



Water-Data Report 2008

12099600 BOISE CREEK AT BUCKLEY, WA

Puget Sound Basin
Puyallup Subbasin

LOCATION.--Lat 47°10'34", long 122°01'02" referenced to North American Datum of 1927, in NE ¼ SE ¼ sec.34, T.20 N., R.6 E., King County, WA, Hydrologic Unit 17110014, on left bank at downstream side of county road bridge, 1.0 mi northeast of Buckley, and at mile 0.1.

DRAINAGE AREA.--15.4 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--March 1977 to September 1981, December 1981 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 640 ft above NGVD of 1929, from topographic map. Prior to January 25, 1984, at site 25 ft upstream at datum 0.91 ft higher. Prior to March 27, 1996, at site 10 ft downstream, at datum 1.00 ft higher.

REMARKS.--Records fair. Flow partly regulated by millpond at mile 5.6. Diversions upstream from station for domestic and industrial use. Inter-basin diversion from Scatter Creek of about 2 ft³/s during low-flow periods enters Boise Creek upstream from millpond. U.S. Geological Survey satellite telemeter at station. Chemical analyses November 1961 to July 1964.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--30 years (water years 1978-81, 1983-2008), 32.1 ft³/s, 23,260 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,200 ft³/s, Feb. 8, 1996, gage height, 4.26 ft, from rating curve extended above 180 ft³/s, on basis of slope-area measurement of peak flow 0.94 mi upstream from station; minimum discharge, 1.7 ft³/s, Sept. 19, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 3	1200	*267	*2.77
Feb 9	0515	259	2.74

Minimum discharge, 5.5 ft³/s, Oct. 18, Nov. 8, 9, Sept. 16-18, gage height, 0.72 ft.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	46	6.2	12	48	58	67	35	32	33	13	13	10
2	47	6.1	37	55	45	48	32	29	32	14	11	9.4
3	60	6.1	151	56	38	43	31	28	39	22	11	8.5
4	37	6.4	126	53	33	40	33	29	38	14	10	8.1
5	24	7.0	88	49	40	34	34	28	39	16	9.7	7.8
6	16	6.4	70	46	41	31	40	28	50	27	9.3	8.0
7	16	6.0	52	45	54	29	51	28	93	15	9.1	7.6
8	18	5.7	43	55	79	29	50	26	63	14	8.7	7.0
9	12	5.7	37	56	194	29	47	24	55	12	11	6.6
10	12	15	34	81	163	28	45	24	77	11	12	6.8
11	14	13	30	109	124	40	43	33	81	11	9.6	6.6
12	10	9.4	26	102	94	36	45	36	64	10	8.8	6.7
13	8.6	8.9	28	97	80	50	54	30	54	10	8.5	6.6
14	7.2	7.3	28	91	65	68	53	44	45	9.8	8.5	6.3
15	6.4	7.2	28	84	54	57	48	52	39	9.2	8.1	6.3
16	6.1	19	24	71	52	59	41	50	34	9.3	8.0	5.9
17	5.9	31	24	64	45	63	36	50	31	10	8.1	5.6
18	5.7	39	26	58	41	62	35	48	28	9.9	8.4	5.9
19	20	28	32	57	38	54	34	41	27	10	11	6.4
20	55	22	38	60	35	50	31	47	25	9.8	25	11
21	31	18	27	49	34	43	30	83	24	9.7	19	19
22	22	16	32	43	33	37	27	140	24	9.5	11	17
23	17	14	70	40	31	39	27	88	22	9.4	9.3	7.6
24	13	13	119	37	31	39	26	69	19	12	8.7	7.2
25	16	12	84	35	34	34	25	58	17	11	11	10
26	12	11	75	40	33	41	24	52	16	10	9.4	8.6
27	10	14	69	45	32	54	25	48	15	12	19	7.6
28	8.6	12	74	38	35	53	37	44	14	11	13	6.9
29	7.6	15	66	42	45	55	48	42	14	11	12	8.0
30	7.3	14	64	47	---	45	37	38	14	13	11	8.6
31	6.7	---	53	64	---	38	---	35	---	10	11	---
Total	578.1	394.4	1,667	1,817	1,681	1,395	1,124	1,404	1,126	375.6	343.2	247.6
Mean	18.6	13.1	53.8	58.6	58.0	45.0	37.5	45.3	37.5	12.1	11.1	8.25
Max	60	39	151	109	194	68	54	140	93	27	25	19
Min	5.7	5.7	12	35	31	28	24	24	14	9.2	8.0	5.6
Ac-ft	1,150	782	3,310	3,600	3,330	2,770	2,230	2,780	2,230	745	681	491

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	14.1	44.3	50.5	56.8	53.3	44.4	38.5	30.7	23.7	13.9	8.98	9.40
Max	29.8	124	96.2	162	145	77.2	69.3	57.5	55.1	35.5	16.3	29.5
(WY)	(1986)	(1991)	(1978)	(1984)	(1996)	(2007)	(1991)	(1984)	(1990)	(1983)	(1993)	(1978)
Min	4.65	6.61	12.7	20.9	15.7	20.7	15.8	15.6	8.45	5.80	3.65	3.37
(WY)	(1990)	(2003)	(2003)	(2001)	(2005)	(2005)	(2004)	(1982)	(1982)	(2003)	(2003)	(1989)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1977 - 2008	
Annual total	10,516.8		12,152.9			
Annual mean	28.8		33.2		32.1	
Highest annual mean					50.4	1991
Lowest annual mean					21.3	2001
Highest daily mean	216	Mar 25	194	Feb 9	898	Feb 8, 1996
Lowest daily mean	3.3	Sep 27	5.6	Sep 17	2.0	Sep 23, 1989
Annual seven-day minimum	3.9	Sep 21	6.1	Sep 13	2.4	Sep 20, 1989
Annual runoff (ac-ft)	20,860		24,110		23,260	
10 percent exceeds	65		64		65	
50 percent exceeds	19		29		23	
90 percent exceeds	6.2		7.7		6.6	

