

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

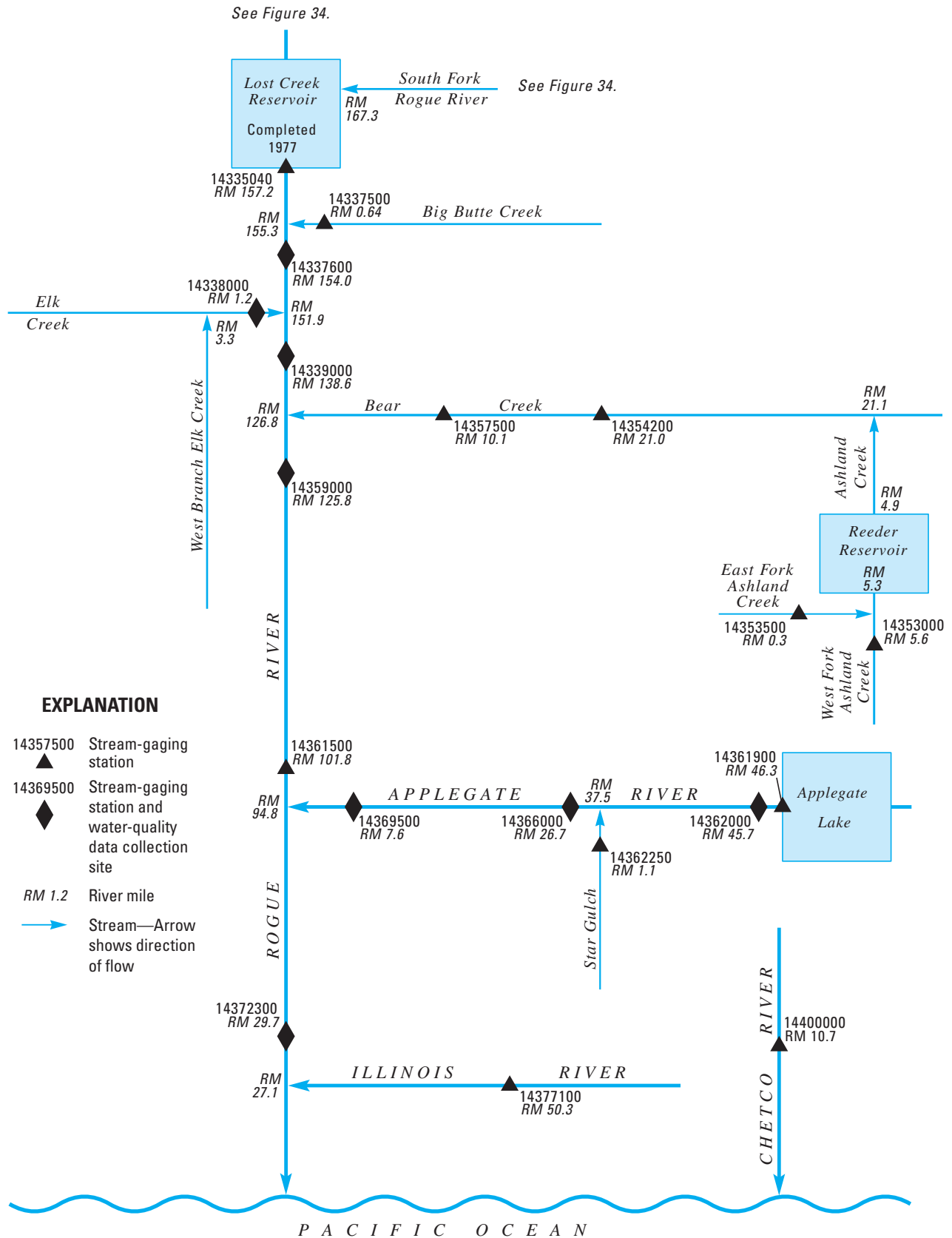


Figure 35. Schematic diagram of surface-water and water-quality stations in the Rogue River Basin, downstream from Lost Creek Reservoir.

ROGUE RIVER BASIN

14361900 APPLEGATE LAKE NEAR COPPER, OR

LOCATION.--Lat 42°03'25", long 123°06'30", in SE ¼ sec.25, T.40 S., R.4 W., Jackson County, Hydrologic Unit 17100309, in outlet structure of Applegate Dam on Applegate River, 2.5 mi northeast of former town of Copper, 13 mi south of Ruch and at mile 46.3.

DRAINAGE AREA.--223 mi².

PERIOD OF RECORD.--December 1980 to current year.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--Reservoir is formed by earthfill dam completed in October 1980. Storage began Dec. 2, 1980. Total capacity, 82,200 acre-ft between elevations 1,763.0 ft and 1,987.0 ft, maximum pool elevation. Elevation of gated spillway crest, 1,943.7 ft. Usable contents, 75,200 acre-ft between elevations 1,854.0 ft and 1,987.0 ft. Water is used for flood control, recreation, pollution abatement, irrigation, and other purposes. U.S. Army Corps of Engineers satellite telemeter at station.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 82,610 acre-ft May 11, 1997, elevation, 1,987.41 ft; minimum contents since first filling, 7,230 acre-ft Jan. 11, 1991, elevation, 1,855.1 ft, from graph of gage readings furnished by U.S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 82,470 acre-ft May 18, elevation, 1,987.27 ft; minimum contents, 15,900 acre-ft Dec. 6, elevation, 1,885.96 ft.

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	1,933.06	1,910.63	1,887.48	1,888.98	1,898.16	1,912.44	1,936.83	1,972.62	1,986.97	1,985.37	1,972.45	1,953.76
2	1,932.35	1,909.62	1,887.16	1,888.85	1,898.87	1,912.95	1,937.88	1,974.14	1,986.96	1,985.09	1,971.93	1,953.10
3	1,931.65	1,908.86	1,886.83	1,888.74	1,899.67	1,913.37	1,938.96	1,975.56	1,986.97	1,984.78	1,971.40	1,952.43
4	1,930.94	1,908.04	1,886.48	1,888.67	1,900.52	1,913.78	1,939.90	1,977.14	1,986.97	1,984.47	1,970.86	1,951.74
5	1,930.23	1,907.15	1,886.14	1,888.55	1,901.38	1,914.15	1,940.75	1,979.28	1,986.98	1,984.15	1,970.32	1,951.06
6	1,929.51	1,906.23	1,886.22	1,888.44	1,902.14	1,914.50	1,941.63	1,981.32	1,986.97	1,983.82	1,969.77	1,950.36
7	1,928.78	1,905.25	1,886.59	1,888.36	1,902.82	1,914.93	1,942.73	1,983.09	1,986.99	1,983.47	1,969.22	1,949.67
8	1,928.06	1,904.26	1,892.74	1,888.35	1,903.41	1,915.40	1,943.91	1,985.39	1,987.00	1,983.12	1,968.66	1,948.97
9	1,927.37	1,903.27	1,899.76	1,888.33	1,903.90	1,915.99	1,944.98	1,986.86	1,986.98	1,982.76	1,968.09	1,948.28
10	1,926.65	1,902.27	1,899.24	1,888.32	1,904.34	1,916.60	1,946.00	1,986.99	1,986.98	1,982.41	1,967.51	1,947.59
11	1,925.91	1,901.30	1,897.94	1,888.23	1,904.74	1,917.26	1,947.06	1,987.00	1,986.98	1,982.04	1,966.92	1,946.90
12	1,925.17	1,900.42	1,897.14	1,888.07	1,905.24	1,917.97	1,948.12	1,987.00	1,986.95	1,981.66	1,966.34	1,946.21
13	1,924.42	1,899.50	1,896.34	1,887.89	1,905.76	1,918.70	1,949.06	1,987.04	1,986.89	1,981.27	1,965.75	1,945.50
14	1,923.65	1,898.57	1,895.85	1,887.74	1,906.24	1,919.28	1,949.88	1,987.06	1,986.82	1,980.88	1,965.17	1,944.79
15	1,922.88	1,897.63	1,895.13	1,887.64	1,906.67	1,919.72	1,950.65	1,987.03	1,986.72	1,980.47	1,964.58	1,944.07
16	1,922.07	1,896.67	1,894.70	1,887.72	1,907.07	1,920.08	1,951.52	1,987.00	1,986.73	1,980.07	1,963.99	1,943.35
17	1,921.25	1,895.70	1,894.33	1,888.23	1,907.40	1,920.38	1,952.64	1,986.99	1,986.77	1,979.65	1,963.38	1,942.64
18	1,920.82	1,894.81	1,894.28	1,889.66	1,907.76	1,920.66	1,953.59	1,987.14	1,986.96	1,979.22	1,962.76	1,941.91
19	1,920.43	1,893.92	1,894.18	1,891.28	1,908.13	1,921.20	1,954.44	1,986.79	1,986.98	1,978.76	1,962.16	1,941.18
20	1,919.82	1,893.11	1,893.97	1,892.93	1,908.59	1,921.98	1,955.27	1,986.71	1,987.00	1,978.31	1,961.55	1,940.43
21	1,919.10	1,892.29	1,893.59	1,894.46	1,909.05	1,922.59	1,956.07	1,986.80	1,986.94	1,977.86	1,960.93	1,939.67
22	1,918.30	1,891.48	1,893.14	1,895.83	1,909.46	1,923.35	1,957.00	1,986.91	1,986.88	1,977.41	1,960.30	1,938.92
23	1,918.06	1,890.80	1,892.70	1,896.70	1,909.83	1,924.12	1,958.25	1,986.91	1,986.80	1,976.94	1,959.68	1,938.19
24	1,917.40	1,890.25	1,892.20	1,896.82	1,910.20	1,924.70	1,959.48	1,987.00	1,986.70	1,976.47	1,959.04	1,937.19
25	1,916.71	1,889.86	1,891.62	1,896.72	1,910.56	1,925.20	1,960.64	1,986.98	1,986.58	1,975.99	1,958.39	1,936.41
26	1,916.11	1,889.47	1,891.23	1,896.94	1,910.93	1,925.68	1,961.85	1,986.97	1,986.43	1,975.51	1,957.73	1,935.63
27	1,915.32	1,889.02	1,890.71	1,897.20	1,911.31	1,928.27	1,963.72	1,986.95	1,986.27	1,975.02	1,957.08	1,934.84
28	1,914.43	1,888.52	1,890.24	1,897.40	1,911.92	1,931.06	1,967.00	1,986.95	1,986.10	1,974.51	1,956.42	1,934.05
29	1,913.53	1,888.11	1,889.78	1,897.48	---	1,933.03	1,969.14	1,986.97	1,985.91	1,974.02	1,955.74	1,933.24
30	1,912.62	1,887.81	1,889.42	1,897.55	---	1,934.50	1,970.93	1,986.97	1,985.65	1,973.49	1,955.09	1,932.70
31	1,911.63	---	1,889.06	1,897.67	---	1,935.70	---	1,986.96	---	1,972.98	1,954.43	---
MAX	1,933.06	1,910.63	1,899.76	1,897.67	1,911.92	1,935.70	1,970.93	1,987.14	1,987.00	1,985.37	1,972.45	1,953.76
MIN	1,911.63	1,887.81	1,886.14	1,887.64	1,898.16	1,912.44	1,936.83	1,972.62	1,985.65	1,972.98	1,954.43	1,932.70
(†)	26,690	16,570	17,030	20,400	26,830	40,230	67,240	82,160	80,880	68,990	53,610	38,320
(‡)	-12,290	-10,120	+460	+3,370	+6,430	+13,400	+27,010	+14,920	-1,280	-11,890	-15,380	-15,290
CAL YR2004	MAX 1,987.06	MIN 1,886.14	AC-FT‡	+10								
WTR YR2005	MAX 1,987.14	MIN 1,886.14	AC-FT‡	-660								

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

‡ Change in contents, in acre-feet.

ROGUE RIVER BASIN

14362000 APPLEGATE RIVER NEAR COPPER, OR

LOCATION.--Lat 42°03'50", long 123°06'37", in SW ¼ NW ¼ sec.30, T.40 S., R.3 W., Jackson County, Hydrologic Unit 17100309, U.S. Army Corps of Engineers land, on left bank 0.1 mi downstream from Brushy Gulch, 0.6 mi downstream from Applegate Dam, 3.1 mi northeast of former town of Copper and at mile 45.7.

DRAINAGE AREA.--225 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to current year. Prior to January 1939 monthly discharge only, published in WSP 1318.

REVISED RECORDS.--WDR OR-78-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,747.51 ft above NGVD of 1929. Prior to Oct. 1, 1977, at site 0.6 mi upstream at datum 12.15 ft higher.

REMARKS.--No estimated daily discharges. Records good except those above 600 ft³/s, which are fair. Flow regulated since December 1980 by Applegate Lake (station 14361900). Some storage during winter in Squaw Lakes Reservoir, capacity, 1,100 acre-ft, on Squaw Creek upstream from station. Diversions upstream from station from Carberry Creek for irrigation in Thompson Creek basin. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--43 years (water years 1939-81), 438 ft³/s, 317,300 acre-ft/yr. 24 years (water years 1982-2005), 423 ft³/s, 306,200 acre-ft/yr, regulated period.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,800 ft³/s Jan. 15, 1974, gage height, 25.38 ft, site and datum then in use, from high-water mark in well, from rating curve extended above 12,000 ft³/s on basis of four slope-area measurements of peak flows made in 1950, 1955, 1964, and 1974; minimum discharge, 1.5 ft³/s Dec. 20, 1980, result of regulation at Applegate Dam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,230 ft³/s May 18, gage height, 5.19 ft; minimum discharge, 99 ft³/s May 6-8.

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	271	325	122	199	228	118	121	113	447	303	299	298
2	270	324	122	199	154	118	121	112	424	302	298	298
3	267	316	122	183	130	118	121	110	392	301	298	302
4	265	294	122	171	129	118	123	106	371	301	298	303
5	265	293	122	171	130	117	123	104	355	301	297	302
6	263	293	125	171	131	118	124	102	361	300	299	301
7	265	295	125	171	132	122	122	100	318	300	301	301
8	265	294	250	172	135	124	120	158	321	300	300	301
9	264	293	872	174	141	124	120	588	322	300	300	300
10	264	292	1,420	174	142	125	121	1,080	289	300	299	299
11	265	286	1,110	174	135	125	122	993	289	299	298	298
12	264	265	779	174	108	120	122	866	285	299	297	298
13	264	266	699	174	104	112	122	827	283	299	297	298
14	264	265	697	174	106	113	123	836	283	299	296	297
15	264	265	617	175	110	122	122	890	283	298	298	297
16	266	263	461	175	111	126	123	847	283	298	299	296
17	266	260	387	176	115	126	123	736	284	298	301	297
18	266	244	294	189	115	127	124	1,430	293	299	301	298
19	266	239	287	228	116	127	121	1,600	382	299	300	297
20	265	219	288	249	117	128	114	1,130	302	298	300	300
21	264	218	297	249	116	130	112	869	309	298	299	298
22	283	212	291	246	115	121	112	789	291	297	298	296
23	295	190	275	356	115	115	113	757	281	297	299	296
24	294	172	275	537	116	115	113	654	281	297	302	296
25	294	173	274	596	117	116	113	681	281	296	302	298
26	292	172	274	615	117	115	114	655	280	296	301	300
27	293	172	272	568	117	117	113	638	281	297	300	299
28	313	165	268	491	117	119	112	662	280	297	300	298
29	322	142	268	441	---	120	112	564	280	300	300	297
30	324	122	267	383	---	121	113	525	303	300	299	296
31	326	---	249	333	---	120	---	498	---	299	298	---
TOTAL	8,609	7,329	12,031	8,488	3,519	3,737	3,559	20,020	9,434	9,268	9,274	8,955
MEAN	278	244	388	274	126	121	119	646	314	299	299	298
MAX	326	325	1,420	615	228	130	124	1,600	447	303	302	303
MIN	263	122	122	171	104	112	112	100	280	296	296	296
AC-FT	17,080	14,540	23,860	16,840	6,980	7,410	7,060	39,710	18,710	18,380	18,390	17,760

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2005, BY WATER YEAR (WY)

MEAN	320	365	543	672	514	497	402	623	393	240	231	272
MAX	506	1,033	2,374	3,542	1,685	1,481	909	1,416	1,026	376	389	435
(WY)	(1984)	(1985)	(1982)	(1997)	(1983)	(1998)	(1982)	(1983)	(1983)	(1999)	(1999)	(1983)
MIN	77.6	79.2	121	115	112	100	118	134	69.0	58.1	65.7	65.4
(WY)	(2002)	(2002)	(1995)	(1991)	(2001)	(2002)	(1994)	(2001)	(2001)	(2001)	(2001)	(2001)

ROGUE RIVER BASIN

14362000 APPLEGATE RIVER NEAR COPPER, OR—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1982 - 2005	
ANNUAL TOTAL	130,442		104,223			
ANNUAL MEAN	356		286		423	
HIGHEST ANNUAL MEAN					829	
LOWEST ANNUAL MEAN					127	
HIGHEST DAILY MEAN	1,420	Dec 10	1,600	May 19	15,500	Jan 2, 1997
LOWEST DAILY MEAN	106	Feb 3	100	May 7	51	Jul 1, 2001
ANNUAL SEVEN-DAY MINIMUM	121	Feb 3	107	May 1	55	Jul 1, 2001
ANNUAL RUNOFF (AC-FT)	258,700		206,700		306,200	
10 PERCENT EXCEEDS	601		453		839	
50 PERCENT EXCEEDS	277		281		267	
90 PERCENT EXCEEDS	191		117		121	



2005 Water Year
ROGUE RIVER BASIN

14362000 APPLEGATE RIVER NEAR COPPER, OR

Latitude: 42° 03 ' 50"

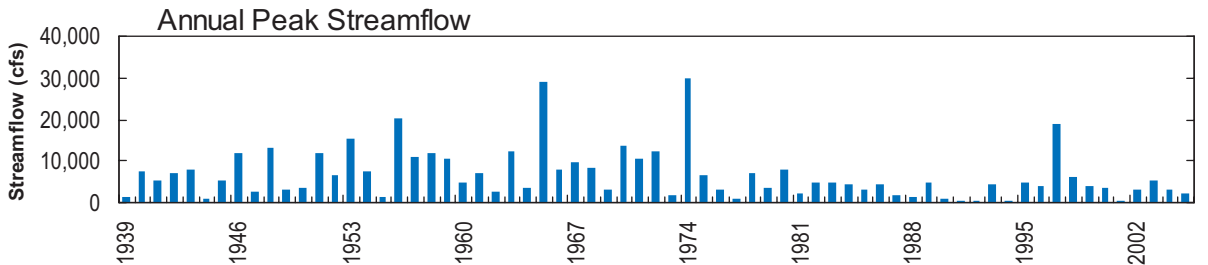
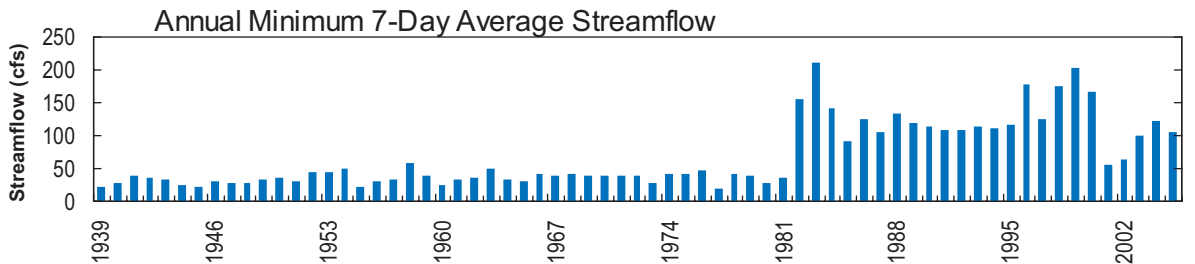
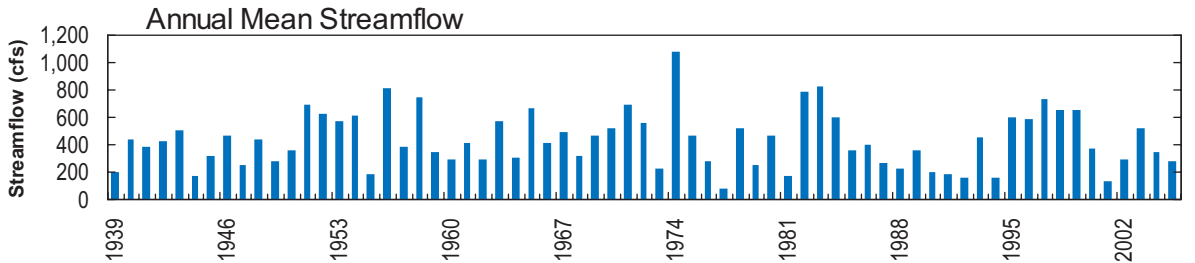
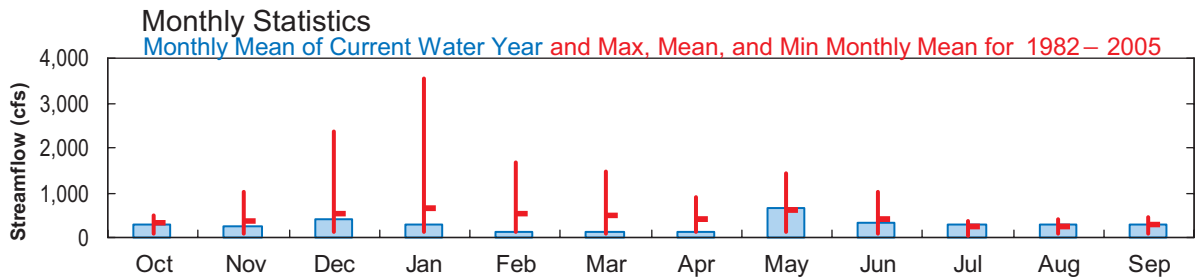
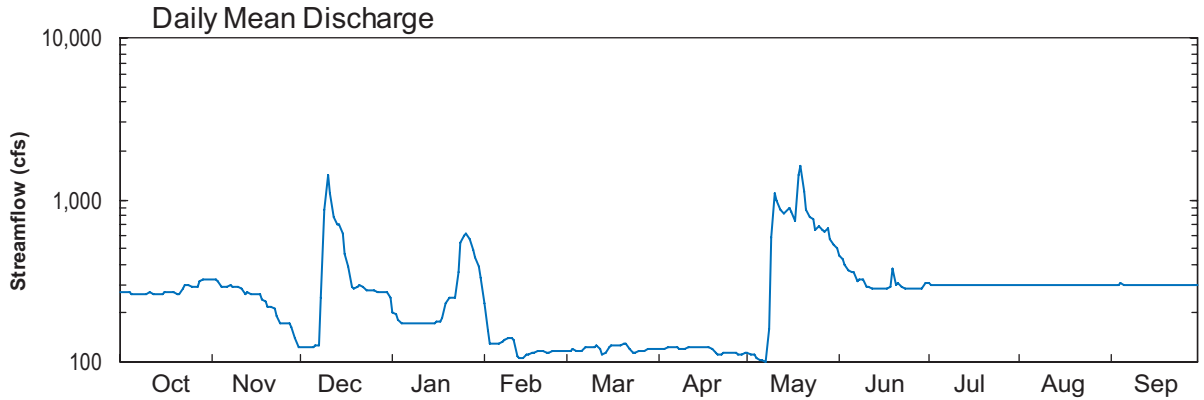
Longitude: 123° 06 ' 37"

Hydrologic Unit Code: 17100309

Jackson County

Datum: 1747.51 feet

Drainage Area: 225 mi²



ROGUE RIVER BASIN

14362000 APPLGATE RIVER NEAR COPPER, OR—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: September 1980 to September 1987.

pH: September 1980 to September 1987.

WATER TEMPERATURE: January 1977 to current year.

DISSOLVED OXYGEN: September 1980 to September 1987.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Records good. Temperatures are affected by releases from Applegate Lake.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 188 microsiemens Sept. 13, 1980; minimum, 61 microsiemens Dec. 3, 1980, Dec. 20, 1981, June 19, 20, 1983.
pH: Maximum, 9.0 units Sept. 4, 1980; minimum recorded, 7.1 units Oct. 8-10, 13, 16, 17, 1986.

WATER TEMPERATURE: Maximum, 26.5°C Aug. 7, 1978; minimum, 0.0°C on many days during winter periods prior to filling of Applegate Lake.

DISSOLVED OXYGEN: Maximum, 15.2 mg/L Feb. 17, 18, 1986; minimum, 4.9 mg/L Sept. 28-30, 1981.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 15.8°C Aug. 23; minimum, 3.8°C Jan. 16, 19, 21-23.

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	13.7	12.4	13.0	9.2	8.8	9.0	9.2	8.8	8.9	5.0	4.8	4.9
2	13.0	12.0	12.6	9.7	9.1	9.4	9.1	8.6	8.8	5.1	4.7	4.9
3	12.9	11.4	12.0	10.2	9.6	10	9.0	8.3	8.6	5.0	4.6	4.8
4	11.8	11.0	11.4	10.7	10.2	10.4	8.6	8.2	8.3	5.0	4.5	4.7
5	11.3	10.4	10.9	10.9	10.5	10.7	8.3	8.0	8.2	4.9	4.5	4.6
6	11.2	10.4	10.8	10.9	10.6	10.7	8.2	7.9	8.0	5.0	4.4	4.6
7	11.4	10.5	11.1	10.8	10.5	10.6	8.3	7.9	8.0	4.6	4.4	4.5
8	12.7	10.9	11.7	10.8	10.4	10.5	8.0	6.9	7.4	4.5	4.1	4.3
9	11.9	10.8	11.4	10.6	10.4	10.5	6.9	6.1	6.4	4.6	4.3	4.4
10	11.9	11.1	11.4	10.7	10.4	10.5	6.4	6.2	6.3	4.6	4.3	4.4
11	11.7	9.3	10.7	10.7	10.4	10.5	6.3	6.2	6.2	4.5	4.0	4.2
12	9.4	7.0	7.2	10.7	10.4	10.5	6.3	6.1	6.2	4.6	4.0	4.2
13	7.5	7.0	7.2	10.8	10.5	10.6	6.3	6.1	6.2	4.3	3.9	4.1
14	7.5	7.0	7.2	10.7	10.4	10.5	6.4	6.2	6.3	4.2	3.9	4.0
15	7.5	7.0	7.2	10.7	10.5	10.6	6.4	6.2	6.3	4.2	3.9	4.0
16	7.5	7.1	7.2	10.8	10.5	10.6	6.4	6.2	6.3	4.4	3.8	4.0
17	7.3	7.1	7.2	10.7	10.4	10.5	6.4	5.8	6.1	4.2	3.9	4.0
18	7.5	7.1	7.2	10.6	10.4	10.5	5.8	5.5	5.7	4.3	3.9	4.0
19	7.5	7.2	7.3	10.7	10.2	10.5	5.7	5.4	5.5	4.2	3.8	4.0
20	7.7	7.3	7.4	10.4	10.0	10.1	5.7	5.5	5.5	4.2	3.9	4.0
21	7.7	7.3	7.5	10.3	9.8	10.0	5.7	5.5	5.6	4.2	3.8	4.0
22	7.6	7.4	7.5	10.0	9.3	9.7	5.8	5.5	5.6	4.2	3.8	3.9
23	7.9	7.5	7.6	9.5	8.9	9.3	5.8	5.6	5.6	4.1	3.8	3.9
24	7.9	7.6	7.7	9.4	8.9	9.0	5.8	5.4	5.6	4.2	3.9	4.0
25	8.0	7.6	7.7	9.2	8.9	9.0	5.7	5.3	5.4	4.2	4.0	4.1
26	8.1	7.7	7.8	9.1	8.9	9.0	5.7	5.3	5.4	4.2	4.1	4.2
27	8.2	7.8	8.0	9.2	8.9	9.0	5.4	5.1	5.3	4.4	4.1	4.2
28	8.3	8.0	8.1	9.2	8.7	8.9	5.2	5.0	5.1	4.8	4.2	4.6
29	8.5	8.2	8.3	9.1	8.6	8.7	5.1	4.9	5.0	4.6	4.4	4.5
30	8.6	8.3	8.4	9.3	8.6	8.9	5.0	4.8	4.8	4.7	4.4	4.5
31	8.8	8.5	8.7	---	---	---	5.1	4.8	4.9	4.8	4.5	4.6
MONTH	13.7	7.0	9.0	10.9	8.6	10.0	9.2	4.8	6.4	5.1	3.8	4.3

ROGUE RIVER BASIN

14362000 APPLEGATE RIVER NEAR COPPER, 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	4.9	4.5	4.6	5.7	4.8	5.0	8.9	7.1	8.0	11.8	10.6	11.1
2	5.2	4.5	4.7	5.7	4.8	5.1	9.2	8.4	8.7	11.5	10.5	10.9
3	5.4	4.6	4.9	5.7	4.8	5.1	9.0	8.6	8.7	12.0	10.4	11.1
4	5.2	4.7	4.9	5.6	4.9	5.1	9.3	8.4	8.8	12.2	9.2	11.3
5	5.1	4.6	4.7	5.9	4.9	5.2	9.5	8.7	9.0	11.7	8.4	11.3
6	5.1	4.5	4.8	6.1	4.8	5.3	10.1	8.8	9.4	12.0	11.1	11.6
7	5.3	4.6	4.9	6.1	5.0	5.3	10.2	9.1	9.6	13.1	11.1	11.9
8	5.1	4.5	4.7	6.2	5.0	5.4	9.6	9.3	9.5	12.6	10.4	11.7
9	5.2	4.5	4.7	6.2	5.0	5.4	9.9	8.8	9.3	11.2	8.6	9.7
10	5.2	4.5	4.7	6.0	5.1	5.4	9.8	8.6	9.2	9.0	8.5	8.8
11	5.4	4.6	4.9	6.2	5.1	5.5	11.6	9.2	10.4	8.6	8.3	8.5
12	5.2	4.7	4.9	6.2	5.2	5.5	10.5	9.5	9.8	10.3	8.6	9.4
13	5.1	4.7	4.8	6.2	5.1	5.4	10.2	9.1	9.6	10.9	10.0	10.4
14	5.4	4.6	4.9	6.2	5.0	5.4	10.1	8.7	9.3	10.8	10.2	10.5
15	5.3	4.6	4.8	6.1	5.1	5.4	9.8	8.6	9.2	11.2	9.9	10.6
16	5.6	4.6	4.9	5.8	5.1	5.4	10.5	9.1	9.7	10.8	9.7	10.2
17	5.5	4.7	4.9	6.0	5.2	5.5	9.8	9.1	9.5	11.3	10.3	10.8
18	5.4	4.7	4.9	6.4	5.1	5.7	9.8	8.8	9.3	11.3	7.8	9.0
19	5.4	4.7	4.9	6.0	5.4	5.7	9.6	8.4	8.9	9.2	7.9	8.5
20	5.4	4.7	5.0	9.2	5.4	7.6	10.2	8.6	9.3	9.6	8.5	9.1
21	5.5	4.6	4.9	9.1	8.5	8.7	10.4	8.9	9.5	10.7	9.2	9.7
22	5.6	4.6	4.9	8.9	8.0	8.4	10.4	8.8	9.5	10.5	8.3	9.7
23	5.6	4.6	5.0	8.6	8.0	8.2	9.7	8.7	9.3	10.5	9.7	10.1
24	5.7	4.7	5.0	8.8	7.7	8.2	9.5	8.6	9.0	11.0	9.8	10.4
25	5.7	4.7	5.0	8.5	7.5	7.9	11.2	8.7	9.8	11.4	10.4	11.0
26	5.6	4.7	5.0	9.7	7.6	8.4	11.9	10.2	10.9	11.6	10.7	11.1
27	5.4	4.8	5.0	9.2	8.4	8.9	11.9	10.4	10.9	11.9	10.6	11.2
28	5.5	4.8	5.0	9.2	8.2	8.6	11.3	10.2	10.7	11.8	10.6	11.2
29	---	---	---	8.7	7.5	8.3	11.0	9.8	10.4	11.8	11.1	11.4
30	---	---	---	8.4	7.0	7.7	11.1	9.6	10.4	11.5	10.7	11.1
31	---	---	---	8.1	6.9	7.4	---	---	---	12.0	10.8	11.5
MONTH	5.7	4.5	4.9	9.7	4.8	6.5	11.9	7.1	9.5	13.1	7.8	10.5
	JUNE			JULY			AUGUST			SEPTEMBER		
1	12.1	10.8	11.5	13.1	11.5	12.2	11.8	11.3	11.6	12.3	11.9	12.1
2	12.1	10.9	11.6	13.0	11.3	11.8	12.1	11.5	11.8	12.4	12.0	12.2
3	12.5	11.1	11.9	12.2	11.4	11.8	12.1	11.6	11.9	12.4	11.9	12.1
4	12.7	10.8	11.9	12.3	11.7	12.0	12.3	11.8	12.0	12.5	12.0	12.2
5	13.1	11.2	12.2	12.4	11.5	11.9	12.4	11.8	12.1	12.7	12.1	12.3
6	13.1	11.5	12.0	12.4	11.0	11.6	12.5	11.8	12.2	12.8	12.2	12.5
7	12.3	10.6	11.5	12.2	11.2	11.6	11.9	11.4	11.6	12.9	12.3	12.5
8	13.1	10.9	12.4	12.3	11.2	11.7	12.0	11.4	11.7	12.9	11.8	12.4
9	12.9	12.2	12.6	12.1	11.6	11.8	12.0	11.6	11.8	12.4	11.9	12.2
10	12.9	11.3	12.3	13.2	10.6	11.9	12.0	11.6	11.8	12.5	11.9	12.2
11	12.7	11.1	12.0	11.5	10.5	11.2	12.0	11.5	11.8	12.6	11.8	12.1
12	12.9	11.9	12.5	11.6	10.6	11.1	12.0	11.6	11.8	12.7	11.9	12.3
13	13.6	12.0	12.9	11.7	10.9	11.3	12.1	11.6	11.8	12.9	11.7	12.3
14	13.6	11.8	12.8	11.9	11.3	11.6	12.3	11.7	12.0	12.6	11.4	12.0
15	13.8	12.0	12.8	12.1	11.6	11.9	12.3	11.9	12.1	12.5	10.8	11.6
16	13.6	12.3	12.8	12.8	11.4	11.9	12.3	11.9	12.1	12.5	11.2	11.8
17	13.7	12.0	12.7	12.4	11.0	11.8	12.3	11.9	12.1	12.2	11.2	11.8
18	12.3	11.0	11.7	11.5	10.9	11.3	12.3	11.9	12.1	12.7	11.9	12.2
19	13.1	11.9	12.5	11.8	11.1	11.5	12.4	12.0	12.2	12.9	12.0	12.5
20	13.3	12.2	12.7	11.8	11.2	11.6	12.6	12.2	12.3	12.8	11.9	12.3
21	13.2	12.2	12.7	12.0	11.5	11.7	12.7	12.2	12.4	12.9	11.4	12.2
22	13.2	12.2	12.7	12.2	11.4	11.8	12.6	11.6	12.2	12.4	11.6	12.0
23	13.5	11.9	12.7	12.4	11.7	12.0	15.8	11.5	12.2	12.4	11.9	12.1
24	13.0	12.0	12.7	12.5	11.7	12.1	12.4	11.8	12.0	12.6	11.9	12.3
25	13.2	12.5	12.9	12.7	11.1	11.8	12.6	12.0	12.2	12.7	12.2	12.4
26	13.3	12.5	13.0	11.9	11.1	11.5	12.6	11.2	12.0	12.8	12.2	12.4
27	13.3	12.3	12.9	12.1	11.4	11.7	12.0	11.4	11.6	12.8	11.9	12.3
28	13.6	12.9	13.3	12.0	11.5	11.8	12.2	11.4	11.8	12.5	12.0	12.2
29	14.0	12.5	13.3	12.2	11.6	11.9	12.0	11.4	11.8	12.6	12.0	12.2
30	13.6	12.7	13.2	12.5	11.4	11.9	12.2	11.5	11.8	12.7	12.2	12.4
31	---	---	---	12.1	11.3	11.7	12.2	11.7	11.9	---	---	---
MONTH	14.0	10.6	12.5	13.2	10.5	11.7	15.8	11.2	12.0	12.9	10.8	12.2
YEAR	15.8	3.8	9.1									

ROGUE RIVER BASIN

14362250 STAR GULCH NEAR RUCH, OR

LOCATION.--Lat 42°09'15", long 123°04'27", in NE ¼ NE ¼ sec.29, T.39 S., R.3 W., Jackson County, Hydrologic Unit 17100309, Bureau of Land Management land, on left bank 1.0 mi downstream from Benson Gulch, 6.0 mi southwest of Ruch and at mile 1.1.

DRAINAGE AREA.--16.0 mi².

PERIOD OF RECORD.--July 1983 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,667.04 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Records fair.

AVERAGE DISCHARGE.--22 years (water years 1984-2005), 5.17 ft³/s, 3,740 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,050 ft³/s Jan. 1, 1997, gage height, 5.43 ft; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 40 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 8	0830	51	2.11	Jan 18	1230	*56	*2.15

Minimum discharge, no flow Aug. 6 to Sept. 10.

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	0.51	0.67	1.2	3.7	4.4	2.2	8.7	7.1	2.7	1.1	0.08	0.00
2	0.47	0.73	1.1	3.4	3.9	2.5	7.1	6.2	2.6	1.1	0.09	0.00
3	0.42	1.9	1.1	3.0	3.6	2.1	6.9	5.5	2.5	1.0	0.09	0.00
4	0.38	1.4	1.0	2.8	3.4	1.9	7.0	5.2	2.4	1.0	0.08	0.00
5	0.33	1.1	1.0	2.6	3.4	1.9	6.4	10	2.4	0.96	0.06	0.00
6	0.31	1.0	6.0	2.4	3.2	1.9	6.0	13	2.5	0.92	0.02	0.00
7	0.32	0.91	14	2.6	3.1	1.7	5.9	12	2.6	0.90	0.00	0.00
8	0.33	0.86	43	3.3	2.9	1.7	6.3	11	2.6	0.90	0.00	0.00
9	0.50	0.84	31	3.9	2.7	1.7	8.1	11	2.5	1.0	0.00	0.00
10	0.60	0.85	17	3.5	2.9	1.6	8.2	11	2.3	1.1	0.00	0.02
11	0.57	0.89	10	3.7	3.3	1.6	7.9	11	2.2	0.98	0.00	0.24
12	0.49	0.89	7.0	3.7	3.1	1.6	7.1	9.5	2.1	0.84	0.00	0.40
13	0.42	0.94	5.4	3.6	2.9	1.5	6.2	8.3	2.1	0.78	0.00	0.38
14	0.36	0.94	4.2	3.7	2.8	1.5	5.4	7.2	2.0	0.73	0.00	0.31
15	0.31	0.94	3.4	4.6	2.8	1.5	4.8	6.5	2.0	0.61	0.00	0.25
16	0.31	0.94	2.8	8.4	2.7	1.5	4.4	6.0	2.1	0.53	0.00	0.24
17	0.90	0.94	2.5	21	2.6	1.5	4.2	5.6	2.3	0.48	0.00	0.37
18	1.1	0.93	2.2	40	2.6	1.5	3.8	6.3	2.3	0.41	0.00	0.49
19	0.71	0.90	2.0	33	2.6	1.5	3.5	5.8	2.2	0.34	0.00	0.46
20	0.68	0.89	1.9	27	2.6	1.6	3.4	5.2	1.9	0.30	0.00	0.38
21	0.53	0.89	1.7	21	2.5	1.7	3.1	4.7	1.8	0.30	0.00	0.31
22	0.52	0.89	1.6	17	2.4	2.4	2.9	4.3	1.7	0.27	0.00	0.29
23	3.2	0.89	1.5	15	2.3	2.7	3.4	4.1	1.6	0.25	0.00	0.35
24	1.0	0.89	1.5	14	2.2	2.6	4.6	3.8	1.5	0.24	0.00	0.52
25	0.78	1.6	1.4	12	2.2	2.3	4.7	3.5	1.4	0.24	0.00	0.59
26	2.6	1.7	2.2	12	2.1	2.1	4.2	3.3	1.4	0.23	0.00	0.57
27	1.7	2.0	2.1	11	2.1	7.1	4.3	3.1	1.4	0.20	0.00	0.50
28	1.1	1.6	2.2	8.4	2.3	18	8.4	3.4	1.4	0.18	0.00	0.40
29	0.90	1.4	2.5	6.8	---	16	9.8	3.3	1.3	0.17	0.00	0.35
30	0.82	1.3	3.7	5.7	---	15	8.4	3.0	1.2	0.14	0.00	0.33
31	0.72	---	3.9	5.0	---	12	---	2.8	---	0.10	0.00	---
TOTAL	23.89	32.62	182.1	307.8	79.6	116.4	175.1	202.7	61.0	18.30	0.42	7.75
MEAN	0.77	1.09	5.87	9.93	2.84	3.75	5.84	6.54	2.03	0.59	0.01	0.26
MAX	3.2	2.0	43	40	4.4	18	9.8	13	2.7	1.1	0.09	0.59
MIN	0.31	0.67	1.0	2.4	2.1	1.5	2.9	2.8	1.2	0.10	0.00	0.00
AC-FT	47	65	361	611	158	231	347	402	121	36	0.8	15

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

MEAN	0.82	2.91	8.91	12.3	12.4	10.9	6.87	3.68	1.85	0.83	0.43	0.40
MAX	1.98	18.0	50.7	75.3	49.3	34.0	19.6	9.08	6.07	3.11	1.61	1.09
(WY)	(1984)	(1985)	(1997)	(1997)	(1999)	(1999)	(1995)	(1998)	(1998)	(1998)	(1998)	(1998)
MIN	0.02	0.23	0.87	1.13	1.30	0.95	1.00	0.22	0.01	0.00	0.00	0.00
(WY)	(1993)	(1993)	(1990)	(1992)	(2001)	(1992)	(1994)	(1992)	(1992)	(1994)	(1988)	(1991)

ROGUE RIVER BASIN

14362250 STAR GULCH NEAR RUCH, OR—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1984 - 2005	
ANNUAL TOTAL	1,825.16		1,207.68			
ANNUAL MEAN	4.99		3.31		5.17	
HIGHEST ANNUAL MEAN					15.1	1997
LOWEST ANNUAL MEAN					0.60	1992
HIGHEST DAILY MEAN	120	Feb 18	43	Dec 8	621	Jan 1, 1997
LOWEST DAILY MEAN	0.01	Aug 2	0.00	Aug 7	0.00	Aug 10, 1987
ANNUAL SEVEN-DAY MINIMUM	0.02	Aug 12	0.00	Aug 7	0.00	Aug 21, 1987
ANNUAL RUNOFF (AC-FT)	3,620		2,400		3,740	
10 PERCENT EXCEEDS	12		8.1		12	
50 PERCENT EXCEEDS	1.2		1.7		1.5	
90 PERCENT EXCEEDS	0.10		0.04		0.06	



2005 Water Year
 ROGUE RIVER BASIN

14362250 STAR GULCH NEAR RUCH, OR

Latitude: 42° 09' 15"

Longitude: 123° 04' 27"

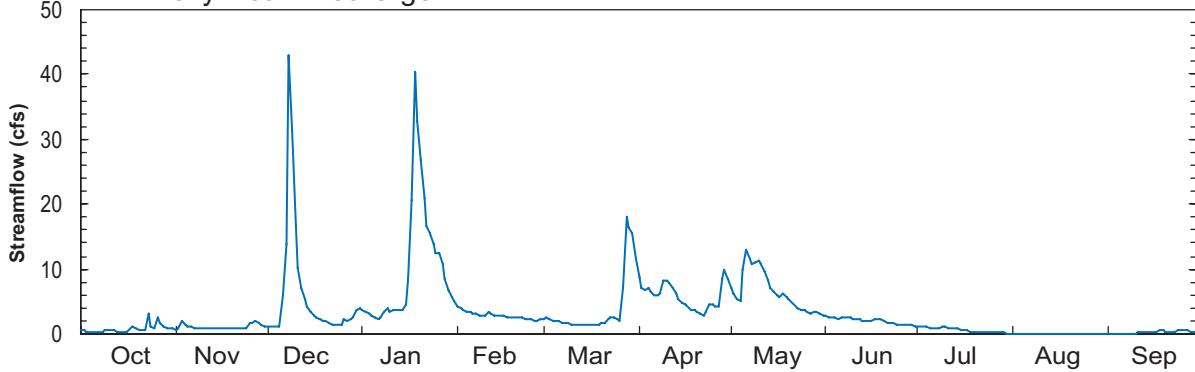
Hydrologic Unit Code: 17100309

Jackson County

Datum: 1667.04 feet

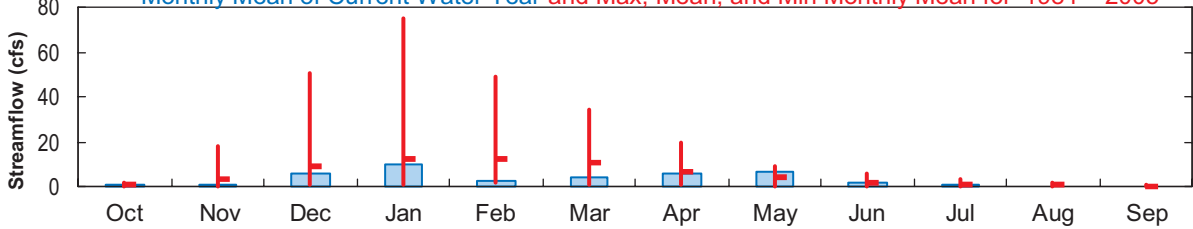
Drainage Area: 16 mi²

Daily Mean Discharge

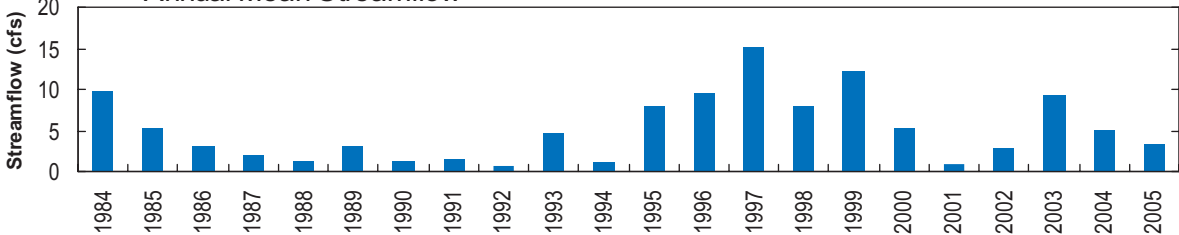


Monthly Statistics

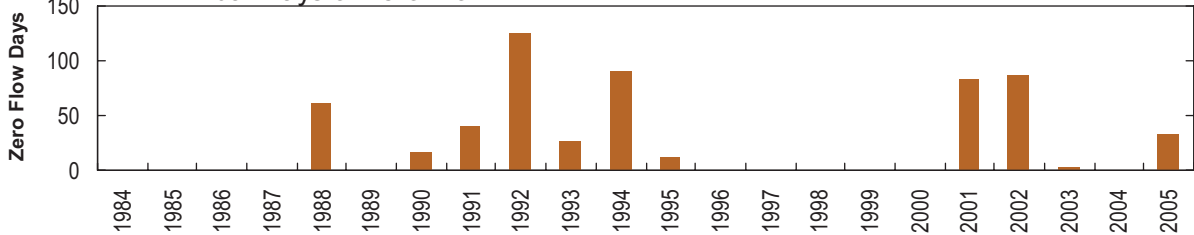
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1984–2005



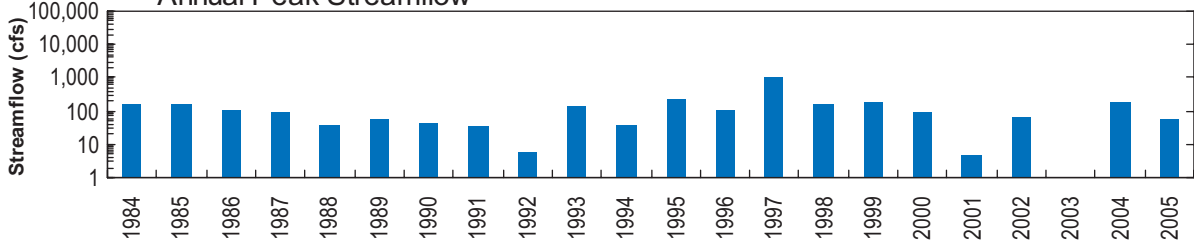
Annual Mean Streamflow



Annual Days of Zero Flow



Annual Peak Streamflow



ROGUE RIVER BASIN

14366000 APPLGATE RIVER NEAR APPLGATE, OR

LOCATION.--Lat 42°14'30", long 123°08'20", in NE ¼ sec.26, T.38 S., R.4 W., Jackson County, Hydrologic Unit 17100309, on left bank 0.9 mi downstream from Keeler Creek, 1.8 mi southeast of Applegate and at mile 26.7.

DRAINAGE AREA.--483 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to current year.

RECORDS.--WSP 1738: Drainage area. WSP 1935: 1953(M). WDR OR-76-1: 1956(M), 1965(M).

GAGE.--Water-stage recorder. Datum of gage is 1,285.33 ft above NGVD of 1929. Prior to Dec. 23, 1938, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow regulated since December 1980 by Applegate Lake (station 14361900). Many diversions for irrigation upstream from station. McDonald Creek Canal diverts from McDonald Creek upstream from station for irrigation in Bear Creek basin. Thompson Creek Irrigation Association ditch diverts upstream from station for irrigation in Thompson Creek basin. Fowler-Keeler and Berryman ditches divert upstream from station for irrigation downstream. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--42 years (water years 1939-80), 548 ft³/s, 397,000 acre-ft/yr. 25 years (water years 1981-2005), 513 ft³/s, 371,700 acre-ft/yr, regulated period.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,200 ft³/s Jan. 15, 1974, gage height, 20.41 ft, from rating curve extended above 18,000 ft³/s on basis of slope-area measurements of flow at gage heights 18.00 ft and 19.57 ft; minimum discharge, 4.6 ft³/s Sept. 22-25, 1979. Minimum discharge since first filling of Applegate Lake, 22 ft³/s July 24, 2001.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 20, 1927, reached a stage of 18.7 ft, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,620 ft³/s May 18, gage height, 4.81 ft; minimum discharge, 153 ft³/s Dec. 5, 6.

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	278	385	158	265	350	164	223	301	582	308	274	272
2	279	387	155	255	254	164	208	287	549	301	275	272
3	276	410	155	243	215	162	210	274	487	300	271	276
4	271	370	155	219	207	164	208	280	467	301	272	278
5	271	363	155	215	206	162	199	400	432	299	268	279
6	273	360	183	217	203	162	196	528	449	294	270	273
7	277	360	270	220	203	163	204	505	430	293	273	273
8	280	359	650	232	199	166	207	500	399	291	272	272
9	288	354	1,210	231	204	168	206	888	413	296	270	273
10	282	352	1,790	230	205	170	205	1,390	374	298	268	278
11	277	351	1,410	231	204	171	205	1,340	372	296	268	283
12	279	318	1,000	226	175	172	203	1,150	366	290	268	282
13	278	325	835	224	162	160	197	1,050	356	284	269	279
14	280	322	822	233	162	157	192	1,060	352	283	268	279
15	278	319	764	240	165	159	188	1,080	349	281	267	279
16	281	316	564	263	164	168	189	1,070	355	284	270	279
17	303	314	476	311	164	167	195	934	370	285	269	284
18	322	294	381	403	165	167	192	1,490	369	284	271	284
19	326	288	359	461	165	167	187	1,990	444	282	271	279
20	325	264	354	466	165	174	180	1,390	372	281	271	279
21	307	260	359	435	165	172	173	1,080	366	281	270	276
22	318	259	357	406	163	174	172	902	348	280	268	275
23	412	236	329	452	162	169	179	907	323	279	266	281
24	372	211	327	674	162	166	189	806	316	277	270	283
25	363	221	325	747	162	161	194	788	306	275	267	284
26	375	230	335	776	162	160	192	766	305	273	268	285
27	365	224	329	747	162	209	203	750	298	270	270	283
28	368	216	324	627	165	299	385	808	298	269	271	281
29	385	188	326	584	---	273	334	707	292	270	271	282
30	385	164	330	487	---	259	301	661	305	272	271	283
31	389	---	322	452	---	236	---	635	---	275	272	---
TOTAL	9,763	9,020	15,509	11,772	5,240	5,585	6,316	26,717	11,444	8,852	8,369	8,366
MEAN	315	301	500	380	187	180	211	862	381	286	270	279
MAX	412	410	1,790	776	350	299	385	1,990	582	308	275	285
MIN	271	164	155	215	162	157	172	274	292	269	266	272
AC-FT	19,360	17,890	30,760	23,350	10,390	11,080	12,530	52,990	22,700	17,560	16,600	16,590

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2005, BY WATER YEAR (WY)

MEAN	312	406	713	865	740	686	552	750	449	232	207	253
MAX	507	1,261	3,077	4,904	2,552	1,892	1,304	1,705	1,237	441	413	425
(WY)	(1983)	(1985)	(1982)	(1997)	(1983)	(1995)	(1982)	(1983)	(1983)	(1998)	(1999)	(1983)
MIN	51.6	97.8	149	133	141	142	139	155	48.2	35.2	36.9	43.7
(WY)	(1981)	(1981)	(1995)	(2001)	(2001)	(1992)	(1992)	(2001)	(2001)	(2001)	(2001)	(2001)

ROGUE RIVER BASIN

14366000 APPLEGATE RIVER NEAR APPLEGATE, OR—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1981 - 2005	
ANNUAL TOTAL	162,764		126,953			
ANNUAL MEAN	445		348		513	
HIGHEST ANNUAL MEAN					1,072	1983
LOWEST ANNUAL MEAN					139	2001
HIGHEST DAILY MEAN	2,110	Feb 18	1,990	May 19	24,400	Jan 1, 1997
LOWEST DAILY MEAN	155	Dec 2	155	Dec 2	17	Oct 8, 1980
ANNUAL SEVEN-DAY MINIMUM	161	Nov 30	161	Nov 30	21	Oct 4, 1980
ANNUAL RUNOFF (AC-FT)	322,800		251,800		371,700	
10 PERCENT EXCEEDS	780		601		1,080	
50 PERCENT EXCEEDS	326		279		276	
90 PERCENT EXCEEDS	248		167		141	



2005 Water Year
ROGUE RIVER BASIN

14366000 APPLGATE RIVER NEAR APPLGATE, OR

Latitude: 42° 14' 30"

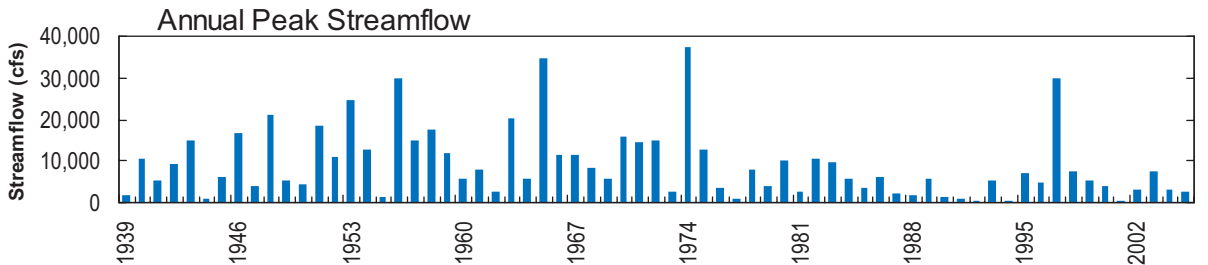
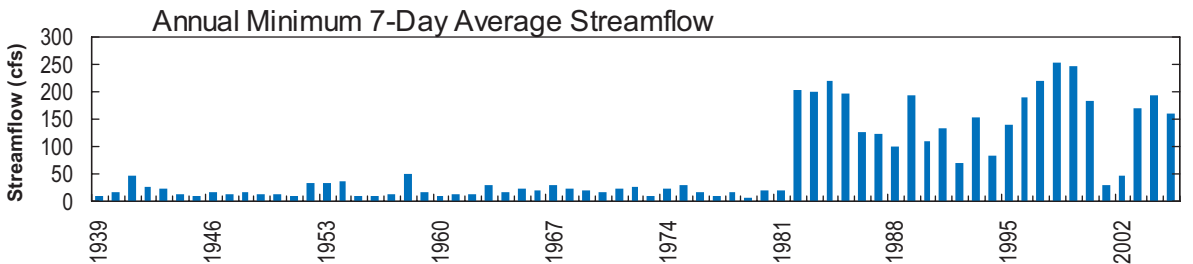
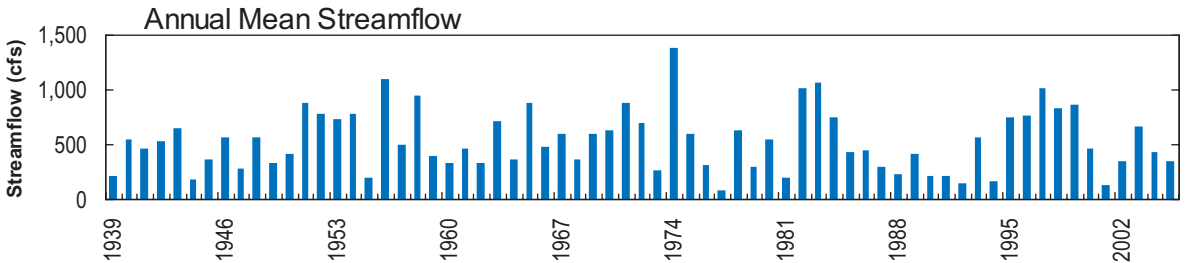
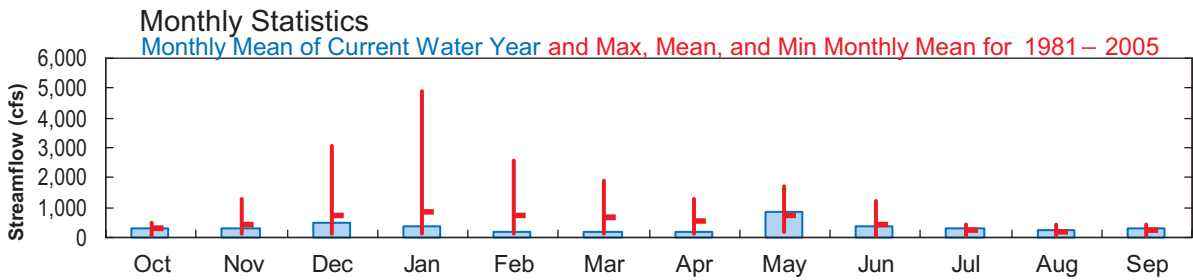
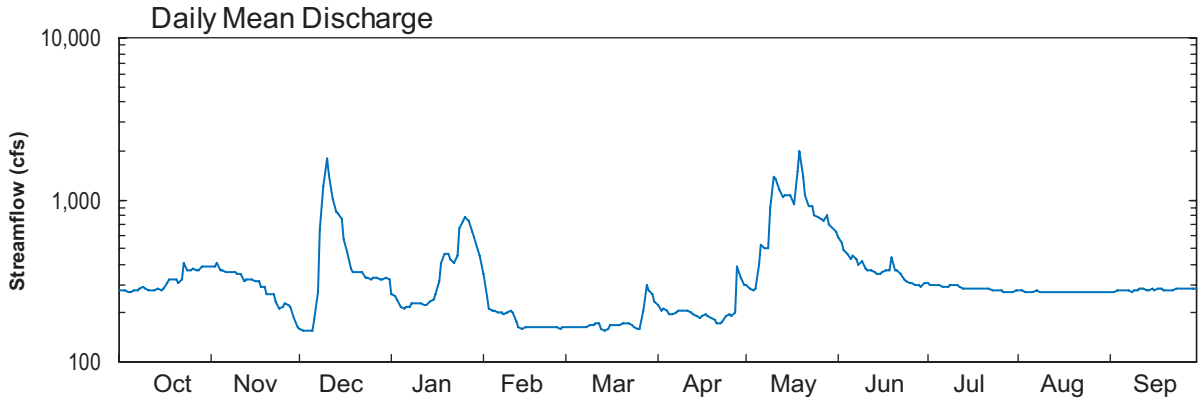
Longitude: 123° 08' 20"

Hydrologic Unit Code: 17100309

Jackson County

Datum: 1285.33 feet

Drainage Area: 483 mi²



ROGUE RIVER BASIN

14366000 APPLGATE RIVER NEAR APPLGATE, OR—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: August 1973 to current year.

INSTRUMENTATION.--Temperature recorder since August 1973.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 28.0°C July 29, 30, Aug. 3, 4, 1974; minimum, 0.0°C on several days during winter periods most years. Maximum since full operation of Applegate Lake, 25.5°C July 5, 1984, July 16, 19, 27, 1992; minimum, 0.0°C on several days during winter periods most years.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 20.9°C June 30; minimum, 1.2°C Jan. 8, 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	17.0	13.2	15.1	10.2	7.4	8.7	7.9	6.5	7.1	5.2	3.9	4.3
2	17.0	13.0	15.1	10.3	7.8	9.1	7.4	6.1	6.8	4.9	3.8	4.3
3	16.8	13.0	15.0	10.0	8.6	9.3	6.1	4.4	5.2	5.2	4.2	4.6
4	16.2	12.5	14.4	10.1	7.9	8.8	5.3	4.1	4.7	4.8	3.5	4.0
5	15.5	12.0	13.9	10.3	7.6	9.0	6.1	5.0	5.6	4.1	2.2	3.1
6	15.0	11.9	13.7	10.3	7.8	9.1	6.0	5.3	5.7	4.8	3.3	3.9
7	15.7	12.7	14.1	10.5	7.8	9.2	6.8	5.5	6.1	4.2	3.7	4.0
8	15.0	11.6	13.4	10.5	8.1	9.3	7.6	6.8	7.2	3.7	1.2	2.4
9	14.3	12.8	13.4	10.2	8.9	9.6	8.3	7.1	7.6	4.3	1.2	2.9
10	14.1	10.7	12.3	11.8	9.8	10.7	7.8	6.8	7.2	5.2	3.7	4.4
11	14.1	10.5	12.2	11.2	9.6	10.3	7.3	6.5	6.8	5.0	3.6	4.4
12	13.2	10.2	11.7	10.2	8.7	9.6	7.3	6.3	6.8	3.9	2.1	3.0
13	12.3	8.9	10.6	11.4	10.0	10.5	7.8	6.5	7.1	3.4	1.6	2.5
14	12.1	8.7	10.5	10.6	9.3	9.9	7.7	6.3	7.1	4.1	2.8	3.5
15	11.7	8.6	10.3	10.5	9.1	9.9	6.7	5.5	6.1	4.9	4.0	4.4
16	11.7	8.4	10.1	11.6	10.2	10.7	6.4	4.9	5.6	5.6	4.0	4.7
17	10.8	9.3	10	10.4	9.1	9.8	6.6	5.0	5.7	5.4	4.1	4.7
18	10.2	8.3	9.3	9.7	8.8	9.3	6.4	4.8	5.5	6.2	4.7	5.3
19	10.3	9.0	9.6	10.1	8.3	9.2	6.0	4.6	5.3	5.6	4.2	4.9
20	10.3	8.2	9.2	8.8	7.4	8.0	6.7	5.3	5.8	5.7	4.3	5.0
21	10.0	7.5	8.8	7.9	6.0	7.0	5.6	4.5	5.0	5.4	3.6	4.5
22	9.1	8.1	8.6	8.3	6.3	7.3	5.4	3.8	4.6	5.8	3.7	4.8
23	10.2	8.7	9.3	8.8	7.0	7.9	5.1	3.8	4.4	5.6	4.0	4.9
24	10.2	8.6	9.2	8.8	7.3	8.1	5.0	3.2	4.1	5.7	3.8	4.6
25	9.3	7.1	8.3	9.1	8.2	8.7	4.8	3.1	4.1	6.5	4.3	5.2
26	9.2	8.0	8.7	8.8	8.2	8.4	5.1	4.7	4.9	5.8	5.1	5.4
27	9.7	7.8	8.9	8.2	7.4	7.8	5.8	4.6	5.1	5.7	4.1	4.9
28	10.1	8.5	9.3	7.8	6.3	7.2	5.8	4.4	5.1	6.5	4.8	5.5
29	10.7	9.1	9.7	6.3	4.7	5.5	6.5	5.4	5.9	6.2	4.5	5.2
30	9.8	8.1	9.0	7.4	5.7	6.5	5.7	4.7	5.2	5.7	3.4	4.6
31	9.7	7.7	8.6	---	---	---	5.9	4.2	5.0	6.1	3.6	4.8
MONTH	17.0	7.1	11.0	11.8	4.7	8.8	8.3	3.1	5.8	6.5	1.2	4.3

ROGUE RIVER BASIN

14366000 APPLGATE RIVER NEAR APPLGATE, 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	5.9	3.4	4.6	8.8	5.8	7.3	11.1	8.3	9.7	14.1	11.1	12.5
2	5.9	3.1	4.5	9.8	6.6	7.9	12.0	8.7	10.2	16.1	11.6	13.5
3	6.4	3.6	4.9	9.0	5.5	7.3	9.9	8.1	8.9	15.8	11.0	13.2
4	6.2	4.2	5.2	9.3	7.4	8.1	12.4	7.4	9.3	14.8	11.8	13.1
5	6.8	5.0	5.8	10.1	6.2	8.0	13.3	8.6	10.6	13.6	11.3	12.3
6	5.3	3.8	4.6	10.7	6.2	8.3	14.4	9.1	11.6	12.4	10.4	11.4
7	6.5	4.8	5.5	11.4	7.0	9.0	13.1	10.0	11.6	12.8	9.9	11.2
8	5.9	3.7	4.7	11.7	7.3	9.3	10.5	8.6	9.6	12.4	10.3	11.3
9	5.8	3.1	4.3	11.4	7.5	9.3	13.4	8.6	10.4	11.3	9.3	10.6
10	6.1	3.0	4.4	11.4	7.3	9.2	12.4	8.4	10.5	9.9	8.5	9.1
11	6.3	3.2	4.6	12.0	7.4	9.5	13.4	10.0	11.4	11.9	8.7	9.9
12	6.2	4.0	5.1	12.1	7.7	9.7	12.5	8.6	10.2	13.0	8.6	10.5
13	6.2	5.0	5.6	11.6	7.3	9.3	10.5	7.2	8.8	13.6	10.1	11.6
14	7.8	5.1	6.2	10.6	6.0	8.2	13.1	7.4	10	13.5	10.6	12.0
15	7.1	4.2	5.7	10.3	5.6	7.8	13.3	7.9	10.5	12.0	11.2	11.5
16	7.5	4.0	5.6	7.9	6.6	7.2	11.6	9.5	10.6	12.8	10.2	11.3
17	8.0	4.5	6.1	10.0	6.5	7.9	13.1	9.0	10.8	11.3	9.8	10.6
18	8.0	5.0	6.4	10.4	6.5	8.3	12.5	8.6	10.5	11.1	8.7	10.4
19	8.4	6.4	7.3	10.8	8.6	9.5	14.0	8.3	10.9	10.8	8.3	9.4
20	8.4	6.5	7.3	9.4	7.3	8.4	14.6	9.0	11.7	11.3	8.8	9.9
21	8.4	5.1	6.6	10.1	6.9	8.6	15.5	10.0	12.7	13.0	9.0	10.8
22	8.4	4.6	6.4	11.2	8.3	9.7	15.7	10.4	13.1	14.3	10.4	11.8
23	8.8	5.0	6.7	11.9	9.0	10.2	13.7	11.8	12.5	14.3	8.7	11.2
24	8.8	5.1	6.9	10.6	6.6	8.7	13.8	10.7	12.2	14.9	9.2	11.8
25	8.8	5.2	6.9	10.2	7.0	8.7	16.5	10.7	13.3	16.1	10.2	12.9
26	8.8	5.2	6.9	10.9	8.3	9.5	17.4	11.2	14.1	17.0	11.3	13.8
27	8.9	6.5	7.6	10.2	8.6	9.8	16.3	12.0	14.0	17.3	11.7	14.2
28	9.1	6.8	7.9	10.2	7.4	8.7	13.4	10.9	12.2	14.2	11.6	12.6
29	---	---	---	9.9	7.8	8.8	14.7	10.0	12.0	13.7	10.9	12.1
30	---	---	---	11.4	6.9	8.8	14.7	10.5	12.6	15.6	11.6	13.3
31	---	---	---	12.0	6.6	9.2	---	---	---	15.6	11.6	13.5
MONTH	9.1	3.0	5.9	12.1	5.5	8.7	17.4	7.2	11.2	17.3	8.3	11.7
	JUNE			JULY			AUGUST			SEPTEMBER		
1	15.2	11.5	13.2	20.6	14.8	17.9	18.2	14.5	16.7	17.9	12.8	15.4
2	16.0	11.1	13.2	19.6	13.7	16.7	19.5	13.9	16.8	18.0	13.2	15.7
3	16.9	10.6	13.6	19.3	13.0	16.3	19.6	13.7	16.8	16.4	13.0	14.6
4	16.7	10.9	13.8	19.6	13.2	16.5	20.2	14.4	17.4	16.4	12.3	14.4
5	15.5	11.1	13.3	20.0	13.7	16.9	20.4	14.8	17.7	16.8	11.9	14.5
6	13.1	11.2	12.1	20.1	14.1	17.1	20.2	14.7	17.6	17.1	12.3	14.8
7	13.0	10.5	11.9	19.8	14.0	16.9	19.8	14.6	17.3	17.5	12.7	15.1
8	15.3	10.3	12.8	18.6	13.2	16.2	19.6	13.9	16.9	15.9	13.0	14.7
9	17.8	12.5	15.0	18.8	14.1	16.5	19.6	14.0	16.9	15.5	12.9	14.3
10	18.4	13.1	15.6	19.8	14.0	16.6	19.2	13.8	16.7	14.9	12.3	13.6
11	17.1	13.0	14.9	19.4	14.0	16.8	18.7	12.9	16.0	16.5	12.8	14.4
12	18.0	12.0	14.9	19.3	13.8	16.6	18.3	13.1	15.8	16.2	11.6	13.9
13	18.4	12.4	15.4	19.5	13.5	16.6	18.9	13.1	16.1	16.4	11.6	14.1
14	18.0	13.3	15.8	20.1	13.5	16.8	19.3	13.8	16.7	16.4	11.8	14.2
15	18.0	12.5	15.4	20.7	14.4	17.6	19.1	13.8	16.6	16.3	11.7	14.1
16	16.4	13.4	14.8	20.5	14.7	17.7	19.1	13.9	16.7	14.9	11.7	13.3
17	16.0	12.3	14.1	20.5	14.3	17.5	18.9	13.6	16.4	15.5	12.5	13.8
18	15.1	12.6	13.9	20.0	14.2	17.3	19.2	13.9	16.6	15.6	10.9	13.3
19	16.4	12.5	14.4	20.2	14.1	17.3	19.1	13.6	16.4	16.2	11.3	13.8
20	18.7	13.1	15.7	20.1	14.2	17.3	19.4	14.1	16.8	16.2	11.8	14.1
21	18.0	13.3	15.9	19.2	14.2	16.8	19.2	14.2	16.8	16.0	11.8	14.0
22	18.9	13.7	16.1	20.1	14.7	17.4	18.9	14.3	16.8	14.8	11.0	13.2
23	19.5	12.9	16.2	20.1	14.0	17.2	18.2	13.6	16.0	14.0	11.8	13.0
24	19.7	13.4	16.7	19.6	14.1	17.1	17.9	12.5	15.4	14.7	10.6	12.6
25	19.1	14.2	16.7	19.5	13.3	16.5	18.7	13.2	16.0	14.8	10.4	12.6
26	19.2	13.9	16.7	19.6	13.3	16.6	18.2	13.3	16.0	13.8	10.7	12.6
27	19.7	14.5	17.0	20.0	13.9	17.0	18.0	12.8	15.5	15.8	12.2	13.9
28	20.2	14.7	17.4	19.9	14.4	17.3	17.8	12.8	15.4	15.3	11.1	13.3
29	20.6	14.3	17.5	20.1	14.2	17.3	17.2	13.4	15.4	15.4	11.3	13.4
30	20.9	14.4	17.8	20.2	14.4	17.4	17.1	12.2	14.7	15.9	11.8	13.9
31	---	---	---	20.1	14.7	17.5	17.6	12.4	15.1	---	---	---
MONTH	20.9	10.3	15.1	20.7	13.0	17.0	20.4	12.2	16.4	18.0	10.4	14.0
YEAR	20.9	1.2	10.8									

ROGUE RIVER BASIN

14369500 APPLGATE RIVER NEAR WILDERVILLE, OR

LOCATION.--Lat 42°21'15", long 123°24'20", in SE ¼ NE ¼ sec.16, T.37 S., R.6 W., Josephine County, Hydrologic Unit 17100309, on left bank 0.3 mi downstream from Jackson Creek, 3.6 mi southeast of Wilderville and at mile 7.6.

DRAINAGE AREA.--698 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to September 1955, September 1978 to current year.

REVISED RECORDS.--WSP 1318: 1943. WSP 1738: 1951, 1953, drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 947.18 ft above NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Sept. 1, 1978, nonrecording gage at site 1,100 ft upstream at datum 2.36 ft higher.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since December 1980 by Applegate Lake (station 14361900). Many diversions for irrigation upstream from station. Wilderville ditch diverts up to 16 ft³/s, 0.3 mi upstream and at the mouth of Jackson Creek. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--19 years (water years 1939-55, 1979, 1980), 717 ft³/s, 519,500 acre-ft/yr. 25 years (water years 1981-2005), 700 ft³/s, 506,900 acre-ft/yr, regulated period.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,500 ft³/s Jan. 18, 1953, gage height, 18.3 ft, from floodmark, site and datum then in use, from rating curve extended above 12,000 ft³/s on basis of slope-area measurement of peak flow; minimum discharge, 0.78 ft³/s Aug. 22-24, 1979. Minimum since first filling of Applegate Lake, 7.0 ft³/s July 26-28, Aug. 11, 12, 2001.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 22, 1955, reached a stage of 20.3 ft, from floodmark, former site and datum, discharge, 66,500 ft³/s, from rating curve extended above 12,000 ft³/s on basis of slope-area measurement of peak flow.

Flood of February 1927 reached a stage of 22 ft at former site, from local resident. Floods of Dec. 22, 1964 and Jan. 15, 1974, are known to have exceeded the December 1955 flood.

No flow was observed at present site during the late summer of 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,630 ft³/s Dec. 9, gage height, 6.07 ft; minimum discharge, 196 ft³/s Dec. 3-6, Mar. 15.

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	265	398	206	407	521	225	531	448	725	314	271	266
2	260	401	201	407	415	228	468	427	677	310	273	265
3	254	448	199	390	357	223	475	401	610	319	270	267
4	255	417	197	353	336	221	495	397	579	323	279	282
5	257	388	197	333	327	220	440	524	530	317	275	290
6	250	379	238	323	317	217	413	697	542	302	263	289
7	252	376	562	329	317	215	410	715	557	299	266	274
8	261	372	2,000	400	303	217	511	726	489	293	269	273
9	289	367	2,870	486	298	217	752	1,120	507	303	267	274
10	299	362	2,220	452	296	217	598	1,600	456	313	262	284
11	293	362	1,740	428	290	217	536	1,690	427	309	261	297
12	290	348	1,290	405	276	217	509	1,520	412	303	259	296
13	286	340	1,010	379	252	210	476	1,370	397	297	260	292
14	283	339	944	374	244	203	439	1,350	390	304	269	285
15	286	335	897	376	241	200	410	1,330	385	299	270	295
16	288	335	713	418	238	207	399	1,340	384	286	272	299
17	316	334	606	558	235	209	399	1,220	413	279	261	300
18	347	325	509	882	235	207	385	1,360	409	284	266	300
19	340	311	448	1,040	235	211	368	2,100	468	271	263	297
20	354	299	433	990	237	253	351	1,690	444	270	264	289
21	336	285	426	893	234	282	333	1,410	404	267	268	288
22	333	280	419	794	229	314	321	1,160	386	266	265	288
23	454	270	399	750	226	330	324	1,180	370	263	259	297
24	425	248	384	906	223	311	343	1,050	360	270	262	301
25	390	247	380	972	221	277	335	970	342	278	279	310
26	418	265	406	979	220	258	325	941	339	273	267	317
27	403	268	399	956	218	487	327	906	333	261	261	315
28	383	258	392	836	226	1,180	508	952	316	258	260	299
29	396	239	396	785	---	1,130	519	905	311	269	263	300
30	406	219	430	663	---	869	445	832	311	267	266	296
31	408	---	433	625	---	644	---	780	---	272	265	---
TOTAL	10,077	9,815	21,944	18,889	7,767	10,416	13,145	33,111	13,273	8,939	8,255	8,725
MEAN	325	327	708	609	277	336	438	1,068	442	288	266	291
MAX	454	448	2,870	1,040	521	1,180	752	2,100	725	323	279	317
MIN	250	219	197	323	218	200	321	397	311	258	259	265
AC-FT	19,990	19,470	43,530	37,470	15,410	20,660	26,070	65,680	26,330	17,730	16,370	17,310

ROGUE RIVER BASIN

14369500 APPELEGATE RIVER NEAR WILDERVILLE, OR—Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2005, BY WATER YEAR (WY)												
MEAN	338	561	1,126	1,335	1,246	1,050	807	828	476	220	187	248
MAX	569	2,099	4,769	6,633	4,241	2,715	2,177	1,916	1,333	439	393	482
(WY)	(1984)	(1985)	(1997)	(1997)	(1983)	(1983)	(1982)	(1983)	(1983)	(1998)	(1999)	(1983)
MIN	80.4	156	196	187	190	209	173	147	32.9	17.2	17.9	34.5
(WY)	(1981)	(1981)	(1991)	(2001)	(2001)	(2001)	(1994)	(2001)	(2001)	(2001)	(2001)	(2001)
SUMMARY STATISTICS												
	FOR 2004 CALENDAR YEAR				FOR 2005 WATER YEAR				WATER YEARS 1981 - 2005			
ANNUAL TOTAL	203,252				164,356				700			
ANNUAL MEAN	555				450				1,546			
HIGHEST ANNUAL MEAN									160			
LOWEST ANNUAL MEAN									36,500			
HIGHEST DAILY MEAN	3,590				2,870				7.7			
LOWEST DAILY MEAN	197				197				9.9			
ANNUAL SEVEN-DAY MINIMUM	208				207				345			
ANNUAL RUNOFF (AC-FT)	403,200				326,000				154			
10 PERCENT EXCEEDS	992				900							
50 PERCENT EXCEEDS	402				325							
90 PERCENT EXCEEDS	231				236							



2005 Water Year
 ROGUE RIVER BASIN

14369500 APPLGATE RIVER NEAR WILDERVILLE, OR

Latitude: 42° 21' 15"

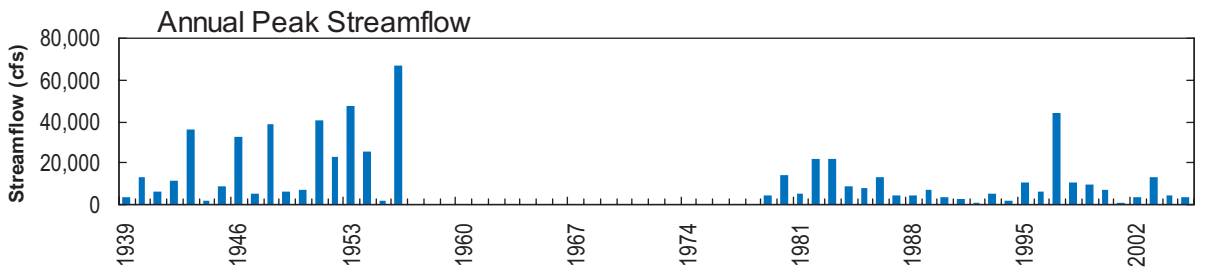
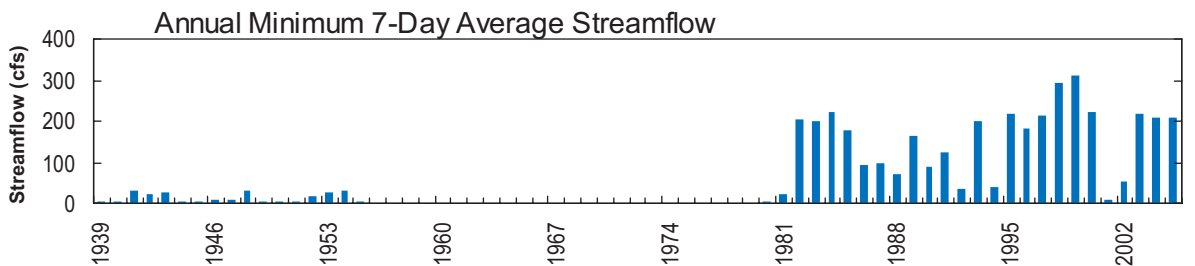
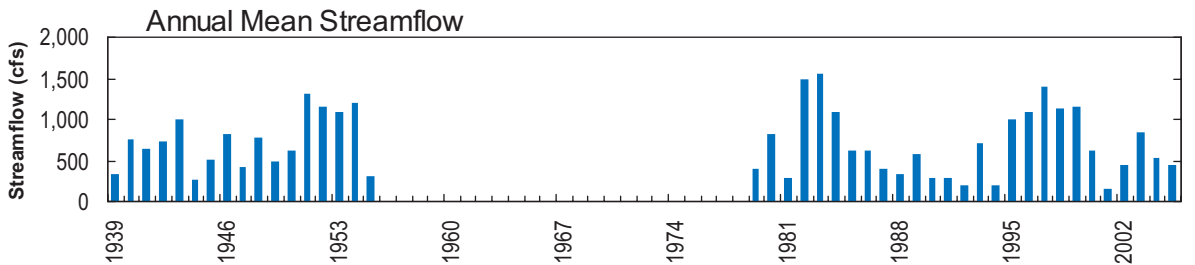
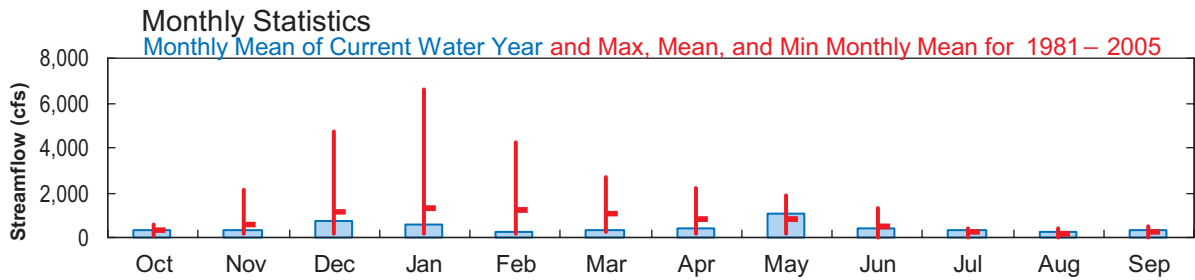
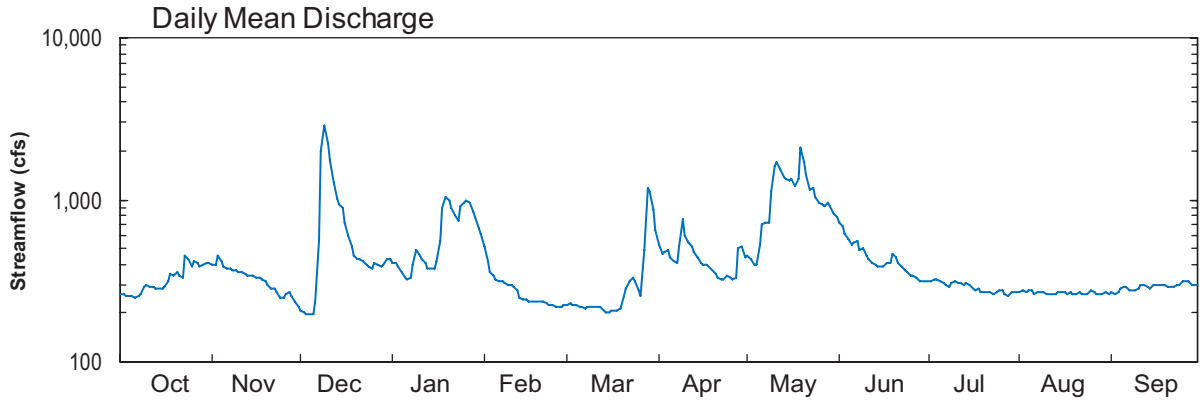
Longitude: 123° 24' 20"

Hydrologic Unit Code: 17100309

Josephine County

Datum: 947.18 feet

Drainage Area: 698 mi²



ROGUE RIVER BASIN

14369500 APPELEGATE RIVER NEAR WILDERVILLE, OR—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: September 1978 to current year.

INSTRUMENTATION.--Temperature recorder.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 29.0°C June 22, 1992; minimum, 0.0°C Feb. 6, 7, 1989.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 24.0°C July 18, 19; minimum, 3.1°C Jan. 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	17.1	14.9	16.1	10.2	8.6	9.4	7.8	7.0	7.5	6.3	5.2	5.9
2	17.6	15.3	16.4	10.1	8.6	9.5	7.9	6.9	7.5	6.1	4.8	5.4
3	17.5	15.5	16.5	10.6	9.5	10.0	6.9	5.7	6.2	6.2	5.5	5.9
4	17.4	15.3	16.4	9.7	8.0	8.8	6.0	5.5	5.8	5.9	5.0	5.4
5	17.0	15.1	16.1	9.4	7.9	8.7	6.4	5.5	6.0	5.3	4.0	4.6
6	16.9	15.1	16.1	9.3	8.1	8.8	6.3	5.9	6.1	5.5	4.3	4.9
7	17.3	15.4	16.3	9.4	8.1	8.8	7.5	6.0	6.7	5.5	4.7	5.1
8	16.5	15.0	15.7	9.6	8.3	9.0	8.8	7.4	8.2	4.7	3.2	3.7
9	15.5	13.8	14.8	10.1	8.8	9.5	9.8	8.7	9.2	5.2	3.1	4.1
10	14.9	13.2	14.1	11.3	9.7	10.4	9.3	8.2	8.7	6.0	5.0	5.5
11	14.6	12.4	13.6	11.3	10.5	11.0	8.5	7.6	8.0	6.3	5.4	5.8
12	14.7	12.6	13.8	11.1	10.1	10.5	8.2	7.6	7.9	5.4	4.3	4.8
13	15.0	13.1	14.2	11.0	9.9	10.5	8.9	7.8	8.3	4.8	3.3	4.0
14	14.5	12.6	13.7	11.1	10.0	10.5	8.9	7.8	8.5	5.1	3.8	4.4
15	14.0	12.5	13.4	10.6	9.5	10.0	7.8	6.7	7.1	6.0	4.9	5.4
16	13.8	12.0	13.0	11.3	10.3	10.8	6.9	6.5	6.8	7.0	5.7	6.3
17	13.8	11.8	12.8	11.2	9.9	10.3	6.8	6.4	6.6	6.9	5.8	6.3
18	12.0	11.0	11.5	10.5	9.6	10	7.0	6.5	6.7	7.1	6.2	6.6
19	12.0	11.1	11.6	9.7	8.6	9.1	6.8	6.4	6.6	6.8	6.2	6.5
20	11.5	10.3	11.0	8.8	7.3	8.0	7.2	6.4	6.7	7.0	6.3	6.6
21	11.2	9.9	10.6	7.9	6.4	6.9	6.5	5.4	5.9	6.6	6.0	6.3
22	11.3	10.2	10.6	7.3	5.8	6.6	6.1	4.8	5.4	7.3	6.0	6.6
23	11.5	10.2	10.8	8.4	6.7	7.5	5.8	4.7	5.1	6.8	6.1	6.5
24	11.2	10.1	10.6	9.1	7.8	8.4	5.4	4.4	4.8	6.4	5.6	6.0
25	10.7	9.2	9.9	9.5	9.0	9.2	5.2	4.3	4.7	6.9	5.8	6.3
26	10.5	9.3	10	9.4	8.6	8.8	5.7	4.9	5.4	7.1	6.7	6.9
27	10.4	9.3	9.9	8.7	8.0	8.4	6.2	5.4	5.8	6.7	5.8	6.3
28	11.3	9.5	10.3	8.4	7.3	7.6	6.3	5.8	6.0	7.2	6.1	6.6
29	11.5	10.5	11.0	7.5	6.3	6.9	7.2	6.1	6.6	7.2	6.1	6.7
30	11.1	9.8	10.4	7.0	6.3	6.6	7.1	6.4	6.8	6.4	5.1	5.8
31	10.5	8.8	9.5	---	---	---	6.7	5.7	6.1	6.5	5.2	5.8
MONTH	17.6	8.8	12.9	11.3	5.8	9.0	9.8	4.3	6.7	7.3	3.1	5.7

ROGUE RIVER BASIN

14369500 APPLGATE RIVER NEAR WILDERVILLE, 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	6.3	5.3	5.8	9.9	8.3	9.1	11.4	9.6	10.4	15.6	13.5	14.6
2	6.4	4.9	5.6	10.6	8.5	9.4	11.3	9.6	10.5	16.9	13.2	15.1
3	6.9	5.0	5.9	10.0	8.5	9.4	10.8	8.7	9.5	16.6	13.7	15.3
4	7.2	5.5	6.4	10.5	9.4	9.9	11.6	8.0	9.6	16.1	14.0	15.2
5	7.2	6.2	6.8	10.4	8.6	9.5	12.6	9.6	11.1	15.9	13.7	14.5
6	6.8	5.5	6.2	11.0	8.7	9.9	13.6	10.0	12.0	14.3	12.7	13.3
7	7.1	6.2	6.6	11.8	9.5	10.7	13.5	11.1	11.9	14.6	12.1	13.4
8	7.0	5.3	6.1	12.3	10.1	11.3	11.3	9.3	10	14.4	12.5	13.4
9	6.3	5.1	5.8	12.5	10.6	11.6	11.5	8.5	9.9	13.4	11.3	11.9
10	6.2	4.7	5.6	12.6	10.3	11.5	11.7	8.8	10.4	11.3	10.0	10.6
11	6.7	4.6	5.8	12.8	10.3	11.7	12.6	10.1	11.3	13.4	10.0	11.4
12	7.3	5.4	6.4	13.0	10.8	12.0	12.0	9.3	10.6	14.0	10.3	12.2
13	7.4	7.0	7.2	12.7	10.6	11.7	10.5	8.4	9.5	14.6	12.0	13.2
14	7.4	6.2	6.9	11.8	9.7	10.8	12.3	8.3	10.3	14.8	12.6	13.7
15	7.1	5.7	6.5	11.3	9.2	10.3	12.6	8.8	10.8	14.4	12.5	13.1
16	7.7	5.5	6.8	10.5	9.1	9.8	12.6	10.6	11.8	13.9	11.8	12.7
17	8.3	6.4	7.5	11.1	8.7	9.8	11.9	9.7	11.0	13.1	11.1	11.8
18	9.0	6.8	7.9	11.8	9.8	10.8	12.1	9.0	10.7	13.8	11.2	12.4
19	9.3	8.5	9.0	11.9	10.9	11.5	13.0	9.1	11.1	12.2	9.4	11.0
20	9.4	8.3	8.9	10.9	9.9	10.3	14.0	10.2	12.3	12.3	10.2	11.2
21	9.3	7.8	8.6	10.2	8.9	9.6	15.6	11.4	13.6	13.7	10.2	11.9
22	9.0	7.3	8.3	11.3	9.3	10.4	15.8	12.3	14.3	15.4	11.9	13.6
23	9.2	7.2	8.4	11.3	9.8	10.5	15.6	13.2	13.9	14.8	11.2	13.1
24	9.1	7.7	8.7	10.1	8.1	9.3	14.5	12.2	13.3	15.3	11.6	13.5
25	9.3	8.1	8.7	10.4	8.7	9.7	16.2	11.9	14.1	16.8	12.9	14.7
26	9.8	8.3	9.2	10.8	9.6	10.3	16.8	13.5	15.4	18.0	14.2	16.0
27	10.2	9.0	9.7	10.6	9.1	10.1	16.5	13.8	15.4	18.3	15.1	16.7
28	10.2	8.9	9.6	10.5	8.4	9.4	15.4	13.3	14.5	17.4	13.7	15.2
29	---	---	---	9.7	8.6	9.2	15.4	12.1	13.8	14.4	12.4	13.4
30	---	---	---	11.1	7.7	9.2	15.8	12.8	14.5	16.6	13.6	14.9
31	---	---	---	12.0	8.1	10.1	---	---	---	16.7	14.5	15.7
MONTH	10.2	4.6	7.3	13.0	7.7	10.3	16.8	8.0	11.9	18.3	9.4	13.5
	JUNE			JULY			AUGUST			SEPTEMBER		
1	17.1	14.4	15.6	22.9	19.6	21.4	22.6	20.2	21.4	20.0	17.2	18.6
2	16.2	13.6	14.9	22.1	18.8	20.6	22.5	19.3	20.8	20.6	17.8	19.2
3	17.5	13.7	15.6	21.7	18.1	20.1	22.4	18.9	20.7	19.5	17.4	18.3
4	17.5	14.5	16.1	21.8	18.4	20.3	23.3	20.0	21.6	18.1	15.8	17.1
5	16.4	14.0	15.3	22.3	18.8	20.7	23.6	20.6	22.1	18.6	15.9	17.3
6	14.9	13.0	13.9	22.7	19.4	21.1	23.6	20.6	22.1	18.8	16.2	17.6
7	14.0	12.3	13.2	22.4	19.1	20.8	22.8	20.5	21.7	19.1	16.3	17.8
8	17.2	12.2	14.5	20.7	18.3	19.7	22.9	19.9	21.4	18.6	16.8	17.8
9	18.6	14.5	16.7	20.5	18.1	19.3	22.8	19.9	21.3	17.8	16.1	17.0
10	18.6	16.2	17.7	21.4	17.7	19.5	22.6	19.5	21.0	16.7	15.4	16.1
11	18.2	15.9	16.9	21.8	18.3	20.2	21.7	18.8	20.3	17.5	14.4	15.9
12	18.9	14.6	16.8	22.3	19.0	20.7	21.2	18.6	19.9	17.6	14.9	16.3
13	19.6	15.8	17.9	22.0	18.7	20.5	21.6	18.4	20.0	17.7	15.0	16.5
14	19.0	16.2	17.8	22.6	18.8	20.7	22.3	19.3	20.7	17.8	15.2	16.6
15	19.4	15.5	17.6	23.4	20.0	21.7	22.3	19.4	20.8	17.9	15.5	16.8
16	18.8	16.0	16.8	23.5	20.3	22.0	22.0	19.2	20.6	17.1	15.2	16.3
17	17.4	14.6	15.9	23.8	20.2	22.0	21.8	19.0	20.5	17.1	15.2	16.2
18	16.3	14.5	15.4	24.0	20.6	22.4	22.0	19.2	20.5	16.8	14.4	15.8
19	17.9	14.4	16.2	24.0	20.9	22.6	21.8	18.7	20.3	16.9	14.2	15.7
20	19.9	15.4	17.7	23.6	20.3	22.0	22.2	19.2	20.6	17.3	14.8	16.1
21	19.7	16.7	18.5	22.3	20.3	21.5	22.1	19.2	20.7	17.1	14.6	16.0
22	20.6	16.5	18.7	23.5	20.1	21.8	21.9	19.3	20.7	16.2	14.3	15.3
23	20.5	16.4	18.6	23.6	20.4	22.0	21.2	18.8	20.1	15.7	14.1	15.0
24	21.1	16.9	19.2	22.9	19.9	21.5	20.3	17.5	19.0	15.1	12.8	14.1
25	21.0	17.9	19.6	22.4	19.3	20.9	20.9	17.9	19.3	15.1	12.5	14.0
26	20.6	17.5	19.4	22.6	18.8	20.7	20.3	18.0	19.3	14.6	12.6	13.9
27	20.2	17.7	18.6	23.4	20.1	21.7	20.5	17.7	19.1	16.1	13.3	14.7
28	22.0	17.4	19.5	23.6	20.7	22.1	20.2	17.6	19.0	16.1	13.8	15.1
29	22.0	18.3	20.2	23.6	20.4	22.0	19.4	17.7	18.7	16.1	13.7	15.1
30	22.6	18.7	20.8	23.5	20.2	21.9	19.3	16.6	18.0	16.8	14.4	15.7
31	---	---	---	23.8	20.7	22.3	19.6	16.8	18.2	---	---	---
MONTH	22.6	12.2	17.2	24.0	17.7	21.2	23.6	16.6	20.3	20.6	12.5	16.3
YEAR	24.0	3.1	12.7									