

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	838	1,530
LOWEST DAILY MEAN	0.00	0.00	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	0.00	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.