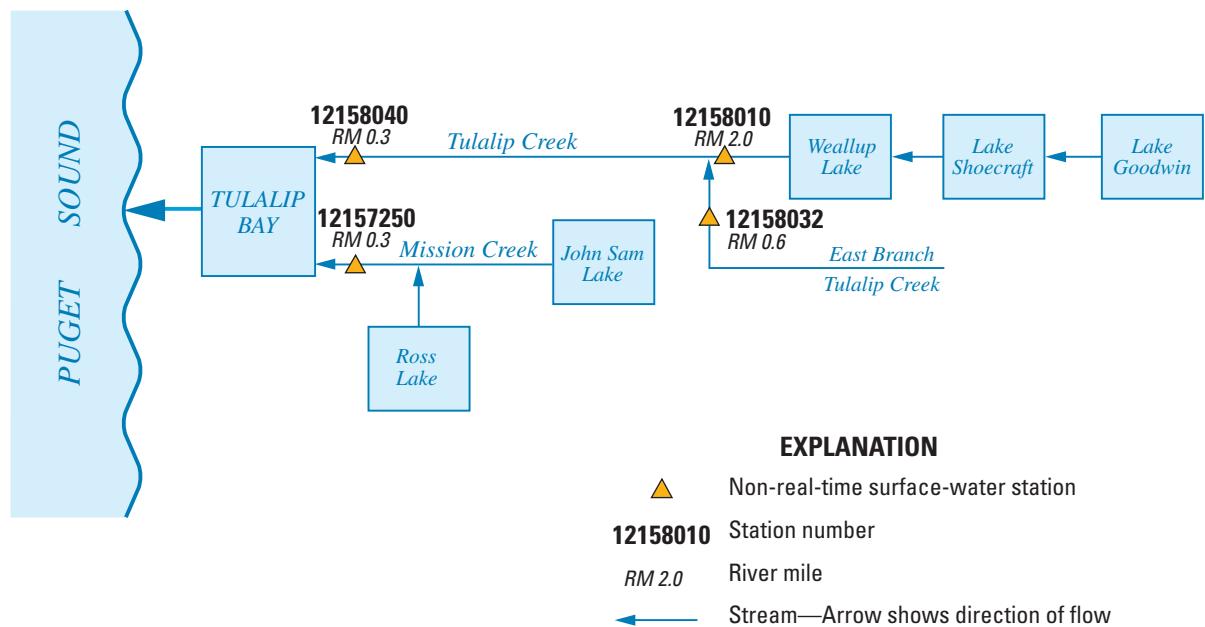


**Figure 36.** Location of surface-water stations in the Tulalip and Mission Creek Basins.



**Figure 37.** Schematic diagram showing surface-water stations in the Tulalip and Mission Creek Basins.

## 12157250 MISSION CREEK NEAR TULALIP, WA

LOCATION.--Lat 48°03'31", long 122°15'58", in SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec.26, T.30 N., R.4 E., Snohomish County, 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>.

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). October 1974 to September 1977, water-stage recorder, at site downstream from highway crossing, at different datum.

REMARKS.--Records fair. Some natural regulation in lakes and beaver ponds. Chemical analysis November 1974 to March 1977. Water temperatures October 1974 to March 1977.

AVERAGE DISCHARGE.--7 years (water years 1975-77, 2002-05), 5.24 ft<sup>3</sup>/s, 8.98 in/yr, 3,790 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, 34 ft<sup>3</sup>/s, Apr. 16, gage height, 56.86 ft; minimum discharge, 0.50 ft<sup>3</sup>/s, July 29.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	3.1	5.2	6.9	4.6	4.5	9.1	4.0	3.3	2.0	0.87	1.1
2	1.4	15	4.5	6.1	4.4	4.4	9.8	3.7	3.1	2.0	0.95	1.0
3	1.4	7.9	4.1	5.3	4.3	4.2	10	3.5	2.6	1.9	1.3	1.0
4	1.3	4.7	4.8	e5.2	5.0	4.0	18	3.2	2.4	1.8	1.1	0.98
5	1.3	3.6	9.4	e5.0	5.9	3.8	15	2.9	2.3	1.7	0.90	1.0
6	1.3	3.2	7.6	e5.0	7.0	3.7	11	3.0	2.5	2.1	0.80	1.1
7	1.2	3.0	6.7	e10	8.6	3.5	16	2.7	2.5	2.2	0.75	1.2
8	2.4	2.8	8.4	e10	7.0	3.5	26	2.7	3.2	2.0	0.75	0.85
9	3.6	2.6	7.7	e8.0	5.7	3.6	18	3.1	3.4	2.1	0.74	2.2
10	3.2	2.5	10	e7.0	5.0	3.5	13	5.7	2.9	1.9	0.76	4.2
11	2.5	2.5	15	e6.0	4.6	3.4	18	5.4	3.8	1.8	1.1	3.4
12	2.2	2.7	11	e7.0	5.1	3.3	16	3.7	4.8	1.8	1.1	2.4
13	1.8	2.6	8.9	e6.0	15	3.2	13	3.3	3.8	1.6	0.93	1.9
14	1.6	2.8	9.4	e5.5	14	2.9	14	3.0	2.9	1.5	0.78	1.6
15	1.7	6.8	9.6	e5.0	9.7	2.9	13	3.7	3.1	1.5	0.78	1.5
16	2.9	7.0	8.2	e6.0	7.8	3.4	23	4.6	2.9	1.9	0.77	1.5
17	7.1	4.8	6.8	e13	6.8	4.9	25	4.7	6.9	2.5	1.3	1.7
18	6.0	4.4	6.1	e16	6.2	5.5	19	5.6	6.3	1.8	1.7	1.4
19	4.1	3.9	6.1	e11	5.7	5.0	15	8.8	4.0	1.5	1.4	1.4
20	3.3	3.4	5.8	e10	5.3	6.1	12	8.0	2.9	1.4	1.2	1.2
21	3.2	3.2	8.1	e10	4.9	6.1	10	7.9	2.4	1.3	1.0	1.2
22	3.0	3.5	9.0	e10	4.6	4.5	8.8	6.5	2.9	1.3	0.97	1.2
23	2.7	5.2	7.1	e10	4.4	4.1	7.7	4.9	3.4	1.3	0.93	1.2
24	2.4	11	6.0	e7.6	4.3	3.7	6.9	3.9	2.9	1.3	0.95	1.2
25	2.2	9.1	6.4	e6.6	4.2	3.4	6.1	3.1	2.3	2.0	0.93	1.2
26	2.2	7.0	8.9	e5.6	4.2	3.4	5.6	2.6	2.1	1.4	0.95	1.2
27	2.0	6.2	8.2	e5.6	4.2	6.5	5.2	2.6	2.4	1.1	0.92	1.2
28	1.9	4.8	6.8	e5.6	4.2	12	4.5	2.4	2.7	0.86	1.0	1.2
29	1.9	4.6	7.1	e4.6	---	9.5	4.2	2.0	2.5	0.73	1.0	1.2
30	2.7	5.8	9.3	e4.6	---	7.7	4.1	2.0	2.4	0.80	1.0	1.8
31	2.4	---	7.9	e4.6	---	6.3	---	2.5	---	0.86	1.1	---
TOTAL	78.4	149.7	240.1	228.8	172.7	146.5	377.0	125.7	95.6	49.95	30.73	45.23
MEAN	2.53	4.99	7.75	7.38	6.17	4.73	12.6	4.05	3.19	1.61	0.99	1.51
MAX	7.1	15	15	16	15	12	26	8.8	6.9	2.5	1.7	4.2
MIN	1.2	2.5	4.1	4.6	4.2	2.9	4.1	2.0	2.1	0.73	0.74	0.85
AC-FT	156	297	476	454	343	291	748	249	190	99	61	90
CFSM	0.32	0.63	0.98	0.93	0.78	0.60	1.59	0.51	0.40	0.20	0.13	0.19
IN.	0.37	0.70	1.13	1.07	0.81	0.69	1.77	0.59	0.45	0.23	0.14	0.21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2005, BY WATER YEAR (WY)

MEAN	3.16	5.65	7.98	8.83	7.94	8.26	7.43	4.56	2.86	1.41	1.90	1.85
MAX	5.73	9.52	14.6	12.7	14.0	13.5	12.6	7.01	5.44	2.04	3.99	2.71
(WY)	(1976)	(1976)	(2002)	(1976)	(1975)	(1975)	(2005)	(1977)	(2001)	(2001)	(1976)	(1977)
MIN	2.06	2.77	4.28	4.43	3.58	4.73	2.80	2.67	1.30	0.63	0.47	0.92
(WY)	(1975)	(2003)	(2001)	(1977)	(1977)	(2005)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)

## TULALIP AND MISSION CREEK BASINS

12157250 MISSION CREEK NEAR TULALIP, WA—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1975 - 2005
ANNUAL TOTAL	1,644.79	1,740.41	
ANNUAL MEAN	4.49	4.77	5.24
HIGHEST ANNUAL MEAN			7.22
LOWEST ANNUAL MEAN			3.52
HIGHEST DAILY MEAN	40	May 28	49
LOWEST DAILY MEAN	0.46	Jul 26	0.13
ANNUAL SEVEN-DAY MINIMUM	0.49	Jul 25	0.25
ANNUAL RUNOFF (AC-FT)	3,260	3,450	3,790
ANNUAL RUNOFF (CFSM)	0.567	0.602	0.661
ANNUAL RUNOFF (INCHES)	7.73	8.17	8.98
10 PERCENT EXCEEDS	9.4	9.9	11
50 PERCENT EXCEEDS	2.9	3.6	3.7
90 PERCENT EXCEEDS	0.72	1.1	1.1

e Estimated

## 12158010 TULALIP CREEK ABOVE EAST BRANCH, NEAR TULALIP, WA

LOCATION.--Lat 48°05'51", long 122°17'17", in SE<sup>1/4</sup>SW<sup>1/4</sup> sec.10, T.30 N., R.4 E., Snohomish County Hydrologic Unit 17110019, Tulalip Indian Reservation, on left bank wing wall upstream side of diversion dam, 1.9 mi north of Tulalip and 2.0 mi upstream from mouth.

DRAINAGE AREA.--9.74 mi<sup>2</sup>.

PERIOD OF RECORD.--November 2000 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2.8 ft below NGVD of 1929, from precision Global Positioning System (GPS).

REMARKS.--Records poor. Some natural regulation in lakes and beaver ponds in basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 61 ft<sup>3</sup>/s, Dec. 16, 2001, gage height, 123.91; minimum daily discharge, 0.61 ft<sup>3</sup>/s, Oct. 25, 2004.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 37 ft<sup>3</sup>/s, Apr. 16, gage height, 123.78 ft; minimum discharge, 0.61 ft<sup>3</sup>/s, Oct. 25.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e3.7	5.7	5.9	8.6	9.2	5.0	8.0	9.4	e6.8	e4.2	e3.3	e3.5
2	e3.1	10	5.9	8.0	8.9	4.9	7.6	9.0	e6.2	e4.3	e3.3	e3.5
3	e3.2	6.9	6.0	7.2	7.7	5.0	8.7	8.6	e5.8	e4.1	e3.4	e3.5
4	e3.6	4.3	7.3	e7.0	8.0	4.6	12	8.7	e5.6	e4.0	e3.3	e3.5
5	4.2	3.3	6.1	e6.6	7.5	5.0	11	8.4	e5.4	e4.0	e3.7	e3.5
6	4.9	3.1	4.0	e6.4	8.7	4.8	16	8.1	e5.4	e4.6	e3.3	e3.4
7	2.3	3.3	4.4	8.5	8.6	4.3	21	7.7	e5.0	e4.4	e3.2	e3.4
8	4.0	3.4	5.5	6.9	e7.0	4.3	26	7.9	e5.4	e4.3	e3.1	e3.4
9	4.0	3.3	4.4	8.0	e6.4	4.4	21	8.5	e4.9	e4.4	e3.1	e4.1
10	3.6	6.0	5.5	e7.6	e6.2	4.1	19	11	e4.7	e4.1	e3.1	e4.4
11	1.8	7.4	7.2	e8.5	6.1	5.4	21	8.7	e6.6	e4.0	e3.3	e4.0
12	1.7	3.3	7.2	9.0	7.8	6.4	19	8.1	e6.6	e3.8	e3.2	e3.9
13	2.3	4.7	8.1	7.9	12	5.3	19	e7.4	e5.4	e3.7	e3.2	e3.8
14	2.3	9.7	6.7	e7.7	7.90	3.7	19	e7.4	e5.0	e3.7	e3.1	e3.7
15	2.2	7.8	7.0	e7.0	6.3	4.1	19	e8.6	e5.4	e3.8	e3.1	e3.7
16	3.9	4.3	6.3	7.3	6.2	6.4	25	e8.8	e5.0	e4.3	e3.1	e3.8
17	5.5	4.0	6.0	12	6.2	7.0	24	e8.8	e10	e4.2	e3.9	e3.8
18	2.3	6.4	6.0	12	6.2	6.5	21	e10	e8.0	e4.0	e3.5	e3.8
19	0.73	5.0	5.9	12	6.3	4.1	20	e12	e5.6	e3.9	e3.3	e3.7
20	0.69	3.3	5.7	16	6.7	5.8	19	e10	e5.2	e3.8	e3.2	e3.7
21	1.4	3.2	7.7	16	6.6	4.6	18	e11	e5.0	e3.8	e3.2	e3.7
22	3.1	3.9	7.7	15	5.6	4.4	17	e10	e5.6	e3.9	e3.2	e3.8
23	3.7	6.7	6.3	14	5.3	4.1	13	e8.2	e5.2	e3.9	e3.2	e3.8
24	3.8	11	5.4	13	5.0	4.0	11	e7.6	e4.6	e3.8	e3.2	e3.8
25	0.61	5.6	6.2	13	5.1	3.9	9.8	e7.2	e4.4	e3.8	e3.2	e3.8
26	0.87	4.0	7.6	12	5.3	4.3	10	e6.6	e4.5	e3.7	e3.2	e3.8
27	1.9	4.5	7.4	11	6.3	6.7	11	e6.2	e4.9	e3.6	e3.3	e3.8
28	2.2	4.5	7.6	11	5.7	7.8	10	e6.4	e4.7	e3.5	e3.5	e3.8
29	3.7	5.4	8.8	9.8	---	7.1	10	e6.0	e4.6	e3.5	e3.7	e3.6
30	3.0	6.1	9.0	9.5	---	6.9	9.8	e5.8	e4.2	e3.5	e3.7	e3.8
31	4.9	---	8.6	9.3	---	6.8	---	e6.2	---	e3.5	e3.7	---
TOTAL	89.20	160.1	203.4	307.8	194.80	161.7	475.9	258.3	165.7	122.1	102.8	111.8
MEAN	2.88	5.34	6.56	9.93	6.96	5.22	15.9	8.33	5.52	3.94	3.32	3.73
MAX	5.5	11	9.0	16	12	7.8	26	12	10	4.6	3.9	4.4
MIN	0.61	3.1	4.0	6.4	5.0	3.7	7.6	5.8	4.2	3.5	3.1	3.4
AC-FT	177	318	403	611	386	321	944	512	329	242	204	222
CFSM	0.30	0.55	0.67	1.02	0.71	0.54	1.63	0.86	0.57	0.40	0.34	0.38
IN.	0.34	0.61	0.78	1.18	0.74	0.62	1.82	0.99	0.63	0.47	0.39	0.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2005, BY WATER YEAR (WY)

MEAN	4.81	5.85	8.45	8.82	8.76	8.69	10.5	6.45	4.44	3.64	3.68	3.88
(WY)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2005)	(2005)	(2005)	(2001)	(2001)	(2001)
MAX	5.90	7.00	21.5	14.3	15.8	13.8	15.9	8.33	5.91	4.58	4.63	4.50
MIN	2.88	5.34	4.43	5.97	6.48	5.22	6.45	4.18	1.81	2.85	3.32	3.38
(WY)	(2005)	(2005)	(2001)	(2001)	(2003)	(2005)	(2004)	(2004)	(2004)	(2003)	(2005)	(2003)

## TULALIP AND MISSION CREEK BASINS

12158010 TULALIP CREEK ABOVE EAST BRANCH, NEAR TULALIP, WA—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 2001 - 2005
ANNUAL TOTAL	1,818.89	2,353.60	
ANNUAL MEAN	4.97	6.45	6.64
HIGHEST ANNUAL MEAN			9.46
LOWEST ANNUAL MEAN			5.07
HIGHEST DAILY MEAN	13	Jan 30	43 Dec 17, 2001
LOWEST DAILY MEAN	0.61	Oct 25	0.61 Oct 25, 2004
ANNUAL SEVEN-DAY MINIMUM	1.2	Jun 25	1.2 Jun 25, 2004
ANNUAL RUNOFF (AC-FT)	3,610	4,670	4,810
ANNUAL RUNOFF (CFSM)	0.510	0.662	0.681
ANNUAL RUNOFF (INCHES)	6.95	8.99	9.26
10 PERCENT EXCEEDS	8.6	11	12
50 PERCENT EXCEEDS	4.2	5.4	5.1
90 PERCENT EXCEEDS	2.2	3.3	3.1

e Estimated

## 12158032 EAST BRANCH TULALIP CREEK NEAR MOUTH, NEAR TULALIP, WA

LOCATION.--Lat 48°05'35", long 122°16'44", in NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec.15, T.30 N., R.4 E., Snohomish County, Hydrologic Unit 17110019, Tulalip Indian Reservation, on left wing wall at diversion dam headworks pool, 200 ft upstream from culvert for one lane road, 1.9 miles north of Tulalip and 0.6 mi above mouth.

DRAINAGE AREA.--1.75 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1960, October 1974 to August 1977 and November 2000 to May 2002 (discharge measurements). May 2002 to current year.

GAGE.--Water-stage recorder. Datum of gage 9.74 ft below NGVD of 1929, from precision Global Positioning System (GPS).

REMARKS.--Records poor. Some natural regulation from beaver ponds and unknown regulation from fish hatchery in basin. Minor diversions for domestic use.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9.2 ft<sup>3</sup>/s, May 28, 2004, gage height, 139.91 ft; maximum gage height, 139.96 ft, Nov. 2, 2004; minimum daily discharge, 0.90 ft<sup>3</sup>/s, Nov. 13, 2003.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 139.96 ft, Nov. 2; discharge not determined; minimum discharge, not determined.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.5	e3.5	e2.5	2.4	1.8	1.6	2.7	e1.6	e2.0	e1.4	e1.3	e1.4
2	e1.4	e4.0	e2.5	2.3	1.8	1.6	2.4	e1.5	e1.8	e1.5	e1.5	e1.4
3	e1.5	2.9	e2.6	2.3	1.8	1.6	2.8	e1.5	e1.7	e1.4	e1.7	e1.4
4	e1.5	2.8	e3.2	2.2	2.1	1.7	4.6	e1.5	e1.7	e1.3	e1.6	e1.4
5	e1.5	2.5	e3.5	2.2	2.3	1.6	4.8	e1.5	e1.6	e1.3	e1.9	e1.4
6	e1.6	e2.5	2.4	2.2	2.9	1.7	5.0	e1.4	e1.6	e1.7	e1.6	e1.4
7	e1.7	e2.5	2.6	3.0	2.7	1.6	5.7	e1.4	e1.5	e1.6	e1.5	e1.4
8	e2.0	e2.4	2.8	2.6	2.4	1.5	5.3	e1.4	e1.6	e1.5	e1.4	e1.4
9	e2.2	e2.4	2.5	2.4	2.6	1.6	5.4	e1.6	e1.5	e1.6	e1.4	e1.9
10	e1.7	e2.3	3.1	2.3	2.1	e1.6	6.1	3.3	e1.5	e1.5	e1.4	e2.0
11	e1.7	e2.3	e3.8	2.2	1.8	e1.6	7.0	2.0	e2.5	e1.5	e1.5	e1.6
12	e1.8	e2.3	3.7	2.4	2.1	e1.7	5.8	1.6	e2.5	e1.4	e1.4	e1.5
13	e2.2	e2.4	e3.3	2.3	3.5	e1.8	4.7	1.6	e1.9	e1.4	e1.4	e1.4
14	e2.0	e2.9	e3.0	2.2	2.2	1.8	4.8	1.9	e1.6	e1.4	e1.3	e1.4
15	e2.3	e3.5	2.7	2.2	1.8	2.0	4.0	2.7	e1.7	e1.4	e1.3	e1.4
16	e2.8	e3.0	2.3	2.5	1.8	2.9	5.5	2.2	e1.6	e1.6	e1.3	e1.5
17	e3.4	e2.7	e2.3	4.1	1.7	e2.5	5.4	2.6	e3.0	e1.5	e1.8	e1.5
18	e2.3	e2.7	e2.3	2.9	1.6	e2.5	5.5	3.6	e2.0	e1.4	e1.6	e1.5
19	2.1	e2.3	e2.2	2.7	1.7	e2.2	5.4	3.4	e1.7	e1.4	e1.4	e1.4
20	2.0	e2.3	e2.2	2.8	1.6	e2.6	5.0	3.1	e1.6	e1.3	e1.4	e1.4
21	e2.0	e2.3	2.8	2.6	1.5	1.6	3.1	3.2	e1.5	e1.3	e1.4	e1.4
22	e2.0	e2.5	2.4	2.1	1.5	1.6	3.0	2.7	e1.7	e1.3	e1.4	e1.5
23	e1.9	e3.1	2.3	2.1	1.5	1.6	2.7	e2.3	e1.6	e1.3	e1.3	e1.5
24	e1.9	e3.8	2.3	1.9	1.5	1.8	2.2	e1.9	e1.5	e1.3	e1.3	e1.5
25	e1.9	e3.0	2.6	1.9	1.5	2.0	e2.1	e1.7	e1.4	e1.3	e1.3	e1.5
26	e1.8	e2.8	2.8	1.9	1.5	2.5	e2.0	e1.6	e1.5	e1.2	e1.3	e1.5
27	e1.8	e2.7	2.4	1.9	1.5	3.2	e1.9	e1.6	e1.6	e1.2	e1.3	e1.5
28	e1.9	e2.6	2.3	2.0	1.5	3.3	e1.7	e1.7	e1.5	e1.2	e1.4	e1.5
29	e2.0	e2.6	2.7	2.1	---	2.4	e1.7	e1.6	e1.5	e1.2	e1.5	e1.4
30	e3.0	e3.0	2.6	2.1	---	3.2	e1.6	e1.5	e1.4	e1.2	e1.5	e1.7
31	e2.7	---	2.4	2.0	---	2.3	---	e1.9	---	e1.2	e1.5	---
TOTAL	62.1	82.6	83.1	72.8	54.3	63.2	119.9	63.1	51.8	42.8	44.9	44.7
MEAN	2.00	2.75	2.68	2.35	1.94	2.04	4.00	2.04	1.73	1.38	1.45	1.49
MAX	3.4	4.0	3.8	4.1	3.5	3.3	7.0	3.6	3.0	1.7	1.9	2.0
MIN	1.4	2.3	2.2	1.9	1.5	1.5	1.6	1.4	1.4	1.2	1.3	1.4
AC-FT	123	164	165	144	108	125	238	125	103	85	89	89

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2005, BY WATER YEAR (WY)

MEAN	2.12	2.38	2.45	2.32	2.55	2.48	2.91	2.02	1.88	1.79	1.80	1.88
MAX	2.34	2.75	2.68	2.46	3.39	3.02	4.00	2.32	2.29	2.55	2.20	2.53
(WY)	(2003)	(2005)	(2005)	(2003)	(2004)	(2003)	(2005)	(2003)	(2002)	(2002)	(2002)	(2002)
MIN	2.00	1.90	2.22	2.17	1.94	2.04	1.95	1.84	1.62	1.38	1.45	1.49
(WY)	(2005)	(2004)	(2001)	(2004)	(2005)	(2005)	(2004)	(2004)	(2004)	(2005)	(2005)	(2005)

## SUMMARY STATISTICS FOR 2004 CALENDAR YEAR FOR 2005 WATER YEAR WATER YEARS 2001 - 2005

ANNUAL TOTAL	792.8	785.3		
ANNUAL MEAN	2.17	2.15	2.19	
HIGHEST ANNUAL MEAN			2.35	2003
LOWEST ANNUAL MEAN			2.06	2004
HIGHEST DAILY MEAN	7.9	Jan 31	7.9	Jan 31, 2004
LOWEST DAILY MEAN	1.1	Jun 2	1.2	Jul 26, 2003
ANNUAL SEVEN-DAY MINIMUM	1.3	Jun 2	1.2	Jul 25, 2003
ANNUAL RUNOFF (AC-FT)	1,570		1,560	1,590
10 PERCENT EXCEEDS	3.0		3.1	3.0
50 PERCENT EXCEEDS	2.0		1.9	2.0
90 PERCENT EXCEEDS	1.5		1.4	1.4

e Estimated

## TULALIP AND MISSION CREEK BASINS

12158040 TULALIP CREEK NEAR TULALIP, WA

LOCATION.--Lat 48°04'07", long 122°17'12", in NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec.22, T.30 N., R.4 E., Snohomish County, Hydrologic Unit 17110019, Tulalip Indian Reservation, on left bank 200 ft upstream from highway crossing, 0.15 mi east of Tulalip and 0.30 mi above mouth.

DRAINAGE AREA.--15.4 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1974 to September 1977, November 2000 to current year. Published as "at Tulalip" 1974-77.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 56.99 ft above NGVD of 1929, from precision Global Positioning System (GPS). October 1974 to September 1977, water-stage recorder, at site 600 ft upstream from highway crossing, at different datum.

REMARKS.--Records good except for discharges below 15 ft<sup>3</sup>/s, and above 80 ft<sup>3</sup>/s, which are fair. Some regulation at outlet of Lake Shoecraft, drainage area 6.12 mi<sup>2</sup>, and natural regulation in lakes and ponds in basin. Minor diversions above station for domestic use from East Branch Tulalip Creek. Tulalip Fish Hatchery diverts entire flow at times from East Branch Tulalip Creek, and Tulalip Creek above East Branch for use in hatchery. Water is returned to creek above station. Chemical analysis November 1974 to March 1977, water temperature October 1974 to March 1977.

AVERAGE DISCHARGE.--7 years (water years 1975-77, 2002-05), 11.7 ft<sup>3</sup>/s, 10.30 in/yr, 8,460 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 136 ft<sup>3</sup>/s, Dec. 17, 2001, gage height, 97.81 ft; minimum discharge, 2.0 ft<sup>3</sup>/s, Aug. 12, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 70 ft<sup>3</sup>/s, Apr. 8, gage height, 97.26 ft; minimum discharge, 3.4 ft<sup>3</sup>/s, July 31, Aug. 1, 8.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	13	9.9	11	12	12	17	10	8.3	5.8	4.3	5.1
2	5.4	21	9.2	10	12	10	16	9.5	7.4	5.9	4.5	5.2
3	5.4	12	9.0	9.3	11	10	18	9.1	6.8	5.7	4.9	5.3
4	5.5	9.5	10	9.1	12	9.9	24	9.1	6.8	5.4	4.6	5.2
5	5.7	8.7	14	8.5	11	9.5	20	9.0	6.7	5.4	5.4	5.3
6	5.9	8.7	12	8.4	12	9.4	20	8.5	6.8	6.6	4.6	5.2
7	6.1	8.7	12	14	15	9.5	27	8.1	6.7	6.2	4.4	5.1
8	8.8	8.4	15	14	11	9.4	46	8.0	7.5	5.9	4.3	5.1
9	9.2	8.4	13	12	10	9.4	25	8.8	7.3	6.1	4.3	7.0
10	7.6	8.0	16	11	9.6	9.3	22	12	6.6	5.6	4.5	7.6
11	7.1	8.0	19	9.9	9.6	9.2	28	9.4	9.6	5.5	4.9	6.4
12	7.2	8.1	14	11	11	9.1	26	8.5	9.6	5.2	4.5	6.0
13	8.4	8.0	14	10	22	8.8	22	8.1	7.8	5.1	4.4	5.9
14	7.6	11	14	9.6	18	8.7	23	8.1	7.1	5.0	4.3	5.7
15	9.0	16	15	9.1	15	8.6	20	9.7	7.8	5.2	4.2	5.8
16	11	13	13	11	13	10	35	9.9	7.1	5.9	4.3	6.0
17	17	11	11	21	13	12	32	10	14	5.8	6.0	6.1
18	12	11	11	24	12	12	25	12	11	5.3	5.4	6.0
19	10	10	11	18	12	11	22	16	8.2	5.0	4.9	5.6
20	8.7	9.2	10	17	12	15	20	13	7.1	4.9	4.8	5.7
21	8.9	9.0	14	18	11	12	19	15	6.8	4.9	4.9	5.8
22	8.7	9.8	14	18	11	11	19	13	7.6	4.9	4.8	6.0
23	8.6	13	11	18	11	10	15	10	7.1	4.9	4.7	6.0
24	8.5	20	10	16	10	9.4	12	9.2	6.1	4.8	4.8	6.0
25	8.4	15	11	15	10	9.1	11	8.5	5.9	4.8	4.7	6.0
26	8.2	12	16	14	10	9.4	11	7.9	6.0	4.6	4.8	6.0
27	8.1	11	13	14	10	14	11	7.4	6.7	4.5	4.8	6.1
28	8.3	9.7	11	14	11	20	11	7.7	6.3	4.3	5.1	6.1
29	9.1	9.8	12	13	---	16	11	7.1	6.2	4.3	5.5	5.7
30	11	12	14	13	---	15	11	7.0	5.8	4.3	5.4	6.6
31	10	---	12	13	---	13	---	7.6	---	4.4	5.4	---
TOTAL	261.2	333.0	390.1	413.9	337.2	341.7	619	297.2	224.7	162.2	148.4	175.6
MEAN	8.43	11.1	12.6	13.4	12.0	11.0	20.6	9.59	7.49	5.23	4.79	5.85
MAX	17	21	19	24	22	20	46	16	14	6.6	6.0	7.6
MIN	5.4	8.0	9.0	8.4	9.6	8.6	11	7.0	5.8	4.3	4.2	5.1
AC-FT	518	661	774	821	669	678	1,230	589	446	322	294	348
CFSM	0.55	0.72	0.82	0.87	0.78	0.72	1.34	0.62	0.49	0.34	0.31	0.38
IN.	0.63	0.80	0.94	1.00	0.81	0.83	1.50	0.72	0.54	0.39	0.36	0.42

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2005, BY WATER YEAR (WY)

MEAN	8.64	11.5	16.4	16.9	16.6	16.7	16.1	10.1	7.59	5.69	6.18	6.25
MAX	10.8	16.1	32.6	26.8	26.4	23.3	27.0	12.8	10.5	7.18	9.18	7.27
(WY)	(2002)	(2002)	(2002)	(2002)	(2002)	(1975)	(1976)	(2002)	(2001)	(2002)	(1976)	(1977)
MIN	5.69	8.60	9.05	8.06	7.63	11.0	8.24	7.50	5.32	3.66	4.31	5.22
(WY)	(1975)	(1977)	(1977)	(1977)	(1977)	(2005)	(2004)	(2004)	(2003)	(2003)	(2003)	(2003)

## TULALIP AND MISSION CREEK BASINS

369

12158040 TULALIP CREEK NEAR TULALIP, WA—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1975 - 2005
ANNUAL TOTAL	3,599.5	3,704.2	
ANNUAL MEAN	9.83	10.1	11.7
HIGHEST ANNUAL MEAN			16.1
LOWEST ANNUAL MEAN			8.75
HIGHEST DAILY MEAN	33	Jan 30	99 Dec 17, 2001
LOWEST DAILY MEAN	4.2	Jul 28	3.1 Jul 23, 2003
ANNUAL SEVEN-DAY MINIMUM	4.3	Jul 24	3.3 Jul 23, 2003
ANNUAL RUNOFF (AC-FT)	7,140	7,350	8,460
ANNUAL RUNOFF (CFSM)	0.639	0.659	0.758
ANNUAL RUNOFF (INCHES)	8.69	8.95	10.30
10 PERCENT EXCEEDS	18	16	22
50 PERCENT EXCEEDS	8.3	9.2	9.1
90 PERCENT EXCEEDS	4.6	5.0	5.2