2.91
MAX	---	---	---	2.35	2.82	---	---	4.23	2.92	2.95	4.24	3.95
MIN	---	---	---	1.81	1.86	---	---	1.83	2.05	1.99	2.45	2.34

265708080093700 HOBE DITCH TRIBUTARY TO LOXAHATCHEE RIVER .5 MI ABOVE MOUTH, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	e4.9	e2.3	0.29	e1.8	e3.2	e4.4	15	e1.3	8.4	e11
2	---	---	e4.7	e2.2	e0.27	e1.8	e3.0	e4.4	7.1	e1.5	e7.4	e16
3	---	---	e4.6	e2.1	1.4	e1.6	2.0	e4.4	3.1	2.8	e9.8	e25
4	---	---	e4.3	e2.0	0.33	e1.4	1.3	e4.1	2.8	5.9	e18	e37
5	---	---	e4.7	e1.8	0.65	e0.96	1.8	e2.8	2.8	5.6	e20	e36
6	---	---	e4.6	e1.7	0.70	0.62	2.1	e1.3	7.7	5.4	e23	e35
7	---	---	e4.3	0.86	0.80	0.55	e1.6	e1.5	e13	2.9	e18	e26
8	---	---	e4.0	e0.17	0.78	0.50	e0.87	1.4	12	2.4	e20	e22
9	---	---	e4.3	0.18	1.4	0.48	1.1	1.4	13	1.9	e20	e18
10	---	---	e6.4	0.72	1.8	e0.41	1.2	1.2	e14	e1.0	e24	e15
11	---	---	e5.8	1.3	1.1	e0.33	e1.0	1.2	e12	e0.92	e27	e7.9
12	---	---	e5.4	1.5	1.3	0.43	e0.99	1.2	e11	e1.0	e24	e2.7
13	---	---	e5.8	e1.4	0.91	5.7	e0.94	e1.0	e9.6	e8.7	e32	e2.6
14	---	---	6.1	e0.87	0.75	7.6	e0.90	e0.92	e8.3	e12	e18	e4.3
15	---	---	5.4	e0.15	3.9	e6.9	e0.87	e0.91	e7.2	e14	e16	e5.3
16	---	---	5.1	e0.15	7.0	e4.9	e0.94	e0.90	e6.5	e11	e23	e5.6
17	---	---	e4.8	e0.16	12	e6.5	e1.4	e0.83	e5.0	e9.9	e20	e8.7
18	---	---	e2.2	e0.15	e10	e8.2	e1.1	e0.91	e1.7	9.5	21	e7.6
19	---	---	e0.54	e0.16	e9.0	e7.8	e1.1	e1.4	e5.8	7.5	33	e6.6
20	---	---	e1.2	e0.13	e7.6	e5.9	e1.1	e2.3	e5.7	6.2	44	e6.1
21	---	---	e2.2	0.14	e6.5	e5.5	e0.96	e3.1	6.3	6.3	30	e7.4
22	---	---	e2.2	0.17	e7.4	e4.9	e0.87	e3.8	7.1	3.9	21	e6.7
23	---	e15	e2.3	0.37	e7.9	e4.6	e0.84	e7.6	e7.1	3.4	e17	e5.9
24	---	e8.9	e2.4	2.1	6.7	e4.5	e0.78	e12	e6.1	2.8	e15	e5.2
25	---	e7.8	2.6	e3.1	4.5	e3.9	e0.74	15	4.7	4.9	e15	e6.0
26	---	e7.2	2.3	e4.1	3.0	e3.6	e1.7	e18	e3.5	16	e14	e8.5
27	---	e6.5	e2.2	4.4	e2.4	e3.9	e2.0	22	e4.3	13	e14	e9.1
28	---	e5.8	e2.1	e3.9	e2.0	e4.9	e3.4	e43	e4.0	9.1	e13	e9.3
29	---	e5.2	e2.0	e3.4	---	e4.4	e4.1	e35	e3.9	8.2	e12	e20
30	---	e5.1	e2.0	e1.8	---	e4.0	e4.2	e26	e2.4	7.4	e11	e16
31	---	---	e2.0	e1.5	---	e3.6	---	e19	---	8.5	e10	---
TOTAL	---	---	113.44	44.98	102.38	112.18	48.10	242.97	212.7	194.92	598.6	392.5
MEAN	---	---	3.66	1.45	3.66	3.62	1.60	7.84	7.09	6.29	19.3	13.1
MAX	---	---	6.4	4.4	12	8.2	4.2	43	15	16	44	37
MIN	---	---	0.54	0.13	0.27	0.33	0.74	0.83	1.7	0.92	7.4	2.6
AC-FT	---	---	225	89	203	223	95	482	422	387	1,190	779

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2003, BY WATER YEAR (WY)

MEAN	---	---	3.66	1.45	3.66	3.62	1.60	7.84	7.09	6.29	19.3	13.1
MAX	---	---	3.66	1.45	3.66	3.62	1.60	7.84	7.09	6.29	19.3	13.1
(WY)	---	---	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)
MIN	---	---	3.66	1.45	3.66	3.62	1.60	7.84	7.09	6.29	19.3	13.1
(WY)	---	---	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)

e Estimate

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

2657080093700 HOBE DITCH TRIBUTARY TO LOXAHATCHEE RIVER .5 MI ABOVE MOUTH, FL-Continued

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.10	2.35	2.66	2.57	2.71	2.18	2.13	2.02	2.06	2.08	2.16	2.23
2	3.03	2.42	2.69	2.56	2.63	2.20	2.16	2.11	2.00	1.97	2.19	2.11
3	2.94	2.55	2.63	2.55	2.50	2.20	2.05	2.18	2.01	1.99	2.23	2.27
4	2.82	2.53	2.59	2.31	2.21	2.24	2.04	2.25	2.04	2.18	2.14	3.10
5	2.67	3.28	2.59	2.29	2.40	2.26	2.04	2.29	2.12	2.28	2.29	7.97
6	2.61	4.18	2.72	2.50	2.49	2.25	2.02	2.28	2.28	2.31	3.01	8.16
7	2.35	3.95	3.34	2.58	2.51	2.28	2.02	2.27	2.24	2.34	2.38	5.81
8	2.20	3.51	3.64	2.72	2.48	2.27	2.01	2.25	2.29	2.37	2.12	4.80
9	2.32	3.67	3.44	2.44	2.44	2.25	2.01	2.23	2.33	2.33	2.19	4.95
10	2.35	3.73	3.27	2.74	2.14	2.23	2.00	2.12	2.35	2.30	2.26	4.89
11	2.38	3.89	3.10	2.77	2.22	2.15	2.01	2.05	2.27	2.22	2.68	4.28
12	2.18	3.57	2.77	2.73	2.35	2.13	2.24	2.02	2.26	2.20	2.74	3.97
13	2.41	3.29	3.31	2.67	2.40	2.08	2.28	2.02	2.28	2.25	2.58	3.11
14	2.77	3.14	3.71	2.40	2.40	2.07	2.32	2.02	2.23	2.23	2.26	2.55
15	2.71	3.09	4.35	2.15	2.41	2.07	2.23	2.07	2.12	2.11	2.12	2.57
16	2.63	3.02	4.27	2.22	2.14	2.13	2.11	2.27	2.02	2.10	2.13	2.89
17	2.55	2.95	3.61	2.36	2.16	2.23	2.13	2.30	2.00	2.05	2.17	3.17
18	2.51	2.97	2.89	2.50	2.26	2.23	2.17	2.24	2.01	2.07	2.42	3.34
19	2.49	2.86	2.62	2.59	2.31	2.23	2.30	2.33	2.12	2.15	2.81	3.10
20	2.53	2.75	2.45	2.53	2.33	2.21	2.26	2.36	2.13	2.17	2.67	3.00
21	2.62	2.62	2.52	2.23	2.14	2.22	2.03	2.35	2.13	2.08	2.58	6.14
22	2.61	2.55	2.68	2.52	2.10	2.16	2.02	2.35	2.25	2.06	2.59	4.93
23	2.56	2.65	2.90	2.50	2.15	2.07	2.01	2.24	2.25	2.14	2.66	4.69
24	2.50	2.73	3.10	2.84	2.20	2.05	2.01	2.19	2.17	2.19	2.64	4.05
25	2.47	2.70	3.14	3.18	2.21	2.03	2.01	2.10	2.15	2.31	2.62	4.66
26	2.42	2.49	3.03	3.18	2.92	2.01	2.02	2.04	2.22	2.36	2.57	11.07
27	2.41	2.49	2.89	2.87	2.97	2.02	1.99	2.11	2.24	2.48	2.87	10.77
28	2.35	2.65	2.77	2.53	2.82	2.13	1.98	1.99	2.14	2.53	2.81	9.99
29	2.36	2.64	2.35	2.54	2.42	2.27	1.97	1.98	2.23	2.42	2.61	8.10
30	2.34	2.63	2.40	2.63	---	2.20	1.98	2.01	2.18	2.31	2.53	6.08
31	2.33	---	2.54	2.68	---	2.04	---	2.07	---	2.21	2.48	---
TOTAL	78.52	89.85	92.97	79.88	69.42	67.09	62.55	67.11	65.12	68.79	76.51	148.75
MEAN	2.53	3.00	3.00	2.58	2.39	2.16	2.08	2.16	2.17	2.22	2.47	4.96
MAX	3.10	4.18	4.35	3.18	2.97	2.28	2.32	2.36	2.35	2.53	3.01	11.07
MIN	2.18	2.35	2.35	2.15	2.10	2.01	1.97	1.98	2.00	1.97	2.12	2.11

265708080093700 HOBE DITCH TRIBUTARY TO LOXAHATCHEE RIVER .5 MI ABOVE MOUTH, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e14	e2.9	e3.5	e4.6	e8.6	e1.4	e1.1	0.40	e0.67	e1.1	e2.2	e2.6
2	e12	e3.3	e3.8	e4.7	e7.3	e1.6	e1.4	e0.95	e0.39	e0.31	e2.6	e0.94
3	e9.8	e4.2	e3.2	e4.6	e5.4	e1.6	e0.37	e1.6	e0.40	e0.51	e3.1	e2.7
4	e8.2	e5.0	e2.8	e1.9	e1.4	e2.1	e0.28	e2.4	e0.58	e2.2	e1.9	e13
5	e7.2	e19	e2.8	e1.7	e3.8	e2.5	e0.26	e2.9	e1.2	e3.5	e3.8	e125
6	e6.6	e44	e4.0	e4.3	e5.2	e2.3	e0.19	e2.8	e3.1	e3.8	e14	e128
7	e2.9	e36	e13	e5.4	e5.5	e2.6	e0.18	e2.6	e2.6	e4.2	e4.8	65
8	e1.2	e23	e20	e7.7	e5.0	e2.6	e0.17	e2.5	e3.3	e4.5	e1.0	38
9	e2.4	e25	e15	e3.9	e4.5	e2.3	e0.20	e2.3	3.7	e4.1	e1.8	e41
10	e2.8	e25	e11	e8.4	e0.70	e2.0	e0.21	e1.2	e4.0	e3.7	e2.6	e40
11	e3.2	e27	e8.7	e8.9	e1.5	e1.1	e0.26	e0.55	e2.9	e2.8	9.1	e26
12	e0.72	e19	e4.7	e8.5	e3.2	e0.85	e2.6	e0.38	e2.9	e2.5	9.7	e20
13	e3.8	e12	e12	e7.7	e3.9	e0.49	e2.9	0.40	e3.1	e3.2	7.0	e8.3
14	e9.3	e8.7	e22	e4.1	e3.9	e0.45	e3.4	0.38	e2.5	e3.0	2.9	e1.9
15	e8.4	e8.0	e40	e0.75	e4.0	e0.45	e2.4	0.78	e1.2	e1.6	1.0	e2.1
16	e7.0	e7.3	e37	e1.5	e0.70	e0.99	e1.0	2.7	e0.52	e1.4	e1.1	e4.4
17	e6.1	e6.5	e20	e3.3	e0.84	e2.0	e1.2	3.1	e0.40	e1.0	e1.5	e6.6
18	e5.3	e6.7	e7.1	e5.3	e2.0	e2.0	e1.7	2.5	e0.48	e1.2	e4.9	e8.4
19	e5.0	e5.5	e3.6	e6.6	e2.5	e2.0	e3.4	e3.5	e1.4	e2.2	e11	e6.0
20	e5.5	e4.4	e2.1	e5.8	e2.7	e1.9	e2.9	e4.0	e1.6	2.4	e8.5	e5.1
21	e6.9	e2.6	e2.9	e1.5	e0.75	e2.0	e0.42	3.9	1.5	1.4	7.0	e77
22	e6.7	e2.1	e4.5	e5.6	e0.36	e1.2	e0.38	3.8	e2.8	1.1	7.2	e44
23	e5.7	e3.1	e7.4	e5.2	e0.76	e0.35	0.33	2.5	e2.8	e2.1	8.3	e36
24	e4.8	e3.9	e10	e11	e1.3	e0.28	0.33	1.9	2.0	e2.7	e8.0	e20
25	e4.1	e3.7	e11	e18	e1.4	e0.19	0.34	1.0	1.7	4.1	e7.6	e36
26	e3.9	e1.7	e9.8	e18	e14	e0.17	0.36	0.56	2.5	e4.7	e6.9	e215
27	e3.5	e1.5	e8.0	e12	e14	e0.20	0.26	1.1	2.8	e6.2	e12	e206
28	e2.9	e3.2	e6.6	e5.9	e11	e1.1	0.22	0.31	1.6	e7.0	e10	e182
29	e3.1	e3.2	e1.9	e5.9	e4.6	e2.7	0.20	0.27	2.7	e5.5	e7.3	e128
30	e2.9	e3.1	e2.4	e7.3	---	e2.0	0.22	e0.39	2.2	e4.1	e6.1	73
31	e2.8	---	e4.1	e8.2	---	e0.37	---	e0.76	---	e2.8	e5.5	---
TOTAL	168.72	320.6	304.9	198.25	120.81	43.79	29.18	54.43	59.54	90.92	180.4	1,562.04
MEAN	5.44	10.7	9.84	6.40	4.17	1.41	0.97	1.76	1.98	2.93	5.82	52.1
MAX	14	44	40	18	14	2.7	3.4	4.0	4.0	7.0	14	215
MIN	0.72	1.5	1.9	0.75	0.36	0.17	0.17	0.27	0.39	0.31	1.0	0.94
AC-FT	335	636	605	393	240	87	58	108	118	180	358	3,100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2004, BY WATER YEAR (WY)

MEAN	5.44	10.7	6.75	3.92	3.92	2.52	1.29	4.80	4.54	4.61	12.6	32.6
MAX	5.44	10.7	9.84	6.40	4.17	3.62	1.60	7.84	7.09	6.29	19.3	52.1
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2004)
MIN	5.44	10.7	3.66	1.45	3.66	1.41	0.97	1.76	1.98	2.93	5.82	13.1
(WY)	(2004)	(2004)	(2003)	(2003)	(2003)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 2003 - 2004

ANNUAL TOTAL	2,743.55	3,133.58		
ANNUAL MEAN	7.52	8.56	8.56	
HIGHEST ANNUAL MEAN			8.56	2004
LOWEST ANNUAL MEAN			8.56	2004
HIGHEST DAILY MEAN	44	215	215	Sep 26, 2004
LOWEST DAILY MEAN	0.13	0.17	0.13	Jan 20, 2003
ANNUAL SEVEN-DAY MINIMUM	0.15	0.21	0.15	Jan 15, 2003
ANNUAL RUNOFF (AC-FT)	5,440	6,220	6,200	
10 PERCENT EXCEEDS	20	14	14	
50 PERCENT EXCEEDS	4.4	3.1	3.1	
90 PERCENT EXCEEDS	0.87	0.41	0.41	

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02277600 LOXAHATCHEE RIVER NEAR JUPITER, FL

LOCATION.--Lat 26°56'20", long 80°10'31", in NE ¼ SE ¼ NE ¼ sec.6, T.41 S., R.42 E., Palm Beach County, Hydrologic Unit 03090202, near left bank, 0.2 mi downstream from State Road 706, 1.3 mi upstream from Floridás Turnpike and 5.2 mi west of Jupiter.

DRAINAGE AREA.--Indeterminate.

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

GAGE.--Electronic data logger. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair, except for estimated daily discharge, which is poor. Flow is augmented by diversion from C-18 canal 2.0 mi upstream from the gage. High-water flow can be diverted into C-18 canal by backflow through the structure. Discharge for the 1991 water year could not be published due to the loss of the original records. Days of no flow for the period of record only occurred during the period May 4-7, 1974.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 32 complete water years of discharge (1972-90, 1992-2004).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 16.39 ft Oct. 18, 1995; minimum, 7.55 ft May 16, 17, 18, 2001.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 15.13 ft Sept. 26; minimum, 9.96 ft July 1.

REVISIONS.--Revised figures of discharge for May 22 to September 30, 2003, superseding those published in the 2003 report are provided below.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	47	31	33	25	20	38	55	176	168	16	157
2	64	37	30	29	23	20	37	59	180	166	17	161
3	62	33	27	27	24	19	36	57	184	164	17	178
4	61	33	32	30	23	19	35	54	192	169	18	183
5	60	33	33	29	22	18	36	51	193	167	20	181
6	58	33	32	29	22	18	45	49	211	150	28	191
7	56	32	31	26	18	18	39	47	189	83	27	188
8	50	32	29	27	25	17	36	45	180	26	25	171
9	41	38	34	32	24	15	38	42	192	21	34	157
10	40	37	82	33	18	19	47	40	185	20	45	152
11	40	37	36	33	19	20	41	37	179	19	54	154
12	39	37	42	31	20	21	37	36	180	17	47	152
13	38	36	52	30	19	31	35	34	174	16	37	147
14	32	29	52	30	19	41	34	33	176	16	39	146
15	40	31	48	29	19	33	32	32	184	16	101	144
16	92	34	45	27	20	32	34	32	184	17	156	140
17	87	34	33	27	23	40	53	30	183	17	157	128
18	79	34	29	26	22	49	48	30	176	17	155	97
19	74	32	30	33	21	53	43	29	186	15	173	93
20	71	31	40	33	21	45	40	29	198	15	170	92
21	68	36	81	32	18	47	38	29	192	16	161	95
22	64	38	47	30	11	43	36	38	186	18	155	94
23	55	34	55	30	24	43	34	114	181	19	151	91
24	53	37	50	29	31	42	33	193	180	19	155	89
25	52	50	47	28	26	40	32	187	181	19	154	90
26	52	52	44	28	24	39	40	181	177	19	156	97
27	51	28	33	28	26	41	46	177	172	16	159	113
28	49	30	30	27	24	48	47	219	173	17	151	116
29	48	28	28	27	---	44	48	166	168	16	152	140
30	49	32	27	27	---	42	52	179	168	17	159	144
31	53	---	28	26	---	39	---	185	---	18	157	---
TOTAL	1,742	1,055	1,238	906	611	1,016	1,190	2,489	5,480	1,493	3,046	4,081
MEAN	56.2	35.2	39.9	29.2	21.8	32.8	39.7	80.3	183	48.2	98.3	136
MAX	92	52	82	33	31	53	53	219	211	169	173	191
MIN	32	28	27	26	11	15	32	29	168	15	16	89
AC-FT	3,460	2,090	2,460	1,800	1,210	2,020	2,360	4,940	10,870	2,960	6,040	8,090

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2003, BY WATER YEAR (WY)

MEAN	133	112	74.0	72.9	69.6	61.1	47.7	43.9	76.2	91.1	99.6	120
MAX	349	277	253	305	295	190	178	150	238	286	212	258
(WY)	(1996)	(1993)	(1995)	(1993)	(1993)	(1993)	(1993)	(1972)	(1994)	(2002)	(1995)	(2001)
MIN	17.2	21.9	15.4	5.90	1.75	10.6	5.88	5.80	9.92	16.2	25.1	26.6
(WY)	(1973)	(1973)	(1989)	(1989)	(1989)	(1975)	(1999)	(1974)	(1989)	(1990)	(1975)	(1972)

EVERGLADES AND SOUTHEASTERN COASTAL AREA
02277600 LOXAHATCHEE RIVER NEAR JUPITER, FL-Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1971 - 2003	
ANNUAL TOTAL	32,339.0		24,347			
ANNUAL MEAN	88.6		66.7		83.8	
HIGHEST ANNUAL MEAN					172	1993
LOWEST ANNUAL MEAN					24.2	1975
HIGHEST DAILY MEAN	392	Jul 13	219	May 28	2,150	Oct 18, 1995
LOWEST DAILY MEAN	3.6	Jun 7	11	Feb 22	0.00	May 4, 1974
ANNUAL SEVEN-DAY MINIMUM	12	Jun 1	16	Jul 14	0.16	May 2, 1974
MAXIMUM PEAK FLOW			232	May 28	2,660	Oct 18, 1995
MAXIMUM PEAK STAGE			12.47	May 28	16.39	Oct 18, 1995
INSTANTANEOUS LOW FLOW			10	Feb 22	0.00	May 4, 1974
ANNUAL RUNOFF (AC-FT)	64,140		48,290		60,680	
10 PERCENT EXCEEDS	239		176		178	
50 PERCENT EXCEEDS	56		38		61	
90 PERCENT EXCEEDS	21		19		16	

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

REVISED

02277600 LOXAHATCHEE RIVER NEAR JUPITER, FL-Continued

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.78	11.27	11.42	11.20	11.21	11.01	10.79	10.66	10.63	10.09	10.77	11.13
2	11.75	11.20	11.52	11.20	11.23	11.01	10.75	10.62	10.66	10.35	10.80	11.49
3	11.72	11.43	11.31	11.19	11.17	11.02	10.65	10.73	10.46	10.12	10.93	11.80
4	11.70	11.53	11.27	11.19	11.04	11.07	10.64	10.82	10.40	10.18	10.98	11.73
5	11.68	11.73	11.30	11.17	11.16	11.04	10.64	10.72	10.71	10.59	11.07	13.99
6	11.66	12.50	11.48	11.08	11.25	11.00	10.66	10.64	10.69	10.73	11.12	14.12
7	11.60	12.36	11.48	11.05	11.10	10.99	10.66	10.62	10.65	10.81	11.05	13.47
8	11.36	12.17	11.41	11.03	11.06	10.97	10.66	10.69	10.65	10.80	11.02	12.85
9	11.33	12.14	11.32	11.02	11.05	10.89	10.66	10.70	10.63	10.66	11.00	12.95
10	11.32	12.00	11.35	11.02	11.05	10.88	10.68	10.69	10.65	10.65	11.02	---
11	11.32	12.02	11.35	11.01	11.04	10.89	10.66	10.69	10.63	10.66	11.40	11.96
12	11.31	12.13	11.33	11.01	11.02	10.88	10.71	10.69	10.61	10.74	11.66	11.67
13	11.31	12.14	11.27	11.01	11.01	10.87	10.71	10.70	10.61	10.84	11.42	11.66
14	11.32	12.11	11.30	11.01	11.01	10.87	10.68	10.71	10.64	10.87	11.38	12.02
15	11.25	12.20	11.49	11.00	11.01	10.88	10.66	10.71	10.65	10.92	11.33	12.05
16	11.13	12.18	11.51	11.00	11.00	10.90	10.68	10.70	10.63	10.93	11.44	12.00
17	11.11	12.16	11.57	11.00	10.99	10.91	10.69	10.70	10.59	10.85	11.36	11.97
18	11.10	12.06	11.56	11.01	10.98	10.89	10.62	10.70	10.64	10.78	11.24	11.94
19	11.10	12.08	11.51	11.03	10.97	10.88	10.64	10.69	10.66	10.77	11.43	11.90
20	11.55	12.08	11.39	11.02	10.96	10.86	10.71	10.65	10.59	10.78	11.45	11.92
21	12.12	12.02	11.36	11.02	10.92	10.85	10.75	10.61	10.59	10.78	11.30	13.29
22	12.18	12.02	11.28	11.02	10.91	10.82	10.77	10.61	10.65	10.80	11.27	13.38
23	12.06	11.87	11.32	11.00	10.91	10.80	10.80	10.60	10.63	10.79	11.36	12.79
24	11.74	11.77	11.62	11.00	10.89	10.80	10.82	10.59	10.63	10.78	11.40	12.19
25	11.51	11.75	11.64	10.99	10.93	10.79	10.75	10.55	10.62	10.77	11.38	12.03
26	11.59	11.68	11.56	10.95	11.02	10.79	10.66	10.56	10.62	10.76	11.33	15.02
27	11.51	11.59	11.48	10.91	11.03	10.77	10.69	10.61	10.61	10.78	11.21	14.77
28	11.40	11.58	11.31	10.91	11.01	10.76	10.70	10.68	10.47	10.80	11.10	14.23
29	11.24	11.48	11.30	10.90	11.01	10.76	10.66	10.68	10.22	10.77	11.11	13.51
30	11.29	11.40	11.36	10.90	---	10.76	10.66	10.54	10.05	10.77	11.06	12.82
31	11.35	---	11.23	10.95	---	10.76	---	10.39	---	10.76	11.13	---
TOTAL	356.39	356.65	353.60	341.80	319.94	337.37	320.81	330.25	317.47	331.68	347.52	---
MEAN	11.50	11.89	11.41	11.03	11.03	10.88	10.69	10.65	10.58	10.70	11.21	---
MAX	12.18	12.50	11.64	11.20	11.25	11.07	10.82	10.82	10.71	10.93	11.66	---
MIN	11.10	11.20	11.23	10.90	10.89	10.76	10.62	10.39	10.05	10.09	10.77	---

265651080045500 LOXAHATCHEE RIVER AT COAST GUARD DOCK NR JUPITER, FL

LOCATION.--Lat 26°56'52", long 80°04'55", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$, sec.31, T.43 S., R.42 E., Palm Beach County, Hydrologic Unit 03090202, at the Coast Guard Station, 1.2 mi northeast of Jupiter, 0.7 mi northwest of the mouth of the Loxahatchee River, 4.75 mi east of U.S. Interstate 95.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--

GAGE HEIGHT: October 2002 to current year.
SALINITY (TOP): October 2002 to current year.
SALINITY (BOTTOM): August 2003 to current year.
WATER TEMPERATURE (TOP): October 2002 to current year.
WATER TEMPERATURE (BOTTOM): August 2003 to current year.

GAGE.--Electronic data logger with water-quality monitor with top and bottom sensors. A second salinity and temperature sensor was installed in August 2003. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Salinity record (top) rated good for 2003 water year. For the 2004 water year record rated excellent Oct. 1-20, Dec. 17 to Mar. 7, May 21 to June 5, June 24 to July 2, July 22 to Aug. 3, Aug. 20 to Sept. 30; rated good Nov. 19, Dec. 16, Mar. 8-18, June 6-8, July 3-5, Aug. 4-9; rated fair Oct. 29 to Nov. 10, June 9-23, July 6-21; rated poor Nov. 11-18, Aug. 15-19. Salinity record (bottom) rated good for the 2003 water year. For the 2004 water year record rated excellent Oct. 1-20, Dec. 3, Dec. 17 to Jan. 10, Feb. 8 to Mar. 18, Apr. 22, May 20 to June 12, June 24 to July 6, July 22 to Sept. 30; rated good Oct. 21 to Dec. 3, Jan. 11-28, June 19-21, July 7-19; rated fair Dec. 4-6, June 22-23, July 20,21. Temperature records (top and bottom) are rated good for the entire water year.

EXTREMES FOR PERIOD OF RECORD.--

GAGE HEIGHT: Maximum gage height, 4.63 ft Sept. 25, 2004; minimum, -1.95 ft July 1, 2004.
SALINITY (TOP): Maximum recorded, 39.5 ppt Aug. 18, 2004; minimum recorded, 1.2 ppt Sept. 27, 2004.
SALINITY (BOTTOM): Maximum recorded, 37.4 ppt Dec. 15,16, 2003; minimum recorded, 1.6 ppt Sept. 27, 2004.
WATER TEMPERATURE (TOP): Maximum recorded, 32.2°C July 15, 2004; minimum recorded, 14.70°C Jan. 25, 2003.
WATER TEMPERATURE (BOTTOM): Maximum recorded, 32.1°C July 14, 2004; minimum recorded, 16.7°C Dec. 22, 2003.

EXTREMES FOR CURRENT YEAR.--

GAGE HEIGHT: Maximum gage height, 4.63 ft Sept. 25; minimum, -1.95 ft July 1.
SALINITY (TOP): Maximum recorded, 39.5 ppt Aug. 18; minimum recorded, 1.2 ppt Sept. 27.
SALINITY (BOTTOM): Maximum recorded, 37.4 ppt Dec. 15,16; minimum recorded, 1.6 ppt Sept. 27.
WATER TEMPERATURE (TOP): Maximum recorded, 32.2°C July 15; minimum recorded, 16.6°C Dec. 22.
WATER TEMPERATURE (BOTTOM): Maximum recorded, 32.1°C July 15; minimum recorded, 16.7°C Dec. 22.

265645080055900 LOXAHATCHEE RIVER AT POMPANO DR. NEAR JUPITER, FL

LOCATION.--Lat 26°56'45", long 80°05'59", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$, sec.36, T.40 S., R.42 E., Palm Beach County, Hydrologic Unit 03090202, on the Loxahatchee River, Jupiter, FL; 76 mi north of Indiantown road, .49 mi east of State Road 811 Alternate (A1A), 3.6 mi northwest of U.S. Interstate 95.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--

GAGE HEIGHT: October 2002 to current year.

SALINITY: October 2002 to current year.

WATER TEMPERATURE: October 2002 to current year.

GAGE.--Electronic data logger with water-quality monitor sensor. Datum of gage is National Geodetic Vertical Datum of 1929, survey levels from a benchmark provided by Palm Beach County.

REMARKS.--Salinity record rated excellent for the 2003 water year. Salinity record rated excellent for the 2004 water year except for the period of April 20-22, May 15-18, when record was rated good. Temperature record rated good for the 2004 water year. Elevation of the salinity-temperature sensor is -1.41 ft NGVD, Oct. 30, 2002.

EXTREMES FOR PERIOD OF RECORD.--

GAGE HEIGHT: Maximum gage height, 4.45 ft Sept. 5, 2004; minimum, -1.54 ft July 1, 2004.

SALINITY: Maximum recorded, 37.0 ppt Nov. 6, 2002 may have been higher during period of missing record; minimum recorded, 0.8 ppt, Sept. 7, 2004, may have been lower during period of missing record.

WATER TEMPERATURE: Maximum recorded, 33.3°C July 15, 2004, may have been higher during period of missing record; minimum recorded, 13.5°C Jan. 25, 2003 may have been lower during period of missing record.

EXTREMES FOR CURRENT YEAR.--

GAGE HEIGHT: Maximum gage height, 4.45 ft Sept. 5; minimum, -1.54 ft July 1.

SALINITY: Maximum recorded, 36.5 ppt July 7-11, may have been higher during period of missing record; minimum recorded, 0.8 ppt, Sept. 7, may have been lower during period of missing record.

WATER TEMPERATURE: Maximum recorded, 33.3°C July 15, may have been higher during period of missing record; minimum recorded, 15.8°C Dec. 21, may have been lower during period of missing record.

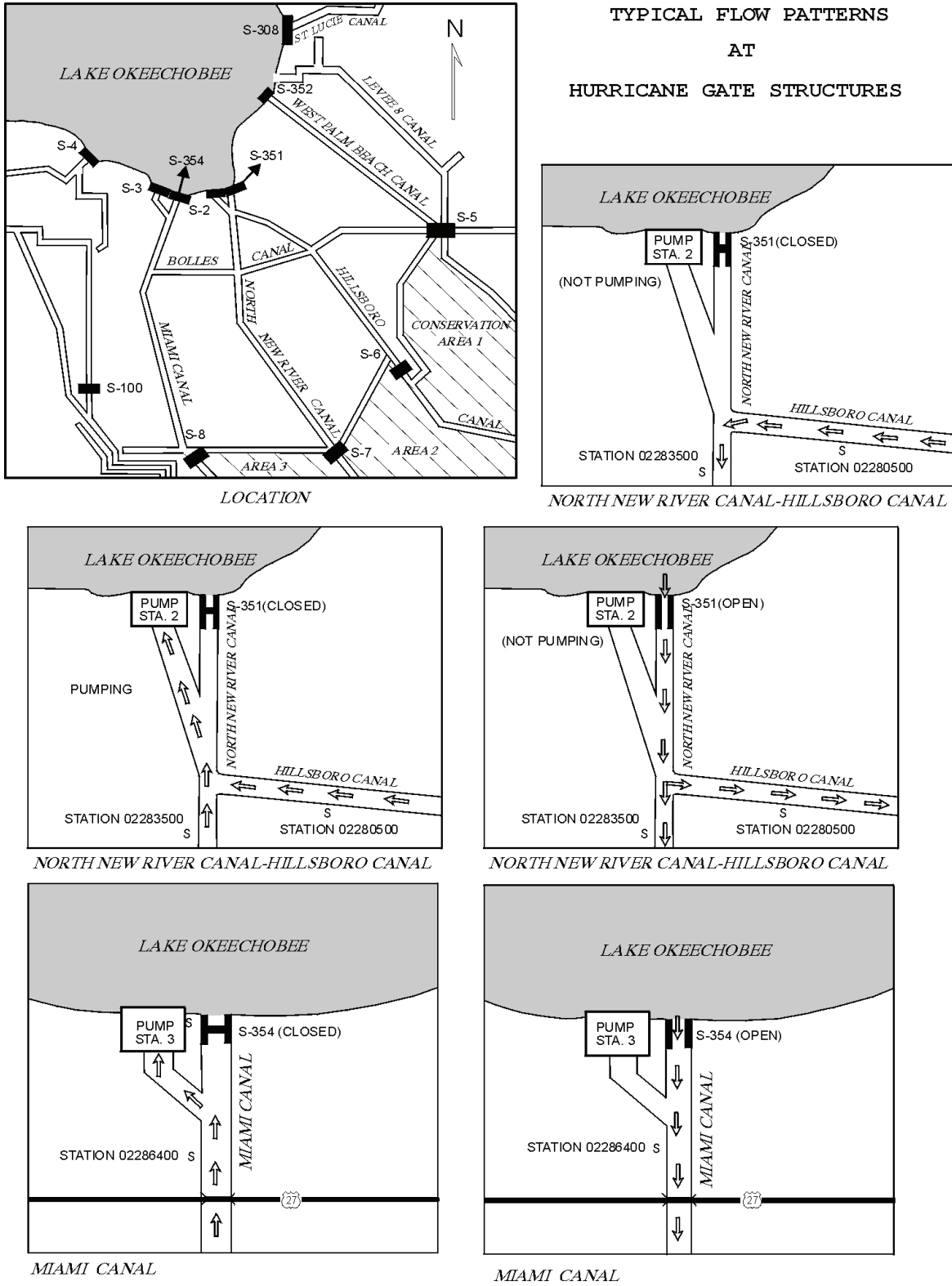


Figure 18. Typical flow patterns at Lake Okeechobee Control Structure.

02278000 WEST PALM BEACH CANAL AT S-352, AT CANAL POINT, FL

LOCATION.--Lat 26°51'05", long 80°37'55", in NE ¼ sec.33, T.41 S., R.37 E., Palm Beach County, Hydrologic Unit 03090202, in the instrumentation house of gate structure 352 at Lake Okeechobee, 200 ft upstream from bridge on U.S. Highway 441 at Canal Point.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1940 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoders. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to January 14, 1954, nonrecording lake gage at site 550 ft downstream at same datum. January 14, 1954 to February 24, 1956, lake water-stage recorder, and February 25, 1956, to September 30, 1967, canal water-stage and deflection vane recorders all at present site and datum. May 1940, auxiliary water-stage recorder at old lock, 700 ft downstream from gate structures replaced on May 1, 1995, by data collection platform at structure. August 1986 to December 1989, electromagnetic velocity meter. Digital water-stage recorder removed and satellite data collection platform installed January 14, 1992.

REMARKS.--No estimated daily discharges. Records fair. Flow regulated at station by operation of gates. Flow was occasionally reversed after periods of considerable rainfall because of downstream natural drainage and pumpage from agricultural lands in the Everglades (negative figures indicate flow reversed), since vertical lift gates replaced HGS-5, reverse flow is not expected. Discharge computed from relations between discharge, head, and gate openings at gate structure S-352. Discharge and lake gage height formerly published as West Palm Beach Canal at HGS-5, at Canal Point. Canal gage height prior to 1997 water year, formerly published as West Palm Beach Canal below S-352, at Canal Point under 02278002.

COOPERATION.--Gate record provided by South Florida Water Management District.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 60 complete water years of discharge (1941-89, 1992-97, 1999-2000, 2002-2004).

EXTREME LAKE STAGES FOR PERIOD OF RECORD.--Maximum gage height, 20.84 ft Sept. 25, 2004; minimum observed, 8.33 ft May 22, 2001.

EXTREME LAKE STAGES FOR CURRENT YEAR.--Maximum gage height, 20.84 ft Sept. 25; minimum, 11.82 ft July 16.

EXTREME CANAL STAGES FOR PERIOD OF RECORD.--Maximum gage height, 18.70 ft Oct. 12, 1947; minimum, 5.80 ft Sept. 5, 2004.

EXTREME CANAL STAGES FOR CURRENT YEAR.--Maximum gage height, 13.30 ft Sept. 27; minimum, 5.80 ft Sept. 5.

LAKE
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.16	16.32	15.96	15.71	15.52	15.41	14.76	13.72	12.47	12.63	12.48	13.70
2	17.17	16.35	15.92	15.70	15.56	15.42	14.72	13.76	12.48	12.60	12.48	13.69
3	17.15	16.31	15.82	15.68	15.56	15.42	14.67	13.85	12.55	12.60	12.58	13.83
4	17.13	16.31	15.84	15.68	15.55	15.38	14.58	13.90	12.59	12.52	12.59	15.04
5	17.10	16.32	15.89	15.68	15.50	15.36	14.49	13.86	12.61	12.53	12.67	15.42
6	17.07	16.34	16.06	15.69	15.54	15.41	14.32	13.77	12.65	12.52	12.71	14.28
7	17.04	16.37	15.99	15.74	15.69	15.45	14.28	13.69	12.67	12.59	12.70	14.50
8	17.04	16.35	15.85	15.65	15.62	15.50	14.29	13.65	12.65	12.47	12.70	14.65
9	17.04	16.39	15.80	15.65	15.47	15.45	14.26	13.60	12.68	12.35	12.71	14.78
10	17.01	16.28	15.80	15.81	15.35	15.38	14.26	13.57	12.69	12.30	12.71	14.86
11	16.98	16.25	15.94	15.74	15.30	15.28	14.22	13.54	12.74	12.36	12.70	14.95
12	16.97	16.25	15.81	15.57	15.39	15.21	14.34	13.47	12.76	12.31	12.73	14.99
13	16.97	16.30	15.78	15.53	15.42	15.18	14.33	13.36	12.77	12.33	12.63	15.06
14	17.00	16.26	15.86	15.53	15.41	15.16	14.68	13.29	12.81	12.32	12.85	15.08
15	16.95	16.19	15.94	15.54	15.52	15.15	14.37	13.22	12.79	12.30	12.99	15.13
16	16.82	16.15	15.88	15.47	15.49	15.20	14.25	13.23	12.77	12.29	13.06	15.26
17	16.79	16.15	16.16	15.41	15.54	15.23	14.20	13.18	12.73	12.32	13.09	15.38
18	16.82	16.13	16.03	15.45	15.61	15.10	14.15	13.18	12.75	12.35	13.12	15.44
19	16.78	16.24	16.02	15.54	15.40	15.05	14.13	13.17	12.79	12.43	13.15	15.43
20	16.70	16.28	15.98	15.60	15.36	14.97	14.10	13.10	12.85	12.44	13.19	15.59
21	16.73	16.17	15.91	15.55	15.35	15.04	14.07	13.06	12.85	12.45	13.23	15.52
22	16.81	16.13	15.85	15.55	15.34	15.04	14.03	13.05	12.84	12.42	13.25	15.72
23	16.75	16.07	15.82	15.54	15.30	14.85	13.97	13.01	12.82	12.41	13.31	15.86
24	16.60	16.05	15.84	15.46	15.25	14.74	13.95	12.96	12.78	12.38	13.39	15.99
25	16.48	16.05	15.88	15.41	15.32	14.72	13.91	12.83	12.75	12.38	13.43	16.84
26	16.47	16.04	15.83	15.42	15.50	14.70	13.88	12.78	12.72	12.40	13.46	16.42
27	16.46	16.01	15.81	15.49	15.62	14.69	13.94	12.80	12.71	12.39	13.51	16.78
28	16.42	16.08	15.77	15.56	15.55	14.72	13.85	12.73	12.72	12.39	13.56	---
29	16.48	16.20	15.74	15.32	15.41	14.72	13.77	12.62	12.69	12.33	13.60	---
30	16.35	16.00	15.73	15.38	---	14.68	13.76	12.57	12.65	12.36	13.64	---
31	16.32	---	15.72	15.46	---	14.70	---	12.54	---	12.43	13.64	---
TOTAL	521.56	486.34	492.23	482.51	448.44	468.31	426.53	411.06	381.33	384.90	403.86	---
MEAN	16.82	16.21	15.88	15.56	15.46	15.11	14.22	13.26	12.71	12.42	13.03	---
MAX	17.17	16.39	16.16	15.81	15.69	15.50	14.76	13.90	12.85	12.63	13.64	---
MIN	16.32	16.00	15.72	15.32	15.25	14.68	13.76	12.54	12.47	12.29	12.48	---

02278000 WEST PALM BEACH CANAL AT S-352, AT CANAL POINT, FL-Continued

CANAL
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.76	11.08	10.82	10.46	9.79	10.30	11.18	11.06	11.59	10.48	10.25	9.88
2	9.15	10.99	11.07	10.37	10.38	10.57	11.07	10.83	11.09	10.52	10.95	9.27
3	9.23	10.77	11.09	10.44	8.95	10.68	11.12	10.45	9.99	10.68	11.57	9.08
4	10.86	9.91	10.90	10.46	10.18	10.58	11.07	10.51	9.77	10.80	11.29	8.53
5	10.31	9.58	11.02	10.29	10.55	10.32	11.03	10.40	9.72	10.80	10.45	9.52
6	10.40	10.43	11.02	10.54	10.39	10.30	11.14	10.63	10.24	10.94	10.01	11.94
7	10.83	9.76	11.19	10.67	10.59	10.53	11.18	10.68	10.63	10.67	9.45	12.70
8	10.97	11.12	10.93	10.59	10.35	10.56	11.16	10.85	9.97	10.87	9.21	12.55
9	10.84	10.44	10.62	10.43	10.23	10.39	11.10	10.86	10.31	11.13	9.95	12.27
10	10.73	10.40	10.76	10.60	10.36	10.58	11.12	10.81	10.15	11.34	10.28	11.69
11	10.71	9.99	10.68	10.67	11.02	10.45	11.03	10.76	10.35	11.35	9.71	11.03
12	10.75	10.08	10.75	10.66	10.95	10.45	10.38	10.74	10.04	11.35	11.22	10.10
13	10.69	10.12	10.81	10.67	10.83	10.66	9.86	10.84	9.98	11.37	10.05	9.71
14	10.43	10.62	11.15	11.00	10.79	10.58	10.82	11.05	9.86	11.35	9.18	10.01
15	10.34	10.76	9.45	10.74	10.95	10.57	11.07	11.09	10.15	11.36	9.78	9.71
16	10.38	10.70	9.35	10.51	10.91	10.60	10.52	11.15	10.31	10.76	10.50	9.59
17	10.40	10.71	10.82	10.56	10.46	10.54	10.40	11.14	10.19	9.49	10.57	10.0
18	10.56	11.06	10.56	10.85	10.48	10.36	10.26	11.09	9.59	10.40	10.22	10.49
19	10.56	11.26	9.37	11.01	11.01	10.69	10.48	11.07	10.72	10.36	10.29	10.32
20	10.54	10.99	9.28	10.67	10.71	10.57	10.66	11.01	10.91	9.80	9.55	10.62
21	10.36	10.67	9.60	10.45	10.74	10.62	10.53	11.16	11.01	10.50	9.68	11.79
22	10.37	10.38	9.96	10.47	10.82	10.74	10.57	11.18	10.63	10.00	10.10	11.73
23	10.35	10.53	10.07	10.60	10.72	11.00	11.10	11.18	9.91	9.96	9.39	10.74
24	10.65	10.90	10.18	10.79	10.20	11.01	11.08	11.15	9.67	10.41	9.42	9.89
25	10.77	11.06	10.24	10.86	9.76	10.90	11.16	11.33	9.95	9.92	10.26	8.89
26	10.80	11.04	10.31	10.82	10.13	11.00	11.21	11.33	10.16	10.17	9.90	10.97
27	11.01	11.19	10.36	10.59	9.53	11.03	10.92	11.46	10.43	9.96	9.50	13.03
28	10.94	11.15	10.32	10.27	9.29	11.02	10.49	11.48	10.33	10.29	9.35	12.94
29	10.94	10.93	10.24	10.24	10.24	10.94	10.38	11.63	10.36	9.84	9.60	12.62
30	10.97	10.95	10.05	10.56	---	10.84	10.76	11.66	10.38	10.32	9.64	12.30
31	11.11	---	10.20	10.77	---	10.93	---	11.66	---	10.49	9.80	---
TOTAL	326.71	319.57	323.17	328.61	301.31	330.31	324.85	342.24	308.39	327.68	311.12	323.91
MEAN	10.54	10.65	10.42	10.60	10.39	10.66	10.83	11.04	10.28	10.57	10.04	10.80
MAX	11.11	11.26	11.19	11.01	11.02	11.03	11.21	11.66	11.59	11.37	11.57	13.03
MIN	9.15	9.58	9.28	10.24	8.95	10.30	9.86	10.40	9.59	9.49	9.18	8.53

02278000 WEST PALM BEACH CANAL AT S-352, AT CANAL POINT, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	411	272	185	0.00	0.00	735	445	1,120	66	0.00	0.00
2	0.00	302	408	88	0.00	0.00	608	159	769	319	0.00	0.00
3	0.00	0.00	279	187	0.00	0.00	511	0.00	98	99	0.00	0.00
4	0.00	0.00	178	134	0.00	4.1	333	0.00	8.7	589	0.00	0.00
5	0.00	0.00	363	207	0.00	0.00	392	148	0.00	427	0.00	0.00
6	0.00	0.00	0.00	459	0.00	144	619	381	0.00	414	0.00	0.00
7	0.00	0.00	0.00	386	0.00	228	712	490	0.00	79	0.00	0.00
8	0.00	0.00	0.00	220	0.00	215	688	499	0.00	474	0.00	0.00
9	0.00	0.00	0.00	230	168	337	630	367	0.00	850	0.00	0.00
10	0.00	0.00	0.00	431	467	380	469	343	0.00	955	0.00	0.00
11	0.00	0.00	0.00	374	519	361	180	360	0.00	869	7.1	0.00
12	0.00	0.00	0.00	400	386	375	0.00	536	0.00	750	0.00	0.00
13	0.00	65	0.00	518	278	319	0.00	616	0.00	559	0.00	0.00
14	0.00	174	0.00	643	0.00	102	0.00	874	0.00	593	0.00	0.00
15	0.00	0.00	0.00	683	0.00	49	0.00	918	0.00	600	0.00	0.00
16	0.00	0.00	0.00	689	0.00	0.00	0.00	843	0.00	372	0.00	0.00
17	0.00	0.00	0.00	703	0.00	0.00	0.00	838	0.00	0.00	0.00	0.00
18	0.00	122	0.00	565	96	418	65	732	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	270	400	664	253	759	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	11	113	456	635	855	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	223	0.00	329	514	830	0.00	0.00	0.00	0.00
22	0.00	47	0.00	352	0.00	598	540	732	0.00	0.00	0.00	0.00
23	0.00	236	0.00	490	0.00	755	773	643	0.00	0.00	0.00	0.00
24	401	744	0.00	487	155	508	542	777	0.00	0.00	0.00	0.00
25	323	728	0.00	251	0.00	417	503	1,170	0.00	0.00	0.00	0.00
26	305	481	0.00	65	0.00	402	591	1,180	182	0.00	0.00	0.00
27	494	301	0.00	10	0.00	390	438	1,070	142	0.00	0.00	0.00
28	518	128	0.00	0.00	0.00	380	38	1,090	193	0.00	0.00	0.00
29	502	111	0.00	382	0.00	371	212	1,180	213	0.00	0.00	0.00
30	483	107	0.00	117	---	491	432	1,140	149	0.00	0.00	0.00
31	560	---	130	0.00	---	605	---	1,140	---	0.00	0.00	---
TOTAL	3,586.00	3,957.00	1,630.00	9,760.00	2,582.00	9,298.10	11,413.00	21,115.00	2,874.70	8,015.00	7.10	0.00
MEAN	116	132	52.6	315	89.0	300	380	681	95.8	259	0.23	0.00
MAX	560	744	408	703	519	755	773	1,180	1,120	955	7.1	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	7,110	7,850	3,230	19,360	5,120	18,440	22,640	41,880	5,700	15,900	14	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)

	MEAN	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	92.3	170	220	217	218	232	321	306	99.6	36.2	86.3	21.0
MAX	803	507	739	1,007	637	610	840	743	703	706	1,156	1,183
(WY)	(2003)	(2003)	(2003)	(2003)	(1949)	(1949)	(1999)	(1965)	(1998)	(1992)	(1959)	(1959)
MIN	-350	-247	-77.0	-13.6	-80.6	-21.2	-99.6	-170	-1,130	-939	-528	-813
(WY)	(1951)	(1964)	(1964)	(1941)	(1941)	(1982)	(1962)	(1976)	(1942)	(1947)	(1953)	(1945)

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1940 - 2004	
ANNUAL TOTAL	83,471.30		74,237.90			
ANNUAL MEAN	229		203		171	
HIGHEST ANNUAL MEAN					376	
LOWEST ANNUAL MEAN					-20.8	
HIGHEST DAILY MEAN	1,100	Jan 7	1,180	May 26	1,610	Oct 2, 1959
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	-1,760	Jun 15, 1942
ANNUAL SEVEN-DAY MINIMUM	0.00	Feb 18	0.00	Oct 1	-1,640	Jun 11, 1942
ANNUAL RUNOFF (AC-FT)	165,600		147,300		123,600	
10 PERCENT EXCEEDS	866		637		557	
50 PERCENT EXCEEDS	0.00		0.00		63	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

265501080364900 LEVEE 8 CANAL NEAR CANAL POINT, FL

LOCATION.--Lat 26°55'01", long 80°36'49", in SE ¼ sec.10, T.41S., R.37 E., Palm Beach County, Hydrologic Unit 03090202, on west side of U.S. Highway 441 bridge, 3.6 mi northeast of Canal Point, and 4.8 mi south of Port Mayaca, at Sand Cut.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--August 1976 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic velocity meter. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharge. Records poor. Discharge computed from relations between stage vs. area and index velocity vs. mean channel velocity. Flow regulated by gated structure at Lake Okeechobee. Flow reverses during and after periods of heavy rainfall because of pumpage into the canal from agricultural lands in the Everglades (negative figures indicate flow towards Lake Okeechobee).

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 18 complete water years of discharge (1977-89, 1995, 1997-99, 2002).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 19.39 ft Oct. 19, 1995; minimum, 8.57 ft May 21, 2001 (estimated).

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 18.52 ft Sept. 27; minimum, 10.75 ft Sept. 5.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.57	16.10	15.74	15.57	15.44	15.25	14.76	13.85	12.75	12.65	12.55	13.83
2	15.66	16.14	15.74	15.58	15.49	15.25	14.73	13.87	12.66	12.63	12.57	13.83
3	15.61	16.19	15.69	15.55	15.42	15.25	14.68	13.95	12.61	12.61	12.71	13.89
4	14.74	16.07	15.68	15.52	15.37	15.23	14.60	13.96	12.62	12.58	12.69	13.81
5	14.10	16.13	15.72	15.53	15.38	15.21	14.56	13.92	12.64	12.57	12.79	13.91
6	14.58	16.32	15.87	15.51	15.41	15.24	14.40	13.85	12.66	12.56	12.83	16.16
7	15.55	16.39	15.79	15.51	15.45	15.26	14.38	13.80	12.70	12.59	12.82	16.48
8	15.78	16.35	15.71	15.48	15.34	15.27	14.38	13.76	12.69	12.53	12.80	16.48
9	15.65	16.32	15.69	15.47	15.29	15.24	14.36	13.69	12.72	12.47	12.78	15.95
10	15.40	16.22	15.76	15.57	15.29	15.19	14.35	13.65	12.76	12.41	12.77	15.77
11	15.26	16.15	15.83	15.51	15.27	15.10	14.31	13.61	12.81	12.43	12.79	15.62
12	15.16	16.14	15.73	15.42	15.27	15.10	14.43	13.58	12.82	12.38	12.97	15.38
13	15.06	16.24	15.72	15.40	15.28	15.02	14.47	13.48	12.82	12.38	13.06	15.40
14	15.14	16.19	15.78	15.41	15.26	15.02	14.70	13.43	12.84	12.39	13.12	15.38
15	15.16	16.10	15.96	15.43	15.33	15.04	14.43	13.38	12.80	12.35	13.22	15.36
16	15.01	16.04	15.86	15.36	15.28	15.07	14.30	13.38	12.81	12.34	13.34	15.34
17	15.06	16.05	16.11	15.33	15.32	15.08	14.22	13.34	12.73	12.34	13.19	15.10
18	15.50	16.03	16.00	15.39	15.33	15.00	14.20	13.32	12.75	12.37	12.98	15.22
19	15.32	16.09	15.93	15.46	15.21	14.99	14.19	13.29	12.82	12.46	13.10	14.94
20	15.48	16.11	15.87	15.47	15.19	14.89	14.21	13.25	12.88	12.48	13.35	15.16
21	15.91	16.04	15.77	15.40	15.18	14.96	14.15	13.21	12.87	12.45	13.38	15.72
22	16.22	15.94	15.73	15.39	15.16	14.94	14.10	13.19	12.89	12.44	13.43	16.19
23	16.45	15.87	15.77	15.37	15.14	14.84	14.07	13.15	12.86	12.42	13.47	16.23
24	16.29	15.87	15.79	15.34	15.14	14.71	14.03	13.11	12.81	12.38	13.57	16.13
25	16.21	15.96	15.69	15.28	15.18	14.71	13.98	13.08	12.76	12.37	13.57	15.61
26	16.18	15.99	15.68	15.27	15.42	14.71	13.98	13.02	12.75	12.41	13.65	16.82
27	16.18	15.85	15.70	15.29	15.42	14.72	14.03	12.98	12.73	12.40	13.69	18.31
28	16.17	15.83	15.68	15.31	15.30	14.77	13.90	12.95	12.73	12.42	13.70	18.16
29	16.15	15.84	15.64	15.26	15.24	14.77	13.81	12.89	12.70	12.38	13.67	18.20
30	16.11	15.72	15.60	15.27	---	14.75	13.86	12.85	12.66	12.39	13.72	18.21
31	16.08	---	15.61	15.33	---	14.76	---	12.80	---	12.48	13.70	---
TOTAL	483.74	482.28	488.84	477.98	443.80	465.34	428.57	415.59	382.65	386.06	407.98	472.59
MEAN	15.60	16.08	15.77	15.42	15.30	15.01	14.29	13.41	12.76	12.45	13.16	15.75
MAX	16.57	16.39	16.11	15.58	15.49	15.27	14.76	13.96	12.89	12.65	13.72	18.31
MIN	14.10	15.72	15.60	15.26	15.14	14.71	13.81	12.80	12.61	12.34	12.55	13.81

265501080364900 LEVEE 8 CANAL NEAR CANAL POINT, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-16	464	451	385	268	400	406	127	163	97	29	-107
2	-6.4	444	408	376	238	424	319	152	140	140	-53	-127
3	8.4	376	372	383	370	424	327	106	156	134	-211	-118
4	17	510	421	420	429	404	318	93	180	143	-173	-5.8
5	13	454	431	414	353	407	194	128	168	120	-208	-446
6	181	195	386	438	403	441	265	128	155	117	-253	-1,150
7	294	67	421	424	493	452	239	143	81	132	-253	-1,260
8	278	176	394	418	448	449	279	132	75	118	-199	-1,190
9	287	272	366	447	449	450	247	140	78	127	-108	-881
10	306	232	288	441	438	424	172	171	-1.9	112	-79	-747
11	319	311	344	413	437	406	121	190	29	107	-124	-579
12	323	351	319	406	441	356	81	162	55	99	-263	-371
13	339	287	306	401	419	421	161	170	28	116	-289	-311
14	330	266	322	400	416	361	189	204	72	108	-199	-263
15	322	332	22	393	466	349	86	166	95	100	-173	-160
16	328	349	217	397	442	390	162	174	-80	103	-228	-10
17	325	344	287	361	453	379	257	157	54	106	-43	0.62
18	283	356	219	335	464	375	227	153	107	105	6.1	-12
19	294	416	323	336	448	341	227	202	40	81	-10	12
20	263	366	312	366	426	372	227	211	60	30	-96	1.7
21	227	371	349	408	426	389	250	206	50	70	-97	-195
22	476	441	361	418	430	381	271	176	---	-95	-119	-448
23	578	467	291	426	418	212	261	139	---	28	-110	-371
24	570	470	306	384	411	311	238	157	---	85	-116	-98
25	531	359	431	375	327	287	242	176	101	103	-66	-18
26	563	309	387	374	293	228	227	208	49	28	-135	-729
27	565	424	347	420	386	212	222	262	103	97	-138	-1,270
28	536	502	325	417	431	220	138	248	113	47	-81	-1,190
29	571	501	351	391	371	168	242	198	111	-46	-28	-1,070
30	487	487	388	409	---	172	188	160	140	-28	-70	-959
31	503	---	381	351	---	295	---	184	---	-41	-33	---
TOTAL	10,095.0	10,899	10,526	12,327	11,794	10,900	6,783	5,223	---	2,443	-3,919.9	-14,071.48
MEAN	326	363	340	398	407	352	226	168	---	78.8	-126	-469
MAX	578	510	451	447	493	452	406	262	--	143	29	12
MIN	-16	67	22	335	238	168	81	93	--	-95	-289	-1,270
AC-FT	20,020	21,620	20,880	24,450	23,390	21,620	13,450	10,360	---	4,850	-7,780	-27,910

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2004, BY WATER YEAR (WY)

MEAN	-78.9	-8.19	70.5	85.6	64.6	53.5	113	127	-27.6	-91.4	-123	-131	
MAX	365	363	359	452	407	352	393	349	227	225	160	173	
(WY)	(1989)	(2004)	(1989)	(2003)	(2004)	(2004)	(2004)	(1987)	(1987)	(1987)	(2003)	(1977)	(2002)
MIN	-564	-313	-182	-107	-177	-107	-226	-93.6	-377	-693	-599	-605	
(WY)	(2001)	(1988)	(1978)	(1987)	(1994)	(1982)	(1991)	(1982)	(1991)	(1991)	(1997)	(1981)	

SUMMARY STATISTICS

ANNUAL MEAN	
HIGHEST ANNUAL MEAN	
LOWEST ANNUAL MEAN	
HIGHEST DAILY MEAN	
LOWEST DAILY MEAN	
ANNUAL SEVEN-DAY MINIMUM	
ANNUAL RUNOFF (AC-FT)	
10 PERCENT EXCEEDS	
50 PERCENT EXCEEDS	
90 PERCENT EXCEEDS	

WATER YEARS 1976 - 2004

-2.02	
125	1989
-126	1997
766	Apr 25, 1983
-1,400	Sep 30, 1992
-1,160	Sep 29, 1992
-1,460	
205	
0.00	
-197	

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02278450 WEST PALM BEACH CANAL ABOVE S-5A, NEAR LOXAHATCHEE, FL

LOCATION.--Lat 26°41'05", long 80°22'15", in SW $\frac{1}{4}$ sec.32, T.43 S., R.43 E., Palm Beach County, Hydrologic Unit 03090202, near south bank, 500 ft upstream from pump station S-5A, 0.3 mi upstream from Levee 8 Canal, 1.1 mi downstream from bridge on U.S. Highway 441 and Cross Canal, and 6 mi west of Loxahatchee.

DRAINAGE AREA.--Indeterminate.

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

REVISED RECORDS.--WDR FL-93-2A:1983.

GAGE.--Electronic data logger for the conservation area, satellite data collection platform with water-stage shaft encoder for West Palm Beach Canal, Moscad RF Data/Telemetry system operated by South Florida Water Management District for Levee 8 Canal. Satellite data collection platform for Levee 8 Canal discontinued on November 19, 2001. Datum of gage is National Geodetic Vertical Datum of 1929 (South Florida Water Management District bench mark). Prior to September 30, 1967, deflection vane recorder at same site and auxiliary water-stage recorder at control structure 5A-W, 0.3 mi downstream. Prior to October 1, 1981, datum of gage is 0.24 ft higher, from October 1, 1981 to June 22, 1994, datum of gage is -.19 ft lower and from June 22, 1994 to October 1, 2001 datum of gage is .11 ft higher than present datum. The change in datum is based upon an adjustment to FCE 790 benchmark elevation surveyed by South Florida Water Management District.

REMARKS.--No estimated daily discharges. Records fair. Flow regulated primarily by pumpage at S-5A and to a lesser extent by operation of control structure 5A-W. Major regulation above the station occurs in Cross Canal, 1.5 mi upstream, and at Lake Okeechobee, 20 mi upstream. Discharge is the difference between pumpage at S-5A and gate discharge at S-5A-W. Negative figures indicate flow to the west. See records on Diversions to Conservation Area No. 1 at S-5A, near Loxahatchee (station 02278500; pump station S-5A, upper), for table of daily gage height and extremes for period of record. Starting in water year 2001, negative discharge from control structure S-5A-W is considered estimated due to updated information provided to the U.S. Geological Survey. Prior negative discharges are not marked estimated in the files or databases of U.S. Geological Survey. Estimated discharge does not necessarily indicate negative discharge through control structure S-5A-W.

COOPERATION.--Gate-opening, pump records and supplemental stage data provided by South Florida Water Management District.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 47 complete water years of discharge (1958-2004).

02278450 WEST PALM BEACH CANAL ABOVE S-5A, NEAR LOXAHATCHEE, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,110	278	263	0.00	1,060	0.00	279	0.00	267	-5.6	586	1,060
2	1,040	279	0.00	130	1,390	0.00	0.00	0.00	274	334	1,350	797
3	421	434	0.00	0.00	500	0.00	0.00	0.00	266	0.00	2,980	320
4	0.00	635	0.00	0.00	0.00	0.00	0.00	0.00	512	553	2,790	884
5	861	508	214	168	276	0.00	0.00	0.00	288	243	2,150	1,900
6	0.00	2,020	0.00	173	202	0.00	250	0.00	794	234	1,480	3,940
7	0.00	1,130	0.00	128	0.00	0.00	271	273	1,520	48	1,130	4,780
8	0.00	0.00	5.2	58	0.00	0.00	209	0.00	643	348	694	4,840
9	0.00	918	0.00	138	262	0.00	189	0.00	598	561	643	4,470
10	0.00	651	0.00	278	227	0.00	0.00	0.00	882	526	1,140	3,960
11	0.00	642	0.00	277	145	0.00	0.00	0.00	585	504	291	3,120
12	0.00	166	0.00	259	250	0.00	672	208	774	477	2,380	2,110
13	0.00	0.00	0.00	261	277	0.00	614	68	547	305	1,770	1,460
14	0.00	57	218	425	0.00	0.00	0.00	619	464	303	507	982
15	0.00	0.00	2,010	774	0.00	0.00	203	856	0.00	252	848	516
16	0.00	0.00	136	767	0.00	0.00	75	858	670	1,220	1,320	277
17	0.00	0.00	658	736	437	0.00	0.00	500	729	451	1,900	0.00
18	0.00	0.00	755	766	0.00	456	0.00	274	387	514	1,670	706
19	0.00	0.00	462	754	205	543	11	279	0.00	1,260	1,720	801
20	0.00	0.00	0.00	513	226	0.00	274	269	746	506	1,550	1,130
21	0.00	0.00	0.00	413	0.00	0.00	33	0.00	554	471	649	2,930
22	0.00	0.00	0.00	534	0.00	276	0.00	0.00	813	450	1,640	4,240
23	0.00	0.00	0.00	469	0.00	213	216	0.00	728	400	1,190	3,470
24	154	268	0.00	533	483	0.00	0.00	384	386	0.00	519	2,430
25	0.00	266	0.00	365	1,060	0.00	0.00	862	0.00	559	1,650	1,780
26	0.00	265	0.00	184	2,040	83	170	533	0.00	432	2,490	2,920
27	253	0.00	0.00	335	1,930	0.00	236	10	0.00	521	1,880	4,860
28	278	0.00	0.00	283	41	0.00	103	0.00	0.00	1,200	1,080	5,000
29	264	0.00	0.00	479	0.00	0.00	0.00	288	82	548	471	4,700
30	282	0.00	0.00	419	---	0.00	0.00	280	167	971	652	4,520
31	280	---	0.00	1,830	---	0.00	---	286	---	0.00	540	---
TOTAL	5,943.00	8,517.00	4,721.20	12,449.00	11,011.00	1,571.00	3,805.00	6,847.00	13,676.00	14,185.40	41,660	74,903.00
MEAN	192	284	152	402	380	50.7	127	221	456	458	1,344	2,497
MAX	2,110	2,020	2,010	1,830	2,040	543	672	862	1,520	1,260	2,980	5,000
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-5.6	291	0.00
AC-FT	11,790	16,890	9,360	24,690	21,840	3,120	7,550	13,580	27,130	28,140	82,630	148,600

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2004, BY WATER YEAR (WY)

MEAN	495	265	231	334	273	290	231	287	512	534	686	799
MAX	1,713	1,381	1,200	2,149	1,321	1,588	840	1,174	1,865	1,309	1,894	2,497
(WY)	(2000)	(1988)	(2003)	(1958)	(1983)	(1970)	(1960)	(1976)	(1968)	(1988)	(1959)	(2004)
MIN	-408	-230	-242	-148	-180	-69.3	-165	-381	-101	-98.8	-162	-107
(WY)	(1989)	(1990)	(1985)	(1985)	(1985)	(1975)	(1986)	(1983)	(1987)	(1979)	(1984)	(1970)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1958 - 2004

ANNUAL TOTAL	194,659.40	199,288.60	412
ANNUAL MEAN	533	545	719
HIGHEST ANNUAL MEAN			150
LOWEST ANNUAL MEAN			2003
HIGHEST DAILY MEAN	3,260	5,000	150
LOWEST DAILY MEAN	-0.80	-5.6	1990
ANNUAL SEVEN-DAY MINIMUM	0.00	0.00	5,230
ANNUAL RUNOFF (AC-FT)	386,100	395,300	298,600
10 PERCENT EXCEEDS	1,580	1,580	1,390
50 PERCENT EXCEEDS	280	262	120
90 PERCENT EXCEEDS	0.00	0.00	-48

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02278500 DIVERSIONS TO CONSERVATION AREA NO. 1 AT S-5A AND S-5A-S, NEAR LOXAHATCHEE, FL

LOCATION.--Lat 26°41'00", long 80°22'10", in SW ¼ sec.32, T.43 S., R.40 E., Palm Beach County, Hydrologic Unit 03090202, at pump station S-5A, 1.5 mi downstream from Cross Canal, and 6 mi west of Loxahatchee.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1957 to current year. Records of gage heights prior to October 1961 are available in files of the U.S. Geological Survey.

GAGE.--Electronic data logger for the conservation area, satellite data collection platform with water-stage shaft encoder for West Palm Beach Canal. Moscad RF Data/Telemetry system operated by South Florida Water Management District for Levee 8 Canal. Satellite data collection platform for Levee 8 Canal discontinued on November 19, 2001. Datum of gage is National Geodetic Vertical Datum of 1929 (South Florida Water Management District benchmark). Prior to September 30, 1967, auxiliary deflection vane recorder 500 ft upstream and in Levee 8 Canal, and auxiliary water-stage recorder upstream from S-5A-W and downstream from S-5A-E. Prior to October 1, 1981, datum of gage is 0.24 ft higher, from October 1, 1981 to June 22, 1994, datum of gage is -0.19 ft lower and from June 22, 1994 to October 1, 2001, datum of gage is 0.11 ft higher than present datum. The change in datum is based upon an adjustment to FCE 790 benchmark elevation surveyed by South Florida Water Management District.

REMARKS.--No estimated daily discharges. Records fair. Normal flow is considered as that to the south into Conservation Area No. 1. Flow is controlled by S-5A pumpage, siphoning, gate operation of S-5A-S, and regulation of Cross Canal, 1.5 mi upstream, and gate structure S-352, 20 mi upstream. Negative figures indicate releases from gate S-5A-S when stage in the conservation area is higher than stage in Levee 8 Canal. The discharge is summation of S-5A pumpage, siphoning and S-5A-S gate flow. Stage determined from either of 2 sources, digital recorder at 02278500 or DCP stage from 02278520 station. Digital recorder discontinued on January 14, 1999. Starting October 1, 2001 the datum of all the gages is 0.11 ft higher. No corrections to previous years were deemed necessary. See GAGE.

COOPERATION.--Gate-opening, pump records and supplemental stage record provided by South Florida Water Management District.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 47 complete water years of discharge (1958-2004).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 14.18 ft present datum, Oct. 3, 1957; minimum, 6.78 ft present datum, Oct. 28, 1981. See GAGE.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 12.04 ft Dec. 14; minimum, 8.61 ft Oct. 2. See GAGE.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.92	11.01	10.93	10.66	9.82	10.48	11.00	10.99	10.27	10.69	10.24	9.57
2	9.01	10.97	11.15	10.57	10.19	10.77	11.14	10.95	10.39	10.53	10.34	9.20
3	9.32	10.79	11.19	10.63	9.18	10.87	11.28	10.67	10.18	10.88	9.40	9.27
4	11.07	9.95	11.04	10.65	10.40	10.75	11.35	10.75	9.87	10.33	9.43	9.24
5	10.20	9.63	11.08	10.43	10.61	10.47	11.26	10.59	9.85	10.71	9.35	9.21
6	10.59	9.57	11.36	10.57	10.54	10.51	11.02	10.71	9.94	10.84	9.64	9.80
7	11.02	9.51	11.50	10.79	10.91	10.77	10.92	10.49	9.90	10.88	9.38	10.20
8	11.20	11.32	11.16	10.75	10.65	10.82	10.93	10.80	9.84	10.65	9.31	9.59
9	11.09	10.34	10.85	10.58	10.30	10.50	10.97	10.94	10.25	10.26	9.99	9.38
10	10.98	10.30	10.97	10.63	10.14	10.68	11.24	10.92	9.86	10.36	9.95	9.20
11	10.93	9.95	11.00	10.77	10.95	10.52	11.16	10.80	10.13	10.53	9.82	9.27
12	10.98	10.28	11.02	10.70	11.01	10.51	10.36	10.59	10.06	10.82	10.06	9.28
13	10.93	10.34	11.04	10.62	10.98	10.78	9.85	10.59	10.04	11.14	9.30	9.37
14	10.67	10.82	11.34	10.78	10.99	10.77	11.26	10.21	9.86	11.09	9.29	9.74
15	10.60	10.98	9.20	10.35	11.23	10.71	11.36	10.06	10.34	11.11	9.63	9.59
16	10.61	10.91	9.56	10.06	11.18	10.82	10.76	10.32	10.18	10.38	10.04	9.67
17	10.63	10.92	10.87	10.00	10.62	10.83	10.62	10.44	10.07	9.65	9.92	10.19
18	10.81	11.23	10.60	10.45	10.81	10.13	10.46	10.69	9.69	10.48	9.71	10.31
19	10.82	11.51	9.56	11.02	11.06	10.17	10.60	10.63	10.94	10.29	9.78	10.08
20	10.78	11.27	9.58	10.86	10.89	10.53	10.28	10.42	10.78	9.92	9.34	10.06
21	10.61	10.92	9.88	10.50	11.01	10.80	10.47	10.73	11.02	10.63	9.79	9.85
22	10.66	10.60	10.21	10.41	11.09	10.54	10.51	10.88	10.52	10.06	9.79	9.24
23	10.65	10.68	10.30	10.47	10.94	10.73	10.69	10.99	9.90	10.04	9.32	9.19
24	10.56	10.74	10.44	10.66	10.19	11.01	11.04	10.58	9.73	10.60	9.58	9.21
25	10.85	10.89	10.51	10.92	9.67	10.94	11.15	9.62	10.16	10.02	9.94	9.18
26	10.93	10.93	10.57	10.99	9.64	11.02	11.04	9.73	10.29	10.22	9.31	9.30
27	10.92	11.31	10.61	10.80	9.12	11.10	10.92	10.47	10.58	10.05	9.30	9.68
28	10.86	11.40	10.55	10.55	9.62	11.16	10.67	10.44	10.51	10.06	9.37	9.64
29	10.89	11.25	10.43	9.92	10.43	11.11	10.48	10.19	10.52	9.93	9.70	9.34
30	10.87	11.21	10.28	10.60	---	10.91	10.66	10.37	10.51	10.19	9.74	9.29
31	10.92	---	10.42	10.37	---	10.92	---	10.35	---	10.70	9.83	---
TOTAL	329.88	321.53	329.20	328.06	304.17	332.63	325.45	326.91	306.18	324.04	299.59	286.14
MEAN	10.64	10.72	10.62	10.58	10.49	10.73	10.85	10.55	10.21	10.45	9.66	9.54
MAX	11.20	11.51	11.50	11.02	11.23	11.16	11.36	10.99	11.02	11.14	10.34	10.31
MIN	8.92	9.51	9.20	9.92	9.12	10.13	9.85	9.62	9.69	9.65	9.29	9.18

02278500 DIVERSIONS TO CONSERVATION AREA NO. 1 AT S-5A AND S-5A-S, NEAR LOXAHATCHEE, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,110	163	240	0.00	1,050	-29	234	0.00	150	0.00	586	1,060
2	1,040	146	-13	130	1,390	-46	-0.70	0.00	128	249	1,350	797
3	421	471	0.00	-34	500	-66	0.00	0.00	121	-155	2,980	320
4	0.00	635	-8.9	2.8	-28	-86	0.00	0.00	428	375	2,790	884
5	861	508	199	136	145	-144	-11	0.00	288	243	2,150	2,080
6	0.00	2,020	0.00	42	96	-163	32	0.00	794	234	1,480	4,460
7	0.00	1,180	0.00	-48	0.00	-140	152	273	1,520	46	1,130	5,310
8	0.00	0.00	5.2	-18	-83	-92	68	0.00	643	348	694	5,160
9	0.00	918	0.00	14	124	-189	99	0.00	598	561	643	4,930
10	0.00	651	0.00	72	96	-102	0.00	0.00	882	402	1,140	4,460
11	0.00	642	0.00	58	16	-67	0.00	-118	585	268	291	3,700
12	0.00	166	0.00	-50	82	0.00	672	208	774	419	2,380	2,540
13	0.00	0.00	0.00	0.40	93	0.00	614	68	547	208	1,770	1,460
14	0.00	57	218	-1.9	-78	0.00	0.00	509	464	247	507	982
15	0.00	0.00	2,010	53	-7.0	0.00	160	764	0.00	141	848	516
16	0.00	0.00	136	51	-80	0.00	65	858	670	1,100	1,320	277
17	0.00	0.00	658	-18	369	-52	-22	500	571	399	1,900	0.00
18	0.00	0.00	755	97	-92	209	0.00	274	224	514	1,670	667
19	0.00	0.00	462	83	38	192	11	193	-90	1,260	1,720	689
20	0.00	0.00	0.00	63	15	-197	274	201	646	506	1,550	984
21	0.00	0.00	0.00	-70	-144	-100	33	-16	508	471	649	2,930
22	0.00	0.00	0.00	48	-54	142	0.00	0.00	721	450	1,640	4,240
23	0.00	0.00	0.00	-29	-132	213	100	0.00	728	400	1,190	3,600
24	62	169	0.00	93	301	0.00	-52	383	367	0.00	519	2,770
25	79	85	0.00	86	996	0.00	-35	830	-34	559	1,650	2,110
26	53	144	0.00	47	2,040	-31	38	472	-31	432	2,490	3,440
27	218	0.00	0.00	4.1	1,930	0.00	153	0.10	0.00	521	1,880	5,480
28	177	-60	0.00	-129	29	0.00	103	-176	0.00	1,200	1,080	5,410
29	266	-77	0.00	72	-89	0.00	-20	75	55	548	471	5,120
30	141	-3.6	0.00	161	---	0.00	0.00	45	158	971	652	4,940
31	130	---	0.00	1,650	---	0.00	---	26	---	0.00	540	---
TOTAL	5,558.00	7,814.40	4,661.30	2,565.40	8,523.00	-748.00	2,667.30	5,369.10	12,415.00	12,917.00	41,660	81,316.00
MEAN	179	260	150	82.8	294	-24.1	88.9	173	414	417	1,344	2,711
MAX	2,110	2,020	2,010	1,650	2,040	213	672	858	1,520	1,260	2,980	5,480
MIN	0.00	-77	-13	-129	-144	-197	-52	-176	-90	-155	291	0.00
AC-FT	11,020	15,500	9,250	5,090	16,910	-1,480	5,290	10,650	24,630	25,620	82,630	161,300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2004, BY WATER YEAR (WY)

MEAN	600	249	155	258	181	209	135	240	525	515	679	878
MAX	2,528	1,719	1,229	2,605	1,478	1,992	820	1,440	2,750	1,592	1,816	2,711
(WY)	(1996)	(1988)	(2003)	(1958)	(1983)	(1970)	(1991)	(1984)	(1968)	(1968)	(2003)	(2004)
MIN	-204	-870	-537	-460	-456	-144	-326	-184	-300	-136	-141	18.2
(WY)	(1981)	(1992)	(1992)	(1984)	(1987)	(1999)	(1995)	(1994)	(1989)	(1989)	(1984)	(1961)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1958 - 2004

ANNUAL TOTAL	187,878.90	184,718.50	
ANNUAL MEAN	515	505	386
HIGHEST ANNUAL MEAN			720
LOWEST ANNUAL MEAN			111
HIGHEST DAILY MEAN	3,260	Aug 12	5,480
LOWEST DAILY MEAN	-478	Mar 25	-197
ANNUAL SEVEN-DAY MINIMUM	-7.4	Apr 8	-131
ANNUAL RUNOFF (AC-FT)	372,700		366,400
10 PERCENT EXCEEDS	1,610		1,580
50 PERCENT EXCEEDS	192		93
90 PERCENT EXCEEDS	0.00		-31

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

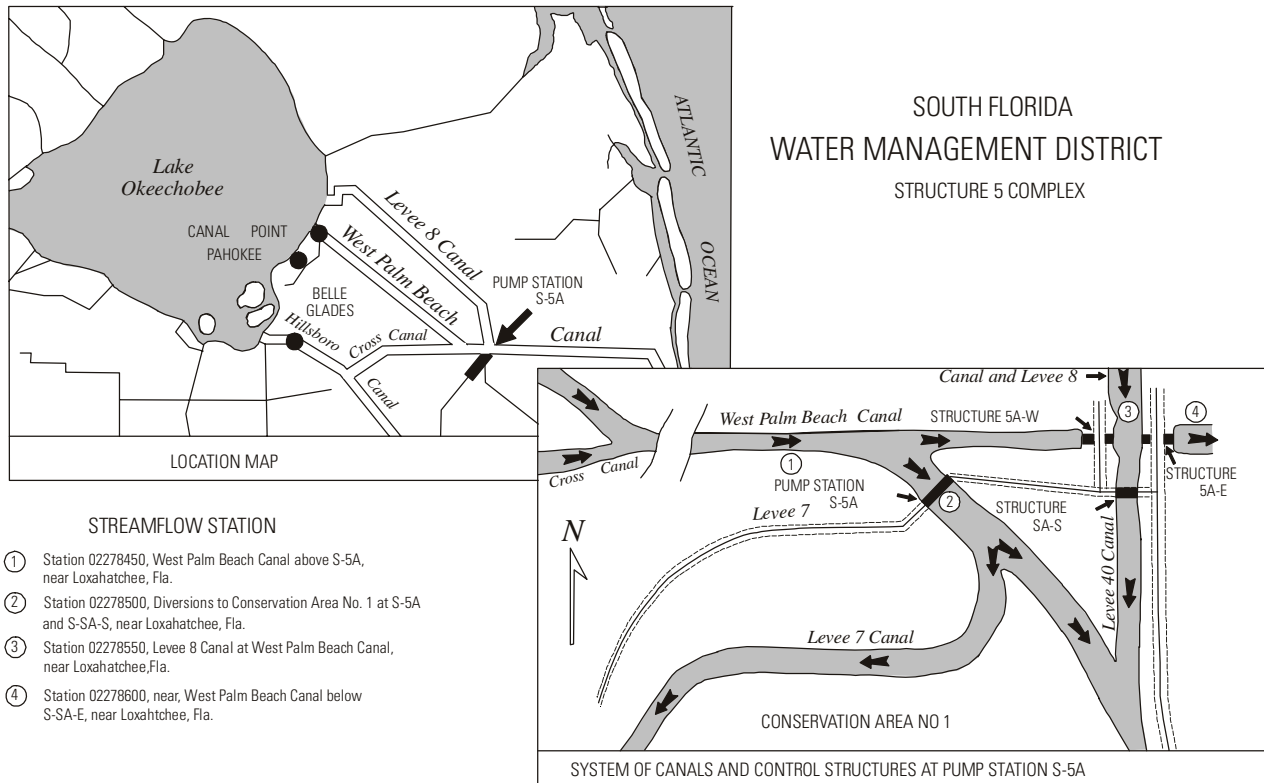


Figure 19. South Florida Water Management District, Structure 5 Complex.

LOCATION.--Lat 26°41'00", long 80°22'10", in SW $\frac{1}{4}$ sec.32, T.43 S., R.40 E., Palm Beach County, Hydrologic Unit 03090202, at pump station S-5A, 1.5 mi downstream from Cross Canal, and 6 mi west of Loxahatchee.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--January 1955 to current year (gage heights only).

GAGE.--Electronic data logger. Datum of gage is National Geodetic Vertical Datum of 1929 (South Florida Water Management District bench marks). Prior to October 1, 1981, datum of gage is 0.24 ft higher, from October 1, 1981 to June 22, 1994, datum of gage is -0.19 ft lower and from June 22, 1994 to October 1, 2001, datum of gage is 0.11 ft higher than present datum. The change in datum is based upon an adjustment to FCE 790 benchmark elevation surveyed by South Florida Water Management District.

REMARKS.--Gage records water level in Conservation Area No. 1 at structure 5 complex. Stage is affected by pumping at S-5A and S-6 and the operation of gated-control structures in levees 39 and 40. Discharge for S-5A-S is stored under this station number in the U.S. Geological Survey's database starting 1991 water year. Records of gage height prior to October 1967 are available from the files of the U.S. Geological Survey.

COOPERATION.--Supplemental stage record provided by South Florida Water Management District.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 19.04 ft present datum, Oct. 18 1999; minimum, 8.18 ft present datum, Apr. 20, 24, 1956. See GAGE.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 18.74 ft Sept. 26; minimum, 11.22 ft May 29.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.02	14.94	15.33	11.91	17.02	16.18	16.80	16.95	15.70	16.34	12.76	13.51
2	13.96	15.14	16.35	13.50	17.12	16.24	17.28	16.71	16.57	17.10	13.94	13.07
3	12.70	15.34	16.11	14.66	17.18	16.20	17.00	16.50	16.78	16.68	16.79	12.15
4	11.97	13.30	15.85	14.23	16.79	16.19	16.74	16.33	16.76	16.93	17.18	13.12
5	13.42	12.99	16.42	14.78	16.84	16.12	16.50	16.13	17.08	17.41	16.21	15.55
6	12.09	15.01	17.12	14.98	17.67	15.98	16.60	15.93	17.13	17.35	14.87	17.72
7	11.97	14.35	16.87	15.23	17.78	15.92	16.80	16.92	16.68	17.73	14.19	17.45
8	11.84	11.91	16.64	14.42	17.00	15.89	17.43	17.74	13.28	16.43	13.32	17.31
9	11.80	13.49	16.43	14.49	16.71	15.80	17.61	17.47	12.75	15.15	12.89	17.42
10	11.79	12.98	16.27	15.11	17.28	15.80	17.63	17.22	13.26	16.44	13.76	17.41
11	11.77	12.95	15.58	16.06	17.51	15.82	17.35	16.41	12.64	16.85	12.28	17.44
12	11.75	12.28	11.80	15.66	17.39	15.89	16.05	16.62	12.75	16.96	15.00	17.05
13	11.74	11.79	11.48	15.32	17.39	15.86	14.94	17.13	12.70	16.64	15.22	14.98
14	11.76	11.87	11.65	15.55	17.16	15.85	16.86	17.00	12.54	16.62	13.05	13.88
15	11.88	11.77	15.49	15.99	16.50	15.88	15.12	17.01	11.59	16.55	13.23	12.96
16	11.97	11.74	12.35	15.98	15.96	15.91	14.68	17.06	12.63	16.90	14.11	12.26
17	12.06	11.73	12.99	15.80	16.61	15.77	14.20	17.07	14.41	16.60	14.98	11.43
18	12.15	11.72	13.28	15.61	17.64	16.28	13.84	16.77	15.63	16.23	14.97	14.10
19	12.22	11.75	12.85	16.37	16.94	17.17	13.93	16.63	16.18	16.01	14.97	16.36
20	12.27	11.72	12.10	16.94	16.98	16.37	15.69	16.66	16.85	12.87	14.73	16.14
21	12.34	11.69	12.07	16.27	16.11	14.32	16.84	16.13	17.40	12.49	13.10	17.52
22	12.39	11.66	12.07	16.29	15.45	15.55	16.68	15.86	17.13	12.46	14.54	18.26
23	12.43	11.64	12.06	16.35	15.78	17.34	17.03	15.61	16.04	12.37	13.96	17.96
24	13.64	14.21	12.07	16.75	15.97	17.73	16.68	16.03	17.23	11.45	12.72	17.02
25	13.73	15.77	12.04	17.50	16.25	17.44	16.25	17.25	16.64	12.63	14.47	15.69
26	13.31	16.07	12.01	17.45	15.24	16.98	15.85	17.05	16.15	14.23	16.13	17.72
27	13.98	16.38	11.99	17.31	15.66	16.64	16.75	16.66	15.77	16.56	15.55	18.05
28	14.50	15.88	11.97	17.17	12.57	16.40	17.69	15.12	15.48	15.89	13.89	17.94
29	14.61	14.96	11.96	16.69	15.73	16.18	17.64	14.20	15.53	13.04	12.62	18.00
30	14.52	13.39	11.95	16.52	---	15.99	17.21	15.06	16.17	13.45	12.86	18.03
31	14.58	---	11.94	16.75	---	15.80	---	15.34	---	11.59	12.75	---
TOTAL	397.16	400.42	425.09	487.64	480.23	501.49	491.67	510.57	457.45	475.95	441.04	477.50
MEAN	12.81	13.35	13.71	15.73	16.56	16.18	16.39	16.47	15.25	15.35	14.23	15.92
MAX	16.02	16.38	17.12	17.50	17.78	17.73	17.69	17.74	17.40	17.73	17.18	18.26
MIN	11.74	11.64	11.48	11.91	12.57	14.32	13.84	14.20	11.59	11.45	12.28	11.43

02278550 LEVEE 8 CANAL AT WEST PALM BEACH CANAL NEAR LOXAHATCHEE, FL

LOCATION.--Lat 26°41'05", long 80°21'35", in SE 1/4 sec.32, T.43 S., R.40 E., Palm Beach County, Hydrologic Unit 03090202, 37 mi east of Belle Glade on U.S. Highway 441, 21 mi southeast of Canal Point on U.S. Highway 98 and 6 mi west of Loxahatchee.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1957 to current year. Discontinued.

REVISED RECORDS.--WDR FL-84-2A, 1982, (revised maximum negative discharge).

GAGE.--Satellite data collection platform with water-stage shaft encoder for West Palm Beach Canal west of Levee 8 Canal, Moscad RF Data/Telemetry system operated by South Florida Water Management District for West Palm Beach Canal east of Levee 8 Canal, electronic data logger for Conservation area. Satellite data collection platform for Levee 8 discontinued on November 19, 2001. Datum of gage is National Geodetic Vertical Datum of 1929 (South Florida Water Management District benchmark). Prior to October 1, 1981, datum of gage is 0.24 ft higher, from October 1, 1981 to June 22, 1994, datum of gage is -.19 ft lower and from June 22, 1994 to October 1, 2001, datum of gage is .11 ft higher than present datum. The change in datum is based upon an adjustment to FCE 790 benchmark elevation surveyed by South Florida Water Management District.

REMARKS.--No estimated daily discharges. Records fair. Discontinued due to combination of flow not possible due to S-5A-E being discontinued. Flow regulated by operation of S-5A-E, S-5A-S, and S-5A-W, just downstream and pumpage at S-5A. Gate operation and pumpage occasionally reverses the flow (negative figures indicate flow reversed). Discharge is summation of flows at S-5A-E, S-5A-S, and S-5A-W. Discharge computed from relation between discharge, head, and gate openings. Records of gage heights prior to October 1961, are available in files of the U.S. Geological Survey, (USGS). Prior to September 30, 1967, deflection vane recorder at upstream side in center of span of bridge on U.S. Highway 441, 50 ft upstream from mouth and West Palm Beach Canal. Satellite data collection platform with acoustic velocity meter installed April 11, 1991, at same location of satellite data collection platform, removed October, 1993. Starting in the water year 2001, negative discharge from control structure S-5A-W and S-5A-E is considered estimated due to updated information, provided to USGS about the site. Prior negative discharges are not marked estimated in the files or data bases of USGS. Estimated discharge does not necessarily indicate negative discharges through these control structures.

COOPERATION.--Gate-opening record and supplemental stage record provided by South Florida Water Management District.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 44 complete water years of discharge (1958-89, 1991-92, 1994-98, 2000-04).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 19.69 ft present datum, Oct. 18, 1995; minimum, 8.21 ft present datum, Mar. 17, 1969. See GAGE.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 18.82 ft Sept. 27; minimum, 10.78 ft June 17.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.48	14.91	14.03	14.59	15.05	13.31	13.73	13.46	12.10	12.04	12.47	14.04
2	14.77	15.09	14.53	14.68	14.94	13.22	14.21	13.44	12.15	11.76	12.62	14.14
3	15.17	14.76	14.53	14.55	14.22	13.27	14.02	13.72	12.14	11.98	12.99	14.34
4	13.77	13.69	14.43	14.20	13.71	13.33	13.98	13.94	11.99	11.86	12.96	15.18
5	13.56	14.82	14.48	14.19	13.85	13.19	14.37	13.92	11.71	12.02	13.25	15.10
6	13.72	16.16	14.95	13.84	13.91	13.33	13.78	13.76	11.70	12.04	13.61	17.03
7	13.85	16.47	14.58	14.32	13.27	13.37	13.85	13.55	11.82	12.01	13.60	17.34
8	13.84	16.26	14.59	14.10	13.15	13.40	13.81	13.58	12.05	12.00	13.34	17.28
9	13.80	16.01	14.92	13.89	13.23	13.31	13.93	13.45	12.14	11.80	12.99	15.72
10	13.48	15.67	15.35	14.28	13.36	13.27	14.28	13.24	12.24	11.73	12.99	16.07
11	13.18	15.32	15.62	14.36	13.20	13.72	14.09	12.96	12.33	12.04	13.31	15.64
12	12.80	15.36	15.52	14.30	13.25	14.29	14.26	13.15	12.40	11.69	13.74	15.09
13	13.03	15.85	15.24	14.30	13.69	13.57	14.13	12.93	12.40	12.00	13.72	15.23
14	13.35	15.75	15.43	14.28	13.31	13.88	14.87	12.74	12.35	11.91	13.73	15.15
15	13.39	15.38	16.00	14.43	13.07	13.72	14.53	12.89	12.53	11.88	13.78	14.69
16	13.07	15.16	15.58	14.19	13.23	13.66	14.09	12.91	12.61	11.85	13.76	14.15
17	13.92	15.25	15.75	14.27	13.30	13.83	13.58	12.89	11.84	11.87	13.27	13.72
18	14.89	15.07	15.69	14.22	13.19	13.57	13.72	13.02	12.28	11.88	12.94	13.64
19	14.61	14.75	15.49	14.59	13.22	13.91	13.75	12.72	12.07	12.07	12.98	13.54
20	15.19	15.46	15.47	14.41	13.29	13.76	13.80	12.77	11.80	12.06	13.56	13.93
21	15.69	15.17	15.17	13.97	13.27	13.53	13.64	12.80	12.23	12.17	13.61	15.02
22	15.00	14.38	15.00	13.95	13.08	13.95	13.69	12.82	12.81	12.64	13.65	16.10
23	14.01	13.96	15.37	13.90	13.21	14.60	13.42	12.83	12.59	12.42	13.68	15.94
24	13.96	14.31	15.37	14.23	13.23	14.00	13.47	12.77	12.41	12.00	13.74	15.26
25	13.76	15.21	14.39	13.92	13.77	14.13	13.27	12.62	12.46	11.87	13.61	14.91
26	13.32	15.44	14.92	13.89	14.35	14.41	13.38	12.51	12.25	11.84	13.77	16.81
27	13.94	14.15	15.03	13.92	13.88	14.45	13.64	11.87	11.83	11.77	13.83	18.43
28	14.46	13.77	15.06	14.06	13.31	14.57	13.62	11.68	11.82	11.88	13.88	18.20
29	14.60	13.73	14.84	13.97	13.35	14.75	12.82	11.68	11.91	12.43	13.77	18.22
30	14.46	13.68	14.64	13.72	---	14.73	13.34	12.16	11.99	12.48	13.75	18.27
31	14.50	---	14.65	13.80	---	14.33	---	11.94	---	12.54	13.80	---
TOTAL	436.57	450.99	466.62	439.32	392.89	428.36	415.07	400.72	364.95	372.53	416.70	468.18
MEAN	14.08	15.03	15.05	14.17	13.55	13.82	13.84	12.93	12.16	12.02	13.44	15.61
MAX	15.69	16.47	16.00	14.68	15.05	14.75	14.87	13.94	12.81	12.64	13.88	18.43
MIN	12.80	13.68	14.03	13.72	13.07	13.19	12.82	11.68	11.70	11.69	12.47	13.54

02278550 LEVEE 8 CANAL AT WEST PALM BEACH CANAL NEAR LOXAHATCHEE, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	436	413	457	397	177	522	244	0.00	-46	5.6	0.00	0.00
2	391	408	367	381	451	495	142	0.00	-28	49	0.00	0.00
3	479	552	329	361	493	477	175	0.00	-27	13	0.00	0.00
4	440	519	387	398	487	468	106	0.00	-6.0	-4.0	1.4	196
5	215	499	361	387	434	438	114	0.00	0.00	0.00	0.00	295
6	297	140	369	406	454	432	65	16	0.00	0.00	0.00	563
7	529	200	378	373	563	439	91	9.2	0.00	-1.6	0.00	1,020
8	536	350	368	420	512	486	72	0.00	0.00	0.00	0.00	1,060
9	534	475	233	340	447	416	80	0.00	0.00	9.2	0.00	840
10	512	544	243	310	452	483	0.00	48	0.00	6.0	0.00	672
11	490	568	249	301	443	177	0.00	45	0.00	-38	0.00	733
12	472	528	248	248	412	337	0.00	24	0.00	29	0.00	664
13	377	508	243	252	408	438	0.00	62	0.00	-51	0.00	477
14	414	548	103	162	484	392	0.00	31	0.00	15	0.00	480
15	479	569	174	-143	526	441	20	-4.0	0.00	-3.0	0.00	553
16	438	590	255	-108	484	391	107	0.00	80	-16	0.00	617
17	114	593	341	-176	527	466	133	0.00	-9.0	-9.0	0.00	617
18	330	592	381	-151	482	410	94	39	-8.0	0.00	0.00	623
19	304	552	377	-85	411	301	93	66	-4.0	0.00	0.00	584
20	46	547	376	160	395	211	94	75	49	0.00	0.00	578
21	166	623	394	112	452	325	64	35	-31	0.00	0.00	548
22	444	572	383	114	452	135	0.00	0.00	-46	0.00	0.00	570
23	554	541	320	113	408	98	101	0.00	0.00	0.00	0.00	736
24	459	466	367	164	428	156	94	39	-2.0	0.00	0.00	878
25	611	406	576	299	312	49	108	47	-9.0	0.00	0.00	994
26	564	472	379	261	505	-22	19	28	-5.0	0.00	0.00	662
27	542	564	396	271	536	0.00	-22	102	55	0.00	0.00	1,120
28	476	524	392	148	544	0.00	76	46	0.00	0.00	0.00	1,090
29	587	509	403	211	471	0.00	92	-33	8.0	0.00	0.00	1,170
30	423	436	412	288	---	0.00	0.00	-1.0	-5.5	0.00	0.00	1,200
31	398	---	416	330	---	165	---	-49	---	0.00	0.00	---
TOTAL	13,057	14,808	10,677	6,544	13,150	9,126.00	2,162.00	625.20	-34.50	4.20	1.40	19,540.00
MEAN	421	494	344	211	453	294	72.1	20.2	-1.15	0.14	0.05	651
MAX	611	623	576	420	563	522	244	102	80	49	1.4	1,200
MIN	46	140	103	-176	177	-22	-22	-49	-46	-51	0.00	0.00
AC-FT	25,900	29,370	21,180	12,980	26,080	18,100	4,290	1,240	-68	8.3	2.8	38,760

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2004, BY WATER YEAR (WY)

MEAN	251	139	79.4	130	79.4	113	94.4	86.1	116	163	174	257
MAX	1,169	691	616	820	503	714	648	728	896	1,048	856	937
(WY)	(1996)	(1960)	(1995)	(1958)	(1983)	(1970)	(1970)	(1984)	(1968)	(1992)	(1986)	(1960)
MIN	-218	-838	-565	-139	-486	-193	-175	-208	-330	-286	-151	-509
(WY)	(1977)	(1992)	(1992)	(1976)	(1999)	(1977)	(1974)	(1992)	(1989)	(1982)	(1977)	(1981)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1958 - 2004	
ANNUAL TOTAL	130,570.50	89,660.30		
ANNUAL MEAN	358	245	145	
HIGHEST ANNUAL MEAN			453	1970
LOWEST ANNUAL MEAN			-76.7	1977
HIGHEST DAILY MEAN	623	Nov 21	1,200	Sep 30
LOWEST DAILY MEAN	-28	Feb 22	-176	Jan 17
ANNUAL SEVEN-DAY MINIMUM	0.00	May 23	-56	Jan 15
ANNUAL RUNOFF (AC-FT)	259,000	177,800	105,200	
10 PERCENT EXCEEDS	526	552	448	
50 PERCENT EXCEEDS	381	176	85	
90 PERCENT EXCEEDS	165	0.00	-103	

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02278600 WEST PALM BEACH CANAL BELOW S-5A-E, NEAR LOXAHATCHEE, FL

LOCATION.--Lat 26°41'05", long 80°21'50", in SE 1/4 sec.32, T.43 S., R.40 E., Palm Beach County, Hydrologic Unit 03090202, near left bank, 350 ft downstream from control structure 5A-E, and 6 mi west of Loxahatchee.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--September 1955 to current year. Discontinued. Monthly discharge only for September 1955, published in WSP 1724. Records of gage heights prior to October 1961, are available in files of the U.S. Geological Survey.

GAGE.--South Florida Water Management District Moscad CR 10 RF data/telemetry system for West Palm Beach Canal east of Levee 8 Canal (east of S-5A-E structure and Levee 8 Canal). Datum of gage is National Geodetic Vertical Datum of 1929 (South Florida Water Management District bench mark). Satellite data collection platform with water-stage shaft encoder for Levee 8 Canal discontinued on November 19, 2001. Auxiliary water-stage recorder on West Palm Beach Canal 100 ft east from S-5A-E discontinued on January 14, 1999. Prior to October 1, 1981, datum of gage is 0.24 ft higher; from October 1, 1981 to June 22, 1994, datum of gage is -0.19 ft lower and from June 22, 1994 to October 1, 2001, datum of gage is .11 ft higher than present datum. The change in datum is based upon an adjustment to FCE 790 benchmark elevation surveyed by South Florida Water Management District.

REMARKS.--No estimated daily discharges. Records fair. Normal flow to east regulated at S-5A-E for irrigation and drainage. Flow diverted upstream from station through S-5A-S and by pumpage at S-5A. Flow materially affected by regulation of Cross Canal 1.5 mi upstream and gate structure S-352, 20 mi upstream. Negative figures indicate flow to the west. Discharge computed from relations between discharge, head, and gate openings at S-5A-E. Acoustic velocity meter installed May 1, 1991, along with satellite data collection platform. Acoustic velocity meter removed September 30, 1993. No discharge was computed using the acoustic velocity meter record. Starting in water year 2001, negative discharge is considered estimated, due to updated information provided to the U.S. Geological Survey, (USGS). Prior negative discharges are not marked estimated in the files or databases of USGS.

COOPERATION.--Gate-opening record provided by South Florida Water Management District.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 46 complete water years of discharge (1956-89, 1991-92, 1994-98, 2000-04).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 17.45 ft present datum, Oct. 16, 1999; minimum, 6.16 ft present datum, Sept. 9, 1965. See GAGE.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 15.88 ft Sept. 26; minimum, 7.96 ft Oct. 20.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.36	10.70	9.98	9.89	9.80	10.76	9.72	10.21	11.83	10.87	10.60	11.94
2	10.33	10.70	9.70	9.81	10.28	10.74	9.78	10.43	11.51	9.22	10.92	9.72
3	10.60	10.76	9.63	9.79	10.68	10.73	9.75	10.46	11.46	9.32	11.20	9.18
4	10.55	10.84	9.87	9.80	10.69	10.64	9.95	10.27	11.05	9.88	11.00	9.25
5	9.31	10.82	9.89	9.79	10.88	10.86	9.82	10.25	10.09	9.81	11.66	13.45
6	9.39	11.15	9.88	10.42	10.86	10.95	9.79	10.26	10.03	9.84	11.10	13.20
7	10.69	10.69	9.95	10.35	10.82	10.91	9.88	10.18	10.11	9.91	11.04	12.85
8	10.61	10.73	9.92	10.17	10.94	10.72	9.71	10.60	10.30	10.05	10.99	12.68
9	10.59	10.76	9.54	9.97	10.91	10.91	9.90	10.03	10.16	10.10	11.43	12.99
10	10.52	10.87	9.31	10.25	10.91	10.85	10.21	9.88	10.16	9.55	11.39	13.25
11	10.47	10.85	9.39	10.19	10.90	9.77	10.24	9.80	10.09	9.75	11.58	13.24
12	10.28	10.85	9.36	10.33	10.88	9.64	8.91	9.88	9.99	9.48	10.24	12.69
13	9.91	10.68	9.31	10.16	10.87	10.07	8.56	9.61	10.17	9.84	8.96	12.77
14	9.97	10.75	9.21	10.56	10.84	9.88	9.74	9.64	9.82	9.50	8.33	12.66
15	10.25	10.84	9.35	10.53	10.76	9.96	10.21	9.93	9.92	9.82	8.65	12.21
16	10.02	10.89	9.86	10.82	10.65	9.64	10.04	9.80	8.80	9.54	9.66	12.32
17	8.94	10.87	9.98	10.79	10.88	10.09	9.96	10.23	9.04	9.64	10.09	12.34
18	9.20	10.91	9.97	10.66	10.80	10.65	9.94	10.01	9.30	10.13	10.86	12.40
19	9.33	10.91	9.92	10.85	10.85	10.74	10.04	10.04	9.83	9.41	10.18	12.17
20	8.31	10.70	9.76	10.85	10.84	10.10	10.03	10.28	9.83	10.05	9.87	12.45
21	8.67	10.82	9.96	10.87	10.86	9.70	9.98	10.37	9.83	10.05	9.68	12.70
22	9.59	10.72	9.93	10.87	10.58	9.95	10.15	10.59	9.58	10.26	10.06	12.77
23	10.59	10.69	9.90	10.86	10.29	10.00	9.87	10.72	9.67	9.31	10.17	12.75
24	10.60	10.73	9.86	10.83	10.89	9.81	9.93	10.26	9.53	9.62	10.19	12.70
25	10.62	10.79	10.77	10.66	10.86	9.89	9.69	10.30	9.79	9.97	12.02	12.64
26	10.43	10.66	9.78	10.40	10.87	10.19	10.25	10.37	9.54	10.18	11.02	14.51
27	10.65	10.68	9.90	10.90	10.77	10.08	10.42	10.33	9.67	9.45	11.99	13.96
28	10.70	10.73	9.87	10.69	10.72	10.30	9.83	10.21	9.82	9.67	11.91	14.09
29	10.76	10.83	9.86	10.88	10.73	10.31	9.87	10.40	9.51	10.14	11.48	13.73
30	10.77	10.13	9.85	10.87	---	10.08	9.89	10.56	10.40	10.15	11.70	13.39
31	10.85	---	9.89	10.92	---	9.70	---	11.45	---	10.23	12.12	---
TOTAL	313.86	323.05	303.35	324.73	311.61	318.62	296.06	317.35	300.83	304.74	332.09	377.00
MEAN	10.12	10.77	9.79	10.48	10.75	10.28	9.87	10.24	10.03	9.83	10.71	12.57
MAX	10.85	11.15	10.77	10.92	10.94	10.95	10.42	11.45	11.83	10.87	12.12	14.51
MIN	8.31	10.13	9.21	9.79	9.80	9.64	8.56	9.61	8.80	9.22	8.33	9.18

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02278600 WEST PALM BEACH CANAL BELOW S-5A-E, NEAR LOXAHATCHEE, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	436	528	480	397	189	551	289	0.00	74	0.00	0.00	0.00
2	391	540	380	382	451	541	143	0.00	118	134	0.00	0.00
3	479	515	329	395	493	543	175	0.00	118	168	0.00	0.00
4	440	519	396	395	515	554	106	0.00	78	174	1.4	196
5	215	499	376	419	565	582	125	0.00	0.00	0.00	0.00	115
6	297	140	369	538	560	595	283	16	0.00	0.00	0.00	44
7	529	154	378	549	563	579	210	9.2	0.00	0.00	0.00	483
8	536	350	368	496	595	578	213	0.00	0.00	0.00	0.00	733
9	534	475	233	464	585	605	170	0.00	0.00	9.2	0.00	378
10	512	544	243	516	583	585	0.00	48	0.00	130	0.00	167
11	490	568	249	521	571	244	0.00	163	0.00	198	0.00	154
12	472	528	248	557	579	337	0.00	24	0.00	87	0.00	235
13	377	508	243	513	591	438	0.00	62	0.00	46	0.00	477
14	414	548	103	589	561	392	0.00	141	0.00	71	0.00	480
15	479	569	174	578	533	441	63	88	0.00	108	0.00	553
16	438	590	255	609	564	391	117	0.00	80	102	0.00	617
17	114	593	341	578	595	518	155	0.00	149	43	0.00	617
18	330	592	381	517	574	657	94	39	155	0.00	0.00	662
19	304	552	377	585	578	652	93	152	86	0.00	0.00	696
20	46	547	376	610	606	408	94	143	149	0.00	0.00	724
21	166	623	394	595	596	425	64	51	15	0.00	0.00	548
22	444	572	383	601	505	269	0.00	0.00	46	0.00	0.00	570
23	554	541	320	611	540	98	217	0.00	0.00	0.00	0.00	602
24	551	565	367	604	610	156	146	40	17	0.00	0.00	539
25	532	587	576	578	374	49	143	79	25	0.00	0.00	665
26	511	593	379	398	505	92	151	89	26	0.00	0.00	143
27	577	564	396	602	536	0.00	61	112	55	0.00	0.00	496
28	577	584	392	559	556	0.00	76	222	0.00	0.00	0.00	683
29	585	586	403	618	560	0.00	112	180	35	0.00	0.00	747
30	564	440	412	546	---	0.00	0.00	234	3.9	0.00	0.00	780
31	547	---	416	509	---	165	---	211	---	0.00	0.00	---
TOTAL	13,441	15,514	10,737	16,429	15,633	11,445.00	3,300.00	2,103.20	1,229.90	1,270.20	1.40	13,104.00
MEAN	434	517	346	530	539	369	110	67.8	41.0	41.0	0.05	437
MAX	585	623	576	618	610	657	289	234	155	198	1.4	780
MIN	46	140	103	382	189	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	26,660	30,770	21,300	32,590	31,010	22,700	6,550	4,170	2,440	2,520	2.8	25,990

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2004, BY WATER YEAR (WY)

	1958	1961	1961	1960	1961	1983	1983	1960	1961	1992	1959	2002
MEAN	153	157	151	195	168	188	193	137	111	185	181	183
MAX	623	650	697	679	700	795	661	626	662	1,106	790	653
(WY)	(1958)	(1961)	(1961)	(1960)	(1961)	(1983)	(1983)	(1960)	(1961)	(1992)	(1959)	(2002)
MIN	-21.3	-39.6	0.00	-26.6	0.00	-57.1	-113	-74.8	-254	-106	-1.77	-76.4
(WY)	(1984)	(1972)	(1972)	(1991)	(1957)	(1982)	(1999)	(1982)	(1982)	(1985)	(1956)	(1977)

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1956 - 2004
ANNUAL TOTAL	137,351.00	104,207.70	
ANNUAL MEAN	376	285	171
HIGHEST ANNUAL MEAN			573
LOWEST ANNUAL MEAN			1.43
HIGHEST DAILY MEAN	623	780	1,630
LOWEST DAILY MEAN	0.00	0.00	-930
ANNUAL SEVEN-DAY MINIMUM	0.00	0.00	-566
ANNUAL RUNOFF (AC-FT)	272,400	206,700	123,900
10 PERCENT EXCEEDS	544	586	537
50 PERCENT EXCEEDS	400	246	51
90 PERCENT EXCEEDS	172	0.00	0.00

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02279000 WEST PALM BEACH CANAL AT WEST PALM BEACH, FL

LOCATION.--Lat 26°38'40", long 80°03'22", in NW $\frac{1}{4}$ sec.15, T.44 S., R.34 E., Palm Beach County, Hydrologic Unit 03090202, at structure S-155, on left bank in concrete control house north of control structure, 200 ft downstream from bridge on U.S. Highway 1, and 4.9 mi south of courthouse in West Palm Beach.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1939 to current year. Discontinued. Records of gage heights prior to October 1961 are available in files of the U.S. Geological Survey.

REVISED RECORDS.--WDR FL-91-2A, 1986-89. WDR FL-03-2A, 2002 (downstream gage height only).

GAGE.--Electronic data logger with shaft encoders for upstream and downstream stages. Prior to November 17, 2003, electronic data logger for 3 gate recorders. Prior to September 23, 1999, digital gate recorders. Prior to November 17, 1999, digital water-stage recorders upstream and downstream. Datum of gage is National Geodetic Vertical Datum of 1929 (State Department of Transportation bench mark). Prior to May 1, 1984, digital upstream stage recorder, and gate-opening indicator at site 200 ft upstream at same datum. Prior to April 26, 1940, nonrecording gage, April 26, 1940 to December 20, 1949, water-stage recorder, at same site at datum 0.25 ft higher, and December 20, 1949 to June 3, 1959, at same site and present datum. June 3, 1959 to September 30, 1985, water-stage and deflection vane recorder at site 800 ft upstream at present datum.

REMARKS.-- Records poor. Flow regulated by operation of control structure. Since January 1954, flow affected by control structures 20 mi upstream. Discharge computed from relations between discharge, head and gate openings. Starting in the 2002 water year, the downstream stage record published is the maximum and minimum stage for each calendar day. Prior to the 2002 water year, daily mean was published.

COOPERATION.--Gate-operation record provided by South Florida Water Management District.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 58 complete water years of discharge (1941-84, 1986-90, 1993-94, 1998-2004).

EXTREME UPSTREAM STAGES FOR PERIOD OF RECORD.--Maximum gage height, 10.89 ft Oct. 13, 1947, present datum; minimum, 2.85 ft Dec. 3, 1953, Oct. 9, 1963, and Sept. 9, 1964.

EXTREME UPSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 9.03 ft Sept. 26; minimum, 6.97 ft Sept. 27, 29.

EXTREME DOWNSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 4.50 ft Sept. 25; minimum, -1.97 ft July 1.

REVISIONS.--Revised figures of discharge for the 2000-2003 water years, superseding those published in the reports for 2000-2003 are provided below due to revised ratings.

02279000 WEST PALM BEACH CANAL AT WEST PALM BEACH, FL-Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	743	e2,840	1,170	999	197	0.00	0.00	0.00	0.00	0.00	296	0.00
2	757	1,700	1,100	848	0.00	0.00	0.00	0.00	0.00	158	509	0.00
3	828	1,250	1,190	839	198	0.00	0.00	0.00	0.00	160	801	0.00
4	891	1,270	1,210	805	197	0.00	0.00	0.00	0.00	171	494	0.00
5	964	1,310	1,010	848	3.7	0.00	0.00	0.00	0.00	169	469	0.00
6	653	1,050	1,200	720	0.00	0.00	0.00	0.00	0.00	238	257	0.00
7	778	1,040	1,190	716	192	0.00	0.00	0.00	0.00	200	320	182
8	1,260	1,080	807	707	133	0.00	0.00	0.00	0.00	396	518	0.00
9	1,180	1,200	620	698	222	0.00	0.00	0.00	265	365	474	0.00
10	989	1,270	851	688	159	0.00	0.00	0.00	136	510	15	0.00
11	979	1,200	944	830	0.00	0.00	0.00	0.00	345	522	77	0.00
12	996	1,180	915	708	82	0.00	458	0.00	7.9	663	134	0.00
13	1,150	1,180	1,050	699	174	0.00	527	228	2.7	527	96	0.00
14	e2,540	1,170	986	689	163	0.00	1,190	531	0.00	495	74	0.00
15	e4,040	1,170	925	671	156	0.00	1,290	203	0.00	376	131	0.00
16	e8,540	1,040	844	661	74	0.00	1,820	350	0.00	221	207	159
17	e6,050	1,040	1,100	650	0.00	13	947	262	0.00	308	334	403
18	e4,530	1,150	1,230	637	1.2	13	530	337	0.00	415	268	232
19	e3,630	1,240	859	247	0.00	527	546	398	0.00	436	216	826
20	e3,090	1,150	915	0.00	0.00	919	118	0.00	0.00	241	378	507
21	2,930	1,390	1,170	0.00	0.00	397	550	0.00	0.00	514	190	492
22	2,690	1,250	958	0.00	0.60	0.00	655	0.00	0.00	310	421	4.1
23	2,330	1,340	1,100	0.00	0.00	0.00	458	0.00	0.00	263	944	0.00
24	2,260	1,080	1,150	580	18	67	541	0.00	0.00	250	182	0.00
25	1,740	1,340	889	269	806	52	520	0.00	0.00	257	0.00	0.00
26	1,720	1,020	1,130	18	168	176	293	0.00	6.8	505	0.00	0.00
27	1,610	1,280	908	213	153	109	92	0.00	0.00	469	0.00	0.00
28	1,400	1,230	894	83	37	286	0.00	0.00	0.00	166	0.00	646
29	1,440	1,170	917	505	0.00	0.00	0.00	0.00	0.00	265	0.00	260
30	1,370	1,080	912	253	---	0.00	0.00	0.00	149	104	0.00	475
31	e1,980	---	925	0.00	---	0.00	---	0.00	---	502	0.00	---
TOTAL	66,058	37,710	31,069	15,581.00	3,134.50	2,559.00	10,535.00	2,309.00	912.40	10,176.00	7,805.00	4,186.10
MEAN	2,131	1,257	1,002	503	108	82.5	351	74.5	30.4	328	252	140
MAX	8,540	2,840	1,230	999	806	919	1,820	531	345	663	944	826
MIN	653	1,020	620	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	131,000	74,800	61,630	30,900	6,220	5,080	20,900	4,580	1,810	20,180	15,480	8,300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2000, BY WATER YEAR (WY)

	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000							
MEAN	1,087	740	501	573	435	428	398	397	750	831	860	1,096	3,889	2,589	2,082	2,067	1,696	1,682	1,967	1,266	2,856	2,960	2,335	2,844	(1948)	(1948)	(1995)	(1993)	(1941)	(1947)	(1942)	(1958)	(1942)	(1947)	(1947)	(1947)	11.5	4.93	0.00	0.06	0.00	0.00	0.00	0.01	30.4	155	89.8	140	(1982)	(1990)	(1991)	(1989)	(1989)	(1990)	(1990)	(1992)	(2000)	(1981)	(1987)	(2000)

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1940 - 2000

ANNUAL TOTAL	295,122.00	192,035.00	
ANNUAL MEAN	809	525	671
HIGHEST ANNUAL MEAN			1,542
LOWEST ANNUAL MEAN			129
HIGHEST DAILY MEAN	8,540	Oct 16	8,540
LOWEST DAILY MEAN	0.00	Feb 27	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	Mar 15	0.00
ANNUAL RUNOFF (AC-FT)	585,400	380,900	486,500
10 PERCENT EXCEEDS	1,340	1,200	1,460
50 PERCENT EXCEEDS	882	240	514
90 PERCENT EXCEEDS	0.00	0.00	10

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

REVISED

02279000 WEST PALM BEACH CANAL AT WEST PALM BEACH, FL-Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	392	0.00	194	0.00	0.00	0.00	153	0.00	296	863	1,240	54
2	700	0.00	82	0.00	0.00	0.00	0.00	0.00	358	610	e2,410	192
3	1,500	0.00	168	0.00	0.00	0.00	0.00	0.00	279	461	e3,610	216
4	2,880	0.00	76	69	0.00	0.00	0.00	0.00	261	522	e2,870	220
5	3,000	0.00	57	38	0.00	0.00	0.00	0.00	53	423	2,300	343
6	2,500	0.00	59	0.00	0.00	0.00	0.00	0.00	82	194	1,840	461
7	1,880	0.00	129	0.00	0.00	0.00	0.00	0.00	124	402	1,680	486
8	1,450	0.00	57	0.00	0.00	0.00	0.00	0.00	123	314	1,380	865
9	1,170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	249	591	1,300	762
10	746	0.00	221	0.00	0.00	0.00	0.00	0.00	89	781	1,130	1,090
11	617	0.00	e1,990	0.00	0.00	0.00	0.00	0.00	181	836	940	1,400
12	651	0.00	754	0.00	0.00	0.00	0.00	0.00	455	922	936	1,930
13	655	0.00	565	0.00	0.00	0.00	0.00	0.00	256	938	758	e3,570
14	276	0.00	260	0.00	0.00	0.00	0.00	0.00	124	868	656	e4,360
15	376	0.00	121	0.00	0.00	0.00	0.00	0.00	0.00	897	673	e3,170
16	237	0.00	316	0.00	0.00	0.00	0.00	0.00	83	922	491	2,270
17	19	0.00	179	0.00	0.00	0.00	0.00	0.00	106	949	518	1,570
18	138	0.00	1.6	0.00	0.00	0.00	0.00	0.00	41	1,670	462	1,160
19	8.4	0.00	186	0.00	0.00	e1,610	0.00	0.00	0.00	1,460	561	991
20	0.00	0.00	4.6	0.00	0.00	e1,000	0.00	0.00	0.00	1,100	474	776
21	301	0.00	0.00	0.00	0.00	363	0.00	0.00	0.00	1,140	566	789
22	0.00	0.00	14	27	0.00	184	0.00	0.00	320	1,380	721	519
23	87	0.00	16	70	0.00	159	0.00	0.00	477	e1,820	701	573
24	47	0.00	113	0.00	0.00	0.00	0.00	0.00	495	e3,080	488	622
25	153	e2,320	0.00	0.00	0.00	0.00	0.00	0.00	487	2,470	486	829
26	0.00	1,280	51	0.00	0.00	0.00	0.00	0.00	578	1,990	467	1,470
27	0.00	408	231	0.00	0.00	0.00	0.00	0.00	813	1,710	423	1,860
28	0.00	137	120	0.00	0.00	0.00	0.00	0.00	2,250	910	235	1,610
29	0.00	148	102	0.00	---	114	0.00	0.00	1,670	910	289	2,910
30	0.00	78	0.00	0.00	---	385	0.00	0.00	780	934	328	2,410
31	102	---	0.00	0.00	---	186	---	0.00	---	891	302	---
TOTAL	19885.40	4,371.00	6,067.20	204.00	0.00	4,001.00	153.00	0.00	11,030.00	32,958	31,235	39,478
MEAN	641	146	196	6.58	0.00	129	5.10	0.00	368	1,063	1,008	1,316
MAX	3,000	2,320	1,990	70	0.00	1,610	153	0.00	2,250	3,080	3,610	4,360
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	194	235	54
AC-FT	39,440	8,670	12,030	405	0.00	7,940	303	0.00	21,880	65,370	61,950	78,300

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

MEAN	1,080	730	496	564	428	423	391	391	744	834	862	1,100
MAX	3,889	2,589	2,082	2,067	1,696	1,682	1,967	1,266	2,856	2,960	2,335	2,844
(WY)	(1948)	(1948)	(1995)	(1993)	(1941)	(1947)	(1942)	(1958)	(1942)	(1947)	(1947)	(1947)
MIN	11.5	4.93	0.00	0.06	0.00	0.00	0.00	0.00	30.4	155	89.8	140
(WY)	(1982)	(1990)	(1991)	(1989)	(1989)	(1990)	(1990)	(2001)	(2000)	(1981)	(1987)	(2000)

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1940 - 2001

ANNUAL TOTAL	87,521.60	149,382.60	
ANNUAL MEAN	239	409	667
HIGHEST ANNUAL MEAN			1,542
LOWEST ANNUAL MEAN			129
HIGHEST DAILY MEAN	3,000	4,360	8,540
LOWEST DAILY MEAN	0.00	0.00	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	0.00	0.00
ANNUAL RUNOFF (AC-FT)	173,600	296,300	483,000
10 PERCENT EXCEEDS	676	1,390	1,460
50 PERCENT EXCEEDS	58	16	508
90 PERCENT EXCEEDS	0.00	0.00	10

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

REVISED

02279000 WEST PALM BEACH CANAL AT WEST PALM BEACH, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	925	0.00	191	487	180	0.00	464	157	770	689	707	843
2	900	0.00	120	474	494	0.00	459	229	801	523	648	1,080
3	591	0.00	139	468	232	0.00	510	528	735	478	672	878
4	0.00	0.00	117	461	258	0.00	528	514	885	633	734	900
5	0.00	0.00	178	452	289	465	514	503	824	555	878	1,100
6	0.00	0.00	124	441	403	488	505	493	946	592	929	1,030
7	0.00	0.00	120	439	391	478	706	664	928	604	773	942
8	0.00	0.00	65	429	347	467	491	486	752	484	812	747
9	0.00	0.00	408	421	432	459	546	470	e1,460	471	940	807
10	0.00	0.00	615	140	303	446	533	464	1,040	456	1,030	774
11	0.00	0.00	244	0.00	234	443	519	453	946	439	831	815
12	0.00	0.00	516	346	296	439	508	309	812	453	1,100	742
13	0.00	0.00	506	123	463	367	494	419	961	526	1,100	747
14	166	0.00	273	289	140	216	473	463	835	506	1,250	804
15	139	0.00	267	130	0.00	627	453	236	953	712	747	766
16	80	348	169	344	0.00	505	474	0.00	660	508	983	719
17	0.00	376	0.00	240	0.00	664	644	0.00	760	499	816	540
18	0.00	0.00	88	540	0.00	585	574	0.00	872	659	902	481
19	0.00	0.00	222	528	0.00	562	497	0.00	994	473	904	523
20	0.00	192	548	262	173	576	484	167	978	459	1,040	479
21	0.00	485	489	182	0.00	674	474	107	1,150	451	973	259
22	0.00	197	480	112	388	639	459	e875	1,070	438	897	317
23	0.00	317	652	0.00	281	649	452	1,010	906	428	876	499
24	0.00	169	644	0.00	42	513	435	314	716	674	832	483
25	0.00	152	484	200	0.00	525	437	552	593	738	878	507
26	0.00	32	300	466	0.00	514	573	441	744	667	795	716
27	0.00	0.00	0.00	26	0.00	735	602	914	786	482	780	555
28	0.00	144	0.00	154	0.00	681	768	1,470	693	471	1,020	440
29	0.00	113	150	182	---	507	775	1,300	735	473	741	665
30	0.00	187	321	136	---	658	916	449	587	682	734	661
31	0.00	---	498	216	---	481	---	594	---	689	819	---
TOTAL	2,801.00	2,712.00	8,928.00	8,688.00	5,346.00	14,363.00	16,267	14,581.00	25,892	16,912	27,141	20,819
MEAN	90.4	90.4	288	280	191	463	542	470	863	546	876	694
MAX	925	485	652	540	494	735	916	1,470	1,460	738	1,250	1,100
MIN	0.00	0.00	0.00	0.00	0.00	0.00	435	0.00	587	428	648	259
AC-FT	5,560	5,380	17,710	17,230	10,600	28,490	32,270	28,920	51,360	33,540	53,830	41,290

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2003, BY WATER YEAR (WY)

	1,059	717	486	551	425	421	389	386	745	838	861	1,092
MEAN	1,059	717	486	551	425	421	389	386	745	838	861	1,092
MAX	3,889	2,589	2,082	2,067	1,696	1,682	1,967	1,266	2,856	2,960	2,335	2,844
(WY)	(1948)	(1948)	(1995)	(1993)	(1941)	(1947)	(1942)	(1958)	(1942)	(1947)	(1947)	(1947)
MIN	11.5	4.93	0.00	0.06	0.00	0.00	0.00	0.00	30.4	155	89.8	140
(WY)	(1982)	(1990)	(1991)	(1989)	(1989)	(1990)	(1990)	(2001)	(2000)	(1981)	(1987)	(2000)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1940 - 2003

ANNUAL TOTAL	153,519.50	164,450.00	
ANNUAL MEAN	421	451	660
HIGHEST ANNUAL MEAN			1,542
LOWEST ANNUAL MEAN			129
HIGHEST DAILY MEAN	2,770	Jun 21	1,470
LOWEST DAILY MEAN	0.00	Jan 3	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 17	0.00
ANNUAL RUNOFF (AC-FT)	304,500		326,200
10 PERCENT EXCEEDS	1,090		898
50 PERCENT EXCEEDS	166		473
90 PERCENT EXCEEDS	0.00		0.00

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

REVISED

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02279000 WEST PALM BEACH CANAL AT WEST PALM BEACH, FL-Continued

UPSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.05	8.53	7.98	8.15	7.73	8.07	8.36	8.13	8.18	7.84	7.60	7.76
2	8.11	8.21	7.97	8.13	8.09	8.15	8.32	8.12	8.23	8.05	7.24	7.33
3	8.13	8.16	8.04	8.01	8.10	8.01	8.33	8.06	8.19	8.02	7.30	7.26
4	8.15	8.25	8.19	8.05	8.02	8.15	8.30	8.00	8.22	8.16	7.35	7.30
5	8.08	8.03	8.56	8.02	8.19	8.03	8.11	8.14	8.01	8.06	8.01	8.23
6	7.99	7.44	8.51	8.10	8.18	8.06	8.24	8.13	8.06	8.05	8.00	7.45
7	8.09	7.78	8.55	8.13	8.09	8.11	8.32	8.11	7.94	8.00	8.07	7.30
8	8.13	8.11	8.51	8.04	7.96	8.02	8.35	8.04	7.91	7.95	8.24	7.25
9	7.94	7.98	8.52	8.09	7.92	8.12	8.35	8.07	7.99	7.88	8.13	7.32
10	8.17	7.94	8.46	8.12	7.98	8.17	8.14	8.02	8.08	8.01	8.03	7.41
11	8.20	8.07	8.59	8.16	8.05	8.21	8.01	8.13	8.13	8.08	8.03	7.24
12	8.09	8.12	8.54	8.06	8.05	8.36	8.10	8.09	8.03	8.05	8.01	7.32
13	8.17	8.09	8.48	8.12	7.98	8.50	8.18	8.08	7.93	8.04	8.01	7.25
14	8.02	8.01	8.57	8.12	8.08	8.64	8.08	8.06	7.99	7.97	8.00	7.28
15	8.07	8.11	8.26	8.14	7.97	8.37	8.07	8.09	7.89	8.04	8.07	7.34
16	8.10	8.14	8.13	8.11	8.01	8.02	8.15	8.08	7.96	8.05	8.07	7.38
17	8.01	7.99	8.15	8.05	8.13	7.98	8.12	8.05	7.99	8.01	8.03	7.27
18	8.14	7.96	8.55	8.11	8.11	8.08	8.13	8.02	8.03	8.02	8.15	7.39
19	8.09	8.10	8.62	8.23	7.97	8.15	8.11	8.08	8.02	8.16	8.11	7.23
20	8.07	8.05	8.49	8.17	7.93	8.14	8.15	8.04	8.11	8.00	8.03	7.28
21	8.17	7.89	8.56	8.26	8.16	8.06	8.26	8.05	8.02	8.10	8.01	7.23
22	8.12	7.92	8.50	8.26	8.06	7.98	8.15	7.99	8.08	8.19	8.12	7.18
23	8.27	8.03	8.62	8.19	8.01	7.92	8.18	7.99	8.04	7.97	8.14	7.26
24	8.26	8.17	8.21	8.17	8.06	8.13	8.31	7.97	8.03	7.97	7.97	7.12
25	8.21	8.29	8.18	8.12	7.97	8.17	8.29	8.03	8.02	7.95	8.03	7.37
26	7.93	8.15	8.00	8.10	7.93	8.10	8.26	7.98	8.03	7.94	8.12	8.52
27	8.11	8.14	8.15	8.15	7.91	8.08	8.11	7.98	8.04	8.09	8.09	7.49
28	8.13	8.13	8.04	8.19	8.19	8.07	8.06	8.09	7.91	8.06	8.04	7.24
29	8.05	8.02	8.04	8.01	8.06	8.11	8.09	8.31	7.91	8.01	8.04	7.30
30	8.39	8.03	8.03	8.14	---	8.09	8.09	8.27	7.91	8.02	8.16	7.21
31	8.53	---	8.01	8.10	---	8.11	---	8.26	---	7.81	8.00	---
TOTAL	251.97	241.84	258.01	251.80	232.89	252.16	245.72	250.46	240.88	248.55	247.20	221.51
MEAN	8.13	8.06	8.32	8.12	8.03	8.13	8.19	8.08	8.03	8.02	7.97	7.38
MAX	8.53	8.53	8.62	8.26	8.19	8.64	8.36	8.31	8.23	8.19	8.24	8.52
MIN	7.93	7.44	7.97	8.01	7.73	7.92	8.01	7.97	7.89	7.81	7.24	7.12

02279000 WEST PALM BEACH CANAL AT WEST PALM BEACH, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	628	381	361	327	694	745	0.00	0.00	0.00	11	518	1,090
2	502	575	441	384	549	702	0.00	0.00	0.00	0.00	561	952
3	706	684	208	353	790	772	0.00	261	0.00	0.00	454	831
4	478	709	227	385	704	494	0.00	106	107	0.00	195	1,220
5	473	767	208	384	608	747	6.4	119	57	0.00	349	e4,640
6	456	2,190	260	457	738	796	0.00	122	0.00	0.00	248	e3,590
7	659	916	176	474	809	630	0.00	0.00	0.00	0.00	200	2,650
8	582	968	180	360	712	607	0.00	0.00	0.00	0.00	177	2,170
9	639	1,000	182	452	695	617	0.00	0.00	0.00	0.00	313	2,460
10	478	745	176	362	682	605	0.00	0.00	0.00	0.00	385	2,230
11	645	712	174	383	693	387	0.00	0.00	0.00	0.00	516	2,100
12	514	822	165	386	709	66	168	0.00	0.00	0.00	772	1,800
13	475	588	179	427	764	304	132	0.00	0.00	0.00	676	1,640
14	601	810	230	386	773	123	0.00	0.00	0.00	0.00	210	1,530
15	510	838	474	450	789	425	0.00	0.00	0.00	0.00	202	1,370
16	506	546	511	478	568	628	0.00	0.00	0.00	0.00	173	1,370
17	424	778	517	512	741	488	153	0.00	0.00	0.00	187	1,460
18	206	673	177	499	592	482	0.00	0.00	0.00	0.00	304	1,450
19	364	658	202	629	796	473	0.00	0.00	0.00	0.00	351	1,360
20	272	627	221	553	660	458	0.00	0.00	0.00	0.00	284	1,520
21	163	596	154	483	672	384	0.00	0.00	0.00	0.00	208	1,820
22	343	584	232	506	602	244	0.00	0.00	0.00	57	318	1,810
23	520	505	446	521	600	0.00	0.00	0.00	0.00	141	212	1,840
24	513	470	672	517	735	0.00	0.00	0.00	0.00	0.00	234	1,810
25	583	463	639	507	978	0.00	0.00	0.00	0.00	0.00	468	1,840
26	705	636	344	240	849	0.00	0.00	0.00	0.00	0.00	90	e5,230
27	476	472	383	548	651	0.00	0.00	0.00	0.00	154	290	e3,620
28	695	576	532	499	486	0.00	0.00	0.00	0.00	25	351	2,890
29	590	607	330	539	680	0.00	0.00	0.00	0.00	111	224	2,670
30	326	508	406	579	---	0.00	104	0.00	7.1	18	188	2,490
31	423	---	413	770	---	0.00	---	0.00	---	377	312	---
TOTAL	15,455	21,404	9,820	14,350	20,319	11,177.00	563.40	608.00	171.10	894.00	9,970	63,453
MEAN	499	713	317	463	701	361	18.8	19.6	5.70	28.8	322	2,115
MAX	706	2,190	672	770	978	796	168	261	107	377	772	5,230
MIN	163	381	154	240	486	0.00	0.00	0.00	0.00	0.00	90	831
AC-FT	30,650	42,450	19,480	28,460	40,300	22,170	1,120	1,210	339	1,770	19,780	125,900

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)

MEAN	1,050	717	483	549	430	420	383	380	733	825	853	1,108
MAX	3,889	2,589	2,082	2,067	1,696	1,682	1,967	1,266	2,856	2,960	2,335	2,844
(WY)	(1948)	(1948)	(1995)	(1993)	(1941)	(1947)	(1942)	(1958)	(1942)	(1947)	(1947)	(1947)
MIN	11.5	4.93	0.00	0.06	0.00	0.00	0.00	0.00	5.70	28.8	89.8	140
(WY)	(1982)	(1990)	(1991)	(1989)	(1989)	(1990)	(1990)	(2001)	(2004)	(2004)	(1987)	(2000)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1940 - 2004

ANNUAL TOTAL	196,688.00	168,184.50	
ANNUAL MEAN	539	460	657
HIGHEST ANNUAL MEAN			1,542
LOWEST ANNUAL MEAN			129
HIGHEST DAILY MEAN	2,190	Nov 6	5,230
LOWEST DAILY MEAN	0.00	Jan 11	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	Feb 25	0.00
ANNUAL RUNOFF (AC-FT)	390,100	333,600	475,700
10 PERCENT EXCEEDS	903	833	1,440
50 PERCENT EXCEEDS	508	352	504
90 PERCENT EXCEEDS	171	0.00	10

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

264514080550700 INDUSTRIAL CANAL AT CLEWISTON, FL

LOCATION.--Lat 26°45'14", long 80°55'07", in NW 1/4 sec.14, T.43 S., R.34 E., Hendry County, Hydrologic Unit 03090202, on concrete wall inside lock chamber of structure S-310 (HGS-2) in Okeechobee Waterway, and 0.8 mi north of U.S. Highway 27 near Clewiston.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--August 1976 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to October 1979, at datum 0.24 ft lower. Prior to April 19, 2001, acoustic velocity meter at same site and datum. Prior to October 19, 1992, water-stage recorder and electromagnetic velocity meter at site. Prior to October 1982, water-stage recorder 0.4 mi downstream of S-310 (HGS-2) on south side of U.S. Highway 27 bridge. August 1976 to September 1979, deflection velocity meter recorder on south side of U.S. Highway 27 bridge.

REMARKS.--Records poor. Discharge computed from relations between stage vs. area and index velocity vs. mean channel velocity. Flow regulated by hurricane gate at Lake Okeechobee. Prior to October 19, 1992, electromagnetic velocity meter at site.

ANNUAL MEAN AND ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 11 complete water years of discharge (1977-79, 1983-87, 1990, 1994, 2002).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 19.17 ft Mar. 7, 1983; minimum, 8.73 ft May 23, 2001.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 17.57 ft Oct. 3; minimum, 10.88 ft Sept. 5.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.21	16.56	16.09	15.76	15.50	15.42	14.63	13.92	12.63	12.69	12.28	13.79
2	17.24	16.53	16.10	15.76	15.53	15.42	14.62	13.85	12.69	12.66	12.31	13.95
3	17.24	16.39	16.00	15.76	15.56	15.43	14.55	13.89	12.72	12.60	12.37	14.15
4	17.19	16.41	15.90	15.73	15.58	15.40	14.52	14.17	12.63	12.56	12.44	14.98
5	17.19	16.38	15.92	15.71	15.55	15.35	14.53	14.12	12.65	12.56	12.49	13.06
6	17.17	16.39	16.10	15.79	15.50	15.34	14.50	14.05	12.70	12.53	12.56	14.12
7	17.14	16.44	16.01	16.13	15.51	15.35	14.39	13.93	12.76	12.58	12.65	14.51
8	17.14	16.47	15.93	15.78	15.81	15.43	---	13.90	12.75	12.53	12.67	14.70
9	17.13	16.57	15.88	15.67	15.48	15.40	14.34	13.89	12.76	12.46	12.77	14.89
10	17.07	16.61	15.80	15.86	15.45	15.43	14.33	13.81	12.76	12.46	12.77	15.04
11	17.03	16.54	15.86	15.92	15.42	15.38	14.29	13.75	12.77	12.46	12.73	15.18
12	16.99	16.45	15.86	15.65	15.38	15.24	14.30	13.71	12.81	12.38	12.71	15.26
13	16.98	16.38	15.82	15.58	15.42	15.26	13.88	13.72	12.82	12.30	12.45	15.30
14	16.91	16.50	15.83	15.55	15.33	15.26	14.38	13.69	12.82	12.27	12.84	15.36
15	17.04	16.31	16.04	15.49	15.35	15.16	14.48	13.66	12.87	12.23	13.06	15.32
16	17.00	16.30	15.93	15.50	15.46	15.05	14.52	13.61	12.90	12.22	13.11	15.34
17	16.86	16.27	15.95	15.49	15.43	15.18	14.50	13.58	12.98	12.22	13.14	15.43
18	16.93	16.23	16.03	15.46	15.60	15.19	14.43	---	12.85	12.18	13.14	15.48
19	16.93	16.16	15.96	15.54	15.43	15.20	14.36	13.48	12.75	12.20	13.18	15.66
20	16.91	16.40	16.03	15.63	15.34	15.20	14.28	13.43	12.80	12.29	13.21	15.87
21	16.79	16.29	16.05	15.59	15.30	15.07	14.23	13.37	12.80	12.40	13.24	16.11
22	16.74	16.22	15.93	15.56	15.29	15.26	14.18	13.27	12.79	12.47	13.26	16.01
23	16.73	16.17	15.86	15.59	15.25	15.40	14.20	13.23	12.82	12.45	13.27	16.10
24	16.72	16.12	15.84	15.49	15.18	15.19	14.16	13.21	12.85	12.42	13.35	16.19
25	16.67	16.09	15.94	15.42	15.37	15.06	14.11	13.14	12.81	12.37	13.43	16.29
26	16.59	16.09	15.96	15.38	15.33	15.02	14.02	13.00	12.76	12.34	13.49	15.22
27	16.50	16.08	15.92	15.37	15.54	14.93	14.03	12.94	12.78	12.38	13.52	16.75
28	16.41	16.06	15.86	---	15.65	14.87	14.27	12.86	12.75	12.40	13.54	17.04
29	16.59	16.45	15.79	---	15.49	14.92	14.13	12.84	12.75	12.41	13.54	17.27
30	16.65	16.17	15.77	---	---	14.78	14.00	12.77	12.74	12.47	13.62	17.44
31	16.57	---	15.76	15.55	---	---	---	12.69	---	12.36	13.66	---
TOTAL	524.26	490.03	493.72	---	448.03	---	---	---	383.27	384.85	402.80	461.81
MEAN	16.91	16.33	15.93	---	15.45	---	---	---	12.78	12.41	12.99	15.39
MAX	17.24	16.61	16.10	---	15.81	---	---	---	12.98	12.69	13.66	17.44
MIN	16.41	16.06	15.76	---	15.18	---	---	---	12.63	12.18	12.28	13.06

264514080550700 INDUSTRIAL CANAL AT CLEWISTON, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.87	43	71	43	-182	-7.4	144	8.2	---	---	---	---
2	-0.62	26	47	109	-140	14	139	46	---	---	---	35
3	0.97	7.8	5.1	95	-54	54	37	12	---	---	---	-3.5
4	14	-7.1	53	52	-9.5	44	26	11	---	---	---	-5.5
5	4.8	2.4	-0.57	36	-0.48	89	167	-14	---	---	---	19
6	14	9.7	38	55	14	137	144	35	---	---	---	200
7	19	3.1	-7.9	53	24	3.2	250	75	---	---	---	248
8	17	0.24	7.8	50	19	73	---	72	---	---	---	216
9	4.5	-7.8	12	48	41	88	107	38	---	---	---	212
10	43	-1.6	54	116	81	110	133	114	---	---	---	213
11	46	25	34	83	23	75	103	171	---	---	---	126
12	38	55	-0.61	122	31	61	-32	203	---	---	---	98
13	68	72	10	113	11	83	-162	198	---	---	---	55
14	65	109	8.8	42	-0.46	28	-97	105	---	---	---	15
15	63	89	4.5	120	0.35	31	-22	34	---	---	---	26
16	73	109	5.3	-10	6.8	56	-12	60	---	---	---	30
17	73	78	-3.5	42	3.0	93	16	95	---	---	---	41
18	54	55	-15	8.6	2.6	137	97	---	---	---	---	44
19	37	24	0.40	-83	2.5	210	118	226	---	---	---	83
20	61	8.1	-9.6	-87	53	148	226	279	---	---	---	166
21	111	47	-5.1	2.0	100	80	137	323	---	---	---	39
22	75	58	3.9	-23	69	120	261	295	---	---	---	-16
23	63	87	11	14	72	84	197	259	---	---	---	-30
24	47	91	8.6	58	35	149	160	213	---	---	---	-31
25	43	90	-8.7	30	-87	163	37	412	---	---	---	-34
26	68	107	-0.80	4.6	-139	59	121	370	---	---	---	1.9
27	46	54	28	-34	-123	124	98	---	---	---	---	-18
28	55	69	81	---	-76	188	25	---	---	---	---	-14
29	20	123	71	---	2.2	139	43	---	---	---	---	2.9
30	58	109	143	---	---	140	38	---	---	---	---	10
31	80	---	99	-161	---	---	---	---	---	---	---	---
TOTAL	1,361.52	1,534.84	744.62	---	-220.99	---	---	---	---	---	---	---
MEAN	43.9	51.2	24.0	---	-7.62	---	---	---	---	---	---	---
MAX	111	123	143	---	100	---	---	---	---	---	---	---
MIN	-0.62	-7.8	-15	---	-182	---	---	---	---	---	---	---
AC-FT	2,700	3,040	1,480	---	-438	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2004, BY WATER YEAR (WY)

MEAN	41.9	54.8	54.8	51.8	65.5	89.2	120	113	40.9	10.7	2.06	17.1
MAX	194	315	438	467	474	472	448	366	399	245	219	232
(WY)	(1988)	(1986)	(1988)	(1988)	(1988)	(1988)	(1986)	(2002)	(1998)	(1984)	(1987)	(1987)
MIN	-93.6	-27.6	-122	-120	-63.7	-42.3	-50.3	-92.3	-168	-114	-153	-119
(WY)	(1994)	(1979)	(1998)	(1992)	(1992)	(1992)	(1991)	(1978)	(2002)	(2002)	(1978)	(2001)

SUMMARY STATISTICS

ANNUAL MEAN	
HIGHEST ANNUAL MEAN	
LOWEST ANNUAL MEAN	
HIGHEST DAILY MEAN	
LOWEST DAILY MEAN	
ANNUAL SEVEN-DAY MINIMUM	
ANNUAL RUNOFF (AC-FT)	
10 PERCENT EXCEEDS	
50 PERCENT EXCEEDS	
90 PERCENT EXCEEDS	

WATER YEARS 1976 - 2004

62.9	
232	1987
-30.2	1978
740	Feb 24, 1989
-1,400	Jul 4, 1984
-465	Jun 12, 2002
45,570	
294	
21	
-62	

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02280500 HILLSBORO CANAL BELOW S-351, NEAR SOUTH BAY, FL

LOCATION.--Lat 26°42'00", long 80°42'45", in SW 1/4 sec.35, T.43 S., R.36 E., Palm Beach County, Hydrologic Unit 03090202, acoustic velocity meter located approximately 1,800 ft downstream from S-351 and pump station 2 at Lake Okeechobee, and 2.5 mi north of South Bay, along the south bank of Hillsboro Canal.

DRAINAGE AREA.--Indeterminate.

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

REVISED RECORDS.--WDR FL-92-2A, 1991; WDR FL-03-2A, 2002.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Prior to January 1, 2002, acoustic velocity meter. Prior to April 1993 water year electromagnetic velocity meter and digital water-stage recorder. Satellite data collection platform with water-stage shaft encoder and acoustic velocity meter installed December 1990. Prior to October 1, 1986, water-stage recorder at pump station 2 used for gage heights at this station. Prior to August 1982, deflection meter. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark).

REMARKS.--Records poor. Flow regulated by vertical lift gates and pump station at Lake Okeechobee. Flow frequently reversed during and after periods of heavy rainfall by pumpage into the canal from agricultural lands in the Everglades, by the operation of pump station 2, or by gravity flow through gates during periods of negative head (negative figures indicate flow reversed). Discharge computed from continuous velocity record obtained from acoustic doppler velocity meter starting January 1, 2002.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 41 complete water years of discharge (1958-88, 1991-95, 1997-98, 2000-01, 2004).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 14.09 ft Sept. 28, 1962; minimum, 6.98 ft Oct. 28, 1981.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 13.00 ft Sept. 6, 22; minimum, 8.64 ft Sept. 4, 5.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.12	11.04	11.32	10.73	11.20	10.35	11.36	11.33	11.85	10.68	11.14	10.01
2	9.98	10.83	11.21	10.66	10.83	10.69	11.33	---	11.68	10.76	11.41	9.24
3	9.97	11.08	11.37	10.60	10.31	10.82	11.31	10.60	11.35	10.94	12.12	9.08
4	11.11	10.67	11.17	10.60	10.56	10.73	11.33	10.56	10.79	10.87	11.91	9.10
5	10.79	10.27	11.19	10.58	10.72	10.53	11.31	10.61	10.12	10.89	---	10.62
6	10.53	11.32	11.02	10.68	10.74	10.61	11.36	10.77	10.38	10.90	---	12.34
7	10.89	10.29	11.12	10.84	10.61	10.91	11.26	10.90	11.03	---	---	10.75
8	10.97	10.84	10.83	10.70	10.36	10.49	11.35	11.25	10.55	---	---	10.34
9	10.92	11.05	11.13	10.63	10.25	10.18	11.44	11.30	10.64	10.96	---	---
10	10.79	10.74	11.16	10.65	10.40	10.24	11.42	11.32	10.15	11.09	10.34	10.13
11	10.76	10.53	10.86	10.81	11.13	10.18	11.20	11.22	10.28	---	9.72	---
12	10.77	10.29	10.83	10.67	11.03	10.41	10.85	11.12	10.68	11.30	10.58	9.70
13	10.74	10.27	10.99	10.56	11.00	11.00	10.73	11.10	10.57	11.40	10.44	9.83
14	10.60	10.91	11.19	11.06	10.85	10.92	11.03	11.33	10.40	11.37	9.79	10.00
15	10.89	10.93	11.36	11.10	11.00	10.89	11.02	11.73	10.24	---	10.51	9.56
16	10.66	10.92	10.51	11.09	10.89	10.68	10.64	11.60	---	11.56	10.70	9.57
17	10.89	11.05	11.32	11.23	10.79	10.57	10.52	11.59	10.54	11.43	10.58	9.86
18	10.92	11.53	10.98	11.19	10.66	10.64	10.47	11.65	10.10	11.39	10.41	10.26
19	10.71	11.22	10.19	11.26	10.86	10.66	10.56	11.61	---	11.63	10.54	10.33
20	10.69	---	9.75	11.02	11.05	10.85	10.63	11.59	11.16	---	9.97	10.07
21	10.60	10.72	9.86	10.58	10.98	10.84	10.66	11.61	11.09	---	9.89	10.77
22	10.94	10.54	10.14	10.55	10.95	10.85	10.67	11.65	10.97	---	10.63	---
23	10.84	10.62	---	10.74	10.88	11.42	11.08	11.67	10.70	10.40	10.22	---
24	10.94	10.69	10.32	11.29	10.56	11.37	11.41	11.59	10.46	---	10.0	---
25	11.00	10.63	10.35	11.34	10.33	11.18	11.32	11.57	---	10.75	10.99	---
26	10.99	11.28	10.46	11.29	11.36	11.22	11.25	11.50	---	---	11.97	---
27	10.97	11.44	10.53	11.08	10.79	11.11	11.16	11.52	10.65	10.79	11.35	---
28	---	11.41	10.47	10.59	9.76	11.11	---	11.73	10.66	11.36	10.34	11.27
29	10.93	11.23	10.33	10.43	10.22	11.10	10.65	11.78	10.65	11.04	9.82	10.39
30	---	11.42	10.36	10.87	---	11.15	10.80	11.80	10.67	11.22	10.77	10.57
31	11.01	---	10.69	11.26	---	11.29	---	11.82	---	10.57	10.46	---
TOTAL MEAN	---	---	---	336.68	311.07	334.99	---	---	---	---	---	---
MAX	---	---	---	10.86	10.73	10.81	---	---	---	---	---	---
MIN	---	---	---	11.34	11.36	11.42	---	---	---	---	---	---
MIN	---	---	---	10.43	9.76	10.18	---	---	---	---	---	---

02280500 HILLSBORO CANAL BELOW S-351, NEAR SOUTH BAY, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	188	227	433	275	289	-17	542	423	892	165	96	-58
2	271	61	436	228	310	80	554	e262	744	275	66	-176
3	325	42	410	192	413	132	400	207	523	269	-263	-186
4	135	128	255	202	165	119	351	13	279	363	-206	47
5	157	77	238	291	11	185	362	284	71	298	e-165	-86
6	51	-75	-157	322	105	297	467	288	-82	241	e-79	-769
7	-5.5	88	-183	266	-71	356	471	409	-60	e250	e-60	-1,090
8	-52	-277	-87	167	-66	-34	571	511	47	e337	e-16	-1,080
9	-2.0	-38	342	236	85	55	562	441	18	476	e-177	e-832
10	44	151	324	275	327	19	454	492	-2.7	559	-179	-526
11	54	-6.4	91	230	394	24	271	477	172	e504	-8.0	e-258
12	55	59	0.64	160	257	186	104	461	124	414	-334	-233
13	46	148	148	187	216	400	94	504	134	346	-40	-130
14	218	265	-69	380	117	278	-45	630	111	354	258	-38
15	349	154	-109	410	15	288	-228	715	28	e379	10	31
16	106	171	254	489	-125	129	-55	632	e-16	73	9.3	74
17	362	290	-135	554	25	48	-0.85	662	157	165	-310	-74
18	322	399	12	371	136	339	102	678	170	150	-124	-32
19	167	27	253	-39	100	391	191	707	e-33	-104	-90	-5.2
20	77	e-97	189	75	228	418	378	766	-177	e-64	63	-217
21	237	-49	119	71	226	317	357	726	-124	e-62	-7.1	-729
22	384	115	104	137	159	404	346	660	-105	e104	-256	e-997
23	340	144	e131	233	205	573	520	611	138	208	117	e-1,080
24	410	247	104	432	173	469	538	702	223	e246	132	e-787
25	316	178	41	355	11	354	385	832	e142	102	-444	e-340
26	291	495	73	347	-142	302	428	838	e267	e163	-450	e-630
27	240	401	74	245	-1.4	220	385	825	226	254	-207	e-1,050
28	e324	304	54	84	98	249	e119	889	278	-131	77	-1,040
29	241	245	79	283	-46	285	247	882	261	-236	124	-925
30	e238	367	242	99	---	456	353	847	248	-342	65	-719
31	310	---	351	-144	---	522	---	861	---	-270	246	---
TOTAL	6,198.5	4,240.6	4,017.64	7,413	3,613.6	7,844	9,223.15	18,235	4,653.3	5,486	-2,151.8	-13,935.2
MEAN	200	141	130	239	125	253	307	588	155	177	-69.4	-465
MAX	410	495	436	554	413	573	571	889	892	559	258	74
MIN	-52	-277	-183	-144	-142	-34	-228	13	-177	-342	-450	-1,090
AC-FT	12,290	8,410	7,970	14,700	7,170	15,560	18,290	36,170	9,230	10,880	-4,270	-27,640

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2004, BY WATER YEAR (WY)

MEAN	-1.47	28.4	56.6	47.2	56.2	87.2	224	172	-2.31	-95.1	-93.5	-124
MAX	296	366	520	606	574	359	676	720	610	482	268	351
(WY)	(1995)	(1974)	(1996)	(2003)	(1993)	(1999)	(1993)	(1966)	(2000)	(1992)	(1974)	(1992)
MIN	-370	-276	-314	-265	-232	-534	-241	-328	-633	-553	-609	-537
(WY)	(1965)	(1960)	(1960)	(1964)	(1963)	(1970)	(1957)	(1968)	(1968)	(1975)	(1981)	(1960)

SUMMARY STATISTICS

ANNUAL TOTAL
ANNUAL MEAN
HIGHEST ANNUAL MEAN
LOWEST ANNUAL MEAN
HIGHEST DAILY MEAN
LOWEST DAILY MEAN
ANNUAL SEVEN-DAY MINIMUM
ANNUAL RUNOFF (AC-FT)
10 PERCENT EXCEEDS
50 PERCENT EXCEEDS
90 PERCENT EXCEEDS

FOR 2004 WATER YEAR

54,837.79
150
892
-1,090
-846
108,800
490
165
-176

WATER YEARS 1957 - 2004

18.3
288
-207
1,210
-1,720
-1,190
13,240
369
27
-335

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02281200 HILLSBORO CANAL AT S-6, NEAR SHAWANO, FL

LOCATION.--Lat 26°28'18", long 80°26'46", in NE ¼ sec.4, T.46 S., R.39 E., Palm Beach County, Hydrologic Unit 03090202, at pump station 6, and 7 mi southeast of Shawano.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1957 to September 1968 (gage heights and discharge). October 1968 to September 1981 (discharge), October 1990 to current year.

REVISED RECORDS.--WDR FL-03-2A, 1995.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. The acoustic velocity meter and acoustic doppler velocity meter were run in tandem for the period of August 10, 2001 to January 30, 2002. Dual water-stage recorder from 1968 to 1981 at S-6. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to October 1, 1959, at datum 0.44 ft lower.

REMARKS.--Records poor. Flow regulated by pumpage at S-6, by Structure 351 and pump station 2 at Lake Okeechobee and by drainage and irrigation pumps upstream. Records include flow from Levee 6 Canal from March 15, 1966 to October 1, 1999. Discharge is the summation of pumpage and siphoning at S-6. Negative flow indicates flow to the north due to siphoning at S-6. Acoustic velocity meter system began operation October 1990, on both S-6 and L-6 canals. After October 1, 1999, total discharge represents S-6 canal flow. Everglades Construction Project for Storm Treatment Area 2 (STA2) had a permanent effect on L-6 canal. Flow from L-6 canal into Hillsboro canal main channel was plugged in August 1999, approximately 0.25 mi upstream of L-6 cross-section for the diversion of flow into STA2. L-6 acoustic velocity meter was discontinued on September 30, 1999. From October 1990 to September 1999, total discharge is computed by the sum of S-6 and L-6 discharges from relations between stage vs area and line velocity vs mean velocity index ratings. Acoustic velocity meter removed on January 30, 2002.

COOPERATION.--Records furnished by South Florida Water Management District October 1968 to September 1981. Prior to October 1968, pump records furnished by South Florida Water Management District, and records computed by U.S. Geological Survey. After reestablishment in the 1991 water year, records computed by U.S. Geological Survey.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 26 complete water years of discharge (1958-81, 1998, 2001).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 14.74 ft Dec. 25, 1958; minimum, 7.35 ft May 14, 1959.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 12.70 ft Sept. 8; minimum, 8.67 ft Oct. 2.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.17	11.18	11.12	10.79	9.24	---	10.93	11.02	10.05	10.80	9.95	9.43
2	---	11.11	10.99	10.78	9.06	10.87	11.11	11.01	10.51	10.78	9.73	9.35
3	9.53	11.22	11.04	10.74	9.62	10.99	---	10.66	10.71	10.97	10.64	9.41
4	11.29	10.60	11.19	---	10.73	10.85	11.41	10.80	10.53	10.71	10.68	9.29
5	10.35	10.16	11.29	10.59	10.89	10.59	11.34	10.50	10.23	10.87	9.41	9.90
6	10.71	9.99	11.60	10.72	10.90	10.62	11.13	10.76	10.49	10.98	9.34	11.23
7	11.12	9.60	11.65	11.01	11.01	10.88	10.97	---	10.23	10.96	9.64	10.46
8	11.27	11.38	11.10	10.88	10.75	10.87	10.67	10.80	9.90	10.80	10.03	10.69
9	11.21	11.40	10.90	10.74	10.48	10.46	---	11.03	10.48	10.58	10.52	9.57
10	11.06	10.53	10.99	10.81	10.37	---	---	10.99	10.16	10.55	10.21	9.22
11	10.99	10.79	11.16	11.02	11.06	---	---	---	10.36	10.77	9.82	9.37
12	11.01	10.51	11.14	10.90	11.17	10.52	---	10.76	10.87	11.13	10.10	9.74
13	10.97	10.47	11.18	10.73	11.22	---	11.20	10.63	10.71	11.36	9.35	10.00
14	10.72	10.99	11.48	11.05	11.03	10.94	10.95	10.48	10.53	11.37	9.33	9.75
15	10.86	11.09	10.29	11.03	11.30	10.86	---	10.66	10.45	---	9.63	9.57
16	10.85	11.06	9.70	10.74	11.28	10.87	---	10.81	10.77	11.61	9.75	9.58
17	10.86	11.08	11.25	10.81	11.10	10.88	---	10.76	10.20	11.41	10.05	10.15
18	10.96	11.42	10.83	11.12	11.02	10.55	---	10.93	10.04	11.49	9.16	10.55
19	10.94	11.51	9.89	11.59	11.12	10.50	---	10.65	10.81	10.55	9.28	10.60
20	10.93	---	9.93	10.98	11.13	10.60	10.45	10.28	11.50	9.78	9.63	9.80
21	10.72	11.02	10.09	10.86	11.14	10.88	10.49	10.65	11.15	10.43	10.02	9.53
22	10.87	10.74	10.37	10.76	11.17	10.74	10.56	10.86	10.86	10.61	10.64	10.91
23	10.84	10.78	10.52	10.89	11.01	10.96	10.70	11.02	10.46	10.49	9.26	10.24
24	10.81	10.82	10.56	11.16	10.70	11.15	11.03	10.48	10.50	---	9.47	9.28
25	11.00	10.82	10.64	11.29	9.76	11.11	11.21	9.80	10.35	10.88	10.23	9.46
26	11.06	10.82	10.74	11.23	9.95	11.20	11.08	9.67	10.46	10.80	11.27	9.77
27	11.09	11.36	10.78	11.21	9.48	11.17	11.07	9.75	10.71	10.45	10.71	10.86
28	11.05	11.49	10.70	10.86	9.62	11.22	---	9.78	10.66	10.20	9.51	10.65
29	---	11.47	10.52	10.44	10.49	11.20	10.62	9.95	10.68	10.37	9.53	9.82
30	---	11.43	10.42	10.55	---	10.98	10.50	10.20	10.65	10.88	9.82	9.33
31	11.07	---	10.66	9.95	---	10.90	---	10.15	---	11.08	9.38	---
TOTAL MEAN	---	---	334.72	---	307.80	---	---	---	316.01	---	306.09	297.51
MAX	---	---	11.65	---	11.30	---	---	---	11.50	---	11.27	11.23
MIN	---	---	9.70	---	9.06	---	---	---	9.90	---	9.16	9.22

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02281200 HILLSBORO CANAL AT S-6, NEAR SHAWANO, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,300	0.00	306	0.00	1,960	0.00	0.00	0.00	0.00	0.00	1,320	1,210
2	e1,390	0.00	268	0.00	1,870	0.00	0.00	0.00	0.00	0.00	1,900	867
3	510	0.00	320	0.00	757	0.00	---	0.00	186	0.00	2,050	674
4	0.00	303	0.00	0.00	15	0.00	0.00	0.00	281	0.00	2,110	1,520
5	611	408	0.00	0.00	0.00	0.00	0.00	232	0.00	0.00	1,870	1,430
6	0.00	1,550	0.00	30	28	0.00	0.00	0.00	0.00	0.00	1,660	2,740
7	0.00	1,020	0.00	0.00	0.00	0.00	0.00	0.00	1,010	0.00	1,050	2,920
8	0.00	0.00	236	0.00	0.00	0.00	232	0.00	691	0.00	685	2,610
9	0.00	0.00	286	0.00	0.00	0.00	0.00	0.00	335	0.00	492	2,590
10	0.00	455	281	0.00	0.00	0.00	---	0.00	249	32	729	1,980
11	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	13	250	1,440
12	0.00	0.00	19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,200	553
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,520	319
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	703	626
15	0.00	0.00	1,780	0.00	0.00	0.00	---	0.00	0.00	0.00	1,290	262
16	0.00	0.00	830	118	0.00	0.00	---	0.00	31	0.00	1,510	252
17	0.00	0.00	409	0.00	0.00	0.00	---	0.00	478	0.00	1,300	0.00
18	0.00	0.00	516	19	0.00	9.0	---	0.00	163	0.00	1,580	0.00
19	0.00	0.00	422	0.00	0.00	0.00	0.00	182	548	1,430	1,750	0.00
20	0.00	0.00	0.00	350	0.00	0.00	0.00	288	0.00	962	812	962
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	458	485	319	2,090
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	622	0.00	673	3,100
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	585	0.00	1,570	2,910
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	151	0.00	0.00	1,220	2,320
25	0.00	0.00	0.00	0.00	928	0.00	0.00	0.00	0.00	0.00	1,990	1,790
26	0.00	304	0.00	66	1,940	0.00	0.00	0.00	0.00	0.00	2,190	2,140
27	0.00	0.00	0.00	77	1,810	0.00	0.00	186	0.00	374	2,090	2,920
28	0.00	0.00	0.00	85	443	0.00	0.00	151	0.00	1,140	1,790	2,860
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	914	1,200	2,670
30	0.00	0.00	0.00	501	---	0.00	143	0.00	120	916	1,380	2,400
31	0.00	---	0.00	1,650	---	0.00	---	0.00	---	0.00	1,360	---
TOTAL	4,811.00	4,040.00	5,673.00	2,896.00	9,751.00	9.00	---	1,190.00	5,757.00	6,266.00	41,563	48,155.00
MEAN	155	135	183	93.4	336	0.29	---	38.4	192	202	1,341	1,605
MAX	2,300	1,550	1,780	1,650	1,960	9.0	---	288	1,010	1,430	2,190	3,100
MIN	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	250	0.00
AC-FT	9,540	8,010	11,250	5,740	19,340	18	---	2,360	11,420	12,430	82,440	95,520

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2004, BY WATER YEAR (WY)

	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)
	382	1,431	-57.4	(1995)	162	1,417	-29.3	(1995)	142	1,120	0.00	(1995)	200	1,326	0.00	(1958)	162	591	-84.0	(1998)
	129	710	-65.9	(1970)	136	1,020	0.00	(1970)	129	710	-65.9	(1991)	136	710	0.00	(1974)	221	991	-11.5	(1998)
	349	1,343	-152	(1968)	355	980	0.00	(1995)	349	1,343	-152	(1980)	349	980	0.00	(1968)	355	980	0.00	(1998)
	422	1,355	43.2	(1994)	422	1,355	43.2	(1994)	422	1,355	43.2	(1994)	572	1,695	4.63	(1960)	572	1,695	4.63	(1960)

SUMMARY STATISTICS

	WATER YEARS 1958 - 2004	
ANNUAL MEAN	227	
HIGHEST ANNUAL MEAN	597	1998
LOWEST ANNUAL MEAN	68.1	1962
HIGHEST DAILY MEAN	4,480	May 1, 1998
LOWEST DAILY MEAN	-673	Apr 16, 1991
ANNUAL SEVEN-DAY MINIMUM	-407	Jun 12, 1980
ANNUAL RUNOFF (AC-FT)	164,300	
10 PERCENT EXCEEDS	848	
50 PERCENT EXCEEDS	0.00	
90 PERCENT EXCEEDS	0.00	

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02281400 HILLSBORO CANAL NEAR MARGATE, FL

LOCATION.--Lat 26°19'48", long 80°12'45", in NW ¼ sec.36, T.47 S., R.41 E., Broward County, Hydrologic Unit 03090202, on north side of Loxahatchee Road, 0.7 mi west of U.S. Highway 441, and 5.1 mi north of Margate. (Corrected).

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--December 1975 to current year.

REVISED RECORDS.--WDR FL-99-2A, 1998

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Prior to November 20, 2001, electronic data logger with water-stage shaft encoder and acoustic doppler velocity meter with cellular phone/radio telemetry provided by South Florida Water Management District. Use of telemetry data started in September, 1999. Digital water-stage recorder removed September 27, 1999. Electromagnetic velocity meter prior to October 1, 1999. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except estimated daily discharges, which are poor. Flow affected by regulation downstream at structure G-56 and upstream storage releases at control structures S-39 and S-39A. Discharge computed from relations between stage vs. area and index velocity vs. mean channel velocity.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 18 complete water years of discharge (1977-89, 1996, 1998-2001).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 12.88 ft Apr. 25, 1979; minimum, 4.15 ft May 20, 1978.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 9.16 ft Sept. 9; minimum, 5.19 ft Sept. 4.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.65	7.68	7.39	7.73	7.42	7.74	7.87	7.65	7.63	7.67	8.01	7.61
2	7.66	7.77	---	7.82	7.88	7.74	7.81	7.64	7.90	7.60	8.18	7.45
3	7.80	7.96	7.32	7.86	7.95	7.81	7.84	7.63	7.73	7.62	7.12	5.97
4	7.70	7.89	7.34	7.98	7.98	7.98	7.80	7.87	7.56	7.74	6.86	5.44
5	7.67	8.05	7.47	7.93	7.94	7.97	7.62	7.52	7.41	7.69	6.98	7.28
6	7.67	7.71	7.84	7.80	7.97	7.98	7.71	---	7.90	7.70	6.91	8.46
7	7.67	6.97	7.47	7.94	7.95	7.98	7.71	7.81	7.69	7.48	6.83	7.07
8	7.63	7.09	7.53	7.76	7.92	7.93	7.91	7.70	7.68	7.62	7.00	6.55
9	7.63	8.01	---	7.84	7.86	7.85	7.92	7.58	7.66	7.81	7.37	8.35
10	7.62	7.94	7.91	7.98	7.80	7.93	8.25	7.65	7.66	7.81	8.26	8.47
11	7.63	7.81	7.79	7.91	7.90	8.06	8.09	7.49	7.75	7.72	8.33	6.66
12	7.63	8.13	7.69	7.80	7.79	8.04	8.07	7.56	7.87	7.75	7.93	6.39
13	7.67	7.97	7.61	7.78	7.78	7.94	7.98	7.68	7.58	7.70	6.90	6.57
14	7.96	7.91	7.89	7.67	7.73	7.87	8.02	7.63	7.70	7.75	6.87	6.49
15	8.20	7.87	7.87	7.78	7.83	7.77	7.39	7.58	7.77	7.68	7.83	6.50
16	8.17	7.45	7.82	7.78	7.80	7.86	7.64	7.66	7.60	7.77	7.99	7.97
17	7.84	7.87	7.96	7.87	7.96	7.92	7.82	7.58	7.43	8.01	7.75	7.94
18	7.54	8.03	7.90	7.93	7.95	7.77	7.90	7.52	7.74	7.28	8.16	7.87
19	7.96	8.07	7.64	8.00	7.95	7.84	7.92	7.59	7.67	7.36	7.90	7.87
20	7.84	7.70	---	7.73	8.10	7.74	---	7.84	7.54	7.73	7.74	---
21	7.46	7.48	7.19	7.47	8.24	7.73	---	7.60	7.57	8.10	7.55	8.08
22	7.64	---	7.42	7.28	8.19	7.76	---	7.71	7.62	8.06	7.55	7.37
23	7.67	7.83	7.80	7.58	8.04	7.69	---	7.42	7.59	7.87	7.68	7.64
24	7.58	7.87	7.81	7.53	7.99	7.74	7.96	7.41	7.66	7.51	7.84	7.74
25	7.82	7.83	7.82	7.58	8.01	7.84	7.77	7.57	7.61	7.69	7.90	7.75
26	8.02	7.80	7.81	7.60	7.81	7.81	8.05	7.69	7.60	7.85	7.89	7.74
27	7.47	7.90	7.81	7.79	7.87	7.84	7.69	7.67	7.67	7.86	8.00	7.42
28	7.48	8.01	7.84	7.95	7.74	7.73	7.57	7.72	7.78	7.92	7.82	7.43
29	---	---	7.71	7.57	7.99	7.81	7.86	7.58	7.74	7.99	8.14	7.40
30	---	7.83	7.26	7.94	---	7.79	7.68	7.69	7.71	7.96	8.08	7.52
31	7.43	---	7.72	7.81	---	7.77	---	7.79	---	7.88	7.96	---
TOTAL	---	---	---	240.99	229.34	243.23	---	---	230.02	240.18	237.33	---
MEAN	---	---	---	7.77	7.91	7.85	---	---	7.67	7.75	7.66	---
MAX	---	---	---	8.00	8.24	8.06	---	---	7.90	8.10	8.33	---
MIN	---	---	---	7.28	7.42	7.69	---	---	7.41	7.28	6.83	---

EVERGLADES AND SOUTHEASTERN COASTAL AREA
02281400 HILLSBORO CANAL NEAR MARGATE, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	575	43	101	115	e200	425	75	113	90	116	140	e205
2	599	51	e58	48	348	406	47	52	94	113	588	375
3	557	228	55	26	430	452	92	96	83	102	381	343
4	601	163	63	21	427	513	101	96	82	97	148	234
5	612	282	e43	35	441	508	155	124	126	84	212	456
6	617	322	106	71	456	493	164	e135	96	92	243	777
7	616	320	45	39	427	465	174	104	102	110	165	571
8	628	e80	41	84	396	477	103	53	82	112	127	469
9	617	174	e65	74	399	474	31	86	123	122	84	720
10	618	178	81	21	431	470	71	96	111	55	176	804
11	643	129	111	25	414	234	59	129	104	72	441	528
12	635	75	e49	98	430	47	114	119	57	109	335	407
13	629	116	e36	112	422	36	155	105	87	109	286	361
14	505	75	115	135	437	36	125	157	91	100	111	361
15	428	106	114	146	421	96	49	168	124	157	65	250
16	209	73	e37	109	417	103	100	155	94	169	e96	152
17	112	e40	42	34	466	129	69	102	147	195	89	311
18	90	45	25	108	469	67	105	150	172	84	80	173
19	43	e49	52	102	483	42	60	205	131	178	124	175
20	131	e88	e64	164	217	38	---	137	145	148	94	e140
21	91	e62	65	130	e24	39	---	145	108	124	118	374
22	54	e35	85	69	e33	76	---	199	90	177	91	402
23	67	e26	63	92	58	100	---	209	115	163	126	363
24	64	e41	79	92	54	72	64	212	126	96	239	365
25	37	e34	56	121	200	75	93	201	110	48	151	385
26	120	e27	54	116	369	59	54	218	76	71	e147	422
27	77	e13	31	68	427	47	54	96	109	62	e74	435
28	50	e17	32	66	421	39	91	62	114	46	126	462
29	e107	e15	66	84	494	74	59	71	108	67	281	454
30	e52	107	117	126	---	127	82	101	107	53	361	537
31	96	---	136	292	---	136	---	96	---	83	e96	---
TOTAL	10,280	3,014	2,087	2,823	10,211	6,355	---	3,992	3,204	3,314	5,795	12,011
MEAN	332	100	67.3	91.1	352	205	---	129	107	107	187	400
MAX	643	322	136	292	494	513	218	172	195	588	804	
MIN	37	13	25	21	24	36	52	57	46	65	140	
AC-FT	20,390	5,980	4,140	5,600	20,250	12,610	---	7,920	6,360	6,570	11,490	23,820

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2004, BY WATER YEAR (WY)

MEAN	201	207	210	246	227	198	188	140	194	211	238	243
MAX	719	671	738	541	634	708	458	452	527	624	630	518
(WY)	(2000)	(2000)	(2000)	(1998)	(1998)	(1998)	(1983)	(2000)	(2003)	(1986)	(1995)	(1995)
MIN	71.8	38.6	2.47	47.4	40.8	27.1	38.0	14.7	45.4	63.1	35.2	40.3
(WY)	(1999)	(1997)	(1997)	(1992)	(1997)	(1997)	(1997)	(1997)	(1985)	(1994)	(1996)	(1992)

SUMMARY STATISTICS

ANNUAL MEAN	
HIGHEST ANNUAL MEAN	
LOWEST ANNUAL MEAN	
HIGHEST DAILY MEAN	
LOWEST DAILY MEAN	
ANNUAL SEVEN-DAY MINIMUM	
ANNUAL RUNOFF (AC-FT)	
10 PERCENT EXCEEDS	
50 PERCENT EXCEEDS	
90 PERCENT EXCEEDS	

WATER YEARS 1976 - 2004

221	
351	2000
103	1977
1,300	Oct 18, 1999
-247	Apr 25, 1979
-45	Nov 17, 1976
160,300	
543	
155	
51	

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02282700 MIDDLE RIVER CANAL AT S-36, NEAR FORT LAUDERDALE, FL

LOCATION.--Lat 26°10'22", long 80°10'47", in NW ¼ sec.20, T.49 S., R.42 E., Broward County, Hydrologic Unit 03090202, 20 ft from south bank, 120 ft upstream from salinity-control structure S-36, 1.5 mi east of bridge on U.S. Highway 441, and 5 mi west of Fort Lauderdale.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1955 to September 1961 (gage heights only), October 1961 to current year.

GAGE.--Electronic data logger with water-stage shaft encoder for upstream and downstream. Electronic data logger for gate opening. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to October 1, 1993, both upstream and downstream gage heights at datum, 0.21 ft lower. Discharge not affected by the change in datum. Electromagnetic velocity meter and deflection vane recorder at same site prior to October 1, 1985.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow is at times affected by tide and occasionally reversed. Flow is regulated by operation of salinity-control structure 36. Discharge computed from the relationship of gate opening versus head difference. Records of gage heights prior to October 1961 are available in files of the U.S. Geological Survey. Starting in the 2002 water year, the downstream record published is maximum and minimum stage for each calendar day. Prior to the 2002 water year, daily mean was published.

COOPERATION.--Gage height and S-36 gate-operation records provided by South Florida Water Management District upon request.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 35 complete water years of discharge (1962-90, 1998-2003).

EXTREME UPSTREAM STAGES FOR PERIOD OF RECORD.--Maximum gage height, 7.59 ft (present datum) Dec. 27, 1958; minimum, -0.32 ft (present datum) June 28, 1958.

EXTREME UPSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 5.13 ft Nov. 3, Feb. 1; minimum, 2.09 ft Apr. 9.

EXTREME DOWNSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 3.80 ft Sept. 25; minimum, -0.82 ft June 30.

UPSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.62	4.84	4.84	4.76	4.28	4.22	4.32	4.02	4.03	4.29	4.21	4.08
2	3.97	4.89	4.81	4.76	4.01	4.25	4.26	3.99	4.01	4.30	3.37	3.55
3	4.58	3.94	4.77	4.74	4.49	4.27	4.21	4.05	3.97	4.32	3.73	3.56
4	4.77	3.55	4.80	4.74	4.53	4.29	4.17	4.22	3.97	4.36	3.71	3.63
5	4.87	3.57	4.78	4.73	4.51	4.30	4.12	4.20	3.96	4.34	3.76	3.86
6	4.92	3.59	4.37	4.72	4.52	4.33	4.06	4.17	3.90	4.34	4.04	3.40
7	4.95	3.49	4.62	4.69	4.51	4.35	4.04	4.13	3.87	4.42	4.01	3.34
8	4.96	3.89	4.70	4.66	4.42	4.33	4.03	4.09	3.82	4.52	3.95	3.56
9	4.97	3.65	4.73	4.66	4.34	4.31	3.89	4.03	3.82	4.55	4.07	4.03
10	4.97	3.59	4.79	4.66	4.29	4.30	4.00	3.99	3.83	4.56	4.38	3.52
11	4.96	3.70	4.85	4.64	4.23	4.27	3.97	3.93	3.80	4.58	4.53	3.42
12	4.97	3.64	4.85	4.62	4.18	4.26	4.08	3.89	3.77	4.62	4.66	3.70
13	4.96	3.68	4.84	4.61	4.10	4.25	4.35	3.85	3.72	4.65	4.30	3.71
14	4.97	4.41	4.94	4.60	4.06	4.23	4.58	3.82	3.65	4.47	3.59	3.63
15	4.95	4.62	5.08	4.59	4.04	4.25	4.54	3.79	3.62	4.28	4.22	3.63
16	4.92	4.74	5.07	4.58	4.01	4.27	4.50	3.77	3.69	4.21	4.39	3.63
17	4.91	4.81	4.84	4.55	4.08	4.28	4.46	3.74	3.77	4.16	4.50	3.61
18	4.92	4.86	4.35	4.58	4.27	4.24	4.43	3.72	3.83	4.14	4.62	3.63
19	4.90	4.92	4.66	4.64	4.31	4.22	4.38	3.71	3.86	4.21	4.65	3.80
20	4.87	4.95	4.74	4.62	4.35	4.15	4.35	3.69	3.91	4.35	4.65	4.19
21	4.85	4.94	4.77	4.62	4.40	4.15	4.32	3.66	3.95	4.34	4.69	4.64
22	4.86	4.93	4.79	4.63	4.42	4.13	4.27	3.77	4.03	4.33	4.74	4.72
23	4.85	4.92	4.81	4.62	4.42	4.07	4.23	3.87	4.04	4.27	4.78	3.98
24	4.81	4.93	4.84	4.63	4.42	4.04	4.20	3.94	4.01	4.21	4.72	3.42
25	4.78	4.93	4.84	4.66	3.91	4.04	4.15	3.99	4.01	4.18	4.39	3.58
26	4.80	4.92	4.83	4.70	3.24	4.16	4.12	4.02	4.08	4.12	4.42	3.93
27	4.81	4.90	4.81	4.73	3.71	4.31	4.11	4.03	4.13	4.07	4.32	3.89
28	4.81	4.90	4.79	4.71	4.07	4.40	4.06	4.05	4.18	4.05	4.31	3.63
29	4.77	4.88	4.78	4.65	4.14	4.44	4.03	4.04	4.22	4.04	4.62	3.46
30	4.41	4.85	4.78	4.59	---	4.40	4.04	4.04	4.25	4.05	4.77	3.38
31	4.74	---	4.78	4.39	---	4.36	---	4.03	---	4.12	4.81	---
TOTAL	148.40	132.43	148.25	144.08	122.26	131.87	126.27	122.24	117.70	133.45	133.91	112.11
MEAN	4.79	4.41	4.78	4.65	4.22	4.25	4.21	3.94	3.92	4.30	4.32	3.74
MAX	4.97	4.95	5.08	4.76	4.53	4.44	4.58	4.22	4.25	4.65	4.81	4.72
MIN	3.62	3.49	4.35	4.39	3.24	4.04	3.89	3.66	3.62	4.04	3.37	3.34

02282700 MIDDLE RIVER CANAL AT S-36, NEAR FORT LAUDERDALE, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	224	0.00	0.00	0.00	e283	0.00	0.00	0.00	0.00	0.00	228	348
2	91	0.00	0.00	0.00	e305	0.00	0.00	0.00	0.00	0.00	570	254
3	0.00	386	0.00	0.00	e334	0.00	0.00	0.00	0.00	0.00	278	154
4	0.00	280	0.00	0.00	e338	0.00	0.00	0.00	0.00	0.00	272	190
5	0.00	234	54	0.00	e334	0.00	0.00	0.00	0.00	0.00	125	398
6	0.00	233	150	0.00	e335	0.00	0.00	0.00	0.00	1.3	146	514
7	0.00	224	0.00	0.00	e343	0.00	0.00	0.00	0.00	0.00	144	400
8	0.00	224	0.00	0.00	e345	0.00	0.00	0.00	0.00	0.00	146	271
9	0.00	484	0.00	0.00	e340	0.00	---	0.00	0.00	0.00	56	342
10	0.00	329	0.00	0.00	e336	0.00	0.00	0.00	0.00	0.00	0.00	402
11	0.00	225	0.00	0.00	e330	0.00	0.00	0.00	0.00	0.00	0.00	229
12	0.00	212	0.00	0.00	e329	0.00	0.00	0.00	0.00	0.60	0.00	146
13	0.00	142	0.00	0.00	e330	0.00	0.00	0.00	0.00	0.00	288	146
14	0.00	0.00	0.00	0.00	e322	0.00	0.00	0.00	0.00	0.00	200	141
15	0.00	0.00	0.00	0.00	e316	0.00	0.00	0.00	0.00	0.00	0.00	144
16	0.00	0.00	0.00	0.00	e314	0.00	0.00	0.00	0.00	0.00	0.00	147
17	0.00	0.00	101	0.00	e152	0.00	0.00	0.00	0.00	0.00	0.00	139
18	0.00	0.00	131	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	132
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63
20	0.00	0.00	0.00	e10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	355
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	140	256
25	0.00	0.00	0.00	0.00	e783	0.00	0.00	0.00	0.00	0.00	208	180
26	0.00	0.00	0.00	0.00	e925	0.00	0.00	0.00	0.00	0.00	162	201
27	0.00	0.00	0.00	0.00	e218	0.00	0.00	0.00	0.00	0.00	159	230
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	97	236
29	106	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	238
30	133	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	236
31	0.00	---	0.00	e1.8	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	554.00	2,973.00	436.00	11.80	7,312.00	0.00	---	0.00	0.00	1.90	3,219.00	6,492.00
MEAN	17.9	99.1	14.1	0.38	252	0.00	---	0.00	0.00	0.06	104	216
MAX	224	484	150	10	925	0.00	---	0.00	0.00	1.3	570	514
MIN	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00
AC-FT	1,100	5,900	865	23	14,500	0.00	---	0.00	0.00	3.8	6,380	12,880

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2004, BY WATER YEAR (WY)

	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
MEAN	90.9	70.9	34.1	30.3	35.0	31.5	30.8	40.4	101	87.1	98.7	104
MAX	277	332	161	123	252	246	220	249	306	226	308	336
(WY)	(1984)	(1995)	(1999)	(1979)	(2004)	(1983)	(1979)	(1979)	(1999)	(1980)	(1982)	(1983)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1962)	(1962)	(1962)	(1962)	(1962)	(1962)	(1962)	(1962)	(1963)	(1963)	(1963)	(1967)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

WATER YEARS 1962 - 2004

ANNUAL TOTAL	18,139.90	
ANNUAL MEAN	49.7	61.2
HIGHEST ANNUAL MEAN		197
LOWEST ANNUAL MEAN		1.44
HIGHEST DAILY MEAN	828	1,490
LOWEST DAILY MEAN	0.00	-402
ANNUAL SEVEN-DAY MINIMUM	0.00	-53
ANNUAL RUNOFF (AC-FT)	35,980	44,310
10 PERCENT EXCEEDS	198	205
50 PERCENT EXCEEDS	0.00	0.00
90 PERCENT EXCEEDS	0.00	0.00

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02283200 PLANTATION ROAD CANAL AT S-33, NEAR FORT LAUDERDALE, FL

LOCATION.--Lat 26°08'05", long 80°11'42", in SW ¼ sec.31, T.49 S., R.42 E., Broward County, Hydrologic Unit 03090202, 15 ft streamward from left bank, 130 ft upstream from salinity-control structure 33, 0.5 mi east of bridge on U.S. Highway 441, 3 mi above mouth, and 4 mi west of Fort Lauderdale.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1955 to February 1962 (gage heights only), March 1962 to current year. Discontinued.

GAGE.--Water-stage recorders upstream and downstream. Gate-opening recorder discontinued on February 24, 2002. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark).

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow is at times affected by tide and is occasionally reversed. Flow is regulated by operation of salinity-control structure 33. Downstream stage is basically tidal, but at times is affected by gate operation. Starting in the 2002 water year, the downstream stage record published is the maximum and minimum stage. Prior to the 2002, water year daily mean for downstream stage was published. Records of gage heights prior to October 1961 are available in files of the U.S. Geological Survey.

COOPERATION.--Gate-opening records provided by South Florida Water Management District.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 34 complete water years of discharge (1963-86,1988-89, 1993, 1998-2004).

EXTREME UPSTREAM STAGES FOR PERIOD OF RECORD.--Maximum gage height, 6.27 ft Oct. 15, 1999; minimum, -0.82 ft Mar. 4, 1958.

EXTREME UPSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 4.16 ft Aug. 2; minimum, 1.73 ft Feb. 1.

EXTREME DOWNSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 3.85 ft Feb. 1; minimum, -.99 ft June 30.

UPSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.62	3.21	3.37	3.27	3.03	3.49	2.95	2.86	2.19	2.03	3.29	3.03
2	2.82	3.16	3.35	3.25	3.83	3.47	3.00	2.82	2.17	2.02	3.47	2.58
3	3.32	3.46	3.32	3.23	3.89	3.45	3.08	2.88	2.14	2.07	3.58	2.61
4	3.49	3.48	3.31	3.22	3.97	3.44	3.10	3.24	2.13	2.11	3.92	2.65
5	3.54	3.50	3.34	3.21	3.97	3.44	3.08	3.26	2.16	2.15	3.88	2.72
6	3.54	3.70	3.69	3.20	3.92	3.43	3.04	3.17	2.22	2.21	3.91	2.44
7	3.53	3.89	3.67	3.18	3.90	3.43	2.98	3.06	2.33	2.26	3.90	2.61
8	3.53	3.70	3.63	3.15	3.84	3.41	2.95	2.99	2.38	2.24	3.85	2.66
9	3.52	3.67	3.58	3.15	3.79	3.38	2.93	2.95	2.40	2.23	3.80	2.58
10	3.48	3.59	3.57	3.14	3.75	3.35	2.96	2.94	2.43	2.18	3.79	2.63
11	3.46	3.78	3.57	3.12	3.70	3.31	2.95	2.87	2.48	2.15	3.73	2.64
12	3.43	3.92	3.53	3.09	3.64	3.34	3.05	2.79	2.49	2.14	3.66	2.63
13	3.39	3.93	3.48	3.08	3.58	3.30	3.37	2.72	2.48	2.20	3.21	2.66
14	3.36	3.82	3.51	3.07	3.54	3.25	3.52	2.70	2.46	2.15	2.92	2.73
15	3.32	3.87	3.61	3.09	3.52	3.27	3.47	2.66	2.42	2.19	3.26	3.28
16	3.28	3.85	3.60	3.09	3.50	3.30	3.44	2.64	2.35	2.32	3.36	3.53
17	3.25	3.83	3.60	3.07	3.49	3.31	3.38	2.63	2.29	2.27	3.43	3.59
18	3.24	3.79	3.53	3.14	3.47	3.26	3.32	2.62	2.27	2.30	3.47	3.62
19	3.23	3.76	3.49	3.29	3.44	3.22	3.26	2.62	2.26	2.43	3.46	3.67
20	3.22	3.72	3.46	3.31	3.43	3.11	3.21	2.59	2.27	2.73	3.44	3.70
21	3.20	3.68	3.45	3.30	3.43	3.04	3.15	2.55	2.31	2.90	3.47	3.55
22	3.20	3.64	3.43	3.31	3.42	2.98	3.07	2.51	2.50	3.05	3.51	3.90
23	3.18	3.61	3.46	3.31	3.40	2.93	3.01	2.47	2.62	2.96	3.54	3.69
24	3.14	3.58	3.46	3.31	3.39	2.97	2.98	2.43	2.54	2.84	3.61	3.91
25	3.11	3.55	3.44	3.31	3.45	3.08	2.96	2.40	2.49	2.78	3.85	3.31
26	3.13	3.51	3.41	3.33	3.63	3.23	2.94	2.37	2.41	2.71	3.94	2.71
27	3.14	3.48	3.37	3.40	3.59	3.22	2.93	2.34	2.31	2.72	3.94	2.54
28	3.12	3.45	3.34	3.42	3.55	3.16	2.89	2.30	2.23	2.80	3.90	2.58
29	3.35	3.43	3.32	3.40	3.53	3.11	2.88	2.27	2.17	2.80	3.86	2.56
30	3.31	3.39	3.31	3.39	---	3.05	2.90	2.24	2.11	2.75	3.86	2.57
31	3.26	---	3.29	3.60	---	3.01	---	2.21	---	2.79	3.77	---
MEAN	3.28	3.63	3.47	3.24	3.61	3.25	3.09	2.68	2.33	2.43	3.63	3.00
MAX	3.54	3.93	3.69	3.60	3.97	3.49	3.52	3.26	2.62	3.05	3.94	3.91
MIN	2.62	3.16	3.29	3.07	3.03	2.93	2.88	2.21	2.11	2.02	2.92	2.44

02283200 PLANTATION ROAD CANAL AT S-33, NEAR FORT LAUDERDALE, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	0.00	0.00	0.00	e72	0.00	0.00	0.00	0.00	0.00	12	e60
2	9.0	0.00	0.00	0.00	1.9	0.00	0.00	0.00	0.00	0.00	63	20
3	0.00	0.00	0.00	0.00	6.4	0.00	0.00	0.00	0.00	0.00	17	17
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27
5	0.00	0.00	9.2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.1	e60
6	0.00	0.00	0.00	0.00	4.6	0.00	0.00	0.00	0.00	0.00	0.00	61
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	73
8	0.00	47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	55
9	0.00	23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100
10	0.00	34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e75
11	0.00	11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.2	e47
12	0.00	6.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e49
13	1.7	12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e48	33
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21	7.2
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.6	3.5
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10	e51
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.2	e52
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e63
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	38
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	26
31	0.00	---	0.00	6.7	---	0.00	---	0.00	---	0.00	0.30	---
TOTAL	28.70	133.10	9.20	6.70	84.90	0.00	0.00	0.00	0.00	0.00	189.40	1,016.30
MEAN	0.93	4.44	0.30	0.22	2.93	0.00	0.00	0.00	0.00	0.00	6.11	33.9
MAX	18	47	9.2	6.7	72	0.00	0.00	0.00	0.00	0.00	63	100
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	57	264	18	13	168	0.00	0.00	0.00	0.00	0.00	376	2,020

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2004, BY WATER YEAR (WY)

MEAN	20.5	15.3	9.03	8.70	9.24	7.70	9.21	10.8	25.6	22.1	21.1	26.1
MAX	57.9	59.6	41.9	48.1	43.4	55.5	60.3	70.5	79.6	80.0	75.9	54.3
(WY)	(1968)	(1970)	(1968)	(1968)	(1972)	(1970)	(1977)	(1979)	(1977)	(1988)	(1976)	(1973)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1971)	(1963)	(1963)	(1963)	(1971)	(1963)	(1963)	(1962)	(1971)	(1971)	(1987)	(1989)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1962 - 2004

ANNUAL TOTAL	1,632.70	1,468.30	
ANNUAL MEAN	4.47	4.01	16.5
HIGHEST ANNUAL MEAN			40.1
LOWEST ANNUAL MEAN			0.99
HIGHEST DAILY MEAN	266	100	748
LOWEST DAILY MEAN	0.00	0.00	-77
ANNUAL SEVEN-DAY MINIMUM	0.00	0.00	-28
ANNUAL RUNOFF (AC-FT)	3,240	2,910	11,920
10 PERCENT EXCEEDS	12	7.7	46
50 PERCENT EXCEEDS	0.00	0.00	0.00
90 PERCENT EXCEEDS	0.00	0.00	0.00

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02283500 NORTH NEW RIVER CANAL BELOW S-351, NEAR SOUTH BAY, FL

LOCATION.--Lat 26°41'50", long 80°42'50", in SW ¼ sec.35, T.43 S., R.36 E., Palm Beach County, Hydrologic Unit 03090202, 30 ft from west bank, 800 ft downstream from Hillsboro Canal, 1,600 ft downstream from gate structure S-351 and pump station 2 at Lake Okeechobee, and 2.5 mi north of South Bay.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--February 1957 to current year. Records of gage heights prior to October 1961 are available in files of the U.S. Geological Survey.

REVISED RECORDS.--WDR FL-77-2A, 1974, 1975; WDR FL-92-2A, 1991; WDR FL-93-2A, 1977, 1985.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Prior to January 1, 2002, acoustic velocity meter at same site and datum. Prior to October 1, 1986, water-stage recorder at pump station 2 used for gage heights at this station. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to January 18, 1954, water-stage and deflection-meter recorder at site 1,600 ft downstream at same datum. January 19, 1965 to September 30, 1967, deflection-meter recorder at site 1,600 ft downstream. Satellite data collection platform collecting stage and velocity data was installed November 29, 1990.

REMARKS.--Records poor. Flow regulated by S-351 gate and pump station at Lake Okeechobee. Flow occasionally reversed during and after periods of heavy rainfall by pumpage into the canal from agricultural lands in the Everglades by pumping at structure 2 or by gravity flow through gates during periods of negative heads (negative figures indicate flow reversed). Discharge was the difference in flow between North New River Canal at S-2 and S-351 and Hillsboro Canal below S-351 October 1967 to June 9, 1987. Records of stage and discharge for water year 2002 are published in the data book for water year 2003.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 42 complete water years of discharge (1958-95,1997-98, 2000, 2004).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 14.09 ft Sept. 28, 1962; minimum, 6.98 ft observed Oct. 28, 1981.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 13.12 ft Sept. 6; minimum, 8.75 ft Sept. 4.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.16	11.09	11.38	10.79	11.28	10.42	11.45	---	11.95	10.74	11.24	10.12
2	10.03	10.88	11.28	10.72	10.92	10.76	11.42	11.15	11.78	10.82	11.50	9.36
3	10.03	11.13	---	10.67	10.40	10.89	11.39	10.66	11.44	11.02	12.22	9.20
4	11.16	10.72	11.24	10.67	10.63	10.79	11.40	10.63	10.87	10.94	12.01	9.22
5	10.84	10.32	11.26	10.66	10.79	10.60	11.38	10.68	10.18	10.96	11.00	10.73
6	10.57	---	11.08	10.75	10.80	10.68	11.44	10.85	10.44	10.97	10.82	12.46
7	10.93	10.35	---	10.91	10.67	10.98	11.34	10.98	11.09	10.96	10.71	10.81
8	11.02	10.88	---	10.77	10.43	10.55	11.43	11.34	10.61	10.95	10.55	10.37
9	10.96	11.10	11.20	10.70	10.33	10.25	11.51	11.38	10.70	11.04	10.70	10.38
10	10.83	10.79	11.22	10.72	10.48	10.31	11.48	---	10.21	11.17	10.43	10.22
11	10.79	10.58	---	10.87	11.22	10.25	11.25	11.30	10.35	11.22	9.81	10.03
12	10.81	10.35	---	10.73	11.10	10.49	10.90	11.20	10.74	11.38	10.67	9.81
13	10.79	10.33	---	10.63	11.08	11.08	10.77	11.20	10.64	11.47	10.53	9.95
14	10.65	10.97	---	11.14	10.92	10.99	11.07	11.43	10.46	11.44	9.90	10.12
15	10.95	10.99	---	11.17	11.06	10.97	11.06	11.84	10.30	---	10.62	9.68
16	10.71	10.97	10.57	11.17	10.95	10.75	10.69	11.70	---	11.65	10.80	9.69
17	10.95	11.11	---	11.31	10.85	10.65	10.57	11.69	10.61	11.53	10.67	9.97
18	10.98	11.60	---	11.27	10.72	10.72	10.52	11.75	10.17	---	10.52	10.37
19	10.76	11.28	10.25	11.32	10.92	10.74	10.62	11.70	11.05	11.73	10.64	10.44
20	10.74	10.98	---	11.09	11.12	10.94	10.70	11.69	11.22	10.62	10.08	10.17
21	10.66	10.77	---	10.64	11.05	10.92	10.72	11.71	11.15	10.60	10.0	10.85
22	11.00	10.60	10.21	10.61	11.02	10.93	10.74	11.73	11.03	10.50	10.73	12.43
23	10.89	---	---	10.81	10.94	11.51	11.16	11.75	10.77	10.50	10.32	10.86
24	10.99	10.75	10.38	11.38	10.63	11.46	11.49	11.69	10.53	10.84	10.12	9.89
25	---	10.69	10.41	11.42	10.40	11.26	11.39	11.68	---	10.83	11.09	9.87
26	---	11.35	10.52	11.37	11.43	11.30	11.32	11.61	10.54	---	12.08	11.26
27	11.02	11.50	10.59	11.15	10.86	11.18	11.23	11.62	10.72	10.88	11.46	12.03
28	11.10	11.47	10.53	10.66	9.83	11.18	---	11.83	10.72	11.46	10.46	11.50
29	10.99	11.29	10.40	10.50	10.30	11.18	---	11.89	10.72	11.14	9.94	---
30	11.02	11.49	10.44	10.94	---	11.23	10.87	11.90	10.73	11.30	10.89	---
31	11.08	---	10.77	11.33	---	11.38	---	11.93	---	10.65	10.58	---
TOTAL	---	---	---	338.87	313.13	337.34	---	---	---	---	333.09	---
MEAN	---	---	---	10.93	10.80	10.88	---	---	---	---	10.74	---
MAX	---	---	---	11.42	11.43	11.51	---	---	---	---	12.22	---
MIN	---	---	---	10.50	9.83	10.25	---	---	---	---	9.81	---

02283500 NORTH NEW RIVER CANAL BELOW S-351, NEAR SOUTH BAY, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-300	203	226	162	-409	11	700	e581	1,170	253	-93	57
2	-293	58	345	155	-463	-111	584	136	89	325	-75	214
3	-394	-27	e320	201	-473	-146	628	-21	-654	443	304	189
4	-202	-115	109	169	-190	-157	556	10	-276	433	225	-87
5	-213	-66	403	180	-55	-190	567	333	-28	429	176	82
6	-121	e117	132	381	-123	315	582	500	99	465	75	85
7	-7.5	-126	e179	253	89	202	590	520	59	577	59	-965
8	-53	294	e138	145	69	49	716	716	-130	614	12	-783
9	-65	20	634	203	-101	394	701	601	-34	731	210	-437
10	-70	-153	311	291	90	499	581	e623	-21	677	119	107
11	-42	18	e466	266	422	464	178	686	-188	688	-16	304
12	-133	-82	e344	214	230	615	-93	830	-183	615	331	276
13	-10	136	e171	204	92	490	-74	859	-208	628	2.6	156
14	-30	297	e69	620	-157	150	23	946	-99	676	-319	64
15	-82	215	e95	561	-5.0	159	197	964	-68	e572	19	-55
16	58	141	-270	608	141	-107	18	742	e-35	208	-53	-107
17	196	664	e140	657	-9.7	91	-41	865	-324	-163	325	93
18	121	608	e-40	283	71	197	53	980	-227	e-159	166	44
19	-55	300	-264	148	237	432	252	951	39	123	75	-26
20	-20	139	e-180	-77	525	273	278	1,020	225	49	-72	240
21	257	44	e-109	-97	366	290	299	1,090	180	80	0.72	659
22	283	9.1	-134	59	253	499	583	1,000	123	-124	273	656
23	148	e131	e-144	272	78	635	848	962	-178	-453	-107	147
24	378	82	-86	703	-119	394	714	1,100	-296	-433	-212	309
25	e230	201	-95	587	-2.5	416	600	1,210	e-196	-109	401	331
26	e196	599	-155	457	183	362	639	1,100	420	e-247	468	373
27	318	393	-156	15	11	394	359	1,350	336	-375	239	75
28	102	353	-61	-77	-101	577	e125	1,460	253	87	-84	226
29	84	382	-129	79	48	588	e217	1,530	-53	273	-170	e443
30	111	364	217	82	---	707	413	1,510	83	355	-35	e678
31	212	---	258	113	---	813	---	1,420	---	282	-327	---
TOTAL	603.5	5,199.1	2,734	7,817	696.8	9,305	11,793	26,574	-122	7,520	1,917.32	3,348
MEAN	19.5	173	88.2	252	24.0	300	393	857	-4.07	243	61.8	112
MAX	378	664	634	703	525	813	848	1,530	1,170	731	468	678
MIN	-394	-153	-270	-97	-473	-190	-93	-21	-654	-453	-327	-965
AC-FT	1,200	10,310	5,420	15,510	1,380	18,460	23,390	52,710	-242	14,920	3,800	6,640

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2004, BY WATER YEAR (WY)

MEAN	-36.1	110	165	149	212	284	487	357	-25.1	-107	-96.7	-239
MAX	609	776	685	751	1,141	1,525	1,405	1,393	1,073	819	401	900
(WY)	(1995)	(1974)	(1996)	(1996)	(1993)	(1985)	(1993)	(1992)	(1979)	(1992)	(1974)	(1992)
MIN	-779	-431	-309	-1,487	-283	-782	-265	-668	-987	-939	-1,086	-1,902
(WY)	(1961)	(1999)	(1995)	(1958)	(1958)	(1970)	(1958)	(1972)	(1982)	(1959)	(1981)	(1960)

SUMMARY STATISTICS

	FOR 2004 WATER YEAR		WATER YEARS 1957 - 2004	
ANNUAL TOTAL	77,385.72			
ANNUAL MEAN	211		113	
HIGHEST ANNUAL MEAN			501	
LOWEST ANNUAL MEAN			-232	
HIGHEST DAILY MEAN	1,530	May 29	2,920	Mar 13, 1985
LOWEST DAILY MEAN	-965	Sep 7	-3,460	Jun 25, 1982
ANNUAL SEVEN-DAY MINIMUM	-285	Sep 4	-2,720	Jun 18, 1959
ANNUAL RUNOFF (AC-FT)	153,500		81,600	
10 PERCENT EXCEEDS	668		704	
50 PERCENT EXCEEDS	156		117	
90 PERCENT EXCEEDS	-158		-421	

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

263537080211400 NORTH LOXAHATCHEE CONSERVATION AREA No. 1, NEAR BOYNTON BEACH, FL

LOCATION.--Lat 26°35'37", long 80°21'14", in T.46 S., R.41 E., Palm Beach County, Hydrologic Unit 03090202 in Loxahatchee Wildlife Refuge (Arthur R. Marshall). Township and range approximated from topographic map for which most section lines are not delineated, unable to determine section.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--July 2001 to current year.

REVISED RECORDS.--WDR FL-03-2A, 2002.

GAGE.--Satellite data collection platform with water-stage shaft encoder. Datum of gage is arbitrary. (Corrected).

REMARKS.--Station is one of several located in Conservation Area No. 1.

COOPERATION.--U.S. Army Corps of Engineers.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 17.94 ft Sept. 30, 2004; minimum, 15.66 ft May 15, 16, 2002.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 17.94 ft Sept. 30; minimum, 15.82 ft July 26.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.26	16.89	16.94	16.94	16.96	16.90	16.56	16.41	16.19	16.00	16.16	16.55
2	17.27	16.91	16.93	16.93	16.96	16.89	16.54	16.39	16.16	15.97	16.23	16.53
3	17.29	16.94	16.92	16.92	16.94	16.88	16.52	16.46	16.13	15.94	16.34	16.53
4	17.30	16.95	16.91	16.91	16.93	16.86	16.50	16.62	16.19	16.00	16.33	16.62
5	17.29	16.98	16.92	16.91	16.92	16.85	16.49	16.59	16.32	16.10	16.34	17.00
6	17.28	17.05	16.98	16.90	16.91	16.84	16.47	16.57	16.35	16.20	16.36	17.11
7	17.25	17.08	16.96	16.89	16.91	16.83	16.46	16.55	16.34	16.17	16.34	17.13
8	17.24	17.08	16.95	16.88	16.89	16.81	16.44	16.53	16.36	16.13	16.32	17.17
9	17.22	17.09	16.94	16.87	16.88	16.80	16.43	16.51	16.34	16.10	16.30	17.23
10	17.20	17.09	16.96	16.87	16.87	16.78	16.42	16.49	16.34	16.06	16.29	17.27
11	17.20	17.09	16.97	16.86	16.87	16.77	16.40	16.47	16.33	16.04	16.30	17.29
12	17.22	17.09	16.96	16.85	16.86	16.75	16.45	16.46	16.31	16.05	16.29	17.31
13	17.19	17.09	16.95	16.84	16.85	16.74	16.53	16.44	16.30	16.02	16.35	17.29
14	17.16	17.09	16.98	16.83	16.84	16.73	16.59	16.41	16.27	15.98	16.34	17.26
15	17.14	17.08	17.05	16.83	16.85	16.72	16.57	16.39	16.24	15.96	16.33	17.23
16	17.11	17.07	17.04	16.82	16.84	16.75	16.55	16.46	16.21	15.99	16.31	17.19
17	17.09	17.06	17.04	16.81	16.83	16.78	16.54	16.56	16.19	15.99	16.30	17.15
18	17.08	17.06	17.03	16.82	16.82	16.76	16.52	16.54	16.18	16.00	16.35	17.10
19	17.06	17.06	17.03	16.83	16.81	16.74	16.50	16.52	16.16	16.00	16.46	17.06
20	17.04	17.05	17.02	16.83	16.81	16.73	16.48	16.50	16.12	15.97	16.44	17.06
21	17.02	17.04	17.01	16.82	16.80	16.72	16.47	16.48	16.16	15.94	16.42	17.30
22	17.01	17.02	17.01	16.81	16.79	16.70	16.45	16.46	16.21	15.91	16.44	17.41
23	16.99	17.02	17.01	16.81	16.78	16.69	16.43	16.44	16.18	15.88	16.48	17.33
24	16.97	17.01	17.00	16.79	16.78	16.67	16.41	16.42	16.14	15.85	16.49	17.27
25	16.96	17.00	16.99	16.79	16.86	16.66	16.39	16.39	16.11	15.85	16.51	17.28
26	16.97	16.99	16.99	16.78	16.98	16.65	16.37	16.37	16.08	15.92	16.54	17.71
27	16.95	16.98	16.98	16.78	16.95	16.63	16.35	16.34	16.05	16.09	16.52	17.79
28	16.94	16.97	16.97	16.78	16.93	16.61	16.34	16.31	16.01	16.09	16.50	17.84
29	16.94	16.96	16.96	16.77	16.91	16.60	16.33	16.28	16.03	16.12	16.49	17.89
30	16.92	16.94	16.95	16.77	---	16.59	16.43	16.25	16.03	16.11	16.48	17.93
31	16.91	---	16.94	16.85	---	16.58	---	16.22	---	16.10	16.51	---
TOTAL	530.47	510.73	526.29	522.09	489.33	519.01	493.93	509.83	486.03	496.53	507.86	516.83
MEAN	17.11	17.02	16.98	16.84	16.87	16.74	16.46	16.45	16.20	16.02	16.38	17.23
MAX	17.30	17.09	17.05	16.94	16.98	16.90	16.59	16.62	16.36	16.20	16.54	17.93
MIN	16.91	16.89	16.91	16.77	16.78	16.58	16.33	16.22	16.01	15.85	16.16	16.53

263180080205001 SITE 7 IN CONSERVATION AREA NO. 1 NEAR SHAWANO, FL

LOCATION.--Lat 26°31'10", long 80°20'50", in T.45 S., R.40 E., Palm Beach County, Hydrologic Unit 03090202, in Loxahatchee Wildlife Refuge (Arthur R. Marshall Park). Township and range approximated from topographic map for which most section lines are not delineated, unable to determine section.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--July 1991 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder. Prior to October 1, 2003, a tipping bucket rain gage. Datum of gage is National Geodetic Vertical Datum (NGVD) of 1929 converted through VERTCON using the NAVD 88 survey levels from a benchmark provided by Florida Department of Environmental Protection (FDEP). The current datum of gage that started October 1, 2003, is at a datum 0.102 ft lower than previously published historic NGVD 1929 datum. Prior to October 1, 2003, datum of gage was historic NGVD 1929 (benchmark provided by U.S. Army Corps of Engineers (USACE)).

REMARKS.--Land surface is approximately 15 ft above National Geodetic Vertical datum of 1929 (Benchmark provided by FDEP converted from NAVD 88 survey levels through VERTCON to NGVD 1929). Station is one of several located in Conservation Area No. 1. Gage is capable of recording water levels below land-surface datum. Rainfall is not published, but is available in files of the U.S. Geological Survey. The rainfall record was discontinued September 30, 2003.

COOPERATION.--U.S. Army Corps of Engineers.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 18.12 ft Nov. 17, 18, 1994 (present datum); minimum, 14.75 ft May 22, 2001 (present datum). (Corrected).

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 17.20 ft Sept. 29, 30; minimum, 15.41 ft June 4.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.04	16.69	16.73	16.71	16.66	16.55	16.20	15.92	15.48	15.63	15.91	16.25
2	17.05	16.70	16.71	16.70	16.66	16.54	16.18	15.90	15.46	15.61	16.01	16.25
3	17.05	16.73	16.70	16.70	16.65	16.53	16.16	15.92	15.43	15.65	16.06	16.25
4	17.08	16.74	16.69	16.69	16.65	16.52	16.14	16.01	15.51	15.74	16.09	16.32
5	17.08	16.80	16.70	16.69	16.64	16.51	16.13	15.99	15.65	15.75	16.13	16.65
6	17.07	16.87	16.73	16.68	16.63	16.50	16.11	15.97	15.72	15.74	16.12	16.79
7	17.06	16.89	16.72	16.67	16.63	16.49	16.10	15.94	15.75	15.72	16.09	16.82
8	17.04	16.89	16.71	16.66	16.61	16.47	16.08	15.92	15.82	15.70	16.07	16.82
9	17.02	16.89	16.70	16.65	16.61	16.45	16.07	15.90	15.82	15.68	16.05	16.82
10	17.00	16.89	16.71	16.64	16.60	16.43	16.06	15.89	15.84	15.65	16.04	16.82
11	16.99	16.89	16.73	16.62	16.60	16.41	16.05	15.87	15.82	15.63	16.04	16.82
12	16.97	16.89	16.72	16.61	16.59	16.40	16.07	15.85	15.81	15.65	16.05	16.81
13	16.95	16.89	16.71	16.61	16.58	16.39	16.13	15.84	15.79	15.67	16.10	16.80
14	16.93	16.89	16.77	16.60	16.58	16.37	16.15	15.82	15.76	15.65	16.10	16.79
15	16.92	16.88	16.84	16.59	16.58	16.37	16.13	15.80	15.76	15.63	16.09	16.78
16	16.90	16.88	16.83	16.58	16.57	16.41	16.12	15.80	15.74	15.62	16.09	16.77
17	16.88	16.87	16.82	16.57	16.56	16.45	16.10	15.79	15.72	15.62	16.07	16.74
18	16.87	16.86	16.80	16.58	16.55	16.43	16.08	15.77	15.73	15.62	16.06	16.71
19	16.85	16.86	16.79	16.60	16.53	16.41	16.06	15.76	15.71	15.64	16.06	16.68
20	16.83	16.85	16.78	16.59	16.53	16.39	16.05	15.74	15.69	15.63	16.08	16.66
21	16.82	16.83	16.77	16.58	16.52	16.37	16.03	15.72	15.71	15.61	16.07	16.91
22	16.81	16.82	16.76	16.58	16.51	16.36	16.02	15.70	15.78	15.59	16.10	17.00
23	16.79	16.81	16.77	16.57	16.50	16.34	16.00	15.68	15.76	15.60	16.18	16.95
24	16.77	16.81	16.77	16.56	16.49	16.32	15.99	15.66	15.76	15.64	16.19	16.90
25	16.76	16.80	16.76	16.54	16.52	16.31	15.97	15.63	15.76	15.68	16.24	16.89
26	16.77	16.79	16.76	16.54	16.60	16.29	15.96	15.61	15.74	15.80	16.24	17.15
27	16.75	16.78	16.75	16.54	16.59	16.27	15.94	15.59	15.71	15.80	16.23	17.16
28	16.74	16.77	16.74	16.53	16.57	16.25	15.94	15.57	15.69	15.82	16.22	17.16
29	16.73	16.75	16.73	16.52	16.56	16.24	15.93	15.55	15.67	15.84	16.24	17.17
30	16.72	16.73	16.73	16.52	---	16.23	15.94	15.53	15.66	15.82	16.25	17.20
31	16.70	---	16.72	16.59	---	16.22	---	15.51	---	15.83	16.25	---
TOTAL	523.94	504.74	519.15	514.81	480.87	508.22	481.89	489.15	471.25	486.26	499.52	503.84
MEAN	16.90	16.82	16.75	16.61	16.58	16.39	16.06	15.78	15.71	15.69	16.11	16.79
MAX	17.08	16.89	16.84	16.71	16.66	16.55	16.20	16.01	15.84	15.84	16.25	17.20
MIN	16.70	16.69	16.69	16.52	16.49	16.22	15.93	15.51	15.43	15.59	15.91	16.25

263050080145001 SITE 8T IN CONSERVATION AREA NO. 1 NEAR BOYNTON BEACH, FL

LOCATION.--Lat 26°30'50", long 80°14'50", in T.41 S., R.41 E., Palm Beach County, Hydrologic Unit 03090202, in Loxahatchee Wildlife Refuge (Arthur R. Marshall Park). Township and range approximated from topographic map for which most section lines are not delineated, unable to determine section.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--July 1991 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder. Prior to October 1, 2003, tipping bucket rain gage. Datum of gage is National Geodetic Vertical Datum (NGVD) 1929 converted through VERTCON using the NAVD 88 survey levels from a benchmark provided by Florida Department of Environmental Protection (FDEP). The current datum of gage that started October 1, 2003, is at a datum 0.04 ft lower than previously published historic NGVD 1929 datum. Prior to October 1, 2003, datum of gage was historic NGVD 1929 (benchmark provided by U.S. Army Corps of Engineers (USACE)).

REMARKS.--Land surface is approximately 15 ft above National Geodetic Vertical datum of 1929 (benchmark provided by FDEP converted from NAVD 88 survey levels through VERTCON to NGVD 1929). Station is one of several located in Conservation Area No. 1. Gage is capable of recording water levels below land-surface datum. Rainfall record is not published, but available in files of the U.S. Geological Survey. The rainfall record was discontinued September 30, 2003.

COOPERATION.--U.S. Army Corps of Engineers.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 18.07 ft Nov. 17, 1994 (present datum); minimum, 13.87 ft May 21, 22, 2001 (present datum).

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 17.16 ft Sept. 27; minimum, 14.10 ft July 11.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.11	16.67	16.72	16.71	16.66	16.45	15.84	15.28	14.44	14.53	14.94	16.41
2	17.11	16.67	16.71	16.69	16.68	16.43	15.81	15.25	14.40	14.46	15.29	16.41
3	17.11	16.74	16.68	16.68	16.68	16.40	15.79	15.26	14.35	14.40	15.38	16.37
4	17.11	16.75	16.66	16.67	16.68	16.37	15.76	15.34	14.45	14.37	15.44	16.55
5	17.10	16.84	16.68	16.66	16.66	16.33	15.73	15.31	14.56	14.33	15.56	16.93
6	17.07	16.97	16.73	16.66	16.65	16.30	15.70	15.28	14.55	14.32	15.66	16.85
7	17.04	16.99	16.73	16.65	16.65	16.29	15.66	15.24	14.49	14.36	15.70	16.82
8	17.02	16.99	16.72	16.64	16.64	16.26	15.63	15.20	14.45	14.28	15.74	16.83
9	17.00	16.98	16.70	16.63	16.61	16.22	15.61	15.17	14.41	14.21	15.79	16.87
10	16.98	16.98	16.71	16.62	16.59	---	15.61	15.13	14.41	14.14	15.82	16.82
11	16.95	16.97	16.73	16.62	16.57	16.15	15.59	15.10	14.41	14.24	15.84	16.78
12	16.93	16.97	16.73	16.61	16.55	16.12	15.63	15.07	14.39	14.42	15.88	16.72
13	16.91	16.96	16.71	16.59	16.54	16.10	15.70	15.04	14.37	14.54	15.90	16.66
14	16.90	16.94	16.73	16.58	16.53	16.08	15.74	15.00	14.35	14.45	15.88	16.60
15	16.90	16.92	16.80	16.57	16.52	16.06	15.72	14.97	14.32	14.38	15.88	16.54
16	16.87	16.91	16.81	16.57	16.51	16.11	15.69	15.02	14.29	14.49	15.88	16.51
17	16.86	16.89	16.84	16.55	16.48	16.16	15.66	14.99	14.28	14.70	15.88	16.48
18	16.84	16.88	16.85	16.55	16.46	16.13	15.63	14.94	14.31	14.63	15.92	16.44
19	16.83	16.88	16.84	16.58	16.43	16.10	15.60	14.91	14.26	14.69	15.95	16.39
20	16.81	16.88	16.84	16.58	16.41	16.07	15.57	14.88	14.23	14.79	15.98	16.36
21	16.79	16.87	16.82	16.57	16.40	16.05	15.54	14.84	14.22	14.74	16.01	16.57
22	16.78	16.84	16.80	16.56	16.39	16.04	15.51	14.81	14.46	14.69	16.05	16.66
23	16.77	16.82	16.80	16.54	16.35	16.01	15.48	14.77	14.84	14.65	16.11	16.64
24	16.74	16.82	16.79	16.53	16.34	15.98	15.44	14.73	14.80	14.61	16.15	16.64
25	16.71	16.81	16.79	16.52	16.35	15.95	15.41	14.69	14.75	14.59	16.21	16.69
26	16.72	16.80	16.78	16.50	16.45	15.92	15.37	14.65	14.69	14.60	16.24	17.08
27	16.71	16.78	16.76	16.51	16.47	15.90	15.34	14.61	14.64	14.57	16.28	17.11
28	16.70	16.78	16.75	16.52	16.48	15.88	15.32	14.56	14.58	14.56	16.34	17.08
29	16.73	16.77	16.73	16.50	16.47	15.87	15.29	14.53	14.64	14.63	16.41	17.08
30	16.71	16.75	16.72	16.50	---	15.86	15.31	14.49	14.60	14.62	16.41	17.08
31	16.68	---	16.72	16.58	---	15.85	---	14.50	---	14.66	16.40	---
TOTAL	523.49	505.82	519.38	514.24	479.20	---	467.68	463.56	433.94	449.65	492.92	500.97
MEAN	16.89	16.86	16.75	16.59	16.52	---	15.59	14.95	14.46	14.50	15.90	16.70
MAX	17.11	16.99	16.85	16.71	16.68	---	15.84	15.34	14.84	14.79	16.41	17.11
MIN	16.68	16.67	16.66	16.50	16.34	---	15.29	14.49	14.22	14.14	14.94	16.36

263000080120001 SITE 8C NEAR L-40 IN CONSERVATION AREA 1 NEAR BOYNTON BEACH, FL

LOCATION.--Lat 26°29'57", long 80°13'20", T.46 S., R.41 E., Palm Beach County, Hydrologic Unit 03090202, 20 ft west of L-40 near Loxahatchee Wildlife Refuge (Arthur R. Marshall Park). Township and range approximated from topographic map for which most section lines are not delineated, unable to determine section.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--April 1991 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and tipping bucket rain gage. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Station is one of several located in Conservation Area No. 1. Rainfall data is not published, but available in files of the U.S. Geological Survey. The rainfall record was discontinued September 30, 2003. Maximum gage height may have been exceeded. Station was destroyed during Hurricane Frances on September 5, 2004.

COOPERATION.--U.S. Army Corps of Engineers.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 18.21 ft Oct. 16, 1999; minimum, 12.02 ft May 22, 2001. (Maximum gage height may have been exceeded). See REMARKS.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 17.33 ft Oct. 2, 3; minimum, 13.54 ft June 5. (Maximum gage height may have been exceeded). See REMARKS.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.32	16.87	16.92	16.90	16.88	16.65	15.98	15.30	13.95	14.32	15.32	16.59
2	17.32	16.88	16.90	16.89	16.90	16.62	15.95	15.29	13.74	14.19	15.45	16.59
3	17.32	16.93	16.87	16.88	16.90	16.59	15.93	15.31	13.66	14.05	15.53	16.54
4	17.31	16.96	16.86	16.87	16.89	16.54	15.89	15.34	13.63	13.98	15.61	16.74
5	17.29	17.04	16.89	16.87	16.87	16.50	15.84	15.31	13.66	14.04	15.73	---
6	17.26	17.16	16.95	16.86	16.86	16.49	15.77	15.22	13.70	14.05	15.83	---
7	17.24	17.19	16.94	16.85	16.87	16.48	15.74	---	13.83	13.98	15.90	---
8	17.22	17.19	16.92	16.84	16.84	16.46	15.74	15.10	13.85	13.84	15.96	---
9	17.20	17.19	16.90	16.83	16.81	16.42	15.72	15.03	14.03	13.68	16.00	---
10	17.17	17.19	16.91	16.83	16.79	16.32	15.75	14.98	14.33	13.77	16.03	---
11	17.14	17.18	16.94	16.83	16.77	16.27	15.74	14.87	14.53	13.94	16.06	---
12	17.13	17.17	16.93	16.80	16.75	16.28	15.79	14.79	14.59	14.01	16.09	---
13	17.10	17.17	16.90	16.79	16.74	16.25	15.88	14.73	14.59	14.14	16.09	---
14	17.09	17.15	16.94	16.78	16.73	16.22	15.93	14.72	14.57	14.17	16.07	---
15	17.09	17.13	17.01	16.78	16.72	16.20	15.87	14.67	14.53	14.05	16.07	---
16	17.06	17.11	17.02	16.77	16.70	16.26	15.82	14.67	14.48	14.01	16.07	---
17	17.05	17.10	17.06	16.74	16.68	16.31	15.78	14.69	14.44	14.10	16.08	---
18	17.04	17.08	17.06	16.76	16.66	16.28	15.74	14.71	14.38	14.19	16.12	---
19	17.02	17.09	17.05	16.79	16.62	16.25	15.71	14.68	14.37	14.28	16.17	---
20	17.00	17.08	17.04	16.79	16.59	16.20	15.70	14.65	14.40	14.58	16.18	---
21	16.99	17.06	17.02	16.77	16.59	16.19	15.67	14.63	14.51	14.75	16.21	---
22	16.98	17.04	17.00	16.76	16.57	16.17	15.62	14.55	14.58	14.73	16.28	---
23	16.97	17.02	17.00	16.75	16.53	16.13	15.58	14.48	14.65	14.74	16.34	---
24	16.93	17.02	17.00	16.74	16.53	16.09	15.54	14.38	14.73	14.70	16.37	---
25	16.90	17.01	16.99	16.71	16.56	16.06	15.49	14.27	14.74	14.71	16.42	---
26	16.92	16.99	16.97	16.70	16.69	16.03	15.45	14.15	14.72	14.76	16.44	---
27	16.91	16.98	16.96	16.73	16.69	16.01	15.44	14.28	14.66	14.82	16.48	---
28	16.90	16.98	16.95	16.73	16.70	16.02	15.36	14.35	14.55	14.87	16.53	---
29	16.93	16.98	16.93	16.71	16.68	16.01	15.32	14.29	14.50	14.96	16.59	---
30	16.91	16.94	16.93	16.70	---	16.02	15.32	14.19	14.43	15.09	16.59	---
31	16.88	---	16.91	16.79	---	16.01	---	14.05	---	15.16	16.59	---
TOTAL	529.59	511.88	525.67	520.54	485.11	504.33	471.06	---	429.33	444.66	499.20	---
MEAN	17.08	17.06	16.96	16.79	16.73	16.27	15.70	---	14.31	14.34	16.10	---
MAX	17.32	17.19	17.06	16.90	16.90	16.65	15.98	---	14.74	15.16	16.59	---
MIN	16.88	16.87	16.86	16.70	16.53	16.01	15.32	---	13.63	13.68	15.32	---

262750080175001 SITE 9 IN CONSERVATION AREA NO. 1, NEAR BOYNTON BEACH, FL

LOCATION.--Lat 26°27'50", long 80°17'50", in T.50 S., R.40 E., Palm Beach County, Hydrologic Unit 03090202, in Loxahatchee Wildlife Refuge (Arthur R. Marshall Park). Township and range approximated from topographic map for which most section lines are not delineated, unable to determine section.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--July 1991 to current year.

REVISED RECORDS.--WDR FL-97-2A, 1997.

GAGE.--Satellite data collection platform with water-stage shaft encoder. Prior to October 1, 2003 tipping bucket rain gage. Datum of gage is National Geodetic Vertical Datum (NGVD) 1929 converted through VERTCON using NAVD 88 survey levels from a benchmark provided by Florida Department of Environmental Protection (FDEP). The current datum of gage that started October 1, 2003, is at a datum 0.015 ft lower than previously published historic NGVD 1929 datum. Prior to October 1, 2003, datum of gage was historic NGVD 1929 (benchmark provided by U.S. Army Corps of Engineers (USACE)).

REMARKS.--Land surface is approximately 15 ft above National Geodetic Vertical Datum of 1929 (benchmark provided by FDEP converted from NAVD 88 survey levels through VERTCON to NGVD 1929). Station is one of several located in Conservation Area No. 1. Gage is capable of recording water levels below land-surface datum. Rainfall data is not published, but available in files of the U.S. Geological Survey. The rainfall record was discontinued September 30, 2003.

COOPERATION.--U.S. Army Corps of Engineers.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 18.02 ft Oct. 15, 1999 (present datum); minimum, 14.74 ft July 3, 2004.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 17.10 ft Oct. 3-6; minimum, 14.74 ft July 3.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.07	16.69	16.73	16.71	16.64	16.45	16.02	15.73	15.23	14.81	15.55	16.37
2	17.08	16.68	16.72	16.70	16.65	16.45	16.00	15.71	15.20	14.78	15.77	16.38
3	17.09	16.74	16.70	16.69	16.65	16.45	15.98	15.72	15.17	14.81	15.81	16.38
4	17.10	16.77	16.69	16.69	16.65	16.43	15.96	15.77	15.19	14.91	15.82	16.48
5	17.10	16.85	16.69	16.68	16.65	16.42	15.94	15.76	15.23	14.92	15.92	16.66
6	17.09	16.91	16.71	16.67	16.65	16.41	15.92	15.74	15.23	14.92	15.93	16.75
7	17.07	16.93	16.71	16.66	16.65	16.39	15.91	---	15.25	14.91	15.88	16.71
8	---	16.93	16.70	16.64	16.62	16.38	15.89	15.70	15.30	14.89	15.85	16.70
9	---	16.94	16.70	16.63	16.61	16.35	15.88	15.69	15.30	14.86	15.84	16.73
10	---	16.95	16.71	16.63	16.61	16.33	15.87	15.67	15.29	14.82	15.83	16.70
11	---	16.95	16.73	16.61	16.60	16.31	15.86	15.65	15.29	14.82	15.81	16.66
12	---	16.95	16.71	16.61	16.59	16.29	15.87	15.63	15.26	14.94	15.80	16.61
13	---	16.95	16.71	16.59	16.58	16.28	15.92	15.61	15.25	15.10	15.85	16.57
14	---	16.93	16.73	16.59	16.56	16.25	15.97	15.58	15.22	15.09	15.85	16.53
15	16.92	16.92	16.78	16.58	16.55	16.24	15.95	15.57	15.20	15.07	15.85	16.49
16	16.89	16.91	16.77	16.57	16.54	16.27	15.93	15.56	15.18	15.07	15.86	16.46
17	16.87	16.89	16.78	16.55	16.52	16.30	15.91	15.54	15.15	15.09	15.85	16.43
18	16.85	16.88	16.78	16.56	16.50	16.27	15.90	15.54	15.14	15.08	15.86	16.40
19	16.83	16.87	16.79	16.58	16.48	16.25	15.88	15.53	15.12	15.09	15.87	16.38
20	16.82	16.85	16.79	16.58	16.47	16.23	15.86	15.51	15.09	15.12	15.90	16.36
21	16.80	16.85	16.79	16.57	16.46	16.21	15.85	15.49	15.07	15.11	15.90	16.53
22	16.79	16.83	16.79	16.57	16.45	16.19	15.83	15.47	15.06	15.09	16.03	16.63
23	16.77	16.82	16.79	16.55	16.43	16.17	15.82	15.44	15.04	15.07	16.15	16.59
24	16.75	16.81	16.79	16.54	16.42	16.15	15.80	15.42	15.02	15.05	16.16	16.55
25	16.74	16.80	16.78	16.53	16.43	16.13	15.78	15.39	14.99	15.06	16.20	16.57
26	16.75	16.79	16.77	16.52	16.50	16.11	15.76	15.37	14.97	15.14	16.19	16.78
27	16.73	16.78	16.76	16.52	16.49	16.10	15.75	15.35	14.93	15.17	16.20	16.90
28	16.72	16.77	16.75	16.52	16.47	16.08	15.74	15.32	14.90	15.24	16.24	16.89
29	16.74	16.76	16.74	16.51	16.45	16.07	15.74	15.30	14.87	15.30	16.35	16.87
30	16.72	16.74	16.73	16.50	---	16.06	15.74	15.27	14.85	15.33	16.36	16.88
31	16.70	---	16.72	16.58	---	16.04	---	15.25	---	15.36	16.37	---
TOTAL	---	505.44	519.04	514.43	479.87	504.06	476.23	---	453.99	466.02	494.85	497.94
MEAN	---	16.85	16.74	16.59	16.55	16.26	15.87	---	15.13	15.03	15.96	16.60
MAX	---	16.95	16.79	16.71	16.65	16.45	16.02	---	15.30	15.36	16.37	16.90
MIN	---	16.68	16.69	16.50	16.42	16.04	15.74	---	14.85	14.78	15.55	16.36

262528080202700 SOUTH LOXAHATCHEE CONSERVATION AREA No. 1, NEAR BOYNTON BEACH, FL

LOCATION.--Lat 26°25'28", long 80°20'27", T.46 S., R.41 E., Palm Beach County, Hydrologic Unit 03090202 in Loxahatchee Wildlife Refuge (Arthur R. Marshall). Township and range approximated from topographic map for which most section lines are not delineated, unable to determine section.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--May 2001 to current year.

REVISED RECORDS.--WDR FL-03-2A, 2002.

GAGE.--Satellite data collection platform with water-stage shaft encoder. Datum of gage is arbitrary. (Corrected).

REMARKS.--Station is one of several located in Conservation Area No. 1

COOPERATION.--U.S. Army Corps of Engineers.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 17.27 ft Oct. 30, 31 and Nov. 1, 2001 (Corrected); minimum, 14.32 ft July 31, 2004.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 17.06 ft Oct. 3, 4; minimum, 14.32 ft July 31.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.02	16.61	16.64	16.62	16.58	16.41	15.72	15.22	14.65	14.44	14.63	16.34
2	17.04	16.60	16.63	16.61	16.59	16.38	15.69	15.21	14.63	14.43	15.06	16.33
3	17.05	16.65	16.62	16.61	16.60	16.36	15.66	15.20	14.61	14.43	15.17	16.29
4	17.04	16.66	16.61	16.60	16.61	16.33	15.64	15.21	14.63	14.46	15.28	16.34
5	17.01	16.74	16.61	16.59	16.61	16.30	15.62	15.19	14.68	14.46	15.42	16.58
6	16.98	16.82	16.63	16.58	16.60	16.26	15.58	15.16	14.68	14.48	15.53	16.52
7	16.95	16.86	16.63	16.57	16.58	16.23	15.55	15.13	14.75	14.48	15.61	16.56
8	16.93	16.87	16.62	16.56	16.55	16.20	15.53	15.10	14.87	14.47	15.68	16.49
9	---	16.88	16.62	16.54	16.54	16.16	15.50	15.08	14.83	14.45	15.73	16.49
10	16.89	16.90	16.63	16.53	16.52	16.12	15.50	15.06	14.81	14.43	15.75	16.45
11	16.87	16.90	16.63	16.51	16.50	16.07	15.49	15.04	14.79	14.42	15.78	16.33
12	16.85	16.89	16.63	16.51	16.48	16.05	15.52	15.02	14.77	14.42	15.83	16.25
13	16.83	16.87	16.62	16.50	16.46	16.02	15.59	15.00	14.74	14.42	15.85	16.19
14	16.82	16.86	16.66	16.49	16.45	16.01	15.61	14.98	14.71	14.39	15.80	16.13
15	16.81	16.84	16.70	16.47	16.43	16.00	15.58	14.96	14.69	14.36	15.80	16.10
16	16.79	16.82	16.73	16.46	16.42	16.01	15.56	14.97	14.67	14.35	15.81	16.14
17	16.77	16.81	16.75	16.46	16.40	16.03	15.54	14.96	14.65	14.38	15.85	16.16
18	16.76	16.80	16.74	16.47	16.38	16.02	15.52	14.93	14.64	14.36	15.89	16.15
19	16.75	16.79	16.74	16.49	16.35	16.01	15.49	14.92	14.62	14.38	15.92	16.13
20	16.73	16.78	16.73	16.47	16.33	15.98	15.47	14.89	14.61	14.45	15.96	16.10
21	16.72	16.77	16.71	16.46	16.31	15.97	15.46	14.87	14.60	14.44	15.99	16.11
22	16.71	16.75	16.70	16.46	16.30	15.94	15.43	14.85	14.59	14.43	16.04	16.22
23	16.68	16.74	16.70	16.45	16.27	15.91	15.41	14.82	14.58	14.41	16.10	16.29
24	16.67	16.73	16.70	16.43	16.26	15.88	15.39	14.80	14.56	14.39	16.13	16.34
25	16.66	16.72	16.69	16.42	16.27	15.86	15.36	14.77	14.54	14.37	16.17	16.41
26	16.68	16.71	16.68	16.42	16.37	15.84	15.33	14.74	14.52	14.38	16.21	16.66
27	16.65	16.70	16.67	16.43	16.38	15.82	15.30	14.73	14.50	14.40	16.24	16.66
28	16.64	16.69	16.66	16.42	16.40	15.80	15.28	14.72	14.48	14.39	16.29	16.57
29	16.65	16.67	16.65	16.42	16.42	15.78	15.27	14.70	14.47	14.38	16.34	16.52
30	16.63	16.66	16.64	16.42	---	15.76	15.25	14.68	14.46	14.35	16.34	16.49
31	16.62	---	16.63	16.50	---	15.74	---	14.67	---	14.37	16.34	---
TOTAL	---	503.09	516.60	511.47	476.96	497.25	464.84	463.58	439.33	446.77	490.54	490.34
MEAN	---	16.77	16.66	16.50	16.45	16.04	15.49	14.95	14.64	14.41	15.82	16.34
MAX	---	16.90	16.75	16.62	16.61	16.41	15.72	15.22	14.87	14.48	16.34	16.66
MIN	---	16.60	16.61	16.42	16.26	15.74	15.25	14.67	14.46	14.35	14.63	16.10

262358080055700 E-4 CANAL AT CLINT-MOORE ROAD, BOCA RATON, FL

LOCATION.--Lat 26°23'58", long 80°05'57", in NE ¼ NE ¼ NW ¼ sec.6, T.47 S., R.43 E., Palm Beach County, Hydrologic Unit 03090202, 0.6 mi west on Clint-Moore Road from U.S. Interstate 95 overpass in Boca Raton.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--March 1982 to current year.

GAGE.--Electronic data logger. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Station is part of a canal system operated and controlled by Lake Worth Drainage District.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 7.52 ft Oct. 15, 1999; minimum, 2.33 ft May 14-16, 1989.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 5.72 ft Sept. 5; minimum, 2.71 ft July 15, 16.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.70	4.35	4.43	4.35	4.87	4.47	4.10	4.06	3.12	2.88	4.42	4.45
2	4.66	4.39	4.42	4.35	4.75	4.45	4.05	4.02	3.07	2.86	4.54	4.44
3	4.62	4.53	4.41	4.35	4.67	4.43	4.00	3.97	3.01	2.84	4.57	4.46
4	4.59	4.51	4.41	4.35	4.62	4.42	3.95	4.10	2.98	2.82	4.55	4.67
5	4.56	4.53	4.47	4.34	4.59	4.42	3.91	4.14	3.00	2.80	4.55	5.37
6	4.54	4.94	4.50	4.33	4.62	4.41	3.89	4.11	2.99	2.79	4.54	5.30
7	4.53	4.92	4.45	4.32	4.58	4.39	3.88	4.06	2.97	2.79	4.52	5.25
8	4.53	4.83	4.43	4.31	4.54	4.37	3.85	4.01	2.98	2.77	4.51	5.14
9	4.50	4.75	4.42	4.32	4.53	4.36	3.81	3.95	2.99	2.77	4.52	5.06
10	4.49	4.71	4.45	4.31	4.52	4.35	3.86	3.92	3.02	2.75	4.50	4.95
11	4.48	4.67	4.44	4.29	4.51	4.35	3.88	3.89	3.02	2.74	4.47	4.89
12	4.46	4.64	4.42	4.30	4.49	4.33	4.02	3.83	3.02	2.73	4.65	4.85
13	4.46	4.62	4.41	4.29	4.49	4.32	4.34	3.76	2.99	2.72	4.82	4.82
14	4.47	4.58	4.50	4.30	4.49	4.30	4.34	3.70	2.96	2.72	4.72	4.80
15	4.46	4.56	4.54	4.29	4.48	4.31	4.31	3.66	2.94	2.71	4.70	4.83
16	4.44	4.54	4.51	4.32	4.46	4.35	4.30	3.64	2.92	2.78	4.65	4.81
17	4.44	4.53	4.49	4.31	4.45	4.36	4.29	3.63	2.91	2.92	4.61	4.78
18	4.42	4.52	4.45	4.38	4.44	4.32	4.27	3.60	2.91	2.93	4.59	4.80
19	4.43	4.51	4.42	4.41	4.44	4.31	4.26	3.63	2.92	2.96	4.59	4.81
20	4.43	4.48	4.41	4.38	4.44	4.30	4.24	3.63	2.94	3.05	4.57	4.80
21	4.43	4.47	4.41	4.36	4.44	4.29	4.21	3.62	2.99	3.10	4.54	5.04
22	4.42	4.47	4.40	4.33	4.43	4.27	4.16	3.63	3.01	3.18	4.52	5.06
23	4.41	4.46	4.42	4.33	4.44	4.24	4.11	3.64	3.01	3.12	4.51	4.97
24	4.39	4.46	4.41	4.34	4.43	4.24	4.06	3.59	3.00	3.06	4.50	4.85
25	4.39	4.45	4.39	4.34	4.51	4.23	4.00	3.50	3.00	3.03	4.50	4.96
26	4.41	4.45	4.38	4.34	4.59	4.22	3.96	3.42	2.96	3.05	4.48	5.26
27	4.40	4.45	4.38	4.35	4.52	4.23	3.93	3.37	2.93	3.22	4.48	---
28	4.38	4.45	4.37	4.34	4.49	4.19	3.93	3.33	2.91	4.18	4.50	---
29	4.41	4.43	4.37	4.31	4.47	4.19	4.00	3.28	2.90	4.20	4.52	---
30	4.37	4.44	4.37	4.32	---	4.18	4.02	3.23	2.89	4.21	4.49	5.23
31	4.36	---	4.35	4.55	---	4.15	---	3.17	---	4.27	4.47	---
TOTAL	138.58	136.64	137.23	134.51	131.30	133.75	121.93	115.09	89.26	94.95	141.10	---
MEAN	4.47	4.55	4.43	4.34	4.53	4.31	4.06	3.71	2.98	3.06	4.55	---
MAX	4.70	4.94	4.54	4.55	4.87	4.47	4.34	4.14	3.12	4.27	4.82	---
MIN	4.36	4.35	4.35	4.29	4.43	4.15	3.81	3.17	2.89	2.71	4.42	---

262337080074800 E-3 CANAL AT 51ST STREET, BOCA RATON, FL

LOCATION.--Lat 26°23'37", long 80°07'48", in NE ¼ NE ¼ NW ¼ sec.11, T.47 S., R.42 E., Palm Beach County, Hydrologic Unit 03090202, 2.2 mi west of U.S. Interstate 95, Yamato Road exit approximately 110 yards south of 51st Street (Yamato Road) on the E-3 Canal in Boca Raton.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--March 1982 to current year.

GAGE.--Electronic data logger. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to June 1, 1994, at site 100 yards upstream at same datum.

REMARKS.--Station is part of a canal system operated by Lake Worth Drainage District.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 13.53 ft June 18, 1999; minimum, 7.61 ft May 23, 2001.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 10.60 ft Nov. 6; minimum, 8.06 ft Sept. 4.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.18	9.19	9.03	9.07	10.0	9.40	9.40	9.33	8.80	9.24	9.84	9.44
2	10.07	9.19	8.99	9.03	9.84	9.33	9.21	9.24	8.79	9.23	9.93	8.61
3	9.93	9.40	9.07	9.00	9.79	9.26	9.09	9.14	8.71	9.21	9.75	8.17
4	9.83	9.49	9.25	8.97	9.73	9.27	9.00	9.12	8.61	9.27	9.72	8.23
5	9.75	9.58	9.52	8.97	9.70	9.26	8.94	9.11	8.65	9.34	9.71	9.41
6	9.68	9.89	9.63	9.21	9.74	9.18	9.14	9.29	8.79	9.17	9.68	9.57
7	9.64	10.01	9.53	9.14	9.71	9.10	9.35	9.22	8.79	9.13	9.63	9.39
8	9.61	9.50	9.46	9.20	9.64	9.06	9.43	9.10	8.84	9.19	9.59	10.02
9	9.58	9.11	9.39	9.35	9.62	9.26	9.30	9.01	8.92	9.21	9.62	10.08
10	9.57	9.00	9.36	9.32	9.65	9.27	9.32	8.95	8.97	9.12	9.69	9.17
11	9.55	9.48	9.39	9.17	9.62	9.14	9.31	9.17	9.00	8.96	9.65	8.78
12	9.51	9.59	9.31	9.09	9.59	9.09	9.42	9.37	9.00	8.89	9.18	8.54
13	9.45	9.56	9.28	9.02	9.53	9.05	9.63	9.42	8.99	8.94	9.01	8.37
14	9.40	9.56	9.38	9.08	9.49	8.97	9.67	9.27	8.97	8.95	8.92	8.22
15	9.37	9.61	9.68	9.23	9.45	8.98	9.56	9.37	8.97	8.94	9.47	8.15
16	9.30	9.58	9.74	9.31	9.41	9.29	9.51	9.50	8.91	9.03	9.67	8.57
17	9.28	9.55	9.65	9.26	9.37	9.47	9.47	9.49	8.72	9.23	9.68	8.99
18	9.30	9.52	9.59	9.16	9.31	9.35	9.45	9.29	8.69	9.28	9.70	9.20
19	9.27	9.50	9.54	9.17	9.29	9.23	9.42	9.36	8.79	9.32	9.75	9.44
20	9.24	9.47	9.49	9.13	9.29	9.12	9.38	9.43	9.05	9.42	9.69	9.51
21	9.21	9.44	9.45	9.20	9.27	9.03	9.32	9.25	9.13	9.47	9.61	9.79
22	9.20	9.41	9.44	9.28	9.25	8.97	9.25	9.08	9.17	9.47	9.55	10.02
23	9.32	9.36	9.44	9.16	9.23	9.15	9.24	9.05	9.22	9.42	9.64	9.40
24	9.48	9.32	9.41	9.07	9.21	9.32	9.46	9.20	9.24	9.33	9.83	8.96
25	9.36	9.28	9.35	9.18	9.24	9.38	9.64	9.10	9.24	9.25	9.79	8.71
26	9.37	9.24	9.30	9.30	9.44	9.24	9.68	9.17	9.24	9.19	9.75	8.99
27	9.33	9.19	9.26	9.23	9.45	9.30	9.49	9.07	9.23	9.18	9.71	8.91
28	9.28	9.16	9.22	9.10	9.44	9.15	9.31	9.12	9.23	9.29	9.70	9.32
29	9.31	9.10	9.18	9.03	9.42	9.08	9.23	9.16	9.23	9.33	9.82	9.82
30	9.29	9.07	9.16	8.99	---	9.31	9.21	9.16	9.23	9.37	9.76	10.10
31	9.24	---	9.12	9.32	---	9.46	---	8.96	---	9.47	9.65	---
TOTAL	293.90	282.35	290.61	283.74	275.72	285.47	280.83	285.50	269.12	285.84	298.69	273.88
MEAN	9.48	9.41	9.37	9.15	9.51	9.21	9.36	9.21	8.97	9.22	9.64	9.13
MAX	10.18	10.01	9.74	9.35	10.00	9.47	9.68	9.50	9.24	9.47	9.93	10.10
MIN	9.20	9.00	8.99	8.97	9.21	8.97	8.94	8.95	8.61	8.89	8.92	8.15

262300080220001 HILLSBORO CANAL AT S-10-D, NEAR DEERFIELD BEACH, FL

LOCATION.--Lat 26°23'14", long 80°22'50", in NE ¼ sec.6, T.47 S., R.40 E., Palm Beach County, Hydrologic Unit 03090202, on Hillsboro Canal on the north bank of the spillway 200 ft northeast of S-10-D, a four-gated control structure, 11.9 mi west of State Road 7 (U.S. Highway 441) on Hillsboro Boulevard. The auxiliary stage recorder is located approximately 20 yards downstream of S-10-D on the south bank of the spillway.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--June 1991 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoders upstream and downstream of structure S-10-D. Tipping bucket rain gage at S-10-D upstream. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers).

REMARKS.--Station is one of several located on L-39 which regulates flow for Conservation Areas 1 and 2A. Gage records are primarily used to determine stages. Gage is capable of recording water levels below land-surface datum. Rainfall data is not published but is available in files of the U.S. Geological Survey. The rainfall record was discontinued September 30, 2003.

EXTREME UPSTREAM STAGES FOR PERIOD OF RECORD.--Maximum gage height, 17.82 ft Dec. 15, 1997; minimum, dry May 11-26, 2001.

EXTREME DOWNSTREAM STAGES FOR PERIOD OF RECORD.--Maximum gage height, 17.07 ft Oct. 15, 1996, Oct. 15, 1999; minimum, 11.43 ft May 22, 2001.

EXTREME UPSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 17.23 ft Oct. 2, 3; minimum, 13.50 ft June 3.

EXTREME DOWNSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 16.18 ft Sept. 28-30; minimum, 11.48 ft July 4, 11.

UPSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.20	16.69	16.72	16.71	16.70	16.52	15.75	15.13	13.79	14.17	15.14	16.44
2	17.22	16.69	16.72	16.70	16.72	16.48	15.72	15.10	13.63	14.04	15.30	16.43
3	17.21	16.70	16.70	16.69	16.75	16.46	15.69	15.08	13.54	13.88	15.41	16.41
4	17.17	16.74	16.67	16.68	16.75	16.42	15.65	15.14	13.61	13.78	15.52	16.44
5	17.14	16.82	16.68	16.67	16.73	16.37	15.63	15.12	13.68	13.83	15.68	16.21
6	17.11	16.94	16.73	16.66	16.69	16.33	15.60	15.05	13.69	13.85	15.78	16.57
7	17.08	17.00	16.71	16.68	16.68	16.29	15.56	14.98	13.76	13.78	15.84	16.62
8	17.05	17.00	16.70	16.65	16.68	16.26	15.51	14.93	13.88	13.65	15.89	16.52
9	17.02	17.02	16.69	16.63	16.64	16.20	15.50	14.88	14.34	13.56	15.90	16.54
10	16.98	17.03	16.69	16.64	16.61	16.17	15.53	14.81	14.48	13.60	15.90	16.43
11	16.96	17.03	16.71	16.64	16.59	16.12	15.54	14.75	14.60	13.74	15.92	16.29
12	16.94	17.00	16.70	16.60	16.55	16.11	15.56	14.67	14.54	13.83	15.90	16.24
13	16.91	16.98	16.69	16.59	16.55	16.10	15.59	14.60	14.51	13.97	15.87	16.18
14	16.89	16.96	16.71	16.58	16.51	16.09	15.64	14.58	14.50	13.98	15.92	16.13
15	16.90	16.93	16.81	16.57	16.51	16.06	15.65	14.52	14.47	13.85	15.93	16.20
16	16.87	16.92	16.86	16.56	16.51	16.07	15.64	14.52	14.43	13.77	15.93	16.30
17	16.85	16.90	16.85	16.54	16.48	16.12	15.61	14.55	14.40	13.86	15.97	16.29
18	16.85	16.88	16.85	16.55	16.47	16.11	15.59	14.58	14.33	13.95	16.00	16.25
19	16.83	16.86	16.84	16.57	16.43	16.09	15.55	14.57	14.27	14.29	16.08	16.21
20	16.81	16.88	16.83	16.58	16.41	16.08	15.51	14.55	14.26	14.70	16.12	16.18
21	16.79	16.86	16.82	16.56	16.39	16.04	15.48	14.54	14.35	14.72	16.16	16.23
22	16.77	16.84	16.80	16.55	16.37	16.02	15.44	14.48	14.42	14.63	16.19	16.39
23	16.75	16.83	16.79	16.55	16.32	16.00	15.40	14.40	14.64	14.61	16.24	16.47
24	16.74	16.81	16.78	16.53	16.30	15.98	15.35	14.33	14.77	14.55	16.27	16.51
25	16.74	16.79	16.79	16.51	16.36	15.96	15.32	14.20	14.78	14.52	16.32	16.52
26	16.75	16.79	16.78	16.49	16.48	15.95	15.26	14.11	14.62	14.66	16.35	16.51
27	16.72	16.77	16.77	16.49	16.55	15.90	15.22	14.17	14.53	14.71	16.38	16.70
28	16.70	16.76	16.76	16.52	16.61	15.86	15.21	14.21	14.40	14.76	16.42	16.49
29	---	16.78	16.74	16.50	16.58	15.84	15.18	14.14	14.38	14.94	16.46	16.47
30	16.72	16.74	16.73	16.51	---	15.82	15.15	14.02	14.27	15.09	16.45	16.47
31	16.71	---	16.72	16.61	---	15.77	---	13.90	---	15.02	16.44	---
TOTAL	---	505.94	519.34	514.31	479.92	499.59	465.03	452.61	427.87	440.29	495.68	491.64
MEAN	---	16.86	16.75	16.59	16.55	16.12	15.50	14.60	14.26	14.20	15.99	16.39
MAX	---	17.03	16.86	16.71	16.75	16.52	15.75	15.14	14.78	15.09	16.46	16.70
MIN	---	16.69	16.67	16.49	16.30	15.77	15.15	13.90	13.54	13.56	15.14	16.13

262300080220001 HILLSBORO CANAL AT S-10-D, NEAR DEERFIELD BEACH, FL-Continued

DOWNSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.38	12.99	12.81	12.58	12.61	12.40	12.05	12.03	---	11.58	11.96	12.93
2	13.39	12.96	12.79	12.58	12.58	12.38	12.03	12.02	---	11.56	12.10	13.81
3	13.41	13.05	12.80	12.57	12.55	12.37	12.02	12.01	---	11.53	12.07	14.41
4	13.41	13.04	12.81	12.57	12.53	12.37	12.02	12.06	---	11.52	12.03	14.32
5	13.43	13.08	12.78	12.56	12.55	12.37	12.01	12.03	---	11.53	12.03	14.50
6	13.44	13.18	12.75	12.54	12.54	12.34	12.02	12.01	---	11.55	12.05	14.50
7	13.44	13.20	12.74	12.50	12.48	12.31	12.02	11.99	---	11.61	12.08	15.00
8	13.43	13.19	12.74	12.51	12.42	12.27	12.01	11.98	---	11.59	12.11	15.45
9	13.42	13.16	12.74	12.51	12.43	12.26	12.04	11.95	---	11.57	12.15	15.50
10	13.41	13.15	12.76	12.48	12.43	12.24	12.13	11.93	11.60	11.54	12.18	15.80
11	13.40	13.14	12.75	12.43	12.44	12.22	12.18	11.93	11.62	11.53	12.24	15.97
12	13.39	13.12	12.74	12.46	12.43	12.23	12.21	11.91	11.62	11.55	13.27	15.94
13	13.37	13.10	12.74	12.46	12.42	12.23	12.27	11.89	11.62	11.61	14.23	15.90
14	13.36	13.07	12.76	12.46	12.43	12.23	12.21	11.86	11.61	11.59	14.23	15.86
15	13.34	13.07	12.78	12.45	12.41	12.24	12.18	11.84	11.60	11.57	14.18	15.57
16	13.32	13.06	12.78	12.45	12.38	12.27	12.16	11.86	11.60	11.61	14.16	15.26
17	13.30	13.05	12.73	12.46	12.37	12.26	12.15	11.86	11.58	11.69	14.16	15.20
18	13.27	13.04	12.71	12.50	12.33	12.25	12.12	11.83	11.57	11.68	13.73	15.16
19	13.23	13.01	12.70	12.53	12.34	12.22	12.10	11.80	11.57	11.67	13.15	15.14
20	13.21	12.97	12.68	12.50	12.36	12.22	12.09	11.79	11.66	11.67	13.02	15.12
21	13.19	12.97	12.66	12.49	12.36	12.18	12.08	11.77	11.78	11.66	12.94	15.12
22	13.16	12.97	12.66	12.48	12.35	12.15	12.08	11.75	11.75	11.65	12.90	15.12
23	13.14	12.96	12.67	12.45	12.35	12.13	12.08	11.73	11.73	11.63	12.86	15.09
24	13.12	12.94	12.67	12.45	12.35	12.13	12.07	11.71	11.72	11.63	12.84	15.10
25	13.12	12.93	12.64	12.46	12.37	12.14	12.05	11.68	11.70	11.61	12.83	15.09
26	13.10	12.92	12.63	12.46	12.44	12.14	12.03	---	11.68	11.60	12.82	15.22
27	13.08	12.91	12.63	12.47	12.39	12.12	12.00	---	11.66	11.59	12.82	15.62
28	13.05	12.89	12.62	12.43	12.35	12.11	11.98	---	11.62	11.59	12.85	16.16
29	---	12.81	12.62	12.43	12.38	12.09	12.01	---	11.60	11.63	12.94	16.17
30	13.04	12.82	12.61	12.44	---	12.08	12.03	---	11.60	11.64	12.95	16.18
31	13.02	---	12.59	12.54	---	12.08	---	---	---	11.69	12.94	---
TOTAL	---	390.75	394.09	387.20	360.37	379.03	362.43	---	---	359.67	398.82	456.21
MEAN	---	13.03	12.71	12.49	12.43	12.23	12.08	---	---	11.60	12.87	15.21
MAX	---	13.20	12.81	12.58	12.61	12.40	12.27	---	---	11.69	14.23	16.18
MIN	---	12.81	12.59	12.43	12.33	12.08	11.98	---	---	11.52	11.96	12.93

262200080210001 HILLSBORO CANAL AT S-10-C, NEAR DEERFIELD BEACH, FL

LOCATION.--Lat 26°22'16", long 80°21'00", in NW ¼ sec.14, T.47 S., R.40 E., Palm Beach County, Hydrologic Unit 03090202, on Hillsboro Canal on the north bank of the spillway 200 ft northeast of S-10-C, a four-gated control structure, 9.6 mi west of State Road 7 (U.S. Highway 441) on Hillsboro Boulevard. The auxiliary stage recorder is located approximately 20 yards downstream of S-10-C on the south bank of the spillway.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--June 1991 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoders upstream and downstream of structure S-10-C. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark).

REMARKS.--Station is one of several located on L-39 which regulates flow for Conservation Areas 1 and 2A. Gage records are primarily used to determine stages. Water levels below land-surface datum can be recorded.

EXTREME UPSTREAM STAGES FOR PERIOD OF RECORD.--Maximum gage height, 17.82 ft Dec. 15, 1997; minimum, 11.79 ft May 22, 23, 2001.

EXTREME DOWNSTREAM STAGES FOR PERIOD OF RECORD.--Maximum gage height, 16.92 ft Oct. 15, 1999; minimum, 11.45 ft May 22, 2001.

EXTREME UPSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 17.16 ft Oct. 2, 3; minimum, 13.34 ft June 5.

EXTREME DOWNSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 16.11 ft Sept. 29, 30; minimum, 11.50 ft June 3, 4.

UPSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.13	16.71	16.75	16.73	16.70	16.48	15.75	15.13	13.75	14.15	15.11	16.45
2	17.14	16.71	16.75	16.72	16.71	16.45	15.74	15.09	13.54	14.03	15.22	16.39
3	17.14	16.72	16.71	16.72	16.72	16.42	15.70	15.08	13.48	13.87	15.29	16.29
4	17.13	16.75	16.68	16.70	16.73	16.38	15.67	15.15	13.42	13.77	15.39	16.35
5	17.09	16.83	16.69	16.69	16.70	16.32	15.64	15.15	13.44	13.81	15.52	16.21
6	17.07	16.95	16.77	16.69	16.67	16.29	15.59	15.10	13.50	13.84	15.63	16.49
7	17.03	17.00	16.75	16.72	16.67	16.26	15.55	14.98	13.62	13.78	15.71	16.52
8	17.02	17.00	16.72	16.68	16.69	16.24	15.50	14.93	13.67	13.64	15.78	16.40
9	17.01	17.01	16.71	16.65	16.64	16.19	15.52	14.88	13.84	13.50	15.84	16.45
10	16.98	17.04	16.70	16.66	16.61	16.14	15.55	14.81	14.12	13.56	15.87	16.23
11	16.94	17.04	16.72	16.68	16.58	16.10	15.55	14.73	14.33	13.70	15.89	16.03
12	16.92	17.01	16.72	16.63	16.55	16.09	15.56	14.64	14.39	13.77	15.89	15.98
13	16.90	16.99	16.71	16.61	16.54	16.09	15.61	14.58	14.40	13.90	15.84	15.93
14	16.88	16.98	16.72	16.60	16.50	16.07	15.68	14.56	14.39	13.92	15.84	15.87
15	16.90	16.95	16.82	16.60	16.50	16.03	15.68	14.51	14.36	---	15.87	15.91
16	16.88	16.93	16.86	16.58	16.50	16.04	15.65	14.51	14.33	13.75	15.87	16.08
17	16.86	16.91	16.87	16.56	16.47	16.10	15.62	14.52	14.29	13.87	15.90	16.10
18	16.86	16.90	16.88	16.57	16.48	16.10	15.59	14.54	14.20	13.93	15.95	16.09
19	16.84	16.87	16.88	16.59	16.43	16.08	15.55	14.51	14.17	14.03	16.01	16.06
20	16.82	16.90	16.87	16.59	16.40	16.06	15.53	14.48	14.20	14.34	16.06	16.03
21	16.80	16.88	16.87	16.57	16.39	16.03	15.48	14.47	14.29	14.53	16.10	16.05
22	16.78	16.86	16.84	16.56	16.38	16.02	15.44	14.38	14.36	14.55	16.14	16.21
23	16.76	16.84	16.82	16.56	16.33	16.00	15.40	14.31	14.45	14.55	16.20	16.28
24	16.74	16.83	16.80	16.55	16.30	15.97	15.36	14.21	14.56	14.52	16.22	16.31
25	16.75	16.81	16.82	16.52	16.34	15.94	15.32	14.10	14.59	14.50	16.27	16.29
26	16.74	16.80	16.81	16.49	16.45	15.92	15.26	13.95	14.54	14.55	16.31	16.34
27	---	16.79	16.80	16.50	16.50	15.88	15.23	14.06	14.49	14.63	16.34	16.48
28	16.70	16.78	16.78	16.55	16.54	15.86	15.21	14.13	14.38	14.67	16.39	16.25
29	---	16.82	16.76	16.52	16.53	15.84	15.17	14.08	14.32	14.77	16.44	16.23
30	16.73	16.76	16.75	16.52	---	15.82	15.15	13.97	14.26	14.90	16.45	16.22
31	16.71	---	16.74	16.61	---	15.78	---	13.84	---	14.95	16.45	---
TOTAL	---	506.37	520.07	514.92	479.55	498.99	465.25	451.38	423.68	---	493.79	486.52
MEAN	---	16.88	16.78	16.61	16.54	16.10	15.51	14.56	14.12	---	15.93	16.22
MAX	---	17.04	16.88	16.73	16.73	16.48	15.75	15.15	14.59	---	16.45	16.52
MIN	---	16.71	16.68	16.49	16.30	15.78	15.15	13.84	13.42	---	15.11	15.87

262200080210001 HILLSBORO CANAL AT S-10-C, NEAR DEERFIELD BEACH, FL-Continued

DOWNSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.39	12.96	12.85	12.60	12.61	12.39	12.08	12.01	11.58	11.61	11.99	12.95
2	13.39	12.95	12.83	12.59	12.58	12.37	12.06	12.00	11.55	11.58	12.13	13.82
3	13.41	13.03	12.83	12.59	12.55	12.36	12.05	12.00	11.52	11.56	12.09	14.43
4	13.42	13.03	12.84	12.59	12.52	12.36	12.04	12.05	11.54	11.56	12.05	14.41
5	13.43	13.09	12.82	12.58	12.53	12.36	12.04	12.02	11.59	11.56	12.06	14.52
6	13.43	13.20	12.80	12.56	12.52	12.33	12.04	11.99	11.57	11.59	12.08	14.51
7	13.43	13.23	12.78	12.51	12.48	12.31	12.05	11.98	---	11.66	12.11	14.90
8	13.43	13.21	12.79	12.51	12.42	12.28	12.04	11.96	---	11.62	12.14	15.35
9	13.41	13.19	12.78	12.51	12.43	12.26	12.06	11.94	---	11.59	12.17	15.39
10	13.40	13.18	12.80	12.48	12.43	12.25	12.15	11.92	---	11.57	12.19	15.69
11	13.39	13.16	12.78	12.44	12.43	12.23	12.20	11.91	---	11.55	12.25	15.89
12	13.38	13.15	12.77	12.46	12.43	12.23	12.20	11.89	---	11.56	13.20	15.86
13	13.36	13.13	12.76	12.46	12.42	12.23	12.25	11.87	---	11.60	14.13	15.81
14	13.35	13.10	12.79	12.46	12.43	12.22	12.20	11.84	---	11.58	14.14	15.77
15	13.33	13.10	12.81	12.45	12.41	12.24	12.17	11.83	11.59	---	14.11	15.54
16	13.31	13.09	12.80	12.45	12.38	12.26	12.14	11.85	11.58	11.59	14.09	15.25
17	13.28	13.08	12.77	12.46	12.37	12.26	12.14	11.84	11.56	11.62	14.12	15.19
18	13.25	13.07	12.74	12.49	12.34	12.24	12.11	11.82	11.56	11.64	13.73	15.15
19	13.22	13.05	12.73	12.53	12.34	12.22	12.10	11.80	11.56	11.65	13.18	15.13
20	13.21	13.01	12.71	12.50	12.36	12.21	12.08	11.78	11.66	11.66	13.05	15.11
21	13.18	13.00	12.68	12.48	12.35	12.18	12.07	11.76	11.80	11.63	12.97	15.09
22	13.15	13.00	12.69	12.48	12.34	12.16	12.07	11.75	11.77	11.62	12.92	15.08
23	13.13	12.98	12.70	12.45	12.34	12.13	12.06	11.73	11.75	11.60	12.89	15.05
24	13.11	12.97	12.70	12.45	12.35	12.13	12.05	11.71	11.73	11.59	12.87	15.07
25	13.10	12.96	12.68	12.46	12.36	12.14	12.03	11.68	11.72	11.56	12.86	15.09
26	13.07	12.95	12.66	12.46	12.44	12.13	12.02	11.66	11.70	---	12.86	15.20
27	---	12.94	12.66	12.46	12.40	12.12	11.99	11.65	11.68	---	12.86	15.54
28	13.03	12.92	12.65	12.43	12.35	12.11	11.97	11.64	11.64	---	---	16.08
29	---	12.86	12.64	12.43	12.37	12.10	11.99	11.62	11.62	11.66	---	16.09
30	13.02	12.86	12.62	12.44	---	12.09	12.01	11.61	11.62	11.66	---	16.10
31	13.00	---	12.61	12.54	---	12.10	---	11.60	---	11.72	---	---
TOTAL	---	391.45	395.07	387.30	360.28	379.00	362.46	366.71	---	---	---	455.06
MEAN	---	13.05	12.74	12.49	12.42	12.23	12.08	11.83	---	---	---	15.17
MAX	---	13.23	12.85	12.60	12.61	12.39	12.25	12.05	---	---	---	16.10
MIN	---	12.86	12.61	12.43	12.34	12.09	11.97	11.60	---	---	---	12.95

262100080190001 HILLSBORO CANAL AT S-10-A, NEAR DEERFIELD BEACH, FL

LOCATION.--Lat 26°21'32", long 80°18'37", in NE ¼ sec.24, T.47 S., R.40 E., Palm Beach County, Hydrologic Unit 03090202, on Hillsboro Canal on the north bank of the spillway 200 ft northeast of S-10-A, a four-gated control structure, 6.9 mi west of State Road 7 (U.S. Highway 441) on Hillsboro Boulevard. The auxiliary stage recorder is located approximately 20 yards downstream of S-10-A on the south bank of the spillway.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--June 1991 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoders upstream and downstream of structure S-10-A. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark).

REMARKS.--Station is one of several located on L-39 which regulates flow for Conservation Areas 1 and 2A. Gage records are primarily used to determine stages. Water levels below land-surface datum can be recorded. Revised figures of downstream stage for water year 2000 are available in the files of the U.S. Geological Survey. These supersede those published in the water year 2000 report. Revisions were necessary due to new levels, run February 7, 2002.

EXTREME UPSTREAM STAGES FOR PERIOD OF RECORD.--Maximum gage height, 17.78 ft Dec. 14, 15, 1998; minimum gage height, 12.03 ft May 23, 2001.

EXTREME DOWNSTREAM STAGES FOR PERIOD OF RECORD.--Maximum gage height, 16.77 ft (estimated) Oct. 16, 1999; minimum, 11.43 ft May 22, 2001.

EXTREME UPSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 17.11 ft Oct. 1, 2; minimum, 13.32 ft June 5.

EXTREME DOWNSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 16.03 ft Sept. 30; minimum, 11.50 ft June 4.

UPSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.10	16.69	16.74	16.72	16.67	16.46	15.76	15.10	13.74	14.13	15.09	---
2	---	16.70	16.73	16.71	16.69	16.43	15.74	15.08	13.53	14.01	15.21	16.38
3	---	16.72	16.70	16.71	16.70	16.40	15.71	15.08	13.47	13.86	15.28	16.29
4	---	16.74	16.66	16.69	16.71	16.35	15.67	15.16	13.41	13.76	15.38	16.44
5	---	16.82	16.68	16.68	16.67	16.30	15.63	15.13	13.43	13.81	15.50	16.34
6	17.08	16.94	16.77	16.68	16.64	16.28	15.57	15.05	13.49	13.83	---	16.47
7	17.05	16.99	16.75	16.71	16.65	16.26	15.53	14.97	13.62	13.77	15.69	16.51
8	17.03	17.00	16.72	---	16.67	16.24	15.49	14.92	13.65	13.63	15.76	16.42
9	17.01	17.01	16.69	16.65	16.63	16.18	15.51	14.86	13.81	13.48	15.81	16.45
10	16.98	17.03	16.69	16.66	16.60	16.13	15.54	14.79	14.09	13.55	15.85	16.24
11	16.94	17.03	16.73	16.68	16.58	16.10	15.53	14.70	14.30	13.70	15.88	16.02
12	16.92	17.01	16.72	16.63	16.55	16.10	15.56	14.61	14.38	13.77	15.88	15.97
13	16.90	17.00	16.70	16.61	16.54	16.09	15.62	14.55	14.38	13.89	15.84	15.90
14	16.88	16.98	16.72	16.60	16.51	16.06	15.71	14.54	14.37	13.92	15.83	15.84
15	16.89	16.95	16.81	16.59	16.50	16.02	15.69	14.49	14.33	13.82	15.86	15.89
16	16.88	16.93	16.84	16.58	16.51	16.03	15.65	14.49	14.31	13.74	15.87	16.07
17	16.86	16.91	16.87	16.56	16.49	16.11	15.62	14.50	14.26	13.85	15.89	16.10
18	16.86	16.89	16.89	16.56	16.49	16.08	15.58	14.53	14.17	13.93	15.93	16.09
19	16.84	16.87	16.87	16.59	16.44	16.07	15.55	14.49	14.15	14.01	15.99	16.07
20	16.83	16.90	16.87	16.60	16.41	16.03	15.52	14.47	14.18	14.31	16.03	16.05
21	16.80	16.89	16.86	16.58	16.41	16.01	15.47	14.45	14.28	14.52	16.06	16.07
22	16.79	16.85	16.83	16.58	16.39	16.00	15.43	14.35	14.35	14.53	16.11	16.22
23	16.77	16.83	16.81	16.57	16.34	15.98	15.39	14.28	14.44	14.53	16.17	16.29
24	16.75	16.82	16.80	16.56	16.31	15.94	15.35	14.18	14.53	14.50	16.19	16.33
25	16.73	16.80	16.81	16.52	16.35	15.90	15.30	14.08	14.56	14.49	16.24	16.37
26	16.74	16.80	16.81	16.50	16.46	15.89	15.25	13.93	14.52	14.54	16.28	16.41
27	16.72	16.78	16.80	16.50	16.50	15.86	15.24	14.05	14.46	14.61	16.31	16.47
28	16.70	16.77	16.78	16.55	16.54	15.84	15.20	14.11	14.36	14.65	16.36	16.27
29	---	16.81	16.75	16.52	16.51	15.83	15.15	14.07	14.30	14.74	---	16.23
30	16.72	16.76	16.73	16.52	---	15.81	15.13	13.97	14.24	14.86	---	16.22
31	16.70	---	16.73	16.60	---	15.78	---	13.83	---	14.94	---	---
TOTAL	---	506.22	519.86	---	479.46	498.56	465.09	450.81	423.11	437.68	---	---
MEAN	---	16.87	16.77	---	16.53	16.08	15.50	14.54	14.10	14.12	---	---
MAX	---	17.03	16.89	---	16.71	16.46	15.76	15.16	14.56	14.94	---	---
MIN	---	16.69	16.66	---	16.31	15.78	15.13	13.83	13.41	13.48	---	---

262100080190001 HILLSBORO CANAL AT S-10-A, NEAR DEERFIELD BEACH, FL-Continued

DOWNSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.43	12.97	12.80	12.57	12.59	12.36	12.08	12.01	11.59	11.60	11.99	12.95
2	13.44	12.96	12.78	12.56	12.56	12.35	12.06	12.00	11.56	11.58	12.13	13.69
3	---	13.03	12.77	12.56	12.53	12.33	12.05	12.01	11.53	11.57	12.09	14.33
4	---	13.02	12.78	12.56	12.51	12.33	12.04	12.06	11.54	11.56	12.05	14.39
5	---	13.06	12.78	12.55	12.50	12.33	12.02	12.03	11.56	11.56	12.06	14.47
6	---	13.16	12.77	12.53	12.50	12.32	12.02	12.00	11.54	11.58	---	14.43
7	---	13.19	12.75	12.50	12.48	12.30	12.02	11.98	11.54	11.63	12.10	14.72
8	---	13.16	12.74	---	12.41	12.27	12.02	11.96	11.55	11.60	12.13	15.19
9	13.40	13.14	12.73	12.49	12.41	12.25	12.04	11.94	11.57	11.56	12.16	15.30
10	13.40	13.12	12.75	12.48	12.41	12.23	12.13	11.92	11.59	11.55	12.20	15.57
11	13.38	13.11	12.75	12.43	12.41	12.21	12.17	11.90	11.61	11.54	12.26	15.81
12	13.37	13.09	12.74	12.45	12.41	12.21	12.21	11.88	11.61	11.56	13.03	15.78
13	13.35	13.08	12.73	12.45	12.40	12.20	12.28	11.86	11.60	11.60	13.87	15.74
14	13.34	13.05	12.76	12.45	12.41	12.20	12.25	11.84	11.59	11.58	13.89	15.69
15	13.33	13.04	12.78	12.44	12.40	12.20	12.20	11.82	11.58	11.56	13.91	15.51
16	13.30	13.03	12.76	12.44	12.37	12.24	12.17	11.84	11.57	11.60	13.92	15.22
17	13.28	13.02	12.75	12.44	12.37	12.25	---	11.83	11.56	11.70	13.94	15.15
18	13.25	13.01	12.72	12.48	12.34	12.23	12.12	11.81	11.55	11.68	13.67	15.10
19	13.22	13.00	12.71	12.51	12.33	12.21	12.10	11.80	11.55	11.67	13.18	15.07
20	13.20	12.97	12.68	12.49	12.34	12.19	12.08	11.78	11.66	11.67	13.06	15.05
21	13.17	12.96	12.66	12.47	12.34	12.18	12.08	11.76	11.80	11.65	12.99	15.02
22	13.15	12.95	12.66	12.47	12.33	12.17	12.07	11.75	11.78	11.63	12.95	15.00
23	13.12	12.93	12.67	12.45	12.33	12.13	12.06	11.74	11.75	11.62	12.91	14.97
24	13.10	12.92	12.67	12.44	12.34	12.12	12.05	11.71	11.72	11.60	12.89	14.98
25	13.08	12.92	12.65	12.44	12.35	12.11	12.03	11.69	11.71	11.60	12.88	15.04
26	13.07	12.90	12.63	12.44	12.43	12.10	12.02	11.67	11.69	11.60	12.86	15.13
27	13.05	12.89	12.62	12.46	12.39	12.10	12.01	11.66	11.67	11.61	12.86	15.41
28	13.03	12.88	12.61	12.43	12.35	12.10	11.98	11.65	11.64	11.62	12.88	15.96
29	---	12.82	12.60	12.41	12.35	12.09	11.99	11.63	11.62	11.64	12.97	15.99
30	13.02	12.81	12.59	12.42	---	12.09	12.01	11.61	11.61	11.65	12.98	16.01
31	12.99	---	12.58	12.52	---	12.09	---	11.61	---	11.72	12.97	---
TOTAL	---	390.19	393.97	---	359.89	378.49	---	366.75	348.44	359.89	---	452.67
MEAN	---	13.01	12.71	---	12.41	12.21	---	11.83	11.61	11.61	---	15.09
MAX	---	13.19	12.80	---	12.59	12.36	---	12.06	11.80	11.72	---	16.01
MIN	---	12.81	12.58	---	12.33	12.09	---	11.61	11.53	11.54	---	12.95

262007080321500 S-150 AT TERRYTOWN, FL

LOCATION.--Lat 26°20'07", long 80°32'15", in NW 1/4 sec.27, T.47 S., R.38 E., Palm Beach County, Hydrologic Unit 03090202, 175 ft downstream of S-150, on the west side of U.S. Highway 27, 18.6 mi north of U.S. Interstate 595.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1990 to current year. Discontinued.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Prior to January 29, 2002, satellite data collection platform with water-stage shaft encoder and acoustic velocity meter. Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter installed May 24, 2001. The acoustic velocity meter and acoustic doppler velocity meter were run in tandem for the period of May 24, 2001 to January 29, 2002. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Discharge computed from relations between stage vs. area and index velocity vs. mean channel velocity. Flow regulated by sluice gates upstream at S-150. Flow occasionally reversed during and after periods of heavy rainfall by pumpage at S-7 which may draw water through S-150 gates.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 8 complete water years of discharge (1994-95, 1997-98, 2000, 2002-04).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 13.50 ft Nov. 2, 1999; minimum, 7.17 ft Apr. 18, 1991.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 12.64 ft Sept. 26; minimum, 7.67 ft June 3.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.94	11.40	10.86	10.40	10.32	9.83	9.02	8.63	7.82	8.14	10.79	11.20
2	11.93	11.37	10.83	10.37	10.57	9.79	8.97	8.61	7.78	8.18	10.55	11.21
3	11.93	11.42	10.81	10.35	10.54	9.74	8.95	8.67	8.46	8.19	10.31	11.24
4	11.92	11.41	10.82	10.33	10.61	9.72	8.92	8.93	9.06	8.24	10.08	11.28
5	11.91	11.46	10.78	10.30	10.65	9.71	8.88	---	8.01	8.26	10.13	11.58
6	11.90	11.56	10.77	10.26	10.67	9.65	8.87	8.78	8.00	8.31	10.23	11.62
7	11.89	11.57	10.74	10.18	10.66	9.59	8.86	8.75	8.61	8.30	10.34	11.65
8	11.88	11.54	10.71	10.17	10.52	9.52	8.85	8.73	9.98	8.29	10.45	11.70
9	11.86	11.51	10.69	10.16	10.25	9.50	8.79	8.68	10.11	8.26	10.35	11.75
10	11.85	11.49	10.70	10.10	10.27	9.45	8.77	8.67	9.85	8.21	10.45	11.78
11	11.84	11.46	10.72	10.05	---	9.40	8.83	8.64	9.34	8.26	10.37	11.82
12	11.82	11.42	10.72	10.07	10.04	9.37	9.37	8.60	8.26	8.31	10.39	11.85
13	11.80	11.39	10.72	10.06	10.01	9.33	9.61	8.55	8.16	8.22	10.51	11.88
14	11.80	11.36	10.81	10.06	10.04	9.30	9.62	8.51	8.55	8.16	10.60	11.92
15	11.78	11.34	11.06	10.03	9.99	9.31	10.61	8.48	9.43	8.14	10.82	11.96
16	11.75	11.31	10.84	10.02	9.95	9.32	9.64	8.45	8.99	8.71	10.79	12.00
17	11.72	11.28	10.88	10.03	9.92	9.24	9.00	8.44	8.66	10.69	10.78	12.03
18	11.70	11.26	11.00	10.05	9.85	9.28	8.95	8.39	8.94	10.72	10.81	12.09
19	11.67	11.24	10.80	10.06	9.85	9.26	8.93	8.37	9.09	10.42	10.87	12.14
20	11.64	11.21	---	10.04	9.84	9.24	8.90	8.32	10.04	---	10.89	---
21	11.62	11.17	10.70	10.03	9.82	9.22	8.90	8.28	10.07	10.35	10.90	12.22
22	11.59	11.14	10.67	10.02	9.79	9.18	8.88	8.19	9.44	10.41	10.93	12.22
23	11.57	11.11	10.65	10.0	9.79	9.12	8.82	8.13	8.31	10.49	10.98	12.22
24	11.54	11.08	10.62	9.99	10.06	9.10	8.81	8.05	8.15	10.65	11.00	12.22
25	11.52	11.05	10.58	10.01	10.03	9.09	8.77	8.00	8.05	10.65	11.05	---
26	11.50	11.03	10.56	10.01	10.04	9.09	8.78	8.01	8.00	10.62	11.12	12.53
27	11.47	11.00	10.53	10.01	9.88	9.09	8.70	8.00	7.87	10.72	11.21	12.47
28	11.45	10.98	10.51	9.93	9.80	9.08	8.60	7.97	7.78	10.68	11.19	12.43
29	11.46	10.93	10.49	9.95	9.82	9.05	8.62	7.93	7.75	10.18	11.20	---
30	---	10.90	10.46	10.28	---	9.07	8.64	7.90	7.84	10.59	11.20	12.52
31	11.42	---	10.42	10.50	---	9.08	---	7.86	---	10.45	11.21	---
TOTAL	---	338.39	---	313.82	---	289.72	269.86	---	260.40	---	332.50	---
MEAN	---	11.28	---	10.12	---	9.35	9.00	---	8.68	---	10.73	---
MAX	---	11.57	---	10.50	---	9.83	10.61	---	10.11	---	11.21	---
MIN	---	10.90	---	9.93	---	9.05	8.60	---	7.75	---	10.08	---

262007080321500 S-150 AT TERRYTOWN, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-3.4	13	15	34	82	28	9.2	24	17	15	231	-2.8
2	-1.7	9.1	15	32	268	27	9.3	23	17	15	12	-9.2
3	-1.8	19	22	30	239	26	11	23	255	13	13	-18
4	2.7	8.4	30	32	320	26	9.1	17	234	15	25	-8.5
5	-1.7	3.7	28	33	324	27	9.7	e15	12	14	30	17
6	-2.7	4.3	16	28	331	26	17	16	12	15	21	15
7	-3.0	-0.33	16	23	315	21	20	19	219	15	105	3.4
8	1.9	8.8	14	24	207	13	20	19	488	14	119	-4.6
9	3.1	12	20	28	113	15	18	18	496	13	119	-5.3
10	4.1	14	29	21	120	17	18	19	439	14	116	-1.9
11	-0.20	8.5	17	18	e35	17	20	19	258	12	45	4.6
12	-2.6	2.4	19	22	34	17	233	19	15	13	16	16
13	-2.4	0.79	30	21	30	19	177	18	13	15	18	13
14	-3.0	9.4	121	11	35	21	265	17	198	14	14	3.9
15	6.2	9.5	232	11	29	22	521	19	384	14	17	14
16	5.1	12	17	7.6	19	21	162	18	192	194	11	2.5
17	9.0	9.2	148	16	13	17	22	18	206	654	2.4	-11
18	6.9	32	230	18	16	20	24	18	182	604	2.4	-4.9
19	9.8	23	9.0	16	22	19	23	19	318	426	-0.49	-3.4
20	9.8	15	e4.6	10	27	19	25	18	488	e363	0.16	e0.40
21	2.7	6.3	3.4	10	26	21	26	20	477	475	-6.8	2.3
22	4.0	7.6	8.2	8.2	22	16	24	17	237	506	-5.6	9.3
23	8.9	10	15	9.6	28	14	27	18	16	510	1.0	1.0
24	10	9.7	13	11	190	18	28	19	14	571	-6.0	-0.72
25	13	5.7	15	21	118	19	27	19	13	541	0.03	e-1.6
26	14	28	14	31	68	19	26	18	12	510	-0.75	16
27	4.0	36	18	25	16	20	24	18	8.6	455	-5.0	-5.1
28	10	35	21	11	14	18	19	17	11	271	-2.6	-13
29	4.5	22	22	19	18	17	20	15	13	209	-2.9	e-0.01
30	e13	30	22	273	---	15	23	18	12	361	5.2	-7.3
31	13	---	32	194	---	16	---	16	---	311	-4.4	---
TOTAL	133.20	404.06	1,216.2	1,048.4	3,079	611	1,857.3	571	5,256.6	7,172	888.65	21.07
MEAN	4.30	13.5	39.2	33.8	106	19.7	61.9	18.4	175	231	28.7	0.70
MAX	14	36	232	273	331	28	521	24	496	654	231	17
MIN	-3.4	-0.33	3.4	7.6	13	13	9.1	15	8.6	12	-6.8	-18
AC-FT	264	801	2,410	2,080	6,110	1,210	3,680	1,130	10,430	14,230	1,760	42

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2004, BY WATER YEAR (WY)

MEAN	7.28	8.52	32.6	88.5	130	95.0	143	130	109	87.0	33.4	5.39
MAX	84.7	94.6	231	378	523	514	566	602	390	408	152	91.3
(WY)	(2003)	(1998)	(1997)	(2003)	(1992)	(1992)	(1992)	(1992)	(1992)	(2000)	(1998)	(1993)
MIN	-49.0	-50.0	-50.0	-50.0	-21.1	-13.7	-15.9	-0.92	-0.70	-22.1	-31.6	-52.0
(WY)	(1995)	(1995)	(1995)	(1995)	(1995)	(1995)	(1993)	(2000)	(1993)	(1992)	(1992)	(1992)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1991 - 2004

ANNUAL TOTAL	26,979.26	22,258.48	
ANNUAL MEAN	73.9	60.8	58.5
HIGHEST ANNUAL MEAN			101
LOWEST ANNUAL MEAN			-6.29
HIGHEST DAILY MEAN	590	Jan 14	850
LOWEST DAILY MEAN	-9.2	Sep 14	-108
ANNUAL SEVEN-DAY MINIMUM	-3.9	Sep 22	-82
ANNUAL RUNOFF (AC-FT)	53,510		44,150
10 PERCENT EXCEEDS	379		231
50 PERCENT EXCEEDS	15		17
90 PERCENT EXCEEDS	1.4		0.02

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

261952080074500 E-3 CANAL AT SW 18TH STREET, BOCA RATON, FL

LOCATION.--Lat 26°19'52", long 80°07'45", in SE ¼ NE ¼ NW ¼ sec.35, T.47 S., R.42 E., Palm Beach County, Hydrologic Unit 03090202, 0.7 mi west of U.S. Interstate 95, 1.5 mi south of Palmetto Park Road exit in Boca Raton.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--March 1982 to current year.

GAGE.--Electronic data logger. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Salinity monitoring was discontinued for water year 2001. Station is part of a canal system operated and controlled by Lake Worth Drainage District.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 11.79 ft May 4, 1982; minimum, 4.65 ft Sept. 15, 2004.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 10.22 ft Nov. 6; minimum, 4.65 ft Sept. 15.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.77	9.17	8.97	9.01	9.77	9.37	9.37	9.38	8.88	9.36	9.79	8.34
2	9.71	9.17	8.94	8.97	9.63	9.33	9.18	9.22	8.97	9.34	9.76	5.40
3	9.64	9.34	9.02	8.94	9.65	9.28	9.05	9.13	8.81	9.33	9.60	4.76
4	9.59	9.45	9.18	8.90	9.61	9.29	8.95	9.14	8.73	9.40	9.60	4.88
5	9.56	9.53	9.45	8.91	9.60	9.25	8.92	9.18	8.87	9.41	9.60	5.73
6	9.57	9.44	9.55	9.15	9.62	9.18	9.13	9.37	9.00	9.24	9.59	5.85
7	9.57	9.81	9.47	9.10	9.61	9.13	9.30	9.22	8.93	9.22	9.53	7.23
8	9.56	9.22	9.40	9.15	9.56	9.09	9.38	9.10	9.04	9.29	9.49	9.70
9	9.54	8.80	9.32	9.28	9.54	9.23	9.25	9.00	9.10	9.30	9.55	8.29
10	9.52	8.84	9.28	9.26	9.57	9.26	9.26	8.98	9.14	9.18	9.62	5.54
11	9.49	9.43	9.32	9.13	9.53	9.13	9.21	9.24	9.15	9.01	9.34	5.21
12	9.47	9.53	9.25	9.03	9.51	9.08	9.29	9.41	9.17	9.00	8.45	5.03
13	9.42	9.50	9.20	8.96	9.48	9.04	9.53	9.44	9.16	9.04	7.83	4.88
14	9.36	9.50	9.29	9.03	9.44	8.97	9.57	9.28	9.16	9.04	8.52	4.75
15	9.34	9.54	9.61	9.19	9.41	8.96	9.47	9.43	9.15	9.02	9.37	6.04
16	9.27	9.52	9.66	9.27	9.38	9.22	9.41	9.56	9.04	9.09	9.56	8.38
17	9.24	9.49	9.58	9.20	9.35	9.44	9.36	9.49	8.87	9.27	9.59	8.90
18	9.26	9.46	9.52	9.10	9.31	9.31	9.33	9.30	8.90	9.31	9.59	9.13
19	9.23	9.44	9.48	9.12	9.27	9.19	9.29	9.43	9.01	9.35	9.63	9.40
20	9.20	9.43	9.44	9.08	9.24	9.09	9.26	9.48	9.21	9.44	9.60	9.48
21	9.18	9.39	9.40	9.17	9.22	9.00	9.22	9.26	9.28	9.47	9.52	9.64
22	9.16	9.35	9.37	9.24	9.19	8.97	9.16	9.09	9.31	9.48	9.48	9.34
23	9.30	9.30	9.36	9.12	9.16	9.16	9.18	9.14	9.32	9.42	9.57	7.38
24	9.45	9.25	9.33	9.03	9.13	9.29	9.45	9.29	9.32	9.33	9.66	5.49
25	9.32	9.21	9.30	9.15	9.19	9.34	9.58	9.16	9.33	9.26	9.60	5.00
26	9.32	9.17	9.25	9.25	9.41	9.21	9.56	9.25	9.33	9.21	9.59	5.23
27	9.29	9.12	9.21	9.18	9.45	9.26	9.40	9.11	9.32	9.19	9.61	6.56
28	9.23	9.09	9.17	9.08	9.44	9.12	9.27	9.23	9.33	9.27	9.58	9.11
29	9.29	9.05	9.12	8.99	9.41	9.08	9.20	9.28	9.34	9.30	9.66	9.58
30	9.27	9.01	9.09	8.96	---	9.29	9.23	9.25	9.36	9.35	9.60	9.69
31	9.22	---	9.06	9.27	---	9.44	---	9.02	---	9.45	9.53	---
TOTAL	291.34	279.55	288.59	282.22	273.68	285.00	278.76	286.86	273.53	287.37	293.01	213.94
MEAN	9.40	9.32	9.31	9.10	9.44	9.19	9.29	9.25	9.12	9.27	9.45	7.13
MAX	9.77	9.81	9.66	9.28	9.77	9.44	9.58	9.56	9.36	9.48	9.79	9.70
MIN	9.16	8.80	8.94	8.90	9.13	8.96	8.92	8.98	8.73	9.00	7.83	4.75

261710080190001 SITE 19 IN CONSERVATION AREA 2A NEAR CORAL SPRINGS, FL

LOCATION.--Lat 26°16'55", long 80°18'23", T.48 S., R.40 E., Broward County, Hydrologic Unit 03090202, in Conservation Area 2A near Coral Springs. Station is located approximately 0.5 mi west of the Sawgrass Expressway and 1 mi north of Sample Road in line with the water tower in Coral Springs. No section could be determined from existing maps.

DRAINAGE AREA.--Indeterminate.

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

GAGE.--Satellite data collection platform with water-stage shaft encoder and tipping bucket rain gage. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Land surface is approximately 10.60 ft above National Geodetic Vertical Datum of 1929. Station is one of several located in Conservation Area 2A. Rainfall data available in files of the U.S. Geological Survey. The rainfall record was discontinued September 30, 2003.

COOPERATION.--U.S. Army Corps of Engineers.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 15.33 ft Dec. 9, 10, 1994; minimum, 10.83 ft July 1-4.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 14.17 ft Sept. 30; minimum, 10.83 ft July 1-4.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	12.82	12.52	11.69	11.57	11.30	10.98	10.98	10.90	10.83	---	12.86
2	---	12.81	12.49	11.67	11.58	11.28	10.97	10.97	10.90	10.83	---	12.86
3	---	12.86	12.46	11.64	11.56	11.27	10.97	10.99	10.89	10.83	---	12.89
4	---	12.87	12.46	11.63	11.55	11.26	10.97	11.06	10.89	10.84	---	13.09
5	---	12.91	12.43	11.61	11.53	11.24	10.96	11.04	10.89	10.86	---	13.54
6	---	13.01	12.42	11.59	11.52	11.23	10.95	11.02	10.89	10.86	---	13.50
7	---	13.05	12.38	11.57	11.52	11.22	10.95	11.00	10.89	10.87	12.14	13.49
8	13.23	13.04	12.35	11.55	11.49	11.21	10.95	10.99	10.89	10.87	12.19	13.54
9	13.31	13.04	12.32	11.52	11.48	11.20	10.96	10.99	10.89	10.87	12.24	13.62
10	13.30	13.03	12.30	11.51	11.46	11.19	11.01	10.98	10.89	10.87	12.33	13.68
11	13.28	13.01	12.29	11.49	11.44	11.17	11.02	10.97	10.89	10.87	12.40	13.74
12	13.26	12.99	12.25	11.47	11.43	11.16	11.07	10.97	10.88	10.87	12.44	13.84
13	13.24	12.97	12.22	11.46	11.41	11.14	11.17	10.96	10.88	10.87	12.50	13.91
14	13.21	12.95	12.21	11.44	11.39	11.13	11.19	10.95	10.87	10.87	12.49	13.97
15	13.20	12.93	12.20	11.43	11.38	11.13	11.16	10.95	10.87	10.87	12.51	14.04
16	13.17	12.91	12.16	11.41	11.37	11.14	11.14	10.96	10.87	10.87	12.55	14.07
17	13.14	12.89	12.13	11.40	11.35	11.17	11.12	10.95	10.87	10.87	12.58	14.04
18	13.12	12.87	12.09	11.41	11.33	11.16	11.10	10.95	10.86	10.87	12.63	14.02
19	13.09	12.85	12.06	11.45	11.31	11.14	11.08	10.95	10.86	10.87	12.66	13.99
20	13.06	12.84	12.02	11.44	11.30	11.12	11.07	10.95	10.87	10.89	12.67	13.96
21	13.03	12.82	11.99	11.44	11.28	11.10	11.06	10.95	10.87	10.89	12.69	13.97
22	13.00	12.80	11.96	11.42	11.28	11.09	11.05	10.94	10.87	10.89	12.70	13.90
23	12.98	12.78	11.94	11.41	11.26	11.08	11.03	10.93	10.86	10.89	12.73	13.84
24	12.94	12.75	11.91	11.40	11.25	11.06	11.02	10.93	10.86	10.89	12.74	13.79
25	12.90	12.73	11.88	11.38	11.27	11.05	11.01	10.93	10.86	10.89	12.74	13.83
26	12.88	12.69	11.85	11.37	11.36	11.04	10.99	10.92	10.85	10.89	12.74	14.09
27	12.86	12.66	11.83	11.37	11.36	11.02	10.99	10.92	10.85	10.90	12.75	13.96
28	12.83	12.62	11.80	11.38	11.33	11.01	10.99	10.91	10.85	---	12.78	13.95
29	12.87	12.59	11.77	11.36	11.32	11.00	10.99	10.91	10.84	---	12.94	14.05
30	---	12.55	11.74	11.36	---	10.99	10.99	10.91	10.84	---	12.88	14.15
31	12.84	---	11.71	11.46	---	10.99	---	10.91	---	---	12.87	---
TOTAL	---	385.64	376.14	355.73	330.68	345.29	330.91	339.74	326.19	---	---	412.18
MEAN	---	12.85	12.13	11.48	11.40	11.14	11.03	10.96	10.87	---	---	13.74
MAX	---	13.05	12.52	11.69	11.58	11.30	11.19	11.06	10.90	---	---	14.15
MIN	---	12.55	11.71	11.36	11.25	10.99	10.95	10.91	10.84	---	---	12.86

261300080280001 NORTH NEW RIVER CANAL AT S-11-C, NEAR ANDYTOWN, FL

LOCATION.--Lat 26°13'43", long 80°27'37", in NE ¼ sec.32, T.48 S., R.37 E., Broward County, Hydrologic Unit 03090202, in North New River Canal on the east bank of the spillway, 100 ft southeast of S-11-C, a four-gated control structure, 5.9 mi north of State Road 84 on U.S. Highway 27. The auxiliary stage recorder is located approximately 30 yards downstream of structure S-11-C on the west bank of the spillway.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--May 1991 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoders upstream and downstream of structure S-11-C. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark).

REMARKS.--Station is one of several located on Levee 38W which regulates flow for Conservation Areas 2A and 3A. Gage records are primarily used to determine stages.

COOPERATION.--U.S. Army Corps of Engineers.

EXTREME UPSTREAM STAGES FOR PERIOD OF RECORD.--Maximum gage height, 14.90 ft Dec. 22, 1994; minimum, 9.64 ft May 22, 2001.

EXTREME DOWNSTREAM STAGES FOR PERIOD OF RECORD.--Maximum gage height, 13.93 ft Dec. 12, 1994; minimum, indeterminate, many days during the 2001, 2002, 2004 water years when well went dry.

EXTREME UPSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 13.51 ft Oct. 3; minimum, 10.22 ft Jan. 9.

EXTREME DOWNSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 12.87 ft Sept. 30; minimum, indeterminate, well was dry for many days.

REVISIONS.--Revised figures of downstream gage height for the 2002, 2003 water years superseding the 2002, 2003 reports are provided below.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.75	11.52	11.14	10.59	10.21	10.17	9.12	8.49	8.50	e10.65	11.63	11.29
2	11.79	11.56	11.11	10.61	10.20	10.21	9.16	8.45	8.45	e10.82	11.60	11.30
3	11.88	11.62	11.07	10.62	10.21	10.20	9.14	8.38	8.54	e10.92	11.57	11.30
4	11.98	11.62	11.03	10.59	10.18	10.18	9.07	8.31	8.64	e11.11	11.54	11.32
5	11.98	11.69	10.99	10.57	10.16	10.12	9.08	8.25	8.52	e11.22	11.52	11.33
6	12.01	11.66	10.96	10.56	10.15	10.04	9.00	8.20	8.51	11.28	11.50	11.32
7	12.01	11.63	10.98	10.56	10.16	10.07	8.95	8.17	8.59	11.30	11.48	11.30
8	12.00	11.62	10.97	10.53	10.11	10.11	8.92	8.14	8.67	11.36	11.49	11.29
9	11.96	11.60	10.93	10.51	10.09	10.06	8.89	8.10	8.77	11.44	11.48	11.27
10	11.90	11.58	10.90	10.49	10.15	10.01	8.87	8.06	8.68	11.51	11.47	11.26
11	11.87	11.57	10.88	10.49	10.23	9.97	8.84	8.03	8.70	11.57	11.45	11.29
12	11.79	11.55	10.84	10.47	10.21	9.97	8.86	e8.04	8.72	11.70	11.43	11.39
13	11.66	11.56	10.80	10.46	10.18	9.93	8.80	---	8.90	11.88	11.41	11.39
14	11.61	11.60	10.77	10.46	10.19	9.88	8.80	---	e8.91	11.93	11.39	11.42
15	11.58	11.60	10.74	10.46	10.22	9.84	8.91	---	e9.19	12.00	11.39	11.40
16	11.56	11.60	10.70	10.48	10.23	9.79	8.85	e8.03	e9.48	12.06	11.37	11.38
17	11.50	11.59	10.68	10.47	10.26	9.74	8.83	e8.04	e9.55	12.06	11.36	11.36
18	11.43	11.58	10.66	10.45	10.27	9.70	8.81	---	e9.57	12.07	11.35	11.34
19	11.46	11.57	10.64	10.43	10.26	9.69	8.79	---	e9.50	12.08	11.34	11.32
20	11.45	11.56	10.61	10.41	10.24	9.60	8.77	8.45	9.54	12.08	11.34	11.31
21	11.48	11.54	10.60	10.39	10.22	9.55	8.76	8.64	9.65	12.07	11.35	11.33
22	11.55	11.53	10.60	10.38	10.23	9.49	8.74	8.53	9.73	12.08	11.40	e11.35
23	11.56	11.51	10.58	10.38	10.31	9.43	8.71	8.28	9.78	12.07	11.39	e11.33
24	11.55	11.49	10.57	10.37	10.32	9.38	8.66	8.33	9.89	12.10	11.37	e11.32
25	11.58	11.47	10.56	10.36	10.32	9.33	8.64	8.21	10.06	12.09	11.35	e11.31
26	11.63	11.45	10.57	10.33	10.30	9.31	8.62	8.13	10.20	12.01	11.32	11.26
27	11.59	11.40	10.58	10.31	10.26	9.34	8.59	8.07	e10.31	11.85	11.32	11.22
28	11.54	11.35	10.56	10.30	10.20	9.28	8.56	8.03	e10.37	11.81	11.31	11.19
29	11.51	11.31	10.54	10.26	---	9.26	8.53	8.17	e10.46	11.78	11.29	11.16
30	11.50	11.23	10.51	10.25	---	9.20	8.50	8.19	e10.50	11.73	11.29	11.13
31	11.52	---	10.53	10.23	---	9.16	---	8.37	---	11.67	11.29	---
TOTAL	362.18	346.16	333.60	323.77	286.07	302.01	264.77	---	278.88	362.30	353.79	339.18
MEAN	11.68	11.54	10.76	10.44	10.22	9.74	8.83	---	9.30	11.69	11.41	11.31
MAX	12.01	11.69	11.14	10.62	10.32	10.21	9.16	---	10.50	12.10	11.63	11.42
MIN	11.43	11.23	10.51	10.23	10.09	9.16	8.50	---	8.45	10.65	11.29	11.13

e Estimated

REVISED

261300080280001 NORTH NEW RIVER CANAL AT S-11-C, NEAR ANDYTOWN, FL-Continued

DOWNSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.14	10.48	10.19	10.49	10.13	10.06	9.53	9.59	10.90	11.24	---	11.70
2	11.11	10.46	10.18	10.47	10.13	10.02	9.51	9.54	10.91	11.24	11.05	11.76
3	11.09	10.43	10.16	10.49	10.12	9.91	9.49	9.52	10.89	11.24	11.06	11.74
4	11.08	10.41	10.16	10.47	10.11	9.89	9.47	9.52	10.75	11.25	11.05	11.72
5	11.06	10.39	10.15	10.44	10.10	9.85	9.44	9.51	10.79	11.25	11.05	11.76
6	11.03	10.39	10.14	10.42	10.10	9.78	9.41	9.50	10.80	11.26	11.06	11.85
7	11.00	10.36	10.11	10.39	10.09	9.71	9.38	9.47	10.79	11.24	11.08	11.88
8	10.98	10.34	10.10	10.39	10.07	9.66	9.36	9.43	10.80	11.23	11.07	11.88
9	10.96	10.31	10.20	10.38	10.06	9.64	9.38	9.40	10.83	11.21	---	11.87
10	10.94	10.28	10.40	10.36	10.05	9.60	9.33	9.37	10.85	11.19	---	11.86
11	10.92	10.26	10.44	10.34	10.03	9.57	9.31	9.34	10.86	11.16	---	11.84
12	10.91	10.24	10.53	10.32	10.01	9.55	9.25	9.30	10.86	---	---	11.83
13	10.89	10.23	10.57	10.31	10.0	---	9.20	9.28	10.85	11.13	11.18	11.84
14	10.87	---	10.62	10.35	9.98	9.54	9.15	9.39	10.84	11.12	11.19	11.83
15	10.88	---	10.60	10.34	9.89	9.50	9.10	9.40	10.83	11.15	11.20	11.82
16	10.88	10.23	10.58	10.32	9.86	9.51	9.08	9.36	10.82	11.11	11.26	11.81
17	10.84	10.39	10.58	10.32	9.87	9.70	9.14	9.31	10.82	11.07	11.32	11.79
18	10.82	10.36	10.57	10.30	9.85	9.73	9.21	9.29	10.84	11.05	11.38	11.75
19	10.80	10.33	10.57	10.28	9.81	9.73	9.24	9.28	10.89	11.04	---	11.73
20	10.77	10.33	10.61	10.27	9.88	9.70	9.23	9.26	10.95	11.04	---	---
21	10.74	10.37	10.66	10.26	10.04	9.74	9.21	9.21	10.99	11.02	11.47	---
22	10.71	---	10.66	10.25	10.05	9.70	9.21	9.32	11.02	11.02	11.52	---
23	10.67	---	10.64	10.21	10.03	9.68	9.18	9.51	11.06	11.06	11.59	---
24	10.65	10.29	10.63	10.17	9.99	9.64	9.16	9.59	11.09	11.03	11.60	---
25	10.64	10.28	10.63	10.18	9.98	9.62	9.22	9.68	11.11	11.01	11.61	11.63
26	---	10.27	10.60	10.18	10.00	9.60	9.26	9.72	---	11.00	11.61	11.66
27	10.61	10.26	10.58	10.17	10.03	9.61	---	9.80	---	10.98	11.62	11.68
28	10.58	---	10.56	10.17	10.08	9.69	---	10.25	11.23	10.98	11.64	11.75
29	10.55	---	10.53	10.16	---	---	---	10.58	11.24	11.00	11.66	11.87
30	10.54	10.21	10.50	10.15	---	---	9.51	10.76	11.24	11.01	11.66	11.96
31	10.50	---	10.49	10.14	---	---	---	10.89	---	---	11.67	---
TOTAL	---	---	323.94	319.49	280.34	---	---	297.37	---	---	---	---
MEAN	---	---	10.45	10.31	10.01	---	---	9.59	---	---	---	---
MAX	---	---	10.66	10.49	10.13	---	---	10.89	---	---	---	---
MIN	---	---	10.10	10.14	9.81	---	---	9.21	---	---	---	---

REVISED

261300080280001 NORTH NEW RIVER CANAL AT S-11-C, NEAR ANDYTOWN, FL-Continued

UPSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.46	12.89	12.55	11.02	11.14	11.57	10.79	10.72	10.55	10.76	11.84	12.82
2	13.50	12.87	12.52	10.94	11.28	11.56	10.78	10.71	10.54	10.78	12.05	12.75
3	13.50	12.92	12.50	10.85	11.34	11.54	10.76	10.69	10.57	10.75	12.14	12.67
4	13.49	12.93	12.48	10.75	11.35	11.50	10.74	10.80	10.51	10.75	12.25	12.67
5	13.49	13.00	12.45	10.64	11.35	11.46	10.73	10.82	10.46	10.77	12.33	12.75
6	13.47	13.10	12.44	10.52	11.34	11.42	10.73	10.81	10.42	10.75	12.36	12.95
7	13.45	13.15	12.40	10.41	11.32	11.37	10.72	10.77	10.50	10.71	12.41	12.75
8	13.42	13.15	12.36	10.33	11.29	11.36	10.71	10.77	10.79	10.67	12.47	12.22
9	13.40	13.14	12.31	10.27	11.27	11.42	10.71	10.78	10.90	10.64	12.53	12.22
10	13.38	13.12	12.25	10.36	11.23	11.46	10.73	10.78	10.93	10.63	12.55	12.25
11	13.35	13.11	12.16	10.41	11.18	11.50	10.75	10.76	10.83	10.65	12.54	12.30
12	13.33	13.09	12.08	10.41	11.13	11.51	10.77	10.74	10.78	10.70	12.47	12.35
13	13.30	13.06	12.01	10.38	11.08	11.45	---	10.71	10.75	10.73	12.34	12.40
14	13.27	13.04	11.98	10.33	11.04	11.39	---	10.69	10.71	10.76	12.30	12.47
15	13.25	13.02	11.99	10.31	11.01	11.33	10.95	10.70	10.67	10.77	12.35	12.52
16	13.22	13.00	11.97	10.34	11.00	11.29	10.95	10.72	10.66	10.82	12.40	12.57
17	13.19	12.98	11.91	10.38	10.96	11.29	10.95	10.72	10.69	10.89	12.44	12.61
18	13.16	12.96	11.86	10.44	10.88	11.24	10.95	10.72	10.61	10.93	12.48	12.68
19	13.13	12.94	11.79	10.54	10.82	11.21	10.94	10.70	10.66	11.03	12.51	12.68
20	13.10	12.92	11.73	10.56	10.79	11.15	10.92	10.69	10.78	11.15	12.55	12.68
21	13.06	12.90	11.65	10.54	10.81	11.07	10.91	10.69	10.79	11.13	12.56	12.68
22	13.03	12.88	11.60	10.50	10.83	10.99	10.88	10.67	10.81	11.13	12.60	12.67
23	12.99	12.85	11.57	10.47	10.85	10.98	10.84	10.67	10.82	11.13	12.67	12.64
24	12.96	12.83	11.53	10.49	10.86	10.96	10.81	10.67	10.82	11.12	12.65	12.63
25	12.93	12.78	11.47	10.51	10.97	10.93	10.82	10.64	10.83	11.10	12.65	12.64
26	12.91	12.74	11.42	10.51	11.21	10.92	10.80	10.62	10.81	11.12	12.66	12.78
27	12.87	12.71	11.37	10.53	11.34	10.89	10.78	10.59	10.77	11.25	12.70	12.77
28	12.88	12.67	11.31	10.58	11.45	10.84	10.78	10.57	10.72	11.32	12.72	12.79
29	12.93	12.63	11.24	10.56	11.53	10.80	10.78	10.55	---	11.45	12.77	12.85
30	12.93	12.59	11.17	10.59	---	10.81	10.75	10.55	---	11.53	12.80	12.94
31	12.91	---	11.10	10.90	---	10.80	---	10.54	---	11.62	12.81	---
TOTAL	409.26	387.97	369.17	326.37	322.65	348.01	---	331.56	---	339.54	386.90	378.70
MEAN	13.20	12.93	11.91	10.53	11.13	11.23	---	10.70	---	10.95	12.48	12.62
MAX	13.50	13.15	12.55	11.02	11.53	11.57	---	10.82	---	11.62	12.81	12.95
MIN	12.87	12.59	11.10	10.27	10.79	10.80	---	10.54	---	10.63	11.84	12.22

261300080280001 NORTH NEW RIVER CANAL AT S-11-C, NEAR ANDYTOWN, FL-Continued

DOWNSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.96	11.36	10.80	10.38	10.24	9.78	9.03	8.59	---	---	9.45	11.22
2	11.94	11.33	10.77	10.35	10.25	9.73	8.98	8.57	---	8.16	9.65	11.30
3	11.93	11.38	10.75	10.32	10.24	9.69	8.96	8.64	---	8.18	9.67	11.39
4	11.91	11.39	10.74	10.29	10.23	9.66	8.93	8.93	---	8.22	9.66	11.51
5	11.89	11.46	10.72	10.26	10.22	9.64	8.88	8.81	---	8.25	9.78	11.76
6	11.87	11.59	10.70	10.24	10.23	9.61	8.85	8.78	---	8.30	9.93	11.73
7	11.85	11.59	10.67	10.18	10.19	9.56	8.84	8.73	---	8.30	9.97	11.91
8	11.83	11.57	10.65	10.17	10.15	9.50	8.83	8.70	8.38	8.29	10.02	12.11
9	11.83	11.54	10.63	10.15	10.10	9.48	8.79	8.66	8.43	8.25	10.03	12.12
10	11.82	11.53	10.66	10.11	10.09	9.43	8.76	8.65	8.43	8.22	10.16	12.15
11	11.81	11.48	10.71	10.07	10.04	9.39	8.80	8.61	8.51	8.27	10.23	12.19
12	11.79	11.39	10.70	10.07	10.01	9.36	8.89	8.57	8.24	8.30	10.33	12.24
13	11.77	11.35	10.69	10.06	9.98	9.31	9.13	8.52	---	8.22	10.48	12.30
14	11.76	11.31	10.72	10.05	9.99	9.28	9.15	8.49	---	---	10.55	12.36
15	11.74	11.28	10.79	10.03	9.97	9.27	9.29	8.46	8.29	---	10.71	12.40
16	11.71	11.25	10.77	10.02	9.93	9.30	9.14	8.44	---	8.30	10.75	12.45
17	11.69	11.22	10.77	10.01	9.91	9.25	8.99	8.41	---	8.66	10.77	12.49
18	11.67	11.21	10.77	10.03	9.86	9.27	8.95	8.38	8.30	8.73	10.80	12.57
19	11.63	11.19	10.73	10.06	9.84	9.26	8.93	8.35	---	8.75	10.85	12.57
20	11.61	11.15	10.70	10.05	9.82	9.23	8.89	8.32	8.40	8.81	10.89	12.57
21	11.58	11.12	10.67	10.03	9.80	9.22	8.88	8.29	8.45	8.86	10.90	12.59
22	11.56	11.08	10.64	10.02	9.77	9.19	8.86	---	8.42	8.86	10.94	12.58
23	11.54	11.05	10.61	10.00	9.76	9.12	8.81	---	---	8.93	10.99	12.56
24	11.50	11.02	10.58	9.98	9.79	9.10	8.79	---	---	8.90	10.99	12.55
25	11.48	10.99	10.56	9.98	9.82	9.08	8.74	---	---	8.95	11.04	12.59
26	11.46	10.96	10.53	9.98	9.91	9.09	8.75	---	---	8.97	11.10	12.74
27	11.44	10.94	10.50	9.99	9.87	9.09	8.69	---	---	9.02	11.17	12.71
28	11.40	10.91	10.48	9.95	9.80	9.07	8.60	---	---	9.15	11.18	12.72
29	---	10.86	10.45	9.93	9.79	9.05	8.60	---	---	9.16	11.19	12.77
30	11.43	10.83	10.43	9.96	---	9.06	8.61	---	---	9.16	11.20	12.85
31	11.39	---	10.40	10.13	---	9.07	---	---	---	9.18	11.22	---
TOTAL	---	337.33	330.29	312.85	289.60	289.14	266.34	---	---	---	326.60	368.00
MEAN	---	11.24	10.65	10.09	9.99	9.33	8.88	---	---	---	10.54	12.27
MAX	---	11.59	10.80	10.38	10.25	9.78	9.29	---	---	---	11.22	12.85
MIN	---	10.83	10.40	9.93	9.76	9.05	8.60	---	---	---	9.45	11.22

262240080258001 SITE 17 NEAR L-38 IN CONSERVATION AREA 2A NEAR CORAL SPRINGS, FL

LOCATION.--Lat 26°17'11", long 80°24'40", in NE ¼ sec.11, T.48 S., R.39 E., Broward County, Hydrologic Unit 03090202, in Conservation Area 2A near L-38 and approximately 7 mi west of Coral Springs.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--August 1991 to current year. Prior to August 1991 station was operated by the U.S. Army Corps of Engineers.

GAGE.--Satellite data collection platform with water-stage shaft encoder and tipping bucket rain gage. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Land surface is approximately 11.10 ft above National Geodetic Vertical datum of 1929. Gage is capable of recording water levels below land-surface datum. Rainfall data is not published but is available in files of the U.S. Geological Survey. The rainfall record was discontinued September 30, 2003.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 15.38 ft Dec. 9, 1994; minimum, 10.30 ft May 19, 1999.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 14.22 ft Sept. 30; minimum, 10.70 ft June 6.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.47	12.90	12.63	11.92	11.86	11.78	11.39	11.31	10.81	11.11	11.82	13.07
2	---	12.88	12.60	11.90	11.86	11.77	11.36	11.28	10.77	11.07	11.98	13.08
3	13.51	12.92	12.57	11.89	11.86	11.77	11.34	11.34	10.74	11.13	12.06	13.08
4	---	12.93	12.59	11.88	11.86	11.75	11.31	11.56	10.73	11.36	12.14	13.12
5	13.52	12.98	12.56	11.87	11.85	11.74	11.29	11.54	10.78	11.44	12.25	13.34
6	---	13.06	12.53	11.86	11.84	11.73	11.27	11.51	10.74	11.43	12.35	13.49
7	---	13.11	12.50	11.84	11.84	11.72	11.25	11.48	10.92	11.41	12.43	13.53
8	13.47	13.12	12.47	11.83	11.82	11.70	11.23	11.46	11.10	11.37	12.50	13.54
9	13.44	13.13	12.45	11.82	11.81	11.69	11.25	11.43	11.10	11.34	12.57	13.57
10	13.42	13.13	12.43	11.80	11.80	11.67	11.41	11.41	11.09	11.31	12.62	13.61
11	13.40	13.11	12.42	11.79	11.79	11.65	11.47	11.39	11.07	11.29	12.66	13.68
12	13.38	13.09	12.38	11.78	11.78	11.64	11.53	11.36	11.05	11.34	12.68	13.78
13	13.35	13.07	12.34	11.77	11.77	11.63	11.64	11.34	11.03	11.40	12.72	13.86
14	13.33	13.05	12.33	11.76	11.77	11.62	11.65	11.31	11.00	11.39	12.72	13.94
15	13.31	13.03	12.33	11.75	11.76	11.61	11.62	11.29	10.96	11.37	12.72	14.00
16	13.28	13.01	12.29	11.74	11.76	11.61	11.60	11.30	10.92	11.43	12.74	14.02
17	13.25	12.99	12.26	11.73	11.74	11.61	11.58	11.29	10.87	11.57	12.76	14.02
18	13.22	12.97	12.22	11.75	11.73	11.61	11.56	11.27	10.84	11.59	12.80	14.01
19	13.19	12.96	12.19	11.79	11.71	11.59	11.53	11.24	10.83	11.61	12.85	13.97
20	13.15	12.94	12.16	11.79	11.71	11.57	11.50	11.21	11.16	11.63	12.89	13.91
21	13.13	12.92	12.14	11.78	11.70	11.55	11.49	11.18	11.18	11.63	12.89	13.92
22	13.10	12.90	12.13	11.77	11.70	11.53	11.47	11.15	11.21	11.62	12.93	13.86
23	13.06	12.87	12.11	11.76	11.69	11.51	11.45	11.11	11.30	11.61	12.98	13.81
24	13.03	12.86	12.09	11.74	11.68	11.50	11.43	11.07	11.29	11.60	12.96	13.77
25	13.00	12.83	12.06	11.73	11.69	11.49	11.40	11.04	11.26	11.62	12.95	13.75
26	12.97	12.80	12.04	11.73	11.79	11.47	11.38	11.01	11.24	11.71	12.94	13.86
27	12.94	12.77	12.02	11.72	11.80	11.46	11.36	10.97	11.21	11.78	12.97	13.93
28	12.91	12.74	11.99	11.72	11.80	11.45	11.35	10.94	11.17	11.73	12.99	13.96
29	12.94	12.70	11.97	11.72	11.79	11.44	11.34	10.91	11.16	11.72	13.04	14.06
30	12.94	12.66	11.95	11.72	---	11.42	11.33	10.88	11.14	11.69	13.05	14.19
31	12.92	---	11.93	11.80	---	11.41	---	10.84	---	11.70	13.06	---
TOTAL	---	388.43	380.68	365.45	341.56	359.69	342.78	348.42	330.67	356.00	393.02	411.73
MEAN	---	12.95	12.28	11.79	11.78	11.60	11.43	11.24	11.02	11.48	12.68	13.72
MAX	---	13.13	12.63	11.92	11.86	11.78	11.65	11.56	11.30	11.78	13.06	14.19
MIN	---	12.66	11.93	11.72	11.68	11.41	11.23	10.84	10.73	11.07	11.82	13.07

261200080275001 NORTH NEW RIVER CANAL AT S-11-B NEAR ANDYTOWN, FL

LOCATION.--Lat 26°12'08", long 80°27'13", in NE ¼ sec.9, T.48 S., R.37 E., Broward County, Hydrologic Unit 03090202, on North New River Canal on the east bank of the spillway, 100 ft southeast of S-11-B, a four-gated control structure, 4.0 mi north of State Road 84 on U.S. Highway 27. The auxiliary stage recorder is located approximately 30 yards downstream of S-11-B, on the west bank of the spillway .

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--May 1991 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoders upstream and downstream of structure S-11-B. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark).

REMARKS.--Station is one of several located on L-38W which regulates flow for Conservation Area 2A and 3A. Gage records are primarily used to determine stage.

COOPERATION.--U.S. Army Corps of Engineers.

EXTREME UPSTREAM STAGES FOR PERIOD OF RECORD.--Maximum gage height, 14.85 ft Jan. 15, 1995; minimum, 9.67 ft May 22, 2001.

EXTREME DOWNSTREAM STAGES FOR PERIOD OF RECORD.--Maximum gage height, 13.84 ft Dec. 5, 1994; minimum, indeterminate, many days during the 2001, 2002, 2004 water years when well went dry.

EXTREME UPSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 13.53 ft Oct. 2-4; minimum, 10.29 ft Jan. 9.

EXTREME DOWNSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 12.76 ft Sept. 30; minimum, indeterminate, well was dry for many days.

UPSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.51	12.93	12.60	11.07	11.17	11.58	10.80	10.73	10.54	10.76	11.81	12.81
2	13.52	12.91	12.57	10.99	11.30	11.59	10.79	10.71	10.54	10.78	12.03	12.76
3	13.52	12.96	12.54	10.90	11.38	11.57	10.77	10.69	10.55	10.76	12.11	12.69
4	13.52	12.98	12.52	10.80	11.40	11.54	10.75	10.81	10.52	10.76	12.22	12.70
5	13.51	13.04	12.49	10.69	11.40	11.50	10.74	10.82	10.47	10.79	12.32	12.69
6	13.50	13.14	12.48	10.58	11.39	11.46	10.74	10.82	10.43	10.76	12.35	12.93
7	13.48	13.19	12.45	10.47	11.37	11.42	10.73	10.78	10.48	10.73	12.40	12.72
8	13.46	13.19	12.40	10.39	11.35	11.40	10.72	10.77	10.76	10.69	12.46	12.18
9	13.44	13.18	12.34	10.34	11.31	11.45	10.72	10.78	10.87	10.65	12.53	12.18
10	13.42	13.17	12.27	10.44	11.28	11.48	10.73	10.78	10.91	10.65	12.56	12.21
11	13.39	13.16	12.18	10.48	11.24	11.50	10.76	10.77	10.84	10.67	12.56	12.26
12	13.36	13.14	12.10	10.48	11.19	11.50	10.77	10.74	10.79	10.71	12.47	12.31
13	13.33	13.11	12.03	10.45	11.14	11.46	10.87	10.72	10.76	10.73	12.31	12.36
14	13.30	13.09	11.99	10.40	11.09	11.40	10.94	10.70	10.72	10.76	12.29	12.43
15	13.29	13.06	12.00	10.38	11.05	11.35	10.96	10.71	10.67	10.78	12.34	12.48
16	13.26	13.04	11.97	10.40	11.05	11.30	10.96	10.72	10.66	10.81	12.38	12.53
17	13.23	13.02	11.92	10.43	11.00	11.30	10.96	10.72	10.69	10.89	12.42	12.57
18	13.20	13.00	11.87	10.49	10.95	11.26	10.96	10.72	10.61	10.93	12.46	12.64
19	13.17	12.98	11.81	10.59	10.87	11.22	10.95	10.70	10.64	11.02	12.50	12.65
20	13.14	12.97	11.75	10.62	10.84	11.17	10.93	10.70	10.77	11.14	12.54	12.64
21	13.10	12.95	11.68	10.60	10.87	11.10	10.91	10.69	10.78	11.15	12.56	12.65
22	13.06	12.93	11.63	10.55	10.89	11.01	10.89	10.67	10.80	11.15	12.59	12.64
23	13.02	12.90	11.61	10.53	10.90	11.00	10.85	10.66	10.82	11.14	12.66	12.62
24	13.00	12.87	11.56	10.52	10.90	10.97	10.82	10.66	10.82	11.13	12.65	12.60
25	12.97	12.83	11.52	10.54	11.00	10.95	10.82	10.64	10.82	11.11	12.65	12.62
26	12.94	12.79	11.47	10.54	11.23	10.94	10.80	10.61	10.81	11.13	12.65	12.71
27	12.91	12.75	11.41	10.57	11.36	10.90	10.78	10.58	10.77	11.24	12.68	12.73
28	12.92	12.71	11.36	10.65	11.46	10.85	10.79	10.56	10.72	11.32	12.71	12.76
29	12.98	12.68	11.29	10.62	11.53	10.82	10.79	10.55	10.71	11.43	12.76	12.81
30	12.97	12.63	11.22	10.65	---	10.82	10.76	10.54	10.74	11.50	12.79	12.90
31	12.96	---	11.15	10.92	---	10.81	---	10.54	---	11.59	12.80	---
TOTAL	410.38	389.30	370.18	328.08	323.91	348.62	324.76	331.59	321.01	339.66	386.56	377.78
MEAN	13.24	12.98	11.94	10.58	11.17	11.25	10.83	10.70	10.70	10.96	12.47	12.59
MAX	13.52	13.19	12.60	11.07	11.53	11.59	10.96	10.82	10.91	11.59	12.80	12.93
MIN	12.91	12.63	11.15	10.34	10.84	10.81	10.72	10.54	10.43	10.65	11.81	12.18

261200080275001 NORTH NEW RIVER CANAL AT S-11-B NEAR ANDYTOWN, FLContinued

DOWNSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.97	11.34	10.79	10.39	10.27	9.81	9.06	8.61	---	---	9.31	11.16
2	11.96	11.31	10.77	10.36	10.28	9.78	9.02	8.59	---	---	9.52	11.20
3	11.93	11.36	10.75	10.34	10.26	9.74	8.99	8.66	---	---	9.57	11.27
4	11.92	11.37	10.73	10.31	10.25	9.71	8.96	8.96	---	8.26	9.58	11.40
5	11.89	11.46	10.71	10.28	10.23	9.69	8.92	8.84	---	8.28	9.65	11.63
6	11.87	11.59	10.69	10.26	10.24	9.66	8.88	8.81	---	8.33	9.76	11.61
7	11.85	11.58	10.67	10.22	10.21	9.61	8.87	8.76	---	8.32	9.81	11.77
8	11.84	11.55	10.65	10.19	10.17	9.56	8.86	8.73	---	8.31	---	11.99
9	11.82	11.53	10.64	10.18	10.13	9.54	8.82	8.69	8.36	8.28	---	12.01
10	11.80	11.49	10.67	10.15	10.11	9.50	8.79	8.67	8.37	8.25	9.97	12.04
11	11.79	11.41	10.72	10.11	10.08	9.44	8.83	8.63	8.50	8.30	10.03	12.08
12	11.77	11.38	10.72	10.10	10.06	9.40	8.89	8.59	8.27	8.32	10.20	12.13
13	11.75	11.35	10.70	10.09	10.03	9.35	9.12	8.55	---	8.25	10.38	12.18
14	11.74	11.31	10.72	10.08	10.03	9.32	9.16	---	---	---	10.44	12.23
15	11.72	11.27	10.79	10.06	10.01	9.30	9.25	8.49	8.26	---	10.60	12.28
16	11.68	11.24	10.77	10.05	9.98	9.32	9.14	8.46	---	---	10.65	12.33
17	11.66	11.21	10.78	10.04	9.95	9.28	9.02	8.44	---	8.51	10.68	12.37
18	11.64	11.20	10.77	10.06	9.92	9.31	8.98	8.41	---	8.59	10.71	12.45
19	11.62	11.18	10.74	10.09	9.88	9.30	8.96	8.38	---	8.62	10.78	12.46
20	11.60	11.15	10.71	10.08	9.86	9.26	8.92	8.35	8.34	8.73	10.80	12.47
21	11.58	11.11	10.68	10.06	9.84	9.25	8.91	---	8.38	8.76	10.80	12.48
22	11.56	11.08	10.65	10.05	9.81	9.22	8.88	---	8.37	8.75	10.84	12.48
23	11.53	11.04	10.61	10.03	9.80	9.16	8.83	---	8.29	8.82	10.92	12.46
24	11.50	11.01	10.59	10.02	9.81	9.14	8.81	---	---	8.78	10.93	12.46
25	11.47	10.99	10.57	10.01	9.85	9.12	8.77	---	---	8.83	10.98	12.50
26	11.45	10.96	10.54	10.01	9.95	9.12	8.77	---	---	8.84	11.03	12.62
27	11.43	10.94	10.51	10.02	9.91	9.12	8.72	---	---	8.89	11.09	12.61
28	11.38	10.91	10.48	9.99	9.85	9.11	8.63	---	---	9.01	11.11	12.62
29	11.45	10.86	10.46	9.97	9.83	9.09	8.63	---	---	9.06	11.12	12.66
30	11.42	10.83	10.44	9.99	---	9.10	8.63	---	---	9.04	11.13	12.74
31	11.38	---	10.41	10.14	---	9.10	---	---	---	9.06	11.15	---
TOTAL	361.97	337.01	330.43	313.73	290.60	290.41	267.02	---	---	---	---	364.69
MEAN	11.68	11.23	10.66	10.12	10.02	9.37	8.90	---	---	---	---	12.16
MAX	11.97	11.59	10.79	10.39	10.28	9.81	9.25	---	---	---	---	12.74
MIN	11.38	10.83	10.41	9.97	9.80	9.09	8.63	---	---	---	---	11.16

261117080315201 SITE 63 IN CONSERVATION AREA 3A, NEAR ANDYTOWN, FL

LOCATION.--Lat 26°11'19", long 80°31'52", in SE 1/4 sec.10, T.38 S., R.49 E., Broward County, Hydrologic Unit 03090202, in Conservation Area 3A, 6.2 mi west of intersection of U.S. Interstate 75 and U.S. Highway 27 and 4 mi north of U.S. Interstate 75.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--June 1991 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and tipping bucket rain gage. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Land surface is approximately 8.40 ft above National Geodetic Vertical Datum of 1929. Gage is capable of recording water levels below land-surface datum. Rainfall data available in files of the U.S. Geological Survey. The rainfall record was discontinued September 30, 2003

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 13.45 ft Dec. 6, 9-11, 1994; minimum, 7.24 ft June 1, 1992.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 12.35 ft Sept. 29, 30; minimum, 8.10 ft July 1.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.83	11.32	10.81	10.41	10.12	9.93	9.44	9.20	8.64	8.25	9.75	10.95
2	11.83	11.29	10.78	10.38	10.13	9.92	9.41	9.18	8.59	8.50	9.87	10.95
3	11.83	11.30	10.76	10.36	10.14	9.90	9.40	9.20	8.55	8.48	9.87	10.98
4	11.83	11.31	10.74	10.34	10.14	9.89	9.38	9.24	8.52	8.76	9.92	11.10
5	11.82	11.38	10.72	10.32	10.14	9.88	9.36	9.23	8.53	8.97	9.94	11.29
6	11.81	11.51	10.72	10.30	10.14	9.85	9.34	9.23	8.48	9.27	9.98	11.35
7	11.79	11.51	10.69	10.29	10.14	9.84	9.32	9.22	8.44	9.33	9.99	11.38
8	11.77	11.48	10.68	10.27	10.13	9.83	9.31	9.20	8.49	9.34	9.99	11.44
9	11.75	11.44	10.66	10.24	10.13	9.81	9.30	9.19	8.52	9.34	10.00	11.52
10	11.73	11.41	10.63	10.22	10.11	9.79	9.29	9.17	8.47	9.33	10.05	11.57
11	11.72	11.38	10.63	10.20	10.10	9.76	9.31	9.15	8.44	9.33	10.05	11.61
12	11.72	11.35	10.63	10.18	10.08	9.74	9.32	9.13	8.43	9.34	---	11.65
13	11.69	11.32	10.63	10.16	10.07	9.72	9.39	9.11	8.44	9.34	10.08	11.69
14	11.67	11.28	10.65	10.14	10.05	9.70	9.42	9.09	8.38	9.32	10.14	11.74
15	11.65	11.24	10.69	10.13	10.04	9.69	9.41	9.07	8.45	9.30	10.28	11.77
16	11.62	11.21	10.69	10.10	10.04	9.67	9.41	9.07	8.64	9.29	10.34	11.81
17	11.60	11.18	10.69	10.10	10.03	9.67	9.39	9.08	8.59	9.31	10.39	11.85
18	11.58	11.16	10.68	10.09	10.01	9.66	9.38	9.06	8.54	9.31	10.44	---
19	11.56	11.14	10.66	10.10	10.00	9.64	9.37	9.04	8.49	9.33	10.51	12.00
20	11.53	11.12	10.65	10.10	9.96	9.61	9.36	9.01	8.42	9.31	10.56	12.03
21	11.51	11.08	10.64	10.09	9.96	9.60	9.35	8.98	8.41	9.31	10.59	12.05
22	11.49	11.05	10.63	10.08	9.93	9.58	9.33	8.95	8.47	9.32	10.64	12.05
23	11.46	11.02	10.61	10.07	9.92	9.57	9.32	8.92	8.50	9.31	10.71	12.07
24	11.44	10.99	10.59	10.05	9.91	9.55	9.32	8.89	8.43	9.29	10.71	12.07
25	11.42	10.97	10.57	10.04	9.90	9.54	9.29	8.86	8.36	9.27	10.72	12.13
26	11.40	10.95	10.55	10.02	9.94	9.53	9.28	8.83	8.31	9.34	---	12.24
27	11.38	10.93	10.53	10.01	9.94	9.52	9.25	8.81	8.26	9.54	10.87	12.25
28	11.35	10.91	10.51	10.01	9.94	9.51	9.25	8.77	8.20	9.64	10.90	12.26
29	11.37	10.87	10.49	10.01	9.93	9.50	9.23	8.73	8.17	9.71	10.92	12.30
30	11.37	10.83	10.46	9.99	---	9.48	9.22	8.71	8.15	9.67	10.93	12.35
31	11.34	---	10.44	10.05	---	9.46	---	8.67	---	9.66	10.95	---
TOTAL	359.86	335.93	329.81	314.85	291.07	300.34	280.15	279.99	253.31	286.81	---	---
MEAN	11.61	11.20	10.64	10.16	10.04	9.69	9.34	9.03	8.44	9.25	---	---
MAX	11.83	11.51	10.81	10.41	10.14	9.93	9.44	9.24	8.64	9.71	---	---
MIN	11.34	10.83	10.44	9.99	9.90	9.46	9.22	8.67	8.15	8.25	---	---

261150080270001 NORTH NEW RIVER CANAL AT S-11-A, NEAR ANDYTOWN, FL

LOCATION.--Lat 26°10'40", long 80°26'53", in SE ¼ sec.16, T.49 S., R.39 E., Broward County, Hydrologic Unit 03090202, on North New River Canal on the east bank of the spillway, 100 ft northeast of S-11-A, a four-gated control structure, 2.2 mi north of State Road 84 on U.S. Highway 27. The auxiliary stage recorder is located approximately 30 yards upstream of S-11-A on the west bank of the spillway.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--May 1991 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoders upstream and downstream of structure S-11-A and tipping bucket rain gage. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark).

REMARKS.--Station is one of several located on Levee 38W which regulates flow for Conservation Areas 2A and 3A. Gage records are primarily used to determine stage. Rainfall data available in files of the U.S. Geological Survey. The rainfall record was discontinued September 30, 2003.

EXTREME UPSTREAM STAGES FOR PERIOD OF RECORD.--Maximum gage height, 15.12 ft Dec. 21, 1994; minimum, 9.64 ft May 22, 23, 2001.

EXTREME DOWNSTREAM STAGES FOR PERIOD OF RECORD.--Maximum gage height, 13.80 ft Dec. 5, 1994; minimum, 7.53 ft May 14, 2002.

EXTREME UPSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 13.50 ft Oct. 1-4; minimum, 10.24 ft Jan. 9.

EXTREME DOWNSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 12.65 ft Sept. 30; minimum, 7.68 ft June 3.

UPSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.48	12.91	12.57	11.03	11.13	11.53	10.79	10.72	10.52	10.75	11.80	12.80
2	13.49	12.89	12.54	10.95	11.27	11.54	10.78	10.71	10.52	10.77	12.01	12.76
3	13.49	12.92	12.50	10.86	11.34	11.53	10.76	10.69	10.54	10.76	12.09	12.71
4	13.49	12.95	12.48	10.76	11.37	11.49	10.73	10.82	10.51	10.76	12.20	12.73
5	13.48	13.01	12.46	10.65	11.36	11.45	10.73	10.83	10.46	10.78	12.30	12.65
6	13.47	13.11	12.45	10.54	11.35	11.41	10.73	10.82	10.43	10.76	12.33	12.92
7	13.45	13.16	12.41	10.44	11.34	11.38	10.71	10.78	10.47	10.72	12.39	12.74
8	13.43	13.16	12.36	10.34	11.32	11.36	10.70	10.77	10.75	10.69	12.45	12.19
9	13.40	13.15	12.30	10.29	11.28	11.40	10.70	10.78	10.86	10.65	12.52	12.18
10	13.37	13.14	12.23	10.40	11.24	11.45	10.72	10.77	10.91	10.64	12.55	12.20
11	13.34	13.13	12.15	10.45	11.19	11.47	10.74	10.76	10.84	10.66	12.54	12.25
12	13.32	13.10	12.07	10.44	11.14	11.48	10.77	10.74	10.79	10.71	12.46	12.30
13	13.29	13.07	12.00	10.40	11.10	11.44	10.87	10.71	10.76	10.73	12.29	12.36
14	13.25	13.06	11.95	10.36	11.04	11.38	10.95	10.69	10.72	10.75	---	12.42
15	13.25	13.03	11.96	10.33	11.02	11.32	10.96	10.70	10.67	10.76	---	12.48
16	13.22	13.00	11.94	10.35	11.01	11.28	10.97	10.72	10.66	10.79	---	12.53
17	13.18	12.98	11.89	10.38	10.97	11.28	10.97	10.72	10.69	10.88	12.41	12.57
18	13.16	12.97	11.83	10.44	10.92	11.24	10.96	10.71	10.60	10.92	12.45	12.64
19	13.13	12.94	11.78	10.54	10.84	11.20	10.95	10.70	10.64	11.01	12.49	12.65
20	13.10	12.94	11.72	10.58	10.81	11.15	10.93	10.69	10.76	11.12	12.54	12.65
21	13.06	12.91	11.65	10.55	10.83	11.07	10.91	10.69	10.78	11.13	12.55	12.65
22	13.02	12.89	11.59	10.51	10.86	11.00	10.89	10.67	10.79	11.13	12.59	12.63
23	12.99	12.87	11.57	10.48	10.87	10.99	10.85	10.65	10.81	11.13	12.65	12.61
24	12.96	12.84	11.52	10.47	10.86	10.96	10.81	10.66	10.81	11.11	12.63	12.60
25	12.93	12.79	11.48	10.48	10.96	10.94	10.82	10.64	10.81	11.09	12.63	12.61
26	12.90	12.75	11.43	10.48	11.18	10.93	10.80	10.60	10.80	11.11	12.65	12.66
27	12.87	12.71	11.38	10.52	11.32	10.89	10.78	10.57	10.76	11.23	12.68	12.72
28	12.88	12.67	11.32	10.61	11.43	10.84	10.79	10.55	10.71	11.30	12.70	12.75
29	12.95	12.66	11.25	10.58	11.49	10.81	10.79	10.54	10.70	11.41	12.76	12.81
30	12.94	12.60	11.18	10.60	---	10.81	10.75	10.52	10.74	11.49	12.78	12.90
31	12.93	---	11.11	10.88	---	10.80	---	10.52	---	11.57	12.80	---
TOTAL	409.22	388.31	369.07	326.69	322.84	347.82	324.61	331.44	320.81	339.31	---	377.67
MEAN	13.20	12.94	11.91	10.54	11.13	11.22	10.82	10.69	10.69	10.95	---	12.59
MAX	13.49	13.16	12.57	11.03	11.49	11.54	10.97	10.83	10.91	11.57	---	12.92
MIN	12.87	12.60	11.11	10.29	10.81	10.80	10.70	10.52	10.43	10.64	---	12.18

261150080270001 NORTH NEW RIVER CANAL AT S-11-A, NEAR ANDYTOWN, FL-Continued

DOWNSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.96	11.33	10.77	10.36	10.24	9.78	9.04	8.58	7.80	8.12	9.25	11.08
2	11.95	11.30	10.76	10.33	10.25	9.75	9.00	8.56	7.76	8.15	9.45	11.11
3	11.92	11.35	10.73	10.31	10.23	9.71	8.96	8.63	7.73	8.18	9.52	11.15
4	11.90	11.36	10.71	10.28	10.22	9.68	8.93	8.94	7.98	8.22	9.54	11.29
5	11.88	11.46	10.69	10.26	10.19	9.66	8.90	8.82	7.98	8.25	9.59	11.52
6	11.86	11.58	10.67	10.24	10.19	9.63	8.87	8.79	7.98	8.30	9.69	11.50
7	11.84	11.57	10.65	10.20	10.16	9.59	8.86	8.74	7.96	8.29	9.74	11.66
8	11.82	11.51	10.63	10.16	10.12	9.55	8.84	8.71	8.25	8.28	9.79	11.86
9	11.81	11.47	10.62	10.14	10.09	9.52	8.80	8.66	8.30	8.24	9.81	11.89
10	11.79	11.44	10.65	10.12	10.08	9.47	8.77	8.64	8.31	8.21	9.87	11.93
11	11.77	11.39	10.69	10.08	10.05	9.42	8.80	8.60	8.44	8.27	9.92	11.98
12	11.76	11.36	10.68	10.07	10.03	9.38	8.85	8.57	8.25	8.29	10.07	12.02
13	11.74	11.33	10.67	10.06	10.01	9.33	9.07	8.54	8.15	8.20	10.23	12.06
14	11.72	11.29	10.69	10.05	10.0	9.29	9.12	8.49	8.09	8.15	---	12.12
15	11.70	11.26	10.74	10.03	9.98	9.27	9.18	8.45	8.19	8.13	---	12.16
16	11.67	11.22	10.74	10.02	9.95	9.29	9.10	8.44	8.22	8.24	---	12.21
17	11.65	11.20	10.74	10.00	9.92	9.26	9.00	8.41	8.12	8.45	---	12.26
18	11.63	11.19	10.73	10.02	9.89	9.28	8.95	8.38	8.23	8.52	10.57	12.33
19	11.61	11.16	10.70	10.05	9.86	9.27	8.93	8.35	8.15	8.56	10.65	12.36
20	11.59	11.13	10.68	10.05	9.84	9.24	8.90	8.31	8.26	8.70	10.69	12.37
21	11.57	11.09	10.65	10.03	9.82	9.23	8.88	8.27	8.30	8.72	10.70	12.38
22	11.54	11.06	10.62	10.02	9.79	9.20	8.86	8.19	8.31	8.70	10.75	12.38
23	11.52	11.02	10.59	10.01	9.77	9.14	8.82	8.11	8.24	8.78	10.80	12.38
24	11.48	---	10.56	9.99	9.78	9.12	8.80	8.05	8.10	8.73	10.81	12.37
25	11.45	---	10.53	9.98	9.81	9.09	8.76	8.01	8.02	8.77	10.87	12.42
26	11.44	10.94	10.51	9.98	9.91	9.09	8.74	7.99	7.95	8.79	10.92	12.53
27	11.41	10.92	10.48	9.99	9.89	9.09	8.70	7.99	7.84	8.83	10.98	12.52
28	11.36	10.89	10.45	9.97	9.83	9.08	8.62	7.96	7.77	---	11.02	12.53
29	11.43	10.84	10.43	9.95	9.80	9.06	8.60	7.92	7.74	---	11.03	12.56
30	11.40	10.80	10.41	9.96	---	9.07	8.60	7.89	7.81	---	11.04	12.64
31	11.36	---	10.39	10.10	---	9.07	---	7.84	---	---	11.06	---
TOTAL	361.53	---	329.56	312.81	289.70	289.61	266.25	259.83	242.23	---	---	361.57
MEAN	11.66	---	10.63	10.09	9.99	9.34	8.88	8.38	8.07	---	---	12.05
MAX	11.96	---	10.77	10.36	10.25	9.78	9.18	8.94	8.44	---	---	12.64
MIN	11.36	---	10.39	9.95	9.77	9.06	8.60	7.84	7.73	---	---	11.08

261023080443001 SITE 62 IN CONSERVATION AREA 3A, NEAR ANDYTOWN, FL

LOCATION.--Lat 26°10'28", long 80°45'05", T.36 S., R.49 E., Broward County, Hydrologic Unit 03090202, 20.5 mi west of intersection of U.S. Interstate 75 and U.S. Highway 27 and 1.5 mi north of U.S. Interstate 75. No section could be determined from existing map.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--August 1991 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and tipping bucket rain gage. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Land surface is approximately 9.90 ft above National Geodetic Vertical Datum of 1929. Gage is capable of recording water levels below land-surface datum. Rainfall data available in files of the U.S. Geological Survey. The rainfall record was discontinued September 30, 2003.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 13.68 ft Oct. 21, 1999; minimum, 8.06 ft June 3, 1992.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 12.50 ft Oct. 5, 6; minimum, 9.52 ft June 4.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	11.83	11.38	11.06	10.98	11.01	10.69	10.48	9.74	10.91	11.21	11.96
2	12.49	11.80	11.37	11.04	10.99	11.00	10.67	10.46	9.66	10.89	11.34	11.95
3	---	11.82	11.35	11.05	10.99	11.00	10.65	10.51	9.59	10.86	11.44	11.93
4	---	11.82	11.33	11.03	10.98	11.00	10.64	10.60	9.79	10.83	11.49	11.98
5	---	11.88	11.31	11.01	10.98	10.99	10.62	10.59	10.16	10.88	11.58	12.07
6	12.50	11.89	11.31	11.01	10.97	10.99	10.60	10.57	10.15	10.94	11.63	12.13
7	12.49	11.88	11.29	11.00	10.98	10.98	10.59	10.55	10.17	10.91	11.65	12.14
8	12.47	11.86	11.27	10.98	10.96	10.96	10.57	10.53	10.22	10.92	11.67	12.15
9	---	11.83	11.25	10.96	10.95	10.96	10.57	10.51	10.22	10.87	11.72	12.17
10	---	11.83	11.24	10.96	10.95	10.95	10.58	10.49	10.29	10.84	11.70	12.16
11	---	11.81	11.25	10.94	10.94	10.93	10.66	10.48	10.40	10.81	11.72	12.17
12	---	11.79	11.24	10.92	10.93	10.91	10.68	10.46	10.53	10.79	11.79	12.16
13	---	11.77	11.23	10.91	10.91	10.91	10.74	10.44	10.63	10.76	11.81	12.16
14	---	11.74	11.26	10.89	10.92	10.91	10.75	10.42	10.64	10.73	11.82	12.17
15	12.28	11.71	11.29	10.87	10.93	10.89	10.72	10.41	10.67	10.73	11.85	12.16
16	12.25	11.68	11.29	10.87	10.92	10.89	10.70	10.39	10.70	10.73	11.86	12.18
17	12.21	11.65	11.28	10.86	10.91	10.91	10.68	10.37	10.70	10.72	11.86	12.25
18	12.18	11.64	11.28	10.88	10.91	10.89	10.66	10.36	10.70	10.74	11.86	12.24
19	---	11.61	11.25	10.91	10.89	10.88	10.65	10.34	10.74	10.80	11.85	12.24
20	---	11.61	11.25	10.90	10.88	10.87	10.64	10.32	10.77	10.88	11.85	12.23
21	---	11.57	11.23	10.91	10.89	10.86	10.63	10.29	10.75	10.88	11.86	12.23
22	---	11.56	11.20	10.89	10.87	10.84	10.61	10.27	10.77	10.87	11.92	12.24
23	---	11.52	11.19	10.88	10.86	10.82	10.60	10.25	10.82	10.86	11.94	12.24
24	12.00	11.51	11.17	10.88	10.84	10.80	10.58	10.21	10.82	10.86	11.96	12.24
25	11.97	11.49	11.17	10.87	10.87	10.79	10.57	10.18	10.82	10.90	11.98	12.23
26	11.94	11.48	11.15	10.85	10.99	10.78	10.55	10.14	10.81	10.88	12.00	12.28
27	11.91	11.47	11.13	10.84	11.00	10.76	10.54	10.09	10.80	10.88	12.01	12.32
28	11.89	11.45	11.11	10.83	11.01	10.75	10.52	10.04	10.82	10.96	11.98	12.34
29	11.91	11.43	11.10	10.82	11.01	10.73	10.51	9.97	10.90	11.05	11.98	12.40
30	11.88	11.40	11.10	10.82	---	10.72	10.50	9.89	10.91	11.08	11.97	12.44
31	11.86	---	11.08	10.95	---	10.71	---	9.82	---	11.12	11.98	---
TOTAL	---	350.33	348.35	338.59	317.21	337.39	318.67	320.43	314.69	336.88	365.28	365.56
MEAN	---	11.68	11.24	10.92	10.94	10.88	10.62	10.34	10.49	10.87	11.78	12.19
MAX	---	11.89	11.38	11.06	11.01	11.01	10.75	10.60	10.91	11.12	12.01	12.44
MIN	---	11.40	11.08	10.82	10.84	10.71	10.50	9.82	9.59	10.72	11.21	11.93

260810080222001 SITE 99 NEAR L-35A IN CONSERVATION AREA 2B, NEAR SUNRISE, FL

LOCATION.--Lat 26°08'21", long 80°22'02", in sec.32, T.49 S., R.40 E., Broward County, Hydrologic Unit 03090202, located in Conservation Area 2B, north of North New River Canal, West of Markham Park.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--July 1991 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Land surface is approximately 6.20 ft above National Geodetic Vertical Datum of 1929. Rainfall data collection discontinued April 4, 1996. Rainfall data available in files of the U.S. Geological Survey. Prior to July 1991, station operated by the U.S. Army Corps of Engineers.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 11.92 ft Dec. 23, 1994; minimum, 4.12 ft May 26, 1992.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 11.35 ft Oct. 1, 2; minimum, 5.01 ft July 11.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.35	---	10.57	10.64	---	9.86	9.15	8.42	7.12	5.61	6.17	9.72
2	11.33	---	---	10.63	---	9.84	9.12	8.38	7.05	5.54	6.99	9.74
3	11.29	10.76	---	10.60	10.34	9.82	9.08	8.39	6.99	5.55	7.62	9.77
4	11.27	---	---	10.58	10.32	9.79	9.04	8.46	6.95	5.53	7.97	9.96
5	11.25	---	10.61	10.57	10.29	9.76	---	8.46	6.96	5.44	8.16	10.00
6	11.22	---	10.64	10.55	10.27	9.74	---	8.43	6.90	5.37	8.32	10.10
7	11.19	---	10.64	10.54	10.26	9.72	8.94	8.40	6.91	5.30	8.43	10.13
8	11.16	---	10.64	10.51	10.24	9.71	---	8.37	6.96	5.24	8.52	10.16
9	11.14	---	10.64	10.48	10.21	9.68	8.88	8.33	6.88	5.17	8.60	10.20
10	11.11	---	10.66	10.47	10.20	9.65	8.85	8.29	6.83	5.09	8.63	10.18
11	11.09	10.82	10.70	10.44	10.17	9.63	8.82	8.25	6.79	5.28	8.67	10.17
12	11.06	10.80	10.70	10.41	10.15	9.61	8.81	8.20	6.75	5.64	8.70	10.14
13	11.04	10.79	10.70	10.40	10.13	9.60	8.89	8.16	6.71	5.76	8.74	10.11
14	---	10.75	10.73	10.37	10.11	9.56	8.96	8.11	6.70	5.63	8.79	10.09
15	---	10.73	10.78	10.35	10.09	9.52	8.95	8.07	6.69	5.67	8.84	10.08
16	---	10.70	10.77	10.32	10.08	9.51	8.92	8.05	6.64	6.00	8.90	10.07
17	---	10.68	10.78	10.30	10.05	9.50	8.90	8.03	6.59	6.03	8.94	10.06
18	---	10.66	10.78	10.29	10.04	9.47	8.88	7.98	6.52	5.95	8.98	10.06
19	---	10.65	10.77	10.30	10.00	9.45	8.85	7.94	6.44	6.13	9.03	10.05
20	---	10.64	10.77	10.29	9.98	9.43	8.82	7.89	6.35	6.34	9.09	10.03
21	---	10.61	10.76	10.27	9.96	9.40	8.80	7.84	6.24	6.41	9.14	10.02
22	---	---	10.74	10.25	9.94	9.37	8.77	7.78	6.20	6.41	9.19	10.02
23	---	---	10.73	10.24	9.91	9.34	8.73	7.72	6.12	6.35	9.28	10.02
24	---	---	10.73	10.21	9.89	9.30	8.69	7.66	6.00	6.28	9.31	10.05
25	10.72	---	10.73	10.19	9.89	9.28	8.65	7.60	5.90	6.15	9.40	10.12
26	10.70	10.53	10.72	10.17	9.94	9.27	8.62	7.53	5.82	6.04	9.49	10.19
27	10.69	10.54	10.70	10.16	9.93	9.27	8.58	7.47	5.74	6.00	9.54	10.31
28	10.67	10.55	10.69	10.15	9.92	9.26	8.55	7.39	5.75	5.88	9.61	10.35
29	10.79	10.57	10.68	10.12	9.89	9.24	8.50	7.32	5.82	5.82	9.64	10.42
30	---	10.56	10.66	---	---	---	8.46	7.26	5.69	5.72	9.67	10.50
31	---	---	10.66	---	---	---	---	7.19	---	5.77	9.69	---
TOTAL	---	---	---	---	---	---	---	247.37	195.01	179.10	272.05	302.82
MEAN	---	---	---	---	---	---	---	7.98	6.50	5.78	8.78	10.09
MAX	---	---	---	---	---	---	---	8.46	7.12	6.41	9.69	10.50
MIN	---	---	---	---	---	---	---	7.19	5.69	5.09	6.17	9.72

02286100 SOUTH NEW RIVER CANAL AT S-13, NEAR DAVIE, FL

LOCATION.--Lat 26°03'57", long 80°12'32", in SW ¼ sec.25, T.50 S., R.41 E., Broward County, Hydrologic Unit 03090202, 18 ft from north bank, 150 ft upstream from pump station S-13, 300 ft west of U.S. Highway 441, and 1.5 mi east of Davie.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--March 1957 to September 2004. Discontinued.

REVISED RECORDS.--WDR FL-87-2A, 1962-86 (maximum daily reverse flow); WDR FL-95-2A, 1994; WDR FL-99-2A, 1996-98.

GAGE.--Electronic data logger for upstream with water-stage shaft encoder for downstream. Prior to July 20, 1999, water-stage recorders. Prior to October 25, 2001, electronic data logger for gate recorder. Datum of gage is National Geodetic vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records fair. Flow is affected by tide and is occasionally reversed. Negative figures indicate reverse flow. Flow is regulated by pumpage and operation of gate at S-13. Flow is affected by regulation of control-structure 13A, 5 mi upstream, and by upstream withdrawals from the canal during the growing season and pumpage into the canal during high water. Discharge is computed from relation between head and gate-opening at S-13. The discharge published represents gate discharge computed by U.S. Geological Survey combined with pump discharge computed by South Florida Water Management District unless otherwise noted. The South Florida Water Management District determined that the previous rating used to compute pump discharge needed revision. The pump rating was revised during 1999. They revised their pump discharge for the water years 1995 through 1999. Prior to 1995 the accuracy of the pump discharge combined with our gate discharge can not be determined. Downstream stage is basically tidal, but at times is affected by gate operation and pumping at S-13. The downstream stage record published is the maximum and minimum elevation for each calendar day. Prior to October 1, 2001, the downstream stage record published is the maximum and minimum tide event for each calendar day. Prior to 1998 tidal stages were published under station number 02286101. Prior to September 30, 1984, deflection vane and prior to September 30, 1985, electromagnetic velocity meter at same site. During the 2003 water year auxiliary gage data from South Florida Water Management was used all year.

COOPERATION.--Gate-opening and pump records provided by South Florida Water Management District.

ANNUAL MEAN AND ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 37 complete water years of discharge (1958-86, 1988, 1990, 1999-2004).

EXTREME UPSTREAM STAGES FOR PERIOD OF RECORD.--Maximum gage height, 5.04 ft Oct. 15, 1999; minimum, -0.79 ft July 14, 1961.

EXTREME UPSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 2.23 ft Feb. 1; minimum, 0.06 ft Sept. 3.

EXTREME DOWNSTREAM STAGES FOR PERIOD OF RECORD.--Maximum gage height, 4.33 ft Oct. 15, 1999; minimum, -1.97 ft Apr. 28, 1963.

EXTREME DOWNSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 3.00 ft Sept. 25; minimum -1.22 ft Apr. 15.

UPSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	1.27	1.22	1.60	1.60	1.73	1.61	1.49	1.70	1.62	1.44
2	---	---	1.25	1.17	1.36	1.29	1.74	1.71	1.46	1.73	1.49	0.71
3	---	---	1.27	1.22	1.31	1.23	1.74	1.69	1.43	1.64	0.85	0.23
4	---	---	1.25	1.18	1.31	1.28	1.74	1.65	1.42	1.65	0.59	0.27
5	---	---	1.29	1.17	1.31	1.30	1.72	1.62	1.43	1.64	0.83	0.57
6	---	---	1.25	1.22	1.37	1.27	1.70	1.59	1.46	1.58	0.53	0.58
7	---	---	1.26	1.22	1.34	1.23	1.69	1.61	1.52	1.64	0.79	0.72
8	---	---	1.32	1.25	1.29	1.26	1.69	1.61	1.58	1.67	1.32	1.26
9	---	---	1.23	1.27	1.29	1.30	1.67	1.62	1.60	1.73	1.43	1.24
10	---	---	1.23	1.28	1.29	1.32	1.68	1.62	1.66	1.57	1.56	1.21
11	---	---	1.24	1.30	1.32	1.30	1.70	1.62	1.52	1.64	1.56	1.27
12	---	---	1.24	1.28	1.29	1.31	1.65	1.62	1.67	1.68	1.52	1.29
13	---	1.72	1.26	1.27	1.26	1.31	1.61	1.63	1.72	1.72	0.97	1.29
14	---	1.60	1.27	1.30	1.24	1.32	1.60	1.59	1.71	1.70	1.22	1.32
15	---	1.45	1.25	1.30	1.28	1.33	1.63	1.65	1.56	1.63	1.21	1.30
16	---	1.36	1.24	1.30	1.30	1.37	---	1.62	1.65	1.58	1.43	1.26
17	---	1.34	1.25	1.30	1.39	1.35	1.63	1.63	1.67	1.62	1.59	1.31
18	---	1.35	1.24	1.33	1.36	1.34	1.62	1.61	1.69	1.62	1.61	1.34
19	---	1.33	1.27	1.30	1.39	1.36	1.63	1.62	1.69	1.60	1.60	1.39
20	---	1.37	1.30	1.31	1.43	1.64	1.63	1.58	1.69	1.58	1.60	1.42
21	---	1.38	1.30	1.31	1.43	1.60	1.63	1.60	1.65	1.56	1.59	1.50
22	---	1.36	1.33	1.32	1.43	1.60	1.68	1.66	1.66	1.60	1.60	1.65
23	---	1.35	1.34	1.31	1.39	1.61	1.70	1.71	1.59	1.61	1.59	1.62
24	---	1.48	1.34	1.30	1.36	1.62	1.74	1.72	1.64	1.60	1.62	1.22
25	---	1.36	1.30	1.30	1.51	1.64	1.63	1.67	1.61	1.59	1.54	0.25
26	---	1.29	1.28	1.30	1.83	1.72	1.72	1.64	1.62	1.61	1.59	0.57
27	---	1.30	1.31	1.26	1.61	1.69	1.76	1.61	1.68	1.58	1.57	0.66
28	---	1.29	1.34	1.19	1.52	1.67	1.56	1.59	1.64	1.38	1.60	1.40
29	---	1.29	1.32	1.17	1.65	1.75	1.70	1.56	1.72	1.61	1.59	1.46
30	---	1.28	1.26	1.19	---	1.60	1.74	1.54	1.58	1.60	1.59	1.58
31	---	---	1.23	1.23	---	1.68	---	1.51	---	1.58	1.60	---
TOTAL	---	---	39.53	39.07	40.46	44.89	---	50.31	48.01	50.24	42.80	33.33
MEAN	---	---	1.28	1.26	1.40	1.45	---	1.62	1.60	1.62	1.38	1.11
MAX	---	---	1.34	1.33	1.83	1.75	---	1.72	1.72	1.73	1.62	1.65
MIN	---	---	1.23	1.17	1.24	1.23	---	1.51	1.42	1.38	0.53	0.23

02286100 SOUTH NEW RIVER CANAL AT S-13, NEAR DAVIE, FL--Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	208	150	107	212	373	226	0.00	10	0.00	0.00	323	171
2	139	127	94	206	280	234	0.00	0.00	0.00	0.00	539	171
3	113	194	90	196	250	236	0.00	49	0.00	34	446	18
4	124	120	86	201	189	218	0.00	58	0.00	68	333	81
5	152	151	72	215	216	193	0.00	50	0.00	35	301	179
6	153	145	93	189	264	225	0.00	145	0.00	56	304	247
7	143	125	67	199	304	205	0.00	162	0.00	34	207	238
8	201	187	65	176	286	197	0.00	126	0.00	0.00	206	369
9	181	236	94	329	288	193	0.00	121	0.00	0.00	164	320
10	168	195	94	217	276	195	0.00	117	0.00	44	159	281
11	165	157	89	189	269	190	0.00	112	68	0.00	151	218
12	156	90	87	195	274	189	48	112	0.00	0.00	145	210
13	155	185	109	191	267	182	215	50	0.00	0.00	207	207
14	147	174	118	186	258	179	197	62	32	53	144	196
15	147	183	105	175	251	198	96	73	17	36	189	209
16	152	186	110	183	253	192	84	43	0.00	58	108	211
17	139	185	154	182	223	166	65	83	0.00	45	99	180
18	133	157	196	188	210	156	78	49	0.00	53	106	182
19	132	169	220	211	182	142	25	54	0.00	123	98	172
20	123	151	210	190	211	105	41	65	0.00	140	95	165
21	118	142	185	170	218	132	38	53	32	164	103	146
22	102	136	179	197	228	134	36	0.00	93	147	96	178
23	59	143	178	198	224	118	0.00	0.00	91	121	122	202
24	85	71	204	188	221	64	36	0.00	31	108	184	229
25	86	123	212	186	179	0.00	0.00	0.00	47	112	244	109
26	71	108	211	190	180	0.00	0.00	0.00	38	92	206	169
27	90	117	201	186	216	44	0.00	0.00	34	122	157	253
28	94	119	190	197	202	0.00	54	0.00	0.00	120	139	232
29	196	113	201	188	184	0.00	0.00	0.00	0.00	117	152	345
30	154	111	204	99	---	67	30	0.00	45	91	144	424
31	144	---	198	147	---	0.00	---	0.00	---	159	117	---
TOTAL	4,230	4,450	4,423	5,976	6,976	4,380.00	1,043.00	1,594.00	528.00	2,132.00	5,988	6,312
MEAN	136	148	143	193	241	141	34.8	51.4	17.6	68.8	193	210
MAX	208	236	220	329	373	236	215	162	93	164	539	424
MIN	59	71	65	99	179	0.00	0.00	0.00	0.00	0.00	95	18
AC-FT	8,390	8,830	8,770	11,850	13,840	8,690	2,070	3,160	1,050	4,230	11,880	12,520

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2004, BY WATER YEAR (WY)

MEAN	187	157	139	148	138	128	97.7	119	196	184	178	195
MAX	394	459	472	465	328	419	371	339	404	371	443	510
(WY)	(1965)	(1970)	(1961)	(1961)	(1983)	(1970)	(1957)	(1969)	(1984)	(1958)	(1966)	(1960)
MIN	43.2	9.49	5.25	4.10	0.00	2.35	0.00	0.00	17.6	36.0	26.5	62.2
(WY)	(1990)	(1990)	(1989)	(1990)	(1990)	(1971)	(1965)	(1965)	(2004)	(1971)	(1971)	(1989)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1957 - 2004

ANNUAL TOTAL	55,513.00			48,032.00					
ANNUAL MEAN	152			131			161		
HIGHEST ANNUAL MEAN							320		
LOWEST ANNUAL MEAN							51.9		
HIGHEST DAILY MEAN	599	May 28		539	Aug 2		2,460	Dec 27, 1986	
LOWEST DAILY MEAN	0.00	Jan 21		0.00	Mar 25		-128	Sep 6, 1965	
ANNUAL SEVEN-DAY MINIMUM	20	Jan 26		0.00	Mar 31		-9.3	Mar 26, 1974	
ANNUAL RUNOFF (AC-FT)	110,100			95,270			116,300		
10 PERCENT EXCEEDS	234			227			340		
50 PERCENT EXCEEDS	148			140			133		
90 PERCENT EXCEEDS	60			0.00			0.00		

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

260037080303401 SITE 76 IN CONSERVATION AREA 3B NEAR ANDYTOWN, FL

LOCATION.--Lat 26°00'27", long 80°28'58", in NW ¼ sec.18, T.39 S., R.51 E., Broward County, Hydrologic Unit 03090202, in Conservation Area 3B approximately 0.7 mi southeast of Levee 67C, 3 mi southwest of intersection of Levee 67C and Levee 67A.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--July 1991 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and tipping bucket rain gage. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Land surface is approximately 6.80 ft above National Geodetic Vertical Datum of 1929. Rainfall data is available in files of the U.S. Geological Survey. Revised figures of stage required because an erroneous M.P. elevation was initially used for the 1995-98 water years. These will not be republished and supersede those published in the reports for 1995-98. The revised data are available in the files of the U.S. Geological Survey. The rainfall record was discontinued September 30, 2003.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 9.66 ft Oct. 15, 1999; minimum, 5.39 ft May 22, 23 2001. (Corrected).

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 8.74 ft Oct. 1; minimum, 6.54 ft July 4.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.74	8.29	8.12	7.58	7.76	7.61	7.34	7.22	6.95	6.61	7.19	7.46
2	8.72	8.28	8.11	7.56	7.73	7.60	7.33	7.21	6.91	6.59	7.24	7.46
3	8.70	8.33	8.08	7.55	7.71	7.60	7.32	7.26	6.88	6.55	7.28	7.46
4	8.68	8.35	8.07	7.54	7.70	7.59	7.30	7.28	6.84	6.56	7.26	7.49
5	8.66	8.48	8.04	7.52	7.70	7.59	7.30	7.34	6.86	6.58	7.24	7.59
6	8.64	8.56	8.02	7.51	7.70	7.58	7.30	7.31	6.90	6.59	7.24	7.63
7	8.61	8.60	7.99	7.49	7.68	7.56	7.29	7.29	6.92	6.64	7.24	7.65
8	8.59	8.60	7.96	7.50	7.68	7.55	7.27	7.29	6.93	6.70	7.28	7.66
9	8.57	8.58	7.93	7.51	7.66	7.54	7.27	7.29	6.92	6.69	7.35	7.67
10	8.55	8.56	7.91	7.51	7.65	7.53	7.27	7.28	6.90	6.66	7.34	7.67
11	8.53	8.55	7.90	7.52	7.64	7.52	7.27	7.28	6.90	6.63	7.32	7.67
12	8.52	8.52	7.88	7.52	7.64	7.51	7.28	7.25	6.88	6.66	7.31	7.67
13	8.50	8.50	7.85	7.52	7.63	7.50	7.33	7.24	6.86	6.69	7.30	7.67
14	8.48	8.48	7.85	7.52	7.63	7.49	7.36	7.23	6.84	6.69	7.32	7.67
15	8.46	8.45	7.88	7.52	7.62	7.48	7.36	7.22	6.82	6.71	7.36	7.68
16	8.44	8.43	7.85	7.52	7.62	7.46	7.34	7.22	6.81	6.72	7.36	7.68
17	8.42	8.41	7.84	7.52	7.62	7.46	7.32	7.21	6.78	6.71	7.36	7.68
18	8.40	8.38	7.82	7.53	7.62	7.46	7.31	7.20	6.75	6.71	7.36	7.68
19	8.39	8.36	7.81	7.55	7.60	7.44	7.30	7.19	6.72	6.71	7.36	7.68
20	8.37	8.34	7.79	7.55	7.59	7.43	7.29	7.19	6.70	6.77	7.36	7.69
21	8.35	8.32	7.76	7.55	7.59	7.43	7.27	7.18	6.71	6.79	7.36	7.69
22	8.34	8.30	7.74	7.55	7.58	7.40	7.27	7.16	6.80	6.80	7.36	7.79
23	8.32	8.28	7.72	7.55	7.57	7.40	7.27	7.15	6.84	6.81	7.37	7.82
24	8.31	8.26	7.70	7.55	7.56	7.39	7.26	7.13	6.84	6.81	7.39	7.82
25	8.29	8.24	7.69	7.55	7.58	7.38	7.26	7.11	6.83	6.85	7.42	7.82
26	8.28	8.23	7.67	7.54	7.66	7.38	7.25	7.10	6.80	6.90	7.43	7.86
27	8.27	8.21	7.65	7.54	7.63	7.38	7.25	7.09	6.76	6.92	7.43	7.89
28	8.25	8.18	7.64	7.54	7.62	7.38	7.25	7.07	6.72	7.01	7.45	7.89
29	8.31	8.16	7.61	7.54	7.61	7.36	7.25	7.05	6.69	7.13	7.45	7.92
30	8.31	8.14	7.60	7.54	---	7.36	7.23	7.02	6.65	7.10	7.45	8.00
31	8.30	---	7.58	7.60	---	7.36	---	6.99	---	7.12	7.46	---
TOTAL	262.30	251.37	243.06	233.59	221.58	231.72	218.71	223.15	204.71	209.41	227.64	231.01
MEAN	8.46	8.38	7.84	7.54	7.64	7.47	7.29	7.20	6.82	6.76	7.34	7.70
MAX	8.74	8.60	8.12	7.60	7.76	7.61	7.36	7.38	6.95	7.13	7.46	8.00
MIN	8.25	8.14	7.58	7.49	7.56	7.36	7.23	6.99	6.65	6.55	7.19	7.46

255828080401301 SITE 64 IN CONSERVATION AREA 3A NEAR COOPERTOWN, FL

LOCATION.--Lat 25°58'31", long 80°40'10", in T.37 S., R.51 E., Broward County, Hydrologic Unit 03090202, approximately 17 mi northwest of Coopertown.
No section could be determined from existing maps.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--June 1991 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and tipping bucket rain gage. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Land surface is approximately 8.40 ft above National Geodetic Vertical Datum of 1929. Gage is capable of recording water levels below land-surface datum. Rainfall data is available in files of the U.S. Geological Survey. The rainfall record was discontinued September 30, 2003.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 12.81 ft Nov. 2, 1999; minimum, 8.23 ft May 31, 1992.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 11.74 ft Oct. 1, 2; minimum 8.92 ft June 28.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.74	11.32	10.86	10.48	10.40	10.17	9.54	9.34	9.01	8.98	9.43	10.53
2	11.74	11.30	10.84	10.46	10.40	10.15	9.52	9.32	8.98	9.05	9.47	10.55
3	11.73	11.29	10.82	10.45	10.40	10.13	9.50	9.38	8.97	9.04	9.56	10.58
4	11.72	11.29	10.80	10.44	10.39	10.12	9.49	9.51	9.01	9.04	9.57	10.61
5	11.71	11.33	10.79	10.43	10.39	10.10	9.46	9.49	9.07	9.04	9.56	10.71
6	11.70	11.35	10.80	10.41	10.39	10.08	9.46	9.47	9.06	9.04	9.56	10.82
7	11.68	11.37	10.77	10.39	10.38	10.05	9.44	9.44	9.05	9.02	9.56	10.84
8	11.66	11.38	10.74	10.37	10.35	10.02	9.42	9.42	9.03	9.00	9.56	10.89
9	11.64	11.37	10.73	10.36	10.34	9.99	9.41	9.40	9.03	8.98	9.56	10.97
10	11.63	11.36	10.72	10.34	10.33	9.97	9.42	9.38	9.02	8.98	9.56	10.98
11	11.61	11.34	10.71	10.32	10.32	9.94	9.45	9.37	9.02	9.04	9.58	11.00
12	11.59	11.32	10.70	10.31	10.32	9.92	9.48	9.35	9.01	9.09	9.62	11.01
13	11.58	11.30	10.68	---	10.30	9.90	9.61	9.32	9.00	9.09	9.68	11.02
14	11.56	11.27	10.68	---	10.30	9.88	9.64	9.30	8.98	9.09	9.72	11.05
15	11.54	11.25	10.71	10.26	10.30	9.86	9.63	9.28	9.00	9.14	9.74	11.08
16	11.52	11.23	10.70	---	10.28	9.85	9.61	9.27	9.08	9.14	9.76	11.10
17	11.50	11.21	10.69	10.23	10.25	9.83	9.59	9.25	9.08	9.13	9.80	11.12
18	11.48	11.18	10.67	10.24	10.22	9.81	9.57	9.23	9.07	9.14	9.87	11.15
19	11.46	11.17	10.66	10.25	10.20	9.79	9.55	9.21	9.07	9.14	9.90	11.20
20	11.45	11.14	10.64	10.25	10.18	9.76	9.51	9.19	9.07	9.14	9.95	11.24
21	11.43	11.12	10.62	10.24	10.17	9.74	9.50	9.17	9.06	9.15	9.99	11.27
22	11.41	11.09	10.61	10.24	10.16	9.71	9.49	9.14	9.05	9.15	10.04	11.35
23	11.39	11.07	10.59	10.23	10.14	9.69	9.47	9.12	9.03	9.16	10.09	11.39
24	11.37	11.04	10.59	10.22	10.13	9.67	9.45	9.10	9.00	9.21	10.15	11.40
25	11.35	11.02	10.58	10.21	10.15	9.65	9.43	9.09	8.99	9.23	10.29	11.41
26	11.34	11.00	10.57	10.20	10.25	9.65	9.42	9.06	8.97	9.23	10.35	11.48
27	11.32	10.97	10.55	10.20	10.23	9.64	9.40	9.04	8.95	9.27	10.38	11.56
28	11.30	10.95	10.53	10.19	10.20	9.62	9.38	9.02	8.95	9.46	10.41	11.59
29	11.36	10.92	10.52	10.18	10.18	9.60	9.37	8.99	8.98	9.46	10.44	11.65
30	---	10.89	10.51	10.17	---	9.58	9.35	8.97	8.96	9.46	10.48	11.71
31	11.35	---	10.49	10.25	---	9.56	---	8.98	---	9.44	10.50	---
TOTAL	---	335.84	330.87	---	298.05	305.43	284.56	286.60	270.55	283.53	306.13	333.26
MEAN	---	11.19	10.67	---	10.28	9.85	9.49	9.25	9.02	9.15	9.88	11.11
MAX	---	11.38	10.86	---	10.40	10.17	9.64	9.51	9.08	9.46	10.50	11.71
MIN	---	10.89	10.49	---	10.13	9.56	9.35	8.97	8.95	8.98	9.43	10.53

255300080370001 SITE 69 IN CONSERVATION AREA 3B NEAR COOPERTOWN, FL

LOCATION.--Lat 25°53'00", long 80°37'00", in T.52 S., R.35 E., Miami-Dade County, Hydrologic Unit 03090202. Two gages are located on the east and west sides of the Levee 67A, 11.3 mi northeast of access gate at the Tamiami Trail. No section could be determine from existing maps.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD FOR EAST GAGE.--July 1991 to current year.

PERIOD OF RECORD FOR WEST GAGE.--October 1994 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder with tipping bucket rain gage located in the east gage shelter. Shaft encoder located in the west gage shelter. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Rainfall data is available in files of the U.S. Geological Survey. The rainfall record was discontinued September 30, 2003.

COOPERATION.--U.S. Army Corps of Engineers.

EXTREME STAGES FOR EAST GAGE FOR PERIOD OF RECORD.--Maximum gage height, 10.48 ft Oct. 15, 1999; minimum, 7.22 ft May 22-23, 2001. (Corrected).

EXTREME STAGES FOR EAST GAGE FOR CURRENT YEAR.--Maximum gage height, 9.73 ft Oct. 1; minimum, 7.69 ft June 3, 30.

EXTREME STAGES FOR WEST GAGE FOR PERIOD OF RECORD.--Maximum gage height, 12.74 ft Dec. 21, 1994; minimum, 7.42 ft Apr. 27, 1999.

EXTREME STAGES FOR WEST GAGE FOR CURRENT YEAR.--Maximum gage height, 11.55 ft Sept. 29; minimum, 7.80 ft June 28-30.

EAST
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.72	9.34	9.10	8.81	8.86	8.67	8.36	8.25	7.76	7.74	8.17	8.70
2	9.69	9.33	9.08	8.80	8.86	8.66	8.36	8.23	7.73	7.77	8.20	8.70
3	9.66	9.36	9.07	8.80	8.85	8.64	8.35	8.26	7.70	7.81	8.28	8.70
4	9.64	9.37	9.06	8.79	8.83	8.63	8.34	8.29	7.83	7.92	8.29	8.74
5	9.62	9.41	9.06	8.78	8.82	8.61	8.33	8.30	7.98	7.94	8.30	8.86
6	9.60	9.43	9.06	8.77	8.82	8.60	8.32	8.29	7.96	7.93	8.34	8.90
7	9.58	9.46	9.04	8.75	8.81	8.59	8.32	8.29	7.94	7.93	8.34	8.90
8	9.57	9.46	9.02	8.74	8.79	8.57	8.31	8.28	7.96	7.94	8.34	8.92
9	9.55	9.45	9.01	8.74	8.77	8.55	8.30	8.27	7.99	7.94	8.34	8.95
10	9.54	9.43	9.00	8.73	8.77	8.54	8.31	8.27	8.00	7.93	8.34	8.95
11	9.53	9.41	9.00	8.72	8.76	8.52	8.32	8.25	8.01	7.96	8.34	8.95
12	9.51	9.40	8.98	8.72	8.75	8.51	8.32	8.24	8.01	8.03	8.34	8.94
13	9.50	9.38	8.97	8.71	8.75	8.50	8.34	8.23	7.98	8.02	8.35	8.94
14	9.49	9.36	8.99	8.70	8.77	8.49	8.35	8.21	7.95	7.99	8.37	8.96
15	9.48	9.35	9.02	8.70	8.75	8.48	8.34	8.19	7.99	7.97	8.38	8.97
16	9.45	9.33	9.00	8.69	8.74	8.47	8.34	8.20	8.02	7.97	8.40	8.97
17	9.44	9.32	9.00	8.69	8.72	8.46	8.33	8.18	8.00	7.99	8.41	8.98
18	9.44	9.30	8.97	8.70	8.71	8.45	8.33	8.16	7.99	7.99	8.44	8.98
19	9.42	9.29	8.96	8.74	8.69	8.44	8.32	8.14	7.97	8.02	8.46	9.02
20	9.41	9.27	8.94	8.74	8.68	8.43	8.32	8.12	7.96	8.05	8.47	9.06
21	9.40	9.26	8.92	8.72	8.67	8.42	8.31	8.10	7.96	8.05	8.49	9.06
22	9.42	9.24	8.91	8.72	8.66	8.41	8.30	8.06	7.96	8.06	8.51	9.10
23	9.40	9.22	8.91	8.71	8.64	8.40	8.30	8.03	7.96	8.07	8.53	9.12
24	9.39	9.21	8.90	8.70	8.63	8.40	8.29	7.99	7.93	8.07	8.59	9.12
25	9.37	9.20	8.89	8.69	8.65	8.40	8.28	7.96	7.88	8.09	8.65	9.12
26	9.37	9.18	8.88	8.69	8.74	8.40	8.28	7.93	7.84	8.09	8.66	9.19
27	9.35	9.16	8.87	8.68	8.73	8.40	8.27	7.90	7.79	8.11	8.68	9.23
28	9.34	9.15	8.86	8.68	8.71	8.39	8.26	7.87	7.75	8.13	8.69	9.26
29	9.36	9.13	8.85	8.67	8.69	8.38	8.26	7.84	7.74	8.14	8.69	9.31
30	9.36	9.11	8.83	8.67	---	8.38	8.26	7.81	7.71	8.15	8.69	9.40
31	9.35	---	8.82	8.73	---	8.37	---	7.78	---	8.16	8.70	---
TOTAL	293.95	279.31	277.97	270.48	253.62	263.16	249.42	251.92	237.25	247.96	261.78	270.00
MEAN	9.48	9.31	8.97	8.73	8.75	8.49	8.31	8.13	7.91	8.00	8.44	9.00
MAX	9.72	9.46	9.10	8.81	8.86	8.67	8.36	8.30	8.02	8.16	8.70	9.40
MIN	9.34	9.11	8.82	8.67	8.63	8.37	8.26	7.78	7.70	7.74	8.17	8.70

255300080370001 SITE 69 IN CONSERVATION AREA 3B NEAR COOPERTOWN, FL-Continued

WEST
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.49	11.01	10.55	10.18	10.24	9.85	9.11	8.69	7.96	8.20	9.02	10.37
2	11.48	10.99	10.52	10.17	10.23	9.82	9.08	8.65	7.92	8.23	9.13	10.39
3	11.46	10.99	10.49	10.16	10.23	9.79	9.05	8.73	7.87	8.25	9.25	10.41
4	11.44	11.00	10.47	10.14	10.22	9.75	9.02	8.94	8.12	8.29	9.31	10.51
5	11.43	11.07	10.46	10.13	10.19	9.71	8.99	8.92	8.16	8.33	9.34	10.57
6	11.40	11.11	10.48	10.12	10.18	9.68	8.95	8.90	8.15	8.37	9.40	10.60
7	11.38	11.13	10.45	10.11	10.17	9.66	8.93	8.86	8.13	8.36	9.42	10.64
8	11.37	11.12	10.42	10.10	10.15	9.62	8.90	8.83	8.31	8.36	9.44	10.70
9	11.36	11.11	10.39	10.10	10.13	9.59	8.87	8.80	8.38	8.34	9.46	10.77
10	11.34	11.09	10.39	10.09	10.12	9.56	8.86	8.78	8.41	8.31	9.47	10.78
11	11.32	11.07	10.39	10.08	10.10	9.51	8.88	8.73	8.49	8.38	9.48	10.80
12	11.31	11.05	10.38	10.06	10.08	9.47	8.90	8.70	8.41	8.42	9.50	10.81
13	11.29	11.03	10.37	10.06	10.06	9.43	9.03	8.66	8.33	8.34	9.52	10.82
14	11.28	10.99	10.39	10.05	10.05	9.40	9.10	8.63	8.26	8.25	9.55	10.85
15	11.27	10.97	10.43	10.04	10.03	9.37	9.10	8.60	8.28	8.20	9.63	10.87
16	11.24	10.94	10.41	10.03	10.02	9.34	9.08	8.59	8.26	8.30	9.66	10.90
17	11.21	10.91	10.41	10.01	10.00	9.33	9.05	8.56	8.18	8.39	9.70	10.93
18	11.20	10.89	10.40	10.04	9.98	9.34	9.03	8.53	8.25	8.43	9.77	10.97
19	11.18	10.87	10.37	10.08	9.95	9.34	9.01	8.50	8.17	8.46	9.79	11.02
20	11.16	10.85	10.36	10.08	9.91	9.33	8.98	8.46	8.24	8.59	9.84	11.07
21	11.14	10.82	10.33	10.06	9.89	9.31	8.95	8.42	8.27	8.65	9.89	11.09
22	11.14	10.79	10.32	10.05	9.86	9.30	8.94	8.33	8.29	8.66	9.94	11.15
23	11.11	10.76	10.30	10.05	9.84	9.27	8.91	8.26	8.30	8.68	9.97	11.19
24	11.08	10.73	10.29	10.03	9.81	9.24	8.89	8.21	8.16	8.69	10.03	11.21
25	11.07	10.71	10.29	10.01	9.84	9.23	8.86	8.16	8.08	8.75	10.13	11.26
26	11.05	10.69	10.27	10.00	9.94	9.23	8.83	8.14	8.02	8.76	10.17	11.30
27	11.04	10.67	10.26	10.0	9.93	9.22	8.80	8.12	7.91	8.79	10.21	11.34
28	11.02	10.65	10.24	9.99	9.92	9.20	8.76	8.10	7.84	8.86	10.25	11.40
29	11.06	10.62	10.22	9.98	9.89	9.18	8.75	8.06	7.83	8.89	10.28	11.47
30	11.06	10.57	10.21	9.98	---	9.16	8.72	8.02	7.91	8.90	10.31	11.53
31	11.04	---	10.19	10.08	---	9.14	---	7.98	---	8.93	10.34	---
TOTAL	348.42	327.20	321.45	312.06	290.96	292.37	268.33	263.86	244.89	263.36	301.20	327.72
MEAN	11.24	10.91	10.37	10.07	10.03	9.43	8.94	8.51	8.16	8.50	9.72	10.92
MAX	11.49	11.13	10.55	10.18	10.24	9.85	9.11	8.94	8.49	8.93	10.34	11.53
MIN	11.02	10.57	10.19	9.98	9.81	9.14	8.72	7.98	7.83	8.20	9.02	10.37

254848080432001 SITE 65 IN CONSERVATION AREA 3A NEAR COOPERTOWN, FL

LOCATION.--Lat 25°48'52", long 80°43'12", SE ¼ T.53 S., R.36 E., Miami-Dade County, Hydrologic Unit 03090202, in the Everglades Water Conservation Area 3A, 4 mi north of Tamiami Trail (U.S. Highway 41) and 5 mi west of Levee 67A. No section could be determined from existing maps.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--1991 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder with tipping bucket rain gage. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Rainfall data is available in files of the U.S. Geological Survey. The rainfall record was discontinued September 30, 2003.

COOPERATION.--U.S. Army Corps of Engineers.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 12.06 ft Dec. 21, 22, 1994; minimum, 7.82 ft May 22, 23, 2001.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 11.04 ft Oct. 1; minimum, 8.24 ft June 9, 14, 15.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.03	10.55	10.22	9.92	10.05	9.76	9.08	8.78	8.33	8.44	8.88	10.00
2	11.00	10.54	10.20	9.92	10.05	9.73	9.05	8.77	8.31	8.43	8.99	10.01
3	10.98	10.55	10.18	9.91	10.04	9.71	9.02	8.83	8.30	8.42	9.08	10.00
4	10.96	10.57	10.17	9.91	10.04	9.68	8.99	8.89	8.29	8.43	9.13	10.02
5	10.94	10.64	10.15	9.90	10.04	9.65	8.96	8.88	8.28	8.43	9.15	10.11
6	10.92	10.66	10.17	9.89	10.03	9.62	8.95	8.85	8.28	8.43	9.20	10.14
7	10.90	10.67	10.15	9.88	10.01	9.60	8.93	8.83	8.28	8.43	9.21	10.14
8	10.88	10.67	10.12	9.88	9.99	9.57	8.91	8.81	8.27	8.46	9.21	10.18
9	10.87	10.67	10.10	9.88	9.98	9.52	8.89	8.80	8.26	8.45	9.21	10.19
10	10.86	10.67	10.08	9.88	9.97	9.49	8.88	8.78	8.29	8.48	9.22	10.21
11	10.86	10.66	10.08	9.88	9.96	9.46	8.86	8.76	8.29	8.63	9.22	10.22
12	10.86	10.65	10.07	9.88	9.94	9.44	8.86	8.73	8.29	8.77	9.23	10.23
13	10.83	10.63	10.06	9.88	9.91	9.42	8.93	8.70	8.27	8.79	9.24	10.25
14	10.81	10.60	10.07	9.87	9.91	9.40	8.97	8.68	8.25	8.72	9.26	10.26
15	10.80	10.58	10.12	9.87	9.90	9.37	8.97	8.67	8.27	8.69	9.30	10.28
16	10.79	10.56	10.11	9.86	9.89	9.34	8.96	8.66	8.32	8.70	9.32	10.30
17	10.76	10.54	10.09	9.86	9.88	9.32	8.95	8.64	8.32	8.68	9.42	10.32
18	10.75	10.52	10.07	9.88	9.85	9.28	8.93	8.61	8.43	8.65	9.48	10.39
19	10.72	10.49	10.05	9.94	9.83	9.26	8.91	8.59	8.68	8.63	9.47	10.46
20	10.70	10.47	10.03	9.92	9.81	9.24	8.89	8.58	8.65	8.67	9.48	10.46
21	10.68	10.44	10.01	9.91	9.78	9.22	8.87	8.56	8.62	8.70	9.53	10.46
22	10.67	10.42	10.0	9.90	9.76	9.20	8.86	8.53	8.60	8.71	9.56	10.48
23	10.66	10.40	9.99	9.89	9.74	9.19	8.84	8.51	8.61	8.68	9.60	10.51
24	10.63	10.38	9.98	9.88	9.70	9.17	8.83	8.49	8.58	8.66	9.65	10.53
25	10.61	10.36	9.98	9.86	9.72	9.15	8.81	8.48	8.55	8.65	9.71	10.56
26	10.61	10.34	9.97	9.86	9.83	9.16	8.80	8.46	8.53	8.65	9.78	10.62
27	10.60	10.33	9.97	9.85	9.80	9.16	8.79	8.44	8.49	8.68	9.84	10.63
28	10.58	10.32	9.96	9.85	9.78	9.15	8.78	8.42	8.47	8.81	9.88	10.67
29	10.59	10.27	9.95	9.83	9.78	9.13	8.78	8.39	8.46	8.80	9.90	10.74
30	10.58	10.24	9.94	9.83	---	9.11	8.78	8.37	8.45	8.80	9.93	10.81
31	10.57	---	9.93	9.90	---	9.09	---	8.35	---	8.82	9.96	---
TOTAL	334.00	315.39	311.97	306.37	286.97	290.59	267.03	267.84	252.02	267.29	292.04	310.18
MEAN	10.77	10.51	10.06	9.88	9.90	9.37	8.90	8.64	8.40	8.62	9.42	10.34
MAX	11.03	10.67	10.22	9.94	10.05	9.76	9.08	8.89	8.68	8.82	9.96	10.81
MIN	10.57	10.24	9.93	9.83	9.70	9.09	8.78	8.35	8.25	8.42	8.88	10.00

255250080335001 SITE 71 IN CONSERVATION AREA 3B, NEAR COOPERTOWN, FL

LOCATION.--Lat 25°53'04", long 80°33'25", in T.52 S., R.35 E., Miami-Dade County, Hydrologic Unit 03090202, in Conservation Area 3B, 2.6 mi east of Levee 67°C and 8.3 mi southeast of intersection with Levee 30. No section could be determined from existing maps.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--July 1991 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and tipping bucket rain gage. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Land surface is approximately 7.00 ft above National Geodetic Vertical Datum of 1929. Gage is capable of recording water levels below land-surface datum. Rainfall data available in files of the U.S. Geological Survey. The rainfall record was discontinued September 30, 2003.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 9.80 ft Oct. 15, 1999; minimum, 6.04 ft May 22, 23, 2001.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 8.83 ft Oct. 1, 2; minimum, 6.97 ft July 3.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.82	8.52	8.31	7.94	8.01	7.82	7.43	7.28	7.04	7.00	---	7.62
2	8.81	8.52	8.29	7.93	8.00	7.81	7.41	7.27	7.02	6.99	---	7.61
3	8.80	8.53	8.28	7.92	7.98	7.79	7.40	7.35	7.01	7.00	---	7.59
4	8.79	8.55	8.27	7.91	7.97	7.78	7.39	7.52	7.03	7.08	---	7.61
5	8.77	8.61	8.25	7.90	7.96	7.77	7.37	7.48	7.11	7.11	---	7.73
6	8.76	8.64	8.25	7.89	7.95	7.75	7.36	7.45	7.10	7.10	---	7.77
7	8.74	8.65	8.23	7.87	7.94	7.74	7.35	7.42	7.10	7.08	7.49	7.78
8	8.73	8.65	8.22	7.86	7.92	7.71	7.33	7.40	7.13	7.07	7.47	7.79
9	8.72	8.64	8.20	7.85	7.91	7.69	7.32	7.38	7.13	7.06	7.46	7.78
10	8.70	8.63	8.19	7.84	7.90	7.68	7.32	7.36	7.13	7.05	7.44	7.78
11	8.69	8.62	8.19	7.82	7.89	7.66	7.40	7.34	7.14	7.05	7.42	7.78
12	8.68	8.60	8.17	7.82	7.88	7.65	7.44	7.32	7.13	7.18	7.41	7.77
13	8.67	8.60	8.15	7.80	7.87	7.64	7.50	7.30	7.12	7.22	7.40	7.77
14	8.65	8.59	8.15	7.80	7.90	7.63	7.53	7.28	7.10	7.18	7.41	7.77
15	8.65	8.57	8.18	7.79	7.89	7.62	7.50	7.27	7.10	7.15	7.45	7.78
16	8.63	8.55	8.16	7.78	7.88	7.61	7.47	7.27	7.12	7.13	7.44	7.78
17	8.61	8.53	8.16	7.78	7.86	7.59	7.45	7.27	7.12	7.12	7.44	7.78
18	8.61	8.51	8.14	7.79	7.84	7.58	7.43	7.25	7.11	7.11	7.45	7.78
19	8.60	8.51	8.12	7.83	7.82	7.56	7.41	7.23	7.11	7.10	7.45	7.77
20	8.59	8.50	8.10	7.83	7.81	7.54	7.39	7.21	7.10	7.12	7.45	7.78
21	8.57	8.48	8.09	7.82	7.80	7.53	7.37	7.20	7.10	7.13	7.45	7.79
22	8.62	8.47	8.07	7.82	7.79	7.51	7.36	7.18	7.09	7.12	7.46	7.84
23	8.58	8.45	8.06	7.80	7.78	7.50	7.34	7.17	7.08	7.11	7.47	7.86
24	8.56	8.43	8.05	7.79	7.76	7.48	7.33	7.15	7.07	7.11	7.50	7.86
25	8.56	8.42	8.05	7.78	7.79	7.48	7.31	7.13	7.05	7.10	7.56	7.86
26	8.54	8.41	8.03	7.78	7.89	7.50	7.30	7.12	7.04	7.10	7.57	7.92
27	8.52	8.39	8.02	7.77	7.88	7.50	7.29	7.11	7.02	7.11	7.60	7.95
28	8.51	8.37	8.00	7.77	7.86	7.49	7.28	7.09	7.01	7.18	7.65	7.95
29	8.55	8.35	7.98	7.75	7.84	7.48	7.29	7.07	7.03	7.23	7.63	8.00
30	8.54	8.33	7.97	7.75	---	7.46	7.28	7.06	7.02	7.23	7.62	8.11
31	8.54	---	7.96	7.83	---	7.45	---	7.05	---	---	7.62	---
TOTAL	268.11	255.62	252.29	242.61	228.57	236.00	221.35	224.98	212.46	---	---	233.96
MEAN	8.65	8.52	8.14	7.83	7.88	7.61	7.38	7.26	7.08	---	---	7.80
MAX	8.82	8.65	8.31	7.94	8.01	7.82	7.53	7.52	7.14	---	---	8.11
MIN	8.51	8.33	7.96	7.75	7.76	7.45	7.28	7.05	7.01	---	---	7.59

02286200 SNAKE CREEK CANAL AT NW 67TH AVENUE, NEAR HIALEAH, FL

LOCATION.--Lat 25°57'50", long 80°18'40", in SW ¼ sec.36, T.51 S., R.40 E., Broward County, Hydrologic Unit 03090202, 300 ft downstream of N.W. 67th Avenue bridge on A-frame walkway, 6.0 mi north of Hialeah, Dade County, 10.9 mi upstream from salinity-control structure 29, and 11 mi upstream from mouth.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1959 to February 1962 (gage heights only), March 1962 to current year.

REVISED RECORDS.--WDR FL-74-2A, 1969; WDR FL-02-0219, 2001.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Prior to January 31, 2002, telemetry included cellular phone/radio telemetry and electronic data logger provided by the South Florida Water Management District. Prior to July 19, 1999, water-stage recorder and electromagnetic velocity meter. Datum of gage is National Geodetic Vertical Datum of 1929 (State Department of Transportation bench mark). Prior to October 1, 1975, at datum 0.28 ft lower. November 1, 1959, to March 15, 1962, water-stage recorder 10 ft downstream at datum 0.28 ft lower.

REMARKS.--Records poor. Flow affected by regulation at salinity-control structure 29, Broward county pump structure (S7) on the N.W. 67 Avenue Canal and, at times by tide, and is occasionally reversed. Records of gage heights prior to March 1962, are available in files of the U.S. Geological Survey. Discharge represents flow to the east. Discharge computed from relations between stage vs. area and index velocity vs. mean channel velocity.

COOPERATION.--South Florida Water Management District.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 27 complete years of discharge (1963-86, 1993, 2000, 2004).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 5.57 ft Oct. 15, 1999; minimum, 0.58 ft June 22, 1960.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 2.95 ft Sept. 5; minimum, 1.39 ft Sept. 19.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.72	2.33	2.26	2.26	2.32	1.98	---	2.13	1.79	2.04	2.36	2.13
2	2.61	2.26	2.32	2.26	2.45	2.16	2.04	2.12	1.77	2.01	2.55	1.88
3	2.50	2.32	2.34	2.26	2.23	2.20	2.01	2.20	1.74	1.99	2.57	1.70
4	2.30	2.36	2.36	2.25	2.09	2.22	1.99	2.28	1.71	2.00	2.42	1.75
5	2.40	2.47	2.38	2.25	2.17	2.23	1.98	---	1.70	2.03	2.28	2.53
6	2.42	2.48	2.25	2.24	2.37	2.23	1.96	---	1.70	2.03	2.18	2.45
7	---	2.38	2.00	2.23	2.23	2.24	1.95	2.36	1.81	2.01	1.93	2.19
8	2.35	2.39	2.17	2.22	2.13	2.24	1.94	2.34	2.04	2.00	1.84	2.04
9	2.40	2.57	2.27	2.21	2.06	2.23	1.95	2.31	2.07	1.96	1.94	2.09
10	2.42	2.37	2.32	2.20	2.02	2.21	1.97	2.29	2.06	1.93	2.27	1.99
11	2.46	2.26	2.30	2.18	2.07	2.20	1.96	2.27	2.07	1.89	2.20	1.82
12	2.40	2.22	2.12	2.16	2.29	2.19	2.02	2.23	2.07	1.93	1.82	1.70
13	2.35	2.12	2.27	2.16	2.36	2.19	2.18	2.20	2.06	2.04	1.69	1.69
14	2.31	2.36	2.31	2.15	2.39	2.18	1.87	2.17	2.06	2.11	1.74	1.66
15	2.31	2.38	2.11	2.14	2.32	2.19	1.98	2.15	2.10	1.94	2.13	1.67
16	2.32	2.36	2.01	2.13	2.05	2.19	2.20	2.18	2.11	2.10	2.24	1.63
17	2.20	2.31	1.94	2.13	2.06	2.19	2.24	---	2.06	2.27	2.30	1.59
18	2.21	2.29	1.88	2.15	2.22	2.18	2.23	2.15	2.04	2.26	2.35	1.57
19	2.38	2.26	1.96	2.23	2.25	2.16	2.22	2.12	2.04	2.31	2.38	1.57
20	2.18	2.22	---	2.23	2.27	2.14	2.21	2.09	2.12	2.23	2.18	---
21	2.30	2.34	2.18	2.22	2.27	2.12	2.20	2.07	2.12	2.16	2.05	1.91
22	2.34	2.36	2.21	2.22	2.28	2.11	2.18	2.04	2.18	2.19	2.01	2.28
23	2.26	2.42	2.25	2.21	2.24	2.08	2.16	2.01	2.27	2.11	2.10	2.27
24	2.30	2.39	2.26	2.20	2.26	2.05	2.15	1.96	2.24	2.08	2.14	2.05
25	2.40	2.33	2.27	2.19	2.23	2.05	2.13	1.94	2.19	2.23	2.32	1.96
26	2.43	2.40	2.28	2.19	2.21	2.13	2.11	1.93	2.16	---	2.47	2.17
27	2.42	2.31	2.28	2.19	1.90	2.15	2.09	1.90	2.11	2.30	2.29	2.16
28	2.31	2.38	2.28	2.19	1.88	2.14	2.11	1.88	2.06	2.19	2.18	1.99
29	2.30	2.15	2.27	2.17	1.93	2.13	2.14	1.85	2.09	1.84	2.15	1.94
30	---	2.08	2.27	1.95	---	2.12	2.13	1.83	2.06	1.94	2.33	1.98
31	2.26	---	2.26	1.63	---	2.07	---	1.81	---	2.31	2.23	---
TOTAL	---	69.87	---	67.40	63.55	66.90	---	---	60.60	---	67.64	---
MEAN	---	2.33	---	2.17	2.19	2.16	---	---	2.02	---	2.18	---
MAX	---	2.57	---	2.26	2.45	2.24	---	---	2.27	---	2.57	---
MIN	---	2.08	---	1.63	1.88	1.98	---	---	1.70	---	1.69	---

02286200 SNAKE CREEK CANAL AT NW 67TH AVENUE, NEAR HIALEAH, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	747	265	115	98	651	204	e82	65	117	e93	337	405
2	651	291	85	99	541	90	83	73	104	104	665	474
3	570	292	85	91	535	78	85	154	91	126	676	379
4	588	317	115	102	528	81	81	289	102	146	671	398
5	432	443	119	104	350	90	64	e161	81	126	592	329
6	406	553	216	109	274	105	e54	e85	83	121	544	672
7	e385	672	308	91	343	110	61	80	e114	87	513	722
8	389	623	139	86	347	101	94	78	116	70	521	699
9	335	602	103	103	335	91	106	72	e83	e43	383	691
10	341	587	117	95	337	81	79	84	136	e40	248	604
11	341	544	166	80	259	68	80	72	170	87	376	520
12	345	515	235	92	110	80	72	94	146	134	478	429
13	343	522	121	99	93	e63	147	e70	119	137	424	404
14	332	288	165	112	79	82	406	77	129	126	311	372
15	274	260	318	94	173	89	210	e84	121	243	70	363
16	257	276	323	98	309	113	e35	e71	e87	e51	59	368
17	320	300	338	94	216	107	e18	e70	e84	e-25	59	354
18	263	293	309	111	84	e59	e21	e71	115	e21	75	342
19	137	304	211	115	e65	78	e34	e71	116	122	135	317
20	314	289	e106	96	76	e56	e38	e71	47	310	281	e258
21	152	188	95	93	105	95	59	e59	83	288	280	e47
22	202	189	104	105	105	93	55	72	154	273	294	e29
23	239	134	109	94	116	54	e45	e68	144	240	282	253
24	144	166	123	98	95	65	66	106	126	210	277	413
25	97	206	98	93	207	e67	e48	77	131	194	338	399
26	107	129	97	113	323	e63	77	106	115	e121	283	322
27	131	207	98	112	449	e63	92	118	83	141	288	418
28	201	160	90	74	361	67	e50	104	e75	323	283	459
29	344	292	106	79	279	78	e35	110	e96	485	295	481
30	e323	258	107	283	---	64	57	124	e85	316	205	535
31	354	---	106	488	---	110	---	125	---	108	338	---
TOTAL	10,064	10,165	4,827	3,601	7,745	2,645	2,434	2,961	3,253	4,861	10,581	12,456
MEAN	325	339	156	116	267	85.3	81.1	95.5	108	157	341	415
MAX	747	672	338	488	651	204	406	289	170	485	676	722
MIN	97	129	85	74	65	54	18	59	47	-25	59	29
AC-FT	19,960	20,160	9,570	7,140	15,360	5,250	4,830	5,870	6,450	9,640	20,990	24,710

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2004, BY WATER YEAR (WY)

	331	248	177	173	171	159	139	176	340	281	323	345
MEAN	331	248	177	173	171	159	139	176	340	281	323	345
MAX	642	727	348	408	408	625	623	650	829	740	920	891
(WY)	(1967)	(1970)	(1970)	(1995)	(1969)	(1970)	(1970)	(1979)	(1968)	(1966)	(1966)	(1966)
MIN	4.64	3.41	1.49	9.39	3.26	28.3	4.87	-4.84	31.3	10.0	1.64	1.94
(WY)	(1994)	(1994)	(1994)	(1994)	(1996)	(1996)	(1998)	(2001)	(1993)	(1993)	(1993)	(1993)

SUMMARY STATISTICS

ANNUAL TOTAL
ANNUAL MEAN
HIGHEST ANNUAL MEAN
LOWEST ANNUAL MEAN
HIGHEST DAILY MEAN
LOWEST DAILY MEAN
ANNUAL SEVEN-DAY MINIMUM
ANNUAL RUNOFF (AC-FT)
10 PERCENT EXCEEDS
50 PERCENT EXCEEDS
90 PERCENT EXCEEDS

FOR 2004 WATER YEAR

75,593
207

747
-25
37
149,900
452
121
66

WATER YEARS 1963 - 2004

266
518
114
1,550
-64
-13
193,000
558
214
59

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

255026080231300 SNAPPER CREEK CANAL EXTENSION AT NW 74TH STREET, NEAR HIALEAH, FL

LOCATION.--Lat 25°50'26", long 80°23'13", in SE ¼ sec.12, T.53 S., R.39 E., Miami-Dade County, Hydrologic Unit 03090202, on the north side of a short spur canal that runs west from the main canal at N.W. 74th Street, and 5.5 mi upstream from the Tamiami Canal.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--April 1984 to current year.

GAGE.--Electronic data logger. Datum of gage is National Geodetic Vertical Datum of 1929.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 7.07 ft Oct. 15-17, 1999; minimum, 0.21 ft June 5, 6, 1989.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 5.47 ft Oct. 1; minimum, 2.61 ft June 28.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.44	4.55	4.03	3.60	4.08	3.59	3.18	3.25	2.75	2.70	3.50	---
2	5.38	4.54	3.98	3.59	4.05	3.55	3.15	3.20	2.70	2.71	4.00	---
3	5.31	4.52	3.95	3.58	4.00	3.52	3.14	3.34	2.67	2.75	4.23	---
4	5.26	4.52	3.93	3.59	3.94	3.50	3.13	3.72	2.65	2.80	4.26	---
5	5.22	4.62	3.92	3.58	3.90	3.46	3.10	3.59	2.67	2.83	4.23	---
6	5.17	4.76	3.90	3.56	3.86	3.44	3.08	3.49	2.69	2.80	4.37	---
7	5.13	4.79	3.86	3.54	3.82	3.43	3.06	3.42	2.79	2.78	4.27	---
8	5.09	4.78	3.83	3.50	3.77	3.40	3.05	3.35	2.86	2.82	4.20	---
9	5.05	4.83	3.81	3.47	3.73	3.37	3.04	3.31	2.83	2.77	4.19	---
10	5.02	4.79	3.81	3.47	3.71	3.36	3.03	3.27	2.89	2.72	4.14	---
11	5.01	4.74	3.81	3.45	3.69	3.34	3.05	3.23	2.97	2.70	4.07	---
12	4.98	4.70	3.79	3.43	3.68	3.34	3.11	3.18	2.89	2.71	3.98	---
13	4.95	4.66	3.77	3.42	3.65	3.34	3.33	3.15	2.83	2.78	3.93	---
14	4.91	4.62	3.82	3.42	3.62	3.34	3.54	3.14	2.78	2.87	3.87	---
15	4.88	4.59	3.89	3.41	3.62	3.35	3.42	3.13	2.77	2.85	3.82	---
16	4.84	4.55	3.85	3.40	3.59	3.36	3.34	3.16	2.79	2.84	3.78	---
17	4.81	4.53	3.83	3.38	3.56	3.36	3.28	3.14	2.73	2.86	3.79	---
18	4.79	4.50	3.79	3.43	3.52	3.35	3.23	3.11	2.68	2.86	3.81	---
19	4.76	4.48	3.76	3.56	3.48	3.34	3.19	3.08	2.68	2.94	3.79	---
20	4.73	4.45	3.73	3.51	3.47	3.32	3.17	3.06	2.72	3.18	3.77	---
21	4.70	4.41	3.71	3.49	3.47	3.31	3.15	3.04	2.78	3.16	3.75	---
22	4.76	4.37	3.69	3.49	3.46	3.30	3.14	3.01	2.94	3.16	3.74	---
23	4.71	4.34	3.69	3.47	3.44	3.27	3.12	2.98	2.94	3.09	3.76	---
24	4.68	4.30	3.69	3.43	3.43	3.25	3.11	2.95	2.85	3.06	3.77	---
25	4.65	4.26	3.68	3.43	3.55	3.27	3.09	2.93	2.78	3.08	3.82	---
26	4.62	4.23	3.67	3.43	3.85	3.36	3.07	2.91	2.73	3.13	3.79	---
27	4.59	4.20	3.65	3.43	3.76	3.35	3.05	2.89	2.69	3.20	3.77	---
28	4.55	4.17	3.64	3.40	3.69	3.29	3.15	2.87	2.64	3.53	3.79	---
29	4.62	4.12	3.63	3.36	3.64	3.25	3.28	2.84	2.81	3.46	3.76	---
30	4.59	4.07	3.62	3.36	---	3.22	3.24	2.81	2.76	3.38	3.72	---
31	4.59	---	3.60	3.56	---	3.19	---	2.78	---	3.34	3.69	---
TOTAL	151.79	134.99	117.33	107.74	107.03	104.12	95.02	97.33	83.26	91.86	121.36	---
MEAN	4.90	4.50	3.78	3.48	3.69	3.36	3.17	3.14	2.78	2.96	3.91	---
MAX	5.44	4.83	4.03	3.60	4.08	3.59	3.54	3.72	2.97	3.53	4.37	---
MIN	4.55	4.07	3.60	3.36	3.43	3.19	3.03	2.78	2.64	2.70	3.50	---

02286400 MIAMI CANAL AT S-354, AND S-3, AT LAKE HARBOR, FL

LOCATION.--Lat 26°41'42", long 80°48'25", in SE 1/4 sec. 35, T.44 S., R.35 E., Palm Beach County, Hydrologic Unit 03090202, 0.25 mi downstream of S-354 and pump station 3 at Lake Okeechobee, 0.05 mi south of U.S. Highway 27 on the Miami Canal in Lake Harbor, FL.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--Prior to October 1940, monthly discharge only, published in WSP 1304. October 1988 to current year. December 1939 to June 1943 (published as Miami Canal at Lake Harbor, October 1957 to September 1988, published as Miami Canal at HGS-3, and S-3, at Lake Harbor.

REVISED RECORDS.--WDR FL-93-2A, 1992

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Datum of gage is National Geodetic Vertical Datum of 1929. December 1, 1939 to June 30, 1943, nonrecording gage at this site at same datum. October 1, 1957 to September 30, 1959, dual water-stage recorder at present site, at datum 0.05 ft lower and October 1, 1959 to February 7, 1962, at datum 0.22 ft lower. October 1, 1957 to September 30, 1968, two deflection vane recorders. From 1981 water year to April 1, 1987, electromagnetic velocity meter and digital recorder. Electromagnetic velocity meter reinstalled May 11, 1988 and discontinued in the 1992 water year, September 11, 1991 to October 4, 2003, acoustic velocity meter. Satellite data collection platform installed September 11, 1991. Acoustic doppler velocity meter installed May 23, 2002 and ran simultaneously with the acoustic velocity meter until October 4, 2003 when the acoustic velocity meter was removed. Prior to October 1, 1998, lake stage published under station number 02286399. Lake station discontinued September 30, 1998.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated by gates and pump station at Lake Okeechobee. Discharge is the flow through acoustic velocity meter site approximately 0.25 mi below S-354 structure. Stage collected also at the acoustic velocity meter site. Flow frequently reversed during and after periods of heavy rainfall by pumpage into the canal from agricultural lands in the Everglades, or by the operation of pump station 3 (negative figure indicates reverse flow). Discharge computed from relations between stage vs. area and index velocity vs. mean channel velocity.

COOPERATION.--S-3 pump, syphon record and S-354 gate-operation record provided by South Florida Water Management District.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 39 complete water years of discharge (1957-89, 1993-97, 2001, 2004).

EXTREME CANAL STAGES FOR PERIOD OF RECORD.--Maximum gage height 14.92 ft, present datum, Mar. 21, 1960 and Oct. 2, 1965; minimum, 7.45 ft May 2, 2001.

EXTREME CANAL STAGES FOR CURRENT YEAR.--Maximum gage height, 12.49 ft Sept. 6; minimum, 9.23 ft Sept. 4.

REVISIONS.--The period of record annual and monthly statistics published in the 2001-2003 reports are accurate for the period of 1958-1997 only and did not include any data from 1998 to the published water year. The revised annual and monthly statistics for the 2001-2003 are published below.

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

MEAN	-66.9	42.8	89.6	110	197	240	445	332	3.17	-72.9	-103	-174
MAX	609	420	385	634	1,439	1,415	1,480	1,065	1,157	936	302	1,191
(WY)	(1989)	(1974)	(1969)	(1993)	(1993)	(1966)	(1993)	(2000)	(1998)	(1992)	(1993)	(1992)
MIN	-1,167	-429	-330	-849	-373	-1,185	-316	-296	-897	-769	-899	-1,614
(WY)	(1961)	(1961)	(1958)	(1958)	(1983)	(1970)	(1958)	(1972)	(1968)	(1985)	(1981)	(1960)

SUMMARY STATISTICS

	FOR 2001 WATER YEAR		WATER YEARS 1958 - 2001	
ANNUAL TOTAL	-28,273.27			
ANNUAL MEAN	-77.5		69.4	
HIGHEST ANNUAL MEAN			487	1993
LOWEST ANNUAL MEAN			-290	1960
HIGHEST DAILY MEAN	530	Dec 20	2,280	Mar 24, 1966
LOWEST DAILY MEAN	-1,870	Jul 26	-2,790	Mar 26, 1970
ANNUAL SEVEN-DAY MINIMUM	-1,420	Sep 9	-2,170	Jun 18, 1959
ANNUAL RUNOFF (AC-FT)	-56,080		50,280	
10 PERCENT EXCEEDS	302		542	
50 PERCENT EXCEEDS	23		0.00	
90 PERCENT EXCEEDS	-705		-391	

REVISED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2002, BY WATER YEAR (WY)

MEAN	-68.4	41.3	85.5	106	193	240	444	332	3.17	-71.5	-100	-170
MAX	609	420	385	634	1,439	1,415	1,480	1,065	1,157	936	302	1,191
(WY)	(1989)	(1974)	(1969)	(1993)	(1993)	(1966)	(1993)	(2000)	(1998)	(1992)	(1993)	(1992)
MIN	-1,167	-429	-330	-849	-373	-1,185	-316	-296	-897	-769	-899	-1,614
(WY)	(1961)	(1961)	(1958)	(1958)	(1983)	(1970)	(1958)	(1972)	(1968)	(1985)	(1981)	(1960)

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR		WATER YEARS 1958 - 2002	
ANNUAL TOTAL	-43,083.72			
ANNUAL MEAN	-118		69.4	
HIGHEST ANNUAL MEAN			487	1993
LOWEST ANNUAL MEAN			-290	1960
HIGHEST DAILY MEAN	460	Apr 18	2,280	Mar 24, 1966
LOWEST DAILY MEAN	-1,870	Jul 26	-2,790	Mar 26, 1970
ANNUAL SEVEN-DAY MINIMUM	-1,420	Sep 9	-2,170	Jun 18, 1959
ANNUAL RUNOFF (AC-FT)	-85,460		50,280	
10 PERCENT EXCEEDS	230		542	
50 PERCENT EXCEEDS	0.00		0.00	
90 PERCENT EXCEEDS	-675		-391	

REVISED

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2003, BY WATER YEAR (WY)

MEAN	-66.8	41.3	83.8	104	189	240	444	330	3.27	-69.8	-97.6	-166
MAX	609	420	385	634	1,439	1,415	1,480	1,065	1,157	936	302	1,191
(WY)	(1989)	(1974)	(1969)	(1993)	(1993)	(1966)	(1993)	(2000)	(1998)	(1992)	(1993)	(1992)
MIN	-1,167	-429	-330	-849	-373	-1,185	-316	-296	-897	-769	-899	-1,614
(WY)	(1961)	(1961)	(1958)	(1958)	(1983)	(1970)	(1958)	(1972)	(1968)	(1985)	(1981)	(1960)

SUMMARY STATISTICS

WATER YEARS 1958 - 2003

ANNUAL MEAN	69.4	
HIGHEST ANNUAL MEAN	487	1993
LOWEST ANNUAL MEAN	-290	1960
HIGHEST DAILY MEAN	2,280	Mar 24, 1966
LOWEST DAILY MEAN	-2,790	Mar 26, 1970
ANNUAL SEVEN-DAY MINIMUM	-2,170	Jun 18, 1959
ANNUAL RUNOFF (AC-FT)	50,280	
10 PERCENT EXCEEDS	542	
50 PERCENT EXCEEDS	0.00	
90 PERCENT EXCEEDS	-391	

REVISED

02286400 MIAMI CANAL AT S-354, AND S-3, AT LAKE HARBOR, FL-Continued

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.72	10.76	10.85	10.68	10.76	10.56	11.20	11.22	11.61	10.57	10.71	10.30
2	11.03	10.66	11.18	10.67	10.34	10.81	11.11	10.97	11.63	10.72	11.12	9.95
3	10.68	10.99	11.16	10.70	10.09	10.94	11.04	10.39	10.62	10.75	11.20	9.79
4	10.28	11.16	11.19	10.73	10.66	10.75	11.16	10.30	10.28	10.73	11.13	9.50
5	11.07	10.51	11.03	10.75	10.76	11.00	11.23	10.58	10.51	10.71	10.57	10.58
6	10.14	10.26	10.64	10.69	10.90	10.73	11.27	---	10.40	10.67	10.54	12.05
7	10.23	10.29	10.50	10.64	10.48	10.80	11.15	10.55	10.46	---	10.32	12.17
8	10.87	10.34	10.81	10.62	10.43	---	11.13	11.08	10.11	10.69	10.65	11.60
9	10.78	10.41	11.16	10.65	10.36	10.54	11.14	11.10	10.44	10.75	10.77	11.46
10	---	10.50	10.93	10.58	10.44	10.51	11.23	---	---	11.22	10.18	11.12
11	10.89	10.32	10.87	10.76	10.64	10.66	11.16	---	10.27	11.22	10.22	10.36
12	11.04	10.24	10.89	10.55	10.87	10.62	10.84	11.04	10.22	11.17	10.65	10.27
13	10.91	10.33	11.03	10.53	10.88	10.77	11.13	11.27	10.52	---	10.62	9.93
14	10.88	10.71	10.86	10.66	10.79	10.68	11.05	---	10.65	11.04	10.44	9.89
15	11.06	10.62	10.88	10.50	10.72	10.75	11.01	11.59	10.85	11.10	10.51	9.77
16	10.84	10.75	10.33	10.41	10.55	10.75	10.76	11.59	10.83	---	10.40	9.81
17	10.88	10.75	10.97	10.62	10.68	10.64	10.60	11.52	10.64	11.54	9.95	9.51
18	10.88	10.79	10.85	10.89	10.62	10.44	10.52	11.52	10.33	11.46	9.93	9.78
19	11.07	10.87	10.43	11.11	10.65	10.54	10.37	11.47	10.52	11.49	10.34	9.85
20	11.11	10.74	10.69	11.05	10.66	10.58	10.48	11.57	10.64	10.49	10.14	10.02
21	10.98	10.66	10.77	10.71	10.66	10.68	10.56	11.55	10.67	---	9.83	10.05
22	10.89	10.45	10.75	10.58	10.61	10.72	10.50	11.58	10.49	10.25	9.84	10.49
23	10.83	10.46	10.63	10.72	---	11.18	10.83	11.58	10.29	10.38	9.81	10.23
24	10.73	10.73	10.69	10.87	10.62	11.13	11.28	11.53	10.33	---	10.01	10.00
25	10.82	10.83	10.68	10.99	---	10.93	11.20	11.63	10.49	10.55	10.14	9.56
26	---	10.83	10.65	11.04	11.02	11.24	11.04	11.54	10.51	10.39	10.02	10.92
27	10.93	10.72	10.67	10.97	10.75	11.08	11.13	11.53	10.57	10.52	9.91	11.38
28	10.97	10.61	10.63	10.52	10.79	10.94	10.51	11.60	10.52	10.72	9.68	10.86
29	---	10.55	10.69	10.67	10.72	10.98	10.50	11.60	10.61	9.98	9.84	10.20
30	10.99	10.61	10.70	10.76	---	11.08	---	11.62	10.65	9.95	10.12	10.23
31	10.92	---	10.69	11.13	---	11.04	---	11.56	---	10.17	10.47	---
TOTAL	---	318.45	334.80	332.75	---	---	---	---	---	---	320.06	311.63
MEAN	---	10.62	10.80	10.73	---	---	---	---	---	---	10.32	10.39
MAX	---	11.16	11.19	11.13	---	---	---	---	---	---	11.20	12.17
MIN	---	10.24	10.33	10.41	---	---	---	---	---	---	9.68	9.50

02286400 MIAMI CANAL AT S-354, AND S-3, AT LAKE HARBOR, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e-12	30	464	222	2.6	22	676	512	894	406	9.9	24
2	38	44	424	417	-4.9	-2.4	684	160	417	590	20	31
3	22	37	239	537	-0.68	0.55	679	e3.5	-1.6	542	-11	46
4	-6.3	11	257	484	-0.58	40	667	e149	0.32	519	23	2.3
5	-1.6	16	392	524	-6.1	-9.7	606	337	12	643	18	15
6	-7.2	1.2	-28	402	-13	12	354	e485	1.9	786	15	-0.32
7	0.07	16	65	155	-2.8	1.8	399	658	-14	e879	30	3.1
8	2.1	21	392	113	19	e191	402	957	-1.9	1,010	20	1.7
9	e-5.2	15	308	394	2.2	910	377	763	-4.7	1,390	-17	-2.5
10	e-24	42	280	496	195	1,110	369	e688	e15	1,270	1.3	-15
11	20	31	612	460	266	1,060	200	e769	24	1,130	7.4	-18
12	10	14	448	363	267	662	5.2	1,020	-1.2	1,040	20	-16
13	20	179	489	489	95	198	33	1,230	-1.5	e620	18	1.1
14	26	185	250	388	-32	76	-21	e1,120	3.0	691	27	16
15	28	99	16	26	8.4	41	-38	720	-6.0	738	12	2.3
16	-30	14	14	202	-12	-5.1	2.3	654	-6.3	e277	10	23
17	e-9.5	43	7.4	433	-14	-4.4	-16	641	33	19	-23	-3.2
18	e1.1	18	-14	240	-44	178	-36	e712	-3.9	25	13	4.7
19	e14	12	299	15	-32	436	92	762	8.8	17	0.08	6.9
20	11	-38	590	-7.3	-17	304	465	1,040	-1.9	-6.3	-17	44
21	-41	-10	585	-6.5	-18	311	461	1,090	7.6	e22	-11	46
22	-12	-14	509	381	-9.2	476	667	1,020	9.6	-9.5	-6.1	e7.1
23	-32	166	147	62	e5.0	650	1,200	975	13	-14	7.7	0.14
24	41	295	341	145	17	289	1,000	940	411	e-31	9.1	10
25	53	263	334	257	e26	449	698	1,280	1,000	-8.0	16	2.4
26	e88	127	270	287	e9.2	630	739	1,170	1,050	-4.7	19	64
27	181	24	246	342	-15	419	501	1,290	729	-13	6.8	-15
28	56	13	309	316	-12	535	107	1,240	98	18	-7.0	e9.0
29	e-1.7	202	335	276	4.8	670	386	1,230	6.7	36	-35	e16
30	14	85	387	170	---	699	e577	1,160	-22	-8.1	-10	e9.5
31	-10	---	295	24	---	697	---	1,180	---	-0.56	7.2	---
TOTAL	432.77	1,941.2	9,262.4	8,606.2	683.94	11,045.75	12,235.5	25,955.5	4,668.92	12,572.84	173.38	315.22
MEAN	14.0	64.7	299	278	23.6	356	408	837	156	406	5.59	10.5
MAX	181	295	612	537	267	1,110	1,200	1,290	1,050	1,390	30	64
MIN	-41	-38	-28	-7.3	-44	-9.7	-38	3.5	-22	-31	-35	-18
AC-FT	858	3,850	18,370	17,070	1,360	21,910	24,270	51,480	9,260	24,940	344	625

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2004, BY WATER YEAR (WY)

MEAN	-65.0	41.9	88.7	108	185	243	444	342	6.65	-59.7	-95.4	-162
MAX	609	420	385	634	1,439	1,415	1,480	1,065	1,157	936	302	1,191
(WY)	(1989)	(1974)	(1969)	(1993)	(1993)	(1966)	(1993)	(2000)	(1998)	(1992)	(1993)	(1992)
MIN	-1,167	-429	-330	-849	-373	-1,185	-316	-296	-897	-769	-899	-1,614
(WY)	(1961)	(1961)	(1958)	(1958)	(1983)	(1970)	(1958)	(1972)	(1968)	(1985)	(1981)	(1960)

SUMMARY STATISTICS

ANNUAL TOTAL
ANNUAL MEAN
HIGHEST ANNUAL MEAN
LOWEST ANNUAL MEAN
HIGHEST DAILY MEAN
LOWEST DAILY MEAN
ANNUAL SEVEN-DAY MINIMUM
ANNUAL RUNOFF (AC-FT)
10 PERCENT EXCEEDS
50 PERCENT EXCEEDS
90 PERCENT EXCEEDS

FOR 2004 WATER YEAR

87,893.62
240

1,390
-44
-21
174,300
732
30
-12

WATER YEARS 1958 - 2004

73.8
487
-290
2,280
-2,790
-2,170
53,460
553
0.00
-376
1993
1960
Mar 24, 1966
Mar 26, 1970
Jun 18, 1959

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02286700 MIAMI CANAL AT S-8, NEAR LAKE HARBOR, FL

LOCATION.--Lat 26°19'53", long 80°46'29", in NE 1/4 sec.7, T.48 S., R.36 E., Broward County, Hydrologic Unit 03090202, 26 mi south of Lake Harbor, and 26.4 mi downstream from S-354 and pump station 3 at Lake Okeechobee.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--March 1962 to September 1968 (gage heights and discharge), October 1968 to December 1982, October 1990 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Prior to May 14, 2002, satellite data collection platform with water-stage shaft encoder and acoustic velocity meter. Acoustic doppler velocity meter installed November 16, 2001. The acoustic velocity meter and acoustic doppler meter were run in tandem for the period of November 16, 2001 to May 14, 2002. The acoustic velocity meter was installed October 2, 1990. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark).

REMARKS.--Records fair except for estimated discharges, which are poor. Flow regulated by pumpage and operation of gate at pump station 8, by operation of S-354 and pump station 3 at Lake Okeechobee, and operation of drainage and irrigation pumps upstream. Discharge computed from relations between stage vs. area and index velocity vs. mean channel velocity.

COOPERATION.--Discharge record furnished by South Florida Water Management District October 1968 to December 1982 for publication. Prior to October 1968, gage height, gate opening and pump records furnished by South Florida Water Management District, and records computed by U.S. Geological Survey.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTIC.--Figures represent 28 complete water years of discharge (1963-82, 1992, 1995-96, 1998, 2000, 2002-04).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 15.17 ft, Oct. 17, 1995; minimum (daily) gage height, 6.02 ft June 7, 1981.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 15.06 ft Sept. 7, 8; minimum, 9.48 ft July 9.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.71	11.62	11.39	11.04	14.06	11.71	---	10.49	9.65	10.53	12.02	14.16
2	14.47	11.58	11.40	11.01	13.74	11.66	10.72	10.45	9.80	10.82	12.91	14.07
3	14.31	11.67	11.39	10.99	12.67	11.63	10.68	10.45	11.01	10.83	14.07	13.52
4	13.81	11.64	11.39	10.99	11.76	11.60	10.65	10.50	10.11	10.80	14.08	13.98
5	13.68	12.30	11.67	10.98	11.68	11.57	10.62	---	10.08	10.79	13.58	14.08
6	14.11	12.51	11.42	10.97	11.61	11.51	10.60	---	10.10	10.73	13.63	14.69
7	13.18	12.31	11.29	10.95	11.52	11.47	10.57	10.42	10.74	10.71	13.71	15.03
8	12.77	11.76	11.25	10.94	11.45	11.41	10.54	10.40	13.22	10.67	13.69	15.03
9	12.87	11.71	11.28	10.92	11.40	11.34	10.51	10.38	13.26	10.07	14.04	15.00
10	12.43	11.69	11.26	10.88	11.36	11.29	10.50	10.36	13.54	9.88	13.73	14.93
11	12.36	11.66	11.53	10.88	11.35	11.24	10.56	10.34	12.38	9.93	13.73	14.64
12	12.30	11.63	11.33	10.88	11.34	11.20	10.61	10.31	11.41	10.06	14.39	14.29
13	12.25	11.60	11.24	10.85	11.32	11.17	10.76	10.27	11.22	10.63	14.30	14.23
14	12.21	11.56	11.25	10.84	11.31	11.14	10.77	10.23	11.39	10.84	14.27	13.86
15	12.16	11.53	12.32	10.83	11.31	11.12	10.74	10.21	11.31	10.92	14.16	13.59
16	12.12	11.51	11.61	10.80	11.29	11.13	10.70	10.19	11.71	11.12	13.88	13.54
17	12.08	11.48	11.92	10.80	11.56	11.14	10.66	10.17	11.88	11.75	14.09	13.47
18	12.04	11.46	11.55	10.87	11.37	11.08	10.62	10.13	11.85	12.42	13.84	13.81
19	11.99	11.43	11.37	10.97	11.28	11.03	10.59	10.09	11.29	12.77	14.18	13.58
20	11.95	11.37	---	10.95	11.26	11.00	10.56	10.06	11.12	12.28	14.12	---
21	11.92	11.36	11.24	10.92	11.23	10.99	10.55	10.02	11.07	11.62	13.69	13.93
22	11.88	11.36	11.21	10.85	11.19	10.97	10.53	9.97	11.14	11.61	13.62	13.76
23	11.84	11.36	11.20	10.85	11.16	10.96	10.50	9.93	11.48	11.53	13.66	13.50
24	11.80	11.41	11.17	10.86	11.13	10.96	10.49	9.88	11.23	11.48	13.71	13.43
25	11.77	11.54	11.14	10.87	11.45	10.92	10.47	10.72	11.08	11.48	13.56	13.36
26	11.76	11.53	11.12	10.87	14.14	10.91	11.23	10.51	11.00	---	13.40	13.94
27	11.73	11.51	11.11	10.86	13.12	10.89	11.19	10.06	10.94	12.13	13.70	14.39
28	11.70	11.49	11.08	10.80	12.43	10.85	10.81	9.88	10.92	12.67	13.70	14.43
29	---	11.42	11.07	10.79	11.79	10.82	10.58	9.79	10.95	13.48	13.64	14.17
30	---	11.41	11.05	10.81	---	10.81	10.51	9.74	10.68	12.73	14.10	14.15
31	11.66	---	11.04	13.15	---	10.78	---	9.69	---	11.94	14.25	---
TOTAL	---	348.41	---	339.97	342.28	346.30	---	---	337.56	---	427.45	---
MEAN	---	11.61	---	10.97	11.80	11.17	---	---	11.25	---	13.79	---
MAX	---	12.51	---	13.15	14.14	11.71	---	---	13.54	---	14.39	---
MIN	---	11.36	---	10.79	11.13	10.78	---	---	9.65	---	12.02	---

02286700 MIAMI CANAL AT S-8, NEAR LAKE HARBOR, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,990	e-17	e-23	e-0.33	1,980	13	e-19	11	84	340	5.6	2,060
2	2,390	e-27	e-29	5.1	1,580	8.5	e-16	0.63	162	431	821	1,890
3	2,070	7.7	12	e-13	539	15	e-30	4.8	59	454	2,100	1,130
4	1,280	11	19	e-1.8	6.6	10	e-26	e-19	24	440	2,030	1,690
5	1,320	505	112	7.0	14	e-2.4	e-34	e-32	26	411	1,330	1,760
6	1,840	578	e-23	e-17	0.46	18	9.8	e7.4	21	374	1,420	2,930
7	511	409	e-14	e-7.1	e-33	2.6	28	26	325	398	1,520	3,550
8	211	7.0	e-12	1.8	e-17	e-28	7.2	26	1,020	375	1,510	3,480
9	419	e-29	3.0	e-5.3	e-2.0	e-18	20	18	1,040	222	2,000	3,360
10	e-19	e-21	e-7.0	e-6.8	e-7.8	e-19	39	15	1,360	222	1,530	3,170
11	13	e-11	63	e-12	1.2	e-14	41	11	388	225	1,550	2,590
12	e-17	3.3	e-6.2	e-18	e-9.6	e-11	3.9	17	e-19	135	2,590	2,030
13	e-11	e-33	33	e-13	1.1	1.4	e-0.34	13	e-17	26	2,380	1,960
14	e-34	e-1.4	e-20	e-16	e-7.9	7.1	9.2	19	76	47	2,330	1,420
15	e-31	8.8	666	e-22	e-35	9.6	e-24	14	17	31	2,080	1,070
16	12	e-2.4	6.5	e-21	e-26	21	e-18	14	168	55	1,660	1,070
17	e-7.4	e-12	248	9.9	88	e-33	4.7	12	224	123	1,950	1,010
18	e-44	e-13	e-19	e-3.5	e-18	33	e-1.5	32	218	673	1,610	1,520
19	e-31	e-8.8	e-9.3	e-19	e-17	e-12	8.0	17	7.3	872	2,200	1,160
20	e-4.5	e-9.4	e-14	e-14	e-5.6	27	e-1.4	43	e-4.5	330	2,040	e1,600
21	e-11	e-19	e-20	e-25	e-24	6.2	7.2	47	e-6.1	e-16	1,380	1,680
22	e-22	e-8.2	e-18	e-24	8.0	e-34	18	52	4.9	e-0.75	1,150	1,460
23	e-18	0.73	9.2	e-11	11	e-15	22	34	77	e-6.7	1,310	1,090
24	e-4.7	15	e-47	e-26	e-12	1.9	38	33	0.38	e-0.91	1,420	1,000
25	e-7.9	7.8	e-31	3.4	236	19	38	154	e-14	e-3.1	1,160	916
26	e-11	5.2	e-24	10	2,110	37	167	40	e-16	e224	974	1,690
27	e-0.88	6.0	e-16	e-0.33	1,030	41	26	64	4.0	264	1,480	2,390
28	e-25	7.1	13	e-1.2	461	16	16	69	e-16	622	1,430	2,390
29	e-88	e-22	2.0	13	18	e-14	28	78	5.8	1,280	1,350	1,960
30	e-5.5	e-21	12	3.3	---	e-14	8.1	73	123	554	2,020	1,910
31	e-8.9	---	e-11	1,510	---	e-9.6	---	73	---	e-8.4	2,270	---
TOTAL	12654.22	1,316.43	855.2	1,286.14	7,869.46	63.3	368.86	966.83	5,341.78	9,092.14	50,600.6	56,936
MEAN	408	43.9	27.6	41.5	271	2.04	12.3	31.2	178	293	1,632	1,898
MAX	2,990	578	666	1,510	2,110	41	167	154	1,360	1,280	2,590	3,550
MIN	-88	-33	-47	-26	-35	-34	-34	-32	-19	-16	5.6	916
AC-FT	25,100	2,610	1,700	2,550	15,610	126	732	1,920	10,600	18,030	100,400	112,900

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2004, BY WATER YEAR (WY)

	436	182	147	169	276	204	252	242	473	512	637	707
MEAN	436	182	147	169	276	204	252	242	473	512	637	707
MAX	2,116	1,289	1,551	1,053	1,830	1,385	1,395	767	2,059	1,854	1,975	1,950
(WY)	(2000)	(1999)	(1995)	(1979)	(1993)	(1966)	(1993)	(1996)	(1982)	(1982)	(1974)	(1992)
MIN	6.58	-33.2	-186	-54.5	-56.9	-40.5	0.00	0.06	0.00	0.10	-0.48	0.00
(WY)	(1982)	(2001)	(2000)	(2000)	(2000)	(2000)	(1968)	(1962)	(1962)	(1962)	(1966)	(1981)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1962 - 2004

ANNUAL TOTAL	176,593.90	147,350.96	
ANNUAL MEAN	484	403	355
HIGHEST ANNUAL MEAN			900
LOWEST ANNUAL MEAN			41.6
HIGHEST DAILY MEAN	3,190	Jun 23	3,550
LOWEST DAILY MEAN	-88	Oct 29	-88
ANNUAL SEVEN-DAY MINIMUM	-25	Oct 27	-25
ANNUAL RUNOFF (AC-FT)	350,300		292,300
10 PERCENT EXCEEDS	1,850		1,670
50 PERCENT EXCEEDS	13		12
90 PERCENT EXCEEDS	-22		-20
			257,100
			1,090
			69
			0.00
			4,240
			-369
			-300
			8,199
			Oct 22, 1969
			Aug 3, 1991
			Dec 8, 1999

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02287395 MIAMI CANAL EAST OF LEVEE 30, NEAR MIAMI, FL

LOCATION.--Lat 25°56'28", long 80°26'23", in NE ¼ sec.9, T.52 S., R.39 E., Miami-Dade County, Hydrologic Unit 03090202, south of State Road 997 approximately 800 ft on south bank, 1000 ft downstream from control structure 32, 14.1 mi upstream from salinity-structure 26, 19.5 mi northwest of Miami, and 19.8 mi upstream from mouth.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1959 to current year. Published as "at broken dam, near Miami" November 1959 to September 1967, and October 1984 to November 1988.

REVISED RECORDS.--WDR FL-99-2A, 1998.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Datum of gage is National Geodetic Vertical Datum of 1929 (Dade County bench mark). Prior to January 20, 1968 and October 1984 to November 1988, at site 0.5 mi downstream at same datum.

REMARKS.--Records fair except for flows below 100 cfs and estimated daily discharges, which are poor. Flow affected by regulation at downstream salinity-control structure S-26 and by upstream storage releases at control structures 31, 32, and 32A and S-337. Prior to August 23, 1999, water-stage recorder and electromagnetic velocity meter. Discharge computed from relations between stage vs. area and index velocity vs. mean channel velocity.

COOPERATION.--South Florida Water Management District.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 31 complete water years of discharge (1961-84, 87, 1992-94, 1999-2001).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 6.59 ft July 1, 1982; minimum, 1.40 ft May 31, 1962 (site at broken dam). See PERIOD OF RECORD.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 3.91 ft Oct. 1; minimum, 1.82 ft Sept. 4.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.35	3.02	2.53	2.93	2.60	2.67	2.41	2.47	2.15	2.07	2.61	2.36
2	3.27	3.04	2.50	2.92	2.70	2.79	2.41	2.45	2.11	2.05	2.76	2.08
3	3.15	---	2.49	2.93	2.68	3.10	2.42	2.62	2.07	2.08	2.83	2.03
4	3.12	3.02	2.77	2.94	2.69	3.27	2.41	2.70	2.05	2.15	2.69	2.03
5	3.13	3.13	2.99	2.94	2.75	3.30	2.42	2.68	2.06	2.19	2.67	2.79
6	3.08	3.08	2.93	2.96	2.80	3.27	2.44	2.65	---	2.20	2.64	2.69
7	3.01	2.94	2.96	---	2.73	3.26	2.42	2.59	---	2.14	2.49	2.45
8	2.96	3.23	2.99	2.52	2.73	3.24	2.39	2.54	2.14	2.14	2.44	2.34
9	2.90	2.94	---	2.47	2.74	3.25	2.37	2.51	2.09	2.11	2.55	2.23
10	2.95	2.72	---	2.46	2.75	3.26	2.39	---	2.15	2.08	2.67	2.17
11	---	2.66	---	2.60	2.72	3.26	2.42	---	2.14	2.05	2.35	2.11
12	2.88	2.59	---	2.60	2.69	3.26	2.47	2.40	2.07	2.12	2.21	2.11
13	2.86	2.51	3.02	2.58	2.67	3.27	2.56	2.42	2.06	2.18	2.21	---
14	2.82	---	3.05	2.58	2.70	3.30	2.64	2.45	2.03	2.27	2.10	2.16
15	2.79	2.70	2.98	2.57	2.69	3.31	2.57	2.47	2.03	2.26	2.07	2.16
16	2.77	2.79	3.02	2.56	2.66	3.30	2.53	2.51	---	---	2.22	2.10
17	2.73	2.79	2.97	2.48	2.64	2.89	2.47	2.51	1.95	2.31	2.46	2.04
18	2.71	2.78	2.99	2.51	2.59	2.61	2.43	2.46	1.95	2.28	2.52	2.05
19	2.73	2.72	2.98	2.68	2.67	2.58	2.41	2.43	1.98	2.39	2.52	2.08
20	2.75	2.67	2.97	2.60	2.70	2.60	2.47	2.39	2.03	2.53	2.52	2.09
21	2.76	2.68	2.98	2.64	2.68	2.58	2.49	2.37	2.04	2.44	2.53	2.34
22	2.75	2.67	2.98	2.65	2.62	2.55	2.49	2.33	2.20	2.42	2.57	2.58
23	2.76	---	2.96	2.61	2.61	2.54	2.47	2.32	2.19	---	2.64	2.50
24	2.77	2.65	2.92	2.53	2.61	2.53	2.47	2.26	2.13	2.39	2.61	2.23
25	---	2.64	2.94	2.63	2.67	2.56	2.47	2.24	---	2.42	---	2.28
26	2.78	2.62	2.92	2.65	2.78	2.63	2.45	2.23	2.05	2.48	2.63	2.64
27	2.93	2.62	2.92	2.61	2.65	2.55	2.39	2.22	2.01	2.52	2.58	2.57
28	3.09	2.61	2.94	2.46	2.61	2.47	---	2.21	1.96	2.60	2.61	2.37
29	---	2.57	2.92	2.43	2.66	2.40	---	2.19	2.05	2.23	2.60	2.30
30	3.12	2.56	2.96	2.21	---	2.37	---	2.18	2.09	2.23	2.57	2.34
31	3.11	---	2.98	2.01	---	2.37	---	2.16	---	2.38	2.53	---
TOTAL	---	---	---	---	77.79	89.34	---	---	---	---	---	---
MEAN	---	---	---	---	2.68	2.88	---	---	---	---	---	---
MAX	---	---	---	---	2.80	3.31	---	---	---	---	---	---
MIN	---	---	---	---	2.59	2.37	---	---	---	---	---	---

02287395 MIAMI CANAL EAST OF LEVEE 30, NEAR MIAMI, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	262	41	237	37	201	30	25	25	27	e4.5	30
2	96	260	38	235	35	278	27	e23	25	26	26	32
3	58	e267	35	234	34	434	27	24	25	18	24	25
4	53	270	178	231	44	492	31	22	19	21	26	28
5	50	276	275	231	35	483	19	28	22	26	25	45
6	49	173	259	227	122	495	30	30	e24	24	24	53
7	49	198	258	---	228	486	29	37	e22	19	30	50
8	49	292	264	---	225	482	24	35	30	25	34	50
9	46	46	---	33	231	480	19	35	25	25	30	49
10	45	42	---	28	231	477	24	e41	29	24	32	53
11	e45	47	---	31	229	481	27	e40	26	16	31	51
12	45	47	---	29	230	479	24	37	30	22	32	55
13	47	41	260	31	229	481	24	35	28	24	36	e57
14	43	e40	257	28	226	482	23	39	27	27	32	58
15	45	40	255	27	227	477	25	36	29	23	28	54
16	48	44	260	29	226	476	29	40	e32	e23	27	56
17	47	43	248	27	225	230	28	33	29	e18	24	49
18	44	43	247	30	223	35	29	39	25	16	29	46
19	45	43	247	29	e227	31	31	38	24	26	23	45
20	44	40	247	30	236	35	31	35	25	25	23	33
21	43	40	243	30	e227	27	31	34	25	18	30	50
22	44	41	249	29	e198	29	31	33	29	24	24	48
23	46	e40	251	28	e199	27	34	31	35	e22	21	49
24	44	41	246	32	e197	26	33	32	32	26	30	42
25	e48	40	237	28	197	30	37	27	e33	20	e28	40
26	49	41	239	37	194	33	24	27	27	20	30	56
27	168	40	238	34	190	31	18	24	28	19	23	53
28	313	41	242	28	194	30	e22	24	25	24	32	54
29	e298	35	240	31	235	26	e37	25	28	35	28	58
30	301	39	238	34	---	26	e30	29	28	30	31	62
31	291	---	238	36	---	23	---	24	---	e16	30	---
TOTAL	2,665	2,912	---	---	5,331	7,823	828	982	811	709	847.5	1,431
MEAN	86.0	97.1	---	---	184	252	27.6	31.7	27.0	22.9	27.3	47.7
MAX	313	292	236	495	37	41	35	35	36	62		
MIN	43	35	34	23	18	22	19	16	4.5	25		
AC-FT	5,290	5,780	---	---	10,570	15,520	1,640	1,950	1,610	1,410	1,680	2,840

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2004, BY WATER YEAR (WY)

	209	215	202	202	189	173	197	157	136	146	164	183
MEAN	209	215	202	202	189	173	197	157	136	146	164	183
MAX	921	696	638	586	826	826	885	689	798	636	668	649
(WY)	(1961)	(1961)	(1961)	(1961)	(1983)	(1983)	(1970)	(1970)	(1970)	(1982)	(1982)	(1966)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1981)	(1981)	(1981)	(1982)	(1982)	(1980)	(1980)	(1979)	(1979)	(1980)	(1980)	(1980)

SUMMARY STATISTICS

ANNUAL MEAN
 HIGHEST ANNUAL MEAN
 LOWEST ANNUAL MEAN
 HIGHEST DAILY MEAN
 LOWEST DAILY MEAN
 ANNUAL SEVEN-DAY MINIMUM
 ANNUAL RUNOFF (AC-FT)
 10 PERCENT EXCEEDS
 50 PERCENT EXCEEDS
 90 PERCENT EXCEEDS

WATER YEARS 1961 - 2004

197
 476
 28.4
 1,090
 0.00
 0.00
 142,700
 345
 190
 0.00

1970
 1997
 Mar 20, 1970
 Apr 26, 1979
 Apr 26, 1979

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02287497 N.W. WELLFIELD CANAL NEAR DADE BROWARD LEVEE, NEAR PENNSUCO, FL

LOCATION.--Lat 25°53'28", long 80°25'13", in NE ¼ sec.27, T.52 S., R.39 E., Miami-Dade County, Hydrologic Unit 03090202, (Pennsuco quadrangle), 0.7 mi north of Pennsuco Canal, 1.9 mi east of Dade Broward Levee, 2.0 mi southwest of the Miami Canal, 4 mi east of Levee 30 Canal, and 2.5 mi west of Pennsuco.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--February 1991 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Electronic data logger at auxiliary gage downstream of NW 137th Avenue gated culverts began February 24, 2003. Datum of gage is National Geodetic Vertical Datum of 1929 (DERM bench mark). Prior to February 21, 2003, site was 1.0 mi upstream at datum 0.10 ft lower. Prior to October 9, 2002, acoustic velocity meter. Acoustic doppler velocity meter installed February 21, 2003.

REMARKS.--Records fair except for flows below 40 cfs and estimated daily discharges, which are poor. Flow is the sum of regulation from vertical control structure DERM No. 1, NW 137th Avenue gated culverts and from levee seepage. Flow is positive to the east. Discharge computed from relations between stage vs. area and index velocity vs. mean channel velocity.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 7 water years of complete discharge (1992, 1996-2000, 2004).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 7.07 ft Oct. 15-17, 1999; minimum, 1.39 ft May 28, 1992.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 5.76 ft Sept. 29; minimum, 2.85 ft June 28, 29.

EXTREME STAGES FOR AUXILIARY GAGE DOWNSTREAM FOR PERIOD OF RECORD.--Maximum gage height, 5.71 ft Sept. 29, 2003; minimum, 2.83 ft June 28, 29, 2004.

EXTREME STAGES FOR AUXILIARY GAGE DOWNSTREAM FOR CURRENT YEAR.--Maximum gage height, 5.67 ft Oct. 1; minimum, 2.83 ft June 28, 29.

UPSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.73	5.01	4.38	---	4.48	3.87	3.42	3.47	2.99	2.90	3.73	4.00
2	5.70	4.99	4.33	---	---	3.83	3.39	3.41	2.95	2.90	4.23	4.36
3	---	4.98	4.26	3.84	4.37	3.81	3.38	3.60	2.92	2.94	4.48	4.47
4	---	4.97	4.22	---	4.30	3.78	3.36	4.00	2.89	2.99	4.52	4.65
5	---	5.06	4.20	3.83	4.24	3.76	3.34	3.85	2.90	3.02	4.51	5.14
6	5.56	5.16	4.18	3.82	4.20	3.74	3.33	3.74	2.90	2.99	4.64	5.41
7	5.53	5.19	4.14	3.79	4.15	3.72	3.31	3.67	2.97	2.97	4.56	5.52
8	5.50	5.20	4.10	3.76	4.09	3.69	3.30	3.63	3.05	3.04	4.48	5.56
9	5.48	5.23	4.08	3.73	4.04	3.66	3.28	3.59	3.03	2.97	4.44	5.62
10	5.46	5.21	4.09	3.73	4.02	3.65	3.28	3.55	3.12	2.92	4.39	5.63
11	5.44	5.19	4.08	3.71	4.00	3.63	3.30	3.51	3.19	2.89	4.33	5.64
12	5.42	---	4.05	3.69	3.97	3.62	3.38	3.48	3.09	2.91	4.25	5.62
13	5.40	---	4.04	3.68	3.94	3.61	3.62	3.43	3.04	2.99	4.19	5.59
14	5.37	5.10	4.10	3.67	3.93	3.61	3.81	3.41	3.00	3.08	4.13	5.58
15	5.34	5.06	4.17	3.66	3.92	3.62	3.68	3.40	2.99	---	4.07	5.58
16	5.31	5.02	4.12	3.65	3.89	3.63	3.60	3.42	---	3.04	4.03	5.56
17	5.29	4.98	4.10	3.63	3.85	3.62	3.54	3.40	2.94	3.05	4.04	5.51
18	---	4.94	4.06	3.70	3.81	3.60	3.49	3.36	2.90	3.06	4.05	5.45
19	---	4.91	4.04	3.83	3.78	3.59	3.44	3.33	2.88	3.18	4.03	5.39
20	---	4.87	4.01	3.77	3.76	3.57	3.42	3.31	2.94	3.43	4.00	5.34
21	---	4.82	3.98	3.74	3.74	3.56	3.39	3.28	3.00	3.38	3.98	5.33
22	5.24	4.78	3.96	3.73	3.73	3.54	3.37	3.26	3.14	3.36	3.98	5.38
23	5.20	4.73	3.96	3.71	3.71	3.52	3.36	3.23	3.16	3.29	4.01	5.38
24	5.16	4.67	3.96	3.68	---	3.50	3.34	3.20	3.07	3.26	4.00	5.50
25	5.12	4.63	3.94	3.68	3.83	3.51	3.32	3.18	---	3.27	4.03	5.51
26	5.08	4.59	3.93	3.68	4.14	3.61	3.30	3.16	2.96	---	4.00	5.64
27	5.04	4.55	3.91	3.69	4.04	3.60	3.28	3.15	2.91	3.43	3.99	5.70
28	---	4.51	3.90	3.66	3.97	3.54	3.35	3.13	2.87	3.81	4.02	5.73
29	5.10	4.46	3.89	3.62	3.91	3.50	3.48	3.09	3.05	3.70	3.98	5.41
30	5.07	4.41	3.87	3.63	---	3.46	---	3.06	2.96	3.61	3.95	5.06
31	5.06	---	3.86	3.88	---	3.44	---	3.03	---	3.56	3.91	---
TOTAL	---	---	125.91	---	---	112.39	---	105.33	---	---	128.95	160.26
MEAN	---	---	4.06	---	---	3.63	---	3.40	---	---	4.16	5.34
MAX	---	---	4.38	---	---	3.87	---	4.00	---	---	4.64	5.73
MIN	---	---	3.86	---	---	3.44	---	3.03	---	---	3.73	4.00

02287497 N.W. WELLFIELD CANAL NEAR DADE BROWARD LEVEE, NEAR PENNSUCO, FL-Continued

DOWNSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	3.79	3.95	4.46	4.54	4.91	4.47	5.17
2	---	---	---	---	---	3.77	3.91	4.32	4.56	4.96	4.64	5.19
3	---	---	---	---	---	3.75	3.87	4.21	4.51	5.04	4.74	5.18
4	---	---	---	---	---	3.74	3.84	4.13	4.46	4.98	4.72	5.22
5	---	---	---	---	---	3.72	3.81	4.05	4.45	4.99	4.72	5.39
6	---	---	---	---	---	3.71	3.78	3.98	4.52	4.98	4.72	5.55
7	---	---	---	---	---	3.70	3.76	3.92	4.47	4.96	4.74	5.56
8	---	---	---	---	---	3.68	3.73	3.87	4.43	4.92	4.92	5.55
9	---	---	---	---	---	3.65	3.70	3.82	4.42	4.87	4.97	5.50
10	---	---	---	---	---	3.68	3.67	3.78	4.62	4.83	5.03	5.46
11	---	---	---	---	---	3.74	3.65	3.75	4.70	4.77	5.01	5.43
12	---	---	---	---	---	3.69	3.63	3.73	4.70	4.71	4.99	5.41
13	---	---	---	---	---	3.65	3.61	3.84	4.63	4.65	4.94	5.49
14	---	---	---	---	---	3.62	3.59	4.27	4.59	4.60	4.98	5.52
15	---	---	---	---	---	3.61	3.69	4.14	4.68	4.56	5.02	5.50
16	---	---	---	---	---	3.77	3.68	4.04	4.73	4.58	4.99	5.47
17	---	---	---	---	---	4.24	3.72	3.96	4.70	4.61	4.97	5.45
18	---	---	---	---	---	4.19	3.66	3.91	4.70	4.56	4.94	5.43
19	---	---	---	---	---	4.11	3.70	3.88	4.68	4.52	4.92	5.42
20	---	---	---	---	---	4.03	3.67	3.84	4.71	4.49	4.97	5.40
21	---	---	---	---	---	3.96	3.64	3.80	4.70	4.48	5.06	5.37
22	---	---	---	---	---	3.90	3.61	3.83	4.85	4.46	5.06	5.34
23	---	---	---	---	---	3.92	3.58	4.02	5.10	4.43	5.05	5.27
24	---	---	---	---	---	3.97	3.56	4.24	5.10	4.40	5.05	5.39
25	---	---	---	---	---	3.73	3.88	3.55	4.35	4.39	5.04	5.43
26	---	---	---	---	---	3.98	3.82	3.72	4.46	5.04	5.06	5.44
27	---	---	---	---	---	3.88	3.97	3.88	4.41	5.03	4.36	5.43
28	---	---	---	---	---	3.82	4.38	3.83	4.56	5.00	4.34	5.47
29	---	---	---	---	---	---	4.23	3.82	4.71	4.97	4.37	5.20
30	---	---	---	---	---	---	4.14	4.21	4.70	4.95	4.41	5.18
31	---	---	---	---	---	---	4.04	---	4.61	---	4.38	5.17
TOTAL	---	---	---	---	---	120.05	112.02	127.59	141.61	143.91	153.48	162.66
MEAN	---	---	---	---	---	3.87	3.73	4.12	4.72	4.64	4.95	5.42
MAX	---	---	---	---	---	4.38	4.21	4.71	5.10	5.04	5.20	5.68
MIN	---	---	---	---	---	3.61	3.55	3.73	4.42	4.34	4.47	5.17

02287497 N.W. WELLFIELD CANAL NEAR DADE BROWARD LEVEE, NEAR PENNSUCO, FL-Continued

DOWNSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.65	4.84	4.25	3.82	4.45	3.84	3.40	3.47	2.97	2.88	3.72	3.81
2	5.60	4.83	4.21	3.81	4.40	3.81	3.38	3.42	2.93	2.89	4.23	3.51
3	5.55	4.82	4.19	3.81	4.34	3.78	3.36	3.60	2.89	2.93	4.48	3.42
4	5.50	4.81	4.18	3.81	4.27	3.75	3.34	4.00	2.87	2.98	4.52	3.39
5	5.46	4.91	4.17	3.80	4.22	3.73	3.32	3.85	2.89	3.01	4.50	3.85
6	5.42	5.02	4.14	3.78	4.17	3.71	3.31	3.74	2.88	2.99	4.64	4.04
7	5.39	5.05	4.10	3.75	4.12	3.69	3.29	3.66	2.96	2.97	4.55	4.00
8	5.35	5.05	4.06	3.72	4.07	3.66	3.27	3.60	3.04	3.03	4.48	4.05
9	5.32	5.09	4.04	3.70	4.02	3.63	3.26	3.56	3.01	2.96	4.45	3.97
10	5.30	5.06	4.05	3.69	3.99	3.62	3.26	3.52	3.10	2.91	4.39	3.91
11	5.28	5.03	4.05	3.67	3.98	3.60	3.28	3.48	3.18	2.88	4.33	3.85
12	5.25	5.00	4.02	3.65	3.96	3.59	3.36	3.43	3.08	2.90	4.24	3.81
13	5.23	4.96	4.01	3.64	3.93	3.59	3.60	3.40	3.03	2.98	4.19	3.76
14	5.20	4.92	4.07	3.64	3.91	3.59	3.79	3.38	2.98	3.07	4.12	3.74
15	5.16	4.89	4.14	3.62	3.91	3.60	3.67	3.36	2.97	3.06	4.07	3.75
16	5.13	4.85	4.09	3.62	3.87	3.61	3.58	3.39	2.99	3.03	4.03	3.76
17	5.10	4.82	4.07	3.61	3.83	3.60	3.52	3.37	2.92	3.05	4.03	3.74
18	5.09	4.78	4.03	3.67	3.79	3.58	3.47	3.33	2.88	3.05	4.04	3.73
19	5.06	4.76	4.00	3.80	3.76	3.57	3.42	3.30	2.87	3.16	4.02	3.73
20	5.02	4.72	3.97	3.75	3.74	3.55	3.40	3.28	2.93	3.41	3.99	3.68
21	5.00	4.67	3.94	3.72	3.73	3.54	3.39	3.25	2.99	3.37	3.97	3.68
22	5.06	4.63	3.93	3.71	3.71	3.52	3.37	3.23	3.13	3.35	3.96	3.91
23	5.02	4.59	3.93	3.69	3.70	3.50	3.35	3.20	3.14	3.28	4.00	3.97
24	4.98	4.55	3.93	3.66	3.69	3.48	3.34	3.17	3.06	3.25	3.99	3.78
25	4.95	4.51	3.91	3.65	3.83	3.49	3.32	3.15	2.99	3.26	4.02	3.76
26	4.91	4.47	3.89	3.65	4.13	3.59	3.30	3.13	2.94	3.31	3.99	3.96
27	4.87	4.43	3.88	3.66	4.04	3.59	3.27	3.12	2.89	3.41	3.98	3.99
28	4.83	4.40	3.87	3.63	3.96	3.53	3.35	3.10	2.85	3.79	4.00	3.92
29	4.92	4.35	3.85	3.60	3.90	3.48	3.48	3.07	3.02	3.69	3.97	4.28
30	4.90	4.30	3.84	3.62	---	3.45	3.45	3.04	2.95	3.60	3.93	4.80
31	4.89	---	3.82	3.85	---	3.42	---	3.01	---	3.55	3.90	---
TOTAL	160.39	143.11	124.63	114.80	115.42	111.69	101.90	104.61	89.33	98.00	128.73	115.55
MEAN	5.17	4.77	4.02	3.70	3.98	3.60	3.40	3.37	2.98	3.16	4.15	3.85
MAX	5.65	5.09	4.25	3.85	4.45	3.84	3.79	4.00	3.18	3.79	4.64	4.80
MIN	4.83	4.30	3.82	3.60	3.69	3.42	3.26	3.01	2.85	2.88	3.72	3.39

02287497 N.W. WELLFIELD CANAL NEAR DADE BROWARD LEVEE, NEAR PENNSUCO, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	122	144	108	e103	148	98	51	74	59	50	84	57
2	129	141	106	e101	e150	96	48	70	58	53	92	13
3	e132	140	108	94	137	96	40	89	56	51	108	13
4	e138	140	111	e102	131	96	42	112	54	55	107	9.3
5	e138	135	108	95	124	95	42	96	54	60	113	2.8
6	142	133	107	94	120	94	62	89	52	56	116	16
7	146	137	104	95	117	95	54	83	46	58	112	23
8	147	138	106	94	116	95	58	82	51	66	106	18
9	148	136	103	95	110	93	65	77	55	60	98	21
10	148	141	103	93	108	92	66	80	66	56	98	22
11	146	143	104	93	105	91	69	81	68	54	96	21
12	147	e151	103	92	102	90	84	76	60	60	93	25
13	148	e151	102	91	102	89	96	75	58	63	90	23
14	149	148	105	89	100	89	100	72	58	64	91	26
15	150	144	111	89	98	90	90	72	60	e64	89	21
16	152	144	106	89	99	89	86	72	e63	56	85	14
17	152	140	105	91	100	89	82	70	57	50	86	17
18	e152	136	103	93	99	87	81	68	56	50	86	17
19	e151	136	101	96	97	85	79	66	53	69	82	18
20	e152	133	103	96	94	83	77	64	55	83	82	19
21	e150	130	101	93	91	82	77	65	52	70	79	17
22	151	125	102	92	90	82	76	65	45	63	81	45
23	147	123	100	90	89	79	74	64	59	59	85	43
24	145	120	99	90	e98	78	73	64	58	58	80	16
25	145	118	99	89	96	82	72	65	e56	51	77	5.8
26	143	115	98	89	104	88	72	62	54	e53	78	2.0
27	141	112	96	87	96	88	71	64	53	74	81	-0.08
28	e140	110	96	91	97	82	67	62	51	103	84	23
29	148	111	96	90	98	52	67	60	70	87	81	104
30	147	108	94	95	---	27	74	58	57	78	81	174
31	142	---	95	112	---	30	---	58	---	70	80	---
TOTAL	4,488	3,983	3,183	2,903	3,116	2,602	2,095	2,255	1,694	1,944	2,801	825.82
MEAN	145	133	103	93.6	107	83.9	69.8	72.7	56.5	62.7	90.4	27.5
MAX	152	151	111	112	150	98	100	112	70	103	116	174
MIN	122	108	94	87	89	27	40	58	45	50	77	-0.08
AC-FT	8,900	7,900	6,310	5,760	6,180	5,160	4,160	4,470	3,360	3,860	5,560	1,640

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2004, BY WATER YEAR (WY)

MEAN	167	176	166	163	162	152	153	141	149	151	172	166
MAX	219	228	225	231	225	217	268	248	235	219	229	210
(WY)	(1998)	(1996)	(1999)	(1999)	(1998)	(1995)	(1994)	(1994)	(1994)	(1997)	(1994)	(1995)
MIN	97.5	128	99.6	93.6	93.7	83.9	69.8	60.1	56.5	62.7	90.4	27.5
(WY)	(2002)	(2002)	(2002)	(2004)	(2002)	(2004)	(2004)	(1992)	(2004)	(2004)	(2004)	(2004)

SUMMARY STATISTICS

ANNUAL TOTAL
ANNUAL MEAN
HIGHEST ANNUAL MEAN
LOWEST ANNUAL MEAN
HIGHEST DAILY MEAN
LOWEST DAILY MEAN
ANNUAL SEVEN-DAY MINIMUM
ANNUAL RUNOFF (AC-FT)
10 PERCENT EXCEEDS
50 PERCENT EXCEEDS
90 PERCENT EXCEEDS

FOR 2004 WATER YEAR

31,889.82
87.1
174
-0.08
14
63,250
141
89
50

WATER YEARS 1991 - 2004

168
208
87.1
360
-0.08
14
121,800
222
184
87

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02288600 MIAMI CANAL AT N.W. 36TH STREET, MIAMI, FL

LOCATION.--Lat 25°48'29", long 80°15'49", in NE ¼ sec.29, T.53 S., R.41 E., Miami-Dade County, Hydrologic Unit 03090202, on right bank at downstream end of NW 36th Street bridge fender at Miami, 1200 ft upstream from salinity-control structure S-26.

DRAINAGE AREA.--Indeterminate.

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

REVISED RECORDS.--WDR FL-98-2A, 1997, WDR FL-03-2A, 2002.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Prior to June 12, 2002, electronic data logger with water-stage shaft encoder and acoustic velocity meter with phone/radio telemetry provided by South Florida Water Management District. Datum of gage is National Geodetic Vertical Datum of 1929 (Dade County bench mark).

REMARKS.--Records fair except for estimated daily discharges and discharges between -20 and 20 cfs, which are poor. Flow affected by tide and is occasionally reversed. Some seepage losses above station into Miami-Dade Water and Sewer Authority well field for groundwater withdrawals. Natural flow materially affected by levee and control structures 31, 32 and 32A about 14 mi upstream, and structure 26 downstream. Acoustic velocity meter began on October 1, 1996, and was removed on June 12, 2002. Acoustic doppler velocity meter began on June 12, 2002. Discharge computed from relations between stage vs. area and index velocity vs. mean channel velocity.

COOPERATION.--South Florida Water Management District.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 28 complete water years of discharge (1960-85, 1987-88).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 5.28 ft (estimated) Oct. 15, 1999; minimum, -0.55 ft Apr. 26, 1970.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 3.25 ft Sept. 26; minimum, 0.46 ft Aug. 11.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.97	2.50	2.53	2.56	2.04	2.27	---	2.47	2.20	2.12	2.31	2.07
2	2.08	2.53	2.49	2.56	2.54	2.25	2.52	2.45	2.16	2.10	1.62	1.62
3	2.15	2.52	2.45	2.55	2.56	2.20	2.52	2.57	2.13	2.17	1.63	1.69
4	2.35	2.51	2.53	2.56	2.59	2.21	2.52	2.65	2.12	2.23	1.62	1.82
5	2.55	2.58	2.72	2.65	2.67	2.25	2.50	---	2.13	2.26	1.66	2.07
6	2.54	2.31	2.69	2.78	2.56	2.25	2.47	---	2.14	2.26	1.44	1.65
7	2.54	2.00	2.71	2.70	2.23	2.25	2.44	2.61	2.28	2.22	1.37	1.44
8	2.52	2.08	2.75	2.49	2.24	2.25	2.47	2.55	2.18	2.18	1.48	1.48
9	2.53	2.09	2.74	2.49	2.24	2.27	2.47	2.52	2.12	2.13	2.11	1.47
10	2.56	2.01	2.70	2.62	2.26	2.24	2.46	2.47	2.19	2.13	2.41	1.50
11	2.51	2.08	2.63	2.64	2.21	2.25	2.45	2.41	2.15	2.13	1.49	1.51
12	2.51	2.06	2.76	2.63	2.22	2.26	2.51	2.37	2.12	2.14	1.41	1.57
13	2.52	2.10	2.76	2.63	2.22	2.28	2.55	2.40	2.09	2.20	1.50	1.60
14	2.54	2.64	2.70	2.64	2.26	2.31	2.74	2.44	2.05	2.27	1.46	1.72
15	2.56	2.60	2.58	2.64	2.24	2.31	2.66	2.47	2.05	2.28	1.47	1.72
16	2.53	2.74	2.67	2.61	2.24	2.28	2.58	2.52	2.02	2.33	1.94	1.69
17	2.54	2.74	2.65	2.49	2.22	2.49	2.51	2.50	1.97	2.39	2.46	1.68
18	2.53	2.72	2.71	2.50	2.22	2.64	2.46	2.47	1.94	2.37	2.52	1.66
19	2.57	2.68	2.74	2.73	2.35	2.61	2.45	2.45	2.04	2.38	2.54	1.71
20	2.65	2.70	---	2.66	2.36	2.59	2.52	2.43	2.09	2.52	2.53	---
21	2.66	2.68	2.75	2.70	2.34	2.63	2.53	2.39	2.09	2.45	2.54	2.36
22	2.56	2.66	2.69	2.71	2.31	2.63	2.51	2.36	2.25	2.44	2.59	2.59
23	2.66	2.64	2.61	2.69	2.26	2.58	2.51	2.34	2.18	2.35	2.67	2.20
24	2.69	2.64	2.54	2.60	2.27	2.55	2.50	2.31	2.11	2.41	2.60	1.86
25	2.70	2.61	2.57	2.66	---	2.58	2.50	2.31	2.08	2.49	2.70	2.06
26	2.66	2.60	2.53	2.68	2.30	2.65	2.48	2.30	2.03	---	2.65	2.12
27	2.67	2.59	2.53	2.67	2.21	2.56	2.49	2.28	2.00	2.55	2.63	2.02
28	2.55	2.60	2.55	2.55	2.21	2.51	2.57	2.26	1.96	2.31	2.65	1.72
29	2.49	2.60	2.53	2.46	2.26	2.46	2.60	2.24	2.06	1.51	2.65	1.67
30	---	2.55	2.68	1.96	---	2.42	2.52	2.24	2.11	1.97	2.60	1.65
31	2.50	---	2.75	1.45	---	2.45	---	2.23	---	2.37	2.56	---
TOTAL	---	74.36	---	79.26	---	74.48	---	---	63.04	---	65.81	---
MEAN	---	2.48	---	2.56	---	2.40	---	---	2.10	---	2.12	---
MAX	---	2.74	---	2.78	---	2.65	---	---	2.28	---	2.70	---
MIN	---	2.00	---	1.45	---	2.20	---	---	1.94	---	1.37	---

02288600 MIAMI CANAL AT N.W. 36TH STREET, MIAMI, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	454	295	2.4	201	415	244	e-0.96	8.1	6.5	6.2	e210	211
2	370	309	4.8	202	247	277	0.63	11	-0.82	e7.1	e695	307
3	353	283	4.4	206	215	369	-4.7	98	7.4	2.7	670	253
4	263	278	8.5	208	169	385	-2.8	143	4.2	2.9	602	254
5	223	318	18	122	65	368	-1.4	---	3.5	4.7	531	434
6	223	519	30	0.69	158	373	8.5	e5.5	4.3	6.9	633	634
7	219	558	34	2.6	354	372	21	9.9	1.8	-0.25	544	590
8	221	740	4.2	5.1	315	352	-1.1	7.6	6.6	5.8	489	521
9	203	719	7.0	5.1	348	359	-12	8.8	5.1	e7.8	213	468
10	235	564	53	-2.4	346	424	-7.2	9.4	3.9	4.4	185	413
11	267	466	80	4.1	368	424	5.1	7.7	9.5	4.4	453	388
12	218	444	-0.18	2.6	342	428	-3.5	5.4	4.7	e8.8	417	342
13	199	347	7.7	2.1	290	425	77	8.4	4.4	2.9	387	294
14	178	98	95	-3.4	255	411	36	13	-3.7	2.1	359	225
15	159	107	136	3.1	283	422	3.0	14	0.67	-0.43	352	272
16	158	5.3	81	2.6	252	445	6.0	13	8.5	3.8	169	264
17	143	7.4	82	4.7	262	197	7.2	14	5.2	-3.1	4.4	268
18	142	9.7	33	51	240	10	8.1	13	12	2.1	5.8	268
19	123	40	17	-17	162	14	7.7	10	1.0	4.5	4.0	266
20	80	2.5	---	-0.15	206	7.6	10	10	0.54	3.2	6.5	---
21	78	3.7	6.6	0.54	252	2.6	10	13	-0.60	-1.4	5.5	7.4
22	163	5.0	70	-4.4	265	-16	11	9.1	-2.7	1.3	0.15	11
23	104	6.4	158	1.1	267	7.1	7.6	10	8.3	e6.3	4.9	226
24	56	7.1	214	-4.3	268	5.3	8.2	7.8	11	5.5	51	253
25	42	10	213	7.2	---	5.8	9.7	11	11	2.2	7.0	157
26	88	5.2	236	9.1	405	7.4	9.6	6.6	9.7	e3.6	7.1	288
27	101	3.7	233	-4.8	379	7.2	-10	7.5	6.9	5.8	1.8	323
28	238	-2.1	218	1.4	317	5.0	5.0	3.8	4.8	e152	1.5	414
29	336	-0.43	211	7.8	265	-1.9	8.8	4.1	7.7	e353	-0.60	434
30	---	4.8	95	271	---	-4.4	11	-2.9	6.0	e111	-5.2	455
31	324	---	28	495	---	-8.1	---	1.1	---	0.07	6.1	---
TOTAL	---	6,153.27	---	1,779.38	---	6,316.6	227.47	---	147.39	715.89	7,008.95	---
MEAN	---	205	---	57.4	---	204	7.58	---	4.91	23.1	226	---
MAX	740	---	495	445	77	---	12	353	695	---	---	---
MIN	-2.1	---	-17	-16	-12	---	-3.7	-3.1	-5.2	---	---	---
AC-FT	---	12,210	---	3,530	---	12,530	451	---	292	1,420	13,900	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2004, BY WATER YEAR (WY)

	MEAN	366	280	209	182	180	148	116	127	247	255	284	362
MAX	1,272	1,071	1,041	939	791	729	662	682	813	791	848	1,146	
(WY)	(1961)	(1961)	(1960)	(1961)	(1961)	(1960)	(1960)	(1960)	(1968)	(1959)	(1960)	(1960)	
MIN	34.5	6.94	0.00	0.00	0.00	-1.61	0.00	-5.53	0.33	4.08	2.32	76.6	
(WY)	(1981)	(1989)	(1982)	(1981)	(1982)	(1962)	(1974)	(1993)	(1980)	(1981)	(1987)	(1987)	

SUMMARY STATISTICS

ANNUAL MEAN
HIGHEST ANNUAL MEAN
LOWEST ANNUAL MEAN
HIGHEST DAILY MEAN
LOWEST DAILY MEAN
ANNUAL SEVEN-DAY MINIMUM
ANNUAL RUNOFF (AC-FT)
10 PERCENT EXCEEDS
50 PERCENT EXCEEDS
90 PERCENT EXCEEDS

WATER YEARS 1959 - 2004

251
843
31.2
1,730
-279
-69
182,000
610
202
0.00

1960
1987
Oct 16, 1999
Jun 1, 1993
May 26, 1993

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

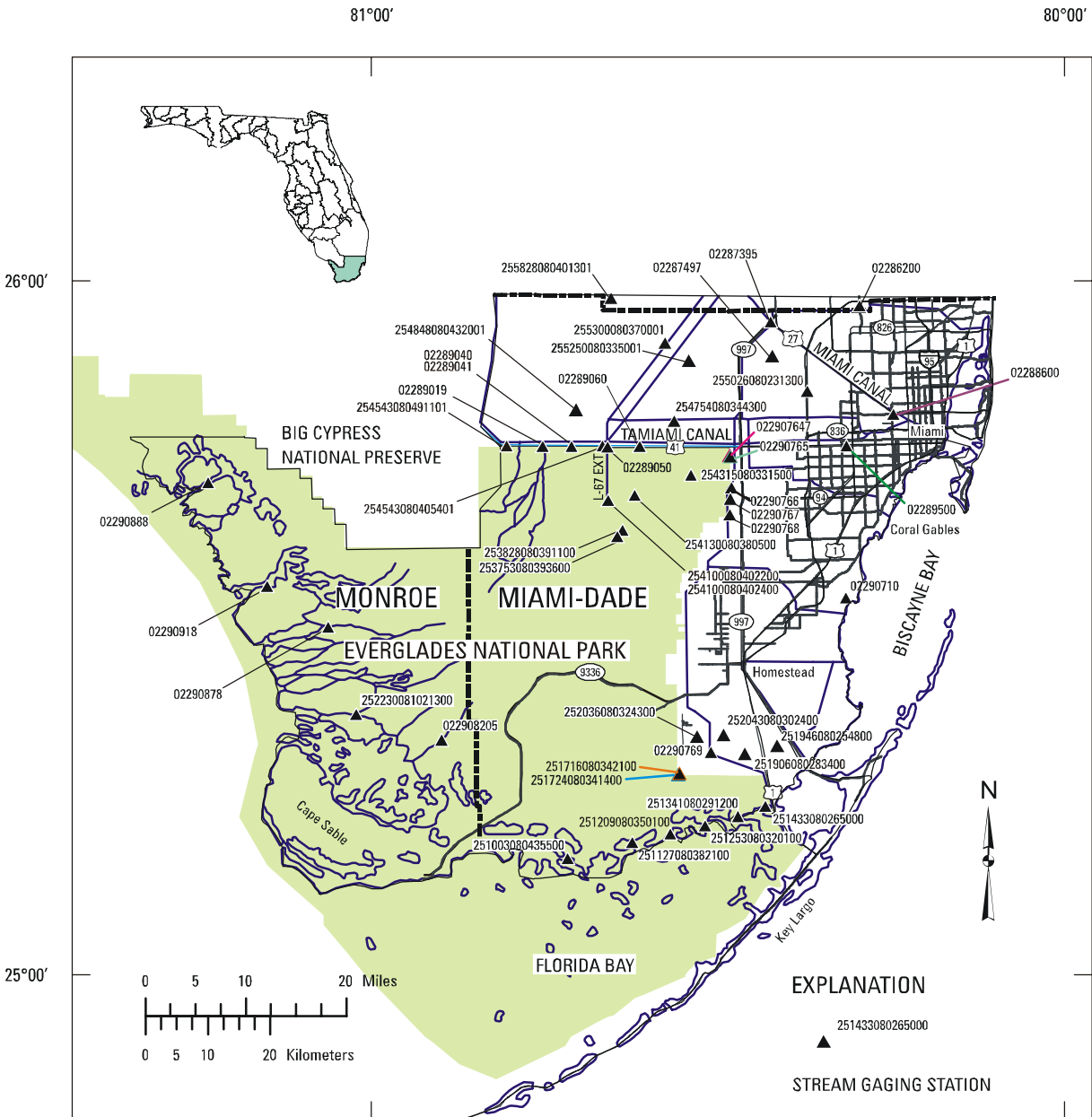
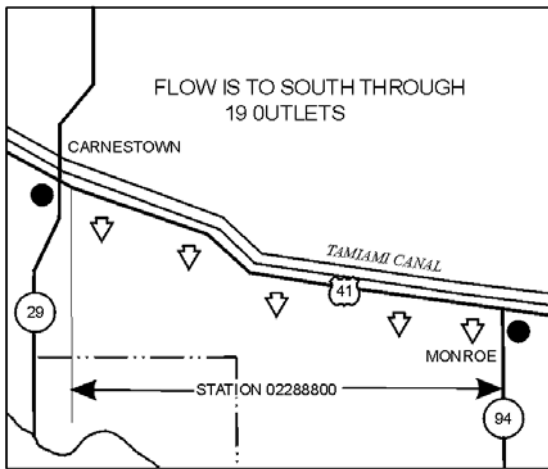
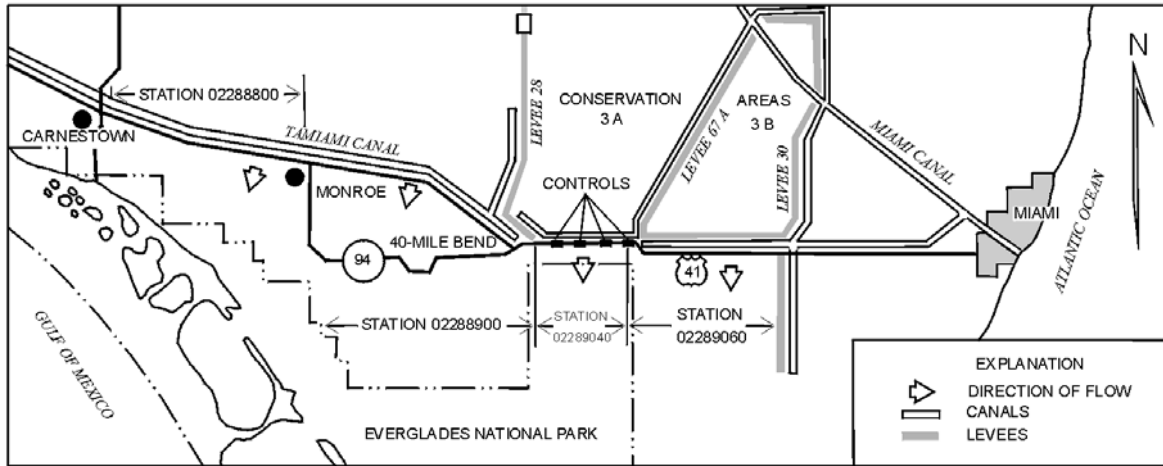
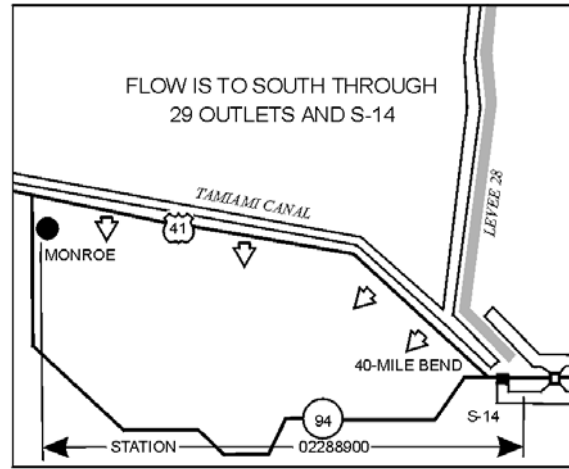


Figure 20. Location of gaging stations in the portion of the Everglades and the southeastern coastal area south of latitude 26 degrees, Florida Bay, and the Florida Keys.

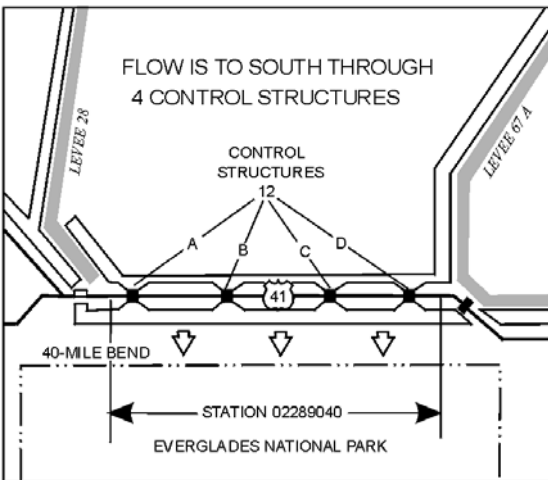
TAMIAMI CANAL OUTLETS



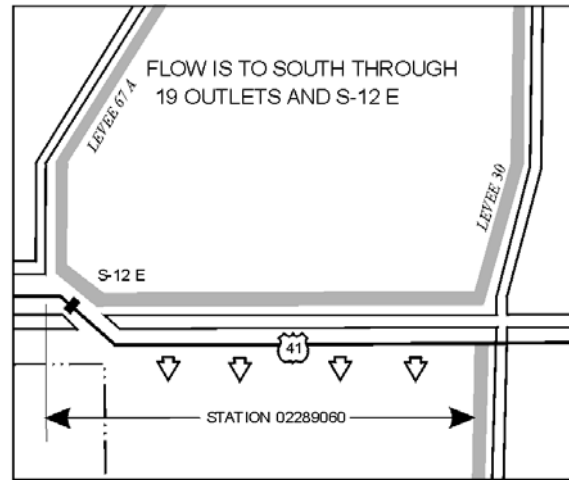
STATION 02288800 MONROE TO CARNESTOWN



STATION 02288900 40-MILE BEND TO MONROE



STATION 02289040 LEVEE 67A TO 40-MILE BEND



STATION 02289060 LEVEE 30 TO LEVEE 67A

Figure 21. Tamiami Canal Outlets.

02288800 TAMIAMI CANAL OUTLETS, MONROE TO CARNESTOWN, FL

LOCATION.--Lat 25°53'10", long 81°15'30", in NW ¼ sec.6, T.53 S., R.31 E., Collier County, Hydrologic Unit 03090204, on downstream side of bridge 84 on U.S. Highway 41, 7 mi east of Carnestown, and 10 mi west of Monroe.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--August 1960 to current year.

REVISED RECORDS.--WDR FL-98-2A, 1997.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to May 2, 1963, at site 2 mi east at datum 0.93 ft lower. From May 2, 1963 to February 10, 1965, at site on west bank of unnamed lateral 30 ft downstream.

REMARKS.--Records poor. Figures of discharge consist of runoff from Big Cypress Watershed as represented by flow through all the outlets of the Tamiami Canal from Monroe, 55 mi west of Miami, to a point 1 mi east of the intersection with State Highway 29 at Carnestown (Bridge numbers 95-77). Flow at western-most outlets affected by tide. Flow measurements under tidal influence are computed as zero flow. Zero flow occurs for numerous days, during most of the water years. Peak flow above base is not determined.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 43 complete water years of discharge (1960-94, 1996-2004).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 5.90 ft present datum Sept. 14, 1960; minimum, -0.52 ft, June 5-8, 2001.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 5.67 ft Oct. 1; minimum, 0.24 ft June 7.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.66	4.18	3.55	3.13	3.76	4.16	2.45	2.25	0.42	3.23	3.85	---
2	5.65	4.15	3.52	3.11	3.78	4.14	2.36	2.27	0.36	3.39	3.89	---
3	5.58	4.19	3.49	3.10	3.75	4.11	2.28	2.86	0.31	3.55	4.28	---
4	5.50	4.27	3.46	3.08	3.72	4.07	2.19	3.06	0.33	3.62	4.61	---
5	5.40	4.34	3.45	3.06	3.68	4.02	2.12	3.04	0.32	3.64	4.68	---
6	5.30	4.42	3.47	3.04	3.65	3.97	2.04	2.95	0.29	3.59	4.80	---
7	5.20	4.40	3.43	3.02	3.62	3.91	1.97	2.85	0.26	3.52	4.89	---
8	5.10	4.38	3.39	2.99	3.59	3.85	1.90	2.75	0.29	3.44	4.91	---
9	5.02	4.36	3.36	2.97	3.56	3.77	1.83	2.65	0.31	3.37	4.91	---
10	4.95	4.32	3.34	2.95	3.54	3.70	1.77	2.55	0.40	3.37	4.91	---
11	4.89	4.28	3.33	2.92	3.52	3.63	1.69	2.46	0.96	3.53	4.90	---
12	4.82	4.24	3.30	2.88	3.50	3.56	1.67	2.36	1.17	3.49	4.85	---
13	4.75	4.20	3.28	2.86	3.49	3.50	2.72	2.24	1.28	3.41	4.82	---
14	4.68	4.17	3.30	2.83	3.46	3.44	3.20	2.11	1.85	3.33	---	---
15	4.63	4.13	3.38	2.81	3.49	3.38	3.23	1.98	3.18	3.26	---	---
16	4.56	4.09	3.39	2.79	3.52	3.35	3.21	1.86	3.25	3.22	4.77	4.66
17	4.50	4.06	3.41	2.77	3.50	3.33	3.18	1.74	3.20	3.26	4.78	4.64
18	4.46	4.03	3.40	2.89	3.47	3.28	3.13	1.60	3.13	3.29	4.78	4.62
19	4.42	4.00	3.38	3.23	3.43	3.21	3.08	1.48	3.06	3.36	4.73	4.59
20	4.38	3.98	3.36	3.25	3.40	3.14	3.02	1.36	2.98	3.48	4.66	4.54
21	4.34	3.94	3.34	3.24	3.36	3.06	2.96	1.26	2.89	3.52	4.60	4.52
22	4.31	3.90	3.32	3.22	3.32	2.98	2.89	1.15	2.81	3.53	4.67	4.51
23	4.27	3.85	3.30	3.20	3.28	2.89	2.82	1.05	2.72	3.50	4.80	4.52
24	4.24	3.81	3.29	3.18	3.24	2.81	2.76	0.98	2.62	3.45	4.93	4.53
25	4.21	3.77	3.27	3.16	3.29	2.76	2.71	0.91	2.53	3.42	5.04	4.52
26	4.18	3.74	3.25	3.14	3.72	2.77	2.63	0.84	2.48	3.47	5.08	4.51
27	4.15	3.70	3.23	3.15	3.95	2.79	2.56	0.76	2.39	3.56	5.08	4.51
28	4.12	3.66	3.21	3.16	4.09	2.75	2.50	0.69	2.38	3.98	5.05	4.51
29	4.25	3.62	3.19	3.14	4.15	2.67	2.42	0.62	2.74	4.06	4.98	4.53
30	4.26	3.58	3.17	3.16	---	2.60	2.34	0.55	2.96	4.00	4.95	4.51
31	4.22	---	3.15	3.60	---	2.52	---	0.48	---	3.91	4.98	---
TOTAL	146.00	121.76	103.71	95.03	103.83	104.12	75.63	55.71	53.87	108.75	---	---
MEAN	4.71	4.06	3.35	3.07	3.58	3.36	2.52	1.80	1.80	3.51	---	---
MAX	5.66	4.42	3.55	3.60	4.15	4.16	3.23	3.06	3.25	4.06	---	---
MIN	4.12	3.58	3.15	2.77	3.24	2.52	1.67	0.48	0.26	3.22	---	---

02288800 TAMAMIAMI CANAL OUTLETS, MONROE TO CARNESTOWN, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,570	494	108	22	197	240	0.02	1.1	e11	22	334	e2,150
2	4,520	453	102	20	203	229	0.00	1.3	e9.6	35	409	e2,180
3	4,230	494	93	18	183	212	0.00	7.0	e8.1	55	960	e2,050
4	3,870	574	86	17	160	197	0.00	15	e8.7	63	1,630	e1,970
5	3,450	648	84	15	137	175	0.00	14	e8.6	63	1,840	e1,890
6	3,060	744	90	13	117	153	0.00	9.5	e7.5	48	2,200	e1,800
7	2,710	700	81	12	100	134	0.00	6.8	e7.0	31	2,510	e1,710
8	2,420	664	72	10	85	114	0.00	5.1	e7.7	19	2,590	e1,610
9	2,180	626	66	9.6	75	92	0.00	3.9	e8.3	11	2,590	e1,500
10	1,990	566	61	9.0	66	74	0.00	3.1	e13	11	2,590	e1,390
11	1,840	507	58	8.1	59	60	0.00	2.4	e25	21	2,520	e1,320
12	1,680	458	53	7.2	53	49	0.00	1.8	e29	15	2,210	e1,280
13	1,500	417	51	6.8	47	40	3.4	1.2	e33	8.3	2,000	e1,190
14	1,340	377	56	6.3	41	32	16	0.62	e48	5.3	e1,850	e1,110
15	1,220	339	71	5.9	43	26	23	0.17	71	3.8	e1,650	e1,040
16	1,090	305	74	5.6	44	23	22	0.00	80	3.8	1,580	1,000
17	970	275	76	5.2	39	21	19	0.00	64	4.8	1,520	968
18	897	246	74	10	33	17	16	0.00	47	6.2	1,510	957
19	826	239	68	35	28	12	13	0.00	33	10	1,380	912
20	766	232	62	46	25	8.7	10	0.00	22	24	1,220	857
21	709	218	57	45	22	6.4	8.1	0.00	14	32	1,090	836
22	656	204	52	42	19	4.8	6.6	0.00	8.8	39	1,210	838
23	610	188	49	40	16	3.6	5.5	0.00	6.3	40	1,490	865
24	571	175	46	37	13	2.8	4.6	0.00	4.4	39	1,830	889
25	534	162	42	34	18	2.3	4.0	e0.07	3.2	42	2,140	886
26	505	151	38	32	79	2.2	3.3	e0.42	2.7	57	2,260	891
27	472	141	35	33	148	2.3	2.8	e0.88	1.9	89	2,220	906
28	442	133	32	35	204	1.9	2.4	e1.6	1.8	295	2,130	925
29	576	123	29	32	235	1.3	2.0	e2.5	4.4	385	1,910	962
30	572	113	26	36	---	0.75	1.5	e3.8	9.2	373	1,820	955
31	536	---	24	134	---	0.32	---	e6.4	---	341	1,890	---
TOTAL	51,312	10,966	1,916	781.7	2,489	1,937.37	163.22	88.66	598.2	2,192.2	55,083	37,837
MEAN	1,655	366	61.8	25.2	85.8	62.5	5.44	2.86	19.9	70.7	1,777	1,261
MAX	4,570	744	108	134	235	240	23	15	80	385	2,590	2,180
MIN	442	113	24	5.2	13	0.32	0.00	0.00	1.8	3.8	334	836
AC-FT	101,800	21,750	3,800	1,550	4,940	3,840	324	176	1,190	4,350	109,300	75,050

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2004, BY WATER YEAR (WY)

MEAN	888	342	163	133	105	104	40.1	46.0	450	750	908	1,225
MAX	2,623	1,877	1,627	1,312	840	1,499	397	347	2,658	2,830	1,948	3,165
(WY)	(2000)	(1995)	(1995)	(1995)	(1983)	(1970)	(1970)	(1996)	(1969)	(1966)	(1981)	(1960)
MIN	68.7	12.8	0.03	0.01	0.00	0.00	0.00	0.00	6.58	40.0	38.0	341
(WY)	(1962)	(1991)	(1991)	(2001)	(1982)	(1975)	(1961)	(1962)	(2001)	(1980)	(1963)	(1967)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1960 - 2004

ANNUAL TOTAL	228,986.92		165,364.35			
ANNUAL MEAN	627		452		414	
HIGHEST ANNUAL MEAN					790	1983
LOWEST ANNUAL MEAN					187	1975
HIGHEST DAILY MEAN	4,570	Oct 1	4,570	Oct 1	6,010	Sep 13, 1960
LOWEST DAILY MEAN	0.00	few days	0.00	few days		
ANNUAL SEVEN-DAY MINIMUM	0.00	few days	0.00	few days		
ANNUAL RUNOFF (AC-FT)	454,200		328,000		300,000	
10 PERCENT EXCEEDS	1,670		1,690		1,260	
50 PERCENT EXCEEDS	246		52		100	
90 PERCENT EXCEEDS	8.2		1.9		0.00	

e Estimated

** Many days during water years 1961-62, 1966, 1970, 1972-77, 1979-83, 1988-96, 1998-2004

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02288900 TAMIAMI CANAL OUTLETS, 40-MILE BEND TO MONROE, FL

LOCATION.--Lat 25°51'05", long 80°58'50", in SW 1/4 sec.13, T.53 S., R.33 E., Collier County, Hydrologic Unit 03090202, on south bank, 25 ft east of bridge 105 on U.S. Highway 41, and 54 mi west of Miami, Dade County.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1939 to September 1963 (monthly discharge only), October 1963 to current year. Prior to October 1963, published as Tamiami Canal at bridge 105, near Miami (auxiliary). Records of gage height prior to October 1963, are available in files of the U.S. Geological Survey.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to February 20, 1952, non-recording gage and February 20, 1952, to May 28, 1952, water-stage recorder, at same site at datum 0.37 ft higher.

REMARKS.--Records poor. Figures of daily discharge consist of runoff from Big Cypress Watershed and from the southern extension of the Levee 28 canal as represented by flow through all 29 bridges from bridge 28 to 22 and bridge 117 to 96. Prior to October 1963, daily discharge for this portion of canal was published as part of the total daily discharge of station, Tamiami Canal Outlets, Miami to Monroe (station 02289000). No NASQAN water quality records collected after September 30, 1993. No peaks above base determined. Zero flow occurs numerous days, during many water years.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Average annual mean discharge, 348 ft³/s, 252,130 acre-ft/yr. Figures represent 62 complete water years of discharge (1964-88, 1990-97, 1999-2004). Monthly discharge only, available 1941-63 water years.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 10.01 ft Oct. 20,1947 (present datum); minimum, 2.65 ft May 26,1974.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 8.90 ft Oct. 3; minimum, 4.64 ft June 2.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.88	8.60	8.27	8.05	8.16	8.11	7.06	6.52	4.68	7.28	8.04	8.50
2	8.86	8.59	8.26	8.04	8.16	8.08	7.01	6.50	4.80	7.30	8.08	8.52
3	8.85	8.62	8.24	8.02	8.15	8.06	6.96	6.82	5.86	7.58	8.12	8.56
4	8.86	---	8.23	8.01	8.13	8.04	6.92	7.15	6.55	7.60	8.20	8.62
5	8.83	---	8.22	8.00	8.12	8.01	6.88	7.02	6.82	7.58	8.23	8.66
6	8.81	---	8.21	8.00	8.10	7.98	6.84	6.91	6.93	7.55	8.28	8.71
7	8.79	---	8.19	7.98	8.09	7.96	6.78	6.82	6.92	7.50	8.33	8.68
8	8.78	---	8.18	7.96	8.07	7.92	6.74	6.72	6.93	7.41	8.35	8.69
9	8.76	---	8.16	7.94	8.04	7.88	6.70	6.64	6.89	7.33	8.35	8.70
10	8.75	---	8.15	7.92	8.02	7.84	6.65	6.57	7.13	7.30	8.35	8.65
11	8.74	---	8.16	7.89	8.01	7.80	6.59	6.47	7.16	7.40	8.34	8.61
12	8.72	---	8.14	7.86	7.99	7.76	6.69	6.39	7.15	7.36	8.34	8.57
13	8.72	---	8.13	7.84	7.97	7.72	7.41	6.30	7.12	7.32	8.42	8.54
14	8.70	---	8.19	7.81	7.98	7.68	7.67	6.21	7.07	7.29	8.46	8.51
15	8.70	---	8.26	7.79	7.99	7.65	7.62	6.14	7.17	7.25	8.46	8.48
16	8.68	---	8.24	7.76	7.99	7.64	7.54	6.06	7.12	7.20	8.45	8.45
17	8.67	---	8.24	7.74	7.98	7.61	7.47	5.98	7.03	7.32	8.44	8.43
18	8.66	---	8.22	7.82	7.96	7.56	7.39	5.90	6.94	7.28	8.44	8.41
19	8.65	8.45	8.21	7.99	7.93	7.51	7.31	5.82	6.88	7.25	8.42	8.39
20	8.64	8.44	8.19	7.99	7.91	7.46	7.24	5.73	6.81	7.47	8.41	8.37
21	8.62	8.42	8.18	7.98	7.89	7.41	7.17	5.64	6.71	7.56	8.44	8.36
22	8.61	8.40	8.17	7.96	7.86	7.36	7.10	5.52	6.61	7.56	8.45	8.36
23	8.60	8.39	8.16	7.94	7.84	7.31	7.04	5.40	6.54	7.49	8.47	8.35
24	8.58	8.38	8.15	7.91	7.81	7.27	6.98	5.30	6.43	7.43	8.48	8.33
25	8.57	8.36	8.14	7.89	7.89	7.25	6.90	5.19	6.33	7.42	8.49	8.33
26	8.56	8.35	8.13	7.86	8.16	7.28	6.83	5.10	6.24	7.45	8.48	8.35
27	8.56	8.33	8.11	7.85	8.17	7.25	6.77	5.00	6.13	7.50	8.46	8.43
28	8.54	8.32	8.10	7.83	8.15	7.20	6.70	4.92	6.41	7.76	8.44	8.53
29	8.65	8.30	8.08	7.80	8.13	7.16	6.65	4.84	7.35	7.92	8.42	8.60
30	8.63	8.28	8.07	7.80	---	7.12	6.59	4.77	7.32	7.98	8.40	8.58
31	8.62	---	8.06	8.07	---	7.09	---	4.73	---	8.02	8.44	---
TOTAL	269.59	---	253.44	245.30	232.65	235.97	210.20	185.08	200.03	231.66	259.48	255.27
MEAN	8.70	---	8.18	7.91	8.02	7.61	7.01	5.97	6.67	7.47	8.37	8.51
MAX	8.88	---	8.27	8.07	8.17	8.11	7.67	7.15	7.35	8.02	8.49	8.71
MIN	8.54	---	8.06	7.74	7.81	7.09	6.59	4.73	4.68	7.20	8.04	8.33

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,330	832	445	183	343	193	16	0.05	0.00	0.00	163	1,460
2	2,250	788	424	175	382	169	14	0.08	0.00	0.32	201	1,560
3	2,200	867	401	166	402	140	12	4.2	0.00	2.6	256	1,740
4	2,200	e940	381	164	372	126	10	12	0.00	3.6	347	1,930
5	2,100	e1,040	365	157	335	116	8.9	8.4	0.00	3.7	395	2,050
6	2,010	e1,190	349	153	307	109	7.4	6.6	0.00	3.5	484	2,240
7	1,940	e1,140	322	144	280	101	5.7	5.3	0.00	3.0	579	2,140
8	1,880	e1,100	304	132	247	92	4.5	4.1	0.00	2.0	621	2,150
9	1,800	e1,050	285	124	213	82	3.7	3.5	0.00	1.2	631	2,130
10	1,720	e1,010	279	118	191	73	2.7	2.7	0.00	1.2	644	1,930
11	1,670	e973	280	112	171	64	1.7	1.6	0.00	3.0	633	1,710
12	1,600	e932	263	106	152	56	3.5	1.0	0.00	2.7	640	1,470
13	1,540	e883	248	101	138	49	36	0.67	0.00	2.5	848	1,240
14	1,450	e842	338	97	136	41	51	0.40	0.00	2.4	981	1,060
15	1,410	e793	401	92	139	35	42	0.32	0.00	2.2	973	897
16	1,330	e757	353	88	135	32	36	0.26	0.00	2.5	946	797
17	1,250	e732	346	85	125	31	31	0.19	0.00	6.4	927	731
18	1,210	e713	328	104	117	30	26	0.16	0.00	6.8	920	684
19	1,140	696	318	145	111	28	21	0.15	0.00	7.8	869	642
20	1,080	672	301	137	107	25	17	0.12	0.00	20	868	595
21	1,030	646	280	131	103	24	14	0.12	0.00	28	966	564
22	978	619	272	123	98	22	11	0.10	0.00	32	1,070	558
23	908	596	271	117	94	20	8.9	0.09	0.00	31	1,120	539
24	857	574	261	112	90	19	6.7	0.07	0.00	31	1,200	504
25	802	557	248	107	117	19	4.6	0.06	0.00	34	1,250	502
26	773	533	237	102	263	22	3.0	0.06	0.00	40	1,270	539
27	753	523	234	100	260	21	1.9	0.03	0.00	48	1,200	752
28	695	503	219	97	241	20	0.97	0.03	0.00	77	1,150	1,180
29	1,010	478	207	91	221	18	0.59	0.03	0.16	104	1,060	1,480
30	961	450	198	92	---	18	0.27	0.00	0.06	120	1,020	1,500
31	889	---	195	218	---	17	---	0.00	---	142	1,180	---
TOTAL	43,766	23,429	9,353	3,873	5,890	1,812	402.03	52.39	0.22	764.42	25,412	37,274
MEAN	1,412	781	302	125	203	58.5	13.4	1.69	0.01	24.7	820	1,242
MAX	2,330	1,190	445	218	402	193	51	12	0.16	142	1,270	2,240
MIN	695	450	195	85	90	17	0.27	0.00	0.00	0.00	163	502
AC-FT	86,810	46,470	18,550	7,680	11,680	3,590	797	104	0.4	1,520	50,400	73,930

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2004, BY WATER YEAR (WY)

	854	490	268	196	152	132	74.9	63.3	342	581	698	836
MEAN	854	490	268	196	152	132	74.9	63.3	342	581	698	836
MAX (WY)	4,052 (1996)	3,057 (1995)	3,369 (1995)	3,062 (1995)	1,790 (1995)	971 (1995)	437 (1983)	583 (1969)	1,707 (1982)	2,021 (1966)	1,499 (1966)	2,275 (1995)
MIN (WY)	66.6 (1973)	26.4 (1975)	3.80 (1991)	1.54 (1990)	0.53 (1985)	0.00 (1971)	0.00 (1971)	0.00 (1967)	0.01 (2004)	24.7 (2004)	29.7 (1987)	135 (1967)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1964 - 2004

ANNUAL TOTAL	212,185.6		152,028.06			
ANNUAL MEAN	581		415		397	
HIGHEST ANNUAL MEAN					1,660 1995	
LOWEST ANNUAL MEAN					118 1975	
HIGHEST DAILY MEAN	2,330	Sep 30	2,330	Oct 1	7,270	Oct 17, 1999
LOWEST DAILY MEAN	2.7	Apr 25	0.00*		0.00**	
ANNUAL SEVEN-DAY MINIMUM	7.5	Apr 19	0.00*		0.00**	
ANNUAL RUNOFF (AC-FT)	420,900		301,500		287,500	
10 PERCENT EXCEEDS	1,320		1,200		1,110	
50 PERCENT EXCEEDS	496		138		132	
90 PERCENT EXCEEDS	29		0.06		1.1	

e Estimated

* Many days.

** Many days during water years 1965-67, 1971-77, 1979, 1981-82, 1984-85, 1988-92, 1999-2002, 2004.

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

254754080344300 SHARK RIVER SLOUGH NO. 1 IN CONSERVATION AREA 3B NEAR COOPERTOWN, FL

LOCATION.--Lat 25°47'54", long 80°33'43", in SW ¼ sec.30, T.53 S., R.38 E., Miami-Dade County, Hydrologic Unit 03090202, 2.8 mi northwest of Coopertown on east-west ditch in Conservation Area 3B.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1976 to September 1980, October 1982 to current year. Prior to October 1977, published as "Shark Valley Slough No. 1 in Conservation Area 3B near Coopertown."

GAGE.--Satellite data collection platform with water-stage shaft encoder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Water years 1994 - 1997 were corrected by -0.02 ft, due to levels. Water years 1998 and 1999 were corrected by -0.03 ft, due to levels. Corrected data are in the files of the U.S. Geological Survey.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 9.76 ft Oct. 15, 1999; minimum, 3.95 ft May 23, 1990.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 8.62 ft Oct. 1; minimum, 6.60 ft June 4.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.62	8.26	8.03	7.68	7.73	7.63	7.27	7.17	6.77	6.81	7.26	7.37
2	8.61	8.24	8.01	7.67	7.74	7.62	7.26	7.16	6.71	6.77	7.34	7.36
3	8.59	8.24	8.00	7.66	7.74	7.60	7.24	7.22	6.66	6.74	7.36	7.35
4	8.57	8.26	7.98	7.65	7.72	7.59	7.22	7.41	6.72	6.79	7.39	7.35
5	8.56	8.32	7.97	7.64	7.70	7.58	7.21	7.38	6.96	6.81	7.39	7.47
6	8.55	8.35	7.96	7.63	7.69	7.57	7.19	7.35	7.00	6.82	7.41	7.55
7	8.54	8.37	7.95	7.62	7.68	7.55	7.18	7.32	7.06	6.84	7.43	7.57
8	8.52	8.36	7.94	7.60	7.66	7.54	7.16	7.29	7.07	7.01	7.46	7.60
9	8.50	8.36	7.92	7.58	7.65	7.52	7.16	7.27	7.06	6.99	7.47	7.62
10	8.49	8.35	7.91	7.57	7.64	7.51	7.15	7.25	7.06	6.96	7.43	7.61
11	8.47	8.34	7.90	7.55	7.63	7.49	7.17	7.23	7.05	6.99	7.40	7.59
12	8.47	8.32	7.89	7.54	7.62	7.48	7.20	7.21	7.04	7.05	7.37	7.58
13	8.46	8.31	7.88	7.53	7.61	7.47	7.29	7.19	7.07	7.07	7.34	7.56
14	8.44	8.29	7.88	7.52	7.61	7.46	7.36	7.17	7.05	7.08	7.34	7.56
15	8.42	8.27	7.91	7.51	7.61	7.45	7.32	7.15	7.04	7.04	7.36	7.55
16	8.40	8.26	7.90	7.50	7.61	7.44	7.30	7.14	7.07	7.04	7.36	7.55
17	8.40	8.25	7.90	7.49	7.59	7.43	7.28	7.12	7.06	7.04	7.37	7.54
18	8.43	8.24	7.88	7.52	7.58	7.42	7.26	7.10	7.07	7.02	7.40	7.53
19	8.40	8.23	7.87	7.58	7.57	7.40	7.25	7.08	7.08	7.01	7.39	7.52
20	8.38	8.21	7.85	7.56	7.56	7.39	7.23	7.06	7.05	7.03	7.38	7.54
21	8.35	8.19	7.83	7.55	7.55	7.37	7.22	7.04	7.06	7.03	7.38	7.55
22	8.33	8.17	7.82	7.54	7.54	7.35	7.20	7.02	7.12	7.02	7.40	7.60
23	8.31	8.16	7.82	7.53	7.53	7.34	7.18	7.01	7.13	7.00	7.39	7.63
24	8.29	8.14	7.80	7.51	7.52	7.32	7.16	6.99	7.07	6.98	7.37	7.62
25	8.28	8.12	7.78	7.50	7.56	7.32	7.14	6.97	7.03	6.95	7.36	7.62
26	8.27	8.11	7.77	7.49	7.67	7.35	7.13	6.94	7.00	6.94	7.36	7.67
27	8.26	8.09	7.75	7.49	7.67	7.35	7.11	6.92	6.95	6.95	7.37	7.70
28	8.24	8.08	7.74	7.49	7.65	7.33	7.12	6.89	6.91	7.02	7.41	7.70
29	8.31	8.06	7.72	7.47	7.64	7.31	7.14	6.86	6.88	7.03	7.40	7.74
30	8.28	8.04	7.71	7.47	---	7.30	7.14	6.83	6.85	7.03	7.39	7.77
31	8.28	---	7.69	7.53	---	7.29	---	6.80	---	7.11	7.38	---
TOTAL	261.02	246.99	243.96	234.17	221.27	230.77	216.24	220.54	209.65	215.97	228.86	226.97
MEAN	8.42	8.23	7.87	7.55	7.63	7.44	7.21	7.11	6.99	6.97	7.38	7.57
MAX	8.62	8.37	8.03	7.68	7.74	7.63	7.36	7.41	7.13	7.11	7.47	7.77
MIN	8.24	8.04	7.69	7.47	7.52	7.29	7.11	6.80	6.66	6.74	7.26	7.35

261533080571600 L-28 INTERCEPTOR CANAL BELOW S-190 NEAR CLEWISTON, FL

LOCATION.--Lat 26°15'33", long 80°57'16", in SW ¼ sec.32, T.48 S., R.34 E., Hendry County, Hydrologic Unit 03090202, on east bank of Levee 28 Interceptor canal, 500 ft upstream from the northern boundary of Big Cypress National Preserve and inside the southern boundary of the Big Cypress Seminole Indian Reservation, 3.3 mi south of State Road 833, 4.6 mi west of the intersection of the Hendry, Collier and Broward county lines, 6.6 mi north of U.S. Interstate 75, and 33 mi south of Clewiston.

DRAINAGE AREA.--Indeterminate.

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

GAGE.--Water-stage shaft encoder and acoustic doppler velocity meter provided by the U.S. Geological Survey. Acoustic velocity meter prior to January 1, 2001. Electronic data logger with cellular phone/radio telemetry provided by South Florida Water Management District. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except for daily discharges below 100 cfs and estimated discharges, which are poor. Flow affected by levee and control structure S-190 about 2 mi upstream. Flow is positive to the south.

COOPERATION.--Seminole Tribe of Florida.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 5 complete water years of discharge (1998-2001, 2004).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 13.80 ft Nov. 5, 1998; minimum, 9.13 ft May 23, 2001.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 13.45 ft Oct. 1; minimum, 9.56 ft June 1.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.41	11.73	11.31	11.25	11.62	11.63	10.88	10.52	9.73	11.07	11.72	12.50
2	13.31	11.69	11.29	11.23	11.56	11.58	10.84	10.48	9.88	11.07	12.03	12.51
3	13.20	11.83	11.30	11.22	11.48	11.52	10.81	10.49	10.00	11.28	12.13	12.37
4	13.04	11.82	11.32	11.22	11.56	11.53	10.78	10.57	10.02	11.17	12.10	12.40
5	12.91	12.01	11.30	11.21	11.46	11.55	10.76	10.57	10.07	11.12	12.13	12.99
6	12.81	11.86	11.24	11.18	11.58	11.41	10.76	10.57	10.16	11.10	12.44	13.22
7	12.67	11.76	11.23	11.12	11.46	11.45	10.75	10.57	10.18	11.11	12.42	13.15
8	12.60	11.83	11.24	11.13	11.42	11.43	10.72	10.55	10.19	11.29	12.25	13.10
9	12.49	11.73	11.26	11.13	11.38	11.34	10.69	10.52	10.25	11.20	12.17	13.01
10	12.45	11.74	11.26	11.08	11.51	11.28	10.68	10.50	10.48	11.13	12.10	12.95
11	12.46	11.76	11.24	11.04	11.39	11.25	10.70	10.49	11.04	11.08	12.35	12.81
12	12.44	11.67	11.24	11.06	11.32	11.23	10.71	10.47	11.21	11.05	12.49	12.76
13	12.42	11.65	11.25	11.06	11.43	11.22	10.83	10.43	11.30	11.02	12.52	12.63
14	12.35	11.73	11.27	11.05	11.47	11.20	10.83	10.39	11.30	10.99	12.86	12.57
15	12.31	11.63	11.47	11.03	11.37	11.21	10.83	10.36	11.40	10.97	12.82	12.53
16	12.25	11.60	11.45	11.03	11.44	11.20	10.83	10.32	11.44	11.02	12.84	12.42
17	12.23	11.58	11.53	11.04	11.40	11.18	10.82	10.29	11.37	11.10	12.76	12.33
18	12.17	11.57	11.45	11.08	11.26	11.18	10.81	10.24	11.37	11.35	12.72	12.33
19	12.11	11.63	11.57	11.13	11.26	11.15	10.79	10.21	11.37	11.38	12.82	12.33
20	12.11	11.57	11.41	11.11	11.24	11.14	10.77	10.17	11.24	11.45	12.63	12.23
21	12.03	11.51	11.33	11.11	11.22	11.10	10.76	10.13	11.30	11.47	12.55	12.22
22	12.01	11.49	11.52	11.10	11.20	11.07	10.74	10.09	11.23	11.50	12.76	12.21
23	11.92	11.48	11.44	11.08	11.21	11.05	10.71	10.05	11.15	11.49	12.69	12.12
24	11.95	11.47	11.37	11.08	11.33	11.03	10.70	10.0	11.09	11.44	12.54	12.11
25	11.96	11.45	11.31	11.10	11.44	11.02	10.67	9.95	11.05	11.41	12.70	12.06
26	11.94	11.44	11.40	11.11	11.73	11.01	10.64	9.92	11.03	11.43	12.71	12.24
27	11.89	11.43	11.43	11.24	11.66	11.00	10.60	9.88	11.00	11.57	12.74	12.16
28	---	11.40	11.37	11.27	11.61	10.97	10.57	9.84	11.02	11.78	12.74	12.16
29	11.89	11.29	11.33	11.23	11.57	10.95	10.56	9.79	11.11	11.75	12.60	12.22
30	11.82	11.32	11.30	11.22	---	10.93	10.54	9.76	11.09	11.66	12.59	12.35
31	11.77	---	11.27	11.51	---	10.92	---	9.75	---	11.66	12.48	---
TOTAL	---	348.67	351.70	345.45	331.58	347.73	322.08	317.87	325.07	350.11	387.40	374.99
MEAN	---	11.62	11.35	11.14	11.43	11.22	10.74	10.25	10.84	11.29	12.50	12.50
MAX	---	12.01	11.57	11.51	11.73	11.63	10.88	10.57	11.44	11.78	12.86	13.22
MIN	---	11.29	11.23	11.03	11.20	10.92	10.54	9.75	9.73	10.97	11.72	12.06

261533080571600 L-28 INTERCEPTOR CANAL BELOW S-190 NEAR CLEWISTON, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,440	3.8	1.5	5.7	143	70	48	7.5	-34	1.1	262	e667
2	1,290	1.3	9.7	11	125	113	32	-9.4	-39	67	472	e639
3	1,110	83	6.0	5.5	30	16	45	-5.5	-1.1	5.1	531	e520
4	907	16	-0.02	-3.9	89	91	53	30	-8.2	-16	520	e665
5	743	207	17	-15	55	14	37	40	-14	0.67	544	e1,030
6	639	9.9	20	15	12	-8.3	5.7	8.9	4.9	12	e825	e1,170
7	478	6.4	19	1.1	111	120	-16	-11	-4.6	45	e737	e1,130
8	462	123	19	6.8	3.7	46	-8.7	0.44	7.7	109	e605	e1,060
9	351	7.6	6.4	16	71	24	51	8.2	0.75	-26	e510	e979
10	273	80	7.6	6.3	48	9.7	25	3.3	-0.64	-1.0	e446	e912
11	382	-3.7	27	4.3	-20	18	-12	13	252	11	e774	e809
12	404	1.6	1.4	15	-6.5	-6.9	-0.44	12	1.8	-11	e699	e749
13	316	44	-17	9.7	108	-4.9	11	14	105	8.7	e746	e629
14	304	49	-2.3	24	-39	4.4	31	3.3	116	39	e1,070	e563
15	295	7.6	70	20	27	29	11	7.3	105	12	e1,030	e513
16	172	1.2	-0.10	11	100	-30	13	-5.7	161	1.1	e964	e452
17	221	3.2	80	1.9	20	46	-7.3	10	80	-21	e974	e387
18	187	14	23	-7.1	7.9	-4.7	-2.9	-6.8	50	82	e913	e344
19	166	65	73	23	4.4	10	-9.6	-7.1	121	113	e950	e358
20	124	11	17	21	-14	-2.0	16	-9.6	8.5	95	e818	e379
21	58	11	4.3	19	-13	25	-4.8	-2.6	114	120	e712	307
22	155	5.5	65	16	5.4	31	-13	-17	-17	130	e907	269
23	65	7.1	17	14	-15	4.1	-14	-14	-20	68	e813	267
24	68	-16	-2.2	13	58	-0.92	-13	8.3	-1.7	97	e698	267
25	115	1.1	27	-1.2	-1.1	-11	-4.5	18	-18	40	e874	260
26	133	10	67	-28	196	-5.2	-23	-2.5	-15	8.5	e826	e339
27	-6.0	-2.6	9.8	60	176	3.4	13	-1.4	-11	210	e896	208
28	e84	3.3	-4.8	9.8	95	16	17	9.4	20	321	e861	278
29	74	2.4	2.3	-3.0	61	17	4.0	-18	30	215	e698	332
30	8.0	12	-16	-3.0	---	3.5	5.2	-1.5	12	191	e711	386
31	13	---	2.1	113	---	42	---	-29	---	232	e592	---
TOTAL	11,031.0	764.7	549.68	380.9	1,437.8	679.18	288.66	52.54	1,005.41	2,159.17	22,978	16,868
MEAN	356	25.5	17.7	12.3	49.6	21.9	9.62	1.69	33.5	69.7	741	562
MAX	1,440	207	80	113	196	120	53	40	252	321	1,070	1,170
MIN	-6.0	-16	-17	-28	-39	-30	-23	-29	-39	-26	262	208
AC-FT	21,880	1,520	1,090	756	2,850	1,350	573	104	1,990	4,280	45,580	33,460

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

	MEAN	282	73.4	34.3	-1.31	14.6	9.75	-7.62	-9.94	39.3	70.2	234	281
MAX	536	302	164	80.6	108	105	9.62	7.24	139	144	741	562	
(WY)	(2001)	(1999)	(1998)	(1998)	(1998)	(1998)	(2004)	(1997)	(2003)	(2001)	(2004)	(2004)	(2004)
MIN	42.5	0.69	-49.7	-53.5	-39.2	-35.3	-29.3	-30.2	-18.9	-16.5	10.3	37.6	
(WY)	(1998)	(2001)	(1997)	(2000)	(1997)	(1997)	(1997)	(2000)	(2000)	(1998)	(2000)	(2000)	(2000)

SUMMARY STATISTICS

	FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004	
ANNUAL TOTAL	58,195.04			
ANNUAL MEAN	159		90.5	
HIGHEST ANNUAL MEAN			159	
LOWEST ANNUAL MEAN			38.6	
HIGHEST DAILY MEAN	1,440	Oct 1	2,050	Oct 5, 2000
LOWEST DAILY MEAN	-39	Feb 14	-135	Jan 18, 2000
ANNUAL SEVEN-DAY MINIMUM	-19	May 29	-91	Jan 17, 2000
ANNUAL RUNOFF (AC-FT)	115,400		65,570	
10 PERCENT EXCEEDS	666		288	
50 PERCENT EXCEEDS	17		15	
90 PERCENT EXCEEDS	-9.6		-41	

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

261543080495000 L28 CANAL ABOVE S-140 NEAR CLEWISTON, FL

LOCATION.--Lat 26°15'43", long 80°49'50", in SW ¼ sec. 34, T.48 S., R.35 E., Broward County, Hydrologic Unit 03090202, Florida, on east bank, 500 ft upstream from the northern boundary of the Miccosukee Tribe of Florida and inside the southern boundary of the Big Cypress Seminole Indian Reservation, 3.1 mi east of the intersection of the Broward, Collier and Hendry county lines, 6.0 mi north of Pump Station S-140, 6.9 mi north of U.S. Interstate 75, and 33 mi south of Clewiston on the Levee 28 canal.

DRAINAGE AREA.--Indeterminate.

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

GAGE.--Electronic data logger with water-stage shaft encoder and acoustic velocity meter with cellular phone/radio telemetry provided by South Florida Management District. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except for discharge below 100 cfs and estimated discharges, which are poor. Flow affected by G-89 and U.S. Sugar Outfall (USSO) culvert structures upstream and pump structure S-140 downstream. Positive flow is to the south. Discharge computed from continuous velocity record obtained from acoustic velocity meter and relations between stage vs. area and index velocity vs. mean channel velocity.

COOPERATION.--Seminole Tribe of Florida.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 4 complete water years of discharge (1998-2000, 2002).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 12.06 ft Oct. 16, 1999; minimum, 7.84 ft Mar. 7, 2002.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 11.41 ft July 30; minimum, 8.56 ft Oct. 25.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.60	10.11	9.97	10.75	10.21	10.48	10.57	10.50	9.66	9.69	9.61	9.54
2	9.52	9.74	10.01	10.06	9.84	10.08	10.54	10.47	9.91	9.62	9.46	9.58
3	9.66	10.09	10.39	10.18	10.33	10.37	10.52	10.49	10.54	10.34	9.62	9.60
4	9.60	9.97	10.60	10.55	10.09	10.80	10.49	10.65	10.75	9.96	9.57	9.61
5	9.43	9.84	9.94	9.91	10.43	10.18	10.45	10.65	10.58	10.34	9.62	9.93
6	9.52	9.85	9.99	10.01	10.06	10.36	10.42	10.64	10.55	10.07	9.59	9.90
7	9.43	9.69	10.33	10.44	10.33	10.70	10.41	10.62	10.46	9.65	9.69	9.62
8	9.55	10.34	10.51	10.64	10.71	10.0	10.41	10.61	10.48	10.14	10.30	9.62
9	10.14	9.98	10.66	9.96	10.09	10.11	10.38	10.56	10.57	9.85	9.60	9.65
10	9.95	9.71	9.98	9.96	10.29	10.56	10.36	10.52	10.78	10.05	9.54	9.66
11	9.86	9.50	10.04	10.35	10.74	10.73	10.37	10.50	10.23	10.44	9.53	9.60
12	9.76	9.43	9.64	10.55	10.85	10.01	10.45	10.48	10.02	9.92	9.47	9.58
13	9.77	9.39	9.71	10.67	10.21	10.07	10.69	10.43	10.01	10.06	9.59	9.98
14	9.76	9.37	10.18	10.75	10.53	10.43	10.75	10.36	10.11	9.65	9.49	9.94
15	9.77	9.90	9.81	10.01	10.80	10.62	10.72	10.30	10.15	9.71	9.52	9.96
16	9.81	10.42	10.00	10.04	10.89	9.93	10.74	10.25	10.40	9.56	9.60	9.93
17	9.91	9.91	9.72	10.37	---	10.00	10.73	10.22	10.21	10.31	9.44	9.93
18	9.85	10.13	9.87	10.62	---	10.42	10.69	10.22	10.09	10.11	9.65	9.80
19	9.72	9.86	9.53	10.79	---	9.76	10.67	10.17	10.19	10.03	9.79	10.06
20	9.67	10.04	9.69	10.18	---	9.70	10.66	10.11	10.18	10.23	9.60	10.03
21	9.71	9.90	10.14	10.31	10.29	10.06	10.67	10.06	10.19	10.27	9.69	9.89
22	9.64	10.15	10.35	10.62	10.65	10.23	10.66	10.04	10.05	10.27	10.33	9.61
23	9.54	10.46	10.59	9.93	10.76	10.35	10.66	9.98	9.93	10.18	10.16	9.33
24	9.43	10.64	9.93	9.93	10.03	10.45	10.65	9.92	9.71	9.95	9.97	9.34
25	9.23	10.0	9.93	10.32	10.25	10.51	10.62	9.88	9.53	9.98	9.65	9.33
26	9.92	9.53	10.33	10.53	10.45	10.55	10.61	9.88	9.44	9.94	9.65	9.10
27	9.69	9.79	10.60	10.69	10.18	10.60	10.59	9.83	9.37	10.13	9.65	9.79
28	10.09	10.20	10.67	10.23	9.73	10.59	10.44	9.78	9.93	10.79	9.60	9.80
29	9.87	10.43	10.28	10.24	9.89	10.58	10.45	9.73	10.28	10.11	9.60	10.20
30	10.20	10.60	10.40	9.86	---	10.58	10.49	9.68	9.82	10.75	9.68	9.67
31	9.83	---	10.67	10.45	---	10.58	---	9.65	---	9.51	9.67	---
TOTAL	301.43	298.97	314.46	319.90	---	320.39	316.86	317.18	304.12	311.61	299.93	291.58
MEAN	9.72	9.97	10.14	10.32	---	10.34	10.56	10.23	10.14	10.05	9.68	9.72
MAX	10.20	10.64	10.67	10.79	---	10.80	10.75	10.65	10.78	10.79	10.33	10.20
MIN	9.23	9.37	9.53	9.86	---	9.70	10.36	9.65	9.37	9.51	9.44	9.10

261543080495000 L28 CANAL ABOVE S-140 NEAR CLEWISTON, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	517	30	92	46	118	88	2.7	33	36	127	347	400
2	495	93	25	108	112	117	-40	15	77	119	388	351
3	459	63	15	43	54	88	-32	15	78	118	373	352
4	467	124	62	79	139	120	-25	-1.5	142	153	359	338
5	431	143	93	117	101	114	-38	-4.2	149	61	386	460
6	401	140	27	9.5	141	89	31	-25	135	155	363	478
7	394	128	15	39	50	63	54	12	123	131	342	440
8	318	51	25	29	52	94	47	27	126	95	408	456
9	335	122	36	99	114	40	42	-9.0	152	132	353	462
10	304	121	109	31	77	33	-11	22	189	65	335	432
11	297	115	26	23	133	39	35	34	245	50	335	403
12	278	108	100	16	133	109	---	29	232	110	273	404
13	251	107	55	29	115	13	---	30	201	83	223	344
14	224	97	38	36	59	15	---	17	193	133	264	364
15	226	45	97	96	75	78	21	17	218	60	250	317
16	201	57	76	14	49	109	0.78	7.9	230	122	307	320
17	189	103	127	48	e109	7.9	-14	9.1	236	110	292	287
18	165	81	33	39	e42	35	-32	-12	214	165	340	263
19	153	111	101	57	e42	85	-27	-5.2	242	115	462	233
20	145	38	41	107	e111	9.2	-12	-27	216	146	482	242
21	133	83	23	13	46	-42	65	-26	221	145	487	251
22	129	18	10	24	31	-25	47	-14	220	136	650	246
23	127	41	69	104	77	-1.6	42	18	198	146	585	234
24	121	60	113	13	114	14	34	-26	195	155	518	174
25	114	118	18	42	47	-12	57	-35	143	152	521	224
26	65	78	27	47	113	-17	76	7.5	161	135	508	188
27	136	62	21	73	124	-11	37	28	152	138	487	266
28	79	70	33	86	121	-24	6.0	51	72	282	460	238
29	130	22	75	48	67	-32	8.9	50	94	247	483	263
30	40	14	84	115	---	-10	27	56	125	306	449	283
31	124	---	52	47	---	37	---	54	---	265	435	---
TOTAL	7,448	2,443	1,718	1,677.5	2,566	1,222.5	---	347.6	5,015	4,357	12,465	9,713
MEAN	240	81.4	55.4	54.1	88.5	39.4	---	11.2	167	141	402	324
MAX	517	143	127	117	141	120	---	56	245	306	650	478
MIN	40	14	10	9.5	31	-42	---	-35	36	50	223	174
AC-FT	14,770	4,850	3,410	3,330	5,090	2,420	---	689	9,950	8,640	24,720	19,270

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

MEAN	228	103	50.5	35.1	46.6	36.8	15.4	23.6	132	174	197	204
MAX	495	287	140	67.0	102	125	42.2	98.6	242	407	402	324
(WY)	(2000)	(1999)	(1998)	(1998)	(1998)	(1998)	(2003)	(1997)	(1999)	(2002)	(2004)	(1999)
MIN	59.3	9.04	2.72	-3.51	-7.12	-10.2	0.98	-9.62	3.17	59.4	49.6	115
(WY)	(1998)	(1998)	(2001)	(2000)	(2000)	(1997)	(2000)	(2001)	(2000)	(2000)	(2000)	(2000)

SUMMARY STATISTICS

ANNUAL MEAN
HIGHEST ANNUAL MEAN
LOWEST ANNUAL MEAN
HIGHEST DAILY MEAN
LOWEST DAILY MEAN
ANNUAL SEVEN-DAY MINIMUM
ANNUAL RUNOFF (AC-FT)
10 PERCENT EXCEEDS
50 PERCENT EXCEEDS
90 PERCENT EXCEEDS

WATER YEARS 1997 - 2004

98.4
129
71.3
853
-77
-37
71,270
276
54
-13

2002
2000
Oct 5, 2000
Apr 24, 2002
May 8, 2001

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02289027 DRAINAGE CANAL BELOW STRUCTURE G-136, NEAR CLEWISTON, FL

LOCATION.--Lat 26°40'02", long 80°56'18", in SW $\frac{1}{4}$ sec.9, T.44 S., R.34 E., Hendry County, Hydrologic Unit 03090202, approximately 1,000 ft east of structure G-136, and approximately 6 mi south of Clewiston, FL.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--May - July 1992 (gage heights only), August 1992 to current year. Discontinued.

REVISED RECORDS.--WDR FL-94-2A, 1992, 1993.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Prior to February 1, 2002, acoustic velocity meter. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Flow affected by structure activity at G-136 and by agricultural pumping. Discharge computed from relations between stage vs. area and index velocity vs. mean channel velocity.

ANNUAL MEAN AND ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 4 complete water years of discharge (1996-97, 2000, 2004).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 13.88 ft Nov. 5, 1998; minimum, 9.08 ft May 21, 22, 2001.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 13.31 ft Sept. 6; minimum, 9.79 ft Sept. 25, 26.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.49	11.00	11.01	10.89	10.94	10.81	11.29	11.43	11.75	10.77	10.96	10.70
2	11.85	10.89	11.37	10.86	10.59	11.06	11.23	11.21	11.86	10.91	11.41	10.49
3	11.42	11.22	11.39	10.89	10.34	11.18	11.15	10.62	10.89	10.95	11.62	10.35
4	10.99	11.39	11.40	10.93	10.90	11.00	11.26	10.52	10.50	10.92	11.57	10.32
5	11.48	10.74	11.21	10.92	11.03	11.23	11.40	10.82	10.74	10.88	11.00	11.22
6	10.66	10.48	10.82	10.89	11.11	10.92	11.50	10.62	10.64	10.80	10.93	12.97
7	10.53	10.52	10.69	10.84	10.65	10.97	11.34	10.74	10.70	10.83	10.79	13.18
8	11.12	10.56	10.97	10.83	10.65	10.79	11.28	11.22	10.38	10.77	11.06	12.69
9	11.03	10.62	11.39	10.83	10.58	---	11.34	11.30	10.68	10.73	11.18	12.71
10	10.86	10.75	11.09	10.71	10.64	---	11.43	11.19	10.60	11.25	10.58	12.32
11	11.11	10.56	10.97	10.93	10.85	10.73	11.38	---	10.56	11.29	10.60	11.53
12	11.25	10.47	11.06	10.72	11.06	10.77	11.04	11.18	10.49	---	11.18	11.17
13	---	10.52	11.20	10.70	11.09	11.02	11.29	11.37	10.79	11.33	11.26	10.76
14	11.05	10.92	11.04	10.84	10.99	10.96	11.21	11.74	10.93	11.20	11.19	10.56
15	11.27	10.83	11.12	10.69	10.90	11.01	11.23	11.82	11.12	11.25	11.28	10.27
16	11.07	10.99	10.55	---	10.76	10.95	11.00	11.83	11.11	11.42	11.08	10.21
17	11.10	10.98	11.12	---	10.86	10.86	10.88	11.76	10.94	11.76	10.57	10.10
18	11.09	11.01	11.06	---	10.81	10.68	10.79	11.72	10.59	11.71	10.38	10.33
19	11.28	11.06	10.59	---	10.86	10.76	10.61	11.67	10.76	11.82	10.70	10.50
20	11.35	---	10.82	---	10.88	10.85	10.67	11.73	10.87	10.84	10.48	10.80
21	11.19	10.88	10.94	10.89	10.85	10.89	10.78	11.64	10.90	---	10.18	10.98
22	11.07	10.66	10.92	10.70	10.82	10.91	10.68	11.71	10.73	10.56	10.16	11.25
23	11.03	10.68	10.85	10.89	10.92	11.39	10.88	11.72	10.55	10.64	10.10	10.96
24	10.94	10.93	10.86	11.04	10.81	11.40	11.40	11.66	10.53	11.08	10.33	10.65
25	11.06	11.03	10.87	11.16	10.92	11.19	11.38	11.69	10.59	10.80	10.45	10.17
26	10.98	11.05	10.86	11.22	11.20	11.48	11.19	---	10.60	10.62	10.37	11.33
27	11.14	10.94	10.88	11.13	10.97	11.33	11.30	11.56	10.74	10.76	10.33	12.17
28	11.18	10.81	10.85	10.69	11.05	11.14	---	11.64	10.75	11.01	10.13	11.70
29	11.22	10.73	10.90	10.87	10.98	11.16	10.78	11.67	10.86	10.31	10.25	11.05
30	---	10.83	10.90	10.96	---	11.25	10.93	11.70	10.90	10.26	10.55	10.95
31	11.15	---	10.89	11.37	---	11.15	---	11.60	---	10.43	10.87	---
TOTAL	---	---	340.59	---	315.01	---	---	---	324.05	---	333.54	334.39
MEAN	---	---	10.99	---	10.86	---	---	---	10.80	---	10.76	11.15
MAX	---	---	11.40	---	11.20	---	---	---	11.86	---	11.62	13.18
MIN	---	---	10.55	---	10.34	---	---	---	10.38	---	10.10	10.10

02289027 DRAINAGE CANAL BELOW STRUCTURE G-136, NEAR CLEWISTON, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	244	3.7	-6.0	0.42	5.5	12	-5.6	-3.9	-13	-0.08	30	80
2	220	0.69	1.5	1.2	29	13	-4.9	2.1	-2.7	4.3	62	86
3	191	-1.6	3.5	-1.3	28	7.6	-4.4	3.8	6.9	4.1	88	93
4	163	-0.01	-1.4	-1.8	25	5.4	-5.1	0.81	-1.8	1.6	88	103
5	131	-0.12	-0.03	0.86	7.5	5.2	1.7	3.1	2.7	2.1	78	219
6	94	-0.24	-4.8	4.7	10	5.3	1.6	0.74	8.3	1.2	62	331
7	66	2.7	-3.3	0.77	6.6	-7.7	-2.0	-0.14	0.51	-4.8	74	330
8	61	2.1	4.6	-0.50	2.0	0.11	1.3	-0.32	-2.0	2.6	63	314
9	48	2.5	4.0	1.3	-0.29	e0.00	-1.1	1.6	-0.89	-0.93	67	335
10	41	4.5	-1.6	-1.9	3.1	e0.00	1.2	0.99	8.5	2.5	54	287
11	37	3.7	-3.9	2.0	3.6	-0.21	4.3	e-3.7	35	-1.6	58	235
12	6.5	0.67	-2.1	1.1	-2.9	-0.62	-2.8	-2.1	50	e2.4	104	195
13	e12	1.1	2.9	2.0	3.2	2.8	-2.0	0.93	32	0.14	109	150
14	17	1.2	-1.8	-3.6	-0.13	6.8	-5.6	0.57	35	-2.0	138	115
15	12	0.03	4.6	-2.3	-1.7	-3.6	4.7	-1.7	37	-3.6	150	86
16	0.94	-0.62	-4.3	e0.00	5.9	1.5	0.07	2.0	25	-3.0	132	77
17	2.9	1.2	-3.7	e0.00	1.2	-2.9	1.8	-2.1	21	-5.3	97	81
18	5.1	-2.2	-0.14	e0.00	0.07	-1.3	4.4	2.2	14	17	70	103
19	8.2	0.38	-1.2	e0.00	3.4	1.2	0.68	0.55	-1.1	41	63	131
20	1.6	e0.22	-0.91	e0.00	2.0	6.0	0.24	2.1	-7.0	46	53	145
21	6.4	3.2	1.6	1.0	-0.36	-0.17	0.10	-34	-0.66	e47	42	165
22	-2.1	1.2	3.9	-4.1	4.2	4.4	-2.7	-22	2.2	45	30	185
23	-3.1	-1.0	4.1	-4.4	1.8	6.6	-2.2	-22	3.6	37	28	150
24	1.6	3.4	4.5	-0.20	-0.77	8.2	3.3	-3.3	-2.6	19	28	128
25	1.6	2.3	0.11	3.6	-1.8	8.4	-2.1	-14	3.3	8.7	28	88
26	-0.47	-0.50	2.1	-2.9	12	10	-1.4	e-1.1	3.2	14	42	164
27	8.5	-3.7	2.0	10	27	6.0	-1.7	-15	-1.7	15	67	236
28	-0.04	-1.6	2.5	-2.3	33	0.80	e3.7	-40	0.59	42	63	205
29	0.37	-1.7	-1.5	-0.35	23	2.8	-0.37	-30	-0.19	33	70	176
30	e4.5	0.92	2.3	1.0	---	0.81	-5.1	-26	-1.7	24	89	147
31	4.0	---	2.8	4.2	---	-1.1	---	-36	---	27	88	---
TOTAL	1,383.50	22.42	10.33	8.50	229.12	97.32	-19.98	-235.87	253.46	415.33	2,215	5,140
MEAN	44.6	0.75	0.33	0.27	7.90	3.14	-0.67	-7.61	8.45	13.4	71.5	171
MAX	244	4.5	4.6	10	33	13	4.7	3.8	50	47	150	335
MIN	-3.1	-3.7	-6.0	-4.4	-2.9	-7.7	-5.6	-40	-13	-5.3	28	77
AC-FT	2,740	44	20	17	454	193	-40	-468	503	824	4,390	10,200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)

	51.9	23.9	23.4	20.5	25.5	19.7	12.1	15.8	36.5	43.3	56.7	69.5
MEAN	51.9	23.9	23.4	20.5	25.5	19.7	12.1	15.8	36.5	43.3	56.7	69.5
MAX	138	113	84.1	77.3	73.6	38.2	19.6	33.9	116	127	131	171
(WY)	(1996)	(1999)	(1995)	(1995)	(1998)	(1998)	(1997)	(1996)	(1996)	(2002)	(1997)	(2004)
MIN	7.27	0.12	0.04	0.27	7.90	3.14	-0.67	-7.61	8.45	6.54	14.4	15.5
(WY)	(1993)	(1993)	(1993)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(1993)	(2000)	(1996)

SUMMARY STATISTICS

	FOR 2004 WATER YEAR		WATER YEARS 1992 - 2004	
ANNUAL TOTAL	9,519.13			
ANNUAL MEAN	26.0		29.3	
HIGHEST ANNUAL MEAN			42.0	1996
LOWEST ANNUAL MEAN			21.1	1993
HIGHEST DAILY MEAN	335	Sep 9	376	Oct 17, 1995
LOWEST DAILY MEAN	-40	May 28	-40	May 28, 2004
ANNUAL SEVEN-DAY MINIMUM	-23	May 27	-23	May 27, 2004
ANNUAL RUNOFF (AC-FT)	18,880		21,250	
10 PERCENT EXCEEDS	90		73	
50 PERCENT EXCEEDS	2.1		15	
90 PERCENT EXCEEDS	-3.0		0.00	

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02289031 LEVEE 3 CANAL BELOW STRUCTURE G-155, NEAR CLEWISTON, FL

LOCATION.--Lat 26°19'48", long 80°52'48", in NW ¼ sec.7, T.48 S., R.35 E., Broward County, Hydrologic Unit 03090202, approximately 1,050 ft downstream, due east of structure G-155, 3.0 mi northeast of Snake Road, and 35 mi south of Clewiston, FL.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--May to August 1992 (gage heights only), September 1992 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic velocity meter until January 17, 2002, when it was removed. Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter installed September 25, 2001. The acoustic velocity meter and acoustic doppler velocity meter were run in tandem for the period of September 25, 2001 to January 17, 2002. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Discharge computed from relations between stage vs. area and index velocity vs. mean channel velocity. Flow affected by structure activity at G-155 and by agricultural pumping. Gage height records revised May 1992 through September 1994, based upon new elevation for BM L-4-6 from 22.578 ft to 22.543 ft. Discharge was not revised. Revised records are available in the files of the U.S. Geological Survey. The elevation of BM L-4-6 was revised by South Florida Water Management for a second time, elevation is now 22.380 ft. Gage height records for the 1992 - 1994 water years require an adjustment of + 0.16 ft due to the revised elevation of BM L-4-6. Gage height records for the 1995 - 1996 water years require an adjustment of + 0.19 ft also due to the revised elevation of BM L-4-6.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 2 complete water year of discharge (1997, 2004).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 15.56 ft Nov. 8, 1998; minimum, 7.75 ft May 17, 2002.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 14.53 ft Oct. 3, Sept. 10,11; minimum, 10.48 ft May 26.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.49	12.70	12.35	13.22	13.06	13.88	11.73	11.57	11.01	12.31	14.07	13.62
2	14.52	12.65	12.29	13.18	13.12	13.43	11.71	11.43	11.44	12.30	13.99	13.80
3	14.52	13.02	12.14	13.23	13.11	13.33	11.62	11.46	12.86	12.31	13.79	13.76
4	14.50	13.57	12.23	13.27	13.12	13.51	11.54	11.54	12.57	12.31	13.78	13.64
5	14.34	13.84	12.29	13.27	13.26	13.26	11.48	11.49	12.33	12.31	13.80	13.85
6	14.11	13.82	12.32	13.23	13.42	13.59	11.24	11.34	12.28	12.33	13.81	14.07
7	14.04	13.82	12.32	12.86	13.87	13.29	11.06	11.35	12.19	12.31	13.77	14.29
8	14.31	13.86	12.34	12.61	13.64	13.16	10.86	11.42	12.08	12.35	13.76	14.42
9	14.29	13.89	12.40	12.48	13.61	13.07	10.89	11.33	11.86	12.43	13.77	14.49
10	14.38	13.70	12.42	12.97	13.29	13.00	10.78	11.27	12.02	12.46	13.71	14.51
11	14.42	13.54	12.44	13.23	13.15	12.92	10.80	---	12.06	12.47	13.67	14.51
12	14.42	13.31	12.39	13.20	13.08	12.84	10.97	11.23	12.08	12.45	13.59	14.48
13	14.40	13.03	12.43	12.87	13.11	12.77	11.19	11.09	12.10	12.40	13.50	14.41
14	14.29	12.87	12.56	12.87	13.55	12.70	11.41	11.10	12.24	12.34	13.79	14.37
15	14.23	12.89	12.70	12.56	13.65	12.61	12.23	11.57	13.12	12.25	13.98	14.35
16	14.23	12.92	12.76	12.31	13.78	12.55	12.72	11.54	13.47	12.22	13.90	14.30
17	13.72	12.90	12.87	12.05	13.47	12.51	12.34	11.42	13.59	12.66	13.63	14.23
18	13.45	12.84	12.96	11.89	13.33	12.46	12.12	11.35	13.59	13.30	13.62	14.01
19	13.27	12.66	13.06	12.15	13.23	12.41	11.98	11.30	13.74	12.80	13.72	13.96
20	13.13	---	13.12	13.45	13.08	12.35	11.62	11.21	13.80	12.92	13.71	13.91
21	13.01	12.61	13.14	13.03	13.00	12.28	11.39	11.04	13.74	13.62	13.68	13.91
22	12.96	12.36	13.08	12.72	12.99	12.24	11.40	11.16	13.44	13.85	13.86	13.91
23	12.96	12.32	13.12	12.46	12.89	12.18	12.03	11.13	13.01	13.87	13.62	13.92
24	12.96	12.33	13.16	12.34	12.83	12.12	12.41	11.21	12.80	13.88	13.50	13.91
25	12.86	12.05	13.18	12.28	---	12.09	12.83	11.08	12.65	13.86	13.46	13.86
26	12.73	12.04	13.24	12.37	13.33	12.02	12.91	---	12.52	13.78	13.49	13.88
27	12.65	12.12	13.22	12.68	13.30	11.97	12.43	11.03	12.41	13.86	13.56	14.19
28	12.64	12.20	13.20	13.56	13.66	11.93	---	10.95	12.35	13.89	13.57	14.23
29	12.73	12.22	13.21	13.08	13.87	11.92	12.12	10.86	12.36	13.52	13.55	14.18
30	---	12.23	13.28	13.11	---	11.90	11.95	10.87	12.34	13.66	13.61	14.22
31	12.73	---	13.19	13.19	---	11.82	---	10.98	---	13.96	13.72	---
TOTAL	---	---	395.41	397.72	---	392.11	---	---	378.05	400.98	424.98	423.19
MEAN	---	---	12.76	12.83	---	12.65	---	---	12.60	12.93	13.71	14.11
MAX	---	---	13.28	13.56	---	13.88	---	---	13.80	13.96	14.07	14.51
MIN	---	---	12.14	11.89	---	11.82	---	---	11.01	12.22	13.46	13.62

02289031 LEEVEE 3 CANAL BELOW STRUCTURE G-155, NEAR CLEWISTON, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	476	26	17	e-38	37	108	35	24	e-18	38	87	189
2	472	32	e-3.8	e-29	42	88	34	24	0.07	55	105	266
3	460	e-2.2	e-8.3	e-28	22	56	28	27	12	60	117	215
4	442	26	7.8	e-17	20	81	31	18	23	38	95	241
5	322	63	e-4.5	e-3.6	37	72	17	14	17	37	122	236
6	213	79	39	e-0.42	33	26	22	e-17	49	35	123	376
7	151	83	24	19	63	25	16	e-13	31	30	122	464
8	119	83	e-1.7	21	60	39	15	e-2.7	29	35	121	490
9	72	95	1.6	e-1.7	105	39	20	e-8.7	25	42	116	510
10	64	65	e-4.0	e-21	84	32	19	e-3.2	37	39	128	506
11	81	66	e-5.9	e-17	82	39	23	e-8.8	55	44	111	497
12	71	51	35	1.6	26	44	22	e-7.8	46	54	106	471
13	51	33	46	e-29	7.9	27	23	2.8	44	34	136	443
14	77	34	33	e-0.26	75	24	32	e-23	31	22	288	421
15	46	38	45	23	13	43	e-37	e-11	17	17	355	416
16	89	45	49	18	25	30	4.3	e-13	31	29	259	408
17	88	44	44	23	68	25	11	e-7.3	26	e-19	164	346
18	66	40	41	19	47	30	19	e-11	43	54	158	249
19	45	29	44	e-44	41	26	15	e-13	17	44	175	246
20	40	e39	50	6.6	11	18	15	e-7.0	21	15	193	239
21	29	31	47	17	e-12	26	24	e-12	32	52	153	239
22	39	19	e-2.0	13	9.2	17	e-18	e-13	69	91	171	243
23	38	25	e-41	20	40	15	e-51	e-13	64	82	105	248
24	34	31	e-62	21	9.5	14	e-40	e-19	47	57	94	243
25	25	23	e-46	40	e25	8.8	e-24	6.5	43	43	95	250
26	31	26	e-25	e-4.4	57	8.5	23	e-24	45	53	142	228
27	39	28	e-38	e-65	52	21	5.2	e-9.7	37	61	166	386
28	28	27	e-52	e-12	62	28	e-48	e-28	36	132	155	362
29	e31	32	e-24	30	55	27	e-3.1	e-27	39	115	134	321
30	e20	24	e-23	18	---	19	26	e-17	32	74	186	345
31	20	---	e-18	45	---	28	---	e-32	---	66	216	---
TOTAL	3,779	1,234.8	164.2	24.82	1,196.6	1,084.3	258.4	-224.9	980.07	1,529	4,698	10,094
MEAN	122	41.2	5.30	0.80	41.3	35.0	8.61	-7.25	32.7	49.3	152	336
MAX	476	95	50	45	105	108	35	27	69	132	355	510
MIN	20	-2.2	-62	-65	-12	8.5	-51	-32	-18	-19	87	189
AC-FT	7,500	2,450	326	49	2,370	2,150	513	-446	1,940	3,030	9,320	20,020

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)

	MEAN	218	61.2	36.6	23.2	52.5	52.0	16.1	22.3	76.1	172	216	272
MAX	594	181	189	78.8	272	351	36.6	94.2	168	605	486	491	491
(WY)	(2000)	(1995)	(1998)	(1998)	(1998)	(1998)	(2003)	(1997)	(1994)	(1999)	(1998)	(1994)	(1994)
MIN	30.9	-2.04	-20.6	-7.67	-7.05	-11.2	-9.36	-7.25	3.43	46.3	43.6	65.4	65.4
(WY)	(1993)	(1998)	(1997)	(1997)	(1999)	(1999)	(1999)	(2004)	(1999)	(1993)	(2001)	(2000)	(2000)

SUMMARY STATISTICS

ANNUAL TOTAL
ANNUAL MEAN
HIGHEST ANNUAL MEAN
LOWEST ANNUAL MEAN
HIGHEST DAILY MEAN
LOWEST DAILY MEAN
ANNUAL SEVEN-DAY MINIMUM
ANNUAL RUNOFF (AC-FT)
10 PERCENT EXCEEDS
50 PERCENT EXCEEDS
90 PERCENT EXCEEDS

FOR 2004 WATER YEAR

24,818.29
67.8
510
-65
-41
49,230
220
32
-13

WATER YEARS 1992 - 2004

90.7
114
67.8
1,040
-65
-41
65,670
304
33
-16

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02289032 LEVEE 4 BELOW STRUCTURE G-88, NEAR CLEWISTON, FL

LOCATION.--Lat 26°19'52", long 80°52'48", in NW ¼ sec.7, T.48 S., R.35 E., Broward County, Hydrologic Unit 03090202, approximately 1,050 ft below structure G-88, 3.0 mi northeast of Snake Road and 35 mi south of Clewiston, FL.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--May to July 1992 (gage height only), August 1992 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Prior to October 18, 2001, satellite data collection platform with water-stage shaft encoder and acoustic velocity meter. Acoustic doppler velocity meter installed January 10, 2001. The acoustic velocity meter and acoustic doppler velocity meter were run in tandem for the period of January 10, 2001 to October 18, 2001. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Flow affected by operation of G-88, pump station S-8, and by agricultural pumping. Flow reversal occurs at times, during agricultural activity. Discharge computed from relations between stage vs. area and index velocity vs. mean channel velocity. Gage height records revised -0.04 ft May 1992 through September 1994, based upon revised elevation for BM L-4-6 from 22.578 ft to 22.543 ft. Discharge was not revised. Revised records are available in the files of the U.S. Geological Survey. The elevation of BM L-4-6 was revised by South Florida Water Management for a second time, elevation is now 22.380 ft. Gage height records for the 1992 - 1994 water years are now in error +0.21 ft in the files of the U.S. Geological Survey due to the revised elevation of BM L-4-6. Gage height records for the 1995-1996 water years are now in error +0.25 ft in the files of the U.S. Geological Survey due to the revised elevation of BM L-4-6.

ANNUAL MEAN AND ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 5 complete water years of discharge (1994, 1996-97, 2001-2002).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 14.72 ft July 12, 2002; minimum, 8.11 ft May 17, 2002.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 14.58 ft Oct. 3; minimum, 10.45 ft May 30.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	12.65	12.30	13.18	13.01	13.79	11.68	---	10.96	12.28	14.02	13.58
2	14.57	12.60	12.25	13.14	13.07	13.36	11.66	11.40	11.40	12.26	13.96	---
3	14.57	12.97	12.10	13.18	13.07	13.27	11.57	11.43	12.82	12.28	13.76	13.72
4	14.54	13.52	12.19	13.23	13.08	13.44	11.49	11.51	12.53	12.27	---	13.63
5	14.37	13.79	12.26	13.22	13.21	---	11.43	11.46	12.30	12.27	13.77	---
6	14.12	13.78	12.28	13.18	13.37	13.52	11.17	11.32	12.25	12.30	13.78	14.04
7	14.04	13.78	12.29	12.81	13.79	13.24	11.00	11.32	12.16	12.27	13.73	14.27
8	14.30	13.81	12.31	12.58	13.56	13.11	10.80	11.38	12.06	12.31	13.72	---
9	14.28	13.86	12.35	12.44	13.54	13.02	---	11.28	11.83	12.39	13.73	14.50
10	14.37	13.66	12.38	12.92	13.24	12.95	10.71	---	11.98	12.42	13.66	14.52
11	14.40	13.50	12.40	13.18	13.09	12.86	10.73	---	12.02	12.42	13.62	14.50
12	14.40	13.28	12.35	13.15	13.03	12.78	10.91	11.20	12.04	---	13.55	14.45
13	---	12.98	12.38	12.82	13.05	12.71	11.15	11.05	---	---	13.46	14.36
14	14.27	12.82	12.51	12.82	13.48	12.64	11.37	11.06	12.20	12.28	13.75	14.32
15	14.21	12.84	12.65	12.52	13.58	12.56	12.14	11.53	13.08	12.20	13.95	14.31
16	14.21	12.87	12.71	12.27	13.69	12.50	12.62	11.51	13.43	12.17	13.87	14.26
17	13.70	12.85	12.83	12.00	13.40	12.46	12.25	11.39	13.54	12.62	13.58	14.18
18	13.43	12.79	12.93	11.85	13.27	12.41	12.03	---	13.55	13.27	13.57	13.96
19	13.25	12.62	13.02	12.10	13.18	12.36	11.90	11.27	13.71	12.79	13.68	13.89
20	13.10	---	13.08	13.39	13.03	12.30	11.56	11.18	13.76	12.91	---	13.84
21	12.99	12.57	13.10	12.96	12.96	12.23	11.33	11.00	13.70	---	13.64	13.83
22	12.94	12.33	13.04	12.67	12.94	12.19	11.37	11.13	13.41	---	13.86	13.84
23	12.93	12.28	13.08	12.42	12.84	12.13	12.00	11.09	12.97	13.80	13.60	13.85
24	12.92	---	13.12	12.30	12.79	12.08	12.37	11.17	12.76	13.80	13.48	13.84
25	12.82	12.01	13.14	12.24	13.18	12.03	12.79	11.04	12.62	13.79	13.45	13.80
26	12.70	12.00	13.20	---	13.28	11.97	12.87	---	---	13.72	---	13.81
27	12.62	12.08	13.18	12.63	13.25	11.91	12.40	10.99	12.37	13.79	---	14.12
28	12.61	12.16	13.16	13.51	13.59	11.88	---	10.90	12.32	13.83	13.54	14.16
29	12.68	12.18	13.17	13.04	13.79	11.87	12.09	10.80	12.33	13.47	---	14.11
30	12.69	12.19	13.23	13.05	---	11.85	11.92	---	---	13.61	13.58	14.16
31	12.68	---	13.15	13.14	---	11.77	---	10.93	---	13.91	13.69	---
TOTAL	---	---	394.14	---	384.36	---	---	---	---	---	---	---
MEAN	---	---	12.71	---	13.25	---	---	---	---	---	---	---
MAX	---	---	13.23	---	13.79	---	---	---	---	---	---	---
MIN	---	---	12.10	---	12.79	---	---	---	---	---	---	---

02289032 LEVEE 4 BELOW STRUCTURE G-88, NEAR CLEWISTON, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e216	17	-0.69	-22	14	59	-15	e3.9	-43	24	62	87
2	224	14	-16	-27	41	47	-8.6	15	-13	23	91	e127
3	219	-15	1.3	-17	50	36	-14	3.0	-8.5	21	107	95
4	207	5.3	0.35	-8.8	46	42	-10	-3.3	-0.84	24	e114	46
5	165	33	-7.6	-12	46	e35	-18	3.5	-1.1	14	110	---
6	125	44	-4.0	-17	43	13	-2.9	-17	14	8.7	109	---
7	82	46	-6.7	-4.8	35	9.4	-5.0	-19	16	-3.5	111	---
8	67	51	-8.1	7.7	33	-0.01	-12	-17	12	22	104	e249
9	50	55	3.1	-18	45	9.0	e-13	-9.4	11	42	94	262
10	46	52	-5.7	-31	32	4.4	-13	e-23	13	36	72	260
11	49	48	-12	-20	32	25	10	e-17	17	16	57	257
12	34	38	13	-2.4	5.4	29	-2.0	-19	14	e17	61	240
13	e29	-8.3	26	-39	1.2	26	-7.0	3.0	e18	e15	72	203
14	39	16	19	-28	24	21	-17	-29	7.0	-1.5	144	191
15	34	23	22	-24	-17	23	-41	-6.9	-9.8	-6.2	173	204
16	57	26	30	-16	-1.4	-6.4	0.13	-5.0	3.9	2.1	131	191
17	44	24	22	2.1	8.5	-7.8	5.6	-3.2	8.8	-29	75	164
18	21	20	27	-11	-2.0	23	18	e-9.1	-0.21	-0.65	84	115
19	16	-11	38	-51	20	19	8.3	-16	-14	6.3	102	112
20	15	e-0.61	44	-15	9.3	19	3.1	-7.5	-16	2.7	e98	89
21	6.7	8.7	46	-15	-6.1	-2.6	7.0	-28	-11	e45	84	103
22	-15	-4.2	27	-28	7.8	-7.3	-32	-26	21	e65	113	114
23	-9.8	12	5.2	e-13	21	13	-49	-27	32	46	78	112
24	24	e-5.7	-21	-10	10	17	-40	-29	36	49	65	109
25	16	-23	-26	12	1.0	20	-20	-3.3	23	25	62	72
26	17	14	-6.5	e-15	16	19	-2.8	e-44	e21	17	e74	68
27	11	16	-15	-51	14	17	-30	-29	23	36	e74	152
28	11	-5.6	-15	-25	40	23	e-23	-49	8.6	62	71	---
29	3.0	-4.2	-7.7	11	51	8.9	-6.6	-53	14	63	e68	---
30	20	11	-7.0	-2.6	---	-4.6	12	e-41	e23	67	89	---
31	18	---	-31	17	---	-8.0	---	-52	---	45	104	---
TOTAL	1,840.9	496.39	133.96	-473.8	619.7	520.99	-317.77	-554.3	218.85	752.95	2,853	---
MEAN	59.4	16.5	4.32	-15.3	21.4	16.8	-10.6	-17.9	7.29	24.3	92.0	---
MAX	224	55	46	17	51	59	18	15	36	67	173	---
MIN	-15	-23	-31	-51	-17	-8.0	-49	-53	-43	-29	57	---
AC-FT	3,650	985	266	-940	1,230	1,030	-630	-1,100	434	1,490	5,660	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)

	245	67.9	71.1	52.7	28.7	15.2	-8.31	-15.0	59.4	101	70.4	221
MEAN	245	67.9	71.1	52.7	28.7	15.2	-8.31	-15.0	59.4	101	70.4	221
MAX	756	242	438	290	69.7	86.0	37.4	79.5	186	218	133	676
(WY)	(1996)	(1995)	(1995)	(1995)	(1998)	(1998)	(1997)	(1997)	(1999)	(1994)	(1994)	(1995)
MIN	17.2	-6.15	-0.25	-15.3	-6.28	-30.1	-65.2	-74.7	-23.4	11.4	8.39	40.7
(WY)	(2003)	(1998)	(2001)	(2004)	(1996)	(1999)	(1999)	(1993)	(2000)	(1993)	(2000)	(2000)

SUMMARY STATISTICS

ANNUAL MEAN
HIGHEST ANNUAL MEAN
LOWEST ANNUAL MEAN
HIGHEST DAILY MEAN
LOWEST DAILY MEAN
ANNUAL SEVEN-DAY MINIMUM
ANNUAL RUNOFF (AC-FT)
10 PERCENT EXCEEDS
50 PERCENT EXCEEDS
90 PERCENT EXCEEDS

WATER YEARS 1992 - 2004

70.8
126
28.3
995
-214
-127
51,310
177
26
-10

1996
2001
Oct 21, 1995
May 20, 2000
May 21, 1998

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

254543080491101 TAMIAMI CANAL AT S-12-A, NEAR MIAMI, FL

LOCATION.--Lat 25°45'43", long 80°49'11", T.54 S., R.35 E., Dade County, Hydrologic Unit 03090202, on northwest bank of Levee 29 Tamiami Canal, 50 feet south of structure S-12-A. Approximately 21.8 mi west of State Road 997 (old State Road 27) along U.S. Highway 41 near 40 mile bend. No section could be determined from existing maps.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1963 to September 1965, October 1970 to September 1971, October 1975 to September 1976, October 1977 to September 1980 (discharge only), October 1980 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoders for upstream and downstream stages. Datum of gage is National Geodetic Vertical Datum of 1929. Satellite data collection platform installed April 1, 1990.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Station is one of several located downstream from the control structures, in Levee 29 at Tamiami Canal. Gage record is primarily used to determine discharge through control structure 12-A. Discharge is the total discharge through the S-12-A structure, from Conservation Area 3A. The daily discharge computed from relations between discharge, head, and gate-openings when flow is controlled by gates and computed by relation between stage and discharge under uncontrolled conditions. Stage and discharge records prior to 1980, were either fragmentary or unavailable from the files of the U.S. Geological Survey. Upstream gage height records were formerly published under 254543080491100. Upstream gage height records have been relocated under 254543080491101 as Published Upstream record in the files of the U.S. Geological Survey.

COOPERATION.--Gate opening records provided by U.S. Army Corps of Engineers.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 31 complete water years of discharge (1964-65, 1971,1976,1978-2004).

EXTREME UPSTREAM STAGES FOR PERIOD OF RECORD.--Maximum gage height, 11.83 ft Dec. 21, 1994; minimum, 5.17 ft June 18, 19, 1989.

EXTREME UPSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 10.69 ft Oct. 1; minimum, 7.60 ft June 3.

EXTREME DOWNSTREAM STAGES FOR PERIOD OF RECORD.--Maximum gage height, 11.80 ft Dec. 21, 1994; minimum, 5.21 ft June 19, 20, 1989.

EXTREME DOWNSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 10.67 ft Oct. 1; minimum, 7.41 ft May 29-31.

UPSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.68	10.38	10.13	9.87	10.06	9.75	8.95	8.56	7.73	8.07	8.85	9.84
2	10.65	10.39	10.10	9.87	10.07	9.72	8.93	8.51	7.70	8.10	8.96	9.84
3	10.62	10.40	10.08	9.87	10.07	9.70	8.89	8.57	7.65	8.11	9.07	9.84
4	10.60	10.47	10.06	9.87	10.07	9.67	8.86	8.77	7.89	8.16	9.13	9.84
5	10.58	10.56	10.05	9.87	10.06	9.63	8.83	8.77	7.93	8.19	9.15	9.85
6	10.56	10.57	10.10	9.86	10.03	9.60	8.80	8.76	7.92	8.22	9.20	9.92
7	10.54	10.57	10.06	9.88	10.01	9.57	8.77	8.73	7.91	8.22	9.23	9.96
8	10.53	10.56	10.03	9.89	10.03	9.54	8.72	8.68	8.09	8.22	9.24	9.97
9	10.51	10.57	10.00	9.89	10.0	9.51	8.70	8.66	8.15	8.21	9.26	9.98
10	10.49	10.57	9.99	9.89	9.98	9.47	8.69	8.62	8.17	8.19	9.27	9.99
11	10.48	10.56	9.99	9.91	9.96	9.45	8.71	8.58	8.23	8.27	9.27	10.00
12	10.48	10.54	9.98	9.89	9.93	9.41	8.73	8.54	8.18	8.34	9.27	10.01
13	10.47	10.52	9.96	9.88	9.92	9.37	8.83	8.52	8.10	8.25	9.25	10.02
14	10.47	10.50	9.98	9.87	9.91	9.34	8.91	8.48	8.02	8.12	---	10.04
15	10.49	10.48	10.03	9.85	9.90	9.30	8.91	8.45	8.11	8.07	---	10.04
16	10.44	10.45	10.01	9.85	9.90	9.25	8.91	8.43	8.18	8.16	---	10.06
17	10.41	10.43	9.99	9.85	9.88	9.23	8.90	8.41	8.09	8.23	---	10.09
18	10.39	10.40	9.98	9.87	9.88	9.23	8.89	8.36	8.14	8.24	9.46	10.14
19	10.37	10.37	9.96	9.93	9.84	9.22	8.87	8.32	8.06	8.28	9.48	10.18
20	10.35	10.36	9.94	9.93	---	9.21	8.84	8.29	8.11	8.42	9.51	10.19
21	10.33	10.34	9.93	9.92	---	9.18	8.80	8.25	8.15	8.49	9.54	10.16
22	10.31	10.31	9.91	9.90	---	9.16	8.79	8.15	8.18	8.50	9.57	10.19
23	10.29	10.29	9.89	9.89	---	9.15	8.77	8.07	8.18	8.52	9.63	10.21
24	10.27	10.27	9.89	9.88	---	9.14	8.74	8.02	8.06	8.53	9.66	10.22
25	10.27	10.24	9.89	9.86	---	9.13	8.72	7.95	7.96	8.57	9.72	10.23
26	10.27	10.23	9.89	9.84	9.80	9.15	8.67	7.93	7.91	8.60	9.76	10.20
27	10.25	10.21	9.89	9.83	9.79	9.12	8.63	7.91	7.80	8.65	9.76	10.29
28	10.23	10.20	9.88	9.84	9.79	9.09	8.64	7.88	7.73	8.70	9.79	10.33
29	10.27	10.20	9.86	9.84	9.78	9.06	8.64	7.84	7.72	8.72	9.80	10.37
30	---	10.15	9.85	9.84	---	9.03	8.59	7.79	7.78	8.75	9.82	10.42
31	10.30	---	9.85	9.94	---	8.99	---	7.76	---	8.79	9.84	---
TOTAL	---	312.09	309.15	306.17	---	289.37	263.63	258.56	239.83	258.89	---	302.42
MEAN	---	10.40	9.97	9.88	---	9.33	8.79	8.34	7.99	8.35	---	10.08
MAX	---	10.57	10.13	9.94	---	9.75	8.95	8.77	8.23	8.79	---	10.42
MIN	---	10.15	9.85	9.83	---	8.99	8.59	7.76	7.65	8.07	---	9.84

254543080491101 TAMIAMI CANAL AT S-12-A, NEAR MIAMI, FL-Continued

DOWNSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.66	8.71	8.26	8.14	8.28	8.15	7.83	7.74	7.44	7.77	8.05	9.01
2	10.63	8.58	8.28	8.14	8.23	8.14	7.82	7.73	7.47	7.78	8.16	9.01
3	10.60	8.50	8.25	8.14	8.21	8.13	7.80	7.84	7.47	7.78	8.20	9.01
4	10.58	8.50	8.21	8.14	8.20	8.12	7.79	7.98	7.57	7.80	8.19	9.02
5	10.56	8.55	8.21	8.13	8.19	8.11	7.78	7.90	7.61	7.81	8.17	9.04
6	10.54	8.52	8.22	8.13	8.18	8.09	7.77	7.85	7.64	7.81	8.16	9.05
7	10.52	8.48	8.21	8.12	8.18	8.09	7.76	7.82	7.62	7.78	8.17	9.59
8	10.50	8.45	8.20	8.12	8.16	8.07	7.75	7.81	7.61	7.77	8.15	9.96
9	10.49	8.43	8.19	8.12	8.16	8.05	7.74	7.80	7.64	7.75	8.13	9.97
10	10.47	8.41	8.21	8.11	8.15	8.03	7.74	7.78	7.72	7.81	8.11	9.98
11	10.46	8.40	8.21	8.10	8.14	8.01	7.74	7.77	7.73	7.96	8.11	9.99
12	10.46	8.38	8.20	8.10	8.14	8.00	7.76	7.76	7.71	7.96	8.16	10.00
13	10.45	8.37	8.19	8.10	8.13	7.98	7.94	7.74	7.69	7.93	8.16	10.01
14	10.18	8.36	8.24	8.09	8.15	7.97	7.99	7.72	7.67	7.89	---	10.03
15	10.17	8.35	8.26	8.09	8.16	7.96	7.92	7.70	7.66	7.87	---	10.03
16	10.42	8.34	8.25	8.09	8.16	7.95	7.89	7.69	7.66	7.86	---	10.05
17	10.39	8.33	8.24	8.08	8.15	7.93	7.86	7.67	7.64	7.88	---	10.07
18	10.37	8.33	8.22	8.13	8.14	7.91	7.84	7.66	7.63	7.87	8.18	10.12
19	10.35	8.32	8.21	8.18	8.13	7.90	7.83	7.64	7.64	7.90	8.16	10.17
20	10.34	8.31	8.21	8.16	8.13	7.89	7.82	7.62	7.65	7.97	8.14	10.18
21	10.31	8.30	8.20	8.15	8.12	7.88	7.80	7.60	7.65	7.94	8.14	10.15
22	10.29	8.29	8.19	8.14	8.11	7.86	7.79	7.58	7.65	7.92	8.15	10.18
23	10.27	8.29	8.19	8.13	8.10	7.84	7.78	7.55	7.65	7.90	8.16	10.20
24	10.25	8.28	8.19	8.13	8.09	7.84	7.77	7.52	7.64	7.90	8.16	10.21
25	10.25	8.27	8.18	8.12	8.17	7.85	7.76	7.49	7.62	7.92	8.25	10.23
26	10.25	8.31	8.17	8.11	8.25	7.88	7.75	7.46	7.59	7.95	8.61	10.19
27	10.23	8.32	8.17	8.11	8.21	7.88	7.74	7.44	7.56	7.99	8.96	10.27
28	10.21	8.27	8.16	8.11	8.18	7.86	7.74	7.42	7.58	7.98	8.97	10.32
29	10.25	8.24	8.16	8.10	8.17	7.85	7.77	7.42	7.70	7.98	8.99	10.35
30	---	8.23	8.15	8.11	---	7.85	7.76	7.42	7.69	8.01	9.00	10.40
31	9.71	---	8.15	8.20	---	7.84	---	7.42	---	8.04	9.00	---
TOTAL	---	251.42	254.38	251.82	236.77	246.91	234.03	237.54	228.80	244.48	---	296.79
MEAN	---	8.38	8.21	8.12	8.16	7.96	7.80	7.66	7.63	7.89	---	9.89
MAX	---	8.71	8.28	8.20	8.28	8.15	7.99	7.98	7.73	8.04	---	10.40
MIN	---	8.23	8.15	8.08	8.09	7.84	7.74	7.42	7.44	7.75	---	9.01

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	838	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	138
2	820	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	139
3	803	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	138
4	786	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	137
5	775	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	137
6	762	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	142
7	752	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	333
8	741	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	464
9	733	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	471
10	721	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	474
11	714	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	480
12	716	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	486
13	708	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	490
14	547	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	499
15	554	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	499
16	702	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	510
17	684	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	522
18	677	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	545
19	666	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	577
20	657	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	580
21	643	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	571
22	629	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	586
23	618	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	602
24	612	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	611
25	608	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	619
26	608	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	81	603
27	598	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	137	649
28	589	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	137	679
29	612	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	137	698
30	e609	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	138	731
31	e327	---	0.00	0.00	---	0.00	---	0.00	---	0.00	139	---
TOTAL	20,809	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	769.00	14,110
MEAN	671	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.8	470
MAX	838	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	139	731
MIN	327	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	137
AC-FT	41,270	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,530	27,990

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2004, BY WATER YEAR (WY)

	308	223	110	70.7	61.9	59.3	35.6	17.5	34.5	118	159	208
MEAN	308	223	110	70.7	61.9	59.3	35.6	17.5	34.5	118	159	208
MAX	1,152	1,261	1,335	1,346	849	580	464	267	394	714	682	722
(WY)	(1996)	(1995)	(1995)	(1995)	(1995)	(1993)	(1993)	(1993)	(1993)	(1982)	(1982)	(1995)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1964 - 2004

ANNUAL TOTAL	52,742.00	35,688.00	
ANNUAL MEAN	144	97.5	132
HIGHEST ANNUAL MEAN			672
LOWEST ANNUAL MEAN			0.00
HIGHEST DAILY MEAN	846	Sep 30	838
LOWEST DAILY MEAN	0.00	Jan 1	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00
ANNUAL RUNOFF (AC-FT)	104,600	70,790	95,360
10 PERCENT EXCEEDS	553	587	445
50 PERCENT EXCEEDS	0.00	0.00	0.00
90 PERCENT EXCEEDS	0.00	0.00	0.00

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02289019 TAMiami CANAL AT S-12-B, NEAR MIAMI, FL

LOCATION.--Lat 25°45'40", long 80°46'05", T.54 S., R.36 E., Miami-Dade County, Hydrologic Unit 03090202, on west bank of spillway, 100 ft southwest of control structure 12-B, and 35 mi west of Miami. No section could be determined from existing maps.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--April 1963 to September 1963, October 1963 to September 1965, October 1966 to September 1975 (gage heights only), October 1975 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoders for upstream and downstream stages. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records fair. Since March 9, 1990, satellite data collection platform. Station is one of several located below the gated control structures in Levee 29 at Tamiami Canal. Gage record is primarily used to determine discharge through structure 12-B. Discharge computed from relation between discharge, head, and gate openings when flow is controlled by gates and computed by relation between stage and discharge under uncontrolled conditions. Discharge records for the missing periods above were either fragmentary or unavailable from files of the U. S. Geological Survey. Upstream gage height records were formerly published under 02289018. Upstream gage height records have been relocated under 02289019 as "Published upstream" record in the files of the U.S. Geological Survey.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 31 complete water years of discharge (1964-65, 1976-2004).

COOPERATION.--Gate opening records provided by U.S. Army Corps of Engineers.

EXTREME UPSTREAM STAGES FOR PERIOD OF RECORD.--Maximum gage height, 11.92 ft Dec. 21, 1994; minimum, 5.14 ft June 18, 19, 1989.

EXTREME UPSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 10.72 ft Oct. 1; minimum, 7.58 ft June 3.

EXTREME DOWNSTREAM STAGES FOR PERIOD OF RECORD.--Maximum gage height, 11.91 ft Dec. 21, 1994; minimum, 5.02 ft June 19, 1989.

EXTREME DOWNSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 10.71 ft Oct. 1; minimum, 6.93 ft June 3.

UPSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.71	10.33	10.06	9.85	10.05	9.72	8.93	8.53	7.71	8.03	8.78	9.91
2	10.68	10.34	10.05	9.85	10.05	9.69	8.91	8.50	7.67	8.06	8.89	9.89
3	10.65	10.34	10.02	9.85	10.05	9.67	8.87	8.56	7.63	8.08	9.01	9.86
4	10.62	10.40	10.00	9.85	10.05	9.64	8.84	8.75	7.87	8.12	9.07	9.86
5	10.60	10.49	9.99	9.84	10.03	9.60	8.81	8.74	7.91	8.12	9.09	9.84
6	10.58	10.50	10.03	9.84	10.00	9.57	8.79	8.73	7.90	8.12	9.14	9.89
7	10.56	10.50	10.00	9.86	10.00	9.54	8.76	8.70	7.88	8.12	9.16	9.93
8	10.54	10.50	9.97	9.88	10.01	9.51	8.71	8.66	8.07	8.14	9.18	9.95
9	10.53	10.50	9.95	9.87	9.98	9.48	8.68	8.63	8.13	8.13	9.20	9.96
10	10.51	10.49	9.94	9.88	9.95	9.44	8.67	8.60	8.15	8.10	9.20	9.98
11	10.49	10.49	9.94	9.89	9.93	9.41	8.69	8.55	8.21	8.17	9.21	9.99
12	10.50	10.47	9.93	9.87	9.91	9.37	8.71	8.53	8.16	8.22	9.21	10.00
13	10.48	10.45	9.91	9.86	9.89	9.33	8.82	8.51	8.08	8.16	9.19	10.02
14	10.49	10.43	9.93	9.85	9.88	9.30	8.90	8.49	8.00	8.04	9.23	10.04
15	10.50	10.40	9.98	9.84	9.87	9.27	8.89	8.47	8.09	7.98	9.30	10.04
16	10.45	10.38	9.97	9.84	9.88	9.22	8.89	8.41	8.16	8.08	9.32	10.07
17	10.43	10.36	9.95	9.83	9.86	9.20	8.88	8.41	8.07	8.16	9.39	10.10
18	10.42	10.33	9.93	9.85	9.85	9.20	8.86	8.34	8.12	8.17	9.42	10.16
19	10.40	10.30	9.91	9.92	9.81	9.19	8.85	8.30	8.03	8.19	9.44	10.21
20	10.38	10.29	9.90	9.91	9.78	9.18	8.82	8.26	8.09	8.32	9.47	10.22
21	10.36	10.27	9.88	9.90	9.75	9.16	8.78	8.22	8.13	8.42	9.50	10.20
22	10.33	10.25	9.87	9.89	9.72	9.14	8.77	8.12	8.15	8.44	9.54	10.23
23	10.31	10.22	9.86	9.88	9.69	9.13	8.74	8.04	8.16	8.45	9.59	10.25
24	10.30	10.20	9.86	9.86	9.65	9.10	8.72	7.99	8.03	8.46	9.64	10.26
25	10.29	10.18	9.87	9.85	9.70	9.11	8.69	7.93	7.93	8.49	9.70	10.29
26	10.29	10.17	9.86	9.83	9.80	9.12	8.65	7.90	7.87	8.52	9.74	10.24
27	10.27	10.17	9.86	9.81	9.79	9.10	8.62	7.88	7.77	8.57	9.74	10.32
28	10.25	10.15	9.85	9.83	9.79	9.06	8.62	7.86	7.70	8.62	9.78	10.38
29	10.29	10.13	9.83	9.82	9.76	9.04	8.61	7.82	7.68	8.65	9.81	10.43
30	10.29	10.09	9.82	9.82	---	9.01	8.57	7.77	7.75	8.68	9.84	10.49
31	10.29	---	9.83	9.92	---	8.97	---	7.74	---	8.71	9.88	---
TOTAL	323.79	310.12	307.75	305.64	286.48	288.47	263.05	---	239.10	256.52	290.66	303.01
MEAN	10.44	10.34	9.93	9.86	9.88	9.31	8.77	---	7.97	8.27	9.38	10.10
MAX	10.71	10.50	10.06	9.92	10.05	9.72	8.93	---	8.21	8.71	9.88	10.49
MIN	10.25	10.09	9.82	9.81	9.65	8.97	8.57	---	7.63	7.98	8.78	9.84

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02289019 TAMiami CANAL AT S-12-B, NEAR MIAMI, FL-Continued

DOWNSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.71	10.34	10.08	8.85	8.15	7.99	7.80	7.63	7.00	7.47	7.98	9.32
2	10.68	10.35	10.06	8.79	8.09	7.98	7.78	7.66	6.97	7.48	8.02	9.60
3	10.65	10.35	10.03	8.74	8.07	7.97	7.76	7.86	6.94	7.55	8.11	9.89
4	10.63	10.42	10.01	8.71	8.05	7.96	7.74	7.93	6.97	7.65	8.10	9.89
5	10.61	10.50	10.00	8.69	8.04	7.95	7.73	7.86	7.08	7.70	8.01	9.86
6	10.59	10.51	10.04	8.68	8.04	7.95	7.71	7.82	7.10	7.77	7.97	9.91
7	10.57	10.51	10.01	8.63	8.03	7.95	7.70	7.78	7.08	7.70	7.96	9.95
8	10.56	10.51	9.98	8.50	8.02	7.93	7.68	7.74	7.07	7.66	7.94	9.96
9	10.54	10.51	9.96	8.41	8.02	7.92	7.67	7.71	7.09	7.61	7.92	9.98
10	10.52	10.51	9.95	8.35	8.01	7.92	7.65	7.69	7.19	7.65	8.00	9.99
11	10.51	10.49	9.96	8.29	8.01	7.91	7.64	7.66	7.22	7.86	8.27	10.01
12	10.51	10.48	9.94	8.24	8.01	7.91	7.72	7.63	7.23	7.95	8.29	10.01
13	10.49	10.46	9.92	8.20	8.01	7.90	7.89	7.61	7.27	7.91	8.30	10.02
14	10.29	10.44	9.94	8.18	8.03	7.90	7.91	7.57	7.23	7.84	8.32	10.04
15	10.29	10.41	10.00	8.15	8.02	7.90	7.86	7.55	7.27	7.80	8.33	10.04
16	10.47	10.39	9.97	8.11	8.01	7.90	7.82	7.53	7.47	7.78	8.32	10.07
17	10.44	10.37	9.96	8.10	8.00	7.91	7.80	---	7.42	7.75	8.35	10.10
18	10.43	10.34	9.94	8.11	7.99	7.90	7.77	7.48	7.49	7.73	8.32	10.14
19	10.41	10.31	9.92	8.13	7.99	7.89	7.75	7.45	7.74	7.75	8.10	10.20
20	10.39	10.30	9.90	8.10	7.99	7.88	7.73	7.42	7.68	7.93	8.05	10.22
21	10.37	10.28	9.89	8.08	7.99	7.87	7.71	7.39	7.62	7.92	8.02	10.19
22	10.35	10.26	9.86	8.07	7.99	7.86	7.69	7.36	7.63	7.87	7.98	10.22
23	10.33	10.23	9.85	8.05	7.98	7.84	7.68	7.32	7.68	7.82	7.96	10.24
24	10.31	10.21	9.84	8.04	7.98	7.83	7.66	7.28	7.63	7.82	7.98	10.26
25	10.30	10.19	9.85	8.04	8.04	7.86	7.64	7.25	7.57	7.91	8.01	10.28
26	10.29	10.17	9.85	8.04	8.10	7.90	7.62	7.21	7.53	7.87	8.12	10.23
27	10.28	10.17	9.84	8.04	8.04	7.89	7.61	7.17	7.48	7.89	8.85	10.31
28	10.26	10.16	9.83	8.04	8.01	7.87	7.62	7.14	7.46	7.98	9.24	10.37
29	10.30	10.14	9.82	8.03	8.00	7.85	7.66	7.10	7.55	7.95	9.26	10.41
30	10.30	10.10	9.81	8.04	---	7.84	7.65	7.06	7.50	7.93	9.28	10.47
31	10.30	---	9.30	8.10	---	7.82	---	7.03	---	7.95	9.30	---
TOTAL	323.68	310.41	307.31	256.53	232.71	244.95	231.65	---	220.16	241.45	256.66	302.18
MEAN	10.44	10.35	9.91	8.28	8.02	7.90	7.72	---	7.34	7.79	8.28	10.07
MAX	10.71	10.51	10.08	8.85	8.15	7.99	7.91	---	7.74	7.98	9.30	10.47
MIN	10.26	10.10	9.30	8.03	7.98	7.82	7.61	---	6.94	7.47	7.92	9.32

02289019 TAMiami CANAL AT S-12-B, NEAR MIAMI, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	670	424	354	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	230
2	655	426	352	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	291
3	638	423	342	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	361
4	626	443	334	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	360
5	615	472	328	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	349
6	606	473	340	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	365
7	594	471	327	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	381
8	588	466	317	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	387
9	579	462	308	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	393
10	571	457	304	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	396
11	563	448	306	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	402
12	566	439	296	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	405
13	556	427	291	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	409
14	416	416	296	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	415
15	418	403	310	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	416
16	540	393	300	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	425
17	526	382	297	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	432
18	514	371	291	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	450
19	500	366	286	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	473
20	489	368	281	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	478
21	474	367	277	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	466
22	461	364	286	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	478
23	449	362	282	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	486
24	440	360	312	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	490
25	432	359	296	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	500
26	427	359	270	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	478
27	419	364	296	0.00	0.00	0.00	0.00	0.00	0.00	0.00	149	511
28	408	364	301	0.00	0.00	0.00	0.00	0.00	0.00	0.00	220	539
29	420	363	280	0.00	0.00	0.00	0.00	0.00	0.00	0.00	222	558
30	415	356	254	0.00	---	0.00	0.00	0.00	0.00	0.00	223	583
31	413	---	90	0.00	---	0.00	---	0.00	---	0.00	227	---
TOTAL	15,988	12,148	9,204	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,041.00	12,907
MEAN	516	405	297	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.6	430
MAX	670	473	354	0.00	0.00	0.00	0.00	0.00	0.00	0.00	227	583
MIN	408	356	90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	230
AC-FT	31,710	24,100	18,260	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2,060	25,600

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2004, BY WATER YEAR (WY)

	302	247	145	79.3	64.6	59.6	31.3	17.4	35.3	104	149	210
MEAN	302	247	145	79.3	64.6	59.6	31.3	17.4	35.3	104	149	210
MAX	930	1,032	1,232	1,160	681	424	338	192	311	519	550	605
(WY)	(1996)	(2000)	(1995)	(1995)	(1995)	(1995)	(1993)	(1993)	(1993)	(1982)	(1982)	(1995)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1964 - 2004

ANNUAL TOTAL	66,636.00	51,288.00	
ANNUAL MEAN	183	140	128
HIGHEST ANNUAL MEAN			561
LOWEST ANNUAL MEAN			0.00
HIGHEST DAILY MEAN	689	Sep 30	1,380
LOWEST DAILY MEAN	0.00	Jan 1	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	-3.1
ANNUAL RUNOFF (AC-FT)	132,200		92,600
10 PERCENT EXCEEDS	477		388
50 PERCENT EXCEEDS	0.00		14
90 PERCENT EXCEEDS	0.00		0.00

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02289040 TAMAMIAMI CANAL OUTLETS, LEVEE 67A TO 40-MILE BEND, NEAR MIAMI, FL

LOCATION.--Lat 25°45'22", long 80°43'34", T.54 S., R.36 E., Miami-Dade County, Hydrologic Unit 03090202, on south bank of Levee 29 Borrow Canal, 100 ft northwest of control structure 12-C, and 33 mi west of Miami. No section could be determined from existing maps.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1939 to September 1963 (monthly discharge), October 1963 to September 2004. Discontinued.

REVISED RECORDS.--WDR FL-87-2A, 1986; WDR FL-89-2A, 1983.

GAGE.--Satellite data collection platform with water-stage shaft encoder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Discharge is the total discharge through the S-12 structures A, B, C, and D from Conservation Area 3A. Prior to October 1963 discharge was the total discharge of station, Tamiami Canal Outlets, Miami to Monroe (station 02289000). The daily discharge computed from relation between discharge, head, and gate openings when flow is controlled by gates and computed by relation between stage and discharge under uncontrolled conditions. Satellite data collection platform at S-12-C downstream that records upstream and downstream gages.

COOPERATION.--Gate-opening records for S-12 complex provided by U.S. Army Corps of Engineers.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Average annual mean discharge, 581 ft³/s, 420,900 acre-ft/yr. Figures represent 60 complete water years of discharge (1941-97,1999-2001). Monthly discharge only, available 1941-63 water years.
SPECIAL NOTE: Statistics for the period of record 1941-2001 computed manually. NWIS database not complete.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 11.87 ft Dec. 21, 1994; minimum, 5.17 ft June 19, 1989.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 10.76 ft Oct. 1; minimum, 7.65 ft June 3.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.75	10.35	10.08	9.85	---	9.73	8.98	8.57	7.76	8.10	---	9.98
2	10.72	10.36	10.05	9.86	---	9.71	8.95	8.53	7.73	8.12	---	9.95
3	10.69	10.36	10.03	9.86	---	9.68	8.92	8.59	7.68	8.12	9.08	9.91
4	10.67	10.41	10.01	9.86	10.08	9.65	8.89	8.80	7.93	8.16	9.13	9.93
5	10.65	10.49	10.00	9.85	10.06	9.60	8.86	8.80	7.97	8.19	9.15	9.91
6	10.63	10.51	10.02	9.85	10.03	9.57	8.83	8.78	7.95	8.23	9.21	9.94
7	10.61	10.51	10.00	9.88	10.02	9.55	8.80	8.74	7.94	8.22	9.22	9.99
8	10.60	10.51	9.98	9.89	10.03	9.52	8.75	8.70	8.12	8.21	9.24	---
9	10.58	10.51	9.96	9.89	10.00	9.48	8.73	8.68	8.18	8.19	9.26	---
10	10.57	10.51	9.95	9.90	9.98	9.45	8.72	8.64	8.20	8.17	9.26	---
11	10.56	10.49	9.96	9.91	9.96	9.41	8.74	8.59	8.27	8.25	9.26	---
12	10.56	10.48	9.94	9.89	9.93	9.37	8.76	8.56	8.20	8.31	9.25	---
13	10.54	10.45	9.93	9.88	9.92	9.33	8.86	8.53	8.13	8.22	9.23	10.08
14	10.57	10.43	9.95	9.87	9.90	9.30	8.94	8.50	8.05	8.11	9.28	10.09
15	10.58	10.41	10.00	9.86	9.89	9.26	8.94	8.46	8.14	8.05	9.35	10.10
16	10.52	10.38	9.97	9.86	9.89	9.21	8.94	8.45	8.20	8.14	9.37	10.12
17	10.49	10.36	9.96	9.85	9.88	9.21	8.93	---	8.12	8.22	---	10.16
18	10.48	10.33	9.94	9.86	9.87	9.22	8.91	8.38	8.17	8.23	---	10.20
19	10.46	10.31	9.93	9.93	9.82	9.21	8.89	8.34	8.08	8.27	---	10.26
20	10.44	10.29	9.91	9.93	9.79	9.20	8.86	8.31	8.14	8.37	9.54	10.28
21	10.42	---	9.89	9.92	9.76	9.19	8.82	8.26	8.19	8.43	9.57	10.26
22	10.40	---	9.88	9.90	9.73	9.17	8.81	8.17	8.21	8.44	9.61	10.29
23	10.38	---	9.88	9.90	9.71	9.16	8.79	8.10	8.21	8.46	9.66	10.31
24	10.36	---	9.88	9.88	9.66	9.14	8.76	8.04	8.08	8.46	9.71	10.32
25	10.35	---	9.89	9.86	9.70	9.13	8.73	7.99	7.99	8.51	9.76	10.35
26	10.35	---	9.89	9.84	9.80	9.14	8.70	7.96	7.93	8.53	9.79	10.33
27	10.33	---	9.88	9.83	9.80	9.11	8.67	7.94	7.83	8.56	9.80	10.39
28	10.31	---	9.86	9.85	9.80	9.09	8.66	7.91	7.76	8.57	9.84	10.45
29	10.34	10.13	9.85	9.84	9.77	9.06	8.65	7.87	7.74	8.57	9.87	10.50
30	10.34	10.10	9.84	9.85	---	9.04	8.60	7.82	7.81	8.59	9.90	10.56
31	10.32	---	9.84	9.94	---	9.01	---	7.79	---	---	9.94	---
TOTAL	325.57	---	308.15	306.14	---	288.90	264.39	---	240.71	---	---	---
MEAN	10.50	---	9.94	9.88	---	9.32	8.81	---	8.02	---	---	---
MAX	10.75	---	10.08	9.94	---	9.73	8.98	---	8.27	---	---	---
MIN	10.31	---	9.84	9.83	---	9.01	8.60	---	7.68	---	---	---

02289040 TAMAMI CANAL OUTLETS, LEVEE 67A TO 40-MILE BEND, NEAR MIAMI, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,860	2,040	1,690	1,140	73	119	136	59	0.00	0.00	0.00	1,220
2	3,780	2,060	1,680	1,020	73	118	140	52	0.00	0.00	0.00	1,470
3	3,700	2,060	1,630	956	73	116	138	63	0.00	0.00	0.00	1,700
4	3,640	2,140	1,580	970	e73	114	e133	115	0.00	0.00	0.00	1,730
5	3,590	2,260	1,570	991	e72	139	129	116	0.00	0.00	0.00	1,690
6	3,550	2,320	1,600	993	72	154	124	107	0.00	0.00	0.00	1,750
7	3,490	2,310	1,560	653	72	152	138	96	0.00	0.00	0.00	2,010
8	3,460	2,300	1,520	332	72	150	133	85	0.00	0.00	0.00	2,180
9	3,420	2,300	1,480	335	71	146	115	84	0.00	0.00	0.00	2,220
10	3,370	2,280	1,470	339	71	143	106	74	0.00	0.00	306	2,250
11	3,350	2,250	1,480	342	70	190	109	62	0.00	0.00	411	2,280
12	3,350	2,210	1,440	338	105	217	125	56	0.00	0.00	407	2,290
13	3,300	2,170	1,420	335	130	209	---	52	0.00	0.00	393	2,310
14	e2,340	2,130	1,430	213	129	202	---	45	0.00	0.00	e402	2,340
15	e2,650	2,080	1,490	149	128	195	e135	42	0.00	0.00	---	2,360
16	e3,110	2,040	1,460	150	129	184	132	41	0.00	0.00	---	2,410
17	e3,050	2,000	1,440	150	128	187	130	40	0.00	0.00	---	2,470
18	3,020	1,960	1,420	150	127	190	125	30	0.00	0.00	---	2,560
19	2,970	1,920	1,400	155	124	191	123	26	0.00	0.00	e218	2,690
20	2,920	1,910	1,380	156	122	188	111	24	0.00	0.00	221	2,730
21	2,870	1,900	1,360	155	121	184	105	29	0.00	0.00	227	2,690
22	2,820	1,860	1,360	116	120	181	105	28	0.00	0.00	232	2,760
23	2,780	1,840	1,360	68	118	181	101	14	0.00	0.00	236	2,820
24	2,740	1,820	1,420	68	116	176	93	22	0.00	0.00	240	2,860
25	2,720	1,790	1,440	68	116	172	91	24	0.00	0.00	249	2,930
26	2,710	1,800	1,410	67	123	165	82	7.6	0.00	0.00	651	2,870
27	2,670	1,820	1,420	67	123	156	78	0.00	0.00	0.00	1,200	3,030
28	2,620	1,790	1,400	68	123	151	72	0.00	0.00	0.00	1,440	3,190
29	2,690	1,750	1,380	68	121	147	75	0.00	0.00	0.00	1,460	3,320
30	e2,670	1,710	1,340	68	---	143	64	0.00	0.00	0.00	1,290	3,470
31	e2,350	---	1,200	70	---	138	---	0.00	---	0.00	1,210	---
TOTAL	95,560	60,820	45,230	10,750	2,995	5,098	---	1,393.60	0.00	0.00	---	72,600
MEAN	3,083	2,027	1,459	347	103	164	---	45.0	0.00	0.00	---	2,420
MAX	3,860	2,320	1,690	1,140	130	217	116	0.00	0.00	---	3,470	---
MIN	2,340	1,710	1,200	67	70	114	0.00	0.00	0.00	---	1,220	---
AC-FT	189,500	120,600	89,710	21,320	5,940	10,110	---	2,760	0.00	0.00	---	144,000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2004, BY WATER YEAR (WY)

	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004									
MEAN	1,648	1,412	876	587	496	470	358	220	438	913	1,107	1,321																																						
MAX	5,310	5,715	6,658	6,259	4,115	2,968	3,136	1,581	2,998	4,033	4,377	3,908																																						
(WY)	(1996)	(2000)	(1995)	(1995)	(1995)	(1970)	(1970)	(1969)	(1969)	(1968)	(1968)	(1995)																																						
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00																																						
(WY)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1989)	(1965)	(1965)	(1965)	(1964)	(1964)																																						

SUMMARY STATISTICS

WATER YEARS 1964 - 2004*

ANNUAL MEAN	819
HIGHEST ANNUAL MEAN	3,328 1995
LOWEST ANNUAL MEAN	6.82 1964
HIGHEST DAILY MEAN	7,430 Dec 22, 1994
LOWEST DAILY MEAN	-38 Mar 28, 1985
ANNUAL SEVEN-DAY MINIMUM	-5.4 Mar 28, 1985
ANNUAL RUNOFF (AC-FT)	593,500
10 PERCENT EXCEEDS	2,300
50 PERCENT EXCEEDS	322
90 PERCENT EXCEEDS	0.00

e Estimated

*The period of record statistics were computed from complete water year's of record stored in the NWIS database. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript for the statistics for the complete period of record (1941-2001).

02289041 TAMAMIAMI CANAL BELOW S-12-C, NEAR MIAMI, FL

LOCATION.--Lat 25°45'40", long 80°43'34", T.54 S., R.36 E., Miami-Dade County, Hydrologic Unit 03090202, on west bank of spillway, 100 ft southwest of control structure 12-C, and 33 mi west of Miami. No section could be determined from existing maps.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--April 1963 to September 1963, October 1965 to September 1976 (gage heights only), October 1963 to September 1965, October 1976 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoders for upstream and downstream stages. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Daily mean for upstream gage height published under 02289040. Station is one of several located downstream from the control structures in Levee 29 at Tamiami Canal. Gage record is primarily used to determine discharge through control structure 12-C. Discharge is the total discharge through the S-12-C structure, from Conservation Area 3A. The daily discharge computed from relation between discharge, head, and gate-openings when flow is controlled by gates and computed by relation between stage and discharge under uncontrolled conditions. Since March 16, 1990, data collection platform. Discharge records prior to 1976, for missing periods were fragmentary or missing from the files of the U.S. Geological Survey.

COOPERATION.--Gate-opening records provided by the U.S. Army Corps of Engineers.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 28 complete water years of discharge (1964-65, 1977-2002).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 11.86 ft Dec. 21, 1994; minimum, 4.87 ft June 19, 20, 1989.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 10.75 ft Oct. 1; minimum, 6.93 ft June 3.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.74	10.32	10.07	9.75	8.17	8.00	7.83	7.64	7.00	7.47	8.02	9.15
2	10.71	10.34	10.05	9.64	8.11	8.00	7.80	7.68	6.97	7.47	8.05	9.54
3	10.68	10.34	10.03	9.56	8.09	7.99	7.78	7.89	6.94	7.56	8.13	9.89
4	10.66	10.41	10.00	9.54	8.07	7.98	7.77	7.96	6.99	7.65	8.12	9.91
5	10.64	10.49	9.99	9.54	8.05	7.97	7.75	7.89	7.09	---	8.04	9.88
6	10.62	10.51	10.03	9.53	8.05	7.97	7.73	7.83	7.10	---	8.01	9.91
7	10.60	10.51	10.00	9.15	8.05	7.97	7.71	7.79	7.08	---	8.00	9.96
8	10.59	10.50	9.98	8.59	8.04	7.96	7.70	7.75	7.07	---	7.99	9.99
9	10.57	10.50	9.95	8.46	8.04	7.95	7.69	7.72	7.10	7.60	7.96	10.00
10	10.56	10.49	9.95	8.38	8.04	7.94	7.67	7.70	7.18	7.64	8.35	10.02
11	10.54	10.48	9.96	8.31	8.03	7.93	7.66	7.67	7.22	7.86	8.74	10.03
12	10.55	10.46	9.94	8.26	8.03	7.93	7.75	7.64	7.23	7.91	8.75	10.04
13	10.53	10.45	9.93	8.23	8.04	7.92	7.91	7.62	7.26	7.90	8.75	10.05
14	10.24	10.42	9.94	8.20	8.05	7.92	7.94	7.58	7.23	7.83	8.77	10.07
15	10.35	10.39	9.99	8.17	8.04	7.92	7.88	7.55	7.29	7.78	8.81	10.07
16	10.50	10.37	9.97	8.13	8.04	7.92	7.84	7.53	7.48	7.75	8.81	10.09
17	10.47	10.35	9.96	8.11	8.03	7.92	7.82	---	7.42	7.72	---	10.12
18	10.46	10.32	9.94	8.13	8.01	7.92	7.79	7.48	7.48	7.70	---	10.16
19	10.44	10.30	9.93	8.15	8.01	7.91	7.76	7.46	7.74	7.72	---	10.22
20	10.42	10.28	9.91	8.11	8.01	7.89	7.75	7.42	7.68	7.93	8.07	10.24
21	10.40	10.26	9.90	8.09	8.01	7.89	7.72	7.39	7.62	7.93	8.03	10.22
22	10.39	10.24	9.89	8.08	8.00	7.88	7.70	7.36	7.61	7.88	7.99	10.25
23	10.37	10.22	9.83	8.07	8.00	7.86	7.69	7.32	7.68	7.83	7.97	10.27
24	10.35	10.20	9.78	8.06	8.00	7.85	7.67	7.29	7.62	7.85	8.00	10.28
25	10.34	10.18	9.79	8.06	8.07	7.88	7.65	7.25	7.57	7.93	8.02	10.31
26	10.33	10.17	9.79	8.06	8.12	7.92	7.64	7.21	7.52	7.88	8.63	10.28
27	10.31	10.17	9.78	8.06	8.06	7.90	7.63	7.18	7.46	7.93	9.11	10.34
28	10.30	10.15	9.77	8.05	8.03	7.88	7.63	7.14	7.46	8.02	9.08	10.40
29	10.33	10.13	9.76	8.04	8.01	7.87	7.68	7.10	7.54	7.98	9.10	10.45
30	10.33	10.09	9.75	8.05	---	7.86	7.67	7.06	7.49	7.96	9.12	10.51
31	10.30	---	9.75	8.13	---	7.84	---	7.03	---	7.98	9.14	---
TOTAL	324.62	310.04	307.31	262.69	233.30	245.54	232.21	---	220.12	---	---	302.65
MEAN	10.47	10.33	9.91	8.47	8.04	7.92	7.74	---	7.34	---	---	10.09
MAX	10.74	10.51	10.07	9.75	8.17	8.00	7.94	---	7.74	---	---	10.51
MIN	10.24	10.09	9.75	8.04	8.00	7.84	7.63	---	6.94	---	---	9.15

02289041 TAMiami CANAL BELOW S-12-C, NEAR MIAMI, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,280	889	712	566	0.00	0.00	0.00	0.00	0.00	0.00	0.00	419
2	1,250	895	703	524	0.00	0.00	0.00	0.00	0.00	0.00	0.00	567
3	1,230	896	687	514	0.00	0.00	0.00	0.00	0.00	0.00	0.00	703
4	1,210	929	671	519	0.00	0.00	0.00	0.00	0.00	0.00	0.00	712
5	1,200	973	663	519	0.00	0.00	0.00	0.00	0.00	0.00	0.00	698
6	1,190	983	671	524	0.00	0.00	0.00	0.00	0.00	0.00	0.00	713
7	1,170	979	654	251	0.00	0.00	0.00	0.00	0.00	0.00	0.00	737
8	1,160	972	639	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	750
9	1,150	968	623	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	759
10	1,140	962	616	0.00	0.00	0.00	0.00	0.00	0.00	0.00	162	768
11	1,130	948	615	0.00	0.00	0.00	0.00	0.00	0.00	0.00	221	777
12	1,130	935	602	0.00	0.00	0.00	0.00	0.00	0.00	0.00	218	780
13	1,120	924	592	0.00	0.00	0.00	0.00	0.00	0.00	0.00	213	785
14	e741	909	594	0.00	0.00	0.00	0.00	0.00	0.00	0.00	219	798
15	e824	891	610	0.00	0.00	0.00	0.00	0.00	0.00	0.00	226	800
16	e1,050	878	597	0.00	0.00	0.00	0.00	0.00	0.00	0.00	229	819
17	e1,030	863	592	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e233	838
18	1,020	846	584	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	868
19	1,000	831	578	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	904
20	983	823	570	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	918
21	968	811	565	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	914
22	953	797	562	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	936
23	938	784	541	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	956
24	926	775	538	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	971
25	918	765	549	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	998
26	911	762	547	0.00	0.00	0.00	0.00	0.00	0.00	0.00	353	986
27	899	763	550	0.00	0.00	0.00	0.00	0.00	0.00	0.00	595	1,030
28	886	753	536	0.00	0.00	0.00	0.00	0.00	0.00	0.00	670	1,080
29	904	738	535	0.00	0.00	0.00	0.00	0.00	0.00	0.00	675	1,120
30	898	723	533	0.00	---	0.00	0.00	0.00	0.00	0.00	503	1,170
31	882	---	547	0.00	---	0.00	---	0.00	---	0.00	414	---
TOTAL	32,091	25,965	18,576	3,417.00	0.00	0.00	0.00	0.00	0.00	0.00	---	25,274
MEAN	1,035	866	599	110	0.00	0.00	0.00	0.00	0.00	0.00	---	842
MAX	1,280	983	712	566	0.00	0.00	0.00	0.00	0.00	0.00	---	1,170
MIN	741	723	533	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	419
AC-FT	63,650	51,500	36,850	6,780	0.00	0.00	0.00	0.00	0.00	0.00	---	50,130

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2004, BY WATER YEAR (WY)

MEAN	521	468	294	205	155	141	82.7	52.3	88.6	257	329	414
MAX	1,385	1,542	1,752	1,677	1,174	789	537	366	431	948	855	1,136
(WY)	(1996)	(2000)	(1995)	(1995)	(1995)	(1995)	(1993)	(1993)	(1993)	(1982)	(1982)	(1995)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)

SUMMARY STATISTICS

ANNUAL MEAN
HIGHEST ANNUAL MEAN
LOWEST ANNUAL MEAN
HIGHEST DAILY MEAN
LOWEST DAILY MEAN
ANNUAL SEVEN-DAY MINIMUM
ANNUAL RUNOFF (AC-FT)
10 PERCENT EXCEEDS
50 PERCENT EXCEEDS
90 PERCENT EXCEEDS

WATER YEARS 1964 - 2004

262
919
0.00
2,500
-49
-9.7
189,600
714
101
0.00

1995
1964
Jan 23, 1970
Jul 14, 1990
Jul 8, 1990

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

254543080405401 TAMIAMI CANAL AT S-12-D, NEAR MIAMI, FL

LOCATION.--Lat 25°45'43", long 80°40'54", T.54 S., R.36 E., Miami-Dade County, Hydrologic Unit 03090202, on south bank 100 ft southwest of structure 12-D, near east boundary of Indian Reservation on U.S. Highway 41. No section could be determined from existing maps.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1963 to September 1965, October 1975 to September 1977, October 1978 to September 1979, October 1980 to September 1981 (discharge only), October 1981 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoders for upstream and downstream stages. After October 1, 2003, tipping bucket rain gage maintained by the U.S. Army Corps of Engineers. After October 1, 2003, rainfall record is no longer available in the files of the U.S. Geological Survey. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Station is one of several located downstream from the control structures in Levee 29 at Tamiami Canal. Gage records are primarily used to determine discharge through control structure 12-D. Discharge is the total discharge through the S-12-D structure from Conservation Area 3A. The daily discharge computed from relations between discharge, head, and gate openings when flow is controlled by gates and computed by relation between stage and discharge under uncontrolled conditions. Discharge and stage record for missing periods were fragmentary or missing from the files of the U.S. Geological Survey. Since October 1, 1989, satellite data collection platform. Rainfall data is available in files of the U.S. Geological Survey. The rainfall record was discontinued September 30, 2003. Upstream gage height records were formerly published under 254543080405400. Upstream gage height records have been relocated under 254543080405401 as "Published upstream" record in the files of the U.S. Geological Survey.

COOPERATION.--Gate-opening records provided by the U.S. Army Corps of Engineers.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 26 complete water years of discharge (1964-65, 1976-77, 1979, 1981-97, 1999-2001, 2003).

EXTREME UPSTREAM STAGES FOR PERIOD OF RECORD.--Maximum gage height, 11.99 ft Dec. 21, 1994; minimum, 5.16 ft June 19, 1989.

EXTREME UPSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 10.95 ft Oct. 1; minimum, 7.62 ft June 3.

EXTREME DOWNSTREAM STAGES FOR PERIOD OF RECORD.--Maximum gage height, 11.94 ft Dec. 21, 1994; minimum, 4.70 ft June 20, 1989.

EXTREME DOWNSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 10.90 ft Oct. 1; minimum, 6.84 ft July 1.

UPSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.93	10.47	10.13	9.91	10.08	9.68	8.94	8.53	7.74	8.08	8.86	10.03
2	10.90	10.47	10.11	9.91	10.09	9.66	8.91	8.49	7.71	8.11	8.97	10.02
3	10.89	10.46	10.08	9.91	10.08	9.63	8.88	8.56	7.66	8.13	9.10	10.00
4	10.87	10.50	10.06	9.89	---	9.59	8.84	8.77	7.91	8.17	9.15	10.04
5	10.85	10.58	10.05	9.89	---	9.54	8.82	8.77	7.94	8.20	9.17	10.02
6	10.83	10.61	10.08	9.88	10.01	9.51	8.79	8.75	7.93	8.24	9.23	10.06
7	10.81	10.61	10.05	9.90	10.02	9.49	8.76	8.71	7.91	8.23	9.24	10.13
8	10.80	10.61	10.03	9.90	10.02	9.46	8.72	8.66	8.10	8.23	9.25	10.17
9	10.79	10.61	10.00	9.90	9.98	9.42	8.70	8.64	8.16	8.21	9.28	10.21
10	10.77	10.61	10.00	9.91	9.96	9.39	8.69	8.60	8.18	8.19	9.28	10.22
11	10.75	10.59	10.01	9.92	9.94	9.35	8.71	8.55	8.25	8.27	9.26	10.23
12	10.76	10.57	10.00	9.90	9.91	9.30	8.73	8.52	8.18	8.31	9.26	10.24
13	10.74	10.54	9.98	9.88	9.90	9.27	---	8.49	8.11	8.23	9.25	10.25
14	10.76	10.52	10.00	9.88	9.87	9.22	---	8.46	8.03	8.12	---	10.26
15	10.74	10.49	10.05	9.88	9.86	9.19	---	8.43	8.13	8.07	---	10.27
16	10.71	10.47	10.03	9.87	9.87	9.13	8.91	8.41	8.18	8.16	---	10.30
17	10.69	10.44	10.02	9.85	9.85	9.16	8.89	8.38	8.10	8.24	---	10.33
18	10.68	10.40	10.00	9.87	9.83	9.17	8.87	8.35	8.15	8.26	---	10.37
19	10.66	10.38	9.99	9.93	9.78	9.18	8.86	8.31	8.06	8.29	---	10.43
20	10.64	10.37	9.97	9.94	9.75	9.17	8.82	8.28	8.13	8.43	9.55	10.45
21	10.62	10.34	9.95	9.92	9.72	9.15	8.79	8.23	8.17	8.50	9.59	10.43
22	10.60	10.32	9.94	9.91	9.70	9.14	8.77	8.14	8.19	8.52	9.64	10.46
23	10.58	10.29	9.94	9.90	9.67	9.13	8.76	8.07	8.19	8.53	9.68	10.49
24	10.56	10.27	9.94	9.89	9.62	9.10	8.73	8.02	8.06	8.54	9.72	10.50
25	10.55	10.25	9.97	9.87	9.65	9.09	8.70	7.96	7.97	8.59	9.78	10.53
26	10.54	10.24	9.96	9.84	9.76	9.10	8.66	7.94	7.91	8.60	9.83	10.52
27	10.52	10.27	9.95	9.84	9.76	9.08	8.64	7.92	7.81	8.65	9.86	10.57
28	10.51	10.23	9.93	9.86	9.76	9.05	8.62	7.88	7.74	8.70	9.91	10.64
29	10.53	10.19	9.92	9.84	9.72	9.03	8.61	7.85	7.72	8.73	9.96	10.71
30	10.51	10.15	9.90	9.84	---	9.00	8.56	7.80	7.80	8.75	9.97	10.78
31	10.47	---	9.90	9.94	---	8.96	---	7.77	---	8.77	9.99	---
TOTAL	331.56	312.85	309.94	306.57	---	287.34	---	258.24	240.12	259.05	---	309.66
MEAN	10.70	10.43	10.00	9.89	---	9.27	---	8.33	8.00	8.36	---	10.32
MAX	10.93	10.61	10.13	9.94	---	9.68	---	8.77	8.25	8.77	---	10.78
MIN	10.47	10.15	9.90	9.84	---	8.96	---	7.77	7.66	8.07	---	10.00

254543080405401 TAMIAMI CANAL AT S-12-D, NEAR MIAMI, FL--Continued

DOWNSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.89	10.43	10.11	9.81	8.60	8.72	8.77	8.52	7.28	6.88	7.65	9.52
2	10.86	10.43	10.09	9.73	8.58	8.72	8.75	8.48	7.22	7.01	7.71	9.79
3	10.84	10.43	10.06	9.68	8.58	8.71	8.73	8.54	7.15	7.11	7.81	9.97
4	10.82	10.46	10.03	9.65	---	8.70	8.71	8.73	7.18	7.23	7.87	10.01
5	10.81	10.54	10.02	9.63	---	8.75	8.69	8.72	7.35	7.36	7.83	9.99
6	10.79	10.59	10.05	9.62	8.56	8.80	8.68	8.71	7.31	7.53	7.81	10.03
7	10.77	10.59	10.03	9.52	8.56	8.80	8.67	8.68	7.27	7.46	7.81	10.09
8	10.76	10.59	10.01	9.38	8.56	8.79	8.66	8.64	7.24	7.39	7.81	10.13
9	10.74	10.59	9.98	9.37	8.56	8.79	8.65	8.61	7.23	7.31	7.81	10.17
10	10.73	10.58	9.98	9.36	8.55	8.78	8.63	8.58	7.32	7.34	8.40	10.18
11	10.72	10.56	10.00	9.36	8.55	8.87	8.65	8.53	7.30	7.60	8.87	10.19
12	10.72	10.54	9.97	9.36	8.64	8.95	8.67	8.51	7.33	7.55	8.87	10.20
13	10.70	10.51	9.96	9.35	8.74	8.94	8.76	8.48	7.42	7.49	8.89	10.21
14	10.36	10.49	9.97	9.11	8.74	8.92	8.84	8.44	7.35	7.41	8.94	10.22
15	10.70	10.46	10.02	8.92	8.74	8.91	---	8.41	7.43	7.37	8.95	10.23
16	10.67	10.44	10.00	8.91	8.74	8.88	8.85	8.40	7.62	7.39	8.96	10.26
17	10.65	10.41	9.99	8.90	8.74	8.89	8.84	8.37	7.54	7.32	8.99	10.29
18	10.64	10.37	9.98	8.90	8.74	8.90	8.82	8.34	7.49	7.27	9.00	10.33
19	10.62	10.34	9.96	8.91	8.73	8.90	8.81	8.30	7.50	7.26	8.99	10.39
20	10.60	10.33	9.94	8.90	8.72	8.90	8.78	8.27	7.42	7.45	9.03	10.40
21	10.58	10.31	9.93	8.89	8.72	8.90	8.75	8.22	7.34	7.50	9.04	10.39
22	10.57	10.29	9.92	8.80	8.72	8.89	8.74	8.13	7.29	7.47	9.05	10.42
23	10.55	10.26	9.87	8.61	8.72	8.88	8.72	8.06	7.25	7.42	9.07	10.45
24	10.53	10.25	9.84	8.60	8.71	8.86	8.70	8.01	7.19	7.43	9.09	10.46
25	10.52	10.22	9.86	8.59	8.73	8.87	8.67	7.95	7.12	7.56	9.11	10.49
26	10.51	10.22	9.86	8.58	8.74	8.87	8.64	7.88	7.06	7.53	9.31	10.48
27	10.49	10.24	9.85	8.57	8.73	8.86	8.62	7.74	7.00	7.52	9.46	10.54
28	10.47	10.20	9.83	8.57	8.73	8.84	8.60	7.62	6.95	7.54	9.45	10.61
29	10.50	10.17	9.82	8.56	8.72	8.83	8.59	7.51	6.92	7.54	9.47	10.68
30	10.47	10.13	9.80	8.57	---	8.82	8.55	7.42	6.87	7.52	9.48	10.74
31	10.44	---	9.80	8.58	---	8.79	---	7.34	---	7.54	9.50	---
TOTAL	330.02	311.97	308.53	281.29	---	274.03	---	256.14	217.94	229.30	270.03	307.86
MEAN	10.65	10.40	9.95	9.07	---	8.84	---	8.26	7.26	7.40	8.71	10.26
MAX	10.89	10.59	10.11	9.81	---	8.95	---	8.73	7.62	7.60	9.50	10.74
MIN	10.36	10.13	9.80	8.56	---	8.70	---	7.34	6.87	6.88	7.65	9.52

02289050 TAMAMI CANAL AT S-333 NEAR MIAMI, FL

LOCATION.--Lat 25°45'39", long 80°40'27", in SW ¼ sec.6, T.54 S., R.37 E., Miami-Dade County, Hydrologic Unit 03090202, on south bank of Levee 29 in control house of control structure 333 at Levee 67A, 100 ft north of U.S. Highway 41 and 29 mi west of Miami.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--August 1978 to September 1981 (gage heights only), October 1981 to September 2004. Discontinued.

REVISED RECORDS.--WDR FL-87-2A, 1986.

GAGE.--Water-stage shaft encoders for upstream and downstream, and gate-opening recorder with cellular phone/radio telemetry. Water-stage recorders prior to September 1, 1999. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark).

REMARKS.--Records good except for estimated discharges, which are poor. Flow is regulated by operation of control structure 333. Discharge computed from relations between discharge, head, and gate opening. Records prior to October 1981, are available in files of the South Florida Water Management District.

COOPERATION.--Control structure S-333 gate-operation records and upstream and downstream data provided by South Florida Water Management District.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 21 complete water years of discharge (1982-2001, 2004).

EXTREME UPSTREAM STAGES FOR PERIOD OF RECORD.--Maximum gage height, 12.10 ft Dec. 21, 1994; minimum, 5.20 ft June 19, 1989 (estimated).

EXTREME UPSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 10.96 ft Oct. 1; minimum, 7.57 ft June 30.

EXTREME DOWNSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 7.84 ft Oct. 1; minimum, 6.35 ft June 4, 28.

UPSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.95	10.50	10.16	9.93	10.08	9.69	8.93	8.52	7.72	8.05	8.84	10.04
2	10.93	10.50	10.14	9.92	10.09	9.66	8.91	8.49	7.69	8.08	8.95	10.04
3	10.91	10.50	10.11	9.92	10.08	9.63	8.88	8.55	7.64	8.10	9.08	10.03
4	10.89	10.53	10.09	9.91	10.08	9.59	8.85	8.76	7.88	8.15	9.13	10.07
5	10.87	10.61	10.07	9.90	10.04	9.53	8.82	8.76	7.92	8.18	9.16	10.05
6	10.85	10.66	10.10	9.89	10.01	9.50	8.79	8.74	7.91	8.22	---	10.10
7	10.83	10.66	10.08	9.92	10.02	9.48	8.76	8.69	7.90	8.21	---	10.17
8	10.82	10.66	10.06	9.92	10.03	9.45	8.71	8.65	8.08	8.21	9.25	10.22
9	10.82	10.65	10.03	9.91	9.99	9.41	8.69	8.63	8.14	8.19	9.27	10.26
10	10.82	10.65	10.03	9.92	9.97	9.38	8.68	8.59	8.16	8.18	9.28	10.26
11	10.81	10.63	10.04	9.94	9.94	9.35	8.70	8.54	8.23	8.26	9.26	10.28
12	10.81	10.60	10.03	9.91	9.91	9.30	8.72	8.51	8.17	8.30	9.26	10.28
13	10.78	10.57	10.01	9.90	9.90	9.27	8.82	8.49	8.09	8.21	9.25	10.29
14	10.79	10.55	10.02	9.89	9.87	9.22	8.91	8.45	8.01	8.10	9.31	10.30
15	10.78	10.52	10.08	9.88	9.86	9.19	8.91	8.42	8.10	8.05	9.38	10.31
16	10.75	10.50	10.06	---	9.87	9.12	8.91	8.41	8.16	8.14	9.40	10.34
17	10.73	10.47	10.05	---	9.85	9.15	8.89	8.37	8.07	8.22	9.46	10.37
18	10.72	10.43	10.03	9.88	9.84	9.17	8.87	8.34	8.13	8.23	9.50	10.41
19	10.71	10.40	10.02	9.94	9.79	9.17	8.86	8.30	8.04	8.27	9.52	10.46
20	10.69	10.39	10.00	9.94	9.75	9.16	8.82	8.27	8.10	8.42	9.56	10.48
21	10.67	10.37	9.99	9.93	9.73	9.15	8.79	8.22	8.14	8.49	9.60	10.47
22	10.65	10.35	9.98	9.92	9.70	9.13	8.77	8.13	8.16	8.50	9.64	10.50
23	10.63	10.32	9.97	---	9.67	9.12	8.75	8.06	8.17	8.52	9.67	10.54
24	10.61	10.30	9.98	---	9.61	9.10	8.72	8.00	8.03	8.53	9.72	10.56
25	10.60	10.28	10.00	9.87	9.65	9.09	8.69	7.94	7.94	8.57	9.79	10.59
26	10.59	10.28	10.00	9.85	---	---	8.66	7.92	7.88	8.59	9.84	10.56
27	10.57	10.31	9.98	9.84	9.76	---	8.63	7.90	7.78	8.63	9.88	10.64
28	10.55	10.26	9.96	9.87	9.76	9.05	8.61	7.87	7.71	8.68	9.92	10.71
29	10.58	10.22	9.94	9.85	9.73	9.02	8.60	7.83	7.70	8.71	9.95	10.78
30	10.56	10.19	9.92	9.85	---	9.00	8.56	7.78	7.77	8.73	9.97	10.84
31	10.51	---	9.93	9.95	---	8.95	---	7.75	---	8.75	10.01	---
TOTAL	332.78	313.86	310.86	---	---	---	263.21	257.88	239.42	258.47	---	310.95
MEAN	10.73	10.46	10.03	---	---	---	8.77	8.32	7.98	8.34	---	10.37
MAX	10.95	10.66	10.16	---	---	---	8.93	8.76	8.23	8.75	---	10.84
MIN	10.51	10.19	9.92	---	---	---	8.56	7.75	7.64	8.05	---	10.03

EVERGLADES AND SOUTHEASTERN COASTAL AREA

02289050 TAMIAMI CANAL AT S-333 NEAR MIAMI, FL-Continued

DOWNSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.83	7.46	7.34	7.11	7.33	7.72	7.16	6.94	6.48	6.47	6.73	6.98
2	7.81	7.44	7.34	7.15	7.30	7.71	7.16	6.91	6.46	6.45	6.76	6.96
3	7.79	7.45	7.34	7.20	7.28	7.71	7.15	7.01	6.43	6.45	6.84	6.92
4	7.77	7.47	7.33	7.20	7.28	7.72	7.13	7.19	6.45	6.48	6.85	6.79
5	7.76	7.54	7.30	7.19	7.35	7.73	7.13	7.15	6.54	6.50	6.86	7.03
6	7.75	7.61	7.30	7.18	7.38	7.66	7.13	7.11	6.52	6.53	---	7.16
7	7.73	7.61	7.29	7.17	7.38	7.65	7.12	7.08	6.51	6.53	---	7.16
8	7.70	7.62	7.28	7.18	7.39	7.65	7.09	7.05	6.52	6.59	6.93	7.18
9	7.68	7.62	7.29	7.16	7.38	7.64	7.08	7.03	6.52	6.56	6.95	7.21
10	7.66	7.61	7.23	7.16	7.43	7.64	7.08	7.01	6.53	6.54	6.94	7.20
11	7.65	7.60	7.24	7.15	7.50	7.64	7.10	7.10	6.54	6.56	6.92	7.17
12	7.65	7.58	7.24	7.15	7.49	7.62	7.10	7.02	6.56	6.57	6.90	7.16
13	7.64	7.55	7.24	7.14	7.50	7.62	7.13	6.99	6.59	6.58	6.91	7.14
14	7.61	7.54	7.26	7.13	7.50	7.62	7.15	6.96	6.56	6.56	6.90	7.14
15	7.61	7.52	7.31	7.13	7.51	7.64	7.15	6.94	6.55	6.55	6.91	7.12
16	7.60	7.51	7.30	---	7.52	7.64	7.15	6.93	6.55	6.56	6.92	7.09
17	7.57	7.50	7.28	---	7.51	7.57	7.15	6.93	6.53	6.57	6.93	7.06
18	7.55	7.50	7.28	7.14	7.58	7.52	7.14	6.92	6.52	6.54	7.05	7.05
19	7.54	7.48	7.27	7.18	7.64	7.43	7.13	6.90	6.53	6.54	7.14	7.04
20	7.52	7.47	7.26	7.17	7.64	7.36	7.12	6.88	6.52	6.56	7.16	7.10
21	7.51	7.45	7.25	7.15	7.64	7.30	7.11	6.87	6.54	6.56	7.18	7.28
22	7.49	7.43	7.25	7.14	7.64	7.28	7.05	6.85	6.60	6.55	7.19	7.34
23	7.48	7.42	7.25	---	7.64	7.28	6.99	6.83	6.62	6.55	7.20	7.36
24	7.48	7.40	7.19	---	7.63	7.27	6.97	6.81	6.59	6.54	7.20	7.35
25	7.47	7.39	7.17	7.13	7.68	7.28	6.95	6.78	6.56	6.56	7.22	7.31
26	7.46	7.37	7.17	7.12	---	---	6.93	6.71	6.54	6.59	7.15	7.41
27	7.43	7.35	7.17	7.10	7.72	---	6.89	6.59	6.52	6.67	7.05	7.40
28	7.41	7.36	7.17	7.10	7.71	7.24	6.92	6.56	6.48	6.71	7.04	7.33
29	7.44	7.38	7.16	7.10	7.72	7.22	6.95	6.53	6.50	6.71	7.01	7.35
30	7.47	7.35	7.14	7.10	---	7.20	6.93	6.51	6.49	6.71	6.99	7.35
31	7.49	---	7.12	7.16	---	7.18	---	6.50	---	6.69	6.97	---
TOTAL	235.55	224.58	224.76	---	---	---	212.24	213.59	195.85	203.53	---	215.14
MEAN	7.60	7.49	7.25	---	---	---	7.07	6.89	6.53	6.57	---	7.17
MAX	7.83	7.62	7.34	---	---	---	7.16	7.19	6.62	6.71	---	7.41
MIN	7.41	7.35	7.12	---	---	---	6.89	6.50	6.43	6.45	---	6.79

02289050 TAMiami CANAL AT S-333 NEAR MIAMI, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	360	526	0.00	68	620	210	93	0.00	0.00	0.00	0.00
2	0.00	361	524	52	69	618	206	93	0.00	0.00	0.00	0.00
3	0.00	361	522	79	69	614	205	93	0.00	0.00	0.00	0.00
4	0.00	361	520	79	69	664	203	93	0.00	0.00	0.00	0.00
5	0.00	236	522	78	204	694	202	93	0.00	0.00	0.00	0.00
6	0.00	79	524	79	283	702	199	92	0.00	0.00	0.00	0.00
7	0.00	78	524	79	284	698	197	92	0.00	0.00	0.00	0.00
8	0.00	77	522	79	283	694	196	92	0.00	0.00	0.00	0.00
9	0.00	77	519	79	282	685	194	91	0.00	0.00	0.00	0.00
10	0.00	119	414	78	380	679	192	91	0.00	0.00	0.00	0.00
11	0.00	163	406	77	461	673	193	194	0.00	0.00	0.00	0.00
12	0.00	240	405	77	458	668	203	111	0.00	0.00	0.00	0.00
13	0.00	334	404	77	457	660	214	100	0.00	0.00	0.00	0.00
14	0.00	334	403	77	453	652	217	92	0.00	0.00	0.00	0.00
15	0.00	333	403	77	452	642	215	92	0.00	0.00	0.00	0.00
16	0.00	333	402	e77	452	627	213	92	0.00	0.00	0.00	0.00
17	0.00	308	404	76	449	494	213	85	0.00	0.00	0.00	0.00
18	0.00	278	399	76	577	421	212	73	0.00	0.00	161	0.00
19	0.00	278	396	77	650	309	211	72	0.00	0.00	246	0.00
20	0.00	278	395	77	645	228	210	72	0.00	0.00	242	120
21	0.00	278	395	77	643	230	207	71	0.00	0.00	242	288
22	0.00	277	364	77	639	228	148	69	0.00	0.00	243	286
23	0.00	277	315	e77	633	224	115	68	0.00	0.00	242	288
24	0.00	277	129	e77	626	222	112	66	0.00	0.00	245	290
25	0.00	276	0.00	74	623	221	110	66	0.00	0.00	247	292
26	0.00	163	37	74	e633	e222	108	27	0.00	0.00	105	287
27	0.00	0.00	56	72	634	219	106	0.00	0.00	0.00	0.00	163
28	0.00	386	56	71	632	219	103	0.00	0.00	0.00	0.00	0.00
29	0.00	528	56	69	626	218	99	0.00	0.00	0.00	0.00	0.00
30	176	527	56	69	---	216	98	0.00	0.00	0.00	0.00	0.00
31	359	---	30	69	---	214	---	0.00	---	0.00	0.00	---
TOTAL	535.00	7,977.00	10,628.00	2,256.00	12,734	14,475	5,311	2,273.00	0.00	0.00	1,973.00	2,014.00
MEAN	17.3	266	343	72.8	439	467	177	73.3	0.00	0.00	63.6	67.1
MAX	359	528	526	79	650	702	217	194	0.00	0.00	247	292
MIN	0.00	0.00	0.00	0.00	68	214	98	0.00	0.00	0.00	0.00	0.00
AC-FT	1,060	15,820	21,080	4,470	25,260	28,710	10,530	4,510	0.00	0.00	3,910	3,990

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2004, BY WATER YEAR (WY)

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
MEAN	188	220	194	169	282	303	365	301	131	208	317	174												
MAX	739	689	693	734	1,094	1,051	936	1,208	346	733	1,188	655												
(WY)	(1986)	(1985)	(1993)	(2003)	(2000)	(2002)	(1998)	(1985)	(1985)	(1986)	(2001)	(1991)												
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00												
(WY)	(1982)	(1982)	(1982)	(1982)	(1982)	(1982)	(1989)	(1982)	(1982)	(1982)	(1983)	(1987)	(1994)											

SUMMARY STATISTICS

	FOR 2004 WATER YEAR	WATER YEARS 1982 - 2004
ANNUAL TOTAL	60,176.00	
ANNUAL MEAN	164	234
HIGHEST ANNUAL MEAN		572
LOWEST ANNUAL MEAN		51.8
HIGHEST DAILY MEAN	702	1,670
LOWEST DAILY MEAN	0.00	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	0.00
ANNUAL RUNOFF (AC-FT)	119,400	169,600
10 PERCENT EXCEEDS	522	696
50 PERCENT EXCEEDS	77	122
90 PERCENT EXCEEDS	0.00	0.00

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02289060 TAMAMI CANAL OUTLETS, LEVEE 30 TO LEVEE 67A, NEAR MIAMI, FL

LOCATION.--Lat 25°45'40", long 80°33'40", in SE 1/4 sec.6, T.54 S., R.38 E., Miami-Dade County, Hydrologic Unit 03090202, on south bank of Levee 29, 50 ft west of bridge 53 on U.S. Highway 41, and 22.8 mi west of Miami.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1939 to September 1963 (monthly discharge), October 1963 to current year. October 1962 to September 1963, stage only (twice monthly) published as Tamiami Canal at bridge 45, near Miami (auxiliary). Stage records prior to October 1962, are available in files of the U.S. Geological Survey. Prior to October 1963, daily discharge for this portion of the canal was published as part of the total daily discharge of station, Tamiami Canal Outlets, Miami to Monroe (station 02289000).

REVISED RECORDS.--WDR FL-2000-2A, 1998-99.

GAGE.--Electronic data logger. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to August 27, 1942, non-recording gage at datum 0.80 ft lower; August 27, 1942 to February 21, 1952, non-recording gage at present datum; and February 21, 1952 to August 7, 1969, water-stage recorder at same datum, all at site 4 mi to the west.

REMARKS.--Records poor. Figures of daily discharge consist of seepage through levee 29 from Conservation Area 3B and discharges from S-333 distributed along Levee 29 from Conservation Area 3A as represented by flow through all the outlets of Tamiami Canal from levee 30 to levee 67A (Bridges 45-59). Flow releases from S-334 were observed during portions of the water year. The discharge from S-334 are not included in the table of mean daily discharge for this station.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Average annual mean discharge, 156 ft³/s, 166,600 acre-ft/yr. Figures represent 63 complete water years of discharge (1941-2004). Monthly discharge only, available 1941-1963 water years.

SPECIAL NOTE: Statistics for the period of record 1941-2004 computed manually. NWIS database not complete.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 9.76 ft Nov. 1, 1960; minimum, 1.66 ft May 13, 14, 1971.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 7.93 ft Oct. 1; minimum, 6.53 ft June 4.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.93	7.51	7.38	7.21	7.43	7.78	7.30	7.04	6.60	6.63	6.88	7.09
2	7.91	7.50	7.37	7.25	7.41	7.78	7.28	7.02	6.58	6.61	6.92	7.07
3	7.89	7.51	7.36	7.29	7.39	7.77	7.27	7.13	6.55	6.61	6.99	7.05
4	7.87	7.53	7.36	7.30	7.37	7.79	7.26	7.32	6.59	6.64	7.01	7.04
5	7.86	7.60	7.35	7.30	7.42	7.80	7.24	7.26	6.69	6.66	7.01	7.19
6	7.83	7.68	7.35	7.30	7.48	7.75	7.23	7.22	6.67	6.69	7.04	7.28
7	7.82	7.69	7.34	7.29	7.49	7.75	7.22	7.18	6.66	6.69	7.05	7.28
8	7.80	7.69	7.33	7.28	7.48	7.74	7.22	7.16	6.66	6.75	7.08	7.30
9	7.78	7.70	7.33	7.28	7.48	7.73	7.21	7.13	6.66	6.71	7.09	7.32
10	7.76	7.68	7.29	7.28	7.52	7.72	7.20	7.11	6.68	6.70	7.08	7.30
11	7.75	7.66	7.32	7.27	7.59	7.71	7.20	7.18	6.68	6.72	7.07	7.28
12	7.76	7.64	7.31	7.26	7.60	7.70	7.21	7.11	6.71	6.73	7.05	7.26
13	7.74	7.62	7.31	7.26	7.60	7.69	7.27	7.07	6.73	6.74	7.05	7.23
14	7.73	7.59	7.33	7.26	7.61	7.68	7.28	7.05	6.71	6.72	7.04	7.22
15	7.70	7.58	7.37	7.25	7.62	7.71	7.27	7.03	6.70	6.71	7.05	7.22
16	7.68	7.56	7.36	7.24	7.61	7.74	7.25	7.02	6.68	6.72	7.06	7.21
17	7.67	7.54	7.36	7.24	7.61	7.68	7.24	7.01	6.67	6.73	7.06	7.19
18	7.66	7.53	7.35	7.26	7.67	7.61	7.23	6.99	6.67	6.73	7.18	7.17
19	7.64	7.53	7.34	7.30	7.72	7.53	7.22	6.98	6.68	6.71	7.28	7.16
20	7.62	7.51	7.33	7.29	7.73	7.44	7.22	6.96	6.68	6.72	7.29	7.22
21	7.61	7.49	7.31	7.28	7.74	7.42	7.21	6.95	6.69	6.71	7.31	7.37
22	7.60	7.47	7.32	7.27	7.74	7.40	7.15	6.94	6.75	6.70	7.32	7.42
23	7.58	7.46	7.33	7.25	7.74	7.37	7.09	6.92	6.76	6.70	7.33	7.45
24	7.56	7.45	7.29	7.24	7.74	7.35	7.07	6.91	6.73	6.70	7.34	7.45
25	7.55	7.44	7.28	7.24	7.77	7.36	7.05	6.89	6.71	6.72	7.35	7.47
26	7.53	7.43	7.27	7.23	7.83	7.36	7.04	6.83	6.68	6.75	7.28	7.54
27	7.52	7.43	7.27	7.23	7.81	7.35	7.03	6.72	6.66	6.82	7.19	7.51
28	7.51	7.43	7.26	7.21	7.79	7.34	7.03	6.68	6.64	6.85	7.18	7.44
29	7.54	7.40	7.25	7.20	7.79	7.33	7.04	6.66	6.64	6.86	7.15	7.45
30	7.53	7.39	7.24	7.20	---	7.33	7.03	6.64	6.64	6.85	7.12	7.45
31	7.53	---	7.23	7.26	---	7.32	---	6.62	---	6.85	7.10	---
TOTAL	238.46	226.24	226.89	225.02	220.78	235.03	215.56	216.73	200.15	208.43	220.95	218.63
MEAN	7.69	7.54	7.32	7.26	7.61	7.58	7.19	6.99	6.67	6.72	7.13	7.29
MAX	7.93	7.70	7.38	7.30	7.83	7.80	7.30	7.32	6.76	6.86	7.35	7.54
MIN	7.51	7.39	7.23	7.20	7.37	7.32	7.03	6.62	6.55	6.61	6.88	7.04

02289060 TAMiami CANAL OUTLETS, LEVEE 30 TO LEVEE 67A, NEAR MIAMI, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	74	74	66	181	705	257	148	11	16	46	39
2	99	73	76	77	171	685	246	141	9.9	14	61	36
3	99	73	78	97	163	679	244	187	8.8	14	92	32
4	101	79	78	109	156	700	240	177	12	17	97	31
5	102	97	78	120	189	708	231	147	18	19	98	55
6	102	119	78	131	234	654	226	134	17	21	78	72
7	104	121	78	129	252	650	224	126	17	22	51	71
8	104	118	79	127	260	636	222	121	17	27	56	75
9	105	117	79	128	275	634	218	117	18	23	59	81
10	107	110	74	126	324	625	218	113	19	22	58	76
11	113	100	81	122	397	611	217	146	20	23	54	69
12	121	92	82	121	426	603	226	120	24	25	51	64
13	124	84	83	120	449	591	259	112	26	25	51	58
14	126	78	92	118	475	586	270	108	24	23	49	55
15	124	71	103	117	509	611	261	106	24	23	51	55
16	116	67	104	114	533	653	254	106	22	24	54	52
17	112	61	103	112	559	582	247	107	21	25	54	49
18	109	58	101	122	645	505	242	104	21	24	81	46
19	103	60	97	135	717	438	237	100	21	23	107	44
20	100	60	94	129	730	361	233	96	21	23	111	58
21	94	60	90	125	737	344	228	93	22	23	116	90
22	91	61	93	123	739	329	199	89	28	22	121	106
23	87	62	94	118	738	312	169	85	29	22	123	114
24	81	63	84	111	736	294	161	81	26	21	125	113
25	80	64	82	109	784	294	155	78	24	24	130	121
26	78	67	80	106	838	297	148	62	21	28	108	144
27	75	71	79	106	793	291	144	37	19	36	75	135
28	72	74	77	101	755	286	143	29	17	41	68	103
29	80	71	74	97	733	279	149	23	17	41	59	99
30	75	72	72	97	---	274	146	18	16	40	50	92
31	76	---	69	116	---	269	---	14	---	40	43	---
TOTAL	3,059	2,377	2,606	3,529	14,498	15,486	6,414	3,125	590.7	771	2,377	2,235
MEAN	98.7	79.2	84.1	114	500	500	214	101	19.7	24.9	76.7	74.5
MAX	126	121	104	135	838	708	270	187	29	41	130	144
MIN	72	58	69	66	156	269	143	14	8.8	14	43	31
AC-FT	6,070	4,710	5,170	7,000	28,760	30,720	12,720	6,200	1,170	1,530	4,710	4,430

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2004, BY WATER YEAR (WY)

MEAN	203	209	165	135	177	175	169	138	105	165	247	187
MAX	763	624	785	725	976	979	914	784	550	828	1,230	694
(WY)	(1993)	(1986)	(1993)	(2003)	(1993)	(1993)	(1993)	(1993)	(1995)	(1986)	(2001)	(1991)
MIN	48.0	46.9	23.4	1.99	0.90	0.00	-0.77	-2.61	-0.37	-0.55	1.58	18.0
(WY)	(1981)	(1972)	(1974)	(1990)	(1990)	(1974)	(1964)	(1964)	(1965)	(1965)	(1965)	(1989)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1964 - 2004*

ANNUAL TOTAL	84,886	57,067.7	
ANNUAL MEAN	233	156	173
HIGHEST ANNUAL MEAN			660
LOWEST ANNUAL MEAN			28.3
HIGHEST DAILY MEAN	871	Jan 9	1,780
LOWEST DAILY MEAN	57	Jun 19	-7.0
ANNUAL SEVEN-DAY MINIMUM	60	Nov 17	-5.9
MAXIMUM PEAK FLOW			1,780
MAXIMUM PEAK STAGE			7.93
INSTANTANEOUS LOW FLOW			8.1
ANNUAL RUNOFF (AC-FT)	168,400	113,200	125,300
10 PERCENT EXCEEDS	608	430	477
50 PERCENT EXCEEDS	133	97	92
90 PERCENT EXCEEDS	75	23	2.0

* The period of record statistics were computed from complete water year's of record stored in the NWIS database. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript for the statistics for the complete period of record (1941-2004).

02289500 TAMIAAMI CANAL NEAR CORAL GABLES, FL

LOCATION.--Lat 25°45'43", long 80°19'42", in SW ¼ sec.3, T.54 S., R.40 E., Miami-Dade County, Hydrologic Unit 03090202, on upstream side of footbridge, 25 ft from south bank, 0.5 mi upstream from Coral Gables Canal, 2.5 mi west of Coral Gables city limits, 3.5 mi downstream from Snapper Creek Canal, and 6.2 mi upstream from mouth.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--January 1940 to June 1943, October 1959 to current year.

REVISED RECORDS.--WDR FL-87-2A, 1986; WDR FL-97-2A, 1995; WDR FL-98-2A, 1997.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic velocity meter. Datum of gage is National Geodetic Vertical Datum of 1929. January 1940 to June 1943, non-recording gage at same site at datum 0.22 ft lower. Benchmark was readjusted, datum prior to 1963, 0.48 lower.

REMARKS.--Records poor. The flow is slightly affected by tide and is regulated by control structures downstream at the Coral Gables Canal, Comfort Canal (S-25), S-25A, S-25B and upstream by S-336 and drainage from the Snapper Creek. Discharge computed from continuous velocity record obtained from acoustic velocity metering system and stage. Records of gage height prior to October 1960, are available in files of the U.S. Geological Survey.

COOPERATION.--South Florida Water Management District.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 32 complete water years of discharge (1941, 42, 1960-83, 1985-88, 1990, 2001).

EXTREME STAGES FOR OUTSIDE PERIOD OF RECORD.--Maximum stage known, 8.01 ft Oct. 12, 1947, present datum, from non-recording gage reading.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 7.90 ft Oct. 4, 2000; minimum, 1.08 ft May 31, 1962.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 3.77 ft Oct. 1; minimum, 2.00 ft June 18.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	2.60	2.56	3.11	2.74	2.91	2.91	2.85	2.63	2.42	2.63	2.66
2	3.25	2.65	2.54	3.16	3.08	2.85	2.94	2.80	2.60	2.43	2.96	2.59
3	3.12	2.63	2.53	3.18	3.17	2.80	2.95	3.10	2.56	2.47	3.06	2.52
4	3.07	2.67	2.53	3.19	3.20	2.78	2.94	3.23	2.55	2.50	3.04	2.52
5	3.00	2.80	2.56	3.11	3.09	2.76	2.94	3.13	2.57	2.55	2.94	2.90
6	2.91	3.00	2.54	2.91	2.89	2.74	2.93	2.99	2.60	2.56	2.96	2.94
7	2.89	2.97	2.52	2.83	2.77	2.71	2.91	2.91	2.76	2.55	2.85	2.86
8	2.82	2.99	2.55	2.77	2.79	2.68	2.91	2.84	2.46	2.53	2.82	2.98
9	2.73	3.09	2.57	2.81	2.99	2.75	2.90	2.79	2.42	2.50	3.02	2.80
10	2.78	2.89	2.61	3.00	3.15	2.94	2.89	2.75	2.40	2.46	2.89	2.72
11	2.81	2.84	2.59	3.05	3.20	3.00	2.89	2.70	2.36	2.44	2.72	2.65
12	2.72	2.80	2.58	3.08	3.07	3.04	2.86	2.64	2.34	2.44	2.62	2.64
13	2.66	2.70	2.59	3.10	2.85	3.06	2.85	2.80	2.29	2.46	2.62	2.59
14	2.62	2.67	2.62	3.12	2.80	3.07	3.02	2.93	2.25	2.56	2.49	2.57
15	2.67	2.64	2.65	3.12	2.78	3.09	2.92	2.97	2.23	2.57	2.47	2.59
16	2.67	2.60	2.65	3.08	2.75	3.11	2.85	3.00	2.19	2.64	2.59	2.61
17	2.68	2.57	2.63	2.84	2.72	3.13	2.77	3.00	2.12	2.76	2.58	2.60
18	2.69	2.57	2.61	2.93	2.69	3.14	2.71	3.00	2.13	2.75	2.59	2.61
19	2.66	2.55	2.59	3.14	2.70	3.13	2.74	2.99	2.13	2.75	2.61	2.62
20	2.63	2.54	2.57	3.03	2.90	3.13	2.91	2.96	2.17	2.78	2.63	2.61
21	2.65	2.54	2.55	3.16	3.00	3.13	2.93	2.84	2.25	2.63	2.62	2.65
22	2.63	2.53	2.68	3.19	3.04	3.13	2.93	2.78	2.48	2.66	2.61	2.85
23	2.67	2.54	2.99	3.10	3.06	3.11	2.93	2.73	2.30	2.61	2.61	2.87
24	2.62	2.56	3.07	2.96	3.07	3.09	2.93	2.74	2.31	2.82	2.61	2.65
25	2.57	2.60	3.11	3.10	3.11	3.12	2.92	2.78	2.27	2.87	2.73	2.62
26	2.53	2.59	3.15	3.14	3.09	3.08	2.90	2.77	2.21	2.92	2.65	2.77
27	2.51	2.58	3.17	3.05	3.15	2.90	2.89	2.75	2.15	2.95	2.63	2.77
28	2.54	2.57	3.19	2.85	3.00	2.80	3.02	2.73	2.10	2.67	2.73	2.67
29	2.59	2.55	3.20	2.75	2.97	2.74	3.01	2.70	2.25	2.50	2.80	2.63
30	2.63	2.55	3.06	2.65	---	2.70	2.91	2.68	2.40	2.49	2.73	2.62
31	2.63	---	2.95	2.56	---	2.76	---	2.65	---	2.51	2.68	---
TOTAL	---	80.38	84.71	93.07	85.82	91.38	87.11	88.53	70.48	80.75	84.49	80.68
MEAN	---	2.68	2.73	3.00	2.96	2.95	2.90	2.86	2.35	2.60	2.73	2.69
MAX	---	3.09	3.20	3.19	3.20	3.14	3.02	3.23	2.76	2.95	3.06	2.98
MIN	---	2.53	2.52	2.56	2.69	2.68	2.71	2.64	2.10	2.42	2.47	2.52

02289500 TAMIAMI CANAL NEAR CORAL GABLES, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	247	203	220	331	295	185	291	160	149	265	e336
2	427	245	210	214	269	299	180	280	157	e135	e334	313
3	369	233	205	211	275	294	175	237	150	128	e377	314
4	342	235	e231	212	277	286	175	292	159	e139	389	e294
5	327	281	e224	244	306	281	174	266	156	e146	335	---
6	325	292	e221	295	344	282	174	267	158	148	340	---
7	303	e374	e217	287	344	273	176	288	220	149	326	e452
8	303	---	e214	295	313	272	178	292	249	138	324	461
9	293	---	e188	278	271	243	174	292	222	130	367	e408
10	277	---	e215	220	232	207	177	286	224	137	e358	---
11	e304	---	e238	210	219	205	179	283	215	132	e312	---
12	e357	e212	e227	208	263	202	210	277	199	126	296	---
13	e385	210	e181	206	291	201	261	232	180	135	281	e333
14	e311	219	e178	204	293	191	273	211	174	140	e294	e306
15	239	e303	e176	198	296	191	274	215	168	142	e284	303
16	e362	e272	e273	217	311	202	275	205	172	157	e282	314
17	e277	e249	e258	274	298	199	280	203	174	153	294	303
18	236	e250	e284	238	287	195	268	205	176	143	290	e318
19	226	e231	306	233	274	201	247	200	180	143	305	e319
20	214	e211	308	250	212	199	198	200	179	131	e327	e318
21	222	221	308	204	198	202	181	e235	229	176	301	309
22	244	224	257	201	197	194	184	231	279	182	e316	328
23	231	222	203	244	202	190	185	221	e253	178	e305	349
24	236	218	209	254	198	188	183	e222	e220	e175	329	e323
25	231	211	208	193	230	185	181	e190	222	151	e353	e305
26	221	210	211	186	320	229	176	168	208	139	349	e293
27	236	218	212	223	275	261	178	e178	e200	139	324	e289
28	235	212	207	246	305	260	204	169	192	249	e325	e287
29	e314	206	213	249	297	254	288	161	e169	277	e321	291
30	e360	206	273	253	---	249	289	160	143	251	e319	318
31	e303	---	275	290	---	216	---	163	---	246	329	---
TOTAL	---	---	7,133	7,257	7,928	7,146	6,282	7,120	5,787	4,964	9,951	---
MEAN	---	---	230	234	273	231	209	230	193	160	321	---
MAX	308	295	344	299	289	292	279	277	389			
MIN	176	186	197	185	174	160	143	126	265			
AC-FT	---	---	14,150	14,390	15,730	14,170	12,460	14,120	11,480	9,850	19,740	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)

MEAN	197	165	162	141	127	107	82.2	86.9	145	156	167	188
MAX	398	376	346	380	329	304	286	283	303	485	344	432
(WY)	(1961)	(1960)	(1961)	(1961)	(1961)	(1983)	(1960)	(1979)	(1969)	(1991)	(1994)	(1960)
MIN	37.1	12.8	33.4	25.9	4.11	10.4	-5.43	-54.5	7.03	35.3	39.1	33.5
(WY)	(1990)	(1990)	(1990)	(1989)	(1991)	(1990)	(1975)	(1991)	(1974)	(1990)	(1965)	(1989)

SUMMARY STATISTICS

WATER YEARS 1940 - 2004

ANNUAL MEAN	139
HIGHEST ANNUAL MEAN	288
LOWEST ANNUAL MEAN	30.8
HIGHEST DAILY MEAN	1,120
LOWEST DAILY MEAN	-259
ANNUAL SEVEN-DAY MINIMUM	-127
ANNUAL RUNOFF (AC-FT)	100,600
10 PERCENT EXCEEDS	268
50 PERCENT EXCEEDS	120
90 PERCENT EXCEEDS	31

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

254315080331500 NORTHEAST SHARK RIVER SLOUGH NO. 2 NEAR COOPERTOWN, FL

LOCATION.--Lat 25°43'11", long 80°33'26", in NW ¼ sec.4, T.54 S., Miami-Dade County, Hydrologic Unit 03090202, 2.7 mi south of Coopertown in Northeast Shark River Slough.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1976 to September 1980, October 1982 to current year (gage heights only). Published as "Northeast Shark Valley Slough No. 2 near Coopertown" October 1976 to September 1977.

GAGE.--Satellite data collection platform with water-stage shaft encoder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Land surface is approximately 5.4 ft above National Geodetic Vertical Datum of 1929. Water levels below land-surface datum are recorded.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 8.51 ft Oct. 16, 1999; minimum, 3.41 ft estimated, Apr. 23, 1979.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 7.71 ft Oct. 1; minimum, 6.16 ft July 25, 26.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.71	7.26	7.14	6.97	7.08	7.16	6.82	6.66	6.29	6.27	6.50	6.88
2	7.68	7.25	7.13	6.96	7.09	7.15	6.80	6.64	6.26	6.25	6.72	6.87
3	7.66	7.24	7.12	6.96	7.07	7.14	6.78	6.76	6.24	6.25	6.73	6.84
4	7.65	7.27	7.11	6.95	7.06	7.13	6.76	6.97	6.27	6.26	6.77	6.84
5	7.63	7.37	7.10	6.95	7.04	7.13	6.74	6.93	6.34	6.26	6.78	6.95
6	7.61	7.46	7.09	6.95	7.03	7.13	6.72	6.90	6.31	6.25	6.82	7.03
7	7.59	7.46	7.08	6.94	7.02	7.12	6.70	6.86	6.34	6.24	6.83	7.06
8	7.57	7.45	7.07	6.94	7.01	7.12	6.68	6.83	6.34	6.24	6.88	7.12
9	7.54	7.46	7.06	6.93	7.01	7.11	6.67	6.80	6.31	6.21	6.89	7.12
10	7.52	7.45	7.06	6.93	7.00	7.09	6.65	6.77	6.30	6.21	6.87	7.10
11	7.51	7.43	7.06	6.92	6.99	7.08	6.64	6.74	6.28	6.21	6.85	7.07
12	7.51	7.41	7.05	6.91	6.99	7.07	6.65	6.72	6.31	6.20	6.83	7.05
13	7.49	7.39	7.04	6.91	7.00	7.07	6.72	6.70	6.37	6.20	6.82	7.02
14	7.48	7.37	7.06	6.90	7.00	7.06	6.79	6.67	6.35	6.21	6.82	7.01
15	7.46	7.35	7.10	6.89	7.01	7.05	6.77	6.65	6.33	6.25	6.82	7.00
16	7.44	7.34	7.09	6.89	7.02	7.05	6.75	6.63	6.31	6.25	6.81	6.99
17	7.42	7.32	7.09	6.88	7.02	7.04	6.74	6.61	6.28	6.24	6.81	6.97
18	7.40	7.31	7.08	6.90	7.01	7.04	6.72	6.59	6.25	6.23	6.82	6.95
19	7.39	7.30	7.08	6.95	7.01	7.02	6.71	6.56	6.24	6.22	6.82	6.93
20	7.37	7.29	7.07	6.94	7.01	7.00	6.69	6.54	6.22	6.22	6.83	6.93
21	7.36	7.27	7.05	6.93	7.01	6.98	6.67	6.52	6.28	6.21	6.85	6.92
22	7.35	7.26	7.05	6.92	7.02	6.96	6.66	6.49	6.41	6.20	6.89	6.97
23	7.33	7.24	7.05	6.91	7.03	6.93	6.64	6.47	6.40	6.20	6.91	7.02
24	7.31	7.23	7.05	6.90	7.03	6.91	6.63	6.45	6.40	6.18	6.92	7.01
25	7.30	7.21	7.04	6.89	7.08	6.90	6.61	6.43	6.38	6.16	6.96	7.02
26	7.29	7.20	7.03	6.87	7.18	6.92	6.59	6.41	6.36	6.21	6.97	7.10
27	7.27	7.19	7.02	6.87	7.17	6.91	6.57	6.39	6.34	6.35	6.97	7.14
28	7.26	7.18	7.01	6.87	7.17	6.89	6.59	6.37	6.32	6.47	6.96	7.17
29	7.27	7.16	7.00	6.85	7.16	6.87	6.68	6.35	6.31	6.48	6.94	7.25
30	7.26	7.15	6.99	6.85	---	6.85	6.66	6.33	6.29	6.45	6.92	7.26
31	7.27	---	6.98	6.92	---	6.83	---	6.31	---	6.43	6.90	---
TOTAL	230.90	219.27	218.95	214.35	204.32	217.71	200.80	205.05	189.43	194.01	212.21	210.59
MEAN	7.45	7.31	7.06	6.91	7.05	7.02	6.69	6.61	6.31	6.26	6.85	7.02
MAX	7.71	7.46	7.14	6.97	7.18	7.16	6.82	6.97	6.41	6.48	6.97	7.26
MIN	7.26	7.15	6.98	6.85	6.99	6.83	6.57	6.31	6.22	6.16	6.50	6.84

254130080380500 NORTHEAST SHARK RIVER SLOUGH NO. 1 NEAR COOPERTOWN, FL

LOCATION.--Lat 25°41'30", long 80°38'05" in NW ¼ sec.4, T.54 S., R.31 E., Miami-Dade County, Hydrologic Unit 03090202, 0.7 mi west of southeast corner of Blue Shanty Canal, 0.8 mi south of east-west section of Shanty Canal, and 4.7 mi southwest of Coopertown.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1976 to September 1980, July 1982 to current year (gage heights only).

REVISED RECORDS.--WDR FL-79-2A, 1977; WDR FL-96-2A, 1995.

GAGE.--Satellite data collection platform with water-stage shaft encoder and tipping bucket rain gage. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Land surface is approximately 5.9 ft above National Geodetic Vertical Datum of 1929. Rainfall data available in files of the U.S. Geological Survey. The rainfall record was discontinued September 30, 2003. Water levels below land-surface datum are recorded. Prior to October 1977, published as "Northeast Shark Valley Slough No. 1 near Coopertown."

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 8.54 ft Oct. 16, 1999; minimum, indeterminate, well was dry.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 7.90 ft Oct. 1; minimum, 6.34 ft June 4.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.90	7.54	7.42	7.28	7.28	7.13	6.87	6.67	6.40	6.43	6.75	7.00
2	7.87	7.53	7.42	7.28	7.27	7.13	6.85	6.65	6.38	6.41	6.90	7.00
3	7.85	7.53	7.41	7.27	7.25	7.12	6.84	6.72	6.36	6.41	6.96	6.97
4	7.83	7.59	7.40	7.26	7.22	7.12	6.81	6.97	6.36	6.41	7.00	6.97
5	7.82	7.67	7.39	7.25	7.20	7.11	6.80	6.95	6.45	6.43	6.99	7.07
6	7.80	7.70	7.38	7.25	7.17	7.10	6.78	6.93	6.52	6.49	7.00	7.17
7	7.78	7.72	7.37	7.23	7.15	7.09	6.76	6.90	6.51	6.48	7.03	7.18
8	7.76	7.72	7.37	7.22	7.14	7.08	6.75	6.88	6.53	6.45	7.08	7.20
9	7.74	7.71	7.36	7.21	7.11	7.08	6.73	6.87	6.50	6.44	7.05	7.24
10	7.73	7.70	7.36	7.21	7.10	7.06	6.72	6.84	6.49	6.41	7.02	7.22
11	7.71	7.68	7.36	7.19	7.09	7.05	6.71	6.82	6.49	6.41	7.03	7.21
12	7.73	7.66	7.35	7.18	7.07	7.04	6.71	6.79	6.49	6.42	7.04	7.20
13	7.71	7.65	7.34	7.17	7.06	7.03	6.78	6.77	6.49	6.41	7.00	7.18
14	7.70	7.63	7.36	7.16	7.06	7.03	6.87	6.74	6.47	6.40	6.97	7.20
15	7.67	7.62	7.41	7.15	7.06	7.03	6.87	6.72	6.46	6.39	6.97	7.19
16	7.66	7.61	7.41	7.14	7.06	7.02	6.85	6.71	6.48	6.41	6.97	7.18
17	7.64	7.59	7.40	7.12	7.06	7.01	6.84	6.68	6.45	6.43	7.00	7.17
18	7.63	7.59	7.39	7.12	7.05	7.01	6.81	6.66	6.44	6.42	7.01	7.16
19	7.61	7.58	7.38	7.16	7.04	7.00	6.80	6.65	6.45	6.41	7.00	7.14
20	7.60	7.56	7.37	7.15	7.03	6.99	6.78	6.63	6.48	6.41	7.00	7.15
21	7.59	7.55	7.36	7.14	7.02	6.98	6.76	6.61	6.48	6.43	7.00	7.15
22	7.58	7.54	7.35	7.12	7.02	6.97	6.75	6.58	6.52	6.44	7.02	7.17
23	7.57	7.53	7.35	7.10	7.01	6.95	6.73	6.57	6.56	6.51	7.02	7.21
24	7.55	7.51	7.35	7.08	7.01	6.93	6.71	6.54	6.56	6.49	7.01	7.21
25	7.54	7.50	7.34	7.07	7.04	6.93	6.69	6.52	6.54	6.49	7.06	7.22
26	7.54	7.49	7.34	7.05	7.15	6.94	6.68	6.50	6.52	6.53	7.12	7.32
27	7.54	7.48	7.33	7.04	7.14	6.94	6.66	6.49	6.50	6.59	7.10	7.37
28	7.52	7.46	7.32	7.03	7.14	6.93	6.65	6.47	6.48	6.66	7.09	7.42
29	7.55	7.45	7.31	7.02	7.14	6.92	6.67	6.44	6.46	6.68	7.07	7.52
30	7.55	7.44	7.30	7.01	---	6.92	6.67	6.43	6.45	6.71	7.04	7.49
31	7.55	---	7.29	7.08	---	6.90	---	6.41	---	6.72	7.01	---
TOTAL	237.82	227.53	228.29	221.74	206.14	217.54	202.90	207.11	194.27	200.72	217.31	215.88
MEAN	7.67	7.58	7.36	7.15	7.11	7.02	6.76	6.68	6.48	6.47	7.01	7.20
MAX	7.90	7.72	7.42	7.28	7.28	7.13	6.87	6.97	6.56	6.72	7.12	7.52
MIN	7.52	7.44	7.29	7.01	7.01	6.90	6.65	6.41	6.36	6.39	6.75	6.97

254100080402400 L-67 EXTENDED CANAL WEST NEAR FLORIDA CITY, FL

LOCATION.--Lat 25°41'00", long 80°40'24", between sec.24, T.55 S., R.36 E., and sec.6, T.55 S., R.37 E., between hiatus of unsurveyed area, Miami-Dade County, Hydrologic Unit 03090202, 5.8 mi south of U.S. Highway 41 on the Levee 67 extension and 11.8 mi west of Krome Avenue.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1983 to current year (gage heights only).

GAGE.--Electronic data logger. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--During the 1999 water year, due to a change in starting benchmarks, a -0.12 ft datum correction was applied to published records for the 1984 to 1996 water years. Revised daily mean values for 1984 - 1996 are available in the files of the U.S. Geological Survey.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 9.32 ft Oct. 16, 1999; minimum, 3.38 ft Apr. 8, 1990.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 8.40 ft Nov. 6, 7; minimum, 6.43 ft June 2.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	8.25	8.14	7.93	---	7.15	7.05	6.82	6.46	6.51	7.02	7.38
2	---	8.24	8.12	7.93	---	7.14	7.04	6.83	6.48	6.49	7.05	7.39
3	---	8.25	8.11	7.92	---	7.13	7.02	6.97	6.56	6.48	7.11	7.42
4	---	8.30	8.10	7.90	---	7.12	7.01	7.14	---	6.50	7.15	7.47
5	---	8.37	8.09	7.88	---	7.11	6.99	7.11	---	6.55	7.14	7.64
6	---	8.39	8.09	7.86	---	7.11	6.98	7.07	---	6.63	7.14	7.75
7	---	8.39	8.07	7.85	---	7.10	6.96	7.04	---	6.61	---	7.77
8	---	8.38	8.06	7.83	---	7.10	6.95	7.00	---	6.59	---	7.79
9	---	8.38	8.06	7.80	---	7.09	6.92	6.97	---	6.56	---	7.82
10	---	8.38	8.06	7.76	---	7.08	6.91	6.95	---	6.57	---	7.81
11	---	8.36	8.06	7.72	---	7.07	6.90	6.92	---	6.68	---	7.80
12	---	8.34	8.05	7.69	---	7.08	6.92	6.89	---	6.67	---	7.80
13	---	8.34	8.04	7.67	---	7.08	7.00	6.87	---	6.65	---	7.80
14	---	8.32	8.06	7.63	7.15	7.09	7.07	6.84	---	6.62	---	7.83
15	---	8.30	8.10	7.59	7.15	7.10	7.06	6.80	---	6.59	---	7.83
16	---	8.30	8.09	7.55	7.15	7.10	7.04	6.78	---	6.62	---	7.83
17	8.28	8.28	8.09	7.51	7.14	7.10	7.02	6.76	---	6.62	---	7.84
18	8.28	8.27	8.07	7.50	7.12	7.10	7.01	6.74	---	6.59	---	7.86
19	8.27	8.26	8.07	7.51	7.11	7.09	6.99	6.71	6.70	6.57	---	7.88
20	8.27	8.26	8.05	7.48	7.11	7.09	6.98	6.69	6.69	6.63	7.33	7.90
21	8.26	8.25	8.04	7.45	7.10	7.08	6.96	6.66	6.68	6.67	7.33	7.90
22	8.26	8.23	8.03	7.43	7.09	7.08	6.95	6.64	6.73	6.68	7.33	7.95
23	8.25	8.22	8.03	7.39	7.08	7.07	6.93	6.61	6.76	6.72	7.31	8.01
24	8.24	8.21	8.02	7.36	7.07	7.07	6.92	6.59	6.71	6.72	7.30	8.01
25	8.23	8.20	8.01	7.32	7.11	7.07	6.90	6.57	6.67	6.82	7.32	8.02
26	8.23	8.19	8.00	7.33	7.20	7.09	6.88	6.55	6.63	6.83	7.32	8.10
27	8.22	8.18	7.99	7.28	7.19	7.09	6.87	6.54	6.59	6.89	7.31	8.14
28	8.22	8.17	7.98	7.21	7.18	7.09	6.86	6.53	6.57	6.95	7.32	8.15
29	8.27	8.17	7.97	7.12	7.17	7.08	6.87	6.50	6.55	7.00	7.33	8.17
30	8.26	8.15	7.95	7.04	---	7.07	6.85	6.49	6.53	7.02	7.34	8.16
31	8.26	---	7.95	7.14	---	7.07	---	6.47	---	7.01	7.36	---
TOTAL	---	248.33	249.55	234.58	---	219.89	208.81	210.05	---	207.04	---	235.22
MEAN	---	8.28	8.05	7.57	---	7.09	6.96	6.78	---	6.68	---	7.84
MAX	---	8.39	8.14	7.93	---	7.15	7.07	7.14	---	7.02	---	8.17
MIN	---	8.15	7.95	7.04	---	7.07	6.85	6.47	---	6.48	---	7.38

254100080402200 NORTHEAST SHARK RIVER SLOUGH EAST OF L 67 EXT. NEAR RICHMOND HEIGHTS, FL

LOCATION.--Lat 25°41'00", long 80°40'22", in NW ¼ sec.6, T.55 S., R.37 E., Miami-Dade County, Hydrologic Unit 03090202, 5.8 mi south of U.S. Highway 41 on the Levee 67 extension and 11.8 mi west of Krome Avenue.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--January 1984 to current year (gage heights only).

GAGE.--Electronic data logger. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Due to a change in the starting benchmarks, a -0.12 ft datum correction was applied to the published records for the 1984 to 1996 water years. Revised daily mean values for 1984-1996 are available in the files of the U.S. Geological Survey.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 8.85 ft Oct. 15, 1999; minimum, indeterminate, well was dry.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 8.32 ft Oct. 1; minimum 6.28 ft June 3, 4.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.32	8.06	7.93	7.75	7.39	7.15	6.96	6.72	6.35	6.45	7.01	7.26
2	8.29	8.06	7.91	7.74	7.37	7.14	6.94	6.79	6.32	6.43	7.06	7.27
3	8.29	8.06	7.90	7.72	7.34	7.13	6.91	6.93	6.29	6.42	7.11	7.29
4	8.27	8.11	7.89	7.71	7.31	7.12	6.90	7.09	6.43	6.45	7.14	7.33
5	8.25	8.17	7.88	7.70	7.28	7.11	6.89	7.07	6.70	6.54	7.13	7.47
6	8.22	8.19	7.88	7.68	7.25	7.11	6.87	7.03	6.73	6.69	7.13	7.57
7	8.20	8.20	7.87	7.66	7.22	7.10	6.86	7.00	6.68	6.65	7.18	7.59
8	8.19	8.20	7.86	7.64	7.19	7.10	6.85	6.97	6.67	6.64	7.21	7.62
9	8.17	8.19	7.86	7.61	7.17	7.09	6.83	6.93	6.64	6.56	7.16	7.65
10	8.16	8.19	7.86	7.58	7.15	7.08	6.81	6.90	6.75	6.55	7.14	7.64
11	8.15	8.17	7.86	7.54	7.13	7.07	6.79	6.88	6.71	6.61	7.14	7.63
12	8.14	8.16	7.85	7.52	7.12	7.07	6.84	6.86	6.66	6.61	7.16	7.63
13	8.14	8.14	7.85	7.49	7.11	7.07	6.94	6.83	6.62	6.59	7.14	7.63
14	8.13	8.13	7.86	7.48	7.12	7.07	7.00	6.80	6.59	6.55	7.15	7.66
15	8.12	8.11	7.89	7.44	7.12	7.07	6.98	6.77	6.57	6.54	7.23	7.66
16	8.12	8.10	7.89	7.40	7.12	7.06	6.96	6.75	6.55	6.61	7.23	7.66
17	8.11	8.09	7.88	7.38	7.11	7.06	6.94	6.72	6.52	6.64	7.24	7.66
18	8.10	8.08	7.87	7.37	7.10	7.05	6.91	6.69	6.56	6.57	7.23	7.68
19	8.10	8.07	7.87	7.38	7.09	7.04	6.89	6.67	6.69	6.55	7.24	7.70
20	8.09	8.06	7.86	7.37	7.08	7.03	6.88	6.64	6.64	6.64	7.24	7.72
21	8.09	8.05	7.85	7.35	7.07	7.03	6.87	6.62	6.67	6.67	7.24	7.72
22	8.08	8.03	7.84	7.32	7.06	7.02	6.85	6.59	6.82	6.68	7.24	7.75
23	8.07	8.02	7.83	7.30	7.06	7.00	6.83	6.56	6.80	6.74	7.23	7.80
24	8.06	8.01	7.82	7.27	7.05	7.00	6.81	6.54	6.72	6.72	7.22	7.80
25	8.06	8.00	7.81	7.24	7.09	7.00	6.79	6.52	6.67	6.78	7.24	7.81
26	8.06	7.99	7.80	7.21	7.18	7.02	6.78	6.50	6.62	6.79	7.24	7.90
27	8.04	7.98	7.79	7.18	7.17	7.02	6.76	6.46	6.57	6.85	7.25	7.93
28	8.03	7.98	7.79	7.16	7.16	7.00	6.76	6.43	6.54	6.92	7.25	7.96
29	8.08	7.97	7.77	7.14	7.16	7.00	6.75	6.41	6.53	6.98	7.25	7.99
30	8.07	7.95	7.76	7.13	---	6.99	6.74	6.39	6.49	7.01	7.25	7.96
31	8.08	---	7.75	7.20	---	6.98	---	6.38	---	7.00	7.25	---
TOTAL	252.28	242.52	243.33	230.66	207.77	218.78	205.89	208.44	198.10	206.43	222.93	229.94
MEAN	8.14	8.08	7.85	7.44	7.16	7.06	6.86	6.72	6.60	6.66	7.19	7.66
MAX	8.32	8.20	7.93	7.75	7.39	7.15	7.00	7.09	6.82	7.01	7.25	7.99
MIN	8.03	7.95	7.75	7.13	7.05	6.98	6.74	6.38	6.29	6.42	7.01	7.26

253828080391100 NORTHEAST SHARK RIVER SLOUGH NO. 4, NORTH OF GROSSMAN, FL

LOCATION.--Lat 25°38'24", long 80°39'10", in NW ¼ sec.4, T.54 S., R. Government Lot 6 E., Miami-Dade County, Hydrologic Unit 03090202, approximately 2.0 mi northeast of the extreme southern end of the Levee 67 extension and 11.8 mi west of Krome Avenue.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--July 1985 to current year (gage heights only).

REVISED RECORDS.--WDR FL-93-2A, 1990-1992; WDR FL-95-2A, 1994; WDR FL-96-2A, 1993, 1986-1989 (extremes only).

GAGE.--Satellite data collection platform with water-stage shaft encoder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Hurricane Andrew destroyed the gage and all reference marks in 1992. The station was rebuilt on February 19, 1993, and precise adjustments to the gage datum prior to 1993 based on Everglades National Park contractor surveys were not possible. The reader should use -0.40 to approximate this adjustment for water years prior to 1993. Land surface is approximately 5.5 ft above National Geodetic Vertical Datum of 1929. Gage is capable of recording water levels below land-surface datum.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 8.41 ft Oct. 15, 1999; minimum, indeterminate, well was dry.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 7.79 ft Oct. 1; minimum, 6.06 June 4.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.79	7.42	7.32	7.17	7.07	6.80	---	6.38	6.13	6.19	6.47	6.81
2	7.76	7.42	7.31	7.17	7.06	6.79	---	6.38	6.11	6.18	---	6.80
3	7.74	7.42	7.30	7.16	7.04	6.79	---	6.42	6.09	6.16	---	6.80
4	7.72	7.49	7.29	7.15	7.02	6.78	---	6.47	6.12	6.17	---	6.80
5	7.70	7.60	7.29	7.14	6.99	6.77	---	6.48	6.25	6.20	---	6.90
6	7.68	7.65	7.28	7.14	6.98	6.77	---	6.49	6.33	6.27	---	6.99
7	7.66	7.66	7.26	7.13	6.95	6.76	---	6.49	6.31	6.26	---	7.00
8	7.64	7.63	7.26	7.11	6.93	6.75	---	6.49	6.32	6.25	---	7.01
9	7.62	7.61	7.25	7.10	6.91	6.74	6.47	6.49	6.29	6.23	---	7.03
10	7.60	7.60	7.25	7.09	6.89	6.73	6.45	6.49	6.29	6.21	---	7.02
11	7.60	7.57	7.25	7.07	6.88	6.72	6.44	6.48	6.31	6.20	---	7.01
12	7.62	7.55	7.25	7.06	6.86	6.71	6.48	6.47	6.29	6.21	---	7.01
13	7.59	7.54	7.24	7.05	6.85	---	6.57	6.46	6.27	6.22	---	7.00
14	7.57	7.52	7.26	7.03	6.83	---	6.64	6.45	6.25	6.21	---	7.01
15	7.55	7.50	7.30	7.02	6.83	---	---	6.43	6.23	6.21	---	7.01
16	7.53	7.49	7.29	7.00	6.83	---	---	6.42	6.21	6.21	---	7.01
17	7.51	7.48	7.29	6.98	6.82	---	---	6.41	6.19	6.20	---	7.00
18	7.50	7.47	7.28	6.99	6.80	---	---	6.39	6.17	6.19	---	7.00
19	7.49	7.46	7.27	7.01	6.78	---	---	6.37	6.20	6.18	---	7.01
20	7.48	7.45	7.26	7.00	6.78	---	---	6.35	6.28	6.19	---	7.03
21	7.47	7.43	7.25	6.98	6.77	---	---	6.34	6.30	6.19	---	7.03
22	7.46	7.43	7.24	6.96	6.75	---	---	6.32	6.31	6.20	---	7.06
23	7.45	7.42	7.24	6.94	6.74	---	---	6.30	6.35	6.26	---	7.09
24	7.43	7.41	7.24	6.93	6.74	---	6.47	6.28	6.33	6.25	---	7.09
25	7.43	7.39	7.24	6.91	6.76	---	6.46	6.26	6.31	6.25	---	7.10
26	7.43	7.38	7.23	6.90	6.84	---	6.44	6.24	6.29	6.25	---	7.17
27	7.43	7.37	7.22	6.89	6.82	---	6.43	6.22	6.26	6.28	---	7.21
28	7.42	7.36	7.21	6.87	6.81	---	6.41	6.20	6.25	6.31	---	7.30
29	7.43	7.34	7.20	6.85	6.81	---	6.41	6.18	6.23	6.35	---	7.42
30	7.43	7.33	7.19	6.84	---	---	6.40	6.17	6.21	6.42	---	7.37
31	7.43	---	7.18	6.90	---	---	---	6.15	---	6.46	6.84	---
TOTAL	234.16	224.39	224.94	217.54	199.14	---	---	197.47	187.48	193.36	---	211.09
MEAN	7.55	7.48	7.26	7.02	6.87	---	---	6.37	6.25	6.24	---	7.04
MAX	7.79	7.66	7.32	7.17	7.07	---	---	6.49	6.35	6.46	---	7.42
MIN	7.42	7.33	7.18	6.84	6.74	---	---	6.15	6.09	6.16	---	6.80

253753080393600 NORTHEAST SHARK RIVER SLOUGH NO. 5, SOUTH OF GROSSMAN, FL

LOCATION.--Lat 25°37'55", long 80°39'42", in NW ¼ sec.4, T.54 S., R. Government Lot 6 E., Miami-Dade County, Hydrologic Unit 03090202, approximately 0.3 mi northeast of the extreme southern end of the Levee 67 extension levee and 11.8 mi west of Krome Avenue.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--July 1985 to current year (gage heights only).

REVISED RECORDS.--WDR FL-95-2A, 1994.

GAGE.--Satellite data collection platform with water-stage shaft encoder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Records for water years prior to 1993 were published with a datum of 0.48 ft lower. Levels were run during the 1995 water year. The gage datum was reset based on elevations provided by James Beadman and Associates, Inc. The statement in the remarks section of the 2002 and 2003 Water Resources Data Reports regarding the 1995-2000 water years was in error. The records in the database have been reverted back to the original published records. Land surface is approximately 5.2 ft above National Geodetic Vertical Datum of 1929.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 8.45 ft Oct. 15, 1999; minimum, indeterminate many days during 1989, 1990, 1991, 1992, 2001 water years when well went dry.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 7.67 ft Oct. 1; minimum, 6.00 ft June 4.

REVISIONS.--Data for water years 2000-2003 were found in error. Revised gage height record for the water years 2000-2003 are provided below.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.47	7.86	e7.65	7.38	7.14	6.95	6.57	6.52	6.32	6.63	6.73	6.68
2	7.45	7.89	e7.64	7.37	7.14	6.93	6.55	6.51	6.32	6.63	6.77	6.68
3	7.44	7.87	e7.62	7.36	7.14	6.93	6.53	6.50	6.33	6.67	6.80	6.67
4	7.44	7.85	e7.62	7.35	7.14	6.92	6.51	6.48	6.36	6.66	6.80	6.65
5	7.45	7.84	e7.63	7.34	7.13	6.92	6.48	6.47	6.41	6.65	6.77	6.64
6	7.44	7.82	7.61	7.34	7.12	6.91	6.46	6.46	6.41	6.64	6.80	6.64
7	7.47	7.81	7.59	7.32	7.12	6.90	6.44	6.45	6.44	6.67	6.86	6.65
8	7.50	7.80	7.59	7.31	7.12	6.89	6.44	6.44	6.47	6.65	6.85	6.64
9	7.56	7.79	7.60	7.30	7.16	6.88	6.45	6.44	6.53	6.71	6.82	6.63
10	7.55	7.78	7.62	7.29	7.15	6.87	6.42	6.43	6.58	6.79	6.79	6.67
11	7.52	7.78	7.61	7.28	7.14	6.88	6.41	6.44	6.61	6.78	6.77	6.67
12	7.51	7.77	7.60	7.27	7.14	6.89	6.40	6.43	6.63	6.78	6.75	6.67
13	7.49	7.76	7.59	7.25	7.13	6.86	6.45	6.42	6.60	6.79	6.72	6.68
14	7.57	7.75	7.58	7.24	7.13	6.85	6.66	6.41	6.58	6.76	6.70	6.67
15	8.05	7.74	7.57	7.22	7.12	6.83	6.72	6.40	6.55	6.75	6.69	6.69
16	8.37	7.74	7.55	7.21	7.11	6.81	6.72	6.40	6.53	6.74	6.70	6.69
17	8.30	7.73	7.54	7.20	7.10	6.80	6.72	6.40	6.50	6.75	6.69	6.70
18	8.25	7.73	7.53	7.19	7.09	6.78	6.71	6.38	6.49	6.76	6.68	6.73
19	8.21	7.72	7.52	7.19	7.08	6.78	6.71	6.37	6.46	6.73	6.66	6.73
20	8.16	7.72	7.51	7.18	7.07	6.77	6.69	6.35	6.46	6.70	6.65	6.77
21	8.12	7.72	7.50	7.17	7.05	6.75	6.68	6.33	6.52	6.73	6.64	6.75
22	8.08	7.71	7.49	7.16	7.04	6.74	6.66	6.32	6.51	6.85	6.64	6.74
23	8.04	7.71	7.48	7.15	7.03	6.72	6.64	6.30	6.51	6.80	6.63	6.72
24	8.00	7.71	7.46	7.18	7.01	6.70	6.63	6.29	6.52	6.80	6.61	6.70
25	7.97	7.72	7.44	7.18	7.00	6.68	6.61	6.30	6.54	6.82	6.60	6.68
26	7.95	e7.73	7.43	7.17	6.99	6.66	6.60	6.33	6.55	6.79	6.63	6.71
27	7.93	e7.71	7.42	7.16	6.98	6.65	6.58	6.31	6.58	6.80	6.63	6.76
28	7.91	e7.70	7.41	7.15	6.97	6.64	6.56	6.30	6.58	6.83	6.62	6.74
29	7.91	e7.68	7.40	7.15	6.96	6.62	6.55	6.29	6.59	6.79	6.61	6.75
30	7.89	e7.67	7.40	7.15	---	6.60	6.54	6.28	6.64	6.76	6.64	6.82
31	7.88	---	7.39	7.15	---	6.59	---	6.30	---	6.75	6.67	---
TOTAL	241.88	232.81	233.59	224.36	205.50	210.70	197.09	198.05	195.12	208.96	207.92	200.92
MEAN	7.80	7.76	7.54	7.24	7.09	6.80	6.57	6.39	6.50	6.74	6.71	6.70
MAX	8.37	7.89	7.65	7.38	7.16	6.95	6.72	6.52	6.64	6.85	6.86	6.82
MIN	7.44	7.67	7.39	7.15	6.96	6.59	6.40	6.28	6.32	6.63	6.60	6.63

e Estimated

REVISED

253753080393600 NORTHEAST SHARK RIVER SLOUGH NO. 5, SOUTH OF GROSSMAN, FL-Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.87	6.99	6.70	6.56	6.27	5.96	5.90	---	---	5.81	6.33	6.85
2	6.88	6.98	6.69	6.55	6.26	5.94	5.87	---	5.64	5.79	6.54	6.86
3	7.24	6.96	6.68	6.53	6.25	5.92	5.83	---	5.62	5.76	6.62	6.88
4	7.78	6.95	6.67	6.53	6.24	5.93	5.79	---	5.62	5.75	6.63	6.92
5	7.70	6.94	6.66	6.51	6.23	6.05	5.76	---	5.65	5.73	6.62	6.93
6	7.65	6.94	6.65	6.50	6.22	6.02	5.73	---	5.72	5.71	6.65	6.96
7	7.61	6.93	6.64	6.49	6.21	6.00	5.70	---	5.73	5.75	6.63	6.98
8	7.57	6.92	6.63	6.48	6.20	5.97	5.68	---	5.73	5.84	6.62	6.99
9	7.52	6.91	6.62	6.47	6.19	5.95	5.64	---	5.77	5.84	6.60	7.02
10	7.48	6.90	6.73	6.45	6.18	5.94	5.61	---	5.82	5.85	6.58	7.08
11	7.44	6.89	6.86	6.45	6.17	5.92	5.58	---	5.82	5.86	6.62	7.13
12	7.41	6.88	6.83	6.43	6.16	5.90	5.55	---	5.80	5.89	6.66	7.19
13	7.38	6.87	6.81	6.42	6.15	5.88	5.51	---	5.79	5.87	6.64	7.18
14	7.34	6.86	6.79	6.41	6.14	5.87	5.47	---	5.79	5.87	6.64	7.26
15	7.31	6.85	6.78	6.41	6.13	5.84	5.42	---	5.77	5.97	6.66	7.27
16	7.28	6.83	6.76	6.40	6.11	5.83	5.36	---	5.76	6.00	6.66	7.22
17	7.25	6.83	6.75	6.39	6.10	5.81	5.30	---	5.75	6.02	6.68	7.20
18	7.22	6.82	6.73	6.38	6.09	5.84	5.22	---	5.74	6.10	6.68	7.20
19	7.20	6.81	6.71	6.37	6.07	5.87	5.15	---	5.73	6.12	6.68	7.19
20	7.18	6.80	6.70	6.40	6.06	5.94	---	---	5.72	6.13	6.69	7.17
21	7.16	6.79	6.68	6.39	6.05	5.91	---	---	5.70	6.19	6.72	7.14
22	7.14	6.77	6.67	6.38	6.03	5.88	---	---	5.72	6.27	6.75	7.11
23	7.12	6.77	6.66	6.37	6.02	5.85	---	---	5.76	6.29	6.78	7.09
24	7.10	6.76	6.65	6.36	6.01	5.82	---	---	5.76	6.30	6.78	7.06
25	7.09	6.75	6.64	6.35	5.99	5.80	---	---	5.74	6.29	6.79	7.04
26	7.07	6.75	6.63	6.33	5.98	5.77	---	---	5.73	6.29	6.81	7.05
27	7.06	6.74	6.61	6.32	5.97	5.75	---	---	5.72	6.27	6.82	7.10
28	7.04	6.73	6.60	6.31	5.96	5.73	---	---	5.81	6.26	6.83	7.20
29	7.03	6.72	6.60	6.30	---	5.76	---	---	5.86	6.25	6.83	7.46
30	7.01	6.71	6.59	6.29	---	5.95	---	---	5.84	6.24	6.84	7.49
31	7.00	---	6.57	6.28	---	5.92	---	---	---	6.22	6.84	---
TOTAL	225.13	205.35	207.29	198.81	171.44	182.52	---	---	---	186.53	207.22	213.22
MEAN	7.26	6.84	6.69	6.41	6.12	5.89	---	---	---	6.02	6.68	7.11
MAX	7.78	6.99	6.86	6.56	6.27	6.05	---	---	---	6.30	6.84	7.49
MIN	6.87	6.71	6.57	6.28	5.96	5.73	---	---	---	5.71	6.33	6.85

REVISED

253753080393600 NORTHEAST SHARK RIVER SLOUGH NO. 5, SOUTH OF GROSSMAN, FL-Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.45	7.32	7.00	6.90	6.53	6.52	6.55	6.21	6.09	6.84	6.92	e7.11
2	7.41	7.30	6.99	6.90	6.52	6.52	6.57	6.19	6.08	6.83	6.96	7.11
3	7.38	7.29	6.99	6.91	6.51	6.52	6.63	6.17	6.08	6.83	6.96	7.13
4	7.35	7.29	6.98	6.88	6.50	6.52	6.65	6.15	6.06	6.81	6.96	7.18
5	7.32	7.35	6.96	6.86	6.48	6.51	6.63	6.13	6.05	6.81	6.95	7.22
6	7.32	7.33	6.99	6.85	6.47	6.51	6.61	6.11	6.05	6.82	6.95	7.25
7	7.30	7.30	7.02	6.84	6.45	6.52	6.59	6.09	6.11	6.84	6.95	7.22
8	7.28	7.28	7.01	6.81	6.44	6.55	6.58	e6.07	6.17	6.86	6.95	7.20
9	7.28	7.26	7.08	6.79	6.45	6.56	6.57	6.05	6.17	6.94	6.95	7.19
10	7.28	7.24	7.12	6.78	6.53	6.57	6.55	6.03	6.17	7.01	6.94	7.20
11	7.25	7.22	7.10	6.76	6.53	6.57	6.54	6.01	6.25	7.05	6.97	7.21
12	7.22	7.21	7.09	6.75	6.52	6.58	6.53	5.99	6.30	7.05	7.04	7.24
13	7.20	7.19	7.09	6.74	6.51	6.58	6.51	5.98	6.31	7.06	7.04	7.24
14	7.18	7.18	7.09	6.73	6.51	6.58	6.50	5.98	6.31	7.04	7.04	7.23
15	7.17	7.16	7.09	6.72	6.49	6.58	6.49	5.96	6.50	7.03	7.04	7.22
16	7.15	7.15	7.07	6.71	6.49	6.59	6.48	e5.94	6.68	7.02	7.04	7.20
17	7.14	7.14	7.07	6.69	6.49	6.59	6.47	5.93	6.68	7.05	7.03	7.18
18	7.14	7.13	7.05	6.68	6.48	6.59	6.45	5.91	6.68	7.06	7.02	7.17
19	7.20	7.12	7.04	6.67	6.47	6.59	6.44	5.93	6.68	7.06	7.01	7.15
20	7.21	7.11	7.02	6.66	6.46	6.58	6.41	6.00	6.73	7.04	7.05	7.15
21	7.32	7.09	7.00	6.65	6.45	6.58	6.40	6.00	6.87	7.02	7.09	7.15
22	7.46	7.08	6.98	6.65	6.44	6.57	6.38	5.99	6.84	7.00	7.07	7.14
23	7.43	7.07	6.96	6.63	6.55	6.57	6.36	5.97	6.84	6.99	7.07	7.19
24	7.42	7.06	6.94	6.62	6.56	6.57	6.34	5.95	6.82	6.98	7.07	7.29
25	7.42	7.05	6.93	6.61	6.55	6.57	6.33	5.93	6.84	6.98	7.05	7.27
26	7.43	7.04	6.93	6.60	6.54	6.58	6.31	5.91	6.86	6.97	7.03	7.24
27	7.42	7.03	6.91	6.59	6.53	6.61	6.29	5.90	6.83	6.96	7.03	7.22
28	7.40	7.02	6.90	6.57	6.52	6.60	6.27	5.95	6.81	6.94	7.05	7.22
29	7.37	7.02	6.88	6.56	---	6.58	6.25	5.98	6.79	6.93	7.09	7.20
30	7.35	7.00	6.86	6.55	---	6.57	6.23	6.01	6.80	6.93	7.10	7.19
31	7.33	---	6.87	6.54	---	6.56	---	6.09	---	6.92	7.11	---
TOTAL	226.58	215.03	217.01	208.20	181.97	203.49	193.91	186.51	194.45	215.67	217.53	215.91
MEAN	7.31	7.17	7.00	6.72	6.50	6.56	6.46	6.02	6.48	6.96	7.02	7.20
MAX	7.46	7.35	7.12	6.91	6.56	6.61	6.65	6.21	6.87	7.06	7.11	7.29
MIN	7.14	7.00	6.86	6.54	6.44	6.51	6.23	5.90	6.05	6.81	6.92	7.11

e Estimated

REVISED

253753080393600 NORTHEAST SHARK RIVER SLOUGH NO. 5, SOUTH OF GROSSMAN, FL-Continued

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.19	7.06	6.85	6.68	6.55	6.46	6.43	6.53	6.83	7.12	7.12	7.36
2	7.17	7.04	6.84	6.68	6.54	6.46	6.42	6.55	6.81	7.11	7.16	7.35
3	7.16	7.04	6.82	6.70	6.54	6.45	6.41	6.58	6.79	7.11	7.18	7.35
4	7.15	7.03	6.81	6.70	6.53	6.44	6.40	6.58	6.78	7.12	7.18	7.36
5	7.14	7.02	6.79	6.68	6.53	6.43	6.40	6.58	6.78	7.11	7.17	7.36
6	7.14	7.02	6.78	6.68	6.53	6.42	6.39	6.56	6.86	7.09	7.17	7.38
7	7.13	7.01	6.76	6.66	6.52	6.41	---	6.55	7.02	7.07	7.17	7.38
8	7.11	7.00	6.75	6.66	6.52	6.40	6.33	6.53	7.00	7.05	7.27	7.38
9	7.10	6.99	6.81	6.65	6.52	6.40	6.36	6.51	7.00	7.03	7.23	7.37
10	7.09	6.98	6.98	6.64	6.51	6.39	6.35	6.50	7.02	7.01	7.24	7.36
11	7.08	6.97	6.97	6.64	6.50	6.39	6.33	6.48	6.97	6.99	7.23	7.35
12	7.09	6.96	6.96	6.63	6.49	6.38	6.32	6.47	6.96	6.97	7.25	7.34
13	7.09	6.96	6.95	6.62	6.48	6.37	6.31	6.45	6.95	6.96	7.23	7.36
14	7.09	---	6.93	6.63	6.48	6.37	6.30	6.44	6.93	6.94	7.26	7.37
15	7.09	6.93	6.90	6.62	6.47	6.36	6.29	6.43	6.94	6.95	7.28	7.37
16	7.14	6.96	6.87	6.62	6.46	6.38	6.28	6.42	6.96	6.99	7.25	7.37
17	7.15	7.16	6.85	6.61	6.46	6.44	6.29	6.41	6.94	7.05	7.24	7.39
18	7.14	7.13	6.84	6.60	6.46	6.44	6.34	6.40	6.95	7.04	7.23	7.48
19	7.13	7.10	6.82	6.60	6.45	6.43	6.32	6.41	6.95	7.05	7.22	7.48
20	7.15	7.08	6.81	6.60	6.46	6.42	6.30	6.40	6.96	7.07	7.24	7.45
21	7.20	7.06	6.79	6.59	6.47	6.43	6.29	6.38	6.97	7.06	7.29	7.45
22	7.18	---	6.77	6.59	6.47	6.47	6.28	6.37	7.19	7.09	7.30	7.42
23	7.16	---	6.76	6.58	6.50	6.47	6.26	6.38	7.26	7.07	7.30	7.40
24	7.14	6.99	6.75	6.58	6.49	6.46	6.25	6.46	7.26	7.05	7.30	7.39
25	7.13	6.97	6.75	6.57	6.49	6.44	6.24	6.69	7.26	7.04	7.29	7.44
26	---	6.95	6.74	6.57	6.49	6.43	6.28	6.69	7.23	7.05	7.28	7.53
27	7.13	6.93	6.73	6.57	6.48	6.46	6.34	6.69	7.20	7.05	7.28	7.52
28	7.11	---	6.72	6.56	6.48	6.49	6.34	6.78	7.19	7.04	7.32	7.51
29	7.10	---	6.70	6.56	---	6.44	6.36	6.88	7.17	7.05	7.36	7.60
30	7.08	6.87	6.69	6.56	---	---	6.43	6.88	7.15	7.05	7.37	7.67
31	7.07	---	6.68	6.56	---	---	---	6.86	---	7.06	7.36	---
TOTAL	---	---	211.17	205.19	181.87	---	---	202.84	210.28	218.44	224.77	222.54
MEAN	---	---	6.81	6.62	6.50	---	---	6.54	7.01	7.05	7.25	7.42
MAX	---	---	6.98	6.70	6.55	---	---	6.88	7.26	7.12	7.37	7.67
MIN	---	---	6.68	6.56	6.45	---	---	6.37	6.78	6.94	7.12	7.34

REVISED

253753080393600 NORTHEAST SHARK RIVER SLOUGH NO. 5, SOUTH OF GROSSMAN, FL-Continued

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.66	7.36	7.26	7.12	7.00	6.72	6.50	6.30	6.06	6.13	6.37	6.76
2	7.66	7.35	7.25	7.11	7.00	6.72	6.48	6.31	6.04	6.11	6.52	6.74
3	7.64	7.35	7.24	7.10	6.97	6.71	6.46	6.35	6.02	6.11	6.64	6.73
4	7.64	7.40	7.24	7.10	6.95	6.70	6.45	6.38	6.04	6.14	6.73	6.74
5	7.62	7.48	7.23	7.09	6.93	6.69	6.44	6.38	6.15	6.19	6.72	6.83
6	7.60	7.55	7.22	7.08	6.91	6.68	6.42	6.38	6.26	6.25	6.74	6.91
7	7.58	7.59	7.21	7.06	6.89	6.68	6.41	6.38	6.24	6.22	6.76	6.93
8	7.57	7.56	7.20	7.05	6.86	6.67	6.40	6.38	6.25	6.21	6.80	6.94
9	7.54	7.54	7.20	7.04	6.84	6.66	6.38	6.38	6.22	6.19	6.80	6.95
10	7.53	7.52	7.19	7.03	6.82	6.64	6.37	6.38	6.24	6.17	6.77	6.96
11	7.53	7.50	7.20	7.02	6.81	6.64	6.36	6.38	6.25	6.15	6.76	6.95
12	7.54	7.48	7.19	7.00	6.79	6.62	6.40	6.38	6.23	6.17	6.75	6.94
13	7.51	7.47	7.18	6.98	6.78	6.62	6.50	6.37	6.21	6.19	6.74	6.94
14	7.50	7.45	7.20	6.97	6.76	6.61	6.57	6.35	6.18	6.17	6.76	6.94
15	7.48	7.44	7.24	6.96	6.76	6.61	6.54	6.34	6.16	6.17	6.85	6.94
16	7.46	7.42	7.24	6.94	6.76	6.61	6.52	6.33	6.15	6.17	6.85	6.94
17	7.41	7.41	7.24	6.93	6.74	6.60	6.50	6.31	6.13	6.16	6.82	6.94
18	---	7.40	7.22	6.93	6.72	6.60	6.48	6.30	6.12	6.15	6.79	6.94
19	7.42	7.39	7.21	6.95	6.71	6.58	6.47	6.28	6.14	6.14	6.79	6.95
20	7.41	7.38	7.20	6.94	6.70	6.58	6.45	6.26	6.18	6.14	6.78	6.98
21	7.40	7.37	7.19	6.92	6.69	6.57	6.44	6.25	6.22	6.15	6.76	6.98
22	---	7.36	7.18	6.90	6.68	6.56	6.42	6.23	6.26	6.15	6.76	7.01
23	7.38	7.35	7.18	6.88	6.66	6.55	6.41	6.21	6.31	6.17	6.77	7.04
24	7.37	7.34	7.18	6.86	6.66	6.54	6.39	6.19	6.27	6.17	6.76	7.04
25	7.36	7.33	7.18	6.85	6.68	6.53	6.38	6.18	6.24	6.18	6.78	7.05
26	7.36	7.32	7.17	6.83	6.76	6.55	6.37	6.16	6.21	6.19	6.84	7.11
27	7.36	7.31	7.16	6.82	6.75	6.55	6.35	6.14	6.19	6.22	6.86	7.16
28	7.35	7.30	7.16	6.81	6.74	6.54	6.34	6.13	6.18	6.23	6.86	7.23
29	7.36	7.29	7.14	6.79	6.73	6.53	6.33	6.11	6.17	6.26	6.83	7.36
30	7.36	7.27	7.14	6.78	---	6.52	6.32	6.09	6.15	6.31	6.80	7.32
31	7.36	---	7.13	6.83	---	6.51	---	6.08	---	6.36	6.77	---
TOTAL	---	222.28	223.17	215.67	197.05	204.89	192.85	194.69	185.47	191.72	209.53	209.25
MEAN	---	7.41	7.20	6.96	6.79	6.61	6.43	6.28	6.18	6.18	6.76	6.97
MAX	---	7.59	7.26	7.12	7.00	6.72	6.57	6.38	6.31	6.36	6.86	7.36
MIN	---	7.27	7.13	6.78	6.66	6.51	6.32	6.08	6.02	6.11	6.37	6.73

02290710 BLACK CREEK CANAL AT S-21, NEAR GOULDS, FL

LOCATION.--Lat 25°32'34", long 80°19'52", in NE ¼ sec.21, T.56 S., R.40 E., Dade County, Hydrologic Unit 03090202, in control house of salinity-control structure S-21, 0.5 mi upstream from mouth, and 3.5 mi east of Goulds.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--March 1957 to October 1969 (gage heights only), November 1969 to September 1977, October 1978 to September 2004. Discontinued.

REVISED RECORDS.--WDR FL-89-2A, 1988; WDR FL-01-2A, 2000.

GAGE.--Electronic data loggers for upstream and downstream stages and electronic data logger with shaft encoders for gate operation. Datum of gage is National Geodetic Vertical Datum of 1929 (Dade County bench mark). Prior to August 9, 1960, water-stage recorder at site 270 ft upstream in north lateral borrow canal, and April 9, 1960 to July 8, 1968, at site 810 ft upstream in north lateral borrow canal, all at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow is regulated by the operation of salinity-control structure S-21 and by some upstream pumpage for irrigation. Downstream stage is basically tidal, but at times is affected by gate operation. Starting in the 2002 water year, the downstream stage record published is the maximum and minimum stage for each calendar day. Prior to the 2002 water year, the daily mean for the downstream stage was published. Discharge computed from relation between head, discharges and gate-openings at structure S-21. Records of gage heights prior to October 1962, are available in files of the U.S. Geological Survey. Discharge occurring under submerged weir flow conditions is considered estimated.

COOPERATION.--Supplementary gate-opening record and gage-height record provided by the South Florida Water Management District.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 23 complete water years of discharge (1971-77, 1979-90, 1995, 1998, 2002, 2004).

EXTREME UPSTREAM STAGES FOR PERIOD OF RECORD.--Maximum gage height, 10.17 ft Aug. 24, 1992; minimum, -1.09 ft Aug. 24, 1992.

EXTREME UPSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 3.07 ft Nov. 11; minimum, 0.27 ft Aug. 4.

EXTREME DOWNSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 2.92 ft Nov. 10, 11; minimum, -0.92 ft Mar. 31.

UPSTREAM
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.90	2.12	1.92	2.36	1.67	2.10	2.23	2.03	2.04	1.75	2.29	1.73
2	1.93	2.13	1.89	2.08	1.84	2.10	2.21	2.32	2.01	1.72	2.01	1.73
3	2.03	2.07	1.98	2.20	1.73	2.33	2.19	2.05	1.98	1.77	1.81	1.64
4	2.23	2.16	2.04	2.26	1.65	2.03	2.17	1.89	1.96	1.82	1.32	1.78
5	2.19	2.15	2.11	2.29	1.73	2.29	2.16	2.11	1.93	1.82	1.51	1.66
6	2.18	2.14	2.15	2.29	1.72	1.99	2.14	2.13	1.92	1.82	1.53	1.59
7	2.19	1.70	2.15	2.30	1.93	2.21	2.13	2.14	1.91	1.81	1.51	1.63
8	2.10	1.78	2.16	2.29	1.93	2.11	2.13	2.22	1.90	1.78	1.60	1.59
9	2.15	1.77	2.17	2.28	1.79	2.19	2.12	1.98	1.90	1.75	1.94	1.64
10	2.17	1.90	2.24	2.29	1.84	2.10	2.11	2.22	1.96	1.72	2.11	1.67
11	2.14	2.44	2.10	2.28	1.93	2.15	2.10	2.14	1.97	1.70	1.82	1.69
12	2.09	2.24	2.13	2.25	1.87	2.27	2.15	2.14	1.97	1.71	1.62	1.72
13	2.03	1.87	2.23	2.24	1.98	2.31	2.26	2.10	1.96	1.75	1.69	1.75
14	1.99	2.12	2.11	2.24	1.86	2.33	2.09	2.30	1.95	1.83	1.82	1.61
15	2.01	2.11	2.18	2.23	1.85	2.35	2.17	2.22	1.91	1.83	1.80	1.70
16	2.08	2.09	2.23	2.21	2.02	1.95	2.23	1.99	1.89	1.84	1.94	1.76
17	2.06	2.08	2.10	2.20	1.87	2.16	2.24	2.23	1.88	1.92	1.92	1.76
18	2.07	2.07	2.29	2.23	1.99	2.23	2.24	2.30	1.86	1.97	1.94	1.77
19	2.09	2.13	2.08	2.31	1.98	2.26	2.24	2.32	1.84	2.08	1.92	1.67
20	2.02	2.08	2.22	2.31	2.12	2.27	2.23	2.33	1.84	2.25	1.92	1.97
21	2.00	2.10	2.30	2.31	2.13	2.27	2.21	2.32	1.84	2.30	1.88	2.14
22	1.99	2.11	2.30	2.03	2.14	2.28	2.19	2.30	1.83	2.31	1.81	2.11
23	2.09	2.16	2.01	2.09	2.14	2.27	2.17	2.28	1.81	2.30	1.77	2.03
24	2.12	2.10	2.27	2.15	2.13	2.26	2.16	2.26	1.78	2.29	1.80	1.76
25	2.10	2.06	2.30	2.17	2.19	2.26	2.15	2.23	1.76	2.05	1.98	1.73
26	2.14	1.99	1.97	2.18	2.05	2.27	2.12	2.20	1.74	2.14	2.05	1.78
27	2.07	1.98	2.24	2.20	2.09	2.27	2.11	2.17	1.72	2.05	2.10	1.75
28	2.04	1.94	2.31	2.21	1.97	2.26	2.16	2.14	1.70	2.10	2.14	1.72
29	1.93	1.89	2.34	2.19	2.18	2.25	2.26	2.12	1.75	2.09	2.12	1.69
30	2.01	1.91	2.34	1.78	---	2.24	2.29	2.10	1.76	2.28	2.13	1.68
31	2.15	---	2.35	1.79	---	2.24	---	2.07	---	2.04	1.95	---
TOTAL	64.29	61.39	67.21	68.24	56.32	68.60	65.36	67.35	56.27	60.59	57.75	52.45
MEAN	2.07	2.05	2.17	2.20	1.94	2.21	2.18	2.17	1.88	1.95	1.86	1.75
MAX	2.23	2.44	2.35	2.36	2.19	2.35	2.29	2.33	2.04	2.31	2.29	2.14
MIN	1.90	1.70	1.89	1.78	1.65	1.95	2.09	1.89	1.70	1.70	1.32	1.59

02290710 BLACK CREEK CANAL AT S-21, NEAR GOULDS, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	935	429	464	0.00	490	168	0.00	103	0.00	0.00	0.00	745
2	851	413	481	101	570	0.00	0.00	0.00	0.00	2.4	307	561
3	598	396	290	0.00	582	0.00	0.00	145	0.00	0.00	400	591
4	282	402	0.00	0.00	546	123	0.00	204	0.00	0.00	580	554
5	421	433	0.00	0.00	486	0.00	0.00	110	0.00	0.00	1,080	741
6	385	769	0.00	0.00	523	144	0.00	100	0.00	0.00	1,090	660
7	392	954	0.00	0.00	368	0.00	0.00	103	0.00	0.00	1,010	752
8	487	718	0.00	0.00	482	110	0.00	7.9	0.00	0.00	888	926
9	496	687	0.00	0.00	412	0.00	0.00	139	0.00	0.00	752	841
10	533	523	0.00	0.00	435	108	0.00	92	0.00	0.00	756	761
11	536	342	97	0.00	468	0.00	0.00	0.00	0.00	0.00	852	701
12	541	493	0.00	11	360	0.00	0.00	143	0.00	0.00	755	637
13	539	626	0.00	0.00	392	0.00	0.00	0.00	0.00	0.00	612	599
14	532	607	108	0.00	408	0.00	102	0.00	0.00	0.00	629	480
15	482	649	0.00	0.00	415	0.00	0.00	122	4.7	0.00	584	495
16	454	662	102	0.00	316	145	0.00	16	0.00	0.00	544	487
17	456	626	3.3	0.00	441	0.00	0.00	0.00	0.00	0.00	584	512
18	432	578	0.00	0.00	289	0.00	0.00	0.00	0.00	0.00	579	508
19	434	610	92	0.00	243	0.00	0.00	0.00	0.00	0.00	581	572
20	458	602	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	580	387
21	444	513	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	594	441
22	430	479	62	128	0.00	0.00	0.00	0.00	0.00	0.00	606	423
23	384	438	47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	608	625
24	204	491	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	641	e884
25	91	523	74	0.00	65	0.00	0.00	0.00	0.00	162	778	e925
26	187	545	63	0.00	176	0.00	0.00	0.00	0.00	0.00	959	862
27	428	507	0.00	0.00	125	0.00	0.00	0.00	0.00	174	878	763
28	434	537	0.00	0.00	184	0.00	0.00	0.00	0.00	0.00	806	898
29	481	529	0.00	0.00	0.00	0.00	0.00	0.00	0.00	124	781	1,080
30	393	489	0.30	226	---	0.00	23	0.00	0.00	0.00	762	1,010
31	350	---	0.00	156	---	0.00	---	0.00	---	120	800	---
TOTAL	14,070	16,570	1,883.60	622.00	8,776.00	798.00	125.00	1,284.90	4.70	582.40	21,376.00	20,421
MEAN	454	552	60.8	20.1	303	25.7	4.17	41.4	0.16	18.8	690	681
MAX	935	954	481	226	582	168	102	204	4.7	174	1,090	1,080
MIN	91	342	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	387
AC-FT	27,910	32,870	3,740	1,230	17,410	1,580	248	2,550	9.3	1,160	42,400	40,510

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2004, BY WATER YEAR (WY)

MEAN	291	174	110	101	98.9	70.9	47.1	93.2	262	218	311	361
MAX	1,059	682	643	1,180	833	508	236	519	1,151	880	717	791
(WY)	(1995)	(1995)	(1995)	(1995)	(1995)	(1998)	(1982)	(2003)	(1983)	(2002)	(1995)	(1981)
MIN	46.0	26.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.65	40.3
(WY)	(1990)	(1985)	(1985)	(1971)	(1971)	(1971)	(1971)	(1971)	(1974)	(1981)	(1987)	(1989)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1970 - 2004

ANNUAL TOTAL	137,172.20	86,513.60	
ANNUAL MEAN	376	236	174
HIGHEST ANNUAL MEAN			600
LOWEST ANNUAL MEAN			33.0
HIGHEST DAILY MEAN	1,530	1,090	2,340
LOWEST DAILY MEAN	0.00	0.00	-384
ANNUAL SEVEN-DAY MINIMUM	0.00	0.00	-94
ANNUAL RUNOFF (AC-FT)	272,100	171,600	126,300
10 PERCENT EXCEEDS	719	661	512
50 PERCENT EXCEEDS	406	9.4	81
90 PERCENT EXCEEDS	0.00	0.00	0.00

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

022907647 LEVEE 31 NORTH EXTENSION AT 1 MILE NEAR WEST MIAMI, FL

LOCATION.--Lat 25°44'53", long 80°29'53", in SE 1/4 sec. 35, T.54 S., R.38 E., Miami-Dade County, Hydrologic Unit 03090202, (South Miami NW quadrangle), 0.5 mi west of intersection of U.S. Highway 41 and Krome Avenue, and 1.0 mi south of U.S. Highway 41 on the west side of Levee 31 North.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1989 to November 1990, (gage heights only). February 1992 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic velocity meter until July 9, 2004, when it was removed. Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter installed May 6, 2004. The acoustic velocity meter and acoustic doppler velocity meter were run in tandem for the period of May 6, 2004 to July 9, 2004. Datum of gage is 0.10 ft below National Geodetic Vertical Datum of 1929 (FCE bench mark).

REMARKS.--Records poor. Discharge computed from relations between stage vs. area and index velocity vs. mean channel velocity. Flow is the sum of regulation from upstream control structures S-334, S-335, and S-336 and from levee seepage and rainfall. Positive flow is to the south and may reverse for short periods. Datum of gage is based upon an adjustment to the RM elevation.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 6 complete water years of discharge (1997-2001, 2004).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 8.17 ft Oct. 15, 1999; minimum, 2.33 ft May 23, 1990.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 6.60 ft Sept. 29; minimum, 3.86 ft May 25.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.51	6.04	5.95	6.02	6.11	6.11	5.72	5.67	4.32	4.32	5.52	5.88
2	6.45	6.04	5.99	6.01	6.08	6.10	5.69	5.64	4.25	4.47	5.92	5.78
3	6.41	6.03	5.99	6.00	6.07	6.09	5.65	5.68	4.19	4.52	6.02	5.77
4	6.42	6.04	5.97	6.00	6.08	6.07	5.61	5.91	4.17	4.68	6.01	5.81
5	6.43	6.17	5.94	6.06	6.07	6.06	5.58	5.80	4.31	4.80	5.97	6.00
6	6.41	6.15	5.96	6.15	6.06	6.07	5.50	---	4.35	4.79	6.08	6.12
7	6.38	6.11	5.97	6.15	6.05	6.07	5.50	5.77	4.36	4.75	6.06	6.14
8	6.35	6.10	5.97	6.15	6.02	6.06	5.47	5.77	4.36	4.81	6.08	5.94
9	6.32	6.11	5.98	6.14	---	6.03	5.41	5.79	4.35	---	6.09	5.88
10	6.29	6.10	6.01	6.13	5.99	6.01	5.35	---	4.39	4.74	6.08	5.83
11	6.28	6.09	6.01	6.11	5.97	5.85	5.36	5.65	4.57	4.74	6.06	5.92
12	6.25	6.06	5.99	6.09	5.95	5.82	5.40	5.51	4.57	4.77	6.00	6.13
13	6.23	6.03	5.98	6.07	5.93	5.84	5.59	---	4.58	4.84	5.98	6.09
14	6.15	6.04	6.01	6.07	5.94	5.83	5.83	5.39	4.50	4.81	6.05	6.06
15	6.10	6.02	6.05	6.08	5.98	5.95	5.78	5.35	---	4.81	6.02	6.06
16	6.10	6.02	6.05	6.07	5.99	6.04	5.71	5.34	4.42	4.94	6.02	6.05
17	6.07	6.01	6.06	6.07	5.97	5.89	5.77	5.26	4.37	4.98	6.02	6.02
18	6.08	6.00	6.04	6.08	5.94	5.79	5.74	5.17	4.32	5.00	6.02	6.00
19	6.11	5.99	6.05	6.08	5.90	5.82	5.70	5.09	4.31	5.00	5.94	5.99
20	6.09	5.98	6.03	6.08	5.94	5.86	5.67	5.02	4.35	5.03	5.90	6.03
21	6.06	6.00	6.03	6.08	6.00	5.85	5.63	4.97	4.49	4.78	5.86	6.11
22	6.05	5.97	6.04	6.09	6.03	5.79	5.59	5.01	4.74	4.76	5.89	6.20
23	6.03	5.97	6.06	6.08	6.03	5.78	5.55	4.99	4.67	4.70	5.99	6.19
24	6.02	5.96	5.95	6.07	6.02	5.86	5.51	4.56	4.58	4.66	6.00	---
25	6.04	5.97	5.81	6.08	5.98	5.85	5.47	3.97	---	4.70	6.06	6.07
26	6.03	5.95	5.80	6.07	6.10	5.89	5.42	4.53	4.42	4.81	6.04	6.08
27	6.01	5.80	5.74	6.07	6.12	5.88	5.45	4.32	4.34	4.90	6.02	6.07
28	5.98	5.89	5.70	6.06	6.11	5.85	5.71	4.41	4.27	5.35	6.04	6.22
29	6.03	5.96	5.69	6.04	6.11	5.82	5.83	4.49	4.29	5.38	6.02	6.40
30	6.06	5.93	5.68	6.04	---	5.79	---	4.40	4.29	5.41	5.99	6.06
31	6.06	---	5.84	6.13	---	5.75	---	4.41	---	5.43	5.94	---
TOTAL	191.80	180.53	184.34	188.42	---	183.47	---	---	---	---	185.69	---
MEAN	6.19	6.02	5.95	6.08	---	5.92	---	---	---	---	5.99	---
MAX	6.51	6.17	6.06	6.15	---	6.11	---	---	---	---	6.09	---
MIN	5.98	5.80	5.68	6.00	---	5.75	---	---	---	---	5.52	---

022907647 LEVEE 31 NORTH EXTENSION AT 1 MILE NEAR WEST MIAMI, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	261	739	847	244	246	270	256	327	331	366	e35	310
2	288	724	847	252	258	279	255	322	324	423	107	299
3	270	738	848	265	251	270	256	318	330	414	119	356
4	254	659	860	267	282	256	257	262	329	416	246	244
5	241	459	873	226	279	303	265	177	313	424	241	368
6	246	306	835	175	271	401	261	e158	323	412	249	369
7	244	339	822	162	281	385	260	132	347	415	256	383
8	247	337	811	162	272	379	251	128	353	446	286	246
9	257	341	813	198	e291	370	294	99	331	e432	306	297
10	241	398	749	155	285	371	292	e32	342	406	312	299
11	293	436	709	168	282	379	286	189	303	405	272	346
12	298	554	711	188	289	382	299	294	306	432	279	451
13	274	700	712	174	283	369	247	e283	280	433	e131	455
14	257	717	697	173	261	383	126	294	284	414	197	424
15	326	734	701	189	258	289	134	290	e316	398	224	424
16	333	757	700	189	261	188	185	283	332	394	258	483
17	332	843	650	187	258	271	211	289	305	385	256	481
18	356	930	664	167	236	275	212	301	263	393	269	467
19	377	914	654	163	313	244	225	291	269	388	282	462
20	362	896	646	164	323	236	220	305	281	e189	269	406
21	401	878	659	188	293	225	219	304	253	e-33	268	374
22	447	892	622	180	284	245	201	325	219	e-26	256	362
23	453	885	565	173	277	259	203	302	258	e-6.6	311	360
24	460	885	504	192	265	253	210	285	238	e4.6	244	e372
25	469	877	384	186	318	248	178	235	e231	e-7.9	269	355
26	483	806	410	179	322	262	179	e63	238	e11	297	393
27	488	526	442	188	271	263	221	e102	267	e7.8	370	343
28	470	687	411	176	271	265	244	218	287	e35	323	e213
29	489	821	399	196	270	269	310	363	310	e-4.4	266	186
30	599	826	391	198	---	263	e345	344	298	e30	357	320
31	737	---	308	198	---	262	---	328	---	e24	371	---
TOTAL	11,253	20,604	20,244	5,922	8,051	9,114	7,102	7,643	8,861	8,019.5	7,926	10,848
MEAN	363	687	653	191	278	294	237	247	295	259	256	362
MAX	737	930	873	267	323	401	345	363	353	446	371	483
MIN	241	306	308	155	236	188	126	32	219	-33	35	186
AC-FT	22,320	40,870	40,150	11,750	15,970	18,080	14,090	15,160	17,580	15,910	15,720	21,520

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)

MEAN	311	368	360	312	314	327	426	318	195	241	285	294
MAX	441	687	653	852	594	486	802	742	404	500	572	460
(WY)	(2003)	(2004)	(2004)	(2000)	(2000)	(1999)	(1998)	(1998)	(1998)	(2003)	(2002)	(2002)
MIN	183	184	186	178	169	207	222	126	8.04	46.0	187	181
(WY)	(1998)	(1998)	(1998)	(1994)	(1996)	(1994)	(2001)	(1995)	(2001)	(1994)	(1997)	(1997)

SUMMARY STATISTICS

	FOR 2004 WATER YEAR		WATER YEARS 1992 - 2004	
ANNUAL TOTAL	125,587.5			
ANNUAL MEAN	343		319	
HIGHEST ANNUAL MEAN			439	
LOWEST ANNUAL MEAN			231	
HIGHEST DAILY MEAN	930	Nov 18	1,090	Jan 16, 2000
LOWEST DAILY MEAN	-33	Jul 21	-181	Jun 10, 1997
ANNUAL SEVEN-DAY MINIMUM	-7.2	Jul 21	-7.2	Jul 21, 2004
ANNUAL RUNOFF (AC-FT)	249,100		230,900	
10 PERCENT EXCEEDS	690		603	
50 PERCENT EXCEEDS	292		265	
90 PERCENT EXCEEDS	177		135	

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02290765 LEVEE 31 NORTH EXTENSION AT 3 MILE NEAR WEST MIAMI, FL

LOCATION.--Lat 25°43'02", long 80°29'50", in SE 1/4 sec.35, T.54 S., R.38 E., Miami-Dade County, Hydrologic Unit 03090202, (South Miami NW quadrangle), 0.5 mi west of intersection of U.S. Highway 41 and Krome Avenue, and 3 mi south of U.S. Highway 41 on the west side of Levee 31 North.

DRAINAGE AREA.--Indeterminate.

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

REVISED RECORDS.--WDR 97-2A, 1992-96.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic velocity meter. Until April 13, 2004 when it was removed. Satellite data collection platform with water-stage shaft encoder and acoustic Doppler velocity meter installed April 13, 2004. Datum of gage is 0.10 ft below National Geodetic Vertical Datum of 1929 (FCE bench mark).

REMARKS.--Records poor. Flow is the sum of regulation from upstream control structures S-334, S-335, and S-336, downstream from structures G-211 and S-338 and from levee seepage and rainfall. Positive flow is to the south and may reverse for short periods. Datum of gage is based upon an adjustment to the RM elevation. To convert stage values to NGVD, a +0.10 ft correction must be applied to all water years. Negative discharge is considered estimated due to insufficient measurements to verify negative portion of the rating.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 10 complete water years of discharge (1993-2001,2004).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 8.19 ft Oct. 15, 1999; minimum, 3.48 ft May 23, 2001.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 6.59 ft Sept. 29; minimum, 3.87 ft May 25. See REMARKS.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.51	---	5.89	6.00	6.10	6.09	5.70	5.70	4.35	4.34	5.55	5.90
2	6.45	---	5.93	5.99	6.07	6.08	5.66	5.67	4.28	4.49	5.94	5.80
3	6.40	---	5.93	5.98	6.06	6.06	5.62	5.71	4.21	4.54	6.03	5.80
4	6.42	---	5.90	5.98	6.07	6.05	5.59	5.94	4.19	4.70	6.03	5.83
5	6.43	6.14	5.87	6.05	6.05	6.03	5.56	5.83	4.33	4.82	5.98	5.97
6	6.41	6.13	5.90	6.13	6.04	6.05	5.48	5.82	4.37	4.81	6.09	6.10
7	6.38	6.09	5.91	6.14	6.04	6.06	5.48	5.80	4.38	4.77	6.08	6.13
8	6.35	6.08	5.91	6.14	6.02	6.05	---	5.80	4.38	4.83	6.10	5.94
9	6.32	6.09	5.92	6.13	5.99	6.02	5.40	5.82	4.37	4.79	6.11	5.88
10	6.29	6.08	5.96	6.13	5.98	6.01	5.33	5.91	4.42	4.75	6.11	5.84
11	6.28	6.06	5.96	6.11	5.96	5.83	5.34	5.68	4.59	4.74	6.08	5.92
12	6.25	6.02	5.95	6.08	5.94	5.80	5.39	5.54	4.60	4.78	6.01	6.13
13	6.23	5.99	5.94	6.06	5.91	5.82	---	5.48	4.61	4.85	5.99	6.09
14	6.16	6.00	5.96	6.07	5.91	5.81	---	5.42	4.52	4.82	6.08	6.06
15	6.11	5.97	6.01	6.08	5.96	5.93	---	5.38	---	4.83	6.05	6.06
16	6.11	5.98	6.01	6.07	5.96	6.02	5.71	5.37	4.45	4.95	6.05	6.04
17	6.08	5.95	6.02	6.05	5.94	5.88	5.77	5.28	4.40	5.00	6.05	6.01
18	6.09	5.93	6.00	6.07	5.93	5.77	5.74	5.20	4.34	5.01	6.04	5.99
19	6.12	5.92	6.02	6.07	5.87	5.81	5.70	5.12	4.34	5.01	5.96	5.98
20	6.09	5.92	6.00	6.08	5.91	5.85	---	5.05	4.37	5.05	5.93	6.02
21	6.07	5.93	5.99	6.07	5.98	5.83	5.63	5.00	4.51	4.81	5.88	6.10
22	6.06	5.91	6.00	6.09	6.00	5.77	5.58	5.04	4.77	4.79	5.92	6.19
23	6.03	5.90	6.02	6.07	6.01	5.76	5.55	5.02	4.70	4.73	6.01	6.18
24	6.02	5.90	5.92	6.06	6.00	5.84	---	4.59	4.61	4.69	---	---
25	6.04	5.90	5.78	6.07	5.95	5.83	5.46	4.00	---	4.73	---	6.06
26	6.03	5.89	5.78	6.06	6.07	5.87	5.41	4.56	4.44	4.84	---	6.05
27	6.00	5.75	5.71	6.05	6.11	5.86	5.45	4.35	4.36	4.92	---	6.06
28	5.98	5.83	5.66	6.06	6.09	5.83	5.71	4.44	4.29	5.38	---	6.21
29	6.03	5.91	5.66	6.03	6.09	5.80	5.83	4.52	4.32	5.41	---	6.39
30	6.05	5.87	5.66	6.03	---	5.77	---	4.42	4.31	5.44	---	6.05
31	---	---	5.82	6.12	---	5.73	---	4.44	---	5.46	5.96	---
TOTAL	---	---	182.99	188.12	174.01	182.91	---	161.90	---	151.08	---	---
MEAN	---	---	5.90	6.07	6.00	5.90	---	5.22	---	4.87	---	---
MAX	---	---	6.02	6.14	6.11	6.09	---	5.94	---	5.46	---	---
MIN	---	---	5.66	5.98	5.87	5.73	---	4.00	---	4.34	---	---

02290765 LEVEE 31 NORTH EXTENSION AT 3 MILE NEAR WEST MIAMI, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	379	e757	810	255	282	e287	189	395	393	462	e67	419
2	372	e743	808	273	345	331	210	345	398	475	167	463
3	337	e758	808	e278	e286	322	200	339	406	441	150	448
4	354	e689	829	e289	288	307	188	316	358	462	361	310
5	343	469	838	e261	264	364	209	222	343	454	355	372
6	366	338	e807	e210	332	462	213	199	331	460	363	412
7	408	349	e794	e167	347	441	219	204	366	458	398	433
8	357	355	e783	e200	308	431	e205	221	367	473	350	281
9	341	365	e785	e235	356	421	255	166	362	451	360	394
10	352	401	731	165	368	433	294	166	359	436	422	367
11	430	438	679	155	362	446	e240	268	336	439	524	405
12	437	556	677	187	344	441	e253	369	340	474	402	651
13	405	703	694	190	391	e452	e308	352	337	487	221	550
14	414	715	686	199	330	e532	e187	360	386	468	317	480
15	431	729	668	197	319	e373	e195	368	e356	454	366	501
16	403	758	673	197	329	184	196	361	364	454	444	530
17	419	830	628	201	329	282	246	375	337	429	425	523
18	431	922	e636	175	291	e326	224	356	309	396	459	539
19	423	906	e626	195	361	e201	214	384	331	397	443	513
20	416	869	e618	189	373	e160	e281	388	333	e186	462	469
21	441	853	e631	e174	357	149	314	419	298	e7.0	466	399
22	476	867	e594	e188	369	184	275	427	283	e-22	465	394
23	466	869	549	181	367	188	305	401	370	e14	427	405
24	472	866	e476	200	323	181	e271	334	418	e14	e392	e408
25	469	874	e356	210	380	190	297	380	e397	e-51	e417	391
26	478	798	e382	191	373	185	249	199	403	e33	e445	386
27	479	544	e414	202	e299	186	276	360	405	32	e518	403
28	471	680	e383	171	e279	193	294	334	377	68	e471	e257
29	488	788	e371	209	256	199	310	442	370	e23	e414	257
30	579	798	e363	223	---	213	e406	382	394	114	e505	482
31	e757	---	e276	205	---	210	---	366	---	e19	355	---
TOTAL	13,394	20,587	19,373	6,372	9,608	9,274	7,523	10,198	10,827	9,007.0	11,931	12,842
MEAN	432	686	625	206	331	299	251	329	361	291	385	428
MAX	757	922	838	289	391	532	406	442	418	487	524	651
MIN	337	338	276	155	256	149	187	166	283	-51	67	257
AC-FT	26,570	40,830	38,430	12,640	19,060	18,390	14,920	20,230	21,480	17,870	23,670	25,470

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)

MEAN	384	409	406	370	374	390	454	366	256	331	380	396
MAX	493	698	759	877	645	564	887	845	542	555	678	592
(WY)	(2003)	(2002)	(2002)	(2000)	(2000)	(1999)	(1998)	(1998)	(1998)	(2003)	(2002)	(2002)
MIN	262	244	233	206	240	219	206	77.5	-30.7	56.9	244	278
(WY)	(1998)	(1998)	(2001)	(2004)	(2002)	(2001)	(2001)	(2001)	(2001)	(2001)	(1992)	(1997)

SUMMARY STATISTICS

	FOR 2004 WATER YEAR		WATER YEARS 1992 - 2004	
ANNUAL TOTAL	140,936.0			
ANNUAL MEAN	385		360	
HIGHEST ANNUAL MEAN			467	
LOWEST ANNUAL MEAN			251	
HIGHEST DAILY MEAN	922	Nov 18	1,210	Nov 1, 2001
LOWEST DAILY MEAN	-51	Jul 25	-218	Oct 4, 2000
ANNUAL SEVEN-DAY MINIMUM	3.9	Jul 21	-69	Jul 10, 2001
ANNUAL RUNOFF (AC-FT)	279,500		261,100	
10 PERCENT EXCEEDS	674		554	
50 PERCENT EXCEEDS	367		341	
90 PERCENT EXCEEDS	189		190	

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02290766 LEVEE 31 NORTH EXTENSION AT 4 MILE NEAR WEST MIAMI, FL

LOCATION.--Lat 25°42'06", long 80°29'46", in NE ¼ NE ¼ NE ¼ sec.35, T.54 S., R. 38 E., Miami-Dade County, Hydrologic Unit 03090202, 0.5 mi west of the junction of U.S. Highway 41 and Krome Avenue and 4.1 mi south of U.S. Highway 41 on west side of Levee 31 North, near West Miami, FL.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--June 1994 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic velocity meter. Datum of gage is National Geodetic Vertical Datum of 1929 (FCE bench mark).

REMARKS.--Records poor. Flow primarily regulated by control structures S-335 upstream and G-211 downstream; occasionally S-334, S-336 and G-119 upstream and S-338 downstream also affect L-31 canal flows. The control structure S-24 located near the Tamiami Trail bridge is not used for regulation. The manual operation gated culvert S-24A, that is located 1 mi upstream, is inoperable.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 7 complete water years of discharge (1995, 1997-2001, 2004).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 8.32 ft Oct. 15, 1999; minimum, 3.53 ft May 23, 2001.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 6.62 ft Sept. 29; minimum, 3.92 ft May 25.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.57	6.06	5.95	6.03	6.13	6.13	5.74	5.73	4.39	4.38	5.57	5.94
2	6.50	6.06	5.99	6.02	6.10	6.12	5.71	5.69	4.32	4.53	5.95	5.84
3	6.46	6.05	5.99	6.01	6.09	6.10	5.67	5.73	4.26	4.57	6.05	5.84
4	6.48	6.06	5.96	6.01	6.10	6.09	5.63	5.97	4.24	4.74	6.04	5.87
5	6.48	6.21	5.94	6.08	6.08	6.07	5.59	5.86	4.38	4.86	6.02	5.99
6	6.46	6.20	5.97	6.15	6.07	6.09	5.51	5.85	4.41	4.85	6.14	6.13
7	6.44	6.17	5.97	6.17	6.06	6.10	5.51	5.83	4.42	4.81	6.11	6.17
8	6.41	6.15	5.99	6.15	6.05	6.09	5.48	5.83	4.42	4.86	6.13	5.99
9	6.38	6.16	---	6.15	6.02	6.05	5.43	5.84	4.41	4.82	6.15	5.92
10	6.35	6.15	---	6.15	6.03	6.04	5.37	5.93	---	4.78	6.16	5.88
11	6.33	6.14	---	6.13	6.02	5.86	5.38	5.71	---	4.78	6.11	5.97
12	6.30	6.09	6.00	6.10	5.97	5.83	5.42	5.57	---	4.81	6.04	6.17
13	6.28	6.06	5.99	6.08	5.95	5.86	5.61	5.51	---	4.88	6.02	6.13
14	6.20	6.06	6.01	6.08	5.95	5.85	5.86	5.45	---	4.85	6.11	6.10
15	6.15	6.04	6.06	6.10	6.00	5.97	5.81	5.42	4.50	4.86	6.08	6.09
16	6.16	6.04	6.07	6.09	6.01	6.06	5.74	5.41	4.49	4.98	6.08	6.08
17	6.13	6.02	6.07	6.09	5.99	5.92	5.80	5.32	4.44	5.02	6.08	6.04
18	6.14	6.00	6.06	6.10	5.98	5.81	5.77	5.23	4.38	5.04	6.07	6.01
19	6.16	5.98	6.07	6.10	5.91	5.86	5.73	5.16	4.38	5.04	6.00	6.01
20	6.14	5.99	6.05	6.11	5.95	5.89	5.69	5.09	4.41	5.08	5.97	6.06
21	6.11	6.00	6.04	6.11	6.02	5.89	5.65	5.04	4.55	4.84	5.93	6.13
22	6.10	5.98	6.06	6.12	6.04	5.83	5.62	5.08	4.80	4.82	5.96	6.22
23	6.07	5.97	6.08	6.11	6.05	5.81	5.58	5.05	4.74	4.77	6.05	6.20
24	6.07	5.96	5.97	6.09	6.03	5.89	5.53	4.63	4.64	4.72	6.06	6.10
25	6.08	5.97	5.85	6.10	5.99	5.87	5.49	4.05	4.58	4.76	6.11	6.09
26	6.07	---	5.83	6.08	6.11	5.91	5.44	4.59	4.48	4.88	6.09	6.08
27	6.05	---	5.76	6.09	6.15	5.90	5.48	4.39	4.41	4.96	6.08	6.09
28	6.02	5.89	5.72	6.10	6.14	5.87	5.74	4.48	4.34	5.40	6.10	6.25
29	6.07	5.97	5.70	6.06	6.13	5.84	5.86	4.55	4.36	5.43	6.08	6.43
30	6.08	5.92	5.68	6.06	---	5.81	5.72	4.45	4.36	5.46	6.05	6.10
31	6.08	---	5.85	6.15	---	5.77	---	4.48	---	5.48	6.01	---
TOTAL	193.32	---	---	188.97	175.12	184.18	168.56	162.92	---	152.06	187.40	181.92
MEAN	6.24	---	---	6.10	6.04	5.94	5.62	5.26	---	4.91	6.05	6.06
MAX	6.57	---	---	6.17	6.15	6.13	5.86	5.97	---	5.48	6.16	6.43
MIN	6.02	---	---	6.01	5.91	5.77	5.37	4.05	---	4.38	5.57	5.84

02290766 LEVEE 31 NORTH EXTENSION AT 4 MILE NEAR WEST MIAMI, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	358	842	965	271	301	338	298	383	324	380	e52	419
2	372	828	958	297	370	346	301	370	322	451	169	461
3	323	843	951	315	358	341	298	354	321	419	158	481
4	350	775	974	298	371	336	300	327	342	438	306	376
5	344	544	986	240	357	368	319	219	291	425	280	416
6	361	417	954	196	332	463	272	197	304	423	329	450
7	416	424	930	163	359	465	289	201	351	408	341	493
8	372	429	921	172	327	475	292	196	349	431	351	376
9	379	436	e901	204	355	434	343	175	313	412	333	432
10	389	472	e836	154	344	450	338	100	e347	405	e374	442
11	427	512	e797	171	356	481	335	e246	e261	407	364	487
12	456	650	802	205	346	475	317	361	e287	459	324	617
13	424	839	794	208	367	453	260	349	e260	460	253	569
14	442	847	791	206	309	453	127	328	e261	441	272	553
15	489	866	796	211	308	317	162	298	303	449	344	547
16	430	880	790	210	328	200	210	308	313	443	389	563
17	425	981	740	186	324	348	231	313	331	421	362	547
18	458	1,070	754	163	285	341	233	309	268	380	366	547
19	461	1,060	748	193	380	311	231	299	266	392	409	538
20	459	1,060	742	198	379	268	221	302	265	e157	429	492
21	491	1,030	746	212	357	273	219	301	276	e11	e399	423
22	558	1,020	692	219	345	315	212	303	270	e47	389	416
23	552	1,020	627	182	344	302	213	309	238	e35	418	424
24	555	1,030	568	226	302	276	196	354	278	e-86	376	438
25	566	1,010	473	194	371	288	216	291	271	e-115	353	436
26	557	e942	500	177	388	294	182	e-15	286	e-66	336	422
27	569	e606	533	195	340	294	264	e103	287	e33	e420	437
28	561	779	504	176	335	293	273	217	318	e-0.74	412	286
29	575	956	486	202	333	322	293	397	279	e-38	423	260
30	687	957	481	233	---	303	393	320	279	e35	409	e566
31	843	---	360	213	---	299	---	332	---	e-42	e394	---
TOTAL	14,649	24,125	23,100	6,490	9,971	10,922	7,838	8,547	8,861	8,014.26	10,534	13,914
MEAN	473	804	745	209	344	352	261	276	295	259	340	464
MAX	843	1,070	986	315	388	481	393	397	351	460	429	617
MIN	323	417	360	154	285	200	127	-15	238	-115	52	260
AC-FT	29,060	47,850	45,820	12,870	19,780	21,660	15,550	16,950	17,580	15,900	20,890	27,600

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2004, BY WATER YEAR (WY)

MEAN	395	475	462	415	404	408	480	357	256	316	381	404
MAX	495	804	758	977	725	585	892	833	465	579	671	574
(WY)	(2002)	(2004)	(2002)	(2000)	(2000)	(2002)	(1998)	(1998)	(1998)	(2003)	(2002)	(2002)
MIN	240	238	241	209	235	236	213	115	9.68	84.2	242	265
(WY)	(1998)	(1998)	(1998)	(2004)	(1996)	(1996)	(2001)	(2001)	(2001)	(2001)	(1997)	(1997)

SUMMARY STATISTICS

ANNUAL TOTAL
ANNUAL MEAN
HIGHEST ANNUAL MEAN
LOWEST ANNUAL MEAN
HIGHEST DAILY MEAN
LOWEST DAILY MEAN
ANNUAL SEVEN-DAY MINIMUM
ANNUAL RUNOFF (AC-FT)
10 PERCENT EXCEEDS
50 PERCENT EXCEEDS
90 PERCENT EXCEEDS

FOR 2004 WATER YEAR

WATER YEARS 1994 - 2004

146,965.26		
402		387
		526
		271
	1,070	Nov 18
	-115	Jul 25
	-34	Jul 23
291,500		280,400
782		674
352		350
196		180

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02290767 LEVEE 31 NORTH EXTENSION AT 5 MILE NEAR WEST MIAMI, FL

LOCATION.--Lat 25°41'09", long 80°29'50", T.54 S., R.38 E., Dade County, Hydrologic Unit 03090202, (South Miami NW quadrangle), 1.05 mi west of the junction of U.S. Highway 41 and Krome Avenue, and 5.25 mi south of U.S. Highway 41 on west side of Levee 31 North, near West Miami, FL.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--June 16, 1994 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic velocity meter. Datum of gage is National Geodetic Vertical Datum of 1929 (FCE bench mark).

REMARKS.--Records fair except those for estimated daily discharges, and velocities recorded fall below 0.20 ft/sec, which are poor. Flow primarily regulated by control structure S-355 upstream and G-211 downstream; occasionally S-334, S-336, G-119 upstream and S-338 downstream also affect L-31 canal flows. The control structure S-24 located near the Tamiami Trail bridge is not used for regulation. The manual operation gated culvert S-24A, that is located 2 mi upstream is inoperable. Positive flow is to the south and may reverse for short periods. Discharge computed from relations between stage vs. area and index velocity vs. mean channel velocity.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 7 water years of discharge (1995, 1997-2001, 2004).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 8.27 ft Oct. 15, 1999; minimum, 3.48 ft May 23, 2001.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 6.58 ft Sept. 29; minimum, 3.87 ft May 25.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.49	5.96	5.86	5.98	6.09	6.09	5.71	5.69	4.34	4.33	5.53	5.89
2	6.43	5.96	5.90	5.97	6.06	6.08	5.68	5.66	4.27	4.48	5.92	5.79
3	6.39	5.94	5.90	5.97	6.06	6.07	5.65	5.69	4.21	4.52	6.03	5.80
4	6.41	5.97	5.87	5.97	6.06	6.05	5.63	5.94	4.18	4.69	6.01	5.81
5	6.41	6.12	5.83	6.03	6.05	6.03	5.62	5.83	4.33	4.81	5.98	5.92
6	6.39	6.12	5.87	6.11	6.03	6.05	5.50	5.82	4.37	4.79	6.09	6.07
7	6.36	6.08	5.87	6.13	6.03	6.06	5.49	5.80	4.38	4.76	6.06	6.11
8	6.33	6.07	5.88	6.12	6.01	6.05	5.45	5.80	4.38	4.81	6.09	5.93
9	6.30	6.09	5.88	6.11	5.98	6.02	5.41	5.81	4.36	4.77	6.10	5.87
10	6.28	6.07	5.92	6.11	5.97	6.01	5.34	---	4.41	4.73	6.09	5.82
11	6.26	6.05	5.93	6.10	5.95	5.83	5.35	5.67	4.58	4.73	6.06	5.91
12	6.23	6.00	5.92	6.06	5.93	5.80	5.39	5.53	4.59	4.76	5.99	6.11
13	6.20	5.95	5.90	6.04	5.91	5.82	5.57	5.47	4.60	4.82	5.96	6.08
14	6.12	5.96	5.92	6.04	5.90	5.81	5.84	5.42	4.52	4.79	6.06	6.04
15	6.07	5.93	5.98	6.06	5.96	5.94	5.78	5.38	4.45	---	6.03	6.04
16	6.08	5.94	5.98	6.05	5.97	6.02	5.71	5.37	---	---	6.03	6.02
17	6.05	5.91	5.99	6.05	5.95	5.88	5.77	5.28	4.39	4.97	6.03	6.00
18	6.05	5.88	5.98	6.06	5.94	5.78	5.74	5.20	4.33	4.99	6.03	5.98
19	6.08	5.87	5.99	6.07	5.87	5.82	5.70	5.12	4.33	4.99	5.95	5.97
20	6.06	5.87	5.97	6.08	5.91	5.86	5.66	5.05	4.37	5.04	5.92	6.02
21	6.03	5.89	5.97	6.07	5.98	5.85	5.62	5.00	4.50	4.80	5.87	6.10
22	6.01	5.86	5.98	6.08	6.00	5.79	5.58	5.04	4.76	4.78	5.90	6.19
23	5.98	5.86	6.00	6.07	6.01	5.78	5.55	5.01	4.69	4.73	6.00	6.18
24	5.98	5.85	5.90	6.06	5.99	5.86	5.50	4.59	4.60	4.68	6.01	6.07
25	6.00	5.86	5.78	6.07	5.95	5.85	5.46	3.99	---	4.72	6.07	6.05
26	5.99	5.86	5.76	6.05	6.07	5.88	5.40	4.54	4.44	---	6.04	6.03
27	5.96	5.76	5.69	6.05	6.11	5.88	5.44	4.34	4.36	4.92	6.02	6.04
28	5.93	5.80	5.65	6.07	6.10	5.85	---	4.43	4.29	5.36	6.05	6.21
29	5.98	5.88	5.64	6.02	6.09	5.81	5.82	4.51	4.31	5.40	6.03	6.38
30	5.99	5.83	5.63	6.03	---	5.78	5.68	4.41	4.31	5.43	6.00	6.05
31	5.98	---	5.80	6.12	---	5.74	---	4.43	---	5.44	5.94	---
TOTAL	190.82	178.19	182.14	187.80	173.93	183.14	---	---	---	---	185.89	180.48
MEAN	6.16	5.94	5.88	6.06	6.00	5.91	---	---	---	---	6.00	6.02
MAX	6.49	6.12	6.00	6.13	6.11	6.09	---	---	---	---	6.10	6.38
MIN	5.93	5.76	5.63	5.97	5.87	5.74	---	---	---	---	5.53	5.79

02290767 LEVEE 31 NORTH EXTENSION AT 5 MILE NEAR WEST MIAMI, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	319	797	962	208	266	281	256	338	294	369	22	405
2	342	793	950	251	319	286	259	344	316	418	116	425
3	308	798	929	235	324	270	243	334	322	388	126	419
4	311	722	957	232	320	282	236	307	311	399	311	363
5	301	e525	e973	205	323	360	284	221	256	397	283	390
6	315	e409	947	144	312	435	226	188	280	397	292	480
7	334	e431	923	135	311	437	262	138	312	379	305	530
8	330	e439	904	124	286	425	220	94	302	423	344	496
9	343	432	885	151	308	414	266	e4.5	297	395	336	493
10	329	e472	820	125	314	410	292	e-2.1	301	388	375	451
11	342	521	781	134	325	453	292	e220	215	375	365	436
12	380	653	781	153	311	450	282	353	241	419	320	589
13	340	834	e778	163	311	420	224	313	231	426	220	546
14	361	856	e768	166	286	418	e102	307	221	411	250	537
15	425	855	e777	167	259	264	e115	301	262	e410	307	557
16	410	868	760	173	291	165	172	302	e248	e403	362	569
17	403	964	725	175	283	309	220	298	299	378	364	558
18	427	1,060	730	124	263	276	221	305	198	323	341	554
19	428	1,070	718	162	347	277	206	312	232	350	393	542
20	427	1,060	719	157	336	249	203	320	228	e102	372	476
21	459	1,020	723	175	299	281	193	336	240	e-19	360	398
22	520	1,020	682	176	307	287	e132	334	249	e-5.4	342	394
23	525	1,010	600	146	327	248	197	319	235	e-8.4	371	404
24	511	1,010	568	172	278	247	e129	335	211	e-145	341	412
25	514	994	445	191	348	263	185	302	e205	e-138	351	418
26	523	917	474	139	346	255	126	e-51	231	e-98	e345	402
27	522	e616	508	125	303	262	237	e72	291	e12	363	422
28	499	768	478	142	307	259	e232	207	298	e-45	403	296
29	526	956	447	156	276	287	268	379	297	e-116	409	351
30	648	949	e448	179	---	277	347	308	305	e-55	410	529
31	792	---	303	162	---	232	---	303	---	e-92	404	---
TOTAL	13,214	23,819	22,463	5,147	8,886	9,779	6,627	7,841.4	7,928	6,840.2	9,903	13,842
MEAN	426	794	725	166	306	315	221	253	264	221	319	461
MAX	792	1,070	973	251	348	453	347	379	322	426	410	589
MIN	301	409	303	124	259	165	102	-51	198	-145	22	296
AC-FT	26,210	47,240	44,560	10,210	17,630	19,400	13,140	15,550	15,730	13,570	19,640	27,460

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2004, BY WATER YEAR (WY)

MEAN	415	497	472	417	421	404	484	348	253	320	405	421
MAX	604	794	828	1,066	804	587	914	859	462	550	669	582
(WY)	(2001)	(2004)	(2000)	(2000)	(2000)	(2002)	(1998)	(1998)	(1998)	(2003)	(2002)	(2002)
MIN	231	229	256	166	266	189	221	110	-47.8	76.3	251	266
(WY)	(1998)	(1998)	(1998)	(2004)	(2002)	(1996)	(2004)	(1996)	(2001)	(1994)	(1997)	(1997)

SUMMARY STATISTICS

	FOR 2004 WATER YEAR		WATER YEARS 1994 - 2004	
ANNUAL TOTAL	136,289.6			
ANNUAL MEAN	372		400	
HIGHEST ANNUAL MEAN			605	
LOWEST ANNUAL MEAN			280	
HIGHEST DAILY MEAN	1,070	Nov 19	1,300	Jan 17, 2000
LOWEST DAILY MEAN	-145	Jul 24	-285	Jun 10, 1997
ANNUAL SEVEN-DAY MINIMUM	-84	Jul 24	-84	Jul 24, 2004
ANNUAL RUNOFF (AC-FT)	270,300		289,800	
10 PERCENT EXCEEDS	762		707	
50 PERCENT EXCEEDS	320		356	
90 PERCENT EXCEEDS	150		183	

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02290768 LEVEE 31 NORTH EXTENSION AT 7 MILE NEAR WEST MIAMI, FL

LOCATION.--Lat 25°39'48", long 80°29'54", NE ¼ NE ¼ SE ¼ sec.11, T.55 S., R.38 E., Miami-Dade County, Hydrologic Unit 03090202, (South Miami NW quadrangle), 0.5 mi west of junction of U.S. Highway 41 and Krome Avenue and 6.9 mi south of U.S. Highway 41 on the west side of Levee 31 North Levee, near West Miami, FL.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--June 1994 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic velocity meter. Datum of gage is National Geodetic Vertical Datum of 1929 (FCE bench mark).

REMARKS.--Records fair except for estimated daily discharges, which are poor. Discharge computed from relations between stage vs. area and index velocity vs. mean channel velocity. Flow is the sum of regulation from upstream control structures S-334, S-335 and S-336 from levee seepage and rainfall, and from structures S-338 and G-211 downstream. Positive flow is to the south and may reverse for short periods.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 7 complete water years of discharge (1995, 1997-98, 2000-02, 2004).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 8.19 ft Oct. 15, 1999; minimum, 3.46 ft May 23, 2001.

EXTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 6.56 ft Sept. 29; minimum, 3.85 ft May 25.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.49	5.92	5.81	5.97	6.09	6.08	---	5.66	4.31	4.33	5.50	5.86
2	6.42	5.91	5.85	5.95	6.08	6.08	---	5.62	4.25	4.46	5.89	5.76
3	6.36	5.90	5.85	5.95	6.09	6.06	5.61	5.66	4.18	4.51	5.99	5.77
4	6.38	5.92	5.82	5.95	6.10	6.04	5.57	5.91	4.16	4.67	5.98	5.77
5	6.38	6.09	5.78	6.01	6.08	6.02	5.54	5.81	4.30	4.78	5.94	5.86
6	6.37	6.09	5.82	6.10	6.05	6.02	5.46	5.79	4.35	4.76	6.06	6.02
7	6.34	6.06	5.82	6.12	6.05	6.04	5.46	5.77	4.35	4.73	6.03	6.07
8	6.31	6.04	5.83	6.10	6.04	6.03	5.42	5.78	4.35	4.78	6.05	5.89
9	6.28	6.06	5.84	6.09	6.00	5.99	5.38	---	4.34	4.75	6.06	5.83
10	6.25	6.04	5.88	6.10	5.99	5.98	5.31	---	4.39	4.72	6.06	5.79
11	6.23	6.02	5.89	6.08	5.97	5.80	5.32	5.65	4.56	4.71	6.03	5.88
12	6.20	5.95	5.87	6.04	5.95	5.78	5.36	5.51	4.57	4.74	5.95	6.08
13	6.17	5.90	5.87	6.03	5.92	5.80	5.54	5.46	4.58	4.85	5.92	6.04
14	6.10	5.91	5.88	6.03	5.91	5.78	5.82	5.40	4.50	4.74	6.03	6.00
15	6.05	5.88	5.94	6.04	5.97	5.91	5.77	5.36	4.43	4.78	6.00	5.99
16	6.05	5.88	5.94	6.03	5.99	5.99	5.69	5.35	---	4.89	6.00	5.98
17	6.02	5.85	5.95	6.01	5.97	5.86	5.75	5.26	---	4.94	6.00	5.96
18	6.03	5.82	---	6.02	5.96	5.75	5.71	5.17	4.31	4.95	5.99	5.94
19	6.05	5.80	5.95	6.03	5.88	5.79	5.68	5.10	4.31	4.95	5.92	5.93
20	6.03	5.81	5.93	6.04	5.92	5.83	5.64	5.03	4.34	5.00	5.89	5.98
21	6.00	5.83	5.93	6.04	5.98	5.81	5.60	4.98	4.47	4.78	5.84	6.06
22	5.98	5.80	5.95	6.05	6.01	5.76	5.55	5.02	4.73	4.76	5.87	6.15
23	5.95	5.80	5.97	6.05	6.01	5.75	5.52	4.99	4.66	4.71	5.97	6.14
24	5.95	5.79	5.87	6.04	5.99	5.83	5.47	4.56	4.58	---	5.98	6.03
25	5.97	5.80	5.75	6.05	5.94	5.82	5.43	3.97	4.52	---	6.03	6.01
26	5.95	5.81	5.74	6.03	6.07	5.85	5.37	4.54	4.42	---	6.01	5.98
27	5.92	5.70	5.66	6.03	6.11	5.84	5.42	4.32	4.35	4.88	5.99	6.00
28	5.90	5.76	5.62	6.06	6.10	5.80	5.69	4.41	4.28	5.34	6.01	6.18
29	5.95	5.84	5.61	6.02	6.09	---	5.80	4.48	4.30	5.36	6.00	6.36
30	5.96	5.78	5.60	6.02	---	---	5.65	4.38	4.30	5.39	5.96	6.01
31	5.93	---	5.78	6.12	---	---	---	4.41	---	5.41	5.91	---
TOTAL	189.97	176.76	---	187.20	174.31	---	---	---	---	---	184.86	179.32
MEAN	6.13	5.89	---	6.04	6.01	---	---	---	---	---	5.96	5.98
MAX	6.49	6.09	---	6.12	6.11	---	---	---	---	---	6.06	6.36
MIN	5.90	5.70	---	5.95	5.88	---	---	---	---	---	5.50	5.76

02290768 LEVEE 31 NORTH EXTENSION AT 7 MILE NEAR WEST MIAMI, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	431	913	e1,040	214	279	321	e260	356	304	362	e-1.0	423
2	464	891	990	248	312	332	e263	343	296	417	134	473
3	464	925	1,000	261	315	330	254	343	301	399	185	432
4	413	839	1,030	252	313	305	253	285	319	414	407	380
5	406	597	1,040	194	340	362	277	174	257	381	349	469
6	412	463	980	119	313	462	235	143	276	415	347	522
7	421	488	952	121	309	440	242	142	316	403	348	572
8	410	497	939	114	300	448	248	157	314	418	347	537
9	400	487	955	140	328	438	288	e139	274	415	333	559
10	402	534	876	109	317	442	284	e64	296	378	333	520
11	416	593	818	124	310	504	289	236	243	373	352	517
12	428	749	e817	150	320	484	290	371	232	426	308	611
13	413	941	822	133	322	460	241	329	e192	430	252	606
14	449	962	819	147	285	463	77	307	257	423	251	605
15	489	981	812	152	278	295	106	288	276	423	310	596
16	486	994	810	156	287	180	148	303	e287	424	333	587
17	485	1,100	760	131	282	316	173	315	e298	396	318	578
18	495	1,210	e759	117	269	306	174	303	243	364	324	582
19	496	1,170	750	123	354	263	185	291	213	365	380	582
20	493	1,130	745	146	354	243	184	304	229	143	365	507
21	535	1,100	751	158	306	232	207	285	293	e-14	356	431
22	597	1,120	701	154	298	285	202	302	328	e-37	351	432
23	597	1,120	640	136	291	262	221	295	246	e-30	373	435
24	588	e1,120	590	166	280	239	200	376	288	e-36	352	446
25	601	1,100	463	134	375	252	201	328	272	e-46	358	457
26	599	1,020	510	134	386	261	205	3.1	291	e-31	367	457
27	597	e703	552	146	330	266	255	157	282	e-17	400	470
28	588	847	515	130	322	254	256	253	296	e7.1	408	345
29	601	e1,040	484	143	320	e264	284	379	284	e-17	430	431
30	739	e1,030	478	155	---	e281	347	339	264	e-12	419	635
31	923	---	316	167	---	e236	---	300	---	e-59	e385	---
TOTAL	15,838	26,664	23,714	4,774	9,095	10,226	6,849	8,210.1	8,267	7,477.1	10,174.0	15,197
MEAN	511	889	765	154	314	330	228	265	276	241	328	507
MAX	923	1,210	1,040	261	386	504	347	379	328	430	430	635
MIN	400	463	316	109	269	180	77	3.1	192	-59	-1.0	345
AC-FT	31,410	52,890	47,040	9,470	18,040	20,280	13,580	16,280	16,400	14,830	20,180	30,140

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2004, BY WATER YEAR (WY)

MEAN	539	719	601	464	444	388	314	374	258	389	464	497
MAX	611	889	809	998	745	583	450	588	483	621	699	641
(WY)	(2002)	(2004)	(2002)	(2000)	(2000)	(2002)	(2000)	(2003)	(2003)	(2003)	(2002)	(2002)
MIN	453	413	258	154	266	220	202	118	32.8	109	328	416
(WY)	(2000)	(2001)	(2001)	(2004)	(2002)	(2001)	(2001)	(2001)	(2001)	(2001)	(2004)	(2000)

SUMMARY STATISTICS

ANNUAL TOTAL
ANNUAL MEAN
HIGHEST ANNUAL MEAN
LOWEST ANNUAL MEAN
HIGHEST DAILY MEAN
LOWEST DAILY MEAN
ANNUAL SEVEN-DAY MINIMUM
MAXIMUM PEAK FLOW
ANNUAL RUNOFF (AC-FT)
10 PERCENT EXCEEDS
50 PERCENT EXCEEDS
90 PERCENT EXCEEDS

FOR 2004 WATER YEAR

146,485.2
400

1,210
-59
-30
1,290
290,600
814
333
145

WATER YEARS 2000 - 2004

447
564
288
1,340
-184
-30
1,320
323,600
839
410
155

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02290769 CANAL 111 AT S-18-C, NEAR FLORIDA CITY, FL

LOCATION.--Lat 25°19'49", long 80°31'31", in NW ¼ sec.3, T.59 S., R.38 E., Miami-Dade County, Hydrologic Unit 03090202, at control structure 18-C, and 8.5 mi south of Florida City.

DRAINAGE AREA.--Indeterminate.

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

REVISED RECORDS.--WDR FL-78-2A, 1974-77.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Prior to September 30, 2001, satellite data collection platform with water-stage shaft encoder and acoustic velocity meter. The acoustic velocity meter and acoustic doppler velocity meter were run in tandem for the period of May 24, 2001 to October 17, 2001. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark).

REMARKS.--Records good except for estimated and negative daily discharges, which are poor. Flow regulated by S-18-C. Prior to November 30, 1992, discharge computed from relation between head, and gate openings at S-18-C. After December 1, 1992, discharge computed based on continuous record of stage and velocity at newly established acoustic velocity meter site downstream of S-18-C. Discharge computed from relations between stage vs. area and index velocity vs. mean channel velocity. Prior to the 1993 water year the downstream gage height is available in files of the U.S. Geological Survey under station number 02290770. Starting with the 1993 water year, the downstream gage height is available in files of the U.S. Geological Survey under station number 02290769. Prior to 1994 water year discharge published under the name Canal 111 Above S-18-C under the same station number (02290769). Prior to December 1, 1992, digital water-stage recorders, electromagnetic velocity meter recorder, and dual graphic water-stage and gate opening recorder.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 30 complete water years of discharge (1969-90, 1993-94, 1996, 1998-99, 2002-04).

COOPERATION.--Gate-opening recorder record and record of slot operations provided by South Florida Water Management District, upon request.

EXTREME UPSTREAM STAGES FOR PERIOD OF RECORD (1969-92).--Maximum gage height, 3.62 ft July 24, 1985; minimum, -1.53 ft estimated May 14, 1971.

EXTREME DOWNSTREAM STAGES FOR PERIOD OF RECORD (1993-current year).--Maximum gage height, 3.82 ft Oct. 15, 1999; minimum, 0.13 ft May 19, 2002.

EXTREME DOWNSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 2.74 ft Nov. 6; minimum, 0.29 ft June 4.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.59	2.24	2.30	2.16	2.11	1.83	1.27	0.91	---	0.83	2.18	2.19
2	2.58	2.24	2.29	2.10	2.21	1.78	1.24	0.91	---	0.77	2.19	2.26
3	2.63	2.25	2.28	2.01	2.20	1.75	1.21	1.01	---	0.81	2.27	2.31
4	2.61	2.42	2.28	---	2.18	1.73	1.18	1.35	0.34	0.96	2.40	2.28
5	2.60	2.60	2.27	1.94	2.16	1.71	1.16	1.36	0.39	1.06	2.41	2.41
6	2.58	2.65	2.26	1.91	2.10	1.68	1.15	1.34	0.60	1.01	2.40	2.68
7	2.56	2.67	2.25	1.88	2.06	1.66	1.13	1.32	0.94	0.95	2.38	2.59
8	2.54	2.63	2.24	1.87	2.01	1.64	1.11	1.29	1.06	0.91	2.36	2.44
9	2.51	2.60	2.24	1.85	1.97	1.62	1.09	1.27	1.06	0.86	2.36	2.41
10	2.50	2.59	2.26	1.83	1.92	1.60	1.07	1.24	1.02	0.81	2.34	2.42
11	2.49	2.58	2.26	1.81	1.91	1.59	1.06	1.22	0.98	0.75	2.32	2.47
12	2.48	2.55	2.26	1.80	1.88	1.57	1.14	1.20	0.93	0.72	2.30	2.44
13	2.46	2.53	2.26	1.79	1.86	1.56	1.26	1.17	0.90	0.77	2.25	2.41
14	2.43	2.51	2.27	1.77	1.85	1.55	1.28	1.13	0.86	0.80	2.22	2.36
15	2.42	2.49	2.30	1.76	1.83	1.55	1.26	1.09	0.81	0.87	2.19	2.27
16	2.41	2.48	2.30	1.74	1.83	1.53	1.24	1.06	0.78	---	2.16	2.23
17	2.39	2.46	2.29	1.74	1.81	1.50	1.22	1.07	0.74	0.94	2.15	2.21
18	2.38	2.45	2.29	1.74	1.79	1.49	1.20	1.03	0.72	0.94	2.15	2.18
19	2.35	2.43	2.28	1.78	1.78	1.47	1.18	0.98	0.67	1.05	2.17	2.22
20	2.33	2.42	2.27	1.77	1.78	1.46	1.14	0.92	0.78	1.30	2.19	2.30
21	2.32	2.41	2.26	1.77	1.77	1.44	1.10	0.88	1.04	1.39	2.18	2.27
22	2.31	2.40	2.26	1.75	1.75	1.42	1.07	0.84	1.06	1.42	2.17	2.26
23	2.29	2.38	2.26	1.74	1.74	1.43	1.03	0.80	1.05	1.40	2.17	2.30
24	2.28	2.36	2.26	1.74	1.73	1.43	1.01	0.74	1.01	1.43	2.17	2.35
25	2.28	2.35	2.26	1.73	1.74	1.44	0.97	0.69	0.96	1.52	2.17	2.32
26	2.28	2.34	2.23	1.73	1.86	1.47	0.93	0.65	0.91	---	2.17	2.35
27	2.26	2.34	2.22	1.73	1.85	1.45	0.91	0.60	0.85	---	2.15	2.37
28	2.24	2.32	2.21	1.72	1.85	1.41	0.93	0.57	0.90	2.15	2.14	2.25
29	---	2.32	2.20	1.72	1.86	1.38	0.98	0.55	0.91	2.19	2.17	2.17
30	2.23	2.30	2.18	1.72	---	1.37	0.96	0.51	0.87	2.17	2.19	2.14
31	2.25	---	2.17	1.81	---	1.33	---	0.48	---	2.19	2.18	---
TOTAL	---	73.31	69.96	---	55.39	47.84	33.48	30.18	---	---	69.25	69.86
MEAN	---	2.44	2.26	---	1.91	1.54	1.12	0.97	---	---	2.23	2.33
MAX	---	2.67	2.30	---	2.21	1.83	1.28	1.36	---	---	2.41	2.68
MIN	---	2.24	2.17	---	1.73	1.33	0.91	0.48	---	---	2.14	2.14

02290769 CANAL 111 AT S-18-C, NEAR FLORIDA CITY, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	499	155	222	143	365	29	1.6	-24	e-19	18	414	246
2	374	152	221	39	372	1.1	-6.4	-23	e-10	9.3	401	414
3	334	218	202	5.0	314	8.1	-3.9	24	e-30	16	515	440
4	275	522	236	e20	255	4.3	-34	-36	-22	5.9	714	413
5	238	711	222	7.3	209	7.2	-7.2	-59	-18	21	655	504
6	231	591	245	9.9	149	5.5	2.1	-50	-4.0	19	605	704
7	224	567	224	-1.6	158	-14	13	-32	4.8	10	536	528
8	230	518	201	-26	37	-8.6	-24	17	-0.16	-6.1	506	307
9	202	471	204	-3.9	15	-8.4	31	0.83	5.0	-12	477	286
10	221	463	226	5.9	-1.6	1.4	-18	3.2	5.0	15	439	391
11	259	403	223	-12	17	-25	3.3	4.6	11	21	420	517
12	247	378	219	-38	6.4	-16	23	-4.5	0.43	1.1	355	421
13	179	383	219	-24	-2.1	-20	-30	-15	-50	12	178	377
14	201	338	236	-26	17	-11	13	-35	0.86	-5.2	236	240
15	225	315	240	-9.6	1.3	-0.96	-1.9	-24	2.1	-13	247	156
16	234	313	243	-35	-18	16	-11	-23	-42	e2.9	230	213
17	204	312	250	-18	-8.8	-20	-19	-25	-27	0.28	230	183
18	221	316	246	-20	-8.0	-33	-17	-28	-2.5	-48	211	183
19	184	331	235	22	-25	-46	-24	-34	7.6	9.7	256	276
20	193	318	222	6.4	0.69	-35	-35	-25	6.7	41	281	326
21	193	296	215	-23	-4.0	-26	23	-53	-13	60	276	263
22	197	266	208	-34	28	-6.1	-13	-23	-20	14	238	232
23	204	238	222	0.08	3.8	-9.0	-4.9	1.1	23	18	261	342
24	170	254	226	-16	-31	-11	1.2	-34	28	98	250	432
25	162	245	219	-7.5	-26	1.3	11	-20	52	78	247	382
26	202	243	158	43	129	1.9	-22	11	5.4	e90	248	353
27	224	257	153	-27	44	-6.7	-8.9	-14	5.6	e294	236	124
28	175	270	155	7.5	34	-36	6.0	12	5.2	535	227	-21
29	e172	262	173	15	33	-7.1	-6.0	-11	2.1	474	252	33
30	149	212	175	-2.0	---	2.1	-10	-17	12	420	254	21
31	157	---	140	13	---	-4.9	---	-20	---	449	255	---
TOTAL	6,980	10,318	6,580	13.48	2,063.69	-266.86	-168.0	-555.77	-80.87	2,647.88	10,650	9,286
MEAN	225	344	212	0.43	71.2	-8.61	-5.60	-17.9	-2.70	85.4	344	310
MAX	499	711	250	143	372	29	31	24	52	535	714	704
MIN	149	152	140	-38	-31	-46	-35	-59	-50	-48	178	-21
AC-FT	13,840	20,470	13,050	27	4,090	-529	-333	-1,100	-160	5,250	21,120	18,420

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2004, BY WATER YEAR (WY)

	MEAN	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	337	171	83.6	72.0	75.7	64.3	43.7	59.1	275	203	319	404
MAX	958	771	517	486	884	965	529	262	1,097	764	1,477	1,001
(WY)	(1988)	(1988)	(1995)	(1995)	(1983)	(1983)	(1983)	(1995)	(1972)	(1986)	(1988)	(1983)
MIN	0.00	0.00	0.00	-2.01	-2.49	-8.61	-11.4	-17.9	-2.70	0.00	0.00	0.00
(WY)	(1975)	(1975)	(1971)	(2001)	(2001)	(2004)	(1999)	(2004)	(2004)	(1974)	(1974)	(1974)

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1969 - 2004	
ANNUAL TOTAL	79,295.12		47,467.55			
ANNUAL MEAN	217		130		169	
HIGHEST ANNUAL MEAN					485	
LOWEST ANNUAL MEAN					4.42	
HIGHEST DAILY MEAN	899	May 30	714	Aug 4	2,940	Aug 16, 1988
LOWEST DAILY MEAN	-85	Apr 15	-59	May 5	-194	Jan 2, 1988
ANNUAL SEVEN-DAY MINIMUM	-31	Mar 15	-30	May 15	-92	Dec 29, 1987
ANNUAL RUNOFF (AC-FT)	157,300		94,150		122,400	
10 PERCENT EXCEEDS	502		379		601	
50 PERCENT EXCEEDS	215		23		4.0	
90 PERCENT EXCEEDS	-11		-24		0.00	

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

252043080302400 EVERGLADES 3 IN C-111 BASIN NEAR HOMESTEAD, FL

LOCATION.--Lat 25°20'53", long 80°30'28", in sec.23, T.58 S., R.38 E., Miami-Dade County, Hydrologic Unit 03090202, approximately 1.5 mi north-northeast of S-18-C and approximately 3.2 mi west of U.S. Highway 1 southwest of Florida City.

DRAINAGE AREA.--Indeterminate.

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

REVISED RECORDS.--WDR FL-96-2A, 1994, 1995.

GAGE.--Electronic data logger. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Land surface is approximately 1.7 ft above National Geodetic Vertical Datum of 1929. Unpublished data prior to 1993 are available in files of the U.S. Geological Survey. Unit values prior to the 1993 water year were not available for review to determine maximum and minimum instantaneous gage height. Water levels below land-surface datum can be recorded.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum mean daily gage height, 3.76 ft Oct. 16, 1999; minimum, 0.40 ft May 17, 1991.

EXTREME STAGES FOR CURRENT YEAR.--Maximum mean daily gage height, 2.86 ft Oct. 1; minimum 0.57 ft June 4.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.86	2.32	2.33	2.19	2.29	2.09	1.41	1.17	0.61	0.71	2.25	2.35
2	2.82	2.32	2.31	2.18	2.29	2.07	1.37	1.19	0.59	0.67	2.30	2.34
3	2.78	2.32	2.30	2.17	2.28	2.05	1.33	1.39	0.58	0.79	2.34	2.33
4	2.75	2.42	2.30	2.17	2.28	2.03	1.29	1.86	0.57	1.06	2.40	2.31
5	2.73	2.55	2.29	2.17	2.27	2.01	1.26	1.86	0.58	1.36	2.44	2.44
6	2.71	2.64	2.27	2.17	2.26	1.98	1.23	1.84	0.74	1.40	2.46	2.68
7	2.68	2.73	2.25	2.16	2.25	1.97	1.21	1.80	1.07	1.33	2.45	2.69
8	2.66	2.73	2.24	2.15	2.23	1.95	1.20	1.76	1.37	1.23	2.43	2.68
9	2.63	2.72	2.24	2.15	2.21	1.92	1.19	1.70	1.21	1.12	2.48	2.64
10	2.61	2.71	2.26	2.14	2.20	1.89	1.18	1.63	1.16	1.02	2.49	2.60
11	2.60	2.69	2.28	2.13	2.20	1.87	1.15	1.58	1.08	0.95	2.45	2.58
12	2.59	2.67	2.27	2.12	2.20	1.85	1.34	1.52	1.01	0.90	2.42	2.56
13	2.57	2.65	2.27	2.11	2.19	1.83	1.59	1.44	0.96	1.03	2.41	2.53
14	2.55	2.63	2.29	2.10	2.18	1.80	1.68	1.36	0.89	1.37	2.39	2.51
15	2.52	2.60	2.31	2.08	2.19	1.79	1.64	1.29	0.84	1.54	2.36	2.48
16	2.50	2.59	2.30	2.08	2.19	1.78	1.60	1.23	0.77	1.43	2.34	2.44
17	2.48	2.57	2.30	2.06	2.18	1.76	1.56	1.23	0.70	1.44	2.32	2.41
18	2.47	2.55	2.29	2.09	2.16	1.73	1.52	1.16	0.66	1.46	2.30	2.38
19	2.45	2.53	2.29	2.16	2.14	1.69	1.47	1.09	0.86	1.67	2.31	2.38
20	2.42	2.51	2.28	2.16	2.13	1.66	1.42	1.03	1.10	1.91	2.37	2.42
21	2.41	2.49	2.27	2.16	2.11	1.63	1.37	0.99	1.27	1.94	2.36	2.40
22	2.39	2.47	2.26	2.15	2.09	1.61	1.32	0.94	1.21	1.96	2.34	2.39
23	2.37	2.46	2.26	2.14	2.08	1.57	1.28	0.88	1.10	1.96	2.33	2.38
24	2.36	2.44	2.27	2.13	2.06	1.53	1.24	0.83	1.03	1.96	2.32	2.36
25	2.37	2.42	2.27	2.12	2.05	1.51	1.19	0.78	0.95	1.97	2.31	2.35
26	2.37	2.41	2.26	2.11	2.16	1.56	1.15	0.74	0.88	1.99	2.32	2.42
27	2.35	2.40	2.25	2.12	2.15	1.54	1.11	0.71	0.80	2.04	2.31	2.43
28	2.34	2.38	2.24	2.13	2.13	1.51	1.12	0.68	0.75	2.11	2.33	2.42
29	2.34	2.36	2.23	2.11	2.11	1.48	1.18	0.66	0.75	2.16	2.38	2.40
30	2.33	2.34	2.21	2.12	---	1.47	1.18	0.64	0.75	2.19	2.37	2.39
31	2.34	---	2.20	2.22	---	1.44	---	0.63	---	2.25	2.35	---
TOTAL	78.35	75.62	70.39	66.25	63.26	54.57	39.78	37.61	26.84	46.92	73.43	73.69
MEAN	2.53	2.52	2.27	2.14	2.18	1.76	1.33	1.21	0.89	1.51	2.37	2.46
MAX	2.86	2.73	2.33	2.22	2.29	2.09	1.68	1.86	1.37	2.25	2.49	2.69
MIN	2.33	2.32	2.20	2.06	2.05	1.44	1.11	0.63	0.57	0.67	2.25	2.31

252036080324300 EVERGLADES 4 IN C-111 BASIN NEAR HOMESTEAD, FL

LOCATION.--Lat 25°20'19", long 80°32'47", in sec.30, T.58 S., R.38 E., Miami-Dade County, Hydrologic Unit 03090202, approximately 1.3 mi northwest of S-18-C and approximately 1.8 mi east of Aerojet Road.

DRAINAGE AREA.--Indeterminate.

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

GAGE.--Satellite data collection platform with water-stage shaft encoder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Land surface is approximately 2.4 ft above National Geodetic Vertical Datum of 1929. Gage is capable of recording water levels below land-surface datum. Unpublished data prior to 1993 water year are available in the files of the U.S. Geological Survey. Unit value data prior to 1993 water year were not available for review to determine instantaneous maximum and minimum gage height.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum mean daily gage height, 3.58 ft Oct. 16, 1999; minimum, indeterminate, well was dry during many years.

EXTREME STAGES FOR CURRENT YEAR.--Maximum mean daily gage height, 2.69 ft Oct. 1; minimum, indeterminate, well was dry for many days.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.69	2.32	2.31	2.17	2.34	2.03	1.23	0.89	---	---	2.27	---
2	2.65	2.32	2.30	2.16	2.33	2.00	1.18	0.97	---	---	2.37	---
3	2.63	2.31	2.28	2.15	2.31	1.97	1.14	1.36	---	---	2.40	---
4	2.62	2.38	2.27	2.15	2.29	1.95	1.10	2.01	---	1.29	2.44	---
5	2.60	2.47	2.27	2.14	2.27	1.92	1.06	1.85	---	1.35	2.45	---
6	2.59	2.51	2.26	2.14	2.26	1.90	1.04	1.72	---	1.18	2.46	---
7	2.57	2.56	2.25	2.12	2.23	1.89	1.02	1.61	---	1.05	2.43	---
8	2.56	2.55	2.24	2.11	2.20	1.87	0.99	1.51	0.98	0.93	2.40	---
9	2.54	2.55	2.23	2.10	2.18	1.84	0.98	1.41	0.86	0.80	2.39	---
10	2.55	2.55	2.25	2.11	2.16	1.81	0.96	1.35	0.79	0.70	2.36	---
11	2.60	2.54	2.28	2.10	2.16	1.78	0.93	1.28	0.75	0.61	2.33	---
12	2.57	2.53	2.27	2.09	2.14	1.76	1.35	1.21	0.72	1.02	2.30	---
13	2.55	2.53	2.26	2.08	2.12	1.74	1.75	1.13	0.67	1.57	2.29	---
14	2.54	2.52	2.27	2.07	2.11	1.72	1.65	1.06	0.59	1.28	2.28	---
15	2.52	2.50	2.29	2.06	2.14	1.71	1.50	0.99	---	1.20	2.27	---
16	---	2.48	2.29	2.04	2.15	1.69	1.42	0.93	---	1.13	2.25	---
17	---	2.46	2.30	2.03	2.13	1.66	1.37	1.05	---	1.17	2.23	---
18	---	2.44	2.30	2.09	2.10	1.62	1.32	0.90	---	1.20	---	---
19	---	2.43	2.29	2.23	2.07	1.58	1.26	0.80	---	1.60	---	---
20	---	2.42	2.28	2.20	2.06	1.54	1.21	0.74	1.34	1.98	---	---
21	---	2.41	2.26	2.17	2.04	1.52	1.16	0.70	1.84	2.00	---	---
22	---	2.40	---	2.16	2.02	1.48	1.11	0.64	1.23	2.07	---	2.27
23	2.37	2.39	2.26	2.14	2.00	1.44	1.08	0.57	0.94	2.00	---	2.26
24	2.36	2.37	2.28	2.11	1.98	1.40	1.04	---	0.80	1.96	---	2.24
25	2.39	2.37	2.27	2.10	1.99	1.38	1.00	---	0.69	1.99	---	2.23
26	2.40	2.36	2.26	2.09	2.18	1.44	0.96	---	0.60	2.02	---	2.29
27	2.37	2.35	2.25	2.12	2.13	1.39	0.92	---	---	2.06	---	2.28
28	2.35	2.34	2.23	2.12	2.09	1.35	0.88	---	---	2.24	---	2.27
29	2.35	2.33	2.21	2.09	2.06	1.34	0.92	---	---	2.25	---	2.25
30	2.33	2.32	2.19	2.10	---	1.32	0.90	---	---	2.27	---	2.22
31	2.34	---	2.18	2.25	---	1.27	---	---	---	2.28	---	---
TOTAL	---	73.01	---	65.79	62.24	51.31	34.43	---	---	---	---	---
MEAN	---	2.43	---	2.12	2.15	1.66	1.15	---	---	---	---	---
MAX	---	2.56	---	2.25	2.34	2.03	1.75	---	---	---	---	---
MIN	---	2.31	---	2.03	1.98	1.27	0.88	---	---	---	---	---

251946080254800 EVERGLADES 1 IN C-111 BASIN NEAR HOMESTEAD, FL

LOCATION.--Lat 25°19'50", long 80°26'06", in NE ¼ sec.4, T.59 S., R.39 E., Dade County, Hydrologic Unit 03090202, approximately 1 mi east of U.S. Highway 1, 1.3 mi west-southwest of Levee 31-E, east of S-18-C, southeast of Florida City.

DRAINAGE AREA.--Indeterminate.

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

GAGE.--Electronic data logger. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark).

REMARKS.--Land surface is approximately 1.1 ft above National Geodetic Vertical Datum of 1929. Data prior to 1993 water year are available in files of the U.S. Geological Survey. Unit values prior to 1993 water year were not available for review to determine maximum and minimum instantaneous gage height. Water levels below land-surface datum can be recorded.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum mean daily gage height, 3.26 ft Nov. 15, 1994; minimum, 0.05 ft May 18, 19, 2002.

EXTREME STAGES FOR CURRENT YEAR.--Maximum mean daily gage height, 2.27 ft Nov. 12; minimum, 0.25 ft June 4.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.92	1.73	1.70	1.65	1.72	1.52	1.26	0.93	0.31	0.70	1.46	1.58
2	1.90	1.73	1.70	1.63	1.70	1.51	1.21	0.89	0.28	0.63	1.48	1.57
3	1.88	1.74	1.69	1.63	1.67	1.49	1.16	0.91	0.26	0.59	1.52	1.57
4	1.89	1.87	1.70	1.62	1.65	1.48	1.13	1.20	0.25	0.59	1.57	1.59
5	1.90	1.98	1.70	1.61	1.63	1.46	1.10	1.20	0.29	0.63	1.62	1.68
6	1.89	2.09	1.69	1.60	1.62	1.45	1.07	1.18	0.42	0.66	1.65	1.79
7	1.87	2.12	1.69	1.59	1.61	1.44	1.06	1.16	0.66	0.65	1.63	1.77
8	1.85	2.04	1.69	1.58	1.60	1.43	1.04	1.14	0.71	0.63	1.62	1.74
9	1.83	2.01	1.67	1.57	1.58	1.42	1.02	1.11	0.93	0.60	1.60	1.72
10	1.81	1.98	1.70	1.58	1.59	1.40	1.00	1.09	1.00	0.58	1.60	1.69
11	1.79	2.09	1.72	1.57	1.60	1.39	0.98	1.10	0.96	0.56	1.59	1.70
12	1.78	2.27	1.71	1.56	1.59	1.37	1.08	1.07	0.92	0.53	1.59	1.69
13	1.76	2.17	1.70	1.55	1.58	1.36	1.22	1.04	0.87	0.52	1.63	1.68
14	1.75	2.04	1.71	1.53	1.57	1.33	1.23	1.00	0.83	0.73	1.62	1.67
15	1.74	1.99	1.73	1.52	1.57	1.33	1.19	0.97	0.79	1.02	1.60	1.67
16	1.74	1.95	1.72	1.51	1.57	1.31	1.16	0.93	0.74	0.98	1.59	1.66
17	1.74	1.90	1.72	1.50	1.56	1.30	1.13	0.93	0.70	0.96	1.58	1.65
18	1.74	1.85	1.72	1.52	1.56	1.27	1.10	0.90	0.69	1.06	1.58	1.64
19	1.73	1.83	1.71	1.60	1.54	1.25	1.06	0.85	0.64	1.07	1.57	1.64
20	1.73	1.81	1.70	1.59	1.53	1.23	1.02	0.80	0.92	1.17	1.57	1.66
21	1.72	1.80	1.69	1.58	1.52	1.23	0.98	0.76	1.24	1.21	1.57	1.65
22	1.73	1.78	1.69	1.57	1.51	1.21	0.95	0.72	1.18	1.21	1.56	1.67
23	1.71	1.78	1.69	1.55	1.50	1.20	0.90	0.66	1.10	1.19	1.57	1.75
24	1.71	1.77	1.72	1.54	1.49	1.21	0.85	0.61	1.03	1.18	1.57	1.75
25	1.72	1.77	1.71	1.53	1.49	1.25	0.80	0.57	0.95	1.28	1.57	1.73
26	1.74	1.76	1.70	1.52	1.59	1.31	0.76	0.53	0.85	1.39	1.58	1.73
27	1.73	1.75	1.69	1.55	1.57	1.39	0.71	0.48	0.76	1.38	1.58	1.70
28	1.71	1.74	1.68	1.56	1.55	1.40	0.88	0.44	0.68	1.38	1.57	1.67
29	1.74	1.72	1.67	1.54	1.54	1.37	0.99	0.40	0.73	1.42	1.58	1.67
30	1.72	1.71	1.67	1.53	---	1.35	0.95	0.37	0.76	1.44	1.57	1.74
31	1.74	---	1.66	1.63	---	1.31	---	0.35	---	1.46	1.57	---
TOTAL	55.21	56.77	52.64	48.61	45.80	41.97	30.99	26.29	22.45	29.40	48.96	50.42
MEAN	1.78	1.89	1.70	1.57	1.58	1.35	1.03	0.85	0.75	0.95	1.58	1.68
MAX	1.92	2.27	1.73	1.65	1.72	1.52	1.26	1.20	1.24	1.46	1.65	1.79
MIN	1.71	1.71	1.66	1.50	1.49	1.20	0.71	0.35	0.25	0.52	1.46	1.57

251906080283400 EVERGLADES 2A IN C-111 BASIN NEAR HOMESTEAD, FL

LOCATION.--Lat 25°18'57", long 80°28'41", in sec.7, T.59 S., R.39 E., Miami-Dade County, Hydrologic Unit 03090202, in C-111 basin between C-109 and C-110 Canals, 1.6 mi west of U.S. Highway 1 and 1.5 mi north of C-111 Canal, approximately 8.5 mi south of Florida City.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--September 25, 1985 to current year.

GAGE.--Electronic data logger. Datum of gage is National Geodetic Vertical Datum of 1929

REMARKS.--Land surface is approximately 1.2 ft above National Geodetic Vertical Datum of 1929. Water levels below land-surface datum are recorded. Gage height records prior to October 1992, are available in the files of the U.S. Geological Survey. Water year 2000 was revised. Revised data is available in the files of the U.S. Geological Survey. Unit values prior to 1993 water year were not available to determine instantaneous maximum and minimum gage height.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum mean daily gage height, 3.60 ft Oct. 15, 1999, (estimated); minimum, 0.03 ft May 18, 19, 2002.

EXTREME STAGES FOR CURRENT YEAR.--Maximum mean daily gage height, 2.71 ft Nov. 7; minimum, 0.28 ft June 3.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.67	2.26	2.28	2.15	1.98	1.83	1.32	0.88	0.38	0.81	1.84	2.18
2	2.64	2.26	2.27	2.14	2.02	1.81	1.29	0.86	0.33	0.75	1.90	2.17
3	2.63	2.26	2.26	2.11	2.04	1.79	1.26	0.94	0.28	0.69	1.99	2.17
4	2.62	2.35	2.25	2.08	2.06	1.77	1.23	1.25	0.32	0.71	2.08	2.18
5	2.61	2.46	2.25	2.06	2.07	1.75	1.20	1.26	0.45	0.82	2.14	2.29
6	2.59	2.62	2.23	2.03	2.07	1.72	1.17	1.25	0.49	0.83	2.19	2.46
7	2.57	2.71	2.22	2.00	2.07	1.71	1.14	1.25	0.88	0.82	2.19	2.49
8	2.55	2.68	2.21	1.98	2.05	1.69	1.11	1.24	1.04	0.79	2.19	2.47
9	2.52	2.66	2.20	1.96	2.04	1.67	1.09	1.23	1.06	0.76	2.19	2.44
10	2.51	2.63	2.22	1.94	2.03	1.65	1.08	1.21	1.03	0.71	2.19	2.41
11	2.49	2.61	2.24	1.92	2.03	1.64	1.06	1.20	1.00	0.67	2.19	2.41
12	2.48	2.59	2.23	1.89	2.01	1.62	1.13	1.18	0.97	0.64	2.19	2.40
13	2.46	2.57	2.23	1.88	1.99	1.60	1.25	1.16	0.93	0.63	2.19	2.38
14	2.45	2.55	2.24	1.86	1.96	1.58	1.28	1.13	0.88	0.65	2.19	2.36
15	2.43	2.52	2.27	1.84	1.95	1.57	1.26	1.09	0.84	0.79	2.18	2.33
16	2.42	2.50	2.26	1.83	1.94	1.56	1.25	1.06	0.79	0.89	2.18	2.29
17	2.40	2.48	2.27	1.81	1.92	1.55	1.23	1.09	0.77	0.94	2.18	2.26
18	2.39	2.46	2.26	1.82	1.90	1.53	1.20	1.06	0.73	0.97	2.17	2.23
19	2.37	2.45	2.25	1.87	1.87	1.51	1.17	1.00	0.68	1.03	2.15	2.24
20	2.35	2.43	2.24	1.87	1.85	1.48	1.15	0.94	0.90	1.14	2.15	2.27
21	2.34	2.42	2.23	1.85	1.84	1.47	1.11	0.89	1.22	1.21	2.16	2.27
22	2.33	2.40	2.23	1.84	1.82	1.45	1.08	0.84	1.18	1.23	2.15	2.26
23	2.31	2.39	2.23	1.82	1.81	1.43	1.05	0.79	1.13	1.24	2.15	2.25
24	2.30	2.37	2.25	1.81	1.79	1.41	1.02	0.73	1.07	1.24	2.15	2.25
25	2.30	2.36	2.24	1.80	1.79	1.40	0.97	0.68	1.00	1.35	2.15	2.26
26	2.29	2.34	2.23	1.79	1.87	1.40	0.93	0.64	0.93	1.45	2.17	2.31
27	2.28	2.33	2.22	1.81	1.86	1.39	0.90	0.60	0.86	1.47	2.15	2.32
28	2.27	2.32	2.21	1.81	1.85	1.38	0.88	0.54	0.84	1.54	2.15	2.30
29	2.27	2.30	2.19	1.79	1.84	1.36	0.91	0.49	0.86	1.67	2.17	2.27
30	2.26	2.29	2.18	1.79	---	1.36	0.90	0.45	0.84	1.74	2.19	2.29
31	2.27	---	2.16	1.87	---	1.34	---	0.42	---	1.80	2.18	---
TOTAL	75.37	73.57	69.25	59.02	56.32	48.42	33.62	29.35	24.68	31.98	66.44	69.21
MEAN	2.43	2.45	2.23	1.90	1.94	1.56	1.12	0.95	0.82	1.03	2.14	2.31
MAX	2.67	2.71	2.28	2.15	2.07	1.83	1.32	1.26	1.22	1.80	2.19	2.49
MIN	2.26	2.26	2.16	1.79	1.79	1.34	0.88	0.42	0.28	0.63	1.84	2.17

251716080342100 EVERGLADES 5A IN C-111 BASIN NEAR HOMESTEAD, FL

LOCATION.--Lat 25°17'10", long 80°34'22", in SW ¼ sec.18, T.59 S., R.38 E., Miami-Dade County, Hydrologic Unit 03090202, in C-111 drainage basin, 2.5 mi south of Levee 31 canal and 7 mi west of U.S. Highway 1, 12.5 mi southwest of Florida City.

DRAINAGE AREA.--Indeterminate.

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

GAGE.--Electronic data logger. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Land surface is approximately 1.1 ft above National Geodetic Vertical Datum of 1929. Unpublished data prior to 1993 water year are available in files of the U.S. Geological Survey. Unit values prior to 1993 water year were not available for review to determine instantaneous maximum and minimum gage height. Water levels below land-surface datum are recorded.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum mean daily gage height, 3.06 ft Oct. 16, 1999; minimum, -0.98 ft May 19, 2002.

EXTREME STAGES FOR CURRENT YEAR.--Maximum mean daily gage height, 2.17 ft Sept. 7; minimum, -0.89 ft June 6.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.89	1.37	1.34	1.25	1.38	1.18	0.59	0.07	-0.67	0.00	1.15	1.20
2	1.84	1.36	1.33	1.24	1.36	1.17	0.54	0.19	-0.73	-0.09	1.18	1.22
3	1.80	1.35	1.32	1.24	1.32	1.15	0.49	0.56	-0.79	-0.07	1.24	1.22
4	1.80	1.44	1.31	1.24	1.29	1.13	0.45	0.96	-0.84	-0.06	1.31	1.21
5	1.77	1.60	1.31	1.23	1.27	1.11	0.41	0.93	-0.87	-0.06	1.37	1.40
6	1.73	1.78	1.30	1.22	1.26	1.09	0.37	0.89	-0.89	0.01	1.41	2.08
7	1.70	1.92	1.29	1.22	1.26	1.08	0.33	0.85	-0.29	-0.03	1.41	2.17
8	1.67	1.86	1.28	1.20	1.24	1.06	0.30	0.81	0.34	-0.12	1.41	2.02
9	1.64	1.79	1.28	1.20	1.23	1.04	0.28	0.76	0.26	-0.20	1.41	1.88
10	1.64	1.73	1.30	1.20	1.22	1.02	0.26	0.71	0.19	-0.28	1.39	1.77
11	1.74	1.67	1.33	1.19	1.22	1.00	0.24	0.66	0.14	-0.32	1.36	1.68
12	1.71	1.63	1.32	1.18	1.21	0.99	0.51	0.62	0.08	-0.32	1.34	1.60
13	1.67	1.59	1.31	1.17	1.20	0.97	0.74	0.56	0.03	-0.20	1.35	1.52
14	1.64	1.56	1.32	1.16	1.19	0.96	0.80	0.47	-0.04	0.26	1.36	1.47
15	1.61	1.53	1.35	1.16	1.20	0.96	0.76	0.38	-0.10	0.87	1.33	1.44
16	1.58	1.52	1.33	1.15	1.22	0.95	0.74	0.35	-0.16	0.77	1.30	1.40
17	1.55	1.50	1.33	1.14	1.22	0.94	0.70	0.31	-0.22	0.70	1.27	1.38
18	1.53	1.48	1.32	1.15	1.20	0.90	0.67	0.22	-0.23	0.61	1.24	1.35
19	1.51	1.47	1.31	1.22	1.18	0.88	0.62	0.13	-0.29	0.53	1.24	1.34
20	1.49	1.46	1.30	1.24	1.17	0.84	0.58	0.06	-0.26	0.56	1.30	1.33
21	1.47	1.44	1.29	1.23	1.16	0.82	0.53	-0.01	0.29	0.71	1.30	1.30
22	1.46	1.42	1.29	1.23	1.15	0.79	0.48	-0.07	0.17	0.93	1.29	1.29
23	1.44	1.41	1.29	1.22	1.14	0.76	0.43	-0.13	0.09	0.92	1.25	1.30
24	1.42	1.41	1.30	1.21	1.12	0.72	0.38	-0.20	0.02	0.93	1.22	1.28
25	1.41	1.40	1.30	1.20	1.13	0.71	0.32	-0.26	-0.06	1.03	1.20	1.26
26	1.41	1.39	1.29	1.20	1.24	0.78	0.26	-0.32	-0.13	1.11	1.18	1.32
27	1.39	1.38	1.29	1.22	1.23	0.75	0.22	-0.38	-0.20	1.13	1.16	1.75
28	1.38	1.38	1.28	1.23	1.21	0.71	0.17	-0.45	-0.18	1.19	1.15	1.99
29	1.38	1.37	1.27	1.21	1.20	0.68	0.14	-0.51	0.07	1.19	1.14	1.89
30	1.38	1.35	1.26	1.22	---	0.66	0.11	-0.57	0.05	1.20	1.15	1.77
31	1.39	---	1.26	1.30	---	0.63	---	-0.62	---	1.19	1.16	---
TOTAL	49.04	45.56	40.40	37.47	35.42	28.43	13.42	6.97	-5.22	14.09	39.57	45.83
MEAN	1.58	1.52	1.30	1.21	1.22	0.92	0.45	0.22	-0.17	0.45	1.28	1.53
MAX	1.89	1.92	1.35	1.30	1.38	1.18	0.80	0.96	0.34	1.20	1.41	2.17
MIN	1.38	1.35	1.26	1.14	1.12	0.63	0.11	-0.62	-0.89	-0.32	1.14	1.20

251724080341400 EVERGLADES 5B IN C-111 BASIN NEAR HOMESTEAD, FL

LOCATION.--Lat 25°17'14", long 80°34'08", in SW ¼ sec.18, T.59 S., R.38 E., Miami-Dade County, Hydrologic Unit 03090202, in C-111 drainage basin, 2.5 mi south of Levee 31 canal and 7 mi west of U.S. Highway 1, 12.5 mi southwest of Florida City.

DRAINAGE AREA.--Indeterminate.

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

GAGE.--Electronic data logger. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark).

REMARKS.--Land surface is approximately 1.1 ft above National Geodetic Vertical Datum of 1929. Water levels below land-surface datum are not able to be recorded. Unpublished data prior to 1993 water year are available in the files of the U.S. Geological Survey. Unit values data prior to 1993 water year was not available to determine instantaneous maximum and minimum gage height. (Corrected).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum mean daily gage height, 3.10 ft Oct. 16, 1999; minimum, indeterminate.

EXTREME STAGES FOR CURRENT YEAR.--Maximum mean daily gage height, 1.97 ft Nov. 7; minimum, indeterminate, well was dry for many days.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.88	1.51	1.48	1.40	1.47	1.32	---	---	---	---	---	---
2	1.84	1.50	1.47	1.40	1.45	1.30	---	---	---	---	---	---
3	1.80	1.49	1.46	1.40	1.43	1.28	---	---	---	---	---	---
4	1.81	1.57	1.46	1.39	1.41	1.27	---	---	---	---	1.39	---
5	1.78	1.67	1.46	1.39	1.40	1.25	---	---	---	---	1.44	---
6	1.75	1.82	1.45	1.38	1.39	1.24	---	---	---	---	1.47	---
7	1.71	1.97	1.44	1.38	1.38	1.23	---	---	---	---	1.47	---
8	1.69	1.91	1.43	1.37	1.37	1.23	---	---	---	---	1.47	---
9	1.66	1.84	1.43	1.36	1.36	---	---	---	---	---	1.47	---
10	1.65	1.78	1.45	1.36	1.35	---	---	---	---	---	1.45	---
11	---	1.73	1.46	1.35	1.35	---	---	---	---	---	1.43	---
12	---	1.69	1.46	1.34	1.34	---	---	---	---	---	1.41	---
13	---	1.67	1.45	1.34	1.33	---	---	---	---	---	1.42	---
14	---	1.65	1.46	1.33	1.32	---	---	---	---	---	1.42	---
15	---	1.63	1.48	1.32	1.34	---	---	---	---	---	1.39	---
16	1.69	1.62	1.47	1.32	1.36	---	---	---	---	---	1.37	---
17	1.66	1.61	1.47	1.31	1.35	---	---	---	---	---	1.34	---
18	1.65	1.59	1.46	1.32	1.33	---	---	---	---	---	1.32	---
19	1.63	1.58	1.46	1.36	1.32	---	---	---	---	---	---	---
20	1.61	1.57	1.45	1.37	1.31	---	---	---	---	---	---	---
21	1.59	1.56	1.44	1.36	1.31	---	---	---	---	---	---	---
22	1.59	1.55	1.44	1.35	1.30	---	---	---	---	---	---	---
23	1.57	1.54	1.44	1.34	1.29	---	---	---	---	---	---	---
24	1.55	1.53	1.46	1.34	1.28	---	---	---	---	---	---	---
25	1.54	1.53	1.45	1.33	1.28	---	---	---	---	---	---	---
26	1.53	1.52	1.45	1.32	1.38	---	---	---	---	---	---	---
27	1.52	1.51	1.44	1.35	1.36	---	---	---	---	---	---	---
28	1.51	1.50	1.43	1.35	1.34	---	---	---	---	---	---	---
29	1.51	1.50	1.42	1.34	1.33	---	---	---	---	---	---	---
30	1.50	1.48	1.42	1.34	---	---	---	---	---	---	---	---
31	1.52	---	1.41	1.42	---	---	---	---	---	---	---	---
TOTAL	---	48.62	44.95	42.03	39.23	---	---	---	---	---	---	---
MEAN	---	1.62	1.45	1.36	1.35	---	---	---	---	---	---	---
MAX	---	1.97	1.48	1.42	1.47	---	---	---	---	---	---	---
MIN	---	1.48	1.41	1.31	1.28	---	---	---	---	---	---	---

251433080265000 WEST HIGHWAY CREEK, FL

LOCATION.--Lat 25°14'33", long 80°26'50", T.60 S., R.39 E., Miami-Dade County, Hydrologic Unit 03090202, located approximately 150 ft upstream of the mouth on the right bank, approximately 6 mi northwest of Key Largo, FL.

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

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

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Datum of gage North American Vertical Datum of 1988.

REMARKS.--Records good. Daily values are not published for this site. Discharge and gage height 15 minute data, are available in the files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

DISCHARGE: Maximum positive discharge, 626 ft³/s Aug. 14, 2001; maximum negative, 1,050 ft³/s Oct. 15, 1999.

GAGE HEIGHT: Maximum gage height, 1.86 ft Oct. 16, 1999; minimum, -1.64 ft Mar. 30, 1996.

EXTREMES FOR CURRENT YEAR.--

DISCHARGE: Maximum positive discharge, 579 ft³/s Nov. 3; maximum negative, 740 ft³/s Sept. 5.

GAGE HEIGHT: Maximum gage height, 1.38 ft Sept. 5; minimum, -1.36 ft Apr. 27.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SALINITY (TOP AND BOTTOM): February 1996 to current year.

WATER TEMPERATURE (TOP AND BOTTOM): February 1996 to current year.

INSTRUMENTATION.--Water-quality monitor with top and bottom sensors.

REMARKS.--Salinity (TOP) record rated excellent except for the following periods: Oct. 29 to Feb. 26, Apr. 16-28, and May 26 to June 28, rated good; Feb. 27 to Mar. 9, rated fair. Salinity (BOTTOM) record rated excellent except for the following periods: Apr. 16 to May 2, rated good. Temperature (TOP AND BOTTOM) record rated good. Salinity and temperature sensors located at -1.85 ft NAVD (TOP) and -3.75 ft NAVD (BOTTOM). Salinity and temperature 15 minute data, are available in files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

SALINITY (TOP): Maximum recorded, 41.4 ppt July 24, 2004, but may have been higher during period of missing record; minimum recorded, 0.2 ppt occurred on many days during the months of July-Oct. during the 1996, 1997, 1999, and 2001 water years, but may have been lower during period of missing record.

SALINITY (BOTTOM): Maximum recorded, 41.9 ppt July 25, 2004, but may have been higher during period of missing record; minimum recorded, 0.2 ppt occurred on many days during the months of July-Oct. during the 1996, 1997, 1999, and 2001 water years, but may have been lower during period of missing record.

WATER TEMPERATURE (TOP): Maximum recorded, 35.8°C July 12, 2000, but may have been higher during period of missing record; minimum recorded, 9.7°C Jan. 19, 1997, but may have been lower during period of missing record.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 36.1°C July 25, 26, 1999, but may have been higher during period of missing record; minimum recorded, 9.7°C Jan. 19, 1997, but may have been lower during period of missing record.

EXTREMES FOR CURRENT YEAR.--

SALINITY (TOP): Maximum recorded, 41.4 ppt July 24, but may have been higher during period of missing record; minimum recorded, 0.3 ppt Oct. 1-3, but may have been lower during period of missing record.

SALINITY (BOTTOM): Maximum recorded, 41.9 ppt July 25, but may have been higher during period of missing record; minimum recorded, 0.3 ppt Oct. 1-3, but may have been lower during period of missing record.

WATER TEMPERATURE (TOP): Maximum recorded, 35.1°C Aug. 30, but may have been higher during period of missing record; minimum recorded, 12.6°C Dec. 21, but may have been lower during period of missing record.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 34.5°C June 27 and Aug. 29, but may have been higher during period of missing record; minimum recorded, 12.6°C Dec. 21, but may have been lower during period of missing record.

251341080291200 STILLWATER CREEK NEAR HOMESTEAD, FL

LOCATION.--Lat 25°13'41", long 80°29'12", T.60 S., R.38 E., Miami-Dade County, Hydrologic Unit 03090202, located on the left bank near the mouth, 8 mi northwest of Key Largo, FL.

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

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

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Datum of gage North American Vertical Datum of 1988.

REMARKS.--Records good. Daily values are not published for this site. Discharge and gage height 15 minute data, are available in the files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

DISCHARGE: Maximum positive discharge, 158 ft³/s Sept. 8, 2004; maximum negative, 206 ft³/s Sept. 5, 2004.

GAGE HEIGHT: Maximum gage height, 1.35 ft Oct. 15, 1999; minimum, -1.84 ft Jan. 24, 2003.

EXTREMES FOR CURRENT YEAR.--

DISCHARGE: Maximum positive discharge, 158 ft³/s Sept. 8; maximum negative, 206 ft³/s Sept. 5.

GAGE HEIGHT: Maximum gage height, 0.98 ft Sept. 5; minimum, -1.69 ft Apr. 27.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SALINITY (TOP AND BOTTOM): April 1999 to current year.

WATER TEMPERATURE (TOP AND BOTTOM): April 1999 to current year.

INSTRUMENTATION.--Water-quality monitor with top and bottom sensors.

REMARKS.--Salinity (TOP) record rated excellent except for the following periods: Aug. 5-16, rated good. Salinity (BOTTOM) record rated excellent except for the following periods: Aug. 1-15, rated good. Temperature (TOP AND BOTTOM) record rated good. Salinity and temperature sensors located at -3.2 ft NAVD (TOP) and -4.4 ft NAVD (BOTTOM). Daily values are not published for this site. Salinity and temperature 15 minute data, are available in files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

SALINITY (TOP): Maximum recorded, 39.8 ppt July 25, 2004, but may have been higher during period of missing record; minimum recorded, 0.5 ppt Oct. 5, 2000, but may have been lower during period of missing record.

SALINITY (BOTTOM): Maximum recorded, 39.5 ppt July 18, 19, 2004, but may have been higher during period of missing record; minimum recorded, 0.6 ppt Sept. 18, 2002, July 2, 3, 2003, but may have been lower during period of missing record.

WATER TEMPERATURE (TOP): Maximum recorded, 35.6°C July 27, 1999, but may have been higher during period of missing record; minimum recorded, 11.8°C Jan. 1, 2001, but may have been lower during period of missing record.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 35.4°C Aug. 29, 2004, but may have been higher during period of missing record; minimum recorded, 10.7°C Jan. 19, 2003, but may have been lower during period of missing record.

EXTREMES FOR CURRENT YEAR.--

SALINITY (TOP): Maximum recorded, 39.8 ppt July 25, but may have been higher during period of missing record; minimum recorded, 0.7 ppt Oct. 14-16, but may have been lower during period of missing record.

SALINITY (BOTTOM): Maximum recorded, 39.5 ppt July 18, 19, but may have been higher during period of missing record; minimum recorded, 0.7 ppt Oct. 15, but may have been lower during period of missing record.

WATER TEMPERATURE (TOP): Maximum recorded, 34.9°C June 20 and Aug. 29, but may have been higher during period of missing record; minimum recorded, 12.3°C Dec. 21, but may have been lower during period of missing record.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 35.4°C Aug. 29, but may have been higher during period of missing record; minimum recorded, 12.4°C Dec. 21, but may have been lower during period of missing record.

251253080320100 TROUT CREEK AT MOUTH, FL

LOCATION.--Lat 25°12'53", long 80°32'01", T.38 S., R.60 E., Miami-Dade County, Hydrologic Unit 03090202, located on left bank, 100 ft upstream of mouth of Trout Creek, 10 mi northwest of Key Largo.

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

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

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Datum of gage is North American Vertical Datum of 1988.

REMARKS.--Records rated good. Daily values are not published for this site. Discharge and gage height 15 minute data are available in the files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

DISCHARGE: Maximum positive discharge, 2,170 ft³/s Oct. 18, 1999; maximum negative, 3,380 ft³/s Sept. 5, 2004.

GAGE HEIGHT: Maximum gage height, 1.76 ft Oct. 15, 1999; minimum, -1.74 ft Mar. 9, 10, 1996.

EXTREMES FOR CURRENT YEAR.--

DISCHARGE: Maximum positive discharge, 1,610 ft³/s Nov. 6; maximum negative, 3,380 ft³/s Sept. 5.

GAGE HEIGHT: Maximum gage height, 1.35 ft Sept. 5; minimum, -1.43 ft Mar. 25.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SALINITY (TOP, BOTTOM): October 1995 to current year.

WATER TEMPERATURE (TOP, BOTTOM): October 1995 to current year.

INSTRUMENTATION.--Water-quality monitor with top and bottom sensors.

REMARKS.--Salinity (TOP) record rated excellent except the following periods: Jan. 22 to Feb. 2, rated good; Nov. 20, rated poor. Salinity (BOTTOM) record rated excellent except for the following period: Oct. 17-22, rated good; Oct. 23-26, rated fair; Nov. 19, 20, and Feb. 1, rated poor. Temperature (TOP and BOTTOM) record rated good. Salinity and temperature sensors located at -1.95 ft NAVD (TOP) and -4.0 ft NAVD (BOTTOM). Salinity and temperature, 15 minute data, are available in files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>. Daily values are not published for this site.

EXTREMES FOR PERIOD OF RECORD.--

SALINITY (TOP): Maximum recorded, 39.8 ppt July 17, 2004, but may have been higher during period of missing record; minimum recorded, 0.3 ppt Oct. 26, 1999, but may have been lower during period of missing record.

SALINITY (BOTTOM): Maximum recorded, 41.0 ppt July 17, 2004, but may have been higher during period of missing record; minimum recorded, 0.3 ppt Oct. 28, 2001, but may have been lower during period of missing record.

WATER TEMPERATURE (TOP): Maximum recorded, 37.5°C July 27, 1999, but may have been higher during period of missing record; minimum recorded, 9.6°C Jan. 20, 1997, but may have been lower during period of missing record.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 37.5°C July 27, 1999, but may have been higher during period of missing record; minimum recorded, 10.0°C Jan. 19, 1997, but may have been lower during period of missing record.

EXTREMES FOR CURRENT YEAR.--

SALINITY (TOP): Maximum recorded, 39.8 ppt July 17, but may have been higher during period of missing record; minimum recorded, 0.4 ppt Oct. 9, but may have been lower during period of missing record.

SALINITY (BOTTOM): Maximum recorded, 41.0 ppt July 17, but may have been higher during period of missing record; minimum recorded, 0.4 ppt Oct. 17, but may have been lower during period of missing record.

WATER TEMPERATURE (TOP): Maximum recorded, 35.8°C Aug. 29, but may have been higher during period of missing record; minimum recorded, 12.4°C Dec. 21, but may have been lower during period of missing record.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 35.8°C Aug. 29, but may have been higher during period of missing record; minimum recorded, 12.9°C Dec. 21, but may have been lower during period of missing record.

251209080350100 MUD CREEK AT THE MOUTH NEAR HOMESTEAD, FL

LOCATION.--Lat 25°12'09", long 80°35'01", T.60 S., R.37 E., Miami-Dade County, Hydrologic Unit 03090202, left bank upstream of mouth, 9 mi northwest of Key Largo, FL.

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

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

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Datum of gage North American Vertical Datum of 1988.

REMARKS.--Records good. Daily values are not published for this site. Discharge and gage height 15 minute data, are available in the files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

DISCHARGE: Maximum positive discharge, 341 ft³/s Sept. 8, 2004; maximum negative, 380 ft³/s Sept. 26, 2004.

GAGE HEIGHT: Maximum gage height, 1.93 ft Oct. 15, 1999; minimum, -1.76 ft Mar. 10, 1996.

EXTREMES FOR CURRENT YEAR.--

DISCHARGE: Maximum positive discharge, 341 ft³/s Sept. 8; maximum negative, 380 ft³/s Sept. 26.

GAGE HEIGHT: Maximum gage height, 1.47 ft Sept. 26; minimum, -1.46 ft Feb. 18.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SALINITY (TOP AND BOTTOM): October 1995 to current year.

WATER TEMPERATURE (TOP AND BOTTOM): October 1995 to current year.

INSTRUMENTATION.--Water-quality monitor with top and bottom sensors.

REMARKS.--Salinity (TOP) record rated excellent. Salinity (BOTTOM) record rated excellent except for the following periods: Oct. 6 to Nov. 16, Mar. 23 to Apr. 6 and Aug. 23 to Sept. 7, rated good; Nov. 17 to Dec. 2, rated fair. Temperature (TOP AND BOTTOM) record rated good. Salinity and temperature sensors located at -2.35 ft NAVD (TOP) and -3.1 ft NAVD (BOTTOM). Daily values are not published for this site. Salinity and temperature 15 minute data, are available in files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

SALINITY (TOP): Maximum recorded, 41.0 ppt July 9, 2004, but may have been higher during period of missing record; minimum recorded, 0.2 ppt Nov. 15-17, 2003, but may have been lower during period of missing record.

SALINITY (BOTTOM): Maximum recorded, 40.9 ppt July 9, 2004, but may have been higher during period of missing record; minimum recorded, 0.3 ppt Oct. 5-18, 2003, and Nov. 15-18, 2003, but may have been lower during period of missing record.

WATER TEMPERATURE (TOP): Maximum recorded, 36.6°C July 26, 27, 1999, but may have been higher during period of missing record; minimum recorded, 10.1°C Jan. 18, 1997, but may have been lower during period of missing record.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 36.7°C July 25, 1999, but may have been higher during period of missing record; minimum recorded, 10.2°C Jan. 19, 1997, but may have been lower during period of missing record.

EXTREMES FOR CURRENT YEAR.--

SALINITY (TOP): Maximum recorded, 41.0 ppt July 9, but may have been higher during period of missing record; minimum recorded, 0.2 ppt Nov. 15-17, but may have been lower during period of missing record.

SALINITY (BOTTOM): Maximum recorded, 40.9 ppt July 9, but may have been higher during period of missing record; minimum recorded, 0.3 ppt Oct. 5-18, and Nov. 15-18, but may have been lower during period of missing record.

WATER TEMPERATURE (TOP): Maximum recorded, 35.6°C Aug. 27, but may have been higher during period of missing record; minimum recorded, 13.1°C Dec. 21, but may have been lower during period of missing record.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 35.8°C Aug. 29, but may have been higher during period of missing record; minimum recorded, 13.2°C Dec. 21, but may have been lower during period of missing record.

251127080382100 TAYLOR RIVER AT MOUTH NEAR HOMESTEAD, FL

LOCATION.--Lat 25°11'27", long 80°38'21", T.60 S., R.37 E., Miami-Dade County, Hydrologic Unit 03090202, located at the mouth of Taylor River on the left bank, approximately 10 mi northwest of Key Largo, FL.

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

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

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Datum of gage North American Vertical Datum of 1988.

REMARKS.--Records excellent. Daily values are not published for this site. Discharge and gage height 15 minute data are available in the files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

DISCHARGE: Maximum positive discharge, 478 ft³/s Oct. 15, 1999; maximum negative, 372 ft³/s Oct. 15, 1999.

GAGE HEIGHT: Maximum gage height, 2.3 ft Oct. 15, 1999; minimum, -1.78 ft Mar. 11, 1996.

EXTREMES FOR CURRENT YEAR.--

DISCHARGE: Maximum positive discharge, 260 ft³/s Nov. 11 and Sept. 9; maximum negative, 276 ft³/s Sept. 5.

GAGE HEIGHT: Maximum gage height, 1.63 ft Sept. 5; minimum, -1.44 ft Jan. 11.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SALINITY (TOP AND BOTTOM): October 1995 to current year.

WATER TEMPERATURE (TOP AND BOTTOM): October 1995 to current year.

INSTRUMENTATION.--Water-quality monitor with top and bottom sensors.

REMARKS.--Salinity (TOP) record rated excellent except for the following periods: Sept. 8-30, rated good. Salinity (BOTTOM) record rated excellent except for the following periods: Feb. 4 to Apr. 14, May 26 to June 28 and Aug. 3 to Sept. 8, rated good; Apr. 14 to May 26, rated fair. Temperature (TOP AND BOTTOM) record rated good. Elevation of the top salinity/temperature sensor located at -3.02 ft NAVD. Bottom salinity/temperature sensor located at -4.82 ft NAVD. Daily values are not published for this site. Salinity and temperature 15 minute data are available in files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

SALINITY (TOP): Maximum recorded, 40.4 ppt July 16, 2004, but may have been higher during period of missing record; minimum recorded, 0.2 ppt Feb. 14, 1999, but may have been lower during period of missing record.

SALINITY (BOTTOM): Maximum recorded, 40.6 ppt July 16, 2004, but may have been higher during period of missing record; minimum recorded, 0.3 ppt Oct. 21-23, 1999, but may have been lower during period of missing record.

WATER TEMPERATURE (TOP): Maximum recorded, 36.6°C July 9, 1998, but may have been higher during period of missing record; minimum recorded, 12.2°C Jan. 20, 1997, but may have been lower during period of missing record.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 37.3°C July 28, 1998, but may have been higher during period of missing record; minimum recorded, 11.7°C Jan. 25, 2003, but may have been lower during period of missing record.

EXTREMES FOR CURRENT YEAR.--

SALINITY (TOP): Maximum recorded, 40.4 ppt July 16, but may have been higher during period of missing record; minimum recorded, 0.2 ppt Nov. 10-19, but may have been lower during period of missing record.

SALINITY (BOTTOM): Maximum recorded, 40.6 ppt July 16, but may have been higher during period of missing record; minimum recorded, 0.2 ppt Nov. 10-19, but may have been lower during period of missing record.

WATER TEMPERATURE (TOP): Maximum recorded, 35.2°C Aug. 29, but may have been higher during period of missing record; minimum recorded, 13.6°C Dec. 21, but may have been lower during period of missing record.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 35.2°C Aug. 29, but may have been higher during period of missing record; minimum recorded, 13.6°C Dec. 21, but may have been lower during period of missing record.

LOCATION.--Lat 25°10'03", long 80°43'55", T.60 S., R.36 E., Miami-Dade County, Hydrologic Unit 03090202, left bank, approximately 500 ft upstream of the mouth, 17 mi east of Flamingo.

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

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

GAGE.--Satellite data collection platform with water-stage shaft encoder, acoustic doppler velocity meter. Datum of gage is North American Vertical Datum of 1988.

REMARKS.--Record rated good. Daily values are not published for this site. Discharge and gage height 15 minute data, are available in files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

DISCHARGE: Maximum positive discharge 396 ft³/s June 10, 1997; maximum negative, 532 ft³/s Oct. 15, 1999.

GAGE HEIGHT: Maximum gage height, 2.46 ft Oct. 15, 1999; minimum, -1.50 ft May 1, 2001.

EXTREMES FOR FOR CURRENT YEAR.--

DISCHARGE: Maximum positive discharge 363 ft³/s Nov. 10; maximum negative, 526 ft³/s Sept. 5.

GAGE HEIGHT: Maximum gage height, 1.56 ft Sept. 5; minimum, -1.36 ft Mar. 25-27.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SALINITY (TOP, BOTTOM): October 1995 to current year.

WATER TEMPERATURE (TOP, BOTTOM): October 1995 to current year.

INSTRUMENTATION.--Water quality monitor with top and bottom sensors.

REMARKS.--Salinity (TOP) record rated excellent except for the following periods: Oct. 1-14, Oct. 30 to Dec.2, Dec. 23 to Feb. 4, Apr. 24 to May 26, rated good. Salinity (BOTTOM) record rated excellent except for the following periods: Nov. 13 to Dec. 2, Apr. 12 to May 14, rated good; May 15-18, rated fair; Oct. 1-14, and May 19-26, rated poor. Temperature (TOP and BOTTOM) record rated good. Salinity and temperature sensors located at -2.05 ft NAVD (TOP) and -3.45 ft NAVD (BOTTOM). Daily values are not published for this site. Salinity and temperature 15 minute data are available in the files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

SALINITY (TOP): Maximum recorded, 49.7 ppt June 26, 2001, but may have been higher during period of missing record; minimum recorded, 1.3 ppt Dec. 1, 2003, but may have been lower during period of missing record.

SALINITY (BOTTOM): Maximum recorded, 49.3 ppt July 4, 2001, but may have been higher during period of missing record; minimum recorded, 0.95 ppt Nov. 7, 1999, but may have been lower during period of missing record.

WATER TEMPERATURE (TOP): Maximum recorded, 36.7°C July 28, 1999, but have been higher during period of missing record; minimum recorded, 11.0°C Jan. 5, 2001, but may have been lower during period of missing record.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 36.6°C July 28, 1999, but have been higher during period of missing record; minimum recorded, 10.8°C Jan. 5, 2001, Jan. 25, 2003, but may have been lower during period of missing record.

EXTREMES FOR CURRENT YEAR.--

SALINITY (TOP): Maximum recorded, 46.5 ppt July 18, but may have been higher during period of missing record; minimum recorded, 1.3 ppt Dec. 1, but may have been lower during period of missing record.

SALINITY (BOTTOM): Maximum recorded, 46.0 ppt July 18, but may have been higher during period of missing record; minimum recorded, 1.4 ppt Dec. 3, but may have been lower during period of missing record.

WATER TEMPERATURE (TOP): Maximum recorded, 35.4°C June 20, July 7, but have been higher during period of missing record; minimum recorded, 13.8°C Dec. 21, but may have been lower during period of missing record.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 35.3°C June 20, July 7, Aug. 29, but have been higher during period of missing record; minimum recorded, 13.4°C Dec. 21, but may have been lower during period of missing record.

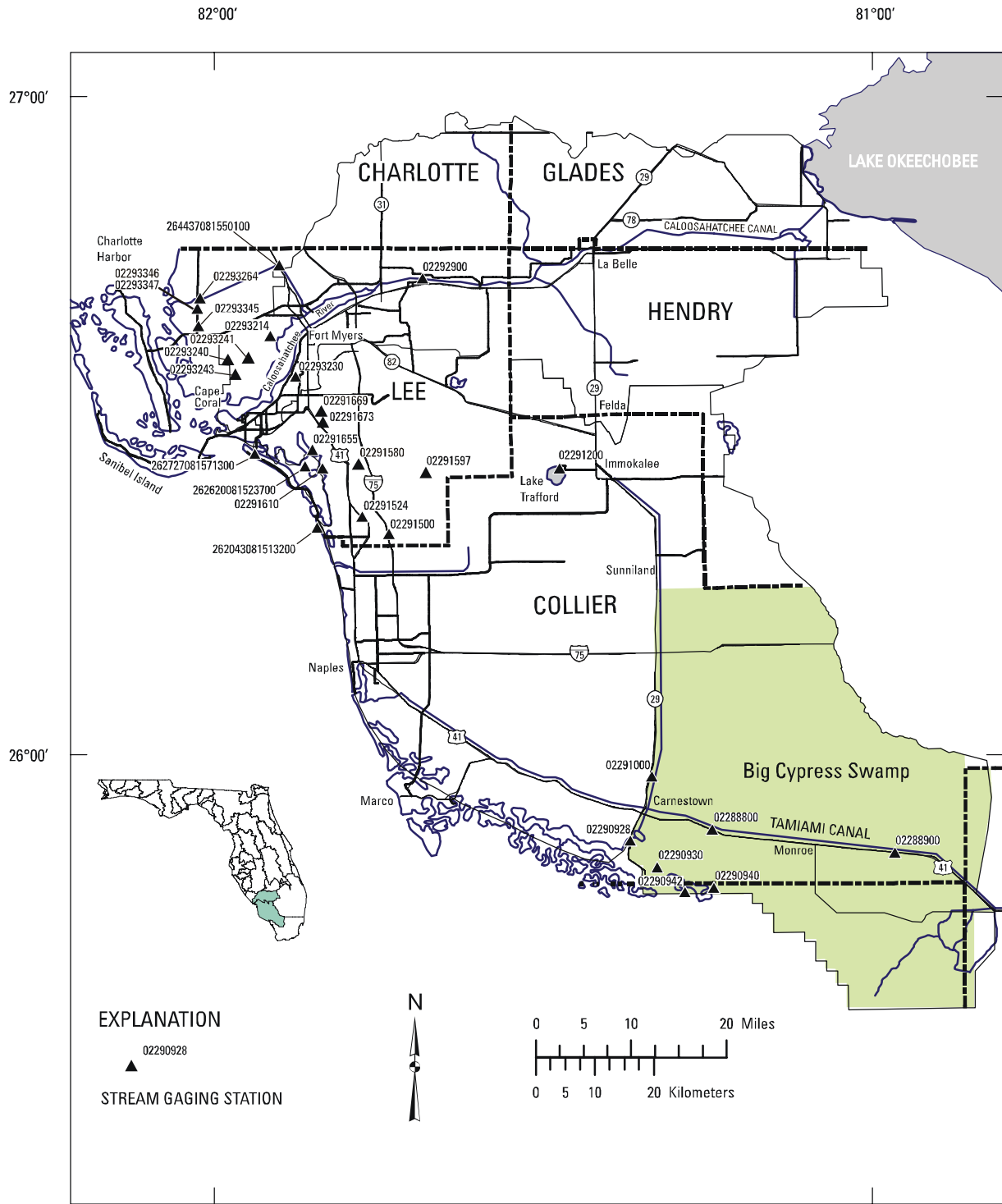


Figure 22. Location of gaging stations in the Big Cypress Swamp and southwestern coastal area, the Caloosahatchee River, Lake Trafford, Charlotte Harbor, and the coastal area.

022908205 NORTH RIVER UPSTREAM OF CUTOFF NEAR FLAMINGO, FL

LOCATION.--Lat 25°20'19", long 80°54'48", T.59 S., R.34 E., Monroe County, Harney River Quadrangle, Hydrologic Unit 03090202, right bank, 0.3 mi northeast of the Cutoff, 13.5 mi northwest of Flamingo.

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1999 to current year. January 12, 1999, to March 14, 2001, operated and maintained by the USGS/Tampa Office. March 15, 2001, to current year operated and maintained by the USGS/Miami Office.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Datum of gage North American Vertical Datum of 1988.

REMARKS.--Records fair. Daily values are not published for this site. Discharge and gage height 15 minute data, are available in the files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

DISCHARGE: Maximum positive discharge, 2,580 ft³/s Sept. 5, 2004; maximum negative, 1,320 ft³/s Sept. 6, 2004.

GAGE HEIGHT: Maximum gage height, 1.47 ft Sept. 5, 2004; minimum, -2.04 ft Mar. 6, 2002.

EXTREMES FOR CURRENT YEAR.--

DISCHARGE: Maximum positive discharge, 2,580 ft³/s Sept. 5; maximum negative, 1,650 ft³/s Sept. 6.

GAGE HEIGHT: Maximum gage height, 1.47 ft Sept. 5; minimum, -1.81 ft Mar. 26.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SALINITY (TOP AND BOTTOM): March 15, 2001 to current year.

WATER TEMPERATURE (TOP AND BOTTOM): March 15, 2001 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Salinity (TOP) record rated excellent except for the following periods: Jan. 2-8, rated good. Salinity (BOTTOM) record rated excellent.

Temperature (TOP AND BOTTOM) record rated good. Salinity and temperature sensors located at -2.0 ft NAVD (TOP) and -3.4 ft NAVD (BOTTOM). Salinity and temperature 15 minute data, are available in files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

SALINITY (TOP): Maximum recorded, 33.6 ppt May 23, 24, 2001, but may have been higher during period of missing record; minimum recorded, 0.2 ppt Sept. 30, 2001, Oct. 1-3, 2001, Sept. 26, 30, 2003, Oct. 1-8, 2003, but may have been lower during period of missing record.

SALINITY (BOTTOM): Maximum recorded, 34.0 ppt May 23, 2001, but may have been higher during period of missing record; minimum recorded, 0.2 ppt Sept. 30, 2001, Oct. 13, 2001, Sept. 30, 2003, Oct. 1-8, 2003, but may have been lower during period of missing record.

WATER TEMPERATURE (TOP): Maximum recorded, 34.2°C June 12, 2001, but may have been higher during period of missing record; minimum recorded, 11.6°C Jan. 25, 2003, but may have been lower during period of missing record.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 34.2°C June 12, 2001, but may have been higher during period of missing record; minimum recorded, 11.6°C Jan. 25, 2003, but may have been lower during period of missing record.

EXTREMES FOR CURRENT YEAR.--

SALINITY (TOP): Maximum recorded, 29.1 ppt June 7, but may have been higher during period of missing record; minimum recorded, 0.2 ppt Oct. 1-8, but may have been lower during period of missing record.

SALINITY (BOTTOM): Maximum recorded, 29.1 ppt June 7, but may have been higher during period of missing record; minimum recorded, 0.2 ppt Oct. 1-8, but may have been lower during period of missing record.

WATER TEMPERATURE (TOP): Maximum recorded, 33.7°C June 4, but may have been higher during period of missing record; minimum recorded, 13.4°C Dec. 22, but may have been lower during period of missing record.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 33.2°C June 1, but may have been higher during period of missing record; minimum recorded, 13.3°C Dec. 22, but may have been lower during period of missing record.

252230081021300 SHARK RIVER NEAR GUNBOAT ISLAND NEAR FLAMINGO, FL

LOCATION.--Lat 25°22'30", long 81°02'12", T.58 S., R.33 E., Monroe County, Harney River Quadrangle, Hydrologic Unit 03090202, left bank, 0.3 mi north of Gunboat Island, 18 mi northwest of Flamingo.

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 2001 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder, acoustic doppler velocity meter. Datum of gage is North American Vertical Datum of 1988.

REMARKS.--Record poor. Daily values are not published for this site. Discharge and gage height 15 minute data, are available in files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

DISCHARGE: Maximum positive discharge 9,820 ft³/s Oct. 16, 2001; maximum negative, 12,600 ft³/s Sept. 5, 2004.

GAGE HEIGHT: Maximum gage height, 1.82 ft Sept. 5, 2004; minimum, -3.21 ft Feb. 14, 2003.

EXTREMES FOR CURRENT YEAR.--

DISCHARGE: Maximum positive discharge 8,980 ft³/s Sept. 27; maximum negative, 12,600 ft³/s Sept. 5.

GAGE HEIGHT: Maximum gage height, 1.82 ft Sept. 5; minimum, -2.84 ft Mar. 25.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SALINITY: March 2001 to current year.

WATER TEMPERATURE: March 2001 to current year.

INSTRUMENTATION.--Water quality monitor.

REMARKS.--Salinity record rated excellent except for the following periods: Nov. 27 to Dec. 18, Dec. 28 to Feb. 3, and June 15 to July 8 rated good. Temperature record rated good. Salinity and temperature sensors located at -3.3 ft NAVD. Salinity and temperature 15 minute data, are available in files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

SALINITY: Maximum recorded, 34.0 ppt June 3, 2004, but may have been higher during period of missing record; minimum recorded, 0.4 ppt Oct. 1-3, 7-9, 26, 27, 2002, and Oct. 2-6, 2004, but may have been lower during period of missing record.

WATER TEMPERATURE: Maximum recorded, 33.1°C Aug. 4, 2002, but have been higher during period of missing record; minimum recorded 14.4°C Jan. 25, 2003, but may have been lower during period of missing record.

EXTREMES FOR CURRENT YEAR.--

SALINITY: Maximum recorded, 34.0 ppt June 3, but may have been higher during period of missing record; minimum recorded, 0.4 ppt Oct. 2-6, but may have been lower during period of missing record.

WATER TEMPERATURE: Maximum recorded, 32.6°C July 27, but have been higher during period of missing record; minimum recorded, 16.2°C Dec. 21, 22, but may have been lower during period of missing record.

02290878 BROAD RIVER NEAR THE CUTOFF, FL

LOCATION.--Lat 25°30'05", long 81°04'37", T.56 S., R.32 E., Monroe County, Big Lostman's Bay Quadrangle, Hydrologic Unit 03090202, located on left bank of Broad River between Broad River Bay and the Cutoff, 27 mi north of Flamingo.

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 2001 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Datum of gage is North American Vertical Datum of 1988.

REMARKS.--Records fair. Daily values are not published for this site. Discharge and gage height 15 minute data are available in the files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

DISCHARGE: Maximum positive discharge, 6,190 ft³/s Sept. 4, 2002; maximum negative, 6,000 ft³/s Sept. 14, 2001.

GAGE HEIGHT: Maximum gage height, 1.66 ft Sept. 5, 2004; minimum, -2.22 ft Mar. 6, 2002.

EXTREMES FOR CURRENT YEAR.--

DISCHARGE: Maximum positive discharge, 5,500 ft³/s Sept. 28; maximum negative, 5,500 ft³/s Sept. 5.

GAGE HEIGHT: Maximum gage height, 1.66 ft Sept. 5; minimum, -1.91 ft Mar. 25.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SALINITY (TOP, BOTTOM): February 2001 to current year.

WATER TEMPERATURE (TOP, BOTTOM): February 2001 to current year.

INSTRUMENTATION.--Water-quality monitor with top of bottom sensors.

REMARKS.--Salinity (TOP) record rated excellent except the following periods: Apr. 23-28 and Aug. 5 to Sept. 9, rated good. Salinity (BOTTOM) records rated excellent except the following period: Nov. 30 to Feb. 21, rated good. Temperature (TOP and BOTTOM) records rated good. Salinity and temperature sensors located at -1.9 ft NAVD (TOP) and -4.4 ft NAVD (BOTTOM). Daily values are not published for this site. Salinity and temperature 15 minute data are available in files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

SALINITY (TOP): Maximum recorded, 36.6 ppt May 22, 2001, but may have been higher during period of missing record; minimum recorded, 0.2 ppt Oct. 1, 13-16, 2003, but may have been lower during period of missing record.

SALINITY (BOTTOM): Maximum recorded, 36.8 ppt May 22, 2001, but may have been higher during period of missing record; minimum recorded, 0.2 ppt Oct. 13-16, 2003, but may have been lower during period of missing record.

WATER TEMPERATURE (TOP): Maximum recorded, 33.6°C Aug. 3, 2002, but may have been higher during period of missing record; minimum recorded, 13.0°C Jan. 25, 2003, but may have been lower during period of missing record.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 33.5°C Aug. 3, 2002, but may have been higher during period of missing record; minimum recorded, 13.5°C Jan. 25, 2003, but may have been lower during period of missing record.

EXTREMES FOR CURRENT YEAR.--

SALINITY (TOP): Maximum recorded, 33.4 ppt June 5, but may have been higher during period of missing record; minimum recorded, 0.2 ppt Oct. 1, 13-16, but may have been lower during period of missing record.

SALINITY (BOTTOM): Maximum recorded, 34.2 ppt June 5, but may have been higher during period of missing record; minimum recorded, 0.2 ppt Oct. 13-16, but may have been lower during period of missing record.

WATER TEMPERATURE (TOP): Maximum recorded, 33.3°C July 8, but may have been higher during period of missing record; minimum recorded, 14.6°C Dec. 21, but may have been lower during period of missing record.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 33.2°C July 8, but may have been higher during period of missing record; minimum recorded, 14.6°C Dec. 21, but may have been lower during period of missing record.

02290888 CHATHAM RIVER NEAR THE WATSON PLACE, FL

LOCATION.--Lat 25°42'33", long 81°14'60", T.55 S., R.31 E., Monroe County, Hydrologic Unit 03090202, right bank, 200 yards southwest of Watson Place, approximately 3 mi from the Gulf of Mexico, 10 mi south of Chokoloskee.

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 2001 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Datum of gage is arbitrary.

REMARKS.--Records fair. Daily values are not published for this site. Discharge and gage height 15 minute data, are available in the files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

DISCHARGE: Maximum positive discharge, 11,800 ft³/s Sept. 14, 2001; maximum negative, 18,800 ft³/s Sept. 14, 2001.

GAGE HEIGHT: Maximum gage height, 6.83 ft Sept. 14, 2001; minimum, 1.80 ft Mar. 5, 2002.

EXTREMES FOR CURRENT YEAR.--

DISCHARGE: Maximum positive discharge, 10,400 ft³/s Sept. 27; maximum negative, 15,300 ft³/s Sept. 26.

GAGE HEIGHT: Maximum gage height, 6.47 ft Sept. 26; minimum, 2.26 ft Mar. 25.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SALINITY (TOP, BOTTOM): March 2001 to current year.

WATER TEMPERATURE (TOP, BOTTOM): March 2001 to current year.

INSTRUMENTATION.--Water-quality monitor with top and bottom sensors.

REMARKS.--Salinity (TOP) record rated excellent. Salinity (BOTTOM) record rated excellent except the following period: Aug. 17-24, rated fair.

Temperature (TOP and BOTTOM) record rated good. Salinity and temperature sensors located at 2.12 ft arbitrary datum (TOP) and 0.02 ft arbitrary datum (BOTTOM). Daily values are not published for this site. Salinity and temperature 15 minute data are available in files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

SALINITY (TOP): Maximum recorded, 42.4 ppt Apr. 27, 2001, and May 3, 2001, but may have been higher during period of missing record; minimum recorded, 1.3 ppt Aug. 14, 2003, but may have been lower during period of missing record.

SALINITY (BOTTOM): Maximum recorded, 42.9 ppt May 1, 2001, but may have been higher during period of missing record; minimum recorded, 1.7 ppt Aug. 14, 2003, but may have been lower during period of missing record.

WATER TEMPERATURE (TOP): Maximum recorded, 33.6°C July 21, 2003, but may have been higher during period of missing record; minimum recorded, 12.1°C Jan. 25, 2003, but may have been lower during period of missing record.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 33.7°C July 21, 2003, but may have been higher during period of missing record; minimum recorded, 12.2°C Jan. 25, 2003, but may have been lower during period of missing record.

EXTREMES FOR CURRENT YEAR.--

SALINITY (TOP): Maximum recorded, 35.6 ppt June 5, 6, but may have been higher during period of missing record; minimum recorded, 2.5 ppt Oct. 5, but may have been lower during period of missing record.

SALINITY (BOTTOM): Maximum recorded, 35.5 ppt June 5, 6, but may have been higher during period of missing record; minimum recorded, 2.5 ppt Oct. 5, but may have been lower during period of missing record.

WATER TEMPERATURE (TOP): Maximum recorded, 33.5°C Aug. 10, but may have been higher during period of missing record; minimum recorded, 14.7°C Dec. 21, but may have been lower during period of missing record.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 33.5°C Aug. 10, but may have been higher during period of missing record; minimum recorded, 14.7°C Dec. 21, but may have been lower during period of missing record.

02290918 LOSTMAN'S RIVER BELOW SECOND BAY, FL

LOCATION.--Lat 25°33'20", long 81°09'53", T.56 S., R.31 E., Monroe County, Hydrologic Unit 03090202, left bank of Lostman's River between First Bay and Second Bay, 3 mi from the mouth, 22 mi southeast of Chokoloskee Island.

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--

DISCHARGE: March 2001 to current year.

GAGE HEIGHT: March 2001 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Datum of gage North American Vertical datum of 1988.

REMARKS.--Records fair. Daily values are not published for this site. Discharge and gage height 15 minute data, are available in the files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

DISCHARGE: Maximum positive discharge, 23,300 ft³/s Sept. 18, 2001; maximum negative, 39,000 ft³/s Sept. 14, 2001.

GAGE HEIGHT: Maximum gage height, 2.82 ft Sept. 14, 2001; minimum, -2.04 ft Mar. 6, 2002.

EXTREMES FOR CURRENT YEAR.--

DISCHARGE: Maximum positive discharge, 21,200 ft³/s Oct. 10; maximum negative, 35,500 ft³/s Sept. 5.

GAGE HEIGHT: Maximum gage height, 2.55 ft Sept. 5; minimum, -1.68 ft Mar. 25.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SALINITY (TOP, BOTTOM): March 2001 to current year.

WATER TEMPERATURE (TOP, BOTTOM): March 2001 to current year.

INSTRUMENTATION.--Water-quality monitor with top of bottom sensors.

REMARKS.--Salinity (TOP) record rated excellent except for the following period: Mar. 2, 3, rated good. Salinity (BOTTOM) record rated excellent except for the following period: Feb. 11 to Mar. 3 rated good. Temperature (TOP and BOTTOM) record rated good. Salinity and temperature sensors located at -2.3 ft NAVD (TOP) and -4.6 ft NAVD (BOTTOM). Salinity and temperature 15 minute data, are available in files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>. Daily values are not published for this site.

EXTREMES FOR PERIOD OF RECORD.--

SALINITY (TOP): Maximum recorded, 40.2 ppt Apr. 26, 2001, but may have been higher during period of missing record; minimum recorded, 0.4 ppt Oct. 27, 2001, Oct. 5-7, 16-17, 2004, but may have been lower during period of missing record.

SALINITY (BOTTOM): Maximum recorded, 40.8 ppt Apr. 26, 2001, but may have been higher during period of missing record; minimum recorded, 0.4 ppt Oct. 10, 2001, Oct. 5-7, 17, 2004, but may have been lower during period of missing record.

WATER TEMPERATURE (TOP): Maximum recorded, 33.7°C Aug. 3, 2002, but may have been higher during period of missing record; minimum recorded, 12.6°C Jan. 25, 2003, but may have been lower during period of missing record.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 33.7°C Aug. 3, 2002, but may have been higher during period of missing record; minimum recorded, 12.6°C Jan. 25, 2003, but may have been lower during period of missing record.

EXTREMES FOR CURRENT YEAR.--

SALINITY (TOP): Maximum recorded, 35.0 ppt June 6, but may have been higher during period of missing record; minimum recorded, 0.4 ppt Oct. 5-7, 16, 17, but may have been lower during period of missing record.

SALINITY (BOTTOM): Maximum recorded, 34.4 ppt June 6, but may have been higher during period of missing record; minimum recorded, 0.4 ppt Oct. 5-7, 17, but may have been lower during period of missing record.

WATER TEMPERATURE (TOP): Maximum recorded, 33.1°C July 9, but may have been higher during period of missing record; minimum recorded, 14.9°C Dec. 21, but may have been lower during period of missing record.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 33.1°C July 9, but may have been higher during period of missing record; minimum recorded, 14.9°C Dec. 21, but may have been lower during period of missing record.

02290928 BARRON RIVER AT EVERGLADES CITY, FL

LOCATION.--Lat 25°52'11", long 81°22'57", NE ¼ sec 12, T.53 S., R.30 E., Collier County, Hydrologic Unit 03090204, left bank, 100 ft east of State Road 29, 1 mi north of Everglades City.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--

GAGE HEIGHT: September 2001 to current year.

SALINITY: September 2001 to current year.

WATER TEMPERATURE: September 2001 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and water-quality monitor. Datum of gage is North American Vertical Datum of 1988.

REMARKS.--Salinity record rated excellent except for the following period; June 5-24, rated good. Temperature record rated good. Salinity and temperature sensors located at -2.4 ft NAVD. Daily values are not published for this site. Gage height salinity and temperature 15 minute data, are available in files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

GAGE HEIGHT: Maximum gage height, 2.01 ft Sept. 26, 2004; minimum, -2.43 ft Jan. 29, Feb. 8, 18, 2004.

SALINITY: Maximum recorded, 39.2 ppt May 30 and June 1, 2002, but may have been higher during period of missing record; minimum recorded, 0.2 ppt occurred on many days during the months of August through October in water years 2001-2004, but may have been lower during period of missing record.

WATER TEMPERATURE: Maximum recorded, 33.6°C June 23, 2004, but may have been higher during period of missing record; minimum recorded, 12.7°C Jan. 25, 2003, but may have been lower during period of missing period.

EXTREMES FOR CURRENT YEAR.--

GAGE HEIGHT: Maximum gage height, 2.01 ft Sept. 26; minimum recorded, -2.43 ft Jan. 29, Feb. 8, 18.

SALINITY: Maximum recorded, 37.3 ppt June 3, but may have been higher during period of missing record; minimum recorded, 0.2 ppt Oct. 1-15, but may have been lower during period of missing record.

WATER TEMPERATURE: Maximum recorded, 33.6°C June 23, but have been higher during period of missing record; minimum recorded 14.7°C Dec. 21, but may have been lower during period of missing record.

02290930 TURNER RIVER NEAR CHOKOLOSKEE ISLAND, FL

LOCATION.--Lat 25°49'43", long 81°20'30", T.53 S., R.30 E., Collier County, Hydrologic Unit 03090204, on right bank 0.8 mi northeast of river mouth, 1.3 mi northeast of Chokoloskee.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--

GAGE HEIGHT: September 2001 to current year.

SALINITY: September 2001 to current year.

WATER TEMPERATURE: September 2001 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and water-quality monitor. Datum of gage is arbitrary.

REMARKS.--Salinity records rated excellent except for the following period: June 6-25, rated good. Temperature record rated good. Salinity and temperature sensors located at 2.8 ft, relative to arbitrary datum. Daily values are not published for this site. Gage height, salinity and temperature 15 minute data, are available in files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

GAGE HEIGHT: Maximum gage height, 7.29 ft Sept. 26, 2004; minimum, 1.66 ft Mar. 5, 2002.

SALINITY: Maximum recorded, 37.3 ppt Apr. 12, 2002, but may have been higher during period of missing record; minimum recorded, 0.5 ppt Oct. 6, 2003, but may have been lower during period of missing record.

WATER TEMPERATURE: Maximum recorded, 34.1°C Aug. 31, 2004, but may have been higher during period of missing record; minimum recorded, 11.4°C Jan. 25, 2003, but may have been lower during period of missing record.

EXTREMES FOR CURRENT YEAR.--

GAGE HEIGHT: Maximum gage height, 7.29 ft Sept. 26; minimum, 1.98 ft Feb. 18.

SALINITY: Maximum recorded, 36.3 ppt June 6, but may have been higher during period of missing record; minimum recorded, 0.5 ppt Oct. 6, but may have been lower during period of missing record.

WATER TEMPERATURE: Maximum recorded, 34.1°C Aug. 31, but have been higher during period of missing record; minimum recorded, 14.0°C Dec. 21, but may have been lower during period of missing record.

02290940 NEW RIVER AT SUNDAY BAY, FL

LOCATION.--Lat 25°47'51", long 81°15'20", T.53 S., R.31 E., Monroe County, Hydrologic Unit 03090204, located 0.5 mi from the river mouth, 7 mi southeast of Chokoloskee Island.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--

GAGE HEIGHT: April 2001 to current year.

SALINITY: April 2001 to current year.

WATER TEMPERATURE: April 2001 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and water-quality monitor. Datum of gage is arbitrary.

REMARKS.--Salinity (TOP) record rated excellent except for the following period: Jan. 10-14 rated good. Salinity (BOTTOM) record rated excellent. Top and bottom temperature record rated good. Salinity and temperature sensors located at 2.0 ft and -0.5 ft, relative to arbitrary datum. Daily values are not published for this site. Gage height salinity and temperature 15 minute data, are available in files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

GAGE HEIGHT: Maximum gage height, 5.60 ft Sept. 14, 2001; minimum, 1.01 ft Mar. 5, 2002.

SALINITY (TOP): Maximum recorded, 43.8 ppt May 20, 2001, but may have been higher during period of missing record; minimum recorded, 0.1 ppt Sept. 29, 30, 2001, Mar. 5, 2001, Sept. 30, 2003, and Oct. 1-10, 2003, but may have been lower during period of missing record.

SALINITY (BOTTOM): Maximum recorded, 43.7 ppt May 20, 2001, but may have been higher during period of missing record; minimum recorded, 0.1 ppt Sept. 30, 2003, Oct. 1-10, 2003, but may have been lower during period of missing record.

WATER TEMPERATURE (TOP): Maximum recorded, 34.6°C July 16, 2004, but may have been higher during period of missing record; minimum recorded, 11.0°C Jan. 25, 2003, but may have been lower during period of missing record.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 34.6°C July 16, 2004, but may have been higher during period of missing record; minimum recorded, 11.5°C Jan. 19, 2003, but may have been lower during period of missing record.

EXTREMES FOR CURRENT YEAR.--

GAGE HEIGHT: Maximum gage height, 5.39 ft Sept. 5; minimum, 1.70 ft Mar. 24.

SALINITY (TOP): Maximum recorded, 33.8 ppt June 6, but may have been higher during period of missing record; minimum recorded, 0.1 ppt Oct. 1-10, but may have been lower during period of missing record.

SALINITY (BOTTOM): Maximum recorded, 33.8 ppt June 5, but may have been higher during period of missing record; minimum recorded, 0.1 ppt Oct. 1-10, but may have been lower during period of missing record.

WATER TEMPERATURE (TOP): Maximum recorded, 34.6°C July 16, but have been higher during period of missing record; minimum recorded, 13.2°C Dec. 21, but may have been lower during period of missing record.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 34.6°C July 16, but have been higher during period of missing record; minimum recorded, 13.1°C Dec. 21, but may have been lower during period of missing record.

02290942 LOPEZ RIVER NEAR THE LOPEZ CAMPSITE, FL

LOCATION.--Lat 25°47'29", long 81°17'59", T.54 S., R.30 E., Monroe County, Hydrologic Unit 03090204, 0.5 mi northeast of campsite, 2 mi northeast of the river mouth, 4.8 mi from Chokoloskee Island.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--

GAGE HEIGHT: September 2001 to current year.

SALINITY: September 2001 to current year.

WATER TEMPERATURE: September 2001 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and water-quality monitor. Datum of gage is arbitrary.

REMARKS.--Salinity record rated excellent except for the following period: Nov. 7 to Dec. 3, Dec. 25 to Jan. 14, rated good. Temperature record rated good.

Salinity and temperature sensors located at 2.78 ft, relative to arbitrary datum. Daily values are not published for this site. Gage height salinity and temperature 15 minute data, are available in files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

GAGE HEIGHT: Maximum gage height, 7.76 ft Sept. 14, 2001; minimum, 2.51 ft Mar. 5, 2002.

SALINITY: Maximum recorded, 43.5 ppt Apr. 30, and May 1, 2001, but may have been higher during period of missing record; minimum recorded, 0.4 ppt Oct. 5, 6, 2003, but may have been lower during period of missing record.

WATER TEMPERATURE: Maximum recorded, 33.9°C June 13, 2001, and June 26, 2004, but may have been higher during period of missing record; minimum recorded, 12.3°C Jan. 25, 2003, but may have been lower during period of missing record.

EXTREMES FOR CURRENT YEAR.--

GAGE HEIGHT: Maximum gage height, 7.27 ft Sept. 26; minimum, 3.14 ft Nov. 29.

SALINITY: Maximum recorded, 36.0 ppt June 6, but may have been higher during period of missing record; minimum recorded, 0.4 ppt Oct. 5, 6, but may have been lower during period of missing record.

WATER TEMPERATURE: Maximum recorded, 33.9°C June 26, but have been higher during period of missing record; minimum recorded, 14.5°C Dec. 21, but may have been lower during period of missing record.

02291000 BARRON RIVER CANAL NEAR EVERGLADES, FL

LOCATION.--Lat 25°57'28", long 81°21'19", in NW ¼ sec.7, T.52 S., R.30 E., Collier County, Hydrologic Unit 03090204, on right bank 40 ft upstream from control structure No. 6, 0.7 mi north of Copeland, 7 mi north of town of Everglades City, and 7.5 mi upstream from mouth.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--July to December 1951 (discharge measurements only), January 1952 to current year.

GAGE.--Electronic data logger. Datum of gage is National Geodetic Vertical Datum of 1929 (State Department of Transportation bench mark). Prior to January 24, 1952, non-recording gage.

REMARKS.--Records poor. Zero flow for numerous days, during many water years. Flow regulated by operation of control structure at, above, and below station. Overbank flow not included in discharge figures. Records prior to January 1952 are available in files of the U.S. Geological Survey.

ANNUAL MEAN and ANNUAL SUMMARY STATISTICS.--Figures represent 49 complete years of discharge (1952-87, 1989-94, 1996, 1998-2004).

EXTREME STAGE FOR PERIOD OF RECORD.--Maximum gage height, 7.07 ft Aug. 26, 1995; minimum, 0.21 ft May 18, 1962 and May 18, 1972.

EXTREMES FOR STAGES FOR CURRENT YEAR.--Maximum gage height, 6.03 ft Oct. 1-3; minimum, 1.52 ft June 3.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.03	5.47	5.05	5.13	5.25	5.39	3.32	2.41	1.64	3.72	4.90	5.65
2	6.02	5.46	4.98	5.09	5.24	5.37	3.26	2.39	1.59	3.75	5.11	5.68
3	6.02	5.48	4.92	5.05	5.24	5.34	3.20	2.46	---	4.05	5.26	5.65
4	6.00	5.53	4.87	5.00	5.27	5.32	3.14	2.60	---	4.01	5.24	5.63
5	5.96	5.58	4.83	4.94	5.30	5.28	3.07	2.58	1.57	3.87	5.26	5.62
6	5.92	5.68	4.77	4.89	5.33	5.23	3.01	2.52	1.59	3.72	5.33	5.69
7	5.88	5.67	4.69	4.82	5.35	5.18	2.95	2.48	1.62	3.58	5.38	5.74
8	5.83	5.66	4.64	4.74	5.34	5.10	2.90	2.41	1.64	3.49	5.37	5.73
9	5.79	5.65	4.60	4.69	5.33	4.99	2.86	2.37	1.65	3.76	5.34	5.71
10	5.74	5.63	4.58	4.65	5.32	4.89	2.82	2.34	1.71	3.63	5.31	5.69
11	5.70	5.60	4.57	4.57	5.29	4.78	2.77	2.31	2.25	3.57	5.28	5.67
12	5.67	5.57	4.50	4.51	5.26	4.69	2.86	2.27	2.60	3.45	5.25	5.64
13	5.64	5.54	4.46	4.45	5.23	4.60	3.37	2.22	2.66	3.34	5.30	5.61
14	5.61	5.52	4.65	4.40	5.18	4.52	3.60	2.17	2.87	3.23	5.36	5.57
15	5.58	5.50	4.82	4.35	5.26	4.46	3.48	---	3.97	3.12	5.35	5.54
16	5.54	5.47	4.82	4.35	5.25	4.48	3.36	---	4.61	3.02	5.34	5.50
17	5.52	5.45	5.20	4.32	5.21	4.46	3.25	2.10	4.46	2.96	5.34	5.47
18	5.50	5.42	5.20	4.57	5.16	4.34	3.16	2.06	4.31	2.91	5.35	5.44
19	5.48	5.41	5.22	4.88	5.09	4.25	3.07	2.03	4.14	3.03	5.44	5.41
20	5.46	5.40	5.23	4.73	5.03	4.16	2.99	2.00	3.99	3.29	5.40	5.39
21	5.44	5.38	5.24	4.62	4.96	4.08	2.91	1.96	3.84	3.60	5.39	5.36
22	5.42	5.36	5.26	4.55	4.89	3.99	2.84	---	3.71	3.66	5.55	5.37
23	5.47	5.34	5.29	4.47	4.82	3.90	2.76	---	3.57	3.55	5.54	5.38
24	5.53	5.32	5.29	4.41	4.75	3.82	2.70	---	3.45	3.45	5.51	5.37
25	5.50	5.30	5.29	4.36	5.02	3.76	2.64	---	3.36	3.41	5.51	5.35
26	5.48	5.28	5.29	4.32	5.43	3.71	2.60	---	3.31	3.64	5.54	5.36
27	5.45	5.25	5.27	4.37	5.43	3.64	2.56	---	3.22	4.01	5.59	5.36
28	5.43	5.22	5.25	4.42	5.42	3.58	2.53	---	3.22	4.45	5.63	5.34
29	5.49	5.18	5.23	4.30	5.41	3.50	2.49	---	3.42	4.70	5.66	5.33
30	5.49	5.11	5.20	4.42	---	3.45	2.45	1.69	3.44	4.75	5.65	5.31
31	5.48	---	5.16	5.23	---	3.41	---	1.65	---	4.76	5.63	---
TOTAL	175.07	163.43	154.37	143.60	151.06	137.67	88.92	---	---	113.48	167.11	165.56
MEAN	5.65	5.45	4.98	4.63	5.21	4.44	2.96	---	---	3.66	5.39	5.52
MAX	6.03	5.68	5.29	5.23	5.43	5.39	3.60	---	---	4.76	5.66	5.74
MIN	5.42	5.11	4.46	4.30	4.75	3.41	2.45	---	---	2.91	4.90	5.31

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA
02291000 BARRON RIVER CANAL NEAR EVERGLADES, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	81	73	79	77	88	39	17	e6.4	47	70	124
2	104	81	70	77	76	86	37	17	e5.9	47	80	126
3	104	82	67	74	76	84	35	18	e5.4	52	91	124
4	103	86	65	71	78	82	33	21	e5.5	51	90	122
5	102	92	63	67	81	79	32	21	5.5	49	91	121
6	101	102	62	64	83	76	30	20	5.8	47	97	128
7	100	101	61	60	85	72	29	19	6.0	44	101	132
8	98	100	60	58	84	67	28	17	6.3	43	100	131
9	97	100	59	58	83	64	27	17	6.4	47	98	130
10	96	98	58	57	82	62	26	16	7.1	45	95	127
11	95	95	58	56	80	61	24	16	15	44	93	126
12	94	93	57	55	78	59	27	15	21	42	90	123
13	93	91	56	54	75	58	40	14	22	40	94	120
14	92	90	60	54	72	56	48	13	27	39	99	117
15	91	88	62	53	78	55	44	e13	51	37	98	114
16	90	87	64	53	77	56	40	e13	62	36	97	111
17	90	86	82	53	74	55	36	12	60	35	97	108
18	89	86	82	57	70	53	34	12	57	34	99	105
19	89	86	83	63	66	52	32	11	54	36	106	103
20	88	85	84	59	65	51	30	11	51	40	102	101
21	88	85	86	57	64	50	28	e10	49	45	102	99
22	87	84	87	56	62	48	26	e9.8	46	46	115	100
23	86	84	89	55	61	47	24	e9.6	44	44	114	101
24	85	83	89	54	60	46	23	e9.2	42	42	112	100
25	83	83	90	54	71	45	22	e8.7	41	42	111	99
26	81	82	89	53	91	44	21	e8.6	40	45	114	99
27	80	81	88	54	91	43	20	e8.1	39	52	118	99
28	80	80	88	55	90	42	20	e7.7	39	60	122	97
29	82	78	86	53	89	41	19	e7.4	42	64	125	96
30	82	75	84	55	---	41	18	e6.9	42	65	124	95
31	81	---	82	76	---	40	---	e6.5	---	65	122	---
TOTAL	2,835	2,625	2,284	1,844	2,219	1,803	892	405.5	904.3	1,425	3,167	3,378
MEAN	91.5	87.5	73.7	59.5	76.5	58.2	29.7	13.1	30.1	46.0	102	113
MAX	104	102	90	79	91	88	48	21	62	65	125	132
MIN	80	75	56	53	60	40	18	6.5	5.4	34	70	95
AC-FT	5,620	5,210	4,530	3,660	4,400	3,580	1,770	804	1,790	2,830	6,280	6,700

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2004, BY WATER YEAR (WY)

	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963
MEAN	141	109	84.3	72.3	62.9	53.5	36.4	28.5	69.8	109	136	154
MAX	231	248	220	218	200	225	192	173	196	239	230	233
(WY)	(1960)	(1960)	(1960)	(1958)	(1958)	(1970)	(1958)	(1958)	(1969)	(1970)	(1982)	(1973)
MIN	13.4	5.09	1.65	0.00	0.00	0.00	0.00	0.00	0.00	0.01	1.21	5.25
(WY)	(1990)	(1991)	(1989)	(1989)	(1989)	(1989)	(1989)	(1989)	(1985)	(1989)	(1989)	(1989)

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1952 - 2004
ANNUAL TOTAL	26,348	23,781.8	
ANNUAL MEAN	72.2	65.0	88.8
HIGHEST ANNUAL MEAN			189
LOWEST ANNUAL MEAN			3.52
HIGHEST DAILY MEAN	116	132	292
LOWEST DAILY MEAN	39	5.4	0.00**
ANNUAL SEVEN-DAY MINIMUM	39	5.8	0.00**
MAXIMUM PEAK FLOW		132	292
MAXIMUM PEAK STAGE		5.75	6.57
INSTANTANEOUS LOW FLOW		5.1	
ANNUAL RUNOFF (AC-FT)	52,260	47,170	64,360
10 PERCENT EXCEEDS	100	102	195
50 PERCENT EXCEEDS	66	64	76
90 PERCENT EXCEEDS	43	17	6.6

e Estimated

** Many days during water years 1952, 1953, 1975, 1982, 1989, 1990, 1996.

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02291200 LAKE TRAFFORD NEAR IMMOKALEE, FL

LOCATION.--Lat 26°26'08", long 81°29'25", in NW ¼ sec.35, T.46 S., R.28 E., Collier County, Hydrologic Unit 03090204, at county boat ramp dock, on north side of lake and 4.2 mi west of Immokalee.

SURFACE AREA.--1,485 acres.

DRAINAGE AREA.--27 mi², approximately.

PERIOD OF RECORD.--March 1941 to current year. Records of elevations prior to October 1960 are available in files of the U.S. Geological Survey.

GAGE.--Electronic data logger. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to October 6, 1960, gage was located at sites in the immediate vicinity at same datum. May 15, 1962, to September 30, 1962, auxiliary nonrecording gage in canal at county boat landing, 0.3 mi southeast. October 1, 1962, to November 25, 1968, nonrecording gage at same site and datum. Gage relocated March 30, 1988, because of excessive aquatic growth in ditch causing erroneous record at low stage.

REMARKS.--Lake is landlocked except above an elevation of about 21 ft, when there is overflow to the south into Corkscrew Swamp.

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum elevation, 22.79 ft Sept. 23, 1947; minimum, 15.90 ft estimated, June 6-10, 1962.

EXTREME STAGES FOR CURRENT YEAR.--Maximum elevation, 21.66 ft Oct. 1; minimum, 18.45 ft July 19.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.65	20.76	20.43	20.34	20.39	20.40	19.92	19.49	18.81	18.82	18.91	20.65
2	21.64	20.73	20.41	20.34	20.39	20.39	19.89	19.47	18.79	18.80	19.00	20.68
3	21.61	20.80	20.40	20.33	20.39	20.38	19.87	19.48	18.77	18.81	19.07	20.67
4	21.58	20.81	20.39	20.33	20.38	20.38	19.85	19.49	18.78	18.80	19.11	20.67
5	21.55	20.82	20.39	20.32	20.38	20.37	19.83	19.46	18.80	18.79	19.15	20.79
6	21.51	20.84	20.38	20.31	20.39	20.37	19.81	19.44	18.79	18.80	19.28	20.82
7	21.47	20.85	20.37	20.27	20.37	20.36	19.79	19.41	18.77	18.78	19.32	20.84
8	21.43	20.85	20.36	20.26	20.34	20.33	19.78	19.39	18.78	18.76	19.38	20.91
9	21.38	20.84	20.35	20.26	20.34	20.31	19.77	19.36	18.76	18.76	19.41	20.98
10	21.35	20.81	20.36	20.24	20.34	20.28	19.76	19.34	18.76	18.74	19.43	20.99
11	21.31	20.80	20.36	20.21	20.33	20.26	19.75	19.32	18.76	18.72	19.46	20.98
12	21.28	20.78	20.35	20.21	20.33	20.25	19.77	19.30	18.77	18.71	19.54	20.97
13	21.25	20.76	20.34	20.20	20.32	20.23	19.82	19.27	18.78	18.69	19.66	20.96
14	21.22	20.73	20.38	20.19	20.32	20.21	19.80	19.24	18.78	18.68	19.78	20.94
15	21.17	20.71	20.39	20.19	20.34	20.21	19.77	19.22	18.84	18.65	19.85	20.93
16	21.12	20.69	20.40	20.18	20.32	20.21	19.75	19.20	18.92	18.62	19.91	20.92
17	21.09	20.68	20.47	20.17	20.31	20.20	19.73	19.18	18.89	18.60	19.95	20.89
18	21.05	20.66	20.47	20.24	20.28	20.18	19.71	19.15	18.87	18.59	20.02	20.87
19	21.02	20.65	20.46	20.32	20.27	20.16	19.69	19.14	18.86	18.62	20.08	20.84
20	20.99	20.63	20.44	20.31	20.27	20.14	19.68	19.11	18.84	18.68	20.13	20.80
21	20.98	20.61	20.42	20.30	20.27	20.13	19.66	19.09	18.82	18.71	20.16	20.82
22	20.95	20.60	20.42	20.29	20.26	20.10	19.65	19.07	18.80	18.71	20.22	20.89
23	20.92	20.59	20.42	20.27	20.25	20.06	19.63	19.04	18.77	18.70	20.31	20.86
24	20.89	20.57	20.42	20.26	20.25	20.04	19.62	19.01	18.74	18.68	20.38	20.83
25	20.86	20.57	20.41	20.26	20.30	20.02	19.61	18.99	18.76	18.67	20.50	20.80
26	20.85	20.55	20.39	20.26	20.43	20.01	19.59	18.98	18.82	18.67	20.54	20.87
27	20.83	20.54	20.38	20.27	20.41	19.99	19.57	18.96	18.81	18.71	20.57	20.83
28	20.82	20.53	20.38	20.26	20.39	19.98	19.53	18.93	18.79	18.82	20.59	20.80
29	20.84	20.47	20.37	20.24	20.39	19.97	19.51	18.90	18.78	18.85	20.60	20.78
30	20.81	20.44	20.37	20.26	---	19.96	19.51	18.87	18.80	18.85	20.62	20.79
31	20.79	---	20.36	20.35	---	19.95	---	18.84	---	18.86	20.62	---
TOTAL	656.21	620.67	632.24	628.24	589.75	625.83	591.62	595.14	564.01	580.65	615.55	625.37
MEAN	21.17	20.69	20.39	20.27	20.34	20.19	19.72	19.20	18.80	18.73	19.86	20.85
MAX	21.65	20.85	20.47	20.35	20.43	20.40	19.92	19.49	18.92	18.86	20.62	20.99
MIN	20.79	20.44	20.34	20.17	20.25	19.95	19.51	18.84	18.74	18.59	18.91	20.65

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

02291500 IMPERIAL RIVER NEAR BONITA SPRINGS, FL

LOCATION.--Lat 26°20'07", long 81°44'59", in SW ¼ sec.31, T.47 S., R.26 E., Lee County, Hydrologic Unit 03090204, on left bank, 4 ft downstream of bridge on Orr Road, 0.3 mi north of Bonita Beach Road, 2.0 mi east of U.S. Highway 41 at Bonita Springs, and 7.4 mi upstream from mouth.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--May 1940 to November 1954, February 1987 to current year.

GAGE.--Satellite data collection platform with a water-stage shaft encoder. Datum of gage is National Geodetic Vertical Datum of 1929. May 1940 to November 1954, water-stage recorder at wooden control on right bank, 1.5 mi east of Bonita Springs (lat 26°20'05", long 81°45'20"). Prior to September 10, 1941, staff gage at same site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Days of no flows for the period of record only occurred during the period of May 27 to June 3, 1940.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 31 complete water years of discharge (1941-54, 1988-2004).

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.43	5.98	4.20	3.54	3.74	4.94	2.97	2.89	2.68	2.69	---	11.26
2	11.51	5.80	4.12	3.50	3.78	4.72	2.95	2.89	2.69	2.69	---	11.24
3	11.51	5.89	4.06	3.48	3.79	4.52	2.94	2.90	2.69	2.69	4.24	11.02
4	11.45	5.93	4.01	3.46	3.78	4.34	2.93	2.90	2.68	2.69	4.62	10.83
5	11.33	6.07	3.96	3.44	3.73	4.16	2.93	2.89	2.68	2.69	4.92	10.78
6	11.19	6.78	3.89	3.41	3.66	4.04	2.91	2.88	2.68	2.68	5.23	10.80
7	11.00	6.93	3.83	3.38	3.61	3.92	2.96	2.91	2.68	2.68	5.62	10.69
8	10.78	6.90	3.78	3.36	3.53	3.82	2.90	2.87	2.68	2.68	5.69	10.65
9	10.50	6.70	3.74	3.34	3.46	3.71	2.90	2.86	2.68	2.68	5.66	10.73
10	10.27	6.51	3.71	3.34	3.41	3.60	2.89	2.85	2.67	2.68	5.51	10.94
11	10.07	6.34	3.73	3.31	3.38	3.50	2.88	2.85	2.68	2.68	5.59	10.81
12	9.82	6.18	3.70	3.29	3.34	3.43	2.92	2.84	2.67	2.70	5.82	10.63
13	9.56	6.03	3.65	3.27	3.32	3.37	2.94	2.83	2.67	2.69	6.42	10.38
14	9.32	5.86	3.67	3.26	3.30	3.32	2.93	2.81	2.68	2.68	8.51	10.20
15	9.08	5.71	3.77	3.25	3.35	3.29	2.92	2.81	2.68	2.68	9.12	10.03
16	8.83	5.57	3.77	3.26	3.40	3.18	2.91	2.80	2.68	2.68	9.38	9.83
17	8.61	5.46	4.02	3.25	3.39	3.05	2.90	2.80	2.68	2.69	9.60	9.62
18	8.39	5.38	4.12	3.26	3.36	3.04	2.90	2.79	2.68	2.68	9.98	9.39
19	8.17	5.32	4.11	3.32	3.30	3.04	2.90	2.78	2.67	2.72	10.14	9.16
20	7.95	5.27	4.07	3.35	3.27	3.03	2.89	2.78	2.67	2.80	10.12	8.93
21	7.77	5.16	4.00	3.35	3.25	3.02	2.89	2.76	2.67	2.86	10.08	8.78
22	7.61	5.03	3.93	3.33	3.22	3.01	2.88	2.76	2.67	---	10.19	8.71
23	7.45	4.93	3.88	3.31	3.20	3.01	2.88	2.75	2.67	---	10.20	8.48
24	7.24	4.84	3.85	3.30	3.18	3.00	2.88	2.74	2.67	---	10.16	8.25
25	7.01	4.76	3.83	3.28	3.31	3.00	2.88	2.73	2.68	---	10.15	8.03
26	6.84	4.68	3.78	3.26	4.38	2.99	2.88	2.72	2.67	---	10.22	8.03
27	6.68	4.61	3.73	3.27	4.88	2.98	2.88	2.71	2.67	2.97	10.64	8.01
28	6.56	4.53	3.69	3.26	5.12	2.98	2.88	2.70	2.69	3.01	11.00	7.91
29	6.55	4.40	3.64	3.26	5.12	2.97	2.88	2.70	2.70	3.05	11.05	7.80
30	6.36	4.28	3.61	3.27	---	3.01	2.89	2.69	2.70	3.08	11.12	7.70
31	6.21	---	3.58	3.48	---	2.98	---	2.69	---	3.14	11.28	---
TOTAL	277.05	167.83	119.43	103.44	105.56	106.97	87.19	86.88	80.36	---	---	289.62
MEAN	8.94	5.59	3.85	3.34	3.64	3.45	2.91	2.80	2.68	---	---	9.65
MAX	11.51	6.93	4.20	3.54	5.12	4.94	2.97	2.91	2.70	---	---	11.26
MIN	6.21	4.28	3.58	3.25	3.18	2.97	2.88	2.69	2.67	---	---	7.70

02291500 IMPERIAL RIVER NEAR BONITA SPRINGS, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	804	155	53	29	35	89	14	12	8.4	8.5	e29	778
2	829	142	50	28	37	77	13	12	8.4	8.5	e48	775
3	830	148	47	27	37	68	13	12	8.5	8.5	55	731
4	817	151	45	26	37	59	13	12	8.4	8.4	72	693
5	793	161	43	26	35	52	13	12	8.4	8.5	88	683
6	764	217	41	25	33	47	13	12	8.3	8.4	106	687
7	727	230	39	24	31	42	14	13	8.3	8.3	130	666
8	683	227	37	24	29	38	12	12	8.3	8.3	134	659
9	636	210	35	23	27	35	12	12	8.3	8.3	133	675
10	604	195	35	23	25	31	12	12	8.2	8.3	123	715
11	577	181	35	22	24	28	12	11	8.3	8.4	128	690
12	543	169	34	22	23	26	13	11	8.2	8.6	143	657
13	510	158	33	21	22	24	13	11	8.2	8.4	192	619
14	480	146	33	21	22	23	13	11	8.3	8.4	386	594
15	451	136	36	21	23	22	13	11	8.3	8.4	455	571
16	421	126	37	21	25	19	13	11	8.3	8.3	487	545
17	396	119	46	21	24	16	13	10	8.3	8.4	515	517
18	372	115	50	21	24	16	12	10	8.3	8.4	564	489
19	348	111	50	22	22	16	12	10	8.2	9.1	586	460
20	326	108	48	23	21	15	12	10	8.2	11	584	433
21	307	101	45	23	21	15	12	9.8	8.2	12	577	415
22	292	94	43	23	20	15	12	9.7	8.1	e12	592	408
23	276	88	41	22	19	15	12	9.6	8.1	e13	594	381
24	257	83	40	22	19	15	12	9.4	8.2	e13	588	349
25	236	79	39	21	23	15	12	9.2	8.3	e13	588	319
26	222	76	37	21	62	14	12	9.0	8.2	e14	597	318
27	209	72	35	21	86	14	12	8.9	8.2	14	659	314
28	199	68	34	21	99	14	12	8.7	8.5	15	726	302
29	198	62	32	21	99	14	12	8.6	8.7	16	736	291
30	183	57	31	21	---	15	12	8.5	8.7	16	749	280
31	172	---	30	27	---	14	---	8.4	---	18	782	---
TOTAL	14,462	3,985	1,234	713	1,004	903	375	326.8	249.3	327.4	12,146	16,014
MEAN	467	133	39.8	23.0	34.6	29.1	12.5	10.5	8.31	10.6	392	534
MAX	830	230	53	29	99	89	14	13	8.7	18	782	778
MIN	172	57	30	21	19	14	12	8.4	8.1	8.3	29	280
AC-FT	28,690	7,900	2,450	1,410	1,990	1,790	744	648	494	649	24,090	31,760

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)

	256	88.3	38.9	32.9	26.9	23.9	16.6	8.98	46.3	151	222	324
MEAN	256	88.3	38.9	32.9	26.9	23.9	16.6	8.98	46.3	151	222	324
MAX (WY)	1,097 (1996)	387 (1996)	219 (1988)	185 (1995)	184 (1998)	226 (1998)	207 (1941)	55.4 (1941)	331 (1947)	569 (1992)	709 (1995)	1,178 (1995)
MIN (WY)	7.01 (1951)	1.73 (1943)	1.51 (1943)	1.25 (1951)	0.82 (1949)	0.86 (1949)	0.74 (1949)	0.72 (1950)	0.61 (1951)	1.84 (1944)	20.8 (1942)	61.5 (1990)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1940 - 2004

ANNUAL TOTAL	65,766	51,739.5	
ANNUAL MEAN	180	141	104
HIGHEST ANNUAL MEAN			273 1995
LOWEST ANNUAL MEAN			24.1 1990
HIGHEST DAILY MEAN	830 Oct 3	830 Oct 3	2,890 Sep 12, 1940
LOWEST DAILY MEAN	11 Apr 19	8.1 Jun 22	0.00**
ANNUAL SEVEN-DAY MINIMUM	11 Apr 19	8.2 Jun 18	0.07 Jun 27, 1940
MAXIMUM PEAK FLOW		833 Oct 2	2,890 Sep 12, 1940
MAXIMUM PEAK STAGE		11.52 Oct 2	13.68 Oct 15, 1995
INSTANTANEOUS LOW FLOW		8.0 Jun 21	0.00**
ANNUAL RUNOFF (AC-FT)	130,400	102,600	75,080
10 PERCENT EXCEEDS	480	579	306
50 PERCENT EXCEEDS	70	26	21
90 PERCENT EXCEEDS	13	8.4	1.3

e Estimated

** Many days during water year 1940.

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

02291524 SPRING CREEK HEADWATER NEAR BONITA SPRINGS, FL

LOCATION.--Lat 26°21'42", long 81°47'27", in SE ¼ sec.22, T.47 S., R.25 E., Lee County, Hydrologic Unit 03090204, at culvert on State Road 887 (old U.S. Highway 41), 1.8 mi north of Bonita Springs, 4.7 mi upstream from mouth and 5.6 mi south of Estero.

DRAINAGE AREA.--Indeterminate.

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

GAGE.--Satellite data collection platform with water-stage shaft encoder. Datum of gage is National Geodetic Vertical Datum of 1929 (Florida State Road Department Bench Mark).

REMARKS.--Records are fair, except for estimated daily values, which are poor. Days of no flow occurred during water years 1989, 1990, 1997.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 16 complete water years of discharge (1989-2004).

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.60	6.81	6.70	6.70	7.24	7.92	7.34	7.65	6.99	7.16	8.19	7.64
2	8.21	6.81	---	6.69	7.24	7.88	7.30	7.65	6.97	7.15	---	7.76
3	8.00	6.83	---	6.69	7.34	7.86	7.27	7.66	6.99	7.14	8.29	7.45
4	7.85	6.83	6.69	6.69	7.51	7.84	7.26	7.66	7.01	---	8.32	7.42
5	7.74	6.84	---	6.68	7.50	7.82	7.24	7.61	7.01	7.15	8.24	7.56
6	7.64	6.91	6.68	6.69	7.48	7.80	7.22	7.57	6.98	7.23	8.28	7.55
7	7.53	6.93	6.69	6.69	7.48	7.78	7.19	7.53	7.01	7.24	8.20	7.49
8	7.45	6.91	---	6.69	7.44	7.77	7.18	7.50	7.08	7.23	---	7.42
9	7.37	6.95	6.69	6.68	7.42	7.75	7.19	7.47	7.09	7.20	8.02	7.37
10	7.30	6.93	6.70	6.68	7.40	7.73	7.20	7.44	7.08	7.17	---	7.25
11	7.25	6.90	6.70	6.68	7.38	7.71	7.21	7.42	7.08	7.20	---	7.21
12	7.21	6.87	6.70	6.68	7.40	7.70	7.29	7.38	7.09	---	7.40	7.13
13	7.17	6.84	6.69	6.68	7.40	7.68	7.40	7.35	7.08	---	7.85	7.08
14	7.14	6.83	6.70	6.68	7.39	7.67	7.44	7.31	7.24	7.34	9.77	7.05
15	7.11	6.81	6.70	6.66	7.56	7.66	7.41	7.28	7.31	7.32	8.86	7.02
16	7.07	6.80	6.72	6.67	7.63	7.67	7.36	7.30	7.36	7.29	8.22	7.00
17	7.04	6.79	6.87	6.66	7.62	7.66	7.33	7.26	7.35	7.32	9.10	6.98
18	---	6.78	6.90	6.74	7.59	7.64	7.31	7.24	7.33	7.36	8.91	6.95
19	---	6.79	6.86	6.83	7.59	7.61	7.28	7.20	7.30	7.48	8.18	6.93
20	6.98	6.79	6.84	6.83	7.57	7.59	7.24	7.17	7.26	7.91	7.79	6.92
21	6.97	6.78	6.81	6.81	---	7.59	7.22	---	7.23	8.03	7.72	6.90
22	6.95	6.76	6.80	6.79	7.54	7.59	---	7.14	7.20	7.93	8.40	6.90
23	6.94	6.75	6.78	6.78	7.52	7.55	---	---	7.17	7.87	7.91	6.88
24	6.92	6.74	6.77	6.76	7.50	7.53	7.18	---	7.16	7.82	7.59	6.87
25	6.91	6.74	6.76	6.75	7.83	7.49	7.20	7.10	7.15	7.93	7.44	6.86
26	6.88	6.74	6.75	6.75	8.39	7.48	7.18	7.08	7.14	8.05	7.33	6.88
27	6.87	---	6.74	6.75	8.13	7.47	7.17	7.06	7.14	7.96	7.24	6.95
28	6.86	6.73	6.73	6.75	8.03	7.46	7.15	7.04	7.20	8.07	7.19	6.91
29	6.85	---	6.72	6.83	7.98	7.44	7.13	7.03	7.20	8.37	7.13	6.88
30	6.84	6.70	6.71	7.04	---	7.42	7.28	7.01	7.19	8.19	7.12	6.86
31	6.82	---	6.70	7.21	---	7.38	---	7.01	---	8.11	7.24	---
TOTAL	---	---	---	209.21	---	237.14	---	---	214.39	---	---	214.07
MEAN	---	---	---	6.75	---	7.65	---	---	7.15	---	---	7.14
MAX	---	---	---	7.21	---	7.92	---	---	7.36	---	---	7.76
MIN	---	---	---	6.66	---	7.38	---	---	6.97	---	---	6.86

02291524 SPRING CREEK HEADWATER NEAR BONITA SPRINGS, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	4.2	2.7	2.5	2.3	9.2	2.8	5.7	0.80	1.3	16	18
2	42	4.1	e2.7	2.4	2.0	8.7	2.4	5.2	0.72	1.2	e20	20
3	33	4.3	e2.7	2.4	2.6	8.5	2.2	5.0	0.83	1.1	18	15
4	27	4.4	2.7	2.4	4.1	8.3	2.1	5.0	1.0	e1.0	19	15
5	23	4.5	e2.7	2.3	3.9	8.0	1.9	4.6	0.98	1.2	17	17
6	20	5.5	2.6	2.4	3.7	7.8	1.7	4.2	0.80	1.8	18	16
7	17	5.8	2.6	2.4	3.7	7.6	1.5	3.9	0.95	1.8	17	16
8	15	5.5	e2.6	2.4	3.3	7.4	1.5	3.6	1.4	1.7	e15	15
9	14	6.1	2.6	2.4	3.1	7.1	1.5	3.4	1.5	1.5	14	14
10	12	5.8	2.7	2.3	2.9	6.9	1.6	3.2	1.3	1.3	e13	12
11	11	5.3	2.6	2.3	2.8	6.7	1.6	3.0	1.3	1.6	e13	12
12	10	4.9	2.7	2.2	3.0	6.6	2.4	2.7	1.3	e2.4	14	11
13	9.7	4.6	2.6	2.2	2.9	6.4	3.3	2.5	1.3	e2.7	35	10
14	9.1	4.3	2.7	2.2	2.9	6.2	3.7	2.2	2.4	2.7	92	9.6
15	8.7	4.1	2.7	2.1	4.5	6.1	3.4	2.1	3.0	2.5	51	9.2
16	8.0	4.0	2.9	2.1	5.3	6.2	3.0	2.3	3.4	2.2	32	9.0
17	7.5	3.8	4.6	2.0	5.1	6.0	2.7	2.0	3.3	2.5	56	8.7
18	e7.2	3.8	5.1	2.8	4.9	5.8	2.5	1.9	3.1	2.9	50	8.3
19	e6.7	3.8	4.5	3.7	4.8	5.6	2.2	1.6	2.8	4.1	28	8.1
20	6.6	3.9	4.2	3.6	4.6	5.3	1.9	1.5	2.4	9.2	20	7.9
21	6.3	3.8	3.8	3.4	e4.7	5.3	1.7	e1.4	2.1	11	19	7.7
22	6.1	3.5	3.7	3.2	4.3	5.3	e1.6	1.3	1.8	9.8	34	7.6
23	6.0	3.4	3.5	3.1	4.1	4.9	e1.5	e1.3	1.5	9.2	23	7.5
24	5.7	3.3	3.3	3.0	4.0	4.6	1.4	e1.3	1.4	8.7	17	7.3
25	5.5	3.2	3.2	2.8	8.1	4.3	1.6	1.2	1.3	10	15	7.1
26	5.1	3.2	3.1	2.7	17	4.1	1.5	1.1	1.2	12	13	7.4
27	4.9	e3.1	2.9	2.8	12	4.0	1.4	1.0	1.2	11	12	8.3
28	4.8	3.1	2.8	2.8	11	3.9	1.2	0.95	1.6	13	12	7.8
29	4.7	e2.9	2.8	3.3	9.9	3.7	1.1	0.89	1.5	19	11	7.4
30	4.5	2.8	2.7	3.1	---	3.5	2.3	0.82	1.4	15	11	7.1
31	4.3	---	2.6	2.5	---	3.1	---	0.82	---	14	12	---
TOTAL	404.4	125.0	95.6	81.8	147.5	187.1	61.2	77.68	49.58	179.4	737	327.0
MEAN	13.0	4.17	3.08	2.64	5.09	6.04	2.04	2.51	1.65	5.79	23.8	10.9
MAX	59	6.1	5.1	3.7	17	9.2	3.7	5.7	3.4	19	92	20
MIN	4.3	2.8	2.6	2.0	2.0	3.1	1.1	0.82	0.72	1.0	11	7.1
AC-FT	802	248	190	162	293	371	121	154	98	356	1,460	649

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2004, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	16.6	7.06	4.44	3.77	3.64	2.95	2.01	1.39	6.66	14.3	19.5	22.2						
MAX	95.9	26.5	14.1	9.45	15.3	11.8	5.56	6.41	28.9	42.0	46.1	52.6						
(WY)	(1996)	(1999)	(1998)	(1995)	(1998)	(1998)	(1993)	(1991)	(1992)	(1999)	(1995)	(1995)						
MIN	4.05	1.63	1.02	0.71	0.28	0.11	0.11	0.18	0.43	0.90	5.16	9.20						
(WY)	(1990)	(1990)	(1993)	(1997)	(1997)	(1997)	(1990)	(1989)	(1988)	(1988)	(1989)	(1996)						

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1987 - 2004

ANNUAL TOTAL	3,069.0	2,473.26	
ANNUAL MEAN	8.41	6.76	8.88
HIGHEST ANNUAL MEAN			17.2
LOWEST ANNUAL MEAN			3.18
HIGHEST DAILY MEAN	105	Sep 30	92
LOWEST DAILY MEAN	1.7	Apr 24	0.72
ANNUAL SEVEN-DAY MINIMUM	1.9	Apr 19	0.83
MAXIMUM PEAK FLOW			102
MAXIMUM PEAK STAGE			9.92
INSTANTANEOUS LOW FLOW			0.66
ANNUAL RUNOFF (AC-FT)	6,090	4,910	6,430
10 PERCENT EXCEEDS	18	15	19
50 PERCENT EXCEEDS	4.9	3.8	3.8
90 PERCENT EXCEEDS	2.6	1.4	0.70

e Estimated

** Many days during water years 1989, 1990, 1997.

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA

02291580 NORTH BRANCH ESTERO RIVER AT ESTERO, FL

LOCATION.--Lat 26°26'30", long 81°47'45", in SW ¼ SW ¼ NE ¼ sec.27, T.46 S., R.25 E., Lee County, Hydrologic Unit 03090204, on right bank behind house at east end of Broadway Road, 0.95 mi east of U.S. Highway 41, 0.9 mi upstream from confluence with South Branch Estero River and 5.6 mi upstream from mouth of Estero River.

DRAINAGE AREA.--Indeterminate.

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

GAGE.--Satellite data collection platform with water-stage shaft encoder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Many days of no flow during the water year.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 17 complete water years of discharge (1988-2004).

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.58	8.10	7.66	7.52	7.82	8.16	7.24	7.30	6.79	7.15	---	11.23
2	13.38	8.06	7.63	7.52	7.81	8.11	7.27	7.31	6.79	---	---	11.40
3	13.07	8.06	7.62	7.51	7.79	8.14	7.26	7.31	6.79	---	10.17	11.43
4	12.73	8.06	7.60	7.51	7.78	8.14	7.24	7.32	6.80	7.49	10.38	11.47
5	12.34	8.26	7.58	7.51	7.74	8.03	7.22	7.29	6.80	7.47	10.21	11.87
6	11.87	8.57	7.57	7.49	7.71	7.97	7.20	7.24	6.78	7.42	10.43	12.68
7	11.43	8.50	7.54	7.46	7.69	7.97	7.19	7.18	6.77	7.25	10.26	12.85
8	11.06	8.42	7.51	7.49	7.66	7.92	7.17	7.12	6.82	7.15	9.97	12.69
9	10.72	8.34	7.49	7.54	7.63	7.86	7.15	7.07	6.82	7.15	9.64	12.40
10	10.39	8.27	7.50	7.55	7.63	7.82	7.13	7.04	6.82	7.20	9.35	12.33
11	10.09	8.21	7.50	7.52	7.66	7.77	7.11	7.02	6.81	7.32	9.25	11.94
12	9.76	8.16	7.49	7.51	7.66	7.74	7.24	6.97	6.81	7.60	9.33	11.58
13	9.47	8.11	7.46	7.49	7.61	7.71	7.51	6.92	6.79	7.59	10.07	11.26
14	9.31	8.04	7.55	7.46	7.54	7.67	7.54	6.87	6.86	7.50	12.26	11.00
15	9.23	8.00	7.65	7.46	7.79	7.66	7.49	6.88	6.88	7.44	11.96	10.74
16	9.00	7.96	7.66	7.49	7.80	7.65	7.43	6.88	6.89	7.39	11.58	10.49
17	8.81	7.93	7.92	7.47	7.75	7.63	7.38	6.87	6.87	7.45	---	10.24
18	8.69	7.90	8.10	7.64	7.74	7.57	7.33	6.87	6.88	7.44	---	9.99
19	8.59	7.90	7.94	7.78	7.72	7.53	7.28	6.87	6.87	7.57	---	9.76
20	8.50	7.91	7.85	7.77	7.69	7.49	7.25	6.86	6.87	8.34	---	9.55
21	8.43	7.89	7.81	7.86	7.65	7.46	7.22	6.85	6.87	9.05	10.22	9.49
22	8.37	7.86	7.77	7.73	7.62	7.44	7.23	6.85	6.85	8.66	9.97	9.41
23	8.32	7.83	7.74	7.69	7.60	7.40	7.22	6.85	6.84	8.42	10.52	9.24
24	8.26	7.81	7.71	7.66	7.58	7.37	7.17	6.84	6.85	8.22	10.98	9.03
25	8.24	7.79	7.69	7.63	7.87	7.35	7.13	6.82	7.09	8.27	11.94	8.85
26	8.18	7.77	---	7.59	8.41	7.33	7.10	6.83	7.04	8.84	11.86	9.06
27	8.13	7.74	---	7.59	8.33	7.30	7.07	6.82	6.99	8.76	11.76	9.44
28	8.09	7.73	7.62	7.59	8.26	7.28	7.04	6.81	7.16	9.73	11.71	9.36
29	8.21	7.70	7.62	7.55	8.21	7.27	7.04	6.81	7.12	11.37	11.64	9.20
30	8.26	7.68	7.57	7.57	---	7.25	7.23	6.80	7.05	---	11.54	9.00
31	8.16	---	7.52	7.76	---	7.23	---	6.79	---	---	11.40	---
TOTAL	302.67	240.56	---	234.91	225.70	237.22	217.08	216.26	206.37	---	---	318.98
MEAN	9.76	8.02	---	7.58	7.78	7.65	7.24	6.98	6.88	---	---	10.63
MAX	13.58	8.57	---	7.86	8.41	8.16	7.54	7.32	7.16	---	---	12.85
MIN	8.09	7.68	---	7.46	7.54	7.23	7.04	6.79	6.77	---	---	8.85

02291580 NORTH BRANCH ESTERO RIVER AT ESTERO, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	302	6.0	1.8	1.0	3.0	6.7	0.28	0.28	0.00	0.13	e68	114
2	284	5.5	1.6	1.0	2.9	6.1	0.35	0.29	0.00	e0.94	e58	125
3	258	5.4	1.6	0.97	2.8	6.5	0.32	0.30	0.00	e1.3	56	126
4	230	5.5	1.5	0.98	2.7	6.5	0.28	0.33	0.00	0.92	65	129
5	200	8.6	1.4	0.98	2.4	5.1	0.24	0.26	0.00	0.84	57	157
6	167	14	1.3	0.89	2.2	4.5	0.20	0.17	0.00	0.63	69	218
7	139	12	1.2	0.78	2.0	4.5	0.17	0.08	0.00	0.18	60	232
8	116	11	0.97	0.91	1.8	4.0	0.15	0.03	0.00	0.05	47	219
9	98	9.4	0.92	1.1	1.6	3.5	0.11	0.01	0.00	0.05	35	196
10	82	8.3	0.94	1.2	1.6	3.2	0.08	0.00	0.00	0.11	26	191
11	66	7.4	0.96	1.1	1.8	2.9	0.06	0.00	0.00	0.37	23	161
12	51	6.7	0.89	0.98	1.5	2.6	0.29	0.00	0.00	1.5	25	137
13	39	6.1	0.80	0.92	1.5	2.4	1.2	0.00	0.00	1.4	62	117
14	34	5.3	1.2	0.80	1.2	2.2	1.3	0.00	0.00	0.97	183	102
15	31	4.7	1.8	0.76	2.8	2.1	1.1	0.00	0.00	0.69	161	89
16	24	4.3	1.8	0.89	2.8	2.0	0.83	0.00	0.00	0.51	135	77
17	19	4.0	3.9	0.84	2.4	1.9	0.59	0.00	0.00	0.76	e104	64
18	16	3.8	6.0	1.8	2.4	1.6	0.45	0.00	0.00	0.70	e90	52
19	14	3.7	4.1	2.7	2.2	1.4	0.31	0.00	0.00	1.4	e82	43
20	12	3.9	3.3	2.6	2.0	1.2	0.22	0.00	0.00	12	e71	35
21	11	3.6	2.9	3.4	1.8	1.0	0.16	0.00	0.00	25	60	33
22	10	3.3	2.6	2.3	1.6	0.94	0.18	0.00	0.00	16	49	31
23	9.1	3.1	2.4	2.0	1.5	0.78	0.16	0.00	0.00	11	75	26
24	8.2	2.9	2.2	1.8	1.3	0.66	0.09	0.00	0.00	7.6	100	20
25	7.9	2.7	2.0	1.6	4.0	0.58	0.05	0.00	0.17	8.6	160	16
26	7.0	2.6	1.8	1.4	11	0.52	0.02	0.00	0.01	20	155	21
27	6.3	2.4	1.7	1.4	9.2	0.44	0.01	0.00	0.01	18	148	32
28	5.9	2.3	1.6	1.4	8.2	0.39	0.00	0.00	0.07	54	144	29
29	7.4	2.1	1.6	1.2	7.4	0.35	0.03	0.00	0.03	130	140	25
30	8.2	2.0	1.3	1.3	---	0.29	0.15	0.00	0.00	101	133	20
31	6.8	---	1.0	2.5	---	0.25	---	0.00	---	e81	124	---
TOTAL	2,269.8	162.6	59.08	43.50	89.6	77.10	9.38	1.75	0.29	497.65	2,765	2,837
MEAN	73.2	5.42	1.91	1.40	3.09	2.49	0.31	0.06	0.01	16.1	89.2	94.6
MAX	302	14	6.0	3.4	11	6.7	1.3	0.33	0.17	130	183	232
MIN	5.9	2.0	0.80	0.76	1.2	0.25	0.00	0.00	0.00	0.05	23	16
AC-FT	4,500	323	117	86	178	153	19	3.5	0.6	987	5,480	5,630

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2004, BY WATER YEAR (WY)

	MEAN	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	27.2	8.12	2.65	1.54	3.21	1.44	0.17	0.03	4.04	8.58	15.9	32.2
MAX	153	59.7	23.6	11.2	49.2	21.0	1.42	0.26	27.7	30.8	89.2	104
(WY)	(1996)	(1999)	(1998)	(1998)	(1998)	(1998)	(1987)	(1998)	(2003)	(1999)	(2004)	(2001)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1990)	(1990)	(1990)	(1990)	(1990)	(1988)	(1989)	(1988)	(1989)	(1989)	(1989)	(1989)

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1987 - 2004
ANNUAL TOTAL	6,449.01	8,812.75	
ANNUAL MEAN	17.7	24.1	9.01
HIGHEST ANNUAL MEAN			24.1
LOWEST ANNUAL MEAN			0.00**
HIGHEST DAILY MEAN	314 Sep 30	302 Oct 1	366 Aug 26, 1995
LOWEST DAILY MEAN	0.00*	0.00*	0.00**
ANNUAL SEVEN-DAY MINIMUM	0.00*	0.00*	0.00**
MAXIMUM PEAK FLOW		311 Oct 1	381 Aug 25, 1995
MAXIMUM PEAK STAGE		13.68 Oct 1	14.41 Aug 25, 1995
ANNUAL RUNOFF (AC-FT)	12,790	17,480	6,530
10 PERCENT EXCEEDS	34	99	18
50 PERCENT EXCEEDS	2.6	2.0	0.05
90 PERCENT EXCEEDS	0.00	0.00	0.00

e Estimated

* Many days.

** Many days during water years 1988-2004.

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02291597 SOUTH BRANCH ESTERO RIVER AT ESTERO, FL

LOCATION.--Lat 26°25'43", long 81°47'36", in NW ¼ sec.34, T.46 S., R.25 E., Lee County, Hydrologic Unit 03090204, near left bank on downstream culvert headwall on Corkscrew Road, 1.1 mi east of U.S. Highway 41 at Estero and 3.9 mi upstream from mouth of Estero River.

DRAINAGE AREA.--Indeterminate.

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

REVISED RECORDS.--WDR FL-2000-2A, 1999.

GAGE.--Satellite data collection platform with water-stage shaft encoder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Water years 2000 and 2001 at datum 0.30 ft higher than current datum. Water years 1987-1999 at datum near 0.30 ft higher than current datum (original benchmark destroyed during road construction in July 1999). Days of no flow occurred during water years 1996, 1999, 2000.

ANNUAL MEAN AND ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 15 complete water years of discharge (1989-98, 2000-2004).

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.55	3.00	2.82	2.82	3.21	3.25	2.84	2.80	2.64	2.82	5.32	5.65
2	7.07	2.98	2.81	2.85	3.16	3.19	2.84	2.78	2.64	2.84	5.37	5.75
3	6.62	2.99	2.81	2.88	3.13	3.14	2.83	2.80	2.64	2.81	5.23	5.76
4	6.23	3.00	2.80	2.90	3.13	3.11	2.82	2.82	2.64	2.81	5.17	5.74
5	5.86	3.17	2.80	2.90	3.11	3.08	2.81	2.80	2.64	2.85	4.92	6.12
6	5.46	3.39	2.80	2.90	3.10	3.06	2.81	2.78	2.64	2.84	5.00	6.62
7	5.09	3.32	2.79	2.89	3.09	3.04	2.81	2.77	2.64	2.81	5.01	6.57
8	4.81	3.25	2.79	2.90	3.07	3.01	2.82	2.77	2.64	2.78	4.84	6.36
9	4.58	3.19	2.78	2.91	3.06	2.98	2.82	2.76	2.64	2.76	4.48	6.16
10	4.39	3.13	2.78	2.93	3.06	2.97	2.81	2.76	2.64	2.81	4.21	6.03
11	4.22	3.09	2.78	2.92	3.05	2.95	2.81	2.76	2.64	2.96	4.25	5.80
12	4.07	3.06	2.77	2.98	3.06	2.94	2.85	2.75	2.64	3.05	4.61	5.55
13	3.95	---	2.77	2.97	3.09	2.94	2.90	2.75	2.65	2.96	5.45	5.32
14	3.87	---	2.81	2.98	3.15	2.93	2.87	2.74	2.69	2.90	7.14	5.20
15	3.80	2.97	2.82	2.99	3.17	2.93	2.84	2.74	2.73	2.86	7.09	5.09
16	3.67	2.99	2.83	3.01	3.02	2.93	2.83	2.75	2.73	2.83	6.71	4.91
17	3.58	2.98	3.02	3.02	2.99	2.94	2.82	2.74	2.71	2.83	7.06	4.73
18	3.51	2.94	2.94	3.16	2.96	2.92	2.81	2.73	2.69	2.83	7.96	4.56
19	3.44	2.93	2.91	3.11	2.94	2.91	2.80	2.72	2.69	3.07	7.40	4.38
20	3.37	2.93	2.88	3.01	2.93	2.90	2.80	2.72	2.68	3.77	6.73	4.19
21	3.31	2.90	2.88	2.97	2.91	2.90	2.79	2.71	2.67	3.86	6.16	4.06
22	3.26	2.89	2.86	2.94	2.89	2.90	2.79	2.71	2.66	3.68	5.76	3.98
23	3.21	2.88	2.86	2.93	2.88	2.88	2.78	2.70	2.65	3.51	5.46	3.84
24	3.16	2.87	2.86	2.91	2.88	2.88	2.78	2.69	2.65	3.33	5.14	3.71
25	3.11	2.86	2.85	2.90	3.39	2.87	2.77	2.69	2.69	3.47	5.12	3.61
26	3.09	2.86	2.84	2.93	3.93	2.87	2.77	2.69	2.71	3.68	5.13	3.85
27	3.07	2.85	2.83	3.00	3.56	2.86	2.76	2.68	2.76	3.91	5.37	3.93
28	3.06	2.85	2.83	3.01	3.36	2.86	2.76	2.68	2.87	5.50	5.86	3.85
29	3.08	2.84	2.82	3.02	3.29	2.85	2.76	2.67	2.85	6.52	6.01	3.72
30	3.05	2.82	2.82	3.06	---	2.85	2.78	2.65	2.82	6.17	5.88	3.61
31	3.03	---	2.82	3.21	---	2.85	---	2.65	---	5.66	5.73	---
TOTAL	129.57	---	87.78	91.91	90.57	91.69	84.28	84.76	80.58	107.48	175.57	148.65
MEAN	4.18	---	2.83	2.96	3.12	2.96	2.81	2.73	2.69	3.47	5.66	4.96
MAX	7.55	---	3.02	3.21	3.93	3.25	2.90	2.82	2.87	6.52	7.96	6.62
MIN	3.03	---	2.77	2.82	2.88	2.85	2.76	2.65	2.64	2.76	4.21	3.61

02291597 SOUTH BRANCH ESTERO RIVER AT ESTERO, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	174	5.2	2.4	1.2	5.2	8.3	2.0	1.1	0.21	1.7	74	87
2	155	4.8	2.3	1.4	4.0	7.1	2.0	1.0	0.17	1.9	76	91
3	134	4.9	2.2	1.6	3.4	6.1	1.9	1.1	0.15	1.6	71	92
4	116	5.0	2.0	1.7	3.5	5.5	1.8	1.3	0.16	1.7	69	91
5	100	9.0	2.0	1.7	3.3	4.9	1.7	1.1	0.19	2.1	60	106
6	84	14	1.9	1.7	3.2	4.5	1.7	0.98	0.20	1.9	62	122
7	70	12	1.8	1.6	3.2	4.2	1.8	0.91	0.22	1.6	63	112
8	60	11	1.7	1.6	3.0	3.7	1.8	0.89	0.25	1.4	57	102
9	52	9.2	1.6	1.7	2.9	3.4	1.7	0.82	0.26	1.2	45	94
10	45	7.8	1.6	1.9	3.0	3.2	1.6	0.78	0.27	1.7	37	89
11	40	6.8	1.5	1.7	3.0	3.0	1.6	0.78	0.29	3.5	38	80
12	35	6.2	1.3	2.3	3.1	2.9	2.0	0.75	0.32	4.5	49	71
13	32	e5.3	1.3	2.2	3.6	2.8	2.4	0.72	0.37	3.1	84	63
14	30	e3.8	1.6	2.2	4.8	2.8	2.1	0.66	0.54	2.4	153	59
15	27	4.5	1.7	2.4	5.7	2.7	1.8	0.61	0.85	2.0	151	56
16	23	4.8	1.8	2.5	2.9	2.8	1.6	0.66	0.82	1.7	133	50
17	20	4.7	3.9	2.6	2.6	2.9	1.5	0.63	0.69	1.7	150	45
18	19	4.0	2.8	5.4	2.3	2.6	1.5	0.58	0.65	1.7	195	40
19	17	3.9	2.3	3.8	2.2	2.5	1.4	0.54	0.63	6.0	166	35
20	14	3.8	2.0	2.5	2.1	2.4	1.3	0.51	0.58	24	134	29
21	13	3.4	1.9	2.0	2.0	2.5	1.2	0.47	0.57	26	108	26
22	11	3.2	1.7	1.7	1.9	2.5	1.2	0.46	0.55	21	91	24
23	10	3.1	1.7	1.5	1.8	2.4	1.2	0.44	0.52	16	80	20
24	8.7	3.0	1.6	1.4	1.8	2.3	1.1	0.38	0.52	11	68	16
25	7.7	2.9	1.6	1.3	14	2.2	1.0	0.36	0.72	15	67	13
26	7.2	2.9	1.5	1.4	29	2.2	0.99	0.35	0.83	21	67	21
27	6.7	2.8	1.4	2.1	17	2.1	0.99	0.33	1.2	28	76	24
28	6.4	2.8	1.3	2.2	11	2.1	0.93	0.31	2.2	84	95	22
29	6.9	2.6	1.2	2.2	9.3	2.0	0.91	0.27	2.0	124	102	18
30	6.3	2.4	1.2	2.8	---	2.0	1.1	0.23	1.7	109	96	15
31	5.9	---	1.2	5.1	---	2.0	---	0.21	---	87	90	---
TOTAL	1,336.8	159.8	56.0	67.4	154.8	102.6	45.82	20.23	18.63	609.4	2,807	1,713
MEAN	43.1	5.33	1.81	2.17	5.34	3.31	1.53	0.65	0.62	19.7	90.5	57.1
MAX	174	14	3.9	5.4	29	8.3	2.4	1.3	2.2	124	195	122
MIN	5.9	2.4	1.2	1.2	1.8	2.0	0.91	0.21	0.15	1.2	37	13
AC-FT	2,650	317	111	134	307	204	91	40	37	1,210	5,570	3,400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2004, BY WATER YEAR (WY)

	31.2	11.2	4.10	3.25	5.17	3.58	1.45	0.76	6.54	17.8	33.4	43.1
MEAN	31.2	11.2	4.10	3.25	5.17	3.58	1.45	0.76	6.54	17.8	33.4	43.1
MAX	220	59.5	28.6	13.6	57.4	31.5	8.66	4.69	29.8	60.7	126	142
(WY)	(1996)	(1999)	(1998)	(1998)	(1998)	(1998)	(1987)	(1987)	(1996)	(1992)	(1995)	(1995)
MIN	4.87	0.61	0.30	0.29	0.10	0.10	0.07	0.01	0.17	0.85	2.60	4.91
(WY)	(1989)	(1993)	(1991)	(1997)	(1997)	(1997)	(2000)	(2000)	(1988)	(2000)	(1989)	(1990)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1987 - 2004

ANNUAL TOTAL	6,250.44		7,091.48		
ANNUAL MEAN	17.1		19.4		13.2
HIGHEST ANNUAL MEAN					33.6
LOWEST ANNUAL MEAN					2.03
HIGHEST DAILY MEAN	195	Sep 30	195	Aug 18	410
LOWEST DAILY MEAN	0.04	May 27	0.15	Jun 3	0.00**
ANNUAL SEVEN-DAY MINIMUM	0.08	May 22	0.18	May 31	0.00**
MAXIMUM PEAK FLOW			210	Aug 17	440
MAXIMUM PEAK STAGE			8.24	Aug 17	12.60
INSTANTANEOUS LOW FLOW			0.14	Jun 2	0.00**
ANNUAL RUNOFF (AC-FT)	12,400		14,070		9,540
10 PERCENT EXCEEDS	44		77		37
50 PERCENT EXCEEDS	6.8		2.6		2.0
90 PERCENT EXCEEDS	1.5		0.64		0.21

e Estimated

** Many days during water years 1996,1999, 2000.

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

262043081513200 FISH TRAP BAY NEAR BONITA BEACH, FL

LOCATION.--Lat 26°27'50", long 81°54'44", T.47 S., R.25 E., Lee County, Hydrologic Unit 03090204, east bank of connection between Fishtrap Bay and Big Hickory Bay, 0.25 mi northwest of Imperial River, 2 mi north of Bonita Beach.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--

SALINITY: January 2002 to current year.

WATER TEMPERATURE: January 2002 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Salinity record rated excellent. Temperature record rated good. Daily values are not published for this site. Salinity and temperature 15 minute data, are available in files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

SALINITY: Maximum recorded, 39.2 ppt Feb. 7, 2002, but may have been higher during period of missing record; minimum recorded, 0.3 ppt Oct. 2, 3, 2003, and Sept. 3, 4, 2004, but may have been lower during period of missing record.

WATER TEMPERATURE: Maximum recorded, 35.1°C July 16, 2002, but may have been higher during period of missing record; minimum recorded, 9.0°C Jan. 25, 2003, but may have been lower during period of missing record.

EXTREMES FOR CURRENT YEAR.--

SALINITY: Maximum recorded, 35.3 ppt June 5, 6, but may have been higher during period of missing record; minimum recorded, 0.3 ppt Oct. 2, 3 and Sept. 3, 4, but may have been lower during period of missing record.

WATER TEMPERATURE: Maximum recorded, 34.8°C July 9, but may have been higher during period of missing record; minimum recorded, 13.8°C Dec. 21 and Jan. 11, but may have been lower during period of missing record.

02291610 ESTERO RIVER NEAR THE MOUTH NEAR ESTERO, FL

LOCATION.--Lat 26°26'07", long 81°51'02", T.46 S., R.24 E., Lee County, Hydrologic Unit 03090204, left bank, 0.8 mi from mouth of river, 1.5 mi east of Mound Key, 13 mi south of Ft. Myers.

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--

DISCHARGE: February 2002 to current year.

GAGE HEIGHT: October 2001 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Datum of gage is arbitrary.

REMARKS.--Records fair. Daily values are not published for this site. Discharge and gage height 15 minute data, are available in the files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREME FOR PERIOD OF RECORD.--

DISCHARGE: Maximum positive discharge, 645 ft³/s Oct. 1, 2003; maximum negative, 1,020 ft³/s Sept. 26, 2004.

GAGE HEIGHT: Maximum gage height, 4.38 ft Sept. 26, 2004; minimum, -0.92 ft Mar. 5, 2002.

EXTREME FOR CURRENT YEAR.--

DISCHARGE: Maximum positive discharge, 645 ft³/s Oct. 1; maximum negative, 1,020 ft³/s Sept. 26.

GAGE HEIGHT: Maximum gage height, 4.38 ft Sept. 26; minimum, -0.55 ft Nov. 29.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SALINITY: October 2001 to current year.

WATER TEMPERATURE: October 2001 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Salinity record rated excellent. Temperature record rated good. Elevation of the salinity-temperature sensor -0.3 ft arbitrary datum. Daily values not published for this site. Salinity and temperature 15 minute data, are available in files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

SALINITY: Maximum recorded, 40.1 ppt June 6, 2002, but may have been higher during period of missing record; minimum recorded, 0.1 ppt Sept. 29, 30, 2003, and Oct. 1-4, 2003, but may have been lower during period of missing record.

WATER TEMPERATURE: Maximum recorded, 35.5°C July 16, 2002, and July 8, 2004, but may have been higher during period of missing record; minimum recorded, 9.6°C Jan. 25, 2003, but may have been lower during period of missing record.

EXTREMES FOR CURRENT YEAR.--

SALINITY: Maximum recorded, 35.4 ppt June 4, but may have been higher during period of missing record; minimum recorded, 0.1 ppt Oct. 1-4, but may have been lower during period of missing record.

WATER TEMPERATURE: Maximum recorded, 35.5°C July 8, but may have been higher during period of missing record; minimum recorded, 13.6°C Dec. 18, but may have been lower during period of missing record.

262620081523700 ESTERO BAY NEAR HORSESHOE KEYS, FL

LOCATION.--Lat 26°26'20", long 81°52'37", in T.46S., R.24 E., Lee County, Hydrologic Unit 03090204, at Horseshoe Keys, .8 mi southwest from Mullock Creek, 11 mi southwest of Fort Myers.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--

GAGE HEIGHT: October 2001 to current year.

SALINITY: October 2001 to current year.

WATER TEMPERATURE: October 2001 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and water-quality monitor. Datum of gage is arbitrary.

REMARKS.--Salinity record rated excellent except for the following periods: Nov. 14-18, Dec. 28-31, Jan. 1-5, Feb. 12-18, Apr. 4-7, May 26-28, June 21-30, July 27-31, Aug. 1-3, 14-18, rated good; Feb. 19-24, Apr. 8-11, July 1-8, Aug. 4-10, 19-21, rated fair; and Apr. 12-21, July 9-22, Aug. 11-22, Sept. 1, rated poor. Temperatures record rated good. Elevation of the salinity-temperature sensor ranges from -1.6 to -2.0 ft arbitrary datum. Gage height, salinity and temperature 15 minute data, are available in the files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>. Daily values are not published for this site.

EXTREMES FOR PERIOD OF RECORD.--

GAGE HEIGHT: Maximum gage height, 3.89 ft Aug. 13, 2004; minimum, -2.81 ft Mar. 4, 5, 2002.

SALINITY: Maximum recorded, 37.5 ppt June 7, 2002, may have been higher during period of missing record; minimum recorded, 4.3 ppt, June 24, 2003, but may have been lower during period of missing record.

WATER TEMPERATURE: Maximum recorded, 35.3°C Aug. 11, 2004, but may have been higher during period of missing record; minimum recorded, 7.2°C Jan. 28, 2003, but may have been lower during period of missing record.

EXTREMES FOR CURRENT YEAR.--

GAGE HEIGHT: Maximum gage height, 3.89 ft Aug. 13; minimum, -2.58 ft Nov. 29.

SALINITY: Maximum recorded, 35.4 ppt May 25, but may have been higher during period of missing record; minimum recorded, 5.3 ppt Aug. 14, but may have been lower during period of missing record.

WATER TEMPERATURE: Maximum recorded, 35.3°C Aug. 11, but may have been higher during period of missing record; minimum recorded, 11.4°C Dec. 21, but may have been lower during period of missing record.

02291655 MULLOCK CREEK NEAR THE MOUTH NEAR ESTERO, FL

LOCATION.--Lat 26°27'50", long 81°51'57", T.46 S., R.23 E., Lee County, Hydrologic Unit 03090204, near right bank, 450 ft from the mouth of river, 11 mi south of Ft. Myers.

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--

DISCHARGE: January 2002 to current year.

GAGE HEIGHT: October 2001 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Datum of gage is arbitrary.

REMARKS.--Discharge record unavailable at time of publication. Daily values are not published for this site. Gage height 15 minute data is available in the files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

GAGE HEIGHT: Maximum gage height, 4.81 ft Sept. 26, 2004; minimum, -1.39 ft Jan. 24, 2003.

EXTREMES FOR CURRENT YEAR.--

GAGE HEIGHT: Maximum gage height, 4.81 ft Sept. 26; minimum, -1.28 ft Nov. 29.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SALINITY: October 2001 to current year.

WATER TEMPERATURE: October 2001 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Salinity record rated excellent except for the following periods: Dec. 10-31, Jan. 1-5, 21-28, Feb. 26, 27, rated good. Temperature record rated good. Elevation of the salinity and temperature sensor located at -1.04 ft relative to arbitrary datum. Daily values are not published for this site. Salinity and temperature 15 minute data are available in files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

SALINITY: Maximum recorded, 37.4 ppt June 8, 2002, but may have been higher during period of missing record; minimum recorded, 0.2 ppt occurred on several days during the months of Sept. 2003, 2004, and October 2003, but may have been lower during period of missing record.

WATER TEMPERATURE: Maximum recorded, 34.1°C July 16, 2002, and July 21, 2003, but may have been higher during period of missing record; minimum recorded, 10.2°C Jan. 25, 2003, but may have been lower during period of missing record.

EXTREMES FOR CURRENT YEAR.--

SALINITY: Maximum recorded, 34.7 ppt June 3, 5, 6, but may have been higher during period of missing record; minimum recorded, 0.2 ppt Oct. 1-5, Sept. 11-13, but may have been lower during period of missing record.

WATER TEMPERATURE: Maximum recorded, 33.6°C June 23, July 9, but may have been higher during period of missing record; minimum recorded, 14.3°C Dec. 21, but may have been lower during period of missing record.

262727081571300 MANTANZAS PASS BRIDGE AT FORT MYERS BEACH, FL

LOCATION.--Lat 26°27'27", long 81°57'13", T.46 S., R.23 E., Lee County, Hydrologic Unit 03090204, on bridge fenders on Matanzas Pass Bridge, 300 ft from northeast bank of Matanzas Pass, and 11 mi southwest of Fort Myers.

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--

DISCHARGE: February 2002 to current year.

GAGE HEIGHT: December 2001 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Daily values are not published for this site. Discharge and gage height 15 minute data, are available in the files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

DISCHARGE: Maximum positive discharge, 35,100 ft³/s Aug. 13, 2004; maximum negative, 59,400 ft³/s Aug. 13, 2004.

GAGE HEIGHT: Maximum gage height, 5.92 ft Aug. 13, 2004; minimum, -2.52 ft Feb. 18, 2004.

EXTREMES FOR CURRENT YEAR.--

DISCHARGE: Maximum positive discharge, 35,100 ft³/s Aug. 13; maximum negative, 59,400 ft³/s Aug. 13.

GAGE HEIGHT: Maximum gage height, 5.92 ft Aug. 13; minimum, -2.52 ft Feb. 18.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SALINITY (TOP AND BOTTOM): December 2001 to current year.

WATER TEMPERATURE (TOP AND BOTTOM): December 2001 to current year.

INSTRUMENTATION.--Water-quality monitor with top and bottom sensors.

REMARKS.--Salinity (TOP) record rated excellent except for the following periods: Dec. 1-3, Aug. 12 to Sept. 28, rated good. Salinity (BOTTOM) record rated excellent except for the following periods: Sept. 13-16, rated good; Sept. 17-20, rated fair; and Sept. 21-26, rated poor. Temperature (TOP AND BOTTOM) record rated good. Salinity-temperature sensors located at -2.00 NGVD (TOP) and -6.00 NGVD (BOTTOM). Daily values are not published for this site. Salinity and temperature 15 minute data, are available in files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>.

EXTREMES FOR PERIOD OF RECORD.--

SALINITY (TOP): Maximum recorded, 37.1 ppt May 31, 2002, and June 1, 2002, but may have been higher during period of missing record; minimum recorded, 12.1 ppt Sept. 7, 2003, but may have been lower during period of missing record.

SALINITY (BOTTOM): Maximum recorded, 37.0 ppt May 28, 2002, but may have been higher during period of missing record; minimum recorded, 13.6 ppt June 25, 2003, and Sept. 10, 2004, but may have been lower during period of missing record.

WATER TEMPERATURE (TOP): Maximum recorded, 33.4°C July 9, 16, 2004, but may have been higher during period of missing record; minimum recorded, 12.1°C Jan. 25, 2003, but may have been lower during period of missing record.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 33.4°C July 16, 2004, but may have been higher during period of missing record; minimum recorded, 12.2°C Jan. 25, 2003, but may have been lower during period of missing record.

EXTREMES FOR CURRENT YEAR.--

SALINITY (TOP): Maximum recorded, 35.8 ppt June 6, 7, but may have been higher during period of missing record; minimum recorded, 13.4 ppt Sept. 10, but may have been lower during period of missing record.

SALINITY (BOTTOM): Maximum recorded, 35.5 ppt over several days, but may have been higher during period of missing record; minimum recorded, 13.6 ppt Sept. 10, but may have been lower during period of missing record.

WATER TEMPERATURE (TOP): Maximum recorded, 33.4°C July 9, 16, but may have been higher during period of missing record; minimum recorded, 14.3°C Dec. 22, but may have been lower during period of missing record.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 33.4°C July 16, but may have been higher during period of missing record; minimum recorded, 14.2°C Dec. 22, but may have been lower during period of missing record.

02291669 SIXMILE CYPRESS CREEK NORTH NEAR FORT MYERS, FL

LOCATION.--Lat 26°31'18", long 81°51'09", in SW ¼ NW ¼ NW ¼ sec.31, T.45 S., R.25 E., Lee County, Hydrologic Unit 03090204, 10 ft upstream from Tennile Canal, 0.4 mi south of Sixmile Cypress parkway, and 5.2 mi south of Colonial Boulevard in Ft. Myers, FL.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--December 1987 to 1990, 1992 to current year.

REVISED RECORDS.--WDR FL-01-2A, 2000.

GAGE.--Satellite data collection platform with water-stage shaft encoder. Datum of gage is National Geodetic Vertical Datum of 1929.

COOPERATION.--Gate operation log provided by the county of Lee.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow can be regulated by four vertical lift gates, two on either side of control weir. New control weir constructed in 1991. Records of discharge for water years 1999-2004 represent only flow over the top of the weir. Daily value discharge during water years 1999-2004 are not provided when partial or full gate openings occurred. Records of discharge prior to water year 1999 include combinations of flow over the weir and gate flow. No distinctions in flow types prior to water year 1999 have been made. Zero flow occurs numerous days, during all water years. During the 2004 water year, discharge data for August 11 to September 23 were deleted due to gate operations.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 9 complete water years of discharge (1989-90, 1992-98).

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.44	10.98	10.90	10.97	11.05	11.14	7.76	5.99	5.44	9.82	11.31	6.54
2	11.36	10.98	10.89	10.97	11.05	11.12	7.38	6.00	5.50	10.85	11.33	6.56
3	11.24	11.01	10.87	10.97	11.06	11.10	6.98	6.00	5.46	11.02	11.35	6.34
4	11.12	11.04	10.86	10.97	11.06	11.08	6.64	6.01	5.51	11.06	11.37	5.94
5	10.96	11.07	10.85	10.97	11.05	11.07	6.39	5.97	5.47	11.10	11.40	6.10
6	10.12	11.08	10.82	10.97	11.05	11.06	6.26	5.92	5.46	11.10	11.46	6.88
7	8.82	11.09	10.78	10.97	11.04	11.06	6.22	5.88	5.48	11.08	11.49	7.46
8	7.97	11.11	10.73	10.96	11.03	11.05	6.19	5.85	5.55	11.07	11.48	8.26
9	7.36	11.11	10.66	10.95	11.03	11.04	6.17	5.81	5.59	11.05	11.45	9.02
10	6.94	11.10	10.61	10.95	11.03	11.03	6.13	5.78	5.62	11.04	11.40	9.11
11	---	11.09	10.62	10.93	11.02	11.02	6.06	5.75	5.64	11.06	9.21	8.52
12	---	11.07	10.59	10.92	11.03	11.02	6.22	5.72	5.67	11.11	6.68	7.98
13	---	11.06	10.56	10.92	11.02	11.01	6.58	5.69	5.63	11.09	6.86	7.49
14	---	11.04	10.63	10.91	11.02	10.99	6.63	5.65	5.68	11.08	7.78	7.08
15	11.11	11.03	10.85	10.89	11.04	10.99	6.53	5.60	5.65	11.06	8.09	6.75
16	11.09	11.02	10.96	10.88	11.04	---	6.39	5.56	5.62	11.06	8.45	6.43
17	11.07	11.01	11.03	10.86	11.03	10.99	6.27	5.54	5.60	11.07	8.76	6.22
18	11.06	11.00	11.05	10.93	11.02	10.98	6.19	5.55	5.59	11.08	8.57	6.30
19	11.05	11.00	11.06	11.02	11.02	10.95	6.08	5.50	5.62	11.11	8.82	6.16
20	11.04	11.00	11.05	11.03	11.01	10.91	5.99	5.45	5.60	11.14	8.58	6.05
21	11.03	10.99	11.04	11.04	11.01	10.87	5.93	5.40	5.56	11.16	8.14	5.97
22	11.02	10.98	11.02	11.05	11.01	10.79	5.89	5.38	5.54	11.19	7.79	5.92
23	11.00	10.98	11.02	11.05	11.00	10.67	5.86	5.37	5.53	11.20	7.73	8.48
24	10.98	10.98	11.01	11.04	11.00	10.46	5.84	5.36	5.55	11.20	7.60	11.08
25	10.98	10.97	11.00	11.03	11.05	10.17	5.83	5.35	5.59	11.20	7.60	11.06
26	10.98	10.97	10.99	11.02	11.12	9.83	5.81	5.36	5.60	11.21	7.69	11.05
27	10.97	10.96	10.99	11.02	11.15	9.44	5.80	5.49	5.68	11.19	7.78	11.04
28	10.98	10.96	10.98	11.01	11.16	9.07	5.79	5.45	6.00	11.23	7.61	11.04
29	10.99	10.94	10.98	11.00	11.16	8.72	5.78	5.42	7.47	11.26	7.23	11.03
30	10.99	10.92	10.98	11.01	---	8.40	5.95	5.41	8.81	11.29	6.86	11.05
31	10.99	---	10.98	11.03	---	8.08	---	5.40	---	11.30	6.61	---
TOTAL	---	330.54	337.36	340.24	320.36	---	187.54	174.61	172.71	343.48	278.48	238.91
MEAN	---	11.02	10.88	10.98	11.05	---	6.25	5.63	5.76	11.08	8.98	7.96
MAX	---	11.11	11.06	11.05	11.16	---	7.76	6.01	8.81	11.30	11.49	11.08
MIN	---	10.92	10.56	10.86	11.00	---	5.78	5.35	5.44	9.82	6.61	5.92

BIG CYPRESS SWAMP AND SOUTHWESTERN COASTAL AREA
 02291669 SIXMILE CYPRESS CREEK NORTH NEAR FORT MYERS, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
 WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	175	5.2	0.27	4.4	22	51	0.00	0.00	0.00	0.00	134	---
2	129	5.2	0.08	4.1	23	44	0.00	0.00	0.00	12	146	---
3	76	11	0.00	5.1	25	39	0.00	0.00	0.00	28	152	---
4	35	16	0.00	5.2	25	34	0.00	0.00	0.00	37	161	---
5	5.2	24	0.00	5.2	23	30	0.00	0.00	0.00	49	181	---
6	0.00	27	0.00	5.2	22	28	0.00	0.00	0.00	52	219	---
7	0.00	30	0.00	5.1	20	27	0.00	0.00	0.00	44	238	---
8	0.00	34	0.00	4.3	17	26	0.00	0.00	0.00	40	232	---
9	0.00	35	0.00	3.5	16	23	0.00	0.00	0.00	34	211	---
10	0.00	32	0.00	2.9	16	19	0.00	0.00	0.00	32	182	---
11	e0.00	29	0.00	1.9	15	16	0.00	0.00	0.00	39	---	---
12	e0.00	26	0.00	1.3	16	16	0.00	0.00	0.00	53	---	---
13	e0.00	22	0.00	0.97	15	13	0.00	0.00	0.00	47	---	---
14	e20	18	0.00	0.64	13	11	0.00	0.00	0.00	44	---	---
15	34	14	0.09	0.24	19	9.7	0.00	0.00	0.00	39	---	---
16	28	12	3.7	0.06	19	e10	0.00	0.00	0.00	38	---	---
17	23	11	15	0.00	16	9.8	0.00	0.00	0.00	41	---	---
18	20	8.8	18	4.6	15	7.5	0.00	0.00	0.00	41	---	---
19	17	8.6	20	13	16	4.1	0.00	0.00	0.00	50	---	---
20	13	8.1	19	16	15	1.3	0.00	0.00	0.00	62	---	---
21	11	7.2	16	19	14	0.12	0.00	0.00	0.00	67	---	---
22	9.0	5.8	13	22	14	0.00	0.00	0.00	0.00	79	---	---
23	6.4	5.2	12	22	12	0.00	0.00	0.00	0.00	84	---	---
24	4.6	5.2	9.8	19	12	0.00	0.00	0.00	0.00	84	---	68
25	4.1	4.5	8.7	16	26	0.00	0.00	0.00	0.00	84	---	62
26	3.8	4.1	7.0	14	43	0.00	0.00	0.00	0.00	87	---	58
27	3.6	3.5	6.6	14	52	0.00	0.00	0.00	0.00	82	---	54
28	3.9	3.0	5.7	13	57	0.00	0.00	0.00	0.00	99	---	54
29	5.8	1.6	5.2	11	57	0.00	0.00	0.00	0.00	112	---	52
30	5.3	0.69	5.2	12	---	0.00	0.00	0.00	0.00	124	---	60
31	5.1	---	5.2	17	---	0.00	---	0.00	---	130	---	---
TOTAL	637.80	417.69	170.54	262.71	655	419.52	0.00	0.00	0.00	1,814.00	---	---
MEAN	20.6	13.9	5.50	8.47	22.6	13.5	0.00	0.00	0.00	58.5	---	---
MAX	175	35	20	22	57	51	0.00	0.00	0.00	130	---	---
MIN	0.00	0.69	0.00	0.00	12	0.00	0.00	0.00	0.00	0.00	---	---
AC-FT	1,270	828	338	521	1,300	832	0.00	0.00	0.00	3,600	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2004, BY WATER YEAR (WY)

MEAN	46.6	8.43	3.83	4.62	3.95	5.07	0.37	0.02	5.69	31.1	78.1	70.8
MAX	216	38.0	22.7	18.6	23.2	48.5	5.04	0.31	42.1	153	195	238
(WY)	(1996)	(1996)	(1998)	(1998)	(1998)	(1998)	(1998)	(1994)	(1992)	(1992)	(1995)	(1995)
MIN	2.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	2.79	26.3
(WY)	(1990)	(1993)	(1990)	(1989)	(1989)	(1990)	(1988)	(1988)	(1988)	(1988)	(1993)	(1997)

SUMMARY STATISTICS

WATER YEARS 1987 - 2004

ANNUAL MEAN	23.3
HIGHEST ANNUAL MEAN	47.2
LOWEST ANNUAL MEAN	6.84
HIGHEST DAILY MEAN	860
LOWEST DAILY MEAN	0.00**
ANNUAL SEVEN-DAY MINIMUM	0.00**
MAXIMUM PEAK FLOW	1,830
MAXIMUM PEAK STAGE	12.12
ANNUAL RUNOFF (AC-FT)	16,910
10 PERCENT EXCEEDS	70
50 PERCENT EXCEEDS	0.00
90 PERCENT EXCEEDS	0.00

e Estimated

** Many days during water years 1988-2004.

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02291673 TENMILE CANAL AT CONTROL NEAR ESTERO, FL

LOCATION.--Lat 26°30'19", long 81°51'00", in NW ¼ SW ¼ NW ¼ sec. 6, T.46 S., R.24 E., Lee County, Hydrologic Unit 03090204, on left bank 367 ft upstream of weir, 1.05 mi north of Alico Road, and 5.3 mi northwest of Estero.

DRAINAGE AREA.--Indeterminate.

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

GAGE.--Satellite data collection platform with water-stage shaft encoder and acoustic doppler velocity meter. Prior to July 22, 2003, Satellite data collection platform with water-stage shaft encoder only. Datum of gage is National Geodetic Vertical Datum of 1929 (State Department of Transportation bench mark).

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow is regulated by a broad-crested weir and by two vertical lift gates. Records of discharge represent flow over the weir, flow through gates or a combination of weir flow with gate flow included. Records of discharge for water years 1999-2003 represent only flow over the top of the weir; no daily value flow was provided when partial of full gate openings occurred. Zero flow occurs numerous days during most of the water years.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 9 complete water years of discharge (1990-98).

EXTREME STAGES FOR PERIOD OF RECORD.--Maximum gage height, 8.34 ft Aug. 26, 1995; minimum, 2.70 ft Sept. 19, 1990.

ESTREME STAGES FOR CURRENT YEAR.--Maximum gage height, 6.74 ft Oct. 1; minimum, 4.37 ft Oct. 14.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.64	---	---	5.61	5.79	5.79	5.53	5.55	5.48	5.72	6.28	5.89
2	6.48	---	5.57	5.61	5.76	5.76	5.52	5.54	5.51	5.78	6.37	6.08
3	6.34	---	5.57	5.61	5.76	5.75	5.52	5.55	5.49	5.76	6.31	5.89
4	6.21	5.71	5.57	5.60	5.75	5.73	5.52	5.55	5.52	5.85	6.36	5.32
5	6.10	5.76	5.57	5.60	5.69	5.70	5.52	5.54	5.49	5.87	6.32	5.52
6	6.00	5.82	5.55	5.59	5.67	5.69	5.51	5.54	5.48	5.82	6.44	6.26
7	5.91	5.81	5.55	5.57	5.69	5.68	5.51	5.53	5.51	5.77	6.38	6.30
8	5.81	5.80	5.55	5.56	5.66	5.67	5.51	5.52	5.56	5.75	6.28	6.32
9	5.74	5.80	5.55	5.55	5.64	5.65	5.51	5.51	5.61	5.76	6.20	6.41
10	5.66	5.78	5.55	5.55	5.65	5.66	5.51	5.50	5.65	5.73	6.12	6.34
11	5.57	5.76	5.55	---	5.64	5.66	5.50	5.50	5.66	5.76	6.03	6.14
12	5.32	5.74	5.55	5.56	5.64	5.66	5.53	5.49	5.67	5.86	6.05	5.97
13	4.75	5.72	5.55	5.56	5.64	5.66	5.53	5.47	5.64	5.78	5.83	5.77
14	5.08	5.70	5.60	5.56	5.64	5.64	5.53	5.46	5.69	5.78	6.63	5.58
15	5.81	5.69	5.63	5.56	5.67	5.63	5.52	5.44	5.65	5.74	6.45	5.51
16	5.77	5.68	5.65	5.58	5.67	5.63	5.52	5.43	5.63	5.72	6.36	5.37
17	5.74	5.67	5.78	5.60	5.66	5.63	5.51	5.43	5.62	5.76	6.44	---
18	5.73	5.67	5.76	5.66	5.65	5.62	5.50	5.45	5.61	5.75	6.36	5.94
19	5.71	5.67	5.74	5.73	5.64	5.61	5.50	5.42	5.63	5.83	6.63	5.89
20	5.70	5.66	---	5.72	5.63	5.58	5.50	5.41	5.61	6.05	6.41	5.85
21	---	5.65	5.70	5.71	5.64	5.57	5.51	5.39	5.58	6.12	6.22	5.83
22	---	5.64	5.69	5.71	5.63	5.56	5.50	5.38	5.56	6.05	6.09	5.81
23	---	5.63	5.68	5.73	5.63	5.55	5.50	5.38	5.55	6.00	6.15	5.84
24	5.67	5.63	5.67	5.75	5.62	5.54	5.47	5.38	5.57	5.96	6.20	5.95
25	---	5.62	5.67	5.72	5.71	5.54	5.47	5.37	5.59	5.97	6.32	5.94
26	---	5.62	5.66	5.71	5.89	5.54	5.45	5.42	5.62	6.05	6.32	5.95
27	---	5.62	5.65	5.71	5.86	5.54	5.45	5.51	5.68	6.06	6.26	5.94
28	---	---	5.64	5.69	5.83	5.54	5.45	5.45	5.85	6.24	6.13	5.92
29	---	---	5.63	5.67	5.82	5.54	5.46	5.44	5.75	6.30	5.97	5.90
30	---	---	5.63	5.69	---	5.54	5.53	5.42	5.72	6.27	5.82	5.92
31	---	---	5.62	5.76	---	5.53	---	5.41	---	6.28	5.73	---
TOTAL	---	---	---	---	165.17	174.39	165.09	169.38	168.18	183.14	193.46	---
MEAN	---	---	---	---	5.70	5.63	5.50	5.46	5.61	5.91	6.24	---
MAX	---	---	---	---	5.89	5.79	5.53	5.55	5.85	6.30	6.63	---
MIN	---	---	---	---	5.62	5.53	5.45	5.37	5.48	5.72	5.73	---

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e839	e63	e20	28	92	83	1.9	3.9	9.9	60	436	e287
2	e689	e67	19	28	79	73	1.4	4.4	8.0	81	534	e235
3	e576	e67	20	27	82	69	1.5	4.9	8.2	72	e564	e242
4	e475	62	20	26	76	59	1.4	4.8	8.9	110	e605	e264
5	e400	80	20	25	54	48	1.3	4.3	4.8	122	e620	---
6	e340	104	16	24	50	45	0.99	4.7	4.2	97	e738	---
7	e283	99	15	20	54	41	0.67	4.0	8.0	79	e658	---
8	e235	97	15	18	46	36	0.66	2.7	16	73	e563	---
9	e202	96	15	16	41	32	0.73	2.3	26	77	e500	---
10	e173	86	16	16	42	34	0.83	1.5	35	66	e418	---
11	e168	76	16	e16	40	32	0.61	1.2	39	80	e406	---
12	e154	69	15	18	40	31	2.4	0.93	41	118	e440	---
13	e145	61	16	18	42	30	2.5	0.36	34	86	e551	---
14	e101	55	26	18	40	26	1.8	0.11	45	84	e1,110	---
15	105	52	33	19	49	22	1.4	0.03	36	67	e1,010	---
16	89	50	39	23	49	22	1.2	0.02	31	60	e941	---
17	78	46	79	27	47	20	0.96	0.03	27	79	e1,060	---
18	71	45	72	42	43	18	0.63	0.05	25	72	e973	e149
19	67	45	65	62	39	16	0.59	0.00	32	112	e1,340	e137
20	62	42	e59	58	39	8.0	0.50	0.00	26	242	e1,130	e208
21	---	40	52	56	40	6.9	0.67	0.00	19	293	e909	e120
22	---	38	49	56	38	6.0	0.60	0.00	18	237	e781	e103
23	---	36	46	64	37	3.8	0.39	0.00	16	206	e733	e89
24	48	34	44	75	35	3.3	0.11	0.00	19	182	e662	146
25	e46	33	43	66	67	2.9	0.05	0.00	25	189	e796	139
26	e50	34	39	61	138	2.8	0.02	4.3	31	239	e846	143
27	e50	32	38	63	121	2.7	0.02	8.5	50	254	e809	142
28	e54	e27	35	55	107	2.7	0.01	1.5	110	393	e685	130
29	e54	e25	33	49	100	2.7	0.28	0.65	69	452	e576	121
30	e58	e22	32	56	---	2.4	2.3	0.33	58	428	e520	129
31	e63	---	30	79	---	2.2	---	0.19	---	433	e307	---
TOTAL	---	1,683	1,037	1,209	1,727	783.4	28.42	55.70	880.0	5,143	22,221	---
MEAN	---	56.1	33.5	39.0	59.6	25.3	0.95	1.80	29.3	166	717	---
MAX	104	79	79	138	83	2.5	8.5	110	452	1,340	---	---
MIN	22	15	16	35	2.2	0.01	0.00	4.2	60	307	---	---
AC-FT	---	3,340	2,060	2,400	3,430	1,550	56	110	1,750	10,200	44,080	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2004, BY WATER YEAR (WY)

	128	31.8	21.5	23.9	26.7	16.8	5.05	8.20	53.7	145	268	241
MEAN	128	31.8	21.5	23.9	26.7	16.8	5.05	8.20	53.7	145	268	241
MAX	603	118	131	65.8	186	136	14.6	107	212	676	717	827
(WY)	(1996)	(1994)	(1998)	(1998)	(1998)	(1998)	(1994)	(1991)	(1991)	(1991)	(2004)	(1995)
MIN	14.7	2.84	0.91	0.02	0.00	1.85	0.00	0.00	1.20	3.90	35.3	67.2
(WY)	(1989)	(1990)	(1991)	(1989)	(1989)	(1990)	(1999)	(1988)	(1998)	(1988)	(1993)	(1997)

SUMMARY STATISTICS

ANNUAL MEAN
HIGHEST ANNUAL MEAN
LOWEST ANNUAL MEAN
HIGHEST DAILY MEAN
LOWEST DAILY MEAN
ANNUAL SEVEN-DAY MINIMUM
ANNUAL RUNOFF (AC-FT)
10 PERCENT EXCEEDS
50 PERCENT EXCEEDS
90 PERCENT EXCEEDS

WATER YEARS 1988 - 2004

90.4
165
29.6
2,170
0.00**
0.00**
65,510
261
16
0.29

Sep 18, 2000

e Estimated

** Many days during water years 1989-95, 1997-2002, 2004.

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

02292900 CALOOSAHATCHEE RIVER AT S-79, NEAR OLGA, FL

LOCATION.--Lat 26°43'25", long 81°41'55", in SW ¼ sec.23, T.43 S., R.26 E., Lee County, Hydrologic Unit 03090205, in control house at southeast end of lock at salinity-control structure 79, 1 mi upstream from Telegraph Creek, and 1.2 mi northeast of Olga.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--December 1964 to March 1966 (gage heights only), April 1966 to current year.

REVISED RECORDS.--WDR FL-79-2A, 1978.

GAGE.--U.S. Army Corps of Engineers owned and operated satellite data collection platform with water-stage shaft encoders. Prior to October 16, 1998, similar equipment belonging to the U.S. Geological Survey was used. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Records good, except for estimated daily discharges, which are poor. Flow regulated by operation of salinity-control structure 79. Downstream stage is basically tidal, but at times is affected by gate operation. Starting in the 2002 water year the downstream stage record published is the maximum and minimum gage height for each calendar day. Prior to the 2002 water year daily mean for downstream stage was published. Discharge computed from relations between discharge, head, and gate opening. Satellite data collection platform with shaft encoders were installed August 30, 1991 to collect upstream and downstream stages. U.S. Army Corps of Engineers equipment installed on October 16, 1998.

COOPERATION.--Records of stage, gate and lock operation provided by U.S. Army Corps of Engineers.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 32 complete years of discharge (1967-94, 1996-97, 2003-04).

EXTREME UPSTREAM STAGES FOR PERIOD OF RECORD.--Maximum gage height, 6.04 ft Sept. 14, 2001; minimum, 1.18 ft Sept. 22, 1966.

EXTREME UPSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 4.63 ft Sept. 6; minimum, 2.28 ft Sept. 26.

EXTREME DOWNSTREAM STAGES FOR PERIOD OF RECORD.--Not available.

EXTREME DOWNSTREAM STAGES FOR CURRENT YEAR.--Maximum gage height, 5.41 ft Aug. 13; minimum, -1.04 ft Nov. 29.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.79	2.99	3.18	---	2.98	3.27	3.11	3.11	3.17	3.30	3.21	3.04
2	2.94	3.01	3.17	---	2.88	3.16	3.10	3.21	3.26	3.27	2.98	2.92
3	2.92	3.06	2.98	3.04	3.01	3.22	3.31	3.18	3.31	3.25	3.01	2.71
4	2.91	3.05	2.96	3.16	3.08	3.15	3.22	3.28	3.39	---	3.11	2.55
5	2.77	3.07	3.33	3.10	3.03	3.20	2.99	3.09	3.10	---	3.25	2.96
6	2.84	3.06	---	2.99	3.00	3.09	3.10	3.12	3.33	---	3.24	3.94
7	2.96	3.01	3.27	3.03	3.13	3.16	3.20	3.02	3.16	3.17	3.20	2.79
8	3.12	3.03	3.08	3.07	2.97	3.18	3.19	2.97	3.31	3.03	3.16	2.85
9	2.91	3.10	3.17	3.19	3.09	2.72	3.30	3.20	3.08	3.18	3.18	2.80
10	3.00	3.01	3.29	2.97	3.29	2.97	3.26	3.06	3.22	3.23	3.28	2.57
11	3.00	2.92	3.32	2.99	2.97	2.97	3.20	2.91	3.20	3.31	3.07	2.58
12	2.97	2.97	3.03	3.10	2.93	3.05	3.29	3.06	3.23	3.26	3.00	2.61
13	2.91	3.11	3.08	3.25	3.24	3.16	3.37	3.22	3.25	3.23	2.91	2.69
14	2.98	3.20	3.30	3.05	3.12	3.15	3.16	3.20	3.17	3.17	---	2.61
15	3.03	3.27	3.11	3.29	3.22	3.26	2.92	3.23	3.06	3.28	3.23	2.84
16	2.70	3.31	3.12	3.28	3.17	3.31	3.04	3.04	3.09	3.25	3.12	2.81
17	3.05	3.19	3.18	3.14	3.10	3.16	3.08	3.01	3.10	3.16	3.26	2.72
18	3.13	3.13	3.07	3.22	3.23	3.06	3.12	2.99	3.07	3.15	3.11	3.04
19	3.01	3.03	3.09	3.25	3.08	3.12	3.05	3.14	3.02	---	3.15	3.09
20	2.79	3.06	3.05	3.18	2.99	3.02	2.98	3.18	3.05	---	3.06	3.05
21	2.91	3.11	3.15	3.12	3.29	3.02	3.18	3.17	3.03	3.05	3.03	2.98
22	3.02	3.19	3.17	3.11	3.17	3.10	3.15	3.19	2.96	3.29	3.18	3.00
23	3.04	2.98	3.17	2.93	3.20	3.04	2.94	3.25	2.97	3.18	3.30	2.91
24	3.20	3.11	3.15	3.03	3.20	2.96	2.91	3.10	3.18	3.24	3.12	2.59
25	3.07	3.21	3.11	3.20	3.28	3.11	2.99	2.97	3.03	3.21	3.26	2.66
26	3.07	3.19	3.11	3.09	3.23	3.10	3.05	3.07	3.15	3.29	3.11	3.33
27	3.14	3.17	3.04	2.99	3.03	2.97	2.95	3.12	3.26	3.24	3.18	3.04
28	3.06	3.20	3.14	3.06	3.05	3.24	3.07	3.13	3.05	3.26	3.15	2.78
29	3.00	3.22	3.14	2.93	3.30	3.20	3.06	3.09	---	3.17	3.00	2.84
30	2.91	3.20	3.13	3.06	---	2.84	3.01	3.06	---	3.05	2.96	3.03
31	2.82	---	3.09	2.87	---	3.01	---	3.03	---	3.12	2.92	---
TOTAL	91.97	93.16	---	---	90.26	95.97	93.30	96.40	---	---	---	86.33
MEAN	2.97	3.11	---	---	3.11	3.10	3.11	3.11	---	---	---	2.88
MAX	3.20	3.31	---	---	3.30	3.31	3.37	3.28	---	---	---	3.94
MIN	2.70	2.92	---	---	2.88	2.72	2.91	2.91	---	---	---	2.55

02292900 CALOOSAHATCHEE RIVER AT S-79, NEAR OLGA, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9,310	1,340	0.00	e1,710	2,050	1,020	254	815	0.00	260	877	4,510
2	9,800	3,870	0.00	e929	1,460	424	381	158	0.00	409	1,700	4,230
3	8,680	6,400	894	751	639	861	486	39	0.00	78	1,510	3,820
4	7,980	6,960	1,080	725	506	1,130	1,120	597	691	339	1,960	3,350
5	7,450	5,430	e1,220	801	879	2,430	1,740	499	827	e260	2,580	2,910
6	6,650	4,320	e232	26	863	2,480	1,350	103	463	e319	3,310	9,120
7	6,140	3,540	215	0.00	3,340	2,710	1,090	0.00	817	534	3,040	7,850
8	6,250	2,270	0.00	0.00	3,570	1,310	756	0.00	1,220	332	2,960	7,820
9	5,720	1,160	88	802	2,910	278	662	0.00	2,400	454	2,220	8,600
10	4,740	1,010	248	3,090	2,560	162	482	0.00	1,380	0.00	2,010	6,510
11	3,770	810	732	2,820	1,510	107	302	0.00	1,610	278	2,190	5,560
12	4,890	0.00	545	3,060	898	69	1,160	664	2,350	710	3,450	4,900
13	7,280	0.00	96	2,150	1,480	530	1,150	1,340	1,980	612	2,150	3,540
14	5,870	0.00	953	2,560	1,330	1,440	1,750	803	1,840	205	e5,870	4,030
15	5,880	0.00	2,270	2,170	1,260	1,800	470	150	1,410	42	5,630	3,440
16	3,930	164	3,690	1,100	1,250	1,940	187	0.00	743	260	5,430	6,760
17	2,300	62	6,320	509	94	1,880	658	0.00	452	176	6,430	7,840
18	1,940	0.00	5,380	1,010	298	740	908	0.00	253	84	5,300	7,590
19	1,580	0.00	3,810	1,530	2,280	418	691	0.00	180	e716	5,990	6,800
20	799	0.00	1,860	1,630	2,310	322	498	0.00	120	e2,040	5,110	5,920
21	257	0.00	1,810	1,470	2,730	271	388	0.00	97	1,680	4,350	5,820
22	1,830	1,300	2,160	3,170	3,060	277	314	0.00	0.00	1,390	3,110	4,440
23	4,220	1,740	1,290	3,670	2,210	97	274	0.00	0.00	845	4,850	3,550
24	6,410	548	1,230	3,350	1,360	0.00	180	0.00	134	623	5,890	2,630
25	6,460	140	323	2,690	3,160	118	134	0.00	260	106	6,510	2,210
26	5,270	0.00	1,750	2,320	4,610	1,590	46	0.00	98	1,020	5,420	2,720
27	4,200	0.00	2,970	1,530	3,700	1,150	0.00	699	744	299	5,080	7,100
28	2,230	0.00	3,840	1,550	2,160	825	0.00	1,420	389	903	5,820	5,430
29	1,650	0.00	2,830	813	679	1,260	619	822	e65	1,490	5,740	6,610
30	1,040	0.00	2,520	1,370	---	334	1,220	153	e471	907	4,830	9,920
31	920	---	2,190	1,870	---	0.00	---	0.00	---	670	3,910	---
TOTAL	145,446	41,064.00	52,546.00	51,176.00	55,156	27,973.00	19,270.00	8,262.00	20,994.00	18,041.00	125,227	165,530
MEAN	4,692	1,369	1,695	1,651	1,902	902	642	267	700	582	4,040	5,518
MAX	9,800	6,960	6,320	3,670	4,610	2,710	1,750	1,420	2,400	2,040	6,510	9,920
MIN	257	0.00	0.00	0.00	94	0.00	0.00	0.00	0.00	0.00	877	2,210
AC-FT	288,500	81,450	104,200	101,500	109,400	55,480	38,220	16,390	41,640	35,780	248,400	328,300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2004, BY WATER YEAR (WY)

MEAN	2,108	1,082	743	1,239	1,395	1,633	1,215	766	2,035	2,473	2,913	2,703
MAX	10,390	6,869	5,519	7,486	10,080	10,320	8,198	2,914	6,053	7,376	10,750	9,357
(WY)	(1996)	(1970)	(1995)	(1970)	(1983)	(1983)	(1983)	(2000)	(1982)	(1974)	(1974)	(1995)
MIN	84.7	23.9	0.00	2.91	0.00	5.68	10.0	10.0	192	80.7	228	370
(WY)	(1973)	(1997)	(2001)	(1982)	(2001)	(1990)	(1967)	(1967)	(1979)	(1981)	(1972)	(1972)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1966 - 2004

ANNUAL TOTAL	1,305,671.00		730,685.00			
ANNUAL MEAN	3,577		1,996		1,638	
HIGHEST ANNUAL MEAN					5,203	
LOWEST ANNUAL MEAN					296	
HIGHEST DAILY MEAN	15,200	Jun 22	9,920	Sep 30	21,400	Mar 27, 1970
LOWEST DAILY MEAN	0.00	Feb 21	0.00	Nov 12	0.00	May 17, 1981
ANNUAL SEVEN-DAY MINIMUM	0.00	Nov 26	0.00	Nov 26	0.00	May 20, 1981
ANNUAL RUNOFF (AC-FT)	2,590,000		1,449,000		1,187,000	
10 PERCENT EXCEEDS	9,290		5,760		5,280	
50 PERCENT EXCEEDS	2,270		1,160		504	
90 PERCENT EXCEEDS	178		0.00		9.8	

e Estimated

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

CALOOSAHATCHEE RIVER

02293214 MEADE CANAL AT CAPE CORAL, FL

LOCATION.--Lat 26°38'10", long 81°55'48", in NE ¼ NW ¼ NE ¼ sec.20 T.44 S., R.24 E., Lee County, Hydrologic Unit 0300205, near left bank on upstream side of containment wall, 20 ft east of bridge wingwall, on Viscaya Parkway, 100 ft west of SE 21st Avenue, and 1.2 mi upstream from Caloosahatchee River at Cape Coral.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1986 to current year.

REVISED RECORDS.--WDR FL-99-2A, 1997, 1998.

GAGE.--Electronic data logger. Datum of gage is National Geodetic Vertical Datum of 1929 (State Road Department Bench Mark).

REMARKS.--Records are poor. Zero flow occurs for numerous days, during most water years. Station subjected to major shifting of the stage discharge relationship based on heavy debris buildup on carp grates and installation/removal of stoplogs, which are installed on top of the weir.

ANNUAL MEAN and RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 17 complete water years of discharge (1988-2004).

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.49	5.22	5.20	5.28	5.28	5.27	5.20	5.45	5.19	5.33	5.89	5.61
2	5.47	5.22	5.20	5.28	5.27	5.27	5.19	5.32	5.18	5.34	6.14	5.50
3	5.44	5.26	5.21	5.28	5.26	5.26	5.19	5.29	5.18	5.35	6.08	5.39
4	5.42	5.29	5.21	5.27	5.26	5.26	5.19	5.27	5.19	5.40	6.53	5.35
5	5.39	5.30	5.22	5.27	5.25	5.25	5.19	5.26	5.18	5.40	6.42	5.39
6	5.37	5.33	5.21	5.27	5.25	5.25	5.19	5.25	5.19	5.42	6.34	5.51
7	5.36	5.34	5.20	5.27	5.24	5.25	5.19	5.24	5.30	5.41	6.13	5.54
8	5.35	5.34	5.21	5.26	5.23	5.24	5.19	5.23	5.45	5.40	6.00	5.53
9	5.35	5.34	5.21	5.24	5.22	5.23	5.20	5.23	5.46	5.39	5.85	5.49
10	5.34	5.37	5.23	5.23	5.23	5.23	5.20	5.23	5.40	5.39	5.70	5.48
11	5.33	5.40	5.23	5.22	5.23	5.22	5.20	5.23	5.38	5.50	5.52	5.40
12	5.33	5.41	5.23	5.22	5.23	5.23	5.29	5.23	5.36	5.67	5.41	5.35
13	5.33	5.43	5.22	5.22	5.23	5.23	5.28	5.22	5.41	5.63	5.69	5.31
14	5.33	5.45	5.41	5.22	5.23	5.23	5.25	5.22	5.69	5.60	5.91	5.30
15	5.33	5.45	5.40	5.22	5.26	5.23	5.23	5.21	5.63	5.58	5.67	5.28
16	5.31	5.46	5.37	5.22	5.24	5.24	5.23	5.22	5.60	5.57	5.57	5.27
17	5.31	5.46	5.48	5.22	5.23	5.23	5.23	5.22	5.48	5.60	5.57	5.27
18	5.31	5.46	5.40	5.37	5.22	5.22	5.22	5.22	5.43	5.59	5.58	5.28
19	5.30	5.44	---	5.38	5.22	5.22	5.22	5.22	5.35	5.57	5.55	5.27
20	5.27	5.30	---	5.31	5.23	5.21	5.22	5.23	5.32	5.48	5.52	5.27
21	5.23	5.26	---	5.28	5.23	5.21	5.22	5.22	5.30	5.44	5.47	5.29
22	5.22	5.24	---	5.27	5.23	5.21	5.22	5.22	5.29	5.46	---	5.32
23	5.21	5.23	---	5.26	5.22	5.20	5.22	5.21	5.28	5.53	---	5.33
24	5.21	5.23	---	5.25	5.22	5.20	5.21	5.21	5.31	5.53	5.67	5.32
25	5.21	5.23	5.30	5.25	---	5.20	5.21	5.21	5.31	5.57	5.95	5.30
26	5.22	5.23	5.30	5.24	---	5.21	5.20	5.20	5.29	5.60	5.87	5.35
27	5.22	5.22	5.29	5.25	5.33	5.21	5.20	5.20	5.29	5.61	5.94	5.38
28	5.23	5.22	5.29	5.24	5.30	5.21	5.20	5.20	5.31	5.76	5.95	5.31
29	5.25	5.20	5.29	5.23	5.28	5.21	5.20	5.20	5.32	5.86	5.87	5.29
30	5.23	5.19	5.29	5.24	---	5.21	5.24	5.20	5.33	5.68	5.77	5.28
31	5.23	---	5.29	5.27	---	5.21	---	5.19	---	5.69	5.67	---
TOTAL	164.59	159.52	---	163.03	---	162.05	156.42	162.25	160.40	171.35	---	160.96
MEAN	5.31	5.32	---	5.26	---	5.23	5.21	5.23	5.35	5.53	---	5.37
MAX	5.49	5.46	---	5.38	---	5.27	5.29	5.45	5.69	5.86	---	5.61
MIN	5.21	5.19	---	5.22	---	5.20	5.19	5.19	5.18	5.33	---	5.27

DISCHARGE NOT AVAILABLE AT TIME OF PUBLICATION

02293230 WHISKEY CREEK AT FT. MYERS, FL

LOCATION.--Lat 26°34'27", long 81°53'29", in NW ¼ NW ¼ SE ¼, sec.10, T.45 S., R.24 E., Lee County, Hydrologic Unit 03090205, 300 ft upstream from mouth on left bank, above spillway at Whiskey Creek Drive, 1.4 mi south of Colonial Boulevard.

DRAINAGE AREA.--Approximately 9 mi sq. Information provided by Johnson Engineering, Inc. 1979.

PERIOD OF RECORD.--April 1994 to current year.

GAGE.--Satellite data collection platform with water-stage shaft encoder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except for estimated daily discharges, which are poor. Discharge for all periods when the vertical gates are opened are not included. Formerly published as Whiskey Creek at Whiskey Creek Drive near Ft. Myers, Fl. Days of zero flow occurred during water years 1994, 1995 and 1997. Storm surges caused by hurricanes on September 6, 26, 2004, created backwater conditions. Discharge is considered poor for those days.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 5 complete water years of discharge (1995-98, 2002).

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.23	3.07	3.06	3.07	3.10	3.08	3.06	3.12	3.01	3.23	3.31	3.28
2	3.20	3.07	3.06	3.07	3.07	3.09	3.06	3.09	3.00	3.24	3.31	3.21
3	3.17	3.12	3.05	3.07	3.07	3.08	3.07	3.10	3.05	3.19	3.30	3.16
4	3.16	3.08	3.04	3.07	3.07	3.08	3.07	3.09	3.14	3.18	3.30	3.20
5	3.14	3.12	3.05	3.07	3.07	3.08	3.07	3.09	3.05	3.16	3.37	3.29
6	3.13	3.11	3.04	3.07	3.08	3.08	3.07	3.09	3.05	3.16	3.47	3.53
7	3.13	3.10	3.04	3.07	3.07	3.07	3.07	3.09	3.08	3.15	3.33	3.32
8	3.12	3.09	3.04	3.07	3.07	3.08	3.07	3.09	3.27	3.13	3.29	3.23
9	3.14	3.09	3.04	3.07	3.07	3.08	3.08	3.09	3.22	3.12	3.27	3.20
10	3.14	3.09	3.08	3.07	3.07	3.08	3.07	3.09	3.16	3.12	3.26	3.19
11	3.15	3.08	3.04	3.07	3.07	3.09	3.07	3.09	3.30	---	3.25	3.17
12	3.15	3.09	3.05	3.06	3.07	3.09	3.15	3.08	3.21	---	2.49	3.16
13	3.16	3.09	3.05	3.06	3.07	3.09	3.09	3.07	3.20	---	2.45	3.15
14	3.16	3.09	3.18	3.06	3.07	3.09	3.08	3.07	3.26	---	3.31	3.15
15	3.16	3.09	3.08	3.06	3.10	3.09	3.08	3.07	3.20	3.17	3.30	3.14
16	3.15	3.08	3.13	3.05	3.07	3.10	3.08	3.07	3.17	3.17	3.24	3.13
17	3.13	3.08	3.19	3.05	3.07	3.08	3.08	3.05	3.16	3.16	3.25	3.13
18	3.12	3.07	3.11	3.20	3.05	3.08	3.08	3.05	3.15	3.17	3.30	3.12
19	3.11	3.08	3.09	3.09	3.06	3.08	3.08	3.04	3.14	3.35	3.50	3.12
20	3.10	3.08	3.08	3.07	3.06	3.07	3.08	3.04	3.14	3.40	3.28	3.11
21	3.10	3.07	3.07	3.07	3.06	3.07	3.08	3.04	3.13	3.30	3.24	3.11
22	3.10	3.07	3.07	3.07	3.06	3.07	3.07	3.05	3.13	3.25	3.22	3.10
23	3.09	3.07	3.07	3.06	3.06	3.08	3.07	3.05	3.12	3.22	3.21	3.09
24	3.09	3.07	3.08	3.06	3.05	3.06	3.07	3.05	3.15	3.19	3.28	3.09
25	3.09	3.06	3.07	3.06	3.23	3.05	3.07	3.03	3.17	3.17	3.48	3.09
26	3.09	3.06	3.07	3.06	3.16	3.04	3.07	3.04	3.16	3.16	3.32	3.19
27	3.09	3.06	3.07	3.06	3.10	3.05	3.07	3.03	3.29	3.17	3.25	3.10
28	3.10	3.07	3.07	3.04	3.09	3.05	3.05	3.03	3.32	3.20	3.21	3.08
29	3.11	3.06	3.07	3.05	3.08	3.06	3.08	3.03	3.22	3.19	3.20	3.07
30	3.08	3.06	3.07	3.07	---	3.06	3.11	3.02	3.18	3.19	3.21	3.10
31	3.07	---	3.07	3.08	---	3.06	---	3.01	---	3.22	3.25	---
TOTAL	96.96	92.42	95.28	95.15	89.32	95.31	92.30	94.95	94.83	---	100.45	95.01
MEAN	3.13	3.08	3.07	3.07	3.08	3.07	3.08	3.06	3.16	---	3.24	3.17
MAX	3.23	3.12	3.19	3.20	3.23	3.10	3.15	3.12	3.32	---	3.50	3.53
MIN	3.07	3.06	3.04	3.04	3.05	3.04	3.05	3.01	3.00	---	2.45	3.07

02293230 WHISKEY CREEK AT FT. MYERS, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	3.1	2.1	3.8	9.5	3.8	1.2	9.0	0.67	32	49	36
2	22	3.3	1.9	3.9	6.0	4.4	1.4	5.7	0.55	31	45	21
3	18	9.5	1.4	3.9	5.5	4.1	1.4	6.5	9.6	22	43	14
4	15	4.0	1.3	3.9	5.5	3.7	1.2	6.0	16	20	43	21
5	12	8.6	1.5	3.7	6.1	3.7	1.3	5.8	2.2	17	62	43
6	11	7.5	1.4	3.8	6.5	3.2	1.3	5.5	1.9	17	89	e110
7	10	5.8	1.3	3.7	5.1	2.7	1.2	5.5	5.7	15	49	45
8	10	5.2	1.2	3.7	4.6	2.9	1.3	5.7	54	12	40	26
9	12	5.0	1.6	4.0	4.9	3.0	1.4	6.1	27	11	35	20
10	12	4.6	4.5	5.2	5.0	3.3	1.3	6.0	15	11	33	18
11	13	4.2	1.5	4.7	4.8	3.7	1.5	5.4	58	e11	31	16
12	14	4.5	1.9	3.9	4.6	3.9	9.3	4.9	24	e50	---	13
13	15	4.6	2.1	3.6	4.5	4.0	2.7	4.2	25	e25	---	12
14	15	4.6	24	3.9	4.8	4.1	2.0	3.9	35	e19	---	12
15	15	4.5	4.3	3.9	8.6	3.6	1.8	3.6	23	18	42	11
16	14	3.6	14	3.1	4.4	3.6	2.6	3.8	18	18	30	10
17	10	3.0	19	3.0	3.6	2.5	2.7	2.8	15	16	32	9.2
18	7.7	2.8	6.9	32	2.7	2.6	2.8	2.3	14	16	57	8.8
19	6.7	3.1	4.8	7.1	3.4	2.6	2.8	1.7	12	59	103	8.2
20	6.1	2.9	3.7	5.2	3.4	2.1	2.7	1.7	12	69	37	7.6
21	5.6	2.5	3.1	4.8	3.4	2.1	2.6	1.7	11	42	27	6.9
22	5.6	2.4	3.1	4.7	3.5	2.1	2.6	1.9	11	31	23	5.2
23	4.7	2.6	3.1	4.0	3.1	2.3	2.7	1.9	11	25	22	4.3
24	5.0	2.5	4.4	3.7	---	1.8	2.8	2.1	16	20	37	4.0
25	5.2	2.1	3.8	4.0	33	0.98	2.7	1.5	18	17	101	4.2
26	4.9	2.2	3.8	4.5	14	0.73	2.7	1.5	17	16	45	e4.4
27	5.1	2.2	3.9	5.0	6.4	0.82	3.2	1.4	59	18	29	4.6
28	6.8	2.4	4.1	3.3	4.6	0.98	2.5	1.3	51	22	23	3.0
29	8.1	2.1	3.7	4.1	4.3	1.0	7.7	1.2	29	20	21	2.6
30	3.9	2.2	3.7	6.2	---	1.1	8.1	0.91	21	20	21	6.4
31	3.3	---	3.7	6.9	---	1.1	---	0.64	---	25	32	---
TOTAL	324.7	117.6	140.8	161.2	---	82.51	81.5	112.15	612.62	745	---	507.4
MEAN	10.5	3.92	4.54	5.20	---	2.66	2.72	3.62	20.4	24.0	---	16.9
MAX	28	9.5	24	32	---	4.4	9.3	9.0	59	69	110	---
MIN	3.3	2.1	1.2	3.0	---	0.73	1.2	0.64	0.55	11	2.6	---
AC-FT	644	233	279	320	---	164	162	222	1,220	1,480	---	1,010

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2004, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
MEAN	9.89	4.89	4.52	4.50	2.68	3.81	3.44	2.80	15.5	23.5	22.5	25.7
MAX	16.3	9.22	10.0	8.10	5.01	10.6	5.32	6.18	32.4	31.0	37.5	50.0
(WY)	(1997)	(2000)	(1998)	(1996)	(2002)	(1998)	(2000)	(1996)	(1996)	(2001)	(2001)	(2001)
MIN	3.81	1.41	1.52	0.88	0.72	1.00	1.35	0.71	2.21	14.4	10.7	13.4
(WY)	(1995)	(1997)	(1997)	(2001)	(2001)	(1995)	(1999)	(1994)	(1994)	(2002)	(1997)	(1994)

SUMMARY STATISTICS

ANNUAL MEAN
HIGHEST ANNUAL MEAN
LOWEST ANNUAL MEAN
HIGHEST DAILY MEAN
LOWEST DAILY MEAN
ANNUAL SEVEN-DAY MINIMUM
MAXIMUM PEAK FLOW
MAXIMUM PEAK STAGE
ANNUAL RUNOFF (AC-FT)
10 PERCENT EXCEEDS
50 PERCENT EXCEEDS
90 PERCENT EXCEEDS

WATER YEARS 1994 - 2004

10.9
13.1 1995
8.88 1997
380 Sep 2, 1995
0.00**
0.00**
1,280 Jun 15, 1996
4.87 Sep 5, 2003
7,920
23
4.9
0.97

e Estimated

** Many days during water years 1994, 1995, 1997.

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

CHARLOTTE HARBOR AND COASTAL AREA

02293240 ARIES CANAL AT CAPE CORAL, FL

LOCATION.--Lat 26°36'00", long 81°59'39", in SE ¼ SW ¼ NE ¼ sec.34, T.44 S., R.23 E., Lee County, Hydrologic Unit 03090205, on right wingwall on downstream side of bridge at SW 28th Street, 0.33 mi west of Skyline Boulevard, and 4.6 mi upstream from Caloosahatchee River at Cape Coral.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--December 1989 to current year.

GAGE.--Electronic data logger. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Zero flow occurs for numerous days, during most water years. Station subjected to major shifting of the stage discharge relationship based on heavy debris build up on carp grates and installation/removal of stoplogs, which are installed on top of the weir.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 15 complete water years of discharge (1990-2004).

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.59	3.19	3.09	3.26	3.26	3.34	3.12	3.52	3.11	3.69	4.37	3.57
2	3.50	3.18	3.09	3.28	3.25	3.33	3.11	3.40	3.09	3.74	5.13	3.50
3	3.39	3.22	3.10	3.29	3.23	3.33	3.10	3.37	3.08	3.74	5.17	3.46
4	3.35	3.24	3.10	3.31	3.22	3.32	3.09	3.34	3.06	3.74	5.23	3.41
5	3.32	3.23	3.09	3.32	3.21	3.27	3.07	3.30	3.05	3.78	4.62	3.47
6	3.31	3.22	3.10	3.32	3.23	3.26	3.08	3.29	3.04	3.75	4.61	3.72
7	3.30	3.20	3.09	3.31	3.23	3.24	3.08	3.28	---	3.48	4.25	3.75
8	3.28	3.19	3.08	3.31	3.22	3.23	3.07	3.28	---	3.31	4.02	3.66
9	3.27	3.18	3.06	3.34	3.21	3.21	3.08	3.28	---	3.25	3.89	3.58
10	3.26	3.16	3.08	3.36	3.21	3.20	3.08	3.28	---	3.22	3.79	3.64
11	3.25	3.16	3.08	3.35	3.22	3.20	3.08	3.25	---	3.22	3.81	3.52
12	3.24	3.16	3.07	3.33	3.23	3.20	3.20	3.23	---	3.24	3.68	3.45
13	3.24	3.16	3.07	3.23	3.23	3.20	3.24	3.21	---	3.23	4.00	3.41
14	3.23	3.14	3.30	3.18	3.24	3.20	3.20	3.20	---	3.21	4.55	3.39
15	3.22	3.14	3.31	3.14	3.31	3.20	3.17	3.19	---	3.19	3.90	3.37
16	3.20	3.14	3.32	3.13	3.31	3.23	3.15	3.18	---	3.19	3.72	3.36
17	3.20	3.14	3.50	3.12	3.31	3.22	3.14	3.18	---	3.19	3.99	3.36
18	3.19	3.15	3.36	3.35	3.28	3.20	3.13	3.17	---	3.19	4.33	3.35
19	3.20	3.17	3.30	3.46	3.22	3.17	3.12	3.16	---	3.23	4.03	3.35
20	3.20	3.17	3.27	3.40	3.19	3.16	3.12	3.16	---	3.32	3.79	3.34
21	3.20	3.17	3.25	3.36	3.18	3.15	3.12	3.15	---	3.36	3.75	3.35
22	3.22	3.18	3.24	3.33	3.17	3.15	3.12	3.14	---	3.37	3.60	3.35
23	3.24	3.18	3.23	3.31	3.17	3.13	3.12	3.14	---	3.46	3.60	3.35
24	3.22	3.18	3.25	3.30	3.18	3.12	3.12	3.12	---	3.40	3.65	3.34
25	3.21	3.18	3.25	3.30	3.36	3.12	3.13	3.12	---	3.40	3.72	3.33
26	3.20	3.14	3.24	3.31	3.50	3.13	3.12	3.11	---	3.46	3.69	3.36
27	3.20	3.13	3.24	3.33	3.42	3.14	3.12	3.12	---	3.61	3.58	3.38
28	3.20	3.13	3.23	3.33	3.38	3.14	3.11	3.12	---	3.84	3.52	3.38
29	3.24	3.11	3.23	3.31	3.35	3.13	3.17	3.12	---	3.96	3.48	3.36
30	3.21	3.09	3.24	3.25	---	3.13	3.38	3.12	3.77	3.92	3.45	3.34
31	3.20	---	3.25	3.25	---	3.14	---	3.11	---	3.95	3.45	---
TOTAL	101.08	95.03	99.11	102.17	94.52	99.19	93.94	99.64	---	107.64	124.37	103.20
MEAN	3.26	3.17	3.20	3.30	3.26	3.20	3.13	3.21	---	3.47	4.01	3.44
MAX	3.59	3.24	3.50	3.46	3.50	3.34	3.38	3.52	---	3.96	5.23	3.75
MIN	3.19	3.09	3.06	3.12	3.17	3.12	3.07	3.11	---	3.19	3.45	3.33

02293240 ARIES CANAL AT CAPE CORAL, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	11	3.5	14	15	13	4.0	28	5.3	68	83	52
2	34	11	3.2	13	13	12	2.9	16	4.5	75	187	44
3	32	14	3.4	13	11	12	2.2	13	3.3	76	190	39
4	27	16	3.6	12	8.3	18	1.7	11	2.5	76	167	33
5	24	15	3.3	11	7.9	19	1.1	8.0	1.7	81	67	41
6	23	14	3.2	9.7	8.9	18	1.3	7.0	1.4	76	85	73
7	22	13	2.6	7.4	9.2	17	1.3	6.5	e4.20	32	55	77
8	20	12	1.7	6.0	8.1	15	0.96	5.9	e38	8.4	43	64
9	19	11	0.90	6.3	7.6	14	1.3	6.0	e68	12	43	54
10	18	9.6	1.8	7.6	7.7	13	1.4	11	e58	14	38	62
11	17	9.3	2.0	7.3	7.9	12	1.4	17	e54	13	48	47
12	16	9.2	1.4	14	7.6	12	10	15	e51	14	55	38
13	16	8.9	1.4	15	7.2	12	14	14	e54	12	127	34
14	15	7.9	21	9.8	7.4	12	9.6	13	e78	9.4	217	31
15	14	7.7	20	7.0	11	12	7.3	12	e78	7.6	99	29
16	13	7.7	22	5.5	12	14	6.3	11	e76	6.7	73	29
17	12	8.0	42	4.8	11	14	5.0	11	e65	6.5	119	28
18	12	8.4	28	27	17	11	4.4	10	e62	5.5	173	27
19	12	9.7	22	36	14	9.6	3.7	9.2	e59	7.8	121	27
20	12	10	19	29	12	7.9	3.0	8.8	e55	15	82	26
21	13	10	17	25	11	7.3	2.9	8.1	e54	18	78	27
22	14	11	16	22	10	6.6	2.8	7.7	e51	18	56	27
23	16	11	16	20	10	5.8	2.4	7.4	e49	26	56	27
24	15	11	17	19	11	5.2	2.4	6.6	e51	20	63	26
25	13	11	17	19	23	4.8	2.5	5.9	e51	19	72	25
26	13	8.1	16	20	30	5.2	1.9	5.8	e51	24	68	29
27	13	6.7	16	21	21	5.4	1.9	6.1	e50	38	54	31
28	13	6.1	15	21	17	5.3	1.1	6.1	e50	67	47	27
29	16	4.7	15	19	15	4.8	4.4	6.1	e50	78	42	23
30	14	3.8	16	17	---	5.0	14	6.0	79	51	38	18
31	12	---	15	16	---	5.2	---	5.5	---	35	39	---
TOTAL	549	296.8	382.00	474.4	351.8	328.1	119.16	304.7	1,354.90	1,009.9	2,685	1,115
MEAN	17.7	9.89	12.3	15.3	12.1	10.6	3.97	9.83	45.2	32.6	86.6	37.2
MAX	39	16	42	36	30	19	14	28	79	81	217	77
MIN	12	3.8	0.90	4.8	7.2	4.8	0.96	5.5	1.4	5.5	38	18
AC-FT	1,090	589	758	941	698	651	236	604	2,690	2,000	5,330	2,210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2004, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	16.2	5.78	5.12	8.48	5.87	4.41	2.94	3.09	23.5	40.0	35.3	41.9			
MAX	33.2	15.3	20.6	22.3	31.6	11.8	8.56	9.83	71.5	127	86.6	110			
(WY)	(1992)	(1999)	(1998)	(1999)	(1998)	(1998)	(1992)	(2004)	(2003)	(1999)	(2004)	(2000)			
MIN	2.52	0.01	0.40	1.25	0.74	0.23	0.00	0.00	0.92	7.92	6.02	13.6			
(WY)	(1999)	(1997)	(1991)	(1990)	(2001)	(1997)	(1999)	(1994)	(1994)	(1994)	(1994)	(1996)			

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1990 - 2004

ANNUAL TOTAL	8,431.81	8,970.76	
ANNUAL MEAN	23.1	24.5	16.1
HIGHEST ANNUAL MEAN			27.9
LOWEST ANNUAL MEAN			5.73
HIGHEST DAILY MEAN	595	217	595
LOWEST DAILY MEAN	0.36	0.90	0.00**
ANNUAL SEVEN-DAY MINIMUM	0.81	1.3	0.00**
MAXIMUM PEAK FLOW		338	849
MAXIMUM PEAK STAGE		5.59	7.17
INSTANTANEOUS LOW FLOW		0.01	
ANNUAL RUNOFF (AC-FT)	16,720	17,790	11,660
10 PERCENT EXCEEDS	50	62	40
50 PERCENT EXCEEDS	11	14	5.7
90 PERCENT EXCEEDS	1.8	3.7	0.00

e Estimated

** Many days during water years 1990-91, 1994-2002.

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

CALOOSAHATCHEE RIVER

02293241 SAN CARLOS CANAL AT CAPE CORAL, FL

LOCATION.--Lat 26°36'11", long 81°57'48", in NW ¼ SW ¼ NE ¼ sec.36, T.44 S., R.23 E., Lee County, Hydrologic Unit 03090205, near right bank on upstream side of wingwall of bridge on SE 26th Terrace, 300 ft west of Retunda Parkway and 2.4 mi upstream of Caloosahatchee River.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1986 to current year.

REVISED RECORDS.--WDR FL-01-2A, 2000.

GAGE.--Electronic data logger. Datum of gage is National Geodetic Vertical Datum of 1929 (State Road Department bench mark).

REMARKS.--No estimated daily discharges. Records poor. Station is subject to disruption of the stage discharge relationship based on heavy debris buildup on the carp grates, which are installed on top of the weir. Removal of carp grates and stop logs during highflow events also alters the stage discharge relationship. There are many days of no flow during the water year.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 17 complete water years of discharge (1988-2004).

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.42	3.46	3.84	4.85	5.09	5.05	4.49	5.25	4.40	5.14	5.53	5.28
2	4.35	3.43	3.85	4.87	5.08	5.03	4.48	5.17	4.34	5.16	5.76	5.23
3	4.33	3.42	3.87	4.86	5.06	5.01	4.48	5.13	4.27	5.15	5.77	5.20
4	4.30	3.44	3.88	4.80	5.03	4.99	4.46	5.12	4.25	5.17	5.75	5.19
5	4.28	3.46	3.90	4.75	5.01	5.01	4.43	5.08	4.18	5.19	5.60	5.25
6	4.25	3.50	3.94	4.70	5.03	5.00	4.40	5.06	4.02	5.19	5.63	5.43
7	4.22	3.56	3.95	4.65	5.03	4.99	4.40	5.06	4.13	5.17	5.47	5.42
8	4.19	3.59	3.95	4.59	4.99	4.97	4.39	5.05	4.95	5.14	5.34	5.34
9	4.17	3.56	3.96	4.60	4.95	4.93	4.38	5.03	5.37	5.13	5.28	5.27
10	4.19	3.52	4.00	4.61	4.92	4.89	4.40	5.01	5.29	5.12	5.32	5.24
11	4.19	3.49	4.06	4.57	4.89	4.83	4.41	5.01	5.23	5.11	5.36	5.20
12	4.20	3.45	4.09	4.53	4.85	4.85	4.57	5.00	5.19	5.14	5.27	5.17
13	4.21	3.41	4.13	4.49	4.88	4.82	4.71	4.98	5.22	5.13	5.74	5.15
14	4.21	3.42	4.43	4.47	4.87	4.77	4.76	4.97	5.63	5.11	5.91	5.13
15	4.21	3.45	4.69	4.45	4.94	4.73	4.78	4.97	5.61	5.08	5.47	5.12
16	4.16	3.47	4.79	4.48	4.95	4.71	4.81	4.96	5.58	5.08	5.38	5.11
17	4.16	3.50	5.08	4.45	4.93	4.74	4.84	4.97	5.40	5.10	5.39	5.11
18	4.16	3.52	5.11	4.67	4.90	4.70	4.86	4.96	5.35	5.10	5.38	5.11
19	4.08	3.57	5.13	4.98	4.86	4.70	4.87	4.94	5.30	5.11	5.36	5.10
20	4.00	3.62	5.12	5.01	4.88	4.68	4.87	4.94	5.24	5.18	5.29	5.09
21	3.93	3.66	5.11	5.01	4.87	4.61	4.86	4.92	5.22	5.21	5.25	5.10
22	3.85	3.69	5.10	5.01	4.83	4.52	4.87	4.91	5.17	5.19	5.41	5.09
23	3.79	3.71	5.09	5.04	4.80	4.50	4.87	4.87	5.13	5.25	5.61	5.07
24	3.77	3.73	5.08	5.03	4.76	4.51	4.87	4.84	5.17	5.22	5.47	5.07
25	3.73	3.75	5.05	5.01	4.94	4.53	4.85	4.81	5.18	5.26	5.51	5.05
26	3.66	3.77	5.07	4.99	5.19	4.54	4.84	4.78	5.17	5.34	5.45	5.07
27	3.57	3.78	5.05	4.98	5.19	4.54	4.84	4.74	5.15	5.31	5.35	5.12
28	3.50	3.83	4.99	4.97	5.12	4.53	4.82	4.69	5.16	5.32	5.27	5.12
29	3.50	3.85	4.95	4.93	5.08	4.52	4.82	4.63	5.16	5.42	5.22	5.10
30	3.47	3.85	4.92	4.98	---	4.51	4.99	4.56	5.17	5.43	5.17	5.07
31	3.46	---	4.88	5.05	---	4.49	---	4.48	---	5.39	5.17	---
TOTAL	124.51	107.46	141.06	148.38	143.92	147.20	140.42	152.89	150.63	161.04	168.88	155.00
MEAN	4.02	3.58	4.55	4.79	4.96	4.75	4.68	4.93	5.02	5.19	5.45	5.17
MAX	4.42	3.85	5.13	5.05	5.19	5.05	4.99	5.25	5.63	5.43	5.91	5.43
MIN	3.46	3.41	3.84	4.45	4.76	4.49	4.38	4.48	4.02	5.08	5.17	5.05

02293241 SAN CARLOS CANAL AT CAPE CORAL, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	0.00	0.00	0.00	5.5	2.8	0.00	15	0.00	8.0	36	9.6
2	17	0.00	0.00	0.00	4.6	1.7	0.00	9.9	0.00	9.0	53	6.9
3	15	0.00	0.00	0.00	3.3	0.79	0.00	8.1	0.00	8.3	53	9.8
4	12	0.00	0.00	0.00	1.6	0.19	0.00	7.2	0.00	9.3	49	17
5	9.6	0.00	0.00	0.00	0.55	0.64	0.00	5.1	0.00	11	36	21
6	7.8	0.00	0.00	0.00	1.7	0.33	0.00	3.5	0.00	11	39	34
7	5.0	0.00	0.00	0.00	1.3	0.07	0.00	3.3	0.00	9.8	26	30
8	2.5	0.00	0.00	0.00	0.21	0.02	0.00	2.4	8.6	7.9	17	22
9	1.3	0.00	0.00	0.00	0.01	0.00	0.00	1.1	22	7.5	13	17
10	2.9	0.00	0.00	0.00	0.00	0.00	0.00	0.54	17	7.1	21	15
11	2.9	0.00	0.00	0.00	0.00	0.00	0.00	0.48	13	5.9	29	12
12	3.3	0.00	0.00	0.00	0.00	0.00	0.00	0.19	11	7.9	22	10
13	4.3	0.00	0.00	0.00	0.00	0.00	0.00	0.02	14	7.5	67	9.3
14	4.2	0.00	0.00	0.00	0.00	0.00	0.00	0.01	43	6.3	80	8.6
15	3.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	42	4.2	36	7.9
16	0.95	0.00	0.04	0.00	0.00	0.00	0.00	0.01	39	4.4	24	7.3
17	0.82	0.00	5.2	0.00	0.00	0.00	0.00	0.01	25	5.3	23	7.6
18	0.66	0.00	7.5	0.00	0.00	0.00	0.00	0.00	21	5.6	22	7.2
19	0.01	0.00	8.4	0.15	0.00	0.00	0.00	0.00	17	6.2	20	6.9
20	0.00	0.00	8.0	0.68	0.00	0.00	0.00	0.00	14	10	14	6.1
21	0.00	0.00	7.3	0.64	0.00	0.00	0.00	0.00	12	12	11	6.6
22	0.00	0.00	7.0	0.51	0.00	0.00	0.00	0.00	9.5	11	22	6.0
23	0.00	0.00	6.5	2.4	0.00	0.00	0.00	0.00	7.5	14	34	4.9
24	0.00	0.00	5.2	1.5	0.00	0.00	0.00	0.00	9.5	12	23	4.8
25	0.00	0.00	3.5	0.51	3.2	0.00	0.00	0.00	10	15	25	3.6
26	0.00	0.00	4.9	0.17	11	0.00	0.00	0.00	9.4	20	20	4.6
27	0.00	0.00	3.2	0.07	11	0.00	0.00	0.00	8.5	18	14	8.0
28	0.00	0.00	0.47	0.05	7.4	0.00	0.00	0.00	8.8	19	9.1	8.0
29	0.00	0.00	0.01	0.00	4.8	0.00	0.00	0.00	8.9	26	6.0	6.6
30	0.00	0.00	0.00	0.48	---	0.00	0.84	0.00	9.4	28	2.6	5.0
31	0.00	---	0.00	2.9	---	0.00	---	0.00	---	24	2.4	---
TOTAL	116.04	0.00	67.22	10.06	56.17	6.54	0.84	56.86	380.10	351.2	849.1	323.3
MEAN	3.74	0.00	2.17	0.32	1.94	0.21	0.03	1.83	12.7	11.3	27.4	10.8
MAX	22	0.00	8.4	2.9	11	2.8	0.84	15	43	28	80	34
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.2	2.4	3.6
AC-FT	230	0.00	133	20	111	13	1.7	113	754	697	1,680	641

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2004, BY WATER YEAR (WY)

	MEAN	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6.53	2.61	2.23	2.77	1.58	1.27	0.52	0.55	9.06	11.4	14.7	13.4
MAX	19.8	18.0	14.3	9.77	12.7	5.60	2.03	3.63	34.1	33.8	56.3	39.5
(WY)	(1996)	(2003)	(2003)	(1998)	(1998)	(1998)	(1987)	(1996)	(1995)	(1995)	(2003)	(1995)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04	4.48	2.39
(WY)	(1999)	(2001)	(1991)	(1997)	(1996)	(1995)	(1990)	(1988)	(2001)	(1997)	(1999)	(1987)

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1987 - 2004
ANNUAL TOTAL	3,708.32	2,217.43	
ANNUAL MEAN	10.2	6.06	5.65
HIGHEST ANNUAL MEAN			13.1
LOWEST ANNUAL MEAN			2.39
HIGHEST DAILY MEAN	311	80	330
LOWEST DAILY MEAN	0.00*	0.00*	0.00**
ANNUAL SEVEN-DAY MINIMUM	0.00*	0.00*	0.00**
MAXIMUM PEAK FLOW		157	577
MAXIMUM PEAK STAGE		6.57	7.58
INSTANTANEOUS LOW FLOW			0.00**
ANNUAL RUNOFF (AC-FT)	7,360	4,400	4,090
10 PERCENT EXCEEDS	30	20	15
50 PERCENT EXCEEDS	0.01	0.20	1.3
90 PERCENT EXCEEDS	0.00	0.00	0.00

* Many days.

** Many days during water years 1987, 1989-2004.

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

CALOOSAHATCHEE RIVER

02293243 COURTNEY CANAL AT CAPE CORAL, FL

LOCATION.--Lat 26°34'40", long 81°59'00", in SW ¼ SE ¼ SW ¼ sec.2, T.45 S., R.23 E., Lee County, Hydrologic Unit 03090205, near left bank on upstream side of wing wall of bridge at Mohawk Parkway, 200 ft west of 5th Avenue, 1.07 mi north of West Cape Coral Parkway and 3.15 mi upstream from Caloosahatchee River at Cape Coral.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--November 1986 to current year.

GAGE.--Electronic data logger. Datum of gage is National Geodetic Vertical Datum of 1929 (State Road Department bench mark).

REMARKS.--Records poor. Zero flow occurs for numerous days during all water years. Station subjected to major shifting of the stage discharge relationship based on heavy debris buildup on carp grates and installation/removal of stoplogs, which are installed on top of the weir. Removal of carp grates and stoplogs during high flow events also alters the stage discharge relationship.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 17 complete water years of discharge (1988-2004).

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.72	3.60	3.36	4.36	4.48	4.61	3.75	4.21	4.01	4.39	5.08	5.09
2	4.65	3.57	3.32	4.43	4.47	4.60	3.88	4.24	4.05	4.48	5.37	5.14
3	4.71	3.57	3.27	4.39	4.44	4.55	3.87	4.25	4.13	4.44	5.39	5.07
4	4.68	3.69	3.21	4.35	4.39	4.51	3.76	4.31	4.32	4.44	5.51	4.79
5	4.64	3.71	3.38	4.33	4.36	4.54	3.65	4.27	4.21	4.40	5.34	4.76
6	4.61	3.78	3.42	4.34	4.42	4.48	3.56	4.21	4.07	4.39	5.37	4.98
7	4.57	3.95	3.40	4.32	4.40	4.43	3.44	4.30	4.12	4.37	5.14	5.08
8	4.51	4.01	3.41	4.27	4.35	4.43	3.38	4.27	4.70	4.31	4.99	5.03
9	4.45	3.99	3.39	4.37	4.30	4.40	3.49	4.19	4.83	4.39	4.88	4.96
10	4.48	4.00	3.35	4.37	4.31	4.35	3.54	4.09	4.67	4.32	4.85	4.96
11	4.42	3.98	3.42	4.34	4.28	4.33	3.49	4.01	4.64	4.26	4.85	4.86
12	4.38	3.92	3.62	4.31	4.26	4.42	3.65	3.88	4.50	4.36	4.76	4.80
13	4.31	3.88	3.68	4.31	4.37	4.39	3.82	3.71	4.44	4.30	5.21	4.74
14	4.28	3.98	3.97	4.28	4.35	4.35	3.90	3.76	4.74	4.23	5.51	4.71
15	4.23	3.95	4.42	4.25	4.41	4.31	3.93	3.70	4.88	4.18	5.11	4.67
16	4.17	3.88	4.54	4.35	4.40	4.32	4.13	3.56	4.91	4.29	5.10	4.64
17	4.20	3.80	4.78	4.34	4.38	4.35	4.14	3.45	4.84	4.25	5.36	4.63
18	4.17	3.71	4.68	4.50	4.33	4.33	4.09	3.40	4.79	4.26	5.42	4.60
19	4.05	3.63	4.70	4.59	4.32	4.40	4.01	3.31	4.63	4.35	5.31	4.59
20	3.94	3.61	4.61	4.53	4.44	4.35	3.94	3.23	4.52	4.49	5.14	4.56
21	3.81	3.71	4.54	4.44	4.41	4.31	3.81	3.32	4.44	4.54	5.08	4.58
22	3.65	3.66	4.49	4.40	4.38	4.29	3.72	3.37	4.40	4.52	5.06	4.59
23	3.52	3.56	4.45	4.47	4.35	4.24	3.81	3.25	4.34	4.66	5.24	4.57
24	3.52	3.48	4.47	4.43	4.35	4.14	3.78	3.09	4.37	4.58	5.30	4.59
25	3.42	3.43	4.50	4.38	4.48	4.05	3.62	2.92	4.46	4.53	5.30	4.57
26	3.29	3.37	4.61	4.35	4.64	4.14	3.52	2.72	4.44	4.58	5.17	4.57
27	3.18	3.32	4.62	4.38	4.68	4.12	3.52	2.69	4.41	4.66	5.07	4.64
28	3.23	3.48	4.57	4.36	4.65	4.00	3.46	3.20	4.42	4.71	5.05	4.64
29	3.41	3.50	4.55	4.33	4.62	3.90	3.37	3.61	4.39	4.89	5.01	4.59
30	3.44	3.41	4.51	4.41	---	3.84	3.79	3.79	4.44	4.94	4.97	4.57
31	3.57	---	4.39	4.46	---	3.79	---	3.92	---	4.91	4.95	---
TOTAL	126.21	111.13	125.63	135.74	128.02	133.27	111.82	114.23	134.11	138.42	159.89	142.57
MEAN	4.07	3.70	4.05	4.38	4.41	4.30	3.73	3.68	4.47	4.47	5.16	4.75
MAX	4.72	4.01	4.78	4.59	4.68	4.61	4.14	4.31	4.91	4.94	5.51	5.14
MIN	3.18	3.32	3.21	4.25	4.26	3.79	3.37	2.69	4.01	4.18	4.76	4.56

02293243 COURTNEY CANAL AT CAPE CORAL, FL-Continued

DISCHARGE NOT AVAILABLE AT TIME OF PUBLICATION

02293264 GATOR SLOUGH AT SR 765 AT CAPE CORAL, FL (REVISED)

LOCATION.--Lat 26°41'38", long 82°02'14" in SW ¼ NW ¼ NW ¼ sec.32, T.43 S., R.23 E., Lee County, Hydrologic Unit 03100103, 380 ft upstream from bridge on SR-765 (Burnt Store Road) in Cape Coral, 280 ft upstream from weir, and 2.9 mi north of Pine Island Road in Cape Coral, FL.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--1973-83 (annual maximum gage heights, only), May 1984 to October 5, 1997, June 2000 to current year. Prior to 1984, published as "near Pine Island." Prior to October 1, 2003, published under 264139082022100.

GAGE.--Electronic data logger. Datum of gage is National Geodetic Vertical Datum of 1929. (State road department bench mark).

REMARKS.--Records fair except for estimated daily discharges, which are poor. Zero flow occurs for numerous days during most water years. Formerly published as, "near Ft. Myers, FL." Storm surge caused by hurricanes on August 13, September 6, and September 26, 2004, created backwater conditions. Discharged is considered poor for those days.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 17 complete water years of discharge (1985-97, 2001-2004).

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.07	2.54	2.49	2.55	2.56	2.62	2.49	2.54	2.45	2.62	3.05	2.93
2	2.96	2.54	2.49	2.54	2.55	2.59	2.48	2.52	2.45	2.63	3.32	2.91
3	2.89	2.55	2.48	2.54	2.56	2.58	2.48	2.52	2.47	2.63	3.49	2.91
4	2.85	2.55	2.48	2.53	2.55	2.58	2.47	2.52	2.46	2.71	3.66	2.90
5	2.81	2.55	2.48	2.53	2.55	2.57	2.48	2.52	2.46	2.69	3.63	2.92
6	2.79	2.62	2.49	2.53	2.54	2.56	2.49	2.52	2.46	2.68	3.39	3.09
7	2.77	2.63	2.48	2.52	2.54	2.56	2.49	2.51	2.45	2.67	3.20	3.06
8	2.76	2.60	2.48	2.51	2.54	2.55	2.48	2.51	2.47	2.64	3.08	3.06
9	2.75	2.59	2.47	2.51	2.53	2.55	2.48	2.51	2.50	2.63	2.98	3.03
10	2.73	2.58	2.47	2.52	2.53	2.55	2.48	2.51	2.50	2.64	2.96	3.14
11	2.71	2.58	2.47	2.51	2.52	2.54	2.47	2.51	2.53	2.68	2.98	3.08
12	2.69	2.57	2.47	2.51	2.52	2.54	2.51	2.50	2.53	2.84	2.92	3.00
13	2.68	2.56	2.46	2.51	2.51	2.54	2.49	2.49	2.54	2.81	3.04	2.94
14	2.67	2.55	2.51	2.51	2.51	2.53	2.49	2.48	2.58	2.75	3.45	2.90
15	2.66	2.55	2.50	2.51	2.53	2.54	2.48	2.48	2.61	2.69	3.32	2.87
16	2.64	2.54	2.51	2.51	2.53	2.55	2.48	2.48	2.65	2.68	3.20	2.85
17	2.62	2.54	2.59	2.51	2.53	2.54	2.47	2.48	2.64	2.65	3.14	2.84
18	2.61	2.54	2.61	2.55	2.52	2.54	2.46	2.48	2.63	2.62	3.09	2.84
19	2.60	2.54	2.62	2.55	2.52	2.53	2.46	2.47	2.62	2.68	3.04	2.84
20	2.59	2.53	2.63	2.54	2.52	2.52	2.46	2.48	2.61	2.92	3.05	2.83
21	2.58	2.52	2.62	2.55	2.52	2.51	2.47	2.48	2.61	3.01	3.04	2.86
22	2.58	2.52	2.61	2.55	2.52	2.52	2.47	2.47	2.59	2.97	3.01	2.87
23	2.58	2.52	2.60	2.55	2.52	2.51	2.46	2.48	2.59	2.87	3.03	2.86
24	2.57	2.52	2.60	2.55	2.52	2.51	2.46	2.47	2.60	2.81	3.01	2.83
25	2.56	2.52	2.59	2.55	2.56	2.50	2.46	2.46	2.61	2.77	3.01	2.82
26	2.55	2.51	2.58	2.55	2.61	2.50	2.46	2.47	2.61	2.75	3.00	3.02
27	2.55	2.51	2.57	2.55	2.67	2.50	2.46	2.47	2.60	2.78	2.95	2.78
28	2.56	2.51	2.56	2.54	2.67	2.50	2.46	2.47	2.60	2.86	2.93	2.76
29	2.57	2.50	2.56	2.54	2.64	2.50	2.45	2.46	2.60	2.99	2.92	2.74
30	2.55	2.50	2.56	2.55	---	2.50	2.49	2.46	2.58	3.12	2.91	2.71
31	2.55	---	2.55	2.55	---	2.50	---	2.45	---	3.03	2.92	---
TOTAL	83.05	76.38	78.58	78.52	73.89	78.63	74.23	77.17	76.60	85.82	96.72	87.19
MEAN	2.68	2.55	2.53	2.53	2.55	2.54	2.47	2.49	2.55	2.77	3.12	2.91
MAX	3.07	2.63	2.63	2.55	2.67	2.62	2.51	2.54	2.65	3.12	3.66	3.14
MIN	2.55	2.50	2.46	2.51	2.51	2.50	2.45	2.45	2.45	2.62	2.91	2.71

02293264 GATOR SLOUGH AT SR 765 AT CAPE CORAL, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	219	9.5	3.3	9.8	9.8	20	1.4	5.9	0.00	16	165	110
2	160	9.3	3.0	8.8	9.6	15	1.2	3.2	0.02	17	306	106
3	125	10	2.2	7.3	9.9	14	0.82	3.6	0.20	18	393	106
4	103	10	2.1	6.3	9.2	13	0.70	3.3	0.03	34	485	100
5	87	11	2.7	6.2	8.7	11	1.0	3.2	0.01	30	467	109
6	77	24	3.0	6.1	8.0	9.5	1.3	3.0	0.01	28	341	e160
7	69	25	2.7	5.1	7.8	8.6	1.3	2.5	0.00	26	236	169
8	61	19	2.4	4.7	7.5	8.2	1.0	2.4	0.50	20	170	172
9	55	16	1.4	4.7	6.9	7.6	0.86	2.1	1.1	19	123	156
10	47	15	1.4	5.6	6.9	7.3	0.86	2.0	1.2	20	115	210
11	41	14	1.6	5.0	6.0	7.0	0.70	2.1	3.9	31	123	181
12	38	13	1.5	4.7	5.2	6.6	3.3	1.8	3.2	72	100	140
13	36	12	1.2	4.4	4.6	6.4	1.9	0.95	4.5	61	e156	116
14	33	11	5.7	4.5	4.9	6.0	1.3	0.62	8.6	46	381	100
15	31	11	4.1	4.4	7.0	6.1	1.2	0.52	14	31	311	88
16	25	9.7	6.2	4.3	6.2	7.6	1.0	0.53	21	28	242	81
17	22	9.3	17	4.0	6.1	6.5	0.68	0.55	18	23	208	78
18	20	8.6	20	9.8	5.9	6.3	0.34	0.29	17	17	179	78
19	18	8.6	23	9.1	5.6	5.9	0.26	0.13	15	29	156	78
20	16	7.8	24	8.3	5.9	4.4	0.10	0.38	14	105	159	76
21	15	7.2	23	8.5	5.4	3.7	0.21	0.22	13	140	156	90
22	14	7.1	21	9.0	5.1	4.1	0.17	0.12	11	123	145	92
23	14	6.6	19	8.9	5.6	3.8	0.15	0.20	11	84	150	88
24	13	6.4	18	8.9	5.8	2.9	0.07	0.11	13	64	142	80
25	12	6.3	16	9.1	11	2.8	0.08	0.06	13	49	141	76
26	10	6.0	14	9.4	18	2.4	0.06	0.09	13	44	136	e70
27	10	5.1	13	9.0	29	2.4	0.08	0.08	13	53	115	63
28	12	5.1	12	8.2	30	2.5	0.06	0.06	12	80	110	57
29	13	4.3	12	7.9	25	2.4	0.17	0.04	11	128	106	51
30	11	3.9	11	9.2	---	2.6	1.2	0.01	9.8	189	102	43
31	9.8	---	11	9.4	---	2.0	---	0.00	---	150	106	---
TOTAL	1,416.8	311.8	298.5	220.6	276.6	208.6	23.47	40.06	242.07	1,775	6,225	3,124
MEAN	45.7	10.4	9.63	7.12	9.54	6.73	0.78	1.29	8.07	57.3	201	104
MAX	219	25	24	9.8	30	20	3.3	5.9	21	189	485	210
MIN	9.8	3.9	1.2	4.0	4.6	2.0	0.06	0.00	0.00	16	100	43
AC-FT	2,810	618	592	438	549	414	47	79	480	3,520	12,350	6,200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2004, BY WATER YEAR (WY)

	MEAN	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	63.4	24.0	13.9	13.6	7.42	12.2	9.71	13.9	70.1	108	143	116
MAX (WY)	253 (1996)	91.9 (2003)	113 (2003)	48.4 (2003)	20.1 (1993)	41.5 (1987)	43.2 (1987)	58.0 (1991)	215 (1995)	284 (1995)	359 (1997)	268 (2001)
MIN (WY)	17.4 (1989)	2.31 (2001)	0.23 (2001)	0.00 (2001)	0.00 (1997)	0.00 (1997)	0.00 (2002)	0.00 (2001)	0.24 (1985)	9.15 (2000)	55.3 (1993)	23.3 (1990)

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1984 - 2004	
ANNUAL TOTAL	27,752.31		14,162.50			
ANNUAL MEAN	76.0		38.7		50.3	
HIGHEST ANNUAL MEAN					92.7 1995	
LOWEST ANNUAL MEAN					21.7 1990	
HIGHEST DAILY MEAN	1,220	Jun 23	485	Aug 4	1,400	Sep 14, 2001
LOWEST DAILY MEAN	0.07	Mar 16	0.00*		0.00	**
ANNUAL SEVEN-DAY MINIMUM	0.12	Mar 10	0.03	May 27	0.00	**
MAXIMUM PEAK FLOW			503	Aug 3	2,550	Sep 14, 2001
MAXIMUM PEAK STAGE			3.70	Aug 3	4.61	Sep 14, 2001
INSTANTANEOUS LOW FLOW					0.00	**
ANNUAL RUNOFF (AC-FT)	55,050		28,090		36,410	
10 PERCENT EXCEEDS	201		124		130	
50 PERCENT EXCEEDS	25		9.6		15	
90 PERCENT EXCEEDS	0.73		0.54		0.35	

e Estimated

* May 31, June 1,7.

** Many days during water years 1989-90,1996-97, 2001-02, 2004.

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

CHARLOTTE HARBOR AND COASTAL AREA

02293345 SHADROE CANAL AT CAPE CORAL, FL

LOCATION.--Lat 26°39'07", long 82°02'22", in SE 1/4 SW 1/4 SW 1/4 sec.8 T.44 S., R.23 E., Lee County, Hydrologic Unit 03100103, near right bank on downstream side of wingwall of bridge on Embers Parkway, 75 ft west of NW 29th Place, 0.28 mi east of State Road 765 (Burnt Store Road) and 0.3 mi upstream of weir, at Cape Coral.

DRAINAGE AREA.--Indeterminate.

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

GAGE.--Electronic data logger. Datum of gage is National Geodetic Vertical Datum of 1929 (State Road Department Bench Mark).

REMARKS.--Records good except for estimated daily discharges, which are poor. Zero flow occurs for numerous days, during most water years. Storm surges caused by Hurricanes on August 13, September 6, 26, 2004, created backwater conditions. Discharge is considered poor for those days.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT)SUMMARY STATISTICS.--Figures represent 17 complete water years of discharge (1988-2004).

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.65	2.50	2.46	2.49	2.52	2.50	2.45	2.59	2.44	2.49	2.85	2.59
2	2.62	2.50	2.46	2.49	2.51	2.50	2.45	2.49	2.44	2.52	2.91	2.56
3	2.60	2.52	2.46	2.49	2.50	2.50	2.45	2.48	2.44	2.51	3.10	2.55
4	2.59	2.52	2.46	2.49	2.48	2.49	2.45	2.47	2.44	2.52	2.98	2.57
5	2.58	2.51	2.47	2.48	2.47	2.49	2.45	2.46	2.44	2.52	2.85	2.62
6	2.58	2.52	2.47	2.48	2.47	2.49	2.45	2.45	2.44	2.51	2.78	2.95
7	2.57	2.53	2.46	2.48	2.47	2.49	2.45	2.45	2.43	2.50	2.72	2.69
8	2.57	2.51	2.46	2.47	2.47	2.48	2.45	2.45	2.44	2.50	2.65	2.63
9	2.57	2.51	2.45	2.47	2.47	2.47	2.44	2.45	2.45	2.49	2.62	2.68
10	2.56	2.50	2.45	2.48	2.47	2.47	2.44	2.45	2.44	2.50	2.60	2.74
11	2.56	2.49	2.45	2.47	2.47	2.47	2.44	2.45	2.43	2.51	2.58	2.63
12	2.56	2.49	2.44	2.47	2.47	2.47	2.46	2.45	2.43	2.52	2.57	2.60
13	2.55	2.49	2.44	2.47	2.47	2.47	2.46	2.45	2.46	2.51	2.90	2.58
14	2.55	2.48	2.59	2.47	2.47	2.47	2.44	2.45	2.68	2.49	2.93	2.57
15	2.55	2.48	2.54	2.47	2.49	2.47	2.44	2.45	2.66	2.48	2.67	2.56
16	2.54	2.48	2.54	2.47	2.47	2.48	2.44	2.45	2.57	2.48	2.62	2.55
17	2.54	2.48	2.60	2.47	2.47	2.48	2.44	2.45	2.52	2.48	2.80	2.54
18	2.54	2.48	2.54	2.58	2.47	2.47	2.44	2.44	2.51	2.48	2.89	2.54
19	2.54	2.49	2.52	2.55	2.47	2.47	2.44	2.44	2.50	2.52	2.83	2.54
20	2.53	2.49	2.51	2.51	2.47	2.47	2.44	2.44	2.50	2.69	2.85	2.54
21	2.53	2.48	2.50	2.49	2.47	2.46	2.44	2.44	2.49	2.63	2.79	2.57
22	2.53	2.48	2.50	2.49	2.47	2.46	2.44	2.44	2.48	2.57	2.68	2.55
23	2.53	2.48	2.50	2.49	2.47	2.46	2.44	2.44	2.48	2.55	2.69	2.53
24	2.53	2.48	2.51	2.49	2.47	2.46	2.44	2.44	2.49	2.54	2.68	2.52
25	2.52	2.48	2.50	2.49	2.56	2.46	2.44	2.44	2.49	2.54	2.66	2.52
26	2.51	2.48	2.50	2.49	2.60	2.45	2.44	2.44	2.50	2.54	2.65	2.78
27	2.51	2.48	2.50	2.49	2.54	2.45	2.44	2.44	2.51	2.58	2.61	2.67
28	2.52	2.48	2.49	2.49	2.51	2.45	2.44	2.44	2.51	2.61	2.60	2.55
29	2.55	2.47	2.49	2.48	2.51	2.45	2.47	2.44	2.50	2.61	2.59	2.52
30	2.52	2.46	2.49	2.49	---	2.45	2.50	2.44	2.49	2.60	2.58	2.52
31	2.51	---	2.49	2.51	---	2.45	---	2.44	---	2.57	2.58	---
TOTAL	79.11	74.74	77.24	77.15	72.15	76.60	73.41	76.05	74.60	78.56	84.81	77.96
MEAN	2.55	2.49	2.49	2.49	2.49	2.47	2.45	2.45	2.49	2.53	2.74	2.60
MAX	2.65	2.53	2.60	2.58	2.60	2.50	2.50	2.59	2.68	2.69	3.10	2.95
MIN	2.51	2.46	2.44	2.47	2.47	2.45	2.44	2.44	2.43	2.48	2.57	2.52

02293345 SHADROE CANAL AT CAPE CORAL, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	7.4	4.0	6.4	11	7.8	1.7	22	1.2	7.3	94	19
2	22	7.4	4.1	6.4	8.9	7.5	1.7	8.8	1.2	10	102	16
3	20	9.2	4.0	6.3	8.0	7.3	1.7	6.9	1.1	9.2	158	15
4	18	9.4	3.9	6.3	6.5	6.7	1.7	6.1	0.81	10	121	16
5	17	8.4	4.4	6.0	5.6	6.4	1.6	4.4	0.81	10	84	25
6	16	9.6	4.4	6.1	5.6	5.5	1.6	3.9	0.81	9.2	65	e34
7	15	9.9	3.9	6.1	5.6	5.2	1.6	3.9	0.57	8.2	49	39
8	15	8.5	3.5	5.6	5.6	4.6	1.4	3.9	1.0	7.8	33	26
9	15	7.9	2.9	5.8	5.6	3.9	1.2	3.9	1.3	7.4	26	42
10	14	7.1	3.2	6.0	5.6	3.9	1.2	3.9	0.94	8.1	22	53
11	14	6.7	3.2	5.2	5.6	3.9	1.1	3.9	0.56	9.3	20	26
12	13	6.4	2.6	5.5	5.6	3.9	2.8	3.3	0.51	10	19	22
13	13	6.4	2.3	5.6	5.6	3.9	2.2	3.0	2.7	8.8	e67	19
14	13	5.8	23	5.5	5.3	3.9	1.3	2.9	44	7.7	e80	16
15	12	5.6	12	5.6	6.1	3.9	1.2	2.6	35	6.6	38	14
16	11	5.7	13	5.6	4.8	4.6	1.2	2.8	18	6.3	27	13
17	11	5.8	20	5.6	4.7	4.3	1.2	2.9	12	6.2	76	12
18	11	5.7	11	21	4.7	3.9	1.2	2.4	10	6.5	95	12
19	11	6.6	9.1	15	4.7	3.9	1.2	2.1	9.7	10	79	11
20	11	6.6	8.2	9.2	4.7	3.7	1.2	1.8	9.0	42	85	11
21	10	6.0	7.4	7.6	4.7	3.1	1.2	1.7	8.3	27	66	15
22	10	5.7	7.4	7.3	4.7	3.0	1.2	1.7	6.9	16	39	13
23	10	5.6	7.3	7.3	4.6	3.0	1.2	1.7	6.4	14	41	11
24	10	5.5	8.2	7.2	4.6	3.0	1.2	1.7	7.4	14	38	9.1
25	9.0	5.6	7.8	7.1	15	3.0	1.2	1.7	6.9	14	34	9.0
26	8.5	5.6	7.3	7.2	19	1.9	1.2	1.7	8.9	14	32	e7.7
27	8.7	5.5	6.9	7.4	11	1.7	1.2	1.3	9.5	19	24	37
28	9.6	5.4	6.5	6.9	8.6	1.7	1.2	1.2	9.4	24	21	15
29	13	4.3	6.4	6.4	8.1	1.7	3.3	1.2	7.9	25	20	12
30	9.7	3.9	6.4	7.4	---	1.7	5.6	1.2	7.2	23	19	11
31	8.2	---	6.4	9.3	---	1.7	---	1.2	---	19	18	---
TOTAL	406.7	199.2	220.7	225.9	200.1	124.2	48.5	111.7	230.01	409.6	1,692	580.8
MEAN	13.1	6.64	7.12	7.29	6.90	4.01	1.62	3.60	7.67	13.2	54.6	19.4
MAX	28	9.9	23	21	19	7.8	5.6	22	44	42	158	53
MIN	8.2	3.9	2.3	5.2	4.6	1.7	1.1	1.2	0.51	6.2	18	7.7
AC-FT	807	395	438	448	397	246	96	222	456	812	3,360	1,150

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2004, BY WATER YEAR (WY)

	MEAN	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	16.6	6.98	4.95	5.79	5.45	4.01	2.45	3.31	10.6	20.0	22.5	26.0
MAX	114	27.2	28.5	19.3	38.2	13.1	7.99	14.8	53.8	63.6	68.4	75.8
(WY)	(1996)	(2003)	(2003)	(1998)	(1998)	(1998)	(2003)	(2003)	(2003)	(1995)	(1995)	(1995)
MIN	2.56	0.50	0.00	0.82	0.31	0.37	0.03	0.00	0.01	3.31	3.43	3.77
(WY)	(1989)	(1991)	(1991)	(2001)	(2001)	(1990)	(2000)	(1999)	(1988)	(1988)	(1989)	(1990)

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1987 - 2004	
ANNUAL TOTAL	7,830.0		4,449.41			
ANNUAL MEAN	21.5		12.2		10.5	
HIGHEST ANNUAL MEAN					24.5	
LOWEST ANNUAL MEAN					3.70	
HIGHEST DAILY MEAN	321	Jun 23	158	Aug 3	903	Jul 23, 2001
LOWEST DAILY MEAN	1.8	Apr 25	0.51	Jun 12	0.00**	
ANNUAL SEVEN-DAY MINIMUM	3.1	Dec 7	0.81	Jun 6	0.00**	
MAXIMUM PEAK FLOW			326	Aug 3	1,580	Jul 23, 2001
MAXIMUM PEAK STAGE			3.68	Aug 3	4.61	Sep 3, 1995
INSTANTANEOUS LOW FLOW			0.33	Jun 7	0.00**	
ANNUAL RUNOFF (AC-FT)	15,530		8,830		7,590	
10 PERCENT EXCEEDS	48		25		20	
50 PERCENT EXCEEDS	10		6.9		3.8	
90 PERCENT EXCEEDS	4.3		1.5		0.25	

e Estimated

** Many days during water years 1989-92, 1994-95, 1997-2001, several days in 2002.

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

CHARLOTTE HARBOR AND COASTAL AREA

02293346 HORSESHOE CANAL AT CAPE CORAL, FL

LOCATION.--Lat 26°40'41", long 82°02'26", in SW ¼ NW ¼ NW ¼ sec.5, T.44 S., R.23 E., Lee County, Hydrologic Unit 03100103, on left bank, 100 ft north of Diplomat Parkway 152 ft upstream from weir and 252 ft east of State Road 765 (Burnt Store Road) in Cape Coral.

DRAINAGE AREA.--Indeterminate.

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

GAGE.--Electronic data logger. Datum of gage is National Geodetic Vertical Datum of 1929 (State Road Department bench mark).

REMARKS.--Records poor. Gage height records for the 1998, 1999 and 2000 water years were revised based on levels run during the 2001 water year. The corrected gage heights are in the files of the U.S. Geological Survey. Extremely low flows are occasionally affected by water that is diverted from the canal during dry periods by the City of Cape Coral to supplement their dual water supply. Zero flow occurs for numerous days during most water years.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 17 complete water years of discharge (1988-2004).

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.01	2.65	2.53	2.63	2.66	2.70	2.49	2.56	2.39	2.65	3.16	2.81
2	2.96	2.65	2.51	2.62	2.66	2.69	2.49	2.51	2.37	2.68	---	2.76
3	2.94	2.67	2.50	2.60	2.65	2.69	2.49	2.51	2.38	2.67	---	2.75
4	2.90	2.68	2.50	2.59	2.65	2.67	2.48	2.50	2.41	2.72	---	2.76
5	2.89	2.68	2.50	2.58	2.64	2.67	2.48	2.48	2.41	2.71	---	2.79
6	2.87	2.71	2.51	2.58	2.64	2.67	2.49	2.48	2.39	2.69	3.33	3.02
7	2.85	2.72	2.51	2.57	2.63	2.66	2.48	2.49	2.38	2.69	3.17	2.91
8	2.84	2.72	2.51	2.55	2.63	2.65	2.47	2.47	2.40	2.68	3.05	2.89
9	2.82	2.70	2.50	2.56	2.62	2.64	2.45	2.47	2.46	2.67	2.97	2.90
10	2.82	2.69	2.50	2.55	2.59	2.63	2.44	2.47	2.46	2.67	2.94	2.98
11	2.82	2.68	2.52	2.54	2.58	2.62	2.43	2.49	2.47	2.70	2.92	2.93
12	2.82	2.67	2.51	2.54	2.56	2.62	2.47	2.47	2.48	2.81	2.88	2.88
13	2.81	2.66	2.50	2.53	2.55	2.62	2.50	2.45	2.49	2.76	3.13	2.84
14	2.80	2.65	2.58	2.54	2.55	2.61	2.48	2.46	2.56	2.70	3.41	2.82
15	2.79	2.65	2.55	2.54	2.57	2.60	2.46	2.44	2.62	2.66	3.14	2.79
16	2.79	2.65	2.57	2.53	2.56	2.61	2.45	2.44	2.66	2.65	3.06	2.78
17	2.78	2.63	2.62	2.53	2.56	2.61	2.43	2.45	2.70	2.65	3.09	2.77
18	2.78	2.61	2.64	2.61	2.55	2.60	2.42	2.44	2.70	2.65	3.00	2.77
19	2.78	2.59	---	2.64	2.55	2.59	2.42	2.43	2.71	2.70	2.96	2.76
20	2.78	2.58	---	2.63	2.55	2.58	2.40	2.46	2.70	2.96	2.98	2.76
21	2.77	2.57	---	2.64	2.55	2.56	2.42	2.45	2.68	3.00	2.95	2.80
22	2.77	2.56	---	2.64	2.54	2.56	2.41	2.44	2.66	2.94	2.99	2.79
23	2.76	2.56	---	2.64	2.55	2.55	2.41	2.42	2.64	2.88	3.07	2.77
24	2.76	2.56	---	2.65	2.54	2.54	2.40	2.42	2.65	2.83	3.00	2.76
25	2.72	2.55	2.71	2.64	---	2.53	2.41	2.43	2.67	2.84	2.97	2.76
26	2.70	2.55	2.70	2.64	---	2.52	2.40	2.41	2.66	2.84	2.96	2.96
27	2.70	2.55	2.70	2.64	2.71	2.52	2.39	2.40	2.65	2.83	2.93	2.79
28	2.70	2.54	2.69	2.63	2.71	2.51	2.39	2.39	2.66	2.88	2.93	2.76
29	2.71	2.54	2.68	2.62	2.71	2.51	2.40	2.40	2.65	3.03	2.88	2.75
30	2.69	2.54	2.67	2.63	---	2.52	2.48	2.39	2.64	3.05	2.85	2.74
31	2.68	---	2.66	2.65	---	2.52	---	2.38	---	2.98	2.83	---
TOTAL	86.81	78.76	---	80.48	---	80.57	73.33	76.00	76.70	86.17	---	84.55
MEAN	2.80	2.63	---	2.60	---	2.60	2.44	2.45	2.56	2.78	---	2.82
MAX	3.01	2.72	---	2.65	---	2.70	2.50	2.56	2.71	3.05	---	3.02
MIN	2.68	2.54	---	2.53	---	2.51	2.39	2.38	2.37	2.65	---	2.74

02293346 HORSESHOE CANAL AT CAPE CORAL, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87	13	0.51	11	15	20	0.07	4.4	0.00	14	142	38
2	74	12	0.03	9.1	14	19	0.00	0.32	0.00	17	e177	31
3	66	15	0.00	7.4	13	18	0.03	0.30	0.00	16	e296	29
4	58	16	0.00	6.2	14	16	0.00	0.06	0.00	23	e399	31
5	54	16	0.00	5.6	13	15	0.00	0.00	0.00	21	e309	35
6	49	19	0.01	5.0	12	15	0.02	0.00	0.00	19	185	e45
7	45	20	0.00	4.3	11	14	0.00	0.04	0.00	18	131	59
8	43	20	0.00	2.7	11	13	0.00	0.00	0.00	18	94	56
9	40	17	0.00	3.2	9.6	12	0.00	0.00	0.01	16	75	58
10	39	16	0.02	3.1	6.9	10	0.00	0.00	0.00	15	68	76
11	39	14	0.07	2.1	5.4	9.8	0.00	0.00	0.36	21	61	64
12	39	13	0.03	1.9	3.4	9.3	0.03	0.00	0.09	39	53	54
13	38	12	0.00	1.3	2.7	9.6	0.10	0.00	0.25	29	e120	45
14	35	11	6.9	1.9	2.8	8.4	0.01	0.00	5.0	20	217	41
15	34	11	3.0	1.8	4.8	7.1	0.00	0.00	12	15	122	36
16	33	10	5.6	1.3	3.5	8.4	0.00	0.00	15	14	97	33
17	32	8.9	9.6	1.4	3.3	8.3	0.00	0.00	20	14	108	32
18	32	6.5	12	9.8	3.0	7.2	0.00	0.00	20	13	83	31
19	32	4.7	e20	12	2.7	6.3	0.00	0.00	22	20	73	30
20	32	3.9	e22	11	2.6	5.3	0.00	0.00	20	76	78	30
21	30	2.8	e22	12	3.0	3.6	0.00	0.00	18	81	69	37
22	29	2.0	e22	12	2.2	3.2	0.00	0.00	15	67	83	36
23	28	2.0	e22	12	2.6	2.7	0.00	0.00	13	54	102	32
24	28	2.0	e22	13	2.3	2.3	0.00	0.00	13	43	82	30
25	22	1.6	22	12	e11	1.2	0.00	0.00	16	46	74	29
26	19	1.4	21	12	e22	0.92	0.00	0.00	14	44	71	e27
27	19	1.4	20	12	22	1.0	0.00	0.00	13	43	65	35
28	19	1.00	19	11	22	0.53	0.00	0.00	14	54	64	30
29	21	0.90	17	10	21	0.51	0.00	0.00	13	89	54	27
30	18	0.90	16	11	---	0.66	0.45	0.00	12	95	47	27
31	16	---	15	14	---	0.84	---	0.00	---	78	42	---
TOTAL	1,150	275.00	297.77	233.1	261.8	249.16	0.71	5.12	255.71	1,132	3,641	1,164
MEAN	37.1	9.17	9.61	7.52	9.03	8.04	0.02	0.17	8.52	36.5	117	38.8
MAX	87	20	22	14	22	20	0.45	4.4	22	95	399	76
MIN	16	0.90	0.00	1.3	2.2	0.51	0.00	0.00	0.00	13	42	27
AC-FT	2,280	545	591	462	519	494	1.4	10	507	2,250	7,220	2,310

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2004, BY WATER YEAR (WY)

	MEAN	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	29.2	12.1	9.23	10.4	11.4	10.1	5.62	7.50	36.1	56.3	60.2	55.6
MAX	93.0	43.3	60.5	62.4	130	72.9	27.8	43.4	88.0	115	134	128
(WY)	(1996)	(2003)	(1998)	(1998)	(1998)	(1998)	(1987)	(1991)	(1995)	(1991)	(1995)	(2001)
MIN	4.44	0.14	0.01	0.01	0.00	0.00	0.00	0.00	0.04	8.90	27.5	12.7
(WY)	(1990)	(2001)	(2001)	(2001)	(2001)	(2002)	(1999)	(1999)	(2001)	(2000)	(2000)	(1990)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1987 - 2004

ANNUAL TOTAL	13,241.26	8,665.37	
ANNUAL MEAN	36.3	23.7	25.1
HIGHEST ANNUAL MEAN			50.1 1998
LOWEST ANNUAL MEAN			10.9 1989
HIGHEST DAILY MEAN	600 Jun 23	399 Aug 4	1,060 Aug 25, 1995
LOWEST DAILY MEAN	0.00*	0.00 Dec 3	0.00**
ANNUAL SEVEN-DAY MINIMUM	0.00*	0.00 Apr 15	0.00**
MAXIMUM PEAK FLOW		e486 Aug 3	1,420 Aug 25, 1995
MAXIMUM PEAK STAGE		e4.00 Aug 3	5.10 Aug 25, 1995
INSTANTANEOUS LOW FLOW			0.00**
ANNUAL RUNOFF (AC-FT)	26,260	17,190	18,220
10 PERCENT EXCEEDS	86	64	66
50 PERCENT EXCEEDS	21	12	7.3
90 PERCENT EXCEEDS	0.13	0.00	0.00

e Estimated

* Many days.

** Many days during water years 1989-90, 1992, 1994-2002, 2004.

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

CHARLOTTE HARBOR AND COASTAL AREA

02293347 HERMOSA CANAL AT CAPE CORAL, FL

LOCATION.--Lat 26°40'41", long 82°02'26", in NW 1/4 SW 1/4 SW 1/4 sec.5, T.44 S., R.23 E., Lee County, Hydrologic Unit 03100103, on right bank, 175 ft upstream of bridge on State Road 765 (Burnt Store Road) and approximately 50 ft south of NW 9th Terrace in Cape Coral.

DRAINAGE AREA.--Indeterminate.

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

REVISED RECORDS.--WDR FL-01-2A, 2000.

GAGE.--Electronic data logger. Datum of gage is National Geodetic Vertical Datum of 1929 (State Road Department bench mark).

REMARKS.--Records good except for estimated daily discharges, which are poor. Revised figures of discharge for the 2000 water year based upon weir cleaning and inspection records from the City of Cape Coral.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 17 complete water years of discharge (1988-2004).

REVISIONS.--Records of daily mean gage height for the 2002 and 2003 water years were revised due to datum correction. Revised records are available in the files of the U.S. Geological Survey.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.84	2.54	2.47	2.53	2.57	2.62	2.47	2.56	2.38	2.59	3.12	2.80
2	2.81	2.54	2.47	2.52	2.55	2.61	2.46	2.49	2.37	2.60	3.23	2.78
3	2.78	2.55	2.45	2.51	2.54	2.60	2.46	2.48	2.38	2.59	3.52	2.77
4	2.76	2.55	2.45	2.51	2.55	2.59	2.46	2.47	2.41	2.64	3.56	2.80
5	2.74	2.54	2.46	2.51	2.54	2.58	2.45	2.47	2.40	2.62	3.38	2.83
6	2.72	2.56	2.46	2.50	2.54	2.56	2.46	2.46	2.39	2.60	3.19	3.06
7	2.70	2.57	2.46	2.50	2.53	2.56	2.46	2.46	2.38	2.59	3.07	2.95
8	2.68	2.56	2.46	2.49	2.53	2.55	2.39	2.46	2.39	2.59	2.94	2.93
9	2.68	2.56	2.46	2.49	2.52	2.55	2.24	2.46	2.44	2.58	2.88	2.94
10	2.68	2.55	2.47	2.49	2.51	2.54	2.29	2.46	2.44	2.58	2.85	2.96
11	2.67	2.54	2.47	2.48	2.50	2.54	2.36	2.47	2.43	2.60	2.84	2.89
12	2.67	2.54	2.47	2.48	2.49	2.53	2.45	2.46	2.44	2.70	2.80	2.86
13	2.67	2.54	2.46	2.48	2.49	2.53	2.46	2.45	2.45	2.66	3.13	2.83
14	2.66	2.53	2.54	2.48	2.49	2.52	2.44	2.44	2.57	2.60	3.36	2.82
15	2.66	2.53	2.51	2.48	2.51	2.52	2.43	2.43	2.58	2.57	3.12	2.77
16	2.66	2.53	2.52	2.49	2.49	2.53	2.44	2.44	2.58	2.56	3.03	2.76
17	2.66	2.52	2.55	2.49	2.49	2.53	2.43	2.45	2.59	2.56	3.11	2.75
18	2.66	2.52	2.52	2.57	2.48	2.52	2.42	2.44	2.60	2.56	3.01	2.75
19	2.66	2.51	2.56	2.56	2.48	2.51	2.42	2.43	2.62	2.62	2.97	2.75
20	2.65	2.51	2.58	2.53	2.48	2.51	2.40	2.45	2.61	2.84	2.98	2.75
21	2.65	2.51	2.59	2.54	2.48	2.50	2.41	2.44	2.59	2.85	2.93	2.78
22	2.64	2.50	2.59	2.54	2.49	2.50	2.42	2.43	2.57	2.80	2.98	2.76
23	2.63	2.50	2.59	2.54	2.49	2.49	2.41	2.43	2.55	2.76	3.06	2.74
24	2.62	2.50	2.59	2.55	2.50	2.49	2.41	2.42	2.56	2.73	2.97	2.72
25	2.60	2.50	2.59	2.54	2.58	2.48	2.41	2.42	2.57	2.74	2.94	2.71
26	2.58	2.50	2.58	2.54	2.64	2.48	2.40	2.42	2.57	2.73	2.92	2.92
27	2.57	2.50	2.58	2.54	2.64	2.48	2.39	2.41	2.56	2.74	2.89	2.75
28	2.57	2.49	2.57	2.54	2.63	2.48	2.39	2.41	2.57	2.77	2.90	2.69
29	2.59	2.47	2.56	2.54	2.62	2.48	2.41	2.40	2.59	2.89	2.88	2.66
30	2.57	2.47	2.56	2.54	---	2.48	2.49	2.39	2.59	2.89	2.86	2.66
31	2.56	---	2.55	2.57	---	2.48	---	2.39	---	2.84	2.83	---
TOTAL	82.59	75.73	78.14	78.07	73.35	78.34	72.53	75.79	75.17	82.99	94.25	84.14
MEAN	2.66	2.52	2.52	2.52	2.53	2.53	2.42	2.44	2.51	2.68	3.04	2.80
MAX	2.84	2.57	2.59	2.57	2.64	2.62	2.49	2.56	2.62	2.89	3.56	3.06
MIN	2.56	2.47	2.45	2.48	2.48	2.48	2.24	2.39	2.37	2.56	2.80	2.66

02293347 HERMOSA CANAL AT CAPE CORAL, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	4.4	1.5	6.6	12	19	0.66	12	0.00	14	160	56
2	47	4.6	1.3	5.5	8.6	17	0.30	3.1	0.00	15	165	50
3	40	5.8	0.10	4.6	7.3	16	0.10	2.4	0.00	14	304	49
4	35	6.5	0.15	4.2	8.0	15	0.05	1.7	0.00	22	305	55
5	31	6.2	0.52	4.1	7.8	13	0.01	1.2	0.00	19	221	62
6	27	11	0.78	3.5	6.9	10	0.10	0.93	0.00	16	147	e147
7	24	12	0.46	3.0	6.6	9.8	0.03	0.78	0.00	15	109	95
8	21	10	0.54	2.2	6.1	9.0	0.01	0.45	0.00	14	71	90
9	21	9.3	0.68	2.4	5.4	7.8	0.00	0.61	0.01	12	55	96
10	20	7.8	1.2	2.4	4.6	7.2	0.00	0.60	0.00	12	48	100
11	19	7.2	1.6	1.9	3.6	6.7	0.00	1.3	0.00	16	45	77
12	19	7.2	1.3	1.6	2.6	5.9	0.38	0.81	0.00	34	36	68
13	18	7.2	0.73	1.5	2.4	6.1	0.36	0.17	0.82	26	e144	61
14	17	6.5	9.1	1.5	2.6	5.3	0.00	0.02	15	15	e187	57
15	17	6.1	4.0	1.9	4.5	5.1	0.00	0.00	13	11	111	46
16	17	5.7	6.1	2.1	2.8	6.2	0.00	0.17	13	9.5	84	42
17	17	5.1	8.6	2.0	2.4	5.8	0.00	0.12	15	10	126	41
18	17	4.6	5.2	13	1.9	4.9	0.00	0.01	16	10	119	41
19	17	4.4	9.5	9.2	1.6	4.6	0.00	0.01	19	20	106	40
20	16	5.1	13	6.6	1.2	4.2	0.00	0.14	17	69	109	40
21	15	5.1	14	7.1	1.9	3.2	0.00	0.03	14	70	95	48
22	14	4.4	14	7.3	2.1	2.9	0.00	0.00	11	59	112	43
23	13	4.2	14	7.7	2.4	2.6	0.00	0.00	9.0	47	136	38
24	12	4.2	14	8.0	3.1	2.4	0.00	0.00	9.5	40	105	34
25	8.4	4.2	14	7.5	15	1.9	0.00	0.00	11	44	97	33
26	6.1	4.2	13	7.7	23	1.8	0.00	0.00	11	42	89	e50
27	5.1	3.8	13	7.2	22	1.6	0.00	0.00	10	43	79	38
28	5.6	2.9	11	7.4	21	1.5	0.00	0.00	12	52	83	25
29	7.8	1.9	9.8	6.8	19	1.5	0.76	0.00	14	83	76	21
30	6.2	1.5	9.1	7.6	---	1.2	3.9	0.00	14	83	71	20
31	5.2	---	8.1	11	---	1.5	---	0.00	---	69	64	---
TOTAL	593.4	173.1	200.36	165.1	208.4	200.7	6.66	26.55	224.33	1,005.5	3,659	1,663
MEAN	19.1	5.77	6.46	5.33	7.19	6.47	0.22	0.86	7.48	32.4	118	55.4
MAX	55	12	14	13	23	19	3.9	12	19	83	305	147
MIN	5.1	1.5	0.10	1.5	1.2	1.2	0.00	0.00	0.00	9.5	36	20
AC-FT	1,180	343	397	327	413	398	13	53	445	1,990	7,260	3,300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2004, BY WATER YEAR (WY)

	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)																												
	32.3	88.1	7.51	(1996)	14.8	47.0	2.52	(1988)	11.7	64.3	1.00	(2003)	9.60	59.6	0.23	(1998)	9.46	98.2	0.00	(1998)	7.42	41.1	0.00	(1998)	3.80	12.0	0.00	(1994)	5.42	25.6	0.00	(1991)	28.5	89.0	0.28	(2003)	43.8	92.9	8.93	(1995)	51.1	118	16.4	(2004)	49.0	126	7.21	(2000)
				(1989)				(1991)				(1997)				(1997)				(2000)				(1999)				(1999)			(1998)				(2000)				(1999)				(1987)					

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1987 - 2004

ANNUAL TOTAL	10,483.05	8,126.10	
ANNUAL MEAN	28.7	22.2	22.8
HIGHEST ANNUAL MEAN			39.1 1995
LOWEST ANNUAL MEAN			12.7 1990
HIGHEST DAILY MEAN	601 Jun 23	305 Aug 4	1,040 Aug 25, 1995
LOWEST DAILY MEAN	0.00 many days	0.00 many days	0.00**
ANNUAL SEVEN-DAY MINIMUM	0.00 many days	0.00 many days	0.00**
MAXIMUM PEAK FLOW		504 Aug 3	1,370 Aug 25, 1995
MAXIMUM PEAK STAGE		3.92 Aug 3	5.11 Aug 25, 1995
ANNUAL RUNOFF (AC-FT)	20,790	16,120	16,510
10 PERCENT EXCEEDS	68	69	58
50 PERCENT EXCEEDS	12	7.4	8.9
90 PERCENT EXCEEDS	0.20	0.00	0.00

e Estimated

** Many days during water years 1989, 1996-2004.

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

CHARLOTTE HARBOR AND COASTAL AREA

264437081550100 GATOR SLOUGH AT U.S. 41 NEAR FT. MYERS, FL

LOCATION.--Lat 26°44'38", long 81°54'59", in SE ¼ NE ¼ SW ¼ sec.9, T.43 S., R.24 E., Lee County, Hydrologic Unit 03100103, 325 ft upstream of bridge on U.S. Highway 41, 4.4 mi north of State Road 78, and 8.3 mi upstream from mouth.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--1973 to 1984 (annual maximum gage heights only), June 1984 to current year. Prior to 1984, published as Gator Slough near Ft. Myers, FL.

REVISED RECORDS.--WDR FL-03-2A, 2001.

GAGE.--Satellite data collection platform with water-stage shaft encoder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to April 26, 1988, at site 325 ft downstream on upstream side of bridge on U.S. Highway 41 at datum -1.07 ft lower. Gage was extended into deeper water at same location May 27, 1997.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Zero flow occurs for numerous days during most water years.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 19 complete water years of discharge (1985-2004).

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.91	16.03	15.54	15.37	15.43	15.67	15.31	15.35	15.00	15.62	16.88	16.31
2	16.71	16.02	15.52	15.36	15.42	15.61	15.28	15.32	15.00	15.54	17.41	16.31
3	16.57	16.05	15.40	15.36	15.41	15.57	15.26	15.34	15.00	15.50	17.59	16.27
4	16.47	16.11	15.29	15.35	15.40	15.54	15.23	15.37	15.00	15.50	17.62	16.27
5	16.35	16.11	15.29	15.34	15.38	15.51	15.20	15.35	15.00	15.49	17.45	16.39
6	16.26	16.17	15.28	15.34	15.37	15.48	15.16	15.34	15.00	15.48	17.21	16.75
7	16.22	16.28	15.27	15.32	15.36	15.48	15.14	15.31	15.05	15.46	16.94	17.03
8	16.18	16.28	15.26	15.31	15.35	15.47	15.11	15.30	15.02	15.41	16.73	16.98
9	16.17	16.24	15.26	15.31	15.33	15.46	15.09	15.28	15.00	15.39	16.58	16.87
10	16.15	16.20	15.27	15.31	15.33	15.47	15.06	15.27	15.01	15.37	16.69	17.02
11	16.14	16.17	15.27	15.30	15.32	15.48	15.05	15.26	15.01	15.53	16.76	16.74
12	16.13	16.14	15.26	15.29	15.32	15.47	15.22	15.23	15.00	16.26	16.56	16.59
13	16.14	16.11	15.26	15.29	15.33	15.47	15.31	15.20	15.08	16.14	16.88	16.56
14	16.15	16.07	15.36	15.29	15.34	15.46	15.34	15.16	15.36	15.95	17.87	16.43
15	16.15	16.04	15.40	15.29	15.37	15.46	15.31	15.12	15.47	15.82	17.43	16.31
16	16.14	16.00	15.45	15.28	15.37	15.47	15.29	15.09	15.60	15.72	17.05	16.23
17	16.13	15.96	15.92	15.27	15.36	15.50	15.26	15.06	15.55	15.68	16.81	16.16
18	16.11	15.93	15.91	15.39	15.35	15.49	15.23	15.06	15.49	15.63	16.72	16.10
19	16.09	15.91	15.83	15.47	15.35	15.48	15.19	15.05	15.43	15.68	16.79	16.06
20	16.09	15.93	15.74	15.43	15.33	15.47	15.16	15.04	15.39	---	16.84	16.03
21	16.09	15.88	15.66	15.40	15.33	15.46	15.11	15.04	15.36	---	16.77	16.17
22	16.09	15.84	15.62	15.40	15.33	15.46	15.07	15.04	15.33	16.54	16.64	16.25
23	16.09	15.80	15.58	15.38	15.32	15.45	15.06	15.04	15.32	16.21	16.61	16.19
24	16.07	15.75	15.55	15.36	15.32	15.42	15.04	15.03	15.33	15.99	16.76	16.12
25	16.06	15.71	15.50	15.35	15.55	15.41	15.03	15.03	15.47	15.90	16.77	16.09
26	16.05	15.68	15.46	15.35	16.09	15.41	15.03	15.02	15.41	---	16.70	16.13
27	16.04	15.64	15.43	15.35	16.06	15.41	15.03	15.02	15.47	---	16.58	16.22
28	16.06	15.60	15.41	15.35	15.90	15.39	15.03	15.01	15.46	---	16.49	16.21
29	16.08	15.57	15.40	15.34	15.78	15.38	15.03	15.01	15.43	---	16.40	16.12
30	16.07	15.54	15.38	15.36	---	15.37	15.04	15.01	15.55	---	16.31	16.05
31	16.06	---	15.38	15.39	---	15.34	---	15.00	---	16.84	16.27	---
TOTAL	502.02	478.76	479.15	475.70	447.90	479.51	454.67	469.75	457.59	---	523.11	490.96
MEAN	16.19	15.96	15.46	15.35	15.44	15.47	15.16	15.15	15.25	---	16.87	16.37
MAX	16.91	16.28	15.92	15.47	16.09	15.67	15.34	15.37	15.60	---	17.87	17.03
MIN	16.04	15.54	15.26	15.27	15.32	15.34	15.03	15.00	15.00	---	16.27	16.03

264437081550100 GATOR SLOUGH AT U.S. 41 NEAR FT. MYERS, FL-Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	7.6	0.87	0.52	0.97	3.6	0.20	0.32	0.00	2.6	37	14
2	34	7.3	0.78	0.49	0.94	2.9	0.13	0.22	0.00	1.9	63	14
3	26	8.1	0.36	0.49	0.85	2.5	0.08	0.29	0.00	1.5	75	13
4	21	9.8	0.07	0.47	0.79	2.1	0.04	0.37	0.00	1.5	76	13
5	17	9.7	0.06	0.41	0.70	1.8	0.01	0.32	0.00	1.4	65	16
6	13	12	0.05	0.40	0.64	1.6	0.00	0.27	0.00	1.3	51	29
7	12	15	0.04	0.35	0.63	1.5	0.00	0.21	0.01	1.2	37	41
8	11	15	0.04	0.31	0.55	1.4	0.00	0.17	0.00	0.85	28	39
9	10	14	0.03	0.31	0.49	1.3	0.00	0.14	0.00	0.74	22	34
10	9.8	13	0.05	0.31	0.49	1.4	0.00	0.12	0.00	0.64	27	41
11	9.6	12	0.07	0.32	0.45	1.4	0.00	0.09	0.00	2.8	29	29
12	9.4	11	0.05	0.29	0.46	1.3	0.09	0.06	0.00	14	22	23
13	9.9	9.9	0.05	0.28	0.49	1.2	0.17	0.03	0.04	11	34	22
14	10	9.1	0.33	0.28	0.51	1.2	0.25	0.00	0.47	7.0	71	18
15	10	8.2	0.41	0.27	0.68	1.2	0.18	0.00	1.4	4.8	54	14
16	9.6	7.3	0.84	0.25	0.64	1.2	0.13	0.00	2.1	3.4	41	12
17	9.6	6.6	5.7	0.23	0.62	1.4	0.08	0.00	1.7	3.0	31	10
18	9.1	6.1	5.6	0.75	0.59	1.2	0.04	0.00	1.2	2.5	28	9.1
19	8.7	5.7	4.4	1.1	0.55	1.2	0.01	0.00	0.89	2.9	30	8.3
20	8.7	5.9	3.2	0.89	0.50	1.1	0.00	0.00	0.68	e24	33	7.8
21	8.6	5.1	2.5	0.76	0.49	0.98	0.00	0.00	0.57	e32	29	11
22	8.7	4.4	2.1	0.74	0.49	0.98	0.00	0.00	0.46	22	24	13
23	8.6	3.7	1.8	0.67	0.47	0.87	0.00	0.00	0.40	12	23	11
24	8.1	3.1	1.6	0.59	0.43	0.73	0.00	0.00	0.47	7.5	29	9.6
25	8.0	2.6	1.2	0.54	2.6	0.67	0.00	0.00	1.2	5.8	29	9.0
26	7.8	2.1	0.94	0.51	11	0.61	0.00	0.00	0.89	e5.2	27	9.7
27	7.7	1.7	0.79	0.53	10	0.62	0.00	0.00	1.3	e6.6	22	12
28	8.3	1.4	0.69	0.52	7.2	0.51	0.00	0.00	1.3	e12	19	12
29	8.7	1.1	0.62	0.51	5.1	0.46	0.00	0.00	1.0	e20	16	9.6
30	8.5	0.93	0.55	0.55	---	0.39	0.01	0.00	2.0	e36	14	8.1
31	8.1	---	0.52	0.73	---	0.28	---	0.00	---	33	13	---
TOTAL	388.5	219.43	36.31	15.37	50.32	39.60	1.42	2.61	18.08	281.13	1,099	512.2
MEAN	12.5	7.31	1.17	0.50	1.74	1.28	0.05	0.08	0.60	9.07	35.5	17.1
MAX	49	15	5.7	1.1	11	3.6	0.25	0.37	2.1	36	76	41
MIN	7.7	0.93	0.03	0.23	0.43	0.28	0.00	0.00	0.00	0.64	13	7.8
AC-FT	771	435	72	30	100	79	2.8	5.2	36	558	2,180	1,020

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2004, BY WATER YEAR (WY)

	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)																												
	8.36	39.8	0.96	(1996)	3.29	13.4	0.01	(1989)	2.36	15.4	0.00	(1989)	2.21	15.1	0.00	(1989)	1.93	23.8	0.00	(1986)	1.81	18.6	0.00	(1989)	0.90	4.38	0.00	(1989)	2.14	28.3	0.00	(1986)	12.0	47.3	0.01	(2001)	18.9	41.5	1.66	(1998)	19.1	49.7	1.24	(1990)	17.7	41.9	0.79	(1990)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1984 - 2004

ANNUAL TOTAL	5,195.10	2,663.97	
ANNUAL MEAN	14.2	7.28	7.61
HIGHEST ANNUAL MEAN			17.5
LOWEST ANNUAL MEAN			0.64
HIGHEST DAILY MEAN	153	76	277
LOWEST DAILY MEAN	0.03	0.00	0.00**
ANNUAL SEVEN-DAY MINIMUM	0.05	0.00	0.00**
MAXIMUM PEAK FLOW		97	518
MAXIMUM PEAK STAGE		17.90	19.44
ANNUAL RUNOFF (AC-FT)	10,300	5,280	5,510
10 PERCENT EXCEEDS	34	23	22
50 PERCENT EXCEEDS	7.4	1.2	1.4
90 PERCENT EXCEEDS	0.47	0.00	0.00

e Estimated

** Many days during water years 1986, 1989-93, 1997-2002, 2004

The period of record statistics were computed from complete water year's of record. See the annual mean and annual runoff (ac-ft) summary statistics section of the manuscript.

WATER RESOURCES DATA - FLORIDA, 2004
VOLUME 2A: SOUTH FLORIDA

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VOLUME 2A: SOUTH FLORIDA

**SURFACE WATER QUALITY RECORDS
FIELD MEASUREMENTS**

WATER RESOURCES DATA - FLORIDA, 2004

VOLUME 2A: SOUTH FLORIDA

SURFACE WATER QUALITY RECORDS

FIELD MEASUREMENTS

Station number	Local ident- ifier	Lat- i- tude	Long- i- tude	Date	Time	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Chlor- ide, water, fltrd, mg/L (00940)
02282700	MIDDLE RIVER CANAL AT S-36	26 10 22 N	080 10 47 W	10-29-03	0910	548	76.0
		26 10 22 N	080 10 47 W	02-12-04	1023	589	70.0
		26 10 22 N	080 10 47 W	05-11-04	1201	611	84.0
		26 10 22 N	080 10 47 W	08-09-04	1047	583	72.0
02283200	PLANTATION RD CA AT S-33 N	26 08 05 N	080 11 42 W	10-29-03	0830	385	46.0
		26 08 05 N	080 11 42 W	02-12-04	0850	489	66.0
		26 08 05 N	080 11 42 W	05-11-04	1225	376	68.0
		26 08 05 N	080 11 42 W	08-09-04	1128	407	52.0
02285101	NORTH NEW RIVER CA AT SR7	26 05 15 N	080 12 00 W	10-29-03	1100	739	114
		26 05 15 N	080 12 00 W	02-13-04	1245	787	104
		26 05 15 N	080 12 00 W	05-11-04	1403	12300	3900
		26 05 15 N	080 12 00 W	06-07-04	1239	27900	9400
		26 05 15 N	080 12 00 W	08-09-04	1218	586	80.0
260037080100700	HOLLYWOOD CANAL AT HOLLYWO	26 00 37 N	080 10 07 W	10-29-03	0943	2350	740
		26 00 37 N	080 10 07 W	01-30-04	0936	18900	6500
		26 00 37 N	080 10 07 W	04-29-04	0846	6660	2300
		26 00 37 N	080 10 07 W	07-30-04	0902	8710	2150
260104080101300	HOLLYWOOD CANAL AT JOHNSON	26 01 04 N	080 10 13 W	10-29-03	1018	8060	2600
		26 01 04 N	080 10 13 W	01-30-04	0952	19000	6600
		26 01 04 N	080 10 13 W	04-29-04	0900	7160	2600
		26 01 04 N	080 10 13 W	07-30-04	0911	12500	3900
260132080094900	HOLLYWOOD CANAL AT TAFT ST	26 01 32 N	080 09 49 W	10-29-03	1105	16400	5800
		26 01 32 N	080 09 49 W	01-30-04	1031	27400	9800
		26 01 32 N	080 09 49 W	04-29-04	0945	14200	5400
		26 01 32 N	080 09 49 W	07-30-04	0955	17500	5800
260212080112500	HOLLYWOOD CANAL AT N46 AVE	26 02 12 N	080 11 25 W	10-29-03	1150	312	36.0
		26 02 12 N	080 11 25 W	01-30-04	1138	535	118
		26 02 12 N	080 11 25 W	04-29-04	1122	638	174
		26 02 12 N	080 11 25 W	07-30-04	1105	1380	305
260225080095800	HOLLYWOOD CANAL AT N29 AVE	26 02 25 N	080 09 58 W	10-29-03	1134	16400	6100
		26 02 25 N	080 09 58 W	01-30-04	1123	22000	8100
		26 02 25 N	080 09 58 W	04-29-04	1100	21100	7500
		26 02 25 N	080 09 58 W	07-30-04	1051	18700	6700

VOLUME 2A: SOUTH FLORIDA

**NATIONAL WATER-QUALITY ASSESSMENT
(NAWQA) DATA**

WATER RESOURCES DATA - FLORIDA, 2004

VOLUME 2A: SOUTH FLORIDA

NATIONAL WATER-QUALITY ASSESSMENT (NAWQA) PROGRAM

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

02281200 -- HILLSBORO CANAL AT S-6 NEAR SHAWANO

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Gage height, feet (00065)	Dis-charge, cfs (00060)	Instan-taneous dis-charge, cfs (00061)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	pH, water, unfltrd, std units (00400)	Specif. conduc-tance, wat unfiltered, uS/cm 25 degC (00095)	Temper-ature, air, deg C (00020)	Temper-ature, water, deg C (00010)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar-bonate, wat flt incrm. titr., field, mg/L (00453)	Carbon-ate, wat flt incrm. titr., field, mg/L (00452)	Chlor-ide, water, fltrd, mg/L (00940)
OCT 16...	10.86	.00	.00	763	.7	7.3	1380	28.0	27.0	332	405	--	195
NOV 20...	11.49	.00	.00	760	1.7	7.4	1340	22.5	23.5	322	393	--	200
JAN 15...	11.13	.00	.00	764	2.5	7.5	1370	20.0	18.5	315	384	--	208
FEB 12...	11.12	.00	.00	766	2.0	7.4	1370	31.0	21.0	350	427	--	208
MAR 11...	10.44	.00	.00	766	3.7	7.8	1340	24.0	21.5	314	383	--	186
APR 07...	11.02	--	.00	765	3.9	7.6	1260	31.0	22.0	289	353	--	188
MAY 19...	10.94	--	302	765	6.1	8.1	1020	32.0	26.5	240	283	5	148
JUN 17...	9.08	--	1980	762	2.6	7.4	1060	32.0	28.5	250	305	--	140
JUL 08...	10.87	--	.00	764	1.0	7.5	1250	32.5	28.5	318	388	--	172
AUG 12...	10.09	--	2160	759	1.6	7.4	1260	33.0	29.1	318	388	--	166
SEP 22...	10.93	--	3080	760	3.1	7.4	1000	30.0	26.4	282	344	--	105

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd, mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd, mg/L (00665)	2,6-Di-ethyl-aniline water, fltrd, 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)
OCT 16...	85.6	--	2.6	.337	.043	.012	<.006	--	.039	--	--	--	--
NOV 20...	69.8	--	2.3	.428	.160	.032	E.004	--	.022	<.006	<.006	<.006	<.005
JAN 15...	68.2	--	2.2	.300	.204	.016	<.006	--	.018	<.006	<.006	<.006	<.005
FEB 12...	61.8	--	2.3	.413	.320	.037	.006	--	.024	<.006	E.015	<.006	<.005
MAR 11...	89.7	--	2.1	.158	.775	.047	.016	--	.046	<.006	E.038	<.006	<.005
APR 07...	51.3	--	--	--	--	--	--	--	--	<.006	E.018	<.006	<.005
MAY 19...	45.0	--	1.5	.026	.317	.007	<.006	--	.013	<.006	E.032	<.006	<.005
JUN 17...	60.7	--	2.2	.226	2.43	.142	.026	--	.078	--	--	--	--
JUL 08...	52.9	--	2.2	.296	.855	.112	<.006	--	.025	<.006	E.010	<.006	<.005
AUG 12...	76.4	--	2.7	.361	.665	.066	.056	--	.095	--	--	--	--
SEP 22...	77.3	2.6	3.4	.322	2.07	.061	.114	.145	.19	<.006	E.008	<.006	<.005

VOLUME 2A: SOUTH FLORIDA

NATIONAL WATER-QUALITY ASSESSMENT (NAWQA) PROGRAM-continued

02281200 -- HILLSBORO CANAL AT S-6 NEAR SHAWANO

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd, 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd, 0.7u GF ug/L (82673)	Butyl-ate, water, fltrd, ug/L (04028)	Car-baryl, water, fltrd, 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd, 0.7u GF ug/L (82674)	Chlor-pyrifos, water, fltrd, ug/L (38933)	cis-Per-methrin, water, fltrd, 0.7u GF ug/L (82687)	Cyana-zine, water, fltrd, ug/L (04041)	DCPA, water, fltrd, 0.7u GF ug/L (82682)	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Diazi-non, water, fltrd, ug/L (39572)
OCT 16...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 20...	<.005	.083	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005
JAN 15...	<.005	.666	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005
FEB 12...	<.005	.681	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005
MAR 11...	<.005	2.42	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	.021
APR 07...	<.005	.824	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005
MAY 19...	<.005	2.33	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005
JUN 17...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 08...	<.005	.138	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005
AUG 12...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 22...	<.005	.650	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Diel-drin, water, fltrd, ug/L (39381)	Disul-foton, water, fltrd, 0.7u GF ug/L (82677)	EPTC, water, fltrd, 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd, 0.7u GF ug/L (82663)	Etho-prop, water, fltrd, 0.7u GF ug/L (82672)	Desulf-inyl-fipro-nil, amide, wat flt ug/L (62169)	Fipro-nil sulfide, water, fltrd, ug/L (62167)	Fipro-nil sulfone, water, fltrd, ug/L (62168)	Fipro-nil, water, fltrd, ug/L (62166)	Fonofos, water, fltrd, ug/L (04095)	Lindane, water, fltrd, ug/L (39341)	Linuron, water, fltrd, 0.7u GF ug/L (82666)	Mala-thion, water, fltrd, ug/L (39532)
OCT 16...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 20...	<.009	<.02	<.004	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027
JAN 15...	<.009	<.02	<.004	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027
FEB 12...	<.009	<.02	<.004	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027
MAR 11...	<.009	<.02	<.004	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027
APR 07...	<.009	<.02	<.004	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027
MAY 19...	<.009	<.02	<.004	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027
JUN 17...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 08...	<.009	<.02	<.004	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027
AUG 12...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 22...	<.009	<.02	<.004	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027

WATER RESOURCES DATA - FLORIDA, 2004

VOLUME 2A: SOUTH FLORIDA

NATIONAL WATER-QUALITY ASSESSMENT (NAWQA) PROGRAM-continued

02281200 -- HILLSBORO CANAL AT S-6 NEAR SHAWANO

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Methyl para- thion, water, fltrd 0.7u GF (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF (82671)	Naprop- amide, water, fltrd 0.7u GF (82684)	p,p'- DDE, water, fltrd, ug/L (34653)	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF (82669)	Pendi- meth- alin, water, fltrd 0.7u GF (82683)	Phorate water fltrd 0.7u GF (82664)	Prome- ton, water, fltrd, ug/L (04037)	Propy- zamide, water, fltrd 0.7u GF (82676)	Propa- chlor, water, fltrd, ug/L (04024)
OCT 16...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 20...	<.015	.019	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025
JAN 15...	<.015	<.013	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025
FEB 12...	<.015	.088	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025
MAR 11...	<.015	.300	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025
APR 07...	<.015	.032	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025
MAY 19...	<.015	E.009	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025
JUN 17...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 08...	<.015	E.011	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025
AUG 12...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 22...	<.015	.205	<.006	<.003	<.007	<.003	<.010	<.004	<.022	E.004	<.01	<.004	<.025

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Pro- panil, water, fltrd 0.7u GF (82679)	Propar- gite, water, fltrd 0.7u GF (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF (82670)	Terba- cil, water, fltrd 0.7u GF (82665)	Terbu- fos, water, fltrd 0.7u GF (82675)	Thio- bencarb water fltrd 0.7u GF (82681)	Tri- allate, water, fltrd 0.7u GF (82678)	Tri- flur- alin, water, fltrd 0.7u GF (82661)	Sus- pended sedi- ment concen- tration mg/L (80154)
OCT 16...	--	--	--	--	--	--	--	--	--	3
NOV 20...	<.011	<.02	<.005	<.02	<.034	<.02	<.010	<.002	<.009	9
JAN 15...	<.011	<.02	<.007	<.02	<.034	<.02	<.010	<.002	<.009	1
FEB 12...	<.011	<.02	.009	<.02	<.034	<.02	<.010	<.002	<.009	2
MAR 11...	<.011	<.02	.013	<.02	<.034	<.02	<.010	<.002	<.009	2
APR 07...	<.011	<.20	<.010	<.02	<.034	<.02	<.010	<.002	<.009	3
MAY 19...	<.011	<.02	.026	<.02	<.034	<.02	<.010	<.002	<.009	1
JUN 17...	--	--	--	--	--	--	--	--	--	18
JUL 08...	<.011	<.02	<.005	<.02	<.034	<.02	<.010	<.002	<.009	1
AUG 12...	--	--	--	--	--	--	--	--	--	12
SEP 22...	<.011	<.02	.005	<.02	<.034	<.02	<.010	<.002	<.009	41

0Remark codes used in this table:

< -- Less than

E -- Estimated value

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NATIONAL WATER-QUALITY ASSESSMENT (NAWQA) PROGRAM-continued

252414080333200 -- C-111 CANAL 100 FT ABV S-177 NR HOMESTEAD

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Sulfate, water, fltrd, mg/L (00945)
NOV 19...	3.76	225	761	1.4	7.3	495	28.0	26.5	187	228	--	34.2	4.0
JAN 14...	3.52	.00	766	6.9	7.9	485	22.0	20.0	187	228	--	39.5	4.7
FEB 11...	3.54	.00	765	5.9	7.8	497	27.0	22.5	193	236	--	38.9	3.9
MAR 10...	3.17	.00	762	7.4	8.0	490	22.0	23.5	192	234	--	40.0	3.9
APR 06...	2.36	30	767	6.0	7.9	529	25.5	22.5	204	249	--	43.0	1.3
MAY 18...	2.53	.00	765	7.0	8.0	508	27.5	26.0	200	232	6	40.3	3.0
JUN 16...	2.13	.00	762	.8	7.4	613	31.0	28.0	217	265	--	51.5	1.8
JUL 07...	2.61	43	764	3.4	7.7	745	31.5	30.0	240	293	--	80.1	8.0
AUG 11...	3.63	300	760	.8	7.3	517	33.0	25.8	189	231	--	41.3	5.0
SEP 21...	3.61	237	757	1.8	7.4	502	29.0	25.7	194	237	--	38.3	2.8

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	2,6-Diethyl-aniline, fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)
NOV 19...	.48	.045	.039	.003	E.003	.007	<.006	<.006	<.006	<.005	<.005	.019	<.050
JAN 14...	.47	.010	.025	E.001	E.003	.005	<.006	E.004	<.006	<.005	<.005	.014	<.050
FEB 11...	.56	.013	.068	.002	<.006	.005	<.006	E.006	<.006	<.005	<.005	.021	<.050
MAR 10...	.46	E.007	E.009	E.001	<.006	.005	<.006	<.006	<.006	<.005	<.005	.015	<.050
APR 06...	.73	.067	.084	.004	<.006	.012	<.006	<.006	<.006	<.005	<.005	.016	<.050
MAY 18...	.55	E.005	E.010	.002	<.006	.008	<.006	<.006	<.006	<.005	<.005	.011	<.050
JUN 16...	.98	.131	E.015	.002	<.006	.024	--	--	--	--	--	--	--
JUL 07...	1.4	.162	.045	.003	<.006	.013	<.006	E.009	<.006	<.005	<.005	.074	<.050
AUG 11...	.57	.079	.044	.005	<.006	.004	--	--	--	--	--	--	--
SEP 21...	.50	.096	.026	.003	<.006	.005	<.006	E.004	<.006	<.005	<.005	.015	<.050

WATER RESOURCES DATA - FLORIDA, 2004

VOLUME 2A: SOUTH FLORIDA

NATIONAL WATER-QUALITY ASSESSMENT (NAWQA) PROGRAM-continued

252414080333200 -- C-111 CANAL 100 FT ABV S-177 NR HOMESTEAD

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Ben- flur- alin, water, fltrd 0.7u GF (82673)	Butyl- ate, water, fltrd, ug/L (04028)	Car- baryl, water, fltrd 0.7u GF (82680)	Carbo- furan, water, fltrd 0.7u GF (82674)	Chlor- pyrifos water, fltrd, ug/L (38933)	cis- Per- methrin water, fltrd 0.7u GF (82687)	Cyana- zine, water, fltrd, ug/L (04041)	DCPA, water, fltrd 0.7u GF (82682)	Desulf- inyl fipro- nil, water, fltrd, ug/L (62170)	Diazi- non, water, fltrd, ug/L (39572)	Diel- drin, water, fltrd, ug/L (39381)	Disul- foton, water, fltrd 0.7u GF (82677)	EPTC, water, fltrd 0.7u GF (82668)
NOV 19...	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	<.009	<.02	<.004
JAN 14...	<.010	<.004	<.041	<.020	.046	<.006	<.018	<.003	<.012	<.005	<.009	<.02	<.004
FEB 11...	<.010	<.004	E.006	<.020	.013	<.006	<.018	<.003	<.012	<.005	<.009	<.02	<.004
MAR 10...	<.010	<.004	<.041	<.020	.014	<.006	<.018	<.003	<.012	<.005	<.009	<.02	<.004
APR 06...	<.010	<.004	<.041	<.020	.006	<.006	<.018	<.003	<.012	<.005	<.009	<.02	E.002
MAY 18...	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	<.009	<.02	<.004
JUN 16...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 07...	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	<.009	<.02	<.004
AUG 11...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 21...	<.010	<.004	E.107	<.020	<.005	<.006	<.018	<.003	<.012	<.005	<.009	<.02	<.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Ethal- flur- alin, water, fltrd 0.7u GF (82663)	Etho- prop, water, fltrd 0.7u GF (82672)	Desulf- inyl- fipro- nil amide, wat flt ug/L (62169)	Fipro- nil sulfide water, fltrd, ug/L (62167)	Fipro- nil sulfone water, fltrd, ug/L (62168)	Fipro- nil, water, fltrd, ug/L (62166)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala- thion, water, fltrd, ug/L (39532)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)
NOV 19...	<.009	<.005	E.004	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.025	<.006
JAN 14...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.020	<.006
FEB 11...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.014	E.004
MAR 10...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	E.009	E.008	<.006
APR 06...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	E.006	<.006
MAY 18...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	E.009	<.006
JUN 16...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 07...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	E.010	<.006
AUG 11...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 21...	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	E.007	<.006

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NATIONAL WATER-QUALITY ASSESSMENT (NAWQA) PROGRAM-continued

252414080333200 -- C-111 CANAL 100 FT ABV S-177 NR HOMESTEAD

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Molinate, water, fltrd 0.7u GF (82671)	Napropamide, water, fltrd 0.7u GF (82684)	p,p'-DDE, water, fltrd (34653)	Parathion, water, fltrd (39542)	Pebulate, water, fltrd 0.7u GF (82669)	Pendimethalin, water, fltrd 0.7u GF (82683)	Phorate, water, fltrd 0.7u GF (82664)	Prometon, water, fltrd (04037)	Propyzamide, water, fltrd 0.7u GF (82676)	Propachlor, water, fltrd (04024)	Propanil, water, fltrd 0.7u GF (82679)	Propargite, water, fltrd 0.7u GF (82685)	Simazine, water, fltrd (04035)
NOV 19...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005
JAN 14...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005
FEB 11...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005
MAR 10...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005
APR 06...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005
MAY 18...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005
JUN 16...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 07...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005
AUG 11...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 21...	<.003	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Tebu-thiuron, water, fltrd 0.7u GF (82670)	Terbacil, water, fltrd 0.7u GF (82665)	Terbufos, water, fltrd 0.7u GF (82675)	Thiocarb, water, fltrd 0.7u GF (82681)	Triallate, water, fltrd 0.7u GF (82678)	Tri-fluralin, water, fltrd 0.7u GF (82661)	Suspended sediment concentration mg/L (80154)
NOV 19...	<.02	<.034	<.02	<.010	<.002	<.009	1
JAN 14...	<.02	<.034	<.02	<.010	<.002	<.009	17
FEB 11...	<.02	<.034	<.02	<.010	<.002	<.009	1
MAR 10...	M	<.034	<.02	<.010	<.002	<.009	5
APR 06...	E.01	<.034	<.02	<.010	<.002	<.009	1
MAY 18...	<.02	<.034	<.02	<.010	<.002	<.009	1
JUN 16...	--	--	--	--	--	--	1
JUL 07...	<.02	<.034	<.02	<.010	<.002	<.009	2
AUG 11...	--	--	--	--	--	--	.0
SEP 21...	M	<.034	<.02	<.010	<.002	<.009	1

0Remark codes used in this table:

- < -- Less than
- E -- Estimated value
- M -- Presence verified, not quantified

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Conversion Factors

Multiply	By	To obtain
Length		
inch (in.)	2.54×10^1	millimeter (mm)
	2.54×10^{-2}	meter (m)
foot (ft)	3.048×10^{-1}	meter (m)
mile (mi)	1.609×10^0	kilometer (km)
Area		
acre	4.047×10^3	square meter (m ²)
	4.047×10^{-1}	square hectometer (hm ²)
	4.047×10^{-3}	square kilometer (km ²)
square mile (mi ²)	2.590×10^0	square kilometer (km ²)
Volume		
gallon (gal)	3.785×10^0	liter (L)
	3.785×10^{-3}	cubic meter (m ³)
	3.785×10^0	cubic decimeter (dm ³)
million gallons (Mgal)	3.785×10^3	cubic meter (m ³)
	3.785×10^{-3}	cubic hectometer (hm ³)
cubic foot (ft ³)	2.832×10^{-2}	cubic meter (m ³)
	2.832×10^1	cubic decimeter (dm ³)
cubic-foot-per-second day [(ft ³ /s) d]	2.447×10^3	cubic meter (m ³)
	2.447×10^{-3}	cubic hectometer (hm ³)
acre-foot (acre-ft)	1.233×10^3	cubic meter (m ³)
	1.233×10^{-3}	cubic hectometer (hm ³)
	1.233×10^{-6}	cubic kilometer (km ³)
Flow		
cubic foot per second (ft ³ /s)	2.832×10^1	liter per second (L/s)
	2.832×10^{-2}	cubic meter per second (m ³ /s)
	2.832×10^1	cubic decimeter per second (dm ³ /s)
gallon per minute (gal/min)	6.309×10^{-2}	liter per second (L/s)
	6.309×10^{-5}	cubic meter per second (m ³ /s)
	6.309×10^{-2}	cubic decimeter per second (dm ³ /s)
million gallons per day (Mgal/d)	4.381×10^{-2}	cubic meter per second (m ³ /s)
	4.381×10^1	cubic decimeter per second (dm ³ /s)
Mass		
ton (short)	9.072×10^{-1}	megagram (Mg) or metric ton

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows:

$$^{\circ}\text{F} = (1.8 \times ^{\circ}\text{C}) + 32$$

