Water-Data Report 2012

13233300 MALHEUR RIVER BELOW NEVADA DAM, NEAR VALE, OR

Middle Snake-Boise Basin
Lower Malheur Subbasin

LOCATION.--Lat 43°59′15″, long 117°13′08″ referenced to North American Datum of 1983, in NE ¼ SW ¼ sec.21, T.18 S., R.45 E., Malheur County, OR, Hydrologic Unit 17050117, on right bank, 510 ft downstream from dam and headgates of Nevada Canal and 1.5 mi northeast of Vale.

DRAINAGE AREA.--3,880 mi^2, approximately.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--June 1926 to September 1934, April 1936 to March 1942, March 1944 to September 1954, October 1993 to current year. Monthly discharge only for some periods, furnished by State Engineer of Oregon, published in WSP 1317.

GAGE.--Water-stage recorder. Elevation of gage is 2,220 ft above NGVD of 1929, from topographic map. Prior to Nov. 17, 1930, at datum 1.00 ft higher.

REMARKS.--No estimated daily discharges. Records good. Many diversions for irrigation upstream from station. Since March 1930, Vale-Oregon Canal has diverted in sec.31, T.20 S., R.41 E., for irrigation upstream from station and on Willow Creek, a tributary which enters partly upstream and partly downstream from station. Gilleman-Frohman Canal diverts on left bank in sec.8 T.19 S., R.44 E., for irrigation upstream from and downstream from station. Nevada Canal diverts on right bank 300 ft upstream from station for irrigation downstream from station. Flow regulated by Warm Springs Reservoir (active capacity, 191,100 acre-ft) and since December 1935, by Beulah Reservoir (active capacity, 59,900 acre-ft).

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--29 years (water years 1927-34, 1951-52, 1994-2012), 212 ft^3/s, 153,900 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft^3/s Jan. 18, 2011, gage height, 12.58 ft; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 24, 1957 reached a stage of 14.6 ft, discharge, 21,000 ft^3/s. Flood of Mar. 19, 1993 reached a stage of 13.31 ft, discharge, 16,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 696 ft^3/s July 23, gage height, 3.51 ft; minimum daily discharge, 5.6 ft^3/s Apr 13.

Suggested citation: U.S. Geological Survey, 2013, Water-resources data for the United States, Water Year 2012: U.S. Geological Survey Water-Data Report WDR-US-2012, site 13233300, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/13233300.2012.pdf

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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	177	205	156	140	136	98	72	50	105	71	118	164
2	170	200	154	132	132	96	70	27	105	92	119	171
3	173	195	150	125	125	99	49	46	123	92	121	184
4	181	199	149	134	118	100	49	120	132	84	122	181
5	212	197	144	135	111	102	48	130	145	89	120	189
6	260	196	133	130	107	102	46	80	176	66	124	192
7	277	192	131	132	104	101	45	75	152	67	123	185
8	270	189	132	130	103	90	40	69	141	83	126	185
9	254	186	137	120	102	84	29	49	129	81	118	181
10	243	185	135	118	101	81	25	42	114	77	114	178
11	283	184	134	115	104	79	23	41	112	66	107	175
12	300	183	140	106	98	76	11	59	92	68	104	180
13	264	181	133	114	96	76	5.6	69	87	80	114	178
14	229	179	139	116	93	77	84	82	63	89	114	191
15	200	175	140	115	94	81	121	74	59	100	117	197
16	253	172	136	110	93	88	124	73	45	113	103	184
17	234	177	133	113	91	86	116	79	47	119	94	175
18	179	176	126	123	90	83	77	82	50	135	98	161
19	163	174	134	130	87	84	57	88	71	129	102	168
20	149	172	129	142	88	96	47	89	68	132	125	166
21	140	169	133	181	87	93	22	98	70	118	134	169
22	131	167	115	201	87	86	37	96	90	134	139	170
23	125	167	116	220	90	80	48	94	84	458	130	186
24	121	169	117	217	84	77	31	101	80	266	125	207
25	113	166	120	132	84	76	13	124	95	143	135	216
26	111	161	120	120	81	80	20	142	96	133	147	223
27	110	160	125	130	84	78	90	147	93	108	142	211
28	146	160	130	116	98	77	124	138	84	133	162	202
29	163	161	137	180	101	75	74	126	70	129	152	172
30	162	163	153	158	---	75	52	109	70	124	156	161
31	205	---	148	142	---	75	---	107	---	115	166	---
Total	5,998	5,360	4,179	4,277	2,869	2,651	1,649.6	2,706	2,848	3,694	3,871	5,502
Mean	193	179	135	138	98.9	85.5	55.0	87.3	94.9	119	125	183
Max	300	205	156	220	136	102	124	147	176	458	166	223
Min	110	160	115	106	81	75	5.6	27	45	66	94	161
Ac-ft	11,900	10,630	8,290	8,480	5,690	5,260	3,270	5,370	5,650	7,330	7,680	10,910

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	97.4	109	120	225	307	462	556	289	166	70.5	69.2	97.7
Max	228	179	437	1,589	1,322	1,881	3,697	1,786	1,012	179	220	300
(WY)	(2000)	(2012)	(2006)	(1997)	(1997)	(1999)	(2006)	(2011)	(1953)	(1998)	(1999)	(1998)
Min	0.00	13.2	40.5	49.5	65.8	21.8	1.50	0.50	0.00	0.00	0.00	0.00
(WY)	(1931)	(1932)	(1931)	(2004)	(2003)	(1930)	(1934)	(1931)	(1931)	(1931)	(1931)	(1931)

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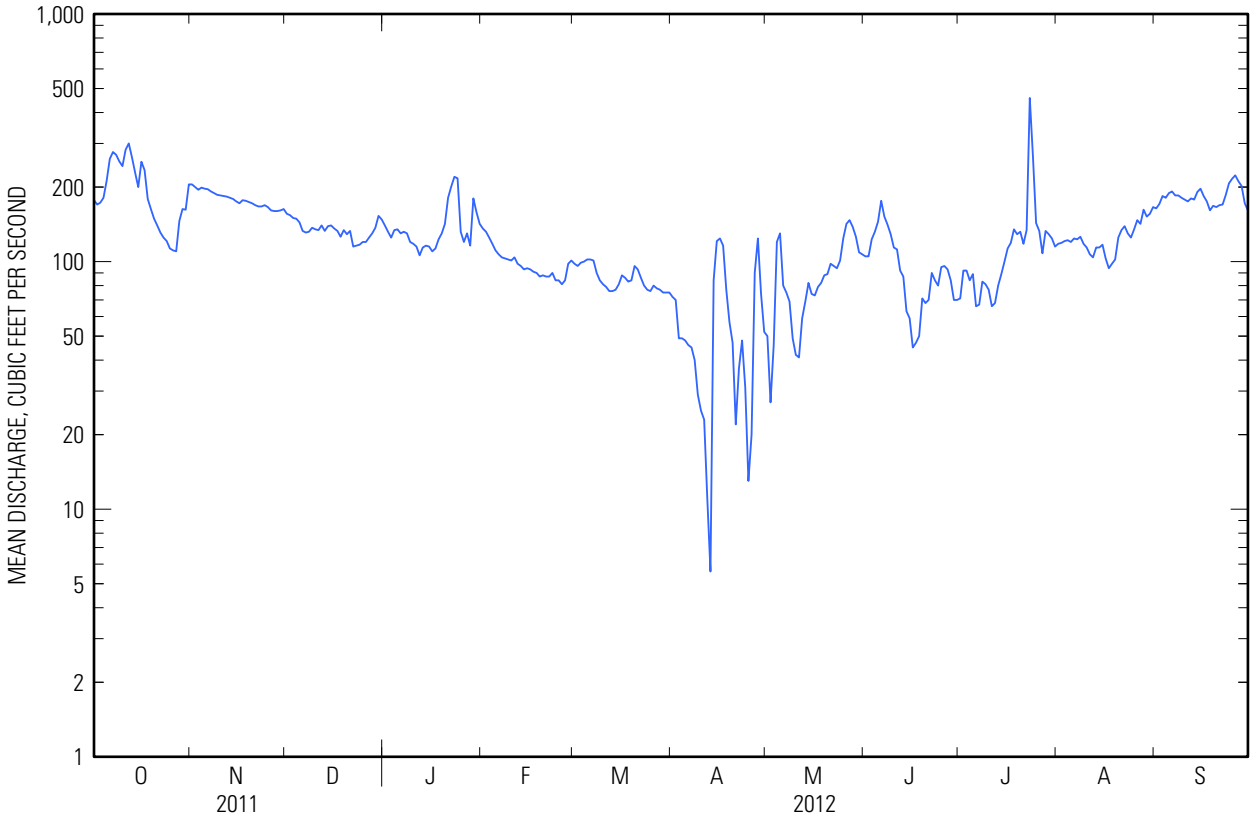
SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1927 - 2012	
Annual total	234,156		45,604.6			
Annual mean	642		125		212	
Highest annual mean					724	2006
Lowest annual mean					22.5	1931
Highest daily mean	8,100	Jan 18	458	Jul 23	9,360	Mar 26, 1952
Lowest daily mean	78	Jan 10	5.6	Apr 13	0.00	Oct 1, 1930
Annual seven-day minimum	80	Jan 8	26	Apr 7	0.00	Oct 1, 1930
Annual runoff (ac-ft)	464,400		90,460		153,900	
10 percent exceeds	1,760		187		422	
50 percent exceeds	222		120		93	
90 percent exceeds	132		68		5.4