Water-Data Report 2012

02231000 ST. MARYS RIVER NEAR MACCLENNY, FL

St. Marys-Satilla Basin
St. Marys Subbasin

LOCATION.--Lat 30°21′31″, long 82°04′54″ referenced to North American Datum of 1927, in NW ¼ sec.2, T.2 S., R.22 E., Baker County, FL, Hydrologic Unit 03070204, on right bank 200 ft downstream from site of former Stokes Bridge, 1 mi downstream from confluence of North and South Prongs, 6 mi northeast of Macclenny, and 100 mi upstream from mouth.

DRAINAGE AREA.--700 mi^2, approximately, includes part of watershed in Okefenokee Swamp, which is indeterminate.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1926 to current year.

REVISED RECORDS.--WSP 1082: 1928(M), 1945(M). WSP 1142: 1928, 1945. WSP 1434: 1927. WSP 1905: Drainage area.

GAGE.--Water-stage recorder and data-collection platform. Datum of gage is 40.00 ft above NGVD of 1929 (levels by Mees and Mees) and 39.06 ft above NAVD of 1988. Prior to Feb. 21, 1939, nonrecording gage and Feb. 21, 1939 to Aug. 15, 1948, water-stage recorder, at site of former bridge 200 ft upstream, at same datum.

REMARKS.--Records fair except for period of estimated daily discharge, which is poor.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	47	42	41	40	31	44	52	24	151	16,900	491	1,080
2	42	41	41	39	31	44	78	22	157	12,600	499	1,320
3	40	40	41	38	30	43	80	21	174	9,570	473	1,380
4	37	38	40	37	30	43	79	21	184	7,490	485	1,420
5	35	37	39	36	30	44	73	20	178	6,090	543	1,260
6	33	37	37	36	30	52	65	19	180	4,890	661	1,070
7	32	36	37	36	29	55	58	19	260	3,890	832	897
8	32	36	37	36	29	52	52	20	451	3,030	1,170	776
9	34	35	37	36	28	49	47	20	580	2,390	1,620	794
10	43	34	37	36	28	48	43	19	571	1,830	1,830	939
11	91	34	36	36	29	46	40	18	667	1,500	1,640	937
12	122	33	41	35	28	46	38	17	799	1,290	1,320	832
13	120	33	53	35	28	44	36	16	879	1,180	1,130	724
14	101	33	73	34	27	42	34	16	1,010	1,060	1,000	638
15	83	33	69	34	28	41	32	17	1,160	921	875	578
16	71	32	62	34	29	39	30	19	1,280	841	760	546
17	63	33	57	34	30	38	28	20	1,210	780	690	514
18	58	33	54	36	32	38	27	20	1,020	727	664	509
19	55	35	52	36	34	37	26	18	780	688	641	741
20	52	37	50	38	36	36	26	17	571	724	677	982
21	52	37	48	38	34	35	27	16	419	752	1,250	1,360
22	51	36	47	37	33	34	33	15	313	710	2,060	1,320
23	49	38	46	37	35	34	35	15	244	641	2,260	1,140
24	47	45	45	37	36	34	37	15	206	588	2,120	957
25	45	57	44	36	36	35	35	14	728	560	1,860	783
26	43	51	44	35	35	49	33	14	13,000	545	1,550	650
27	41	47	43	34	35	58	31	14	e31,800	517	1,280	565
28	40	45	42	33	38	52	29	17	33,300	491	1,090	515
29	42	43	41	32	43	46	27	33	28,400	487	987	485
30	41	42	41	32	---	42	25	126	22,300	505	896	450
31	42	---	40	32	---	43	---	174	---	468	857	---
Total	1,684	1,153	1,415	1,105	922	1,343	1,256	836	142,972	84,655	34,211	26,162
Mean	54.3	38.4	45.6	35.6	31.8	43.3	41.9	27.0	4,766	2,731	1,104	872
Max	122	57	73	40	43	58	80	174	33,300	16,900	2,260	1,420
Min	32	32	36	32	27	34	25	14	151	468	473	450
Cfsm	0.08	0.05	0.07	0.05	0.05	0.06	0.06	0.04	6.81	3.90	1.58	1.25
In.	0.09	0.06	0.08	0.06	0.05	0.07	0.07	0.04	7.60	4.50	1.82	1.39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	758	252	361	574	811	937	712	300	388	585	914	995
Max	6,240	4,155	2,470	2,404	5,940	5,119	6,564	3,303	4,766	2,731	4,488	6,569
(WY)	(1948)	(1948)	(1948)	(1942)	(1998)	(2003)	(1973)	(1964)	(2012)	(2012)	(2008)	(2004)
Min	17.2	15.9	18.0	21.7	20.2	43.3	25.7	12.9	16.8	31.3	24.9	21.4
(WY)	(2007)	(1932)	(1932)	(1932)	(1934)	(2012)	(1935)	(2007)	(2011)	(1954)	(1954)	(1990)

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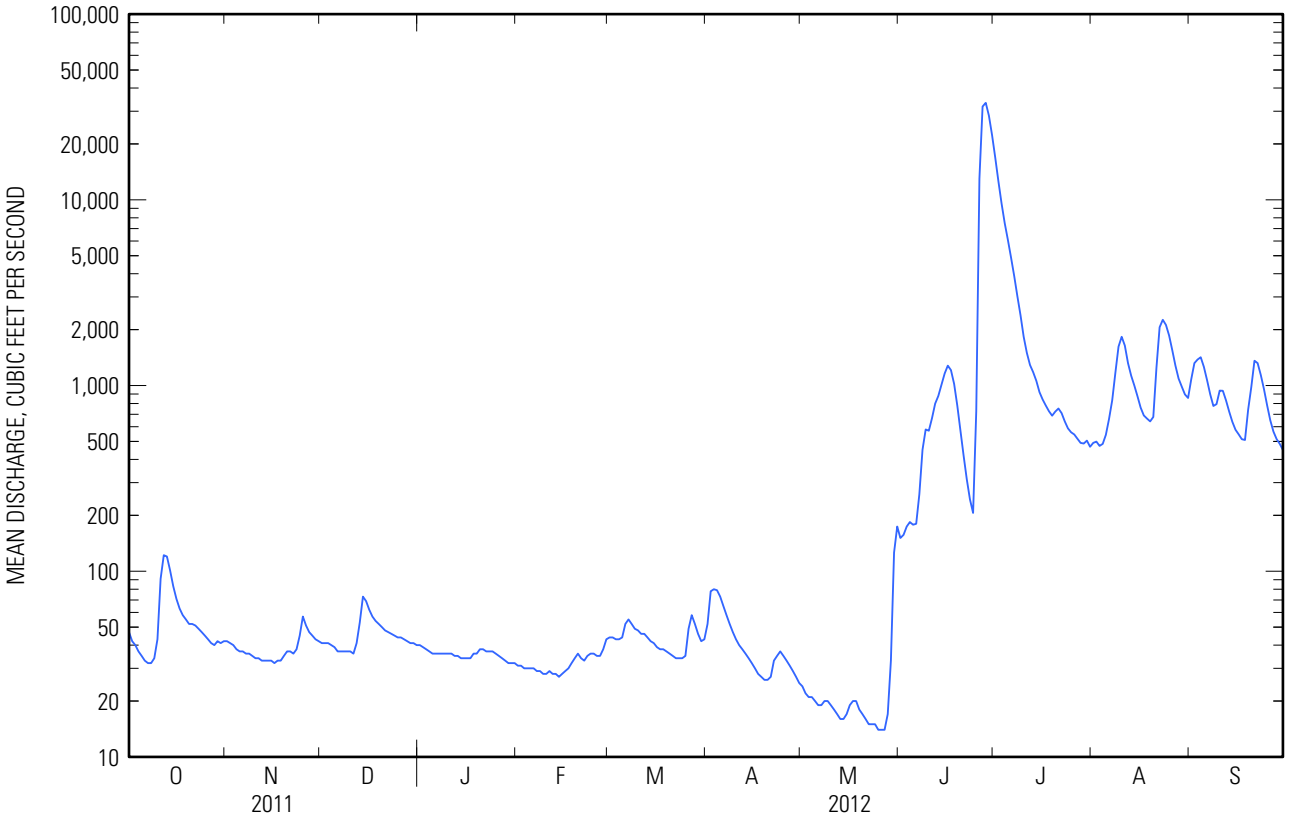
SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1927 - 2012	
Annual total	29,957		297,714			
Annual mean	82.1		813		631	
Highest annual mean					2,285	1948
Lowest annual mean					77.7	2011
Highest daily mean	1,380	Feb 12	33,300	Jun 28	33,300	Jun 28, 2012
Lowest daily mean	13	Jun 20-23	14	May 25-27	9.6	Jun 17, 2002
Annual seven-day minimum	13	Jun 17	15	May 21	10	May 26, 2007
Maximum peak flow			34,800	Jun 28	34,800	Jun 28, 2012
Maximum peak stage			24.38	Jun 28	24.38	Jun 28, 2012
Instantaneous low flow			13	May 26,27	[a]9.5	
Annual runoff (cfsm)	0.117		1.16		0.902	
Annual runoff (inches)	1.59		15.82		12.26	
10 percent exceeds	145		1,190		1,560	
50 percent exceeds	40		44		203	
90 percent exceeds	20		28		36	

[a] Jun 17, 18, 2002, May 31, Jun 1, 2007



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GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1.85	1.74	1.74	1.75	1.62	1.97	2.13	1.45	3.46	20.11	6.08	9.04
2	1.76	1.72	1.73	1.74	1.62	1.96	2.58	1.41	3.54	18.68	6.13	9.89
3	1.69	1.69	1.72	1.71	1.61	1.93	2.62	1.38	3.74	17.42	5.98	10.06
4	1.64	1.66	1.71	1.69	1.61	1.94	2.60	1.35	3.85	16.38	6.05	10.19
5	1.59	1.64	1.69	1.68	1.61	1.97	2.50	1.33	3.81	15.54	6.41	9.68
6	1.54	1.62	1.64	1.68	1.60	2.13	2.38	1.31	3.83	14.71	7.07	8.99
7	1.50	1.62	1.64	1.67	1.59	2.18	2.24	1.31	4.58	13.87	7.93	8.27
8	1.51	1.61	1.64	1.67	1.57	2.13	2.13	1.32	5.96	13.02	9.34	7.72
9	1.56	1.59	1.63	1.67	1.56	2.07	2.03	1.32	6.75	12.14	10.69	7.81
10	1.76	1.57	1.63	1.69	1.56	2.04	1.95	1.28	6.71	11.16	11.18	8.46
11	2.61	1.56	1.62	1.69	1.59	2.01	1.88	1.26	7.22	10.40	10.73	8.45
12	3.03	1.54	1.73	1.67	1.58	2.00	1.82	1.24	7.86	9.79	9.88	7.99
13	3.02	1.53	1.97	1.65	1.56	1.96	1.77	1.21	8.23	9.40	9.21	7.48
14	2.75	1.53	2.33	1.64	1.55	1.93	1.72	1.20	8.77	8.92	8.71	7.05
15	2.49	1.53	2.27	1.64	1.58	1.89	1.68	1.24	9.35	8.33	8.14	6.73
16	2.30	1.51	2.15	1.66	1.59	1.86	1.63	1.29	9.78	7.97	7.60	6.55
17	2.16	1.53	2.06	1.66	1.62	1.84	1.59	1.34	9.54	7.67	7.25	6.37
18	2.07	1.55	2.01	1.71	1.68	1.83	1.55	1.32	8.81	7.41	7.12	6.34
19	2.01	1.59	1.97	1.72	1.73	1.79	1.53	1.28	7.79	7.21	7.00	7.56
20	1.96	1.64	1.94	1.76	1.78	1.77	1.51	1.24	6.75	7.39	7.19	8.65
21	1.97	1.63	1.91	1.77	1.74	1.75	1.55	1.20	5.84	7.54	9.51	9.99
22	1.95	1.61	1.88	1.75	1.71	1.74	1.71	1.17	5.11	7.32	11.61	9.88
23	1.90	1.66	1.86	1.74	1.76	1.72	1.76	1.15	4.55	6.96	11.96	9.29
24	1.85	1.82	1.84	1.75	1.77	1.73	1.81	1.14	4.21	6.66	11.74	8.55
25	1.81	2.05	1.83	1.74	1.77	1.75	1.76	1.12	7.19	6.50	11.23	7.78
26	1.77	1.95	1.82	1.72	1.74	2.07	1.70	1.10	18.06	6.41	10.53	7.14
27	1.74	1.86	1.80	1.69	1.77	2.24	1.66	1.10	---	6.24	9.74	6.69
28	1.71	1.81	1.78	1.67	1.83	2.13	1.61	1.21	24.07	6.08	9.06	6.41
29	1.76	1.78	1.77	1.65	1.95	2.00	1.55	1.64	22.97	6.06	8.65	6.23
30	1.74	1.74	1.78	1.64	---	1.91	1.50	3.11	21.57	6.17	8.26	6.02
31	1.75	---	1.76	1.63	---	1.94	---	3.72	---	5.94	8.09	---
Mean	1.96	1.66	1.83	1.69	1.66	1.94	1.88	1.41	---	9.98	8.71	8.04
Max	3.03	2.05	2.33	1.77	1.95	2.24	2.62	3.72	---	20.11	11.96	10.19
Min	1.50	1.51	1.62	1.63	1.55	1.72	1.50	1.10	---	5.94	5.98	6.02