Water-Data Report 2012

02250030 TURKEY CREEK AT PALM BAY, FL

East Florida Coastal Basin
Cape Canaveral Subbasin

LOCATION.--Lat 28°01′01″, long 80°35′46″ referenced to North American Datum of 1927, in SE ¼ sec.26, T.28 S., R.37 E., Brevard County, FL, Hydrologic Unit 03080202, near center of channel on upstream side of bridge on Port Malabar Boulevard, 1.6 mi southwest of the intersection of U.S. Highway 1 and State Highway 516 in Palm Bay, and 2.0 mi upstream from mouth.

DRAINAGE AREA.--105 mi^2, approximately.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--February 1981 to September 1983, October 1983 to December 1986 (gage heights only), January 1987 to September 1988 (fragmentary), October 1988 to September 2006, September 2006 to April 2007 (gage heights only), April 2007 to September 2010, October 2010 to current year (filtered).

GAGE.--Water-stage recorder, acoustic velocity meter, and data-collection platform. Datum of gage is 5.00 ft below NGVD of 1929 and 6.40 ft below NAVD of 1988. Prior to Oct. 1, 1986 at datum 5.00 ft higher.

REMARKS.--Records poor. Discharge not published some days due to missing velocity or gage height data. 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.

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DISCHARGE, TIDALLY FILTERED, 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	35	340	71	---	60	100	49	32	82	118	147	318
2	33	279	71	---	57	78	47	30	123	104	133	274
3	33	235	67	---	59	70	47	31	94	95	125	247
4	31	203	69	---	59	63	47	33	72	89	119	206
5	22	173	82	---	56	59	45	35	64	89	113	212
6	16	176	170	---	52	59	43	35	60	85	108	294
7	102	182	142	e101	51	66	43	38	80	81	108	416
8	1,150	189	96	94	50	68	41	68	382	79	112	390
9	2,360	246	87	105	48	65	41	124	721	78	109	328
10	2,090	204	104	79	60	71	42	104	634	80	106	363
11	1,490	148	132	74	97	162	42	60	481	92	102	489
12	1,030	139	169	80	85	246	42	50	320	103	108	430
13	737	135	193	77	68	197	38	41	244	94	114	375
14	563	129	e160	74	64	151	33	39	223	87	112	352
15	441	130	e119	74	63	125	36	49	206	94	112	316
16	354	131	---	78	65	111	35	65	199	188	116	281
17	304	75	---	81	63	101	37	71	180	456	131	251
18	311	23	---	82	59	90	36	67	156	581	136	233
19	332	35	---	77	52	84	41	66	143	374	142	227
20	310	47	---	77	55	80	47	63	172	269	138	236
21	276	63	---	76	53	75	51	52	165	222	139	250
22	257	75	---	76	e52	73	49	46	149	e190	173	281
23	241	67	---	75	---	69	43	41	141	e191	216	273
24	212	60	---	72	---	64	35	44	146	e212	219	241
25	110	62	---	70	---	61	35	42	194	e185	183	208
26	38	59	---	66	---	60	36	39	215	160	170	182
27	59	56	---	60	---	58	33	41	205	141	286	163
28	88	58	---	60	e183	56	33	42	183	147	441	155
29	157	65	---	57	135	54	34	39	161	177	628	183
30	186	65	---	59	---	51	34	48	140	173	598	213
31	294	---	---	63	---	51	---	52	---	164	425	---
Total	13,662	3,849	1,732	1,887	1,646	2,718	1,215	1,587	6,335	5,198	5,869	8,387
Mean	441	128	115	75.5	68.6	87.7	40.5	51.2	211	168	189	280
Max	2,360	340	193	105	183	246	51	124	721	581	628	489
Min	16	23	67	57	48	51	33	30	60	78	102	155

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	330	151	107	106	89.6	117	80.6	71.4	145	200	257	314
Max	871	483	444	481	386	369	190	129	528	642	874	1,074
(WY)	(2000)	(1995)	(1998)	(1998)	(1998)	(1998)	(2005)	(2009)	(1994)	(2001)	(2008)	(2004)
Min	67.5	8.33	25.4	33.1	31.4	14.2	13.8	26.5	20.9	50.8	56.7	78.4
(WY)	(2010)	(2010)	(2001)	(2001)	(2001)	(2001)	(1999)	(2008)	(2011)	(1993)	(1993)	(1993)

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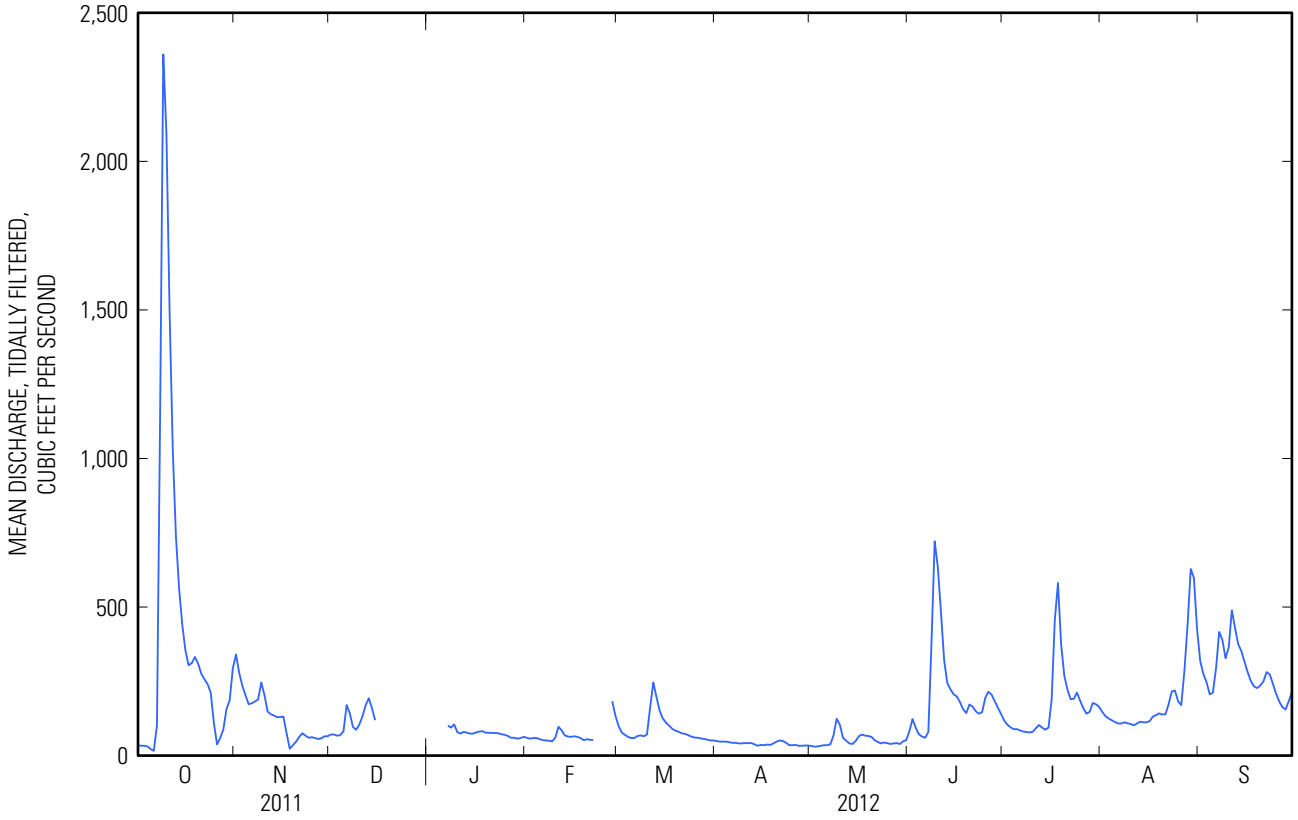
SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1987 - 2012	
Annual total	39,574.30		54,085			
Annual mean	113		160		164	
Highest annual mean					295	1998
Lowest annual mean					70.1	2011
Highest daily mean	2,360	Oct 9	2,360	Oct 9	4,560	Aug 20, 2008
Lowest daily mean	-0.90	Jan 15	16	Oct 6	-7.8	Mar 24, 2001
Annual seven-day minimum	9.5	Jan 10	32	Apr 27	-5.0	Nov 16, 2009
Maximum peak stage			9.76	Oct 9	14.05	Aug 20, 2008
10 percent exceeds	188		311		365	
50 percent exceeds	70		94		96	
90 percent exceeds	20		41		38	

Note.--Negative figures indicate reverse flow



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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	6.32	6.69	5.92	5.34	5.08	5.35	5.39	5.38	6.02	6.08	5.50	6.39
2	6.21	6.41	5.84	5.27	5.12	5.27	5.37	5.32	6.09	6.00	5.47	6.28
3	6.12	6.39	5.80	5.36	5.12	5.07	5.42	5.31	6.07	5.92	5.53	6.19
4	6.08	6.40	5.79	5.19	5.07	5.25	5.46	5.37	5.94	5.93	5.61	6.02
5	6.05	6.68	5.79	5.09	5.15	5.32	5.57	5.38	5.95	5.89	5.48	5.95
6	6.09	6.69	5.92	5.03	5.22	5.36	5.72	5.42	5.92	5.81	5.40	5.99
7	6.17	6.73	5.77	5.05	5.57	5.31	5.95	5.65	6.07	5.80	5.50	6.22
8	7.65	6.79	5.98	5.09	5.69	5.37	5.74	5.71	6.49	5.77	5.48	6.11
9	9.64	6.99	5.74	5.12	5.64	5.39	5.69	5.83	6.95	5.72	5.50	5.87
10	9.09	6.78	5.91	5.10	5.55	5.60	5.65	6.00	6.75	5.64	5.40	5.98
11	8.37	6.87	6.04	4.99	5.85	5.72	5.74	5.98	6.51	5.66	5.37	6.36
12	7.88	6.50	6.18	5.21	6.04	5.79	5.80	5.86	6.22	5.66	5.38	6.23
13	7.50	6.31	6.41	5.25	5.69	5.76	5.72	5.74	6.12	5.57	5.36	6.24
14	7.28	6.25	6.37	5.32	5.46	5.75	5.63	5.79	6.17	5.62	5.36	6.26
15	7.02	6.14	6.26	5.12	5.49	5.62	5.65	5.82	6.25	5.63	5.34	6.28
16	6.80	5.98	6.23	5.06	5.50	5.53	5.57	5.99	6.34	5.65	5.42	6.26
17	6.62	5.94	6.15	4.98	5.58	5.50	5.59	5.96	6.32	5.95	5.46	6.18
18	6.52	6.08	6.23	4.97	5.61	5.45	5.50	6.06	6.30	6.20	5.45	6.12
19	6.56	5.90	5.94	5.14	5.51	5.39	5.51	6.18	6.33	5.75	5.47	6.20
20	6.55	6.00	5.80	5.03	5.91	5.38	5.71	6.18	6.42	5.57	5.50	6.20
21	6.34	6.03	5.81	5.03	5.75	5.30	5.71	6.12	6.36	5.44	5.61	6.26
22	6.28	5.94	5.83	5.10	5.71	5.37	5.85	6.01	6.29	5.46	5.75	6.30
23	6.12	5.88	5.79	5.07	5.68	5.38	5.96	5.96	6.27	5.45	5.83	6.28
24	6.08	6.10	5.90	5.16	5.61	5.32	5.87	6.03	5.99	5.55	5.96	6.25
25	5.99	5.91	5.71	5.20	5.89	5.45	5.65	6.12	5.82	5.54	5.93	6.11
26	5.90	5.87	5.85	5.09	5.63	5.55	5.47	6.11	5.86	5.50	6.05	6.05
27	5.93	5.82	5.65	5.10	5.45	5.45	5.39	6.01	6.27	5.48	6.05	6.05
28	5.99	5.78	5.84	5.31	5.64	5.36	5.40	5.90	6.44	5.44	6.33	5.97
29	6.16	5.90	5.68	5.37	5.41	5.38	5.41	6.00	6.29	5.38	6.83	5.93
30	6.24	5.85	5.56	5.33	---	5.28	5.42	6.06	6.18	5.44	6.75	5.83
31	6.54	---	5.44	5.11	---	5.25	---	5.99	---	5.49	6.52	---
Mean	6.71	6.25	5.91	5.15	5.54	5.43	5.62	5.85	6.23	5.68	5.70	6.15
Max	9.64	6.99	6.41	5.37	6.04	5.79	5.96	6.18	6.95	6.20	6.83	6.39
Min	5.90	5.78	5.44	4.97	5.07	5.07	5.37	5.31	5.82	5.38	5.34	5.83

	Calendar Year 2011	Water Year 2012
Mean	5.70	5.85
Max	9.64	9.64
Min	4.90	4.97