Water-Data Report 2011

12167000 NORTH FORK STILLAGUAMISH RIVER NEAR ARLINGTON, WA

Puget Sound Basin
Stillaguamish Subbasin

LOCATION.--Lat 48°15′42″, long 122°02′47″ referenced to North American Datum of 1927, in SW ¼ NW ¼ sec.16, T.32 N., R.6 E., Snohomish County, WA, Hydrologic Unit 17110008, on right bank 5.7 mi northeast of Arlington, 7.8 mi downstream from Deer Creek, and at mile 6.5.

DRAINAGE AREA.--262 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1928 to current year.

REVISED RECORDS.--WSP 1286: 1938-39. WSP 1932: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 89.34 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Records fair. No regulation and some small diversions upstream. National Weather Service radio telemeter and U.S. Geological Survey satellite telemeter at station. Chemical analyses November 1961 to September 1971, October 1973 to September 1974.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--83 years (water years 1929-2011), 1,904 ft^3/s, 98.73 in/yr, 1,379,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,100 ft^3/s, Dec. 12, 2010, gage height, 15.59 ft; minimum discharge, 117 ft^3/s, Sept. 23, 1938.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 13,000 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec 12	1715	*55,100	*15.59
Jan 14	1130	15,000	9.83
Jan 17	0930	29,400	13.36
Mar 31	0915	23,100	12.26

Minimum discharge, 285 ft^3/s, Sept. 15, 17, 18, 22, gage height, 2.47 ft.

Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2011: U.S. Geological Survey Water-Data Report WDR-US-2011, site 12167000, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/12167000.2011.pdf

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1,050	5,330	4,490	2,190	1,850	919	6,840	1,620	2,290	1,860	804	366
2	913	5,760	2,820	2,080	1,620	1,030	5,990	1,890	2,400	1,540	749	348
3	823	3,470	2,410	1,980	1,510	1,150	4,030	2,670	2,400	1,640	707	334
4	751	2,630	2,110	1,910	2,830	1,070	3,700	2,220	2,400	1,460	686	325
5	687	2,240	1,910	1,940	2,610	1,370	4,150	2,120	2,710	1,320	685	318
6	632	2,370	1,810	3,740	2,060	1,320	3,710	2,270	2,750	1,340	671	314
7	587	4,660	1,860	7,090	3,300	1,160	2,860	2,970	2,770	1,430	634	312
8	551	4,040	4,080	4,960	2,460	1,080	2,340	2,950	2,560	1,320	606	310
9	811	3,260	6,790	3,430	1,920	1,440	2,100	2,320	2,240	1,130	594	315
10	5,580	2,630	5,370	2,810	1,650	3,320	2,070	2,080	2,080	995	577	316
11	2,950	2,290	3,960	2,480	1,500	3,450	3,510	2,580	2,020	970	549	312
12	2,040	2,570	36,800	2,650	1,570	2,390	2,740	3,450	1,840	980	530	309
13	1,700	2,220	16,800	6,870	2,400	2,620	2,260	2,410	2,080	1,190	524	305
14	1,490	2,370	8,820	13,000	2,230	4,970	2,130	2,420	2,440	1,560	512	298
15	1,360	4,090	5,810	7,810	2,740	3,990	2,240	3,390	2,130	1,640	489	293
16	1,250	7,820	4,420	16,100	2,040	4,620	2,410	4,190	1,930	1,330	465	313
17	1,160	5,540	3,650	20,400	1,760	3,460	2,300	3,370	1,700	1,270	445	295
18	1,090	4,780	3,170	6,710	1,560	2,580	1,960	2,570	1,800	1,120	432	305
19	1,030	3,620	2,840	3,680	1,390	2,220	1,770	2,390	2,010	1,040	424	379
20	986	2,990	2,590	2,780	1,260	1,910	1,610	2,400	1,880	1,040	424	333
21	941	2,530	2,400	4,590	1,190	1,730	1,580	2,610	1,770	1,190	441	297
22	945	2,220	2,270	4,180	1,190	1,990	1,490	2,290	1,950	1,290	465	384
23	950	1,940	2,190	2,790	1,130	1,670	1,430	2,100	2,070	1,030	696	543
24	1,440	1,750	2,320	2,700	1,040	1,510	1,440	1,910	1,830	949	606	396
25	5,670	1,710	3,670	3,050	934	1,500	1,660	1,880	1,680	1,030	517	364
26	5,130	1,970	3,470	2,370	885	1,480	2,140	2,640	1,480	1,100	484	514
27	2,930	2,300	3,050	2,080	906	1,450	1,980	2,310	1,560	945	462	1,290
28	2,270	1,920	3,740	2,030	979	1,510	2,150	2,230	1,710	846	432	1,140
29	2,140	1,740	3,220	3,820	---	1,700	1,930	1,980	1,940	825	414	658
30	1,950	2,920	2,640	3,330	---	8,460	1,740	1,920	2,460	816	401	505
31	3,570	---	2,340	2,250	---	16,200	---	1,890	---	807	383	---
Total	55,377	95,680	153,820	147,800	48,514	85,269	78,260	76,040	62,880	37,003	16,808	12,491
Mean	1,786	3,189	4,962	4,768	1,733	2,751	2,609	2,453	2,096	1,194	542	416
Max	5,670	7,820	36,800	20,400	3,300	16,200	6,840	4,190	2,770	1,860	804	1,290
Min	551	1,710	1,810	1,910	885	919	1,430	1,620	1,480	807	383	293
Ac-ft	109,800	189,800	305,100	293,200	96,230	169,100	155,200	150,800	124,700	73,400	33,340	24,780
Cfsm	6.82	12.2	18.9	18.2	6.61	10.5	9.96	9.36	8.00	4.56	2.07	1.59
In.	7.86	13.59	21.84	20.99	6.89	12.11	11.11	10.80	8.93	5.25	2.39	1.77

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,539	2,834	3,033	2,891	2,396	2,164	2,212	2,166	1,655	859	459	667
Max	3,880	8,008	6,177	5,852	5,632	5,814	4,040	4,371	3,348	2,165	1,049	2,418
(WY)	(2004)	(1991)	(1980)	(1953)	(1982)	(1972)	(1959)	(1997)	(1974)	(1972)	(1964)	(1959)
Min	171	223	871	484	467	898	812	1,091	510	290	166	140
(WY)	(1988)	(1937)	(1986)	(1937)	(1929)	(1992)	(1941)	(1992)	(1992)	(1940)	(1938)	(1938)

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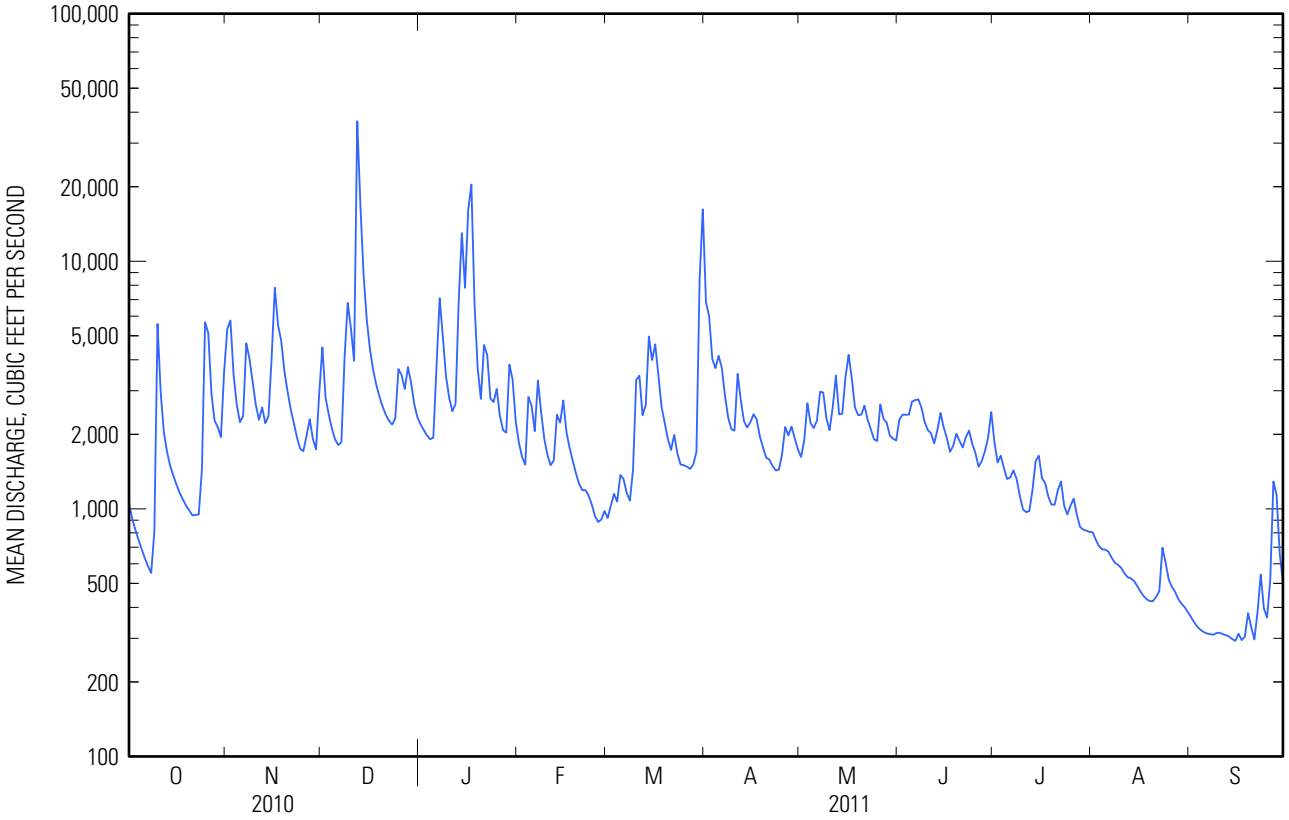
SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1928 - 2011	
Annual total	688,278		869,942			
Annual mean	1,886		2,383		1,904	
Highest annual mean					2,883	1997
Lowest annual mean					1,123	1930
Highest daily mean	36,800	Dec 12	36,800	Dec 12	36,800	Dec 12, 2010
Lowest daily mean	203	Aug 30	293	Sep 15	123	Sep 23, 1938
Annual seven-day minimum	220	Aug 24	303	Sep 12	128	Sep 17, 1938
Annual runoff (ac-ft)	1,365,000		1,726,000		1,379,000	
Annual runoff (cfsm)	7.20		9.10		7.27	
Annual runoff (inches)	97.72		123.52		98.73	
10 percent exceeds	3,580		4,080		3,740	
50 percent exceeds	1,430		1,930		1,390	
90 percent exceeds	355		476		338