

## CHARLOTTE HARBOR AND COASTAL AREA

## 02293346 HORSESHOE CANAL AT CAPE CORAL, FL

LOCATION.--Lat 26°40'41", long 82°02'26", in SW ¼ NW ¼ NW ¼ sec.5, T.44 S., R.23 E., Lee County, Hydrologic Unit 03100103, on left bank, 100 ft north of Diplomat Parkway 152 ft upstream from weir and 252 ft east of State Road 765 (Burnt Store Road) in Cape Coral.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--January 1987 to current year.

GAGE.--Electronic data logger. Datum of gage is National Geodetic Vertical Datum of 1929 (State Road Department bench mark).

REMARKS.--Records poor. Gage height records for the 1998, 1999 and 2000 water years were revised based on levels run during the 2001 water year. The corrected gage heights are in the files of the U.S. Geological Survey. Extremely low flows are occasionally affected by water that is diverted from the canal during dry periods by the City of Cape Coral to supplement their dual water supply. Zero flow occurs for numerous days during most water years.

ANNUAL MEAN and ANNUAL RUNOFF (AC-FT) SUMMARY STATISTICS.--Figures represent 17 complete water years of discharge (1988-2004).

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	3.01	2.65	2.53	2.63	2.66	2.70	2.49	2.56	2.39	2.65	3.16	2.81
2	2.96	2.65	2.51	2.62	2.66	2.69	2.49	2.51	2.37	2.68	---	2.76
3	2.94	2.67	2.50	2.60	2.65	2.69	2.49	2.51	2.38	2.67	---	2.75
4	2.90	2.68	2.50	2.59	2.65	2.67	2.48	2.50	2.41	2.72	---	2.76
5	2.89	2.68	2.50	2.58	2.64	2.67	2.48	2.48	2.41	2.71	---	2.79
6	2.87	2.71	2.51	2.58	2.64	2.67	2.49	2.48	2.39	2.69	3.33	3.02
7	2.85	2.72	2.51	2.57	2.63	2.66	2.48	2.49	2.38	2.69	3.17	2.91
8	2.84	2.72	2.51	2.55	2.63	2.65	2.47	2.47	2.40	2.68	3.05	2.89
9	2.82	2.70	2.50	2.56	2.62	2.64	2.45	2.47	2.46	2.67	2.97	2.90
10	2.82	2.69	2.50	2.55	2.59	2.63	2.44	2.47	2.46	2.67	2.94	2.98
11	2.82	2.68	2.52	2.54	2.58	2.62	2.43	2.49	2.47	2.70	2.92	2.93
12	2.82	2.67	2.51	2.54	2.56	2.62	2.47	2.47	2.48	2.81	2.88	2.88
13	2.81	2.66	2.50	2.53	2.55	2.62	2.50	2.45	2.49	2.76	3.13	2.84
14	2.80	2.65	2.58	2.54	2.55	2.61	2.48	2.46	2.56	2.70	3.41	2.82
15	2.79	2.65	2.55	2.54	2.57	2.60	2.46	2.44	2.62	2.66	3.14	2.79
16	2.79	2.65	2.57	2.53	2.56	2.61	2.45	2.44	2.66	2.65	3.06	2.78
17	2.78	2.63	2.62	2.53	2.56	2.61	2.43	2.45	2.70	2.65	3.09	2.77
18	2.78	2.61	2.64	2.61	2.55	2.60	2.42	2.44	2.70	2.65	3.00	2.77
19	2.78	2.59	---	2.64	2.55	2.59	2.42	2.43	2.71	2.70	2.96	2.76
20	2.78	2.58	---	2.63	2.55	2.58	2.40	2.46	2.70	2.96	2.98	2.76
21	2.77	2.57	---	2.64	2.55	2.56	2.42	2.45	2.68	3.00	2.95	2.80
22	2.77	2.56	---	2.64	2.54	2.56	2.41	2.44	2.66	2.94	2.99	2.79
23	2.76	2.56	---	2.64	2.55	2.55	2.41	2.42	2.64	2.88	3.07	2.77
24	2.76	2.56	---	2.65	2.54	2.54	2.40	2.42	2.65	2.83	3.00	2.76
25	2.72	2.55	2.71	2.64	---	2.53	2.41	2.43	2.67	2.84	2.97	2.76
26	2.70	2.55	2.70	2.64	---	2.52	2.40	2.41	2.66	2.84	2.96	2.96
27	2.70	2.55	2.70	2.64	2.71	2.52	2.39	2.40	2.65	2.83	2.93	2.79
28	2.70	2.54	2.69	2.63	2.71	2.51	2.39	2.39	2.66	2.88	2.93	2.76
29	2.71	2.54	2.68	2.62	2.71	2.51	2.40	2.40	2.65	3.03	2.88	2.75
30	2.69	2.54	2.67	2.63	---	2.52	2.48	2.39	2.64	3.05	2.85	2.74
31	2.68	---	2.66	2.65	---	2.52	---	2.38	---	2.98	2.83	---
TOTAL	86.81	78.76	---	80.48	---	80.57	73.33	76.00	76.70	86.17	---	84.55
MEAN	2.80	2.63	---	2.60	---	2.60	2.44	2.45	2.56	2.78	---	2.82
MAX	3.01	2.72	---	2.65	---	2.70	2.50	2.56	2.71	3.05	---	3.02
MIN	2.68	2.54	---	2.53	---	2.51	2.39	2.38	2.37	2.65	---	2.74

02293346 HORSESHOE CANAL AT CAPE CORAL, 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	87	13	0.51	11	15	20	0.07	4.4	0.00	14	142	38
2	74	12	0.03	9.1	14	19	0.00	0.32	0.00	17	e177	31
3	66	15	0.00	7.4	13	18	0.03	0.30	0.00	16	e296	29
4	58	16	0.00	6.2	14	16	0.00	0.06	0.00	23	e399	31
5	54	16	0.00	5.6	13	15	0.00	0.00	0.00	21	e309	35
6	49	19	0.01	5.0	12	15	0.02	0.00	0.00	19	185	e45
7	45	20	0.00	4.3	11	14	0.00	0.04	0.00	18	131	59
8	43	20	0.00	2.7	11	13	0.00	0.00	0.00	18	94	56
9	40	17	0.00	3.2	9.6	12	0.00	0.00	0.01	16	75	58
10	39	16	0.02	3.1	6.9	10	0.00	0.00	0.00	15	68	76
11	39	14	0.07	2.1	5.4	9.8	0.00	0.00	0.36	21	61	64
12	39	13	0.03	1.9	3.4	9.3	0.03	0.00	0.09	39	53	54
13	38	12	0.00	1.3	2.7	9.6	0.10	0.00	0.25	29	e120	45
14	35	11	6.9	1.9	2.8	8.4	0.01	0.00	5.0	20	217	41
15	34	11	3.0	1.8	4.8	7.1	0.00	0.00	12	15	122	36
16	33	10	5.6	1.3	3.5	8.4	0.00	0.00	15	14	97	33
17	32	8.9	9.6	1.4	3.3	8.3	0.00	0.00	20	14	108	32
18	32	6.5	12	9.8	3.0	7.2	0.00	0.00	20	13	83	31
19	32	4.7	e20	12	2.7	6.3	0.00	0.00	22	20	73	30
20	32	3.9	e22	11	2.6	5.3	0.00	0.00	20	76	78	30
21	30	2.8	e22	12	3.0	3.6	0.00	0.00	18	81	69	37
22	29	2.0	e22	12	2.2	3.2	0.00	0.00	15	67	83	36
23	28	2.0	e22	12	2.6	2.7	0.00	0.00	13	54	102	32
24	28	2.0	e22	13	2.3	2.3	0.00	0.00	13	43	82	30
25	22	1.6	22	12	e11	1.2	0.00	0.00	16	46	74	29
26	19	1.4	21	12	e22	0.92	0.00	0.00	14	44	71	e27
27	19	1.4	20	12	22	1.0	0.00	0.00	13	43	65	35
28	19	1.00	19	11	22	0.53	0.00	0.00	14	54	64	30
29	21	0.90	17	10	21	0.51	0.00	0.00	13	89	54	27
30	18	0.90	16	11	---	0.66	0.45	0.00	12	95	47	27
31	16	---	15	14	---	0.84	---	0.00	---	78	42	---
TOTAL	1,150	275.00	297.77	233.1	261.8	249.16	0.71	5.12	255.71	1,132	3,641	1,164
MEAN	37.1	9.17	9.61	7.52	9.03	8.04	0.02	0.17	8.52	36.5	117	38.8
MAX	87	20	22	14	22	20	0.45	4.4	22	95	399	76
MIN	16	0.90	0.00	1.3	2.2	0.51	0.00	0.00	0.00	13	42	27
AC-FT	2,280	545	591	462	519	494	1.4	10	507	2,250	7,220	2,310

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2004, BY WATER YEAR (WY)

	MEAN	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	29.2	12.1	9.23	10.4	11.4	10.1	5.62	7.50	36.1	56.3	60.2	55.6
MAX	93.0	43.3	60.5	62.4	130	72.9	27.8	43.4	88.0	115	134	128
(WY)	(1996)	(2003)	(1998)	(1998)	(1998)	(1998)	(1987)	(1991)	(1995)	(1991)	(1995)	(2001)
MIN	4.44	0.14	0.01	0.01	0.00	0.00	0.00	0.00	0.04	8.90	27.5	12.7
(WY)	(1990)	(2001)	(2001)	(2001)	(2001)	(2002)	(1999)	(1999)	(2001)	(2000)	(2000)	(1990)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1987 - 2004

ANNUAL TOTAL	13,241.26	8,665.37	
ANNUAL MEAN	36.3	23.7	25.1
HIGHEST ANNUAL MEAN			50.1
LOWEST ANNUAL MEAN			10.9
HIGHEST DAILY MEAN	600	399	1,060
LOWEST DAILY MEAN	0.00*	0.00	0.00**
ANNUAL SEVEN-DAY MINIMUM	0.00*	0.00	0.00**
MAXIMUM PEAK FLOW		e486	1,420
MAXIMUM PEAK STAGE		e4.00	5.10
INSTANTANEOUS LOW FLOW			0.00**
ANNUAL RUNOFF (AC-FT)	26,260	17,190	18,220
10 PERCENT EXCEEDS	86	64	66
50 PERCENT EXCEEDS	21	12	7.3
90 PERCENT EXCEEDS	0.13	0.00	0.00

e Estimated

\* Many days.

\*\* Many days during water years 1989-90, 1992, 1994-2002, 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.