Water-Data Report 2011

06770200 Platte River near Kearney, Nebr.

Middle Platte Basin
Middle Platte-Buffalo Subbasin

LOCATION.--Lat 40°39′29″, long 99°05′10″ referenced to North American Datum of 1983, in SE ¼ SE ¼ sec.14, T.8 N., R.16 W., Kearney County, NE, Hydrologic Unit 10200101, on right bank near downstream side of bridge on State Highway 44, 2 mi south of Kearney, and at mile 117.

DRAINAGE AREA.--57,260 mi^2 of which 4,720 mi^2 probably is noncontributing.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--DAILY DISCHARGE--January 1982 to current year.

PERIOD OF RECORD.--DAILY GAGE HEIGHT--October 2009 to current year.

REVISED RECORDS.--WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 2,134.11 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of the stream affected by transmountain diversions, storage reservoirs, power developments, groundwater withdrawals, diversions for irrigation, and return flow from irrigated areas.

06770200 Platte River near Kearney, Nebr.—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	2,000	1,630	2,170	2,130	e1,530	3,090	3,760	3,060	7,280	7,110	4,380	3,790
2	1,980	1,600	2,230	1,620	e1,310	2,510	3,730	2,660	7,660	6,890	4,080	4,060
3	1,950	1,520	2,260	e1,300	e1,370	2,260	3,760	2,630	7,780	7,170	3,770	4,450
4	1,960	1,510	2,250	e1,090	e1,730	2,560	3,700	3,440	7,670	6,770	3,740	4,420
5	1,980	1,500	2,210	e1,380	e2,010	2,650	3,640	3,230	7,530	6,550	4,240	4,380
6	2,020	1,470	2,160	e1,580	e1,660	2,630	3,610	3,540	e7,440	6,780	4,860	4,280
7	2,080	1,460	2,170	e1,740	e1,410	2,840	3,570	3,540	e7,430	6,710	5,020	4,020
8	2,100	1,470	2,080	e1,680	e1,300	3,190	3,540	3,270	e7,420	6,730	4,720	3,880
9	2,020	1,480	1,380	e1,510	e1,420	3,440	3,490	3,580	7,470	6,270	4,940	4,040
10	1,920	1,480	2,110	e1,250	e1,590	3,530	3,430	3,570	7,280	5,760	5,180	4,090
11	2,040	1,500	2,220	e785	e1,840	3,640	3,340	3,510	6,970	5,740	5,060	4,130
12	2,070	1,580	1,350	e847	e2,350	3,640	3,250	3,980	7,060	5,790	5,010	4,150
13	2,010	1,600	1,200	e988	e2,820	3,710	3,240	4,110	7,260	5,600	5,080	4,170
14	1,960	1,610	1,770	e1,190	e2,880	3,380	3,550	3,810	7,330	5,540	4,940	4,260
15	1,950	1,650	2,100	e1,390	e2,910	3,170	4,550	3,600	7,200	5,330	5,530	4,310
16	1,890	1,930	2,740	e1,670	e3,000	2,720	4,350	4,130	7,260	5,200	4,940	4,550
17	1,820	2,220	2,260	e2,130	2,780	2,990	4,290	4,020	7,280	5,250	4,470	4,730
18	1,790	2,330	2,060	e2,330	2,730	3,370	4,180	3,890	7,070	5,410	4,090	4,830
19	1,700	2,350	2,020	e2,270	2,800	3,760	4,310	4,020	7,670	5,580	3,560	4,790
20	1,540	2,360	1,920	e2,130	3,030	3,740	4,050	4,130	8,310	5,420	3,290	4,710
21	1,570	2,380	1,920	e2,180	3,000	3,750	4,080	4,420	8,630	5,310	3,360	4,690
22	1,560	2,390	1,850	e2,370	2,950	3,750	4,180	4,530	8,650	5,540	3,420	4,690
23	1,780	2,390	2,070	e2,660	2,990	3,720	4,220	4,890	8,110	5,600	3,370	4,700
24	1,770	2,410	2,120	e2,840	2,960	3,690	4,200	5,560	8,120	5,830	3,160	4,700
25	1,740	2,360	2,150	e2,840	2,840	3,720	4,150	7,590	9,060	6,310	3,010	4,720
26	1,440	2,230	2,270	e2,940	2,850	3,750	4,010	8,360	9,100	6,330	2,990	4,720
27	433	2,220	2,310	e3,010	3,030	3,720	3,880	8,360	8,480	5,630	3,080	4,000
28	472	2,220	2,420	e3,050	2,960	3,780	3,790	8,180	7,910	5,300	3,210	4,070
29	502	2,230	2,510	e3,100	---	3,800	3,790	7,890	7,420	4,840	3,290	4,020
30	873	2,150	2,620	e3,040	---	3,780	3,750	7,630	7,270	4,760	3,650	3,910
31	1,430	---	2,400	e2,690	---	3,820	---	7,450	---	4,650	3,880	---
Total	52,350	57,230	65,300	61,730	66,050	104,100	115,390	146,580	231,120	181,700	127,320	130,260
Mean	1,689	1,908	2,106	1,991	2,359	3,358	3,846	4,728	7,704	5,861	4,107	4,342
Max	2,100	2,410	2,740	3,100	3,030	3,820	4,550	8,360	9,100	7,170	5,530	4,830
Min	433	1,460	1,200	785	1,300	2,260	3,240	2,630	6,970	4,650	2,990	3,790
Ac-ft	103,800	113,500	129,500	122,400	131,000	206,500	228,900	290,700	458,400	360,400	252,500	258,400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,256	1,342	1,386	1,571	1,654	1,789	1,642	1,519	2,344	1,285	983	1,208
Max	3,859	3,430	3,288	3,448	3,829	3,358	4,109	4,728	11,580	6,165	4,107	4,342
(WY)	(1987)	(1998)	(1998)	(1998)	(1998)	(2011)	(1986)	(2011)	(1995)	(1995)	(2011)	(2011)
Min	128	255	494	523	496	634	323	27.4	12.0	2.89	9.51	24.9
(WY)	(2004)	(2007)	(2004)	(2004)	(2003)	(2005)	(2004)	(2006)	(2006)	(2006)	(2003)	(2003)

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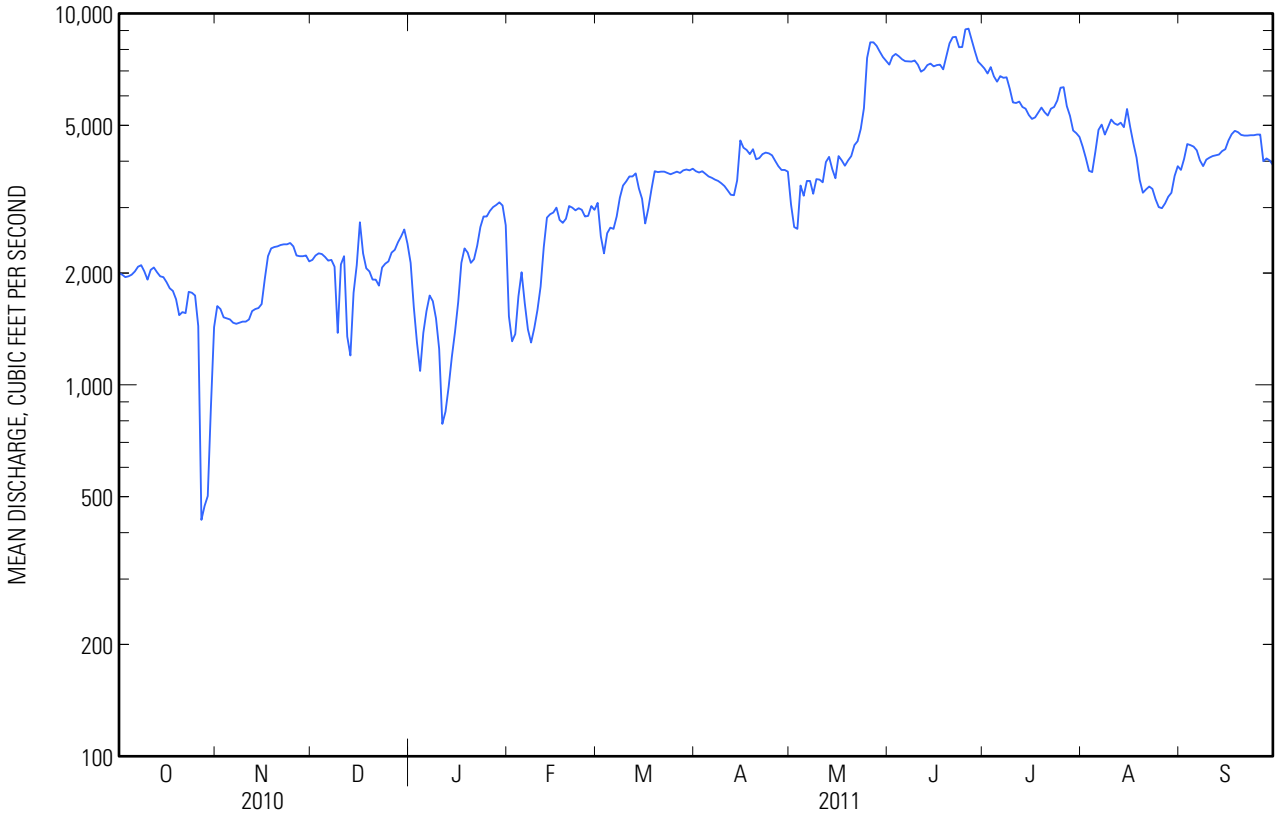
SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1986 - 2011	
Annual total	755,265		1,339,130			
Annual mean	2,069		3,669		1,506	
Highest annual mean					3,669	2011
Lowest annual mean					285	2004
Highest daily mean	8,430	Jun 17	9,100	Jun 26	18,700	Jun 11, 1995
Lowest daily mean	433	Oct 27	433	Oct 27	0.68	Aug 1, 2006
Annual seven-day minimum	969	Oct 26	969	Oct 26	1.0	Jul 26, 2006
Maximum peak flow			[a]9,460	Jun 25	[b]23,700	Jun 29, 1983
Maximum peak stage			[c]7.19	Feb 5	[d]7.95	May 26, 2008
Annual runoff (ac-ft)	1,498,000		2,656,000		1,091,000	
10 percent exceeds	2,620		7,090		3,190	
50 percent exceeds	1,900		3,430		1,100	
90 percent exceeds	1,040		1,570		153	

[a] Gage height, 6.50 ft.
[b] Gage height, 7.42 ft.
[c] Backwater from ice.
[d] Discharge, 13,400 ft³/s.



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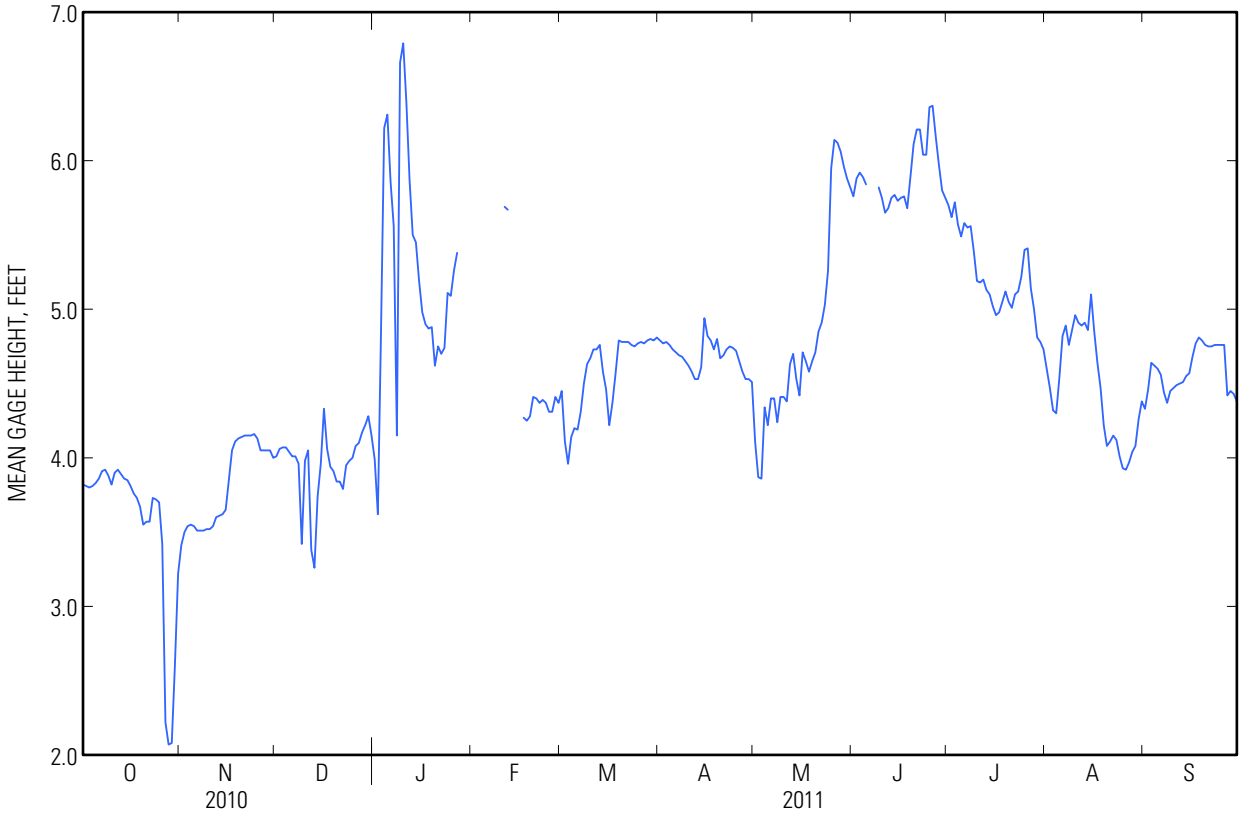
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	3.82	3.41	4.01	3.99	---	4.45	4.79	4.11	5.76	5.70	4.60	4.33
2	3.81	3.50	4.06	3.62	---	4.11	4.77	3.87	5.88	5.62	4.47	4.46
3	3.80	3.54	4.07	4.86	---	3.96	4.78	3.86	5.92	5.72	4.32	4.64
4	3.81	3.55	4.07	6.22	---	4.14	4.76	4.34	5.89	5.57	4.30	4.62
5	3.83	3.54	4.04	6.31	---	4.20	4.73	4.22	5.84	5.49	4.54	4.60
6	3.86	3.51	4.01	5.86	---	4.19	4.71	4.40	---	5.58	4.82	4.56
7	3.91	3.51	4.01	5.56	---	4.31	4.69	4.40	---	5.55	4.89	4.44
8	3.92	3.51	3.96	4.15	---	4.50	4.68	4.24	---	5.56	4.76	4.37
9	3.88	3.52	3.42	6.66	---	4.63	4.65	4.41	5.82	5.39	4.86	4.45
10	3.82	3.52	3.98	6.79	---	4.67	4.62	4.41	5.75	5.19	4.96	4.47
11	3.90	3.54	4.05	6.39	5.69	4.73	4.58	4.38	5.65	5.18	4.91	4.49
12	3.92	3.60	3.38	5.87	5.67	4.73	4.53	4.63	5.68	5.20	4.89	4.50
13	3.89	3.61	3.26	5.50	---	4.76	4.53	4.70	5.75	5.13	4.91	4.51
14	3.86	3.62	3.74	5.45	---	4.58	4.61	4.53	5.77	5.10	4.86	4.55
15	3.85	3.65	3.96	5.19	---	4.46	4.94	4.42	5.73	5.02	5.10	4.57
16	3.81	3.85	4.33	4.98	---	4.22	4.82	4.71	5.75	4.96	4.85	4.68
17	3.76	4.05	4.06	4.90	4.27	4.37	4.79	4.65	5.76	4.98	4.64	4.77
18	3.73	4.11	3.94	4.87	4.25	4.57	4.73	4.58	5.68	5.05	4.47	4.81
19	3.67	4.13	3.91	4.88	4.28	4.79	4.80	4.65	5.89	5.12	4.22	4.79
20	3.55	4.14	3.84	4.62	4.41	4.78	4.67	4.71	6.11	5.05	4.08	4.76
21	3.57	4.15	3.84	4.75	4.40	4.78	4.69	4.85	6.21	5.01	4.11	4.75
22	3.57	4.15	3.79	4.70	4.37	4.78	4.73	4.91	6.21	5.10	4.15	4.75
23	3.73	4.15	3.95	4.74	4.39	4.76	4.75	5.03	6.04	5.12	4.12	4.76
24	3.72	4.16	3.98	5.11	4.37	4.75	4.74	5.26	6.04	5.22	4.01	4.76
25	3.70	4.13	4.00	5.09	4.31	4.77	4.72	5.95	6.36	5.40	3.93	4.76
26	3.42	4.05	4.08	5.26	4.31	4.78	4.65	6.14	6.37	5.41	3.92	4.76
27	2.22	4.05	4.10	5.38	4.41	4.77	4.58	6.12	6.16	5.14	3.97	4.42
28	2.07	4.05	4.17	---	4.37	4.79	4.53	6.06	5.97	5.00	4.04	4.45
29	2.08	4.05	4.22	---	---	4.80	4.53	5.96	5.80	4.81	4.08	4.43
30	2.61	4.00	4.28	---	---	4.79	4.51	5.88	5.75	4.78	4.26	4.38
31	3.22	---	4.15	---	---	4.81	---	5.82	---	4.73	4.38	---
Mean	3.56	3.81	3.96	---	---	4.57	4.69	4.85	---	5.22	4.47	4.59
Max	3.92	4.16	4.33	---	---	4.81	4.94	6.14	---	5.72	5.10	4.81
Min	2.07	3.41	3.26	---	---	3.96	4.51	3.86	---	4.73	3.92	4.33

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