



Water-Data Report 2010

01465880 SOUTHWEST BRANCH RANCOCAS CREEK AT MEDFORD, NJ

DELAWARE RIVER BASIN

LOCATION.--Lat 39°53'43", long 74°49'25" referenced to North American Datum of 1983, Medford Township, Burlington County, NJ, Hydrologic Unit 02040202, at upstream left wingwall of bridge on Argonne Highway (County Route 541), 0.6 mi south of intersection of Argonne Highway and State Route 70 at Medford, and 5.3 mi upstream from the mouth.

DRAINAGE AREA.--47.2 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1961-66, 1973, 1982-93, 1997, and 2002. Annual maximum, water years 1983-95. Continuous-record gaging station, December 2004 to current year.

GAGE.--Water-stage and precipitation recorder and crest-stage gage. Datum of gage is 18.38 ft above NGVD of 1929.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. Occasional regulation by lakes and ponds upstream of gage. Several measurements of water temperature were made during the year. Satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1940, 19.7 ft, July 13, 2004 from floodmark, discharge 12,400 ft³/s, from rating curve extended above 4,200 ft³/s on basis of contracted opening and flow-over-road computation of peak flow; minimum discharge 6.88 ft³/s, August 31, 1966.

01465880 SOUTHWEST BRANCH RANCOCAS CREEK AT MEDFORD, NJ—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES
[*e*, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	64	109	67	155	78	182	277	86	37	27	18	17
2	58	95	68	151	75	196	193	81	33	24	19	14
3	51	88	339	116	77	185	162	118	30	24	19	13
4	46	91	219	98	78	173	137	110	33	24	20	12
5	43	93	149	93	75	150	119	82	41	25	20	11
6	42	89	240	89	96	131	113	70	40	24	19	11
7	40	84	150	83	95	119	109	61	37	23	18	e12
8	39	80	110	84	85	104	101	58	35	23	18	e11
9	38	82	653	80	80	96	131	44	36	30	18	e13
10	37	78	449	74	113	111	99	45	52	31	18	e13
11	38	78	212	70	147	106	110	50	49	32	19	e12
12	41	110	146	68	126	82	99	78	42	32	19	e17
13	39	162	190	67	111	606	91	83	39	119	20	e21
14	38	157	345	66	102	793	92	72	49	208	19	e16
15	55	127	202	66	96	563	88	83	44	300	19	e14
16	83	99	156	68	103	382	85	79	40	101	19	e17
17	88	84	123	105	99	249	92	65	39	73	21	e33
18	119	74	105	232	95	199	85	142	35	57	23	e25
19	97	73	122	149	104	187	80	214	33	47	26	e21
20	68	94	143	108	130	169	76	132	31	47	25	e19
21	56	87	125	90	146	152	77	93	30	45	22	e17
22	50	76	121	81	145	164	101	68	29	37	22	e17
23	47	72	114	74	317	308	93	60	29	31	28	e31
24	60	83	102	72	570	217	80	63	25	28	32	e25
25	217	82	97	263	391	164	108	64	35	27	29	e19
26	129	77	741	338	303	160	224	57	37	27	26	e16
27	106	72	871	184	222	137	252	49	33	25	24	e31
28	433	66	350	131	187	123	150	45	31	24	21	e43
29	334	62	215	101	---	392	112	43	32	27	20	28
30	162	63	157	86	---	478	95	45	30	28	19	30
31	114	---	130	82	---	516	---	41	---	21	19	---
Total	2,832	2,687	7,211	3,524	4,246	7,594	3,631	2,381	1,086	1,591	659	579
Mean	91.4	89.6	233	114	152	245	121	76.8	36.2	51.3	21.3	19.3
Max	433	162	871	338	570	793	277	214	52	300	32	43
Min	37	62	67	66	75	82	76	41	25	21	18	11
Cfsm	1.94	1.90	4.93	2.41	3.21	5.19	2.56	1.63	0.77	1.09	0.45	0.41
In.	2.23	2.12	5.68	2.78	3.35	5.99	2.86	1.88	0.86	1.25	0.52	0.46

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2006 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	71.6	91.4	128	117	97.1	114	123	76.6	70.9	49.9	56.1	51.5
Max	118	197	233	167	152	245	254	111	130	88.5	127	118
(WY)	(2007)	(2007)	(2010)	(2006)	(2010)	(2010)	(2007)	(2009)	(2006)	(2006)	(2009)	(2006)
Min	36.9	29.6	60.2	65.6	60.1	46.6	50.0	51.2	35.3	19.8	16.0	18.0
(WY)	(2008)	(2008)	(2008)	(2008)	(2009)	(2006)	(2008)	(2006)	(2008)	(2008)	(2008)	(2007)

01465880 SOUTHWEST BRANCH RANCOCAS CREEK AT MEDFORD, NJ—Continued**SUMMARY STATISTICS**

	Calendar Year 2009	Water Year 2010		Water Years 2006 - 2010	
Annual total	37,223	38,021			
Annual mean	102	104		85.6	
Highest annual mean				104	2010
Lowest annual mean				49.1	2008
Highest daily mean	871	Dec 27	871	Dec 27	2,060 Apr 16, 2007
Lowest daily mean	27	Jul 5	11	Sep 5, 6, 8	8.6 Jul 22, 2008
Annual seven-day minimum	34	Jun 30	12	Sep 3	10 Jul 17, 2008
Maximum peak flow			1,300	Dec 26	2,900 Apr 16, 2007
Maximum peak stage			11.73	Dec 26	14.76 Apr 16, 2007
Instantaneous low flow			10	Sep 6	8.2 Jul 22, 2008
Annual runoff (cfsm)	2.16	2.21			1.81
Annual runoff (inches)	29.34	29.97			24.63
10 percent exceeds	177	213			162
50 percent exceeds	76	78			63
90 percent exceeds	43	20			20

