

DUCKABUSH RIVER BASIN

12054000 DUCKABUSH RIVER NEAR BRINNON, WA

LOCATION.--Lat 47°41'03", long 123°00'37", in NW 1/4 SW 1/4 sec.1, T.25 N., R.3 W., Jefferson County, Hydrologic Unit 17110018, Olympic National Forest, on left bank 5.2 mi west of Brinnon, and at mile 4.5.

DRAINAGE AREA.--66.5 mi².

PERIOD OF RECORD.--August to December 1910 (gage height only), December 1910 to December 1911, June 1938 to current year.
Published as "near Duckabush" water years 1910-11.

REVISED RECORDS.--WSP 1216: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 241.49 ft above NGVD of 1929. Aug. 19, 1910, to Dec. 31, 1911, nonrecording gage at same site at different datum.

REMARKS.--Records good except estimated daily discharges, which are poor. No regulation or diversion upstream from station.
Chemical analyses April 1972 to September 1974.

AVERAGE DISCHARGE.--64 years (water years 1939-2002), 417 ft³/s, 85.17 in/yr, 302,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,880 ft³/s Jan. 7, 2002, gage height, 8.85 ft; minimum daily discharge, 41 ft³/s Oct. 23-30, 1987, Oct. 15-17, 1992.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 15	0930	5,560	7.04	Jan. 2	1000	3,580	5.89
Nov. 20	0215	5,160	6.83	Jan. 7	1730	*9,880	*8.85
Dec. 16	2115	6,710	7.59				

Minimum discharge, 54 ft³/s Oct. 9, 10, but may have been lower during period of estimated record, Sep. 19-30.

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	66	420	951	629	256	316	225	511	619	502	184	95
2	64	344	771	2760	247	289	232	590	640	455	176	95
3	62	257	513	1630	335	266	224	531	656	436	170	101
4	60	224	418	926	297	254	237	458	666	396	165	95
5	59	218	363	922	276	244	291	396	745	358	164	91
6	56	184	345	2430	396	229	326	350	708	357	168	91
7	55	163	322	6920	415	216	321	317	586	386	157	92
8	55	147	416	3610	333	206	298	297	501	435	149	87
9	55	136	434	1710	288	204	341	283	467	411	150	85
10	61	124	371	1160	264	234	468	272	553	439	156	e84
11	83	122	322	912	251	651	478	271	649	493	151	e82
12	81	563	290	879	232	612	544	310	733	466	143	e80
13	93	877	937	714	218	485	742	439	802	456	143	e78
14	82	3150	1110	619	206	393	1430	437	859	429	143	e77
15	73	3920	658	548	198	332	812	394	812	373	140	e77
16	67	1550	3620	497	197	294	606	366	727	359	134	e97
17	66	822	2600	448	196	260	518	443	659	353	126	103
18	62	595	1150	409	199	239	459	431	664	330	122	93
19	61	2520	782	381	409	224	417	421	575	309	119	e82
20	61	4130	606	361	314	219	394	447	541	296	118	e81
21	61	2560	506	339	968	210	382	523	590	281	114	e77
22	115	1830	442	316	1940	214	376	514	663	276	110	e74
23	240	1150	394	299	1200	227	362	486	641	288	107	e71
24	158	818	358	399	790	250	340	461	584	289	108	e68
25	175	639	323	614	577	280	326	522	602	285	109	e66
26	181	536	291	456	474	290	322	615	667	274	108	e64
27	371	465	281	377	404	263	318	675	671	245	105	e62
28	237	458	343	333	355	241	309	837	651	229	102	e60
29	179	536	331	302	---	228	319	1140	883	228	101	e57
30	209	485	298	284	---	224	380	829	579	215	100	e56
31	640	---	326	270	---	219	---	685	---	201	97	---
TOTAL	3888	29943	20872	32454	12235	8813	12797	15251	19693	10850	4139	2421
MEAN	125	998	673	1047	437	284	427	492	656	350	134	80.7
MAX	640	4130	3620	6920	1940	651	1430	1140	883	502	184	103
MIN	55	122	281	270	196	204	224	271	467	201	97	56
AC-FT	7710	59390	41400	64370	24270	17480	25380	30250	39060	21520	8210	4800
CFSM	1.89	15.0	10.1	15.7	6.57	4.28	6.41	7.40	9.87	5.26	2.01	1.21
IN.	2.17	16.75	11.68	18.15	6.84	4.93	7.16	8.53	11.02	6.07	2.32	1.35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2002, BY WATER YEAR (WY)

	MEAN	280	538	599	518	498	384	395	555	573	359	173	135
MAX	954	1446	1470	1180	1050	883	656	1043	1146	936	598	523	
(WY)	1998	1984	1967	1953	1991	1972	1943	1956	1999	1999	1999	1978	
MIN	44.4	79.6	167	116	133	138	214	314	242	136	75.1	57.6	
(WY)	1988	1994	1977	1979	1985	1985	1973	1977	1992	1977	1944	1942	

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1938 - 2002
ANNUAL TOTAL	115398	173356	
ANNUAL MEAN	316	475	417
HIGHEST ANNUAL MEAN			670
LOWEST ANNUAL MEAN			204
HIGHEST DAILY MEAN	4130	Nov 20	6920
LOWEST DAILY MEAN	55	Oct 7	41
ANNUAL SEVEN-DAY MINIMUM	57	Oct 4	41
ANNUAL RUNOFF (AC-FT)	228900	343900	302000
ANNUAL RUNOFF (CFSM)	4.75	7.14	6.27
ANNUAL RUNOFF (INCHES)	64.55	96.98	85.17
10 PERCENT EXCEEDS	531	820	803
50 PERCENT EXCEEDS	202	326	311
90 PERCENT EXCEEDS	82	83	97

e Estimated