

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.