

Water-Data Report 2013

02301990 HILLSBOROUGH RIVER ABOVE CRYSTAL SPRINGS NEAR ZEPHYRHILLS, FL.

Tampa Bay Basin
Hillsborough Subbasin

LOCATION.--Lat 28°11'08", long 82°11'03" referenced to North American Datum of 1983, in NW ¼ sec.35, T.26 S., R.21 E., Pasco County, FL, Hydrologic Unit 03100205, near center span, on downstream side of bridge on former State Highway 23, 0.2 mi upstream from Crystal Springs, 1.5 mi west of village of Crystal Springs, and 3.0 mi south of Zephyrhills.

DRAINAGE AREA.--82.0 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1941 to August 1964 (fragmentary); September 1964 to September 1983 (gage heights only), incomplete; October 1983 to current year. Records of gage heights prior to October 1963 are available in files of the Geological Survey.

REVISED RECORDS.--

WRD FL-98-3A: 1997 (M and daily).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 and 0.95 ft. below North American Vertical Datum of 1988. Prior to Sept. 12, 1941, nonrecording gage (reference point) at same site at datum 63.30 ft higher; Sept. 12, 1941, to May 14, 1964, nonrecording gage at same site at datum 50.97 ft higher; May 14, 1964, to June 1, 1994, water-stage recorder at same site at present datum.

COOPERATION.--This gage is monitored in cooperation with the Southwest Florida Water Management District.

REMARKS.--Records good. Discharge measurements made at this site are used in conjunction with those made downstream from Crystal Springs (station 02302000) to determine spring flow.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	137	32	21	24	18	15	11	11	11	73	69	101
2	144	31	21	23	18	14	11	12	14	78	50	89
3	228	30	21	23	18	14	11	11	11	86	43	81
4	277	30	21	24	17	14	12	11	11	115	46	75
5	335	29	21	24	17	14	13	11	11	116	51	77
6	351	29	20	23	17	14	12	10	26	113	52	83
7	352	29	20	23	17	14	12	10	27	114	52	149
8	326	28	21	24	16	14	12	10	22	101	54	165
9	300	27	22	23	16	14	11	10	28	82	62	164
10	287	27	22	23	16	13	11	9.9	31	66	63	147
11	270	27	23	22	16	13	11	10	27	53	57	125
12	249	26	23	22	16	14	12	10	24	48	51	104
13	229	26	23	21	16	14	11	10	22	53	44	87
14	213	26	22	21	17	13	11	9.9	20	71	41	76
15	187	26	22	21	18	13	11	9.8	20	54	37	151
16	160	26	22	21	17	13	10	9.7	21	49	33	146
17	138	26	22	21	17	13	9.8	9.5	22	47	31	140
18	121	25	22	21	16	13	9.4	9.4	27	48	34	127
19	104	25	21	21	16	12	11	9.4	32	66	44	111
20	87	25	21	21	16	12	10	9.9	38	72	37	96
21	72	25	24	21	16	12	11	10	41	68	33	81
22	60	24	22	21	16	12	11	9.9	39	63	48	70
23	52	24	22	20	15	14	10	9.7	37	61	73	95
24	46	23	22	20	15	13	10	9.5	34	67	110	230
25	43	23	22	20	15	13	10	9.3	32	90	138	252
26	41	22	23	19	16	12	9.8	9.2	32	121	126	285
27	39	22	23	19	16	12	9.7	9.2	41	107	127	307
28	37	22	23	18	15	12	9.7	9.2	37	98	115	331
29	35	22	29	18	---	12	9.6	9.3	42	95	106	349
30	34	21	26	18	---	12	12	9.5	62	81	106	353
31	32	---	24	18	---	11	---	9.4	---	70	125	---
Total	4,986	778	691	658	459	405	325.0	307.7	842	2,426	2,058	4,647
Mean	161	25.9	22.3	21.2	16.4	13.1	10.8	9.93	28.1	78.3	66.4	155
Max	352	32	29	24	18	15	13	12	62	121	138	353
Min	32	21	20	18	15	11	9.4	9.2	11	47	31	70
Ac-ft	9,890	1,540	1,370	1,310	910	803	645	610	1,670	4,810	4,080	9,220
Cfsm	1.96	0.32	0.27	0.26	0.20	0.16	0.13	0.12	0.34	0.95	0.81	1.89
In.	2.26	0.35	0.31	0.30	0.21	0.18	0.15	0.14	0.38	1.10	0.93	2.11

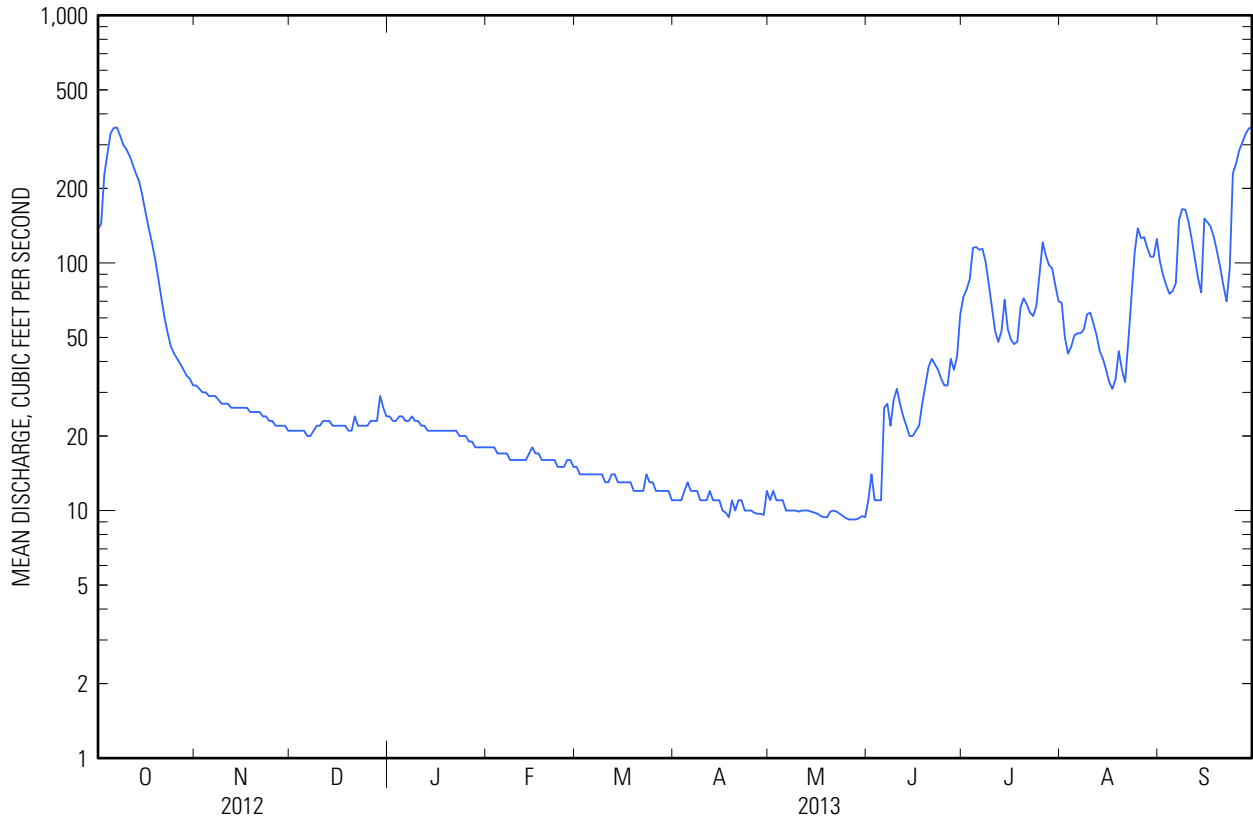
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	85.0	30.7	87.7	62.3	49.5	52.7	35.0	13.2	26.9	76.4	103	162
Max	568	209	1,139	529	622	496	198	25.9	173	343	460	1,046
(WY)	(2005)	(1998)	(1998)	(1998)	(1998)	(1998)	(2011)	(1996)	(2003)	(2005)	(2003)	(2004)
Min	7.24	6.53	5.62	5.10	4.78	5.63	5.72	4.31	4.70	7.02	9.46	9.56
(WY)	(2001)	(2001)	(2011)	(2001)	(2001)	(2001)	(2001)	(2001)	(2000)	(2000)	(1993)	(2000)

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SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1990 - 2013	
Annual total	31,352.7		18,582.7			
Annual mean	85.7		50.9		65.6	
Highest annual mean					282	1998
Lowest annual mean					9.92	2000
Highest daily mean	717	Aug 29	353	Sep 30	2,700	Dec 13, 1997
Lowest daily mean	6.7	May 23	9.2	May 26	3.4	Apr 8, 1991
Annual seven-day minimum	6.8	May 21	9.3	May 25	3.6	May 25, 2001
Maximum peak flow			358	Oct 6	2,700	Dec 13, 1997
Maximum peak stage			54.37	Oct 6	56.65	Sep 27, 2004
Annual runoff (ac-ft)	62,190		36,860		47,500	
Annual runoff (cfsm)	1.04		0.621		0.800	
Annual runoff (inches)	14.22		8.43		10.86	
10 percent exceeds	272		125		144	
50 percent exceeds	21		23		18	
90 percent exceeds	8.0		10		7.9	



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GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	53.53	52.50	52.26	52.35	52.20	52.11	52.01	52.00	51.99	53.06	52.99	53.28
2	53.56	52.48	52.26	52.34	52.19	52.10	52.00	52.02	52.14	53.10	52.80	53.18
3	53.95	52.47	52.26	52.33	52.18	52.10	52.00	52.02	52.02	53.16	52.70	53.11
4	54.13	52.46	52.25	52.37	52.18	52.10	52.06	52.01	52.00	53.38	52.74	53.06
5	54.31	52.45	52.25	52.36	52.16	52.09	52.07	51.98	52.00	53.38	52.81	53.07
6	54.35	52.45	52.25	52.35	52.15	52.09	52.04	51.97	52.49	53.36	52.82	53.13
7	54.35	52.44	52.25	52.35	52.15	52.08	52.02	51.96	52.56	53.37	52.82	53.58
8	54.28	52.42	52.25	52.37	52.14	52.07	52.01	51.95	52.40	53.28	52.85	53.67
9	54.20	52.40	52.30	52.35	52.12	52.07	52.00	51.94	52.57	53.12	52.92	53.66
10	54.16	52.39	52.31	52.33	52.12	52.06	51.99	51.93	52.63	52.96	52.94	53.57
11	54.10	52.39	52.33	52.31	52.12	52.06	51.99	51.95	52.52	52.83	52.87	53.44
12	54.03	52.38	52.32	52.30	52.11	52.08	52.03	51.96	52.44	52.77	52.81	53.30
13	53.96	52.38	52.32	52.29	52.12	52.07	52.00	51.95	52.36	52.81	52.72	53.16
14	53.90	52.37	52.31	52.28	52.17	52.06	51.98	51.94	52.30	53.02	52.66	53.06
15	53.78	52.38	52.30	52.28	52.21	52.05	51.96	51.93	52.27	52.84	52.58	53.59
16	53.65	52.37	52.30	52.28	52.18	52.05	51.94	51.92	52.32	52.79	52.49	53.57
17	53.53	52.37	52.30	52.29	52.16	52.04	51.92	51.92	52.33	52.77	52.45	53.53
18	53.43	52.36	52.29	52.28	52.15	52.04	51.91	51.91	52.47	52.76	52.50	53.45
19	53.31	52.36	52.28	52.28	52.14	52.04	51.98	51.91	52.59	52.97	52.71	53.35
20	53.18	52.36	52.27	52.28	52.14	52.03	51.96	51.94	52.70	53.02	52.57	53.23
21	53.04	52.35	52.35	52.29	52.13	52.04	51.97	51.95	52.77	52.99	52.49	53.11
22	52.93	52.33	52.31	52.29	52.13	52.03	51.97	51.95	52.71	52.93	52.68	53.00
23	52.84	52.32	52.29	52.26	52.12	52.09	51.96	51.94	52.66	52.92	53.03	53.18
24	52.77	52.31	52.29	52.25	52.12	52.07	51.95	51.92	52.60	52.98	53.33	53.95
25	52.72	52.30	52.29	52.25	52.12	52.06	51.94	51.91	52.54	53.18	53.52	54.04
26	52.69	52.28	52.32	52.24	52.14	52.04	51.93	51.90	52.54	53.42	53.45	54.15
27	52.64	52.27	52.33	52.22	52.14	52.03	51.92	51.90	52.70	53.32	53.45	54.22
28	52.60	52.27	52.33	52.21	52.12	52.02	51.92	51.90	52.63	53.25	53.38	54.29
29	52.57	52.27	52.50	52.21	---	52.02	51.92	51.91	52.70	53.23	53.31	54.35
30	52.54	52.26	52.43	52.20	---	52.01	52.05	51.92	52.95	53.11	53.31	54.36
31	52.52	---	52.37	52.21	---	52.01	---	51.92	---	53.00	53.44	---
Mean	53.47	52.37	52.31	52.29	52.15	52.06	51.98	51.94	52.46	53.07	52.91	53.52
Max	54.35	52.50	52.50	52.37	52.21	52.11	52.07	52.02	52.95	53.42	53.52	54.36
Min	52.52	52.26	52.25	52.20	52.11	52.01	51.91	51.90	51.99	52.76	52.45	53.00