



Water-Data Report 2007

## 14048000 JOHN DAY RIVER AT MCDONALD FERRY, OR

John Day Basin  
Lower John Day Subbasin

LOCATION.--Lat 45°35'16", long 120°24'30" referenced to North American Datum of 1927, in NE ¼ NW ¼ sec.11, T.1 N., R.19 E., Sherman County, OR, Hydrologic Unit 17070204, on left bank, at McDonald Ferry, 0.8 mi downstream from Rock Creek, 10 mi east of Klondike and at mile 20.9.

DRAINAGE AREA.--7,580 mi<sup>2</sup>, approximately.

### SURFACE-WATER RECORDS

PERIOD OF RECORD.--December 1904 to September 1996, October 1997 to current year. Prior to Oct. 1, 1930, published as "at McDonald."

REVISED RECORDS.--WSP 1094: 1894(M), 1932(M). WSP 1448: 1908-9, 1912, 1916, 1920(M), 1922, 1932.

GAGE.--Water-stage recorder. Datum of gage is 392.27 ft above NGVD of 1929. Prior to Aug. 30, 1930, nonrecording gage at same site and datum.

REMARKS.--Records good except those below 70 ft<sup>3</sup>/s and estimated daily discharges, which are poor. No regulation. Many diversions for irrigation upstream from station. Water-quality data available for this location.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--101 years (water years 1906-96, 1998-2007), 2,060 ft<sup>3</sup>/s, 1,492,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42,800 ft<sup>3</sup>/s Dec. 24, 1964, gage height, 13.59 ft, from floodmark, from rating curve extended above 11,000 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow; no flow for part of Sept. 2, 1966, Aug. 15 to Sept. 16, 1973, Aug. 13, 14, 19-25, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1894 reached a stage of 12.8 ft, from floodmarks, discharge, 39,100 ft<sup>3</sup>/s, from rating curve extended above 22,000 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,900 ft<sup>3</sup>/s and (or) maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 9	1900	*6,920	*6.25
No other peak greater than base discharge			

Minimum discharge, 28 ft<sup>3</sup>/s, Aug. 17, 18, 26-28, gage height, 1.38 ft.

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**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**  
**DAILY MEAN VALUES**

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	230	375	574	1,490	682	1,940	3,710	e4,000	1,090	329	62	63
2	218	375	518	1,400	712	1,850	3,600	e4,000	1,000	297	57	62
3	216	376	491	1,370	670	1,770	3,530	e4,000	956	290	53	58
4	247	361	490	1,550	625	1,750	3,270	e4,600	910	278	52	54
5	271	334	535	1,970	616	1,920	3,020	e4,200	917	265	52	55
6	291	356	496	2,400	663	2,710	2,920	e3,600	1,030	251	51	59
7	297	411	466	1,970	774	3,570	2,830	e3,200	1,060	236	47	66
8	318	438	480	1,780	877	4,200	2,930	e2,900	1,180	219	43	74
9	392	489	537	1,670	1,050	5,560	3,410	e2,800	1,210	203	38	69
10	394	603	550	1,650	1,150	5,760	4,890	2,900	1,050	191	35	61
11	365	571	550	1,840	1,340	4,850	5,410	2,990	940	173	36	68
12	352	623	598	1,800	1,570	4,590	4,960	3,310	875	155	34	81
13	344	592	638	1,630	1,930	5,120	4,510	3,410	1,080	144	31	79
14	340	548	682	e1,220	2,520	6,030	4,340	3,140	1,200	138	29	89
15	347	566	1,040	e900	2,160	6,140	4,180	2,940	957	124	32	88
16	358	584	2,220	e840	1,980	5,560	4,340	2,620	833	116	33	81
17	350	596	3,140	e840	3,270	4,840	4,310	2,380	743	111	30	79
18	355	588	2,090	e860	5,310	4,500	3,960	2,190	692	105	30	74
19	372	561	1,440	e900	5,280	4,590	4,620	2,110	662	107	34	69
20	387	584	1,020	e920	4,480	4,900	4,370	2,050	624	103	34	64
21	408	586	863	e940	3,730	4,960	4,120	1,950	586	106	35	61
22	416	571	877	e980	3,280	5,190	3,900	1,850	551	104	39	55
23	405	568	925	e1,000	2,870	4,670	3,760	1,910	505	99	39	54
24	446	692	1,030	e980	2,680	4,230	3,960	1,920	476	90	37	52
25	440	748	1,060	e940	2,480	4,020	3,900	1,790	438	90	34	50
26	416	718	1,200	895	2,310	4,000	e3,600	1,630	413	90	32	48
27	402	673	2,020	861	2,190	4,460	e3,600	1,480	384	86	29	55
28	394	649	3,170	825	2,080	4,580	e3,500	1,370	368	83	30	64
29	387	644	3,160	785	---	4,640	e3,400	1,290	362	77	61	65
30	382	611	2,270	744	---	4,160	e3,800	1,240	356	73	77	80
31	378	---	1,700	712	---	3,850	---	1,190	---	68	68	---
<b>Total</b>	10,918	16,391	36,830	38,662	59,279	130,910	116,650	80,960	23,448	4,801	1,294	1,977
<b>Mean</b>	352	546	1,188	1,247	2,117	4,223	3,888	2,612	782	155	41.7	65.9
<b>Max</b>	446	748	3,170	2,400	5,310	6,140	5,410	4,600	1,210	329	77	89
<b>Min</b>	216	334	466	712	616	1,750	2,830	1,190	356	68	29	48
<b>Ac-ft</b>	21,660	32,510	73,050	76,690	117,600	259,700	231,400	160,600	46,510	9,520	2,570	3,920

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1906 - 2007, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	329	598	1,163	1,666	2,615	3,992	5,606	5,163	2,651	638	189	179
<b>Max</b>	892	2,310	7,030	6,402	9,736	11,450	11,900	13,180	9,531	2,131	700	923
<b>(WY)</b>	(1985)	(1974)	(1965)	(1965)	(1996)	(1983)	(1984)	(1917)	(1948)	(1984)	(1984)	(1984)
<b>Min</b>	59.9	157	221	217	374	557	964	533	285	88.0	5.70	23.8
<b>(WY)</b>	(1937)	(1937)	(1937)	(1937)	(1933)	(1977)	(1968)	(1934)	(1992)	(1926)	(1973)	(1934)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1906 - 2007	
<b>Annual total</b>	1,035,093		522,120			
<b>Annual mean</b>	2,836		1,430		2,060	
<b>Highest annual mean</b>					4,724	1984
<b>Lowest annual mean</b>					603	1977
<b>Highest daily mean</b>	12,200	Jan 2	6,140	Mar 15	39,400	Dec 24, 1964
<b>Lowest daily mean</b>	97	Sep 12	29	Aug 14	0.00	Aug 15, 1973
<b>Annual seven-day minimum</b>	101	Sep 9	31	Aug 12	0.00	Aug 15, 1973
<b>Annual runoff (ac-ft)</b>	2,053,000		1,036,000		1,492,000	
<b>10 percent exceeds</b>	7,540		4,140		5,750	
<b>50 percent exceeds</b>	1,580		692		780	
<b>90 percent exceeds</b>	144		59		139	

