

Water-Data Report 2013

02301500 ALAFIA RIVER AT LITHIA, FL.

Tampa Bay Basin
Alafia Subbasin

LOCATION.--Lat 27°52'19", long 82°12'41" referenced to North American Datum of 1927, in NE ¼ sec.16, T.30 S., R.21 E., Hillsborough County, FL, Hydrologic Unit 03100204, near center of span on upstream side of bridge on State Highway 640, 2.0 mi upstream from Little Fishhawk Creek, 4.3 mi west of Lithia, and 16 mi upstream from mouth.

DRAINAGE AREA.--335 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1932 to current year. Monthly discharge only prior to February 1933, published in WSP 1304.

REVISED RECORDS.--WSP 782: 1933(M). WSP 1234: Drainage area. WSP 1274: 1933-35, 1939, 1945, 1947-50.

GAGE.--Water-stage recorder. Datum of gage is 7.00 ft above National Geodetic Vertical Datum of 1929 and 6.04 ft. above North American Vertical Datum of 1988. Prior to Aug. 8, 1939, nonrecording gage at site 200 ft upstream; Aug. 8, 1939, to Sept. 5, 1963, water-stage recorder at site 60 ft downstream; Sept. 6, 1963, to Oct. 14, 1965, water-stage recorder at site 50 ft downstream. Prior to Oct. 14, 1965, at datum 2.86 ft higher.

COOPERATION.--This gage is monitored in cooperation with Southwest Florida Water Management District and with Hillsborough County.

REMARKS.--Records good except estimated daily mean discharges which are poor.

02301500 ALAFIA RIVER AT LITHIA, FL.—Continued

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	456	188	94	118	75	64	48	99	48	493	489	526
2	484	179	105	103	71	61	51	182	53	498	447	481
3	567	174	111	100	67	59	42	198	71	438	516	402
4	733	180	98	99	63	57	42	219	112	473	913	346
5	790	203	90	101	60	56	79	138	105	470	1,070	369
6	1,210	221	87	101	60	55	98	101	309	555	892	443
7	1,330	219	92	104	60	55	96	79	656	553	641	575
8	1,140	197	88	99	61	56	84	71	490	426	569	505
9	1,030	177	96	92	61	58	67	69	818	337	564	429
10	901	160	105	89	58	58	56	67	783	268	535	335
11	747	155	144	88	59	57	65	66	741	225	535	e279
12	631	153	177	80	61	58	67	67	532	217	447	e249
13	536	157	180	83	58	65	74	64	445	349	372	297
14	487	167	172	79	59	63	67	58	331	364	355	331
15	457	174	157	79	76	57	58	52	260	476	430	304
16	437	171	155	81	90	52	52	46	375	645	355	509
17	425	167	144	81	85	48	49	43	318	548	279	590
18	435	167	131	81	77	45	50	41	230	437	299	581
19	419	166	121	77	73	44	54	42	205	405	394	614
20	394	161	114	82	67	43	76	45	199	457	417	674
21	352	152	126	78	62	45	82	57	164	806	398	564
22	315	144	135	77	61	49	87	71	186	1,110	e497	477
23	300	133	123	75	60	92	84	97	179	1,120	717	500
24	294	122	118	75	60	116	70	128	149	802	815	776
25	303	123	110	80	58	88	61	81	164	705	1,460	894
26	293	116	108	78	59	72	55	62	134	917	1,190	1,050
27	283	106	122	76	67	62	49	55	264	1,150	869	951
28	279	103	119	77	70	58	45	48	480	950	783	796
29	262	103	125	75	---	55	42	48	349	794	632	659
30	237	98	136	78	---	52	58	53	276	662	514	593
31	201	---	124	76	---	50	---	49	---	554	504	---
Total	16,728	4,736	3,807	2,662	1,838	1,850	1,908	2,496	9,426	18,204	18,898	16,099
Mean	540	158	123	85.9	65.6	59.7	63.6	80.5	314	587	610	537
Max	1,330	221	180	118	90	116	98	219	818	1,150	1,460	1,050
Min	201	98	87	75	58	43	42	41	48	217	279	249
Med	437	164	121	81	61	57	60	66	262	498	516	507
Ac-ft	33,180	9,390	7,550	5,280	3,650	3,670	3,780	4,950	18,700	36,110	37,480	31,930
Cfs/m	1.61	0.47	0.37	0.26	0.20	0.18	0.19	0.24	0.94	1.75	1.82	1.60
In.	1.86	0.53	0.42	0.30	0.20	0.21	0.21	0.28	1.05	2.02	2.10	1.79

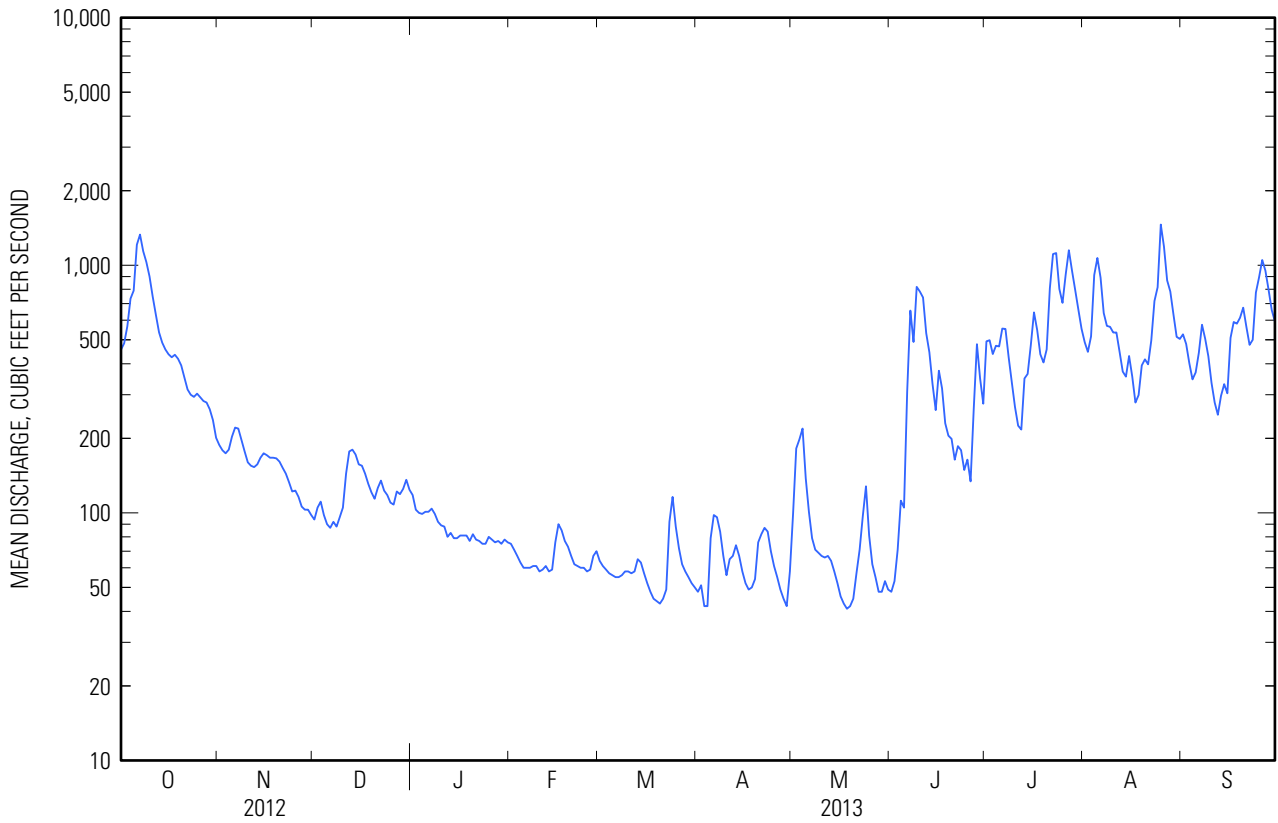
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	344	179	189	233	257	287	188	123	293	502	614	717
Max	1,374	718	1,463	1,023	1,698	1,874	900	748	1,116	2,696	2,319	4,185
(WY)	(1939)	(1954)	(1998)	(2003)	(1998)	(1959)	(1959)	(1957)	(2003)	(1945)	(1949)	(1933)
Min	50.9	28.0	31.8	36.3	33.1	17.5	12.6	9.66	27.0	80.6	138	74.5
(WY)	(1941)	(1941)	(2001)	(2009)	(2001)	(2009)	(2012)	(2001)	(1951)	(1956)	(1989)	(1990)

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SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1933 - 2013	
Annual total	107,006.5		98,652			
Annual mean	292		270		328	
Highest annual mean					845	1960
Lowest annual mean					121	2007
Highest daily mean	2,810	Jun 27	1,460	Aug 25	40,800	Sep 7, 1933
Lowest daily mean	5.1	Apr 17	41	May 18	4.1	May 30, 2000
Annual seven-day minimum	5.5	Apr 13	47	Mar 16	4.2	May 30, 2000
Maximum peak flow			1,570	Aug 25	45,900	Sep 7, 1933
Maximum peak stage			12.75	Aug 25	28.50	Sep 7, 1933
Annual runoff (ac-ft)	212,200		195,700		237,300	
Annual runoff (cfsm)	0.873		0.807		0.978	
Annual runoff (inches)	11.88		10.95		13.29	
10 percent exceeds	773		660		708	
50 percent exceeds	117		134		170	
90 percent exceeds	12		55		50	



02301500 ALAFIA RIVER AT LITHIA, FL.—Continued

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	6.40	4.15	3.20	3.46	3.04	2.96	2.84	3.28	2.81	6.68	6.65	6.94
2	6.62	4.06	3.32	3.30	3.01	2.93	2.85	4.09	2.84	6.72	6.33	6.59
3	7.24	4.02	3.38	3.27	2.98	2.92	2.80	4.22	2.98	6.26	6.85	5.97
4	8.45	4.07	3.25	3.26	2.94	2.90	2.80	4.41	3.36	6.53	9.66	5.53
5	8.85	4.29	3.17	3.28	2.93	2.89	3.08	3.63	3.29	6.51	10.63	5.71
6	11.23	4.46	3.13	3.28	2.92	2.89	3.25	3.25	5.10	7.16	9.53	6.30
7	11.84	4.44	3.18	3.31	2.93	2.89	3.23	3.05	7.89	7.14	7.79	7.30
8	10.96	4.23	3.14	3.25	2.93	2.90	3.11	2.98	6.66	6.15	7.26	6.78
9	10.41	4.04	3.22	3.18	2.93	2.91	2.97	2.96	9.03	5.44	7.22	6.19
10	9.60	3.89	3.33	3.16	2.91	2.90	2.90	2.94	8.79	4.85	7.01	5.44
11	8.55	3.83	3.72	3.15	2.91	2.90	2.96	2.94	8.50	4.46	7.00	---
12	7.71	3.82	4.04	3.08	2.93	2.91	2.98	2.95	6.98	4.40	6.33	---
13	7.01	3.86	4.07	3.11	2.91	2.96	3.03	2.92	6.31	5.54	5.74	5.12
14	6.64	3.95	4.00	3.07	2.92	2.94	2.98	2.88	5.38	5.66	5.59	5.40
15	6.41	4.01	3.86	3.07	3.05	2.90	2.91	2.84	4.77	6.55	6.20	5.17
16	6.25	3.99	3.84	3.09	3.17	2.87	2.86	2.80	5.74	7.81	5.59	6.80
17	6.16	3.95	3.73	3.08	3.12	2.83	2.85	2.77	5.27	7.10	4.96	7.42
18	6.24	3.95	3.60	3.08	3.05	2.82	2.85	2.76	4.51	6.25	5.13	7.35
19	6.11	3.94	3.49	3.06	3.02	2.81	2.88	2.77	4.29	5.99	5.91	7.59
20	5.91	3.89	3.42	3.09	2.98	2.80	3.05	2.79	4.22	6.40	6.09	8.03
21	5.57	3.81	3.54	3.06	2.94	2.82	3.10	2.87	3.89	8.95	5.95	7.22
22	5.27	3.73	3.64	3.06	2.93	2.84	3.14	2.98	4.10	10.80	---	6.57
23	5.14	3.61	3.51	3.04	2.92	3.21	3.11	3.22	4.03	10.87	8.34	6.72
24	5.09	3.50	3.46	3.04	2.92	3.44	3.00	3.54	3.75	8.93	8.99	8.75
25	5.16	3.52	3.37	3.08	2.91	3.15	2.93	3.06	3.89	8.25	12.32	9.55
26	5.09	3.44	3.36	3.06	2.92	3.02	2.88	2.91	3.60	9.69	11.18	10.48
27	5.00	3.34	3.51	3.05	2.98	2.94	2.85	2.86	4.81	11.04	9.39	9.92
28	4.96	3.31	3.47	3.06	3.00	2.90	2.82	2.81	6.58	9.90	8.80	8.89
29	4.82	3.30	3.54	3.04	---	2.89	2.80	2.81	5.52	8.88	7.72	7.92
30	4.59	3.25	3.65	3.06	---	2.86	2.91	2.84	4.91	7.94	6.85	7.44
31	4.27	---	3.53	3.05	---	2.85	---	2.81	---	7.15	6.77	---
Mean	6.89	3.85	3.51	3.14	2.97	2.93	2.96	3.09	5.13	7.29	---	---
Max	11.84	4.46	4.07	3.46	3.17	3.44	3.25	4.41	9.03	11.04	---	---
Min	4.27	3.25	3.13	3.04	2.91	2.80	2.80	2.76	2.81	4.40	---	---

02301500 ALAFIA RIVER AT LITHIA, FL.—Continued**CLIMATOLOGICAL RECORDS**

PERIOD OF RECORD.--October 2002 to current year.

REVISED RECORDS.--WDR-US-2008: Rainfall.

INSTRUMENTATION.--A 6-inch diameter, tipping bucket precipitation gage 15-minute interval, mounted next to the gage structure at approximately 8 ft above ground level.

REMARKS.--Collection, computation and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Records of precipitation prior to October 1, 2002 not published but are available in the files of the Geological Survey.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY SUM VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.19	0.00	0.00	0.00	0.00	0.00	0.00	1.94	1.30	0.41	0.27	0.00
2	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.54	0.65	0.75	0.12	0.00
3	1.23	0.00	0.00	0.14	0.00	0.00	0.02	0.62	0.52	0.31	0.15	0.00
4	0.75	0.00	0.00	0.03	0.00	0.00	0.58	0.00	0.08	0.43	0.03	0.28
5	0.40	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.07	0.31	0.01	0.01
6	0.76	0.09	0.00	0.00	0.00	0.00	0.00	0.00	2.72	0.00	1.09	0.81
7	0.00	0.00	0.00	0.06	0.05	0.00	0.00	0.00	0.01	0.01	0.21	0.01
8	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.99	0.00	0.08	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.02	0.00
10	0.00	0.00	0.27	0.00	0.00	0.00	0.05	0.00	2.13	0.00	0.00	0.00
11	0.00	0.00	0.08	0.00	0.00	0.00	0.14	0.00	0.02	0.02	0.00	---
12	0.00	0.05	0.08	0.00	0.00	0.36	0.00	0.00	0.00	0.25	0.00	0.47
13	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.20	0.00	0.01
14	0.00	0.00	0.00	0.00	0.53	0.00	0.03	0.00	0.00	0.03	0.40	0.40
15	0.07	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.07	0.01	0.00	1.41
16	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.28	0.20	0.02
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.12	0.42
18	0.00	0.00	0.00	0.01	0.00	0.00	0.18	0.00	0.00	0.27	0.78	0.54
19	0.00	0.00	0.00	0.00	0.00	0.00	0.76	0.00	0.24	0.00	0.00	0.67
20	0.00	0.00	0.31	0.00	0.00	0.05	0.03	0.95	0.51	0.07	0.52	0.00
21	0.00	0.00	0.04	0.00	0.00	0.01	0.01	0.07	1.05	0.01	0.01	0.00
22	0.00	0.00	0.00	0.00	0.00	0.60	0.11	0.00	0.25	0.00	1.50	0.18
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.35	0.16	1.43
24	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.02	1.67	0.50
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.82	0.15	0.72
26	0.00	0.00	0.32	0.00	0.33	0.00	0.00	0.00	0.75	0.01	0.30	0.13
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00
28	0.00	0.00	0.43	0.00	0.00	0.00	0.00	0.08	0.00	0.71	0.00	0.06
29	0.00	0.00	0.08	0.05	---	0.00	0.00	0.25	0.02	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	1.15	0.00	0.54	0.00	0.16	0.00
31	0.00	---	0.00	0.09	---	0.00	---	0.00	---	0.07	0.04	---
Total	4.08	0.14	1.71	0.38	1.08	1.02	3.14	4.45	12.98	5.39	8.00	---

Calendar Year 2012	
Total	50.23