

JOHN DAY RIVER BASIN

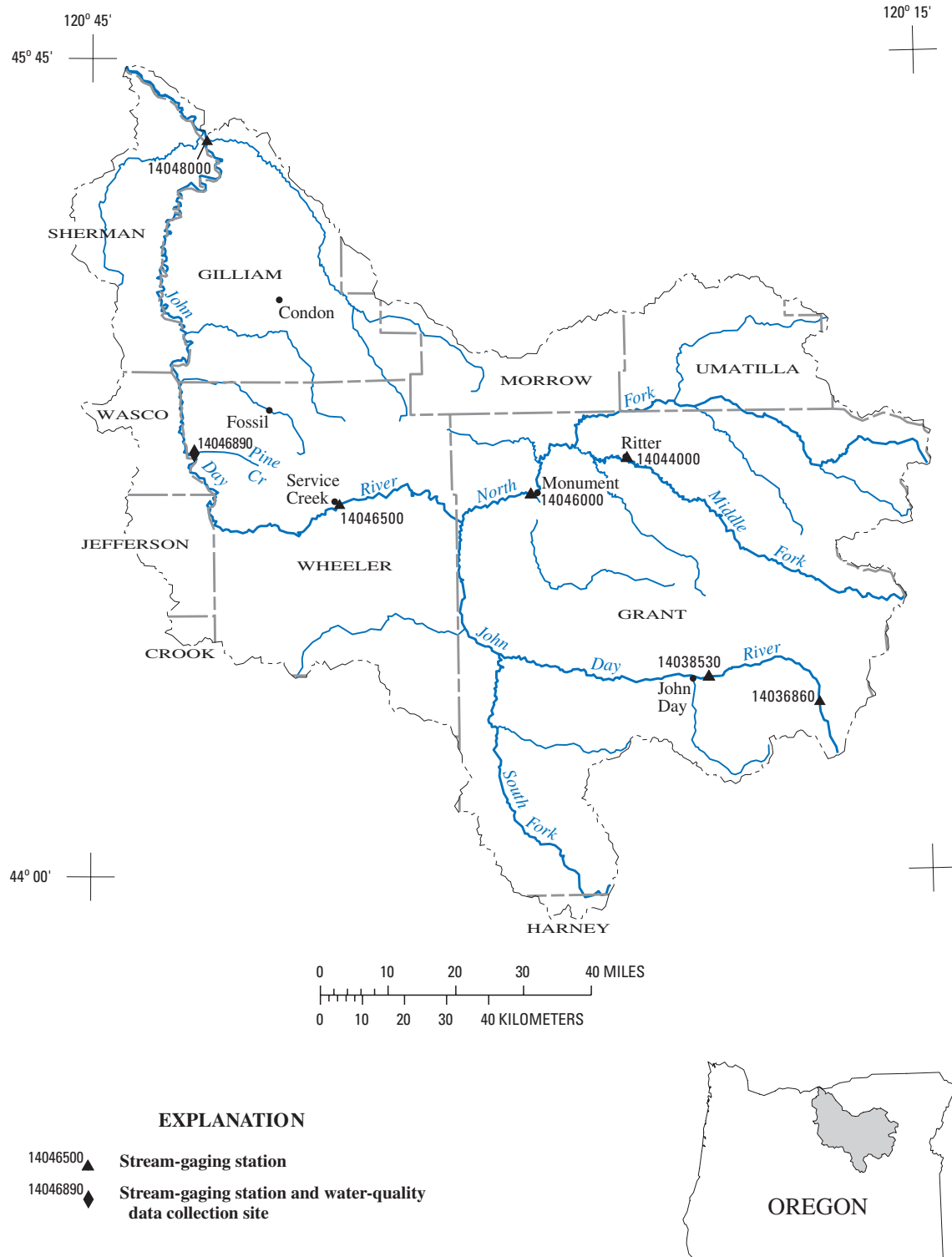


Figure 13. Location of surface-water and water-quality stations in the John Day Basin.

JOHN DAY RIVER BASIN

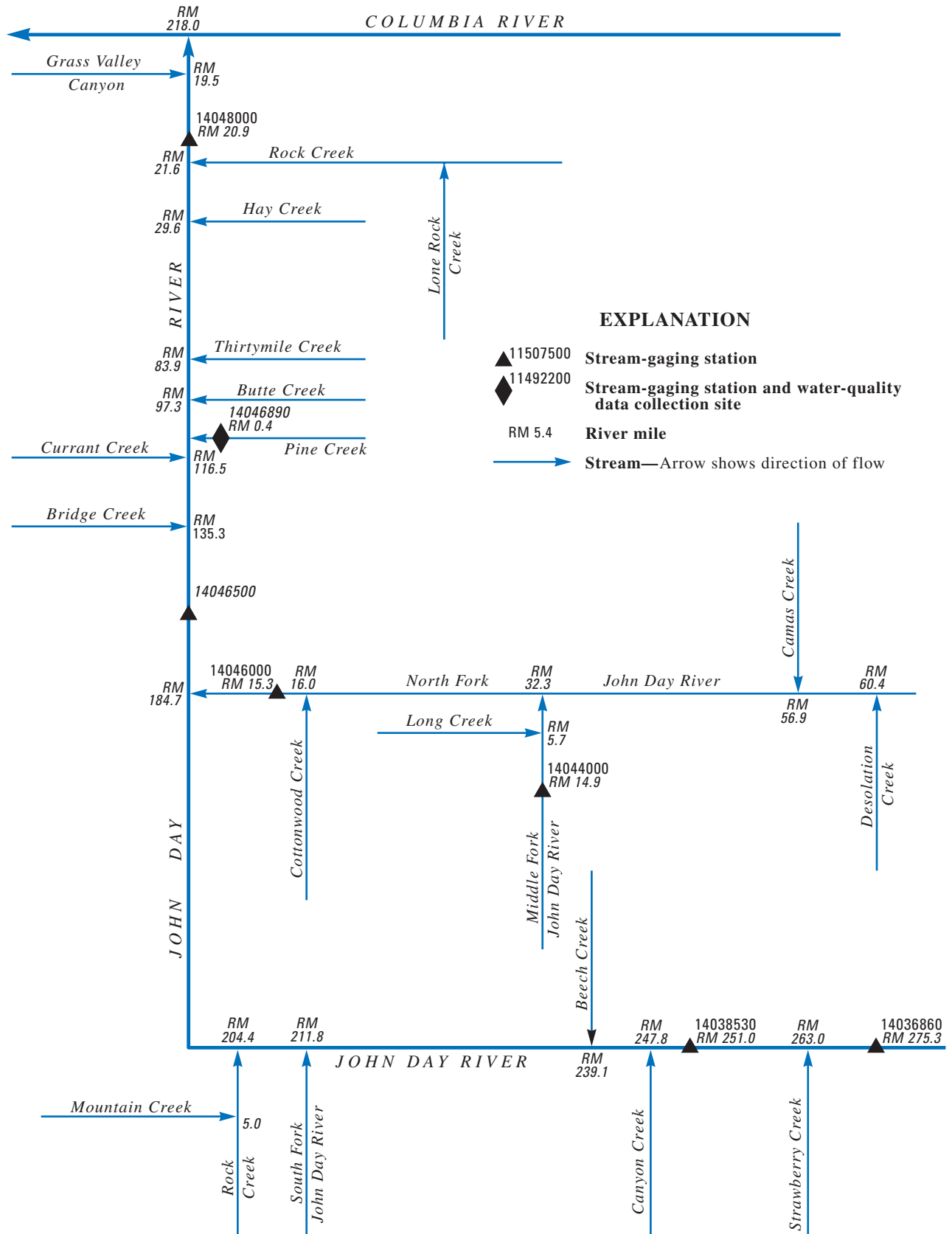


Figure 14. Schematic diagram showing gaging stations in the John Day River Basin.

JOHN DAY RIVER BASIN

14036860 JOHN DAY RIVER AT BLUE MOUNTAIN HOT SPRINGS, NEAR PRAIRIE CITY, OR

LOCATION.--Lat 44°21'29", long 118°34'30", in SE ¼ NW ¼, sec.13, T.14 S., R.34 E., Grant County, Hydrologic Unit 17070201, on right bank at private road crossing, 0.25 mi downstream from Blue Mountain Hot Springs, 0.6 mi downstream from Rail Creek, 8 mi southeast of Prairie City and at mile 275.3.

DRAINAGE AREA.--40.14 mi².

PERIOD OF RECORD.--October 1996 to September 2000, October 2002 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,200 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those above 150 ft³/s, which are fair and estimated daily discharges, which are poor. No regulation. Some diversions for irrigation.

AVERAGE DISCHARGE.--7 years (water year 1997-2000, 2003-05), 52.1 ft³/s, 37,760 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 950 ft³/s May 25, 1998, gage height, 3.90 ft, from crest-stage gage, from rating curve extended above 300 ft³/s; minimum discharge, 24 ft³/s Sept. 20, 21, 29, 2004.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 316 ft³/s May 6, gage height, 2.98 ft; minimum discharge, 24 ft³/s Sept. 20, 21, 29.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	31	34	31	33	29	56	96	84	36	28	26
2	30	32	33	31	32	29	52	94	75	36	28	25
3	30	34	33	e30	31	29	52	96	68	35	28	25
4	30	32	33	e30	32	29	51	104	65	33	28	26
5	30	31	33	e30	32	28	49	138	64	33	27	25
6	30	31	33	e32	31	29	51	210	62	33	28	25
7	30	31	33	33	31	29	57	267	60	33	28	25
8	29	31	34	33	30	30	60	200	57	32	27	25
9	32	32	34	32	30	31	57	175	53	34	28	25
10	30	34	38	31	30	31	53	155	51	34	27	26
11	30	36	39	32	30	32	52	132	54	32	27	26
12	30	35	39	32	30	33	52	123	51	31	27	26
13	30	35	39	31	30	32	50	116	49	31	27	26
14	29	34	40	e30	29	32	48	117	48	30	27	25
15	29	34	39	e30	e28	31	45	133	47	30	27	25
16	30	34	38	32	e28	31	47	151	47	30	27	25
17	31	34	37	31	e29	32	57	135	47	30	27	26
18	32	34	36	34	30	31	56	129	47	30	27	25
19	32	34	35	35	30	34	55	125	45	30	27	25
20	35	33	35	36	30	34	53	123	44	29	26	25
21	33	33	35	35	29	33	53	121	42	29	26	25
22	33	33	34	35	28	33	54	119	42	29	27	25
23	35	33	e33	35	28	33	64	112	41	29	27	26
24	33	33	33	35	28	33	77	105	39	29	27	27
25	33	33	33	35	28	32	101	101	38	29	26	26
26	33	33	33	35	28	34	120	97	38	29	26	26
27	34	33	33	35	28	94	140	98	41	29	26	26
28	34	33	32	35	29	113	141	100	41	28	26	25
29	33	e33	33	34	---	87	128	98	38	28	26	25
30	33	e33	33	33	---	69	105	92	37	28	26	25
31	31	---	32	33	---	60	---	89	---	28	26	---
TOTAL	974	992	1,079	1,016	832	1,237	2,036	3,951	1,515	957	835	763
MEAN	31.4	33.1	34.8	32.8	29.7	39.9	67.9	127	50.5	30.9	26.9	25.4
MAX	35	36	40	36	33	113	141	267	84	36	28	27
MIN	29	31	32	30	28	28	45	89	37	28	26	25
AC-FT	1,930	1,970	2,140	2,020	1,650	2,450	4,040	7,840	3,010	1,900	1,660	1,510
CFSM	0.78	0.82	0.87	0.82	0.74	0.99	1.69	3.18	1.26	0.77	0.67	0.63
IN.	0.90	0.92	1.00	0.94	0.77	1.15	1.89	3.66	1.40	0.89	0.77	0.71

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2005, BY WATER YEAR (WY)

MEAN	34.5	36.4	38.3	41.6	36.6	50.7	78.2	130	76.6	38.7	32.2	31.0
MAX	40.3	49.8	64.6	84.7	47.8	62.6	101	174	119	53.0	39.4	36.8
(WY)	(2000)	(1997)	(1997)	(1997)	(1997)	(1999)	(1997)	(1998)	(1999)	(1998)	(1997)	(1997)
MIN	26.7	27.5	28.6	27.3	29.3	39.9	61.0	88.1	46.7	30.9	26.9	25.4
(WY)	(2003)	(2003)	(2003)	(2004)	(2004)	(2005)	(2004)	(2000)	(2000)	(2005)	(2005)	(2005)

JOHN DAY RIVER BASIN

14036860 JOHN DAY RIVER AT BLUE MOUNTAIN HOT SPRINGS, NEAR PRAIRIE CITY, OR—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1997 - 2005	
ANNUAL TOTAL	15,806		16,187			
ANNUAL MEAN	43.2		44.3		52.1	
HIGHEST ANNUAL MEAN					65.8	
LOWEST ANNUAL MEAN					42.3	
HIGHEST DAILY MEAN	146	May 28	267	May 7	303	Jan 1, 1997
LOWEST DAILY MEAN	24	Jan 5	25	Sep 2	24	Jan 5, 2004
ANNUAL SEVEN-DAY MINIMUM	26	Feb 5	25	Sep 2	25	Sep 24, 2003
ANNUAL RUNOFF (AC-FT)	31,350		32,110		37,760	
ANNUAL RUNOFF (CFSM)	1.08		1.10		1.30	
ANNUAL RUNOFF (INCHES)	14.65		15.00		17.64	
10 PERCENT EXCEEDS	78		94		99	
50 PERCENT EXCEEDS	33		33		38	
90 PERCENT EXCEEDS	27		26		28	

e Estimated



2005 Water Year
JOHN DAY RIVER BASIN

14036860 JOHN DAY R AT BLUE MTN HOT SPGS NR PRAIRIE CITY, OR

Latitude: 44° 21 ' 29"

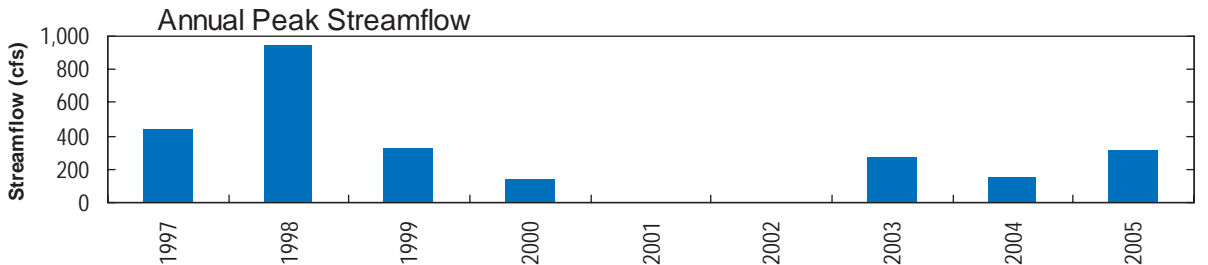
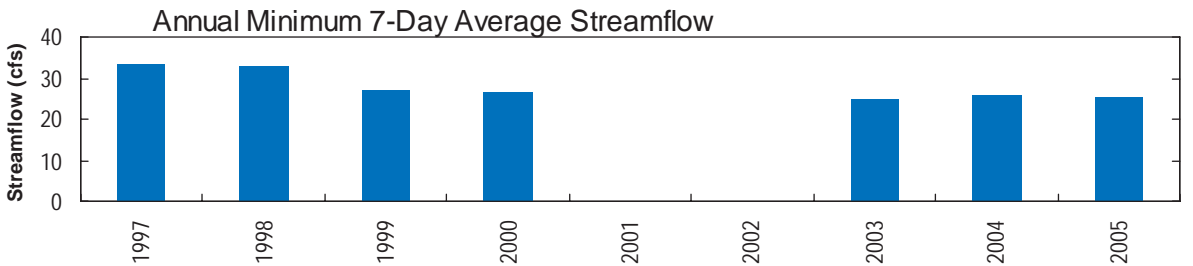
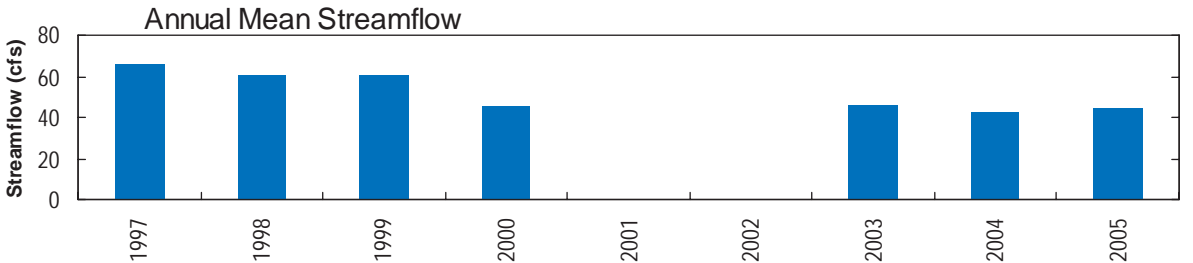
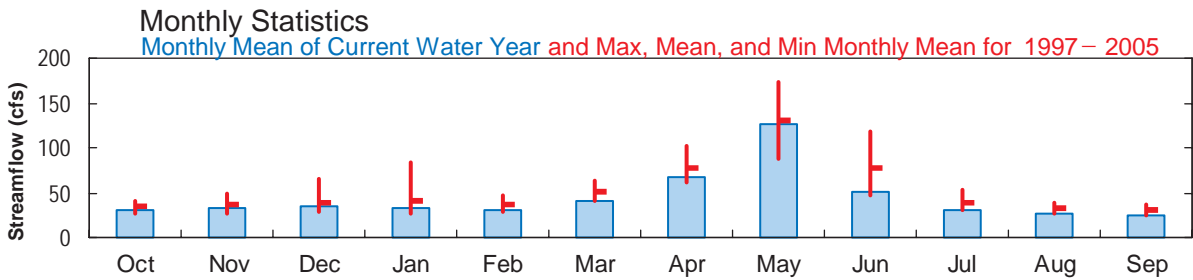
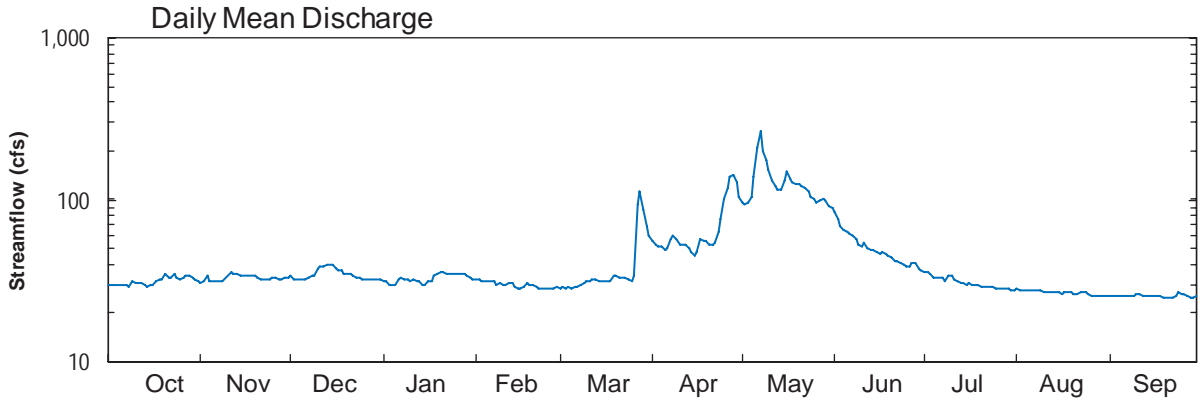
Longitude: 118° 34 ' 30"

Hydrologic Unit Code: 17070201

Grant County

Datum: 4200 feet

Drainage Area: 40.1 mi²



JOHN DAY RIVER BASIN

14038530 JOHN DAY RIVER NEAR JOHN DAY, OR

LOCATION.--Lat 44°25'07", long 118°54'19", in SW ¼ SE ¼ sec.19, T.13 S., R.32 E., Grant County, Hydrologic Unit 17070101, on left bank 1,200 ft downstream from Dog Creek, 2.5 mi east of John Day and at mile 250.8.

DRAINAGE AREA.--386 mi².

PERIOD OF RECORD.--October 1968 to September 1994, May 1996 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,130.56 ft above NGVD of 1929.

REMARKS.--Records good except those for the period Nov. 20 to Feb. 20, those below 20 ft³/s and above 500 ft³/s, which are fair and estimated daily discharges, which are poor. No regulation upstream. Many diversions upstream from station for irrigation.

AVERAGE DISCHARGE.--35 years (water years 1969-94, 1997-2005), 198 ft³/s, 143,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,830 ft³/s June 9, 1969, gage height, 10.80 ft, from floodmark; minimum discharge, 3.5 ft³/s Aug. 26-28, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 7	0200	*1,770	*7.13	May 16	1515	1,160	6.22

Minimum discharge, 13 ft³/s, Aug. 21, 22, 26, 27, gage height, 3.28 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	104	107	113	119	96	211	373	457	109	30	17
2	88	103	104	109	117	96	201	356	375	100	26	19
3	87	146	99	98	116	96	202	375	323	88	21	20
4	86	123	100	e92	117	95	227	390	280	87	22	21
5	86	116	99	e90	117	94	223	475	288	86	20	21
6	87	114	100	e90	110	94	205	889	287	77	20	19
7	90	112	113	e94	113	96	229	1,460	250	68	19	22
8	87	110	143	e94	109	97	241	1,030	232	66	19	21
9	92	110	191	e92	103	98	232	898	197	79	17	22
10	93	114	209	e90	103	101	214	788	169	105	17	27
11	90	120	236	e92	104	102	208	691	175	103	17	32
12	85	122	213	e94	108	104	210	622	159	91	16	38
13	85	117	188	e92	114	104	204	576	153	79	16	42
14	85	112	186	e90	108	102	190	604	139	75	16	44
15	84	111	183	e90	94	102	176	718	129	70	15	42
16	84	111	159	e96	96	101	169	1,040	110	66	17	43
17	85	108	150	107	97	101	233	877	119	61	16	42
18	91	108	145	151	103	99	233	752	140	60	16	43
19	92	108	140	165	104	101	221	760	146	61	16	41
20	146	104	134	160	106	107	215	702	139	60	14	41
21	130	100	127	151	105	103	225	668	118	55	13	43
22	115	103	128	145	101	104	221	623	103	46	14	43
23	155	107	117	142	97	113	241	584	100	40	14	46
24	159	109	123	136	96	106	290	524	106	41	14	56
25	131	115	119	134	96	104	403	473	106	41	14	55
26	121	113	120	134	96	105	424	430	109	39	14	54
27	127	110	114	139	95	209	463	412	122	33	13	54
28	121	106	113	140	96	378	486	419	157	35	14	51
29	116	96	119	132	---	321	459	435	138	31	15	54
30	113	104	117	129	---	272	414	428	118	29	17	69
31	109	---	113	124	---	229	---	419	---	28	16	---
TOTAL	3,196	3,336	4,309	3,605	2,940	4,030	7,870	19,791	5,444	2,009	528	1,142
MEAN	103	111	139	116	105	130	262	638	181	64.8	17.0	38.1
MAX	159	146	236	165	119	378	486	1,460	457	109	30	69
MIN	76	96	99	90	94	94	169	356	100	28	13	17
AC-FT	6,340	6,620	8,550	7,150	5,830	7,990	15,610	39,260	10,800	3,980	1,050	2,270

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2005, BY WATER YEAR (WY)

	95.0	123	156	200	222	304	338	433	309	104	40.8	54.3
MEAN	95.0	123	156	200	222	304	338	433	309	104	40.8	54.3
MAX	156	244	435	613	689	746	718	845	810	314	116	145
(WY)	(1983)	(1974)	(1997)	(1997)	(1982)	(1984)	(1984)	(1984)	(1982)	(1982)	(1984)	(1984)
MIN	65.8	78.2	89.6	88.1	88.8	88.6	88.1	85.4	53.9	25.9	10.4	24.2
(WY)	(1989)	(2003)	(2003)	(1977)	(1977)	(1977)	(1977)	(1992)	(1992)	(1973)	(1973)	(1990)

JOHN DAY RIVER BASIN

14038530 JOHN DAY RIVER NEAR JOHN DAY, OR—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1969 - 2005	
ANNUAL TOTAL	68,577		58,200			
ANNUAL MEAN	187		159		198	
HIGHEST ANNUAL MEAN					393	1984
LOWEST ANNUAL MEAN					73.5	1977
HIGHEST DAILY MEAN	754	May 28	1,460	May 7	2,640	May 19, 1991
LOWEST DAILY MEAN	25	Aug 13	13	Aug 21	3.5	Aug 27, 1969
ANNUAL SEVEN-DAY MINIMUM	28	Aug 12	14	Aug 21	4.3	Aug 24, 1969
ANNUAL RUNOFF (AC-FT)	136,000		115,400		143,600	
10 PERCENT EXCEEDS	371		376		444	
50 PERCENT EXCEEDS	134		107		127	
90 PERCENT EXCEEDS	48		22		39	

e Estimated



2005 Water Year
 JOHN DAY RIVER BASIN

14038530 JOHN DAY RIVER NEAR JOHN DAY, OR

Latitude: 44° 25' 07"

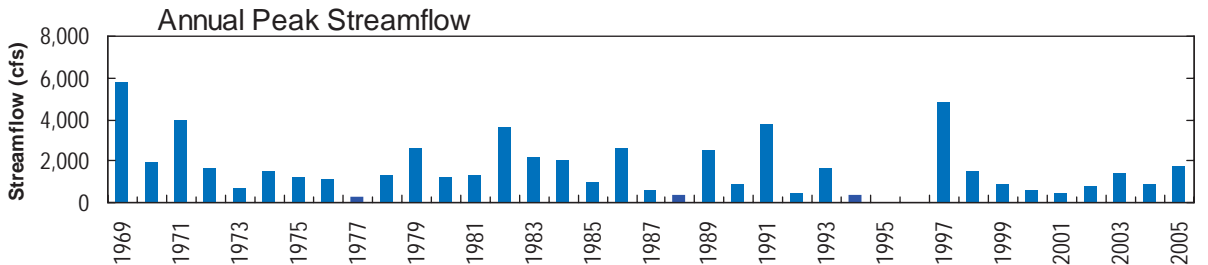
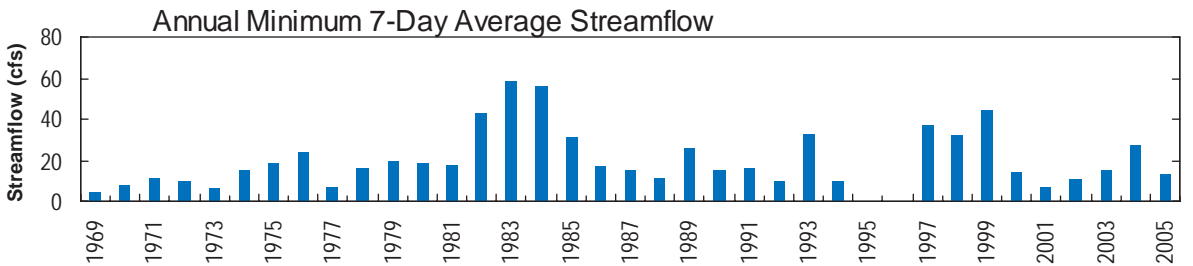
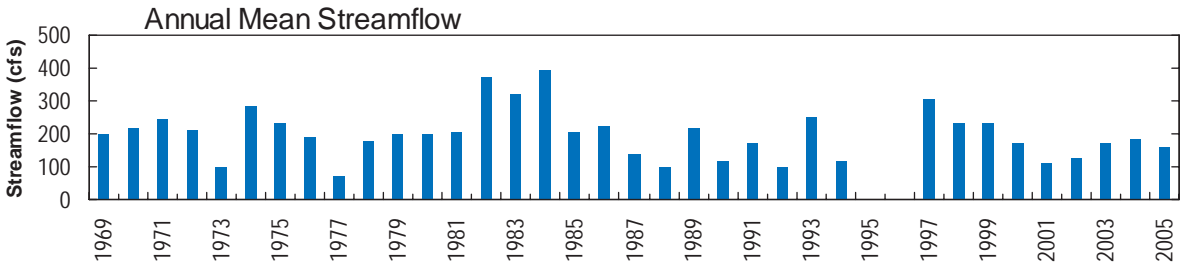
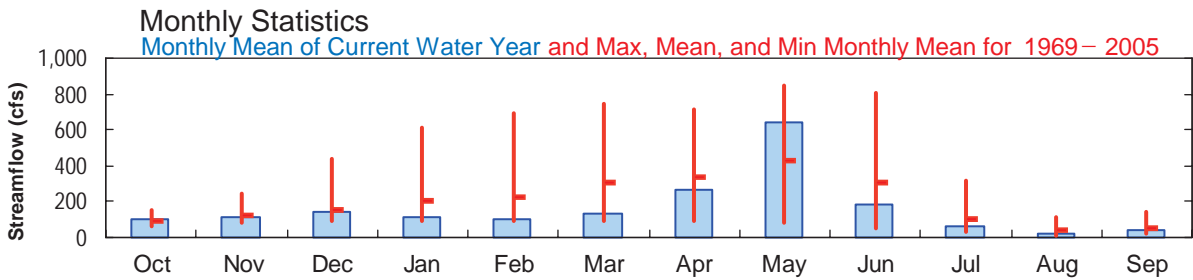
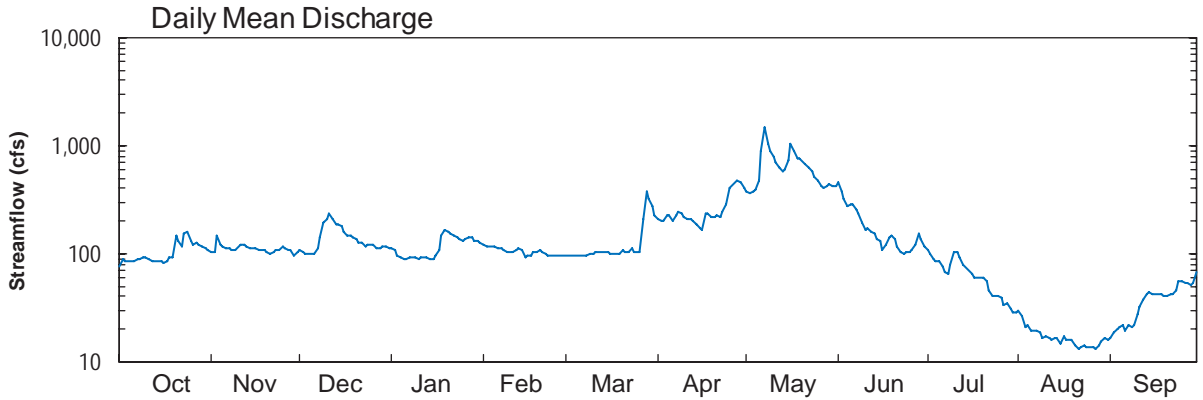
Longitude: 118° 54' 19"

Hydrologic Unit Code: 17070201

Grant County

Datum: 3130.56 feet

Drainage Area: 386 mi²



JOHN DAY RIVER BASIN

14044000 MIDDLE FORK JOHN DAY RIVER AT RITTER, OR

LOCATION.--Lat 44°53'20", long 119°08'25", in SW ¼ NW ¼ sec.8, T.8 S., R.30 E., Grant County, Hydrologic Unit 17070203, on left bank 0.2 mi south of Ritter, 0.8 mi downstream from Twelvemile Creek and at mile 14.9.

DRAINAGE AREA.--515 mi².

PERIOD OF RECORD.--October 1929 to current year.

REVISED RECORDS.--WSP 739: 1931. WSP 1218: 1950. WSP 1448: 1930-32, 1937, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,544.56 ft above NGVD of 1929.

REMARKS.--Records good except those for the period Nov. 20 to Feb. 20, which are fair and estimated daily discharges, which are poor. No regulation. Diversions for irrigation upstream from station. Continuous water-quality records for the period July 1966 to September 1968 have been collected at this location.

AVERAGE DISCHARGE.--76 years (water years 1930-2005), 255 ft³/s, 184,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,730 ft³/s Jan. 30, 1965, gage height, 8.39 ft, from rating curve extended above 2,200 ft³/s; maximum gage height, 9.13 ft Feb. 1, 1963, ice jam; minimum discharge, 0.90 ft³/s Aug. 19, 20, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 6	2000	*2,580	*6.40	May 16	1400	2,350	6.15

Minimum discharge, 22 ft³/s, Aug. 24, 28-30, gage height, 1.83 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	66	75	90	108	105	319	481	375	84	33	25
2	40	64	84	83	104	107	290	455	358	77	33	24
3	40	81	60	e74	110	106	283	481	312	73	31	24
4	39	82	48	e56	111	107	331	486	276	70	30	24
5	39	72	47	e52	107	111	327	563	260	66	29	24
6	40	72	44	e50	94	118	311	1,470	278	62	28	24
7	41	69	75	e64	102	126	336	1,920	281	59	27	24
8	41	69	95	e78	95	145	352	1,220	246	56	27	23
9	45	69	145	e72	81	161	337	1,050	220	59	26	23
10	51	71	215	e76	80	175	306	930	200	73	25	25
11	47	73	219	e74	80	186	291	909	186	76	25	31
12	44	76	268	e70	99	198	295	807	180	64	25	31
13	44	75	227	e78	101	191	289	717	170	58	25	30
14	43	72	200	e76	92	171	264	740	158	54	25	29
15	42	70	197	e66	71	163	244	950	147	51	25	28
16	42	70	165	e72	62	152	231	1,800	137	48	25	27
17	45	72	148	e80	71	149	330	1,410	134	46	24	28
18	53	69	136	101	76	138	386	1,080	133	45	25	28
19	53	69	122	171	86	137	361	1,110	150	43	26	28
20	65	64	116	154	98	143	342	933	137	41	25	27
21	92	51	106	137	96	150	334	952	123	39	24	26
22	83	63	106	131	93	150	346	811	110	38	24	26
23	95	76	89	123	86	167	351	744	103	37	23	26
24	112	68	67	115	88	162	375	650	97	38	23	29
25	82	81	73	116	89	150	449	582	92	36	24	30
26	72	89	98	120	91	139	531	521	87	35	24	29
27	71	79	83	122	93	178	636	476	88	35	23	28
28	75	71	78	128	99	553	633	441	113	34	23	28
29	77	59	102	125	---	491	568	411	113	33	23	27
30	75	56	104	120	---	409	543	384	94	32	23	29
31	70	---	88	116	---	342	---	345	---	31	25	---
TOTAL	1,799	2,118	3,680	2,990	2,563	5,780	10,991	25,829	5,358	1,593	798	805
MEAN	58.0	70.6	119	96.5	91.5	186	366	833	179	51.4	25.7	26.8
MAX	112	89	268	171	111	553	636	1,920	375	84	33	31
MIN	39	51	44	50	62	105	231	345	87	31	23	23
AC-FT	3,570	4,200	7,300	5,930	5,080	11,460	21,800	51,230	10,630	3,160	1,580	1,600

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2005, BY WATER YEAR (WY)

MEAN	44.3	72.6	127	162	245	473	744	707	344	79.4	32.6	32.5
MAX	99.5	231	482	727	1,073	1,214	1,426	1,457	1,127	285	98.4	108
(WY)	(1983)	(1974)	(1956)	(1997)	(1996)	(1972)	(1984)	(1984)	(1984)	(1984)	(1984)	(1984)
MIN	17.4	20.2	29.0	23.4	31.3	69.8	175	79.2	56.6	17.4	3.75	10.0
(WY)	(1937)	(1937)	(1933)	(1937)	(1937)	(1977)	(1968)	(1934)	(1992)	(1973)	(1966)	(1935)

JOHN DAY RIVER BASIN

14044000 MIDDLE FORK JOHN DAY RIVER AT RITTER, OR—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1930 - 2005	
ANNUAL TOTAL	108,649		64,304			
ANNUAL MEAN	297		176		255	
HIGHEST ANNUAL MEAN					538	
LOWEST ANNUAL MEAN					85.1	
HIGHEST DAILY MEAN	1,770	May 28	1,920	May 7	4,360	Jan 30, 1965
LOWEST DAILY MEAN	33	Aug 13	23	Aug 23	0.90	Aug 20, 1966
ANNUAL SEVEN-DAY MINIMUM	35	Aug 10	23	Aug 23	1.1	Aug 19, 1966
ANNUAL RUNOFF (AC-FT)	215,500		127,500		184,700	
10 PERCENT EXCEEDS	848		423		723	
50 PERCENT EXCEEDS	104		84		90	
90 PERCENT EXCEEDS	44		27		26	

e Estimated



2005 Water Year
 JOHN DAY RIVER BASIN

14044000 MIDDLE FORK JOHN DAY RIVER AT RITTER, OR

Latitude: 44° 53' 20"

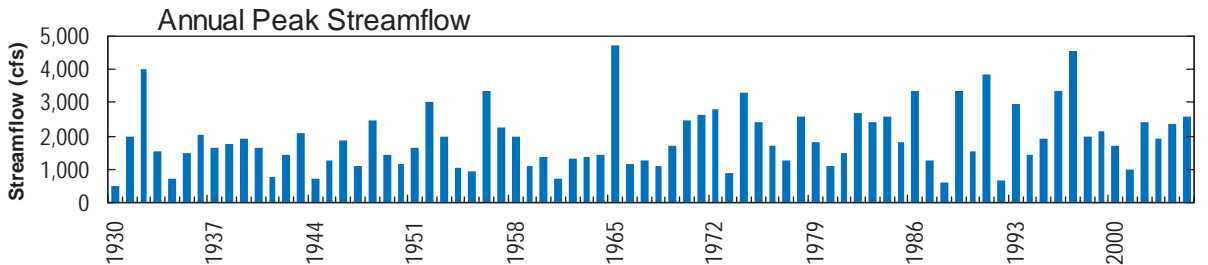
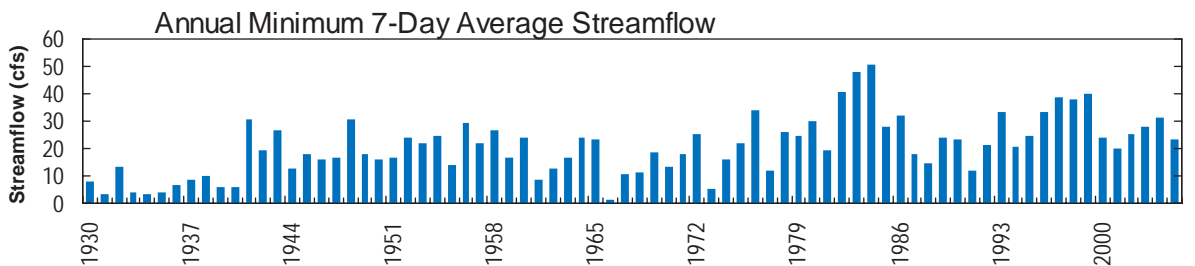
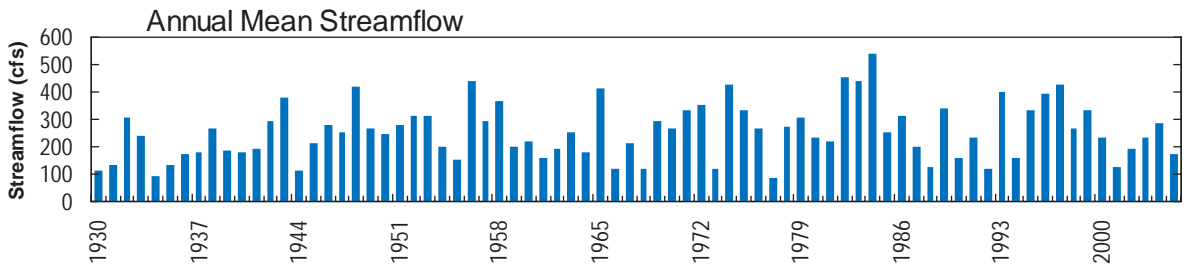
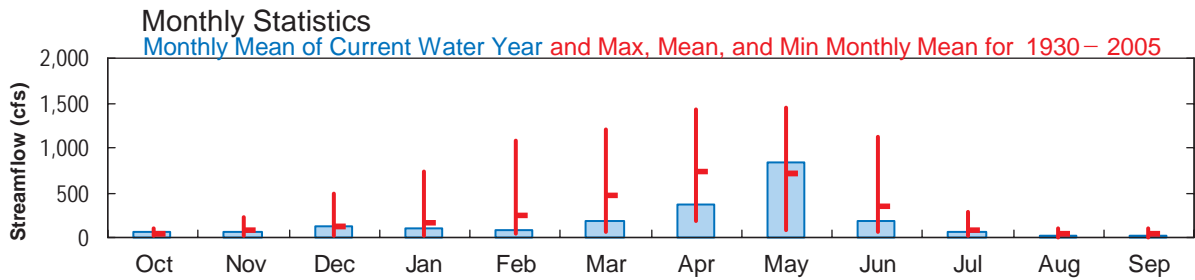
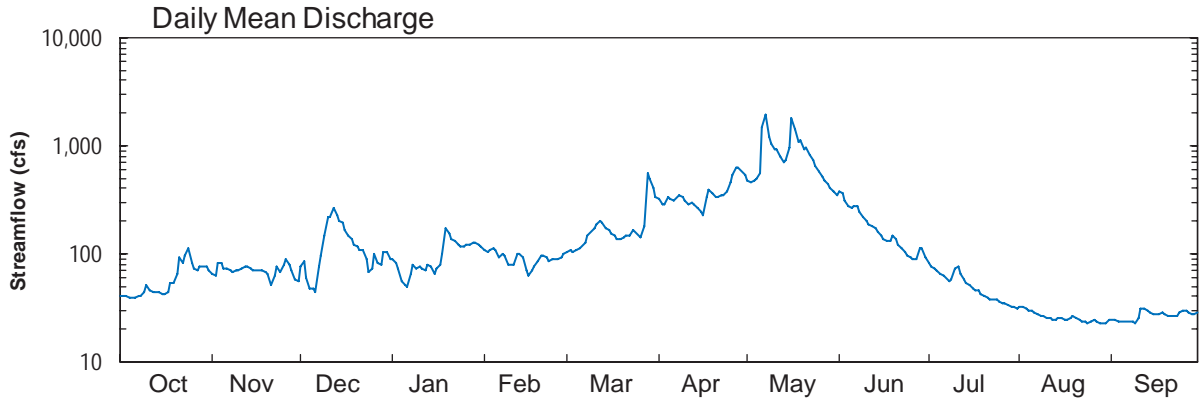
Longitude: 119° 08' 25"

Hydrologic Unit Code: 17070203

Grant County

Datum: 2544.56 feet

Drainage Area: 515 mi²



JOHN DAY RIVER BASIN

14046000 NORTH FORK JOHN DAY RIVER AT MONUMENT, OR

LOCATION.--Lat 44°48'50", long 119°25'50", in SE ¼ sec.2, T.9 S., R.27 E., Grant County, Hydrologic Unit 17070202, on right bank just downstream from entrance to canyon, 0.7 mi downstream from Cottonwood Creek, 0.8 mi west of Monument and at mile 15.3.

DRAINAGE AREA.--2,520 mi², approximately.

PERIOD OF RECORD.--March 1925 to current year. Monthly discharge only for some periods 1925-28, published in WSP 1318.

REVISED RECORDS.--WSP 754: 1932(M), WSP 1448: 1927, 1931(M), 1949.

GAGE.--Water-stage recorder. Datum of gage is 1,959.64 ft above NGVD of 1929. Prior to Nov. 24, 1925, nonrecording gage and Nov. 24, 1925 to Oct. 16, 1928, water-stage recorder at datum 1.10 ft higher. Oct. 17, 1928 to Sept. 30, 1930, water-stage recorder at datum 1.00 ft higher.

REMARKS.--Records good except those for the period November to February, which are fair. Very slight regulation by small reservoirs upstream. Many small diversions for irrigation upstream from station. Continuous water-quality records for the period July 1966 to September 1968 have been collected at this location. National Weather Service gage-height telemeter at station.

AVERAGE DISCHARGE.--77 years (water years 1929-2005), 1,287 ft³/s, 932,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,400 ft³/s Jan. 30, 1965, gage height, 18.45 ft, from rating curve extended above 17,000 ft³/s; minimum discharge, 6 ft³/s sometime during period Nov. 2-13, 1936 (result of freezeup); minimum daily, 17 ft³/s Dec. 12, 1932.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 7	0630	7,490	8.77	May 16	2000	*11,000	*10.48

Minimum discharge, 58 ft³/s, Aug. 29, 30, gage height, 2.52 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	133	242	157	332	498	453	1,570	2,170	1,710	383	105	65
2	132	218	321	325	440	461	1,460	2,010	1,700	346	110	66
3	130	232	244	286	443	467	1,400	2,230	1,470	323	107	65
4	129	283	165	181	460	454	1,650	2,240	1,290	305	100	64
5	127	249	175	170	471	470	1,720	2,560	1,190	286	94	62
6	128	229	187	170	435	496	1,600	3,790	1,220	271	90	63
7	129	241	203	209	395	544	1,690	6,690	1,250	253	86	63
8	132	239	336	313	407	630	1,820	4,960	1,150	242	84	63
9	137	234	406	289	360	742	1,720	4,590	1,030	242	78	62
10	146	238	474	298	291	808	1,550	4,550	932	258	75	63
11	155	246	629	271	294	872	1,460	4,480	851	300	74	67
12	151	252	832	252	361	942	1,520	e4,380	817	283	73	79
13	144	262	867	296	454	943	1,450	e3,620	766	242	72	90
14	140	254	768	288	414	831	1,320	3,730	710	223	71	88
15	136	245	742	235	322	758	1,200	4,460	662	206	72	86
16	134	240	674	250	224	718	1,130	8,900	624	193	71	84
17	137	242	574	291	205	691	1,510	8,530	598	177	71	84
18	151	246	569	322	260	643	2,030	6,390	594	172	71	83
19	172	237	515	498	339	608	1,880	6,010	640	166	71	84
20	198	226	472	607	424	641	1,770	4,960	620	157	71	82
21	268	179	443	628	416	715	1,660	5,070	554	150	71	80
22	301	146	396	595	401	718	1,760	4,370	502	143	70	78
23	299	202	402	584	367	728	1,760	3,880	468	139	65	78
24	336	270	285	552	344	712	1,960	3,300	441	135	63	78
25	312	276	260	541	352	654	2,230	2,870	419	130	62	82
26	261	325	352	548	364	612	2,550	2,540	397	126	62	86
27	240	334	379	558	381	699	2,860	2,300	387	121	63	87
28	250	285	295	590	401	2,960	2,850	2,110	438	117	62	87
29	267	197	346	587	---	2,660	2,570	1,940	508	111	61	85
30	265	142	480	561	---	2,200	2,430	1,810	444	105	60	86
31	253	---	374	536	---	1,750	---	1,660	---	102	61	---
TOTAL	5,893	7,211	13,322	12,163	10,523	27,580	54,080	123,100	24,382	6,407	2,346	2,290
MEAN	190	240	430	392	376	890	1,803	3,971	813	207	75.7	76.3
MAX	336	334	867	628	498	2,960	2,860	8,900	1,710	383	110	90
MIN	127	142	157	170	205	453	1,130	1,660	387	102	60	62
AC-FT	11,690	14,300	26,420	24,130	20,870	54,700	107,300	244,200	48,360	12,710	4,650	4,540

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2005, BY WATER YEAR (WY)

	160	310	705	938	1,443	2,457	3,605	3,582	1,644	374	132	120
MEAN												
MAX	420	1,621	3,374	4,126	6,103	6,456	6,695	8,794	5,227	1,211	345	423
(WY)	(1983)	(1974)	(1965)	(1965)	(1996)	(1983)	(1943)	(1948)	(1948)	(1982)	(1984)	(1984)
MIN	58.5	64.5	96.6	75.8	134	345	822	378	259	97.4	36.6	45.2
(WY)	(1937)	(1937)	(1937)	(1937)	(1929)	(1977)	(1968)	(1934)	(1992)	(1973)	(1931)	(1934)

JOHN DAY RIVER BASIN

14046000 NORTH FORK JOHN DAY RIVER AT MONUMENT, OR—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1929 - 2005	
ANNUAL TOTAL	520,360		289,297			
ANNUAL MEAN	1,422		793		1,287	
HIGHEST ANNUAL MEAN					2,608	
LOWEST ANNUAL MEAN					441	
HIGHEST DAILY MEAN	8,870	May 29	8,900	May 16	31,900	Jan 30, 1965
LOWEST DAILY MEAN	110	Aug 13	60	Aug 30	17	Dec 12, 1932
ANNUAL SEVEN-DAY MINIMUM	114	Aug 11	62	Aug 25	29	Aug 28, 1931
ANNUAL RUNOFF (AC-FT)	1,032,000		573,800		932,200	
10 PERCENT EXCEEDS	3,880		2,060		3,700	
50 PERCENT EXCEEDS	587		332		420	
90 PERCENT EXCEEDS	143		78		97	

e Estimated

JOHN DAY RIVER BASIN

14046000 NORTH FORK JOHN DAY RIVER AT MONUMENT, OR—Continued



2005 Water Year
JOHN DAY RIVER BASIN

14046000 NORTH FORK JOHN DAY RIVER AT MONUMENT, OR

Latitude: 44° 48' 50"

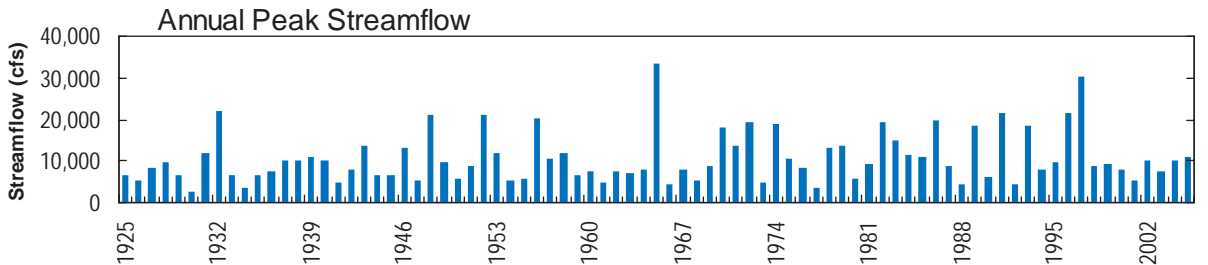
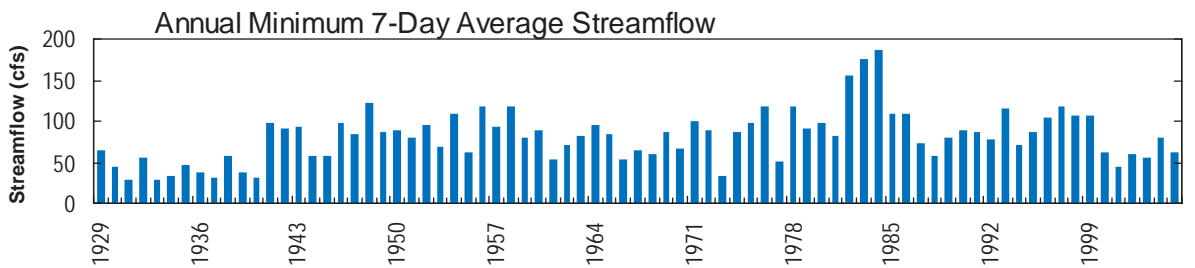
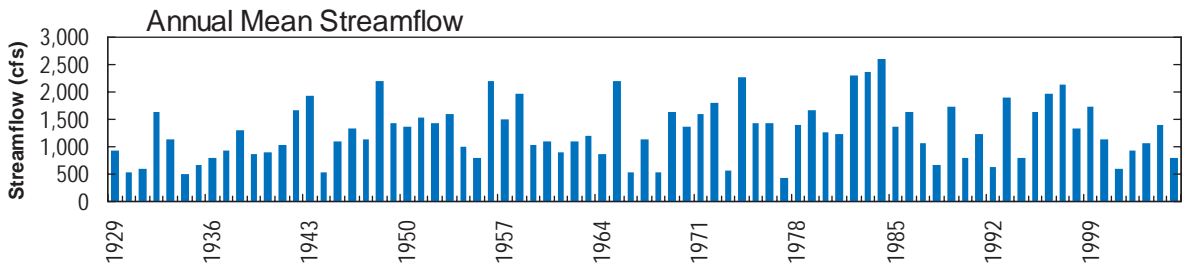
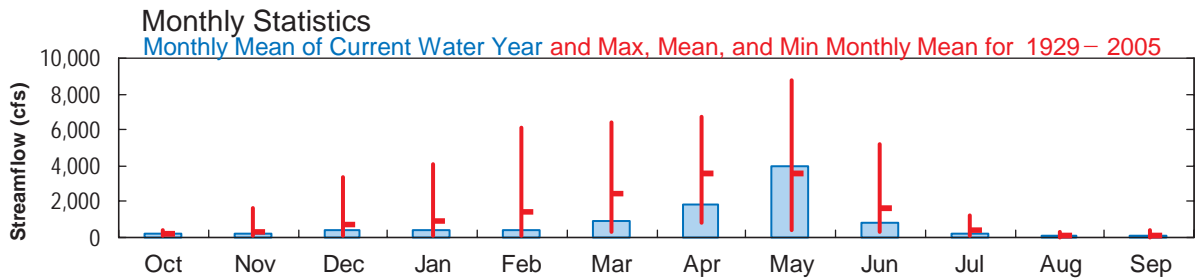
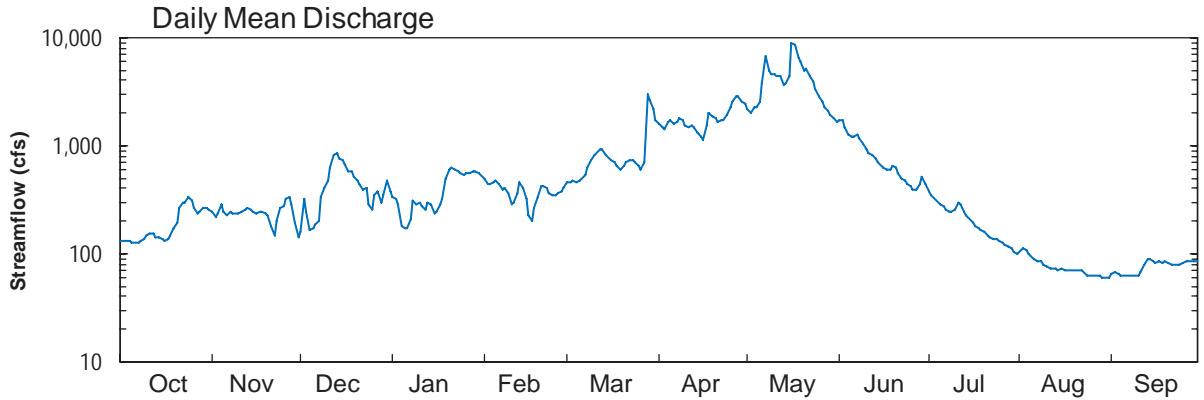
Longitude: 119° 25' 50"

Hydrologic Unit Code: 17070202

Grant County

Datum: 1959.64 feet

Drainage Area: 2520 mi²



JOHN DAY RIVER BASIN

14046500 JOHN DAY RIVER AT SERVICE CREEK, OR

LOCATION.--Lat 44°47'38", long 120°00'20", in NW ¼ NE ¼ sec.18, T.9 S., R.23 E., Wheeler County, Hydrologic Unit 17070204, on left bank 0.2 mi downstream from bridge on State Highway 207, 0.8 mi downstream from Service Creek, 0.5 mi southwest of town of Service Creek and at mile 156.7.

DRAINAGE AREA.--5,090 mi², approximately.

PERIOD OF RECORD.--March 1925 to September 1926, October 1929 to current year. Monthly discharge only March 1925 to September 1926, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 1,632.42 ft above NGVD of 1929. See WSP 1738 for history of changes prior to Feb. 24, 1957.

REMARKS.--Records good except for estimated daily discharges, which are poor. Slight regulation by several small reservoirs upstream from station. Many small diversions for irrigation upstream from station. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--76 years (water years 1930-2005), 1,921 ft³/s, 1,392,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,200 ft³/s Dec. 23, 1964, gage height, 17.85 ft, from rating curve extended above 14,000 ft³/s on basis of slope-area measurement of peak flow; minimum discharge, 6.0 ft³/s Aug. 23, 24, 1973.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 7	1530	9,940	8.90	May 17	0400	*14,800	*10.69

Minimum discharge, 45 ft³/s, Aug. 31, Sept. 1.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	229	488	373	678	1,010	786	2,520	3,800	2,720	734	92	48
2	244	473	416	644	942	837	2,380	3,430	2,890	642	94	50
3	258	455	553	598	872	843	2,240	3,480	2,590	589	91	58
4	275	480	454	499	875	839	2,320	3,690	2,260	556	95	62
5	280	548	392	419	895	832	2,640	3,860	2,040	524	90	71
6	286	491	404	381	892	852	2,490	4,550	2,010	479	85	71
7	281	471	444	443	837	893	2,440	8,670	2,040	e460	78	71
8	283	480	495	503	806	965	2,710	8,060	1,990	e440	e74	69
9	297	475	651	596	793	1,070	2,730	6,940	1,810	e420	e70	65
10	295	472	806	578	706	1,160	2,530	7,060	1,620	e400	e66	63
11	310	480	967	580	635	1,240	2,300	6,760	1,470	e440	63	62
12	319	500	1,250	510	646	1,330	2,290	6,820	1,390	e460	61	64
13	315	509	1,430	512	784	1,410	2,260	5,900	1,330	435	60	70
14	297	517	1,330	537	850	1,370	2,120	5,480	1,250	380	59	83
15	296	499	1,240	495	755	1,260	1,940	6,140	1,180	338	e54	92
16	294	488	1,210	513	623	1,220	1,830	10,000	1,110	304	e52	89
17	291	478	1,070	550	507	1,180	1,920	13,200	1,060	278	e52	89
18	296	479	999	601	509	1,120	2,860	9,800	1,030	258	50	93
19	315	477	963	728	592	1,070	2,860	8,920	1,040	240	49	90
20	345	470	887	1,050	745	1,060	2,700	7,820	e1,060	215	49	89
21	410	455	839	1,150	815	1,130	2,540	7,460	e1,020	195	58	87
22	528	403	802	1,140	791	1,190	2,630	6,910	e980	178	61	83
23	541	373	742	1,100	764	1,180	2,750	6,160	e920	163	67	75
24	548	441	697	1,080	705	1,210	3,010	5,440	e860	144	63	71
25	628	506	536	1,030	689	1,170	3,420	4,800	e820	134	54	74
26	576	527	583	1,030	700	1,100	4,200	4,280	e780	130	51	81
27	517	573	683	1,050	720	1,090	4,600	3,850	e740	125	52	106
28	492	573	616	1,090	741	2,720	4,700	3,460	e800	117	54	108
29	500	520	585	1,120	---	4,480	4,460	3,240	e860	110	53	108
30	511	415	741	1,090	---	3,630	4,130	3,060	835	104	49	116
31	501	---	779	1,050	---	2,990	---	2,840	---	94	47	---
TOTAL	11,558	14,516	23,937	23,345	21,199	43,227	84,520	185,880	42,505	10,086	1,993	2,358
MEAN	373	484	772	753	757	1,394	2,817	5,996	1,417	325	64.3	78.6
MAX	628	573	1,430	1,150	1,010	4,480	4,700	13,200	2,890	734	95	116
MIN	229	373	373	381	507	786	1,830	2,840	740	94	47	48
AC-FT	22,930	28,790	47,480	46,300	42,050	85,740	167,600	368,700	84,310	20,010	3,950	4,680

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2005, BY WATER YEAR (WY)

MEAN	328	585	1,177	1,569	2,337	3,734	5,180	4,909	2,373	556	178	181
MAX	811	2,284	5,540	6,553	8,239	9,773	10,280	12,050	8,327	1,850	594	862
(WY)	(1985)	(1974)	(1965)	(1997)	(1996)	(1983)	(1984)	(1948)	(1948)	(1982)	(1984)	(1984)
MIN	70.5	152	216	195	358	597	1,010	491	302	90.6	15.2	31.4
(WY)	(1937)	(1937)	(1936)	(1937)	(1937)	(1977)	(1968)	(1934)	(1992)	(1973)	(1973)	(1935)

JOHN DAY RIVER BASIN

14046500 JOHN DAY RIVER AT SERVICE CREEK, OR—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1930 - 2005	
ANNUAL TOTAL	732,870		465,124		1,921	
ANNUAL MEAN	2,002		1,274		4,116	
HIGHEST ANNUAL MEAN					1984	
LOWEST ANNUAL MEAN					619	
HIGHEST DAILY MEAN	11,600	May 29	13,200	May 17	36,400	Jan 30, 1965
LOWEST DAILY MEAN	102	Aug 16	47	Aug 31	6.2	Aug 23, 1973
ANNUAL SEVEN-DAY MINIMUM	106	Aug 13	50	Aug 27	7.7	Aug 19, 1973
ANNUAL RUNOFF (AC-FT)	1,454,000		922,600		1,392,000	
10 PERCENT EXCEEDS	5,470		3,310		5,330	
50 PERCENT EXCEEDS	983		628		740	
90 PERCENT EXCEEDS	218		71		132	

e Estimated



2005 Water Year
 JOHN DAY RIVER BASIN
 14046500 JOHN DAY RIVER AT SERVICE CREEK, OR

Latitude: 44° 47' 38"

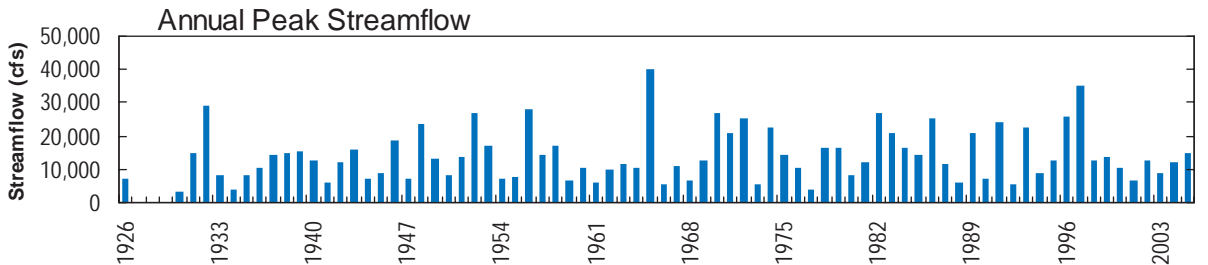
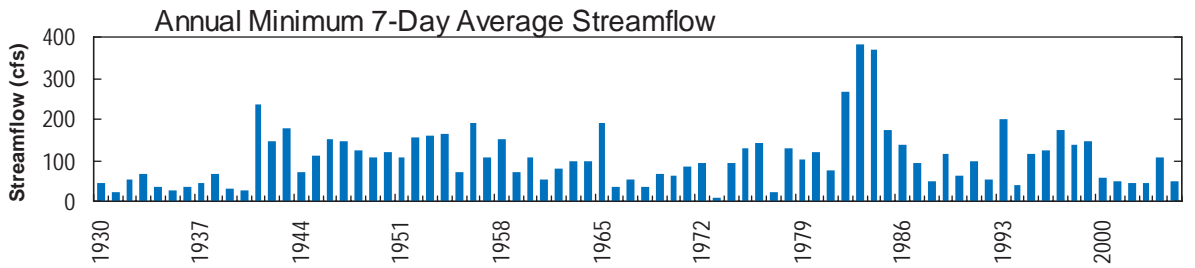
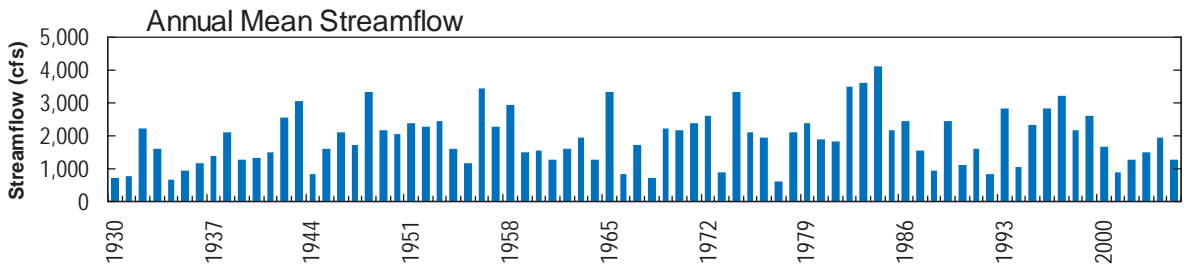
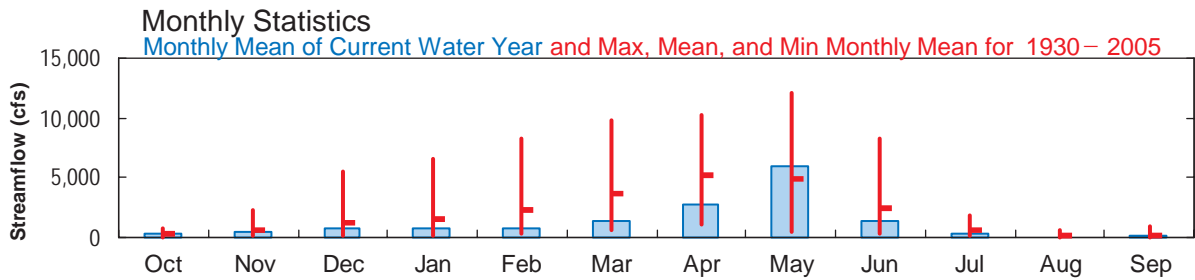
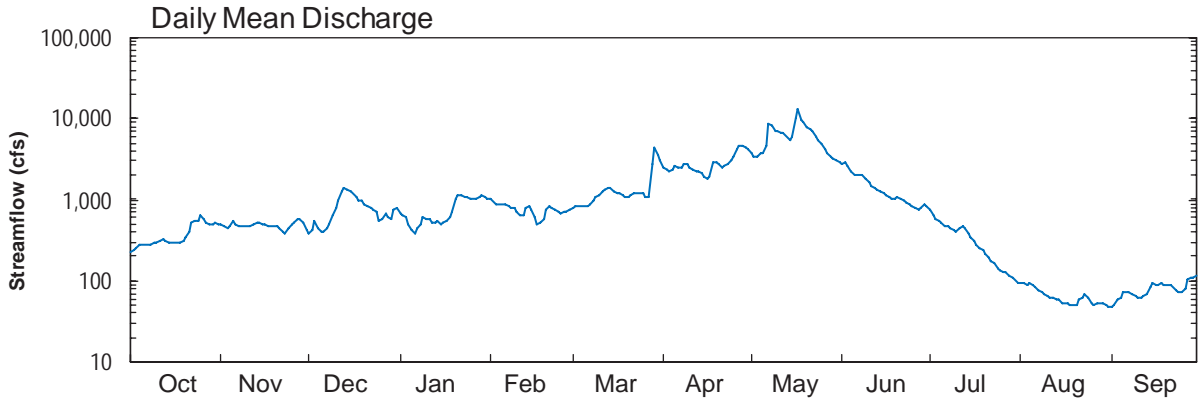
Longitude: 120° 00' 20"

Hydrologic Unit Code: 17070204

Wheeler County

Datum: 1632.42 feet

Drainage Area: 5090 mi²



JOHN DAY RIVER BASIN

14046890 PINE CREEK NEAR CLARNO, OR

LOCATION.--Lat 44°54'38", long 120°26'23", in SW ¼ SW ¼ sec.34, T.7 N., R.19 E., Wheeler County, Hydrologic Unit 17070204, on left bank 1.5 mi east of Clarno and at mile 0.4.

DRAINAGE AREA.--65.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 2003 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,340 ft above NGVD of 1929., from topographic map

REMARKS.--Records fair except for estimated daily discharges, which are poor. No known diversions or regulation. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--2 years (water years 2004-05), 2.91 ft³/s, 0.61 in/yr, 2,110 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28 ft³/s Feb. 19, 2004, gage height, 6.18 ft; minimum discharge, 0.26 ft³/s Jan. 9-11, 2004.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7.2 ft³/s June 11, gage height, 5.29 ft; minimum discharge, 0.34 ft³/s Feb. 9.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.76	0.63	0.51	0.51	0.42	e0.52	e0.92	0.85	5.0	3.0	2.0	1.3
2	0.78	0.63	0.51	0.51	0.42	e0.54	e0.92	0.89	5.2	2.9	2.0	1.2
3	0.76	0.63	0.50	0.51	0.43	e0.56	e0.92	0.91	5.0	2.9	2.0	1.3
4	0.73	0.61	0.49	0.51	0.45	e0.56	e0.96	0.88	4.9	2.9	1.9	1.2
5	0.69	0.63	0.49	0.51	0.42	e0.56	e1.0	0.94	5.0	2.8	1.8	1.2
6	0.70	0.64	0.53	0.52	0.43	e0.58	e1.0	0.95	5.1	2.8	1.8	1.2
7	0.69	0.63	0.54	0.50	0.44	e0.60	e0.98	0.90	5.7	2.8	1.8	1.1
8	0.66	0.64	0.58	0.47	0.44	e0.60	e0.94	0.92	5.5	2.8	1.8	1.1
9	0.61	0.64	0.59	0.44	0.44	e0.62	e0.92	1.0	5.1	2.9	1.7	1.1
10	0.59	0.65	0.57	0.44	0.45	0.63	e0.90	1.1	4.9	2.8	1.8	1.1
11	0.61	0.63	0.57	0.45	0.46	0.63	e0.92	1.0	4.7	2.7	1.8	1.1
12	0.55	0.61	0.55	0.45	0.45	0.64	e0.92	1.0	3.3	2.6	1.8	1.1
13	0.59	0.60	0.60	0.45	0.46	0.63	e0.92	1.0	3.3	2.6	1.7	1.0
14	0.60	0.57	0.59	0.42	e0.46	0.66	e0.92	1.0	3.4	2.2	1.7	0.97
15	0.60	0.60	0.57	0.42	e0.46	0.66	e0.96	1.2	3.5	2.3	1.8	0.93
16	0.64	0.60	0.56	0.42	e0.46	0.70	e0.96	1.3	3.7	2.2	1.7	0.92
17	0.66	0.58	0.57	0.43	e0.46	0.81	e0.92	1.3	3.7	2.1	1.6	0.92
18	0.61	0.59	0.52	0.45	e0.48	e0.83	e0.88	1.4	3.7	2.1	1.6	0.93
19	0.65	0.60	0.51	0.45	e0.48	e0.82	e0.88	1.3	3.6	1.8	1.6	0.87
20	0.71	0.60	0.50	0.45	e0.48	e0.84	0.90	1.5	3.7	1.7	1.5	0.87
21	0.75	0.60	0.50	0.42	e0.48	e0.84	0.85	1.8	3.4	2.0	1.4	0.83
22	0.75	0.60	0.50	0.42	e0.48	e0.86	0.80	1.9	3.3	2.0	1.6	0.88
23	0.68	0.57	0.51	0.42	e0.48	e0.88	0.77	2.0	3.2	1.9	1.7	0.92
24	0.68	0.56	0.54	0.43	e0.48	e0.88	0.86	2.0	3.2	2.2	1.6	0.89
25	0.69	0.55	0.54	0.44	e0.48	e0.88	0.87	2.4	3.2	2.1	1.4	0.89
26	0.68	0.56	0.55	0.44	e0.50	e0.90	0.84	2.8	3.3	2.1	1.4	0.92
27	0.69	0.56	0.53	0.44	e0.52	e0.94	0.84	3.1	3.3	2.0	1.4	0.88
28	0.66	0.57	0.50	0.42	e0.52	e0.94	0.91	3.5	3.2	1.9	1.4	0.90
29	0.63	0.55	0.53	0.42	---	e0.92	0.94	3.7	3.4	2.0	1.4	0.92
30	0.60	0.51	0.52	0.42	---	e0.88	0.82	4.2	3.2	2.0	1.4	0.95
31	0.61	---	0.52	0.42	---	e0.88	---	4.6	---	2.0	1.3	---
TOTAL	20.61	17.94	16.59	14.00	12.93	22.79	27.14	53.34	120.7	73.1	51.4	30.39
MEAN	0.66	0.60	0.54	0.45	0.46	0.74	0.90	1.72	4.02	2.36	1.66	1.01
MAX	0.78	0.65	0.60	0.52	0.52	0.94	1.0	4.6	5.7	3.0	2.0	1.3
MIN	0.55	0.51	0.49	0.42	0.42	0.52	0.77	0.85	3.2	1.7	1.3	0.83
AC-FT	41	36	33	28	26	45	54	106	239	145	102	60
CFSM	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.06	0.04	0.03	0.02
IN.	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.03	0.04	0.03	0.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2005, BY WATER YEAR (WY)

MEAN	0.82	0.64	0.48	2.03	8.20	5.82	4.25	3.91	4.46	2.35	1.41	0.92
MAX	0.98	0.69	0.54	3.61	15.7	10.9	7.59	6.10	4.91	2.36	1.66	1.01
(WY)	(2004)	(2004)	(2005)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2005)	(2005)	(2005)
MIN	0.66	0.60	0.42	0.45	0.46	0.74	0.90	1.72	4.02	2.35	1.17	0.82
(WY)	(2005)	(2005)	(2004)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2004)	(2004)	(2004)

JOHN DAY RIVER BASIN

14046890 PINE CREEK NEAR CLARNO, OR—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2004 - 2005	
ANNUAL TOTAL	1,657.19		460.93			
ANNUAL MEAN	4.53		1.26		2.91	
HIGHEST ANNUAL MEAN					4.55	2004
LOWEST ANNUAL MEAN					1.26	2005
HIGHEST DAILY MEAN	26	Feb 19	5.7	Jun 7	26	Feb 19, 2004
LOWEST DAILY MEAN	0.28	Jan 9	0.42	Jan 14	0.28	Jan 9, 2004
ANNUAL SEVEN-DAY MINIMUM	0.30	Jan 8	0.42	Jan 28	0.30	Jan 8, 2004
ANNUAL RUNOFF (AC-FT)	3,290		914		2,110	
ANNUAL RUNOFF (CFSM)	0.070		0.019		0.045	
ANNUAL RUNOFF (INCHES)	0.95		0.26		0.61	
10 PERCENT EXCEEDS	11		2.9		7.7	
50 PERCENT EXCEEDS	2.0		0.87		0.99	
90 PERCENT EXCEEDS	0.54		0.46		0.45	

e Estimated



2005 Water Year
JOHN DAY RIVER BASIN

14046890 PINE CREEK NEAR CLARNO, OR

Latitude: 44° 54' 38"

Longitude: 120° 26' 23"

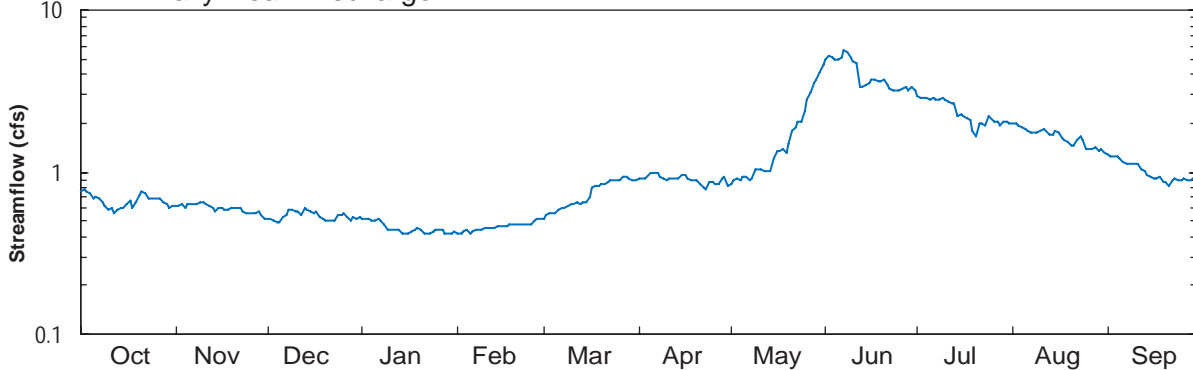
Hydrologic Unit Code: 17070204

Wheeler County

Datum: 1340 feet

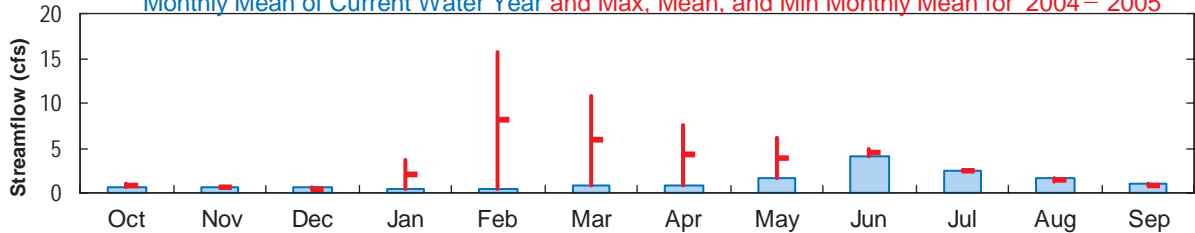
Drainage Area: 65 mi²

Daily Mean Discharge



Monthly Statistics

Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 2004 - 2005



JOHN DAY RIVER BASIN

14046890 PINE CREEK NEAR CLARNO, OR—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: January 2004 to current year.

PRECIPITATION: June 2004 to current year.

INSTRUMENTATION.--Water-temperature recorder and precipitation gage.

REMARKS.--

WATER TEMPERATURE: Records excellent except those for the periods Feb. 23 to Mar. 9, Aug. 1-19 which are good.

PRECIPITATION: Records fair.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum 21.7°C June 4, 2004; minimum, 4.8°C Feb. 20, 2004.

PRECIPITATION: Maximum daily precipitation, 0.84 inches May 9, 2005.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum 19.3°C May 27; minimum, 5.7°C Jan. 15.

PRECIPITATION: Maximum daily precipitation, 0.84 inches May 9.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	15.3	10.8	12.8	12.3	8.6	10.5	10.6	9.6	10.0	10.2	8.6	9.3
2	15.2	10.8	12.7	12.6	11.1	11.7	10.4	8.5	9.4	9.7	8.7	9.2
3	15.2	10.7	12.7	12.5	9.4	11.2	9.6	7.5	8.5	9.2	8.4	8.8
4	15.1	10.4	12.5	11.2	7.9	9.5	10.2	8.0	8.9	8.6	7.8	8.0
5	15.1	10.5	12.6	11.9	8.3	9.9	10.1	8.6	9.2	8.9	6.8	8.0
6	14.7	12.4	13.3	12.2	8.7	10.3	10.2	8.5	9.3	9.3	6.5	7.9
7	15.9	12.2	13.7	12.2	9.5	10.6	10.8	9.0	9.9	9.7	8.7	9.2
8	15.4	11.4	13.3	12.0	8.7	10.2	10.9	10.0	10.3	9.9	8.0	9.0
9	14.6	12.0	13.2	11.9	9.3	10.5	11.6	10.2	10.9	10.1	8.3	9.0
10	14.6	10.9	12.4	11.7	10.9	11.3	12.8	11.2	11.9	9.3	8.4	8.8
11	14.6	10.4	12.2	12.2	10.4	11.4	12.5	10.9	11.8	9.0	8.0	8.4
12	14.7	10.6	12.4	11.8	10.0	10.9	10.9	8.8	9.7	10.4	7.8	9.0
13	14.7	10.6	12.5	12.7	10.9	11.7	10.3	8.6	9.4	9.9	7.6	8.6
14	14.9	10.7	12.5	12.2	10.4	11.2	10.9	9.2	9.9	8.3	7.3	7.7
15	14.8	11.1	12.8	12.3	9.6	11.0	9.7	7.8	8.7	7.5	5.7	7.0
16	14.8	11.1	12.8	12.5	10.0	11.3	9.6	7.6	8.5	9.0	6.7	7.7
17	13.3	11.6	12.5	11.1	8.5	9.7	10.4	8.4	9.3	9.7	7.6	8.6
18	12.7	10.8	11.8	11.3	9.0	9.9	10.1	8.8	9.3	12.0	9.7	10.8
19	12.6	11.5	11.9	10.9	8.5	9.5	10.6	8.9	9.5	11.7	9.3	10.3
20	13.8	11.6	12.4	9.8	7.4	8.5	10.2	8.2	9.2	11.9	9.6	10.4
21	13.3	10.9	12.3	9.7	7.0	8.3	9.5	7.3	8.4	11.1	8.4	9.6
22	12.5	10.2	11.4	11.1	8.2	9.5	10.6	8.4	9.3	11.7	8.3	9.9
23	12.6	10.7	11.9	11.4	8.8	10.2	9.6	7.4	8.4	11.1	8.8	9.8
24	12.7	9.2	10.8	11.7	10.5	11.0	9.3	7.2	8.1	11.1	8.0	9.3
25	12.7	9.0	10.8	11.9	9.5	11.0	10.0	7.8	8.8	10.6	8.6	9.6
26	11.9	11.1	11.4	10.7	8.7	9.6	10.2	8.2	9.2	11.2	9.4	10.2
27	12.8	11.0	11.6	10.3	8.9	9.5	9.3	8.2	8.7	11.7	9.3	10.4
28	12.7	9.3	11.0	9.7	7.8	8.7	9.9	8.4	9.2	11.1	9.4	10.2
29	13.2	11.2	12.0	9.1	6.6	7.9	9.8	7.4	8.7	11.7	9.4	10.4
30	12.5	10.9	11.6	10.7	8.6	9.6	9.8	9.0	9.4	11.0	8.3	9.4
31	12.1	9.6	10.7	---	---	---	9.9	8.7	9.2	10.8	8.4	9.4
MONTH	15.9	9.0	12.2	12.7	6.6	10.2	12.8	7.2	9.4	12.0	5.7	9.2

JOHN DAY RIVER BASIN

14046890 PINE CREEK NEAR CLARNO, OR—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	11.2	7.6	9.2	14.2	9.0	11.1	---	---	---	17.4	11.5	14.1
2	11.6	8.2	9.5	14.1	9.9	11.5	---	---	---	17.0	12.8	14.4
3	11.8	8.0	9.6	14.3	8.6	11.0	---	---	---	18.5	11.6	14.8
4	11.1	9.0	9.8	14.5	9.0	11.3	---	---	---	17.7	13.4	15.0
5	10.9	8.8	9.6	14.5	9.0	11.4	---	---	---	16.3	13.2	14.5
6	11.6	8.9	10.0	15.1	9.2	11.7	---	---	---	17.1	13.1	14.6
7	11.6	9.4	10.4	15.3	9.8	12.1	---	---	---	17.9	11.8	14.4
8	11.6	8.2	9.6	15.7	9.7	12.2	---	---	---	16.0	12.8	14.1
9	11.3	7.9	9.2	---	9.4	---	---	---	---	15.4	12.6	13.5
10	11.6	7.3	9.1	14.9	8.9	11.5	---	---	---	13.7	11.7	12.7
11	11.3	7.3	9.2	15.4	8.9	11.7	---	---	---	16.7	12.1	14.1
12	11.8	8.1	9.9	14.8	9.6	11.7	---	---	---	18.0	11.8	14.7
13	11.7	8.8	10.4	13.5	7.9	10.4	---	---	---	17.6	12.6	15.0
14	11.9	7.8	9.4	14.3	7.7	10.7	---	---	---	18.4	13.9	15.7
15	11.4	7.1	8.9	14.4	9.7	11.5	---	---	---	15.6	13.7	14.7
16	11.5	7.1	9.0	11.4	10.0	10.5	---	---	---	---	---	---
17	11.6	6.9	8.9	14.8	8.7	11.2	---	---	---	15.2	11.7	13.3
18	10.8	7.5	9.0	13.2	9.0	---	15.0	---	---	16.3	12.6	14.1
19	11.7	7.8	9.8	---	---	---	13.6	10.3	---	15.5	12.5	13.9
20	11.4	9.1	10.2	---	---	---	---	---	---	15.9	12.2	13.8
21	11.5	8.9	10.1	---	---	---	---	---	---	13.8	11.5	12.9
22	12.9	8.9	10.5	---	---	---	---	---	---	17.4	12.3	14.4
23	12.9	7.9	10	---	---	---	13.9	---	---	17.1	12.0	14.3
24	13.3	8.1	10.3	---	---	---	13.8	10.8	12.2	17.3	11.4	14.3
25	13.4	8.3	10.4	---	---	---	16.7	12.1	13.7	17.8	11.3	14.5
26	13.6	8.3	10.5	---	---	---	18.9	11.5	14.8	18.5	12.3	15.5
27	13.6	8.7	10.9	---	---	---	17.7	12.4	14.6	19.3	13.2	16.3
28	13.6	10.2	11.6	---	---	---	16.0	11.6	13.6	18.6	14.3	16.4
29	---	---	---	---	---	---	13.2	12.0	12.6	18.6	14.3	16.3
30	---	---	---	---	---	---	18.0	11.8	14.2	18.3	13.6	16.0
31	---	---	---	---	---	---	---	---	---	16.2	13.4	14.4
MONTH	13.6	6.9	9.8	15.7	7.7	11.3	18.9	10.3	13.7	19.3	11.3	14.6
	JUNE			JULY			AUGUST			SEPTEMBER		
1	15.3	12.5	13.9	18.6	14.4	16.5	17.8	16.0	16.8	16.8	13.3	15.1
2	16.2	12.1	14.0	18.1	13.6	15.8	17.8	14.8	16.3	16.3	13.7	15.0
3	17.3	11.8	14.4	17.8	13.0	15.5	17.4	13.6	15.6	15.5	13.4	14.6
4	16.9	11.8	14.4	18.3	13.4	15.9	18.0	14.2	16.1	16.1	13.0	14.6
5	15.6	12.8	14.1	18.6	14.0	16.4	18.4	14.8	16.5	15.9	12.7	14.4
6	14.5	11.2	12.9	18.8	15.1	16.8	18.4	14.9	16.7	15.8	12.7	14.3
7	15.2	10.9	13.0	18.5	14.2	16.4	18.2	15.0	16.6	16.0	12.7	14.4
8	17.0	11.0	14.0	17.2	14.0	15.8	18.2	14.8	16.5	16.0	12.5	14.4
9	17.3	12.1	14.7	16.8	14.2	15.4	18.2	14.8	16.5	14.8	13.4	14.0
10	17.9	12.5	15.1	17.2	14.2	15.6	17.9	14.7	16.2	14.1	12.8	13.5
11	16.5	13.4	14.8	18.6	13.8	16.2	17.4	13.9	15.7	14.7	11.8	13.2
12	16.7	12.1	14.4	18.6	14.6	16.6	17.6	14.2	15.9	14.8	12.1	13.5
13	17.1	12.5	14.8	18.2	14.0	16.2	17.7	14.9	---	15.4	12.2	13.9
14	16.6	12.8	14.6	18.2	13.7	16.0	17.2	13.6	15.4	15.3	12.1	13.8
15	---	11.9	---	18.6	14.2	16.5	17.2	13.3	15.2	15.2	12.3	13.8
16	15.1	13.0	14.0	18.4	14.7	16.5	17.7	14.3	15.9	14.5	12.3	13.5
17	14.9	12.3	13.8	18.3	13.9	16.1	16.5	14.5	15.4	---	---	---
18	16.2	11.8	14.0	18.6	14.2	16.5	17.4	14.0	15.6	14.8	11.7	13.3
19	16.8	11.9	14.5	18.7	14.8	16.7	17.3	13.9	15.6	15.0	11.7	13.4
20	18.3	12.6	15.5	18.3	14.0	16.2	17.5	13.9	15.7	14.9	12.1	13.6
21	18.1	13.9	16.1	17.8	14.1	16.1	18.1	14.7	16.3	14.6	11.8	13.3
22	16.8	13.6	15.2	18.5	15.6	16.9	17.4	14.8	16.2	14.3	11.1	12.8
23	17.8	12.3	15.1	18.1	14.3	16.2	---	13.9	---	14.2	12.6	13.2
24	17.8	12.8	15.5	17.7	14.1	16.0	16.5	13.2	14.8	13.8	10.8	12.3
25	18.0	14.1	16.0	17.5	13.7	15.6	16.7	13.0	14.8	13.8	10.3	12.1
26	17.4	13.5	15.6	17.5	13.7	15.7	17.2	13.5	15.3	14.1	10.6	12.4
27	15.8	14.1	14.9	18.0	14.1	16.1	17.1	13.8	15.5	14.3	11.2	12.8
28	16.8	13.8	15.2	18.1	14.4	16.4	17.1	13.6	15.3	14.2	11.0	12.7
29	18.4	13.3	15.8	18.3	14.9	16.6	---	13.8	---	14.3	11.4	13.0
30	18.5	14.0	16.3	18.3	14.9	16.6	16.3	13.3	14.7	14.4	13.8	14.0
31	---	---	---	18.4	15.1	16.8	16.6	13.3	14.9	---	---	---
MONTH	18.5	10.9	14.7	18.8	13.0	16.2	18.4	13.0	15.8	16.8	10.3	13.6
YEAR	19.3	5.7	12.5									

JOHN DAY RIVER BASIN

14046890 PINE CREEK NEAR CLARNO, OR—Continued

 PRECIPITATION, TOTAL, INCHES
 WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
 DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.01	0.00
2	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.24	0.01	0.00	0.01	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.01	0.01	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.05	0.00	0.00	0.00
6	0.00	0.00	0.16	0.00	0.06	0.00	0.00	0.00	0.07	0.00	0.00	0.00
7	0.00	0.00	0.03	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00
8	0.20	0.00	0.03	0.00	0.00	0.00	0.00	0.21	0.00	0.01	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.00	0.09	0.00	0.00
10	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.01	0.00	0.08
11	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.01
12	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.06	0.00	0.00	0.00	0.00
14	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.54	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.10	0.00	0.00	0.06	0.38	0.03	0.00	0.00	0.00
17	0.00	0.00	0.00	0.04	0.00	0.01	0.02	0.02	0.00	0.00	0.00	0.00
18	0.00	0.02	0.00	0.00	0.00	---	0.00	0.24	0.00	0.00	0.00	0.01
19	0.01	0.00	0.00	0.00	0.18	---	---	0.02	0.10	0.00	0.00	0.01
20	0.03	0.00	0.00	0.00	0.11	---	---	0.04	0.00	0.00	0.00	0.02
21	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.01	0.00	0.03	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.14	0.01	0.00	0.00	0.01	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.01	0.01	0.01	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.01	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.01	0.01	0.01	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.03	0.13	0.01	0.00	0.00
28	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.01	0.00	0.00
29	0.00	0.00	0.38	0.00	---	0.00	0.02	0.00	0.00	0.01	0.00	0.00
30	0.00	0.00	0.12	0.00	---	0.00	0.06	0.00	0.00	0.01	0.00	0.00
31	0.00	---	0.01	0.00	---	0.00	---	0.14	---	0.01	0.00	---
TOTAL	0.26	0.25	0.76	0.16	0.47	---	---	3.61	0.47	0.24	0.02	0.13

JOHN DAY RIVER BASIN

14048000 JOHN DAY RIVER AT MCDONALD FERRY, OR

LOCATION.--Lat 45°35'16", long 120°24'30", in NE ¼ NW ¼ sec.11, T.1 N., R.19 E., Sherman County, 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.

GAGE AREA.--7,580 mi², approximately.

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 for those above 2,000 ft³/s which are fair and estimated daily discharges, which are poor. No regulation. Many diversions for irrigation upstream from station. Water-quality data available for this site. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--99 years (water years 1906-96, 1998-2005), 2,058 ft³/s, 1,491,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42,800 ft³/s Dec. 24, 1964, gage height, 13.59 ft, from floodmark, from rating curve extended above 11,000 ft³/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 ft³/s, from rating curve extended above 22,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,900 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 8	1515	9,230	7.20	May 18	0130	*14,700	*9.08

Minimum discharge, 33 ft³/s, Sept. 8, 9.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	240	530	578	754	1,140	739	3,190	4,080	3,030	730	101	42
2	244	529	507	800	1,080	757	2,670	3,850	2,810	760	95	40
3	249	518	438	716	1,010	796	2,510	3,530	2,970	676	96	37
4	250	510	416	673	948	841	2,390	3,410	2,770	610	94	36
5	267	500	545	707	892	848	2,290	3,720	2,440	565	86	38
6	282	488	539	666	897	843	2,600	3,730	2,190	528	78	37
7	294	567	474	498	926	844	2,590	4,320	2,090	489	80	34
8	303	546	467	475	922	869	2,470	8,070	2,110	462	78	35
9	324	505	478	489	852	917	2,630	7,890	2,080	430	74	38
10	318	514	509	511	822	991	2,730	6,910	1,920	407	72	44
11	316	513	658	605	812	1,160	2,600	7,160	1,750	402	69	55
12	320	511	813	603	741	1,270	2,390	6,730	1,590	388	66	64
13	323	506	1,050	608	674	1,330	2,270	6,760	1,490	382	62	62
14	342	523	1,330	571	687	1,410	2,300	5,920	1,430	427	60	59
15	349	535	1,400	599	800	1,450	2,200	5,540	1,340	424	60	60
16	340	550	1,310	585	849	1,360	2,050	6,460	1,290	377	52	58
17	331	537	1,280	e550	777	1,290	1,940	10,700	1,240	341	50	58
18	327	521	1,240	e560	674	1,270	1,890	12,800	1,190	310	51	60
19	320	517	1,100	e580	587	1,260	2,510	9,660	1,120	286	51	64
20	321	510	1,030	639	546	1,210	2,920	8,940	1,080	263	52	78
21	331	510	987	750	651	1,140	2,770	8,000	1,120	250	47	86
22	358	502	923	1,110	774	1,170	2,640	7,650	1,140	237	46	85
23	406	494	875	1,200	824	1,270	2,610	7,050	1,010	217	43	81
24	500	470	826	1,180	799	1,290	2,790	6,300	915	199	44	82
25	560	424	780	1,150	781	1,280	2,970	5,590	834	179	41	78
26	562	418	748	1,120	739	1,300	3,340	4,980	763	167	39	75
27	626	520	631	1,080	718	1,260	4,010	4,460	726	162	37	71
28	624	539	600	1,070	720	1,210	4,370	4,050	706	144	40	72
29	561	596	725	1,100	---	1,520	4,560	3,690	668	127	43	67
30	521	613	706	1,160	---	4,360	4,400	3,450	661	120	48	69
31	518	---	640	1,190	---	3,670	---	3,240	---	111	45	---
TOTAL	11,627	15,516	24,603	24,299	22,642	40,925	83,600	188,640	46,473	11,170	1,900	1,765
MEAN	375	517	794	784	809	1,320	2,787	6,085	1,549	360	61.3	58.8
MAX	626	613	1,400	1,200	1,140	4,360	4,560	12,800	3,030	760	101	86
MIN	240	418	416	475	546	739	1,890	3,240	661	111	37	34
AC-FT	23,060	30,780	48,800	48,200	44,910	81,170	165,800	374,200	92,180	22,160	3,770	3,500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1906 - 2005, BY WATER YEAR (WY)

MEAN	329	600	1,163	1,632	2,616	3,989	5,591	5,172	2,665	643	191	181
MAX	892	2,310	7,030	6,402	9,736	11,450	11,900	13,180	9,531	2,131	700	923
(WY)	(1985)	(1974)	(1965)	(1965)	(1996)	(1983)	(1984)	(1917)	(1948)	(1984)	(1984)	(1984)
MIN	59.9	157	221	217	374	557	964	533	285	88.0	5.70	23.8
(WY)	(1937)	(1937)	(1937)	(1937)	(1933)	(1977)	(1968)	(1934)	(1992)	(1926)	(1973)	(1934)

JOHN DAY RIVER BASIN

14048000 JOHN DAY RIVER AT MCDONALD FERRY, OR—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1906 - 2005	
ANNUAL TOTAL	768,036		473,160			
ANNUAL MEAN	2,098		1,296		2,058	
HIGHEST ANNUAL MEAN					4,724	1984
LOWEST ANNUAL MEAN					603	1977
HIGHEST DAILY MEAN	11,300	May 30	12,800	May 18	39,400	Dec 24, 1964
LOWEST DAILY MEAN	104	Aug 21	34	Sep 7	0.00	Aug 15, 1973
ANNUAL SEVEN-DAY MINIMUM	119	Aug 17	36	Sep 3	0.00	Aug 15, 1973
ANNUAL RUNOFF (AC-FT)	1,523,000		938,500		1,491,000	
10 PERCENT EXCEEDS	5,590		3,370		5,750	
50 PERCENT EXCEEDS	1,020		666		780	
90 PERCENT EXCEEDS	233		63		140	

e Estimated



2005 Water Year
 JOHN DAY RIVER BASIN

14048000 JOHN DAY RIVER AT MCDONALD FERRY, OR

Latitude: 45° 35' 16"

Longitude: 120° 24' 30"

Hydrologic Unit Code: 17070204

Sherman County

Datum: 392.27 feet

Drainage Area: 7580 mi²

