

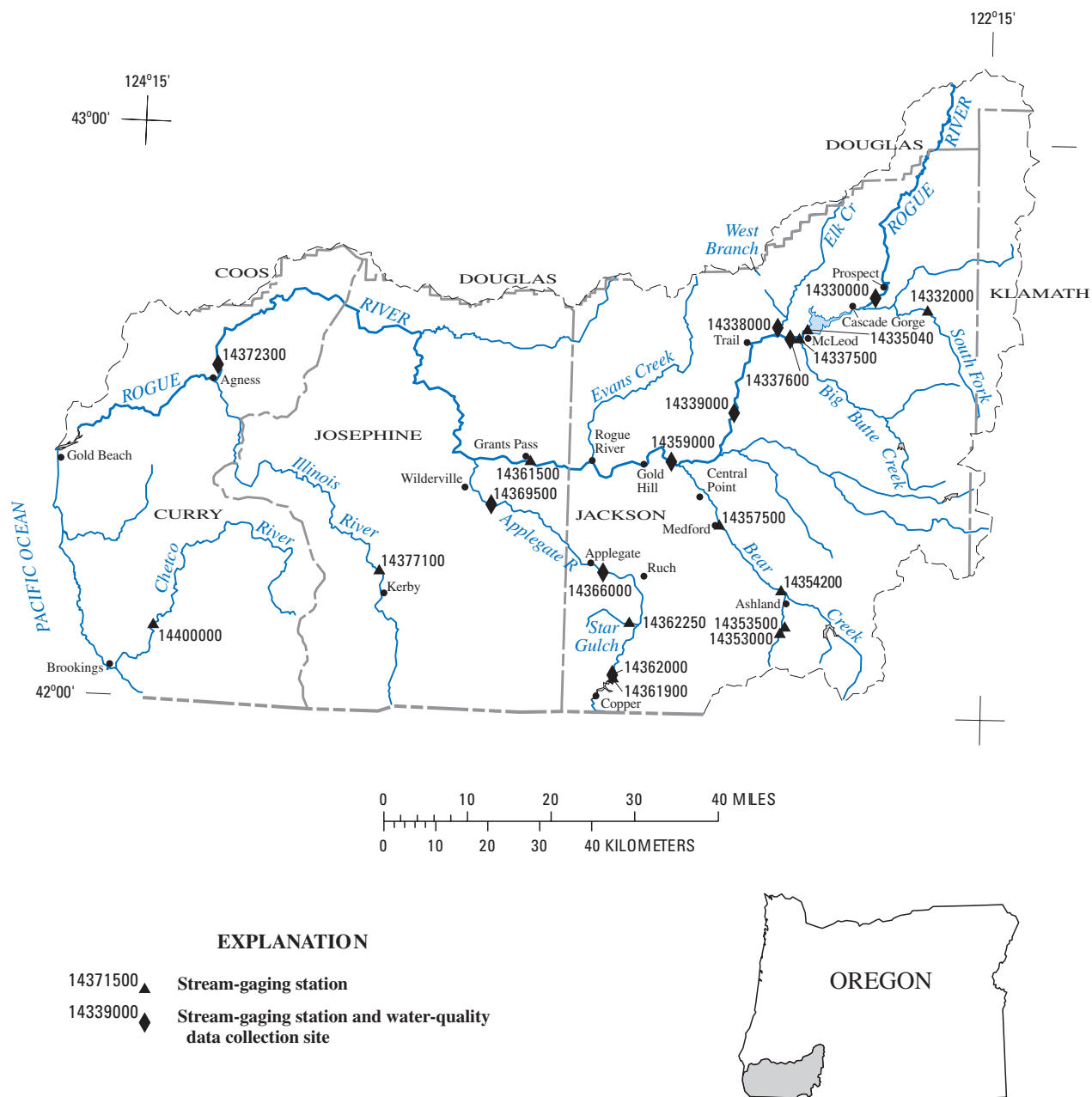


Figure 33. Location of surface-water and water-quality stations in the Rogue and Chetco River Basins.

EXPLANATION

- ▲ 14332000 **Stream-gaging station**
 ◆ 14330000 **Stream-gaging station and water-quality data collection site**
 RM 2.4 **River mile**
 —→ **Stream**—Arrow shows direction of flow
 - - - → **Tunnel, canal or pipe**—Arrow shows direction of flow

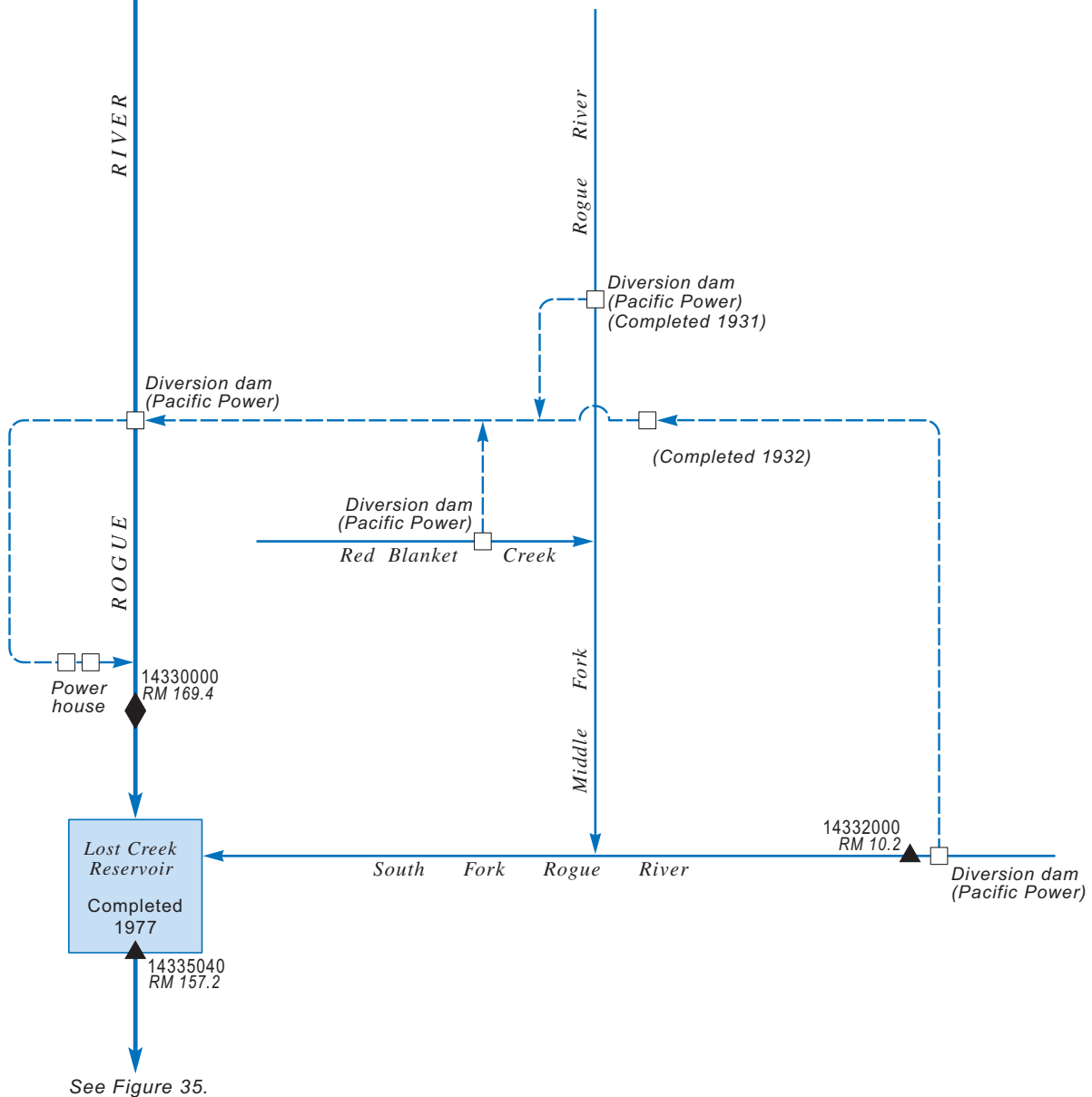


Figure 34. Schematic diagram showing gaging stations in the Rogue River Basin, upstream from Lost Creek Reservoir.

ROGUE RIVER BASIN

14330000 ROGUE RIVER BELOW PROSPECT, OR

LOCATION.--Lat 42°43'47", long 122°30'54", in SE ¼ NW ¼ sec.6, T.33 S., R.3 E., Jackson County, Hydrologic Unit 17100307, on right bank 600 ft downstream from Prospect No. 1 powerplant, 1.4 mi downstream from Mill Creek, 2.0 mi southwest of Prospect, 2.1 mi upstream from South Fork Rogue River, and at mile 169.4.

DRAINAGE AREA.--379 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1913 to September 1930, October 1968 to current year.

REVISED RECORDS.--WSP 1518: 1914-23, 1924(M), 1925, 1928.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,964.56 ft above NGVD of 1929 (PacifiCorp bench mark). Prior to September 1927, nonrecording gage at site 1,000 ft upstream, above powerplants, at different datum, also concurrent nonrecording gage on headrace to obtain equivalent combined flow.

REMARKS.--Records fair. Fluctuations caused by powerplant 600 ft upstream from station. Small diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--37 years, (water years 1969-2005), 1,446 ft³/s, 1,048,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,200 ft³/s Jan. 1, 1997, gage height, 8.15 ft; minimum discharge, 166 ft³/s Sept. 29, 1992, result of regulation by upstream diversion gates.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1890, 25,000 ft³/s, Dec. 22, 1964, gage height, 12.4 ft from floodmarks, from records for Rogue River above Prospect (station 14328000) and Rogue River below South Fork Rogue River, near Prospect (station 14335000) after adjusting for estimated intervening tributary inflow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,180 ft³/s Dec. 9, gage height, 5.10 ft; minimum discharge, 275 ft³/s Aug. 9, result of regulation by upstream diversion gates.

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	614	859	762	1,140	1,290	1,140	1,620	1,880	1,640	1,150	910	611
2	609	854	739	1,100	1,260	1,160	1,620	1,860	e1,630	1,130	914	607
3	609	999	741	1,070	1,240	1,140	1,640	1,830	e1,620	1,120	902	606
4	602	905	779	1,040	1,240	1,110	1,650	1,890	e1,620	1,110	897	610
5	601	872	780	1,030	1,240	1,110	1,580	1,950	e1,610	1,100	891	602
6	602	846	804	1,060	1,220	1,100	1,570	1,970	e1,610	1,090	889	604
7	606	831	782	1,060	1,210	1,110	1,810	1,910	1,600	1,080	880	598
8	608	826	1,400	1,050	1,170	1,130	1,930	2,180	1,540	1,070	886	598
9	695	821	4,350	1,050	1,150	1,140	1,900	2,580	1,480	1,100	863	597
10	639	819	3,370	1,040	1,130	1,140	1,800	2,650	1,470	1,110	879	611
11	612	817	2,420	1,020	1,120	1,150	1,910	2,560	1,460	1,090	865	635
12	607	807	2,090	996	1,110	1,160	1,940	2,330	1,430	1,060	837	618
13	604	807	1,910	968	1,120	1,150	1,800	2,200	1,390	1,040	806	605
14	599	799	1,930	965	1,100	1,110	1,710	2,180	1,380	1,030	771	593
15	591	797	1,840	988	1,070	1,090	1,640	2,230	1,350	1,020	747	601
16	599	788	1,670	1,070	1,070	1,070	1,640	2,370	1,340	1,010	753	593
17	627	795	1,570	1,120	1,070	1,070	1,880	2,310	1,440	998	749	648
18	741	787	1,500	1,250	1,060	1,080	1,800	2,380	1,440	992	750	625
19	726	791	1,470	1,420	1,090	1,130	1,720	2,510	1,380	988	742	603
20	769	773	1,420	1,470	1,170	1,200	1,690	2,320	1,330	974	741	596
21	687	772	1,350	e1,470	1,190	1,170	1,670	2,220	1,300	970	725	586
22	699	771	1,310	e1,470	1,150	1,180	1,690	2,070	1,280	978	652	593
23	1,010	770	1,260	e1,450	1,130	1,230	1,830	1,970	1,260	961	624	603
24	826	774	1,220	e1,430	1,130	1,190	1,930	1,880	1,250	953	627	624
25	788	872	1,200	e1,410	1,120	1,150	1,890	1,810	1,230	950	620	598
26	920	910	1,210	e1,390	1,110	1,180	1,860	1,750	1,210	940	615	590
27	880	842	1,180	e1,380	1,110	1,530	1,880	1,720	1,210	933	616	588
28	851	806	1,160	e1,410	1,170	2,090	2,100	1,790	1,200	928	616	581
29	850	784	1,180	e1,390	---	1,880	2,000	1,850	1,180	925	609	583
30	884	801	1,150	e1,370	---	1,680	1,920	1,750	1,160	917	616	582
31	907	---	1,140	e1,330	---	1,580	---	1,670	---	910	609	---
TOTAL	21,962	24,695	45,687	37,407	32,240	38,350	53,620	64,570	42,040	31,627	23,601	18,089
MEAN	708	823	1,474	1,207	1,151	1,237	1,787	2,083	1,401	1,020	761	603
MAX	1,010	999	4,350	1,470	1,290	2,090	2,100	2,650	1,640	1,150	914	648
MIN	591	770	739	965	1,060	1,070	1,570	1,670	1,160	910	609	581
AC-FT	43,560	48,980	90,620	74,200	63,950	76,070	106,400	128,100	83,390	62,730	46,810	35,880

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

	MEAN	928	1,187	1,531	1,670	1,660	1,806	1,894	2,017	1,608	1,169	982	914
MAX	1,342	2,100	3,312	3,012	2,728	3,627	2,668	3,282	2,923	1,660	1,356	1,267	
(WY)	(1985)	(1974)	(1997)	(1997)	(1996)	(1972)	(1989)	(1971)	(1974)	(1971)	(1984)	(1984)	
MIN	606	640	909	946	946	1,045	1,268	933	765	717	623	560	
(WY)	(1993)	(2004)	(2003)	(1977)	(1977)	(1977)	(2001)	(1992)	(1992)	(1992)	(2001)	(2001)	

ROGUE RIVER BASIN

14330000 ROGUE RIVER BELOW PROSPECT, OR—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1969 - 2005	
ANNUAL TOTAL	487,307		433,888			
ANNUAL MEAN	1,331		1,189		1,446	
HIGHEST ANNUAL MEAN					2,053	1974
LOWEST ANNUAL MEAN					957	2001
HIGHEST DAILY MEAN	4,350	Dec 9	4,350	Dec 9	10,500	Jan 1, 1997
LOWEST DAILY MEAN	591	Oct 15	581	Sep 28	499	Sep 12, 2001
ANNUAL SEVEN-DAY MINIMUM	605	Oct 2	592	Sep 24	506	Sep 6, 2001
ANNUAL RUNOFF (AC-FT)	966,600		860,600		1,048,000	
10 PERCENT EXCEEDS	2,050		1,880		2,230	
50 PERCENT EXCEEDS	1,270		1,110		1,280	
90 PERCENT EXCEEDS	657		610		807	

e Estimated



2005 Water Year
ROGUE RIVER BASIN

14330000 ROGUE RIVER BELOW PROSPECT, OR

Latitude: 42° 43 ' 47"

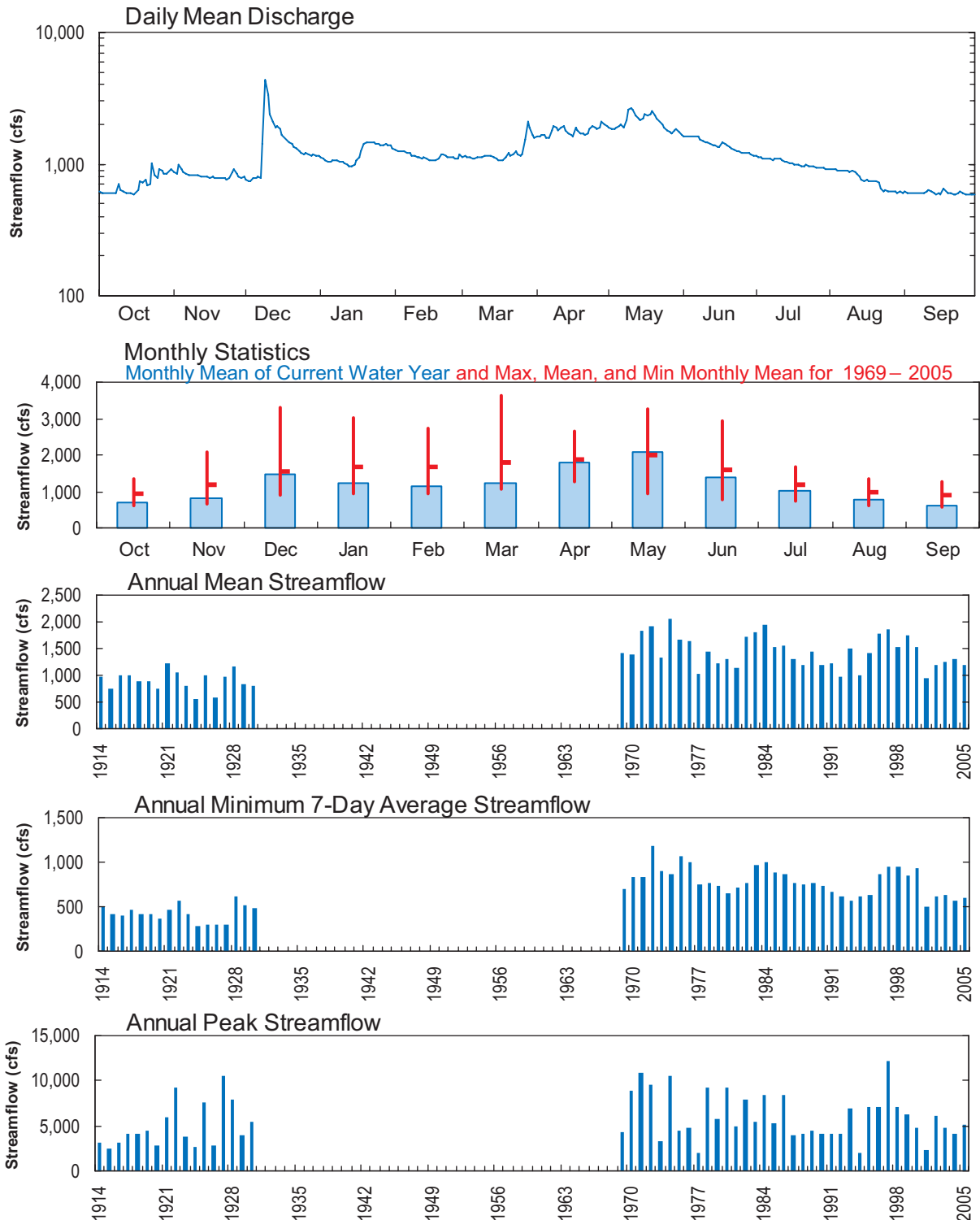
Longitude: 122° 30 ' 54"

Hydrologic Unit Code: 17100307

Jackson County

Datum: 1964.56 feet

Drainage Area: 379 mi²



ROGUE RIVER BASIN

14330000 ROGUE RIVER BELOW PROSPECT, OR—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1976 to September 1981.

pH: November 1976 to September 1981.

WATER TEMPERATURE: October 1968 to current year.

DISSOLVED OXYGEN: October 1979 to September 1981.

SUSPENDED SEDIMENT DISCHARGE: November 1976 to September 1981 (October to April only, 1980 water year, November to April only, 1981 water year).

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Records good. During low flows and warm weather, water temperatures may be influenced by return flows from hydroelectric plant 600 ft upstream.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 73 microsiemens Sept. 22, 1980; minimum recorded, 28 microsiemens Jan. 13, 1980, but may have been lower during period of missing record Jan. 14-17, 1980.

pH: Maximum recorded, 8.3 units Aug. 10, 1981, but may have been higher during period of no record in July and August 1981; minimum, 7.0 units Nov. 30, 1976.

WATER TEMPERATURE: Maximum, 20.5°C July 20, 1979 (result of regulation); minimum, 0.0°C at times most years.

DISSOLVED OXYGEN: Maximum, 13.6 mg/L Dec. 8, 1980, Feb. 21, 1981; minimum, 7.2 mg/L June 21, 1980 (result of regulation.)

SEDIMENT CONCENTRATION: Maximum daily mean (water years 1977-79), 1,270 mg/L (estimated) Jan. 11, 1979; minimum, 0 mg/L on many days each year. Maximum daily mean (period October 1979 to April 1981), 716 mg/L Oct. 25, 1979; minimum daily mean, 0 mg/L on several days in October and December 1979, Nov. 15-21, 28, Dec. 1, 1980, Jan. 19, 1981.

SEDIMENT DISCHARGE: Maximum daily (water years 1977-79), 17,790 tons Dec. 15, 1977; minimum daily, 0 tons on many days each year. Maximum daily (period October 1979 to April 1981), 5,570 tons Jan. 13, 1980; minimum daily, 0 tons on several days in October and December 1979, Nov. 15-21, 28, Dec. 1, 1980, Jan. 19, 1981.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 15.8°C July 18, 19; minimum recorded, 1.5°C Jan. 5., but may have been lower during period of missing record.

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	9.0	7.8	8.5	5.3	4.3	4.8	3.9	2.9	3.4	3.3	2.4	2.9
2	9.0	7.7	8.4	5.4	4.5	4.9	3.7	3.1	3.5	2.9	2.2	2.6
3	9.0	7.7	8.4	5.5	4.7	5.2	3.1	2.4	2.7	2.6	2.2	2.4
4	8.8	7.6	8.3	4.7	3.8	4.3	2.9	2.3	2.6	2.3	1.8	2.0
5	8.8	7.7	8.2	4.4	3.4	4.0	3.2	2.7	3.0	2.3	1.5	1.9
6	9.0	8.0	8.5	4.4	3.4	3.9	3.3	2.3	3.1	3.0	2.0	2.5
7	9.2	8.1	8.7	4.6	3.5	4.0	2.5	1.8	2.1	3.1	2.4	2.9
8	8.8	7.6	8.3	4.8	3.8	4.3	2.6	1.9	2.2	2.4	1.7	2.0
9	8.5	7.6	8.0	5.1	4.2	4.6	4.3	2.6	3.4	2.2	1.6	1.9
10	7.6	6.6	7.2	5.8	5.0	5.4	5.0	4.2	4.6	2.5	2.0	2.3
11	7.1	6.0	6.7	5.9	5.3	5.7	5.2	4.8	4.9	3.1	2.3	2.6
12	7.3	6.1	6.8	5.5	4.8	5.3	5.1	4.6	4.9	2.8	2.3	2.6
13	8.1	6.9	7.4	5.8	5.1	5.4	5.4	4.8	5.1	2.3	1.6	2.1
14	8.2	7.2	7.8	5.4	4.7	5.1	5.4	4.9	5.3	2.8	2.0	2.3
15	7.9	7.0	7.5	5.5	4.6	5.1	4.9	3.9	4.4	3.6	2.7	3.1
16	7.8	6.8	7.4	6.2	5.3	5.7	4.1	3.4	3.8	4.2	3.6	3.8
17	7.6	6.7	7.2	5.5	4.5	5.0	4.1	3.4	3.8	4.3	3.7	4.0
18	6.7	5.9	6.3	4.5	4.0	4.3	4.4	3.7	4.0	4.8	4.1	4.4
19	6.1	5.5	5.8	4.3	3.6	4.0	4.3	3.7	4.0	4.3	3.7	4.0
20	6.6	5.7	6.1	3.6	2.7	3.1	4.0	3.4	3.8	4.5	3.7	4.1
21	6.8	6.2	6.5	2.8	2.2	2.5	3.7	2.8	3.3	---	3.5	---
22	6.7	6.3	6.5	3.4	2.4	2.8	3.1	2.4	2.8	---	---	---
23	6.5	6.1	6.3	4.0	2.9	3.4	3.0	2.3	2.6	---	---	---
24	6.1	5.4	5.7	5.0	4.0	4.5	2.9	2.2	2.5	---	---	---
25	5.4	4.5	5.0	5.5	4.9	5.2	3.1	2.3	2.7	---	---	---
26	5.4	4.7	5.1	5.2	4.2	4.5	3.2	2.7	3.0	---	---	---
27	4.9	3.9	4.4	4.3	3.7	4.0	3.5	2.9	3.2	---	---	---
28	5.5	4.7	5.0	3.8	2.8	3.4	4.1	3.3	3.7	---	---	---
29	6.0	5.2	5.6	2.8	2.1	2.4	4.3	3.9	4.1	---	---	---
30	5.7	5.0	5.3	3.0	2.0	2.5	4.1	3.6	3.9	---	---	---
31	5.4	4.5	4.9	---	---	---	3.8	3.2	3.4	---	---	---
MONTH	9.2	3.9	6.8	6.2	2.0	4.3	5.4	1.8	3.5	4.8	1.5	2.8

ROGUE RIVER BASIN

14330000 ROGUE RIVER BELOW PROSPECT, 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	3.9	3.1	3.5	5.8	4.9	5.4	6.2	5.3	5.7	8.5	7.8	8.1
2	3.9	2.8	3.3	6.4	5.2	5.8	6.3	5.2	5.8	9.0	7.8	8.3
3	4.3	3.2	3.7	6.0	4.7	5.4	6.0	4.8	5.5	9.6	7.9	8.7
4	4.6	3.5	4.1	6.8	5.1	5.8	5.6	4.1	4.8	9.8	8.8	9.2
5	4.5	3.8	4.2	6.6	5.2	5.9	6.2	4.8	5.5	9.3	8.5	9.0
6	4.0	3.3	3.6	6.7	5.1	5.9	7.3	5.4	6.3	8.5	7.8	8.1
7	3.8	2.9	3.3	7.2	5.5	6.3	7.2	5.5	6.5	8.8	7.4	8.1
8	3.4	2.5	3.0	7.2	5.5	6.4	5.5	4.7	5.0	8.9	8.2	8.6
9	3.7	2.5	3.1	7.0	5.6	6.3	6.2	4.7	5.4	8.2	7.0	7.5
10	3.7	2.6	3.2	7.3	5.5	6.4	6.8	4.9	5.9	7.0	6.2	6.6
11	3.9	2.7	3.3	7.6	5.7	6.6	7.2	6.4	6.7	8.6	6.6	7.5
12	4.2	3.1	3.6	7.7	5.9	6.7	6.5	4.8	5.7	9.1	7.3	8.2
13	4.8	4.0	4.4	7.1	5.5	6.3	5.1	4.1	4.6	9.8	8.3	9.0
14	4.5	3.6	4.1	6.6	4.8	5.7	6.0	4.1	4.9	10.5	9.3	9.8
15	3.7	2.8	3.3	6.4	4.7	5.5	6.7	4.8	5.7	10.2	9.2	9.9
16	3.8	2.5	3.1	5.7	4.9	5.4	6.3	5.7	6.0	9.3	8.1	8.6
17	4.4	2.8	3.6	6.5	5.2	5.8	6.1	5.5	5.8	8.1	7.3	7.5
18	4.9	3.5	4.2	6.7	5.6	6.2	6.1	4.9	5.4	8.0	7.2	7.6
19	5.7	4.7	5.1	7.1	6.3	6.6	6.3	4.8	5.5	8.8	7.4	8.0
20	5.9	5.3	5.5	6.6	5.8	6.2	6.6	5.3	6.0	9.0	8.2	8.6
21	5.6	4.5	5.0	6.0	5.2	5.6	7.4	5.7	6.5	8.9	7.4	8.2
22	5.5	4.2	4.8	6.9	5.3	6.0	8.3	6.2	7.2	10.4	8.4	9.2
23	5.7	4.3	4.9	6.4	5.6	6.1	7.7	7.1	7.3	9.8	8.2	9.0
24	5.7	4.3	5.0	5.7	4.7	5.2	7.7	6.5	7.1	10.6	8.4	9.4
25	5.6	4.2	4.9	5.8	4.7	5.2	8.5	7.1	7.7	11.7	9.4	10.4
26	5.6	4.2	5.0	5.8	5.2	5.5	8.8	7.2	7.9	12.7	10.3	11.4
27	5.9	4.7	5.4	6.1	5.6	5.8	8.9	7.4	8.1	13.2	11.3	12.0
28	6.4	5.4	5.9	5.7	4.3	5.0	8.0	7.5	7.8	12.0	10.2	10.9
29	---	---	---	4.3	2.9	3.4	8.5	7.2	7.8	10.9	9.7	10.0
30	---	---	---	5.1	3.1	4.1	9.3	7.6	8.3	10.9	9.5	10.0
31	---	---	---	6.2	4.1	5.1	---	---	---	11.7	10.3	10.9
MONTH	6.4	2.5	4.1	7.7	2.9	5.7	9.3	4.1	6.3	13.2	6.2	9.0
JUNE			JULY			AUGUST			SEPTEMBER			
1	10.8	9.6	10.1	15.0	12.2	13.5	14.8	13.1	14.0	11.9	10.2	11.1
2	---	8.9	---	14.2	11.8	13.0	15.0	10.3	13.7	12.2	10.9	11.5
3	---	---	---	14.2	11.2	12.6	14.8	12.3	13.6	11.6	10.8	11.2
4	---	---	---	14.3	11.3	12.7	15.0	12.5	13.7	11.0	10.0	10.7
5	---	---	---	14.6	11.7	13.0	15.4	12.9	14.0	11.0	9.5	10.4
6	---	---	---	14.8	12.1	13.4	15.3	13.0	14.2	10.8	9.5	10.4
7	8.3	7.1	7.7	15.1	12.4	13.6	14.8	12.8	14.0	11.3	9.8	10.6
8	9.9	6.8	8.2	14.3	12.2	13.3	15.0	12.7	13.9	11.4	10.2	10.8
9	10.9	8.4	9.6	13.6	11.8	12.8	14.6	11.8	13.6	12.0	10.4	10.9
10	10.9	9.0	10	13.4	11.6	12.4	14.4	11.8	13.2	11.0	9.8	10.2
11	11.3	9.8	10.4	13.9	11.2	12.4	13.8	11.7	12.8	10.0	8.9	9.5
12	11.8	9.3	10.4	14.5	11.5	12.8	13.5	11.6	12.5	9.7	8.6	9.2
13	12.6	9.9	11.1	14.7	11.8	13.1	13.9	11.6	12.7	9.8	8.5	9.2
14	12.6	10.6	11.5	15.0	12.0	13.4	14.1	12.1	13.1	10.0	8.7	9.4
15	12.0	9.6	10.8	15.5	12.4	13.9	14.0	12.2	13.2	10.1	8.9	9.6
16	11.1	9.9	10.3	15.6	12.9	14.2	14.0	12.2	13.2	9.9	9.0	9.5
17	9.9	8.9	9.2	15.7	13.0	14.2	13.8	12.0	13.1	10.0	9.0	9.5
18	9.5	8.6	9.0	15.8	13.1	14.3	13.9	12.0	13.0	9.8	8.5	9.2
19	11.2	8.5	9.7	15.8	12.4	14.3	13.8	12.0	12.9	9.8	8.5	9.2
20	12.8	9.5	11.0	15.6	12.9	14.2	14.0	12.0	13.1	10.0	8.8	9.4
21	13.2	10.9	11.9	14.7	12.9	13.6	13.7	12.3	13.1	10.2	9.1	9.7
22	13.4	11.2	12.2	15.1	12.4	13.8	13.4	12.2	12.8	10.0	9.1	9.5
23	13.7	10.7	12.1	15.3	12.6	13.9	13.1	11.7	12.5	9.6	9.0	9.2
24	14.3	11.3	12.6	15.2	12.6	13.8	12.4	11.0	12.0	9.0	8.1	8.6
25	13.6	11.7	12.6	14.5	12.1	13.3	12.5	11.1	11.9	8.5	7.5	8.1
26	13.0	10.8	11.9	14.6	12.1	13.3	12.8	11.3	12.0	8.5	7.4	8.0
27	12.2	11.1	11.7	14.9	12.2	13.5	12.7	11.3	12.0	9.2	8.1	8.6
28	12.7	10.3	11.5	15.2	12.7	13.9	12.4	11.2	11.8	9.4	8.2	8.9
29	14.2	10.9	12.4	15.4	12.9	14.1	12.4	11.1	11.7	9.5	8.3	8.9
30	14.9	11.8	13.2	15.3	12.8	14.1	11.3	10.1	10.9	9.7	8.6	9.2
31	---	---	---	15.3	13.0	14.1	11.5	9.9	10.7	---	---	---
MONTH	14.9	6.8	10.8	15.8	11.2	13.5	15.4	9.9	12.9	12.2	7.4	9.7
YEAR	15.8	1.5	7.6									

ROGUE RIVER BASIN

14332000 SOUTH FORK ROGUE RIVER NEAR PROSPECT, OR

LOCATION.--Lat 42°42'30", long 122°23'30", in SE ¼ SW ¼ sec.7, T.33 S., R.4 E., Jackson County, Hydrologic Unit 17100307, in Rogue River National Forest, on left bank 0.3 mi downstream from South Fork dam and intake of South Fork power canal, 0.31 mi downstream from Innaha Creek, 5.6 mi southeast of Prospect and at mile 10.2.

DRAINAGE AREA.--83.8 mi². Drainage area at site upstream from Innaha Creek was used October 1931 to September 1949, 61.3 mi²; and Innaha Creek near Prospect, 22.2 mi².

PERIOD OF RECORD.--April 1924 to September 1931, October 1949 to current year. Equivalent records for period October 1931 to September 1949 may be obtained by combining flow of South Fork Rogue River above Innaha Creek, near Prospect and Innaha Creek near Prospect.

REVISED RECORDS.--WSP 1318: 1925(M), 1927(M), 1930(M). WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 3,300 ft above NGVD of 1929, from topographic map. Prior to Sept. 10, 1965, at site 1,000 ft upstream at different datum.

REMARKS.--No estimated daily discharges. Records fair. All records given herein do not include flow in South Fork power canal (completed in March 1932) which diverts 1,500 ft upstream from station and returns water to main stem Rogue River upstream from South Fork Rogue River; practically no storage upstream from diversion dam.

AVERAGE DISCHARGE.--59 years (water years 1925-83), 178 ft³/s, 129,000 acre-ft/yr (includes flow of South Fork power canal). 22 years (water years 1984-2005), 73.0 ft³/s, 52,910 acre-ft/yr (river only).

EXTREMES FOR PERIOD OF RECORD.--River only, maximum discharge, 7,010 ft³/s Dec. 22, 1964, gage height, 11.1 ft, from floodmark, from rating curve extended above 410 ft³/s on basis of measurement of flow over dam of 3,180 ft³/s; no flow Jan. 31, 1950, Sept. 29, 30, 1967 (entire flow diverted to canal).

Combined flow, maximum discharge, 7,010 ft³/s Dec. 22, 1964 (no flow in canal); minimum daily, about 38 ft³/s Aug. 1-31, 1931.

EXTREMES FOR CURRENT YEAR.--River only, maximum discharge, 1,280 ft³/s Dec. 9, gage height, 4.94 ft; minimum discharge, 10 ft³/s Jan. 13.

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	16	19	24	18	15	13	22	70	78	16	16	49
2	16	20	26	18	16	13	18	74	66	17	15	33
3	15	32	23	17	16	13	20	75	52	17	15	15
4	15	25	20	16	15	13	17	91	43	17	15	15
5	15	21	20	15	15	14	18	113	45	17	16	14
6	15	20	21	15	15	14	24	174	48	17	15	14
7	18	20	25	16	15	13	33	186	52	16	15	14
8	17	19	340	16	13	13	30	252	45	16	15	14
9	27	20	1,100	15	15	13	30	282	35	17	15	15
10	21	21	499	14	16	13	26	284	30	17	15	15
11	20	20	207	13	16	14	40	285	26	16	15	14
12	19	20	110	13	16	14	38	291	22	16	15	14
13	19	19	70	13	17	14	19	222	20	16	15	14
14	18	19	62	18	15	14	17	234	20	16	15	14
15	18	18	47	27	14	14	18	265	20	16	15	14
16	18	18	32	30	14	14	24	477	21	16	15	14
17	23	18	24	29	13	14	57	407	20	16	15	14
18	29	17	19	30	14	14	41	346	21	16	14	14
19	26	17	16	31	18	19	35	333	20	16	15	14
20	26	18	16	28	20	19	32	268	19	16	15	14
21	25	18	16	26	15	17	28	233	17	16	15	14
22	26	18	15	26	14	21	29	193	17	16	39	14
23	65	18	16	26	14	22	43	159	17	16	53	14
24	38	18	16	27	14	18	45	137	17	16	52	14
25	30	27	15	27	13	20	42	121	17	16	52	14
26	28	28	16	26	13	22	43	111	17	16	51	14
27	22	24	15	22	13	29	49	102	17	16	51	14
28	20	22	15	20	13	30	99	108	17	16	50	14
29	19	21	18	18	---	26	82	121	17	16	50	14
30	21	21	16	16	---	23	73	104	19	15	50	14
31	22	---	15	15	---	22	---	88	---	16	50	---
TOTAL	707	616	2,874	641	417	532	1,092	6,206	875	502	814	478
MEAN	22.8	20.5	92.7	20.7	14.9	17.2	36.4	200	29.2	16.2	26.3	15.9
MAX	65	32	1,100	31	20	30	99	477	78	17	53	49
MIN	15	17	15	13	13	13	17	70	17	15	14	14
AC-FT	1,400	1,220	5,700	1,270	827	1,060	2,170	12,310	1,740	996	1,610	948

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2005, BY WATER YEAR (WY)

	MEAN	23.2	39.5	84.1	84.9	84.4	97.7	135	166	93.9	25.1	18.8	24.9
	MAX	116	161	526	435	323	238	345	347	301	155	121	115
	(WY)	(1998)	(1997)	(1997)	(1997)	(1996)	(1993)	(1989)	(1997)	(1984)	(1997)	(1997)	(1997)
	MIN	1.85	5.38	3.80	2.87	3.42	9.91	19.9	12.8	5.23	5.30	4.11	1.16
	(WY)	(1984)	(1986)	(1987)	(1985)	(1985)	(1985)	(1988)	(1992)	(1987)	(1988)	(1986)	(1984)

ROGUE RIVER BASIN

14332000 SOUTH FORK ROGUE RIVER NEAR PROSPECT, OR—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR			FOR 2005 WATER YEAR		WATER YEARS 1984 - 2005	
ANNUAL TOTAL	21,223			15,754		73.0	
ANNUAL MEAN	58.0			43.2		224	
HIGHEST ANNUAL MEAN						1997	
LOWEST ANNUAL MEAN						17.6	
HIGHEST DAILY MEAN	1,100	Dec	9	1,100	Dec	9	2,670
LOWEST DAILY MEAN	12	Jan	3	13	Jan	11	0.22
ANNUAL SEVEN-DAY MINIMUM	13	Jan	1	13	Feb	25	0.23
ANNUAL RUNOFF (AC-FT)	42,100			31,250			52,910
10 PERCENT EXCEEDS	138			76			197
50 PERCENT EXCEEDS	20			18			18
90 PERCENT EXCEEDS	14			14			5.0



2005 Water Year
ROGUE RIVER BASIN

14332000 SOUTH FORK ROGUE RIVER NEAR PROSPECT, OR

Latitude: 42° 42' 30"

Longitude: 122° 23' 30"

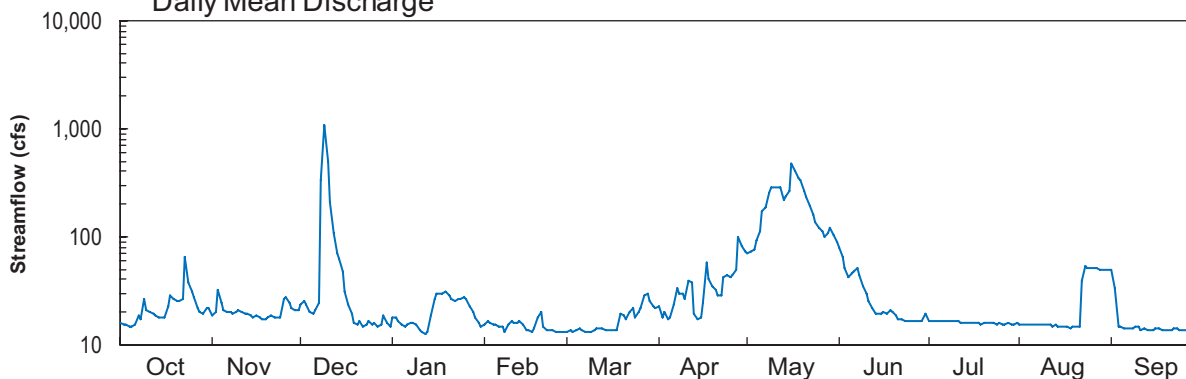
Hydrologic Unit Code: 17100307

Jackson County

Datum: 3300.00 feet

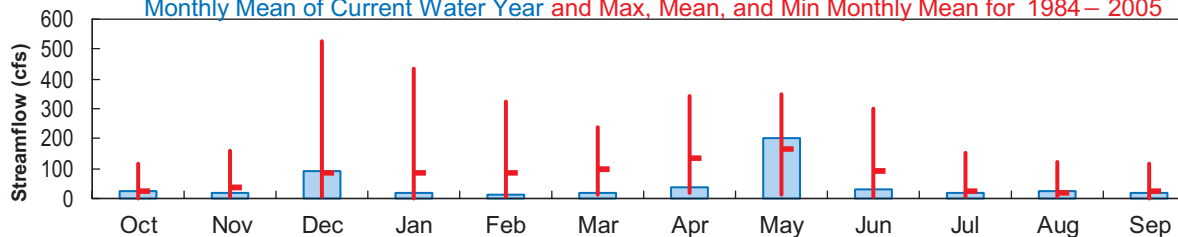
Drainage Area: 83.8 mi²

Daily Mean Discharge

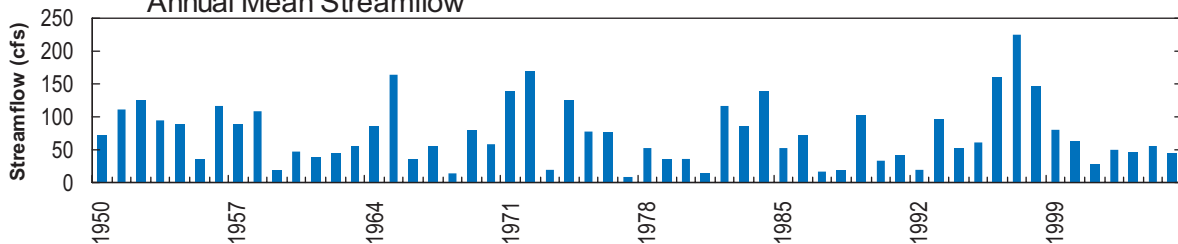


Monthly Statistics

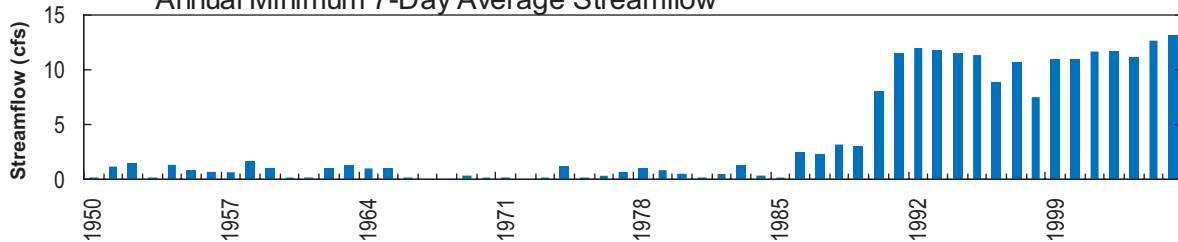
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1984–2005



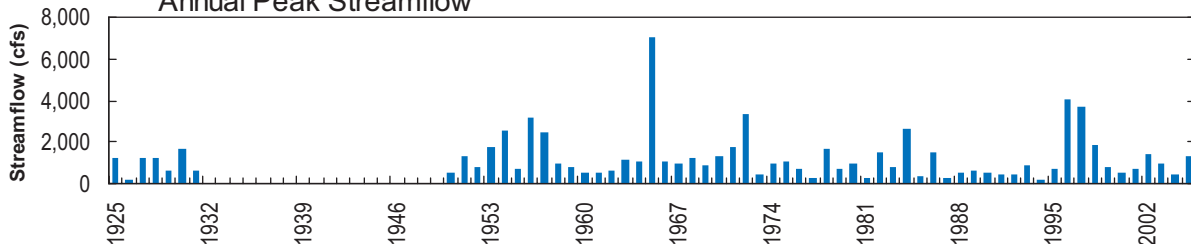
Annual Mean Streamflow



Annual Minimum 7-Day Average Streamflow



Annual Peak Streamflow



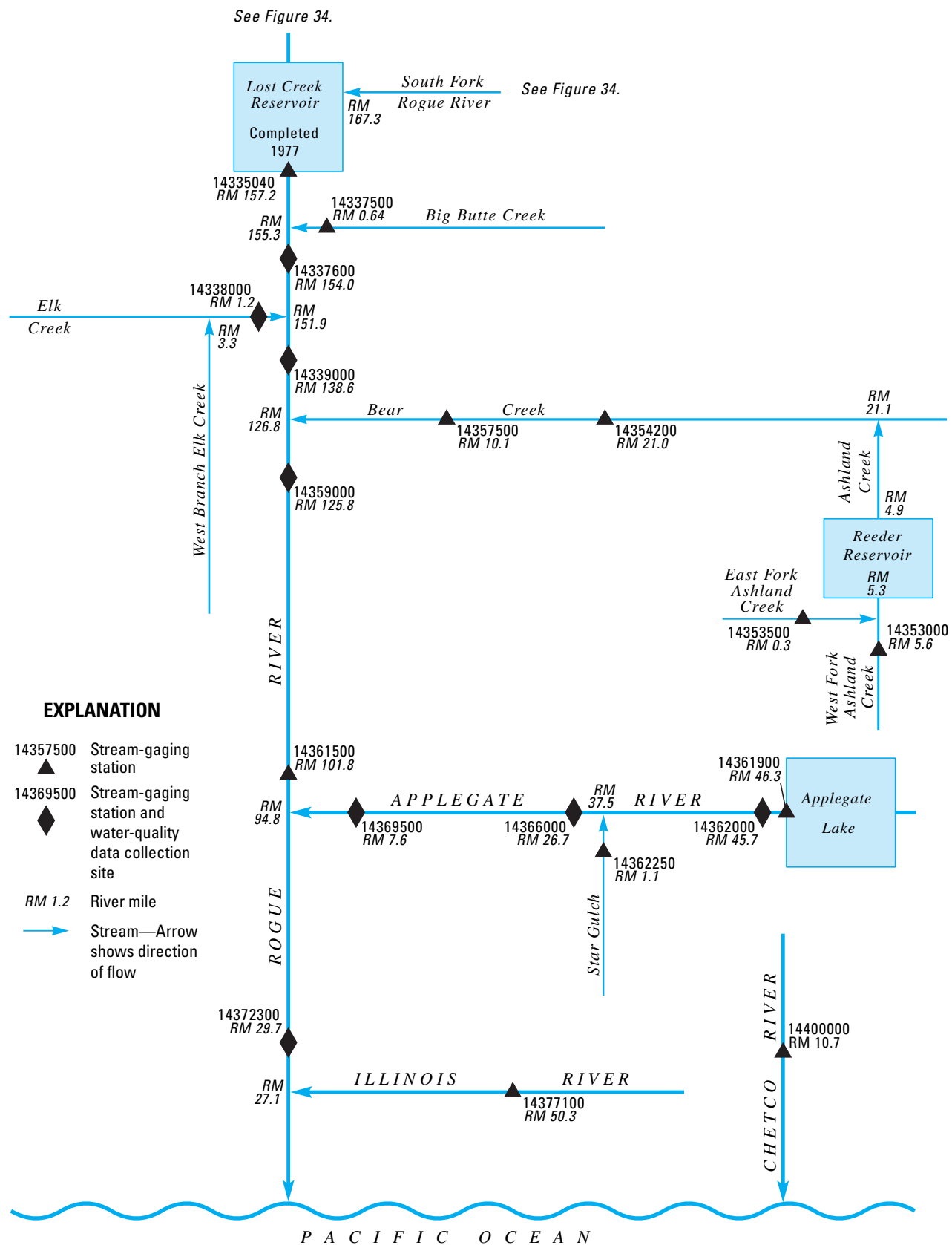


Figure 35. Schematic diagram of surface-water and water-quality stations in the Rogue River Basin, downstream from Lost Creek Reservoir.

ROGUE RIVER BASIN

14335040 LOST CREEK LAKE NEAR MCLEOD, OR

LOCATION.--Lat 42°40'16", long 122°40'25", in SW ¼ sec.26, T.33 S., R. 1 E., Jackson County, Hydrologic Unit 17100307, in outlet structure of Lost Creek Dam on Rogue River, 1.0 mi northeast of McLeod and at mile 157.2.

DRAINAGE AREA.--686 mi².

PERIOD OF RECORD.--February 1977 to current year.

REVISED RECORDS.--WDR OR-85-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Nov. 28, 1977, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by earthfill dam completed in October 1976. Storage began in February 1977. Total capacity, 465,000 acre-ft between elevations 1,551.0 ft and 1,872.0 ft, maximum pool elevation. Elevation of gated spillway crest, 1,823.0 ft. Usable storage, 315,000 acre-ft between elevation 1,751.0 ft and 1,872.0 ft. Water is used for flood control, recreation, power generation, pollution abatement, domestic use and other purposes.

COOPERATION.--Capacity table furnished by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 467,700 acre-ft May 10, 2005, elevation, 1,872.84 ft; minimum contents since first filling, 100,800 acre-ft Oct. 29, 1977, elevation, 1,720.50 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 467,700 acre-ft May 10, elevation, 1,872.84 ft; minimum contents, 279,600 acre-ft Sept. 30, elevation, 1,809.93 ft.

Capacity Table (elevation, in feet and contents, in acre-feet)

1,720	100,100	1,850	393,100
1,750	148,200	1,872	465,000
1,800	254,600	1,899	562,900

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,812.00	1,813.43	1,811.95	1,813.84	1,824.29	1,832.55	1,843.53	1,867.55	1,871.91	1,862.21	1,843.46	1,823.87
2	1,812.00	1,813.33	1,811.96	1,814.02	1,824.67	1,832.84	1,844.22	1,868.38	1,871.92	1,861.50	1,842.89	1,823.19
3	1,812.00	1,813.34	1,811.97	1,814.17	1,825.05	1,833.09	1,844.93	1,869.17	1,871.93	1,860.84	1,842.32	1,822.50
4	1,811.79	1,813.23	1,811.97	1,814.29	1,825.43	1,833.35	1,845.64	1,870.02	1,871.93	1,860.17	1,841.75	1,821.81
5	1,811.79	1,813.09	1,811.98	1,814.40	1,825.80	1,833.59	1,846.26	1,870.85	1,871.97	1,859.50	1,841.17	1,821.11
6	1,811.79	1,812.93	1,811.91	1,814.54	1,826.18	1,833.82	1,846.89	1,871.56	1,871.98	1,858.81	1,840.59	1,820.41
7	1,811.80	1,812.75	1,811.15	1,814.70	1,826.52	1,834.06	1,847.75	1,872.04	1,871.96	1,858.12	1,840.01	1,819.71
8	1,811.86	1,812.58	1,811.94	1,814.93	1,826.84	1,834.29	1,848.69	1,872.40	1,871.94	1,857.41	1,839.41	1,819.00
9	1,811.97	1,812.46	1,816.12	1,815.05	1,827.14	1,834.50	1,849.62	1,872.67	1,871.91	1,856.72	1,838.81	1,818.29
10	1,812.00	1,812.37	1,817.25	1,815.18	1,827.42	1,834.72	1,850.44	1,872.84	1,871.94	1,856.04	1,838.20	1,817.62
11	1,812.02	1,812.28	1,816.88	1,815.29	1,827.70	1,834.94	1,851.37	1,872.78	1,871.95	1,855.40	1,837.58	1,816.94
12	1,812.02	1,812.22	1,816.39	1,815.38	1,827.98	1,835.16	1,852.30	1,872.61	1,871.95	1,854.77	1,836.96	1,816.24
13	1,812.02	1,812.15	1,815.90	1,815.47	1,828.27	1,835.34	1,853.12	1,872.54	1,871.92	1,854.14	1,836.35	1,815.54
14	1,812.02	1,812.09	1,815.47	1,815.54	1,828.53	1,835.52	1,853.85	1,872.52	1,871.68	1,853.50	1,835.74	1,814.83
15	1,812.01	1,812.06	1,815.11	1,815.65	1,828.77	1,835.68	1,854.53	1,872.55	1,871.41	1,852.86	1,835.11	1,814.19
16	1,812.00	1,812.07	1,814.72	1,815.87	1,829.00	1,835.83	1,855.21	1,872.60	1,871.18	1,852.21	1,834.48	1,813.62
17	1,812.11	1,812.08	1,814.34	1,816.12	1,829.24	1,835.98	1,856.13	1,872.14	1,870.99	1,851.56	1,833.86	1,813.19
18	1,812.25	1,812.12	1,814.07	1,816.48	1,829.46	1,836.14	1,856.97	1,871.98	1,870.79	1,850.95	1,833.22	1,812.78
19	1,812.36	1,812.17	1,813.88	1,816.96	1,829.72	1,836.34	1,857.73	1,871.94	1,870.55	1,850.40	1,832.58	1,812.43
20	1,812.50	1,812.20	1,813.69	1,817.47	1,830.07	1,836.59	1,858.46	1,871.94	1,870.27	1,849.90	1,831.94	1,812.13
21	1,812.56	1,812.22	1,813.45	1,818.08	1,830.39	1,836.83	1,859.15	1,871.93	1,869.96	1,849.39	1,831.28	1,811.91
22	1,812.73	1,812.23	1,813.16	1,818.67	1,830.67	1,837.09	1,859.84	1,871.92	1,869.40	1,848.89	1,830.63	1,811.68
23	1,813.21	1,812.21	1,812.91	1,819.26	1,830.95	1,837.46	1,860.64	1,871.90	1,868.63	1,848.37	1,829.98	1,811.48
24	1,813.40	1,812.15	1,812.72	1,819.84	1,831.20	1,837.76	1,861.49	1,871.93	1,867.85	1,847.84	1,829.31	1,811.28
25	1,813.54	1,812.23	1,812.60	1,820.41	1,831.46	1,838.04	1,862.29	1,871.93	1,867.05	1,847.32	1,828.61	1,811.06
26	1,813.70	1,812.17	1,812.62	1,821.06	1,831.70	1,838.35	1,863.07	1,871.91	1,866.23	1,846.78	1,827.93	1,810.82
27	1,813.79	1,812.04	1,812.66	1,821.78	1,831.97	1,839.05	1,863.92	1,871.92	1,865.41	1,846.25	1,827.27	1,810.60
28	1,813.86	1,811.96	1,812.80	1,822.38	1,832.27	1,840.22	1,864.94	1,872.01	1,864.60	1,845.70	1,826.58	1,810.36
29	1,813.81	1,811.93	1,813.10	1,822.94	---	1,841.33	1,865.86	1,872.02	1,863.76	1,845.16	1,825.91	1,810.13
30	1,813.70	1,811.94	1,813.31	1,823.43	---	1,842.13	1,866.71	1,871.96	1,862.96	1,844.60	1,825.22	1,809.93
31	1,813.59	---	1,813.55	1,823.88	---	1,842.84	---	1,871.95	---	1,844.04	1,824.55	---
MAX	1,813.86	1,813.43	1,817.25	1,823.88	1,832.27	1,842.84	1,866.71	1,872.84	1,871.98	1,862.21	1,843.46	1,823.87
MIN	1,811.79	1,811.93	1,811.15	1,813.84	1,824.29	1,832.55	1,843.53	1,867.55	1,862.96	1,844.04	1,824.55	1,809.93
(†)	289,200	284,700	289,000	316,800	340,300	371,200	447,100	464,800	434,600	374,800	318,600	279,600
(‡)	+4,100	-4,500	+4,300	+27,800	+23,500	+30,900	+75,900	+17,700	-30,200	-59,800	-56,200	-39,000

CAL YR2004 MAX 1,872.08 MIN 1,811.15 AC-FT‡ +3,700
WTR YR2005 MAX 1,872.84 MIN 1,809.93 AC-FT‡ -5,500

† Contents, in acre-feet, at 2400, on last day of month.

‡ Change in contents, in acre-feet.

ROGUE RIVER BASIN

14337500 BIG BUTTE CREEK NEAR MCLEOD, OR

LOCATION.--Lat 42°39'05", long 122°41'25", in NE ¼ NW ¼ sec.3, T.34 S., R.1 E., Jackson County, Hydrologic Unit 17100307, on right bank 225 ft upstream from county road bridge, 0.9 mi south of McLeod and at mile 0.64.

DRAINAGE AREA.--245 mi².

PERIOD OF RECORD.--October 1945 to September 1957. October 1967 to current year.

REVISED RECORDS.--WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,525.95 ft above NGVD of 1929. Oct. 9, 1945 to Sept. 30, 1957, nonrecording gage at site 260 ft downstream at datum 0.53 ft higher.

REMARKS.--No estimated daily discharges. Records good. Slight regulation by fish hatchery 600 ft upstream from station. Several diversions in the vicinity of Butte Falls, the two largest being the city of Medford diversion and Eagle Point Irrigation District Canal. Continuous water-quality data records for the period October 1973 to September 2000 have been collected at this location.

AVERAGE DISCHARGE.--50 years (water years 1946-57, 1968-2005), 248 ft³/s, 179,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,950 ft³/s Dec. 22, 1955, gage height, 12.75 ft, site and datum then in use, from rating curve extended above 3,300 ft³/s on basis of slope-area measurement of peak flow; minimum discharge, 6.4 ft³/s June 23, 24, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 22, 1964, reached a stage of 18.6 ft, present site, from floodmark by local resident, discharge, 16,800 ft³/s, from rating curve, at former site, extended above 9,000 ft³/s and field estimate of overflow.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 9	0200	*2,140	*7.00				
						No other peak greater than base discharge.	

Minimum discharge, 34 ft³/s, Aug. 16-21, 31, Sept. 1, 2, gage height, 2.40 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	56	54	49	165	75	55	128	94	162	55	48	35
2	99	55	48	144	90	56	120	94	143	55	48	35
3	99	111	46	125	80	55	133	90	127	55	47	36
4	97	64	46	110	68	55	167	88	113	55	47	37
5	97	55	47	87	67	55	125	197	107	52	46	38
6	97	50	97	85	66	53	109	258	118	52	45	37
7	97	49	342	97	75	53	138	216	128	51	46	36
8	99	48	1,390	122	68	52	170	466	110	52	47	37
9	117	47	1,500	120	65	51	197	713	100	56	38	37
10	107	47	582	132	63	51	151	902	90	56	38	39
11	102	47	334	124	62	51	156	773	85	55	38	44
12	100	46	237	109	62	51	149	576	83	53	38	42
13	100	45	178	94	62	50	149	455	80	43	38	40
14	100	44	153	83	60	49	142	382	76	48	37	39
15	99	43	127	130	59	48	118	351	72	49	36	40
16	100	43	112	252	58	49	114	481	70	49	35	40
17	117	43	100	221	57	50	203	620	79	49	35	47
18	127	43	89	212	57	49	176	599	76	49	36	48
19	113	44	84	184	59	51	147	529	73	49	35	45
20	115	43	78	165	64	51	137	445	69	49	35	44
21	99	44	75	148	62	51	122	390	62	49	36	43
22	69	44	72	134	59	57	110	337	60	50	38	43
23	141	44	68	124	57	69	127	294	59	49	38	48
24	75	44	66	115	56	79	140	254	58	49	36	54
25	67	55	63	110	55	70	115	215	58	49	37	52
26	81	60	75	116	54	55	103	190	59	49	37	51
27	69	61	92	125	54	125	98	177	59	47	38	49
28	64	55	90	106	59	373	122	355	59	47	37	49
29	59	50	170	91	---	479	107	324	55	48	37	49
30	51	49	130	84	---	261	95	244	55	48	37	52
31	55	---	121	80	---	160	---	192	---	47	35	---
TOTAL	2,868	1,527	6,661	3,994	1,773	2,814	4,068	11,301	2,545	1,564	1,219	1,286
MEAN	92.5	50.9	215	129	63.3	90.8	136	365	84.8	50.5	39.3	42.9
MAX	141	111	1,500	252	90	479	203	902	162	56	48	54
MIN	51	43	46	80	54	48	95	88	55	43	35	35
AC-FT	5,690	3,030	13,210	7,920	3,520	5,580	8,070	22,420	5,050	3,100	2,420	2,550

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2005, BY WATER YEAR (WY)

	120	177	379	459	455	461	353	236	132	77.0	65.0	68.3
MEAN	120	177	379	459	455	461	353	236	132	77.0	65.0	68.3
MAX	330	535	1,542	1,325	1,234	1,362	723	492	450	148	121	106
(WY)	(1951)	(1974)	(1997)	(1956)	(1996)	(1972)	(1974)	(1953)	(1953)	(1948)	(1956)	(1948)
MIN	64.4	39.2	58.0	64.2	63.3	90.8	73.4	57.0	42.3	36.7	33.1	42.9
(WY)	(1982)	(2003)	(1977)	(1977)	(2005)	(2005)	(1977)	(1968)	(2001)	(1968)	(2001)	(2005)

ROGUE RIVER BASIN

14337500 BIG BUTTE CREEK NEAR MCLEOD, OR—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1946 - 2005	
ANNUAL TOTAL	56,023		41,620		248	
ANNUAL MEAN	153		114		501	1956
HIGHEST ANNUAL MEAN					74.7	2001
LOWEST ANNUAL MEAN					7,190	Jan 22, 1972
HIGHEST DAILY MEAN	1,500	Dec 9	1,500	Dec 9	15	Jun 24, 1977
LOWEST DAILY MEAN	36	Aug 19	35	Aug 16	30	Jun 23, 1977
ANNUAL SEVEN-DAY MINIMUM	37	Aug 15	35	Aug 15	179,500	
ANNUAL RUNOFF (AC-FT)	111,100		82,550		558	
10 PERCENT EXCEEDS	356		199		132	
50 PERCENT EXCEEDS	90		64		54	
90 PERCENT EXCEEDS	43		40			



2005 Water Year
ROGUE RIVER BASIN

14337500 BIG BUTTE CREEK NEAR MCLEOD, OR

Latitude: 42° 39' 05"

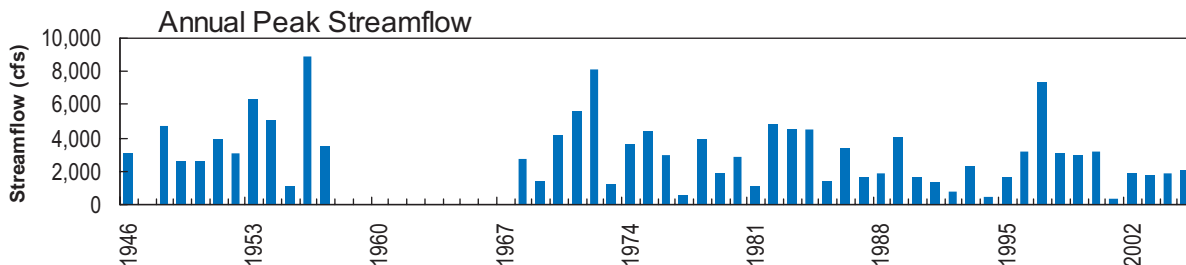
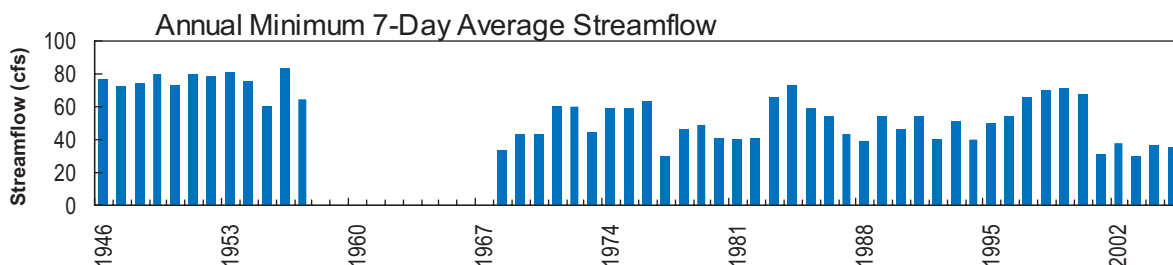
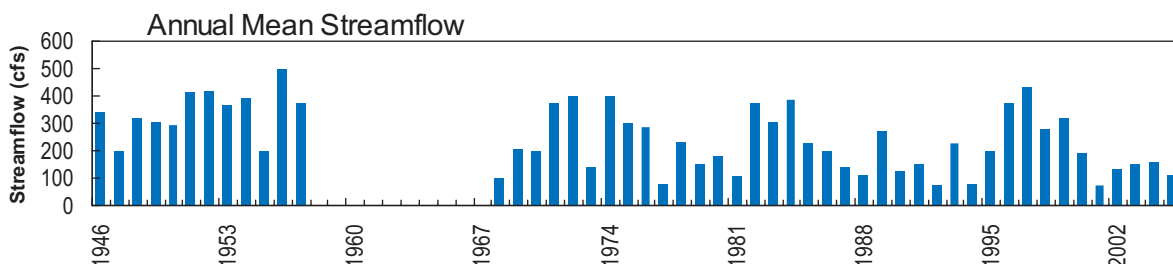
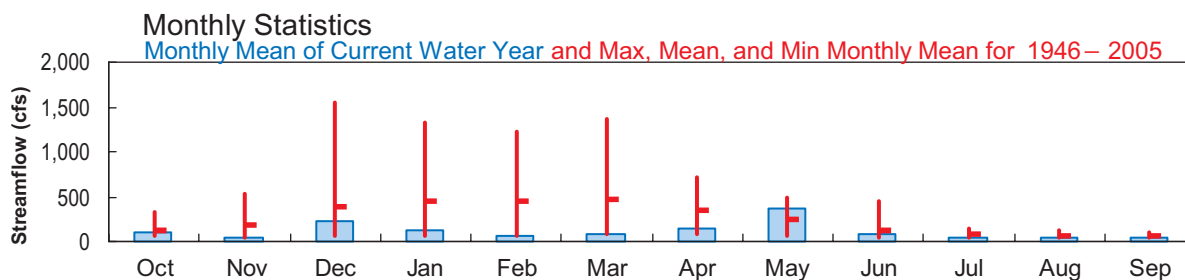
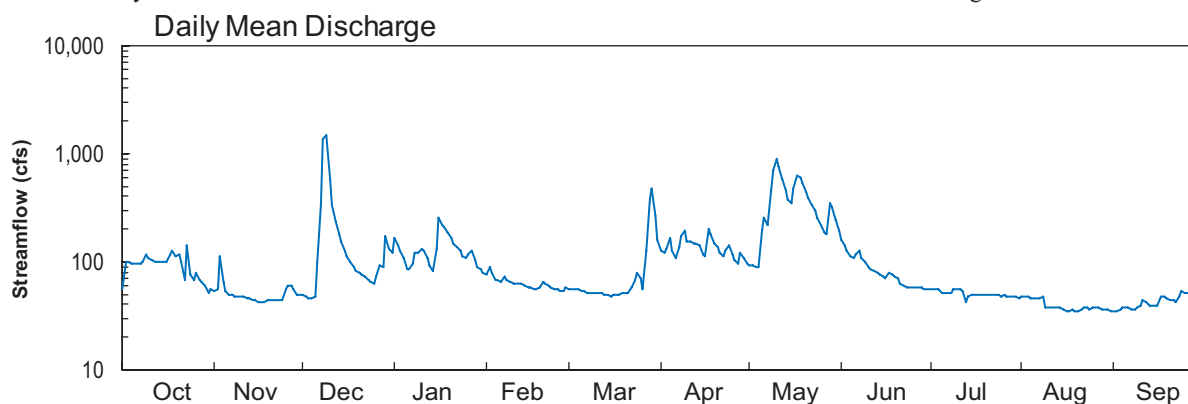
Longitude: 122° 41' 25"

Hydrologic Unit Code: 17100307

Jackson County

Datum: 1525.95 feet

Drainage Area: 245 mi²



ROGUE RIVER BASIN

14337600 ROGUE RIVER NEAR MCLEOD, OR

LOCATION.--Lat 42°39'20", long 122°42'50", in SW ¼ sec.33, T.33 S., R.1 E., Jackson County, Hydrologic Unit 17100307, on left bank at Obstinate J Ranch, 1.3 mi downstream from Big Butte Creek, 1.6 mi southwest of McLeod and at mile 154.0.

DRAINAGE AREA.--938 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,489.08 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since February 1977 by Lost Creek Lake (station 14335040). Diversions for irrigation upstream from station; most of low flow of Big Butte Creek is diverted near Butte Falls.

AVERAGE DISCHARGE.--12 years (water years 1966-77), 2,176 ft³/s, 1,577,000 acre-ft/yr. 28 years (water years 1978-2005), 2,025 ft³/s, 1,467,000 acre-ft/yr, regulated period.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,000 ft³/s Mar. 3, 1972, gage height, 12.24 ft; minimum discharge, 468 ft³/s Feb. 18, 1977, result of closure of Lost Creek Dam.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1928, 20.35 ft Dec. 22, 1964, from floodmarks, discharge, 74,300 ft³/s, from slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,070 ft³/s May 16, 17, gage height, 4.66 ft; minimum discharge, 820 ft³/s Feb. 5.

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	1,030	1,270	992	1,180	883	851	848	866	2,110	2,540	1,850	1,830
2	1,020	1,280	994	1,160	896	856	845	863	1,920	2,450	1,850	1,840
3	1,020	1,330	987	1,140	872	856	860	863	1,830	2,350	1,850	1,830
4	1,020	1,280	991	1,120	855	856	895	862	1,760	2,350	1,850	1,850
5	1,010	1,270	993	1,100	862	857	856	1,090	1,690	2,330	1,840	1,830
6	1,020	1,270	1,370	1,070	866	859	838	1,440	1,900	2,340	1,840	1,830
7	1,010	1,260	2,580	1,100	877	869	866	1,740	1,950	2,340	1,850	1,830
8	1,030	1,250	3,570	1,120	872	887	896	2,940	1,870	2,350	1,850	1,840
9	1,040	1,190	4,030	1,130	863	910	920	3,920	1,770	2,350	1,840	1,830
10	1,020	1,160	4,450	1,130	864	916	870	4,530	1,630	2,330	1,840	1,830
11	1,020	1,150	4,210	1,120	864	911	877	4,510	1,620	2,230	1,840	1,840
12	1,030	1,090	3,600	1,110	861	930	869	4,170	1,590	2,140	1,840	1,840
13	1,020	1,090	3,170	1,080	861	935	866	3,540	1,600	2,140	1,840	1,840
14	1,030	1,080	3,060	1,080	862	934	855	3,350	1,980	2,150	1,830	1,830
15	1,020	1,040	2,750	1,150	861	932	832	3,350	1,970	2,140	1,830	1,730
16	1,020	1,000	2,550	1,260	861	935	856	3,980	1,960	2,140	1,830	1,630
17	1,030	987	2,340	1,230	865	935	901	4,840	1,980	2,130	1,840	1,530
18	1,040	944	2,110	1,220	864	934	880	4,320	1,980	2,040	1,830	1,430
19	1,030	945	1,930	1,200	867	937	855	4,070	1,970	1,940	1,840	1,320
20	1,040	947	1,850	1,160	870	937	834	3,560	1,970	1,840	1,790	1,240
21	1,030	948	1,860	973	865	937	829	3,300	1,970	1,850	1,780	1,150
22	1,010	961	1,860	947	860	946	846	2,980	2,370	1,840	1,830	1,150
23	1,090	1,010	1,750	928	858	921	884	2,790	2,760	1,830	1,840	1,150
24	1,030	1,050	1,620	909	856	894	899	2,510	2,760	1,850	1,850	1,160
25	1,020	1,090	1,480	910	857	870	875	2,400	2,760	1,850	1,890	1,150
26	1,030	1,250	1,390	916	854	856	861	2,350	2,760	1,850	1,860	1,160
27	1,020	1,250	1,310	927	859	918	861	2,230	2,760	1,840	1,840	1,160
28	1,020	1,150	1,160	909	862	1,120	884	2,480	2,750	1,840	1,850	1,150
29	1,140	1,040	1,170	893	---	1,210	871	2,570	2,740	1,840	1,830	1,150
30	1,260	1,020	1,140	884	---	986	868	2,480	2,660	1,840	1,840	1,120
31	1,260	---	1,130	885	---	875	---	2,170	---	1,860	1,830	---
TOTAL	32,410	33,602	64,397	32,941	24,217	28,570	25,997	87,064	63,340	64,910	57,010	46,070
MEAN	1,045	1,120	2,077	1,063	865	922	867	2,809	2,111	2,094	1,839	1,536
MAX	1,260	1,330	4,450	1,260	896	1,210	920	4,840	2,760	2,540	1,890	1,850
MIN	1,010	944	987	884	854	851	829	862	1,590	1,830	1,780	1,120
AC-FT	64,290	66,650	127,700	65,340	48,030	56,670	51,570	172,700	125,600	128,700	113,100	91,380

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2005, BY WATER YEAR (WY)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
MEAN	1,224	1,583	2,220	2,108	1,689	1,999	2,299	2,747	2,484	2,124	2,118	1,669	1,905	3,544	6,464	7,584	4,131	3,557	3,821	4,024	3,755	3,447	2,921	2,195	(1984)	(1985)	(1986)	(1987)
MAX	(1984)	(1985)	(1997)	(1997)	(1996)	(1986)	(1989)	(1996)	(1984)	(1999)	(1984)	(1983)	872	844	964	1,038	842	820	823	1,578	1,492	1,123	1,761	1,290	(1984)	(1985)	(1986)	(1987)
MIN	(1984)	(1985)	(1997)	(1997)	(1996)	(1986)	(1989)	(1996)	(1984)	(1999)	(1984)	(1983)	(1984)	(1985)	(1997)	(1997)	(1996)	(1986)	(1989)	(1996)	(1984)	(1999)	(1984)	(1983)	(1984)	(1985)	(1986)	(1987)
(WY)	(1984)	(1985)	(1997)	(1997)	(1996)	(1986)	(1989)	(1996)	(1984)	(1999)	(1984)	(1983)	(1984)	(1985)	(1997)	(1997)	(1996)	(1986)	(1989)	(1996)	(1984)	(1999)	(1984)	(1983)	(1984)	(1985)	(1986)	(1987)

ROGUE RIVER BASIN

14337600 ROGUE RIVER NEAR MCLEOD, OR—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1978 - 2005	
ANNUAL TOTAL	697,579		560,528			
ANNUAL MEAN	1,906		1,536		2,025	
HIGHEST ANNUAL MEAN					3,224	1997
LOWEST ANNUAL MEAN					1,314	1992
HIGHEST DAILY MEAN	4,450	Dec 10	4,840	May 17	16,500	Jan 9, 1997
LOWEST DAILY MEAN	944	Nov 18	829	Apr 21	730	Feb 4, 1981
ANNUAL SEVEN-DAY MINIMUM	962	Nov 16	855	Apr 15	734	Feb 6, 1981
ANNUAL RUNOFF (AC-FT)	1,384,000		1,112,000		1,467,000	
10 PERCENT EXCEEDS	2,910		2,520		3,200	
50 PERCENT EXCEEDS	1,850		1,160		1,840	
90 PERCENT EXCEEDS	1,030		863		973	



2005 Water Year
ROGUE RIVER BASIN

14337600 ROGUE RIVER NEAR MCLEOD, OR

Latitude: 42° 39' 20"

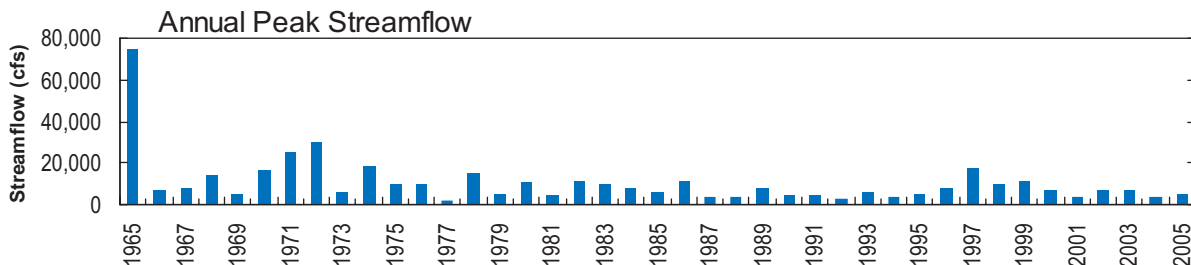
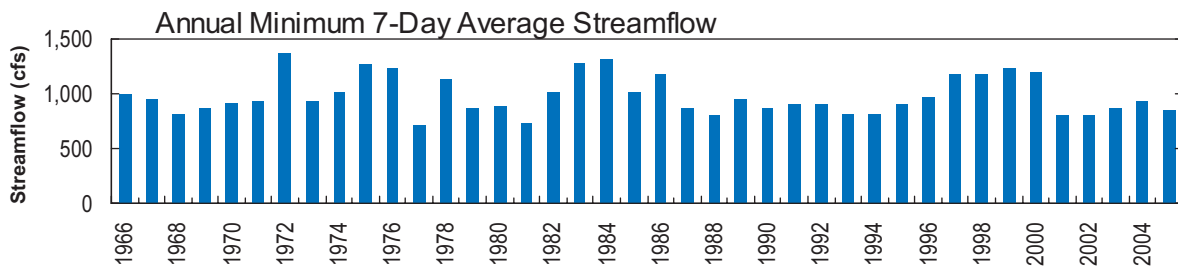
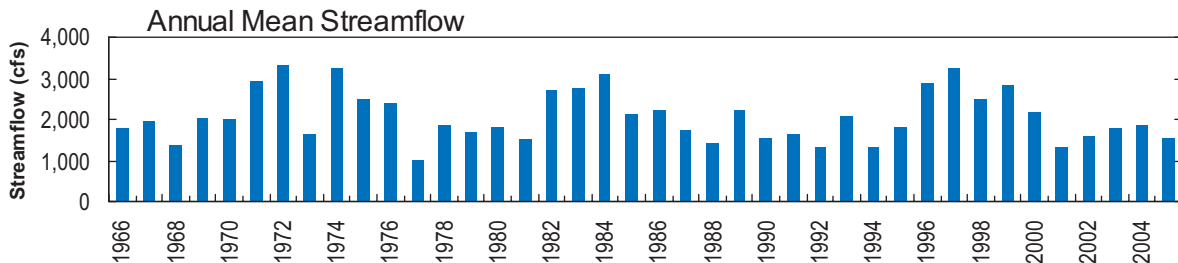
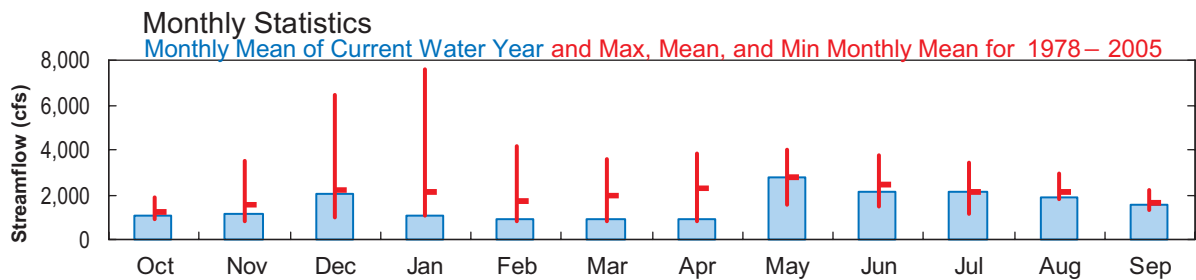
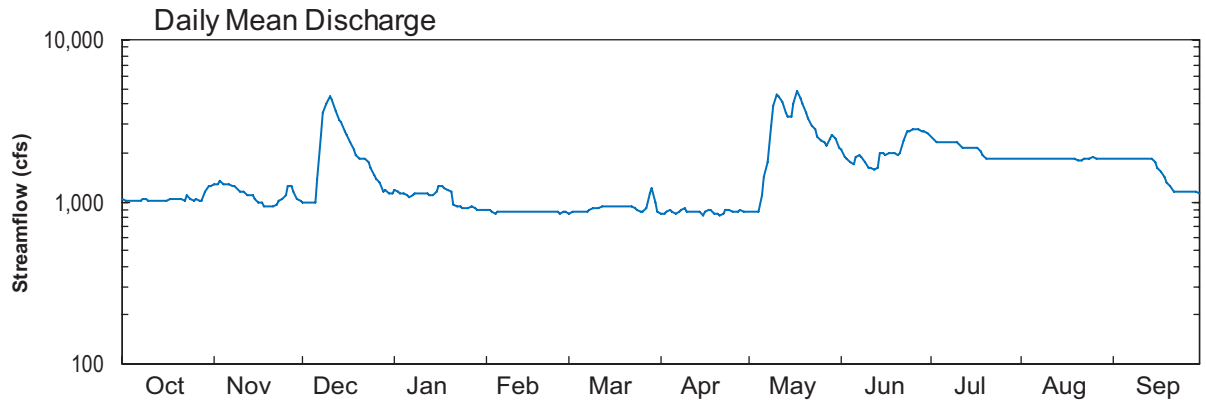
Longitude: 122° 42' 50"

Hydrologic Unit Code: 17100307

Jackson County

Datum: 1489.08 feet

Drainage Area: 938 mi²



ROGUE RIVER BASIN
14337600 ROGUE RIVER NEAR MCLEOD, OR—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: August 1970 to current year.

INSTRUMENTATION.--Temperature recorder.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 18.0°C July 17, 18, Aug. 7, 1973; minimum, 0.5°C Jan. 3-5, 14, 15, 1971. Maximum since full operation of Lost Creek Lake, 16.5°C Sept. 14, 1999, but may have been higher during period of missing record Sept. 21-30; minimum, 2.5°C Jan. 10, 1999.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 15.1°C Aug. 20; minimum, 4.4°C Jan. 21, 22.

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	10.0	8.4	9.0	7.0	6.1	6.5	7.0	6.4	6.7	5.4	4.9	5.2
2	10.0	8.4	9.0	6.7	6.3	6.5	7.2	6.4	6.7	5.6	4.9	5.2
3	9.6	8.0	8.6	7.0	5.9	6.4	7.2	6.3	6.7	5.7	5.1	5.3
4	9.6	7.9	8.6	6.9	5.8	6.2	7.0	6.4	6.6	5.4	4.8	5.1
5	9.5	7.9	8.5	6.9	5.8	6.2	6.9	6.5	6.7	5.5	4.8	5.2
6	9.4	8.0	8.6	6.8	5.9	6.2	6.8	6.2	6.6	5.6	5.2	5.4
7	9.3	7.4	8.4	6.8	5.8	6.2	7.0	6.2	6.7	5.5	5.0	5.3
8	8.9	7.0	7.7	6.8	5.8	6.2	7.1	6.4	6.8	5.1	4.6	5.0
9	8.3	7.2	7.5	6.6	5.9	6.2	7.4	7.0	7.2	5.6	4.7	5.2
10	---	---	---	6.7	6.2	6.4	7.4	7.0	7.2	5.7	5.0	5.3
11	8.0	6.7	7.2	6.7	6.0	6.2	7.3	6.8	6.9	5.5	4.9	5.1
12	8.0	6.6	7.1	6.8	6.0	6.3	6.9	6.8	6.8	5.5	4.8	5.1
13	8.1	6.6	7.2	6.8	6.1	6.3	7.0	6.7	6.9	5.4	4.7	5.0
14	8.2	6.7	7.2	6.7	5.9	6.2	6.9	6.7	6.8	5.3	4.8	5.0
15	7.7	6.5	7.0	6.6	5.9	6.3	6.9	6.7	6.8	5.3	4.8	5.0
16	7.9	6.4	7.0	6.8	6.1	6.4	6.9	6.6	6.8	5.2	4.7	4.9
17	6.9	6.7	6.8	6.8	5.9	6.3	6.9	6.5	6.6	5.2	4.6	4.9
18	---	---	---	6.8	5.9	6.3	6.7	6.3	6.5	5.6	4.9	5.1
19	7.1	6.5	6.7	6.7	5.9	6.2	6.6	6.2	6.4	5.4	4.7	5.0
20	7.5	6.4	6.8	6.8	5.9	6.3	6.5	6.2	6.3	5.3	4.8	5.0
21	7.2	6.3	6.7	6.8	5.8	6.3	6.6	6.2	6.3	5.3	4.4	4.8
22	6.7	6.3	6.5	6.8	6.0	6.3	6.4	5.9	6.1	5.4	4.4	4.8
23	7.3	6.5	6.8	7.0	6.2	6.5	6.3	5.9	6.1	5.5	4.5	4.9
24	7.4	6.4	6.7	7.0	6.4	6.6	6.3	5.8	6.0	5.7	4.6	5.0
25	7.1	6.2	6.5	6.7	6.4	6.5	6.3	5.7	5.9	5.7	5.0	5.3
26	7.5	6.4	6.7	6.7	6.4	6.5	6.0	5.6	5.8	5.7	5.4	5.5
27	7.1	6.1	6.5	6.9	6.3	6.5	6.0	5.6	5.7	5.8	5.2	5.5
28	7.0	6.5	6.6	6.8	6.0	6.4	6.0	5.5	5.7	5.5	5.1	5.3
29	7.0	6.3	6.6	7.0	6.0	6.5	6.0	5.5	5.8	6.0	4.9	5.3
30	7.0	6.1	6.3	7.0	6.4	6.7	6.0	5.5	5.7	5.7	4.9	5.1
31	6.9	6.1	6.4	---	---	---	6.0	5.3	5.5	5.7	4.9	5.1
MONTH	10.0	6.1	7.3	7.0	5.8	6.4	7.4	5.3	6.4	6.0	4.4	5.1

ROGUE RIVER BASIN

14337600 ROGUE RIVER NEAR MCLEOD, 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	5.7	4.8	5.2	5.8	4.9	5.2	8.6	7.2	7.9	12.3	9.6	10.8
2	5.9	4.9	5.3	6.0	5.1	5.4	8.4	7.2	7.7	12.0	10.1	10.8
3	5.9	5.0	5.3	6.4	4.9	5.5	7.8	6.9	7.3	12.5	10.0	10.9
4	5.7	4.9	5.2	6.5	5.3	5.7	8.2	6.6	7.4	12.1	9.6	10.6
5	5.7	4.9	5.2	6.8	5.2	5.8	8.6	7.1	7.7	11.8	9.8	10.6
6	5.3	4.8	5.0	6.8	5.2	5.8	9.4	7.4	8.1	11.4	10.0	10.6
7	5.9	4.8	5.2	7.0	5.4	6.0	8.3	7.3	7.9	11.2	9.4	10.3
8	5.8	4.7	5.2	7.3	5.4	6.3	8.0	7.4	7.6	11.4	9.8	10.3
9	5.9	4.7	5.1	7.8	6.4	7.0	9.5	7.4	8.3	11.5	9.2	10.3
10	6.0	4.8	5.2	8.1	6.4	6.9	9.7	7.5	8.4	9.8	8.4	8.9
11	5.9	4.7	5.1	8.2	6.4	7.0	10.1	8.5	9.1	9.1	8.0	8.4
12	5.6	4.8	5.1	8.3	6.5	7.1	9.6	7.7	8.3	9.2	8.2	8.8
13	5.7	5.0	5.3	7.8	6.6	7.1	8.9	7.4	8.1	9.6	8.7	9.2
14	5.8	4.8	5.1	7.6	5.9	6.6	10.0	7.5	8.6	10.6	9.5	10.0
15	5.8	4.5	5.1	7.9	6.0	6.7	10.4	8.0	9.1	10.3	9.1	9.8
16	6.0	4.5	5.1	7.2	6.4	6.9	9.8	9.0	9.3	10.0	9.1	9.4
17	6.1	4.7	5.2	7.8	6.5	7.0	10.3	9.0	9.4	9.7	8.1	8.5
18	6.0	4.8	5.3	7.7	6.6	7.1	10.1	8.3	9.1	8.7	7.9	8.1
19	6.1	5.1	5.5	8.0	6.0	7.1	10.8	8.2	9.3	9.2	8.1	8.6
20	6.1	5.2	5.5	7.6	6.0	6.7	11.1	8.5	9.2	8.8	8.2	8.5
21	6.3	4.9	5.4	7.8	6.1	7.2	11.5	9.0	9.8	10.3	8.6	9.4
22	6.3	4.8	5.3	8.5	6.8	7.5	11.8	9.1	10.2	10.6	9.2	9.7
23	6.3	4.7	5.3	8.0	7.0	7.5	11.8	9.6	10.2	10.4	8.9	9.8
24	6.3	4.8	5.3	8.2	6.9	7.5	11.0	9.1	10.2	10.9	9.2	10.3
25	6.3	4.7	5.3	8.3	7.1	7.6	12.0	9.2	10.3	12.2	9.3	10.5
26	6.4	4.8	5.4	8.0	7.4	7.6	12.5	10.1	10.9	12.1	9.9	10.5
27	6.2	5.0	5.4	7.8	7.4	7.6	12.5	9.3	10.8	11.3	9.9	10.6
28	6.4	5.1	5.5	8.2	7.0	7.6	11.6	9.4	10.4	11.3	9.7	10.5
29	---	---	---	8.5	7.0	7.6	11.7	9.7	10.2	10.6	9.6	9.9
30	---	---	---	8.8	6.6	7.4	12.4	9.5	10.7	10.8	9.6	10.1
31	---	---	---	9.1	6.6	7.7	---	---	---	10.6	9.5	10.1
MONTH	6.4	4.5	5.3	9.1	4.9	6.8	12.5	6.6	9.1	12.5	7.9	9.8
JUNE			JULY			AUGUST			SEPTEMBER			
1	11.0	9.4	10.2	13.0	10.7	11.9	12.9	10.7	12.0	14.6	12.9	13.8
2	11.8	9.5	10.5	12.4	11.1	11.9	13.0	11.2	12.3	14.2	12.6	13.5
3	12.2	10.2	11.3	12.7	11.1	12.0	13.1	11.1	12.4	13.9	12.9	13.4
4	12.3	10.3	11.6	12.9	11.1	12.1	13.3	11.1	12.5	14.1	12.9	13.5
5	12.2	10.2	11.2	12.7	11.2	12.0	13.4	11.2	12.6	14.3	12.9	13.6
6	11.9	10.0	10.6	12.8	11.2	12.1	13.6	11.5	12.7	14.3	13.1	13.6
7	11.2	10.3	10.8	12.8	10.8	12.0	13.8	11.5	12.9	14.4	13.1	13.6
8	12.0	10.3	11.0	12.8	11.1	12.0	13.8	11.5	13.0	14.3	12.2	13.3
9	12.3	10.4	11.3	12.8	11.3	12.0	13.9	11.6	13.1	13.2	11.8	12.4
10	12.4	10.9	11.5	12.9	11.3	12.2	14.0	11.7	13.2	12.4	11.7	12.1
11	12.3	10.6	11.4	12.8	11.6	12.1	14.2	12.0	13.3	13.0	12.0	12.3
12	12.4	10.5	11.3	12.9	11.2	12.1	14.2	12.4	13.4	12.8	11.7	12.2
13	12.8	10.9	11.7	12.8	11.0	12.1	14.3	12.1	13.5	12.9	11.8	12.2
14	12.6	10.4	11.3	13.2	11.4	12.4	14.4	12.6	13.7	13.0	11.8	12.2
15	12.2	10.3	11.2	13.5	11.6	12.6	14.6	12.4	13.9	12.2	11.0	11.7
16	11.5	10.5	10.9	13.1	11.3	12.5	14.8	12.6	14.0	11.8	10.4	11.2
17	11.1	10.3	10.6	13.4	11.3	12.4	14.6	12.6	13.9	12.1	10.6	11.3
18	11.5	10.4	10.8	13.1	11.2	12.1	14.6	12.8	13.9	12.3	11.0	11.4
19	11.7	10.3	10.9	12.7	10.8	11.8	14.8	13.1	14.0	12.3	10.9	11.4
20	11.9	9.9	11.0	12.9	10.4	11.6	15.1	13.2	14.2	12.5	10.9	11.5
21	12.0	10.2	11.3	12.5	10.7	11.6	15.0	12.8	14.1	12.5	10.8	11.5
22	11.8	10.4	11.3	13.3	10.9	11.8	14.8	12.7	14.0	11.2	9.9	10.7
23	11.7	10.6	11.2	13.3	10.8	12.2	14.8	12.9	14.0	10.7	9.6	10.0
24	12.0	10.5	11.3	12.9	10.6	12.1	14.2	12.7	13.5	11.1	9.5	10.0
25	11.9	10.8	11.3	13.2	11.1	12.2	14.3	13.0	13.6	11.0	9.4	10.0
26	12.0	10.5	11.4	13.2	11.3	12.5	14.6	13.1	13.8	11.0	9.4	10.0
27	11.7	10.6	11.3	13.1	11.4	12.2	14.5	13.1	13.7	11.2	9.7	10.3
28	12.0	10.8	11.4	12.6	10.5	11.9	14.5	12.8	13.7	10.8	9.3	9.9
29	11.8	10.5	11.2	12.6	10.5	11.9	14.1	13.0	13.6	10.9	9.2	9.9
30	12.0	10.4	11.3	12.7	10.3	11.9	14.6	13.3	13.9	10.9	9.3	10
31	---	---	---	12.9	10.5	12.0	14.5	13.3	13.8	---	---	---
MONTH	12.8	9.4	11.1	13.5	10.3	12.1	15.1	10.7	13.4	14.6	9.2	11.8
YEAR	15.1	4.4	8.7									

ROGUE RIVER BASIN

14338000 ELK CREEK NEAR TRAIL, OR

LOCATION.--Lat 42°40'44", long 122°44'27", in NE ¼ NW ¼ sec.30, T.33 S., R.1 E., Jackson County, Hydrologic Unit 17100307, on right bank 4.5 mi northeast of Trail and at mile 1.5.

DRAINAGE AREA.--129 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1945 to current year. Prior to March 1946 monthly discharge only, published in WSP 1318.

REVISED RECORDS.--WDR OR-89-2: Drainage area. WDR OR-92-1: 1989(M), 1990(M), 1991(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,493.91 ft above NGVD of 1929. Prior to July 5, 1946, nonrecording gage at various sites within 1.0 mi of present site at different datums. July 5, 1946 to June 22, 1950, nonrecording gage, and June 23, 1950 to May 23, 1954, water-stage recorder, at site 0.5 mi downstream at datum 25.21 ft lower, May 24, 1954 to Sept. 30, 1988 at site 0.8 mi downstream at datum 37.35 ft lower.

REMARKS.--Records good except for estimated daily discharges which are poor. Diversions for irrigation and fish hatchery operation upstream from station. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--59 years (water years 1947-2005), 215 ft³/s, 155,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,200 ft³/s Dec. 22, 1964, gage height, 18.84 ft, from rating curve extended above 4,700 ft³/s on basis of slope-area measurement of peak flow, site and datum then in use; minimum discharge, 0.01 ft³/s Oct. 8, 1987, result of dam construction 1.3 mi upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 9	1100	*3,830	*8.64				

No other peak greater than base discharge.

Minimum discharge, 4.2 ft³/s, Aug. 28, 29, gage height, 0.96 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	7.9	37	37	197	108	55	375	165	96	32	9.8	5.4
2	7.4	33	35	198	98	55	321	155	90	30	9.4	5.0
3	7.1	117	33	164	91	52	300	141	83	29	9.5	5.0
4	6.7	90	31	149	88	50	377	136	78	27	9.0	5.2
5	6.3	63	31	131	85	47	355	173	75	26	8.1	5.5
6	6.3	47	45	115	82	45	309	186	86	25	7.2	5.4
7	6.6	38	232	115	82	44	352	188	97	25	6.9	5.2
8	7.2	33	1,830	130	76	43	564	309	94	24	7.4	5.0
9	15	29	2,920	120	72	42	727	668	89	26	6.8	4.4
10	15	26	1,370	117	68	41	588	1,190	82	27	6.6	5.3
11	11	24	713	139	66	40	464	1,090	75	26	e6.7	9.1
12	9.9	22	443	135	64	39	386	655	69	23	e6.4	9.1
13	9.3	22	313	123	64	38	326	464	65	22	e6.6	7.8
14	8.7	21	262	112	61	36	281	341	61	21	e6.3	6.2
15	8.4	20	213	138	59	35	256	286	58	20	e6.1	5.5
16	8.4	20	163	422	56	34	235	277	58	19	e6.0	5.4
17	13	20	131	734	54	34	244	284	76	18	e5.9	7.1
18	34	19	111	994	52	35	260	317	72	18	e5.8	9.9
19	27	18	100	913	55	36	252	467	67	16	e5.9	8.1
20	20	18	90	658	65	38	228	382	59	15	e5.9	6.6
21	17	17	81	487	73	39	199	300	54	15	e5.7	5.9
22	18	17	73	369	68	52	197	245	50	16	e5.6	5.8
23	199	17	67	311	63	91	208	200	47	15	5.5	6.2
24	112	17	61	268	58	108	230	167	44	14	5.4	8.1
25	63	37	58	235	55	87	221	144	41	13	5.3	8.1
26	87	85	65	236	53	75	198	126	40	12	5.0	7.4
27	72	64	70	245	51	202	186	111	40	11	4.7	6.6
28	49	53	82	198	58	809	236	135	38	11	4.4	5.9
29	37	e46	139	164	---	1,040	200	137	36	10	4.4	5.8
30	34	e40	184	139	---	701	171	120	34	9.9	4.6	5.8
31	42	---	159	122	---	443	---	106	---	9.7	5.2	---
TOTAL	965.2	1,110	10,142	8,578	1,925	4,486	9,246	9,665	1,954	605.6	198.1	191.8
MEAN	31.1	37.0	327	277	68.8	145	308	312	65.1	19.5	6.39	6.39
MAX	199	117	2,920	994	108	1,040	727	1,190	97	32	9.8	9.9
MIN	6.3	17	31	112	51	34	171	106	34	9.7	4.4	4.4
AC-FT	1,910	2,200	20,120	17,010	3,820	8,900	18,340	19,170	3,880	1,200	393	380

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2005, BY WATER YEAR (WY)

MEAN	29.0	175	435	515	495	408	284	163	58.2	14.7	6.44	7.03
MAX	404	1,008	1,851	1,283	1,131	1,074	565	358	254	36.1	25.1	43.7
(WY)	(1951)	(1974)	(1965)	(1965)	(1958)	(1972)	(1956)	(1975)	(1953)	(1953)	(1976)	(1986)
MIN	3.17	8.92	13.1	19.8	23.1	45.4	65.8	21.6	7.42	1.39	0.21	0.60
(WY)	(1953)	(1994)	(1977)	(1977)	(1977)	(1992)	(1968)	(1992)	(1992)	(1994)	(1994)	(1992)

ROGUE RIVER BASIN

14338000 ELK CREEK NEAR TRAIL, OR—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1947 - 2005	
ANNUAL TOTAL	73,355.5		49,066.7			
ANNUAL MEAN	200		134		215	
HIGHEST ANNUAL MEAN					438	1974
LOWEST ANNUAL MEAN					38.4	2001
HIGHEST DAILY MEAN	2,920	Dec 9	2,920	Dec 9	12,200	Dec 22, 1964
LOWEST DAILY MEAN	4.0	Aug 13	4.4	Aug 28	0.12	Sep 1, 1994
ANNUAL SEVEN-DAY MINIMUM	4.2	Aug 12	4.8	Aug 25	0.12	Sep 1, 1994
ANNUAL RUNOFF (AC-FT)	145,500		97,320		155,500	
10 PERCENT EXCEEDS	630		315		545	
50 PERCENT EXCEEDS	62		54		65	
90 PERCENT EXCEEDS	7.1		6.3		4.6	

e Estimated



2005 Water Year
ROGUE RIVER BASIN

14338000 ELK CREEK NEAR TRAIL, OR

Latitude: 42° 40' 44"

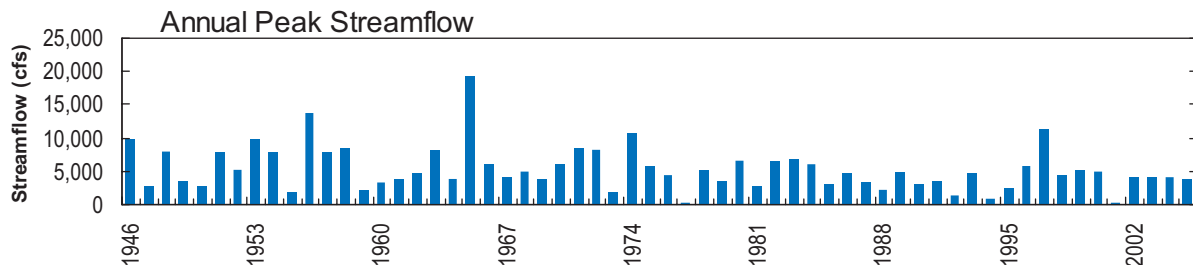
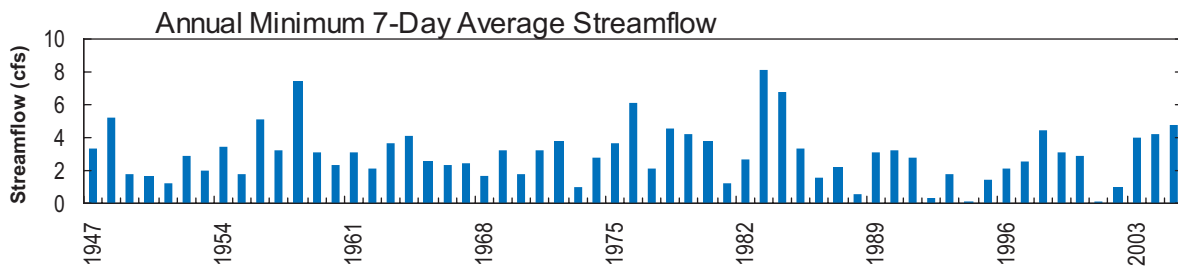
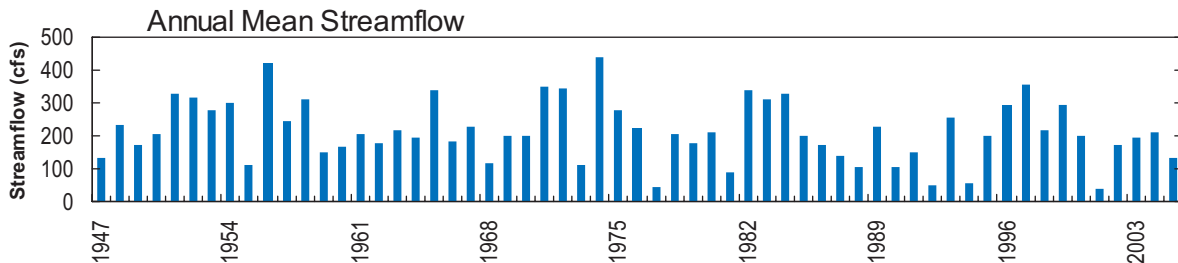
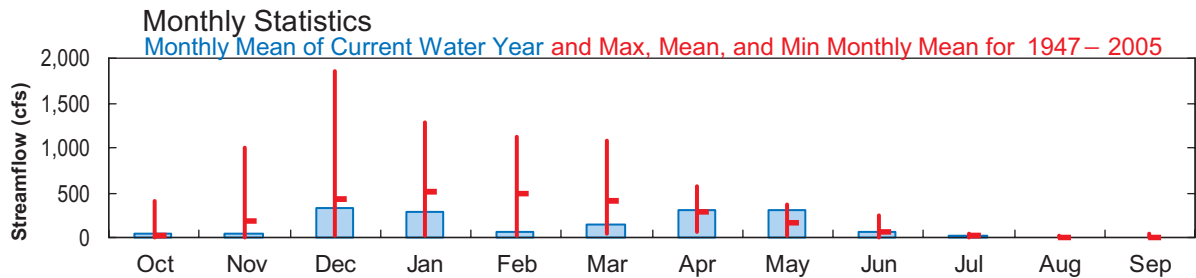
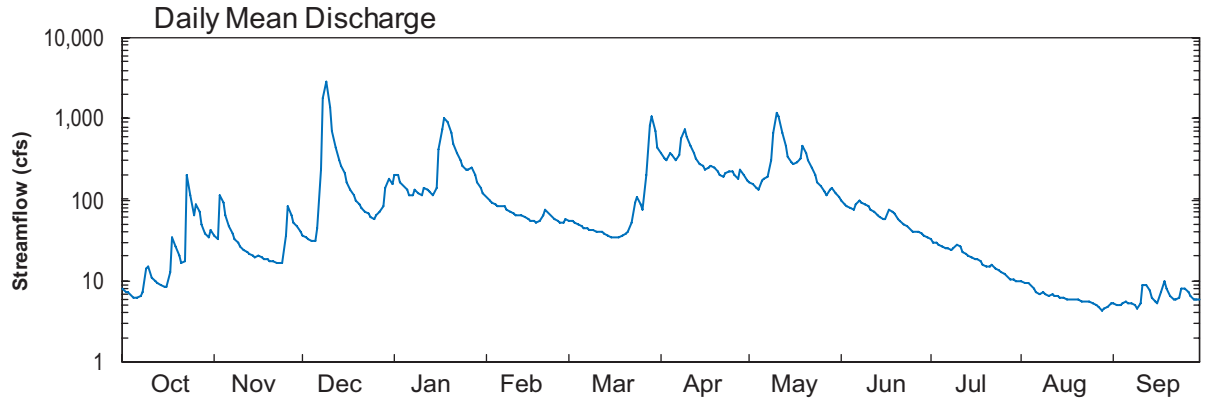
Longitude: 122° 44' 27"

Hydrologic Unit Code: 17100307

Jackson County

Datum: 1493.91 feet

Drainage Area: 129 mi²



ROGUE RIVER BASIN

14338000 ELK CREEK NEAR TRAIL, OR—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: June 1973 to current year.

TURBIDITY: October 1999 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--

WATER TEMPERATURE: Records excellent except those for the period Aug. 9 to Sept. 30, which are good.

TURBIDITY: Records poor. Turbidity data are highly dependent on the instrumentation used for the measurement. See the "Definitions" section for turbidity in the front of this report.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 33.0°C Aug. 24, 1999; minimum, 0.0°C at times during most winter periods.

TURBIDITY: Maximum recorded, 100 FNU Dec. 9, 2004 but may have been higher during periods of missing record; minimum, <1 FNU many days each year.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 27.3°C Aug. 5, but may have been higher during period of missing record; minimum, 1.0°C December 25, Jan. 8, 9.

TURBIDITY: Maximum recorded, 327 FNU Dec. 9, but may have been higher during periods of missing record; minimum, <1 FNU many days during year.

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	17.3	14.7	16.1	8.2	6.8	7.6	5.0	4.0	4.4	4.6	4.0	4.2
2	17.6	14.7	16.3	8.0	7.0	7.5	4.8	3.8	4.2	4.7	3.7	4.2
3	18.6	14.6	16.5	8.8	7.3	7.9	3.9	2.4	3.0	4.5	3.3	3.8
4	17.4	14.4	16.1	7.3	5.5	6.5	2.9	2.0	2.4	3.6	2.4	3.1
5	17.4	14.4	15.9	7.0	5.1	6.1	3.8	2.7	3.1	3.1	1.6	2.4
6	17.5	14.8	16.2	6.8	5.0	6.1	3.9	2.5	3.6	4.2	2.9	3.5
7	17.5	14.7	16.1	6.8	5.1	6.1	4.6	1.9	3.3	4.1	3.5	3.9
8	16.3	14.1	15.3	7.0	5.4	6.3	6.8	4.6	5.6	3.5	1.0	1.9
9	15.2	13.8	14.5	7.2	6.1	6.6	8.0	6.8	7.4	3.3	1.0	2.1
10	15.1	13.0	13.8	8.6	7.2	7.8	8.2	7.7	7.9	4.1	2.9	3.4
11	14.6	12.2	13.4	8.4	7.7	8.1	8.2	7.6	7.9	4.0	2.9	3.3
12	14.2	12.0	13.2	8.1	7.4	7.8	8.0	6.8	7.4	4.1	2.5	3.2
13	15.7	12.3	13.8	8.9	8.0	8.4	8.6	7.2	7.9	3.5	1.9	2.6
14	15.7	12.5	14.0	8.5	7.8	8.2	8.6	7.5	8.2	3.6	2.3	2.9
15	15.1	12.7	13.9	8.3	7.7	7.9	7.5	5.4	6.1	4.6	3.6	4.1
16	14.6	12.4	13.7	9.1	8.0	8.5	5.5	4.2	4.9	5.7	4.2	4.8
17	14.0	11.8	13.0	8.5	7.3	7.8	5.3	4.1	4.7	6.2	4.9	5.5
18	11.8	10.9	11.1	7.3	6.5	6.8	5.4	4.1	4.8	6.8	5.7	6.1
19	11.0	10.4	10.7	6.8	5.6	6.2	5.4	4.1	4.7	6.7	5.8	6.1
20	11.0	10.2	10.7	5.6	4.1	4.7	5.2	4.1	4.6	6.7	5.4	5.9
21	11.3	10.4	10.7	4.1	2.7	3.2	4.5	3.6	4.0	6.0	4.7	5.3
22	10.8	10.3	10.5	3.4	2.5	3.0	3.8	2.6	3.2	6.5	4.5	5.4
23	10.4	9.6	10.1	4.6	3.1	3.7	3.1	2.1	2.6	6.2	4.7	5.6
24	10.3	8.8	9.6	6.3	4.6	5.4	2.5	1.2	1.9	6.2	4.4	5.4
25	9.5	8.0	8.7	7.2	6.3	6.7	2.4	1.0	1.7	6.9	5.2	5.9
26	10.0	8.5	9.2	7.2	6.0	6.3	2.8	2.2	2.5	7.2	6.6	6.8
27	9.2	7.4	8.1	6.5	5.7	6.1	4.2	2.8	3.4	7.0	6.2	6.6
28	9.3	8.2	8.7	5.8	4.4	5.1	4.8	3.4	4.0	6.5	5.8	6.2
29	9.7	9.0	9.3	---	---	---	5.6	4.8	5.1	6.8	5.6	6.1
30	9.4	8.2	8.7	---	---	---	5.8	4.7	5.2	5.6	3.8	4.8
31	8.8	7.2	7.9	---	---	---	5.1	4.0	4.4	5.8	3.8	4.7
MONTH	18.6	7.2	12.4	9.1	2.5	6.5	8.6	1.0	4.6	7.2	1.0	4.5

ROGUE RIVER BASIN

14338000 ELK CREEK NEAR TRAIL, 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	5.1	3.3	4.3	8.2	6.2	7.1	9.1	7.2	8.1	13.0	10.6	11.7
2	5.1	2.9	3.9	9.4	7.0	8.0	8.8	6.9	7.9	13.5	10.7	12.0
3	5.6	3.2	4.3	8.7	6.2	7.4	8.1	6.5	7.2	14.7	10.9	12.9
4	5.7	4.0	4.8	9.0	7.2	8.0	8.6	5.7	7.0	14.6	12.1	13.4
5	5.6	4.5	5.1	9.0	6.8	8.0	9.2	6.5	7.7	13.8	12.1	12.8
6	4.9	3.6	4.1	9.7	7.0	8.3	11.0	7.1	9.0	12.4	11.0	11.5
7	5.2	3.4	4.2	10.5	7.8	9.2	10.5	7.4	8.9	13.4	10.2	11.7
8	4.1	2.4	3.3	10.9	8.4	9.7	7.6	6.3	7.0	12.6	10.9	11.7
9	4.6	2.2	3.4	10.6	8.7	9.7	9.3	6.8	7.8	10.9	9.0	9.7
10	4.6	2.2	3.4	10.9	8.3	9.6	9.6	5.9	7.7	9.7	8.4	9.0
11	4.8	2.2	3.5	11.6	8.9	10.3	9.9	7.8	8.7	11.4	8.5	9.7
12	4.9	3.1	3.9	11.9	9.4	10.7	8.6	6.6	7.5	12.7	8.7	10.5
13	5.9	4.7	5.2	11.2	9.0	10.1	7.5	5.3	6.5	13.3	9.8	11.5
14	5.4	3.5	4.4	10.1	7.8	9.0	9.6	5.5	7.3	14.4	11.2	12.7
15	4.3	2.2	3.4	9.4	7.4	8.5	9.7	5.5	7.7	13.5	11.8	12.5
16	4.7	2.3	3.5	9.1	7.3	7.9	9.3	7.6	8.4	11.8	10.7	11.3
17	5.6	2.8	4.2	9.2	7.0	8.0	8.8	7.2	8.1	10.8	9.2	10
18	6.4	4.0	5.2	10.7	8.2	9.3	9.3	6.0	7.5	11.4	9.4	10.3
19	8.0	6.2	7.0	10.5	9.6	10.1	10.2	5.5	7.9	11.8	9.3	10.6
20	8.4	7.0	7.7	10.1	8.6	9.2	10.1	6.3	8.4	11.9	9.6	10.8
21	7.8	5.6	6.8	9.2	7.8	8.5	11.1	7.5	9.3	12.1	8.8	10.5
22	7.5	5.2	6.4	10.4	8.4	9.4	12.3	7.7	10.0	13.7	10.4	11.9
23	7.7	5.2	6.5	10.1	8.2	9.2	11.7	9.6	10.4	13.4	9.2	11.4
24	7.8	5.4	6.7	8.8	6.7	7.8	12.1	8.8	10.4	14.5	9.5	11.9
25	7.8	5.5	6.8	8.6	6.5	7.6	12.5	8.8	10.6	16.1	11.0	13.5
26	7.9	5.5	6.8	8.3	7.4	7.9	13.2	9.1	11.2	17.7	12.8	15.2
27	8.1	6.4	7.3	8.5	7.7	8.1	13.0	9.8	11.6	18.7	14.6	16.6
28	8.8	7.3	8.1	7.9	7.0	7.4	11.9	10.0	11.0	18.1	13.4	15.3
29	---	---	---	8.2	6.3	7.1	12.7	9.5	11.0	13.4	12.2	12.9
30	---	---	---	8.7	6.2	7.2	14.1	10.1	12.0	15.3	11.7	13.4
31	---	---	---	9.9	5.3	7.5	---	---	---	15.1	13.4	14.4
MONTH	8.8	2.2	5.2	11.9	5.3	8.6	14.1	5.3	8.8	18.7	8.4	12.0
	JUNE			JULY			AUGUST			SEPTEMBER		
1	15.0	12.5	13.9	22.7	20.0	21.3	25.7	22.8	24.1	22.7	18.6	20.9
2	15.3	11.9	13.7	21.5	19.4	20.4	26.1	22.2	23.8	23.3	19.2	21.1
3	16.2	12.1	14.2	21.2	18.6	19.8	25.5	21.8	23.7	21.2	19.0	20.1
4	16.2	12.8	14.6	21.5	18.5	19.9	26.6	22.2	24.2	21.3	17.9	19.6
5	15.5	13.1	14.0	22.4	19.1	20.6	27.3	22.6	24.6	20.9	17.3	19.2
6	13.5	11.1	11.9	23.2	20.0	21.3	27.2	22.6	24.6	21.1	17.2	19.1
7	11.9	9.8	10.9	22.5	20.0	21.1	26.9	22.5	24.5	21.4	17.4	19.4
8	14.5	9.4	11.8	21.6	19.9	20.7	26.5	22.5	24.4	20.9	17.9	19.3
9	15.5	11.8	13.7	21.8	19.7	20.6	26.2	22.1	24.1	20.5	17.8	18.9
10	16.0	13.2	14.6	21.9	19.5	20.5	26.5	21.9	23.8	19.0	17.1	17.8
11	15.6	13.8	14.7	22.5	19.5	20.9	---	---	---	18.6	16.5	17.4
12	16.7	12.9	14.7	23.4	20.0	21.4	---	---	---	18.5	15.8	17.2
13	18.0	14.3	16.1	23.2	20.1	21.5	---	---	---	18.5	15.4	17.1
14	17.5	15.4	16.4	24.0	20.2	21.9	---	---	---	19.0	15.4	17.3
15	17.0	13.8	15.5	25.2	21.4	23.1	---	---	---	18.7	15.4	17.2
16	16.5	13.9	15.0	25.4	22.1	23.6	---	---	---	18.1	15.8	16.9
17	13.9	12.3	13.0	25.3	22.1	23.7	---	---	---	18.6	16.3	17.3
18	13.7	12.3	13.1	26.2	22.7	24.3	---	---	---	17.9	15.4	16.8
19	16.1	12.2	14.0	26.3	22.9	24.5	---	---	---	18.2	15.1	16.7
20	18.7	14.2	16.3	25.9	22.7	24.2	---	---	---	19.1	15.3	17.1
21	18.9	16.1	17.6	24.4	22.6	23.5	---	---	---	18.4	15.4	17.1
22	19.1	16.5	17.8	25.5	22.0	23.7	---	---	---	17.6	15.0	16.3
23	19.5	16.1	17.8	25.9	22.3	23.8	24.7	20.9	22.5	17.1	14.8	15.7
24	20.3	16.9	18.5	25.0	21.9	23.2	24.5	20.0	22.1	16.7	14.1	15.2
25	19.8	17.3	18.7	24.5	20.9	22.5	24.4	20.2	22.4	17.1	13.3	14.7
26	19.4	17.4	18.4	24.8	20.8	22.8	24.6	20.5	22.6	15.4	13.0	14.3
27	18.9	17.5	17.9	25.5	21.5	23.5	24.3	20.0	22.2	17.2	13.7	15.4
28	20.1	16.6	18.2	26.2	22.1	23.9	24.0	19.4	21.7	16.9	13.6	15.4
29	21.1	17.6	19.2	26.3	22.2	24.1	22.2	19.6	21.0	17.1	13.7	15.6
30	22.6	18.9	20.6	25.9	22.3	24.1	22.7	18.2	20.4	17.1	14.7	16.0
31	---	---	---	26.4	22.6	24.5	23.5	18.6	20.7	---	---	---
MONTH	22.6	9.4	15.6	26.4	18.5	22.4	27.3	18.2	23.0	23.3	13.0	17.4
YEAR	27.3	1.0	11.5									

ROGUE RIVER BASIN

14338000 ELK CREEK NEAR TRAIL, OR—Continued

TURBIDITY, WATER, MONOCHROME NEAR INFRA-RED LED LIGHT, 780-900 NM, DETECTION ANGLE 90 +/- 2.5 DEGREES, FNU
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	3	<1	<1	2	<1	<1	1	<1	<1	---	---	---
2	3	<1	<1	1	<1	<1	<1	<1	<1	---	---	---
3	2	<1	<1	13	<1	9	<1	<1	<1	---	---	---
4	2	<1	<1	8	3	5	<1	<1	<1	---	---	---
5	2	<1	<1	3	2	3	<1	<1	<1	21	10	13
6	2	<1	<1	2	1	1	44	<1	<1	10	7	9
7	2	<1	<1	2	<1	<1	122	28	36	8	5	6
8	1	<1	<1	<1	<1	<1	256	36	180	5	4	5
9	2	<1	<1	1	<1	<1	327	75	154	5	4	4
10	2	<1	1	1	<1	<1	75	31	51	4	4	4
11	1	<1	<1	<1	<1	<1	32	18	24	4	4	4
12	<1	<1	<1	2	<1	<1	21	12	16	4	4	4
13	1	<1	<1	1	<1	<1	14	8	10	4	4	4
14	1	<1	<1	1	<1	<1	9	7	8	4	4	4
15	1	<1	<1	---	---	---	8	5	6	5	4	4
16	1	<1	<1	<1	<1	<1	13	4	5	28	5	12
17	4	<1	<1	---	---	---	---	---	---	40	21	26
18	11	3	6	---	---	---	4	2	3	34	22	27
19	5	1	2	---	---	---	3	2	2	24	16	20
20	2	<1	1	---	---	---	3	2	2	18	11	13
21	1	<1	<1	---	---	---	3	1	2	12	9	10
22	2	<1	<1	---	---	---	2	<1	1	9	7	8
23	58	1	21	---	---	---	1	<1	1	8	6	7
24	14	6	9	---	---	---	2	<1	<1	6	6	6
25	7	3	4	---	---	---	2	<1	<1	6	5	5
26	12	3	5	---	---	---	1	<1	<1	5	4	5
27	6	3	4	---	---	---	2	<1	1	5	5	5
28	4	2	2	---	---	---	4	1	3	5	4	4
29	3	1	1	---	---	---	28	3	7	4	4	4
30	2	<1	1	---	---	---	17	8	11	4	3	4
31	3	<1	1	---	---	---	9	6	7	4	3	3
MAX	58	6	21	13	3	9	327	75	180	40	22	27
MIN	<1	<1	<1	<1	<1	<1	<1	<1	<1	4	3	3
FEBRUARY			MARCH			APRIL			MAY			
1	3	3	3	1	1	1	14	10	12	2	2	2
2	3	3	3	1	1	1	11	8	9	2	2	2
3	3	3	3	1	<1	1	9	7	8	2	2	2
4	3	2	3	1	<1	1	11	9	10	2	2	2
5	3	2	2	1	<1	<1	9	8	8	2	2	2
6	2	2	2	1	<1	<1	8	6	7	2	2	2
7	2	2	2	<1	<1	<1	8	6	6	2	2	2
8	2	2	2	<1	<1	<1	14	8	10	11	2	3
9	2	2	2	<1	<1	<1	19	12	15	27	11	18
10	2	2	2	<1	<1	<1	12	9	10	31	19	26
11	2	1	2	<1	<1	<1	9	7	8	25	14	19
12	2	1	1	<1	<1	<1	7	6	6	17	9	12
13	2	1	2	<1	<1	<1	6	5	6	9	6	8
14	2	1	1	<1	<1	<1	5	5	5	6	5	6
15	2	1	1	<1	<1	<1	5	4	5	5	4	4
16	1	1	1	<1	<1	<1	4	4	4	5	4	4
17	1	1	1	<1	<1	<1	4	3	4	6	4	5
18	1	1	1	<1	<1	<1	4	3	4	9	4	4
19	1	1	1	<1	<1	<1	4	3	3	11	7	8
20	1	1	1	<1	<1	<1	3	3	3	7	5	6
21	2	1	2	<1	<1	<1	3	2	3	5	4	4
22	2	2	2	<1	<1	<1	3	2	2	4	3	4
23	2	2	2	2	<1	2	3	2	2	3	2	3
24	2	1	1	4	2	4	3	2	2	2	2	2
25	1	1	1	4	3	4	3	2	2	2	2	2
26	1	1	1	3	2	2	2	2	2	2	1	2
27	1	1	1	75	2	2	2	2	2	2	1	1
28	1	<1	1	71	26	36	5	2	4	2	1	1
29	---	---	---	43	29	35	3	2	3	2	1	1
30	---	---	---	31	19	24	2	2	2	2	1	1
31	---	---	---	20	14	16	---	---	---	1	<1	1
MAX	3	3	3	75	29	36	19	12	15	31	19	26
MIN	1	<1	1	<1	<1	<1	2	2	2	1	<1	1

ROGUE RIVER BASIN

14338000 ELK CREEK NEAR TRAIL, OR—Continued

TURBIDITY, WATER, MONOCHROME NEAR INFRA-RED LED LIGHT, 780-900 NM, DETECTION ANGLE 90 +/- 2.5 DEGREES, FNU—
CONTINUED

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	1	<1	1	<1	<1	<1	---	---	---	8	2	5
2	2	1	1	2	<1	<1	---	---	---	6	2	4
3	1	<1	<1	3	<1	<1	---	---	---	6	2	4
4	<1	<1	<1	1	<1	<1	---	---	---	6	2	4
5	<1	<1	<1	5	<1	<1	1	<1	<1	5	2	4
6	<1	<1	<1	1	<1	<1	1	<1	<1	5	2	4
7	17	<1	<1	<1	<1	<1	1	<1	<1	4	2	3
8	2	<1	1	2	<1	<1	2	<1	1	4	2	3
9	2	1	1	2	<1	<1	2	<1	1	5	2	3
10	---	---	---	1	<1	<1	2	1	1	5	2	4
11	---	---	---	1	<1	<1	---	---	---	4	2	4
12	---	---	---	1	<1	<1	---	---	---	4	2	3
13	---	---	---	1	<1	<1	---	---	---	5	2	4
14	---	---	---	1	<1	<1	---	---	---	4	2	3
15	---	---	---	3	<1	<1	---	---	---	4	2	3
16	---	---	---	---	---	---	---	---	---	4	<1	2
17	---	---	---	---	---	---	---	---	---	<1	<1	<1
18	---	---	---	2	<1	<1	---	---	---	1	<1	<1
19	---	---	---	2	<1	<1	---	---	---	<1	<1	<1
20	---	---	---	1	<1	<1	---	---	---	2	<1	<1
21	1	<1	<1	2	<1	<1	---	---	---	1	<1	<1
22	1	<1	<1	4	<1	2	---	---	---	1	<1	<1
23	<1	<1	<1	3	1	2	---	---	---	2	<1	<1
24	2	<1	<1	3	2	2	4	1	3	4	<1	1
25	2	<1	<1	4	2	3	4	1	3	---	---	---
26	1	<1	<1	6	<1	4	5	1	3	---	---	---
27	<1	<1	<1	3	1	2	5	2	3	---	---	---
28	1	<1	<1	2	1	2	5	1	3	---	---	---
29	2	<1	<1	3	1	2	7	2	4	---	---	---
30	2	<1	<1	---	---	---	7	2	4	4	2	3
31	---	---	---	---	---	---	7	3	5	---	---	---
MAX	17	1	1	6	2	4	7	3	5	8	2	5
MIN	<1	<1	<1	<1	<1	<1	1	<1	<1	<1	<1	<1