

Water-Data Report 2007

**12157250 MISSION CREEK NEAR TULALIP, WA**

Puget Sound Basin  
Puget Sound Subbasin

LOCATION.--Lat 48°03'31", long 122°15'58" referenced to North American Datum of 1927, in SW ¼ NW ¼ sec.26, T.30 N., R.4 E., Snohomish County, WA, Hydrologic Unit 17110019, on left bank 100 ft upstream from highway crossing, 0.25 mi upstream from mouth, and 0.9 mi east of Tulalip.

DRAINAGE AREA.--7.92 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--October 1974 to September 1977, November 2000 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 20.3 ft below NGVD of 1929, from precision Global Positioning System (GPS). Oct. 1974 to Sept. 1977, water-stage recorder, at site downstream from highway crossing, at different datum.

REMARKS.--Records fair, except for estimated daily discharges which are poor. Some natural regulation in lakes and beaver ponds. Chemical analysis Nov. 1974 to March 1977. Water temperatures Oct. 1974 to March 1977.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--9 years (water years 1975-77, 2002-07), 5.26 ft<sup>3</sup>/s, 9.03 in/yr, 3,810 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 85 ft<sup>3</sup>/s, Jan. 19, 1977, gage height, 4.11 ft, from rating curve extended above 20 ft<sup>3</sup>/s datum then in use, probably result of release of water from beaver ponds; minimum discharge, 0.12 ft<sup>3</sup>/s, June 29, 1977, probably result of beaver activity upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 51 ft<sup>3</sup>/s, Dec. 25, gage height, 57.26 ft; minimum discharge, 0.43 ft<sup>3</sup>/s, June 4, gage height, 55.12 ft.

## 12157250 MISSION CREEK NEAR TULALIP, WA—Continued

**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	1.1	1.8	9.4	13	5.2	8.5	7.1	5.3	1.0	0.94	0.62	0.81
2	1.1	2.1	9.8	13	5.0	9.9	11	4.8	0.99	0.86	0.59	0.79
3	1.1	3.0	8.4	15	5.0	15	10	4.3	0.90	0.74	0.55	0.84
4	1.1	4.1	8.3	15	5.8	13	8.0	3.7	0.82	0.70	0.56	0.99
5	1.1	6.6	9.4	13	5.8	10	6.9	3.4	0.98	0.73	0.56	1.0
6	1.1	9.5	9.2	13	5.7	8.8	6.2	3.2	1.3	0.76	0.56	1.0
7	1.1	14	8.3	16	5.7	8.4	5.7	3.2	1.6	0.75	0.57	0.97
8	1.2	13	8.0	16	6.0	8.0	5.5	3.3	1.6	0.65	0.66	0.87
9	1.4	9.3	7.7	14	5.7	7.3	15	3.3	1.6	0.69	0.79	0.81
10	1.4	10	7.4	14	5.5	6.8	27	e3.2	2.2	0.57	0.98	0.82
11	1.4	11	9.3	13	5.9	8.7	18	e2.8	2.0	0.52	1.1	0.80
12	1.3	7.9	15	10	5.8	8.9	13	e2.6	e1.8	0.50	1.2	0.83
13	1.3	13	14	9.2	5.2	7.9	12	e2.6	e1.5	0.51	0.89	0.77
14	1.2	9.9	19	8.3	5.2	7.1	10	e2.6	1.4	0.57	0.75	0.76
15	1.7	9.8	30	7.6	6.0	6.4	9.6	2.4	1.5	1.3	0.66	0.82
16	4.7	16	22	7.6	6.9	6.7	8.6	2.2	1.7	0.98	0.59	0.89
17	4.7	9.6	16	7.9	6.1	7.9	8.2	2.2	2.0	0.70	0.61	1.3
18	3.3	6.6	12	11	7.1	10	7.4	2.0	2.4	0.66	0.61	1.4
19	5.5	6.3	10	14	8.0	8.7	6.9	2.0	3.5	0.76	0.83	1.8
20	6.3	7.1	9.5	13	12	8.7	6.7	2.4	2.2	1.1	1.4	1.7
21	4.1	12	13	11	11	8.9	6.3	5.4	1.6	1.7	1.8	1.4
22	2.9	12	17	9.5	10	9.3	6.0	5.0	1.3	2.0	1.4	1.3
23	2.4	10	16	9.5	8.0	11	5.5	3.3	1.2	1.9	1.1	1.2
24	2.2	8.0	20	9.0	7.7	14	5.1	2.5	1.1	1.5	0.95	1.1
25	2.2	6.6	42	8.1	7.8	16	5.4	2.1	1.1	1.1	0.85	1.1
26	2.1	8.1	31	7.9	7.7	15	5.2	1.6	1.1	0.92	1.2	1.1
27	2.0	15	45	7.4	6.9	13	5.0	1.4	1.0	0.90	1.4	1.1
28	1.9	12	30	6.8	6.8	11	4.7	1.5	1.00	0.68	1.1	3.0
29	1.9	8.0	22	6.2	---	8.9	4.3	1.9	1.0	0.66	0.98	2.6
30	1.9	7.3	17	5.9	---	8.0	3.8	1.4	0.94	0.70	0.89	2.3
31	1.8	---	14	5.6	---	7.5	---	1.2	---	0.67	0.82	---
<b>Total</b>	68.5	269.6	509.7	330.5	189.5	299.3	254.1	88.8	44.33	27.72	27.57	36.17
<b>Mean</b>	2.21	8.99	16.4	10.7	6.77	9.65	8.47	2.86	1.48	0.89	0.89	1.21
<b>Max</b>	6.3	16	45	16	12	16	27	5.4	3.5	2.0	1.8	3.0
<b>Min</b>	1.1	1.8	7.4	5.6	5.0	6.4	3.8	1.2	0.82	0.50	0.55	0.76
<b>Ac-ft</b>	136	535	1,010	656	376	594	504	176	88	55	55	72
<b>Cfsm</b>	0.28	1.13	2.08	1.35	0.85	1.22	1.07	0.36	0.19	0.11	0.11	0.15
<b>In.</b>	0.32	1.27	2.39	1.55	0.89	1.41	1.19	0.42	0.21	0.13	0.13	0.17

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	3.00	5.89	8.63	9.47	7.91	8.23	7.53	4.27	2.67	1.31	1.67	1.76
<b>Max</b>	5.73	9.52	16.4	13.4	14.0	13.5	12.6	7.01	5.44	2.04	3.99	2.71
<b>(WY)</b>	(1976)	(1976)	(2007)	(2006)	(1975)	(1975)	(2005)	(1977)	(2001)	(2001)	(1976)	(1977)
<b>Min</b>	2.06	2.77	4.28	4.43	3.58	4.73	2.80	2.67	1.30	0.63	0.47	0.92
<b>(WY)</b>	(1975)	(2003)	(2001)	(1977)	(1977)	(2005)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1975 - 2007	
<b>Annual total</b>	2,207.06		2,145.79			
<b>Annual mean</b>	6.05		5.88		5.26	
<b>Highest annual mean</b>					7.22	1976
<b>Lowest annual mean</b>					3.52	2003
<b>Highest daily mean</b>	45	Dec 27	45	Dec 27	49	Dec 17, 2001
<b>Lowest daily mean</b>	0.53	Aug 7	0.50	Jul 12	0.13	Jun 29, 1977
<b>Annual seven-day minimum</b>	0.57	Aug 5	0.57	Jul 8	0.25	Jun 25, 1977
<b>Annual runoff (ac-ft)</b>	4,380		4,260		3,810	
<b>Annual runoff (cfsm)</b>	0.763		0.742		0.664	
<b>Annual runoff (inches)</b>	10.37		10.08		9.03	
<b>10 percent exceeds</b>	13		13		12	
<b>50 percent exceeds</b>	4.3		4.7		3.6	
<b>90 percent exceeds</b>	0.70		0.80		0.97	

