

## 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.