

NOOKSACK RIVER BASIN

12208000 MIDDLE FORK NOOKSACK RIVER NEAR DEMING, WA

LOCATION.--Lat 48°46'46", long 122°06'19", in lot 7 or 8, in SW 1/4 sec.13, T.38 N., R.5 E., Whatcom County, Hydrologic Unit 17110004, on left bank 0.5 mi upstream from Heislars Creek, 6.0 mi southeast of Deming, and at mile 5.6.

DRAINAGE AREA.--73.3 mi². Area at site 1910-11, 1920-21, 1954, 75.4 mi².

PERIOD OF RECORD.--October 1910 to March 1911 (fragmentary gage heights and discharge measurements only), August 1920 to September 1921, February 1934 to September 1935, June to October 1954, October 1964 to November 1968, July 1969 to July 1970, January 1992 to current year.

REVISED RECORDS.--WSP 1932: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 580 ft above NGVD of 1929, from river-profile map. Oct. 11, 1910, to Mar. 14, 1911, Aug. 28, 1920, to Sept. 30, 1921, June 3 to Oct. 31, 1954, nonrecording gages at site 0.8 mi downstream at different datums. Feb. 18 to Apr. 6, 1934, Nov. 16, 1934, to Sept. 30, 1935, nonrecording gage at present site and datum. Prior to January 1992 at same site, different datum.

REMARKS.--No estimated daily discharges. Records good. Since February 1962, the City of Bellingham sometimes diverts up to about 100 ft³/s for municipal use at dam 1.8 mi upstream. No regulation. U.S. Geological Survey satellite telemeter at station.

COOPERATION.--Records for the 1992-97 water years were provided by the City of Bellingham and were reviewed by the U.S. Geological Survey.

AVERAGE DISCHARGE.--16 years (water years 1921, 1935, 1965-68, 1993-2002), 501 ft³/s, 92.92 in/yr, 363,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, not determined, probably occurred Nov. 5, 1934, gage height, 15.0 ft, from floodmarks, present site at different datum; minimum discharge, 30 ft³/s Oct. 3, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 16	2145	4,080	6.06	Jan. 07	2115	*6,810	*7.27

Minimum discharge, 118 ft³/s Oct. 7, 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	181	874	661	323	195	311	569	779	901	855	346	297
2	162	780	702	1220	185	285	383	758	912	680	321	440
3	153	545	402	786	224	265	316	535	934	602	288	377
4	150	739	309	523	224	257	329	444	965	551	339	252
5	142	726	319	435	218	257	448	452	1320	527	383	208
6	138	450	321	985	357	232	823	400	1020	606	313	184
7	121	377	305	4030	383	224	861	351	708	712	263	175
8	130	343	547	3300	289	205	480	326	567	1100	278	170
9	149	309	527	1660	249	201	464	306	615	742	308	218
10	306	294	361	992	250	205	960	301	816	830	329	229
11	332	316	302	751	250	693	779	339	970	902	324	238
12	550	528	298	1040	211	564	1190	525	1170	848	337	237
13	425	898	1030	838	190	377	1610	790	1420	793	372	235
14	462	2660	1140	608	173	323	2400	894	1470	707	368	248
15	311	2450	566	497	166	287	1110	615	1340	591	353	239
16	344	1390	2340	433	172	258	741	539	1130	621	310	527
17	353	788	1910	380	176	231	539	1090	891	625	258	379
18	583	559	798	347	238	215	445	816	1740	587	296	216
19	1240	1450	560	333	364	222	452	734	954	551	287	295
20	530	1760	439	323	306	210	475	1070	846	478	258	292
21	460	1340	373	296	1270	199	453	892	1010	481	255	221
22	1120	962	328	270	3310	215	465	730	1070	556	278	210
23	1760	1110	291	257	2120	234	427	633	939	614	331	220
24	831	666	266	406	995	262	373	605	831	599	377	211
25	805	479	246	561	628	310	352	733	920	589	333	192
26	1120	390	231	353	487	343	353	833	1090	547	301	179
27	1300	389	223	292	405	320	344	1010	1110	436	329	164
28	623	399	267	253	351	350	374	1630	1500	440	341	159
29	429	506	273	227	---	325	431	1880	2210	469	325	215
30	636	373	246	217	---	298	582	1660	1220	387	320	216
31	1380	---	263	207	---	297	---	1080	---	360	304	---
TOTAL	17226	24850	16844	23143	14386	8975	19528	23750	32589	19386	9825	7443
MEAN	556	828	543	747	514	290	651	766	1086	625	317	248
MAX	1760	2660	2340	4030	3310	693	2400	1880	2210	1100	383	527
MIN	121	294	223	207	166	199	316	301	567	360	255	159
AC-FT	34170	49290	33410	45900	28530	17800	38730	47110	64640	38450	19490	14760
CFSM	7.58	11.3	7.41	10.2	7.01	3.95	8.88	10.5	14.8	8.53	4.32	3.38
IN.	8.74	12.61	8.55	11.75	7.30	4.55	9.91	12.05	16.54	9.84	4.99	3.78

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2002, BY WATER YEAR (WY)

	MEAN	507	593	579	566	470	375	436	619	684	487	318	337
MAX	1272	1154	940	965	855	698	739	1039	1202	839	573	796	
(WY)	1921	1996	1999	1997	1921	1997	1966	1997	1921	1954	1954	1920	
MIN	229	215	237	271	175	237	127	385	327	311	174	120	
(WY)	1994	1994	1993	1993	2001	1992	1967	1992	1996	1970	1994	1965	

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1920 - 2002

ANNUAL TOTAL	164040		217945			
ANNUAL MEAN	449		597			
HIGHEST ANNUAL MEAN					501	
LOWEST ANNUAL MEAN					665	
HIGHEST DAILY MEAN					362	1921
LOWEST DAILY MEAN					362	1994
HIGHEST DAILY MEAN		2660	Nov 14	4030	Jan 7	7500
LOWEST DAILY MEAN		118	Feb 20	121	Oct 7	32
ANNUAL SEVEN-DAY MINIMUM		124	Feb 15	140	Oct 3	36
ANNUAL RUNOFF (AC-FT)		325400		432300		363200
ANNUAL RUNOFF (CFSM)		6.13		8.15		6.84
ANNUAL RUNOFF (INCHES)		83.25		110.61		92.92
10 PERCENT EXCEEDS		815		1120		962
50 PERCENT EXCEEDS		356		406		373
90 PERCENT EXCEEDS		166		216		168