

Water-Data Report 2011

**12202310 CARPENTER CREEK NEAR BELLINGHAM, WA**

Puget Sound Basin  
Strait of Georgia Subbasin

LOCATION.--Lat 48°45'15", long 122°21'10" referenced to North American Datum of 1927, in SW ¼ NW ¼ sec.30, T.38 N., R.4 E., Whatcom County, WA, Hydrologic Unit 17110002, on left bank 60 ft upstream from North Shore Drive, 8.2 mi east of Bellingham, and 0.1 mi upstream from Lake Whatcom.

DRAINAGE AREA.--1.17 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--May 2002 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 320 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair, except for estimated daily discharges, and daily discharges below 1.00 ft<sup>3</sup>/s, which are poor. No regulation or diversion upstream from station.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--9 years (water years 2003-2011), 1.90 ft<sup>3</sup>/s, 22.03 in/yr, 1,370 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 87 ft<sup>3</sup>/s, Nov. 25, 2004, maximum gage height, 9.82 ft, Nov. 19, 2003, backwater from culvert; minimum daily discharge, no flow on many days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 34 ft<sup>3</sup>/s, Dec. 13, gage height 8.99 ft; minimum daily discharge, no flow on many days in September.

**12202310 CARPENTER CREEK NEAR BELLINGHAM, WA—Continued**

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**  
**DAILY MEAN VALUES**

<b>Day</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
<b>1</b>	0.21	1.9	1.1	1.6	1.8	2.0	10	3.4	0.88	0.11	0.13	0.02
<b>2</b>	0.16	1.2	0.91	1.5	1.7	3.3	11	4.2	0.77	0.09	0.12	0.01
<b>3</b>	0.13	0.77	0.75	1.3	1.8	3.8	8.3	4.0	0.71	0.08	0.11	0.01
<b>4</b>	0.09	0.53	0.63	1.2	3.8	3.0	10	3.2	0.66	0.07	0.11	0.01
<b>5</b>	0.09	0.46	0.57	3.2	3.1	2.8	12	3.2	0.58	0.05	0.11	0.00
<b>6</b>	0.09	0.50	0.52	17	2.8	2.6	9.4	3.2	0.53	0.05	0.10	0.00
<b>7</b>	0.09	0.74	0.50	17	2.8	2.2	6.8	4.6	0.42	0.05	0.10	0.00
<b>8</b>	0.08	1.1	1.6	11	2.3	2.1	4.6	4.5	0.32	0.05	0.09	0.00
<b>9</b>	0.15	0.89	6.0	5.7	2.0	3.4	3.5	3.6	0.31	0.04	0.09	0.00
<b>10</b>	0.47	0.68	9.4	3.2	1.7	5.9	2.8	2.9	0.27	0.04	0.09	0.00
<b>11</b>	0.32	0.56	7.6	2.4	1.6	4.6	3.0	4.9	0.26	0.04	0.09	0.00
<b>12</b>	0.25	0.50	20	5.6	2.6	6.1	2.2	8.5	0.22	0.04	0.09	0.00
<b>13</b>	0.20	0.51	21	9.3	2.6	5.8	2.5	5.1	0.22	0.12	0.09	0.00
<b>14</b>	0.16	0.61	15	11	2.6	4.7	3.7	3.4	0.20	0.56	0.08	0.00
<b>15</b>	0.13	0.94	11	9.9	2.6	4.1	3.2	3.0	0.30	0.42	0.09	0.00
<b>16</b>	0.11	1.1	7.7	14	2.2	6.9	3.0	4.3	0.19	0.39	0.08	0.00
<b>17</b>	0.10	1.3	5.1	16	2.0	5.0	2.6	3.6	0.18	0.59	0.07	0.00
<b>18</b>	0.10	1.8	3.8	11	1.7	3.6	2.4	2.7	0.39	0.56	0.07	0.00
<b>19</b>	0.09	1.3	3.1	7.9	1.5	3.8	2.1	2.0	0.30	0.36	0.07	0.00
<b>20</b>	0.09	1.0	2.5	6.2	1.4	2.6	1.8	1.6	0.25	0.29	0.07	0.00
<b>21</b>	0.09	0.79	2.1	12	1.4	2.1	2.9	1.4	0.21	0.50	0.05	0.00
<b>22</b>	0.09	0.63	1.8	11	1.4	1.8	2.4	1.3	0.19	0.38	0.11	0.01
<b>23</b>	0.11	0.89	1.8	7.2	1.3	1.5	2.0	1.1	0.16	0.27	0.09	0.00
<b>24</b>	0.30	0.70	1.7	8.4	1.2	1.4	1.7	1.0	0.15	0.20	0.06	0.00
<b>25</b>	0.38	0.44	1.7	8.0	1.5	1.3	2.7	1.0	0.13	0.19	0.04	0.00
<b>26</b>	0.50	0.69	2.4	5.3	1.2	1.2	3.1	1.3	0.12	0.20	0.04	0.03
<b>27</b>	0.37	1.3	3.4	3.7	1.2	1.1	3.3	1.1	0.11	0.18	0.03	0.03
<b>28</b>	0.31	0.91	3.1	2.7	2.3	1.1	8.5	1.0	0.12	0.15	0.02	0.01
<b>29</b>	0.28	0.78	2.8	2.6	---	1.0	6.4	0.92	0.17	0.14	0.02	0.00
<b>30</b>	0.24	1.1	2.2	2.4	---	6.3	4.4	0.84	0.15	0.13	0.02	0.00
<b>31</b>	0.78	---	1.9	2.0	---	12	---	0.90	---	0.13	0.02	---
<b>Total</b>	6.56	26.62	143.68	221.3	56.1	109.1	142.3	87.76	9.47	6.47	2.35	0.13
<b>Mean</b>	0.21	0.89	4.63	7.14	2.00	3.52	4.74	2.83	0.32	0.21	0.08	0.00
<b>Max</b>	0.78	1.9	21	17	3.8	12	12	8.5	0.88	0.59	0.13	0.03
<b>Min</b>	0.08	0.44	0.50	1.2	1.2	1.0	1.7	0.84	0.11	0.04	0.02	0.00
<b>Ac-ft</b>	13	53	285	439	111	216	282	174	19	13	4.7	0.3
<b>Cfsm</b>	0.18	0.76	3.96	6.10	1.71	3.01	4.05	2.42	0.27	0.18	0.06	0.00
<b>In.</b>	0.21	0.85	4.57	7.04	1.78	3.47	4.52	2.79	0.30	0.21	0.07	0.00

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2011, BY WATER YEAR (WY)**

	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
<b>Mean</b>	0.82	3.37	3.94	5.48	2.40	2.46	2.41	1.08	0.55	0.08	0.04	0.07
<b>Max</b>	3.51	8.58	9.85	9.03	4.32	4.52	5.49	2.83	2.32	0.22	0.16	0.39
<b>(WY)</b>	(2004)	(2005)	(2005)	(2005)	(2004)	(2007)	(2005)	(2011)	(2008)	(2005)	(2004)	(2004)
<b>Min</b>	0.01	0.30	1.58	3.72	0.40	0.98	0.56	0.30	0.09	0.01	0.00	0.00
<b>(WY)</b>	(2003)	(2003)	(2009)	(2010)	(2009)	(2009)	(2004)	(2007)	(2007)	(2009)	(2009)	(2011)

**12202310 CARPENTER CREEK NEAR BELLINGHAM, WA—Continued****SUMMARY STATISTICS**

	<b>Calendar Year 2010</b>	<b>Water Year 2011</b>	<b>Water Years 2002 - 2011</b>	
<b>Annual total</b>	560.31	811.84		
<b>Annual mean</b>	1.54	2.22	1.90	
<b>Highest annual mean</b>			3.30	2005
<b>Lowest annual mean</b>			0.99	2009
<b>Highest daily mean</b>	21 Dec 13	21 Dec 13	87 Nov 25,	2004
<b>Lowest daily mean</b>	0.00 Jul 26	0.00 Sep 5	0.00 Aug 23,	2002
<b>Annual seven-day minimum</b>	0.00 Aug 10	0.00 Sep 5	0.00 Aug 23,	2002
<b>Annual runoff (ac-ft)</b>	1,110	1,610	1,370	
<b>Annual runoff (cfsm)</b>	1.31	1.90	1.62	
<b>Annual runoff (inches)</b>	17.81	25.81	22.03	
<b>10 percent exceeds</b>	3.6	6.1	4.4	
<b>50 percent exceeds</b>	0.93	1.0	0.82	
<b>90 percent exceeds</b>	0.01	0.04	0.01	

