02246500 ST. JOHNS RIVER AT JACKSONVILLE, FL

St. Johns Basin
Lower St. Johns Subbasin

LOCATION.--Lat 30°19′20″, long 81°39′56″ referenced to North American Datum of 1927, in land grant 44, T.2 S., R.26 E., Duval County, FL, Hydrologic Unit 03080103, near center of channel under the Acosta Bridge at Jacksonville, 2.6 mi upstream from Arlington River, and 23.0 mi upstream from mouth.

DRAINAGE AREA.--8,850 mi², includes Paynes Prairie, a diked sinkhole area of about 650 mi², which is noncontributing except for pumpage.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--February 1954 to September 1970 (volume of flow), October 1970 to September 1971 (gage heights only), October 1971 to September 1974, October 1974 to September 1980 (gage heights only), October 1980 to September 1981, October 1981 to June 1987 (gage heights only), July 1987 to September 1993, October 1993 to July 1996 (gage heights only), August 1996 to September 2010, October 2010 to current year (filtered).

REVISED RECORDS.--WDR FL-92-1A: Drainage area.

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is 9.99 ft below NGVD of 1929 and 11.08 ft below NAVD of 1988. Apr. 13, 1966 to Sept. 30, 1971, at site 0.6 mi downstream at same datum. October 1971 to September 1986, water-stage and deflection meter recorder at site 200 ft upstream at same datum. October 1986 to July 1996, water-stage recorder 0.3 mi downstream at same datum. July 24, 1984 to Mar. 13, 1996, auxiliary water-stage recorder about 5.4 mi downstream.

REMARKS.--Records fair. The stage record published is the maximum and minimum tide event for each calendar day. 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. By convention, the U.S. Geological Survey has established ebb (seaward) flows as positive flow and flood (landward) flows as negative flows. The residuals are not total freshwater flows but are a combination of freshwater flows and water storage caused by higher and lower mean sea levels and storm surges from tropical storm events. Instantaneous discharge computed from index-velocity linear regression relation and gage height rating. Daily values of discharge and gage height are available online at http://waterdata.usgs.gov/nwis.

Suggested citation: U.S. Geological Survey, 2013, Water-resources data for the United States, Water Year 2012: U.S. Geological Survey Water-Data Report WDR-US-2012, site 02246500, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/02246500.2012.pdf

02246500 ST. JOHNS RIVER AT JACKSONVILLE, FL—Continued

DISCHARGE, TIDALLY FILTERED, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	-6,740	-13,400	-2,020	17,300	6,200	16,200	-9,250	-1,050	8,750	23,200	-8,070	11,000
2	27	-6,530	-1,760	13,200	3,270	10,100	-16,000	328	2,780	14,200	-6,660	15,300
3	5,930	11,700	-2,040	-3,040	-12,000	-2,760	-14,200	-212	-2,590	13,700	-6,560	18,700
4	1,430	11,700	-3,030	-2,470	-8,530	-12,600	-6,970	-1,980	-817	11,800	-8,240	14,200
5	-5,950	-30,800	6,280	6,380	-5,880	-6,940	-7,220	-5,030	-6,620	15,300	369	12,400
6	-14,600	-24,600	13,800	-1,530	-19,000	-15,000	-25,900	-14,200	-9,140	13,300	5,150	13,300
7	-20,200	897	21,200	1,140	-19,600	-7,140	-21,000	-20,900	-10,900	10,200	6,050	17,200
8	-21,200	6,780	790	-763	-11,300	-1,130	6,590	-11,400	-776	12,400	5,760	21,400
9	-25,400	15,700	-9,720	-4,380	-8,890	-4,590	9,220	-3,480	12,100	13,700	6,840	8,600
10	-5,560	20,800	-16,300	-8,420	-5,020	-20,600	-493	-5,190	21,900	13,500	16,000	-18,300
11	20,000	17,100	-28,200	-3,310	-306	-8,210	-3,960	-2,550	24,900	7,050	16,400	-18,100
12	25,100	20,500	-13,600	6,840	1,390	4,930	-11,600	466	22,700	-3,890	6,890	-15,100
13	21,400	21,100	5,370	12,300	1,650	4,730	-3,440	5,060	5,910	-3,770	216	-9,360
14	19,800	24,800	16,700	11,200	1,390	5,300	11,000	2,530	-13,000	-1,720	-1,430	-6,280
15	18,200	26,100	20,600	4,130	2,610	3,740	13,800	2,790	-22,700	-643	-411	-1,080
16	11,900	27,700	23,700	-6,720	1,480	2,870	8,170	3,670	-16,400	422	-662	1,970
17	9,790	11,300	18,800	-1,540	-3,240	886	3,730	-3,900	-1,780	7,180	-2,900	5,840
18	17,100	-21,900	5,500	917	-6,910	-1,990	-4,620	-16,600	4,240	17,300	-3,670	16,300
19	27,200	-4,290	8,300	-11,000	213	-5,150	-12,000	-21,700	4,380	22,500	-2,790	12,300
20	24,500	11,000	12,400	-4,590	-7,550	-4,630	-12,200	-16,200	3,080	15,900	-2,090	-247
21	8,220	13,900	16,200	2,680	-5,120	-1,240	-9,850	-1,500	7,630	3,580	6,150	-831
22	-4,110	16,700	15,200	-6,550	7,600	-322	-3,450	10,100	11,100	-7,850	10,800	6,460
23	-11,900	16,000	13,200	-13,000	18,500	-881	3,760	4,520	11,700	-10,600	9,310	9,280
24	-8,780	-6,930	-442	-2,250	16,800	2,930	8,930	-820	15,000	929	-1,480	-1,820
25	-915	-2,240	-5,530	-343	2,900	-336	14,900	-5,360	30,600	-302	-9,450	-7,500
26	1,570	7,370	-6,110	1,320	-2,910	-9,460	15,700	-18,800	26,600	-3,350	-11,800	3,670
27	7,090	11,000	12,100	12,300	-857	-14,400	9,740	-40,700	20,700	4,940	930	3,850
28	6,170	16,500	18,300	5,080	-1,120	-331	-2,150	19,300	47,100	6,660	18,400	4,780
29	-6,940	17,600	7,120	-4,550	5,610	13,200	-9,180	43,400	52,500	3,650	18,600	8,310
30	-13,700	9,300	10,800	-3,280	---	4,190	-7,870	21,200	37,700	-2,180	11,300	7,230
31	-7,110	---	19,000	4,230	---	787	---	8,990	---	---	10,000	---
Total	72,322	224,857	176,608	21,281	-48,620	-47,847	-75,813	-69,218	286,647	197,106	82,952	133,472
Mean	2,333	7,495	5,697	686	-1,677	-1,543	-2,527	-2,233	9,555	6,570	2,676	4,449
Max	27,200	27,700	23,700	17,300	18,500	16,200	15,700	43,400	52,500	23,200	18,600	21,400
Min	-25,400	-30,800	-28,200	-13,000	-19,600	-20,600	-25,900	-40,700	-22,700	-10,600	-11,800	-18,300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2012, BY WATER YEAR (WY)

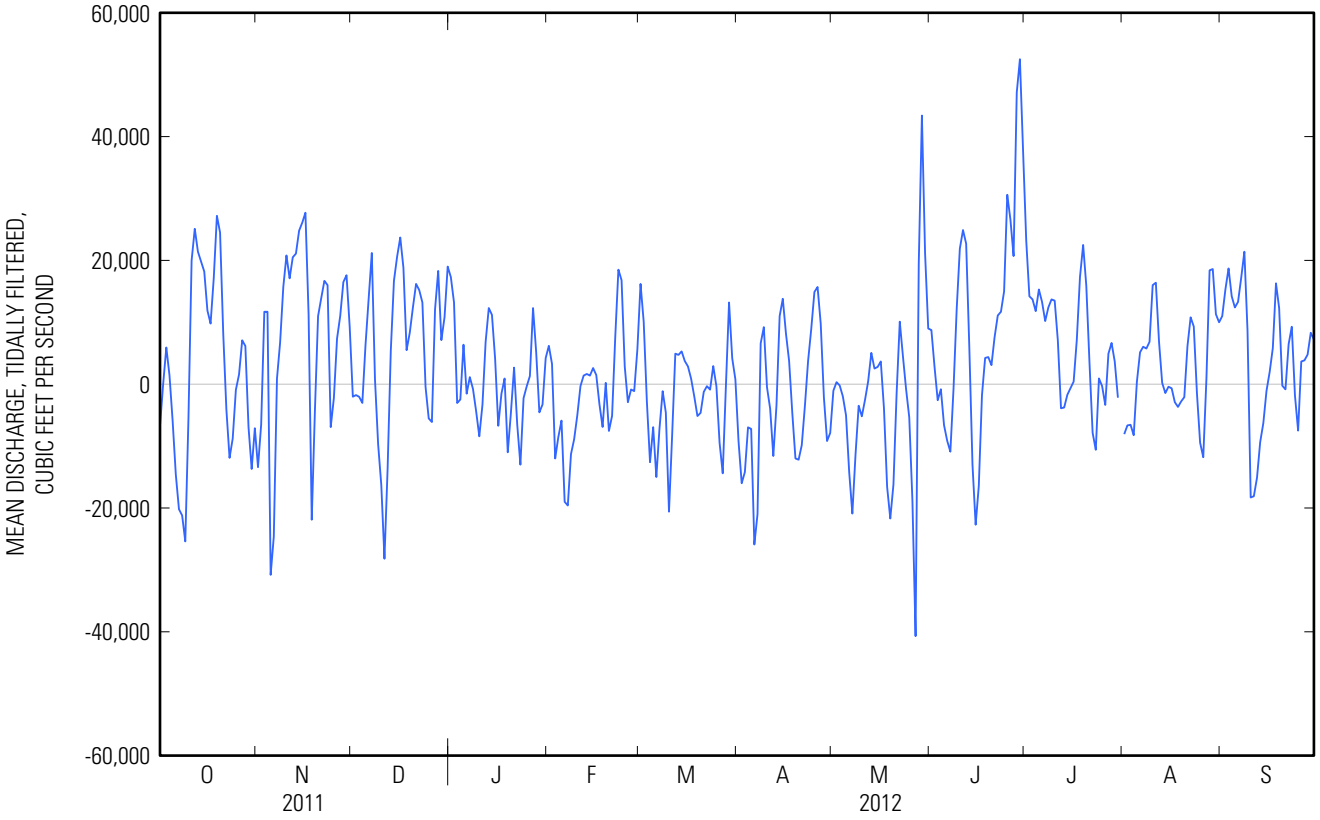
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	9,184	9,564	9,228	7,662	8,042	7,598	5,159	2,503	6,576	7,287	7,011	9,277
Max	24,100	18,580	19,330	17,380	24,520	23,360	15,860	16,380	17,680	21,190	16,980	29,840
(WY)	(2005)	(2006)	(1998)	(1998)	(1998)	(1998)	(2006)	(2009)	(2009)	(2005)	(2009)	(2004)
Min	195	-1,218	1,110	686	-1,677	-1,543	-3,133	-4,427	-1,331	-2,464	-2,401	-1,814
(WY)	(2011)	(2011)	(2011)	(2012)	(2012)	(2012)	(2008)	(2008)	(2011)	(2010)	(2010)	(2010)

02246500 ST. JOHNS RIVER AT JACKSONVILLE, FL—Continued

SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1996 - 2012	
Annual total	461,240		953,747			
Annual mean	1,264		2,613		7,345	
Highest annual mean					15,900	2006
Lowest annual mean					-23.7	2011
Highest daily mean	27,700	Nov 16	52,500	Jun 29	109,000	Sep 7, 2004
Lowest daily mean	-30,800	Nov 5	-40,700	May 27	-45,800	May 7, 2007
Annual seven-day minimum	-13,100	Oct 4	-14,400	Apr 1	-24,200	May 4, 2007
Maximum peak stage			14.24	May 28	15.20	Sep 10, 1964
10 percent exceeds	16,100		18,300		21,600	
50 percent exceeds	486		1,390		7,200	
90 percent exceeds	-10,700		-12,400		-7,280	

Note.--Negative figures indicate reverse flow



02246500 ST. JOHNS RIVER AT JACKSONVILLE, FL—Continued

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Day	High-high	Low-low	High-high	Low-low	High-high	Low-low	High-high	Low-low	High-high	Low-low	High-high	Low-low
	October		November		December		January		February		March	
1	12.16	9.97	12.51	10.98	11.67	10.01	10.94	9.25	10.99	9.39	11.11	9.27
2	12.18	10.34	12.53	11.15	11.76	10.12	10.72	8.98	10.89	9.15	10.82	9.19
3	11.94	10.24	12.62	11.28	11.78	10.31	10.64	9.18	11.00	9.60	11.10	9.40
4	11.88	10.23	12.39	10.61	11.96	10.58	11.08	9.67	11.31	9.64	11.05	9.30
5	11.86	10.30	12.43	11.20	12.03	10.48	11.08	9.27	11.32	9.54	11.28	9.37
6	12.09	10.63	12.86	11.54	11.94	10.30	11.20	9.15	11.51	9.49	11.55	9.17
7	12.37	10.82	12.94	11.60	11.90	10.14	11.23	9.27	11.76	9.96	11.60	9.87
8	12.72	11.16	12.92	11.48	11.47	9.39	11.20	9.19	11.86	10.03	11.61	9.76
9	12.99	11.40	12.83	11.36	11.89	9.98	11.22	9.12	11.88	9.90	11.53	9.58
10	13.68	11.90	12.62	11.00	11.97	10.17	11.37	9.27	11.97	10.23	11.56	9.48
11	13.25	11.75	12.23	10.32	12.31	10.43	11.86	9.73	11.74	9.66	11.95	10.16
12	12.86	11.26	12.21	10.59	12.64	11.05	11.46	9.42	11.52	9.67	11.92	9.91
13	12.57	11.00	12.15	10.50	12.50	10.96	11.29	8.92	11.59	9.86	11.72	9.80
14	12.29	10.78	12.02	10.39	12.38	10.77	10.83	8.82	11.63	10.00	11.54	9.67
15	12.19	10.61	11.80	10.16	12.18	10.51	10.84	8.77	11.65	9.88	11.35	9.62
16	12.08	10.45	11.73	9.98	12.00	10.22	11.11	9.23	11.60	9.82	11.33	9.61
17	12.18	10.57	11.46	9.52	11.79	9.92	11.16	9.22	11.58	10.02	11.28	9.60
18	12.22	10.63	12.03	10.38	11.80	10.00	11.16	9.38	11.77	9.96	11.30	9.52
19	12.17	10.24	12.36	10.70	11.95	10.07	11.26	8.96	12.04	10.21	11.39	9.52
20	11.40	9.80	12.23	10.58	11.91	10.23	11.50	9.50	11.77	9.54	11.50	9.69
21	11.44	9.67	12.09	10.32	12.00	10.00	11.41	9.39	11.85	10.11	11.48	9.78
22	11.71	9.83	12.09	10.12	11.85	9.72	11.31	9.11	11.81	10.04	11.41	9.62
23	12.04	10.03	12.09	9.98	11.79	9.60	11.64	9.49	11.54	9.74	11.48	9.65
24	12.25	10.31	12.08	9.44	11.64	9.31	11.62	9.73	11.44	9.48	11.46	9.53
25	12.24	10.34	12.29	10.03	11.94	9.67	11.49	9.64	10.76	9.04	11.07	9.28
26	12.27	10.18	12.34	10.20	11.96	9.84	11.54	9.75	11.07	9.36	11.27	9.67
27	12.27	10.17	12.21	10.15	12.26	10.15	11.53	9.35	11.25	9.57	11.40	9.98
28	12.19	10.05	12.32	10.05	11.43	9.59	11.08	9.32	11.26	9.65	11.67	10.07
29	12.15	10.12	11.82	9.83	11.52	9.66	11.04	9.35	11.24	9.69	11.44	9.62
30	12.44	10.51	11.61	9.72	11.43	9.68	11.09	9.52	---	---	11.04	9.60
31	12.47	10.78	---	---	11.32	9.38	11.03	9.44	---	---	11.11	9.50
Max	13.68	11.90	12.94	11.60	12.64	11.05	11.86	9.75	12.04	10.23	11.95	10.16
Min	11.40	9.67	11.46	9.44	11.32	9.31	10.64	8.77	10.76	9.04	10.82	9.17

02246500 ST. JOHNS RIVER AT JACKSONVILLE, FL—Continued

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Day	High-high	Low-low	High-high	Low-low	High-high	Low-low	High-high	Low-low	High-high	Low-low	High-high	Low-low
	April		May		June		July		August		September	
1	11.16	9.63	11.39	9.84	11.97	10.00	12.33	10.32	11.86	9.81	12.51	10.77
2	11.44	9.87	11.43	9.60	11.87	9.74	12.40	10.26	11.91	9.92	12.42	10.71
3	11.74	9.89	11.48	9.48	12.09	9.90	12.30	10.20	11.86	10.08	12.25	10.56
4	11.78	10.02	11.64	9.41	12.09	9.78	12.30	10.20	11.76	10.05	12.12	10.46
5	11.87	9.95	11.72	9.38	12.33	10.10	12.05	10.16	11.97	10.23	12.11	10.48
6	12.06	9.81	11.79	9.38	12.28	10.30	12.15	10.10	11.79	10.11	12.03	10.38
7	12.25	10.35	11.79	9.96	12.48	10.98	12.01	10.10	11.71	10.05	12.03	10.36
8	12.02	10.08	12.20	10.22	12.79	11.03	11.96	10.07	11.64	10.03	11.89	10.34
9	12.10	9.71	12.10	10.07	12.54	11.03	11.81	10.01	11.64	10.04	11.59	9.99
10	11.85	9.94	11.78	10.04	12.44	10.82	11.68	9.89	11.52	9.94	11.98	10.48
11	11.85	9.84	11.86	10.22	12.17	10.55	11.71	9.82	11.28	9.63	12.16	10.63
12	11.72	10.15	11.80	10.20	11.97	10.32	11.79	10.13	11.41	9.56	12.30	10.80
13	11.87	10.29	11.69	10.10	11.83	10.19	11.97	10.37	11.53	9.71	12.37	10.73
14	11.92	10.06	11.80	10.03	12.28	10.52	11.94	10.39	11.55	9.70	12.47	10.91
15	11.60	9.99	11.57	10.00	12.54	10.96	11.94	10.29	11.59	9.62	12.44	10.77
16	11.41	9.68	11.54	9.80	12.78	11.24	11.93	10.13	11.58	9.68	12.41	10.78
17	11.43	9.63	11.60	9.90	12.68	11.15	11.83	10.04	11.85	9.84	12.46	10.68
18	11.46	9.63	11.80	10.01	12.58	11.02	11.67	9.91	11.87	9.96	12.37	10.48
19	11.73	9.86	12.15	10.44	12.44	10.85	11.39	9.54	11.92	10.04	12.16	10.20
20	12.05	10.21	12.29	10.45	12.46	10.83	11.16	9.24	11.86	10.08	12.15	10.19
21	12.03	10.46	12.23	10.61	12.32	10.72	11.34	9.23	12.20	10.33	12.28	10.49
22	11.94	10.25	11.99	10.42	12.12	10.64	11.34	9.46	12.24	10.35	12.23	10.53
23	11.48	9.94	11.84	10.24	12.23	10.62	11.65	9.86	12.17	10.40	12.04	10.31
24	11.59	9.89	11.63	10.20	12.21	10.58	11.77	9.97	12.19	10.37	12.05	10.28
25	11.23	9.70	11.78	10.16	12.86	11.33	11.56	9.70	12.33	10.53	12.22	10.58
26	11.30	9.42	11.84	10.36	12.81	11.29	11.74	9.90	12.37	10.62	12.19	10.55
27	11.05	9.36	12.15	10.81	13.57	12.11	11.58	9.68	12.67	11.07	12.12	10.33
28	11.04	9.44	14.24	11.24	13.52	11.85	11.50	9.49	12.51	10.81	12.04	10.27
29	11.24	9.77	12.46	10.38	12.81	11.08	11.54	9.42	12.43	10.57	11.95	10.21
30	11.35	9.85	11.76	9.98	12.41	10.55	11.62	9.56	12.54	10.67	11.94	10.12
31	---	---	11.87	10.01	---	---	11.72	9.57	12.52	10.76	---	---
Max	12.25	10.46	14.24	11.24	13.57	12.11	12.40	10.39	12.67	11.07	12.51	10.91
Min	11.04	9.36	11.39	9.38	11.83	9.74	11.16	9.23	11.28	9.56	11.59	9.99

	High-high	Low-low
Year Maximum	14.24	12.11
Year Minimum	10.64	8.77