

## 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.