

NISQUALLY RIVER BASIN

12088000 OHOP CREEK NEAR EATONVILLE, WA

LOCATION.--Lat 46°52'52", long 122°16'40", in SE 1/4 SE 1/4 sec.10, T.16 N., R.4 E., Pierce County, Hydrologic Unit 17110015, on left bank, 150 ft downstream from Lynch Creek, 0.2 mi downstream from outlet of Ohop Lake, 0.8 mi northwest of Eatonville, and at mile 6.1.

DRAINAGE AREA.--34.5 mi².

PERIOD OF RECORD.--June 1927 to September 1932, September 1941 to September 1971, June 1993 to current year.

REVISED RECORDS.--WSP 1286: 1946. WSP 1932: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 517.76 ft above NGVD of 1929 (stadia traverse). June 1, 1927 to Sept. 30, 1932, water-stage recorder at datum 4.83 ft higher; Sept. 6, 1941, to Mar. 17, 1942, nonrecording gage and Mar. 18, 1942, to June 15, 1964, water-stage recorder at datum 2.04 ft higher; all at site 250 ft downstream. June 15, 1964, to Aug. 26, 1966, water-stage recorder at site on left bank across stream at datum 2.04 ft higher. Aug. 27, 1966, to Sept. 30, 1971, water-stage recorder at site on right bank at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow affected by natural storage in Ohop Lake.

AVERAGE DISCHARGE.--44 years (water years 1928-32, 1942-71, 1994-2002), 66.3 ft³/s, 26.10 in/yr, 48,010 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,620 ft³/s Feb. 8, 1996, gage height, 8.76 ft; minimum discharge, 2.2 ft³/s Sept. 2, 1994 and Sept. 1, 2, 2002.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 17	unknown	*523	(a) *4.24	No other peak greater than base discharge.			

Minimum discharge, 2.2 ft³/s Sept. 1, 2.

(a) from crest stage gage.

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	11	70	258	e70	111	129	70	51	31	24	11	2.5
2	9.9	65	252	e130	101	119	67	47	33	20	9.2	7.9
3	8.9	59	225	e110	104	111	62	43	28	17	7.4	18
4	7.8	52	192	e80	105	104	58	40	25	14	5.5	13
5	6.8	78	170	e70	92	103	57	40	29	14	6.7	10
6	6.3	67	187	e100	94	109	58	42	25	13	27	7.3
7	8.7	58	225	e250	127	103	59	44	22	14	12	7.0
8	8.2	52	187	e300	195	98	54	45	20	28	13	9.5
9	7.6	49	176	e200	210	96	54	42	18	21	12	12
10	7.9	47	160	e170	203	109	64	43	17	20	10	8.9
11	19	45	169	e150	221	186	75	40	15	19	10	6.3
12	16	48	147	e160	225	244	85	37	14	16	11	6.8
13	22	71	219	e130	190	257	104	37	12	13	13	10
14	29	194	e300	e110	163	253	311	42	16	11	11	8.8
15	25	178	e220	e90	147	220	256	37	31	9.6	9.1	7.9
16	24	168	e250	e80	138	197	246	34	23	7.0	8.0	7.0
17	24	135	e500	e70	133	177	192	33	19	5.3	6.9	7.4
18	20	102	e400	e60	141	156	149	31	20	5.1	6.2	6.5
19	17	85	e300	e70	154	216	120	30	22	5.0	5.4	5.5
20	18	87	e240	e80	151	337	100	35	17	4.8	6.7	5.4
21	20	87	e200	e90	162	245	85	67	14	4.4	7.2	4.6
22	29	151	e160	e76	180	188	74	56	12	4.2	5.6	4.2
23	46	253	e130	e70	232	152	66	50	11	7.7	4.2	4.1
24	34	191	e100	e110	274	130	58	42	13	18	3.6	3.8
25	46	141	e80	e190	221	144	53	37	16	14	3.4	3.6
26	40	117	e64	e150	185	125	52	35	13	11	3.4	3.6
27	43	90	e56	e120	160	115	77	33	11	9.6	3.6	3.7
28	52	143	e64	e100	143	103	77	42	17	7.0	3.3	3.6
29	44	211	e62	e80	---	95	64	40	38	5.7	3.0	4.9
30	41	206	e60	e76	---	85	55	35	31	4.3	2.6	5.5
31	69	---	e66	e95	---	74	---	30	---	5.6	2.7	---
TOTAL	761.1	3300	5819	3637	4562	4780	2902	1260	613	372.3	243.7	209.3
MEAN	24.6	110	188	117	163	154	96.7	40.6	20.4	12.0	7.86	6.98
MAX	69	253	500	300	274	337	311	67	38	28	27	18
MIN	6.3	45	56	60	92	74	52	30	11	4.2	2.6	2.5
AC-FT	1510	6550	11540	7210	9050	9480	5760	2500	1220	738	483	415
CFSM	0.71	3.19	5.44	3.40	4.72	4.47	2.80	1.18	0.59	0.35	0.23	0.20
IN.	0.82	3.56	6.27	3.92	4.92	5.15	3.13	1.36	0.66	0.40	0.26	0.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2002, BY WATER YEAR (WY)

	35.2	86.2	121	121	115	95.9	83.0	54.9	40.9	20.2	11.1	15.2
MEAN	35.2	86.2	121	121	115	95.9	83.0	54.9	40.9	20.2	11.1	15.2
MAX	90.8	235	268	258	305	191	141	138	114	64.5	59.6	70.9
(WY)	1928	1961	1947	1971	1996	1932	1928	1960	1942	1993	1968	1968
MIN	7.69	8.76	24.6	32.8	36.1	46.4	39.4	19.2	12.2	6.04	4.95	4.44
(WY)	1930	1953	1953	2001	2001	2001	1998	1947	1932	1944	1994	1952

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1927 - 2002

ANNUAL TOTAL	20099.4	28459.4	
ANNUAL MEAN	55.1	78.0	66.3
HIGHEST ANNUAL MEAN			98.4
LOWEST ANNUAL MEAN			32.4
HIGHEST DAILY MEAN	500	Dec 17	2090
LOWEST DAILY MEAN	4.7	Sep 1	2.5
ANNUAL SEVEN-DAY MINIMUM	6.9	Aug 29	3.0
ANNUAL RUNOFF (AC-FT)	39870	56450	48010
ANNUAL RUNOFF (CFSM)	1.60	2.26	1.92
ANNUAL RUNOFF (INCHES)	21.67	30.69	26.10
10 PERCENT EXCEEDS	137	198	150
50 PERCENT EXCEEDS	34	50	43
90 PERCENT EXCEEDS	8.3	6.3	8.4

e Estimated