

14185000 SOUTH SANTIAM RIVER BELOW CASCADIA, OR

Willamette Basin
South Santiam Subbasin

LOCATION.--Lat 44°23'31", long 122°29'47" referenced to North American Datum of 1927, in NW ¼ SW ¼ sec.31, T.13 S., R.3 E., Linn County, OR, Hydrologic Unit 17090006, on left bank, 0.2 mi upstream from Mouse Creek, 0.8 mi southwest of Cascadia and at mile 49.2.

DRAINAGE AREA.--174 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--September 1935 to current year. Monthly discharge only September 1935, published in WSP 1318.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 775 ft above NGVD of 1929, from topographic map. Prior to Sept. 26, 1989, at site 0.7 mi downstream at datum 759.88 ft above NGVD of 1929. Prior to Nov. 1, 1935, nonrecording gage at site 0.7 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records good. No regulation or diversion upstream from station. Continuous water-quality records for the periods June 1962 to September 1967 and February 1969 to September 1987 have been collected at this location.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--73 years (water years 1936-2008), 814 ft³/s, 63.60 in/yr, 590,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,700 ft³/s Feb. 7, 1996, gage height, 18.11 ft, from rating curve extended above 10,000 ft³/s; minimum discharge, 23 ft³/s Dec. 1, 2, 1936, at site then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,700 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 3	2230	7,810	8.96
Dec 24	0052	*7,900	*9.01

Minimum discharge, 43 ft³/s, Sept. 18, 30, gage height, 2.07 ft.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	241	193	608	1,030	1,050	2,030	684	1,480	1,530	722	96	68
2	117	179	994	968	946	1,710	650	1,330	1,370	635	96	66
3	234	167	5,530	1,060	905	1,410	650	1,360	1,950	579	95	63
4	469	157	6,210	1,430	774	1,210	711	1,380	2,440	510	90	60
5	265	149	3,270	1,590	742	1,060	738	1,530	2,000	443	86	59
6	166	140	2,500	1,300	870	944	862	1,770	1,940	403	83	58
7	129	132	2,010	1,080	1,550	887	1,010	1,700	2,250	369	81	56
8	119	126	1,570	1,380	1,590	1,550	1,010	1,460	1,960	340	80	54
9	105	121	1,240	1,980	1,420	1,590	1,030	1,260	1,760	320	80	52
10	115	207	1,020	2,490	1,570	1,450	1,050	1,170	1,750	299	80	51
11	141	196	851	3,560	1,570	1,980	999	1,290	1,800	268	75	50
12	119	237	723	3,090	1,470	1,700	1,210	1,270	1,530	242	73	48
13	103	830	629	2,740	1,650	1,680	1,730	1,190	1,420	227	70	48
14	94	451	563	2,160	1,340	1,930	1,810	1,300	1,450	214	68	47
15	89	379	545	2,040	1,110	1,870	1,450	1,850	1,370	201	65	46
16	127	773	497	1,630	1,100	1,730	1,190	2,730	1,300	187	63	45
17	219	3,200	554	1,330	1,080	1,500	1,050	3,300	1,250	175	61	45
18	299	3,560	800	1,120	1,100	3,000	1,030	3,100	1,140	165	62	44
19	2,660	3,010	1,320	981	1,230	3,110	942	2,650	1,050	157	66	45
20	1,880	1,950	1,780	921	1,260	2,230	854	2,650	1,050	151	107	45
21	1,550	1,340	1,280	798	1,220	1,880	786	2,650	1,080	144	204	47
22	969	994	1,220	706	1,150	1,570	830	2,430	1,030	136	129	53
23	739	779	3,020	651	1,050	1,430	1,130	1,960	935	137	98	54
24	577	657	5,030	608	984	1,680	1,110	1,660	834	126	85	50
25	465	571	2,470	558	1,100	1,410	1,030	1,690	795	120	88	51
26	372	515	1,790	695	1,200	1,280	1,010	1,550	774	114	86	54
27	318	625	1,410	1,570	1,200	1,130	1,250	1,470	759	111	78	50
28	275	559	1,280	1,100	1,200	1,040	1,570	1,610	868	108	78	47
29	243	822	1,420	919	1,290	924	1,830	1,970	915	104	73	45
30	243	732	1,720	802	---	837	1,700	1,750	829	108	70	44
31	210	---	1,260	1,010	---	744	---	1,660	---	104	68	---
Total	13,652	23,751	55,114	43,297	34,721	48,496	32,906	56,170	41,129	7,919	2,634	1,545
Mean	440	792	1,778	1,397	1,197	1,564	1,097	1,812	1,371	255	85.0	51.5
Max	2,660	3,560	6,210	3,560	1,650	3,110	1,830	3,300	2,440	722	204	68
Min	89	121	497	558	742	744	650	1,170	759	104	61	44
Ac-ft	27,080	47,110	109,300	85,880	68,870	96,190	65,270	111,400	81,580	15,710	5,220	3,060
Cfsm	2.53	4.55	10.2	8.03	6.88	8.99	6.30	10.4	7.88	1.47	0.49	0.30
In.	2.92	5.08	11.78	9.26	7.42	10.37	7.04	12.01	8.79	1.69	0.56	0.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	283	1,078	1,538	1,466	1,354	1,174	1,133	924	522	165	79.2	91.9
Max	1,296	2,442	4,319	3,278	3,326	2,913	2,052	1,812	1,371	466	222	318
(WY)	(1951)	(1943)	(1965)	(1953)	(1996)	(1972)	(1937)	(2008)	(2008)	(1983)	(1968)	(1959)
Min	31.6	27.6	82.3	107	130	324	356	282	101	54.2	35.9	40.9
(WY)	(1988)	(1937)	(1977)	(1977)	(1977)	(1941)	(1941)	(1987)	(1992)	(1940)	(1992)	(1987)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1936 - 2008	
Annual total	269,941		361,334			
Annual mean	740		987		814	
Highest annual mean					1,280	1972
Lowest annual mean					359	1977
Highest daily mean	7,740	Feb 16	6,210	Dec 4	23,200	Feb 7, 1996
Lowest daily mean	36	Sep 11	44	Sep 18	23	Dec 1, 1936
Annual seven-day minimum	37	Sep 21	45	Sep 14	24	Nov 25, 1936
Annual runoff (ac-ft)	535,400		716,700		590,100	
Annual runoff (cfsm)	4.25		5.67		4.68	
Annual runoff (inches)	57.71		77.25		63.60	
10 percent exceeds	1,850		1,960		1,810	
50 percent exceeds	406		920		503	
90 percent exceeds	48		68		60	

