

Water-Data Report 2011

**02293190 BILLY'S CREEK AT FT MYERS, FL**

Southern Florida Basin  
Caloosahatchee Subbasin

LOCATION.--Lat 26°39'14", long 81°50'26" referenced to North American Datum of 1983, Lee County, FL, Hydrologic Unit 03090205, located 375 yards upstream from S.R. 80 bridge on the right bank, 1 mi northeast of downtown Fort Myers.

DRAINAGE AREA.--Indeterminate

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--

DISCHARGE: February 2008 to current year.

GAGE HEIGHT: February 2008 to current year.

REVISED RECORDS.--WDR-US-2010 site 02293090: 2008, 2009, gage height daily values and extremes revised to NAVD88 datum.

GAGE.--Internally logging acoustic Doppler velocity meter with acoustic stage recorder. Datum of gage is North American Vertical Datum of 1988 (NAVD88).

REMARKS.--Records fair, except for those of estimated daily discharges, which are poor. Streamflow at this site is significantly affected by astronomical tides. Daily mean discharge was computed from filtered unit value discharge data. The Godin low-pass filter was used to remove principal tidal frequencies from unit values. Positive discharge is generally to the southwest and negative discharge to the northeast. Discharge and gage height 15 minute data, are available in the files of the U.S. Geological Survey. Data can also be accessed online at <http://sofia.usgs.gov/>. Daily values of discharge and gage height are available online at <http://waterdata.usgs.gov/nwis>.

EXTREMES FOR PERIOD OF RECORD.--

DISCHARGE: Maximum positive discharge (unfiltered), 553 ft<sup>3</sup>/s Aug. 19, 2008; maximum negative (unfiltered), 183 ft<sup>3</sup>/s June 22, 2011.

GAGE HEIGHT: Maximum gage height, 2.16 ft Sept. 10, 2008; minimum, -3.02 ft Sept. 30, 2009.

EXTREMES FOR CURRENT YEAR.--

DISCHARGE: Maximum positive discharge (unfiltered), 399 ft<sup>3</sup>/s July 12; maximum negative discharge (unfiltered), 183 ft<sup>3</sup>/s June 22.

GAGE HEIGHT: Maximum gage height, 1.84 ft Sept. 6; minimum, -2.45 ft Jan. 13.

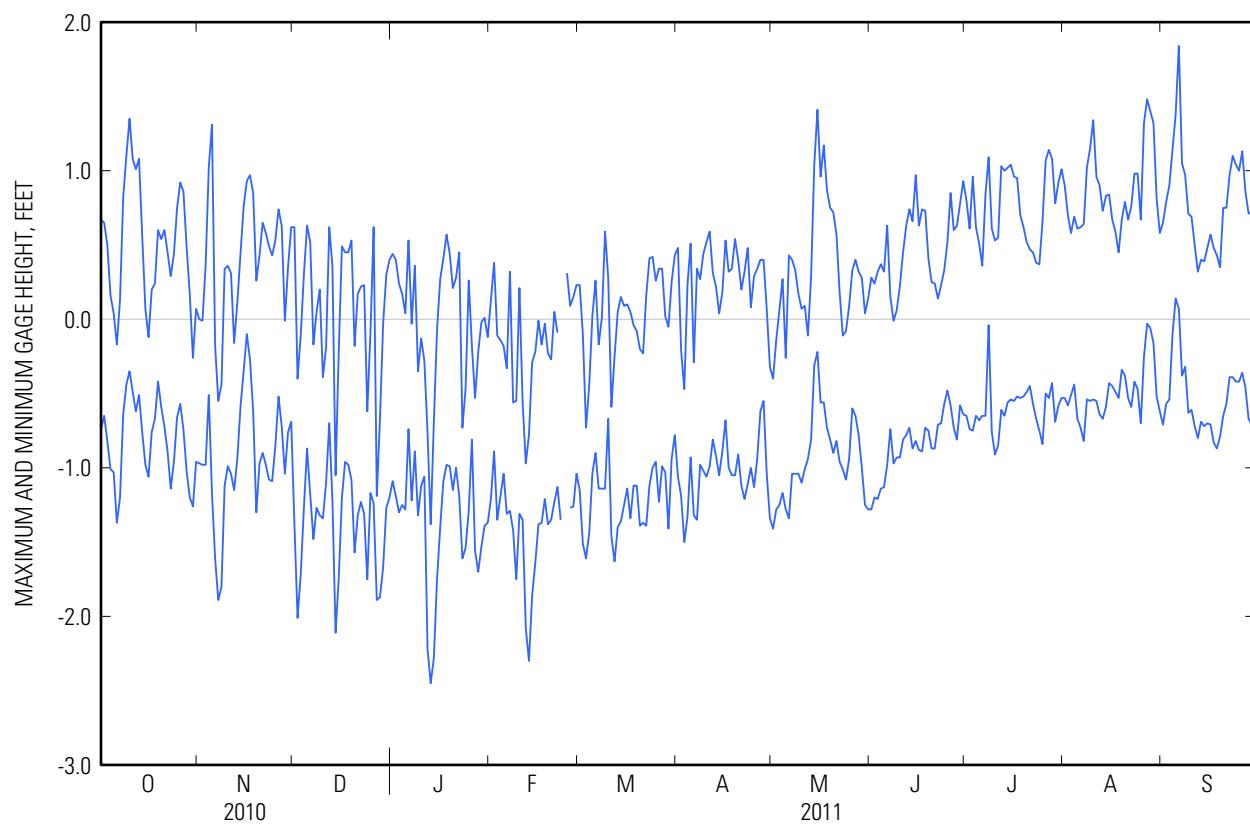
**02293190 BILLY'S CREEK AT FT MYERS, FL—Continued**
**GAGE HEIGHT, FEET**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	<b>October</b>		<b>November</b>		<b>December</b>		<b>January</b>		<b>February</b>		<b>March</b>	
<b>1</b>	0.67	-0.74	0.00	-0.97	0.62	-1.37	0.44	-1.09	0.13	-1.21	0.23	-1.15
<b>2</b>	0.65	-0.65	-0.01	-0.98	-0.40	-2.01	0.40	-1.19	0.38	-0.89	-0.10	-1.51
<b>3</b>	0.50	-0.82	0.36	-0.98	-0.11	-1.72	0.24	-1.30	-0.11	-1.35	-0.73	-1.61
<b>4</b>	0.16	-1.01	1.02	-0.51	0.30	-1.27	0.17	-1.25	-0.14	-1.19	-0.45	-1.44
<b>5</b>	0.04	-1.03	1.31	-1.17	0.63	-0.87	0.04	-1.28	-0.18	-1.04	0.02	-1.04
<b>6</b>	-0.17	-1.37	-0.18	-1.61	0.52	-1.18	0.53	-0.74	-0.33	-1.31	0.26	-0.90
<b>7</b>	0.13	-1.20	-0.55	-1.89	-0.17	-1.48	-0.03	-1.22	0.32	-1.29	-0.17	-1.14
<b>8</b>	0.82	-0.64	-0.44	-1.80	0.05	-1.27	0.36	-0.89	-0.56	-1.42	0.01	-1.14
<b>9</b>	1.10	-0.44	0.34	-1.12	0.20	-1.32	-0.35	-1.32	-0.55	-1.75	0.59	-1.14
<b>10</b>	1.35	-0.35	0.36	-0.99	-0.39	-1.34	-0.13	-1.12	0.21	-1.31	0.28	-0.67
<b>11</b>	1.08	-0.49	0.31	-1.04	-0.19	-1.10	-0.28	-1.06	-0.56	-1.35	-0.59	-1.46
<b>12</b>	1.01	-0.62	-0.16	-1.15	0.62	-0.70	-0.76	-2.22	-0.97	-2.08	-0.25	-1.63
<b>13</b>	1.08	-0.51	0.11	-0.94	0.36	-1.22	-1.38	-2.45	-0.78	-2.30	0.05	-1.40
<b>14</b>	0.56	-0.76	0.44	-0.59	-1.05	-2.11	-0.69	-2.28	-0.29	-1.86	0.15	-1.36
<b>15</b>	0.07	-0.98	0.76	-0.35	-0.21	-1.74	-0.07	-1.75	-0.22	-1.64	0.09	-1.25
<b>16</b>	-0.12	-1.06	0.93	-0.10	0.49	-1.20	0.27	-1.40	-0.01	-1.38	0.10	-1.14
<b>17</b>	0.20	-0.76	0.97	-0.27	0.45	-0.96	0.41	-1.09	-0.17	-1.37	0.05	-1.34
<b>18</b>	0.24	-0.67	0.85	-0.62	0.45	-0.98	0.57	-0.98	-0.03	-1.21	-0.04	-1.12
<b>19</b>	0.60	-0.42	0.26	-1.30	0.53	-1.08	0.44	-0.99	-0.23	-1.38	-0.08	-1.12
<b>20</b>	0.54	-0.59	0.43	-0.97	-0.18	-1.57	0.21	-1.15	-0.27	-1.35	-0.20	-1.39
<b>21</b>	0.60	-0.72	0.65	-0.90	0.17	-1.32	0.28	-1.00	0.05	-1.23	-0.23	-1.37
<b>22</b>	0.45	-0.89	0.58	-0.98	0.22	-1.23	0.45	-1.19	-0.09	-1.13	0.16	-1.39
<b>23</b>	0.29	-1.14	0.49	-1.08	0.23	-1.31	-0.73	-1.61	---	-1.35	0.41	-1.12
<b>24</b>	0.44	-0.96	0.43	-1.09	-0.62	-1.75	-0.47	-1.54	---	---	0.42	-1.00
<b>25</b>	0.75	-0.66	0.53	-0.85	-0.09	-1.17	0.26	-1.29	0.31	---	0.26	-0.96
<b>26</b>	0.92	-0.57	0.74	-0.52	0.62	-1.24	-0.18	-0.81	0.09	-1.27	0.34	-1.23
<b>27</b>	0.86	-0.74	0.63	-0.72	-1.19	-1.89	-0.53	-1.56	0.15	-1.26	0.34	-0.99
<b>28</b>	0.49	-1.02	-0.01	-1.04	-0.67	-1.87	-0.22	-1.70	0.23	-1.04	0.02	-1.03
<b>29</b>	0.17	-1.20	0.35	-0.76	-0.03	-1.67	-0.02	-1.53	---	---	-0.05	-1.41
<b>30</b>	-0.26	-1.26	0.62	-0.69	0.30	-1.27	0.01	-1.39	---	---	0.25	-0.94
<b>31</b>	0.07	-0.96	---	---	0.40	-1.20	-0.12	-1.37	---	---	0.43	-0.78
<b>Month</b>	1.35	-1.37	1.31	-1.89	0.63	-2.11	0.57	-2.45	---	---	0.59	-1.63

**02293190 BILLY'S CREEK AT FT MYERS, FL—Continued**
**GAGE HEIGHT, FEET**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	<b>April</b>		<b>May</b>		<b>June</b>		<b>July</b>		<b>August</b>		<b>September</b>	
<b>1</b>	0.48	-1.06	-0.40	-1.41	0.28	-1.28	0.80	-0.65	0.90	-0.53	0.65	-0.71
<b>2</b>	-0.21	-1.19	-0.14	-1.28	0.24	-1.20	0.61	-0.74	0.70	-0.58	0.79	-0.57
<b>3</b>	-0.47	-1.50	0.06	-1.25	0.32	-1.21	0.96	-0.75	0.58	-0.51	0.90	-0.54
<b>4</b>	0.23	-1.33	0.27	-1.17	0.37	-1.14	0.62	-0.65	0.69	-0.44	1.14	-0.10
<b>5</b>	0.51	-0.93	-0.26	-1.28	0.32	-1.13	0.51	-0.68	0.61	-0.67	1.38	0.14
<b>6</b>	-0.29	-1.32	0.43	-1.34	0.63	-0.98	0.36	-0.65	0.62	-0.73	1.84	0.07
<b>7</b>	0.34	-1.35	0.40	-1.04	0.15	-0.74	0.84	-0.65	0.64	-0.82	1.05	-0.38
<b>8</b>	0.27	-0.98	0.33	-1.04	-0.01	-0.97	1.09	-0.04	1.02	-0.54	0.97	-0.32
<b>9</b>	0.44	-1.02	0.17	-1.04	0.06	-0.93	0.61	-0.76	1.15	-0.55	0.71	-0.63
<b>10</b>	0.52	-1.06	0.07	-1.10	0.22	-0.93	0.53	-0.91	1.34	-0.54	0.69	-0.61
<b>11</b>	0.59	-0.99	0.09	-1.01	0.45	-0.81	0.55	-0.85	0.96	-0.55	0.50	-0.72
<b>12</b>	0.31	-0.81	-0.11	-0.94	0.63	-0.78	1.03	-0.61	0.90	-0.64	0.32	-0.80
<b>13</b>	0.22	-0.92	0.29	-0.81	0.74	-0.73	1.00	-0.65	0.73	-0.67	0.40	-0.69
<b>14</b>	0.04	-1.05	1.04	-0.31	0.66	-0.87	1.02	-0.56	0.83	-0.59	0.39	-0.72
<b>15</b>	0.18	-0.89	1.41	-0.22	0.97	-0.82	1.04	-0.54	0.84	-0.43	0.48	-0.70
<b>16</b>	0.53	-0.68	0.96	-0.56	0.63	-0.88	0.96	-0.55	0.67	-0.45	0.57	-0.71
<b>17</b>	0.32	-1.00	1.17	-0.56	0.74	-0.89	0.95	-0.52	0.59	-0.49	0.48	-0.83
<b>18</b>	0.34	-1.05	0.87	-0.73	0.73	-0.73	0.70	-0.53	0.45	-0.53	0.43	-0.87
<b>19</b>	0.54	-1.05	0.75	-0.81	0.41	-0.75	0.62	-0.52	0.67	-0.34	0.35	-0.79
<b>20</b>	0.40	-0.91	0.72	-0.90	0.25	-0.87	0.52	-0.49	0.79	-0.38	0.75	-0.65
<b>21</b>	0.20	-1.12	0.57	-0.82	0.24	-0.87	0.47	-0.45	0.67	-0.53	0.75	-0.57
<b>22</b>	0.32	-1.21	0.18	-0.96	0.14	-0.71	0.45	-0.57	0.76	-0.59	0.97	-0.39
<b>23</b>	0.48	-1.11	-0.11	-1.01	0.23	-0.70	0.38	-0.67	0.98	-0.42	1.10	-0.39
<b>24</b>	0.08	-1.00	-0.08	-1.08	0.33	-0.57	0.37	-0.75	0.98	-0.47	1.04	-0.42
<b>25</b>	0.29	-1.13	0.09	-0.94	0.52	-0.48	0.66	-0.84	0.67	-0.70	1.00	-0.42
<b>26</b>	0.34	-0.94	0.33	-0.60	0.85	-0.58	1.07	-0.50	1.32	-0.25	1.13	-0.36
<b>27</b>	0.40	-0.62	0.40	-0.65	0.60	-0.73	1.14	-0.53	1.48	-0.03	0.86	-0.46
<b>28</b>	0.40	-0.55	0.32	-0.78	0.63	-0.81	1.08	-0.43	1.40	-0.06	0.71	-0.67
<b>29</b>	0.07	-1.04	0.28	-1.00	0.78	-0.58	0.78	-0.69	1.32	-0.16	0.73	-0.71
<b>30</b>	-0.32	-1.34	0.04	-1.25	0.93	-0.64	0.92	-0.58	0.81	-0.52	0.84	-0.66
<b>31</b>	---	---	0.14	-1.28	---	---	1.01	-0.53	0.58	-0.62	---	---
<b>Month</b>	0.59	-1.50	1.41	-1.41	0.97	-1.28	1.14	-0.91	1.48	-0.82	1.84	-0.87

**02293190 BILLY'S CREEK AT FT MYERS, FL—Continued**



## Water-Data Report 2011

02293190 BILLY'S CREEK AT FT MYERS, FL—Continued

**DISCHARGE, TIDALLY FILTERED, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**  
**DAILY MEAN VALUES**  
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	13	-0.54	3.9	0.62	-3.8	-0.38	0.08	-6.5	0.30	3.8	17	40
2	13	0.34	-3.1	3.7	0.20	-3.0	-2.3	-7.3	-4.3	-6.0	21	47
3	14	-1.3	-4.6	4.3	-0.84	-6.4	-3.2	-4.1	-7.2	-1.8	28	39
4	9.8	19	-5.3	-2.0	-2.3	-9.3	-4.5	0.85	-3.3	0.03	25	32
5	6.9	32	0.17	-2.5	-5.0	-7.0	-1.0	-3.5	-0.55	-5.4	22	35
6	4.9	13	4.9	5.5	-4.6	-2.6	-4.7	-6.1	1.3	-8.0	17	111
7	-1.8	3.3	-2.2	-3.0	-1.5	-2.6	-2.5	-1.2	0.54	-2.8	17	135
8	1.6	-0.88	-4.0	-1.4	-1.1	-8.0	0.20	0.17	-5.4	9.8	32	82
9	6.2	4.3	-1.4	-2.0	-5.0	-4.3	-2.5	-2.4	-6.0	5.8	49	64
10	5.8	-1.1	-5.3	-3.2	-1.3	-0.55	-4.9	-5.6	-5.2	15	136	50
11	6.7	-7.3	-8.2	0.97	4.6	-3.6	-3.8	-3.1	-3.8	57	169	45
12	9.5	-7.5	-3.4	2.9	0.43	-5.8	1.4	-4.3	-3.1	130	150	44
13	12	-9.3	5.5	-2.9	-4.0	-4.4	0.33	-5.1	-1.5	113	101	38
14	10	-10	-1.2	-5.6	-6.1	-0.56	-5.1	10	-0.49	58	68	36
15	2.3	-12	-5.9	-4.4	-5.3	1.2	-4.1	19	0.02	34	52	34
16	-3.7	-0.53	-3.7	-2.7	-6.0	2.0	-0.24	0.16	-1.2	30	46	32
17	-5.2	10	0.66	-0.41	-7.9	-1.8	0.70	-0.90	-1.9	61	55	29
18	-2.3	6.9	-2.5	1.7	-5.9	-6.0	-0.71	1.4	-2.6	60	58	23
19	4.5	-4.9	-2.6	-0.24	-8.8	-3.5	-0.20	-0.94	-3.0	35	46	18
20	7.4	-4.7	-9.2	-3.5	-12	-5.7	-0.50	-2.3	-2.7	24	39	18
21	4.8	1.7	-9.5	-4.7	-6.8	-5.0	-5.0	2.6	-3.9	23	57	19
22	-2.1	2.0	-2.3	-2.3	e-4.2	-3.1	-3.6	-0.10	-2.2	61	57	32
23	-4.3	1.2	-0.84	-3.4	e-3.1	-2.2	-2.2	-1.9	-4.4	111	75	34
24	-2.7	-0.10	-6.0	-1.9	e1.6	-0.84	-0.84	-3.2	3.2	109	96	34
25	-0.86	-0.06	-3.8	9.0	e2.0	0.55	-2.0	-6.6	4.7	54	62	32
26	4.7	3.3	4.5	11	e2.6	-1.8	-7.3	-4.5	2.4	30	41	30
27	8.2	5.0	1.7	-0.27	e-4.5	6.9	-6.3	7.2	19	32	35	32
28	6.7	-5.0	-1.8	-4.2	-1.2	16	-2.4	0.85	11	34	35	29
29	-0.17	-8.9	-4.4	-5.4	---	-2.4	-2.7	-1.2	20	30	39	25
30	-7.7	-1.6	-3.7	-2.7	---	-5.8	-5.8	-4.1	22	18	42	24
31	-6.5	---	-2.1	-5.1	---	-2.2	---	-2.9	---	18	36	---
<b>Total</b>	114.67	26.33	-75.71	-24.13	-89.81	-72.18	-75.68	-35.61	21.72	1,132.43	1,723	1,243
<b>Mean</b>	3.70	0.88	-2.44	-0.78	-3.21	-2.33	-2.52	-1.15	0.72	36.5	55.6	41.4
<b>Max</b>	14	32	5.5	11	4.6	16	1.4	19	22	130	169	135
<b>Min</b>	-7.7	-12	-9.5	-5.6	-12	-9.3	-7.3	-7.3	-7.2	-8.0	17	18

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2008 - 2011, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	13.6	0.28	-1.10	-1.50	-2.25	-2.45	5.23	4.89	9.51	29.2	47.5	48.9
<b>Max</b>	29.9	0.88	0.25	-0.78	-1.29	-1.74	21.8	18.1	18.8	36.5	57.3	55.3
(WY)	(2009)	(2011)	(2010)	(2011)	(2010)	(2009)	(2010)	(2010)	(2010)	(2011)	(2008)	(2009)
<b>Min</b>	3.70	-0.09	-2.44	-2.23	-3.21	-3.27	-3.54	-1.15	0.72	22.1	36.8	41.4
(WY)	(2011)	(2009)	(2011)	(2010)	(2011)	(2008)	(2008)	(2011)	(2011)	(2010)	(2010)	(2011)

**02293190 BILLY'S CREEK AT FT MYERS, FL—Continued****SUMMARY STATISTICS**

	Water Year 2011		Water Years 2008 - 2011	
<b>Annual total</b>	3,888.03			
<b>Annual mean</b>	10.7		10.7	
<b>Highest annual mean</b>			10.7	2011
<b>Lowest annual mean</b>			10.7	2011
<b>Highest daily mean</b>	169	Aug 11	218	Sep 30, 2008
<b>Lowest daily mean</b>	-12	Nov 15	-12	Jun 24, 2008
<b>Annual seven-day minimum</b>	-7.5	Feb 15	-7.5	Feb 15, 2011
<b>10 percent exceeds</b>	40		40	
<b>50 percent exceeds</b>	-0.49		-0.49	
<b>90 percent exceeds</b>	-5.8		-5.8	

