

ESQUATZEL COULEE BASIN

12513000 ESQUATZEL COULEE AT CONNELL, WA

LOCATION.--Lat 46°39'49", long 118°51'44", in SW 1/4 SE 1/4 sec.25, T.14 N., R.31 E., Franklin County, Hydrologic Unit 17020016, on right bank, at Clark Street Bridge in Connell, and 7.8 mi downstream from Hatton Coulee.

DRAINAGE AREA.--234 mi², approximately.

PERIOD OF RECORD.--October 1952 to current year. Records published for period August 1959 to September 1964 include effluent from sewage treatment plant 0.8 mi downstream; records adjusted to exclude effluent October 1964 to June 1967.

REVISED RECORDS.--WSP 1933: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 820 ft above NGVD of 1929, from topographic map. Prior to Aug. 7, 1959, at site 0.4 mi downstream at different datum, Aug. 7, 1959, to July 8, 1967, at site 0.9 mi downstream at different datum, July 9, 1967, to Oct. 28, 1981, at site 0.7 mi downstream at different datum, and Oct. 29, 1981, to Sept. 30, 1984 at datum 10 ft lower.

REMARKS.--Records poor. No diversion upstream from station. Most flow for October, and April through September is return and waste from water imported for irrigation, entering about 3 mi upstream on the right bank. U.S. Geological Survey satellite telemeter at gage.

AVERAGE DISCHARGE.--33 years (water years 1953-85), 1.73 ft³/s, 1,253 acre-ft/yr, adjusted for effluent from sewage treatment plant 1959-64. Average discharge is not computed after the 1985 water year because of ground-water withdrawals and return flows from irrigation occurring during the summer months upstream from the gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,560 ft³/s Feb. 21, 1956, gage height, 12.68 ft, site and datum then in use; no flow at times during most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 25 ft³/s Apr. 15, gage height, 11.57 ft; maximum gage height, 11.94 ft Oct. 22; no flow most days, November through March.

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	1.8	0.12	0.00	0.00	0.00	e0.00	5.7	8.7	4.6	15	7.5	7.8
2	2.1	0.06	0.00	0.00	0.00	e0.00	8.3	4.2	5.2	8.4	9.5	12
3	2.4	0.02	0.00	0.00	0.00	e0.00	14	9.7	6.5	10	4.8	9.1
4	3.4	0.00	0.00	0.00	0.00	e0.00	12	5.8	7.2	16	4.4	7.8
5	3.4	0.00	0.00	0.00	0.00	e0.00	7.3	6.8	3.1	14	7.7	8.1
6	11	0.00	0.00	0.00	0.00	e0.00	4.6	7.9	3.7	5.9	7.6	12
7	10	0.00	0.00	0.00	0.00	e0.00	4.0	12	12	7.1	10	11
8	5.4	0.00	0.00	0.00	0.00	e0.00	5.4	8.8	7.1	13	3.3	6.0
9	8.9	0.00	0.00	0.00	0.00	e0.00	12	9.0	6.9	15	2.1	7.4
10	2.7	0.00	0.00	0.00	0.00	e0.00	11	11	7.8	12	3.1	5.5
11	10	0.00	0.00	0.00	0.00	e0.00	7.6	10	5.7	8.1	5.4	6.0
12	11	0.00	0.00	0.00	0.00	e0.00	7.7	8.2	5.1	5.5	5.7	7.1
13	18	0.00	0.00	0.00	0.00	e0.00	13	6.7	2.4	2.9	7.0	8.7
14	7.5	0.00	0.00	0.00	0.00	e0.00	15	8.3	3.0	7.8	5.3	3.0
15	5.5	0.00	0.00	0.00	0.00	e0.00	22	7.3	2.2	6.0	6.1	3.4
16	3.5	0.00	0.00	0.00	0.00	e0.00	21	6.6	3.6	7.9	4.1	7.5
17	6.4	0.00	0.00	0.00	0.00	e0.00	15	8.1	7.6	7.2	8.6	15
18	7.8	0.00	0.00	0.00	0.00	e0.00	17	5.0	11	5.8	9.5	11
19	9.2	0.00	0.00	0.00	0.00	e0.00	11	4.5	7.0	10	7.5	12
20	5.8	0.00	0.00	0.00	0.00	0.49	7.0	5.5	3.4	5.9	7.3	9.2
21	6.8	0.00	0.00	0.00	e0.00	0.59	3.1	6.6	2.6	7.9	8.6	2.9
22	22	0.00	0.00	0.00	e0.00	0.52	3.0	5.3	4.4	5.4	10	7.3
23	21	0.00	0.00	0.00	e0.00	0.51	2.1	5.3	4.2	3.3	9.1	10
24	18	0.00	e0.00	0.00	e0.00	0.65	2.2	6.2	6.9	5.1	6.6	7.9
25	5.0	0.00	e0.00	0.00	e0.00	0.36	5.6	7.3	8.0	6.8	9.2	6.0
26	5.2	0.00	e0.00	0.00	e0.00	0.44	4.5	4.6	2.4	6.1	8.8	6.2
27	1.4	0.00	e0.00	0.00	e0.00	0.45	5.6	6.2	3.2	4.5	11	11
28	0.21	0.00	e0.00	0.00	e0.00	0.37	11	6.1	4.0	7.4	2.8	9.0
29	0.12	0.00	e0.00	0.00	---	0.46	11	7.6	8.4	9.4	12	13
30	0.32	0.00	e0.00	0.00	---	2.4	11	6.0	17	4.6	10	12
31	0.16	---	e0.00	0.00	---	4.1	---	4.4	---	5.0	9.3	---
TOTAL	216.01	0.20	0.00	0.00	0.00	11.34	279.7	219.7	176.2	249.0	223.9	254.9
MEAN	6.97	0.007	0.00	0.00	0.00	0.37	9.32	7.09	5.87	8.03	7.22	8.50
MAX	22	0.12	0.00	0.00	0.00	4.1	22	12	17	16	12	15
MIN	0.12	0.00	0.00	0.00	0.00	0.00	2.1	4.2	2.2	2.9	2.1	2.9
AC-FT	428	0.4	0.00	0.00	0.00	22	555	436	349	494	444	506
CAL YR 2001	TOTAL 1042.97	MEAN 2.86	MAX 22	MIN 0.00	AC-FT 2070							
WTR YR 2002	TOTAL 1630.95	MEAN 4.47	MAX 22	MIN 0.00	AC-FT 3230							

e Estimated