



Water-Data Report 2008

## 12209490 SKOOKUM CREEK ABOVE DIVERSION, NEAR WICKERSHAM, WA

Puget Sound Basin  
Nooksack Subbasin

LOCATION.--Lat 48°40'18", long 122°08'18" referenced to North American Datum of 1927, in NE ¼ NE ¼ sec.27, T.37 N., R.5 E., Whatcom County, WA, Hydrologic Unit 17110004, on right bank, 200 ft upstream of hatchery diversion, 3.6 mi northeast of Wickersham, and at mile 0.2.

DRAINAGE AREA.--23.0 mi<sup>2</sup>.

### **SURFACE-WATER RECORDS**

PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 410 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except estimated daily discharges, which are poor. No regulation or diversion upstream from station. Records for water years 1992-1998 are available in the files of Devine Tarbell & Associates, Bellingham, Washington.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--10 years (water years 1999-2008) 140 ft<sup>3</sup>/s, 82.99 in/yr, 101,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,850 ft<sup>3</sup>/s, Oct. 16, 2003, gage height, 8.55 ft; minimum discharge, 14 ft<sup>3</sup>/s, Oct. 1, 1998, Sept. 27, 28, 2005, and Oct. 12-14 2006.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,480 ft<sup>3</sup>/s, Dec. 3, gage height, 6.54 ft; minimum discharge, 27 ft<sup>3</sup>/s, Sept. 30, gage height, 1.16 ft.

## 12209490 SKOOKUM CREEK ABOVE DIVERSION, NEAR WICKERSHAM, WA—Continued

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

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	558	67	54	55	36	214	45	110	257	229	66	99
2	491	62	70	80	34	121	44	100	197	202	84	82
3	307	107	1,380	104	32	102	44	123	219	235	56	72
4	342	130	1,060	152	30	97	46	164	305	165	46	64
5	184	84	381	165	37	83	44	211	242	136	44	59
6	142	71	221	107	37	74	47	226	407	132	42	56
7	442	73	159	85	50	75	58	208	263	105	42	52
8	251	87	126	75	78	110	59	160	212	104	42	48
9	149	121	106	73	94	103	52	132	265	107	48	45
10	131	191	92	104	145	178	50	148	306	96	161	43
11	149	119	83	160	120	339	49	214	232	80	60	41
12	111	e150	75	137	109	164	84	146	203	79	46	39
13	91	e155	71	144	111	123	196	144	273	79	41	37
14	78	e100	72	134	85	107	152	371	224	75	39	36
15	74	e160	119	121	73	99	104	450	186	67	40	34
16	91	e700	104	94	69	91	83	581	206	65	39	33
17	111	e300	105	81	61	87	78	881	192	62	38	32
18	144	e250	121	70	58	85	81	777	160	57	40	32
19	414	e160	166	66	63	74	69	659	152	52	45	31
20	187	e130	137	59	72	74	60	912	194	51	182	33
21	180	e100	98	50	73	67	55	540	230	51	843	49
22	384	e90	106	48	71	61	51	375	209	51	193	55
23	217	e80	139	46	77	94	53	316	165	46	114	41
24	218	e75	139	44	74	90	59	388	148	43	129	35
25	174	e65	101	41	66	71	56	506	148	45	149	43
26	134	e65	88	41	66	69	54	452	144	44	97	39
27	114	e70	77	40	79	62	92	435	146	46	158	34
28	98	e65	76	36	96	57	220	418	214	42	151	31
29	89	62	69	37	152	54	247	354	263	42	288	30
30	79	57	65	36	---	51	145	263	257	73	215	28
31	71	---	58	37	---	49	---	260	---	47	128	---
<b>Total</b>	6,205	3,946	5,718	2,522	2,148	3,125	2,477	11,024	6,619	2,708	3,666	1,353
<b>Mean</b>	200	132	184	81.4	74.1	101	82.6	356	221	87.4	118	45.1
<b>Max</b>	558	700	1,380	165	152	339	247	912	407	235	843	99
<b>Min</b>	71	57	54	36	30	49	44	100	144	42	38	28
<b>Ac-ft</b>	12,310	7,830	11,340	5,000	4,260	6,200	4,910	21,870	13,130	5,370	7,270	2,680
<b>Cfs/m</b>	8.70	5.72	8.02	3.54	3.22	4.38	3.59	15.5	9.59	3.80	5.14	1.96
<b>In.</b>	10.04	6.38	9.25	4.08	3.47	5.05	4.01	17.83	10.71	4.38	5.93	2.19

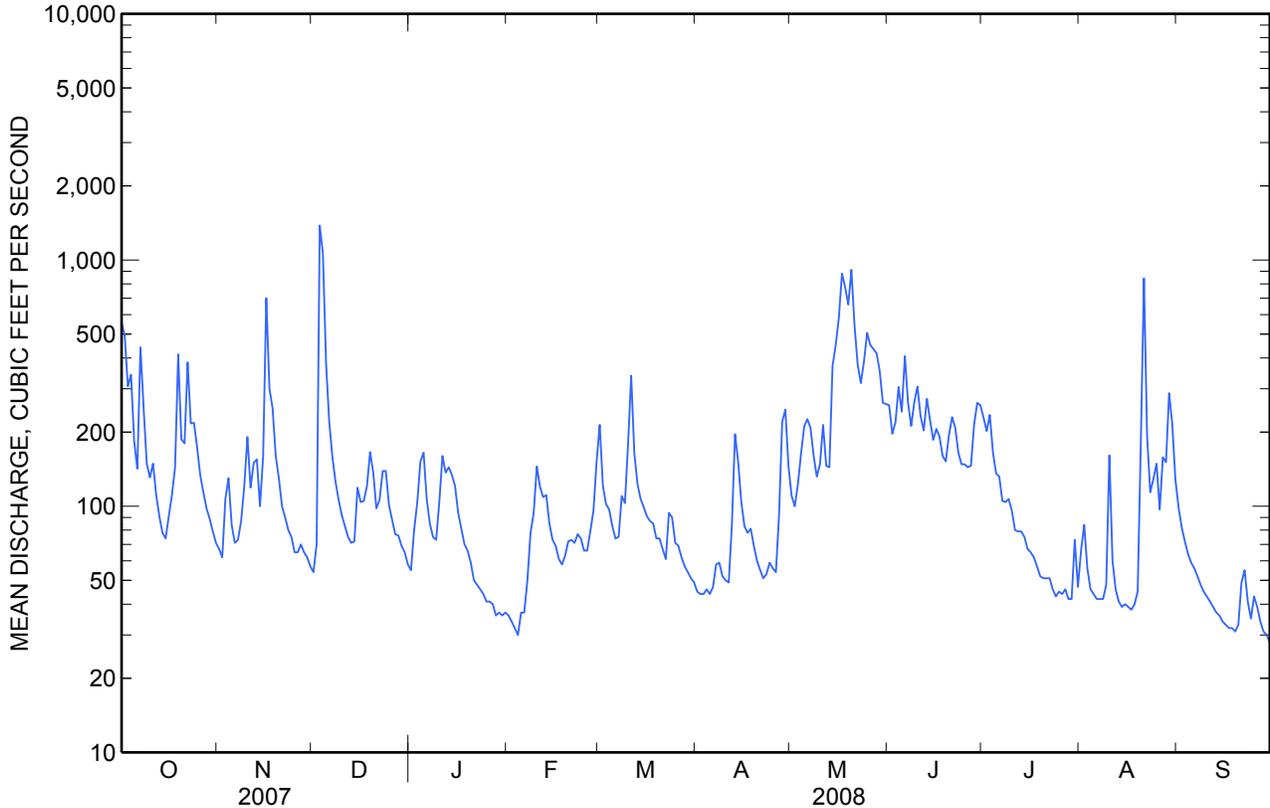
**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2008, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	124	212	187	196	109	141	169	193	158	84.5	62.2	48.0
<b>Max</b>	354	338	296	375	197	324	333	356	288	201	130	131
<b>(WY)</b>	(2004)	(2000)	(2000)	(2003)	(2002)	(2007)	(2000)	(2008)	(1999)	(1999)	(1999)	(2004)
<b>Min</b>	24.7	63.9	89.8	81.4	53.4	66.5	82.6	98.6	65.8	46.2	23.7	27.2
<b>(WY)</b>	(2007)	(2001)	(2001)	(2008)	(2001)	(2006)	(2008)	(2005)	(2005)	(2004)	(2003)	(2003)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1999 - 2008	
<b>Annual total</b>	52,185.0		51,511			
<b>Annual mean</b>	143		141		140	
<b>Highest annual mean</b>					175	1999
<b>Lowest annual mean</b>					84.9	2001
<b>Highest daily mean</b>	1,380	Dec 3	1,380	Dec 3	2,390	Oct 17, 2003
<b>Lowest daily mean</b>	22	Sep 13	28	Sep 30	14	Oct 1, 1998
<b>Annual seven-day minimum</b>	23	Sep 10	33	Sep 14	15	Sep 22, 2005
<b>Maximum peak flow</b>					4,190	Mar 13, 2003
<b>Maximum peak stage</b>					7.62	Mar 13, 2003
<b>Instantaneous low flow</b>					14	Oct 1, 1998
<b>Annual runoff (ac-ft)</b>	103,500		102,200		101,800	
<b>Annual runoff (cfsm)</b>	6.22		6.12		6.11	
<b>Annual runoff (inches)</b>	84.40		83.31		82.99	
<b>10 percent exceeds</b>	249		264		268	
<b>50 percent exceeds</b>	104		91		98	
<b>90 percent exceeds</b>	33		42		31	



**12209490 SKOOKUM CREEK ABOVE DIVERSION, NEAR WICKERSHAM, WA—Continued**

**WATER-QUALITY RECORDS**

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: April to September 2008.

INSTRUMENTATION.--Water-temperature sensor with a 15-minute logging interval, interfaced with an electronic data logger.

REMARKS.--Temperature records are good.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum recorded, 16.0°C, Aug. 16, 2008; minimum recorded, 2.0°C, Apr. 29, 2008.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 16.0°C, Aug. 16; minimum recorded, 2.0°C, Apr. 29.

**TEMPERATURE, WATER, DEGREES CELSIUS  
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
Month	---	---	---	---	---	---	---	---	---	---	---	---

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TEMPERATURE, WATER, DEGREES CELSIUS  
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	---	---	---	---	---	---	---	---	---	5.7	3.7	4.5
2	---	---	---	---	---	---	---	---	---	6.3	3.5	4.9
3	---	---	---	---	---	---	---	---	---	5.4	4.5	5.0
4	---	---	---	---	---	---	---	---	---	7.4	4.3	5.4
5	---	---	---	---	---	---	---	---	---	7.0	4.3	5.3
6	---	---	---	---	---	---	---	---	---	7.2	4.1	5.3
7	---	---	---	---	---	---	---	---	---	5.6	4.5	4.9
8	---	---	---	---	---	---	---	---	---	5.5	4.3	4.7
9	---	---	---	---	---	---	---	---	---	6.8	3.5	5.1
10	---	---	---	---	---	---	---	---	---	5.5	4.7	5.1
11	---	---	---	---	---	---	---	---	---	5.3	3.9	4.7
12	---	---	---	---	---	---	---	---	---	5.8	4.0	4.9
13	---	---	---	---	---	---	---	---	---	5.5	4.6	5.0
14	---	---	---	---	---	---	---	---	---	5.2	4.4	4.8
15	---	---	---	---	---	---	---	---	---	8.0	4.4	5.4
16	---	---	---	---	---	---	---	---	---	7.6	4.3	5.2
17	---	---	---	---	---	---	6.0	4.4	5.1	7.1	4.5	5.1
18	---	---	---	---	---	---	5.2	3.5	4.1	7.0	4.5	5.3
19	---	---	---	---	---	---	3.8	2.8	3.1	6.1	4.8	5.3
20	---	---	---	---	---	---	4.2	2.2	3.1	4.9	4.5	4.7
21	---	---	---	---	---	---	4.4	2.4	3.4	5.7	4.4	4.9
22	---	---	---	---	---	---	5.2	2.3	3.8	5.3	4.7	5.0
23	---	---	---	---	---	---	5.5	4.1	4.8	7.1	4.7	5.6
24	---	---	---	---	---	---	5.0	4.3	4.6	8.5	5.0	6.2
25	---	---	---	---	---	---	5.5	3.4	4.3	8.3	5.2	6.1
26	---	---	---	---	---	---	6.7	3.1	4.8	7.2	5.1	5.9
27	---	---	---	---	---	---	6.0	4.8	5.4	8.2	5.3	6.2
28	---	---	---	---	---	---	5.8	4.3	4.9	8.6	5.3	6.4
29	---	---	---	---	---	---	4.8	2.0	3.8	6.3	5.4	5.8
30	---	---	---	---	---	---	4.8	3.1	3.9	7.3	5.0	5.9
31	---	---	---	---	---	---	---	---	---	8.5	4.8	6.3
Month	---	---	---	---	---	---	---	---	---	8.6	3.5	5.3

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**TEMPERATURE, WATER, DEGREES CELSIUS**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
<b>1</b>	6.1	5.5	5.8	13.2	8.9	10.7	11.7	10.1	10.9	10.3	8.4	9.4
<b>2</b>	6.3	5.4	5.8	13.1	9.1	10.8	11.3	10.5	10.9	9.9	8.3	9.2
<b>3</b>	6.3	5.4	5.8	11.3	10.0	10.3	12.1	9.6	10.8	10.4	8.6	9.5
<b>4</b>	6.3	5.0	5.6	11.1	9.3	10.1	13.4	10.9	12.1	10.6	9.1	9.9
<b>5</b>	5.7	5.4	5.6	10.4	9.2	9.9	14.1	11.7	13.0	10.5	9.7	10.1
<b>6</b>	6.4	4.8	5.6	10.2	9.2	9.7	14.6	12.6	13.7	11.6	10.2	10.8
<b>7</b>	6.0	5.3	5.6	12.2	8.4	10.1	15.2	13.2	14.2	11.6	10.1	10.9
<b>8</b>	7.5	5.2	6.2	13.0	9.4	11.1	14.8	13.4	14.2	11.7	10.1	10.9
<b>9</b>	6.4	4.6	5.8	13.5	10.2	11.8	14.1	12.6	13.2	11.4	10.0	10.7
<b>10</b>	6.0	4.6	5.3	12.5	9.8	10.8	12.6	10.9	11.5	10.9	9.2	10.1
<b>11</b>	6.1	5.5	5.8	12.1	8.5	10.2	12.6	10.3	11.4	11.3	9.6	10.4
<b>12</b>	8.4	5.6	6.7	13.2	9.9	11.5	12.8	11.0	12.0	11.8	10.1	10.8
<b>13</b>	8.4	6.1	7.0	13.3	10.5	12.0	14.3	12.2	13.1	11.3	9.7	10.5
<b>14</b>	7.6	5.4	6.4	12.8	10.2	11.7	14.8	12.5	13.7	11.5	9.8	10.6
<b>15</b>	8.7	5.6	7.0	12.8	9.8	11.4	15.6	13.9	14.8	12.0	10.3	11.0
<b>16</b>	10.1	5.6	7.4	13.1	10.2	11.7	16.0	14.1	15.1	12.1	10.4	11.2
<b>17</b>	7.6	6.0	6.8	12.8	10.5	11.8	15.8	14.8	15.4	12.1	10.8	11.4
<b>18</b>	8.0	6.3	7.0	12.6	10.5	11.7	15.6	13.9	14.7	11.6	11.2	11.4
<b>19</b>	8.1	5.8	6.9	13.3	10.9	12.1	14.4	13.4	13.8	11.5	11.2	11.3
<b>20</b>	9.8	6.5	7.8	13.2	10.8	12.1	13.8	11.8	12.9	11.3	10.9	11.2
<b>21</b>	8.3	6.8	7.5	13.5	11.0	12.4	11.8	10.6	11.0	10.9	10.5	10.7
<b>22</b>	8.8	6.8	7.6	13.3	11.8	12.5	12.0	9.4	10.6	10.6	9.0	10
<b>23</b>	9.0	5.8	7.3	12.4	11.0	11.5	13.0	10.8	11.8	9.0	7.6	8.4
<b>24</b>	10.1	6.8	8.2	13.2	10.6	11.8	12.8	11.9	12.3	9.6	8.9	9.2
<b>25</b>	10.3	6.6	8.3	13.8	11.7	12.8	12.1	11.0	11.5	10.0	9.6	9.8
<b>26</b>	9.0	7.0	8.0	13.4	11.7	12.5	11.3	10.3	10.8	10.5	9.3	9.8
<b>27</b>	11.4	6.7	8.7	12.7	11.5	12.1	10.9	10.0	10.4	11.1	9.9	10.3
<b>28</b>	12.3	7.8	9.6	12.5	10.1	11.4	10.9	10.2	10.5	10.2	8.8	9.5
<b>29</b>	12.6	8.4	10.1	12.4	11.5	11.8	12.2	10.8	11.3	10.3	8.7	9.4
<b>30</b>	13.2	9.0	10.6	11.5	10.2	10.7	10.9	9.4	10.1	10.8	9.5	10.0
<b>31</b>	---	---	---	10.3	9.3	9.9	10.2	8.5	9.3	---	---	---
<b>Month</b>	13.2	4.6	7.1	13.8	8.4	11.3	16.0	8.5	12.3	12.1	7.6	10.3