



Water-Data Report 2007

14377100 ILLINOIS RIVER NEAR KERBY, OR

Southern Oregon Coastal Basin
Illinois Subbasin

LOCATION.--Lat 42°13'55", long 123°39'45" referenced to North American Datum of 1927, in SE ¼ SE ¼ sec.29, T.38 S., R.8 W., Josephine County, OR, Hydrologic Unit 17100311, Siskiyou National Forest, on right bank, 1.6 mi upstream from Josephine Creek, 2.5 mi northwest of Kerby and at mile 50.3.

DRAINAGE AREA.--380 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,198.8 ft above NGVD of 1929. Prior to Jan. 28, 1965, water-stage recorder and Jan. 28 to Sept. 30, 1965, nonrecording gage 700 ft downstream at datum 2.99 ft lower.

REMARKS.--Records fair. No regulation. Diversions for irrigation upstream from station.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--46 years (water years 1962-2007), 1,262 ft³/s, 45.11 in/yr, 913,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 92,200 ft³/s Dec. 22, 1964, gage height, 45.28 ft, from floodmark, site and datum then in use, from rating curve extended above 30,000 ft³/s on basis of slope-area measurement of peak flow; minimum discharge, 12 ft³/s Aug. 24, 1992.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 11,000 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 13	1315	18,600	20.63
Dec 26	1830	*25,400	*24.38

Minimum discharge, 23 ft³/s, Sept. 12, 13, gage height, 0.59 ft.

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

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	41	62	1,070	2,170	531	2,550	1,400	890	283	124	52	34
2	41	68	977	1,900	509	2,660	1,250	1,080	273	117	49	34
3	42	101	841	5,460	493	3,160	1,140	1,470	259	111	48	32
4	44	240	736	7,600	477	3,440	1,060	1,520	254	103	48	33
5	49	325	669	4,690	473	3,720	998	1,310	263	97	48	37
6	50	346	637	3,900	472	3,780	968	1,140	283	88	47	38
7	49	502	616	3,520	495	3,830	1,010	1,070	277	82	46	36
8	49	1,370	595	2,940	739	3,850	980	1,030	252	79	47	35
9	49	1,130	649	2,560	1,170	3,120	1,120	961	236	77	47	34
10	47	583	1,040	2,320	1,330	2,910	1,110	878	240	71	45	33
11	47	1,450	2,560	2,080	5,440	3,100	1,090	800	231	75	45	28
12	47	805	6,310	1,830	4,020	3,730	1,480	746	221	86	44	25
13	47	2,500	13,000	1,620	2,700	3,640	1,320	694	207	82	43	25
14	47	3,610	13,900	1,460	2,100	3,060	1,330	645	197	78	43	27
15	48	1,400	10,000	1,310	2,090	2,530	1,440	608	190	76	41	33
16	52	2,610	5,020	1,210	2,030	2,290	1,320	587	182	73	40	35
17	62	1,570	3,170	1,120	1,760	2,320	1,240	558	171	74	40	34
18	66	933	2,330	1,040	1,560	2,250	1,200	528	160	105	41	34
19	62	740	1,850	983	1,360	2,100	1,130	504	154	121	47	34
20	60	2,580	1,520	929	1,320	2,360	1,080	487	149	102	51	35
21	59	2,240	3,050	869	2,030	2,000	1,150	477	146	97	50	35
22	60	5,560	2,880	819	2,640	1,720	2,280	446	145	92	47	34
23	59	5,450	2,580	777	2,510	1,550	1,930	423	144	81	43	33
24	59	2,950	2,730	740	3,500	1,450	1,620	402	142	74	38	33
25	58	2,180	12,800	709	7,490	1,530	1,430	380	140	71	38	31
26	58	2,580	22,000	672	5,020	1,640	1,260	368	132	68	38	31
27	59	3,530	12,400	648	3,560	1,800	1,140	352	118	65	38	32
28	60	2,210	e5,800	616	2,840	1,720	1,070	338	117	63	36	34
29	60	1,510	4,160	591	---	1,590	1,010	324	127	62	34	38
30	59	1,140	3,150	569	---	1,510	946	308	129	58	32	43
31	60	---	2,570	550	---	1,460	---	294	---	55	32	---
Total	1,650	52,275	141,610	58,202	60,659	78,370	37,502	21,618	5,822	2,607	1,338	1,000
Mean	53.2	1,742	4,568	1,877	2,166	2,528	1,250	697	194	84.1	43.2	33.3
Max	66	5,560	22,000	7,600	7,490	3,850	2,280	1,520	283	124	52	43
Min	41	62	595	550	472	1,450	946	294	117	55	32	25
Ac-ft	3,270	103,700	280,900	115,400	120,300	155,400	74,390	42,880	11,550	5,170	2,650	1,980
Cfsm	0.14	4.59	12.0	4.94	5.70	6.65	3.29	1.84	0.51	0.22	0.11	0.09
In.	0.16	5.12	13.86	5.70	5.94	7.67	3.67	2.12	0.57	0.26	0.13	0.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	202	1,382	2,748	2,951	2,539	2,295	1,601	915	363	98.3	46.0	59.3
Max	1,771	6,344	9,242	7,184	6,686	4,867	4,518	2,439	1,214	280	116	358
(WY)	(1963)	(1974)	(1965)	(1970)	(1986)	(1983)	(1982)	(1963)	(1993)	(1983)	(1976)	(1978)
Min	25.0	82.4	115	236	358	508	433	315	82.7	36.5	19.0	15.5
(WY)	(1988)	(1988)	(1977)	(1977)	(1977)	(1988)	(1977)	(1992)	(1992)	(1987)	(1992)	(1992)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1962 - 2007	
Annual total	657,787		462,653			
Annual mean	1,802		1,268		1,262	
Highest annual mean					2,372 1974	
Lowest annual mean					275 1977	
Highest daily mean	22,000	Dec 26	22,000	Dec 26	64,000	Dec 22, 1964
Lowest daily mean	33	Sep 13	25	Sep 12	13	Aug 22, 1992
Annual seven-day minimum	35	Sep 8	29	Sep 9	14	Sep 8, 1992
Annual runoff (ac-ft)	1,305,000		917,700		913,900	
Annual runoff (cfsm)	4.74		3.34		3.32	
Annual runoff (inches)	64.39		45.29		45.11	
10 percent exceeds	4,920		3,110		3,100	
50 percent exceeds	849		558		502	
90 percent exceeds	41		38		38	

