

13292000 IMNAHA RIVER AT IMNAHA, OR

Lower Snake Basin
Imnaha Subbasin

LOCATION.--Lat 45°33'45", long 116°50'00" referenced to North American Datum of 1927, in NW ¼ SW ¼ sec.16, T.1 N., R.48 E., Wallowa County, OR, Hydrologic Unit 17060102, on left bank, at Imnaha, 0.3 mi downstream from Big Sheep Creek and at mile 19.3.

DRAINAGE AREA.--622 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--June 1928 to September 2013 (discontinued).

REVISED RECORDS.--WSP 833: 1938. WSP 1397: 1929, 1932(M), 1949. WSP 1737: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,941.14 ft above NGVD of 1929. Prior to Aug. 6, 1934, nonrecording gage at site 0.25 mi upstream at different datum. Aug. 6-31, 1934, nonrecording gage at present site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. No regulation. Diversions upstream from station for irrigation. Water is diverted from Big Sheep Creek and tributaries upstream from station for irrigation in Wallowa River basin. Water-quality records for periods August 1965 to September 1968 and May 1976 to September 1977 have been collected at this location.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--85 years (water years 1929-2013), 511 ft³/s, 369,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,200 ft³/s Jan. 1, 1997, gage height, 11.44 ft, from floodmark, from rating curve extended above 7,900 ft³/s on basis of slope-area measurement of peak flow; minimum discharge observed, 16 ft³/s Nov. 22, 1931, result of freezeup; minimum daily discharge, 25 ft³/s Nov. 22, 23, 1931.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 2	1515	*2,780	*4.98
May 14	0430	2,000	4.35

Minimum daily discharge, 94 ft³/s, Sept. 15.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	99	188	694	135	244	207	912	837	750	863	166	102
2	99	183	1,760	111	241	215	1,020	770	804	807	193	103
3	97	171	1,400	e100	251	247	1,110	764	848	798	180	110
4	100	164	972	e105	259	269	1,190	824	871	688	163	118
5	101	161	1,080	e105	267	292	1,450	863	940	595	155	138
6	102	160	1,010	e110	272	310	1,480	920	1,040	533	150	158
7	102	158	822	e110	272	302	1,470	1,030	1,150	484	145	121
8	102	164	701	e115	273	285	1,360	1,170	1,260	448	140	113
9	101	166	591	e115	264	283	1,170	1,280	1,230	410	137	109
10	102	151	537	e110	256	285	1,030	1,380	1,220	381	135	106
11	105	138	486	e105	241	295	963	1,440	1,150	363	134	103
12	104	146	456	e100	238	302	893	1,550	1,030	348	133	100
13	109	157	413	e100	233	327	878	1,720	976	322	132	97
14	114	151	389	e105	228	399	817	1,800	909	306	129	96
15	117	148	385	e110	224	563	765	1,540	811	291	124	94
16	129	146	362	e115	229	662	701	1,340	789	278	120	97
17	151	150	359	e120	250	660	636	1,250	800	267	117	105
18	128	253	305	e130	256	590	593	1,280	865	254	118	122
19	122	201	228	e140	270	517	579	1,170	992	244	115	113
20	134	244	310	e150	259	505	602	1,040	901	234	112	103
21	139	621	329	e160	240	571	622	1,070	736	223	111	99
22	129	381	315	e180	247	540	648	1,060	668	213	110	101
23	142	297	291	e200	243	495	624	928	599	203	116	104
24	137	260	280	e220	227	446	604	843	600	194	114	117
25	137	241	254	234	216	436	613	773	770	188	111	158
26	132	211	260	252	207	406	660	718	986	183	108	174
27	138	205	262	246	207	394	762	730	945	179	108	147
28	147	206	241	236	212	415	868	774	933	173	108	134
29	245	204	224	246	---	519	944	781	941	167	106	198
30	264	480	226	249	---	697	931	799	936	163	104	367
31	202	---	185	245	---	812	---	748	---	159	103	---
Total	4,030	6,506	16,127	4,759	6,826	13,246	26,895	33,192	27,450	10,959	3,997	3,807
Mean	130	217	520	154	244	427	896	1,071	915	354	129	127
Max	264	621	1,760	252	273	812	1,480	1,800	1,260	863	193	367
Min	97	138	185	100	207	207	579	718	599	159	103	94
Ac-ft	7,990	12,900	31,990	9,440	13,540	26,270	53,350	65,840	54,450	21,740	7,930	7,550

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	155	183	210	207	236	414	943	1,560	1,322	554	193	143
Max	501	625	806	1,343	570	1,026	1,760	2,804	2,612	1,348	380	256
(WY)	(1963)	(1974)	(1942)	(1997)	(1996)	(1995)	(1956)	(1948)	(1974)	(1975)	(1982)	(1978)
Min	81.5	80.0	88.6	69.3	82.4	114	345	445	361	123	78.8	82.8
(WY)	(1937)	(1937)	(1936)	(1937)	(1937)	(1977)	(1977)	(1977)	(1992)	(1977)	(1931)	(1931)

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SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1929 - 2013	
Annual total	209,484		157,794			
Annual mean	572		432		511	
Highest annual mean					897	1974
Lowest annual mean					184	1977
Highest daily mean	3,180	Apr 26	1,800	May 14	12,400	Jan 1, 1997
Lowest daily mean	71	Jan 12	94	Sep 15	25	Nov 22, 1931
Annual seven-day minimum	97	Jan 11	99	Sep 11	43	Jan 8, 1993
Annual runoff (ac-ft)	415,500		313,000		369,800	
10 percent exceeds	1,420		999		1,390	
50 percent exceeds	225		251		226	
90 percent exceeds	108		107		114	

