



Water-Data Report 2007

05512500 BAY CREEK AT PITTSFIELD, IL

Upper Mississippi-Salt Basin
The Sny Subbasin

LOCATION.--Lat 39°37'31", long 90°47'38" referenced to North American Datum of 1927, in NE ¼ SW ¼ sec.18, T.5 S., R.3 W., Pike County, IL, Hydrologic Unit 07110004, on right bank at downstream side of bridge on abandoned county road, 50 ft downstream from Panther Creek, 0.1 mi downstream from U.S. Highway 54, 1.4 mi northeast of Pittsfield, and at mile 33.6.

DRAINAGE AREA.--39.4 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: October 1939 to current year.

STAGE: Water years 1994 to current year.

REVISED RECORDS.-- WSP 1175: 1940(P), 1941, 1949. WSP 1508: 1942. WDR IL-75-1: Drainage area.

GAGE.-- Water-stage recorder, phone telemeter, and crest-stage gage. Datum of gage is 638.48 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers) (638.19 ft NAVD 1988). Prior to Dec. 7, 1939, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Effluent from sewage-treatment plant upstream at Pittsfield averaged about 1.39 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 13,700 ft³/s, Sept. 14, 1993, gage height, 14.92 ft, from rating curve extended above 4,400 ft³/s; no flow during many periods.

EXTREMES OUTSIDE PERIOD OF RECORD.—

SURFACE-WATER DISCHARGE AND STAGE: Flood of Sept. 8, 1926, reached a stage of 18.4 ft, from floodmark, discharge not determined.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES
[*e*, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.47	1.3	9.5	7.2	5.8	320	27	12	8.1	3.2	0.55	0.62
2	0.53	1.1	6.3	4.4	4.9	37	20	13	16	2.3	0.56	0.57
3	0.88	1.1	4.3	4.5	3.4	26	80	36	8.9	1.9	0.74	0.73
4	1.9	0.83	3.4	7.3	2.9	19	32	59	9.4	2.5	0.55	0.67
5	2.0	0.78	2.9	23	2.4	19	23	34	8.0	1.6	0.49	1.2
6	2.0	1.4	3.3	10	e2.1	17	20	24	6.6	1.6	0.47	4.4
7	2.0	0.85	3.0	7.3	e1.8	17	18	19	5.9	1.3	0.51	0.65
8	1.8	1.1	1.5	5.7	e1.7	15	17	16	5.6	1.3	0.51	0.78
9	1.5	0.97	1.5	4.6	e1.6	17	15	15	5.3	1.3	0.53	0.79
10	1.0	1.9	2.3	3.7	e1.3	20	15	13	5.0	1.2	0.53	0.62
11	3.9	1.4	23	4.0	e1.2	17	78	13	5.3	1.3	0.52	0.58
12	0.88	1.5	132	4.4	e1.2	17	33	10	4.6	1.2	0.45	0.67
13	0.78	0.97	26	5.1	e1.2	16	23	9.6	4.2	0.77	0.45	0.55
14	0.77	0.69	13	15	e1.1	16	28	8.9	3.7	0.79	0.35	0.51
15	0.45	1.9	8.6	106	e1.1	14	25	8.5	3.4	0.81	0.37	0.51
16	4.0	1.4	6.8	18	e1.1	12	20	7.9	2.8	0.89	6.0	0.53
17	4.6	1.5	5.4	12	e1.1	12	18	7.2	2.4	2.7	0.97	0.57
18	3.6	0.83	4.3	10	e1.1	12	17	7.1	2.5	1.2	0.57	0.62
19	1.6	0.54	3.5	8.3	e3.0	14	15	7.1	2.7	0.89	0.28	0.67
20	1.3	0.72	4.6	7.4	e14	12	14	7.0	2.5	0.66	0.33	0.66
21	2.0	0.88	60	7.4	e70	14	13	6.7	1.7	0.67	0.90	0.64
22	1.3	0.63	18	7.1	e37	21	12	6.2	1.4	0.62	0.97	0.74
23	0.92	0.50	11	6.4	e30	23	11	5.7	1.8	0.79	0.71	0.82
24	1.1	0.51	8.0	6.5	e250	21	10	5.3	1.4	0.96	0.54	0.85
25	1.1	0.53	7.0	5.8	e150	18	54	6.2	1.7	1.2	2.3	0.85
26	3.4	0.54	5.8	13	36	64	33	14	2.0	0.57	0.63	0.98
27	1.6	0.57	5.5	48	28	32	23	20	3.5	0.60	1.3	0.90
28	1.9	0.88	5.0	14	43	22	18	15	8.5	0.64	1.8	0.81
29	1.3	3.5	4.2	9.5	---	18	15	9.9	9.4	0.55	0.61	0.73
30	1.4	61	3.5	6.9	---	126	13	8.7	4.4	0.63	0.61	2.5
31	1.8	---	12	5.4	---	38	---	9.6	---	0.55	0.67	---
Total	53.78	92.32	405.2	397.9	698.0	1,046	740	434.6	148.7	37.19	26.77	26.72
Mean	1.73	3.08	13.1	12.8	24.9	33.7	24.7	14.0	4.96	1.20	0.86	0.89
Max	4.6	61	132	106	250	320	80	59	16	3.2	6.0	4.4
Min	0.45	0.50	1.5	3.7	1.1	12	10	5.3	1.4	0.55	0.28	0.51
Cfsm	0.04	0.08	0.33	0.33	0.63	0.86	0.63	0.36	0.13	0.03	0.02	0.02
In.	0.05	0.09	0.38	0.38	0.66	0.99	0.70	0.41	0.14	0.04	0.03	0.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	11.8	16.9	17.4	19.5	31.2	39.2	48.7	50.3	32.3	24.9	13.1	19.0
Max	140	201	142	128	126	132	207	283	243	417	103	359
(WY)	(1942)	(1986)	(1983)	(2005)	(1942)	(1973)	(1973)	(1970)	(1945)	(1981)	(1961)	(1993)
Min	0.20	0.19	0.08	0.06	0.27	0.45	3.61	1.23	0.94	0.10	0.07	0.06
(WY)	(1951)	(1951)	(1951)	(1940)	(1954)	(1956)	(1963)	(1954)	(1977)	(1940)	(1941)	(1940)

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SUMMARY STATISTICS

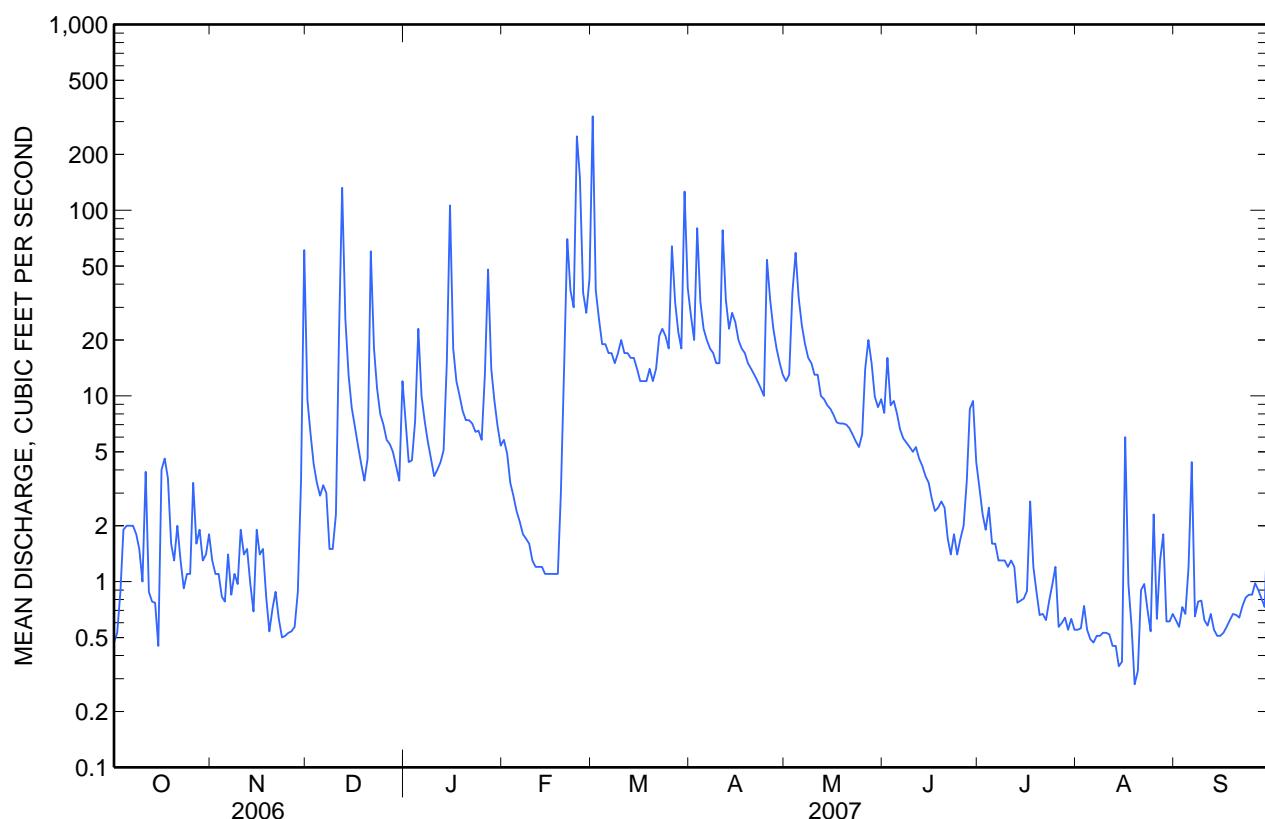
	Calendar Year 2006	Water Year 2007	Water Years 1940 - 2007
Annual total	2,580.20	4,107.18	
Annual mean	7.07	11.3	27.0
Highest annual mean			94.8
Lowest annual mean			2.76
Highest daily mean	212 Sep 11	320 Mar 1	5,660 Jul 26, 1981
Lowest daily mean	0.23 Aug 13	0.28 Aug 19	0.00 A
Annual seven-day minimum	0.34 Aug 11	0.46 Aug 9	0.00 A
Maximum peak flow		1,120 Mar 1	B 13,700 Sep 14, 1993
Maximum peak stage		C 10.01 Feb 24	14.92 Sep 14, 1993
Instantaneous low flow		0.12 D	
Annual runoff (cfsm)	0.179	0.286	0.685
Annual runoff (inches)	2.44	3.88	9.30
10 percent exceeds	11	23	38
50 percent exceeds	1.8	3.5	3.8
90 percent exceeds	0.60	0.58	0.30

A Several occurrences in most years.

B From rating curve extended above 4400 ft³/s.

C Ice jam.

D Aug. 14, 19-21.



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GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.81	0.92	1.58	1.47	1.40	3.69	2.03	1.42	1.23	0.90	0.64	0.67
2	0.82	1.09	1.43	1.31	1.34	2.32	1.76	1.46	1.61	0.84	0.64	0.66
3	0.86	1.08	1.31	1.32	1.25	1.99	2.52	2.29	1.31	0.80	0.67	0.69
4	0.97	1.06	1.25	1.47	1.21	1.73	2.19	2.55	1.34	0.85	0.64	0.69
5	0.98	1.05	1.21	2.04	1.18	1.72	1.88	2.24	1.26	0.78	0.63	0.72
6	0.98	1.11	1.24	1.61	1.19	1.64	1.76	1.92	1.17	0.77	0.63	0.88
7	0.98	1.06	1.22	1.48	1.20	1.62	1.68	1.74	1.12	0.75	0.64	0.67
8	0.97	1.08	1.13	1.40	1.18	1.56	1.62	1.60	1.10	0.74	0.63	0.69
9	0.94	1.06	1.13	1.33	1.15	1.63	1.56	1.53	1.08	0.74	0.64	0.70
10	0.88	1.15	1.18	1.27	1.12	1.74	1.56	1.46	1.05	0.73	0.64	0.67
11	1.10	1.08	1.82	1.29	1.11	1.64	2.76	1.46	1.08	0.74	0.64	0.67
12	0.87	1.12	3.21	1.32	1.16	1.62	2.23	1.35	1.03	0.73	0.62	0.68
13	0.86	1.08	2.12	1.36	1.14	1.59	1.89	1.31	0.99	0.68	0.62	0.66
14	0.86	1.04	1.72	1.62	1.14	1.60	2.04	1.28	0.95	0.68	0.60	0.65
15	0.81	1.13	1.54	2.93	1.13	1.50	1.96	1.26	0.92	0.68	0.61	0.65
16	1.05	1.12	1.46	1.91	1.13	1.44	1.77	1.22	0.87	0.69	0.90	0.66
17	1.15	1.13	1.38	1.69	1.14	1.43	1.68	1.19	0.84	0.83	0.72	0.67
18	1.09	1.06	1.31	1.62	1.13	1.43	1.62	1.18	0.85	0.74	0.66	0.67
19	0.94	1.01	1.26	1.52	1.27	1.50	1.55	1.18	0.86	0.69	0.61	0.68
20	0.92	1.03	1.32	1.48	2.26	1.45	1.51	1.17	0.85	0.66	0.61	0.68
21	0.96	1.07	2.52	1.48	3.40	1.50	1.47	1.16	0.78	0.66	0.70	0.68
22	0.92	1.03	1.90	1.47	2.92	1.78	1.44	1.13	0.76	0.66	0.73	0.69
23	0.88	0.99	1.64	1.43	2.33	1.90	1.40	1.09	0.79	0.68	0.69	0.70
24	0.89	1.00	1.51	1.44	4.88	1.82	1.35	1.06	0.76	0.71	0.66	0.71
25	0.90	1.01	1.46	1.40	3.51	1.66	2.56	1.12	0.79	0.73	0.84	0.71
26	1.07	1.01	1.40	1.59	2.31	2.08	2.23	1.46	0.81	0.65	0.68	0.72
27	0.95	1.02	1.38	2.48	2.04	2.18	1.86	1.74	0.87	0.65	0.74	0.72
28	0.97	1.07	1.35	1.77	2.32	1.82	1.67	1.53	1.26	0.66	0.81	0.70
29	0.91	1.18	1.30	1.59	---	1.69	1.56	1.33	1.32	0.64	0.67	0.69
30	0.92	2.48	1.25	1.45	---	2.74	1.48	1.26	1.00	0.65	0.67	0.80
31	0.96	---	1.64	1.38	---	2.36	---	1.31	---	0.64	0.68	---
Mean	0.94	1.11	1.52	1.58	1.73	1.82	1.82	1.45	1.02	0.72	0.67	0.69
Max	1.15	2.48	3.21	2.93	4.88	3.69	2.76	2.55	1.61	0.90	0.90	0.88
Min	0.81	0.92	1.13	1.27	1.11	1.43	1.35	1.06	0.76	0.64	0.60	0.65

	Calendar Year 2006	Water Year 2007
Mean	1.14	1.25
Max	3.21	4.88
Min	0.81	0.60

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