

13217500 NORTH FORK MALHEUR RIVER AT BEULAH, OR

Middle Snake-Boise Basin
Upper Malheur Subbasin

LOCATION.--Lat 43°54'27", long 118°09'12" referenced to North American Datum of 1983, in NW ¼ NE ¼ sec.22, T.19 S., R.37 E., Malheur County, OR, Hydrologic Unit 17050116, on left bank, at Beulah, 0.3 mi downstream from Agency Valley Dam, 12 mi northwest of Juntura and at mile 14.5.

DRAINAGE AREA.--440 mi², approximately.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--June 1926 to current year. Published as "near Beulah" June 1926 to September 1935.

REVISED RECORDS.--WSP 1397: 1927-32, 1934, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,261.20 ft above NGVD of 1929. Prior to Apr. 25, 1936, water-stage recorder at site 1 mi downstream at different datum. Apr. 25, 1936 to Sept. 30, 1949, nonrecording gage at site 20 ft downstream at datum 1.0 ft higher. Oct. 1, 1949 to June 30, 1964, at present site at datum 1.0 ft higher.

REMARKS.--No estimated daily discharges. Records good above 20 ft³/s and poor below. Flow regulated since 1935 by Beulah Reservoir (active capacity, 59,900 acre-ft). Diversions for irrigation upstream from station.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--9 years (1927-35), 87.9 ft³/s, 2.71 in/yr, 63,710 acre-ft/yr. 85 years (water years 1927-68, 1970-2012), 139 ft³/s, 100,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,000 ft³/s May 7, 1942, gage height, 9.4 ft, present datum, from floodmark, caused by failure of gates at Agency Valley Dam, from rating curve extended above 1,100 ft³/s on basis of computation of peak flow over dam; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 846 ft³/s April 26, 27, gage height, 4.47 ft; minimum daily discharge, 0.04 ft³/s Dec. 2-23.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	139	0.26	0.05	0.05	0.09	0.30	1.9	636	366	369	412	203
2	139	0.27	0.04	0.05	0.08	0.29	2.0	589	366	360	411	202
3	137	0.30	0.04	0.06	0.09	0.29	2.3	514	366	355	409	200
4	149	0.30	0.04	0.06	0.09	0.31	3.0	399	366	350	409	200
5	155	0.29	0.04	0.06	0.08	0.33	3.7	295	359	349	406	199
6	155	0.27	0.04	0.06	0.08	0.36	4.7	278	327	349	409	192
7	132	0.23	0.04	0.06	0.10	0.42	6.0	252	308	348	410	188
8	121	0.16	0.04	0.06	0.15	0.42	7.5	258	302	346	409	185
9	121	0.13	0.04	0.06	0.17	0.44	8.8	267	302	346	406	184
10	121	0.11	0.04	0.07	0.17	0.47	9.3	302	301	344	403	182
11	121	0.11	0.04	0.07	0.17	0.49	10	318	299	340	400	170
12	96	0.11	0.04	0.07	0.18	0.55	11	318	322	342	399	160
13	83	0.10	0.04	0.07	0.18	0.61	11	318	333	343	396	155
14	38	0.09	0.04	0.07	0.18	0.64	13	318	331	342	387	154
15	0.18	0.08	0.04	0.07	0.19	0.65	148	353	331	342	362	164
16	0.26	0.08	0.04	0.07	0.20	0.68	210	367	330	346	338	172
17	0.31	0.08	0.04	0.08	0.20	0.72	227	366	330	343	337	171
18	0.34	0.07	0.04	0.08	0.20	0.77	228	366	354	337	337	170
19	0.39	0.07	0.04	0.11	0.20	0.92	231	366	368	315	335	183
20	0.42	0.07	0.04	0.14	0.21	1.0	269	366	374	308	332	190
21	0.31	0.07	0.04	0.19	0.22	1.1	309	366	377	305	322	190
22	0.15	0.06	0.04	0.13	0.22	1.2	319	357	376	245	315	190
23	0.16	0.06	0.04	0.10	0.25	1.3	327	340	376	151	315	188
24	0.20	0.06	0.05	0.10	0.28	1.4	420	336	376	249	312	186
25	0.22	0.05	0.05	0.09	0.30	1.4	579	336	376	351	283	161
26	0.23	0.05	0.05	0.09	0.29	1.5	712	336	375	417	269	135
27	0.24	0.05	0.05	0.09	0.29	1.6	811	348	375	435	269	130
28	0.24	0.05	0.05	0.09	0.29	1.6	752	356	373	419	243	129
29	0.25	0.05	0.05	0.08	0.30	1.7	741	356	372	410	228	128
30	0.26	0.05	0.05	0.08	---	1.6	680	441	371	409	211	128
31	0.26	---	0.06	0.08	---	1.7	---	366	---	412	203	---
Total	1,711.42	3.73	1.34	2.54	5.45	26.76	7,057.2	11,184	10,482	10,677	10,677	5,189
Mean	55.2	0.12	0.04	0.08	0.19	0.86	235	361	349	344	344	173
Max	155	0.30	0.06	0.19	0.30	1.7	811	636	377	435	412	203
Min	0.15	0.05	0.04	0.05	0.08	0.29	1.9	252	299	151	203	128
Ac-ft	3,390	7.4	2.7	5.0	11	53	14,000	22,180	20,790	21,180	21,180	10,290

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	36.1	6.21	6.23	13.4	30.0	90.7	285	342	269	259	204	122
Max	134	79.1	66.0	287	478	936	999	810	580	503	399	341
(WY)	(1954)	(1928)	(1928)	(1943)	(1965)	(1983)	(2006)	(1983)	(2011)	(2011)	(1980)	(1945)
Min	0.09	0.00	0.00	0.00	0.00	0.00	2.29	28.7	26.7	20.5	14.5	17.7
(WY)	(1974)	(1938)	(1938)	(1936)	(1938)	(1938)	(1981)	(1934)	(1934)	(1934)	(1934)	(1931)

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SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1927 - 2012	
Annual total	96,367.94		57,017.44			
Annual mean	264		156		139	
Highest annual mean					335	1983
Lowest annual mean					39.5	1934
Highest daily mean	1,710	May 17	811	Apr 27	3,700	May 7, 1942
Lowest daily mean	0.04	Dec 2	0.04	Dec 2	0.00	Dec 22, 1935
Annual seven-day minimum	0.04	Dec 2	0.04	Dec 2	0.00	Dec 22, 1935
Annual runoff (ac-ft)	191,100		113,100		100,600	
10 percent exceeds	711		376		360	
50 percent exceeds	156		26		45	
90 percent exceeds	0.05		0.05		0.09	

