

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)

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