

CALENDAR FOR WATER YEAR 2002

2001

OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6					1	2	3							1
7	8	9	10	11	12	13	4	5	6	7	8	9	10	2	3	4	5	6	7	8
14	15	16	17	18	19	20	11	12	13	14	15	16	17	9	10	11	12	13	14	15
21	22	23	24	25	26	27	18	19	20	21	22	23	24	16	17	18	19	20	21	22
28	29	30	31				25	26	27	28	29	30		23	24	25	26	27	28	29
														30	31					

2002

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
		1	2	3	4	5						1	2						1	2
6	7	8	9	10	11	12	3	4	5	6	7	8	9	3	4	5	6	7	8	9
13	14	15	16	17	18	19	10	11	12	13	14	15	16	10	11	12	13	14	15	16
20	21	22	23	24	25	26	17	18	19	20	21	22	23	17	18	19	20	21	22	23
27	28	29	30	31			24	25	26	27	28			24	25	26	27	28	29	30
																				31

APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6			1	2	3	4								1
7	8	9	10	11	12	13	5	6	7	8	9	10	11	2	3	4	5	6	7	8
14	15	16	17	18	19	20	12	13	14	15	16	17	18	9	10	11	12	13	14	15
21	22	23	24	25	26	27	19	20	21	22	23	24	25	16	17	18	19	20	21	22
28	29	30					26	27	28	29	30	31		23	24	25	26	27	28	29
																				30

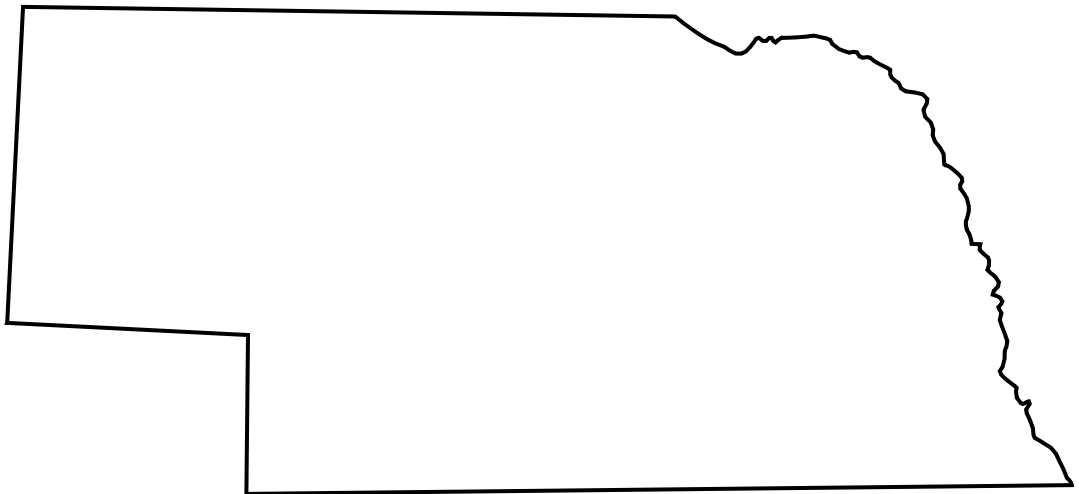
JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6					1	2	3	1	2	3	4	5	6	7
7	8	9	10	11	12	13	4	5	6	7	8	9	10	8	9	10	11	12	13	14
14	15	16	17	18	19	20	11	12	13	14	15	16	17	15	16	17	18	19	20	21
21	22	23	24	25	26	27	18	19	20	21	22	23	24	22	23	24	25	26	27	28
28	29	30	31				25	26	27	28	29	30	31	29	30					

U.S. Department of the Interior
U.S. Geological Survey

Water Resources Data Nebraska Water Year 2002

By D.E. Hitch, S.H. Hull, and V.C. Walczyk

Water-Data Report NE-02-1



Prepared in cooperation with the Nebraska Department of Natural Resources,
the Conservation and Survey Division of the University of Nebraska, the Nebraska
Department of Environmental Quality, and other Federal, State, and local agencies



UNITED STATES DEPARTMENT OF THE INTERIOR
GAIL A. NORTON, Secretary
GEOLOGICAL SURVEY
Charles G. Groat, Director

For information on the water programs in Nebraska, write to:

District Chief
U.S. Geological Survey
Federal Building, Room 406
100 Centennial Mall, North
Lincoln, Nebraska 68508

PREFACE

This annual hydrologic data report of Nebraska is one of a series of annual reports that documents hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, quality of water, and ground-water levels provide the hydrologic information needed by Federal, State, and local agencies, and the private sector for developing and managing our Nation's land and water resources.

This report is the culmination of a concerted effort by personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who edited and assembled the report.

In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to U.S. Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, review, and tabulation of the data:

P.J. Soenksen, G.V. Steele, J.S. Stanton, P.A. Bartz, W.H. Kress, J.D. Frankforter, V.L. Mcguire, D.L. Rus, M.J. Griffin, K.E. Wilson, and S.K. Sebree of the District office.

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R.A. Drudik, and V.A. John of the Ord field office.

D.L. Curtis, J.D. Miller, and J.M. Sedlacek (student assistant) of the North Platte field office.

This report was prepared in cooperation with the State of Nebraska and with other agencies under the general supervision of Robert L. Joseph, District Chief, Nebraska.

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13. ABSTRACT <i>(Maximum 200 words)</i> The Nebraska water resources data report for water year 2002 includes records of stage, discharge, and water quality of streams; stage and/or contents of lakes and reservoirs; and water levels and quality of ground water in wells. This report contains records of stream stage for 3 stations; stream discharge for 96 continuous and 5 crest-stage gaging stations, and 3 miscellaneous and 55 low-flow sites; stream water quality for 23 gaging stations and 5 miscellaneous sites; water elevation and/or contents for 1 lake and 1 reservoir; ground-water levels for 43 observation wells; and ground-water quality for 115 wells. These data represent that part of the National Water Data System collected in and near Nebraska by the U.S. Geological Survey and cooperating local, State, and Federal agencies.			
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SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE
PUBLISHED IN THIS VOLUME

[Letter after station name designates type of data: (d) discharge, (st) stage only, (e) elevation and/or contents, (c) chemical, (m) microbiological, (t) water temperature, and (s) sediment.] Each station has been assigned an 8-digit station number. For ease in reading the station number, the 06 preceding the number has been left off as well as the 00 following a 4-digit number]

	<i>Station number</i>	<i>Page</i>
MISSOURI RIVER BASIN		
PONCA CREEK BASIN		
Ponca Creek at Verdel (d)-----	4536	48
NIOBRARA RIVER BASIN		
Niobrara River near Sparks (d c t)-----	4615	50
Long Pine Creek near Riverview (d c t)-----	4635	54
Keya Paha River at Wewela, SD (d)-----	4645	58
Niobrara River near Verdel (d)-----	4655	60
Verdigre Creek near Verdigre (d)-----	4657	62
MISSOURI RIVER:		
Lewis and Clark Lake near Yankton, SD (e)-----	4670	66
Missouri River at Sioux City, IA (d)-----	4860	68
OMAHA CREEK BASIN		
Omaha Creek at Homer (d)-----	6010	70
Missouri River at Decatur (d)-----	6012	72
Missouri River at Omaha (d c t s)-----	6100	74
PLATTE RIVER BASIN		
North Platte River (head of Platte River) at Wyoming-Nebraska State line (d c t s)-----	6745	86
South Platte River:		
South Platte River at Julesburg, CO (d) (Revised Water Year 2001 data)-----	7640	90
South Platte River at Julesburg, CO (d)-----	7640	92
South Platte River at Roscoe (d)-----	764880	94
Platte River:		
Plum Creek near Smithfield (d)-----	7675	96
Platte River near Overton (d c t)-----	7680	98
Spring Creek near Overton (d)-----	768020	102
Platte River Middle Channel at Cottonwood Ranch, near Elm Creek (d)-----	768035	104
Buffalo Creek near Overton (d)-----	7690	106
Elm Creek near Elm Creek (d)-----	769525	108
North Dry Creek 2 mi SW of Platte River Bridge S of Kearney (d)-----	770195	110
Platte River near Kearney (d)-----	7702	112
Fort Kearney Slough near Newark (d)-----	770240	114
Platte River near Newark (st)-----	770253	116
Platte River near Prosser (st)-----	770375	117
Platte River near Doniphan (st)-----	770470	118
Platte River near Grand Island (d)-----	7705	120
Warm Slough near Central City (d)-----	772775	122

SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE
PUBLISHED IN THIS VOLUME

	<i>Station number</i>	<i>Page</i>
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PLATTE RIVER BASIN--Continued		
Platte River near Duncan (d)-----	7740	124
Middle Loup River (head of Loup River) at Dunning (d)-----	7755	128
Dismal River near Thedford (d c t s)-----	7759	130
South Loup River at St. Michael (d c t)-----	7840	136
Middle Loup River at St. Paul (d c t)-----	7850	140
North Loup River at Taylor (d)-----	7860	144
North Loup River near St. Paul (d c t)-----	7905	146
Loup River:		
Loup River Power Canal near Genoa (d)-----	7925	150
Loup River near Genoa (d)-----	7930	152
Beaver Creek at Genoa (d)-----	7940	154
Shell Creek near Columbus (d)-----	7955	158
Platte River at North Bend (d)-----	7960	160
Platte River near Leshara (d)-----	7965	162
Elkhorn River at Ewing (d)-----	7975	166
Elkhorn River at Norfolk (d)-----	7990	168
North Fork Elkhorn River near Pierce (d)-----	7991	170
Elkhorn River at Pilger (d)-----	799315	172
Elkhorn River at West Point (d)-----	799350	174
Logan Creek near Uehling (d)-----	7995	176
Maple Creek near Nickerson (d c t s)-----	8000	178
Elkhorn River at Waterloo (d c t s)-----	8005	194
Platte River near Ashland (d c t)-----	8010	204
Olive Branch (head of Salt Creek) near Hallam (d c t)-----	801180	208
Salt Creek at Roca (d)-----	8030	212
Salt Creek at Pioneers Boulevard at Lincoln (d)-----	803080	214
Haines Branch at SW 56th St. at Lincoln (d)-----	803093	216
Middle Creek at SW 40th St at Lincoln (d)-----	803170	218
Oak Creek at Air Park Rd at Lincoln (d)-----	803486	220
Salt Creek at Lincoln (d)-----	8035	222
Little Salt Creek near Lincoln (d)-----	803510	224
Salt Creek at 70th St. at Lincoln (d)-----	803513	226
Stevens Creek near Lincoln (d)-----	803520	228
Rock Creek near Ceresco (d)-----	803530	230
Salt Creek at Greenwood (d)-----	803555	232
Wahoo Creek at Ithaca (d c t)-----	8040	234
Wahoo Creek at Ashland (d)-----	8047	238
Johnson Creek near Memphis (d)-----	8049	240
Platte River at Louisville (d c t s)-----	8055	242
WEeping WATER CREEK BASIN		
Weeping Water Creek at Union (d)-----	8065	252

SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE
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	<i>Station number</i>	<i>Page</i>
MISSOURI RIVER BASIN--Continued		
MISSOURI RIVER:		
Missouri River at Nebraska City (d c t s)-----	8070	254
LITTLE NEMAHA RIVER BASIN		
Little Nemaha River at Auburn (d) -----	8115	260
MISSOURI RIVER:		
Missouri River at Rulo (d)-----	8135	262
BIG NEMAHA RIVER BASIN		
Big Nemaha River:		
Turkey Creek near Seneca, KS (d)-----	8140	264
Big Nemaha River at Falls City (d c t) -----	8150	266
KANSAS RIVER BASIN		
Arikaree River (head of Kansas River) at Haigler (d) -----	8215	272
North Fork Republican River at Colorado-Nebraska State line (d)-----	8230	274
Republican River (continuation of Arikaree River):		
Buffalo Creek near Haigler (d)-----	8235	276
Rock Creek at Parks (d)-----	8240	278
South Fork Republican River near Benkelman (d) -----	8275	280
Republican River at Stratton (d)-----	8285	282
Enders Reservoir near Enders (e) -----	8320	284
Frenchman Creek at Palisade (d)-----	8340	286
Frenchman Creek at Culbertson (d) -----	8355	288
Driftwood Creek near McCook (d) -----	8365	290
Republican River at McCook (d)-----	8370	292
Red Willow Creek near Red Willow (d) -----	8380	294
Republican River at Cambridge (d)-----	8435	296
Republican River near Orleans (d c t) -----	8445	298
Sappa Creek:		
Sappa Creek near Beaver City (d) -----	8452	302
Beaver Creek at Cedar Bluffs, KS (d) -----	8465	304
Sappa Creek near Stamford (d) -----	8475	306
Prairie Dog Creek near Woodruff, KS (d) -----	8485	308
Republican River below Harlan County Dam (d)-----	8495	310
Courtland Canal at Nebraska-Kansas State line (d) -----	8525	312
Republican River at Guide Rock (d)-----	853020	314
Republican River near Hardy (d)-----	8535	316
Kansas River (continuation of Republican River):		
Big Blue River:		
West Fork Big Blue River near Dorchester (d c t)-----	8808	320
Big Blue River near Crete (d) -----	8810	324
Turkey Creek near DeWitt (d) -----	881380	326
Big Blue River at Barneston (d c t) -----	8820	328
Little Blue River near Deweese (d) -----	8830	332
Little Blue River near Fairbury (d c t) -----	8840	334
Little Blue River at Hollenberg, KS (d) -----	884025	338

**GROUND-WATER WELLS, BY COUNTY,
FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME**

ADAMS COUNTY

Well	403403098244001	Local number	7N	10W	23AB-----	360
------	-----------------	--------------	----	-----	-----------	-----

BLAINE COUNTY

Well	414958100061501	Local number	22N	24W	33CA -----	360
------	-----------------	--------------	-----	-----	------------	-----

BOONE COUNTY

Well	413323098074501	Local number	18N	7W	4CA -----	360
------	-----------------	--------------	-----	----	-----------	-----

BUFFALO COUNTY

Well	404618098504401	Local number	9N	14W	1DC -----	360
------	-----------------	--------------	----	-----	-----------	-----

Well	404345098560001	Local number	9N	14W	19DD -----	361
------	-----------------	--------------	----	-----	------------	-----

CHASE COUNTY

Well	403220101384001	Local number	7N	38W	28CC-----	361
------	-----------------	--------------	----	-----	-----------	-----

Well	403235101395501	Local number	7N	38W	29CBB-----	361
------	-----------------	--------------	----	-----	------------	-----

CHERRY COUNTY

Well	423205100321501	Local number	30N	28W	36AAA -----	362
------	-----------------	--------------	-----	-----	-------------	-----

COLFAX COUNTY

Well	412810097054501	Local number	17N	3E	4CC -----	362
------	-----------------	--------------	-----	----	-----------	-----

DAWSON COUNTY

Well	404949099445701	Local number	10N	21W	18DDD -----	362
------	-----------------	--------------	-----	-----	-------------	-----

DUNDY COUNTY

Well	400155101521302	Local number	1N	40W	29BB2 -----	363
------	-----------------	--------------	----	-----	-------------	-----

FILLMORE COUNTY

Well	402504097432201	Local number	5N	4W	12BDC -----	363
------	-----------------	--------------	----	----	-------------	-----

Well	403800097300701	Local number	8N	2W	26AD -----	364
------	-----------------	--------------	----	----	------------	-----

GARFIELD COUNTY

Well	414718099083201	Local number	21N	16W	14CB-----	364
------	-----------------	--------------	-----	-----	-----------	-----

GROUND-WATER WELLS, BY COUNTY,
FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

				Page
GOSPER COUNTY				
Well	403626099451401	Local number	7N 21W 6BC -----	364
HALL COUNTY				
Well	405315098304302	Local number	11N 11W 25CC2 -----	365
HAMILTON COUNTY				
Well	404836097584101	Local number	10N 6W 27ACAA -----	365
Well	405514097573901	Local number	11N 6W 13CB-----	366
HOLT COUNTY				
Well	421605098203001	Local number	27N 9W 34DA -----	366
Well	423148098300601	Local number	30N 10W 32DAA -----	366
Well	423730098560001	Local number	31N 14W 27DDD -----	367
HOOKER COUNTY				
Well	420204101200502	Local number	24N 35W 23DC2 -----	367
KEARNEY COUNTY				
Well	402625098594501	Local number	6N 15W 34DC -----	367
KIMBALL COUNTY				
Well	411416103361101	Local number	15N 55W 26CCC-----	368
LANCASTER COUNTY				
Well	403929096401001	Local number	8N 7E 18DDB -----	368
Well	403833096385501	Local number	8N 7E 20DDA -----	368
Well	404706096413001	Local number	10N 6E 36CDD -----	368
McPHERSON COUNTY				
Well	413130100531201	Local number	18N 31W 16DD -----	369
NUCKOLLS COUNTY				
Well	400240098111301	Local number	1N 8W 23AB -----	369

GROUND-WATER WELLS, BY COUNTY,
FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

						Page
PHELPS COUNTY						
Well	403123099261501	Local number	6N	19W	2AA-----	369
PLATTE COUNTY						
Well	412955097192001	Local number	18N	1E	28CD-----	370
SALINE COUNTY						
Well	403855097072501	Local number	8N	3E	19ADA-----	370
SARPY COUNTY						
Well	410308096190701	Local number	13N	10E	32DBBA-----	370
SAUNDERS COUNTY						
Well	410558096210601	Local number	13N	9E	13ADBA-----	371
Well	410427096202501	Local number	13N	10E	19CDDD-----	371
Well	410340096202201	Local number	13N	10E	30CDDA-----	371
Well	410303096192901	Local number	13N	10E	32CABC-----	372
Well	411005096281502	Local number	14N	8E	24ACD2-----	372
SCOTTS BLUFF COUNTY						
Well	415325103392801	Local number	22N	55W	11DDC-----	373
SEWARD COUNTY						
Well	405406097115001	Local number	11N	2E	21DD-----	373
VALLEY COUNTY						
Well	412955099123201	Local number	18N	16W	30CC-----	374
WEBSTER COUNTY						
Well	400423098314001	Local number	1N	11W	11AB-----	374
YORK COUNTY						
Well	405305097351503	Local number	11N	2W	31BA3-----	374

The following continuous-record surface-water discharge or stage-only stations (gaging stations) in Nebraska have been discontinued. Daily streamflow or stage records were collected and published for the period of record, expressed in water years, shown for each station. Each station has been assigned an 8-digit station number. For ease in reading the station number, the 06 preceding the number has been left off as well as the 00 following 4-digit number.

DISCONTINUED SURFACE-WATER GAGING STATIONS

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only); mi², square mile; --, not available; WYO, Wyoming; NE, Nebraska]

Station name	Station number	Drainage area (mi ²)	Period of record (water years)
White River Basin			
White River near Crawford (d)	4435	1,163	*1897
White River at Crawford (d)	4440	313	1931-43, 1948-91
White River below Crawford (d)	4445	350	*1931
White River below Cottonwood Creek near Whitney (d)	4450	676	1949-61
White River near Chadron (d)	4455	750	1931-43
Big Bordeaux Creek near Chadron (d)	445590	9.42	1968-79
Ponca Creek Basin			
Ponca Creek near Naper (d)	4534	373	1961-74
Ponca Creek at Anoka (d)	4535	504	1949-94
Ponca Creek at Lynch (d)	453550	--	1961-64
Niobrara River Basin			
Niobrara River at WYO-NE State Line (d)	4540	455	1956-94
Niobrara River at Agate (d)	4541	840	1957-91
Niobrara River above Box Butte Reservoir (d)	4545	1,400	1947-94
Niobrara River below Box Butte Reservoir (d)	4555	1,460	1947-91
Niobrara River near Dunlap (d)	4559	1,580	1931-42, 1962-71
Niobrara River near Hay Springs (d)	4565	1,790	1950-64
Niobrara River near Colclessler (d)	4570	2,220	1948
Niobrara River near Gordon (d)	4575	4,290	1929-32, 1946-91
Antelope Creek near Gordon (d)	4580	160	*1948
Bear Creek near Eli (d)	4585	360	1948-53
Niobrara River at Cody (d)	4590	5,570	1948-57
Snake River at Doughboy (d)	459175	405	1982-93
Snake River above Merritt Reservoir (d)	4592	440	1963-81
Snake River near Burge (d)	4595	646	1947-94
Gordon Creek near Simeon (d)	4600	--	*1948
Niobrara River near Valentine (d)	4605	6,160	1901-06, 1928-32
Minnechaduza Creek near Kilgore (d)	4609	85.0	1958-74
Minnechaduza Creek at Valentine (d)	4610	390	1948-93
Niobrara River near Norden (d)	4620	8,390	1953-83, 1986
Plum Creek at Meadville (d)	4625	536	1948-75, 1977-94

DISCONTINUED SURFACE-WATER GAGING STATIONS--Continued

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only); mi², square mile; --, not available; WYO, Wyoming; NE, Nebraska]

Station name	Station number	Drainage area (mi ²)	Period of record (water years)
Niobrara River Basin--Continued			
Niobrara River at Meadville (d)	4630	--	1951-52
Long Pine Creek near Long Pine (d)	463080	246	1980-91
Niobrara River at Mariaville (d)	463720	9,810	1986-91
Keya Paha River near Naper	4649	1,690	1958-94
Eagle Creek near Redbird (d)	465310	206	1979-91
Redbird Creek at Redbird (d)	465440	157	1981-94
North Branch Verdigre Creek near Verdigre (d)	465680	137	1980-92
Niobrara River at Niobrara (d)	4660	--	1954-58
Bazile Creek Basin			
Bazile Creek near Niobrara (d)	4665	440	1952-95
Bow Creek Basin			
Bow Creek near St. James (d)	478518	304	1979-93
Blackbird Creek Basin			
Blackbird Creek near Macy (d)	6011	102	1979-80
Tekamah Creek Basin			
Tekamah Creek at Tekamah (d)	6080	23.0	1949-81
New York Creek Basin			
New York Creek at Herman (d)	6090	29.7	1946-69
Platte River Basin			
Mitchell Canal at WY-NE State Line (d)	6740	--	1938-41
North Platte River at Henry (d)	6750	--	1912-18
Horse Creek near Lyman (d)	6775	1,707	1931-94
Sheep Creek near Morrill (d)	6780	362	1932-91
North Platte River at Morrill (d)	6785	--	1917-23
Dutch Flats Drain near Mitchell (d)	6788	--	1961-65
Dry Spotted Tail Creek at Mitchell (d)	6790	77.2	1949-79
North Platte River at Mitchell (d)	6795	24,300	1920-94
Tub Springs near Scottsbluff (d)	6800	--	1949-79
North Platte River at Scottsbluff (d)	6805	24,500	1887-1900, 1912, 1917-18

DISCONTINUED SURFACE-WATER GAGING STATIONS--Continued

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only); mi², square mile;
--, not available; WYO, Wyoming; NE, Nebraska]

Station name	Station number	Drainage area (mi ²)	Period of record (water years)
Platte River Basin--Continued			
Winter Creek at Tri-State Canal, near Scottsbluff (d)	6807	--	1961-65
Winter Creek near Scottsbluff (d)	6810	--	1932-79
Gering Drain near Gering (d)	6815	79.8	1932-45, 1949-91
North Platte River near Minatare (d)	6820	24,700	1924-91
Alliance Drain near Minatare (d)	6822	--	1961-65
Ninemile Drain near Minatare (d)	6823	--	1961-65
Ninemile Drain near McGrew (d)	6825	--	1932-79
Bayard Sugar Factory Drain near Bayard (d)	6830	--	1932-79
Red Willow Creek near Bridgeport (d)	6835	83.0	*1931
Red Willow Creek near Bayard (d)	6840	162	1932-79
North Platte River at Bridgeport (d)	6845	25,300	1917-91
Pumpkin Creek near Bridgeport (d)	6850	1,020	1932-91
North Platte River at Broadwater (d)	6855	--	1917-23
North Platte River at Lisco (d)	6860	26,700	1932-94
North Platte River at Oshkosh (d)	6865	31,300	1916-17, 1928-60
Blue Creek near Lewellen (d)	6870	1,190	1931-91
North Platte River at Lewellen (d)	6875	28,600	1941-91
North Platte River at Belmar (d)	6880	29,100	1917-26
Otter Creek near Lemoyne (d)	6885	13.9	1932-37
North Platte River at Lemoyne (d)	6890	--	1926-27
North Platte River at Martin (d)	6895	--	1934-38
North Platte River near Keystone (d)	6905	29,400	1942-94
North Platte River near Sutherland (d)	6910	29,800	1937-91
Birdwood Creek near Sutherland (d)	6915	250	1913-15
Birdwood Creek near Hershey (d)	6920	940	1932-91
Lincoln County Drain No. 1 near North Platte (d)	6925	--	1931, 1955-79
North Platte River at North Platte (d)	6930	30,900	1895-1994
Lodgepole Creek at Bushnell (upper station)(d)	7620	1,090	1931-32
Lodgepole Creek at Bushnell (d)	7625	1,350	1932-91
Lodgepole Creek at Sidney (d)	7630	2,190	1931-32

DISCONTINUED SURFACE-WATER GAGING STATIONS--Continued

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only); mi², square mile; --, not available; WYO, Wyoming; NE, Nebraska]

Station name	Station number	Drainage area (mi ²)	Period of record (water years)
Platte River Basin--Continued			
Lodgepole Creek at Ralton (d)	7635	3,307	
South Platte River at Big Springs (d)	7645	23,200	*1903
South Platte River at Paxton (d)	7650	24,000	1923-24, 1931-33, 1937-70
South Platte River at North Platte (d)	7655	24,300	1917-94
Fremont Slough near North Platte (d)	765710	--	1983-85
Platte River at Brady (d)	7660	56,200	1939-91
Platte River near Cozad (d)	7665	56,500	1938-91
Platte River near Lexington (d)	7670	57,300	1902-06, 1916-24
Buffalo Creek near Darr (d)	7685	63.0	1947-69
Elm Creek near Overton (d)	7695	31.0	1947-58
Platte River near Odessa (d)	7700	58,100	1938-91
Whisky Slough 1 mi E of Phelps-Kearney County Line (d)	770175	--	1996-98
North Dry Creek near Kearney (d)	770190	--	1969-71
Downstream Drain near Newark (d)	770255	--	1996-98
Platte River near Grand Island (South Channel) (d)	770478	--	1984-87
Wood River near Riverdale (d)	7710	379	1946-73
Wood River near Gibbon (d)	7715	526	1949-76, **1991-95
Wood River near Alda (d)	7720	599	1954-94
Dry Creek near Cairo (d)	7730	25	1949-53
Prairie Creek near Ovina (d)	773050	132	**1991-95, 1996-99
Silver Creek at Ovina (d)	773150	67.6	**1991-95
Middle Loup River near Mullen (d)	7745	1,120	1947-48
Middle Loup River near Seneca (d)	7750	1,140	1948-53
Dismal River near Gem (d)	7760	1,360	1947-53
Dismal River at Dunning (d)	7765	2,040	*1932, 1946-95
Middle Loup River near Milburn (d)	7770	3,690	1952-56, 1958, 1960-64
Middle Loup River at Walworth (d)	7775	4,650	1941-60
Middle Loup River at Sargent (d)	7780	4,480	1937-38, 1953-70
Middle Loup River near Comstock (d)	7785	4,960	*1937
Middle Loup River at Arcadia (d)	7790	5,040	1937-93

DISCONTINUED SURFACE-WATER GAGING STATIONS--Continued

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only); mi², square mile;
--, not available; WYO, Wyoming; NE, Nebraska]

Station name	Station number	Drainage area (mi ²)	Period of record (water years)
Middle Loup River at Loup City (d)	7795	4,860	1936-38, 1949-56
Middle Loup River at Rockville (d)	7800	5,310	1956-64, 1968-75
Boelus Power Canal near Boelus (d)	7805	--	1952-63
Middle Loup River at Boelus (d)	7810	--	1952-55
Middle Loup River at Boelus (combined flow)(d)	7815	--	1937-38
Platte River Basin--Continued			
South Loup River near Cumro (d)	7820	1,340	1946-53
South Loup River at Ravenna (d)	7825	1,660	1941-58, 1968-75
Mud Creek near Broken Bow (d)	7830	440	1949-53
Mud Creek near Sweetwater (d)	7835	707	1946-94
Oak Creek near Loup City (d)	7843	41.9	1952-60, 1961-64
Oak Creek near Dannebrog (d)	7845	122	1949-57
Turkey Creek near Dannebrog (d)	7848	66.2	1966-93
North Loup River at Brewster (d)	7855	1,890	1945-51
North Loup River at Burwell (d)	7865	2,510	1953-60
Calamus River near Harrop (d)	7870	693	1979-97
Calamus River near Burwell (d)	7875	994	1941-95
North Loup River near Burwell (d)	7880	--	1937-38, 1952-60
North Loup River at Ord (d)	7885	3,760	1952-94
Mira Creek near North Loup (d)	788988	65.8	1980-93
North Loup River at Scotia (d)	7890	3,960	1937-70
Davis Creek near Cotesfield (d)	7895	94.0	1949-58
North Loup River near Cotesfield (d)	7900	--	1950-56
Spring Creek at Cushing (d)	7910	164	1949-53
Cedar River near Spalding (d)	7915	752	1945-53, 1958-94
Spalding Power Canal at Spalding (d)	7917	--	1960-64
Cedar River at Primrose (d)	791750	870	1960-64
Cedar River at Belgrade (d)	7918	1,060	1960-65
Cedar River near Fullerton (d)	7920	1,220	1931-32, 1941-95
Fullerton Power Canal at Fullerton (d)	7921	--	1960-64
Beaver Creek at Loretto (d)	7935	311	1945-53, 1980-91
Loup River at Columbus (d)	7945	15,200	1895-1915, 1931,1934-78
Shell Creek at Newman Grove (d)	7950	122	1949-67
Platte River near Fremont (d)	796450	--	1911-15
Elkhorn River near Atkinson (d)	796973	586	1983-91
Holt Creek near Emmet (d)	796978	--	1979-89

DISCONTINUED SURFACE-WATER GAGING STATIONS--Continued

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only); mi², square mile; --, not available; WYO, Wyoming; NE, Nebraska]

Station name	Station number	Drainage area (mi ²)	Period of record (water years)
Elkhorn River at Emmet (d)	796985	--	1980-82
Elkhorn River at O'Neill (d)	7970	651	1931-32
South Fork Elkhorn River near Ewing (d)	7980	314	1948-53, 1961-72, 1978-91
Clearwater Creek near Clearwater (d)	7983	210	1962-64, 1978-91
Elkhorn River at Neligh (d)	7985	2,200	1931-93
Platte River Basin--Continued			
Elkhorn River at Meadow Grove (d)	7988	2,500	1960-65
Willow Creek near Foster (d)	799080	137	1976-93
Union Creek at Madison (d)	799230	174	1979-93
Pebble Creek at Scribner (d)	799385	204	1979-93
Logan Creek at Pender (d)	799450	731	1966-93
Salt Creek subwatershed No. 3 near Sprague(d)	8013	4.20	1955-59
Salt Creek subwatershed No. 1 near Roca (d)	8014	1.46	1955-61
Salt Creek subwatershed No. 12 near Roca (d)	8015	1.12	1954-61
Salt Creek subwatershed No. 34 near Roca (d)	8025	5.72	1954-61
Antelope Creek at 17th St., at Lincoln (d)	8034	12.1	1958-62
Oak Creek near Raymond (d)	803450	88.7	1963-67
Dee Creek at Greenwood (d)	803550	14.3	*1960
Cottonwood Creek above Czechland near Rescue	803920	--	
Cottonwood Creek tributary above Dam 6B near Prague	803935	--	1994-96
Silver Creek at Ithaca (d)	8045	80.0	1950-58
Salt Creek near Ashland (d)	8050	1,640	1948-67
Little Nemaha River Basin			
Little Nemaha River near Syracuse (d)	8105	218	1951-69
Brownell Creek subwatershed No. 1A near Syracuse (d)	8109	19	1955-69
Brownell Creek subwatershed No. 1 near Syracuse (d)	8110	.77	1955-69
Big Nemaha River Basin			
North Fork Big Nemaha River at Humboldt (d)	8145	548	1953-96
Muddy Creek at Verdon (d)	8155	186	1953-72
Kansas River Basin			
Pioneer Canal at CO-NE State Line (d)	8225	--	1950-51
Republican River at Benkelman (d)	8245	4,880	1947-94
Republican River at Max (d)	8280	7,740	1928-45
Muddy Creek at Stratton (d)	828490	157	1978

DISCONTINUED SURFACE-WATER GAGING STATIONS--Continued

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only); mi², square mile;
--, not available; WYO, Wyoming; NE, Nebraska]

Station name	Station number	Drainage area (mi ²)	Period of record (water years)
Swanson Lake near Trenton (e)	8290	8,620	1953-94
Republican River at Culbertson (d)	8300	8,450	1931-50
Frenchman Creek near Champion (d)	8305	700	1932-40
Frenchman Creek below Champion (d)	8310	721	1935-56
Frenchman Creek near Imperial (d)	8315	1,050	1941-94
Frenchman Creek near Enders (d)	8325	1,140	1947-93
Kansas River Basin--Continued			
Frenchman Creek near Hamlet (d)	8335	1,270	1929-56
Stinking Water Creek near Wauneta (d)	8345	1,330	1941-50
Stinking Water Creek near Palisade (d)	8350	1,500	1950-94
Blackwood Creek near Culbertson (d)	8360	320	1946-86
Red Willow Creek above Hugh Butler Lake (d)	8373	582	1961-94
Hugh Butler Lake near McCook (e)	83790	730	1961-94
Red Willow Creek near McCook (d)	8375	740	1941-47, 1961-93
Dry Creek near Bartley (d)	8385	5.24	1955-57
Medicine Creek at Maywood (d)	8390	231	1951-58
Brushy Creek near Maywood (d)	8395	95.3	1951-58
Fox Creek at Curtis (d)	8400	74.3	1952-58, 1978-91
Dry Creek near Curtis (d)	8405	20	1951-58
Medicine Creek above Harry Strunk Lake (d)	8410	770	1950-94
Mitchell Creek above Harry Strunk Lake (d)	8415	52.0	1950-74
Harry Strunk Lake near Cambridge (e)	8420	880	1949-94
Medicine Creek below Harry Strunk Lake (d)	8425	900	1950-94
Medicine Creek at Cambridge (d)	8430	909	1936-57
Muddy Creek at Arapahoe (d)	8440	246	1951-72, 1978-93
Turkey Creek at Edison (d)	844210	74.9	1978-93
Sappa Creek near Beaver City (d)	8452	1,480	1937-72
Beaver Creek near Beaver City (d)	8470	2,080	1937-94
Harlan County Lake near Republican City (e)	8490	20,750	1953-94
Turkey Creek at Naponee (d)	8500	129	1948-53
Cottonwood Creek near Bloomington (d)	8502	15.6	1948-56
Republican River near Bloomington (d)	8505	21,020	1929-57

DISCONTINUED SURFACE-WATER GAGING STATIONS--Continued

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only); mi², square mile; --, not available; WYO, Wyoming; NE, Nebraska]

Station name	Station number	Drainage area (mi ²)	Period of record (water years)
Center Creek at Franklin (d)	8510	177	1948-56, 1978-93
Thompson Creek at Riverton (d)	8515	290	1948-56, 1969-75 1978-94
Elm Creek at Amboy (d)	8520	39.2	1948-54, 1978-93
Republican River near Guide Rock (d)	8530	22,040	1951-84
Beaver Creek near Rosemont (d)	8531	.75	1968-70
Big Blue River at Surprise (d)	8799	345	1964-93
Lincoln Creek near Seward (d)	8800	438	1954-73, 1974-94
Big Blue River at Seward (d)	8805	1,107	1954-94
Turkey Creek near Wilber (d)	8812	461	1960-94
Big Blue River at Beatrice (d)	8815	3,900	1911-15, 1975-94
Little Blue River below Pawnee Creek, near Pauline (d)	8829	929	1963-68
Little Blue River at Angus (d)	8835	--	1950-53
Little Blue River near Alexandria (d)	883570	1,557	1960-72, 1975-92
Big Sandy Creek at Alexandria (d)	883940	607	1980-93

* Partial year only.

** Irrigation season only.

The following surface-water crest stage stations in Nebraska have been discontinued. The years given in the period of record represent water years for which the annual maximum has been determined for each station. Each station has been assigned an 8-digit station number. For ease in reading the station number, the preceding number has been left off as well as the 00 following a 4-digit number.

DISCONTINUED SURFACE-WATER CREST STAGE STATIONS

[mi², square mile; No., number]

Station name	Station number	Drainage area (mi ²)	Period of record (water years)
Cheyenne River Basin			
Warbonnet Creek near Harrison	396490	24.5	1969-78
White River Basin			
White River tributary near Glen	4432	7.97	1953-70
Deep Creek near Glen	4433	10.9	1953-78
Soldiers Creek near Crawford	4437	52.6	1955-78
White River tributary No. 2 near Crawford	4439	5.45	1953-70
Chadron Creek tributary at Chadron State Park near Chadron	445530	.59	1953-78
Chadron Creek at Chadron State Park near Chadron	445560	15.4	1953-78
Niobrara River Basin			
Niobrara River tributary near Belmont	4544	6.71	1971-78
Pebble Creek near Esther	4562	3.07	1953-78
Pebble Creek near Dunlap	4563	23.5	1953-70
Cottonwood Creek near Dunlap	4564	82.2	1953-78
Point of Rocks Creek near Marsland	4571	7.10	1970-78
Berea Creek near Alliance	4572	34.0	1953-78
Antelope Creek at Gordon	4577	61.1	1953-70
Antelope Creek tributary near Gordon	4578	26.6	1953-78
Big Beaver Creek near Valentine	4613	24.9	1971-79
Bone Creek tributary near Ainsworth	4631	.39	1956-68
Bone Creek tributary No. 2 near Ainsworth	4632	2.18	1958-68
Sand Draw tributary near Ainsworth	4633	1.07	1956-74
Honey Creek near O'Neill	4652	2.54	1958-68
Camp Creek near O'Neill	4653	1.65	1958-78
Blackbird Creek tributary near O'Neill	4654	.60	1958-68
Bingham Creek near Niobrara	465850	6.5	1968-79
Weigand Creek Basin			
Weigand Creek near Crofton	466950	3.5	1968-78
Bow Creek Basin			
West Bow Creek near Fordyce	478520	52.8	1964-65, 1968-78

DISCONTINUED SURFACE-WATER CREST STAGE STATIONS--Continued

[mi², square mile; No., number]

Station name	Station number	Drainage area (mi ²)	Period of record (water years)
Omaha Creek Basin			
South Omaha Creek tributary near Walthill	6006	2.64	1951-67
South Omaha Creek near Walthill	6007	15.1	1951-67
South Omaha Creek tributary No. 2 near Walthill	6008	1.51	1950-78
South Omaha Creek at Walthill	6009	51.0	1951-78
Tekamah Creek Basin			
South Branch Tekamah Creek near Craig	6077	2.54	1950-67
South Branch Tekamah Creek tributary near Tekamah	6078	4.08	1951-78
South Branch Tekamah Creek near Tekamah	6079	9.73	1951-67
Tekamah Creek at Tekamah	6080	23.0	1982-89
New York Creek Basin			
New York Creek near Spiker	6086	1.75	1952-67
New York Creek tributary near Spiker	6087	1.55	1951-78
New York Creek north of Spiker	6088	6.50	1951-75
New York Creek east of Spiker	6089	13.9	1950-78
Papillion Creek Basin			
Big Papillion Creek near Orum	6107	8.52	1968-78
Platte River Basin			
Dry Spottedtail Creek tributary near Mitchell	678750	15.0	1971-78
Hackberry Creek near Redington	6849	16.6	1970-78
Ash Hollow near Oshkosh	6876	54.9	1971-78
Lodgepole Creek tributary near Kimball	762650	8.68	1970-78
Lodgepole Creek tributary near Sumol	7632	15.6	1968-78
South Fork Plum Creek tributary near Farnam	7671	9.81	1951-70
North Fork Plum Creek tributary near Farnam	7672	1.83	1952-78
Plum Creek tributary at Farnam	7673	19.8	1947-48, 1952-70
North Plum Creek near Farnam	7674	38.3	1952-70
Plum Creek near Farnam	767410	79.8	1947, 1951-78
Plum Creek near Smithfield	7675	229	1955-68, 1978
Buffalo Creek tributary No. 1 near Buffalo	768050	2.08	1965-78
East Buffalo Creek near Buffalo	7681	5.21	1951-78
Buffalo Creek at Buffalo	7682	33.5	1951-67
Buffalo Creek tributary No. 2 near Buffalo	7683	1.93	1952-65

DISCONTINUED SURFACE-WATER CREST STAGE STATIONS--Continued

[mi², square mile; No., number]

Station name	Station number	Drainage area (mi ²)	Period of record (water years)
Platte River Basin--Continued			
West Buffalo Creek near Buffalo	7684	17.1	1951-78
Elm Creek tributary near Overton	7691	.58	1951-78
Elm Creek near Sumner	7692	14.9	1951-78
Elm Creek tributary No. 2 near Overton	7693	5.62	1951-78
Wood River tributary near Lodi	7706	2.02	1952-78
Wood River near Lodi	7707	12.9	1952-78
Wood River near Oconto	7708	26.4	1950, 1952-78
Wood River at Oconto	7709	44.8	1950, 1952-78
Wood River near Lomax	770910	79.6	1952-78
Wood River near Riverdale	7710	379	1974-80
North Fork Dismal River near Mullen	7757	670	1971-78
Lillian Creek tributary near Broken Bow	7776	2.02	1952-78
Lillian Creek near Broken Bow	7777	4.77	1947, 1951-78
Lillian Creek tributary near Walworth	7778	2.04	1951-78
South Branch Mud Creek tributary near Broken Bow	7826	.43	1951-78
South Branch Mud Creek near Broken Bow	782620	79.4	1976-78
South Branch Mud Creek at Broken Bow	7827	400	1945, 1951-75
North Branch Mud Creek at Broken Bow	7828	15.5	1952-67
Mud Creek tributary near Broken Bow	7829	5.98	1945, 1951-78
Turkey Creek near Farwell	7847	27.2	1950, 1953-78
Davis Creek tributary near North Loup	7891	2.29	1952-67
Davis Creek tributary No. 2 near North Loup	7892	6.79	1952-70
Davis Creek near North Loup	7893	21.1	1952-67
Davis Creek southwest of North Loup	7894	41.6	1951-78
East Branch Spring Creek tributary near Wolbach	7906	1.52	1952-78
West Branch Spring Creek at Brayton	7907	19.5	1945, 1952-78
West Branch Spring Creek near Wolbach	7908	36.9	1952-67
Mary's Creek at Wolbach	7909	7.63	1952-67
Spring Creek near Cushing	7911	184	1948, 1953-78
Skeedee Creek tributary near Genoa	793995	.59	1968-78
Bone Creek near David City	794710	8.75	1968-78
Shell Creek at Newman Grove	7950	122	1961
South Fork Union Creek tributary near Cornlea	799190	6.54	1968-78
North Logan Creek near Laurel	799423	25.3	1965, 1968-78
Pond Creek near Schuyler	799850	.54	1968-78

DISCONTINUED SURFACE-WATER CREST STAGE STATIONS--Continued

[mi², square mile; No., number]

Station name	Station number	Drainage area (mi ²)	Period of record (water years)
Platte River Basin--Continued			
Elkhorn River tributary near Nickerson	800350	6.53	1968-78
Olive Branch above Sprague	8012	43	1956-61
Olive Branch below Sprague	801320	81	1956-58
Hickman Branch above Hickman	801340	14.7	1956-61
Hickman Branch at Hickman	801360	42.8	1956-61
Antelope Creek at 48th Street, Lincoln	8032	6.82	1951, 1958-78
Antelope Creek at 27th Street, Lincoln	8033	10.4	1957-78
Antelope Creek at 17th Street, Lincoln	8034	12.5	1963-78
Dee Creek near Alvo	803540	8.06	1962-78
Dunlap Creek tributary near Weston	803570	.31	1950-78
North Fork Wahoo Creek near Prague	8036	15.2	1951-78
Dunlap Creek near Weston	8037	8.90	1951-67
North Fork Wahoo Creek at Weston	8039	43.7	1951-78
Silver Creek near Cedar Bluffs	8041	10.9	1950-78
Silver Creek near Colon	8042	29.9	1950-78
Silver Creek tributary near Colon	8043	14.3	1951-78
Silver Creek tributary at Colon	8044	22.4	1951-78
Silver Creek at Ithaca	8045	72.0	1959-78
Buffalo Creek near Gretna	805510	4.29	1968-78
Weeping Water Creek Basin			
Weeping Water Creek at Elmwood	8064	20.8	1951-67
Stove Creek near Elmwood	806420	5.23	1951-67
Stove Creek at Elmwood	806440	10.0	1950-78
Weeping Water Creek at Weeping Water	806460	75.5	1947, 1950-78
Weeping Water Creek tributary near Weeping Water	806470	.87	1950-78
Honey Creek Basin			
Honey Creek near Peru	810060	3.40	1968-78
Little Nemaha River Basin			
Hooper Creek tributary near Palmyra	8101	7.81	1950-78
Hooper Creek near Palmyra	8102	57.5	1951-67
Wolf Creek near Syracuse	8103	25.5	1951-67
Little Nemaha River tributary near Syracuse	8104	.76	1950-78
Big Nemaha River Basin			
Muddy Creek at Verdon	8155	186	1973
Temple Creek near Falls City	815510	3.02	1968-78

DISCONTINUED SURFACE-WATER CREST STAGE STATIONS--Continued

[mi², square mile; No., number]

Station name	Station number	Drainage area (mi ²)	Period of record (water years)
Kansas River Basin			
North Branch Indian Creek near Max	8281	4.76	1962, 1970-78
Thompson Canyon near Trenton	8297	10	1966-78
Spring Creek tributary near Grant	341	17.9	1970-78
Bobtail Creek near Palisade	8351	41	1966-78
Ash Creek near Red Willow	8371	22	1966-78
Medicine Creek at Maywood	8390	231	1960-78
Elkhorn Canyon near Maywood	8392	6.74	1952-78
Elkhorn Canyon southwest of Maywood	8394	13.2	1952-70
Brushy Creek near Maywood	8395	130	1947, 1960-76
Frazier Creek near Maywood	8396	11.3	1952-70
Frazier Creek tributary near Maywood	8397	.72	1952-78
Fox Creek (Site No. 1) near Curtis	8398	6.97	1952-70
Fox Creek north of Curtis	839850	13.8	1952-70
Fox Creek above Cut Canyon near Curtis	8399	31.8	1951-78
Cut Canyon near Curtis	839950	25.6	1951-78
Fox Creek at Curtis	8400	72.6	1947, 1960-70
Dry Creek near Curtis	8405	20	1947, 1960-70
Turkey Creek near Holdrege	8496	27.8	1941, 1960, 1968-78
Cottonwood Creek near Bloomington	8502	15.6	1957-78
Republican River near Bloomington	8505	20,800	1970-78
Center Creek at Franklin	8510	146	1961-68
Republican River at Riverton	851090	-	1970-78
West Branch Thompson Creek at Hildreth	8511	65.2	1953-70
West Branch Thompson Creek near Hildreth	8512	110	1953-70
West Branch Thompson Creek tributary near Hildreth	8513	11.6	1953-78
West Branch Thompson Creek near Upland	8514	90.8	1953-78
Thompson Creek at Riverton	8515	290	1961-68
Elm Creek at Amboy	8520	39.2	1954-78
Beaver Creek near Rosemont	8531	.752	1971-78
Republican River at Superior	8534	22,300	1971-75, 1977

DISCONTINUED SURFACE-WATER CREST STAGE STATIONS--Continued

[mi², square mile; No., number]

Station name	Station number	Drainage area (mi ²)	Period of record (water years)
Kansas River Basin--Continued			
Big Blue River tributary near Hordville	879850	4.07	1968-78
Plum Creek near Seward	880508	85.5	1968-78
North Branch West Fork Big Blue River tributary at Giltner	880590	7.52	1968-78
School Creek tributary near Harvard	880710	13.1	1953-70
School Creek near Harvard	880720	55.1	1953-78
School Creek tributary No. 2 near Harvard	880730	14.0	1953-78
School Creek near Saronville	880740	89.4	1953-70
Beaver Creek tributary near Henderson	880775	1.16	1968-78
West Fork Big Blue River at Beaver Crossing	880790	1153	1967-68
South Fork Swan Creek tributary near Western	881250	1.00	1968-78
Indian Creek at Beatrice	881450	74.7	1961-93
Big Blue River at Beatrice	8815	3900	1969-74
Bear Creek near Adams	881510	2.85	1968-70
Big Blue River tributary near Beatrice	881530	1.86	1971-78
Little Blue River below Pawnee Creek near Pauline	8829	929	1969
Little Blue River near Angus	8831	1038	1958-68
Spring Creek tributary near Ruskin	883540	2.11	1968-78
South Fork Big Sandy Creek near Edgar	8836	15.2	1953-70
South Fork Big Sandy Creek near Davenport	8837	32.0	1950, 1952-78
South Fork Big Sandy Creek near Carleton	8838	50.4	1953-70
South Fork Big Sandy Creek near Hebron	8839	90.3	1953-70
Little Sandy Creek near Ohiowa	883955	11.6	1968-78
Dry Branch tributary near Fairbury	884005	4.51	1968-78

The following surface-water quality stations in Nebraska have been discontinued or converted to partial-record stations. Water quality data (daily or periodic samples with collection frequency not less than quarterly were collected and published for the period of record shown for each station. Each station has been assigned an 8-digit station number. For ease in reading the station number, the 06 preceding the number has been left off as well as the 00 following a 4-digit number.

DISCONTINUED SURFACE-WATER QUALITY STATIONS

[Type of record: c, chemical; m, microbiological; s, sediment; t, temperature]

Station name	Station number	Period of record (water years)	Type of record
White River Basin			
White River at Crawford	4440	*1957	c
White River near Whitney	4450	1969-72	c m
White River at Slim Butte, SD	4457	*1964, 1965-67	c
		1964-67	s
		1965-67	t
Ponca Creek Basin			
Ponca Creek at Anoka	4535	1949-53, 1964, 1967	c
		1949-52, 1967	s
*Ponca Creek at Verdel	4536	*1930, *1949, *1971	c
		1975-80	c m t
Niobrara River Basin			
Niobrara River at Agate	4541	*1952	c
Niobrara River above Box Butte Reservoir	4545	*1952	c
Niobrara River near Verdel	4655	1976-80	c
		1972-81	s
		1959-84	t
		1958-65, 1967-94	m
Niobrara River near Dunlap	4559	1969-73	c m t
Niobrara River near Hay Springs	4565	1949-53, *1961, 1964	c
		1950-57	s
		1951-55	t
Niobrara River near Colclesser	4570	1969-73	c m t
Niobrara River near Gordon	4575	1947-55	c s
		*1964	c s t
Antelope Creek near Gordon	4577	*1948-49	c
Bear Creek near Eli	4585	*1947	c m t
Niobrara River near Cody	4590	1948-56	c s t
Snake River above Merritt Reservoir	4592	1964-75	t
		1976	c t
Ainsworth Canal near Johnstown	459350	1978-84	c t
Snake River near Burge	4595	1947-52	c
		1949-53	s
Gordon Creek near Simeon	4600	*1948	c
Niobrara River near Valentine	4605	*1948	c

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

[Type of record: c, chemical; m, microbiological; s, sediment; t, temperature]--Continued

Station name	Station number	Period of record (water years)	Type of record		
Niobrara River Basin--Continued					
Minnechaduz Creek at Valentine	4610	*1948-49	c		
**Niobrara River near Sparks	4615	1982-93	c		t
Niobrara River near Norden	4620	*1953, *1961, 1964-67	c	s	t
Plum Creek at Johnstown	462450	1969-75, 1978-84	c	m	t
Plum Creek near Johnstown	462470	1969-75, 1978-84	c	m	t
Plum Creek near Meadville	4625	1948-49	c	*s	
		1977-84	c		t
Niobrara River at Meadville	4630	1950-52	c	s	t
Long Pine Creek at Long Pine	463050	1978-84	c		t
Bone Creek at Ainsworth	463090	*1969-75, 1978-84	c		t
Sand Draw near Johnstown	463290	1978-84	c		t
Sand Draw near Meadville	463310	1978-84	c		t
Bone Creek near Long Pine	463350	*1969-75, 1978-84	c		t
Niobrara River near Mariaville	463720	1985-89	c	m	s
Keya Paha River at Wewela, SD	4645	1947-49	c		
**Niobrara River near Spencer	4650	*1946-48	c		
		1976	c		t
Eagle Creek near Midway	465050	*1957-66,	c		
		1976-90	c		t
East Branch Eagle Creek near Midway	4651	*1957-66	c		
		1976-90	c		t
		1974-83	c		
Honey Creek near Midway	465202	*1957-66	c		
Eagle Creek near Redbird	465310	1986-90	c		
Redbird Creek near Meek	465398	*1957-66	c		
		1976-90	c		t
Blackbird Creek near Meek	465420	*1957-66	c		
		1976-90	c		t
**Niobrara River near Verdel	4655	1958-65,1967-94,	c		
		1958-65,1967-84			t
		1972-81		s	
South Branch Verdigre Creek near Royal	465650	*1967	c		
Verdigre River near Verdigre	4657	1948-49	c		
		1948-50			s

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

[Type of record: c, chemical; m, microbiological; s, sediment; t, temperature]--Continued

Station name	Station number	Period of record (water years)	Type of record
Bazile Creek Basin			
Bazile Creek near Creighton	4662	*1967	c
Missouri River			
Missouri River at Yankton, SD	4675	1951, 1957-59	c
		1957-59	t
Missouri River at Decatur	6012	1969-73	c m t
Missouri River near Mormon Bridge at Omaha	6098	1974-75	c m t
Missouri River at Omaha	6100	1969-72	c m t
Missouri River at Bellevue	6106	1969-70, 1971-73	c m t
Platte River Basin			
Ft. Laramie Canal at WY-NE State Line near Lyman	6562	*1964	c
Interstate Canal at WY-NE State Line near Henry	6566	*1964	c
High Line Canal near Bayard	6568	*1964	c
Low Line Canal near Bayard	656955	*1964	c
North Platte River at WY-NE State Line at Henry	6745	*1946,1964	c
North Platte River south of Henry	6750	*1938	c
South Horse Creek lateral at WY-NE State Line near Lyman		*1964	c
Kiowa Creek near Gering	677208	*1964	c
Kiowa Creek above Ft. Laramie Canal near Lyman	677210	*1963-64	c
Kiowa Creek above Horse Creek lateral near Lyman	677220	*1963-64	c
Unnamed tributary to Kiowa Creek near Lyman	677221	*1963-64	c
Owl Creek above Ft. Laramie Canal near Lyman	677234	*1963-64	c
Owl Creek below Ft. Laramie Canal near Lyman	677235	*1963-64	c
Owl Creek near Lyman	677240	*1963-64	c
Unnamed eastern tributary to Kiowa Creek near Lyman	677245	*1963-64	c
Kiowa Creek above Dry Creek Drain near Lyman	677250	*1963-64	c
Dry Creek Drain below Ft. Laramie Canal near Lyman	677251	*1963-64	c
Western tributary to Dry Creek Drain above Horse Creek lateral	677270	*1963-64	c
Dry Creek Drain below Horse Creek lateral near Lyman	677274	*1963-64	c
Western tributary to Dry Creek Drain near Lyman	677280	*1963-64	c
Dry Creek Drain near Lyman	677290	*1963-64	c s
Kiowa Creek near Lyman	6773	1961-65	c s
Horse Creek near Lyman	6775	*1949, *1964	c
		1970-73	t
Lane Drain near Lyman	677550	*1964	c
Sheep Creek near Morrill	6780	*1964	c

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

[Type of record: c, chemical; m, microbiological; s, sediment; t, temperature]--Continued

Station name	Station number	Period of record (water years)	Type of record
Platte River Basin--Continued			
Morrill Drain near Morrill	678580	*1964	c
Akers Draw near Morrill	678610	*1949-64	c
Brown Canyon Drain near Mitchell	6787	1961-65	c s
Dutch Flats Drain near Mitchell	6788	1961-65	c s
Dry Spottedtail Creek at Mitchell	6790	*1964	c
Bald Drain near Mitchell	6794	*1964 1970-73	c c t
North Platte River at Mitchell	6795	*1964	c
Wet Spottedtail Creek near Mitchell	679950	*1964	c
Tub Springs near Scottsbluff	6800	*1964	c
Gering Canal at siphon under Gering Drain near Gering	680450	*1964	c
Winter Creek at Tri-State Canal near Scottsbluff	6807	1961-65	c s
Hale Drain near Scottsbluff	6808	1961-65	c s
Scottsbluff Drain No.1 near Scottsbluff	680950	*1964	c
Winter Creek near Scottsbluff	6810	*1964	c
Gering Drain tributary near Gering	681290	*1963-64	c
Gering Drain at Mitchell-Gering Canal near Gering	6813	1961-65	c s
Gering Drain near Gering	6815	*1964	c s
Scottsbluff Drain No. 2 near Minatare	681950	*1964	c
North Platte River near Minatare	6820	*1938, *1964	c
Fairfield Seep near Minatare	682010	*1964	c
Alliance Drain near Minatare	6822	1961-65	c *s
Ninemile Drain above Tri-State Canal near Minatare	682280	*1963-64	c
East Ninemile Drain near Minatare	682290	*1963-64	c
Ninemile Drain near Minatare	6823	1961-65	c s
Ninemile Drain near McGrew	6825	*1964	c
North Platte River at McGrew	682505	1973-89	c m
Bayard Sugar Factory Drain near Bayard	6830	*1964	c
Cleveland Drain near McGrew	683050	*1964	c
West Wildhorse Drain near Bayard	6832	1961-62	c s
Wildhorse Drain near Bayard	6833	1961-62	c s
Red Willow Creek near Bayard	6840	*1964	c
DeGraw Drain near Bridgeport	684250	*1964	c
Indian Creek near Bridgeport	684350	*1964	c
Upper Dugout Creek near Bridgeport	684450	*1964	c

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

[Type of record: c, chemical; m, microbiological; s, sediment; t, temperature]--Continued

Station name	Station number	Period of record (water years)	Type of record	
Platte River Basin--Continued				
North Platte River at Bridgeport	6845	*1964	c	
		1971-74	c	t
		1970-73	c	t
Pumpkin Creek near Bridgeport	6850	*1949	c	
North Platte River at Lisco	6860	1970-94	c	m s
		1971-81	c	
		1971-81		t
North Platte River at Oshkosh	6865	1951	c	
Kingsley Reservoir (Lake McConaughy)	6900	1947-50	c	
Sutherland Canal below diversion from North Platte River near Keystone	6903	*1968	c	
North Platte River near Keystone	6905	*1945	c	
		1973-74	c	t
North Platte River at North Platte	6930	*1950, *1958-59,		
		*1965	c	
Lodgepole Creek at Kimball	762550	1973-74	c	m t
South Platte River at Julesburg, CO	764001	1946-69	c	
South Platte River near Julesburg, CO	764201	1969-71	c	
**South Platte River at Roscoe	764880	1975-83	c	m t
Sutherland Canal below diversion from South Platte River near Paxton	7649	*1968	c	
South Platte River at Paxton	7650	*1965	c	
Supply Canal (Tri-County diversion) near Maxwell	7657	1951-72	c	t
Platte River at Brady	7660	1950-72	c	
		1951-72		t
South Platte River at North Platte	7655	1993-95	c	s t
Tri-County Canal (1.25 mi below diversion) near North Platte	765698	1993-95	c	s t
Platte River near Cozad	7665	*1947-49, *1965,		
Platte River near Lexington	7670	1951	c	
Johnson Reservoir below Power Plant No. 2 near Lexington	767040	1950-52, 1957-70	c	
Plum Creek near Smithfield	7675	1996-98	c	t
Larson Drain 2 miles SW of Platte River bridge S of Overton	767996	*1968	c	
Spring Creek below Lexington	768015	1973-74	c	m t
**Spring Creek near Overton	768020	1996-99	c	t
Buffalo Creek near Darr	7685	*1948	c	
**Buffalo Creek near Overton	7690	1996-99	c	t
**Elm Creek near Elm Creek	769525	1996-99	c	t
Unnamed Drain 2.2 miles SW of Platte River bridge S of Elm Creek	769950	*1968	c	
Unnamed Drain 8.2 miles N of Holdrege	769994	*1968	c	

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

[Type of record: c, chemical; m, microbiological; s, sediment; t, temperature]--Continued

Station name	Station number	Period of record (water years)	Type of record		
Platte River Basin--Continued					
Unnamed Drain 5.2 miles SE of Platte River bridge S of Elm Creek	769996	*1968	c		
Platte River near Odessa	7700	*1947-49, 1950-52, *1965	c		
Unnamed Drain 2.3 miles SE of Platte River bridge S of Odessa	770002	*1968	c		
Whisky Slough 1 mi E of Phelps-Kearney County Line	770175	1996-98	c		t
North Dry Creek near Kearney	770190	1969-71	c	m	t
**North Dry Creek 2 mi SW of Platte River bridge south of Kearney	770195	1996-99	c		t
Whiskey Slough 3.2 miles SW of Platte River bridge south of Kearney	770198	*1968	c		
**Platte River near Kearney	7702	*1947, *1959	c		
Platte River (North Channel) near Kearney	770205	1973-74	c	m	t
Fort Kearney Slough near Newark	770240	1998	c		t
Crooked Creek Drain 0.8 mile NW of Newark	770250	*1968	c		
Downstream Drain near Newark	770255	1996-98	c		t
Lost Creek 7.7 miles NE of Axtell	770340	*1968	c		
**Platte River near Grand Island	7705	19972-80			t
		1972-89	c	m	
		1993-95	c		s
		1996-99	c		t
Wood River near Riverdale	7710	*1947-49, *1965-66, 1974 1947-52	c		s
Wood River near Gibbon	7715	*1966, 1974, 1976	c		
Wood River near Alda	7720	*1966, 1974, 1998-99	c	m	t
Wood River near Grand Island	7722	*1965-66, 1973-74	c	m	t
Wood River near Chapman	7725	*1958-59, 1962-80	c	m	t
Warm Slough near Chapman	772750	*1965-66	c		
**Warm Slough near Central City	772775	1996-99	c		t
**Silver Creek at mile 4 near Silver Creek	772898	1996-99	c		t
Silver Creek near Silver Creek	7729	*1951, *1965-66	c		
Prairie Creek near Cairo	772950	*1965	c		
Silver Creek at Ovina	773150	*1966	c		
Prairie Creek near Central City	7734	*1965-66	c		
Prairie Creek near Fullerton	773410	*1951	c		
**Prairie Creek near Silver Creek	7735	1996-99	c		t
**Platte River near Duncan	7740	1965-94 1996-99	c	s	t
Middle Loup River near Seneca	7750	*1949-51			s

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

[Type of record: c, chemical; m, microbiological; s, sediment; t, temperature]--Continued

Station name	Station number	Period of record (water years)	Type of record
Platte River Basin--Continued			
**Middle Loup River at Dunning	7755	*1947-66	c
		1950-52, 1954, *1977	s
		1950-56, 1966-89	t
Dismal River near Thedford	7759	1968-98	c t
Dismal River near Gem	7760	1949-51	s
Dismal River at Dunning	7765	*1952	c
		1948-53, 1956-57	s
		1956, *1977	s
Middle Loup River near Milburn	7770	1949-55	s
		1970-74	c t
Middle Loup River at Walworth	7775	*1949	s
Lillian Creek near Walworth	7779	1951	s
Detention structure near Sargent	7781	1960-62	s
Middle Loup River near Comstock	7785	1969-74	c t
Farwell Canal at Highway 58 above Sherman Reservoir	778860	1977-83	c t
Middle Loup River at Arcadia	7790	*1949	c
		1948-57	s
		1977-83	c
Middle Loup River at Loup City	7795	1949-52	s
Deer Creek near Boleus	781530	1977-83	c t
South Loup River near Cumro	7820	*1948	c
		1948-51	s
Mud Creek near Broken Bow	7830	1973-74	c m t
Mud Creek near Sweetwater	7835	*1977	s
		1978-89	c m
**South Loup River at St. Michael	7840	1946-53	s
Oak Creek near Loup City	7843	1951-58	s
Oak Creek near Farwell	7844	1977-83	c t
Oak Creek near Dannebrog	7845	1977-83	c t
Dry Creek near Dannebrog	784505	1977-83	c t
Turkey Creek near Nysted	784750	1977-83	c t
Turkey Creek northeast of Dannebrog	784810	1977-83	c t
Turkey Creek tributary near St. Paul	784820	1977-83	c t
Unnamed Creek at St. Paul	785020	1977-83	c t

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

[Type of record: c, chemical; m, microbiological; s, sediment; t, temperature]--Continued

Station name	Station number	Period of record (water years)	Type of record
Platte River Basin--Continued			
North Loup River at Brewster	7855	*1950 1948-51	c s
**North Loup River at Taylor	7860	*1956 *1949, *1977 1974-81	c s t
North Loup River near Burwell	7865	*1944, 1952 *1949-57	c s
Calamus River near Burwell	7875	*1944, *1952-56 *1949-55 1972-81	c s t
North Loup River at Ord	7885	1944 1949-55	c s
North Loup River at Scotia	7890	*1944 *1949	c s
Davis Creek near Cotesfield	7895	*1950-53, 1956	s
North Loup River near Cotesfield	7900	*1950, 1951-54	s
Auger Creek at Elba	790245	1977-83	c t
Unnamed Creek south of Elba	790255	1977-83	c t
Loup River near Palmer	791150	1993-95	c s t
Cedar River near Spalding	7915	*1947-49, *1959-60 1946-47 1957-63	c s s
Cedar River at Belgrade	7918	*1959 1958-63	c s
Cedar River near Fullerton	7920	1958-59, 1974-96	c
Loup River Power Canal at Diversion near Genoa	792499	1973-86 1974-83	c m s t t
**Loup River Power Canal near Genoa	7925	1950-53	s
**Loup River near Genoa	7930	1976, 1979-86	c s t
Beaver Creek at Loretto	7935	1947-49 1946-51	c s
Beaver Creek near Albion	7936	1973-78	c m t
**Beaver Creek at Genoa	7940	*1977 1978-89	s c m
Loup River at Columbus	7945	*1946	c
**Clear Creek 1.75 mi west of Polk County Line	794650	1996-99	c t

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

[Type of record: c, chemical; m, microbiological; s, sediment; t, temperature]--Continued

Station name	Station number	Period of record (water years)	Type of record	
Platte River Basin--Continued				
Platte River near Schuyler	7947	1966-68	c	s
**Shell Creek near Columbus	7955	*1948-49, *1968	c	
		1948-49		s
**Platte River at North Bend	7960	*1966-69		s
		1973-77		t
		1973-89	c	m
Elkhorn River near Stuart	796950	*1966, *1968-69	c	
Elkhorn River near Atkinson	796973	1983-89	c	m
Holt Creek near Emmet	796980	*1966, *1968-69	c	
Dry Creek near O'Neill	7972	*1966, *1968-69	c	
Elkhorn River near Inman	7974	*1966, *1968-69	c	
		1965-70		s
**Elkhorn River at Ewing	7975	*1948-49, 1960-66,		
		1968-69, 1976	c	
		1948-52, 1961		s
South Fork Elkhorn River at Ewing	7980	*1948, 1960-66	c	
		1961, 1963-67		s
Cache Creek near Ewing	798150	*1967-68	c	
Clearwater Creek at Clearwater	798302	*1964, *1967-69	c	
		1962-64		s
Antelope Creek near Neligh	798450	*1967-68	c	
Elkhorn River at Neligh	7985	*1947, *1967-68,		
		1974-81	c	t
		1948-51		s
		1962-64		s
Cedar Creek at Oakdale	798550	*1967-69		s
Elkhorn River at Meadow Grove	7988	*1943, *1964, *1967-69	c	
		1963-65		s
Elkhorn River near Battle Creek	7989	*1968-69	c	
Battle Creek at Battle Creek	798920	*1968-69	c	
**Elkhorn River near Norfolk	7990	*1976-77		s t
		1960-69, 1974-89	c	m
North Fork Elkhorn River above Pierce	799020	*1968-69	c	
Dry Creek near Pierce	799030	*1968-69	c	
North Fork Elkhorn River below Dry Creek	799031	*1968	c	

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

[Type of record: c, chemical; m, microbiological; s, sediment; t, temperature]--Continued

Station name	Station number	Period of record (water years)	Type of record
Platte River Basin--Continued			
Yankton Slough near Pierce	799040	*1968	c
Willow Creek near Pierce	799050	*1968-69	c
**North Fork Elkhorn River near Pierce	7991	*1944, 1959-64, *1968-69 *1961, 1963-64	c s
North Fork Elkhorn River at Hadar	799110	*1968-69	c
North Fork Elkhorn River at Norfolk	799130	*1965, 1968-69 1965-68	c s
Union Creek near Stanton	799290	*1964, *1968-69 1962-65	c s
Elkhorn River at Stanton	7993	*1943, *1968-69	c
Humbug Creek near Pilger	799310	*1968-69	c
Rock Creek near Beemer	799325	*1968-69	c
Plum Creek near Beemer	799345	*1968-69	c
**Elkhorn River at West Point	799350	1968-69, 1981-89	c m
Cuming Creek near Scribner	799365	*1968-69	c
Pebble Creek at Scribner	799385	*1968-69	c
Elkhorn River near Hooper	7994	*1968-69	c
Middle Logan Creek at Laurel	799410	*1968-69	c
Logan Creek at Wakefield	799445	*1963	c
Logan Creek at Pender	799450	1964-68, 1973-89	c m
**Logan Creek near Uehling	7995	1968-71, 1974-81	t
Middle Fork Maple Creek near Schuyler	7999	*1968	c
Bell Creek at Arlington	800250	*1968-69	c
Elkhorn River at Waterloo	8005	1966-95	c m s t
**Platte River near Ashland	8010	*1946, 1950-53, *1969	c
East inlet to Olive Creek Lake near Kramer	801148	*1967	c
West tributary to Bluestem Lake near Sprague	801264	*1967	c
Bluestem Lake near Sprague	801266	*1968	c
Salt Creek near Roca	801330	1971-80	c m
Tributary to Wagon Train Lake near Hickman	801345	*1967	c
Wagon Train Lake near Hickman	801346	*1967	c
West tributary to Stagecoach Lake near Hickman	801364	*1967	c
South inlet to Stagecoach Lake near Hickman	801365	*1967	c

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

[Type of record: c, chemical; m, microbiological; s, sediment; t, temperature]--Continued

Station name	Station number	Period of record (water years)	Type of record		
Platte River Basin--Continued					
Stagecoach Lake near Hickman	801366	*1968	c		
Hickman Branch near Roca	801370	1971	c	m	t
Hickman Branch at Roca	8026	*1972	c	m	t
Salt Creek at Saltillo Siding	803010	*1972	c		
Cardwell Branch near Denton	803068	*1968	c		
Yankee Hill Reservoir at dam near Denton	803070	*1968	c		
Holmes Creek near Denton	803073	*1968	c		
Conestoga Lake near Denton	803075	*1968	c		
Salt Creek above Beal Slough at Lincoln	803080	1971-83	c	m	t
Beal Slough at Lincoln	803085	*1971-72	c	m	t
Haines Branch at Lincoln	803098	*1971-72	c	m	t
Salt Creek at A Street at Lincoln	8031	*1950	c		
West tributary to Twin Lakes Reservoir near Pleasant Dale	803113	1968	c		
North tributary to Twin Lakes Reservoir near Pleasant Dale	803114	*1968	c		
Twin Lakes Reservoir near Pleasant Dale	803115	*1968	c		
Middle Creek near Malcolm	803128	*1968	c		
Pawnee Lake near Emerald	803130	*1968	c		
Middle Creek at Lincoln	803180	1971-72	c	m	t
Salt Creek at 14th Street at Lincoln	803190	1971-80	c	m	t
Antelope Creek above Antelope Lake at Lincoln	803196	*1968	c		
Antelope Lake at Lincoln	803198	*1968	c		
Antelope Creek at 52nd Street at Lincoln	803199	1983	c		t
Antelope Creek at 27th Street at Lincoln	8033	1971-72, 1983	c	m	t
Antelope Creek at Lincoln	8034	*1963	c		
Antelope Creek at Court Street at Lincoln	803405	1971-83	c	m	t
Oak Creek at Agnew	803442	*1968	c		
Middle Oak Creek near Garland	803445	*1968	c		
Branched Oak Reservoir near Raymond	803448	*1968	c		
North Oak Creek near Valparaiso	803470	*1971-72	c	m	t
Oak Creek above Air Base near Lincoln	803480	1971-72	c	m	t
Elk Creek near Lincoln	803485	*1971-72	c	m	t
Oak Creek at 1st Street at Lincoln	803490	1968-69	c		
Oak Creek at 14th Street at Lincoln	803493	1971-80	c	m	t
**Salt Creek at Lincoln	8035	1950-60, 1968-80	c	m	t
		1951-54			s
Dead Man's Run at 66th Street at Lincoln	803501	1983	c		t

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

[Type of record: c, chemical; m, microbiological; s, sediment; t, temperature]--Continued

Station name	Station number	Period of record (water years)	Type of record
Platte River Basin--Continued			
Dead Man's Run at Highway 6 at Lincoln	803503	1971-72, 1983	c m t
Little Salt Creek near Davey	803507	*1952, *1969	c
**Little Salt Creek near Lincoln	803510	*1952, *1969	c
		1971-72, 1974-77	c m t
Stevens Creek near Walton	803515	*1971-72	c m t
**Stevens Creek near Lincoln	803520	*1969, 1979-80	c
Salt Creek below Stevens Creek near Waverly	803525	1971-93	c m
Stevens Creek at Highway 6 near Lincoln	803523	1971-72, 1974-78	c m t
**Rock Creek near Ceresco	803530	1970-81	c m s t
Rock Creek near Greenwood	803534	*1971-72, 1977	c m t
Camp Creek near Greenwood	803537	*1971-72	c m t
Dee Creek at Greenwood	803550	*1971-72	c m t
Salt Creek at Greenwood	803555	1971-89	c m
		1971-72, 1981-84	t
		1972-76	s
Greenwood Creek near Greenwood	803558	*1971-72	c m t
Callahan Creek near Greenwood	803563	*1971-72	c m t
Salt Creek above Ashland	803565	1971-74	c m t
Salt Creek at Ashland	803567	*1972	c
Wahoo Creek at Ithaca	8040	1967-68	c
Silver Creek near Wahoo	804495	1974-78	c m t
Salt Creek near Ashland	8050	*1950	c
Salt Creek at mouth near Ashland	805005	*1971	c
Platte River near South Bend	805010	*1960-65	c
		1960, 1965, 1970	s
Mill Creek at Louisville	805499	1973-81	c m s t
Cedar Creek near Manley	805520	*1968	c
Cedar Creek near Louisville	805525	1973-81	c m s t
		*1971	c m t
Platte River near Plattsmouth	805550	1969-72	c m t
Fourmile Creek near Plattsmouth	805565	1974-81	c m s t
Platte River at La Platte	805570	1974	c m t

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

[Type of record: c, chemical; m, microbiological; s, sediment; t, temperature]--Continued

Station name	Station number	Period of record (water years)	Type of record
Weeping Water Creek Basin			
Weeping Water Creek at Weeping Water	806460	1973-81	c m s t
South Branch Weeping Water Creek near Union	806495	1973-81	c m s t
**Weeping Water Creek at Union	8065	*1977	s
Weeping Water Creek near Union	806501	1973-81	c m s t
		*1971	c m t
		*1977	s
Missouri River			
Missouri River at Nebraska City	8070	1951-73	c t
Little Nemaha River Basin			
Brownell Creek SWS No. 1A near Syracuse	8109	1955-69	s
Brownell Creek SWS No. 1 near Syracuse	8110	1955-69	s
**Little Nemaha River at Auburn	8115	*1977	s
		1973-89	c m
Big Nemaha River Basin			
**Big Nemaha River at Falls City	8150	1951, 1973-89	c m
Kansas River Basin			
**Arikaree River at Haigler	8215	1947-49	c
		1947-51	s
		1950-51	t
**North Fork Republican River at CO-NE State Line	8230	1947-49	c s
**Rock Creek at Parks	8240	*1952-53	c
Republican River at Benkelman	8245	*1950	s
		1969-73, 1980-89	c m
**South Fork Republican River near Benkelman	8275	1950	
Republican River near Max	8280	1946-47	c t
**Republican River at Stratton	8285	1951, 1953-54	s t
Swanson Lake near Trenton	8290	*1957	c
Republican River at Trenton	8295	1947-49	c
		1947-49, 1953	t
		1947-51, 1953	s
		*1975-76	c t
***Enders Reservoir	8320	1952-57	c

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

[Type of record: c, chemical; m, microbiological; s, sediment; t, temperature]--Continued

Station name	Station number	Period of record (water years)	Type of record	
Kansas River Basin--Continued				
Frenchman Creek near Enders	8325	1947-49	c	
		1946-47, 1962, 1964		s
Frenchman Creek at Wauneta	8331	1962		s
Frenchman Creek 2.6 miles E of Enders Dam near Wauneta	8327	1962		s
Frenchman Creek 5.6 miles E of Enders Dam near Wauneta	8329	1962, 1964-67		s
Frenchman Creek above Sand Canyon near Hamlet	8333	1962		s
Frenchman Creek near Hamlet	8335	1962		s
**Frenchman Creek at Palisade	8340	1964-65, *1975-76	c	t
		1971-76		s
**Frenchman Creek at Culbertson	8355	1970-87	c	
**Republican River at McCook	8370	1957	c	
		1967-88		t
		1956-57		s
Red Willow Creek at Red Willow Diversion Dam near McCook	8379	1970-74	c	t
**Red Willow Creek near Red Willow	8380	1950-53	c	t
		1950-54		s
Republican River above Medicine Creek at Cambridge	8387	1951-58	c	
		1951		s
Medicine Creek at Maywood	8390	1951-58		s t
Brushy Creek near Maywood	8395	1951-58		s t
		*1956	c	
Fox Creek at Curtis	8400	1951-58		s t
**North Fork Republican River at CO-NE State Line	8230	1947-49	c	s
**Rock Creek at Parks	8240	*1952-53	c	
Republican River at Benkelman	8245	*1950		s
		1969-73, 1980-89	c	m
**South Fork Republican River near Benkelman	8275	1950		s
Dry Creek near Curtis	8405	*1953-56	c	
		1951-58		s
Medicine Creek above Harry Strunk Lake	8410	*1951-56	c	
		1953-58		t
		1951-58		s
		1951-57		t
		1946-49, 1951-57		s
**Republican River at Cambridge	8435	1947-53	c	
		1951-53		s
Turkey Creek near Edison	8442	*1968	c	

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

[Type of record: c, chemical; m, microbiological; s, sediment; t, temperature]--Continued

Station name	Station number	Period of record (water years)	Type of record	
Kansas River Basin--Continued				
**Republican River near Orleans	8445	1969-94	c	t
Sappa Creek near Oberlin, KS	8450	1952-53, 1963-64	c	
		1963		t
		1950, 1963		s
Sappa Creek near Beaver City	8452	1947-51	c	
		1949-52		t
		1947-52		s
Beaver Creek at Cedar Bluffs, KS	8465	1962-63	c	s t
Mitchell Creek above Harry Strunk Lake	8415	*1951-56	c	
		1951-57		s
Harry Strunk Lake	8420	1952-56	c	
Medicine Creek below Harry Strunk Lake	8425	1951-52, 1954,		
		1956-57		s
		1970-74	c	t
Medicine Creek at Cambridge	843010	*1947-53	c	
Beaver Creek near Beaver City	8470	1950-53	c	t
		1948-50, 1951-53		s
**Sappa Creek near Stamford	8475	*1948-49, 1953	c	
		1950-53		t
		1947-53		s
Harlan County Reservoir	8490	1956-58	c	
**Republican River below Harlan County Dam	8495	1969-74	c	t
		1956-57		t
Republican River near Bloomington	8505	1947-49	c	
Thompson Creek at Riverton	8515	1950-52	c	
Republican River near Guide Rock	8530	1962-85	c m	t
**Republican River at Guide Rock	853020	1986-89	c m	
Republican River at Superior	8534	1969-73	c	
**Big Blue River at Surprise	8799	1965-70, 1974-81	c	t
		1965-72		s
Kezan Creek near Garrison	879945	*1968-69	c	
Lincoln Creek near Utica	879995	*1968-69	c	
Lincoln Creek near Seward	8800	1963-70, 1973-89	c m	
		1964-71		s
Big Blue River at Seward	8805	1978-89	c m	
Plum Creek at Seward	880510	*1968-69	c	
Big Blue River near Milford	880550	*1968-69	c	

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

[Type of record: c, chemical; m, microbiological; s, sediment; t, temperature]--Continued

Station name	Station number	Period of record (water years)	Type of record
Kansas River Basin--Continued			
West Fork Big Blue River below Hastings	880556	*1968-69 1973-78	c c m t
Flessner Creek near Stockham	8806	*1968	c
School Creek near Grafton	880750	*1968-69	c
Beaver Creek near Beaver Crossing	880785	*1968-69	c
**West Fork Big Blue River near Dorchester	8808	1963-70, 1973-91 1988-93	c s
Big Blue River at Crete	880950	*1951, *1963	c s
**Big Blue River near Crete	8810	1961-62, *1964, 1968-84 1960-62, *1964 1962, 1968-84	c m s t
Squaw Creek near Crete	881010	*1968	c
Big Blue River at Wilber	881050	*1964, *1969	c
Big Blue River near Wilber	881052	*1964	c
Big Blue River at DeWitt	8811	*1964	c
Clatonia Creek near DeWitt	881105	*1968	c
Turkey Creek near Milligan	881110	1968-69	c
Turkey Creek above Brush Creek near Wilber	881150	*1964	c
Turkey Creek near Wilber	8812	1965-72, 1966-70, 1973-89	s c m
Turkey Creek 2 miles SW of Wilber	881210	*1964	c
Turkey Creek above Swan Creek near DeWitt	881220	*1964	c
North Fork Swan Creek near Swanton	881353	*1964	c
Swan Creek at Swanton	881356	*1964	c
Swan Creek near DeWitt	881357	*1968-69	c
Turkey Creek near DeWitt	881358	*1964	c
Big Blue River near DeWitt	881420	*1968-69	c
Cub Creek near Beatrice	881430	*1968-69	c
Indian Creek at Beatrice	881450	*1968-69	c
Big Blue River at Beatrice	8815	*1960-69 *1960-61, *1963 1978-83	c s c m t
Bear Creek near Beatrice	881520	*1968-69	c
Cedar Creek near Holmesville	881530	*1968	c
Mud Creek near Holmesville	881650	*1968-69	c
Big Indian Creek at Wymore	881750	*1968-69	c
Wildcat Creek near Barneston	881950	*1968	c

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

[Type of record: c, chemical; m, microbiological; s, sediment; t, temperature]--Continued

Station name	Station number	Period of record (water years)	Type of record
Kansas River Basin--Continued			
**Big Blue River at Barneston	8820	1967-68	
		1981-93	c m t
Plum Creek at Barneston	882050	*1968-69	c
Big Blue Creek near Oketo, KS	8824	1961-64	c
Sand Creek near Holstein	882550	*1969	c
Cottonwood Creek near Roseland	882650	*1968-69	c
Little Blue River below Pawnee Creek near Pauline	8829	*1965, *1968	c
Pawnee Creek at Spring Ranch	882950	*1968-69	c
**Little Blue River near Deweese	8830	1959-70, 1975-89	c m
		1979-81	t
		1953, 1955-61	s
Little Blue River above Oxbow Creek near Angus	8833	*1968	c
Little Blue River at Angus	8835	1951-53	s
Elk Creek near Oak	883510	*1968-69	c
Spring Creek at Hebron	883553	*1968-69	c
Dry Creek near Hebron	883563	*1968-69	c
Little Blue River near Alexandria (Gilead)	883570	*1968	c
Big Sandy Creek near Davenport	883585	*1968-69	c
Big Sandy Creek near Powell	883950	*1968-69	c
Little Sandy Creek near Powell	883960	*1968-69	c
Little Blue River at Fairbury	883995	*1968-69	c
**Little Blue River near Fairbury	8840	1951-53, 1955-57	s
		1952-63, *1960-61,	
		*1968	c
Rose Creek near Endicott	884010	*1968	c
Little Blue River at Steele City	884020	*1968	c
****Little Blue River at Hollenberg, KS	884025	1972-90	c s t

*Less than 10 samples.

**Current continuous-record surface-water gaging station.

***Surrent reservoir stations.

****Station operated by Nebraska USGS.

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INTRODUCTION

The Water Resources Discipline of the U.S. Geological Survey (USGS), in cooperation with State and local agencies, obtains a large amount of data pertaining to the water resources of Nebraska each water year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the USGS, the data are published annually in this report series entitled "Water Resources Data - Nebraska."

The Nebraska water resources data report for water year 2002 includes records of stage, discharge, and water quality of streams; stage and/or contents of lakes and reservoirs; and water levels and quality of ground water in wells. This report contains records of stream stage for 3 stations; stream discharge for 96 continuous and 5 crest-stage gaging stations, and 3 miscellaneous and 55 low-flow sites; stream water quality for 23 gaging stations and 5 miscellaneous sites; water elevation and/or contents for 1 lake and 1 reservoir; ground-water levels for 43 observation wells; and ground-water quality for 115 wells. These data represent that part of the National Water Data System collected in and near Nebraska by the U.S. Geological Survey and cooperating local, State, and Federal agencies.

This series of annual reports for Nebraska began with the 1961 water year with a report that only contained data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that only contained data relating to water quality. Beginning with the 1975 water year, the report format was changed to present, in one volume, data on quantities of surface water, quality of surface and ground water, and ground-water levels.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for Nebraska were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States, Parts 6A and 6B." For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from U.S. Geological Survey, Information Services, Federal Center, MS 517, Box 25046, Denver, CO 80225.

Additional information, including current prices, for ordering specific reports may be obtained from the Office Chief at the address given on the back of the title page or by telephone (402) 437-5082.

COOPERATION

The U.S. Geological Survey and agencies of the State of Nebraska have had cooperative agreements for the collection of water-resource records since 1930. Organizations that assisted in collecting the data in this report through cooperative agreement with the Survey are: Nebraska Department of Natural Resources; Conservation and Survey Division, University of Nebraska-Lincoln; Big Blue River Compact Administration; Loup River Public Power District; Nebraska Public Power District; City of Lincoln; Lancaster County; and many of the Natural Resources Districts.

Assistance with funds or services was given by the U.S. Army Corps of Engineers in collecting records for 22 streamflow-gaging stations and 4 crest-stage gages, and by the U.S. Bureau of Reclamation in collecting records for 1 reservoir station.

The following organizations aided in collecting records: Nebraska Department of Natural Resources, Central Nebraska Public Power and Irrigation District, Nebraska Public Power District, and Loup River Public Power District, and all 23 Natural Resources Districts with ground-water levels.

SUMMARY OF HYDROLOGIC CONDITIONS

Streamflow, chemical quality of streamflow, and ground-water levels are related to precipitation. The relation of these hydrologic characteristics to precipitation during water year 2002 at selected locations is discussed in this summary section.

Precipitation

Precipitation data from published reports of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service (NWS) for the eight NWS divisions in Nebraska are listed in table 1. The locations of the NWS divisions in Nebraska are shown in figure 1. Precipitation for the normal period (1961-90), water year 2002, and departures from normal are shown for each quarter of the year to emphasize temporal as well as spatial variations of precipitation.

The precipitation totals for each division in Nebraska during water years 2000, 2001, and 2002 and normal precipitation (1961-1990) are shown in figure 2. Precipitation for water year 2002 was significantly less than for water year 2001, and for the normal period in all divisions. Precipitation totals for each division for each month of water year 2002 and normal precipitation are shown in figure 3.

Four divisions (North Central, Northeast, Southwest, and South Central) received greater-than-normal precipitation during the first quarter. After that, all divisions received less-than-normal precipitation for the remainder of the water year. Three divisions received significantly less precipitation than normal. The Panhandle division received only 62 percent of its normal precipitation, the Southwest division, 61 percent, and the South Central division, 60 percent of their normal precipitation.

Streamflow

Streamflow during water year 2002 compared to long-term records at representative streamflow-gaging stations is shown in figure 1. These representative stations have drainage areas within or mostly within the eight NWS division boundaries. The monthly mean flows for water year 2002 for each of these representative stations are compared to the monthly mean flows for the long-term record for each of these stations and to the precipitation data for the appropriate NWS divisions. Although a station may lie outside a division boundary, the comparison of flow is made to the current year's precipitation within the division where most of the drainage area lies.

The individual graphs demonstrate the varied streamflow conditions in the State during water year 2002. For stations with significant streamflow regulation, 06803555 (Salt

Creek at Greenwood) and 06843500 (Republican River at Cambridge), the period of record used for the long-term mean is from the completion of the last known storage structure or from the latest change in streamflow regulation upstream from the gage. For the following discussion, refer to figure 1 for streamflow data and to figure 3 for precipitation data unless noted otherwise.

Data for station 06454500, Niobrara River above Box Butte Reservoir, in the Panhandle division, was supplied by the Nebraska Department of Natural Resources. Streamflow was less than the long-term record for the entire year. Although October, November, and August received greater-than-normal precipitation for the year, precipitation was 6.35 inches less than normal (table 1).

Station 06786000, North Loup River at Taylor, located in the southern part of the North Central division, receives runoff from the Sandhills in the west-central to south-central parts of the division. Precipitation in the North Central division was 6.99 inches less than normal (table 1) for the water year. Streamflow was at or above normal in December, January, February, and September. A significant part of the streamflow is derived from ground-water discharge in sandhills streams, and therefore streamflow remains relatively stable even in drier-than-normal conditions.

Station 06800500, Elkhorn River at Waterloo, is located in the East Central division of the State. Its drainage area includes the eastern part of the North Central division, as well as most of the Northeast division and part of the East Central division. Water year 2001 had been an above-average year for discharge, and this trend continued in the first quarter of 2002. However, the second quarter had only 48 percent of normal precipitation, with third and fourth quarters also recording below-normal precipitation. As a result, discharge was below the long-term mean for the final three quarters of the water year.

Station 06784000, South Loup River at St. Michael, is located near the southern edge of the Sandhills region in the Central division of the State. Because precipitation was only 64 percent of normal, streamflow was well below normal for all months except for December and January. Greater-than-normal precipitation in November may have accounted for December and January not following the general annual trend for the water year.

Station 06803555, Salt Creek at Greenwood, is located in and receives runoff almost entirely from the East Central division. Discharge was at or below the monthly mean for all months except August. Thunderstorms in the East Central division for August produced significantly greater than normal precipitation, and resulted in above-normal streamflow for that month.

Table 1. Precipitation and departures from normal, water year 2002

[All values are in inches; %, percent. Period of record for normal, 1961-90. Source: U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service published reports and the National Climatic Data Center web site, accessed February 26, 2002]

National Weather Service division	Precipitation															
	First quarter (October-December)			Second quarter (January-March)			Third quarter (April-June)			Fourth quarter (July-September)			Totals (October-September)			
	Water year 2001	Departure (%)		Water year 2001	Departure (%)		Water year 2001	Departure (%)		Water year 2001	Departure (%)		Normal	Water year 2002	Departure (%)	
Panhandle	1.80	-0.04		1.77	0.81	-0.96	7.80	2.78	-5.02	5.39	5.06	-0.33	16.76	10.41	-6.35	
North Central	2.59	0.01		2.34	1.21	-1.13	9.03	4.90	-4.13	7.68	5.94	-1.74	21.64	14.65	-6.99	
Northeast	3.60	1.36		3.10	1.49	-1.61	10.48	7.76	-2.72	8.66	7.92	-0.74	25.84	22.13	-3.71	
Central	3.05	-0.41		2.77	1.17	-1.60	10.12	5.87	-4.25	8.48	5.84	-2.64	24.42	15.52	-8.90	
East Central	4.40	-0.54		3.46	2.26	-1.20	11.20	8.86	-2.34	10.11	8.30	-1.81	29.17	23.28	-5.89	
Southwest	2.17	0.37		2.11	0.82	-1.29	8.58	4.30	-4.28	6.72	4.27	-2.45	19.58	11.93	-7.65	
South Central	2.93	0.03		2.70	1.16	-1.54	9.86	5.56	-4.30	8.85	4.83	-4.02	24.34	14.51	-9.83	
Southeast	4.62	-1.35		3.68	2.25	-1.43	11.02	8.79	-2.23	11.02	6.99	-4.03	30.34	21.30	-9.04	

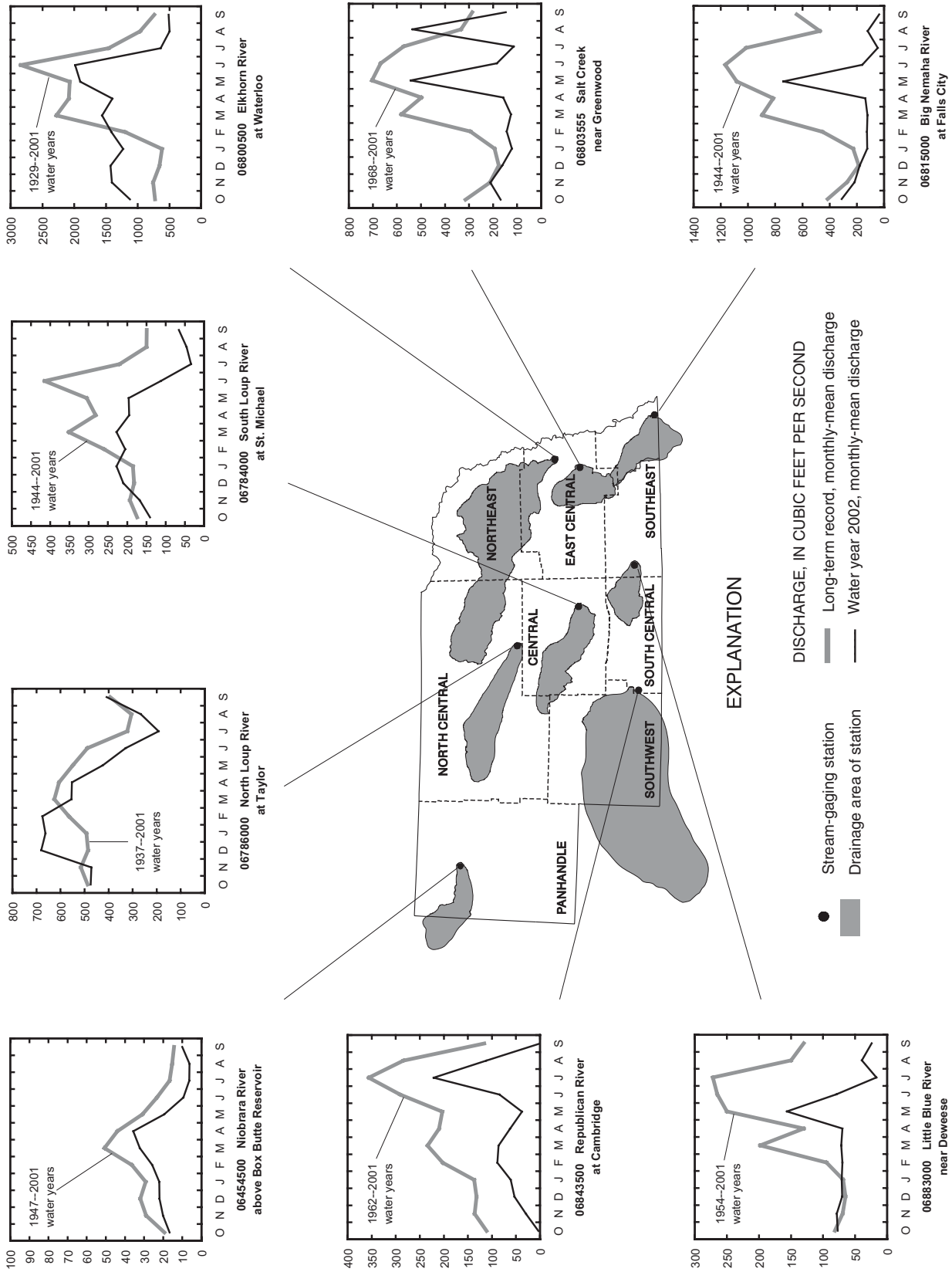


Figure 1. Streamflow data for selected stream-gaging stations to compare water year 2002 with the long-term record. Refer to corresponding precipitation data (fig. 3).

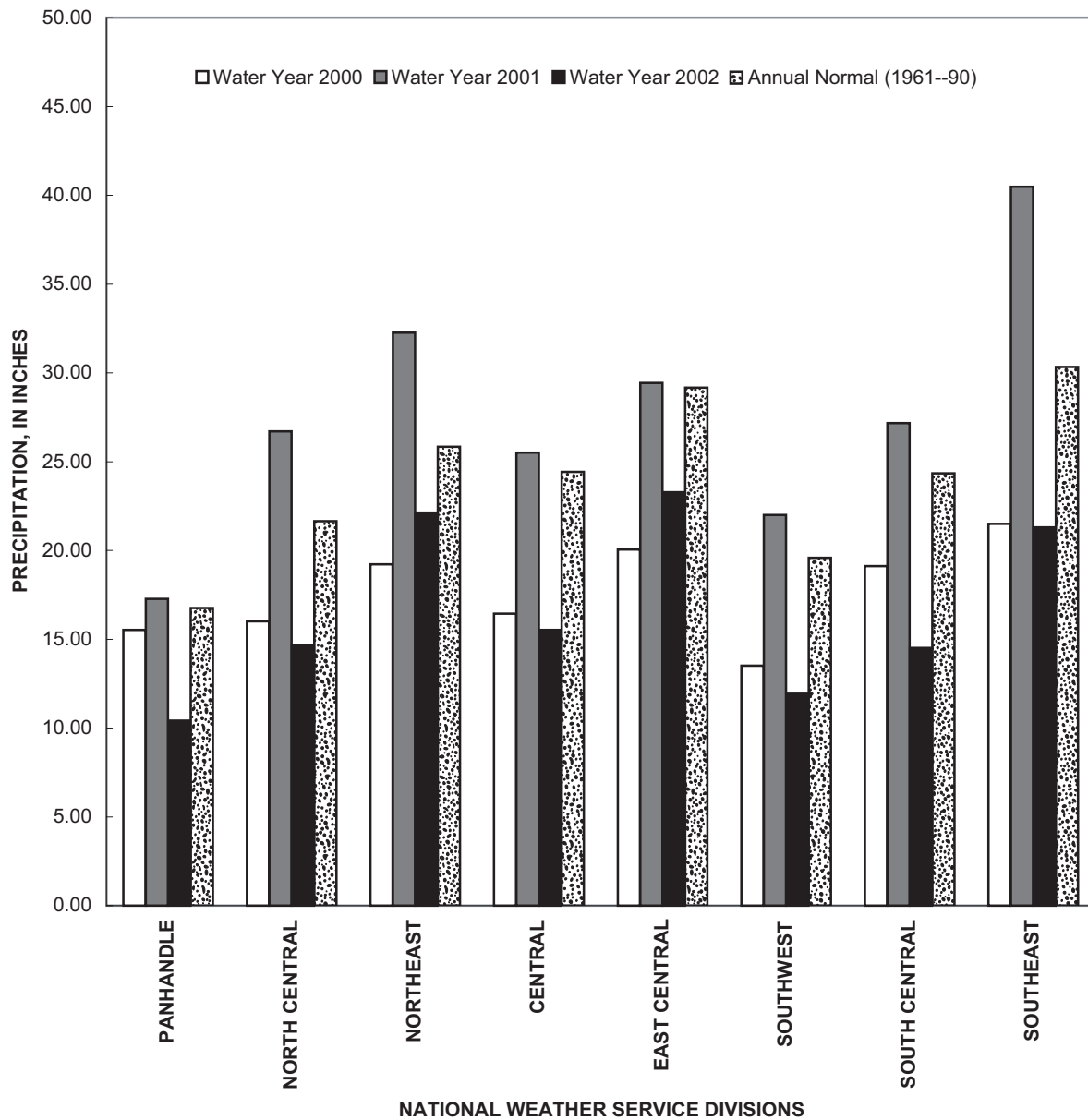


Figure 2. Precipitation for water years 2000–2002 and normal precipitation (1961–90) for the eight National Weather Service divisions in Nebraska.

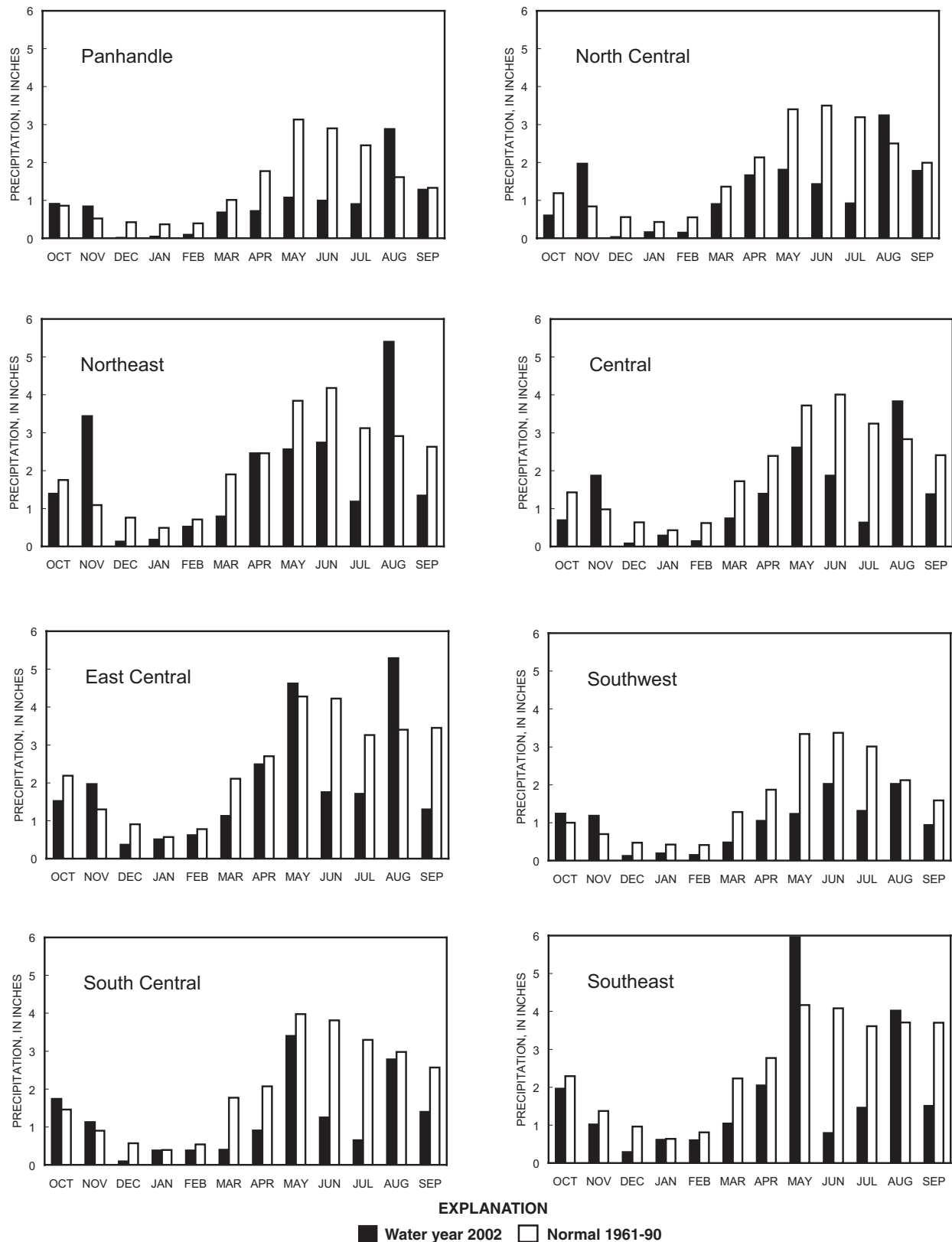


Figure 3. Monthly precipitation for water year 2002 and normal precipitation (1961–90) for each National Weather Service division in Nebraska.

Data for station 06843500, Republican River at Cambridge, was supplied by the Nebraska Department of Natural Resources. This station is located near the eastern edge of the Southwest division and has a drainage area encompassing most of the Southwest division as well as parts of northeastern Colorado and northwestern Kansas; only a little more than 50 percent of the area contributes to surface runoff. Monthly streamflow was less than the long-term record during the entire water year. Precipitation was less than normal during all months, except for October and November, and was significantly less from March to July. This resulted in an annual mean discharge that was only 30 percent of the long-term mean.

Although station 06883000, Little Blue River near Deweese, is located in the Southeast division, this station receives runoff from areas mostly in the South Central division. Flows were near the long-term mean for the first quarter, then dropped off significantly. Precipitation was only 60 percent of normal for the South Central division, so it comes as no surprise that the streamflow was only 46 percent of the long-term mean for the water year.

Station 06815000, Big Nemaha River at Falls City, located in the southeast part of the Southeast division, receives runoff from the eastern part of the division. Monthly streamflow at this gaging station was less than the long-term record for the entire year. Precipitation was below normal for all four quarters (table 1) and this directly affected streamflow. Annual mean discharge was only 30 percent of the long-term discharge.

Water Quality

Water samples were collected to determine the water quality at various surface- and ground-water quality stations around the State. Parameters measured routinely include specific conductance, pH, temperature (both water and air), barometric pressure, dissolved oxygen, suspended sediment, bacteria, nutrients, pesticides, major ions, and other parameters of interest.

Generally, the concentration of dissolved solids (which includes major ions) in streams is related inversely to streamflow. Large streamflows resulting from snowmelt and rainfall runoff have smaller dissolved-solids concentrations per unit volume, whereas small streamflows, composed largely of ground-water discharge to streams (base flow), have larger dissolved-solids concentrations. This inverse relation between dissolved solids and streamflow is less pronounced at stations downstream from lakes and reservoirs, where two components of flow (runoff and base flow) can be retained and mixed.

The presence of nutrients in surface water is recognized as a major factor in growth of aquatic plants. The contribution of nutrients, commonly resulting from application of agricultural fertilizers, to surface water can result in biological enrichment of algae and other aquatic plant growth. Dissolved oxygen in streams is essential for the survival of most aquatic organisms and plays an important role in the decomposition of wastes. Suspended-sediment concentration is directly related to

stream turbidity and generally increases with stream discharge as a result of eroded sediment transported by runoff.

Ground-Water Levels

Water-level changes during water year 2002 were determined from a statewide network of observation wells measured by 28 Federal, State, and local agencies. The network consists of approximately 3,000 wells measured annually, semiannually, or monthly and approximately 60 wells equipped with continuous recorders. Because of the importance of ground water as a source for irrigation and municipal supplies, most observation wells in Nebraska are located in those areas where large quantities of ground water are withdrawn. Water-level fluctuations in selected observation wells for water years 2001 and 2002 are shown in figure 4. Data from 45 observation wells are included in this report; 19 of these wells are equipped with continuous recorders.

In areas of Nebraska where ground water is used only for domestic and stock supplies, most water-level fluctuations are caused by variations in natural recharge to and discharge from the aquifers. In these areas, water levels commonly rise during the fall and winter months, when recharge from precipitation exceeds discharge by seepage to streams and by evapotranspiration. Water levels generally decline during the spring and summer months, when discharge by seepage to streams and by evapotranspiration is greater than recharge from precipitation.

In water year 2002, total precipitation was less than normal in all divisions (fig. 2), providing less water available for recharge to the aquifers. Water level changes in the individual divisions are described next.

The hydrograph for the observation well in Scotts Bluff County (fig. 4) shows the influences of recharge from surface-water irrigation canals. Typically, ground-water levels reach their highest levels in early to late spring (March through June) prior to ground-water withdrawals for irrigation. Exceptions to this can occur when leakage from surface-water irrigation canals, typically operating from May-June through September, recharge shallow aquifers. At the end of surface-water irrigation, infiltration of surface water slows or stops, and by late spring, ground-water levels return to pre-irrigation conditions. Because water levels in this well are affected by surface-water irrigation, annual comparisons are made from June to June (typically the lowest water levels during the year) rather than at the end of the water year. The lowest water level in June 2002 was lower (0.13 foot) than the lowest water level in June 2001.

Water-level fluctuations for an observation well in Holt County (fig. 4) are generally representative of water-level fluctuations in wells in the North-Central division of the State. Precipitation in the division was normal for the first quarter, but only 63 percent of normal for the remainder of the water year. Water levels rose 1.65 ft from the end of September 2001 to the end of April, but insufficient rainfall prevented further recharge of the aquifer. The lack of normal precipitation likely created a

greater demand for ground-water withdrawals for irrigation. Subsequently, by the end of September, the water level in this well was 4.72 ft lower than at the end of the 2001 water year.

In the Central division in Nebraska, monthly total precipitation was above normal only in November and August (fig. 3). For the year, precipitation was only 64 percent of normal. The hydrograph for the Buffalo County well (fig. 4), which generally is representative of hydrographs for wells in this division, shows that precipitation was not substantial enough to recharge the aquifer sufficiently. From the end of September 2001 through the end of April, the water level in this well rose only 0.75 ft. The overall lack of precipitation in June and July coupled with ground-water withdrawals for irrigation resulted in a steady decline in the water table of the aquifer so that, by the end of water year 2002, the water level was 3.47 ft lower than the previous water year.

The hydrograph for the observation well in Seward County (fig. 4) is generally representative of water-level fluctuations that occurred in the East Central division of the State during water years 2001 and 2002. Precipitation for the year was 80 percent of normal, with only June, July, and September being significantly below normal. Recharge caused a water-level rise of 1.11 ft. Following the start-up of ground-water withdrawals for irrigation in June, ground-water levels began to decline so that by mid-August, when water levels were at their lowest, water levels were 8.78 ft lower than they had been at the end of May, when they were at their highest levels.

Water-level fluctuations shown for an observation well in Chase County (fig. 4) are representative of those that occurred in irrigated areas in the Southwest division of the State during water years 2001 and 2002. Precipitation was below normal in the Southwest division for all months except October and November (fig. 3). For January through September, precipitation was only 54 percent of normal. By the end of August, when water levels were their lowest, they were 5.88 ft lower than at the end of April (their highest level) and 2.67 ft lower than the end of August 2001, which were the lowest recorded levels for that water year.

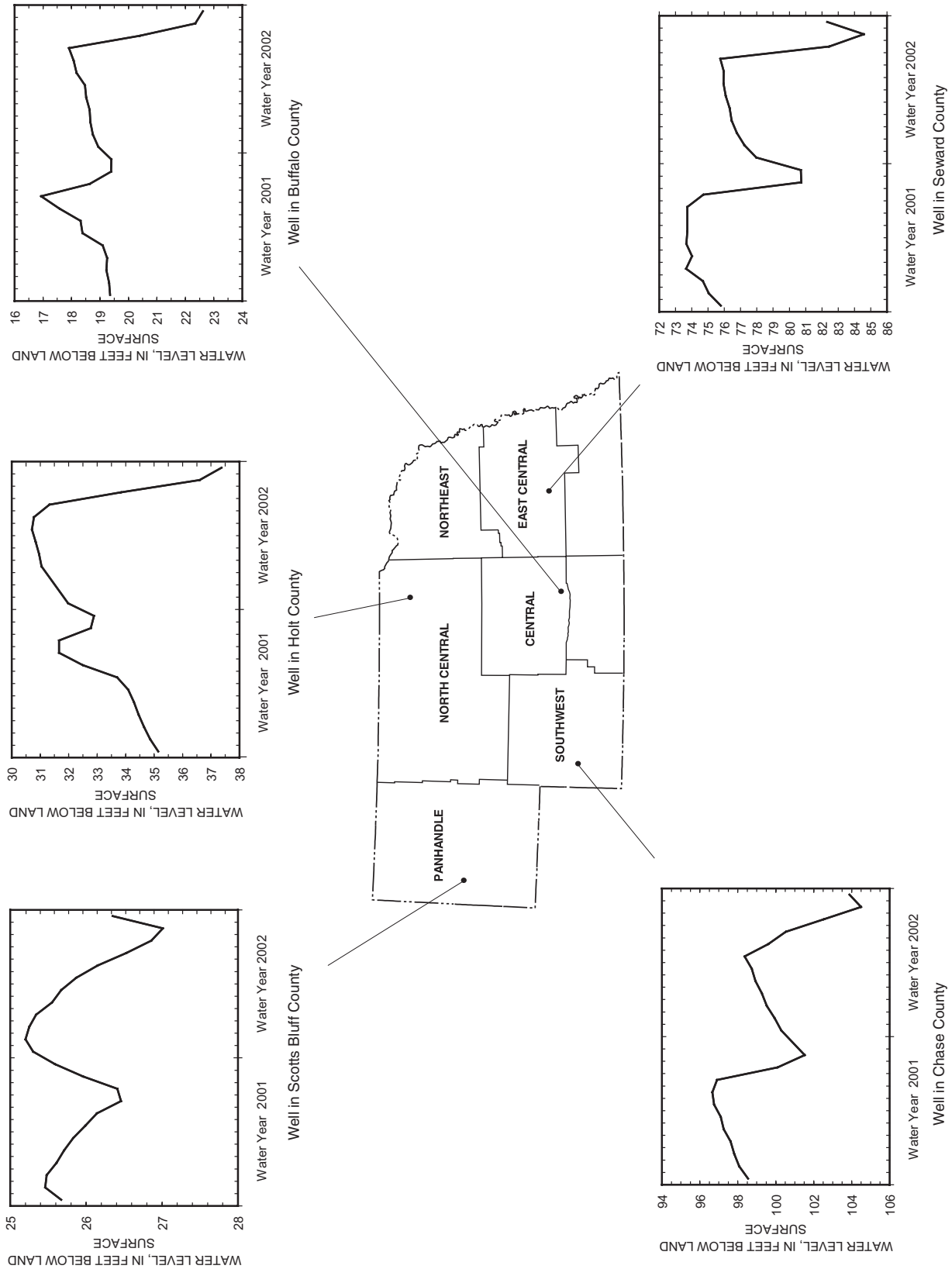


Figure 4. Water levels in selected observation wells, water years 2001 and 2002.

WATER USE

General water-use facts for the State of Nebraska for the year 1995 are listed below. Water-use information is collected and published every 5 years.

- Total water use in Nebraska was 25,241.59 million gallons per day (Mgal/d).
- Surface-water use was 19,040.61 Mgal/d, or 75.4 percent of total water use.
- Ground-water use was 6,200.98 Mgal/d, or 24.6 percent of total water use, of which 5,776.60 Mgal/d or 93.1 percent was used for irrigation.
- The largest use of water in Nebraska was for power generation, with 17,354.26 Mgal/d or 68.8 percent of all water use, of which greater than 99.9 percent was from surface water.
- Excluding power production, total water use was 7,887.33 Mgal/d, of which 6,196.12 Mgal/d or 78.6 percent was from ground water.
- Total population for 1995 was 1.64 million; total population for 1990 was 1.58 million, a 3.8% increase since 1990.
- Total per capita use of all water was 15,419.42 GPD (gallons per day).
- Domestic water use was 197.25 Mgal/d, an average of 120 GPD per capita.
- Commercial water use was 78.98 Mgal/d, with 99.9 percent from public supply.
- Industrial water use was 56.61 Mgal/d, with 46.3 percent supplied from public supply.
- Irrigation water use was 6,996.38 Mgal/d, or 27.7 percent of all water use. This is 70.0 percent of all off-stream water use.
- Livestock water use was 141.90 Mgal/d, or 1.4 percent of all off-stream use.
- Total power generation was 24,451 Gwh (gigawatt hours).

[From Zheng, S. and Frankforter, J.D., Estimated Water Use in Nebraska, 1995, Nebraska Natural Resources Commission Publication No. 501-2]

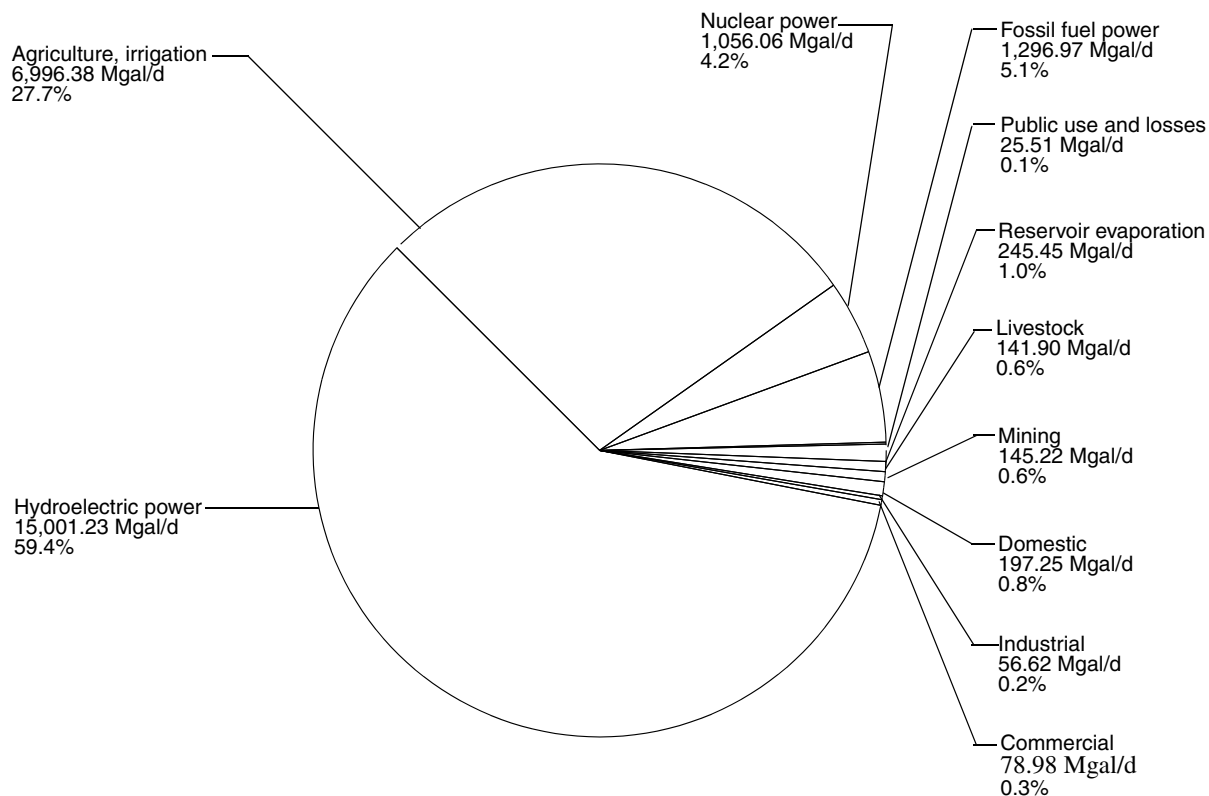


Figure 5. (a) Estimated total water use in Nebraska, 1995.

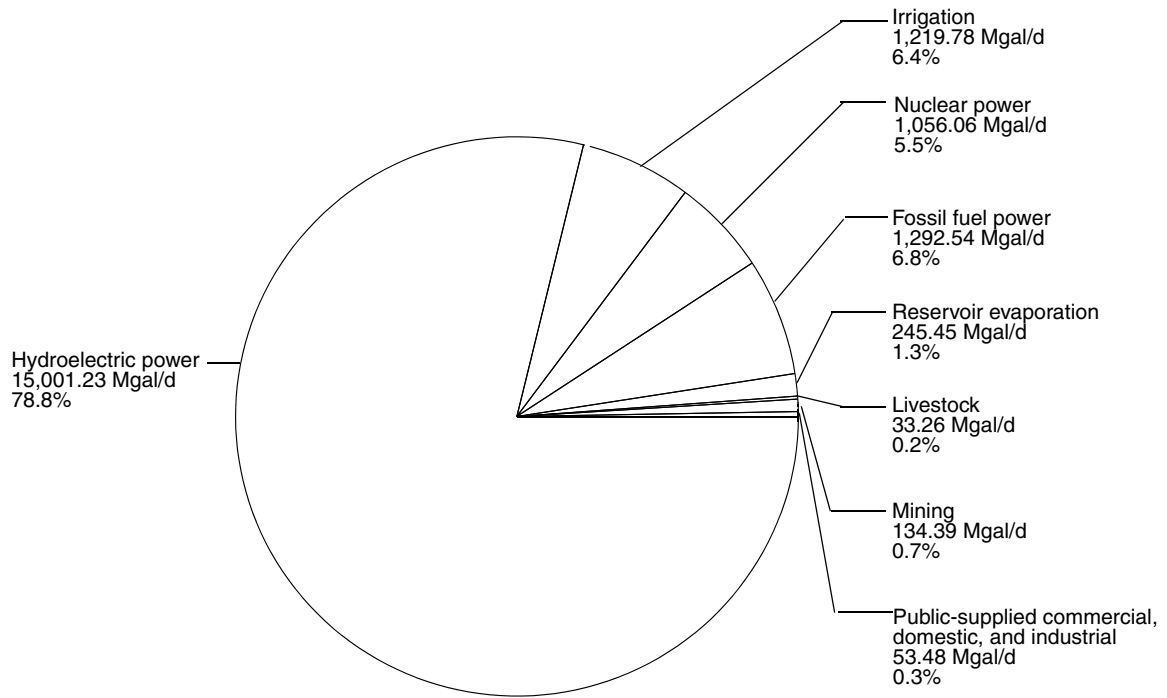


Figure 5. (b) Estimated total surface-water use in Nebraska, 1995.

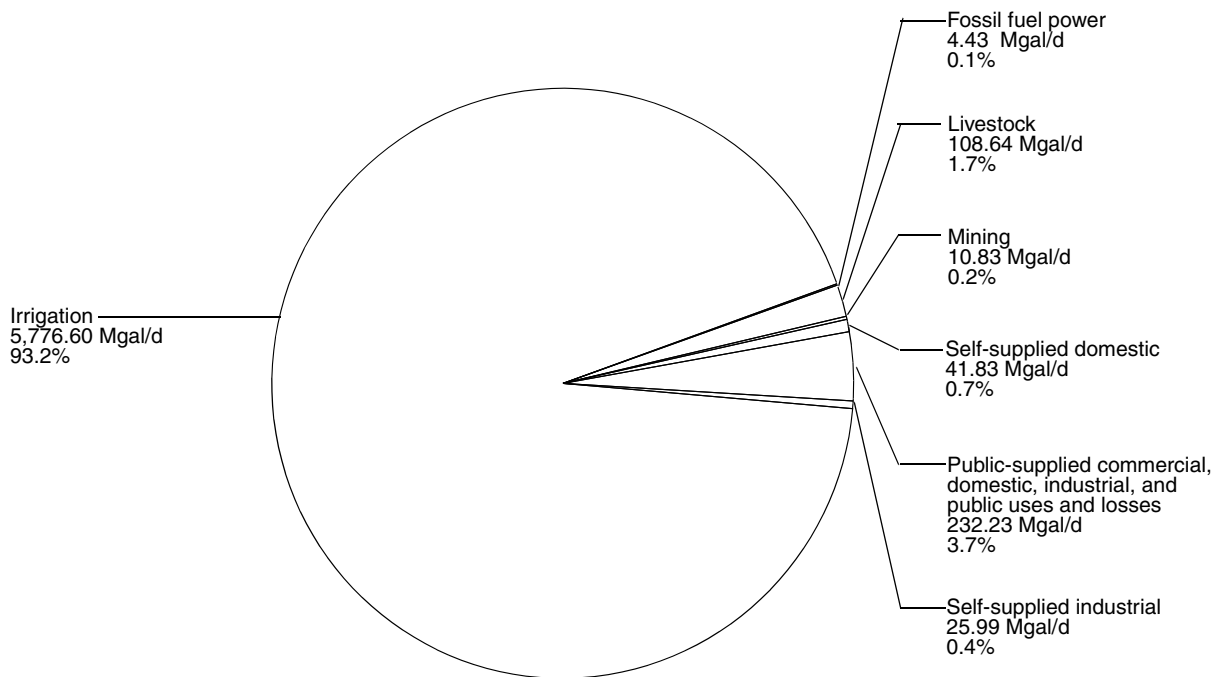


Figure 5. (c) Estimated total ground-water use in Nebraska, 1995.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Bench-Mark Network is a network of 50 sites in small drainage basins around the country whose purpose is to provide consistent data on the streamflow representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by human activities. At 10 of these sites, water-quality information is being gathered on major ions and nutrients, primarily to assess the affects of acid deposition on stream chemistry. Additional information on the Hydrologic Benchmark Program can be found at <http://water.usgs.gov/hbn/>.

National Stream-Quality Accounting Network ((NASQAN) monitors the water quality of large rivers within the Nation's largest river basins. From 1995 through 1999, a network of approximately 40 stations were operated in the Mississippi, Columbia, Colorado, and Rio Grande. From 2000 through 2004, sampling was reduced to a few index stations on the Colorado and Columbia so that a network of 5 stations could be implemented on the Yukon River. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment Program (NAWQA); (3) to characterize processes unique to large-river systems such as storage and remobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals. Additional information about the NASQAN Program can be found at <http://water.usgs.gov/nasqan/>.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical constituents in precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 225 precipitation chemistry monitoring sites. This long-term, nationally consistent monitoring program, coupled with ecosystem research, provides critical information toward a national score card to evaluate the effectiveness of ongoing and future regulations intended to reduce atmospheric emissions and subsequent impacts to the Nation's land and water resources. Reports and other information on the NADP/NTN

Program, as well as all data from the individual sites, can be found at <http://bqs.usgs.gov/acidrain/>.

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 59 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents will be measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

Communication and coordination between USGS personnel and other local, State, and federal interests are critical components of the NAWQA Program. Each study unit has a local liaison committee consisting of representatives from key federal, State, and local water resources agencies, Indian nations, and universities in the study unit. Liaison committees typically meet semiannually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities to collaborate efforts among the agencies. Additional information about the NAWQA Program can be found at http://water.usgs.gov/nawqa/nawqa_home.html

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 1999 water year that began October 1, 1998, and ended September 30, 1999. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, water-quality data for surface and ground water, and ground-water-level data. The locations of the stations and wells where the data were collected are shown in figures 6, 7, and 8. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each data station, whether stormiest or well, in this report is assigned a unique identification number. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The “downstream order” system is used for surface-water stations and the “latitude-longitude” system is used for wells.

Downstream Order System

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a mainstream station are listed before that station. A station on a tributary that enters between two mainstream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary with respect to the stream to which it is immediately tributary is indicated by an indentation in the “List of Stations” in the front of this report. Each indentation represents one rank. This downstream order and system of indentation shows which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight-digit number for each station, such as 06797000, which appears just to the left of the station name, includes the two-digit Part number “06” plus the six-digit downstream-order number “797000.” The Part number designates the major river basin; for example, Part “06” is the Missouri River Basin.

Latitude-Longitude System

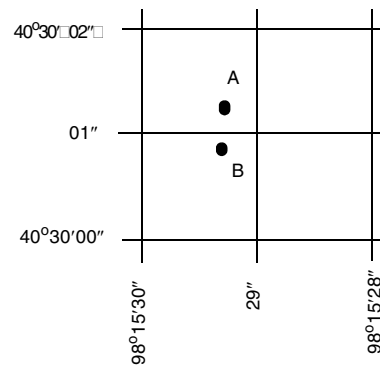
The identification numbers for wells are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This site-identification number, once assigned, is a pure number and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true

latitude and longitude will be listed in the LOCATION paragraph of the station description. (See figure).

COORDINATES:

Well A 403001098152901

Well B 403001098152902



System for numbering wells (latitude and longitude)

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device from which either instantaneous or mean daily discharges may be computed. Complete records of lake or reservoir content, similarly, are those for which stage or content may be computed or estimated with reasonable accuracy for any time, or period of time. Because daily mean discharges and end-of-day contents commonly are published for such stations, they are referred to as “daily stations.”

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device, and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as “Crest-stage partial records,” or “Discharge measurements at miscellaneous sites.” Records of discharge measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately. Location of all complete-record and crest-stage partial-record stations for which data are given in this report are shown in figure 6.

Data Collection and Computation

The data obtained at a complete-record gaging station on a stream or canal generally consist of an incremental record (15- to 60-minute time step) of stage, individual measurements of discharge throughout a range of stages, and notations regarding

factors that may affect the relations between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges. The data obtained at a complete-record gaging station on a lake or reservoir consist of a record of stage and of notations regarding factors that may affect the relationship between stage and lake content. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas and lake storage.

Continuous records of stage are obtained by electronic data logger on a set time step and, at most sites, transmitted to the office by satellite. At some sites, a back-up paper pen trace is obtained by an analog recorder. Measurements of discharge are made with current meters using methods adopted by the U.S. Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A1 through A19 and Book 8, Chapters A2 and B2. The methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for Standards (ISO).

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using: (1) logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow over dams or weirs; or (4) step-backwater techniques.

Daily mean discharges are computed by applying the daily mean stages (gage heights) to the stage-discharge curves or tables. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on the individual discharge measurements and notes of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may so obscure the stage-discharge relations that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and records for other stations in the same or nearby basins for comparable periods.

In computing records of lake or reservoir contents, it is necessary to have available data from surveys, curves or tables defining the relationship of stage and content. The application of stage to the stage-content curves or tables gives the contents from which daily, monthly, or yearly changes then are determined. If the stage-content relationship changes because of deposition of sediment in a lake or reservoir, periodic resurveys may be necessary to redefine the relationship. Even when this is done, the contents computed may become increasingly in error as the lapsed time since the last survey increases. Discharges over lake or reservoir spillways are computed from stage-discharge relationships much as other stream discharges are computed.

For some gaging stations, there are periods when no gage-height record is obtained, or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated from operator's logs, previous or following record, inflow-outflow studies, and other information. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections, "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

Data Presentation

Streamflow data in this report are presented in a new format that is considerably different from the format in data reports prior to the 1992 water year. The major changes are that statistical characteristics of discharge now appear in tabular summaries following the water-year data table and less information is provided in the text or station manuscript above the table. These changes represent the results of a pilot program to reformat the annual water-data report to meet current user needs and data preferences.

The records published for each continuous-record surface-water discharge station (gaging station) now consist of four parts, the manuscript or station description; the data table of daily mean values of discharge for the current year with summary data; a tabular statistical summary of monthly mean flow data for a designated period, by water year; and a summary statistics table that includes statistical data

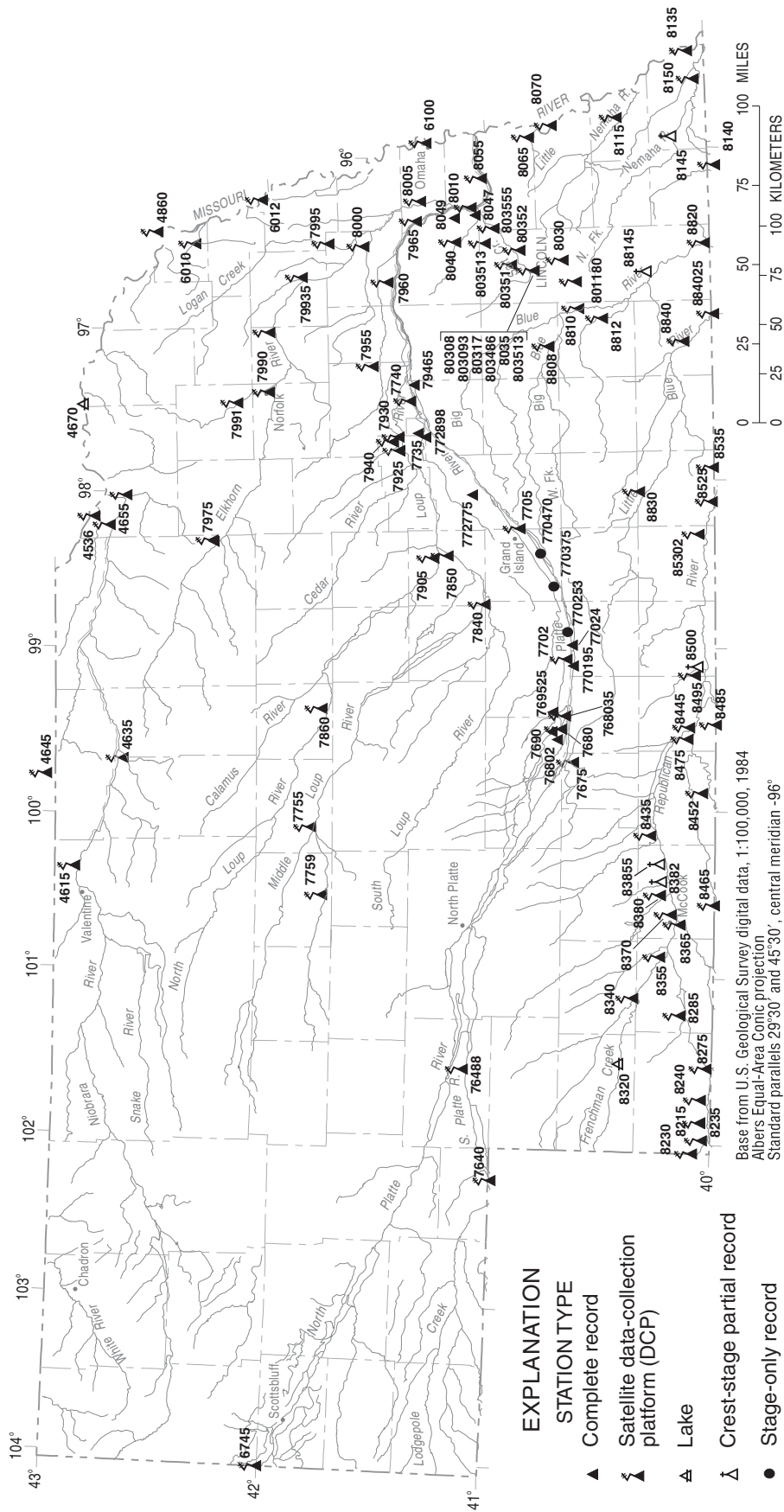


Figure 6. Location of active surface-water gaging stations.

of annual, daily, and instantaneous flows as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration.

Station Manuscript

The manuscript provides, under various headings, descriptive information, such as station location; period of record; historical extremes outside the period of record; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of the station description.

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the gage with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages, given for only a few stations, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.--This indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not and whose location was such that records from it can reasonably be considered equivalent with records from the present station.

REVISED RECORDS.--Because of new information, published records occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

GAGE.--The type of gage in current use, the datum of the current gage referred to sea level (see glossary), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.--All periods of estimated daily-discharge record will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily-discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a remarks statement is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, to conditions that affect natural flow at the station and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

COOPERATION.--Records provided by a cooperating organization or obtained for the U.S. Geological Survey by a cooperating organization are identified here.

EXTREMES OUTSIDE PERIOD OF RECORD.--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the U.S. Geological Survey.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there would be no current or, possibly, future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the offices whose addresses are given on the back of the title page of this report to determine if the published records were ever revised after the station was discontinued. If the data were obtained by computer retrieval, the data would be current and there would be no need to check because any published revision of data is always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity table when daily contents are given.

Headings for AVERAGE DISCHARGE, EXTREMES FOR PERIOD OF RECORD, and EXTREMES FOR CURRENT YEAR have been deleted and the information contained in these paragraphs, except for the listing of secondary instantaneous peak discharges in the EXTREMES FOR CURRENT YEAR paragraph, is now presented in the tabular summaries following the discharge table or in the REMARKS paragraph, as appropriate. No changes have been made to the data presentations of lake contents.

Data Table of Daily Mean Values

The daily table of discharge records for stream-gaging stations gives mean discharges for each day of the water year. In the monthly summary for the table, the line headed "TOTAL" gives the sum of the daily figures for each month; the line headed "MEAN" gives the average flow in cubic feet per second for the month; the lines headed "MAX" and "MIN" give the maximum and minimum daily mean discharges, respectively, for each month. Discharge for the month also is usually expressed in cubic feet per second per square mile (line headed "CSFM"); or in inches (line headed "IN"); or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversion data or reservoir contents are given. These figures are identified by a symbol and corresponding footnote.

Statistics of Monthly Mean Data

A tabular summary of the mean (line headed "MEAN"), maximum (line headed "MAX"), and minimum (line headed "MIN") of monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those figures. The designated period will be expressed as "FOR WATER YEARS - , BY WATER YEAR (WY)," and will list the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station manuscript. It will consist of all the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript.

Summary Statistics

A table titled "SUMMARY STATISTICS" follows the statistics of monthly mean data tabulation. This table consists of four columns, with the first column containing the line headings of the statistics being reported. The table provides a statistical

summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, "WATER YEARS - ," will consist of all the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (See line headings below.), except for the "ANNUAL 7-DAY MINIMUM" statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the manuscript or in footnotes. Because the designated period may not be the same as the station period of record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the column heading. When this occurs, it should be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration curve statistics and runoff data are also given. Runoff data may be omitted if there is extensive regulation or diversion of flow in the drainage basin.

The following summary statistics data, as appropriate, are provided with each continuous record of discharge. Comments to follow clarify information presented under the various line headings of the summary statistics table.

ANNUAL TOTAL.--The sum of the daily mean values of discharge for the year. At some stations the annual total discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

ANNUAL MEAN.--The arithmetic mean of the individual daily mean discharges for the year noted or for the designated period. At some stations the yearly mean discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes. At least 5 complete years of record must be available before this statistic is published for the designated period.

HIGHEST ANNUAL MEAN.--The maximum annual mean discharge occurring for the designated period.

LOWEST ANNUAL MEAN.--The minimum annual mean discharge occurring for the designated period.

HIGHEST DAILY MEAN.--The maximum daily mean discharge for the year or for the designated period.

LOWEST DAILY MEAN.--The minimum daily mean discharge for the year or for the designated period.

ANNUAL 7-DAY MINIMUM.--The lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1-March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

INSTANTANEOUS PEAK FLOW.--The maximum instantaneous discharge occurring for the water year or for the designated period. Note that secondary instantaneous peak discharges above a selected base discharge are stored in District computer files for stations meeting certain criteria. Those discharge values may be obtained by writing to the District Office. (See address on back of title page of this report.)

INSTANTANEOUS PEAK STAGE.--The maximum instantaneous stage occurring for the water year or for the designated period. If the dates of occurrence for the instantaneous peak flow and instantaneous peak stage differ, the REMARKS paragraph in the manuscript or a footnote may be used to provide further information.

INSTANTANEOUS LOW FLOW.--The minimum instantaneous discharge occurring for the water year or for the designated period.

ANNUAL RUNOFF.--Indicates the total quantity of water in runoff for a drainage area for the year. Data reports may use any of the following units of measurement in presenting annual runoff data:

Acre-foot (AC-FT) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equal to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area.

Inches (INCHES) indicates the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

10 PERCENT EXCEEDS.--The discharge that has been exceeded 10 percent of the time for the designated period.

50 PERCENT EXCEEDS.--The discharge that has been exceeded 50 percent of the time for the designated period.

90 PERCENT EXCEEDS.--The discharge that has been exceeded 90 percent of the time for the designated period.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified either by flagging individual daily values with the letter symbol "e" and printing a table footnote, "e Estimated."

Accuracy of the Records

The accuracy of streamflow records depends primarily on: (1) The stability of the stage- discharge relation or, if the control is unstable, the frequency of discharge measurements; and (2) the accuracy of measurements of stage, measurements of discharge, and interpretation of records.

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of their true values; "good," within 10 percent; and "fair," within 15 percent. Records that do not meet the criteria mentioned are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less

than 1 ft³/s; to the nearest tenth between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures for more than 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff, in inches, are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other Records Available

Information used in the preparation of the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables is on file in the Nebraska District office. Also, most of the daily mean discharges are in computer-readable form and have been analyzed statistically. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained from the District office.

Records of daily diversions of water from streams by canals are collected by and published in Hydrographic Reports of the Nebraska Department of Water Resources. Included are discharge records for streams and storage records for reservoirs not published in reports of the U.S. Geological Survey. Copies of the Hydrographic Reports may be obtained from the Nebraska Department of Water Resources, 301 Centennial Mall, South, P.O. Box 94676, Lincoln, NE 68509 (telephone number: 402-471-2363).

Records of discharge, not published by the U.S. Geological Survey, are collected in Nebraska at several sites by the U.S. Army Corps of Engineers. The National Water Data Exchange (NAWDEX), U.S. Geological Survey, Reston, VA 20192, maintains an index of these sites as well as sites where other agencies have collected water data.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in

this report may involve a variety of types of data and measurement frequencies.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be one or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A careful distinction needs to be made between “continuing records,” as used in this report, and “continuous recordings,” which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which records on the quality of surface water appear in this report are shown in figure 7.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

Onsite Measurements and Sample Collection

In obtaining water-quality data, a major concern needs to be assuring that the data obtained represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory.

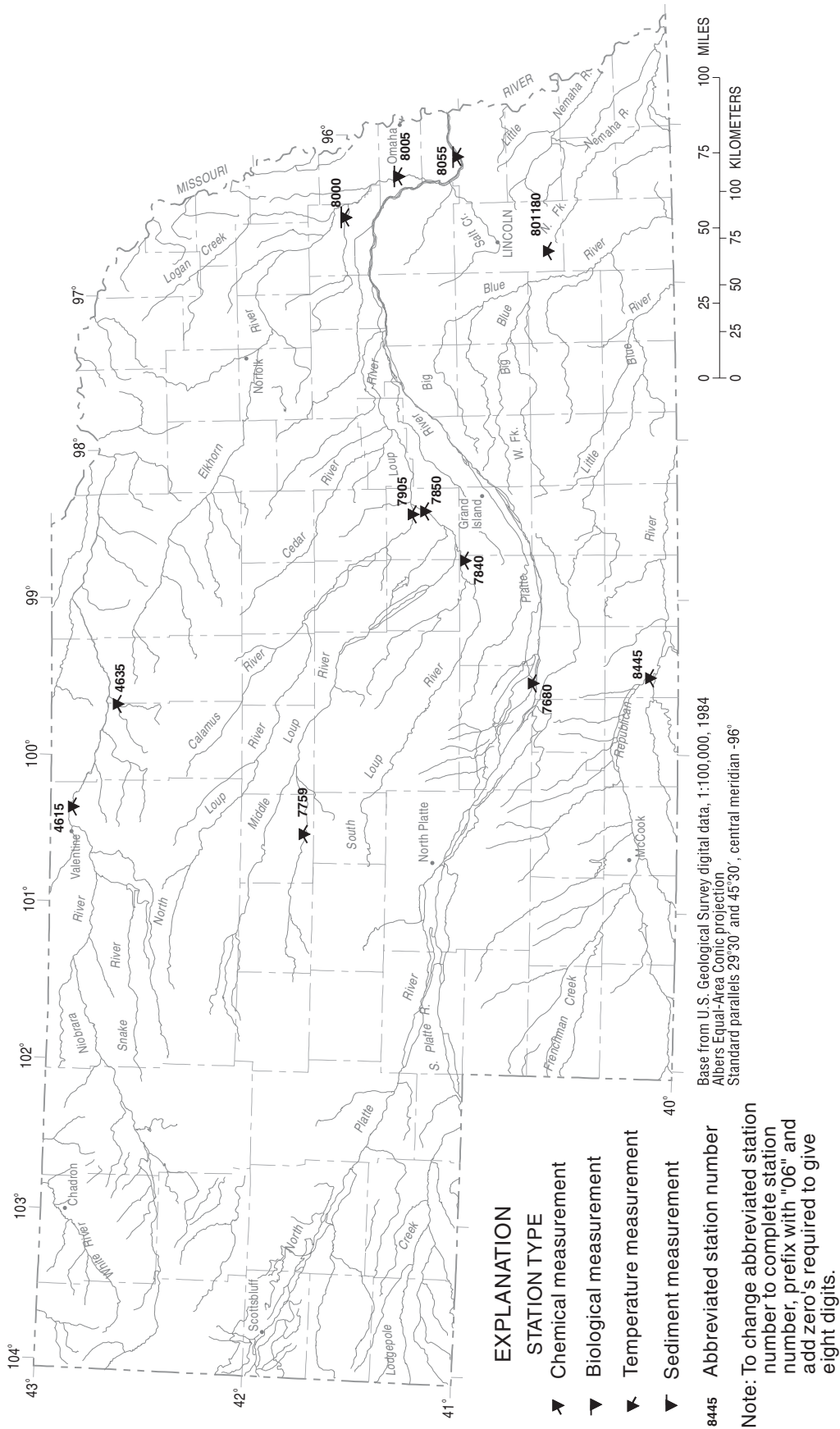


Figure 7. Location of active surface-water quality stations.

Procedures for onsite measurements and for collecting, treating, and shipping samples are detailed in TWRI Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. These references are listed in the PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS section of this report. These methods are consistent with ASTM standards and generally follow ISO standards.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals depends on flow conditions and other factors which must be evaluated by the collector.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

In March 1989 the National Water-Quality Laboratory discovered a bias in the turbidimetric method for sulfate analysis, indicating that values below 75 mg/L have a median positive bias of 2 mg/L above the true value for the period between 1982 and 1989. Sulfate values in this report have not been corrected for this bias.

Historical and current (1998) dissolved trace-element concentrations are reported herein for water that was collected, processed, and analyzed by using either ultraclean or other than ultraclean techniques. If ultraclean techniques were used, then those concentrations are reported in nanograms per liter. If other than ultraclean techniques were used, then those concentrations are reported in micrograms per liter and could reflect contamination introduced during some phase of the procedure.

Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at the time of discharge measurements for water-discharge stations.

For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the Nebraska District office.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow and in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of suspended-sediment discharge, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included for some stations.

Laboratory Measurements

Sediment samples are analyzed in Iowa City, Iowa; samples for biochemical-oxygen demand (BOD), samples for indicator bacteria, and daily samples for specific conductance are analyzed locally; and all other samples are analyzed in the U.S. Geological Survey laboratory in Arvada, Colorado. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the U.S. Geological Survey laboratory are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. These methods are consistent with ASTM standards and generally follow ISO standards.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily, are presented first. Tables of "daily values" of specific conductance,

pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

DRAINAGE AREA.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

INSTRUMENTATION.--Information on instrumentation is given only if a water-quality monitor temperature record, sediment pumping sampler, or other sampling device is in operation at a station.

REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the records.

COOPERATION.--Records provided by a cooperating organization or obtained for the U.S. Geological Survey by a cooperating organization are identified here.

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently, because the true maximums or minimums may not have been sampled. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report

series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to insure the most recent updates.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Records of Ground-Water Levels

Only water-level data from a network of selected observation wells are given in this report. These data are intended to provide a sampling and historical record of water-level changes in the Nation's most important aquifers. Locations of the observation wells in this network in Nebraska are shown in figure 8.

Although, in this report, records of water levels are presented for only selected wells, records are obtained through cooperative efforts of many Federal, State, and local agencies for several thousand observation wells throughout Nebraska and are placed in computer storage. Each spring, the Nebraska District and the Nebraska Department of Natural Resources release a web-only report for water-level changes through the previous calendar year. This web report contains hydrographs of recorder wells, detailed maps showing changes in water levels from the previous year, and other useful items. Information about the availability of the data in the water-level file may be obtained from the District Chief, Nebraska District. (see address on back of front page.)

Data Collection and Computation

Measurements of water levels are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well ensure that measurements at each well are of consistent accuracy and reliability.

Tables of water-level data are presented by counties arranged in alphabetical order. The prime identification number for a given well is the 15-digit number that appears in the upper left corner of the table. The secondary identification number is the local well number, an alphanumeric number, derived from the township-range location of the well.

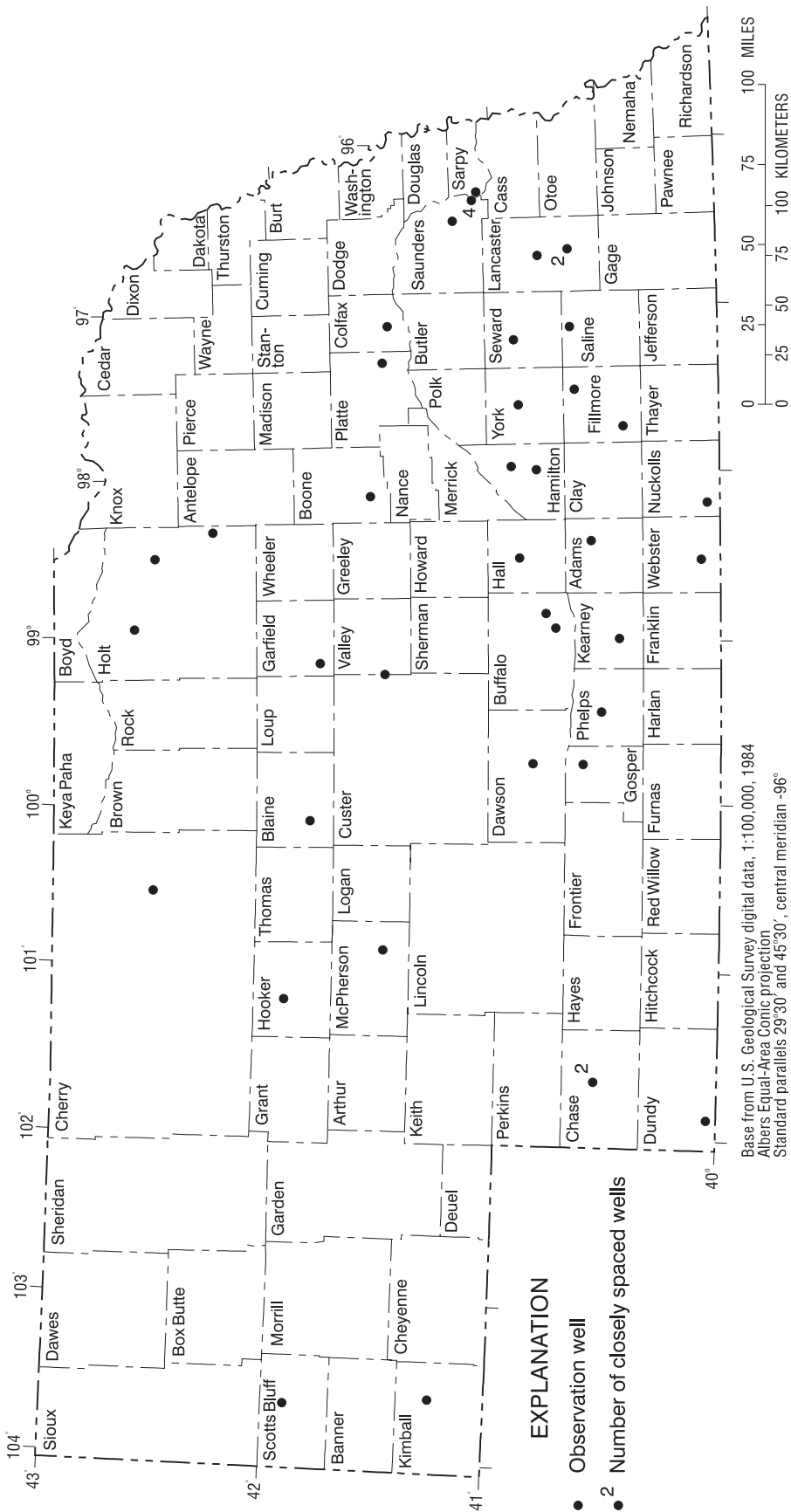


Figure 8. Location of selected observation wells.

Water-level records are obtained from direct measurements with a steel tape or from the graph or punched tape of a water-stage recorder. The water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given to a tenth of a foot or a larger unit.

Data Presentation

Each well record consists of two parts, the station description and the data table of water levels observed during the water year. Hydrographs also are presented for some wells. The description of the well is presented first through use of descriptive headings preceding the tabular data. The comments to follow clarify information presented under the various headings.

LOCATION.--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); a landline location designation; the hydrologic-unit number; the distance and direction from a geographic point of reference; and the owner's name.

AQUIFER.--This entry designates by name (if a name exists) and geologic age the aquifer(s) open to the well.

WELL CHARACTERISTICS.--This entry describes the well in terms of depth, diameter, casing depth and/or screened interval, method of construction, use, and additional information such as casing breaks, collapsed screen, and other changes since construction.

DATUM.--This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base and so on), and in relation to land surface (such as

1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above (or below) sea level; it is reported with a precision depending on the method of determination.

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level. It should identify wells that also are water-quality observation wells, and may be used to acknowledge the assistance of local (non-Survey) observers.

PERIOD OF RECORD.--This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water-level records by the U.S. Geological Survey and the words "to current year" if the records are to be continued into the following year. Periods for which water-level records are available, but are not published by the U.S. Geological Survey, may be noted.

EXTREMES FOR PERIOD OF RECORD.--This entry contains the highest and lowest water levels of the period of published record, with respect to land-surface datum, and the dates of their occurrence.

A table of water levels follows the station description for each well. Water levels are reported in feet below land-surface datum and all taped measurements of water level are listed. For wells equipped with recorders, only abbreviated tables are published; generally, only water-level lows are listed for every fifth day and at the end of the month (eom). The highest and lowest water levels of the water year and their dates of occurrence are shown on a line below the abbreviated table. Because all values are not published for wells with recorders, the extremes may be values that are not listed in the table. Missing records are indicated by dashes in place of the water level.

Records of Ground-Water Quality

Records of ground-water quality in this report differ from other types of records in that, for most sampling sites, they consist of only one set of measurements for the water year. The quality of ground water ordinarily changes only slowly; therefore, for most general purposes, one annual sampling, or only a few samples taken at infrequent intervals during the year, is sufficient. Frequent measurement of the same constituents is not necessary unless one is concerned with a particular problem, such as monitoring for trends in nitrate concentration. In the special cases where the quality of ground water may change more rapidly, more frequent measurements are made to identify the nature of the changes.

Data Collection and Computation

The records of ground-water quality in this report were obtained mostly as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some counties but none are presented for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality Statewide. Such a view can be attained only by considering records for this year in context with similar records obtained for these and other counties in earlier years.

Most methods for collecting and analyzing water samples are described in the "U.S. Geological Survey TWRI publications referred to in the "Onsite Measurements and Sample Collection" and the "Laboratory Measurements: sections in the data report. In addition, the TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground-water samples for selected unstable constituents. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. These methods are consistent with ASTM standards and generally follow the ISO standards. All samples were obtained by trained personnel. The wells sampled were pumped long enough to assure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

Data Presentation

The records of ground-water quality are published in a section titled QUALITY OF GROUND WATER immediately following the ground-water-level records. Data for quality of ground water are listed alphabetically by County within indi-

vidual study areas and are identified by well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. No descriptive statements are given for ground-water-quality records; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water. The REMARK codes listed for surface-water-quality records are also applicable to ground-water-quality records.

ACCESS TO USGS WATER DATA

The USGS provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry and historic daily-mean and peak-flow discharge data for most current or discontinued gaging stations through the world wide web (WWW). These data may be accessed at

<http://water.usgs.gov>

Some water-quality and ground-water data also are available through the WWW. In addition, data can be provided in various machine-readable formats on magnetic tape or 3 1/2-inch floppy disk. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division District Offices. For Nebraska, the address is:

District Chief
U.S. Geological Survey
Rm. 406, Federal Bldg.
100 Centennial Mall, North
Lincoln, Nebraska 68508

e-mail: info_ne@usgs.gov (general information)
swinfo@ne20dnelnc.cr.usgs.gov (surface-water information)
gwinfo@ne20dnelnc.cr.usgs.gov (ground-water information)
wqinfo@ne20dnelnc.cr.usgs.gov (water-quality information)

DEFINITION OF TERMS

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. Definitions of common terms such as algae, water level, and precipitation are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting inch/pound units to International System (SI) units on the inside of the back cover.

Acid neutralizing capacity (ANC) is the equivalent sum of all bases or base-producing materials, solutes plus particulates, in an aqueous system that can be titrated with acid to an equivalence point. This term designates titration of an “unfiltered” sample (formerly reported as alkalinity).

Acre-foot (AC-FT, acre-ft) is a unit of volume, commonly used to measure quantities of water used or stored, equivalent to the volume of water required to cover 1 acre to a depth of 1 foot and equivalent to 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters. (See also “Annual runoff”)

Adenosine triphosphate (ATP) is an organic, phosphate-rich compound important in the transfer of energy in organisms. Its central role in living cells makes ATP an excellent indicator of the presence of living material in water. A measurement of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample. (See also “Biomass” and “Dry weight”)

Alkalinity is the capacity of solutes in an aqueous system to neutralize acid. This term designates titration of a “filtered” sample.

Annual runoff is the total quantity of water that is discharged (“runs off”) from a drainage basin in a year. Data reports may present annual runoff data as volumes in acre-feet, as discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches.

Annual 7-day minimum is the lowest mean value for any 7-consecutive-day period in a year. Annual 7-day minimum values are reported herein for the calendar year and the water year (October 1 through September 30). Most low-flow frequency analyses use a climatic year (April 1–March 31), which tends to prevent the low-flow period

from being artificially split between adjacent years. The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day, 10-year low-flow statistic.)

Aroclor is the registered trademark for a group of polychlorinated biphenyls that were manufactured by the Monsanto Company prior to 1976. Aroclors are assigned specific 4-digit reference numbers dependent upon molecular type and degree of substitution of the biphenyl ring hydrogen atoms by chlorine atoms. The first two digits of a numbered aroclor represent the molecular type, and the last two digits represent the percentage weight of the hydrogen-substituted chlorine.

Artificial substrate is a device that is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is collected. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multi-plate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection. (See also “Substrate”)

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500 °C for 1 hour. Ash mass of zooplankton and phytoplankton is expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2). (See also “Biomass” and “Dry mass”)

Aspect is the direction toward which a slope faces with respect to the compass.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, whereas others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Bankfull stage, as used in this report, is the stage at which a stream first overflows its natural banks formed by floods with 1- to 3-year recurrence intervals.

Base discharge (for peak discharge) is a discharge value, determined for selected stations, above which peak discharge data are published. The base discharge at each station is selected so that an average of about three peak flows per year will be published. (See also “Peak flow”)

Base flow is sustained flow of a stream in the absence of direct runoff. It includes natural and human-induced streamflows. Natural base flow is sustained largely by ground-water discharge.

Bedload is material in transport that is supported primarily by the streambed. In this report, bedload is considered to consist of particles in transit from the bed to an elevation equal to the top of the bedload sampler nozzle (ranging from 0.25 to 0.5 foot) that are retained in the bedload sampler. A sample collected with a pressure-differential bedload sampler also may contain a component of the suspended load.

Bedload discharge (tons per day) is the rate of sediment moving as bedload, reported as dry weight, that passes through a cross section in a given time. NOTE: Bedload discharge values in this report may include a component of the suspended-sediment discharge. A correction may be necessary when computing the total sediment discharge by summing the bedload discharge and the suspended-sediment discharge. (See also “Bedload,” “Dry weight,” “Sediment,” and “Suspended-sediment discharge”)

Bed material is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed. (See also “Bedload” and “Sediment”)

Benthic organisms are the group of organisms inhabiting the bottom of an aquatic environment. They include a number of types of organisms, such as bacteria, fungi, insect larvae and nymphs, snails, clams, and crayfish. They are useful as indicators of water quality.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as mass per unit area or volume of habitat.

Biomass pigment ratio is an indicator of the total proportion of periphyton that are autotrophic (plants). This is also called the Autotrophic Index.

Blue-green algae (*Cyanophyta*) are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample. (See also “Phytoplankton”)

Bottom material (See “Bed material”)

Bulk electrical conductivity is the combined electrical conductivity of all material within a doughnut-shaped volume surrounding an induction probe. Bulk conductivity is affected by different physical and chemical properties of the material including the dissolved solids content of the pore water and lithology and porosity of the rock.

Cells/volume refers to the number of cells of any organism that is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample volume, and are generally reported as cells or units per milliliter (mL) or liter (L).

Cells volume (biovolume) determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell members of algae are frequently used in aquatic surveys as an indicator of algal production. However, cell numbers alone cannot represent true biomass because of considerable cell-size variation among the algal species. Cell volume (μm^3) is determined by obtaining critical cell measurements or cell dimensions (for example, length, width, height, or radius) for 20 to 50 cells of each important species to obtain an average biovolume per cell. Cells are categorized according to the correspondence of their cellular shape to the nearest geometric solid or combinations of simple solids (for example, spheres, cones, or cylinders). Representative formulae used to compute biovolume are as follows:

$$\text{sphere } \frac{4}{3} \pi r^3 \quad \text{cone } \frac{1}{3} \pi r^2 h \quad \text{cylinder } \pi r^2 h.$$

pi (π) is the ratio of the circumference to the diameter of a circle; $\pi = 3.14159\dots$

From cell volume, total algal biomass expressed as biovolume ($\mu\text{m}^3/\text{mL}$) is thus determined by multiplying the number of cells of a given species by its average cell volume and then summing these volumes for all species.

Cfs-day (See “Cubic foot per second-day”)

Channel bars, as used in this report, are the lowest prominent geomorphic features higher than the channel bed.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with BOD or with carbonaceous organic pollution from sewage or industrial wastes. [See also “Biochemical oxygen demand (BOD)”]

***Clostridium perfringens* (*C. perfringens*)** is a spore-forming bacterium that is common in the feces of human and other warmblooded animals. Clostridial spores are being used experimentally as an indicator of past fecal contamination and presence of microorganisms that are resistant to disinfection and environmental stresses. (See also “Bacteria”)

Coliphages are viruses that infect and replicate in coliform bacteria. They are indicative of sewage contamination of water and of the survival and transport of viruses in the environment.

Color unit is produced by 1 milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Confined aquifer is a term used to describe an aquifer containing water between two relatively impermeable boundaries. The water level in a well tapping a confined aquifer stands above the top of the confined aquifer and can be higher or lower than the water table that may be present in the material above it. In some cases, the water level can rise above the ground surface, yielding a flowing well.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Continuous-record station is a site where data are collected with sufficient frequency to define daily mean values and variations within a day.

Control designates a feature in the channel that physically affects the water-surface elevation and thereby determines the stage-discharge relation at the gage. This feature may be a constriction of the channel, a bedrock outcrop, a gravel bar, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure, as used in this report, is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of saltwater.

Cubic foot per second (CFS, ft³/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point in 1 second. It is equivalent to approximately 7.48 gallons per second or approximately 449 gallons per minute, or 0.02832 cubic meters per second. The term “second-foot” sometimes is used synonymously with “cubic foot per second” but is now obsolete.

Cubic foot per second-day (CFS-DAY, Cfs-day, [(ft³/s)/d]) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.98347 acre-feet, 646,317 gallons, or 2,446.6 cubic meters. The daily mean discharges reported in the daily value data tables are numerically equal to the daily volumes in cfs-days, and the totals also represent volumes in cfs-days.

Cubic foot per second per square mile [CFSM, (ft³/s)/mi²] is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area. (See also “Annual runoff”)

Daily mean suspended-sediment concentration is the time-weighted concentration of suspended sediment pass-

ing a stream cross section during a 24-hour day. (See also “Sediment” and “Suspended-sediment concentration”).

Daily-record station is a site where data are collected with sufficient frequency to develop a record of one or more data values per day. The frequency of data collection can range from continuous recording to periodic sample or data collection on a daily or near-daily basis.

Data collection platform (DCP) is an electronic instrument that collects, processes, and stores data from various sensors, and transmits the data by satellite data relay, line-of-sight radio, and/or landline telemetry.

Data logger is a microprocessor-based data acquisition system designed specifically to acquire, process, and store data. Data are usually downloaded from onsite data loggers for entry into office data systems.

Datum is a surface or point relative to which measurements of height and/or horizontal position are reported. A vertical datum is a horizontal surface used as the zero point for measurements of gage height, stage, or elevation; a horizontal datum is a reference for positions given in terms of latitude-longitude, State Plane coordinates, or UTM coordinates. (See also “Gage datum,” “Land-surface datum,” “National Geodetic Vertical Datum of 1929,” and “North American Vertical Datum of 1988”)

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample. (See also “Phytoplankton”)

Diel is of or pertaining to a 24-hour period of time; a regular daily cycle.

Discharge, or flow, is the rate that matter passes through a cross section of a stream channel or other water body per unit of time. The term commonly refers to the volume of water (including, unless otherwise stated, any sediment or other constituents suspended or dissolved in the water) that passes a cross section in a stream channel, canal, pipeline, etc., within a given period of time (cubic feet per second). Discharge also can apply to the rate at which constituents, such as suspended sediment, bedload, and dissolved or suspended chemicals, pass through a cross section, in which cases the quantity is expressed as the mass of constituent that passes the cross section in a given period of time (tons per day).

Dissolved refers to that material in a representative water sample that passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal and State agencies that collect water-quality data. Determinations of “dissolved” constituent concentrations are made on sample water that has been filtered.

Dissolved oxygen (DO) is the molecular oxygen (oxygen gas) dissolved in water. The concentration in water is a function of atmospheric pressure, temperature, and dissolved-solids concentration of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved-solids concentration. Photosynthesis and respiration by plants commonly cause diurnal variations in dissolved-oxygen concentration in water from some streams.

Dissolved-solids concentration in water is the quantity of dissolved material in a sample of water. It is determined either analytically by the “residue-on-evaporation” method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4926 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L CaCO₃) can be converted to carbonate concentration by multiplying by 0.60.

Diversity index (H) (Shannon index) is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = -\sum_{i=1}^s \frac{n_i}{n} \log_2 \frac{n_i}{n},$$

where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specific location is that area upstream from the location, measured in a horizontal plane, that has a common outlet at the site for its surface runoff from precipitation that normally drains by gravity into a stream. Drainage areas given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

Drainage basin is a part of the Earth’s surface that contains a drainage system with a common outlet for its surface runoff. (See “Drainage area”)

Dry mass refers to the mass of residue present after drying in an oven at 105 °C, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass. (See also “Ash mass,” “Biomass,” and “Wet mass”)

Dry weight refers to the weight of animal tissue after it has been dried in an oven at 65 °C until a constant weight is achieved. Dry weight represents total organic and inorganic matter in the tissue. (See also “Wet weight”)

Embeddedness is the degree to which gravel-sized and larger particles are surrounded or enclosed by finer-sized particles. (See also “Substrate embeddedness class”)

Enterococcus bacteria are commonly found in the feces of humans and other warmblooded animals. Although some strains are ubiquitous and not related to fecal pollution, the presence of enterococci in water is an indication of fecal pollution and the possible presence of enteric pathogens. Enterococcus bacteria are those bacteria that produce pink to red colonies with black or reddish-brown precipitate after incubation at 41 °C on mE agar (nutrient medium for bacterial growth) and subsequent transfer to EIA medium. Enterococci include *Streptococcus feacalis*, *Streptococcus feacium*, *Streptococcus avium*, and their variants. (See also “Bacteria”)

EPT Index is the total number of distinct taxa within the insect orders Ephemeroptera, Plecoptera, and Trichoptera. This index summarizes the taxa richness within the aquatic insects that are generally considered pollution sensitive; the index usually decreases with pollution.

Escherichia coli (E. coli) are bacteria present in the intestine and feces of warmblooded animals. *E. coli* are a member species of the fecal coliform group of indicator bacteria. In the laboratory, they are defined as those bacteria that produce yellow or yellow-brown colonies on a filter pad saturated with urea substrate broth after primary culturing for 22 to 24 hours at 44.5 °C on mTEC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also “Bacteria”)

Estimated (E) concentration value is reported when an analyte is detected and all criteria for a positive result are met. If the concentration is less than the method detection limit (MDL), an ‘E’ code will be reported with the value. If the analyte is qualitatively identified as present, but the quantitative determination is substantially more uncertain, the National Water Quality Laboratory will identify the result with an ‘E’ code even though the measured value is greater than the MDL. A value reported with an ‘E’ code should be used with caution. When no analyte is detected in a sample, the default reporting value is the MDL preceded by a less than sign (<).

Euglenoids (Euglenophyta) are a group of algae that are usually free-swimming and rarely creeping. They have the ability to grow either photosynthetically in the light or heterotrophically in the dark. (See also “Phytoplankton”)

Extractable organic halides (EOX) are organic compounds that contain halogen atoms such as chlorine. These organic compounds are semivolatile and extractable by ethyl acetate from air-dried streambed sediment. The ethyl acetate extract is combusted, and the concentration is determined by microcoulometric determination of the halides formed. The concentration is reported as micrograms of chlorine per gram of the dry weight of the streambed sediment.

Fecal coliform bacteria are present in the intestines or feces of warmblooded animals. They often are used as indicators of the sanitary quality of the water. In the laboratory, they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5 °C plus or minus 0.2 °C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also “Bacteria”)

Fecal streptococcal bacteria are present in the intestines of warmblooded animals and are ubiquitous in the environment. They are characterized as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms that produce red or pink colonies within 48 hours at 35 °C plus or minus 1.0 °C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also “Bacteria”)

Fire algae (*Pyrrhophyta*) are free-swimming unicells characterized by a red pigment spot. (See also “Phytoplankton”)

Flow-duration percentiles are values on a scale of 100 that indicate the percentage of time for which a flow is not exceeded. For example, the 90th percentile of river flow is greater than or equal to 90 percent of all recorded flow rates.

Gage datum is a horizontal surface used as a zero point for measurement of stage or gage height. This surface usually is located slightly below the lowest point of the stream bottom such that the gage height is usually slightly greater than the maximum depth of water. Because the gage datum itself is not an actual physical object, the datum usually is defined by specifying the elevations of permanent reference marks such as bridge abutments and survey monuments, and the gage is set to agree with the reference marks. Gage datum is a local datum that is maintained independently of any national geodetic datum. However, if the elevation of the gage datum relative to the national datum (North American Vertical Datum of 1988 or National Geodetic Vertical Datum of 1929) has been determined, then the gage readings can be converted to elevations above the national datum by adding the elevation of the gage datum to the gage reading.

Gage height (G.H.) is the water-surface elevation, in feet above the gage datum. If the water surface is below the gage datum, the gage height is negative. Gage height often is used interchangeably with the more general term “stage,” although gage height is more appropriate when used in reference to a reading on a gage.

Gage values are values that are recorded, transmitted, and/or computed from a gaging station. Gage values typically are collected at 5-, 15-, or 30-minute intervals.

Gaging station is a site on a stream, canal, lake, or reservoir where systematic observations of stage, discharge, or other hydrologic data are obtained.

Gas chromatography/flame ionization detector (GC/FID) is a laboratory analytical method used as a screening technique for semivolatile organic compounds that are extractable from water in methylene chloride.

Geomorphic channel units, as used in this report, are fluvial geomorphic descriptors of channel shape and stream velocity. Pools, riffles, and runs are types of geomorphic channel units considered for National Water-Quality Assessment (NAWQA) Program habitat sampling.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating “moss” in lakes. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample. (See also “Phytoplankton”)

Habitat, as used in this report, includes all nonliving (physical) aspects of the aquatic ecosystem, although living components like aquatic macrophytes and riparian vegetation also are usually included. Measurements of habitat are typically made over a wider geographic scale than are measurements of species distribution.

Habitat quality index is the qualitative description (level 1) of instream habitat and riparian conditions surrounding the reach sampled. Scores range from 0 to 100 percent with higher scores indicative of desirable habitat conditions for aquatic life. Index only applicable to wadable streams.

Hardness of water is a physical-chemical characteristic that commonly is recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations (primarily calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate (CaCO₃).

High tide is the maximum height reached by each rising tide. The high-high and low-high tides are the higher and lower of the two high tides, respectively, of each tidal day. See NOAA web site:
<http://www.co-ops.nos.noaa.gov/tideglos.html>

Hilsenhoff's Biotic Index (HBI) is an indicator of organic pollution that uses tolerance values to weight taxa abundances; usually increases with pollution. It is calculated as follows:

$$HBI = \text{sum} \frac{(n)(a)}{N} ,$$

where n is the number of individuals of each taxon, a is the tolerance value of each taxon, and N is the total number of organisms in the sample.

Horizontal datum (See "Datum")

Hydrologic index stations referred to in this report are continuous-record gaging stations that have been selected as representative of streamflow patterns for their respective regions. Station locations are shown on index maps.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as defined by the former Office of Water Data Coordination and delineated on the State Hydrologic Unit Maps by the USGS. Each hydrologic unit is identified by an 8-digit number.

Inch (IN., in.), as used in this report, refers to the depth to which the drainage area would be covered with water if all of the runoff for a given time period were uniformly distributed on it. (See also "Annual runoff")

Instantaneous discharge is the discharge at a particular instant of time. (See also "Discharge")

Island, as used in this report, is a mid-channel bar that has permanent woody vegetation, is flooded once a year on average, and remains stable except during large flood events.

Laboratory reporting level (LRL) is generally equal to twice the yearly determined long-term method detection level (LT-MDL). The LRL controls false negative error. The probability of falsely reporting a nondetection for a sample that contained an analyte at a concentration equal to or greater than the LRL is predicted to be less than or equal to 1 percent. The value of the LRL will be reported with a "less than" (<) remark code for samples in which the analyte was not detected. The National Water Quality Laboratory (NWQL) collects quality-control data from selected analytical methods on a continuing basis to determine LT-MDLs and to establish LRLs. These values are reevaluated annually on the basis of the most current quality-control data and, therefore, may change. [Note: In several previous NWQL documents (NWQL Technical Memorandum 98.07, 1998), the LRL was called the non-detection value or NDV—a term that is no longer used.]

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Latent heat flux (often used interchangeably with latent heat-flux density) is the amount of heat energy that converts water from liquid to vapor (evaporation) or from vapor to liquid (condensation) across a specified cross-sectional area per unit time. Usually expressed in watts per square meter.

Light-attenuation coefficient, also known as the extinction coefficient, is a measure of water clarity. Light is attenuated according to the Lambert-Beer equation:

$$I = I_o e^{-\lambda L} ,$$

where I_o is the source light intensity, I is the light intensity at length L (in meters) from the source, λ is the light-attenuation coefficient, and e is the base of the natural logarithm. The light-attenuation coefficient is defined as

$$\lambda = -\frac{1}{L} \log_e \frac{I}{I_o} .$$

Lipid is any one of a family of compounds that are insoluble in water and that make up one of the principal components of living cells. Lipids include fats, oils, waxes, and steroids. Many environmental contaminants such as organochlorine pesticides are lipophilic.

Long-term method detection level (LT-MDL) is a detection level derived by determining the standard deviation of a minimum of 24 method detection limit (MDL) spike sample measurements over an extended period of time. LT-MDL data are collected on a continuous basis to assess year-to-year variations in the LT-MDL. The LT-MDL controls false positive error. The chance of falsely reporting a concentration at or greater than the LT-MDL for a sample that did not contain the analyte is predicted to be less than or equal to 1 percent.

Low tide is the minimum height reached by each falling tide. The high-low and low-low tides are the higher and lower of the two low tides, respectively, of each tidal day. See NOAA web site:
<http://www.co-ops.nos.noaa.gov/tideglos.html>

Macrophytes are the macroscopic plants in the aquatic environment. The most common macrophytes are the rooted vascular plants that usually are arranged in zones in aquatic ecosystems and restricted in the area by the extent of illumination through the water and sediment deposition along the shoreline.

Mean concentration of suspended sediment (Daily mean suspended-sediment concentration) is the time-weighted concentration of suspended sediment passing a stream cross section during a given time period. (See also “Daily mean suspended-sediment concentration” and “Suspended-sediment concentration”)

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period. (See also “Discharge”)

Mean high or low tide is the average of all high or low tides, respectively, over a specific period.

Mean sea level is a local tidal datum. It is the arithmetic mean of hourly heights observed over the National Tidal Datum Epoch. Shorter series are specified in the name; for example, monthly mean sea level and yearly mean sea level. In order that they may be recovered when needed, such datums are referenced to fixed points known as benchmarks. (See also “Datum”)

Measuring point (MP) is an arbitrary permanent reference point from which the distance to water surface in a well is measured to obtain water level.

Membrane filter is a thin microporous material of specific pore size used to filter bacteria, algae, and other very small particles from water.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Method detection limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99-percent confidence that the analyte concentration is greater than zero. It is determined from the analysis of a sample in a given matrix containing the analyte. At the MDL concentration, the risk of a false positive is predicted to be less than or equal to 1 percent.

Methylene blue active substances (MBAS) are apparent detergents. The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

Micrograms per gram (UG/G, $\mu\text{g/g}$) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per kilogram (UG/KG, $\mu\text{g/kg}$) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the constituent per unit mass (kilogram) of the material analyzed. One microgram per kilogram is equivalent to 1 part per billion.

Micrograms per liter (UG/L, $\mu\text{g/L}$) is a unit expressing the concentration of chemical constituents in water as mass (micrograms) of constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter. One microgram per liter is equivalent to 1 part per billion.

Microsiemens per centimeter (US/CM, $\mu\text{S/cm}$) is a unit expressing the amount of electrical conductivity of a solution as measured between opposite faces of a centimeter cube of solution at a specified temperature. Siemens is the International System of Units nomenclature. It is synonymous with mhos and is the reciprocal of resistance in ohms.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in water as the mass (milligrams) of constituent per unit volume (liter) of water. Concentration of suspended sediment also is expressed in milligrams per liter and is based on the mass of dry sediment per liter of water-sediment mixture.

Minimum reporting level (MRL) is the smallest measured concentration of a constituent that may be reliably reported by using a given analytical method.

Miscellaneous site, miscellaneous station, or miscellaneous sampling site is a site where streamflow, sediment, and/or water-quality data or water-quality or sediment samples are collected once, or more often on a random or discontinuous basis to provide better areal coverage for defining hydrologic and water-quality conditions over a broad area in a river basin.

Most probable number (MPN) is an index of the number of coliform bacteria that, more probably than any other number, would give the results shown by the laboratory examination; it is not an actual enumeration. MPN is determined from the distribution of gas-positive cultures among multiple inoculated tubes.

Multiple-plate samplers are artificial substrates of known surface area used for obtaining benthic invertebrate samples. They consist of a series of spaced, hardboard plates on an eyebolt.

Nanograms per liter (NG/L, ng/L) is a unit expressing the concentration of chemical constituents in solution as mass (nanograms) of solute per unit volume (liter) of water. One million nanograms per liter is equivalent to 1 milligram per liter.

National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a fixed reference adopted as a standard geodetic datum for elevations determined by leveling. It was formerly called “Sea Level Datum of 1929” or “mean sea level.” Although the datum was derived from the mean sea level at 26 tide stations, it does not necessarily represent local mean sea level at any particular place. See NOAA web site: <http://www.ngs.noaa.gov/faq.shtml#WhatVD29VD88> (See “North American Vertical Datum of 1988”)

Natural substrate refers to any naturally occurring immersed or submersed solid surface, such as a rock or tree, upon which an organism lives. (See also “Substrate”)

Nekton are the consumers in the aquatic environment and consist of large free-swimming organisms that are capable of sustained, directed mobility.

Nephelometric turbidity unit (NTU) is the measurement for reporting turbidity that is based on use of a standard suspension of formazin. Turbidity measured in NTU uses nephelometric methods that depend on passing specific light of a specific wavelength through the sample.

North American Vertical Datum of 1988 (NAVD 1988) is a fixed reference adopted as the official civilian vertical datum for elevations determined by Federal surveying and mapping activities in the United States. This datum was established in 1991 by minimum-constraint adjustment of the Canadian, Mexican, and United States first-order terrestrial leveling networks.

Open or screened interval is the length of unscreened opening or of well screen through which water enters a well, in feet below land surface.

Organic carbon (OC) is a measure of organic matter present in aqueous solution, suspension, or bottom sediment. May be reported as dissolved organic carbon (DOC), particulate organic carbon (POC), or total organic carbon (TOC).

Organic mass or volatile mass of a living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. Organic mass is expressed in the same units as for ash mass and dry mass. (See also “Ash mass,” “Biomass,” and “Dry mass”)

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (m²), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter

(L). Numbers of planktonic organisms can be expressed in these terms.

Organochlorine compounds are any chemicals that contain carbon and chlorine. Organochlorine compounds that are important in investigations of water, sediment, and biological quality include certain pesticides and industrial compounds.

Parameter code is a 5-digit number used in the USGS computerized data system, National Water Information System (NWIS), to uniquely identify a specific constituent or property.

Partial-record station is a site where discrete measurements of one or more hydrologic parameters are obtained over a period of time without continuous data being recorded or computed. A common example is a crest-stage gage partial-record station at which only peak stages and flows are recorded.

Particle size is the diameter, in millimeters (mm), of a particle determined by sieve or sedimentation methods. The sedimentation method utilizes the principle of Stokes law to calculate sediment particle sizes. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube, sedigraph) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification, as used in this report, agrees with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification Size (mm) Method of analysis

Clay	>0.00024 - 0.004	Sedimentation
Silt	>0.004 - 0.062	Sedimentation
Sand	>0.062 - 2.0	Sedimentation/sieve
Gravel	>2.0 - 64.0	Sieve
Cobble	>64 - 256	Manual measurement
Boulder	>256	Manual measurement

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. For the sedimentation method, most of the organic matter is removed, and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native water analysis.

Peak flow (peak stage) is an instantaneous local maximum value in the continuous time series of streamflows or stages, preceded by a period of increasing values and followed by a period of decreasing values. Several peak values ordinarily occur in a year. The maximum peak value in

a year is called the annual peak; peaks lower than the annual peak are called secondary peaks. Occasionally, the annual peak may not be the maximum value for the year; in such cases, the maximum value occurs at midnight at the beginning or end of the year, on the recession from or rise toward a higher peak in the adjoining year. If values are recorded at a discrete series of times, the peak recorded value may be taken as an approximation of the true peak, which may occur between the recording instants. If the values are recorded with finite precision, a sequence of equal recorded values may occur at the peak; in this case, the first value is taken as the peak.

Percent composition or percent of total is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, weight, mass, or volume.

Percent shading is a measure of the amount of sunlight potentially reaching the stream. A clinometer is used to measure left and right bank canopy angles. These values are added together, divided by 180, and multiplied by 100 to compute percentage of shade.

Periodic-record station is a site where stage, discharge, sediment, chemical, physical, or other hydrologic measurements are made one or more times during a year but at a frequency insufficient to develop a daily record.

Periphyton is the assemblage of microorganisms attached to and living upon submerged solid surfaces. Although primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton are useful indicators of water quality.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

pH of water is the negative logarithm of the hydrogen-ion activity. Solutions with pH less than 7.0 standard units are termed "acidic," and solutions with a pH greater than 7.0 are termed "basic." Solutions with a pH of 7.0 are neutral. The presence and concentration of many dissolved chemical constituents found in water are affected, in part, by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms also are affected, in part, by the hydrogen-ion activity of water.

Phytoplankton is the plant part of the plankton. They are usually microscopic, and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect

upon the quality of the water. They are the primary food producers in the aquatic environment and commonly are known as algae. (See also "Plankton")

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactive nuclide represented by a curie (Ci). A curie is the quantity of radioactive nuclide that yields 3.7×10^{10} radioactive disintegrations per second (dps). A picocurie yields 0.037 dps, or 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Polychlorinated naphthalenes (PCNs) are industrial chemicals that are mixtures of chlorinated naphthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCBs) and have been identified in commercial PCB preparations.

Pool, as used in this report, is a small part of a stream reach with little velocity, commonly with water deeper than surrounding areas.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated (carbon method) by the plants.

Primary productivity (carbon method) is expressed as milligrams of carbon per area per unit time [$\text{mg C}/(\text{m}^2/\text{time})$] for periphyton and macrophytes or per volume [$\text{mg C}/(\text{m}^3/\text{time})$] for phytoplankton. The carbon method defines the amount of carbon dioxide consumed as measured by radioactive carbon (carbon-14). The carbon-14 method is of greater sensitivity than the oxygen light and dark bottle method and is preferred for use with unenriched water samples. Unit time may be either the hour or day, depending on the incubation period. (See also "Primary productivity")

Primary productivity (oxygen method) is expressed as milligrams of oxygen per area per unit time [$\text{mg O}/(\text{m}^2/\text{time})$] for periphyton and macrophytes or per volume [$\text{mg O}/(\text{m}^3/\text{time})$] for phytoplankton. The oxygen method defines production and respiration rates as estimated from

changes in the measured dissolved-oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period. (See also “Primary productivity”)

Radioisotopes are isotopic forms of elements that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus; for example, ordinary chlorine is a mixture of isotopes having atomic weights of 35 and 37, and the natural mixture has an atomic weight of about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron. There are 275 isotopes of the 81 stable elements, in addition to more than 800 radioactive isotopes.

Reach, as used in this report, is a length of stream that is chosen to represent a uniform set of physical, chemical, and biological conditions within a segment. It is the principal sampling unit for collecting physical, chemical, and biological data.

Recoverable from bed (bottom) material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results. (See also “Bed material”)

Recurrence interval, also referred to as return period, is the average time, usually expressed in years, between occurrences of hydrologic events of a specified type (such as exceedances of a specified high flow or nonexceedance of a specified low flow). The terms “return period” and “recurrence interval” do not imply regular cyclic occurrence. The actual times between occurrences vary randomly, with most of the times being less than the average and a few being substantially greater than the average. For example, the 100-year flood is the flow rate that is exceeded by the annual maximum peak flow at intervals whose average length is 100 years (that is, once in 100 years, on average); almost two-thirds of all exceedances of the 100-year flood occur less than 100 years after the previous exceedance, half occur less than 70 years after the previous exceedance, and about one-eighth occur more

than 200 years after the previous exceedance. Similarly, the 7-day, 10-year low flow ($7Q_{10}$) is the flow rate below which the annual minimum 7-day-mean flow dips at intervals whose average length is 10 years (that is, once in 10 years, on average); almost two-thirds of the nonexceedances of the $7Q_{10}$ occur less than 10 years after the previous nonexceedance, half occur less than 7 years after, and about one-eighth occur more than 20 years after the previous nonexceedance. The recurrence interval for annual events is the reciprocal of the annual probability of occurrence. Thus, the 100-year flood has a 1-percent chance of being exceeded by the maximum peak flow in any year, and there is a 10-percent chance in any year that the annual minimum 7-day-mean flow will be less than the $7Q_{10}$.

Replicate samples are a group of samples collected in a manner such that the samples are thought to be essentially identical in composition.

Return period (See “Recurrence interval”)

Riffle, as used in this report, is a shallow part of the stream where water flows swiftly over completely or partially submerged obstructions to produce surface agitation.

River mileage is the curvilinear distance, in miles, measured upstream from the mouth along the meandering path of a stream channel in accordance with Bulletin No. 14 (October 1968) of the Water Resources Council and typically is used to denote location along a river.

Run, as used in this report, is a relatively shallow part of a stream with moderate velocity and little or no surface turbulence.

Runoff is the quantity of water that is discharged (“runs off”) from a drainage basin during a given time period. Runoff data may be presented as volumes in acre-feet, as mean discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches. (See also “Annual runoff”)

Sea level, as used in this report, refers to one of the two commonly used national vertical datums (NGVD 1929 or NAVD 1988). See separate entries for definitions of these datums.

Sediment is solid material that originates mostly from disintegrated rocks; when transported by, suspended in, or deposited from water, it is referred to as “fluvial sediment.” Sediment includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are affected by environmental and land-use factors. Some major factors are topography, soil

characteristics, land cover, and depth and intensity of precipitation.

Sensible heat flux (often used interchangeably with latent sensible heat-flux density) is the amount of heat energy that moves by turbulent transport through the air across a specified cross-sectional area per unit time and goes to heating (cooling) the air. Usually expressed in watts per square meter.

Seven-day, 10-year low flow ($7Q_{10}$) is the discharge below which the annual 7-day minimum flow falls in 1 year out of 10 on the long-term average. The recurrence interval of the $7Q_{10}$ is 10 years; the chance that the annual 7-day minimum flow will be less than the $7Q_{10}$ is 10 percent in any given year. (See also “Annual 7-day minimum” and “Recurrence interval”)

Shelves, as used in this report, are streambank features extending nearly horizontally from the flood plain to the lower limit of persistent woody vegetation.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Sodium hazard in water is an index that can be used to evaluate the suitability of water for irrigating crops.

Soil heat flux (often used interchangeably with soil heat-flux density) is the amount of heat energy that moves by conduction across a specified cross-sectional area of soil per unit time and goes to heating (or cooling) the soil. Usually expressed in watts per square meter.

Soil-water content is the water lost from the soil upon drying to constant mass at 105 °C; expressed either as mass of water per unit mass of dry soil or as the volume of water per unit bulk volume of soil.

Specific electrical conductance (conductivity) is a measure of the capacity of water (or other media) to conduct an electrical current. It is expressed in microsiemens per centimeter at 25 °C. Specific electrical conductance is a function of the types and quantity of dissolved substances in water and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is from 55 to 75 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stable isotope ratio (per MIL) is a unit expressing the ratio of the abundance of two radioactive isotopes. Isotope ratios are used in hydrologic studies to determine the age or source of specific water, to evaluate mixing of different

water, as an aid in determining reaction rates, and other chemical or hydrologic processes.

Stage (See “Gage height”)

Stage-discharge relation is the relation between the water-surface elevation, termed stage (gage height), and the volume of water flowing in a channel per unit time.

Streamflow is the discharge that occurs in a natural channel. Although the term “discharge” can be applied to the flow of a canal, the word “streamflow” uniquely describes the discharge in a surface stream course. The term “streamflow” is more general than “runoff” as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

Substrate embeddedness class is a visual estimate of riffle streambed substrate larger than gravel that is surrounded or covered by fine sediment (<2mm, sand or finer). Below are the class categories expressed as the percentage covered by fine sediment:

0	no gravel or larger substrate	3	26-50 percent
1	> 75 percent	4	5-25 percent
2	51-75 percent	5	< 5 percent

Surface area of a lake is that area (acres) encompassed by the boundary of the lake as shown on USGS topographic maps, or other available maps or photographs. Because surface area changes with lake stage, surface areas listed in this report represent those determined for the stage at the time the maps or photographs were obtained.

Surficial bed material is the upper surface (0.1 to 0.2 foot) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is defined operationally as the material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative suspended water-sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the “total” amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent

digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results. Determinations of “suspended, recoverable” constituents are made either by directly analyzing the suspended material collected on the filter or, more commonly, by difference, on the basis of determinations of (1) dissolved and (2) total recoverable concentrations of the constituent. (See also “Suspended”)

Suspended sediment is the sediment maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid. (See also “Sediment”)

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 foot above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). The analytical technique uses the mass of all of the sediment and the net weight of the water-sediment mixture in a sample to compute the suspended-sediment concentration. (See also “Sediment” and “Suspended sediment”)

Suspended-sediment discharge (tons/d) is the rate of sediment transport, as measured by dry mass or volume, that passes a cross section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft³/s) x 0.0027. (See also “Sediment,” “Suspended sediment,” and “Suspended-sediment concentration”)

Suspended-sediment load is a general term that refers to a given characteristic of the material in suspension that passes a point during a specified period of time. The term needs to be qualified, such as “annual suspended-sediment load” or “sand-size suspended-sediment load,” and so on. It is not synonymous with either suspended-sediment discharge or concentration. (See also “Sediment”)

Suspended, total is the total amount of a given constituent in the part of a water-sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. Knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as “suspended, total.” Determinations of “suspended, total” constituents are made either by directly analyzing portions of the suspended material collected on the filter or, more commonly, by difference, on the basis of determinations of (1) dissolved and (2) total concentrations of the constituent. (See also “Suspended”)

Suspended solids, total residue at 105 °C concentration is the concentration of inorganic and organic material retained on a filter, expressed as milligrams of dry material per liter of water (mg/L). An aliquot of the sample is used for this analysis.

Synoptic studies are short-term investigations of specific water-quality conditions during selected seasonal or hydrologic periods to provide improved spatial resolution for critical water-quality conditions. For the period and conditions sampled, they assess the spatial distribution of selected water-quality conditions in relation to causative factors, such as land use and contaminant sources.

Taxa (Species) richness is the number of species (taxa) present in a defined area or sampling unit.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata*, is the following:

Kingdom:	Animal
Phylum:	Arthropoda
Class:	Insecta
Order:	Ephemeroptera
Family:	Ephemeridae
Genus:	<i>Hexagenia</i>
Species:	<i>Hexagenia limbata</i>

Thalweg is the line formed by connecting points of minimum streambed elevation (deepest part of the channel).

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term “temperature recorder” is used in the table descriptions and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water resulting from the mixing of flow proportionally to the duration of the concentration.

Tons per acre-foot (T/acre-ft) is the dry mass (tons) of a constituent per unit volume (acre-foot) of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

Tons per day (T/DAY, tons/d) is a common chemical or sediment discharge unit. It is the quantity of a substance in solution, in suspension, or as bedload that passes a stream section during a 24-hour period. It is equivalent to 2,000 pounds per day, or 0.9072 metric tons per day.

Total is the amount of a given constituent in a representative whole-water (unfiltered) sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined at least 95 percent of the constituent in the sample.)

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. This group includes coliforms that inhabit the intestine of warmblooded animals and those that inhabit soils. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria that ferment lactose with gas formation within 48 hours at 35 °C. In the laboratory, these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35 °C plus or minus 1.0 °C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 milliliters of sample. (See also "Bacteria")

Total discharge is the quantity of a given constituent, measured as dry mass or volume, that passes a stream cross section per unit of time. When referring to constituents other than water, this term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total in bottom material is the amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

Total length (fish) is the straight-line distance from the anterior point of a fish specimen's snout, with the mouth closed, to the posterior end of the caudal (tail) fin, with the lobes of the caudal fin squeezed together.

Total load refers to all of a constituent in transport. When referring to sediment, it includes suspended load plus bed load.

Total organism count is the number of organisms collected and enumerated in any particular sample. (See also "Organism count/volume")

Total recoverable is the amount of a given constituent in a whole-water sample after a sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data for whole-water samples, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures may produce different analytical results.

Total sediment discharge is the mass of suspended-sediment plus bed-load transport, measured as dry weight, that passes a cross section in a given time. It is a rate and is reported as tons per day. (See also "Bedload," "Bedload discharge," "Sediment," "Suspended sediment," and "Suspended-sediment concentration")

Total sediment load or total load is the sediment in transport as bedload and suspended-sediment load. The term may be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It differs from total sediment discharge in that load refers to the material, whereas discharge refers to the quantity of material, expressed in units of mass per unit time. (See also "Sediment," "Suspended-sediment load," and "Total load")

Transect, as used in this report, is a line across a stream perpendicular to the flow and along which measurements are taken, so that morphological and flow characteristics along the line are described from bank to bank. Unlike a cross section, no attempt is made to determine known elevation points along the line.

Turbidity is the reduction in the transparency of a solution due to the presence of suspended and some dissolved substances. The measurement technique records the collective optical properties of the solution that cause light to be scattered and attenuated rather than transmitted in straight lines; the higher the intensity of scattered or attenuated light, the higher the value of the turbidity. Turbidity is expressed in nephelometric turbidity units (NTU). Depending on the method used, the turbidity units as NTU can be defined as the intensity of light of a specified wavelength scattered or attenuated by suspended particles or

absorbed at a method specified angle, usually 90 degrees, from the path of the incident light. Currently approved methods for the measurement of turbidity in the USGS include those that conform to U.S. EPA Method 180.1, ASTM D1889-00, and ISO 7027. Measurements of turbidity by these different methods and different instruments are unlikely to yield equivalent values.

Ultraviolet (UV) absorbance (absorption) at 254 or 280 nanometers is a measure of the aggregate concentration of the mixture of UV absorbing organic materials dissolved in the analyzed water, such as lignin, tannin, humic substances, and various aromatic compounds. UV absorbance (absorption) at 254 or 280 nanometers is measured in UV absorption units per centimeter of pathlength of UV light through a sample.

Unconfined aquifer is an aquifer whose upper surface is a water table free to fluctuate under atmospheric pressure. (See “Water-table aquifer”)

Vertical datum (See “Datum”)

Volatile organic compounds (VOCs) are organic compounds that can be isolated from the water phase of a sample by purging the water sample with inert gas, such as helium, and subsequently analyzed by gas chromatography. Many VOCs are human-made chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They are often components of fuels, solvents, hydraulic fluids, paint thinners, and dry cleaning agents commonly used in urban settings. VOC contamination of drinking-water supplies is a human health concern because many are toxic and are known or suspected human carcinogens.

Water table is that surface in a ground-water body at which the water pressure is equal to the atmospheric pressure.

Water-table aquifer is an unconfined aquifer within which the water table is found.

Water year in USGS reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 2002, is called the “2002 water year.”

WDR is used as an abbreviation for “Water-Data Report” in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports. (WRD was used as an abbreviation for “Water-Resources Data” in reports published prior to 1976.)

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying

the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

Wet mass is the mass of living matter plus contained water. (See also “Biomass” and “Dry mass”)

Wet weight refers to the weight of animal tissue or other substance including its contained water. (See also “Dry weight”)

WSP is used as an acronym for “Water-Supply Paper” in reference to previously published reports.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and often are large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers. (See also “Plankton”)

TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS OF THE U.S. GEOLOGICAL SURVEY

The USGS publishes a series of manuals, the Techniques of Water-Resources Investigations, describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, section A of book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

Reports in the Techniques of Water-Resources Investigations series, which are listed below, are online at <http://water.usgs.gov/pubs/twri/>. Printed copies are for sale by the USGS, Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office), telephone 1-888-ASK-USGS. Please telephone 1-888-ASK-USGS for current prices, and refer to the title, book number, chapter number, and mention the "U.S. Geological Survey Techniques of Water-Resources Investigations." Products can then be ordered by telephone, or online at <http://www.usgs.gov/sales.html>, or by FAX to (303)236-469 of an order form available online at <http://mac.usgs.gov/isb/pubs/forms/>. Prepayment by major credit card or by a check or money order payable to the "U.S. Geological Survey" is required.

Book 1. Collection of Water Data by Direct Measurement**Section D. Water Quality**

- 1-D1. *Water temperature—Influential factors, field measurement, and data presentation*, by H.H. Stevens, Jr., J.F. Ficke, and G.F. Smoot: USGS–TWRI book 1, chap. D1. 1975. 65 p.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W.W. Wood: USGS–TWRI book 1, chap. D2. 1976. 24 p.

Book 2. Collection of Environmental Data**Section D. Surface Geophysical Methods**

- 2-D1. *Application of surface geophysics to ground-water investigations*, by A.A.R. Zohdy, G.P. Eaton, and D.R. Mabey: USGS–TWRI book 2, chap. D1. 1974. 116 p.
- 2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F.P. Haeni: USGS–TWRI book 2, chap. D2. 1988. 86 p.

Section E. Subsurface Geophysical Methods

- 2-E1. *Application of borehole geophysics to water-resources investigations*, by W.S. Keys and L.M. MacCary: USGS–TWRI book 2, chap. E1. 1971. 126 p.
- 2-E2. *Borehole geophysics applied to ground-water investigations*, by W.S. Keys: USGS–TWRI book 2, chap. E2. 1990. 150 p.

Section F. Drilling and Sampling Methods

- 2-F1. *Application of drilling, coring, and sampling techniques to test holes and wells*, by Eugene Shuter and W.E. Teasdale: USGS–TWRI book 2, chap. F1. 1989. 97 p.

Book 3. Applications of Hydraulics**Section A. Surface-Water Techniques**

- 3-A1. *General field and office procedures for indirect discharge measurements*, by M.A. Benson and Tate Dalrymple: USGS–TWRI book 3, chap. A1. 1967. 30 p.
- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M.A. Benson: USGS–TWRI book 3, chap. A2. 1967. 12 p.
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- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H.F. Matthai: USGS–TWRI book 3, chap. A4. 1967. 44 p.

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- 3-A6. *General procedure for gaging streams*, by R.W. Carter and Jacob Davidian: USGS-TWRI book 3, chap. A6. 1968. 13 p.
- 3-A7. *Stage measurement at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS-TWRI book 3, chap. A7. 1968. 28 p.
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- 3-A9. *Measurement of time of travel in streams by dye tracing*, by F.A. Kilpatrick and J.F. Wilson, Jr.: USGS-TWRI book 3, chap. A9. 1989. 27 p.
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- 3-A11. *Measurement of discharge by the moving-boat method*, by G.F. Smoot and C.E. Novak: USGS-TWRI book 3, chap. A11. 1969. 22 p.
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- 3-A21. *Stream-gaging cableways*, by C. Russell Wagner: USGS-TWRI book 3, chap. A21. 1995. 56 p.

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- 3-B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow*, by E.J. Wexler: USGS-TWRI book 3, chap. B7. 1992. 190 p.
- 3-B8. *System and boundary conceptualization in ground-water flow simulation*, by T.E. Reilly: USGS-TWRI book 3, chap. B8. 2001. 29 p.

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- 3-C1. *Fluvial sediment concepts*, by H.P. Guy: USGS-TWRI book 3, chap. C1. 1970. 55 p.
- 3-C2. *Field methods for measurement of fluvial sediment*, by T.K. Edwards and G.D. Glysson: USGS-TWRI book 3, chap. C2. 1999. 89 p.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS-TWRI book 3, chap. C3. 1972. 66 p.

Book 4. Hydrologic Analysis and Interpretation**Section A. Statistical Analysis**

- 4-A1. *Some statistical tools in hydrology*, by H.C. Riggs: USGS-TWRI book 4, chap. A1. 1968. 39 p.
- 4-A2. *Frequency curves*, by H.C. Riggs: USGS-TWRI book 4, chap. A2. 1968. 15 p.
- 4-A3. *Statistical methods in water resources*, by D.R. Helsel and R.M. Hirsch: USGS-TWRI book 4, chap. A3. 1991. Available only online at <http://water.usgs.gov/pubs/twri/twri4a3/>. (Accessed August 30, 2002.)

Section B. Surface Water

- 4-B1. *Low-flow investigations*, by H.C. Riggs: USGS-TWRI book 4, chap. B1. 1972. 18 p.
- 4-B2. *Storage analyses for water supply*, by H.C. Riggs and C.H. Hardison: USGS-TWRI book 4, chap. B2. 1973. 20 p.
- 4-B3. *Regional analyses of streamflow characteristics*, by H.C. Riggs: USGS-TWRI book 4, chap. B3. 1973. 15 p.

Section D. Interrelated Phases of the Hydrologic Cycle

- 4-D1. *Computation of rate and volume of stream depletion by wells*, by C.T. Jenkins: USGS-TWRI book 4, chap. D1. 1970. 17 p.

Book 5. Laboratory Analysis**Section A. Water Analysis**

- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M.J. Fishman and L.C. Friedman, editors: USGS-TWRI book 5, chap. A1. 1989. 545 p.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P.R. Barnett and E.C. Mallory, Jr.: USGS-TWRI book 5, chap. A2. 1971. 31 p.
- 5-A3. *Methods for the determination of organic substances in water and fluvial sediments*, edited by R.L. Wershaw, M.J. Fishman, R.R. Grabbe, and L.E. Lowe: USGS-TWRI book 5, chap. A3. 1987. 80 p.
- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by L.J. Britton and P.E. Greeson, editors: USGS-TWRI book 5, chap. A4. 1989. 363 p.
- 5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS-TWRI book 5, chap. A5. 1977. 95 p.
- 5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments*, by L.C. Friedman and D.E. Erdmann: USGS-TWRI book 5, chap. A6. 1982. 181 p.

Section C. Sediment Analysis

- 5–C1. *Laboratory theory and methods for sediment analysis*, by H.P. Guy: USGS–TWRI book 5, chap. C1. 1969. 58 p.

Book 6. Modeling Techniques**Section A. Ground Water**

- 6–A1. *A modular three-dimensional finite-difference ground-water flow model*, by M.G. McDonald and A.W. Harbaugh: USGS–TWRI book 6, chap. A1. 1988. 586 p.
- 6–A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model*, by S.A. Leake and D.E. Prudic: USGS–TWRI book 6, chap. A2. 1991. 68 p.
- 6–A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual*, by L.J. Torak: USGS–TWRI book 6, chap. A3. 1993. 136 p.
- 6–A4. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions*, by R.L. Cooley: USGS–TWRI book 6, chap. A4. 1992. 108 p.
- 6–A5. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 3: Design philosophy and programming details*, by L.J. Torak: USGS–TWRI book 6, chap. A5. 1993. 243 p.
- 6–A6. *A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction*, by Eric D. Swain and Eliezer J. Wexler: USGS–TWRI book 6, chap. A6. 1996. 125 p.
- 6–A7. *User's guide to SEAWAT: A computer program for simulation of three-dimensional variable-density ground-water flow*, by Weixing Guo and Christian D. Langevin: USGS–TWRI book 6, chap. A7. 2002. 77 p.

Book 7. Automated Data Processing and Computations**Section C. Computer Programs**

- 7–C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P.C. Trescott, G.F. Pinder, and S.P. Larson: USGS–TWRI book 7, chap. C1. 1976. 116 p.
- 7–C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L.F. Konikow and J.D. Bredehoeft: USGS–TWRI book 7, chap. C2. 1978. 90 p.
- 7–C3. *A model for simulation of flow in singular and interconnected channels*, by R.W. Schaffranek, R.A. Baltzer, and D.E. Goldberg: USGS–TWRI book 7, chap. C3. 1981. 110 p.

Book 8. Instrumentation**Section A. Instruments for Measurement of Water Level**

- 8–A1. *Methods of measuring water levels in deep wells*, by M.S. Garber and F.C. Koopman: USGS–TWRI book 8, chap. A1. 1968. 23 p.
- 8–A2. *Installation and service manual for U.S. Geological Survey manometers*, by J.D. Craig: USGS–TWRI book 8, chap. A2. 1983. 57 p.

Section B. Instruments for Measurement of Discharge

- 8–B2. *Calibration and maintenance of vertical-axis type current meters*, by G.F. Smoot and C.E. Novak: USGS–TWRI book 8, chap. B2. 1968. 15 p.

Book 9. Handbooks for Water-Resources Investigations**Section A. National Field Manual for the Collection of Water-Quality Data**

- 9–A1. *National field manual for the collection of water-quality data: Preparations for water sampling*, by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A1. 1998. 47 p.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS—Continued

- 9–A2. *National field manual for the collection of water-quality data: Selection of equipment for water sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A2. 1998. 94 p.
- 9–A3. *National field manual for the collection of water-quality data: Cleaning of equipment for water sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A3. 1998. 75 p.
- 9–A4. *National field manual for the collection of water-quality data: Collection of water samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A4. 1999. 156 p.
- 9–A5. *National field manual for the collection of water-quality data: Processing of water samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A5. 1999, 149 p.
- 9–A6. *National field manual for the collection of water-quality data: Field measurements*, edited by F.D. Wilde and D.B. Radtke: USGS–TWRI book 9, chap. A6. 1998. Variously paginated.
- 9–A7. *National field manual for the collection of water-quality data: Biological indicators*, edited by D.N. Myers and F.D. Wilde: USGS–TWRI book 9, chap. A7. 1997 and 1999. Variously paginated.
- 9–A8. *National field manual for the collection of water-quality data: Bottom-material samples*, by D.B. Radtke: USGS–TWRI book 9, chap. A8. 1998. 48 p.
- 9–A9. *National field manual for the collection of water-quality data: Safety in field activities*, by S.L. Lane and R.G. Fay: USGS–TWRI book 9, chap. A9. 1998. 60 p.

REMARK CODES

The following remark codes may appear with the water-quality data in this section:

Printed Output	Remark
E	Estimated value
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
K	Results based on colony count outside the acceptance range (non-ideal colony count)
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted)
D	Biological organism count equal to or greater than 15 percent (dominant)
&	Biological organism estimated as dominant
V	Analyte was detected in both the environmental sample and the associated blank
M	Presence of material verified, but not quantified

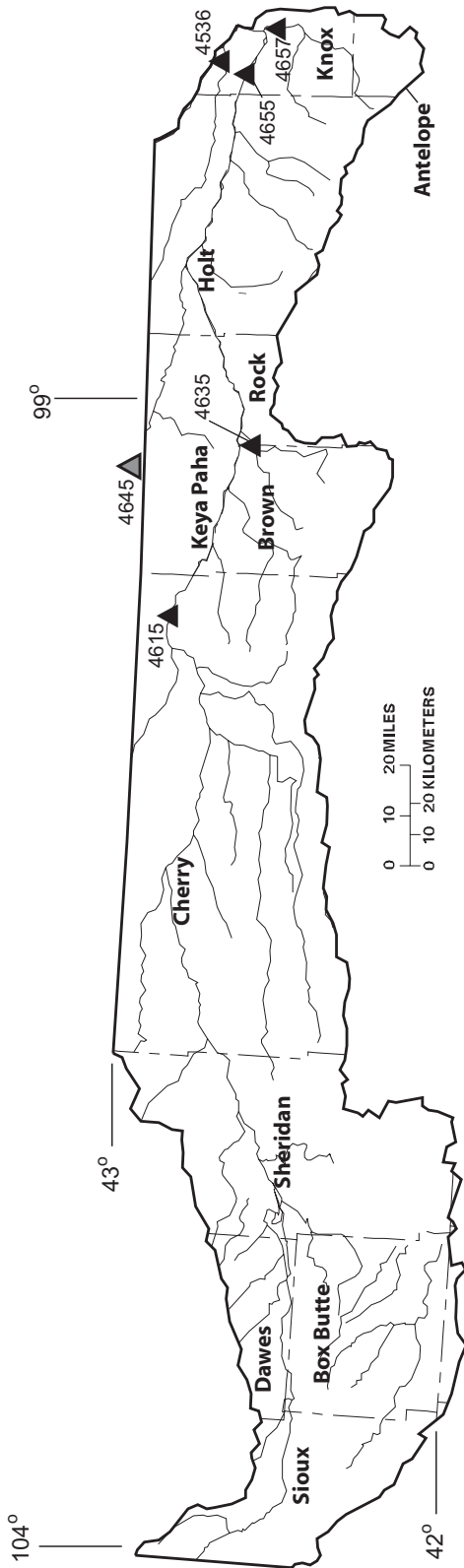
Dissolved Trace-Element Concentrations

NOTE: Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter ($\mu\text{g/L}$) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's and 100's of nanograms per liter (ng/L). Data above the $\mu\text{g/L}$ levels should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey began using new trace-element protocols at some stations in water year 1994.

Change in National Trends Network Procedures

NOTE: Sample handling procedures at all National Trends Network stations were changed substantially on January 11, 1994, in order to reduce contamination from the sample shipping container. The data for samples before and after that date are different and not directly comparable. A tabular summary of the differences based on a special inter-comparison study, is available from the NADP/NTN Coordination Office, Colorado State University, Fort Collins, CO 80523 (Telephone: 303-491-5643).

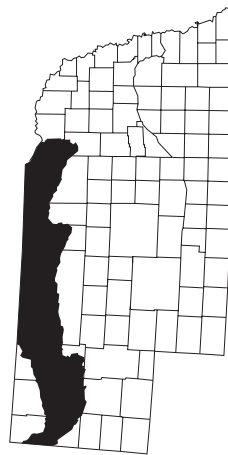
SURFACE-WATER DISCHARGE RECORDS
 PONCA CREEK AND NIOBRARA RIVER BASINS



EXPLANATION

- Hydrologic boundary
- - - County line
- Streams
- ▲ Stream-flow gaging station
- ▲ Gaging station run by neighboring state

NOTE: To change abbreviated station number to complete station number, prefix with "06" and add zero's required to give eight digits.



SURFACE-WATER DISCHARGE RECORDS
 PONCA CREEK AND NIOBRARA RIVER BASINS

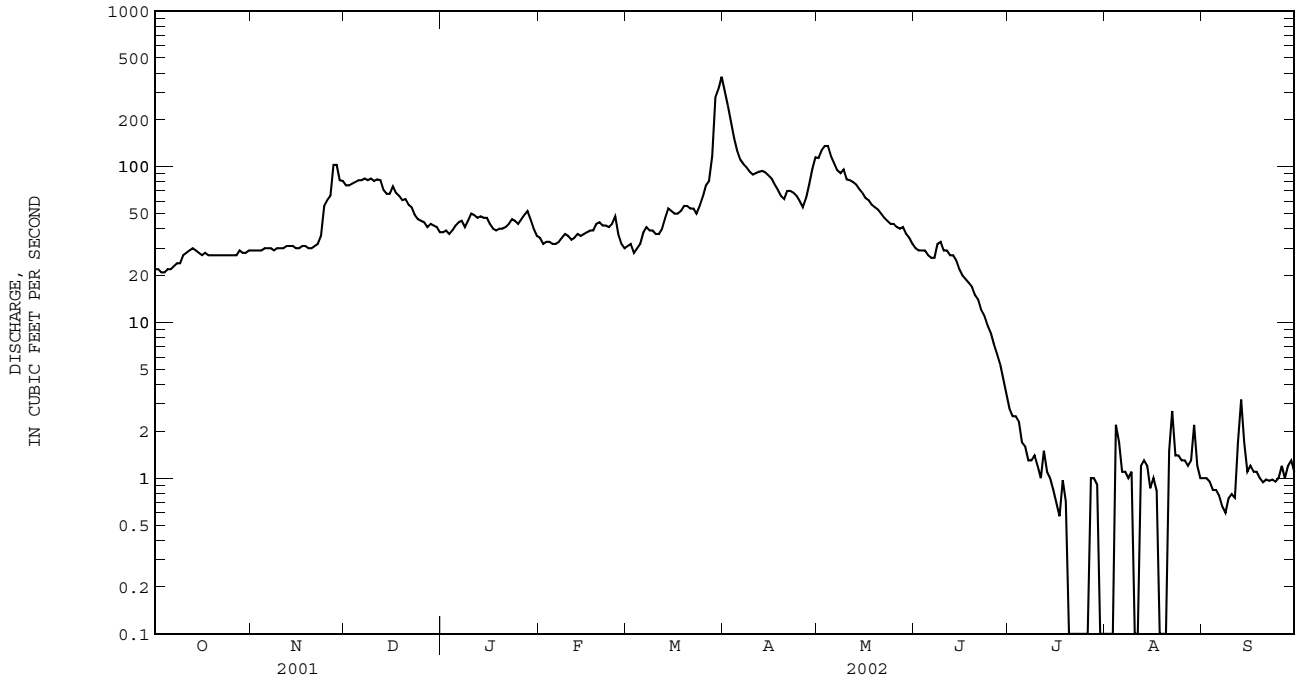
*Station number	Station name	Page
PONCA CREEK BASIN		
4536	Ponca Creek at Verdel	48
NIOBRARA RIVER BASIN		
4615	Niobrara River near Sparks	50
4635	Long Pine Creek near Riverview	54
4645	Keya Paha River at Wewela, SD	58
4655	Niobrara River near Verdel.....	60
4657	Verdigre Creek near Verdigre	62

* NOTE: To change abbreviated station number to complete station number, prefix with "06" and add zero's required to give eight digits.

06453600 PONCA CREEK AT VERDEL, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1958 - 2002	
ANNUAL TOTAL	77098.5		14806.73		92.38	
ANNUAL MEAN	211.2		40.57		343	
HIGHEST ANNUAL MEAN					1962	
LOWEST ANNUAL MEAN					3.75	
HIGHEST DAILY MEAN	5790	Mar 16	379	Mar 31	14800	Mar 28 1960
LOWEST DAILY MEAN	5.2	Jan 1	0.00	Jul 20	*0.00	Oct 1 1957
ANNUAL SEVEN-DAY MINIMUM	7.3	Jan 1	0.00	Jul 20	0.00	Oct 1 1957
MAXIMUM PEAK FLOW			418	Mar 30	**15700	Mar 27 1960
MAXIMUM PEAK STAGE			6.84	Mar 30	***17.30	Mar 6 1993
ANNUAL RUNOFF (AC-FT)	152900		29370		66920	
10 PERCENT EXCEEDS	547		83		200	
50 PERCENT EXCEEDS	48		32		24	
90 PERCENT EXCEEDS	11		0.97		0.20	

e Estimated.
 * No flow for many days in many years.
 ** Stage 15.10 ft, site and datum then in use.
 *** From floodmark, ice jam.



NIOBRARA RIVER BASIN

06461500 NIOBRARA RIVER NEAR SPARKS, NE

LOCATION.--Lat 42°54'10", long 100°21'40", in SE 1/4 sec.22, T.34 N., R.26 W., Cherry County, Hydrologic Unit 10150004, on left bank 18 ft downstream from highway bridge, 2.2 mi downstream from Big Beaver Creek, 5.5 mi downstream from Minnechaduzza Creek, 6.5 mi southwest of Sparks, and at mile 142.5.

DRAINAGE AREA .--7,150 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1945 to current year. Monthly discharge only for some periods, published in WSP 1309.

REVISED RECORDS.--WSP 1209: 1947(M), 1948-50(P). WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder and peak-stage indicator gage. Datum of gage is 2,287.57 ft above sea level. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by irrigation and power developments, storage in Box Butte Reservoir (station 06455000), and since May 1964 by storage in Merritt Reservoir (station 06459300).

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	499	637	e860	e780	845	e760	1050	1100	870	485	380	459
2	497	632	875	e760	814	e800	1150	1170	785	482	376	451
3	491	609	942	e780	811	815	1050	1130	769	494	387	441
4	515	610	921	e820	817	826	994	1130	757	460	409	442
5	564	616	924	e840	811	e840	972	1140	678	417	426	434
6	540	638	903	831	802	e880	925	1120	668	422	434	408
7	533	639	888	902	808	e840	856	1080	664	523	446	404
8	533	639	898	819	812	e820	857	1070	711	487	453	394
9	536	647	862	849	844	e820	846	1030	676	509	480	420
10	548	637	881	856	859	839	824	989	655	463	435	461
11	612	636	873	830	810	876	841	1000	639	436	415	459
12	542	638	869	837	836	945	866	966	616	445	403	516
13	551	642	869	834	840	963	848	962	600	440	412	729
14	535	651	840	859	834	999	854	880	589	429	413	662
15	537	657	836	809	849	943	850	855	584	420	408	614
16	543	654	857	865	838	874	885	845	594	411	409	587
17	539	662	831	868	855	922	865	857	580	403	389	570
18	539	666	823	876	864	947	849	845	598	401	393	552
19	545	684	865	887	885	948	825	838	598	396	394	542
20	555	680	820	855	896	945	805	828	580	394	411	530
21	561	662	816	853	900	969	804	815	589	400	483	530
22	567	707	844	809	910	949	809	823	580	438	435	535
23	588	799	e820	817	914	942	824	787	561	418	427	532
24	613	966	e800	827	936	952	823	769	561	410	504	534
25	612	927	e800	797	949	951	823	778	576	413	506	531
26	623	990	e780	791	838	934	828	703	574	424	460	540
27	602	810	e820	832	613	934	923	736	565	402	489	537
28	612	693	e840	853	e720	987	955	978	532	396	536	539
29	619	e760	e820	847	---	1020	972	851	512	398	506	552
30	630	842	e800	865	---	1040	1010	845	492	395	493	546
31	637	---	e800	830	---	1050	---	915	---	391	471	---
TOTAL	17418	21030	26377	25878	23510	28330	26783	28835	18753	13402	13583	15451
MEAN	561.9	701.0	850.9	834.8	839.6	913.9	892.8	930.2	625.1	432.3	438.2	515.0
MAX	637	990	942	902	949	1050	1150	1170	870	523	536	729
MIN	491	609	780	760	613	760	804	703	492	391	376	394
AC-FT	34550	41710	52320	51330	46630	56190	53120	57190	37200	26580	26940	30650

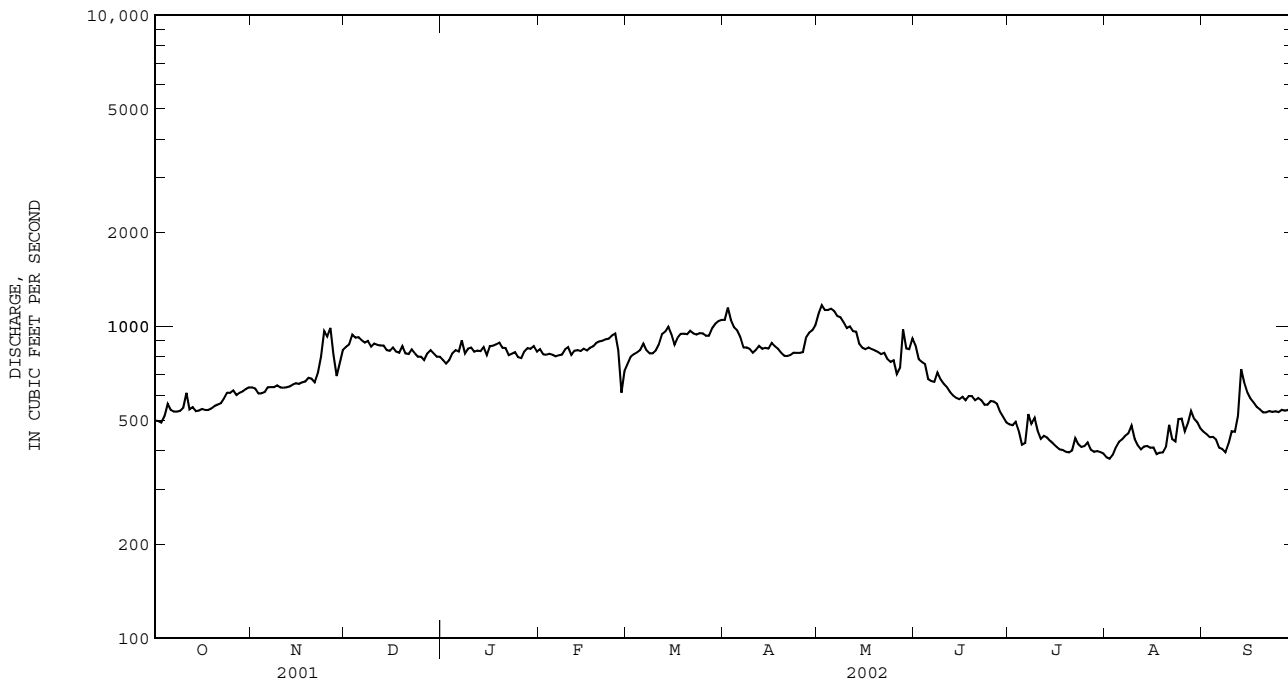
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2002, BY WATER YEAR (WY)

	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	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
MEAN	667.4	756.4	764.7	776.4	887.1	971.8	908.8	900.0	816.8	631.1	590.5	608.2																																													
MAX	879	1092	950	1208	1403	1464	1214	1385	1470	1122	858	993																																													
(WY)	1966	1999	1986	1984	1984	1949	1958	1995	1967	1962	1951	1951																																													
MIN	481	484	448	525	631	584	615	612	506	383	417	426																																													
(WY)	1977	1977	1969	1969	1975	1976	1967	1969	1985	1974	1980	1980																																													

06461500 NIOBRARA RIVER NEAR SPARKS, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1946 - 2002	
ANNUAL TOTAL	296633		259350		772.4	
ANNUAL MEAN	812.7		710.5		911 1962	
HIGHEST ANNUAL MEAN					598 1976	
LOWEST ANNUAL MEAN					5000 Feb 5 1984	
HIGHEST DAILY MEAN	1770	Jul 12	1170	May 2		
LOWEST DAILY MEAN	443	Sep 6	376	Aug 2	100 Jan 10 1957	
ANNUAL SEVEN-DAY MINIMUM	463	Aug 31	389	Jul 28	327 Dec 8 1949	
MAXIMUM PEAK FLOW			*1310	Apr 2	**10200 Mar 5 1949	
MAXIMUM PEAK STAGE			***3.53	Jan 1,4	***10.06 Feb 7 1973	
ANNUAL RUNOFF (AC-FT)	588400		514400		559600	
10 PERCENT EXCEEDS	1190		947		1030	
50 PERCENT EXCEEDS	820		778		764	
90 PERCENT EXCEEDS	503		425		507	

e Estimated.
 * Stage 3.29 ft.
 ** From rating curve extended above 3,800 ft³/s, stage 6.73 ft.
 *** Backwater from ice.



NIOBRARA RIVER BASIN

06461500 NIOBRARA RIVER NEAR SPARKS, NE--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

PERIOD OF DAILY RECORD.-

SPECIFIC CONDUCTANCE: October 1982 to September 1993.

WATER TEMPERATURES: October 1982 to September 1993.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 354 microsiemens Dec. 3, 1983; minimum daily, 153 microsiemens Nov. 22, 26, 1988.

WATER TEMPERATURES: Maximum daily, 35.0°C July 1, 1990; minimum daily, 0.0°C on several days during winter periods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	HARDNESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM ADSORPTION RATIO (00931)	SODIUM DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	
OCT 30...	1355	635	8.2	222	18.5	10.0	91	29.8	4.04	5.99	.4	8.65	16	
MAR 21...	1450	942	8.0	220	-10.5	2.0	85	27.5	3.97	5.65	.4	8.38	16	
APR 23...	1440	808	8.5	228	27.0	17.0	92	29.8	4.22	6.65	.4	9.28	17	
AUG 28...	0755	615	8.2	215	19.5	20.0	88	28.8	3.80	6.38	.4	8.14	16	
Date		ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITROGEN DIS-SOLVED (MG/L AS N) (00602)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)
OCT 30...	114	2.19	.4	51.6	5.7	.24	307	179	<.04	.17	.68	--	--	--
MAR 21...	104	2.60	.4	48.8	6.4	.23	428	168	<.04	.27	.80	--	--	--
APR 23...	113	2.35	.4	49.0	6.1	.24	387	177	<.04	.25	.60	--	--	--
AUG 28...	106	1.34	.3	51.8	4.9	--	--	--	<.04	.15	.50	.34	1.52	--
Date		NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOSPHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOSPHORUS, DIS-SOLVED (MG/L AS P) (00666)	ORTHOPHOSPHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	ALUMINUM, DIS-SOLVED (UG/L AS AL) (01106)	ANTIMONY, DIS-SOLVED (UG/L AS SB) (01095)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYLLIUM, DIS-SOLVED (UG/L AS BE) (01010)
OCT 30...	.51	--	<.008	.169	.06	.06	.10	1.4	--	--	--	--	--	--
MAR 21...	.52	--	<.008	.205	.08	.07	.15	2.0	--	--	--	--	--	--
APR 23...	.35	--	<.008	.227	.08	.07	.13	.7	--	--	--	--	--	--
AUG 28...	.35	.033	.010	.123	E.05	.04	.13	1.3	7	.19	5	75	<.06	--
Date		BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM, DIS-SOLVED (UG/L AS CD) (01025)	CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	URANIUM, DIS-SOLVED (UG/L AS U) (22703)
OCT 30...	30	--	--	--	--	E8	--	E2.2	--	--	--	--	--	--
MAR 21...	20	--	--	--	--	27	--	3.5	--	--	--	--	--	--
APR 23...	20	--	--	--	--	14	--	E2.3	--	--	--	--	--	--
AUG 28...	20	.06	<.8	.09	.6	E5	.20	1.8	.8	.23	<2	<1	.97	--

Remark codes used in this report:

- < -- Less than
- E -- Estimated value

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NIOBRARA RIVER BASIN

06463500 LONG PINE CREEK NEAR RIVERVIEW, NE

LOCATION.--Lat 42°41'21", long 099°40'43", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.5, T.31 N., R.20 W., Brown County, Hydrologic Unit 10150004, on left bank 15 ft downstream from county road bridge, 1 mi downstream from Bone Creek, 5.5 mi southwest of Riverview, and at mile 6.2.

DRAINAGE AREA.--458 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1948 to January 1954, September 1954 to current year.

REVISED RECORDS.--WSP 1729: 1952(M). WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,983.34 ft above sea level, (levels by Bureau of Reclamation). Prior to Dec. 7, 1962, at site 100 ft upstream at present datum. Data collection platform at station.

REMARKS.--Records good. Flow includes return water from Ainsworth Irrigation District since 1965.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	159	163	174	155	157	161	174	184	174	166	151	172
2	159	161	175	161	158	162	172	203	173	165	157	157
3	157	161	176	162	157	162	169	213	175	164	165	158
4	163	163	178	168	157	173	169	188	181	159	172	159
5	161	164	181	167	158	177	170	175	178	155	182	158
6	159	164	181	165	159	179	170	169	162	157	183	156
7	160	163	181	163	159	173	171	166	170	192	170	165
8	160	160	183	166	161	172	168	167	189	179	171	155
9	162	161	182	169	162	164	165	162	190	182	190	157
10	168	161	182	169	155	172	165	161	185	168	177	169
11	164	164	180	166	161	175	167	166	176	147	188	158
12	166	165	178	166	159	176	163	164	161	163	193	180
13	166	166	174	167	158	184	161	161	148	167	192	193
14	163	166	173	166	159	188	160	159	164	161	177	185
15	161	165	172	162	159	175	161	158	169	158	169	175
16	160	165	171	160	160	175	161	175	174	160	166	174
17	163	166	168	159	160	177	157	186	176	150	160	154
18	162	165	169	158	161	180	156	194	172	141	165	141
19	161	161	167	159	160	181	153	199	172	143	163	141
20	162	163	166	160	159	183	154	178	168	141	168	142
21	162	164	167	159	157	190	160	172	173	153	189	140
22	163	165	166	160	157	182	159	178	171	155	175	135
23	163	169	160	161	159	181	157	173	185	154	167	132
24	160	187	161	160	158	184	152	170	180	150	176	132
25	159	177	162	160	153	175	151	177	170	153	176	133
26	160	178	161	162	146	174	152	176	170	152	178	139
27	161	158	168	164	159	181	174	175	151	153	184	138
28	162	171	165	157	164	184	181	182	159	152	171	138
29	161	174	158	155	---	180	186	171	149	155	165	143
30	162	176	162	158	---	178	178	166	160	160	175	143
31	165	---	157	158	---	175	---	159	---	150	173	---
TOTAL	5014	4986	5298	5022	4432	5473	4936	5427	5125	4905	5388	4622
MEAN	161.7	166.2	170.9	162.0	158.3	176.5	164.5	175.1	170.8	158.2	173.8	154.1
MAX	168	187	183	169	164	190	186	213	190	192	193	193
MIN	157	158	157	155	146	161	151	158	148	141	151	132
AC-FT	9950	9890	10510	9960	8790	10860	9790	10760	10170	9730	10690	9170

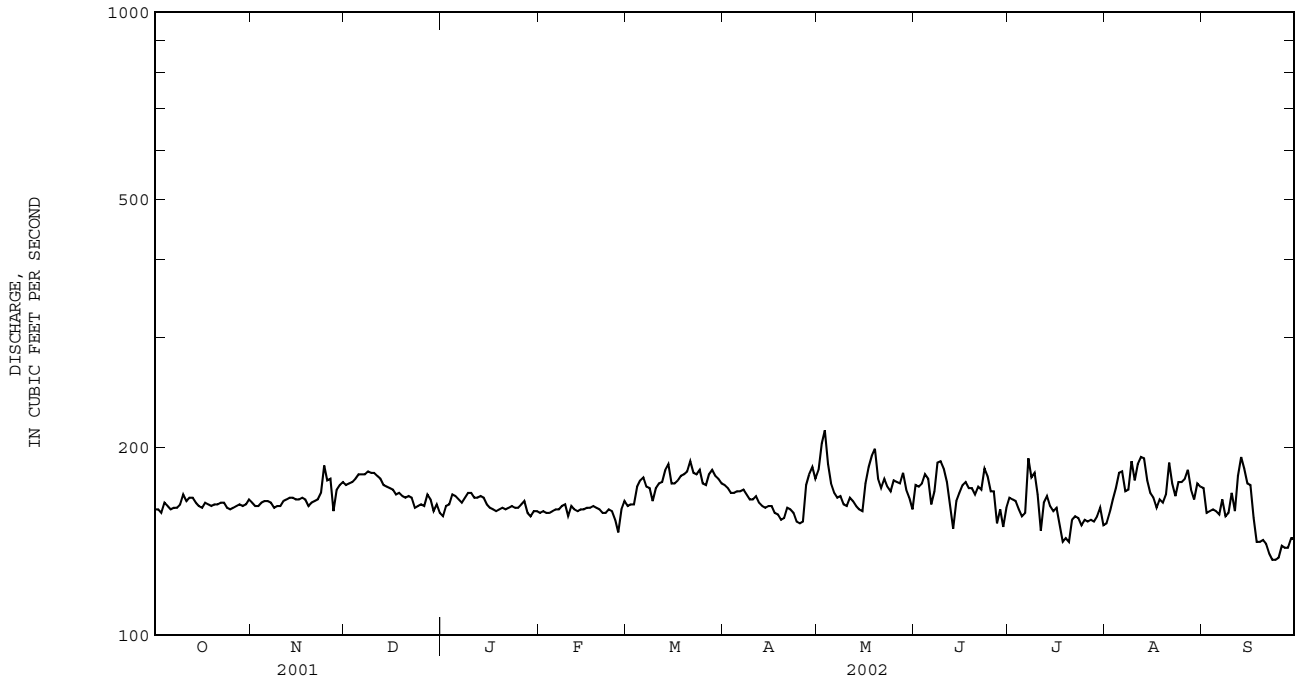
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2002, BY WATER YEAR (WY)

MEAN	141.9	142.9	141.0	138.1	147.7	168.2	173.1	184.6	173.8	164.9	161.9	157.6
MAX	254	238	191	180	256	257	369	495	396	368	256	263
(WY)	1996	1999	1996	1995	1996	1987	1995	1995	1951	1962	1998	1986
MIN	100	101	102	103	96.5	106	114	103	105	99.0	92.9	88.1
(WY)	1949	1950	1969	1957	1951	1951	1950	1948	1948	1949	1948	1948

06463500 LONG PINE CREEK NEAR RIVERVIEW, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1948 - 2002	
ANNUAL TOTAL	71625		60628			
ANNUAL MEAN	196.2		166.1		158.6	
HIGHEST ANNUAL MEAN					231	1995
LOWEST ANNUAL MEAN					111	1949
HIGHEST DAILY MEAN	943	Apr 13	213	May 3	3050	Jul 1 1962
LOWEST DAILY MEAN	154	Apr 2	132	Sep 23	44	Jan 10 1963
ANNUAL SEVEN-DAY MINIMUM	158	Mar 27	135	Sep 22	76	Jan 10 1963
MAXIMUM PEAK FLOW			219	May 3	9650	Jul 1 1962
MAXIMUM PEAK STAGE			1.36	May 3	*15.68	Jul 1 1962
ANNUAL RUNOFF (AC-FT)	142100		120300		114900	
10 PERCENT EXCEEDS	223		181		203	
50 PERCENT EXCEEDS	178		165		149	
90 PERCENT EXCEEDS	160		154		112	

* Backwater from fallen bridge.



NIOBRARA RIVER BASIN

06463500 LONG PINE CREEK NEAR RIVERVIEW, NE--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	HARDNESS TOTAL AS (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM ADSORPTION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)
OCT 31...	0825	163	7.6	202	13.5	11.0	79	25.6	3.72	5.75	.4	7.33	16
MAR 21...	1040	194	8.0	209	-12.0	2.5	78	24.9	3.80	5.66	.4	8.40	18
APR 23...	0930	158	8.1	199	19.0	10.0	79	25.4	3.75	5.72	.4	7.23	15
AUG 27...	1250	199	8.6	183	30.5	19.5	73	23.5	3.41	5.72	.3	6.84	16

Date	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN DIS-SOLVED (MG/L AS N) (00602)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)
OCT 31...	91	3.05	.3	52.7	4.8	.23	73.9	168	<.04	.13	2.4	--	--
MAR 21...	89	3.88	.3	48.5	5.5	.22	86.1	164	E.03	.49	2.6	--	--
APR 23...	89	3.01	.2	49.6	4.6	.22	69.1	162	<.04	.17	2.2	--	--
AUG 27...	84	2.25	.3	47.5	4.5	.20	80.9	150	<.04	.25	1.6	1.32	5.84

Date	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOSPHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOSPHORUS, DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOSPHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOSPHORUS, TOTAL SOLVED (MG/L AS P) (00665)	CARBON DIOXIDE, DIS-SOLVED (MG/L AS CO2) (00405)	BORON, DIS-SOLVED (UG/L AS B) (01020)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT 31...	2.24	--	E.006	.402	.13	.13	.14	4.4	20	E7	E2.2
MAR 21...	2.10	--	<.008	.445	.16	.14	.31	1.7	20	53	5.7
APR 23...	1.99	--	<.008	.383	.12	.12	.14	1.4	20	E9	E2.9
AUG 27...	1.33	.026	.008	.392	.13	.13	.19	.4	30	E9	3.3

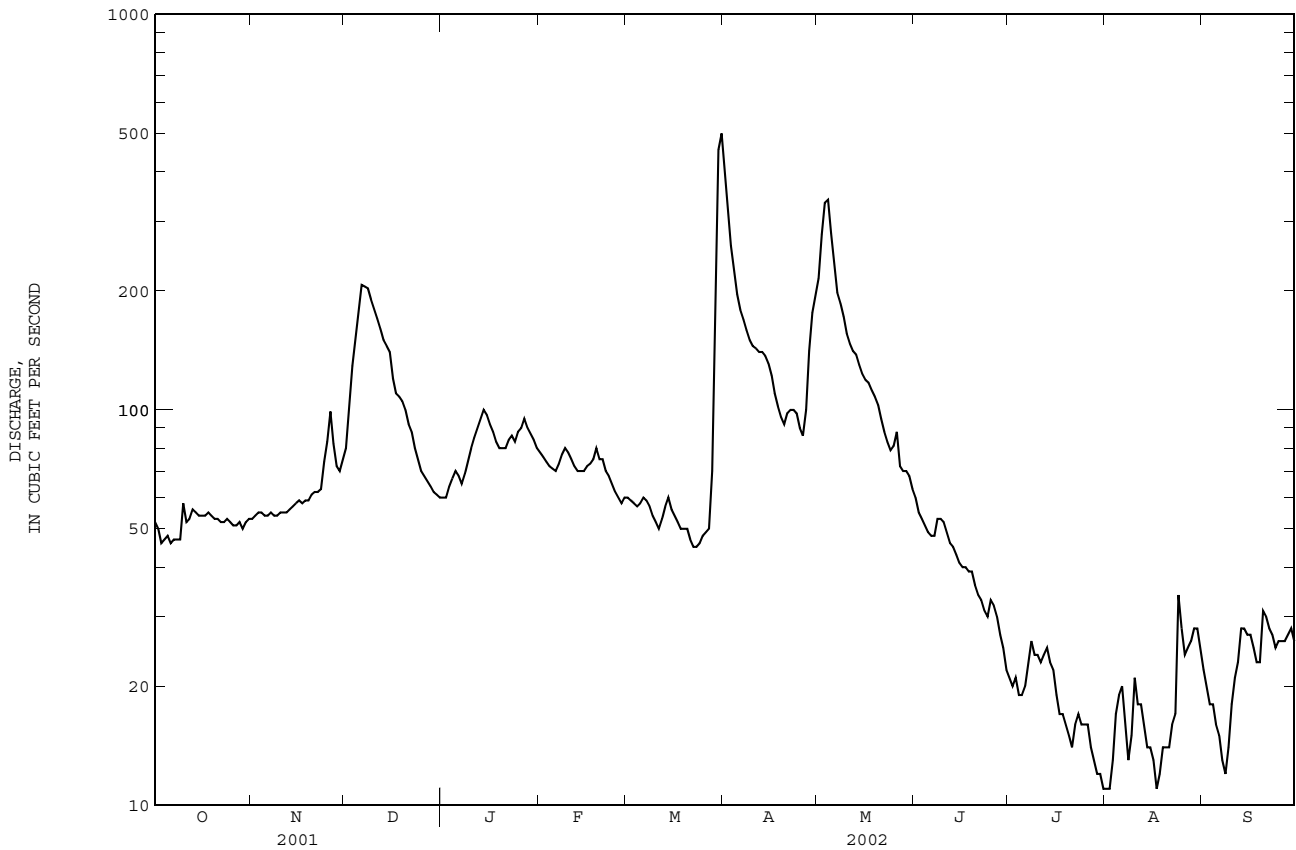
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 < -- Less than
 E -- Estimated value

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06464500 KEYA PAHA RIVER AT WEWELA, SD--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1939-1940, 1948-2002	
ANNUAL TOTAL	50678		26495		81.1a	
ANNUAL MEAN	139		72.6		188	
HIGHEST ANNUAL MEAN					19.5 1976	
LOWEST ANNUAL MEAN					4930 Mar 30 1952	
HIGHEST DAILY MEAN	929	Apr 26	500	Mar 31	0.00	Jan 10 1949b
LOWEST DAILY MEAN	27	Sep 6	11	Jul 31	0.00	Jan 10 1949
ANNUAL SEVEN-DAY MINIMUM	29	Jan 28	12	Jul 28	5430	Mar 31 1952c
MAXIMUM PEAK FLOW			532 Mar 31		13.50 Mar 25 1950d	
MAXIMUM PEAK STAGE			3.77 Mar 31		58750	
ANNUAL RUNOFF (AC-FT)	100500		52550			
10 PERCENT EXCEEDS	307		145		167	
50 PERCENT EXCEEDS	75		57		43	
90 PERCENT EXCEEDS	38		17		16	

- a Median of annual mean discharges, 72 ft³/s.
- b Also Jan. 11 to Feb. 15, 1949, and Aug. 19 to Sept. 14, 1976.
- c Gage height, 13.08 ft.
- d Backwater from ice.
- e Estimated.



NIOBRARA RIVER BASIN

06465500 NIOBRARA RIVER NEAR VERDEL, NE

LOCATION.--Lat 42°44'23", long 098°13'26", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.23, T.32 N., R.8 W., Knox County, Hydrologic Unit 10150007, on right bank at downstream side of county road bridge, 6.6 mi south of Verdel, 7.5 mi upstream from Verdigre Creek, and at mile 14.8.

DRAINAGE AREA.--11,580 mi².

PERIOD OF RECORD.--April 1938 to May 1940, June 1958 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 1,312.12 ft above sea level. Apr. 25, 1938, to June 16, 1939, nonrecording gage at site 2600 ft downstream; June 17, 1939, to June 13, 1940, nonrecording gage 2850 ft downstream; and June 14, 1940 to July 24, 1985, water-stage recorder at site 2600 ft downstream, all at datum 4.00 ft lower. Data collection platform at station.

REMARKS.--Records poor. Natural flow of stream affected by irrigation and power developments.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1470	1260	e1600	e1200	1500	e1550	2930	3100	1850	906	622	926
2	1570	1550	e1650	e1250	e1450	e1550	2860	3240	1770	886	610	897
3	1390	1670	e1650	e1300	e1600	e1400	2810	3260	1890	899	648	860
4	1270	1630	e1700	e1450	e1700	e1450	2980	3130	1660	931	838	852
5	1580	1460	e1750	e1600	e1700	e1500	3050	2870	1660	900	930	843
6	1390	1220	e1700	e1500	e1850	e1700	3000	2560	1780	850	884	830
7	1330	1260	e1650	e1550	e2000	e1900	3050	2480	1780	832	814	793
8	1340	1320	1640	e1800	e2150	e1800	3240	2340	2120	814	737	759
9	1420	1360	1610	e1950	e2350	e1750	2700	1980	2070	897	717	769
10	1720	1340	1690	e1900	e2350	e1650	2720	1820	1910	1070	840	844
11	1810	1240	1650	e1900	e2200	e1600	3100	2160	1840	997	969	949
12	1600	1250	1770	e1900	e2250	e1750	2920	2150	1740	918	1070	1130
13	1560	1210	1750	e2000	e2210	e1950	2770	2250	1690	904	790	2370
14	1510	1370	1550	e1900	e2150	e2150	3080	2210	1560	885	733	1700
15	1160	1360	2260	e1750	e2200	e2050	2570	2170	1460	819	660	1220
16	1300	1260	2570	e1800	e2200	e1950	3330	1940	1440	761	636	1270
17	1340	1440	2140	e1800	e2200	e1950	3090	2100	1480	743	645	1250
18	1360	1550	1860	e1700	e2150	e2000	3340	2060	1440	714	616	1360
19	1290	1460	1810	e1800	e2250	e2100	3260	2160	1360	674	650	1190
20	1380	1570	1880	e1850	e2250	e2000	3070	2110	1300	632	670	1100
21	1300	1700	2080	e1900	e2100	e1800	3380	1940	1300	617	771	1080
22	1220	1540	1770	e1950	e2050	1880	3250	2060	1240	608	771	1060
23	1240	1560	879	e1850	e2050	e2050	3430	2060	1180	652	876	1040
24	1300	2180	631	e1850	e2100	e2000	3030	1930	1170	673	880	1080
25	1390	2500	777	e2000	1940	1820	2590	1630	1210	679	1020	1180
26	1350	2130	1270	e2100	915	2500	2380	1260	1160	684	902	1170
27	1450	826	e1250	e1800	1090	2790	2570	1470	1160	699	1000	1190
28	1580	1340	e1250	e1500	e1450	2880	3080	1600	1160	700	1060	1160
29	1630	1220	e1250	e1300	---	2890	2790	2050	1080	669	1020	1140
30	1510	1550	e1250	1230	---	3030	2860	2230	976	653	1020	1140
31	1560	---	e1200	1170	---	2840	---	1900	---	647	976	---
TOTAL	44320	44326	49487	52550	54405	62230	89230	68220	45436	24313	25375	33152
MEAN	1430	1478	1596	1695	1943	2007	2974	2201	1515	784.3	818.5	1105
MAX	1810	2500	2570	2100	2350	3030	3430	3260	2120	1070	1070	2370
MIN	1160	826	631	1170	915	1400	2380	1260	976	608	610	759
AC-FT	87910	87920	98160	104200	107900	123400	177000	135300	90120	48220	50330	65760

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2002, BY WATER YEAR (WY)

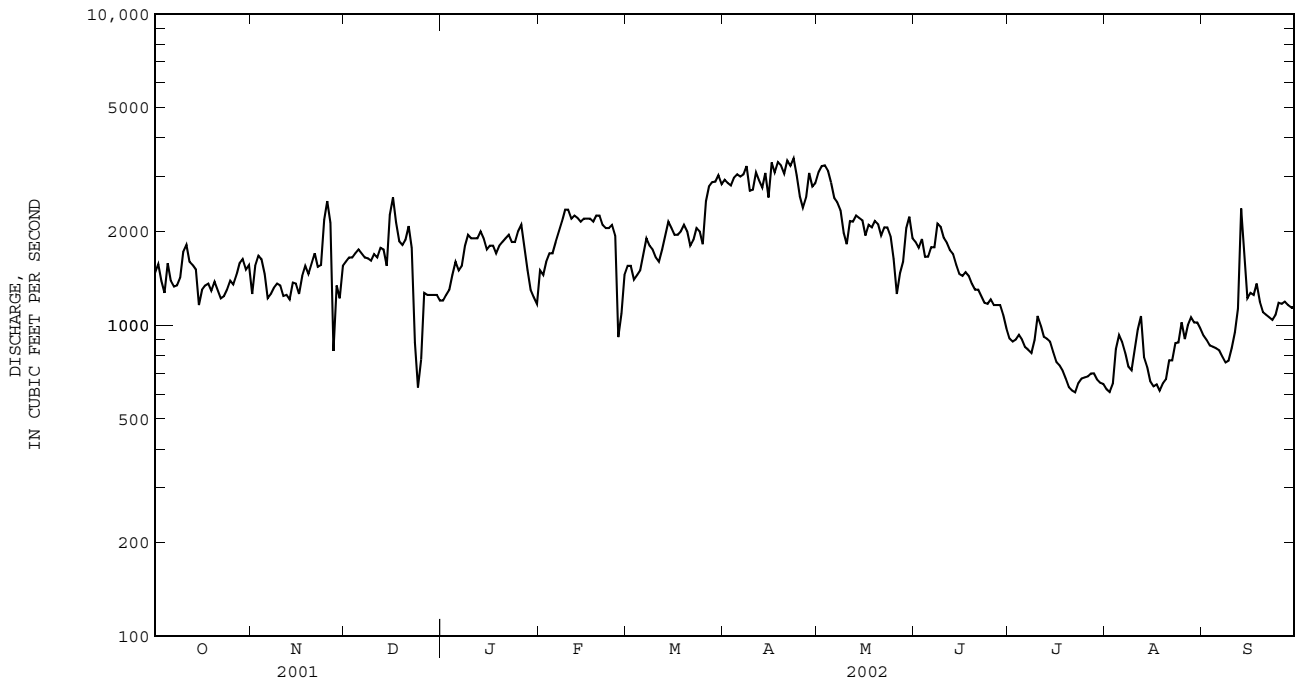
	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	1435	1536	1401	1455	1923	2587	2365	2212	1872	1406	1132	1257																																																					
MAX	2480	2762	2118	2148	3557	4425	4693	5290	4442	5370	2049	2094																																																					
(WY)	1996	1999	1997	1999	1997	1960	1995	1995	1962	1962	1962	1986																																																					
MIN	1009	943	787	706	941	1444	1282	1228	1044	551	644	704																																																					
(WY)	1977	1977	1969	1940	1939	1981	1939	1969	1976	1974	1971	1939																																																					

NIOBRARA RIVER BASIN

06465500 NIOBRARA RIVER NEAR VERDEL, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1938 - 2002	
ANNUAL TOTAL	792763		593044		1722	
ANNUAL MEAN	2172		1625		2461	
HIGHEST ANNUAL MEAN					1269	
LOWEST ANNUAL MEAN					1976	
HIGHEST DAILY MEAN	7430	Apr 23	3430	Apr 23	25100	Mar 27 1960
LOWEST DAILY MEAN	631	Dec 24	608	Jul 22	104	Nov 30 1960
ANNUAL SEVEN-DAY MINIMUM	1040	Dec 23	648	Jul 19	210	Nov 27 1976
MAXIMUM PEAK FLOW			*3770	Mar 27, Apr 8	39000	Mar 27 1960
MAXIMUM PEAK STAGE			**4.26	Jan 9	**10.62	Mar 12 1966
ANNUAL RUNOFF (AC-FT)	1572000		1176000		1247000	
10 PERCENT EXCEEDS	3530		2630		2700	
50 PERCENT EXCEEDS	1850		1560		1530	
90 PERCENT EXCEEDS	1200		806		900	

e Estimated.
 * Stage 3.48 ft.
 ** Backwater from ice.



NIOBRARA RIVER BASIN

06465700 VERDIGRE CREEK NEAR VERDIGRE, NE

LOCATION.--Lat 42°39'16", long 098°02'35", in NE 1/4 NE 1/4 sec.20, T.31 N., R.6 W., Knox County, Hydrologic Unit 10150007, on right bank, near downstream side of county bridge, 0.2 mile west of Highway 14, and 4.0 miles north of Verdigre.

DRAINAGE AREA.--470 mi² approximately.

PERIOD OF RECORD.--November 1957 to July 1958 (measurements only). May to September 2002.

GAGE.--Water-stage recorder. Elevation of gage is 1,290 ft above sea level, from topographic map. Data collection platform at station.

REMARKS.--Records fair.

DISCHARGE FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	209	130	51	35	96
2	---	---	---	---	---	---	---	196	124	56	35	93
3	---	---	---	---	---	---	---	163	130	79	45	86
4	---	---	---	---	---	---	---	127	145	78	81	98
5	---	---	---	---	---	---	---	117	127	69	410	86
6	---	---	---	---	---	---	---	178	122	62	261	73
7	---	---	---	---	---	---	---	149	118	52	179	69
8	---	---	---	---	---	---	---	153	163	44	134	69
9	---	---	---	---	---	---	---	138	149	49	108	75
10	---	---	---	---	---	---	---	132	133	53	254	90
11	---	---	---	---	---	---	---	182	139	60	130	88
12	---	---	---	---	---	---	---	175	134	73	103	87
13	---	---	---	---	---	---	---	154	124	69	97	126
14	---	---	---	---	---	---	---	147	115	64	94	132
15	---	---	---	---	---	---	---	144	114	64	93	105
16	---	---	---	---	---	---	---	141	114	54	91	111
17	---	---	---	---	---	---	---	133	112	43	85	105
18	---	---	---	---	---	---	---	131	103	42	83	99
19	---	---	---	---	---	---	---	130	94	44	94	96
20	---	---	---	---	---	---	---	125	94	42	97	95
21	---	---	---	---	---	---	---	132	88	38	104	96
22	---	---	---	---	---	---	---	129	81	46	98	99
23	---	---	---	---	---	---	---	123	70	45	101	92
24	---	---	---	---	---	---	---	113	63	45	96	89
25	---	---	---	---	---	---	---	161	59	64	93	95
26	---	---	---	---	---	---	---	158	82	59	104	101
27	---	---	---	---	---	---	---	159	66	52	110	106
28	---	---	---	---	---	---	---	149	65	44	94	107
29	---	---	---	---	---	---	---	170	60	41	132	97
30	---	---	---	---	---	---	---	154	55	44	111	100
31	---	---	---	---	---	---	---	173	---	41	98	---
TOTAL	---	---	---	---	---	---	---	4645	3173	1667	3650	2861
MEAN	---	---	---	---	---	---	---	149.8	105.8	53.77	117.7	95.37
MAX	---	---	---	---	---	---	---	209	163	79	410	132
MIN	---	---	---	---	---	---	---	113	55	38	35	69
AC-FT	---	---	---	---	---	---	---	9210	6290	3310	7240	5670

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2002, BY WATER YEAR (WY)

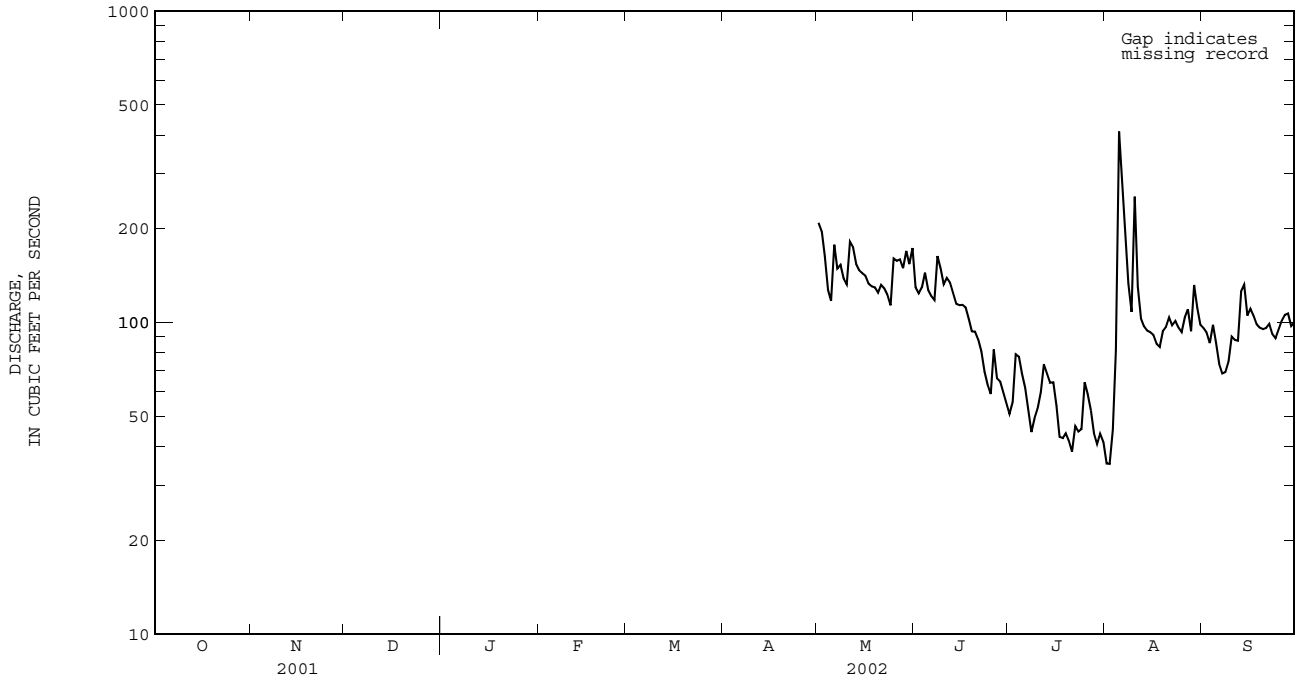
MEAN	---	---	---	---	---	---	---	149.8	105.8	53.77	117.7	95.37
MAX	---	---	---	---	---	---	---	150	106	53.8	118	95.4
(WY)	---	---	---	---	---	---	---	2002	2002	2002	2002	2002
MIN	---	---	---	---	---	---	---	150	106	53.8	118	95.4
(WY)	---	---	---	---	---	---	---	2002	2002	2002	2002	2002

06465700 VERDIGRE CREEK NEAR VERDIGRE, NE--Continued

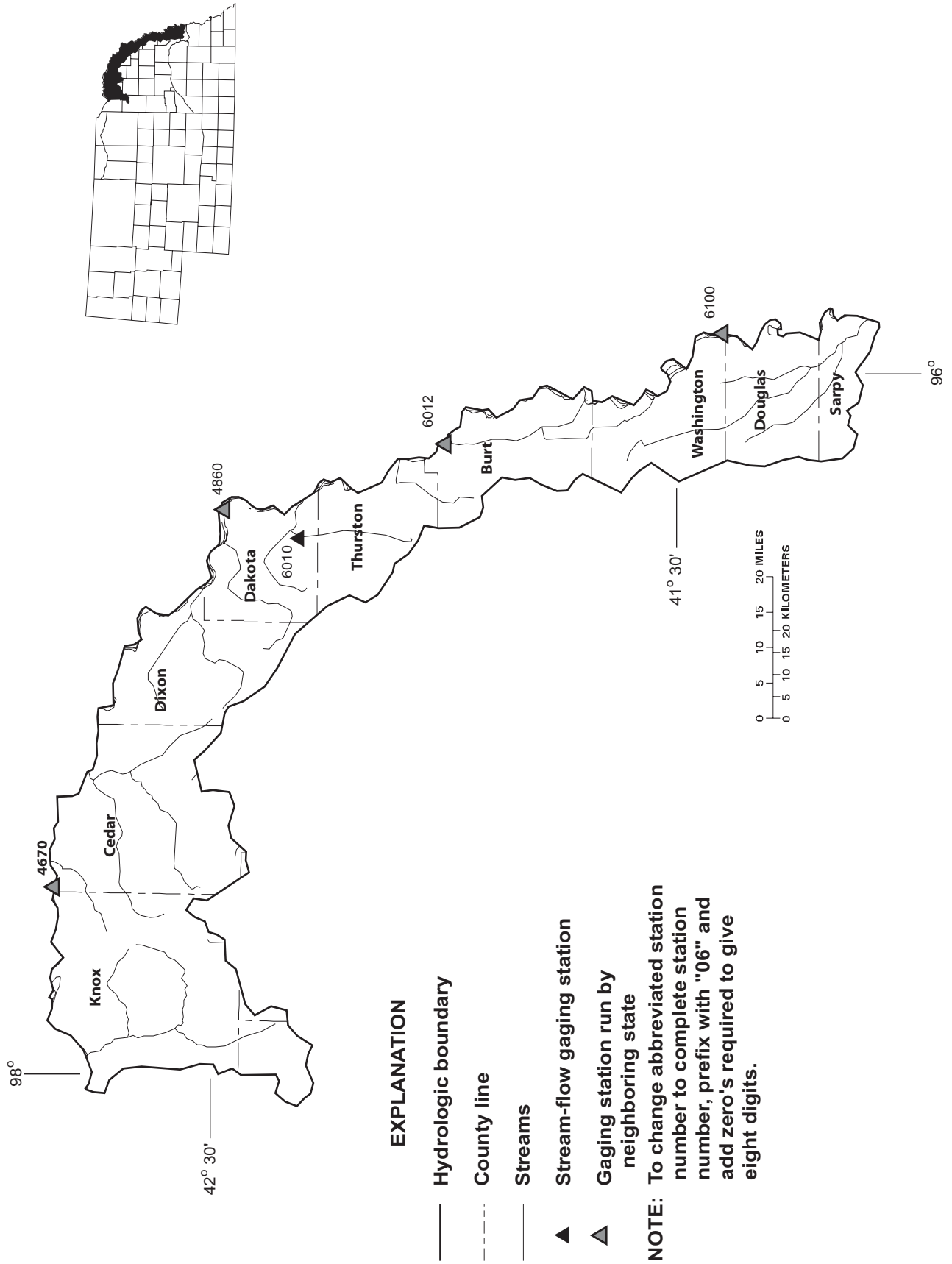
SUMMARY STATISTICS

FOR 2002 WATER YEAR

HIGHEST DAILY MEAN	410	AUG 5
LOWEST DAILY MEAN	35	AUG 1,2
ANNUAL SEVEN-DAY MINIMUM	41	JUL 28
MAXIMUM PEAK FLOW	592	AUG 5
MAXIMUM PEAK STAGE	4.03	AUG 5



SURFACE-WATER DISCHARGE RECORDS
MISSOURI RIVER BASIN



SURFACE-WATER DISCHARGE RECORDS
MISSOURI RIVER BASIN

*Station number	Station name	Page
MISSOURI RIVER MAIN STEM		
4670	Lewis and Clark Lake near Yankton, SD	66
4860	Missouri River at Sioux City, IA	68
OMAHA CREEK BASIN		
6010	Omaha Creek at Homer	70
MISSOURI RIVER MAIN STEM		
6012	Missouri River at Decatur	72
6100	Missouri River at Omaha	74

* NOTE: To change abbreviated station number to complete station number, prefix with 0"6" and add zeros required to equal eight digits.

MISSOURI-LEWIS AND CLARK RIVER BASIN

06467000 LEWIS AND CLARK LAKE NEAR YANKTON, SD

LOCATION.--Lat 42°50'56", long 97°28'54", in SW¹/₄ sec.7, T.33 N., R.1 W., Cedar County, NE, Hydrologic Unit 10170101, in powerhouse of Gavins Point Dam on Missouri River, 3.75 mi southwest of Yankton, 13.6 mi upstream from James River, 32.5 mi downstream from Niobrara River, and at mile 811.0.

DRAINAGE AREA.--279,500 mi², approximately.

PERIOD OF RECORD.--July 1955 to current year (monthend contents only). Prior to October 1955, published as Gavins Point Reservoir near Yankton.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. Prior to Dec. 9, 1955, recorder at temporary location on wall of intake structure unit 3.

REMARKS.--Reservoir is formed by earthfill dam; storage began in July 1955. Maximum capacity, 504,000 acre-ft below elevation 1,210.0 ft (top of spillway gates). Normal maximum, 442,600 acre-ft below elevation 1,208.0 ft. Inactive storage, 157,000 acre-ft below elevation 1,195.0 ft. Dead storage, 23,000 acre-ft below elevation 1,180.0 ft (crest of spillway). From capacity table put into use Nov. 1, 1986; maximum capacity, 491,700 acre-ft. Normal maximum, 432,000 acre-ft. Inactive storage, 149,400 acre-ft. Dead storage, 17,700 acre-ft. Figures given herein represent elevations at powerhouse and total contents adjusted for wind effect.

The spillway consists of 14 taintor gates, each 40 ft wide by 30 ft high; spillway capacity, 280,000 ft³/s at pool elevation 1,210.0 ft. Crest of spillway is at elevation 1,180.0 ft. Normal releases are through 3 power units, installation completed in January 1957; maximum release through power units is 35,000 ft³/s at pool elevation, 1,210.0 ft. Water is used for flood control, navigation, power, and incidental uses. Records provided for this report by the U.S. Geological Survey, South Dakota District.

COOPERATION.--Records of elevation and contents provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 565,000 acre-ft, Apr. 1, 1960, affected by wind; maximum elevation, 1,210.6 ft, Mar. 29, 1960; minimum since initial filling, 61,950 acre-ft, Apr. 23, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 440,000 acre-ft, Nov. 26; minimum contents, 324,000 acre-ft, July 2.

MONTHEND ELEVATION AND CONTENTS AT 2400 HOURS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	1,207.49	398,000	--
Oct. 31	1,207.41	394,000	-4,000
Nov. 30	1,208.28	418,000	+24,000
Dec. 31	1,207.39	394,000	-24,000
CAL YR 2001	--	--	+4,000
Jan. 31	1,207.16	387,000	-7,000
Feb. 28	1,206.23	363,000	-24,000
Mar. 31	1,206.77	378,000	+15,000
Apr. 30	1,206.20	362,000	-16,000
May 31	1,205.80	353,000	-9,000
June 30	1,204.80	329,000	-24,000
July 31	1,205.24	340,000	+11,000
Aug. 31	1,207.16	389,000	+49,000
Sept. 30	1,207.08	386,000	-3,000
WTR YR 2002	--	--	-12,000

NOTE.--Lake frozen over unknown to Apr. 2.

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MISSOURI RIVER MAIN STEM

06486000 MISSOURI RIVER AT SIOUX CITY, IA

LOCATION.--Lat. 42°29'09", long 96°24'49", in NW¹/₄ SE¹/₄ sec.16, T.29 N., R.9 E., sixth principal meridian, Dakota County, Nebraska, Hydrologic Unit 10230001, on right bank on upstream side of bridge on U.S. Highway 20 and 77 at South Sioux City, Nebraska, 1.9 mi downstream from Big Sioux River, and at mile 732.2.

DRAINAGE.--314,600 mi², approximately. The 3,959 mi² in Great Divide basin are not included.

PERIOD OF RECORD.--October 1897 to current year in reports of the U.S. Geological Survey. Prior to October 1928 and October 1931 to September 1938, monthly discharges only, published in WSP 1310. January 1879 to December 1890, monthly discharges only, in House Document 238, 73rd Congress, 2d session, Missouri River. Gage height records collected in this vicinity September 1878 to December 1899 are contained in reports of Missouri River Commission and since July 1889 are contained in reports of U.S. Weather Bureau.

REVISED RECORDS.--WSP 716: 1929-30. WSP 876: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,056.98 ft above NGVD of 1929. Sept. 2, 1878 to Dec. 31, 1905, nonrecording gages at various locations within 1.7 mi of present site and at various datums. Jan. 1, 1906 to Feb. 14, 1935, nonrecording gage, and Feb. 15, 1935 to Sept. 30, 1969, water-stage recorder at site 227 ft downstream at datum 19.98 ft higher, and Oct. 1, 1969 to Sept. 30, 1970 at datum 20.00 ft higher. Oct. 1, 1970 to Jan. 30, 1981, water-stage recorder at site 227 ft downstream at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by upstream main-stem reservoirs. Fort Randall Dam was completed in July 1952, with storage beginning in December 1952. Gavins Point Dam was completed in July 1955, with storage beginning in December 1955. U.S. Army Corps of Engineers rain gage and satellite data collection platform at station. Records provided by the U.S. Geological Survey, Iowa District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 441,000 ft³/s Apr. 14, 1952, gage height, 24.28 ft, datum then in use; minimum, 2,500 ft³/s Dec. 29, 1941; minimum gage height, 7.02 ft Jan. 19, 1996.

DISCHARGE FROM THE DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28000	30200	22100	16100	16100	17500	29200	26100	25800	26100	26000	30400
2	27900	30200	19500	16100	15700	15700	29500	26500	26000	26000	25800	31000
3	27900	30000	17700	16200	15800	17200	28100	25800	26500	26300	25700	31400
4	27700	30000	16900	16000	15300	17200	27400	25300	26700	26400	26300	31400
5	27400	30100	16800	18000	15100	18200	27300	25400	26400	26300	27400	31700
6	27500	30200	16600	16500	15600	16900	27100	25600	26100	26400	26400	31900
7	28300	30500	16400	15200	14900	15600	27400	25400	26500	26400	25900	31900
8	28400	30600	16600	15500	14900	15600	27300	25400	27300	26300	25800	31800
9	28600	30400	16600	15600	15300	15100	27600	25200	26300	26400	25800	32100
10	29200	30500	16500	15200	16400	14000	27500	24700	26300	28100	25900	32200
11	28900	30500	16300	15000	16800	15800	27600	25900	27200	27400	25600	32400
12	28600	30700	16300	15100	16800	16500	27200	26100	26800	26800	25800	32200
13	28800	30800	16300	15100	15300	15800	26200	25700	26600	26800	25900	32600
14	28800	30900	16200	15500	14900	15500	26500	25500	26400	26900	25400	32900
15	28700	31000	16100	15400	15000	15400	26300	24600	26700	26600	25700	31400
16	28900	30900	16400	15700	14900	15100	26300	25000	26600	26300	29700	30600
17	29400	30700	16400	16200	14900	15200	26800	25500	26500	26100	32700	31000
18	29500	30800	16300	15800	15000	15100	26300	24900	26400	26000	31400	30600
19	29700	30900	16200	14900	15300	16700	25900	24800	26300	26000	31100	30600
20	29500	30600	16000	15400	15200	19400	25900	24900	26700	25900	31000	30000
21	29500	30700	15700	15000	15000	22500	26300	25000	26500	26000	31700	29300
22	29400	30700	16200	14900	15100	24400	26500	25000	26300	26100	34200	28800
23	29400	31000	15800	14800	15800	26100	26400	25800	26100	25500	34700	28900
24	29400	31700	15000	14000	16600	26200	27200	25300	26100	25600	33700	29200
25	29500	27800	14900	14300	17300	26500	27000	25200	26100	27400	31700	30300
26	28900	25900	14800	14200	16000	26500	26400	24800	26700	26800	31500	30500
27	29100	27400	15300	14300	15400	26200	26900	24700	26800	26100	31400	31100
28	29300	26100	16500	14600	17400	26400	27700	24500	26600	26200	31100	31700
29	29300	24900	16500	14800	---	26500	26700	27300	26400	26300	30700	33300
30	29900	24100	16500	15100	---	26800	25800	26100	26200	26200	30300	33200
31	30100	---	16200	16000	---	27900	---	25400	---	26000	30000	---
TOTAL	895500	890800	511600	476500	437800	609500	810300	787400	793900	817700	896300	936400
MEAN	28890	29690	16500	15370	15640	19660	27010	25400	26460	26380	28910	31210
MAX	30100	31700	22100	18000	17400	27900	29500	27300	27300	28100	34700	33300
MIN	27400	24100	14800	14000	14900	14000	25800	24500	25800	25500	25400	28800
AC-FT	1776000	1767000	1015000	945100	868400	1209000	1607000	1562000	1575000	1622000	1778000	1857000
CFSM	0.09	0.09	0.05	0.05	0.05	0.06	0.09	0.08	0.08	0.08	0.09	0.10
IN.	0.11	0.11	0.06	0.06	0.05	0.07	0.10	0.09	0.09	0.10	0.11	0.11

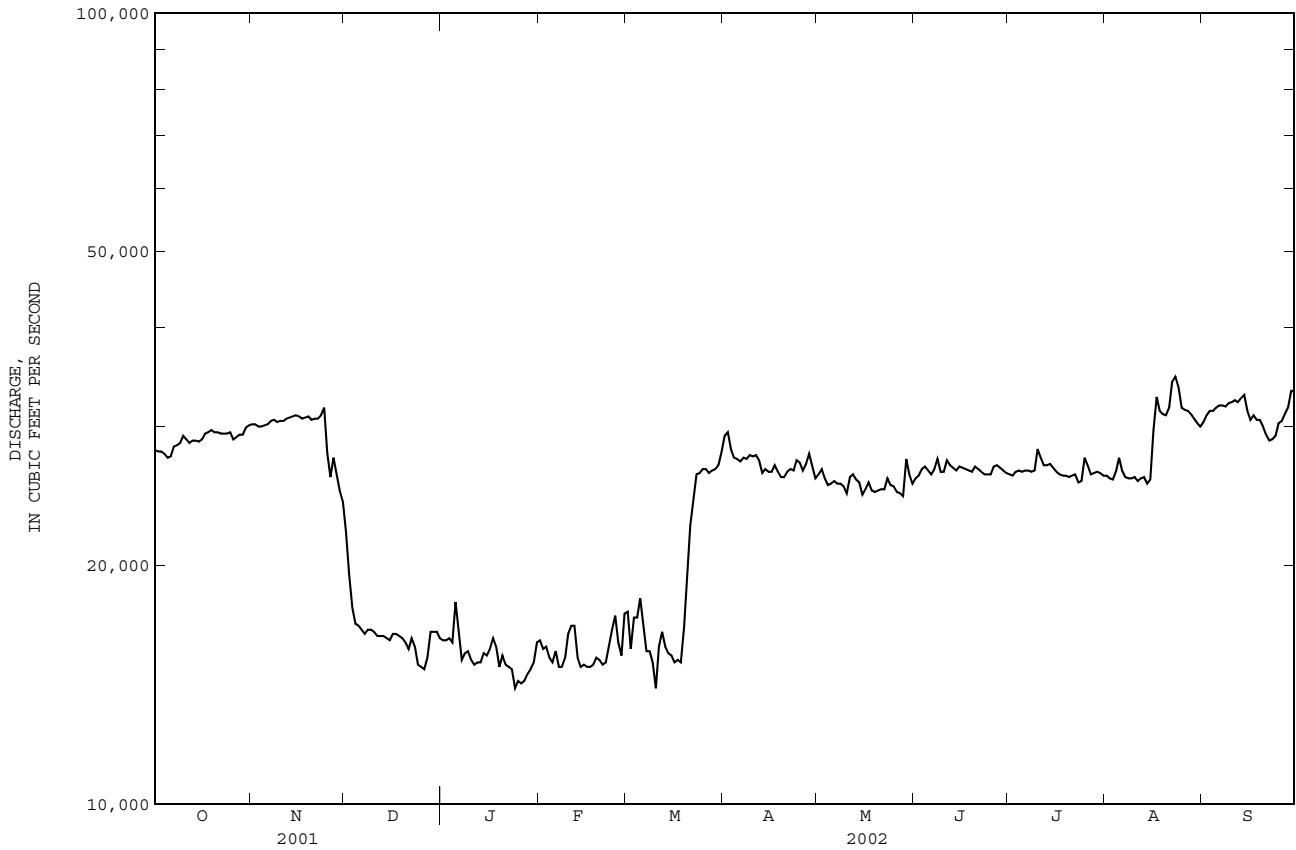
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2002, BY WATER YEAR (WY)

MEAN	36150	31350	18920	16140	17280	23300	33380	33890	35540	36090	36470	36720
MAX	69300	71600	39880	27720	31120	47020	88040	78720	66400	65550	65360	66400
(WY)	1998	1998	1998	1987	1997	1997	1997	1997	1997	1997	1997	1997
MIN	14350	6951	8271	7316	6293	9135	17450	23820	23270	26380	24270	25790
(WY)	1962	1962	1962	1964	1963	1957	1957	1962	1960	2002	1993	1962

06486000 MISSOURI RIVER AT SIOUX CITY, IA--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1953 - 2002a	
ANNUAL TOTAL	9722900		8863700		29650	
ANNUAL MEAN	26640		24280		55890	
HIGHEST ANNUAL MEAN					19770	
LOWEST ANNUAL MEAN					1957	
HIGHEST DAILY MEAN	62000	Apr 28	34700	Aug 23	105000	Jun 25 1953
LOWEST DAILY MEAN	12600	Jan 20	14000	Jan 24	3000	Dec 11 1961
ANNUAL SEVEN-DAY MINIMUM	13600	Jan 20	14400	Jan 23	5430	Feb 22 1963
MAXIMUM PEAK FLOW			36100		101000	Apr 3 1960
MAXIMUM PEAK STAGE			16.55		30.65	Feb 19 1971
INSTANTANEOUS LOW FLOW			13200			
ANNUAL RUNOFF (AC-FT)	19290000		17580000		21480000	
ANNUAL RUNOFF (CFSM)	0.085		0.077		0.094	
ANNUAL RUNOFF (INCHES)	1.15		1.05		1.28	
10 PERCENT EXCEEDS	35900		30900		46400	
50 PERCENT EXCEEDS	28400		26200		30100	
90 PERCENT EXCEEDS	14900		15300		12000	

a Post regulation.

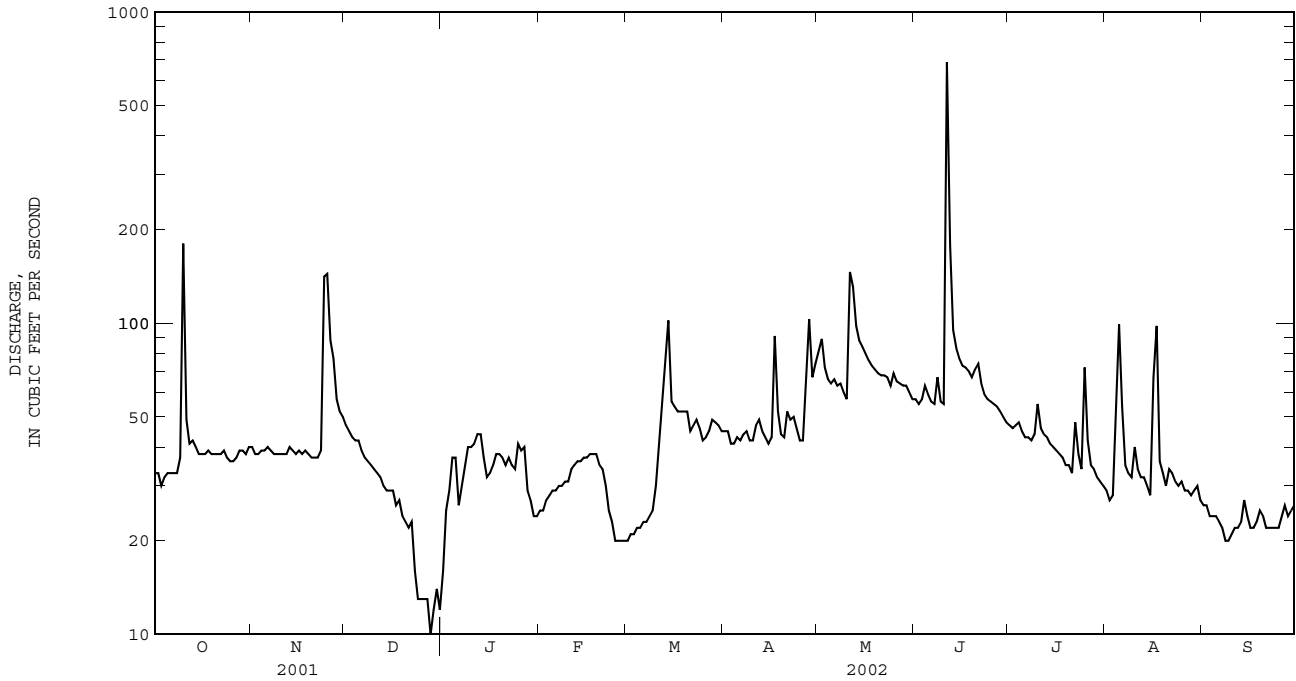


06601000 OMAHA CREEK AT HOMER, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1946 - 2002	
ANNUAL TOTAL	25340		16456		45.01	
ANNUAL MEAN	69.42		45.08		130 1993	
HIGHEST ANNUAL MEAN					6.20 1981	
LOWEST ANNUAL MEAN					6840 Feb 18 1971	
HIGHEST DAILY MEAN	3200	Mar 14	687	Jun 11	0.10 Sep 16 1948	
LOWEST DAILY MEAN	10	Dec 28	10	Dec 28	0.16 Sep 8 1955	
ANNUAL SEVEN-DAY MINIMUM	12	Dec 25	12	Dec 25	*21500 Jul 17 1996	
MAXIMUM PEAK FLOW			1590 Jun 11		28.47 Feb 19 1971	
MAXIMUM PEAK STAGE			6.44 Jun 11			
ANNUAL RUNOFF (AC-FT)	50260		32640		32610	
10 PERCENT EXCEEDS	107		69		83	
50 PERCENT EXCEEDS	41		38		19	
90 PERCENT EXCEEDS	25		23		4.4	

e Estimated.

* Stage 22.30 ft from floodmark, discharge from rating curve extension based on slope-area measurements at 16.38 ft and 23.62 ft.



MISSOURI RIVER MAIN STEM

06601200 MISSOURI RIVER AT DECATUR, NE

LOCATION.--Lat 42°00'26", long 96°14'29", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.36, T.24 N., R.10 E., Burt County, Hydrologic Unit 10230001, on right bank 0.1 mi upstream from Iowa Highway 175 bridge at Decatur, and at mile 691.0.

DRAINAGE AREA.--316,200 mi², approximately. The 3,959 mi² in Great Divide basin are not included.

PERIOD OF RECORD.--October 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,010.00 ft above NGVD of 1929, supplementary adjustment of 1954.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by upstream main-stem reservoirs. Fort Randall Dam was completed in July 1952, with storage beginning in December 1952. Gavins Point Dam was completed in July 1955, with storage beginning in December 1955. U.S. Army Corps of Engineers rain gage and satellite data collection platform at station. Records provided by the U.S. Geological Survey, Iowa District.

DISCHARGE FROM THE DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

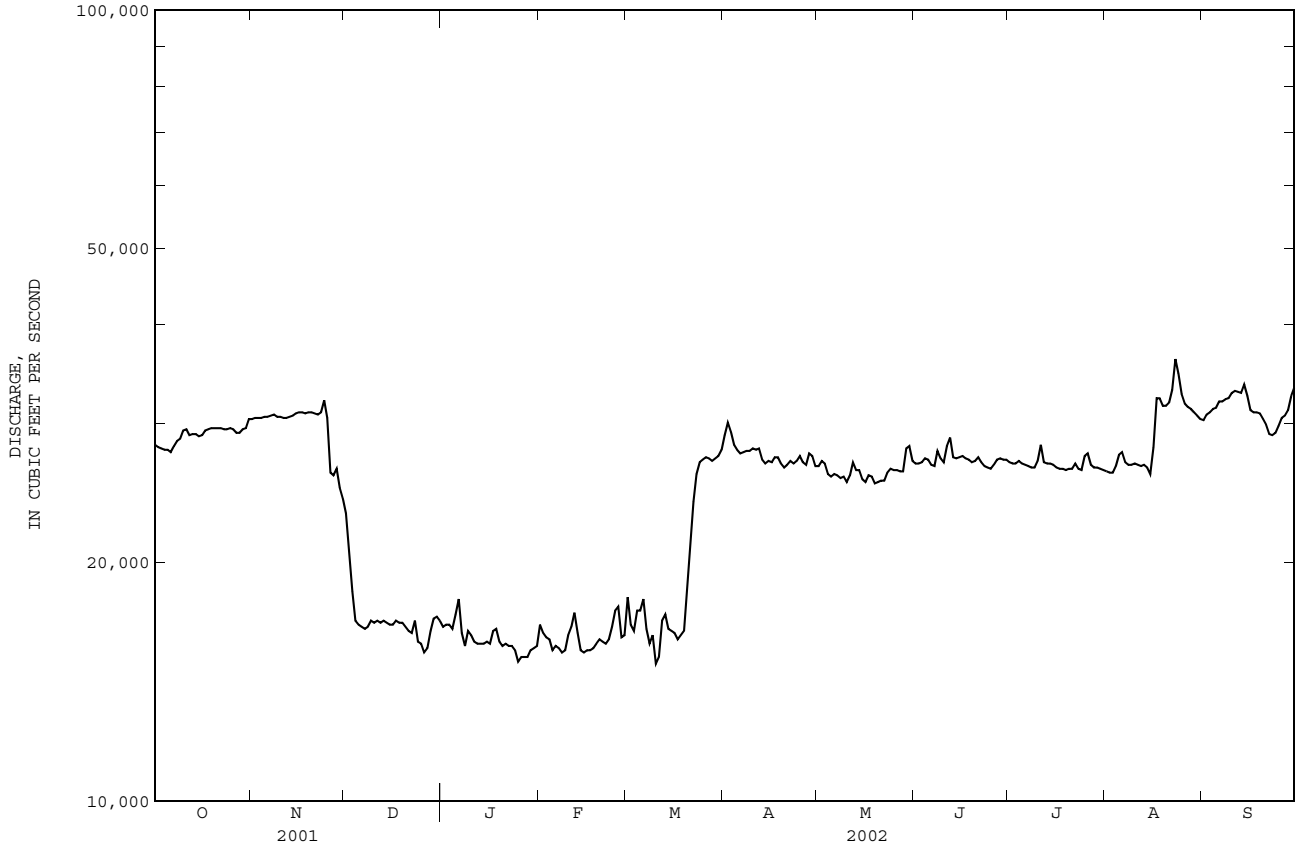
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28200	30400	23100	16600	16700	18100	29000	26500	26700	26800	26100	30300
2	28000	30500	20700	16700	16300	16700	30100	26900	26700	26700	26000	30800
3	27900	30500	18400	16700	16100	16400	29300	26700	26800	26700	26000	31000
4	27800	30500	16900	16500	16000	17400	28200	25900	27100	26900	26500	31300
5	27800	30600	16700	17200	15500	17400	27800	25700	27000	26700	27400	31400
6	27600	30600	16600	18000	15700	18000	27500	25900	26600	26600	27600	32000
7	28100	30700	16500	16300	15600	16500	27600	25800	26500	26500	26800	32000
8	28500	30800	16600	15700	15400	15800	27700	25600	27700	26400	26600	32200
9	28700	30600	16900	16400	15500	16200	27700	25700	27100	26400	26600	32300
10	29400	30600	16800	16200	16200	14900	27900	25300	26800	26900	26700	32800
11	29500	30500	16900	15900	16600	15200	27800	25800	28100	28200	26600	33000
12	29000	30500	16800	15800	17300	16900	27900	26800	28800	26800	26500	32900
13	29100	30600	16900	15800	16300	17200	27000	26200	27200	26700	26600	32800
14	29100	30700	16800	15800	15500	16500	26700	26200	27100	26700	26400	33600
15	28900	30900	16700	15900	15400	16400	26900	25500	27200	26600	25900	32500
16	29000	31000	16700	15800	15500	16300	26800	25300	27300	26400	28000	31200
17	29400	31000	16900	16400	15500	16000	27200	25800	27100	26300	32300	31000
18	29500	30900	16800	16500	15600	16200	27200	25700	27000	26300	32300	31000
19	29600	31000	16800	15900	15800	16400	26700	25200	26800	26200	31600	30900
20	29600	31000	16600	15700	16000	18700	26400	25300	26900	26300	31600	30400
21	29600	30900	16400	15800	15900	21300	26600	25400	27200	26300	31900	29900
22	29600	30800	16300	15700	15800	23900	26900	25400	26800	26700	33100	29100
23	29500	31000	16900	15700	16000	25900	26700	26000	26500	26300	36200	29000
24	29500	32100	15900	15500	16600	26800	26900	26300	26400	26200	34700	29200
25	29600	30500	15800	15000	17400	27000	27300	26200	26300	27300	32700	29800
26	29500	26000	15400	15200	17600	27200	26800	26200	26600	27500	31800	30500
27	29200	25800	15600	15200	16100	27100	26600	26100	27000	26600	31500	30700
28	29200	26300	16400	15200	16200	26900	27500	26100	27100	26400	31300	31200
29	29500	24900	17000	15500	---	27100	27300	27900	27000	26400	31000	32500
30	29600	24100	17100	15600	---	27300	26500	28100	27000	26300	30700	33300
31	30400	---	16900	15700	---	27800	---	26900	---	26200	30400	---
TOTAL	899900	896300	526800	495900	450100	621500	822500	808400	810400	825300	909400	940600
MEAN	29030	29880	16990	16000	16080	20050	27420	26080	27010	26620	29340	31350
MAX	30400	32100	23100	18000	17600	27800	30100	28100	28800	28200	36200	33600
MIN	27600	24100	15400	15000	15400	14900	26400	25200	26300	26200	25900	29000
AC-FT	1785000	1778000	1045000	983600	892800	1233000	1631000	1603000	1607000	1637000	1804000	1866000
CFSM	0.09	0.09	0.05	0.05	0.05	0.06	0.09	0.08	0.09	0.08	0.09	0.10
IN.	0.11	0.11	0.06	0.06	0.05	0.07	0.10	0.10	0.10	0.10	0.11	0.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2002, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	37930	33200	21980	19020	20280	25400	36550	37720	38380	38500	36730	38250			
MAX	70150	72350	41350	26850	32380	49450	90050	80690	67970	66520	66170	67290			
(WY)	1998	1998	1998	1998	1997	1997	1997	1997	1997	1997	1997	1997			
MIN	24250	10470	12070	12360	12210	11580	24410	26080	27010	26620	25700	26750			
(WY)	1993	1991	1991	1990	1991	1991	1991	2002	2002	2002	1993	1993			

06601200 MISSOURI RIVER AT DECATUR, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1988 - 2002	
ANNUAL TOTAL	9909400		9007100		32030	
ANNUAL MEAN	27150		24680		57440	
HIGHEST ANNUAL MEAN					1997	
LOWEST ANNUAL MEAN					21450	
HIGHEST DAILY MEAN	62200	Apr 28	36200	Aug 23	99900	Apr 15 1997
LOWEST DAILY MEAN	13200	Jan 21	14900	Mar 10	7130	Dec 22 1990
ANNUAL SEVEN-DAY MINIMUM	14500	Jan 21	15300	Jan 24	9660	Dec 12 1990
MAXIMUM PEAK FLOW			36900	Aug 23	100000	Apr 15 1997
MAXIMUM PEAK STAGE			23.75	Aug 23	32.31	Jul 18 1996
INSTANTANEOUS LOW FLOW			14400	Mar 10		
ANNUAL RUNOFF (AC-FT)	19660000		17870000		23210000	
ANNUAL RUNOFF (CFSM)	0.086		0.078		0.10	
ANNUAL RUNOFF (INCHES)	1.17		1.06		1.38	
10 PERCENT EXCEEDS	36700		31000		53800	
50 PERCENT EXCEEDS	28700		26700		30400	
90 PERCENT EXCEEDS	15300		15900		14700	



MISSOURI RIVER MAIN STEM

06610000 MISSOURI RIVER AT OMAHA, NE
(National stream-quality accounting network station)

LOCATION.--Lat 41°15'32", long 95°55'20", in SE¹/₄ NW¹/₄ sec.23, T.15 N., R.13 E., Douglas County, Hydrologic Unit 10230006, on right bank on left side of concrete floodwall, at foot of Douglas Street, 275 ft downstream from Interstate 480 Highway bridge in Omaha, and at mile 615.9.

DRAINAGE AREA.--322,800 mi², approximately. The 3,959 mi² in Great Divide basin are not included.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1928 to current year. April 1872 to December 1899 (gage heights only) in reports of the Missouri River Commission and since January 1875, (gage heights only) in reports of the U.S. Weather Bureau.

REVISED RECORDS.--WSP 761: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 948.24 ft above NGVD of 1929. See WSP 1730 for history of changes prior to Sept. 30, 1936. Oct. 1, 1936 to Sept. 30, 1982 at datum 10.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by upstream main-stem reservoirs. Fort Randall Dam was completed in July 1952, with storage beginning in December 1952. Gavins Point Dam was completed in July 1955, with storage beginning in December 1955. U.S. Army Corps of Engineers rain gage and satellite data collection platform at station. Records provided by the U.S. Geological Survey, Iowa District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 396,000 ft³/s Apr. 18, 1952, gage height, 40.20 ft, present datum; minimum, about 2,200 ft³/s Jan. 6, 1937; minimum gage height, 6.85 ft, present datum, Feb. 5, 1989, result of freeze-up.

DISCHARGE FROM THE DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30600	31800	26700	17600	16200	17200	29200	28500	28200	29000	26900	31300
2	31200	31900	25900	17400	16900	18500	30100	28600	27800	28700	26800	31300
3	31000	31700	23900	17400	17000	17900	31000	29200	28100	28600	26800	31700
4	31200	31600	22000	17400	16800	17400	30400	29000	28400	28500	27200	31900
5	30900	31500	20700	17400	16700	18100	29300	28400	28600	28600	28100	31900
6	30400	31200	20200	17800	16300	18400	28900	28200	28600	28200	31700	31900
7	30000	31300	19900	19000	16200	19100	28600	28500	28100	28100	31400	32100
8	30000	31500	19500	17700	16400	17900	28900	28600	28100	27900	29600	32000
9	30200	31700	19300	16900	16100	17000	29000	28200	29300	27700	28600	32000
10	30400	31600	19300	17300	16400	16800	28900	28100	29000	27600	28300	32100
11	30700	31700	19200	17300	16800	15900	29200	28900	30500	28400	28300	32500
12	30600	31500	18900	17000	17400	15500	29200	32800	40000	30000	28500	32500
13	30200	31500	18700	16800	17800	17100	29200	33300	40000	28100	28200	32800
14	30100	31800	18700	16800	17400	18600	28400	31000	33000	27700	28200	32800
15	30100	31800	18500	16800	16500	18000	28000	30000	31600	27500	27800	33300
16	29700	32000	18200	16800	16500	17600	28300	29300	31800	27400	27400	32600
17	29900	32200	18000	16600	16600	17500	28600	29000	31700	27200	29800	31400
18	30200	32200	18000	16900	16700	17300	29300	29300	31300	27000	35300	31400
19	30400	32000	17900	17100	16800	17500	29200	29000	30900	27100	34400	31900
20	30600	31900	17800	16700	17100	18100	28700	28300	30400	26900	32900	32200
21	30600	31800	17700	16300	17200	19900	28400	28100	30400	26900	32800	31100
22	31000	31600	17500	16500	17200	22400	28600	27800	31600	27000	33400	30500
23	31000	31400	17300	16300	17000	24900	28900	27800	30200	27400	36200	29700
24	31000	32200	17400	16300	17100	27300	28500	28300	29500	27100	39400	29600
25	31100	33100	16800	16100	17600	28400	28400	28600	29300	27200	38600	29700
26	31200	31900	16600	15800	18000	28400	28700	28000	29100	28600	35500	30300
27	31400	28300	16500	16000	18200	28500	28800	27800	29300	28800	34000	31100
28	31200	28100	16600	15900	17300	28400	28900	28100	29500	27600	33300	31100
29	31100	28400	17100	15500	--	28300	29700	28100	29400	27200	32900	31700
30	31200	27500	17800	15700	--	28500	29400	29900	29200	27100	32400	32700
31	31100	--	17900	16000	--	28700	--	29800	--	27100	31800	--
TOTAL	950300	938700	590500	521100	474200	645100	870700	898500	912900	862200	966500	949100
MEAN	30650	31290	19050	16810	16940	20810	29020	28980	30430	27810	31180	31640
MAX	31400	33100	26700	19000	18200	28700	31000	33300	40000	30000	39400	33300
MIN	29700	27500	16500	15500	16100	15500	28000	27800	27800	26900	26800	29600
AC-FT	1885000	1862000	1171000	1034000	940600	1280000	1727000	1782000	1811000	1710000	1917000	1883000
CFSM	0.09	0.10	0.06	0.05	0.05	0.06	0.09	0.09	0.09	0.09	0.10	0.10
IN.	0.11	0.11	0.07	0.06	0.05	0.07	0.10	0.10	0.11	0.10	0.11	0.11

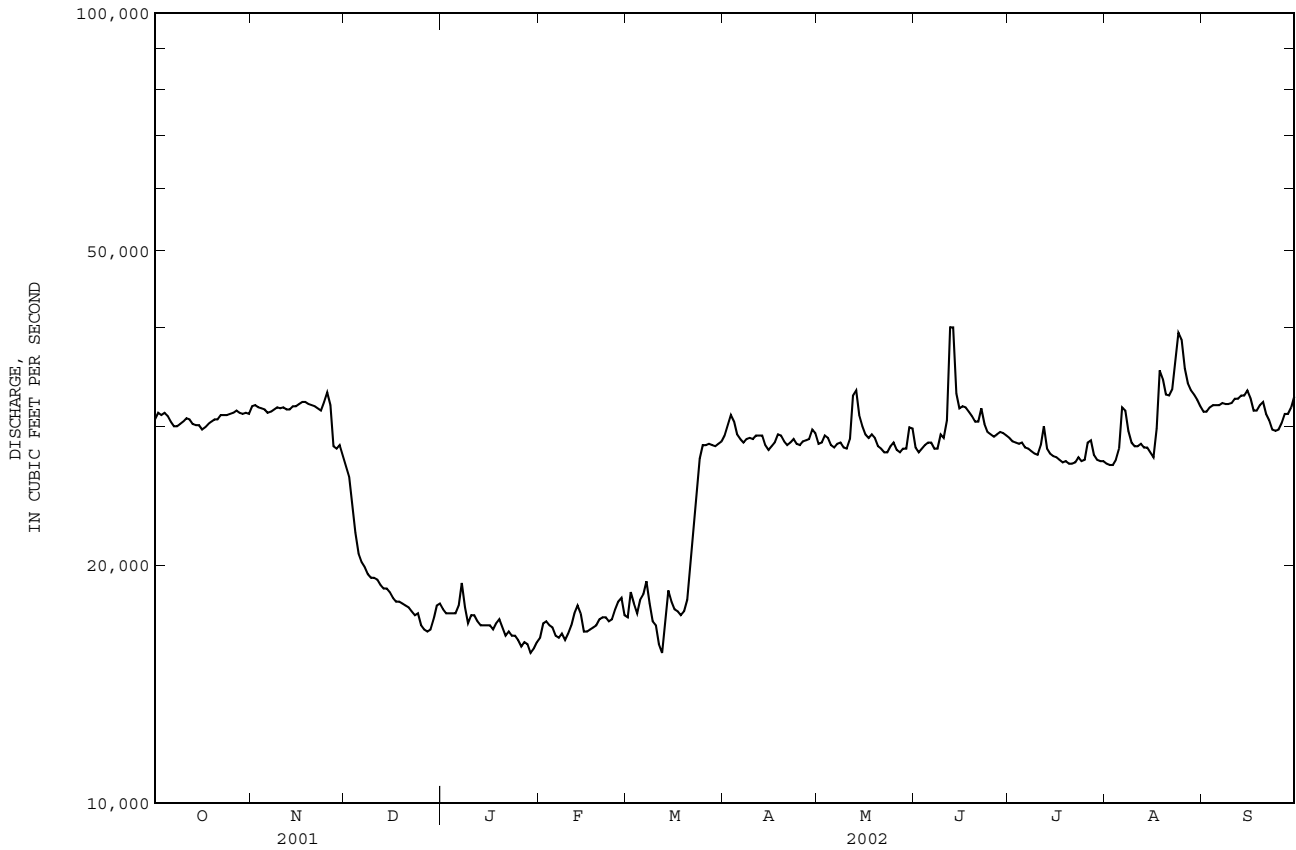
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2002, BY WATER YEAR (WY)

MEAN	38510	34220	21100	17770	19850	28020	38860	38640	41850	40410	38990	38960
MAX	74070	75040	44260	33250	40410	54660	93840	87620	76120	78560	68890	69770
(WY)	1998	1998	1998	1987	1997	1997	1997	1997	1997	1993	1997	1997
MIN	16920	8324	8296	8425	8162	10170	16480	26450	26890	27150	27280	28290
(WY)	1962	1962	1962	1964	1963	1957	1957	1961	1961	1958	1958	1958

06610000 MISSOURI RIVER AT OMAHA, NE--Continued
(National stream-quality accounting network station)

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1953 - 2002a	
ANNUAL TOTAL	11071900		9579800			
ANNUAL MEAN	30330		26250		33140	
HIGHEST ANNUAL MEAN					62150 1997	
LOWEST ANNUAL MEAN					20490 1957	
HIGHEST DAILY MEAN	68700	Apr 29	40000	Jun 12	116000	Apr 4 1960
LOWEST DAILY MEAN	14100	Jan 22	15500	Jan 29	2440	Dec 14 1961
ANNUAL SEVEN-DAY MINIMUM	15100	Jan 22	15900	Jan 25	4300	Nov 28 1955
MAXIMUM PEAK FLOW			42400	Jun 12	120000	Apr 1 1960
MAXIMUM PEAK STAGE			18.85	Jun 12	30.26	Jul 10 1993
INSTANTANEOUS LOW FLOW			15200	Mar 12		
ANNUAL RUNOFF (AC-FT)	21960000		19000000		24010000	
ANNUAL RUNOFF (CFSM)	0.094		0.081		0.10	
ANNUAL RUNOFF (INCHES)	1.28		1.10		1.39	
10 PERCENT EXCEEDS	44600		31900		52600	
50 PERCENT EXCEEDS	30700		28500		32500	
90 PERCENT EXCEEDS	16000		16800		14000	

a Post regulation.



MISSOURI RIVER BASIN

06610000 MISSOURI RIVER AT OMAHA, NE--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

LOCATION.--Water quality samples were collected from Interstate 80 highway bridge 2.0 mi downstream from gaging station.

PERIOD OF RECORD.--July 1969 to 1976, 1978 to current year. Daily sediment loads for April 1939 to September 1971 are in reports of U.S. Army Corps of Engineers.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1972 to September 1976, January 1978 to September 1981, October 1991 to current year.

WATER TEMPERATURES: October 1971 to September 1976, January 1978 to September 1981, October 1991 to current year.

SUSPENDED-SEDIMENT DISCHARGE: October 1971 to September 1976, October 1991 to current year.

REMARKS.--Records of specific conductance are obtained from suspended-sediment samples at time of analysis.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 950 microsiemens Dec. 4, 5, 1980; minimum daily, 335 microsiemens Mar. 22, 1978.

WATER TEMPERATURES: Maximum daily, 32.0°C July 24, 1972; minimum daily, 0.0°C on many days during winter period.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 8,180 mg/L May 19, 1974; minimum daily mean, 69 mg/L May 29, 2002.

SEDIMENT LOADS: Maximum daily, 1,470,000 tons Aug. 6, 1996; minimum daily, 2,560 tons Jan. 3, 1993.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 808 microsiemens Aug. 2; minimum daily, 686 microsiemens June 12.

WATER TEMPERATURES: Maximum daily, 29.5°C July 30; minimum daily, 1.5°C Mar. 7.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,960 mg/L June 12; minimum daily mean, 69 mg/L May 29.

SEDIMENT LOADS: Maximum daily, 214,000 tons June 12; minimum daily, 4,330 tons Feb. 10.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	TURBID- ITY LAB HACH 2100AN (NTU) (99872)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, SOLVED SATUR- ATION (MG/L) (00301)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	HARD- NESS TOTAL AS (MG/L CACO3) (00900)	CALCIUM DIS- SOLVED AS (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED AS (MG/L AS MG) (00925)
OCT													
16...	1130	--	842	8.5	13.5	11.0	21	9.7	10	746	260	60.7	25.0
DEC													
05...	1300	20900	830	8.4	6.5	9.5	47	11.2	12	734	290	70.7	27.1
JAN													
17...	1130	16700	874	8.3	1.5	1.0	13	13.1	100	741	290	70.6	27.2
FEB													
11...	1330	16700	816	8.1	2.5	6.0	16	12.8	100	731	280	68.9	25.3
MAR													
27...	1100	28500	749	8.2	3.0	6.5	30	13.1	100	744	250	61.3	22.4
APR													
12...	1030	29500	768	8.3	11.0	17.5	31	10.3	100	741	250	61.1	23.7
24...	1200	28600	791	8.5	13.0	11.5	31	10.2	100	734	270	65.6	25.9
MAY													
07...	1130	28400	802	8.6	15.5	16.5	33	9.6	100	735	280	69.3	26.9
13...	1030	33500	713	8.3	12.0	14.5	290	8.9	100	741	240	59.5	22.7
JUN													
04...	1100	28400	780	8.5	23.0	19.5	120	7.3	100	735	260	62.5	24.6
12...	1300	41500	689	8.1	18.5	22.0	--	5.2	100	--	220	55.3	20.7
JUL													
02...	0930	28800	782	8.5	27.0	24.5	38	7.7	100	737	250	60.1	24.5
15...	1100	27500	788	8.5	26.0	23.0	41	7.8	100	738	230	57.0	22.3
AUG													
12...	1100	28200	779	8.6	26.5	25.5	22	8.0	100	732	250	60.0	23.7
SEP													
10...	1100	31900	770	8.5	25.0	19.5	25	7.9	100	739	240	56.0	23.3

MISSOURI RIVER BASIN

06610000 MISSOURI RIVER AT OMAHA, NE--Continued
(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
OCT													
16...	73.9	2	6.33	163	2	195	235	14.5	.5	8.36	564	.77	.36
DEC													
05...	59.3	2	5.82	190	0	232	197	17.0	.5	10.4	552	.75	1.28
JAN													
17...	63.5	2	5.81	195	0	238	212	16.6	.5	11.5	568	.77	1.31
FEB													
11...	61.2	2	5.18	197	2	236	195	18.3	.6	12.6	534	.73	E1.16
MAR													
27...	56.1	2	4.96	169	1	204	188	13.6	.5	11.6	484	.66	1.02
APR													
12...	61.2	2	5.54	165	2	198	198	13.2	.4	9.15	497	.68	.72
24...	62.9	2	5.10	178	2	212	204	15.2	.6	7.14	522	.71	.62
MAY													
07...	60.2	2	5.27	176	3	209	205	15.3	.4	6.94	525	.71	1.12
13...	47.7	1	5.17	160	1	192	171	12.3	.4	8.29	457	.62	1.71
JUN													
04...	63.4	2	5.31	165	2	197	205	15.0	.5	5.27	509	.69	.84
12...	49.4	1	5.98	150	1	181	160	12.9	.6	7.14	437	.59	1.70
JUL													
02...	68.6	2	5.27	156	3	184	209	14.0	.4	7.18	517	.70	.12
15...	66.6	2	5.87	162	3	191	211	13.5	.5	6.46	517	.70	.33
AUG													
12...	71.9	2	5.48	154	3	181	212	13.4	.5	6.08	514	.70	.09
SEP													
10...	71.2	2	5.48	--	--	--	206	12.3	.6	7.53	509	.69	.08

Date	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SEDI- MENT, SIEVE DIAM. % FINER THAN (T/DAY) .062 MM (80155)	SED. SUSP. DIAM. % FINER THAN (70331)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)
OCT													
16...	E.006	<.04	.55	.031	.036	.172	221	--	27	2.3	<10	53.6	2.8
DEC													
05...	.009	.29	1.1	.047	.060	.39	327	18500	61	2.0	<10	48.0	2.5
JAN													
17...	.011	.20	.78	.064	.071	.167	122	5500	43	2.2	<10	44.1	3.0
FEB													
11...	E.007	E.14	.48	.039	.048	.117	106	4780	50	1.9	<10	43.8	3.0
MAR													
27...	.011	.06	.44	.037	.044	.20	218	16800	34	2.3	<10	44.1	3.0
APR													
12...	.009	E.02	.63	.049	.060	.23	240	19100	32	2.2	<10	40.9	2.1
24...	.008	<.04	.69	.020	.028	.185	232	17900	27	2.4	<10	45.2	2.1
MAY													
07...	.008	<.04	.69	.014	.021	.169	183	14000	39	2.4	<10	48.9	2.8
13...	.024	.11	2.1	.054	.064	.74	799	72300	80	2.4	<10	36.4	2.5
JUN													
04...	.009	<.04	1.2	.025	.035	.32	318	24400	73	2.3	<10	48.9	3.4
12...	.072	.07	4.9	.086	.098	2.33	2150	241000	95	2.9	<10	47.0	3.0
JUL													
02...	.008	<.04	.65	.008	.015	.150	166	12900	47	2.5	<10	49.2	2.8
15...	.009	<.04	.66	.019	.025	.153	162	12000	54	2.5	<10	50.1	2.6
AUG													
12...	.008	<.04	.65	.015	.022	.162	373	28400	19	2.4	<10	45.3	2.2
SEP													
10...	.009	<.04	.54	.018	.025	.153	155	13400	41	2.5	<10	47.7	1.7

MISSOURI RIVER BASIN

06610000 MISSOURI RIVER AT OMAHA, NE--Continued
(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	CARBON, ORGANIC ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	FONOFOS WATER DISS REC (UG/L) (04095)
OCT													
16...	549	2.5	E.010	8.4	.28	3.8	--	<.010	<.002	<.011	<.01	<.018	<.003
DEC													
05...	576	2.2	E.007	8.0	.61	3.7	7.2	<.010	<.002	<.011	M	<.018	<.003
JAN													
17...	586	4.2	E.007	8.1	.59	3.5	1.5	<.010	<.002	<.005	M	<.018	<.003
FEB													
11...	559	1.9	<.010	8.2	.39	3.0	1.5	<.010	<.002	<.005	M	<.018	<.003
MAR													
27...	488	.7	E.004	8.1	.29	3.2	1.8	<.010	<.002	<.005	M	<.018	<.003
APR													
12...	502	3.6	E.004	8.2	.30	4.0	3.2	<.010	<.002	<.005	M	<.018	<.003
24...	518	3.0	E.005	8.4	.27	3.5	4.0	<.010	<.002	<.005	E.01	<.018	<.003
MAY													
07...	527	4.7	E.014	8.4	.29	3.3	2.7	<.010	<.002	<.005	E.01	<.018	<.003
13...	463	3.9	E.067	7.9	.56	3.9	11.1	<.010	<.002	.010	E.01	.040	<.003
JUN													
04...	502	4.8	E.031	8.3	.23	3.4	7.4	<.010	<.002	.005	M	E.005	<.003
12...	411	3.8	E.222	8.0	.43	4.2	36.2	<.010	<.002	.030	E.01	<.018	<.003
JUL													
02...	541	3.2	E.012	8.1	.19	3.1	3.6	<.010	<.002	<.005	E.01	<.018	<.003
15...	525	3.2	E.014	8.3	.24	3.0	2.8	<.010	<.002	<.005	E.01	E.005	<.003
AUG													
12...	511	3.9	E.012	8.5	.23	3.3	3.7	<.010	<.002	E.003	E.01	<.018	<.003
SEP													
10...	520	5.2	E.009	8.4	.23	3.2	2.3	<.010	<.002	<.005	E.01	<.018	<.003
Date	ALKA- LINITY WAT. DIS FET LAB CACO3 (MG/L) (29801)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	P, P' DDE DISSOLV (UG/L) (34653)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	LINDANE DIS- SOLVED (UG/L) (39341)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	MALA- THION, DIS- SOLVED (UG/L) (39532)	PARA- THION, DIS- SOLVED (UG/L) (39542)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)
OCT													
16...	174	<.005	<.003	<.005	<.004	<.005	E.007	<.027	<.007	<.005	.057	<.002	<.004
DEC													
05...	212	<.005	<.003	<.005	<.004	<.005	E.012	<.027	<.007	<.005	.026	<.002	.011
JAN													
17...	217	<.005	<.003	<.005	<.004	<.005	E.005	<.027	<.010	<.005	.023	<.004	.009
FEB													
11...	202	<.005	<.003	<.005	<.004	<.005	E.005	<.027	<.010	<.005	.025	<.004	<.006
MAR													
27...	178	<.005	<.003	<.005	<.004	<.005	E.009	<.027	<.010	<.005	.021	<.004	<.006
APR													
12...	174	<.005	<.003	<.005	<.004	<.005	.016	<.027	<.010	<.005	.029	<.004	<.006
24...	187	<.005	<.003	<.005	<.004	<.005	.030	<.027	<.010	<.005	.084	<.004	.108
MAY													
07...	190	<.005	<.003	<.005	<.004	<.005	.039	<.027	<.010	<.005	.082	<.004	.078
13...	168	<.005	<.003	E.004	<.004	<.005	1.58	<.027	<.010	E.005	4.11	.007	3.75
JUN													
04...	174	<.005	<.003	<.005	<.004	<.005	.105	<.027	<.010	<.005	.636	<.004	.121
12...	164	<.005	<.003	.005	<.004	<.005	2.00	<.027	<.010	<.005	7.16	.063	.713
JUL													
02...	171	<.005	<.003	<.005	<.004	<.005	.014	<.027	<.010	<.005	.091	<.004	.008
15...	171	<.005	<.003	<.005	<.004	<.005	.018	<.027	<.010	<.005	.134	<.004	.011
AUG													
12...	168	<.005	<.003	<.005	<.004	<.005	.014	<.027	<.010	E.003	.050	<.004	.008
SEP													
10...	168	<.005	<.003	<.005	<.004	<.005	E.007	<.027	<.010	<.005	.028	<.004	<.006

06610000 MISSOURI RIVER AT OMAHA, NE--Continued
(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL PARA- THON WAT FLT 0.7 U GF, REC (UG/L) (82667)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)
OCT													
16...	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006	<.002	<.002	<.02	<.002	<.005
DEC													
05...	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006	<.015	<.002	<.02	<.002	<.005
JAN													
17...	<.006	<.006	<.009	<.009	<.011	<.034	<.035	<.006	.005	<.004	<.02	<.002	<.005
FEB													
11...	<.006	<.006	<.009	<.009	<.011	<.034	<.035	<.006	.004	<.004	<.02	<.002	<.005
MAR													
27...	<.006	<.006	<.009	<.009	<.011	<.034	<.035	<.006	E.001	<.004	<.02	<.002	<.005
APR													
12...	<.006	<.006	<.009	<.009	<.011	<.034	<.035	<.006	<.002	<.004	M	<.002	<.005
24...	<.006	<.006	<.009	<.009	<.011	<.034	<.035	<.006	<.002	<.004	<.02	<.002	<.005
MAY													
07...	<.006	<.006	<.009	<.009	<.011	<.034	<.035	<.006	.005	<.004	<.02	<.002	<.005
13...	.014	<.006	E.004	<.009	<.011	<.034	<.035	<.006	.013	<.004	<.02	<.002	<.005
JUN													
04...	<.006	<.006	E.004	<.009	<.011	<.034	<.035	<.006	E.002	<.004	<.02	<.002	<.005
12...	.011	<.006	.022	<.009	<.011	<.034	<.035	<.006	<.002	<.004	<.02	<.002	<.005
JUL													
02...	<.006	<.006	<.009	<.009	<.011	<.034	<.035	<.006	<.002	<.004	<.02	<.002	<.005
15...	<.006	<.006	<.009	<.009	<.011	<.034	<.035	<.006	<.002	<.004	<.02	<.002	<.005
AUG													
12...	<.006	<.006	<.009	<.009	<.011	<.034	<.035	<.006	<.002	<.004	<.02	<.002	<.005
SEP													
10...	<.006	<.006	<.009	<.009	<.011	<.034	<.035	<.006	<.002	<.004	<.02	<.002	<.005
Date	BEN- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82673)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)
OCT													
16...	<.010	<.020	<.02	<.004	<.02	<.002	<.011	<.041	<.005	<.003	<.010	<.007	<.02
DEC													
05...	<.010	<.020	<.02	<.004	<.02	<.002	<.011	<.041	<.005	<.003	<.010	<.007	<.02
JAN													
17...	<.010	<.020	<.02	<.004	<.02	<.002	<.011	<.041	<.005	<.003	<.022	<.007	<.02
FEB													
11...	<.010	<.020	<.02	<.004	<.02	<.002	<.011	<.041	<.005	<.003	<.022	<.007	<.02
MAR													
27...	<.010	<.020	<.02	<.004	<.02	<.002	<.011	<.041	<.005	<.003	<.022	<.007	<.02
APR													
12...	<.010	<.020	<.02	<.004	<.02	<.002	<.011	<.041	<.005	<.003	<.022	<.007	<.02
24...	<.010	<.020	<.02	<.004	<.02	<.002	<.011	<.041	<.005	<.003	<.022	<.007	<.02
MAY													
07...	<.010	E.012	<.02	<.004	<.02	<.002	<.011	<.041	<.005	<.003	<.022	<.007	<.02
13...	<.010	<.020	<.02	<.004	<.02	<.002	<.011	<.041	<.005	<.003	E.015	<.007	<.02
JUN													
04...	<.010	<.020	<.02	<.004	<.02	<.002	<.011	<.041	<.005	<.003	<.022	<.007	<.02
12...	<.010	E.117	<.02	<.004	<.02	<.002	<.011	<.041	<.005	<.003	E.017	<.007	<.02
JUL													
02...	<.010	<.020	<.02	<.004	<.02	<.002	<.011	<.041	<.005	<.003	<.022	<.007	<.02
15...	<.010	<.020	<.02	<.004	<.02	<.002	<.011	<.041	<.005	<.003	<.022	<.007	<.02
AUG													
12...	<.010	<.020	<.02	<.004	<.02	<.002	<.011	<.041	<.005	<.003	<.022	<.007	<.02
SEP													
10...	<.010	<.020	<.02	<.004	<.02	<.002	<.011	<.041	<.005	<.003	<.022	<.007	<.02

MISSOURI RIVER BASIN

06610000 MISSOURI RIVER AT OMAHA, NE--Continued
(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	DIAZ- INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (91065)	BORON, DIS- SOLVED (UG/L AS B) (01020)
OCT						
16...	<.050	<.006	821	117	85.4	116
DEC						
05...	<.050	<.006	825	97.1	92.6	112
JAN						
17...	<.050	<.006	836	100	93.8	134
FEB						
11...	<.050	<.006	809	109	102	108
MAR						
27...	<.050	<.006	748	105	96.3	100
APR						
12...	<.050	<.006	755	110	93.6	100
24...	<.050	<.006	750	104	95.3	110
MAY						
07...	<.050	<.006	781	117	99.0	107
13...	<.050	<.006	680	116	106	95
JUN						
04...	<.050	<.006	737	125	95.3	116
12...	<.050	<.006	667	118	90.2	119
JUL						
02...	<.050	<.006	762	101	94.4	105
15...	<.050	<.006	747	130	102	120
AUG						
12...	<.050	<.006	754	112	99.0	109
SEP						
10...	<.050	<.006	724	93.7	97.3	170

Date	Time	NUMBER OF SAM- PLING POINTS (COUNT) (00063)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)
OCT											
10...	1255	3	--	0	19	93	99	100	--	--	--
NOV											
06...	1400	3	--	0	23	87	97	99	99	100	--
DEC											
05...	1245	3	--	0	18	83	96	99	100	--	--
JAN											
07...	1600	3	--	0	26	96	99	100	--	--	--
FEB											
11...	1320	3	--	0	27	92	99	100	--	--	--
MAR											
07...	1415	3	--	0	23	93	99	99	100	--	--
APR											
09...	1230	3	--	0	24	96	99	100	--	--	--
MAY											
03...	1100	3	--	0	22	95	99	99	99	100	--
JUN											
04...	1040	3	--	0	21	90	97	98	98	98	100
07...	1000	3	--	0	15	56	71	89	97	100	--
JUL											
05...	0745	3	--	0	19	91	98	100	--	--	--
AUG											
02...	1030	3	0	1	29	93	99	100	--	--	--

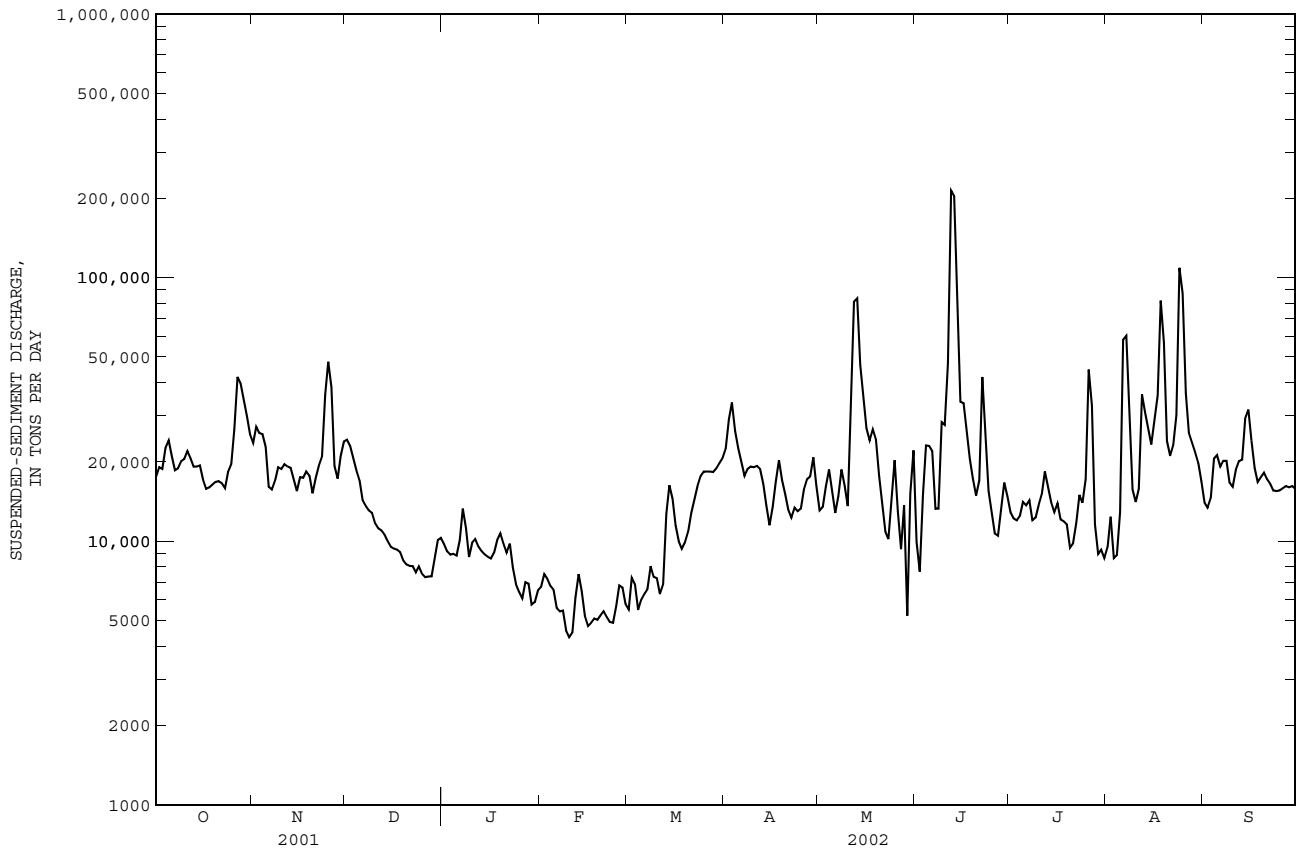
MISSOURI RIVER BASIN

06610000 MISSOURI RIVER AT OMAHA, NE--Continued
(National stream-quality accounting network station)

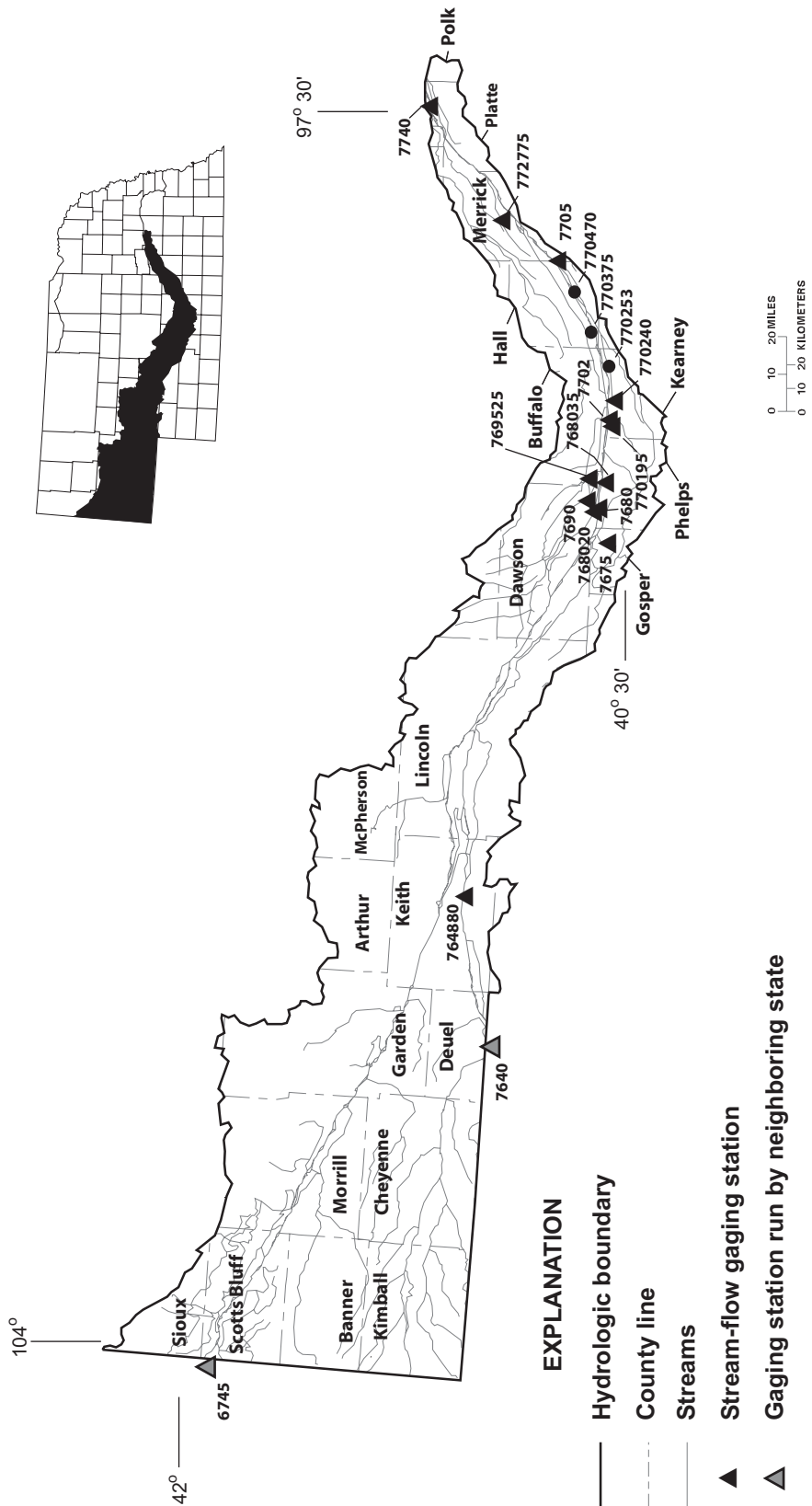
SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MEAN CONCENTRATION (MG/L)		LOAD (TONS/DAY)		MEAN CONCENTRATION (MG/L)		LOAD (TONS/DAY)		MEAN CONCENTRATION (MG/L)		LOAD (TONS/DAY)		MEAN CONCENTRATION (MG/L)		LOAD (TONS/DAY)		MEAN CONCENTRATION (MG/L)		LOAD (TONS/DAY)					
	CONCENTRATION (MG/L)	LOAD (TONS/DAY)	CONCENTRATION (MG/L)	LOAD (TONS/DAY)	CONCENTRATION (MG/L)	LOAD (TONS/DAY)	CONCENTRATION (MG/L)	LOAD (TONS/DAY)	CONCENTRATION (MG/L)	LOAD (TONS/DAY)	CONCENTRATION (MG/L)	LOAD (TONS/DAY)	CONCENTRATION (MG/L)	LOAD (TONS/DAY)	CONCENTRATION (MG/L)	LOAD (TONS/DAY)	CONCENTRATION (MG/L)	LOAD (TONS/DAY)	CONCENTRATION (MG/L)	LOAD (TONS/DAY)				
	OCTOBER				NOVEMBER				DECEMBER				JANUARY				FEBRUARY				MARCH			
1	212	17500	275	23600	337	24300	205	9760	153	6710	119	5510												
2	227	19100	315	27200	329	23000	195	9170	164	7510	145	7270												
3	225	18800	300	25700	319	20600	189	8900	157	7220	142	6860												
4	268	22600	299	25500	314	18600	191	8960	149	6770	117	5490												
5	289	24100	269	22800	304	17000	188	8830	145	6550	122	5990												
6	258	21100	191	16100	263	14300	209	10100	127	5580	127	6310												
7	229	18600	186	15700	252	13600	259	13300	124	5420	128	6580												
8	234	18900	200	17000	249	13100	234	11200	123	5460	167	8040												
9	246	20100	224	19100	244	12800	191	8720	105	4580	159	7330												
10	249	20500	221	18800	224	11700	212	9890	98	4330	160	7240												
11	265	22000	228	19600	217	11200	219	10200	99	4510	146	6300												
12	251	20700	226	19200	215	11000	207	9540	130	6110	163	6850												
13	236	19200	223	19000	210	10600	202	9160	156	7490	273	12700												
14	237	19200	200	17100	199	10000	197	8910	138	6480	323	16300												
15	239	19400	180	15500	191	9530	193	8730	117	5210	297	14500												
16	213	17100	203	17500	191	9370	190	8600	107	4770	242	11500												
17	196	15800	200	17400	191	9300	202	9070	109	4900	212	10000												
18	196	16000	211	18400	187	9090	222	10100	113	5090	201	9360												
19	199	16400	205	17700	174	8440	232	10700	111	5030	210	9910												
20	203	16800	176	15200	170	8160	217	9810	114	5230	224	10900												
21	205	16900	202	17400	169	8060	205	9050	116	5420	238	12800												
22	199	16600	226	19300	170	8050	220	9790	111	5150	241	14500												
23	191	15900	246	20900	163	7620	181	7940	108	4940	240	16200												
24	218	18300	413	36000	171	8030	156	6850	106	4900	240	17700												
25	234	19600	536	48000	165	7520	148	6430	119	5680	240	18400												
26	315	26600	442	38400	163	7310	143	6080	139	6800	240	18400												
27	496	42000	252	19300	165	7350	162	6990	136	6670	239	18400												
28	472	39800	229	17300	165	7360	161	6900	124	5780	240	18300												
29	411	34500	275	21100	186	8570	137	5750	---	---	247	18900												
30	353	29800	323	23900	211	10100	139	5880	---	---	257	19800												
31	303	25500	---	---	214	10300	151	6510	---	---	267	20700												
TOTAL	---	669400	---	649700	---	355960	---	271820	---	160290	---	369040												
DAY	MEAN CONCENTRATION (MG/L)		LOAD (TONS/DAY)		MEAN CONCENTRATION (MG/L)		LOAD (TONS/DAY)		MEAN CONCENTRATION (MG/L)		LOAD (TONS/DAY)		MEAN CONCENTRATION (MG/L)		LOAD (TONS/DAY)		MEAN CONCENTRATION (MG/L)		LOAD (TONS/DAY)					
	APRIL				MAY				JUNE				JULY				AUGUST				SEPTEMBER			
1	285	22400	169	13100	131	9940	164	12900	131	9500	166	14000												
2	356	29000	175	13500	102	7670	157	12200	171	12400	159	13400												
3	402	33600	204	16100	197	15000	155	12000	119	8630	171	14600												
4	319	26200	239	18700	301	23100	163	12500	121	8860	239	20600												
5	286	22600	203	15600	298	23000	183	14100	169	12900	246	21200												
6	258	20100	168	12800	285	22000	179	13700	673	58100	223	19200												
7	230	17700	192	14800	175	13300	188	14300	710	60200	233	20200												
8	240	18800	243	18700	175	13300	160	12000	426	34100	234	20200												
9	245	19200	213	16200	357	28300	164	12300	203	15700	193	16700												
10	245	19100	179	13600	352	27600	184	13700	185	14100	186	16100												
11	245	19300	343	26900	568	47200	196	15100	206	15800	213	18700												
12	239	18800	906	81100	1960	214000	227	18400	467	36000	229	20100												
13	210	16500	927	83500	1880	204000	210	16000	405	30900	230	20400												
14	179	13700	557	46700	729	65900	189	14100	352	26800	330	29200												
15	153	11500	423	34300	396	33800	174	12900	309	23300	352	31600												
16	176	13500	338	26800	389	33400	188	13900	386	28600	273	24100												
17	217	16800	308	24100	310	26500	165	12100	441	35700	224	19000												
18	257	20300	337	26600	242	20500	163	11900	853	81800	198	16800												
19	217	17100	311	24400	208	17300	158	11600	609	56700	203	17500												
20	195	15100	231	17700	182	14900	130	9450	270	24000	209	18200												
21	172	13200	185	14000	207	17000	135	9820	238	21100	205	17200												
22	159	12300	145	10900	490	42000	161	11700	256	23100	200	16500												
23	171	13400	136	10200	298	24300	202	15000	306	30100	195	15600												
24	169	13000	193	14700	195	15500	191	14000	1020	109000	195	15500												
25	173	13300	262	20300	163	12900	233	17200	834	87100	195	15600												
26	203	15700	172	13000	136	10700	577	44800	377	36400	194	15900												
27	221	17200	124	9330	133	10500	418	32700	281	25800	194	16200												
28	226	17600	180	13700	164	13100	156	11600	263	23700	191	16000												
29	259	20800	69	5220	211	16700	122	8950	246	21800	189	16200												
30	204	16200	186	15200	188	14800	127	9290	226	19800	179	15800												
31	---	---	273	22100	---	---	118	8630	197	16900	---	---												
TOTAL	---	544000	---	693850	---	1038210	---	448840	---	1008890	---	552300												
YEAR	6762300																							

06610000 MISSOURI RIVER AT OMAHA, NE--Continued
(National stream-quality accounting network station)



SURFACE-WATER DISCHARGE RECORDS
 PLATTE RIVER BASIN
 NORTH-SOUTH-MIDDLE PLATTE



NOTE: To change abbreviated station number to complete station number, prefix with "06" and add zero's required to give eight digits.

SURFACE-WATER DISCHARGE RECORDS
 PLATTE RIVER BASIN
 NORTH-SOUTH-MIDDLE PLATTE

*Station number	Station name	Page
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7640	South Platte River at Julesburg, CO.....	92
764880	South Platte River at Roscoe.....	94
7675	Plum Creek near Smithfield.....	96
7680	Platte River near Overton.....	98
768020	Spring Creek near Overton.....	102
768035	Platte River Middle Channel at Cottonwood Ranch, near Elm Creek.....	104
7690	Buffalo Creek near Overton.....	106
769525	Elm Creek near Elm Creek.....	108
770195	North Dry Creek 2 mi SW of Platte River bridge S of Kearney.....	110
7702	Platte River near Kearney.....	112
770240	Fort Kearney Slough near Newark.....	114
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* NOTE: To change abbreviated station number to complete station number, prefix with "06" and add zeros required to give eight digits.

PLATTE RIVER BASIN

06674500 NORTH PLATTE RIVER AT WYOMING-NEBRASKA STATE LINE

LOCATION.--Lat 41°59'19", long 104°03'10", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.3, T.23 N., R.60 W., Goshen County, Hydrologic Unit 10180009, on right bank 2000 ft upstream from bridge on NE State Highway 86, 250 ft upstream from Wyoming-Nebraska State line, and 0.7 mi southeast of Henry, NE.

DRAINAGE AREA.--22,218 mi², of which 1,929 mi² probably is non-contributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1929 to current year.

REVISED RECORDS.--WDR WY-76-1: Drainage area.

GAGE.--Water-stage recorder. Sheet-piling control since March 9, 1994. Datum of gage is 4,025 ft above NGVD of 1929, from topographic map. Prior to November 6, 1929, non-recording gage and November 6, 1929, to September 30, 1959, water-stage recorder at site 0.2 mi upstream at different datum. October 7, 1959 to February 22, 1972 water-stage recorder at site 0.2 mi upstream at different datum. February 22, 1972 to March 9, 1994, water-stage recorder at site 0.3 mi downstream at different datum. U.S. Army Corps of Engineers data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, transbasin diversions, power development, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. Gering-Mitchell Canal diverts from right bank 0.5 mi upstream. Records provided by the U.S. Geological Survey, Wyoming District.

COOPERATION.--Six discharge measurements provided by Wyoming State Engineer's Office, fourteen discharge measurements provided by U.S. Bureau of Reclamation and eleven discharge measurements provided by Nebraska Department of Natural Resources.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	474	308	244	e215	e185	e175	177	5.1	108	1520	644	358
2	456	304	243	e215	185	e175	176	5.8	136	1580	647	334
3	437	301	243	e215	187	e175	177	5.5	148	1710	706	311
4	422	297	243	217	185	177	181	5.0	178	1800	756	300
5	432	293	243	217	183	178	182	3.8	425	1730	786	284
6	418	300	242	217	184	178	182	3.0	619	1690	1120	276
7	406	299	238	217	182	175	179	3.0	746	1650	870	268
8	395	293	237	216	183	179	179	2.9	799	1590	762	265
9	389	293	237	217	184	180	176	2.3	681	1590	710	269
10	405	293	237	217	e180	174	170	1.2	551	1600	684	263
11	382	288	236	217	179	176	167	1.2	508	1610	628	256
12	376	286	231	216	181	176	163	1.2	521	1570	499	330
13	370	286	231	211	181	174	163	1.2	699	1470	450	285
14	364	284	227	211	181	186	165	0.0	1030	1200	425	264
15	362	278	230	202	180	183	70	0.0	1120	791	460	254
16	352	276	229	e200	176	178	22	0.0	1160	727	514	247
17	348	271	224	e200	175	176	19	0.0	1180	677	466	243
18	343	272	226	193	175	175	18	0.0	1190	660	471	109
19	343	271	227	e190	175	175	17	0.0	1200	706	439	25
20	340	271	223	191	174	175	17	0.0	1280	784	449	22
21	334	271	224	e190	171	175	16	0.0	1360	868	493	19
22	332	271	225	190	170	175	15	0.0	1420	886	410	19
23	330	268	e220	191	170	175	13	0.0	1460	838	366	18
24	322	264	218	e190	170	175	9.1	0.0	1410	793	360	18
25	316	260	218	182	174	172	7.1	0.0	1370	801	367	21
26	316	264	218	187	175	174	6.5	0.0	1330	866	338	52
27	315	258	217	193	179	175	6.1	0.0	1290	907	355	151
28	308	253	212	190	176	172	5.9	52	1350	906	429	556
29	302	e250	e210	193	---	170	5.4	93	1440	907	450	730
30	313	248	214	185	---	173	4.6	95	1470	852	448	835
31	311	---	e215	e185	---	175	---	98	---	700	396	---
TOTAL	11313	8371	7082	6270	5000	5451	2688.7	379.2	28179	35975	16898	7382
MEAN	364.9	279.0	228.5	202.3	178.6	175.8	89.62	12.23	939.3	1160	545.1	246.1
MAX	474	308	244	217	187	186	182	98	1470	1800	1120	835
MIN	302	248	210	182	170	170	4.6	0.00	108	660	338	18
AC-FT	22440	16600	14050	12440	9920	10810	5330	752	55890	71360	33520	14640

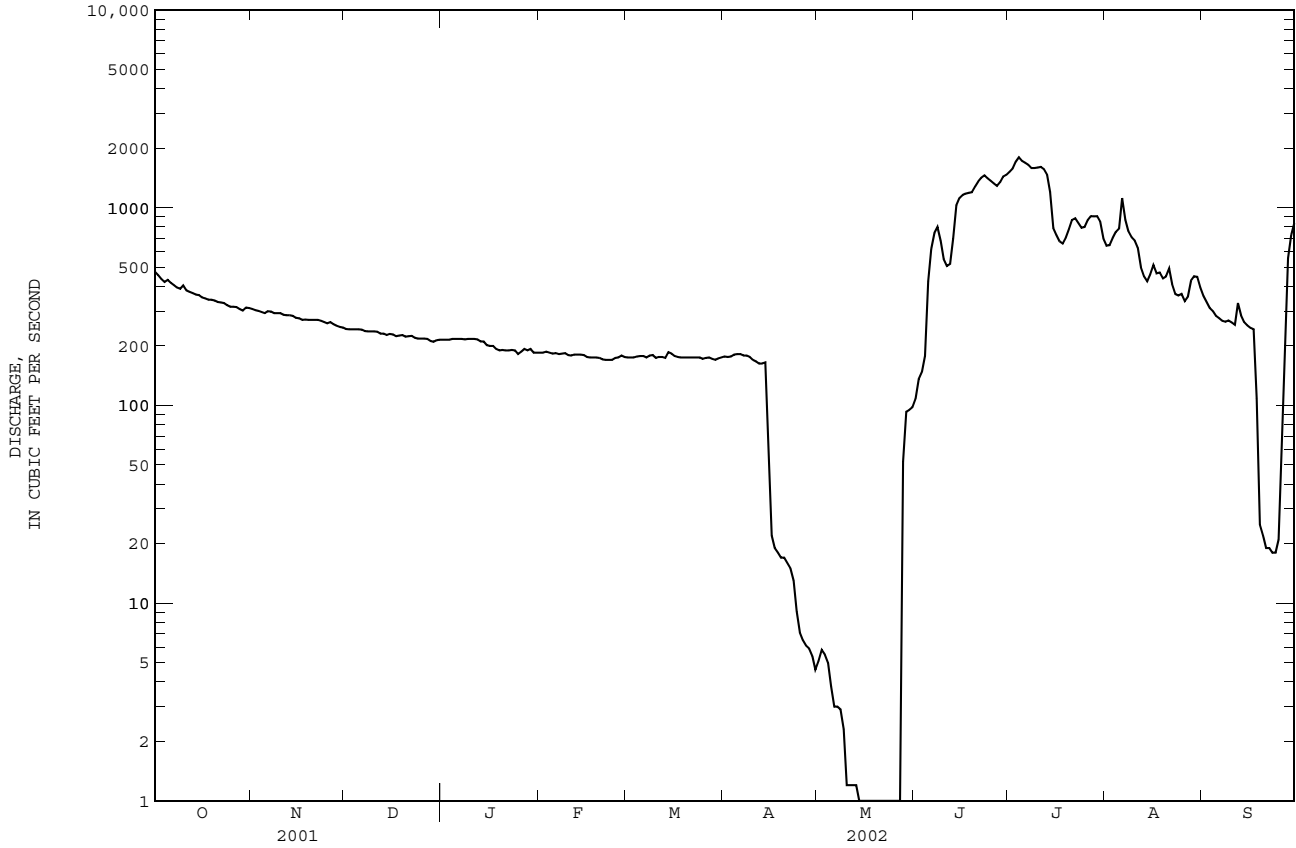
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2002, BY WATER YEAR (WY)

	503.1	418.0	369.3	327.1	331.7	500.1	653.8	1176	1671	1546	1259	855.1
MEAN	503.1	418.0	369.3	327.1	331.7	500.1	653.8	1176	1671	1546	1259	855.1
MAX	1666	1454	895	751	1063	4202	4407	7226	10360	7170	5751	4766
(WY)	1987	1987	1930	1930	1984	1974	1974	1971	1929	1983	1983	1983
MIN	150	174	191	166	148	141	89.6	12.2	49.1	611	154	230
(WY)	1957	1935	1991	1993	1993	1991	2002	2002	1992	1934	1934	1934

06674500 NORTH PLATTE RIVER AT WYOMING-NEBRASKA STATE LINE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1929 - 2002	
ANNUAL TOTAL	192056		134988.9		--	
ANNUAL MEAN	526.2		369.8		785.1	
HIGHEST ANNUAL MEAN	--		--		2863 1984	
LOWEST ANNUAL MEAN	--		--		370 2002	
HIGHEST DAILY MEAN	2540	Jul 10	1800	Jul 4	17600	Jun 2 1929
LOWEST DAILY MEAN	159	Apr 16	0.00	May 14-27	0.00	May 14-27 2002
ANNUAL SEVEN-DAY MINIMUM	162	Feb 23	0.00	May 14	0.00	May 14 2002
MAXIMUM PEAK FLOW	--		1870	Jul 4	17900 ^a	Jun 2 1929
MAXIMUM PEAK STAGE	--		3.52	Jul 4	7.04 ^b	Jun 2 1929
ANNUAL RUNOFF (AC-FT)	380900		267800		568700	
10 PERCENT EXCEEDS	1360		876		1460	
50 PERCENT EXCEEDS	293		230		481	
90 PERCENT EXCEEDS	170		16		204	

a Maximum observed.
 b Site and datum then in use.
 e Estimated.



06674500 NORTH PLATTE RIVER AT WYOMING-NEBRASKA STATE LINE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BAROMETRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATURATION) (00301)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	HARDNESS TOTAL AS (MG/L CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	
NOV 30...	1055	248	653	14.2	125	8.0	942	8.0	3.5	--	--	--	--	
FEB 06...	1530	193	661	10.9	101	7.9	917	10.5	6.0	--	--	--	--	
MAY 17...	1240	2.8	666	6.6	73	7.7	799	10.5	13.5	--	--	--	--	
30...	1150	82	660	8.6	111	8.1	837	18.5	20.5	--	--	--	--	
AUG 27...	1045	337	665	9.3	114	8.1	829	24.0	18.5	250	68.6	19.0	5.78	
Date		SODIUM ADSORPTION RATIO (00931)	ALKALINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	
NOV 30...	--	--	--	--	--	--	--	--	--	.05	--	2.50	.022	
FEB 06...	--	--	--	--	--	--	--	--	--	.14	--	2.59	.030	
MAY 17...	--	--	--	--	--	--	--	--	--	<.04	--	.21	E.004	
30...	--	--	--	--	--	--	--	--	--	<.04	--	.90	.018	
AUG 27...	2	63.8	208	15.4	16.8	191	.69	465	511	<.04	.27	1.24	.011	
Date		PHOSPHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOSPHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	2,6-DIETHYL ANILINE WAT FLT (0.7 U GF, REC) (UG/L) (82660)	ACETOCHLOR, WATER FLTRD REC (UG/L) (49260)	ALACHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRAZINE, WATER, DISS, REC (UG/L) (39632)	BENFLURALIN WAT FLD (0.7 U GF, REC) (UG/L) (82673)	BUTYLATE, WATER, DISS, REC (UG/L) (04028)	CARBARYL WATER FLTRD (0.7 U GF, REC) (UG/L) (82680)	CARBON FURAN WATER FLTRD (0.7 U GF, REC) (UG/L) (82674)
NOV 30...	--	<.02	--	--	--	--	--	--	--	--	--	--	--	--
FEB 06...	--	.03	--	--	--	--	--	--	--	--	--	--	--	--
MAY 17...	--	<.02	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	<.02	--	--	--	--	--	--	--	--	--	--	--	--
AUG 27...	<.06	E.01	<.06	<10	<.006	<.006	<.004	<.005	.012	<.010	<.002	<.041	<.020	
Date		CHLOROPYRIFOS DIS-SOLVED (UG/L) (38933)	CYANAZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD (0.7 U GF, REC) (UG/L) (82682)	DEETHYL ATRAZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISULFOTON WATER FLTRD (0.7 U GF, REC) (UG/L) (82677)	EPTC WATER FLTRD (0.7 U GF, REC) (UG/L) (82668)	ETHALFLURALIN WAT FLT (0.7 U GF, REC) (UG/L) (82663)	ETHOPROP ALIN WATER FLTRD (0.7 U GF, REC) (UG/L) (82672)	FONOFOS WATER DISS, REC (UG/L) (04095)	LINDANE DIS-SOLVED (UG/L) (39341)	LINURON WATER FLTRD (0.7 U GF, REC) (UG/L) (82666)
NOV 30...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 06...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 17...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 27...	<.005	<.018	<.003	E.009	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	

06674500 NORTH PLATTE RIVER AT WYOMING-NEBRASKA STATE LINE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (39532)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P, P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	
NOV 30...	--	--	--	--	--	--	--	--	--	--	--	--	
FEB 06...	--	--	--	--	--	--	--	--	--	--	--	--	
MAY 17...	--	--	--	--	--	--	--	--	--	--	--	--	
MAY 30...	--	--	--	--	--	--	--	--	--	--	--	--	
AUG 27...	<.027	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006	<.011

Date	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	SEDI- MENT, SUS- PENDE (MG/L) (80154)
NOV 30...	--	--	--	--	--	--	--	--	--	--	--	--	54
FEB 06...	--	--	--	--	--	--	--	--	--	--	--	--	20
MAY 17...	--	--	--	--	--	--	--	--	--	--	--	--	2.0
MAY 30...	--	--	--	--	--	--	--	--	--	--	--	--	16
AUG 27...	E.01	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	<.005	<.002	<.009	28

Date

SEDI-
MENT,
DIS-
CHARGE,
SUS-
PENDE
(T/DAY)
(80155)

NOV
30... 36.2

FEB
06... 10.4

MAY
17... .02

MAY
30... 3.5

AUG
27... 25.5

E -- Estimated value

WATER YEAR 2001 REVISED DATA

PLATTE RIVER BASIN

06764000 SOUTH PLATTE RIVER AT JULESBURG, CO

LOCATION.--Lat 40°58'46", long 102°15'15", in NW¹/₄NE¹/₄ and NE¹/₄SE¹/₄ (two channels) sec.33, T.12 N., R.44 W., Sedgwick County, Hydrologic Unit 10190018, on left bank of channel 4 (left channel) 215 ft downstream from bridge, on right bank of channel 2, 5 ft downstream from bridge on U.S. Highway 385, and on left bank of channel 1, 5 ft upstream from bridge on U.S. Highway 385, 0.9 mi southeast of Julesburg, 3.0 mi upstream from Colorado-Nebraska State line, and 8 mi downstream from Lodgepole Creek.

DRAINAGE AREA.--23,193 mi².

PERIOD OF RECORD.--April 1902 to current year. Monthly discharge only for some periods, published in WSP 1310. Published as "near Julesburg" 1903-8, 1915-16, and as "at Ovid" 1922-24.

REVISED RECORDS.--WSP 1310: 1902, 1906-7, 1948(P). WSP 1440: 1903-4. WDR CO-86-1: Drainage area.

GAGE.--Three water-stage recorders with satellite telemetry. Datum of gages is 3,446.76 ft above sea level. See WSP 1710 or 1730 for history of changes prior to Oct. 1, 1956. Since Oct. 1, 1956, water-stage recorders on channels nos. 2 and 4. Channel no. 2: Oct. 1, 1956 to Sept. 22, 1965, at site 300 ft downstream at present datum. Channel no. 4: Oct. 1, 1956 to Dec. 10, 1958, at site 135 ft downstream at present datum. Since May 11, 1973, supplementary water-stage recorder on channel no. 2 at bridge 800 ft upstream at same datum. Since Aug. 16, 1996, water-stage recorder on channel no. 1; satellite telemetry installed Oct. 24, 1996.

REMARKS.--Records fair except for period July 31 to Aug. 14, and estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation of about 1,200,000 acres upstream from station, and return flow from irrigated areas. Records reviewed and provided for this report by Geological Survey, Colorado District.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	48	78	e320	e500	e500	165	328	132	25	94	40
2	111	44	75	e320	e550	e500	184	282	186	35	177	35
3	120	49	71	e320	e550	e450	230	259	155	32	128	29
4	113	37	82	e320	e550	e400	323	237	147	24	86	26
5	111	42	79	e350	e550	e350	378	277	154	30	98	29
6	114	46	76	e350	e550	301	387	252	135	32	61	35
7	136	48	79	e350	e550	287	401	224	171	28	48	49
8	141	80	78	e350	e550	271	405	1290	272	23	43	65
9	143	113	79	e350	e550	261	394	3140	434	24	39	49
10	144	106	78	e350	e550	229	367	2600	633	71	27	49
11	133	100	75	e400	e550	181	389	2080	641	57	24	66
12	125	99	126	e400	e550	155	449	1470	598	46	25	72
13	116	77	130	e400	e550	133	424	1300	499	38	21	78
14	109	e70	145	e400	e550	119	378	952	426	35	40	176
15	100	e70	e150	e400	e550	117	364	767	311	24	33	246
16	89	e70	e170	e450	e550	106	436	624	221	494	37	273
17	76	e70	e190	e450	e550	89	736	484	168	307	35	257
18	73	e70	e210	e450	e550	81	738	298	170	342	24	287
19	61	e70	e230	e450	e550	82	666	227	164	236	27	260
20	45	e70	e300	e450	e550	72	515	188	117	122	36	194
21	38	e100	e350	e550	e550	70	388	182	84	84	46	168
22	46	e120	e400	e600	e580	69	389	162	87	94	41	170
23	56	e150	e450	e550	e580	75	440	154	77	49	86	186
24	66	151	e450	e550	e550	100	396	123	50	136	122	190
25	61	130	e400	e550	e500	133	409	121	42	69	116	186
26	41	112	e350	e500	e500	144	378	115	38	61	101	234
27	35	104	e350	e500	e500	147	423	109	30	51	65	283
28	38	97	e350	e500	e500	164	523	100	24	37	62	191
29	66	85	e350	e500	---	170	500	116	10	40	58	152
30	47	83	e350	e500	---	159	418	114	13	93	56	134
31	45	---	e350	e500	---	121	---	115	---	94	53	---
TOTAL	2689	2511	6651	13430	15210	6036	12593	18690	6189	2833	1909	4209
MEAN	86.7	83.7	215	433	543	195	420	603	206	91.4	61.6	140
MAX	144	151	450	600	580	500	738	3140	641	494	177	287
MIN	35	37	71	320	500	69	165	100	10	23	21	26
AC-FT	5330	4980	13190	26640	30170	11970	24980	37070	12280	5620	3790	8350

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1902 - 2001, BY WATER YEAR (WY)

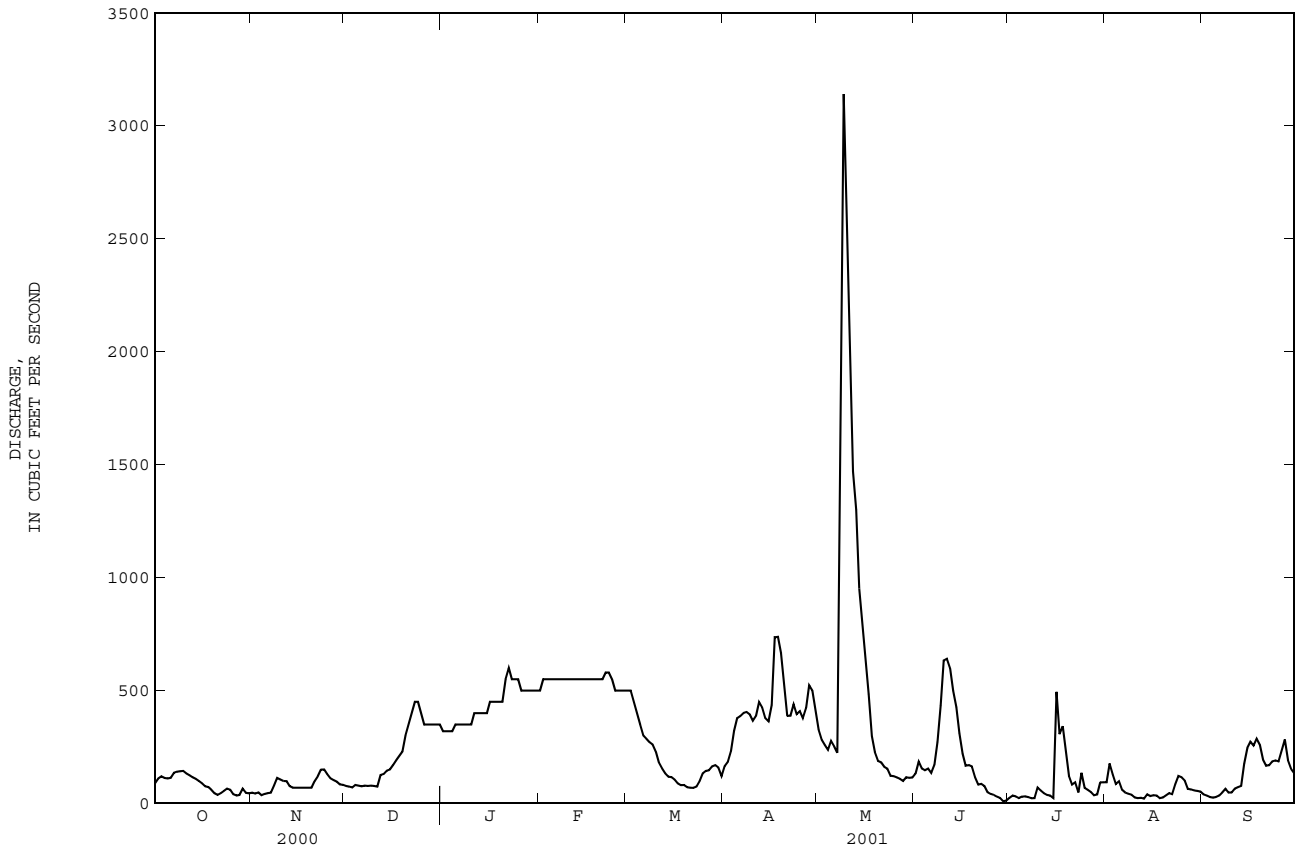
MEAN	318	358	420	538	619	559	555	1075	1504	309	189	252
MAX	2427	2358	1371	1571	1864	2200	2808	9922	12200	5059	1882	1964
(WY)	1985	1985	1985	1998	1930	1939	1983	1980	1983	1983	1997	1984
MIN	5.85	23.0	18.8	89.9	78.9	56.9	17.3	24.1	8.33	2.15	2.52	5.60
(WY)	1904	1911	1912	1965	1935	1904	1904	1911	1910	1903	1902	1903

PLATTE RIVER BASIN

06764000 SOUTH PLATTE RIVER AT JULESBURG, CO--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1902 - 2001	
ANNUAL TOTAL			92950			
ANNUAL MEAN	139836		255		561	
HIGHEST ANNUAL MEAN	382				2882	1983
LOWEST ANNUAL MEAN					76.3	1956
HIGHEST DAILY MEAN	1470	Jan 1	3140	May 9	30800	Jun 16 1921
LOWEST DAILY MEAN	12	Aug 13	10	Jun 29	a0.00	Aug 18 1902
ANNUAL SEVEN-DAY MINIMUM	14	Aug 9	23	Jun 28	0.00	Jul 25 1903
MAXIMUM PEAK FLOW			3420	May 9	37600	Jun 20 1965
MAXIMUM PEAK STAGE			b6.61	May 9	c10.44	Jun 20 1965
ANNUAL RUNOFF (AC-FT)	277400		184400		406700	
10 PERCENT EXCEEDS	1230		550		1180	
50 PERCENT EXCEEDS	120		150		237	
90 PERCENT EXCEEDS	23		38		29	

- e Estimated.
- a Also occurred Aug 19-20, 1902, and Jul 25 to Aug 7, 1903.
- b Gage height recorded for channel #1.
- c From floodmarks in gage well.



PLATTE RIVER BASIN

06764000 SOUTH PLATTE RIVER AT JULESBURG, CO

LOCATION.--Lat 40°58'46", long 102°15'15", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ and NE $\frac{1}{4}$ SE $\frac{1}{4}$ (two channels) sec.33, T.12 N., R.44 W., Sedgwick County, Hydrologic Unit 10190018, on left bank of channel 4 (left channel) 215 ft downstream from bridge, on right bank of channel 2, 5 ft downstream from bridge on U.S. Highway 385, and on left bank of channel 1, 5 ft upstream from bridge on U.S. Highway 385, 0.9 mi southeast of Julesburg, 3.0 mi upstream from Colorado-Nebraska State line, and 8 mi downstream from Lodgepole Creek.

DRAINAGE AREA.--23,193 mi².

PERIOD OF RECORD.--April 1902 to current year. Monthly discharge only for some periods, published in WSP 1310. Published as "near Julesburg" 1903-8, 1915-16, and as "at Ovid" 1922-24.

REVISED RECORDS.--WSP 1310: 1902, 1906-7, 1948(P). WSP 1440: 1903-4. WDR CO-86-1: Drainage area.

GAGE.--Three water-stage recorders with satellite telemetry. Datum of gages is 3,446.76 ft above sea level. See WSP 1710 or 1730 for history of changes prior to Oct. 1, 1956. Since Oct. 1, 1956, water-stage recorders on channels nos. 2 and 4. Channel no. 2: Oct. 1, 1956 to Sept. 22, 1965, at site 300 ft downstream at present datum. Channel no. 4: Oct. 1, 1956 to Dec. 10, 1958, at site 135 ft downstream at present datum. Since May 11, 1973, supplementary water-stage recorder on channel no. 2 at bridge 800 ft upstream at same datum. Since Aug. 16, 1996, water-stage recorder on channel no. 1; satellite telemetry installed Oct. 24, 1996.

REMARKS.--Records fair except for period Nov. 26 to Mar.14, and estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation of about 1,200,000 acres upstream from station, and return flow from irrigated areas. Records reviewed and provided for this report by U.S. Geological Survey, Colorado District.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	87	e315	e272	e400	e228	127	52	30	24	23	17
2	121	79	e394	e272	e409	e268	134	50	24	24	21	16
3	122	67	e485	e272	455	e314	137	48	48	25	20	17
4	123	153	e559	e272	529	e314	142	43	171	27	18	18
5	142	185	551	e272	550	e314	137	41	89	35	45	16
6	157	218	448	281	505	e314	131	36	80	63	e22	16
7	182	210	e390	331	430	e431	130	35	81	76	e19	16
8	158	217	e331	334	357	e541	126	48	68	31	18	18
9	163	224	e274	358	319	e543	108	44	57	31	19	29
10	175	214	e243	299	277	e431	141	44	53	27	18	27
11	196	201	e221	270	396	e316	126	43	52	36	15	22
12	194	156	e221	261	273	e259	117	31	43	29	16	20
13	205	144	e216	260	265	e259	148	30	31	26	21	18
14	231	e152	e210	249	262	207	139	28	26	23	19	18
15	204	157	e215	e248	256	180	104	25	29	22	19	19
16	136	179	e193	e248	253	131	86	24	33	22	18	18
17	117	107	e213	244	254	116	78	25	31	20	20	15
18	107	94	e235	e247	257	105	69	24	32	21	22	16
19	103	123	e187	e275	262	97	67	23	e31	22	15	16
20	96	172	165	286	261	93	71	26	e30	26	15	15
21	89	167	170	301	256	101	67	25	25	27	e15	16
22	97	174	169	344	251	115	59	26	22	22	e14	17
23	86	211	e253	380	250	80	52	25	26	17	e15	16
24	86	248	e253	429	251	67	50	26	26	17	e18	17
25	66	258	e249	e389	238	66	50	26	25	17	e16	16
26	57	214	e253	371	155	59	53	27	26	20	e23	16
27	53	e149	279	433	169	52	54	23	25	19	e22	18
28	70	e196	e278	403	216	49	54	22	26	19	e20	19
29	70	e180	e272	e371	---	52	50	22	24	20	21	20
30	70	e242	e272	e360	---	64	49	22	e25	16	22	19
31	89	---	e272	359	---	111	---	22	---	17	17	---
TOTAL	3885	5178	8786	9691	8756	6277	2856	986	1289	821	606	541
MEAN	125	173	283	313	313	202	95.2	31.8	43.0	26.5	19.5	18.0
MAX	231	258	559	433	550	543	148	52	171	76	45	29
MIN	53	67	165	244	155	49	49	22	22	16	14	15
AC-FT	7710	10270	17430	19220	17370	12450	5660	1960	2560	1630	1200	1070

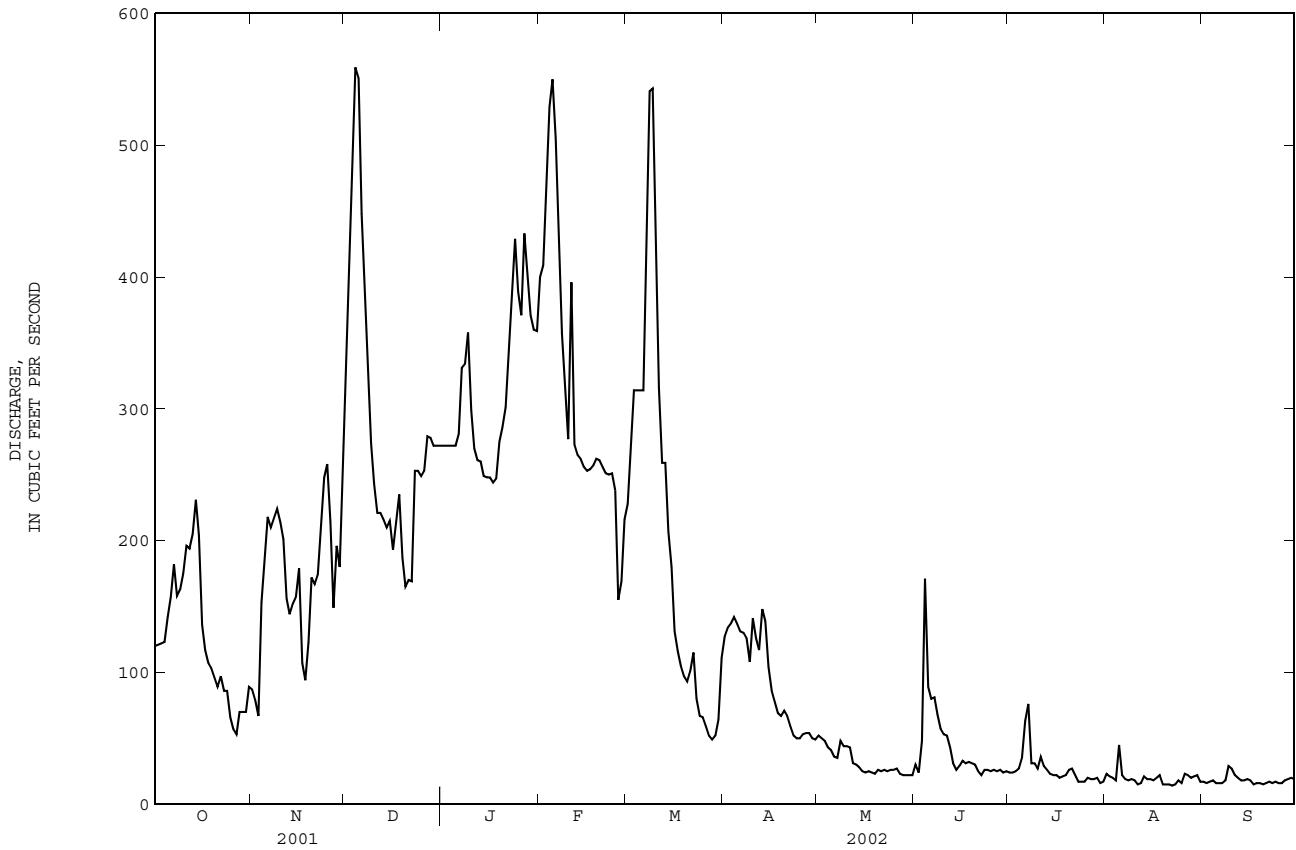
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1902 - 2002, BY WATER YEAR (WY)

MEAN	316	356	419	535	616	555	550	1064	1489	306	188	249
MAX	2427	2358	1371	1571	1864	2200	2808	9922	12200	5059	1882	1964
(WY)	1985	1985	1985	1998	1930	1939	1983	1980	1983	1983	1997	1984
MIN	5.85	23.0	18.8	89.9	78.9	56.9	17.3	24.1	8.33	2.15	2.52	5.60
(WY)	1904	1911	1912	1965	1935	1904	1904	1911	1910	1903	1902	1903

06764000 SOUTH PLATTE RIVER AT JULESBURG, CO--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1902 - 2002	
ANNUAL TOTAL	98948		49672		557	
ANNUAL MEAN	271		136		2882	
HIGHEST ANNUAL MEAN					1983	
LOWEST ANNUAL MEAN					76.3	
HIGHEST DAILY MEAN	3140	May 9	e559	Dec 4	30800	Jun 16 1921
LOWEST DAILY MEAN	10	Jun 29	e14	Aug 22	^a 0.00	Aug 18 1902
ANNUAL SEVEN-DAY MINIMUM	23	Jun 28	15	Aug 19	0.00	Jul 25 1903
MAXIMUM PEAK FLOW			572		37600	
MAXIMUM PEAK STAGE			^b 4.50		^c 10.44	
ANNUAL RUNOFF (AC-FT)	196300		98520		403400	
10 PERCENT EXCEEDS	550		314		1180	
50 PERCENT EXCEEDS	190		86		232	
90 PERCENT EXCEEDS	40		18		29	

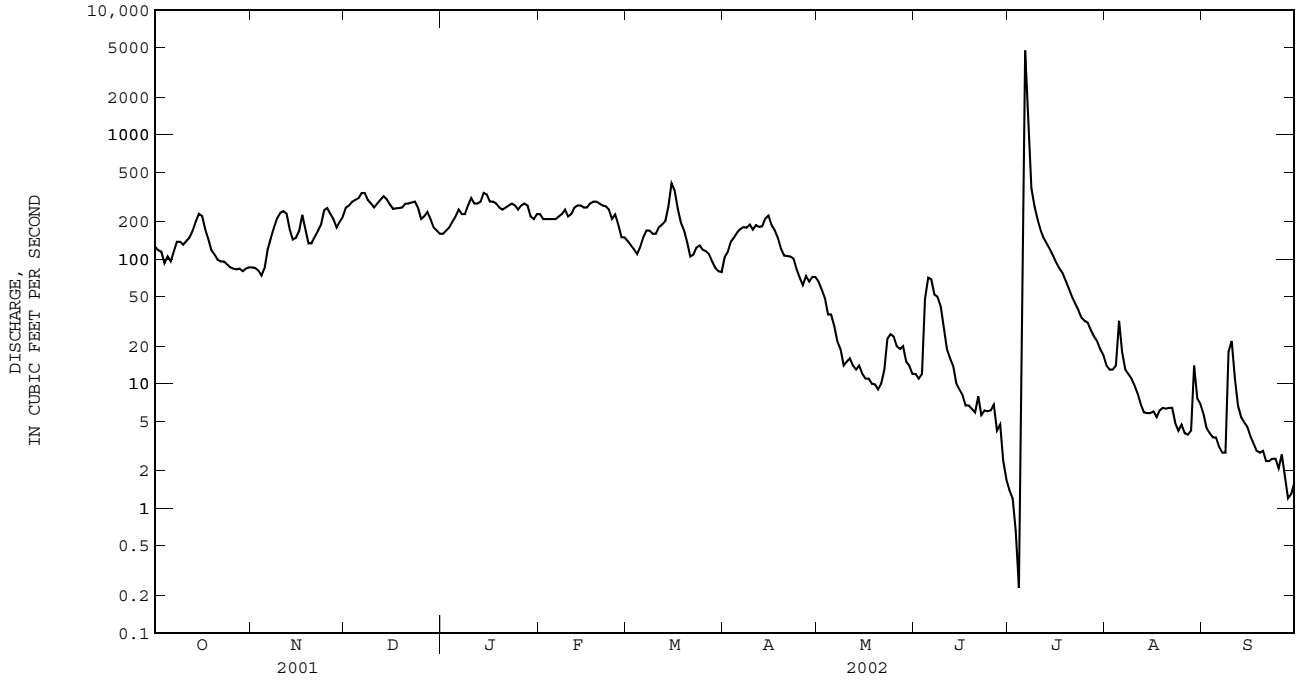
e Estimated.
a Also occurred Aug 19-20, 1902, and Jul 25 to Aug 7, 1903.
b Gage height recorded for channel #1. Maximum gage height, 4.52 ft, Dec 5.
c From floodmarks in gage well.



06764880 SOUTH PLATTE RIVER AT ROSCOE, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1983 - 2002	
ANNUAL TOTAL	86207.81		50774.99		898.3	
ANNUAL MEAN	236.2		139.1		2941 1983	
HIGHEST ANNUAL MEAN					139 2002	
LOWEST ANNUAL MEAN					18100 Jun 6 1995	
HIGHEST DAILY MEAN	2530	May 10	4740	Jul 6		
LOWEST DAILY MEAN	0.81	Sep 7	0.23	Jul 4	0.00 Sep 11 1994	
ANNUAL SEVEN-DAY MINIMUM	2.9	Sep 2	1.5	Jun 29	0.00 Sep 11 1994	
MAXIMUM PEAK FLOW			11400	Jul 6	20100 Jun 6 1995	
MAXIMUM PEAK STAGE			9.74	Jul 6	11.29 Jun 6 1995	
ANNUAL RUNOFF (AC-FT)	171000		100700		650800	
10 PERCENT EXCEEDS	486		272		1870	
50 PERCENT EXCEEDS	180		110		380	
90 PERCENT EXCEEDS	17		4.7		31	

e Estimated.



PLATTE RIVER BASIN

06767500 PLUM CREEK NEAR SMITHFIELD, NE

LOCATION.--Lat 40°38'30", long 099°42'37", in SE ¼ SW ¼ sec.21, T. 8 N., R. 21 W., Gosper County, Hydrologic Unit 10200101, on left bank 15 ft downstream from bridge on county road, 4.8 mi north and 1.4 mi east of Smithfield.

DRAINAGE AREA.--224 mi².

PERIOD OF RECORD.--June 1946 to September 1953, October 1968 to September 1975. Annual maximum, 1954-1968, 1978, at site 1.5 mi downstream at different datum. Continuous record collected September 1980 to January 1992 by Nebraska Department of Water Resources. April 1996 to September 2002 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 2,400.00 ft, above sea level, from topographic map. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	19	e20	e15	e17	e16	20	19	17	13	9.8	8.6
2	14	19	22	e16	e17	e16	20	19	16	13	9.3	8.4
3	14	18	22	e17	e17	e16	19	19	16	13	9.2	8.1
4	14	18	23	e18	e17	e17	17	18	16	13	9.7	8.2
5	14	18	22	e19	e17	e17	18	18	17	14	9.5	8.0
6	14	19	22	e19	e17	e18	18	18	17	12	8.1	8.8
7	14	19	21	e18	e18	e18	19	18	16	12	7.9	8.4
8	15	18	21	21	e19	e17	21	18	16	13	8.8	7.5
9	15	18	21	21	e19	e17	20	18	15	13	10	7.1
10	15	18	21	21	e18	e18	18	17	15	13	11	6.8
11	15	19	21	20	e19	e19	19	19	15	13	11	6.6
12	15	19	21	19	20	e19	18	29	15	13	10	6.6
13	e15	19	21	20	20	e19	18	21	15	14	9.7	6.6
14	e15	20	21	e20	20	e19	18	19	15	13	8.9	7.1
15	e15	19	21	e19	20	e18	18	19	16	14	9.2	9.0
16	e16	19	21	e18	20	e18	17	19	18	12	9.3	8.9
17	e16	19	21	e19	20	19	16	19	18	12	8.7	8.9
18	e17	19	20	e18	e19	20	16	18	16	11	10	8.8
19	18	19	20	e18	e19	20	15	18	16	10	12	8.7
20	17	19	20	e18	e19	19	15	18	17	10	12	8.7
21	17	19	20	e19	20	19	16	18	19	11	11	8.9
22	17	20	21	20	19	19	18	18	16	11	11	8.7
23	17	21	e19	20	20	18	17	18	16	9.1	10	8.6
24	17	29	e18	20	21	20	17	18	15	9.8	68	8.9
25	17	35	e17	19	e19	20	16	19	15	9.8	12	8.9
26	16	25	e17	19	e17	19	15	22	15	10	9.3	9.2
27	16	e20	e18	20	e17	19	19	19	16	11	8.4	9.3
28	16	e19	e17	21	e17	20	27	19	15	11	8.5	9.7
29	18	e18	e16	20	---	21	21	18	15	11	8.5	9.8
30	18	e20	e16	e18	---	20	19	17	14	10	9.0	9.7
31	18	---	e15	e18	---	20	---	17	---	10	9.0	---
TOTAL	489	601	616	588	522	575	545	584	478	364.7	358.8	251.5
MEAN	15.77	20.03	19.87	18.97	18.64	18.55	18.17	18.84	15.93	11.76	11.57	8.383
MAX	18	35	23	21	21	21	27	29	19	14	68	9.8
MIN	14	18	15	15	17	16	15	17	14	9.1	7.9	6.6
AC-FT	970	1190	1220	1170	1040	1140	1080	1160	948	723	712	499

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2002, BY WATER YEAR (WY)

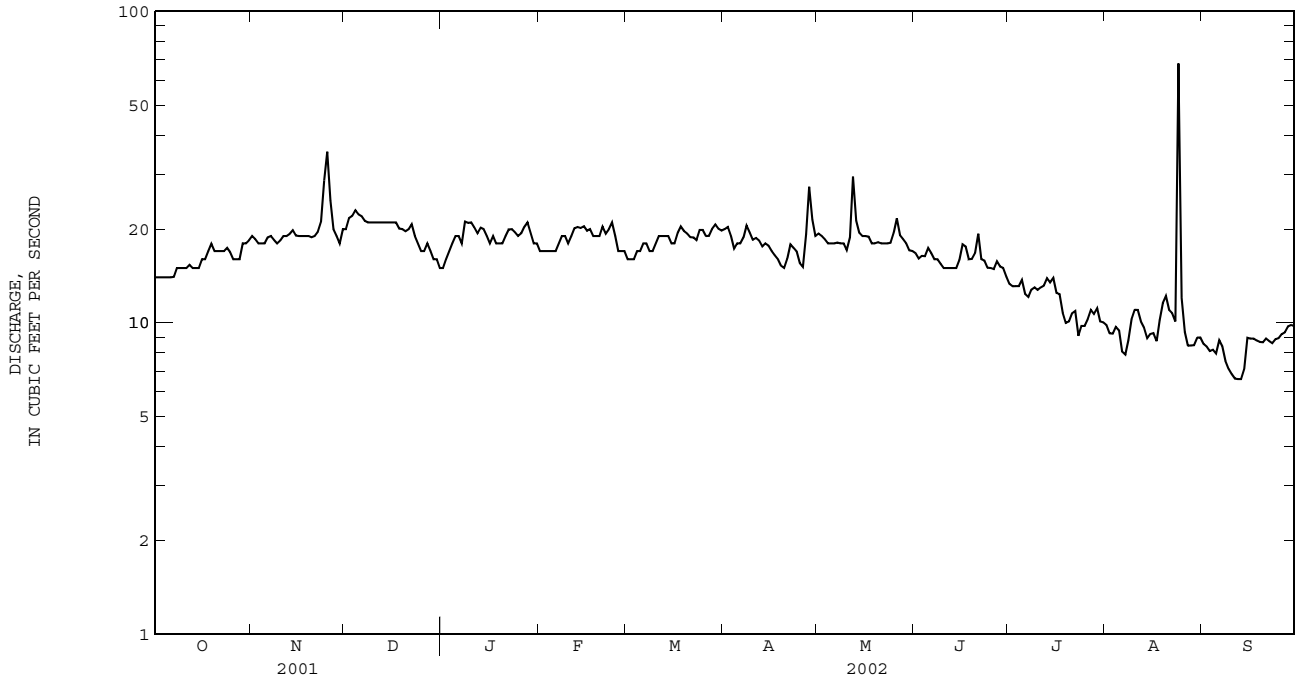
MEAN	11.34	5.316	4.789	4.853	7.646	11.06	6.378	9.930	34.77	10.06	7.178	7.388
MAX	130	20.0	19.9	19.0	21.2	55.6	23.0	26.0	179	52.7	23.1	49.5
(WY)	1947	2002	2002	2002	2001	1948	2001	1996	1947	1948	1996	1969
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.055	0.000	0.000	0.000	0.000
(WY)	1948	1948	1947	1947	1951	1951	1948	1970	1952	1953	1947	1952

PLATTE RIVER BASIN

06767500 PLUM CREEK NEAR SMITHFIELD, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1946 - 2002a	
ANNUAL TOTAL	7221		5973.0		9.872	
ANNUAL MEAN	19.78		16.36		27.4	
HIGHEST ANNUAL MEAN					1947	
LOWEST ANNUAL MEAN					0.099	
HIGHEST DAILY MEAN	77	Aug 15	68	Aug 24	1850	Jun 23 1947
LOWEST DAILY MEAN	11	Jul 19	6.6	Sep 11	0.00	Jul 13 1946
ANNUAL SEVEN-DAY MINIMUM	12	Aug 5	6.9	Sep 8	0.00	Jul 21 1946
MAXIMUM PEAK FLOW			205		2800	
MAXIMUM PEAK STAGE			8.30		*23.41	
ANNUAL RUNOFF (AC-FT)	14320		11850		7150	
10 PERCENT EXCEEDS	26		20		19	
50 PERCENT EXCEEDS	18		17		0.30	
90 PERCENT EXCEEDS	13		9.2		0.00	

e Estimated.
a Water years 1947-53, 1969-75, 1997-2002.
* Site and datum then in use.

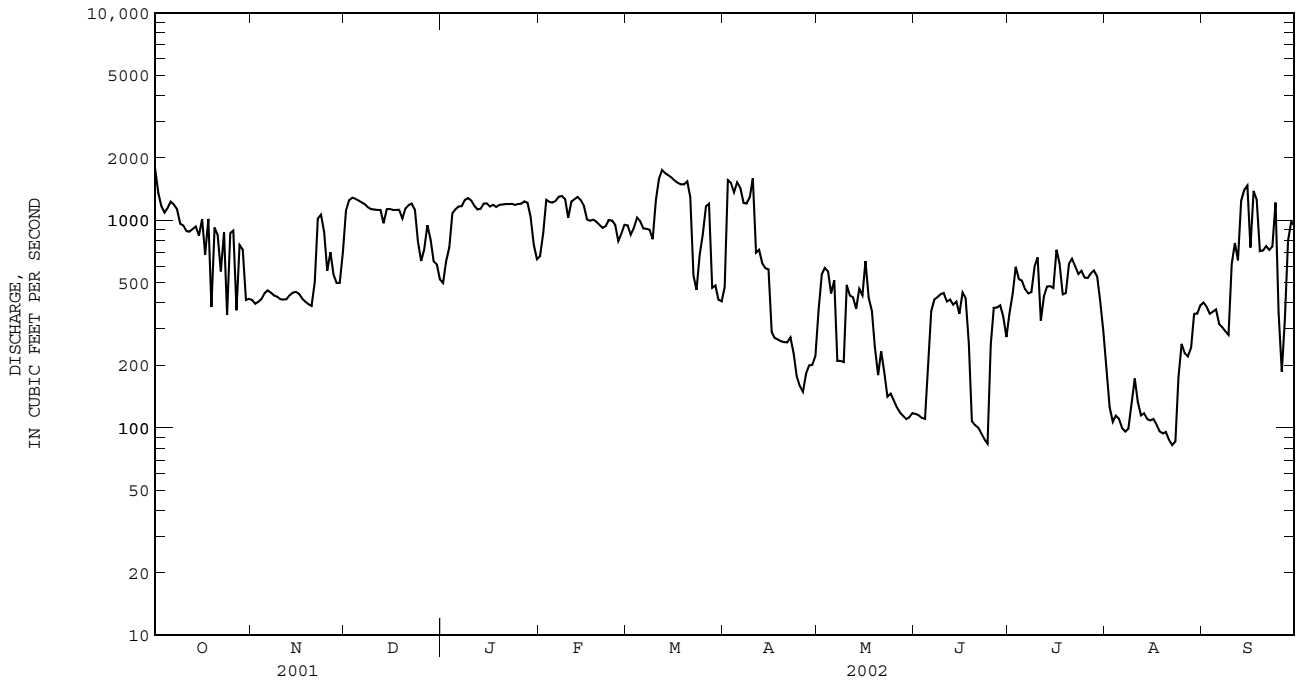


PLATTE RIVER BASIN

06768000 PLATTE RIVER NEAR OVERTON, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1942 - 2002a	
ANNUAL TOTAL	362815		252384		1638	
ANNUAL MEAN	994.0		691.5		5835 1983	
HIGHEST ANNUAL MEAN					558 1956	
LOWEST ANNUAL MEAN					22300 Jun 22 1983	
HIGHEST DAILY MEAN	2090	Apr 24	1780	Oct 1		
LOWEST DAILY MEAN	256	May 28	83	Aug 22	2.0 Aug 31 1942	
ANNUAL SEVEN-DAY MINIMUM	273	May 22	92	Aug 17	5.4 Aug 25 1942	
MAXIMUM PEAK FLOW			*2060	Apr 10	**22900 Jun 28 1983	
MAXIMUM PEAK STAGE			2.55	Sep 13	***7.44 Jun 22 1983	
ANNUAL RUNOFF (AC-FT)	719600		500600		1186000	
10 PERCENT EXCEEDS	1640		1250		3010	
50 PERCENT EXCEEDS	1010		589		1200	
90 PERCENT EXCEEDS	417		134		289	

e Estimated.
a Since beginning of storage in Lake McConaughy.
* Stage 2.54 ft.
** Stage 7.38 ft., current datum.
*** Current datum.



PLATTE RIVER BASIN

06768000 PLATTE RIVER NEAR OVERTON, NE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1952, 1958 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1958 to September 1996.

WATER TEMPERATURES: January 1958 to September 1996.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,480 microsiemens May 15, 1966 (south chan.); minimum daily, 176 microsiemens June 25, 1989 (south chan.).

WATER TEMPERATURES: Maximum, 37.0°C June 13, 1959 (south chan.), July 9, 1960 (north chan.); minimum, 0.0°C on many days during winter periods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATURATION) (00301)	PH WATER WHOLE FIELD (STANDARD) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	POTASSIUM, DIS-SOLVED (MG/L) (00935)	SODIUM, DIS-SOLVED (MG/L) (00930)	ANCILLARY TIT 4.5 LAB (MG/L) (90410)	CHLORIDE, DIS-SOLVED (MG/L) (00940)	FLUORIDE, DIS-SOLVED (MG/L) (00950)
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DEC	05...	1260	13.8	116	8.6	777	11.5	4.5	11.3	65.3	187	25.0	.5
MAR	12...	1690	--	--	8.2	876	11.0	5.5	12.6	71.5	193	30.1	.5
MAY	14...	247	10.0	114	8.4	940	21.0	17.5	12.8	82.6	182	35.7	.6
SEP	05...	414	9.9	131	8.6	873	27.0	25.0	14.7	87.6	192	32.6	.5

Date	SILICA, DIS-SOLVED (MG/L) (00955)	SULFATE DIS-SOLVED (MG/L) (00945)	NITROGEN, AMMONIA DIS-SOLVED (MG/L) (00608)	NITROGEN, AMMONIA DIS-SOLVED (MG/L) (71846)	NITROGEN, NITRATE DIS-SOLVED (MG/L) (00618)	NITROGEN, NITRATE DIS-SOLVED (MG/L) (71851)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	NITROGEN, NITRITE DIS-SOLVED (MG/L) (71856)	NITROGEN, NITRITE DIS-SOLVED (MG/L) (00613)	PHOSPHATE, ORTHO, DIS-SOLVED (MG/L) (00660)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L) (00666)	ORTHOPHOSPHATE, DIS-SOLVED (MG/L) (00671)	CARBON DIOXIDE, DIS-SOLVED (MG/L) (00405)
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DEC	05...	31.1	188	.10	.13	1.01	4.48	1.02	.026	.008	.098	<.06	.03	.9
MAR	12...	29.9	217	<.04	--	--	--	1.58	--	E.007	.101	E.05	.03	2.3
MAY	14...	23.3	238	<.04	--	1.56	6.90	1.58	.066	.020	.196	.06	.06	1.4
SEP	05...	27.1	203	<.04	--	2.19	9.71	2.21	.043	.013	.233	.08	.08	.9

Date	ALUMINUM, DIS-SOLVED (UG/L) (01106)	ANTIMONY, DIS-SOLVED (UG/L) (01095)	ARSENIC, DIS-SOLVED (UG/L) (01000)	BARIUM, DIS-SOLVED (UG/L) (01005)	BERYLLIUM, DIS-SOLVED (UG/L) (01010)	BORON, DIS-SOLVED (UG/L) (01020)	CADMIUM, DIS-SOLVED (UG/L) (01025)	CHROMIUM, DIS-SOLVED (UG/L) (01030)	COBALT, DIS-SOLVED (UG/L) (01035)	COPPER, DIS-SOLVED (UG/L) (01040)	IRON, DIS-SOLVED (UG/L) (01046)	LEAD, DIS-SOLVED (UG/L) (01049)	MANGANESE, DIS-SOLVED (UG/L) (01056)
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DEC	05...	--	--	--	--	110	--	--	--	--	<10	--	E3.1	
MAR	12...	--	--	--	--	120	--	--	--	--	<10	--	E3.1	
MAY	14...	--	--	--	--	140	--	--	--	--	<10	--	4.8	
SEP	05...	1	.38	<13	72	<.06	140	E.02	<.8	.26	1.8	<10	<.08	5.0

Date	MOLYBDENUM, DIS-SOLVED (UG/L) (01060)	NICKEL, DIS-SOLVED (UG/L) (01065)	SELENIUM, DIS-SOLVED (UG/L) (01145)	SILVER, DIS-SOLVED (UG/L) (01075)	ZINC, DIS-SOLVED (UG/L) (01090)	URANIUM, NATURAL DIS-SOLVED (UG/L) (22703)
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DEC	05...	--	--	--	--	--	
MAR	12...	--	--	--	--	--	
MAY	14...	--	--	--	--	--	
SEP	05...	5.4	1.52	<14	<1	1	22.0

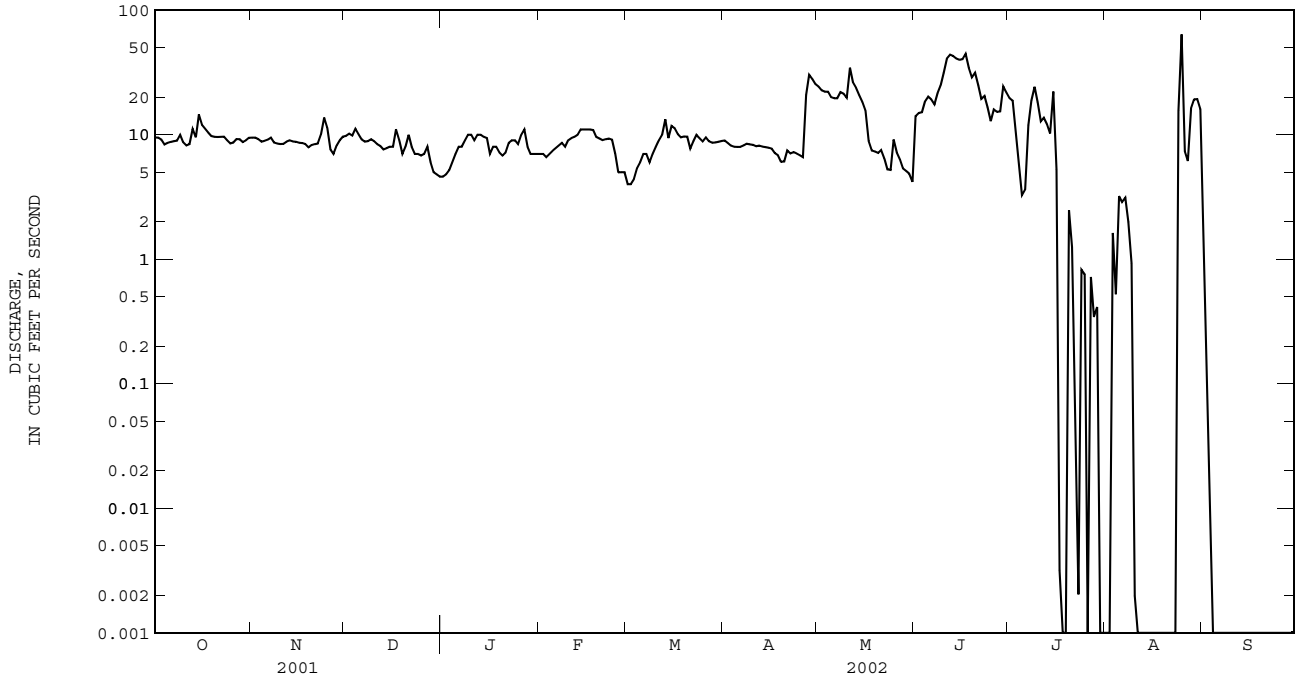
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 < -- Less than
 E -- Estimated value

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06768020 SPRING CREEK NEAR OVERTON, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1996 - 2002	
ANNUAL TOTAL	13450.6		3488.58		31.34	
ANNUAL MEAN	36.85		9.558		45.4	
HIGHEST ANNUAL MEAN					1999	
LOWEST ANNUAL MEAN					2002	
HIGHEST DAILY MEAN	220	May 6	64	Aug 25	431	Aug 19 1999
LOWEST DAILY MEAN	4.0	Jan 1	0.00	Jul 17	0.00	Jul 17 2002
ANNUAL SEVEN-DAY MINIMUM	4.3	Feb 26	0.00	Aug 10	0.00	Aug 10 2002
MAXIMUM PEAK FLOW			153	Aug 25	453	Aug 19 1999
MAXIMUM PEAK STAGE			5.51	Aug 25	7.62	Aug 19 1999
ANNUAL RUNOFF (AC-FT)	26680		6920		22700	
10 PERCENT EXCEEDS	89		20		78	
50 PERCENT EXCEEDS	17		8.5		18	
90 PERCENT EXCEEDS	7.0		0.00		6.0	

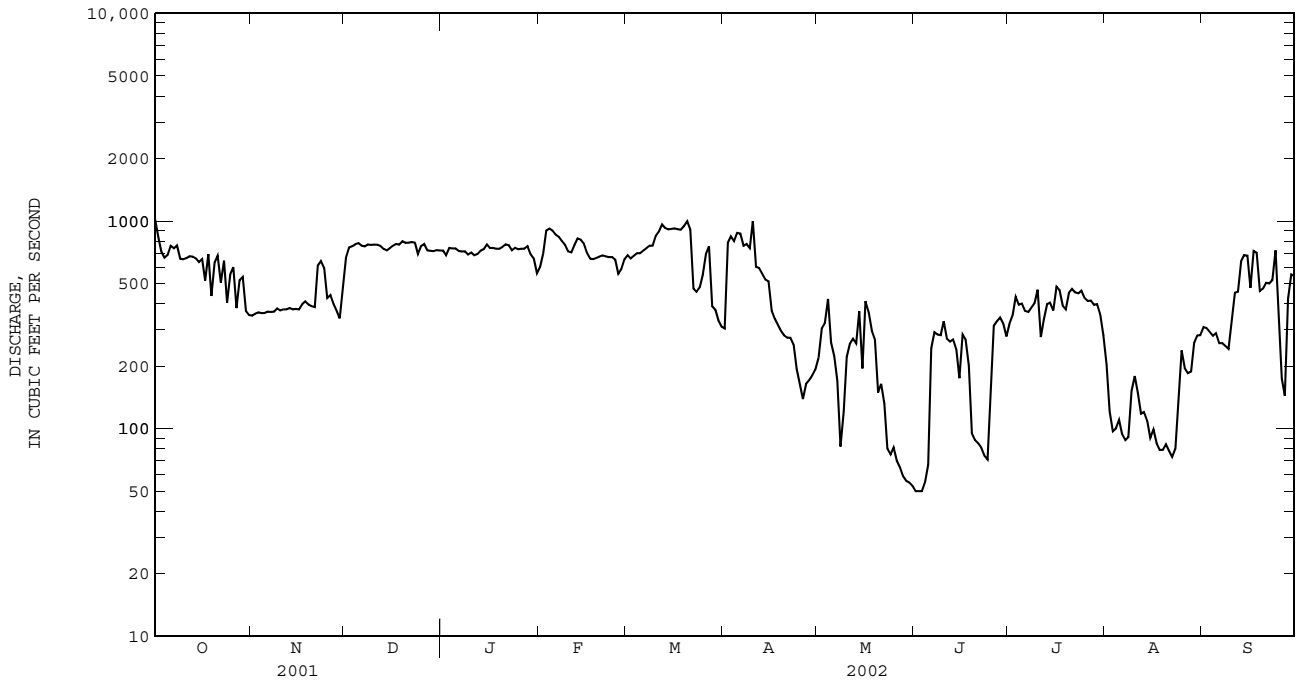
e Estimated.



06768035 PLATTE RIVER MIDDLE CHANNEL AT COTTONWOOD RANCH, NEAR ELM CREEK, NE--Continued

SUMMARY STATISTICS	FOR 2002 WATER YEAR		WATER YEARS 2001 - 2002	
ANNUAL TOTAL	175581			
ANNUAL MEAN	481.0		481.0	
HIGHEST ANNUAL MEAN			481	2002
LOWEST ANNUAL MEAN			481	2002
HIGHEST DAILY MEAN	1020	Oct 1	1080	Aug 17 2001
LOWEST DAILY MEAN	50	Jun 1	50	Jun 1 2002
ANNUAL SEVEN-DAY MINIMUM	53	May 29	53	May 29 2002
MAXIMUM PEAK FLOW	*1090	Apr 10	**1130	Aug 16 2002
MAXIMUM PEAK STAGE	*** 6.99	Mar 4	6.99	Mar 4 2002
ANNUAL RUNOFF (AC-FT)	348300		348500	
10 PERCENT EXCEEDS	776		776	
50 PERCENT EXCEEDS	451		451	
90 PERCENT EXCEEDS	110		110	

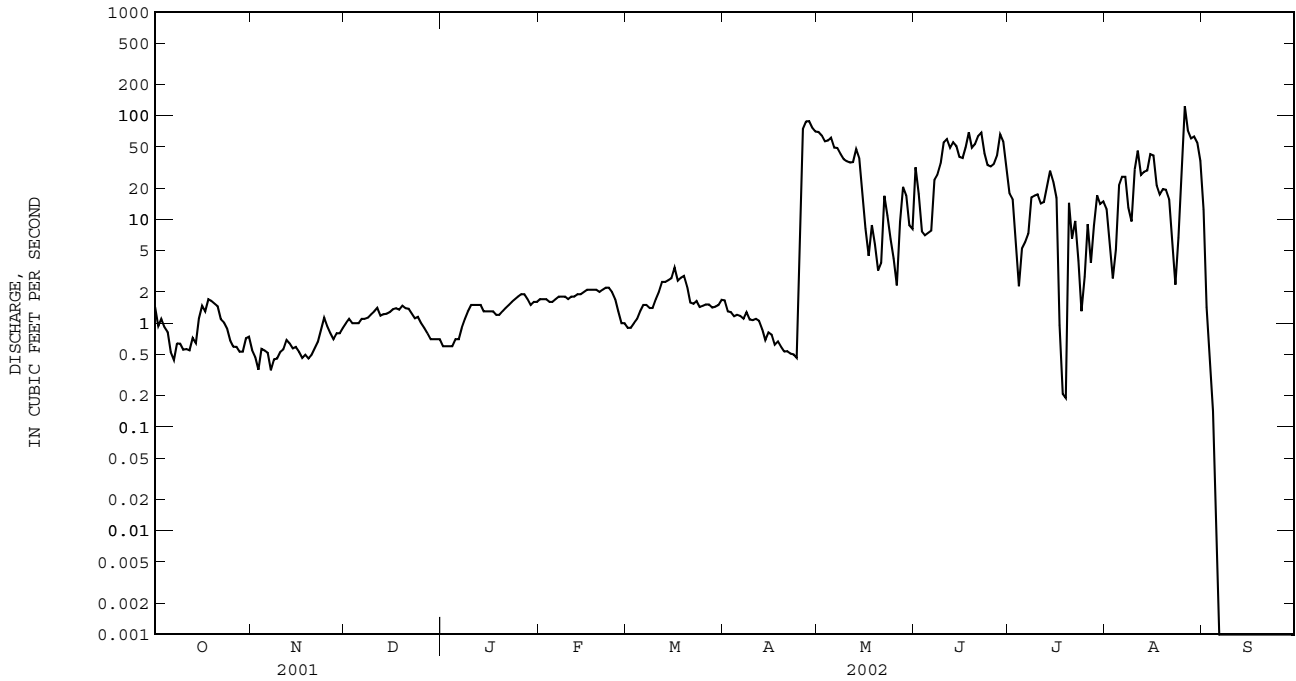
e Estimated.
 * Stage 4.63 ft.
 ** Stage 4.78 ft.
 *** Backwater from ice.



06769000 BUFFALO CREEK NEAR OVERTON, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1949 - 2002a	
ANNUAL TOTAL	9291.94		3967.90		19.34	
ANNUAL MEAN	25.46		10.87		40.9	
HIGHEST ANNUAL MEAN					1999	
LOWEST ANNUAL MEAN					1955	
HIGHEST DAILY MEAN	141	May 6	123	Aug 26	472	Jun 12 1999
LOWEST DAILY MEAN	0.10	Jan 1	0.00	Sep 5	0.00	Apr 26 1953
ANNUAL SEVEN-DAY MINIMUM	0.13	Jan 1	0.00	Sep 5	0.00	Jul 16 1953
MAXIMUM PEAK FLOW			138	Aug 26	509	Jun 12 1999
MAXIMUM PEAK STAGE			6.49	Aug 26	10.79	Jun 12 1999
ANNUAL RUNOFF (AC-FT)	18430		7870		14010	
10 PERCENT EXCEEDS	70		41		63	
50 PERCENT EXCEEDS	8.6		1.5		4.8	
90 PERCENT EXCEEDS	0.40		0.46		0.00	

e Estimated.
a Water years 1949-58, 1996-2002.



PLATTE RIVER BASIN

06769525 ELM CREEK NEAR ELM CREEK, NE

LOCATION.--Lat 40°43'44", long 099°23'53", in NW ¼ NE ¼ , sec.20, T.9 N., R.18 W., Buffalo County, Hydrologic Unit 10200101, on right downstream side of bridge.

PERIOD OF RECORD.--March 1996 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,270 ft above sea level, from topographic map.

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.88	0.91
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.5	0.63	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.1	0.06	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.30	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.09	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.0	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.7	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.1	0.00	0.01	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.3	0.06	6.5	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.9	0.29	8.1	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.8	0.18	3.3	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.8	0.14	1.5	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.0	0.39	3.1	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.0	0.54	3.2	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.0	0.24	0.46	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11	0.27	0.20	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13	0.11	0.39	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	12	0.04	1.5	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.3	12	0.00	3.2	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.4	13	0.81	6.0	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94	11	0.22	6.7	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	7.7	0.00	0.46	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	8.4	0.00	0.83	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.8	0.00	86	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.4	0.17	e148	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.05	e40	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.5	0.64	e10	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.9	0.39	e9.9	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	4.7	0.37	e9.3	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	2.7	0.54	e8.9	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.59	8.1	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.40	181.17	12.16	367.61	0.91
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.142	6.039	0.392	11.86	0.030
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.4	13	3.5	148	0.91
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.7	359	24	729	1.8

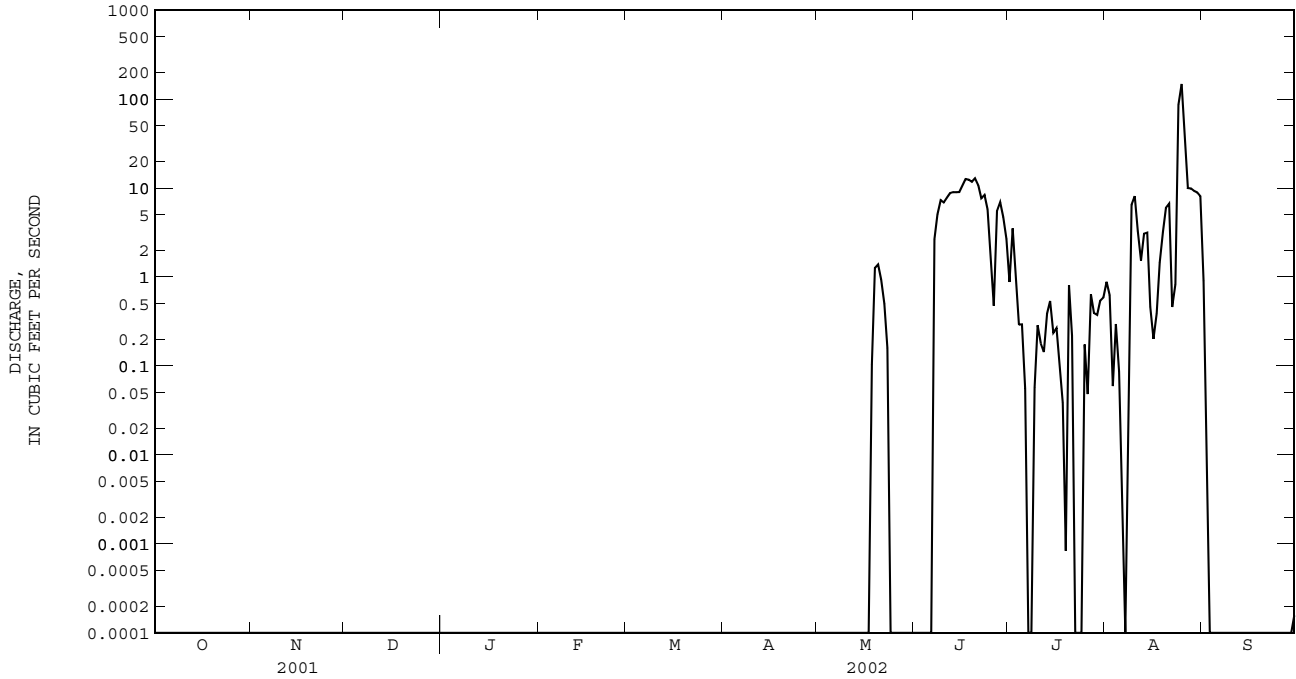
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2002, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000	2001	2002
MEAN	0.000	0.012	0.000	0.000	0.000	2.525	0.216
MAX	0.000	0.073	0.000	0.000	0.000	13.4	1.50
(WY)	1997	1997	1997	1997	1997	2001	2001
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.14
(WY)	1997	1998	1997	1997	1997	1997	1996

06769525 ELM CREEK NEAR ELM CREEK, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1996 - 2002	
ANNUAL TOTAL	1116.92		566.25		3.278	
ANNUAL MEAN	3.060		1.551		5.89 1999	
HIGHEST ANNUAL MEAN					1.55 2002	
LOWEST ANNUAL MEAN					188 Jun 11 1999	
HIGHEST DAILY MEAN	125	Mar 9	148	Aug 25		
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00 Mar 21 1996	
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00 Mar 21 1996	
MAXIMUM PEAK FLOW			204	Aug 25	317 May 21 1998	
MAXIMUM PEAK STAGE			8.69	Aug 25	8.76 May 21 1998	
ANNUAL RUNOFF (AC-FT)	2220		1120		2370	
10 PERCENT EXCEEDS	9.2		3.1		11	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

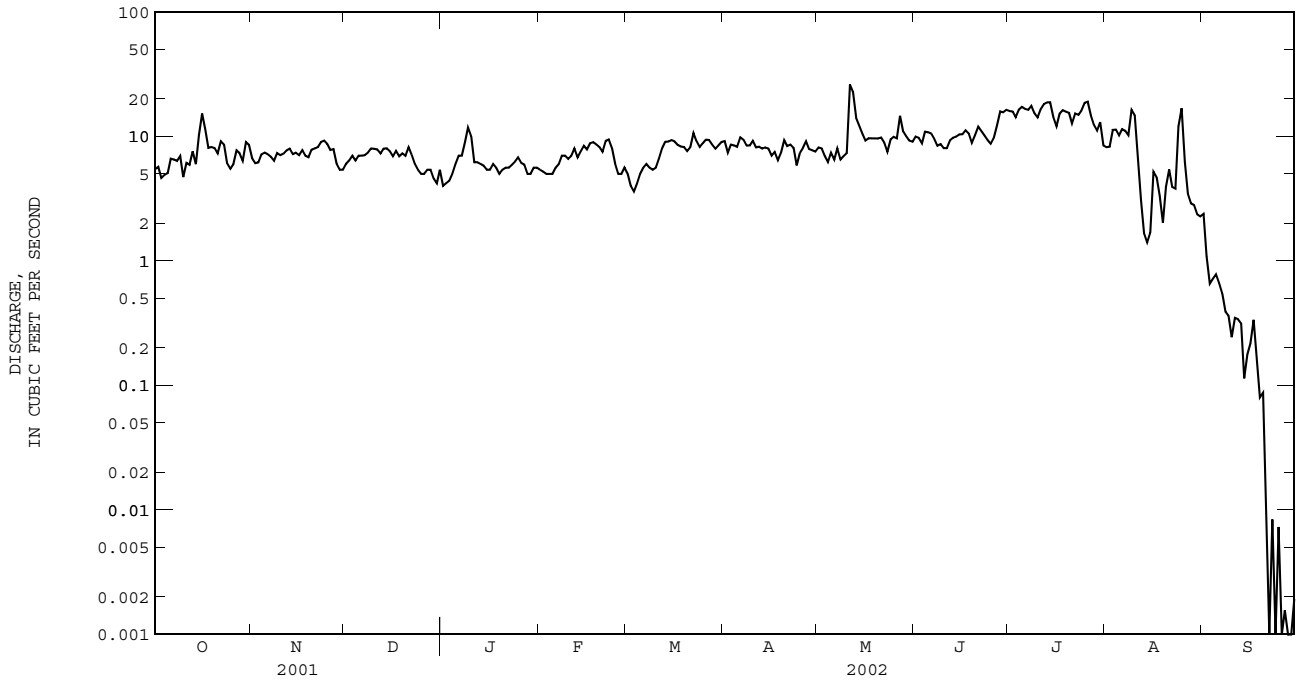
e Estimated.



06770195 NORTH DRY CREEK 2 MI SW OF PLATTE RIVER BRIDGE SOUTH OF KEARNEY, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1996 - 2002	
ANNUAL TOTAL	5195.2		2832.04			
ANNUAL MEAN	14.23		7.759		17.22	
HIGHEST ANNUAL MEAN					24.7	
LOWEST ANNUAL MEAN					7.76	
HIGHEST DAILY MEAN	74	May 5	26	May 11	470	Jul 5 2000
LOWEST DAILY MEAN	2.4	Sep 13	0.00	Sep 21	0.00	Sep 21 2002
ANNUAL SEVEN-DAY MINIMUM	3.6	Sep 9	0.00	Sep 21	0.00	Sep 21 2002
MAXIMUM PEAK FLOW			*51	May 11	862	Jul 5 2000
MAXIMUM PEAK STAGE			**4.04	Mar 9	6.68	Jul 5 2000
ANNUAL RUNOFF (AC-FT)	10300		5620		12480	
10 PERCENT EXCEEDS	26		13		29	
50 PERCENT EXCEEDS	9.0		7.6		14	
90 PERCENT EXCEEDS	5.4		2.6		5.4	

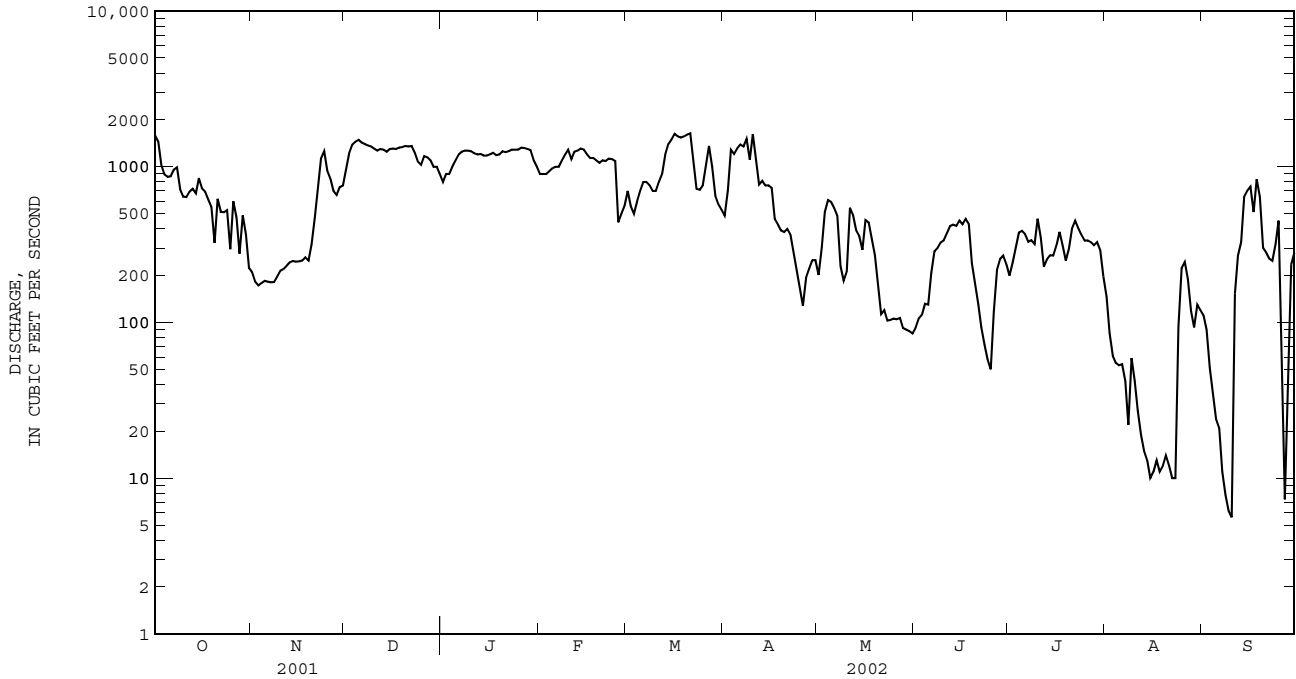
e Estimated.
 * Stage 3.77 ft.
 ** Backwater from ice.



06770200 PLATTE RIVER NEAR KEARNEY, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1983 - 2002	
ANNUAL TOTAL	388215		226151.9		2122	
ANNUAL MEAN	1064		619.6		5418	
HIGHEST ANNUAL MEAN					1983	
LOWEST ANNUAL MEAN					2002	
HIGHEST DAILY MEAN	3070	Apr 24	1640	Mar 21	22300	Jun 29 1983
LOWEST DAILY MEAN	139	Jun 28	5.6	Sep 10	3.0	Sep 7 1990
ANNUAL SEVEN-DAY MINIMUM	181	Nov 2	12	Aug 17	12	Aug 17 2002
MAXIMUM PEAK FLOW			*1910	Apr 10	**23700	Jun 29 1983
MAXIMUM PEAK STAGE			***4.94	Feb 5	***8.62	Feb 24 1994
ANNUAL RUNOFF (AC-FT)	770000		448600		1537000	
10 PERCENT EXCEEDS	1810		1300		4020	
50 PERCENT EXCEEDS	1030		485		1590	
90 PERCENT EXCEEDS	277		85		398	

e Estimated.
 * Stage 3.67 ft.
 ** Stage 7.42 ft.
 *** Backwater from ice.



PLATTE RIVER BASIN

06770240 FORT KEARNEY SLOUGH NEAR NEWARK, NE

LOCATION.--Lat 40°38'28", long 098°59'22", in SE 1/4 SE 1/4 sec.22, T.8 N., R15 W., Kearney County, Hydrologic Unit 10200203, on downstream side of culvert on Highway L-5DA, 2.0 mi west of State Highway 10, and 1.1 mi west of Newark.

PERIOD OF RECORD.--March 1996 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,100.6 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.89	1.9	2.6	2.2	2.9	e1.0	3.0	3.0	3.9	2.7	e0.00	0.00
2	0.93	1.6	2.6	2.3	2.4	e0.70	2.8	2.8	3.9	2.0	e0.00	0.00
3	0.83	1.6	2.7	2.5	2.4	e0.80	2.6	2.7	3.7	2.9	e0.00	0.02
4	0.79	1.7	2.8	2.5	2.3	e0.90	2.6	2.6	3.8	4.6	e0.00	0.00
5	0.85	1.8	2.9	2.4	2.3	e1.2	2.7	2.7	3.8	4.3	e0.00	0.00
6	0.88	1.8	3.1	2.3	2.4	e1.5	2.8	2.7	3.7	4.4	e0.00	0.00
7	0.93	1.7	3.2	2.3	2.5	e1.8	2.9	2.6	3.6	5.2	e0.00	0.00
8	0.94	1.3	3.1	2.5	2.6	e1.8	2.9	2.6	3.6	3.7	e0.00	0.00
9	0.99	1.3	3.5	2.6	2.5	e2.3	2.8	2.3	3.6	2.5	e0.00	0.00
10	0.86	1.4	3.5	2.5	2.5	e2.5	2.9	2.2	3.6	1.5	e0.00	0.00
11	0.86	1.3	3.6	2.5	2.5	2.8	2.9	4.2	3.5	e1.3	e0.00	0.00
12	0.91	1.4	3.3	2.6	2.5	2.8	3.0	5.0	3.4	e1.2	e0.00	0.00
13	1.1	1.5	3.1	3.1	2.5	2.9	3.0	4.6	3.4	e1.1	e0.00	0.00
14	0.96	1.5	3.4	2.7	2.7	3.0	3.1	4.4	3.4	e1.0	e0.00	0.00
15	1.2	1.4	3.5	2.5	2.6	2.8	3.2	4.3	3.4	e1.0	e0.00	0.00
16	1.2	1.3	3.1	2.5	2.6	2.7	3.2	4.0	3.4	e1.0	e0.00	0.00
17	1.4	1.6	3.1	2.5	2.8	2.9	2.9	3.8	3.4	e1.0	e0.00	0.00
18	1.4	1.5	3.1	2.5	3.0	3.0	2.9	3.7	3.3	e0.90	e0.00	0.00
19	1.4	1.3	2.9	2.6	3.0	3.0	2.6	3.7	3.1	e0.90	e0.00	0.00
20	1.5	1.4	2.8	2.8	2.9	2.9	2.4	3.6	2.9	e0.80	e0.00	0.00
21	1.4	1.5	3.1	2.7	2.7	2.6	2.5	3.6	2.6	e0.70	e0.00	0.00
22	1.6	1.5	3.2	2.7	2.8	2.8	2.6	3.7	0.80	e0.60	e0.00	0.00
23	2.3	1.8	2.8	2.5	3.0	3.1	2.7	3.6	1.2	e0.50	e0.00	0.00
24	1.9	2.2	2.7	2.4	3.0	3.1	2.6	3.4	2.0	e0.40	e0.00	0.00
25	1.7	2.5	2.7	2.5	2.6	2.8	2.4	3.5	2.6	e0.20	e0.00	0.00
26	1.7	2.6	2.8	2.6	2.9	2.9	2.4	3.6	3.4	e0.20	e0.00	0.00
27	1.7	2.4	2.8	2.6	3.2	3.1	2.7	4.4	3.2	e0.20	e0.00	0.00
28	1.8	2.3	2.7	2.5	2.7	3.1	2.7	4.6	3.4	e0.10	e0.00	0.00
29	1.7	2.5	2.4	2.3	---	3.1	2.8	4.3	3.0	e0.00	e0.00	0.00
30	1.8	2.6	2.3	2.3	---	2.9	3.0	4.1	2.5	e0.00	0.00	0.00
31	2.1	---	2.3	2.8	---	2.9	---	4.0	---	e0.00	0.00	---
TOTAL	40.52	52.2	91.7	78.3	74.8	75.70	83.6	110.3	95.10	46.90	0.00	0.02
MEAN	1.307	1.740	2.958	2.526	2.671	2.442	2.787	3.558	3.170	1.513	0.000	0.001
MAX	2.3	2.6	3.6	3.1	3.2	3.1	3.2	5.0	3.9	5.2	0.00	0.02
MIN	0.79	1.3	2.3	2.2	2.3	0.70	2.4	2.2	0.80	0.00	0.00	0.00
AC-FT	80	104	182	155	148	150	166	219	189	93	0.00	0.04

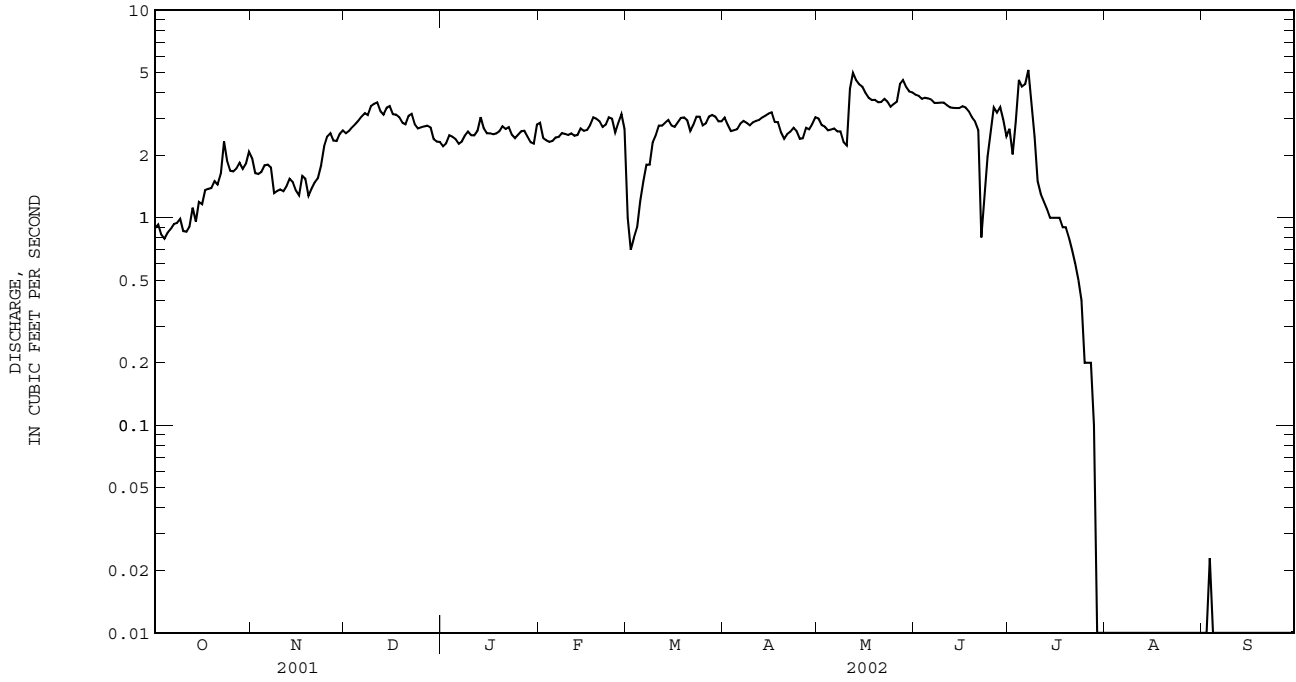
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2002, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000	2001	2002	2002	2002	2002	2001	2002
MEAN	3.127	5.089	4.918	4.252	4.991	6.533	8.496	9.531	10.00	4.830	3.467	1.467
MAX	6.60	11.5	8.26	6.95	8.53	10.1	19.4	17.5	20.4	14.3	11.0	5.26
(WY)	1997	1997	1998	1997	1997	1997	1998	1996	1996	1996	1996	1996
MIN	0.015	1.04	2.10	2.05	2.40	2.44	2.79	3.56	3.17	0.080	0.000	0.001
(WY)	2001	2001	2001	2001	2001	2002	2002	2002	2002	2001	2002	2002

06770240 FORT KEARNEY SLOUGH NEAR NEWARK, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR			FOR 2002 WATER YEAR			WATER YEARS 1996 - 2002	
ANNUAL TOTAL	1256.72			749.14			5.032	
ANNUAL MEAN	3.443			2.052			8.82 1998	
HIGHEST ANNUAL MEAN							2.05 2002	
LOWEST ANNUAL MEAN							80 Jun 16 1996	
HIGHEST DAILY MEAN	41	May	5	5.2	Jul	7	0.00 Mar 26 1996	
LOWEST DAILY MEAN	0.00	Jul	1	0.00	Jul	29	0.00 Sep 12 2000	
ANNUAL SEVEN-DAY MINIMUM	0.00	Sep	3				*140 Jun 16 1996	
MAXIMUM PEAK FLOW				8.2 Jul 7			7.70 Jun 20 2000	
MAXIMUM PEAK STAGE				4.89 Jul 7				
ANNUAL RUNOFF (AC-FT)	2490			1490			3650	
10 PERCENT EXCEEDS	8.7			3.5			9.8	
50 PERCENT EXCEEDS	2.1			2.5			3.7	
90 PERCENT EXCEEDS	0.00			0.00			0.13	

e Estimated.
 * Stage 6.19 ft.



PLATTE RIVER BASIN

06770253 PLATTE RIVER NEAR NEWARK, NE

LOCATION.--Lat 40°40'06", long 098°54'53", in NE ¼ NE ¼ sec.17, T.8 N., R.14 W., Buffalo County, Hydrologic Unit 10200101, on left bank, at National Audubon Society's Rowe Sanctuary, 0.4 mi south of county road, 2 mi east of State Highway 10, and 3 mi east of Newark.

PERIOD OF RECORD.--April 1999 to current year (stage record only).

GAGE.--Water-stage recorder. Datum of gage is 2,076.42 ft above sea level.

REMARKS.--Records good, except for October 16 to November 12, June 22-27, and August 2 to September 11, when record was unreliable or not obtained.

EXTREMES FOR CURRENT YEAR.--Maximum instantaneous gage height, 4.25 ft Feb. 10; minimum instantaneous gage height, 1.76 ft Sept. 28, 29.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.97	---	2.98	3.27	3.18	2.91	2.41	2.18	1.82	1.95	1.94	---
2	2.96	---	3.29	3.03	3.32	3.03	2.42	2.19	1.84	1.97	---	---
3	2.74	---	3.20	3.07	3.26	3.24	2.80	2.38	1.88	2.08	---	---
4	2.67	---	2.88	3.22	3.35	3.39	2.85	2.45	1.93	2.22	---	---
5	2.63	---	2.85	3.32	3.25	3.47	2.84	2.53	1.91	2.23	---	---
6	2.66	---	2.81	3.41	3.23	3.41	2.89	2.43	1.89	2.25	---	---
7	2.76	---	2.82	3.36	3.23	3.21	2.87	2.37	2.09	2.20	---	---
8	2.74	---	2.84	3.49	3.21	3.16	2.88	2.22	2.15	2.19	---	---
9	2.73	---	2.87	3.52	3.02	3.02	2.79	2.09	2.21	2.17	---	---
10	2.61	---	2.86	3.35	3.80	3.11	2.91	2.05	2.22	2.16	---	---
11	2.60	---	2.86	3.01	3.65	3.40	2.88	2.43	2.29	2.26	---	---
12	2.59	---	2.84	2.85	3.62	3.41	2.63	2.42	2.34	2.01	---	1.97
13	2.61	2.26	2.87	2.78	2.93	3.08	2.62	2.33	2.36	1.98	---	2.13
14	2.57	2.25	2.86	2.76	2.77	2.97	2.55	2.27	2.33	2.05	---	2.45
15	2.64	2.22	2.89	2.79	2.78	3.00	2.56	2.30	2.35	2.07	---	2.63
16	---	2.21	2.86	2.81	2.75	3.00	2.53	2.20	2.33	2.07	---	2.63
17	---	2.23	2.83	2.80	2.70	3.01	2.42	2.34	2.39	2.26	---	2.41
18	---	2.22	2.76	2.73	2.67	3.04	2.35	2.24	2.36	2.21	---	2.64
19	---	2.22	2.78	2.73	2.67	3.05	2.30	2.17	2.23	2.05	---	2.68
20	---	2.25	2.83	2.83	2.67	3.04	2.29	2.09	2.05	2.02	---	2.30
21	---	2.35	2.86	2.79	2.68	3.01	2.31	1.99	1.92	2.18	---	2.19
22	---	2.47	2.78	2.79	2.69	2.89	2.30	1.96	---	2.31	---	2.20
23	---	2.72	2.91	2.75	2.67	2.63	2.27	1.91	---	2.29	---	2.18
24	---	2.72	2.90	2.75	2.64	2.55	2.18	1.95	---	2.23	---	2.21
25	---	2.62	2.78	2.79	2.88	2.58	2.16	1.93	---	2.22	---	2.51
26	---	2.46	2.90	2.77	2.82	2.63	2.13	1.92	---	2.27	---	2.12
27	---	2.60	2.94	2.75	2.66	2.74	2.21	1.95	---	2.26	---	1.87
28	---	2.75	2.99	2.59	3.01	2.72	2.21	1.90	1.98	2.28	---	1.78
29	---	2.83	3.24	2.63	---	2.51	2.21	1.88	2.05	2.28	---	1.92
30	---	2.78	3.51	2.61	---	2.46	2.21	1.86	2.04	2.23	---	2.21
31	---	---	3.45	2.74	---	2.44	---	1.83	---	2.08	---	---
MAX	---	---	3.51	3.52	3.80	3.47	2.91	2.53	---	2.31	---	---
MIN	---	---	2.76	2.59	2.64	2.44	2.13	1.83	---	1.95	---	---

PLATTE RIVER BASIN

06770375 PLATTE RIVER NEAR PROSSER, NE

LOCATION.--Lat 40°43'45", long 098°38'07", in SW ¼ SE ¼ sec.23, T.9 N., R. 12 W., Hall County, Hydrologic Unit 10200101, on right bank, at Platte River Whooping Crane Maintenance Trust, 0.4 mi north of Denman road. 3 mi west of Wood River road, and 3.5 mi northwest of Prosser.

PERIOD OF RECORD.--April 1999 to current year (stage record only).

GAGE.--Water-stage recorder. Datum of gage is 1,973.08 ft above sea level.

REMARKS.--Records good, except for December 30 to Jan 3, June 28 to July 1, July 7 to September 6, and September 29, 30, when records were unreliable or not obtained, and they are poor.

EXTREMES FOR CURRENT YEAR.--Maximum instantaneous gage height, 4.29 ft Feb. 28; minimum instantaneous gage height, 1.77 ft Sept. 7, 8.

GAGE HEIGHT, in FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.87	2.23	2.43	---	3.07	2.97	2.20	2.12	1.97	---	---	---
2	2.85	2.17	2.58	---	3.68	2.65	2.22	2.11	1.92	1.87	---	---
3	2.73	2.16	2.67	---	3.86	3.01	2.41	2.13	1.94	1.93	---	---
4	2.57	2.13	2.65	3.62	4.05	3.20	2.59	2.21	1.99	1.95	---	---
5	2.51	2.13	2.62	3.74	4.11	3.37	2.59	2.27	1.96	1.99	---	---
6	2.49	2.16	2.60	3.69	4.11	3.47	2.63	2.26	1.91	2.00	---	---
7	2.48	2.20	2.65	3.53	3.98	3.43	2.65	2.21	1.96	---	---	1.79
8	2.47	2.17	2.66	3.45	4.09	3.37	2.64	2.27	2.01	---	---	1.79
9	2.56	2.16	2.69	3.50	4.01	3.15	2.65	2.14	2.03	---	---	1.80
10	2.38	2.18	2.73	3.45	3.63	3.08	2.58	2.10	2.07	---	---	1.91
11	2.35	2.18	2.69	3.47	3.80	3.23	2.84	2.30	2.11	---	---	1.87
12	2.43	2.19	2.70	3.36	3.99	3.51	2.53	2.39	2.13	---	---	1.92
13	2.50	2.20	2.71	3.34	3.98	3.11	2.46	2.30	2.19	---	---	2.04
14	2.49	2.21	2.65	3.15	3.89	2.78	2.43	2.22	2.13	---	---	2.12
15	2.54	2.21	2.62	3.23	3.79	2.72	2.32	2.23	2.12	---	---	2.29
16	2.50	2.21	2.66	3.60	3.34	2.69	2.30	2.22	2.12	---	---	2.36
17	2.45	2.21	2.67	3.62	2.61	2.69	2.22	2.32	2.10	---	---	2.38
18	2.43	2.25	2.68	3.43	2.48	2.67	2.16	2.29	2.12	---	---	2.33
19	2.47	2.24	2.69	3.45	2.52	2.73	2.17	2.25	2.12	---	---	2.48
20	2.37	2.22	2.70	3.52	2.49	2.76	2.13	2.21	2.07	---	---	2.39
21	2.36	2.23	2.67	3.54	2.48	2.78	2.17	2.07	1.98	---	---	2.24
22	2.45	2.25	2.73	3.58	2.47	2.77	2.14	2.01	1.90	---	---	2.19
23	2.37	2.43	2.62	3.50	2.47	2.42	2.13	2.04	1.87	---	---	2.17
24	2.42	2.67	2.51	3.50	2.52	2.38	2.16	2.01	---	---	---	2.17
25	2.34	2.55	2.53	3.47	2.57	2.38	2.09	2.01	---	---	---	2.26
26	2.33	2.42	2.71	3.42	2.81	2.38	2.08	2.00	---	---	---	2.33
27	2.42	2.54	2.69	2.86	2.93	2.46	2.15	2.04	1.82	---	---	2.12
28	2.36	2.56	2.92	2.35	3.12	2.57	2.14	2.02	---	---	---	2.01
29	2.32	2.63	2.79	2.50	---	2.36	2.11	2.00	---	---	---	---
30	2.38	2.42	---	3.79	---	2.25	2.10	2.00	---	---	---	---
31	2.30	---	---	3.26	---	2.27	---	2.00	---	---	---	---
MAX	2.87	2.67	---	---	4.11	3.51	2.84	2.39	---	---	---	---
MIN	2.30	2.13	---	---	2.47	2.25	2.08	2.00	---	---	---	---

PLATTE RIVER BASIN

06770470 PLATTE RIVER NEAR DONIPHAN, NE

LOCATION.--Lat 40°47'18", long 098°26'17", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.33, T.10 N., R.10 W., Hall County, Hydrologic Unit 10200101, on left bank, at Platte River Whooping Crane Maintenance Trust, 3.2 mi west of U.S. Highway 281, and 3 mi northwest of Doniphan.

PERIOD OF RECORD.--April 1999 to current year (stage record only).

GAGE.--Water-stage recorder. Datum of gage is 1899.80 ft above sea level.

REMARKS.--Records good, except April 22 to June 26, which are fair. Channel was dry August 5-26.

EXTREMES FOR CURRENT YEAR.--Maximum instantaneous gage height, 4.09 ft Feb. 10; minimum instantaneous gage height, 1.26 ft Aug. 5.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

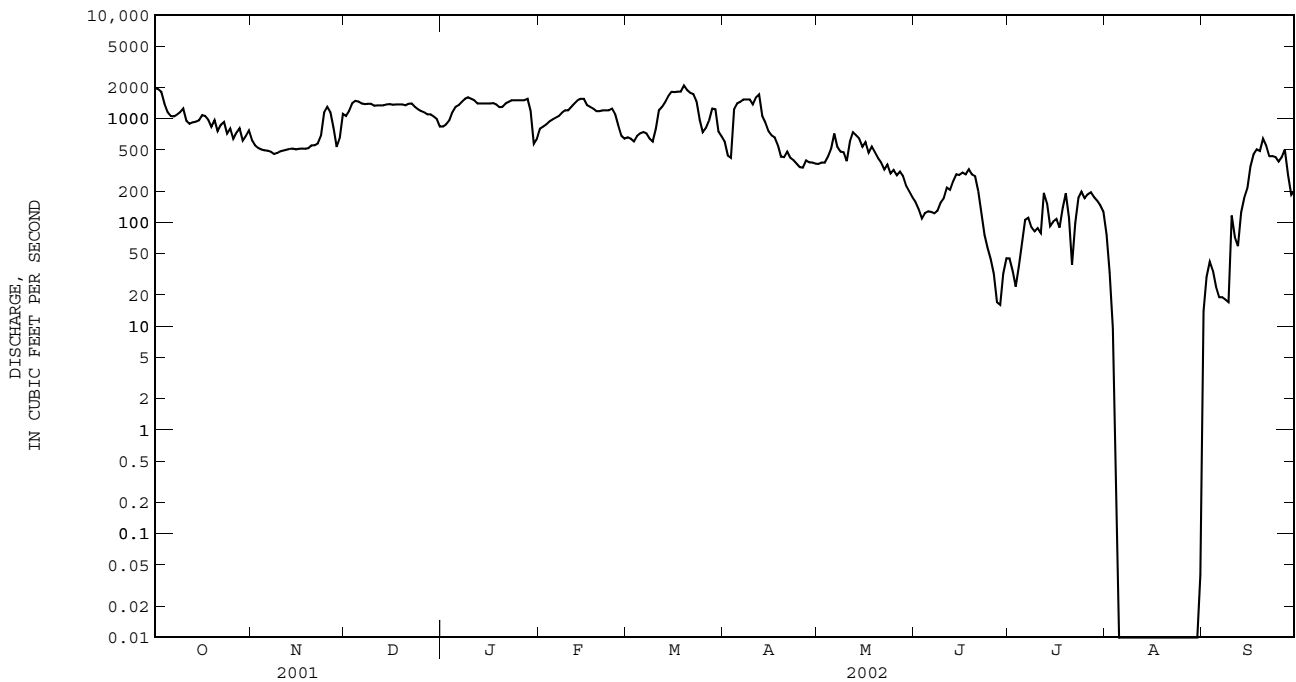
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.72	2.32	2.90	3.05	2.55	2.67	2.22	2.15	1.97	1.84	1.79	1.91
2	2.73	2.30	2.93	2.96	2.65	2.61	2.22	2.15	1.94	1.81	1.66	1.97
3	2.69	2.25	2.91	2.93	3.11	2.62	2.30	2.15	1.91	1.82	1.51	1.94
4	2.56	2.22	2.90	2.88	3.20	2.75	2.49	2.18	1.94	1.89	1.40	1.90
5	2.51	2.21	2.78	3.00	3.31	2.92	2.56	2.22	1.94	1.92	---	1.85
6	2.48	2.21	2.76	3.24	3.37	2.99	2.64	2.26	1.92	1.92	---	1.81
7	2.47	2.21	2.72	3.25	3.45	2.97	2.66	2.23	1.91	1.92	---	1.81
8	2.45	2.21	2.71	3.12	3.51	2.89	2.65	2.20	1.95	1.89	---	1.77
9	2.47	2.19	2.72	3.15	3.64	2.80	2.64	2.15	1.93	1.87	---	1.78
10	2.43	2.20	2.69	3.10	3.74	2.87	2.54	2.11	1.97	1.85	---	2.07
11	2.38	2.23	2.70	3.04	3.43	2.93	2.65	2.23	1.99	1.89	---	1.92
12	2.39	2.25	2.70	2.88	3.29	2.99	2.53	2.30	2.03	1.97	---	1.91
13	2.44	2.27	2.69	2.77	3.25	2.95	2.47	2.25	2.06	1.89	---	2.01
14	2.45	2.28	2.71	2.64	3.09	2.81	2.44	2.24	2.06	1.86	---	2.09
15	2.49	2.27	2.72	2.78	2.94	2.80	2.40	2.22	2.05	1.89	---	2.17
16	2.53	2.24	2.74	2.77	2.84	2.76	2.37	2.23	2.04	1.89	---	2.26
17	2.48	2.23	2.79	2.72	2.70	2.74	2.33	2.25	2.04	1.86	---	2.28
18	2.46	2.24	2.81	2.76	2.58	2.75	2.25	2.28	2.06	1.94	---	2.28
19	2.43	2.24	2.84	2.60	2.52	2.76	2.21	2.27	2.04	1.97	---	2.33
20	2.42	2.22	2.85	2.71	2.50	2.69	2.19	2.23	2.01	1.88	---	2.36
21	2.33	2.22	2.85	2.72	2.49	2.71	2.21	2.23	1.95	1.83	---	2.27
22	2.41	2.26	2.88	2.74	2.48	2.70	2.19	2.09	1.87	1.94	---	2.23
23	2.42	2.39	2.62	2.80	2.49	2.54	2.13	2.12	1.84	1.96	---	2.23
24	2.38	2.62	2.88	2.74	2.50	2.43	2.10	2.10	1.79	1.95	---	2.22
25	2.39	2.59	2.94	2.69	2.55	2.46	2.12	2.10	1.75	1.93	---	2.21
26	2.32	2.54	2.63	2.66	2.35	2.40	2.13	2.08	1.68	1.95	---	2.28
27	2.39	2.77	2.53	2.60	2.49	2.48	2.18	2.07	1.63	1.96	1.90	2.22
28	2.38	2.68	2.64	2.62	2.62	2.55	2.10	2.04	1.72	1.94	1.88	2.12
29	2.32	2.81	2.72	2.52	---	2.48	2.06	2.03	1.82	1.92	1.92	2.06
30	2.36	2.90	2.67	2.78	---	2.34	2.13	2.02	1.86	1.91	1.89	2.09
31	2.37	---	3.09	2.92	---	2.28	---	2.01	---	1.87	1.88	---
MAX	2.73	2.90	3.09	3.25	3.74	2.99	2.66	2.30	2.06	1.97	---	2.36
MIN	2.32	2.19	2.53	2.52	2.35	2.28	2.06	2.01	1.63	1.81	---	1.77

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06770500 PLATTE RIVER NEAR GRAND ISLAND, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1942 - 2002a	
ANNUAL TOTAL	447907		252097.39		1635	
ANNUAL MEAN	1227		690.7		5380	
HIGHEST ANNUAL MEAN					1983	
LOWEST ANNUAL MEAN					414	
HIGHEST DAILY MEAN	3070	May 7	2080	Mar 19	23500	Jun 30 1983
LOWEST DAILY MEAN	321	Jul 2	0.00	Aug 5	*0.00	Oct 1 1941
ANNUAL SEVEN-DAY MINIMUM	351	Jun 28	0.00	Aug 5	0.00	Oct 1 1941
MAXIMUM PEAK FLOW			**2220	Mar 19	***23900	Jun 30 1983
MAXIMUM PEAK STAGE			****5.01	Jan 31	*****6.16	Mar 27 1960
ANNUAL RUNOFF (AC-FT)	888400		500000		1185000	
10 PERCENT EXCEEDS	2010		1450		3230	
50 PERCENT EXCEEDS	1180		571		1180	
90 PERCENT EXCEEDS	482		22		144	

e Estimated.
a Since beginning of storage in Lake McConaughy.
* No flow at times in many years.
** Stage 4.26 ft.
*** Stage 5.97 ft, datum then in use.
**** Backwater from ice.
***** Backwater from ice, datum then in use.



PLATTE RIVER BASIN

06772775 WARM SLOUGH NEAR CENTRAL CITY, NE

LOCATION.--Lat 41°05'27", long 098°04'39", in SW ¼ SW ¼ sec.13, T.11 N., R.7 W., Merrick County, Hydrologic Unit 10200103, on downstream side of county road bridge, 4 mi southwest of Central City.

PERIOD OF RECORD.--May 1996 to current year.

REVISED RECORDS.--WSP 1310: 1902, 1906-7, 1948(P). WSP 1440: 1903-4. WDR CO-86-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 1,718 ft above sea level.

REMARKS.--Records excellent except for daily discharges for May 11-13, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

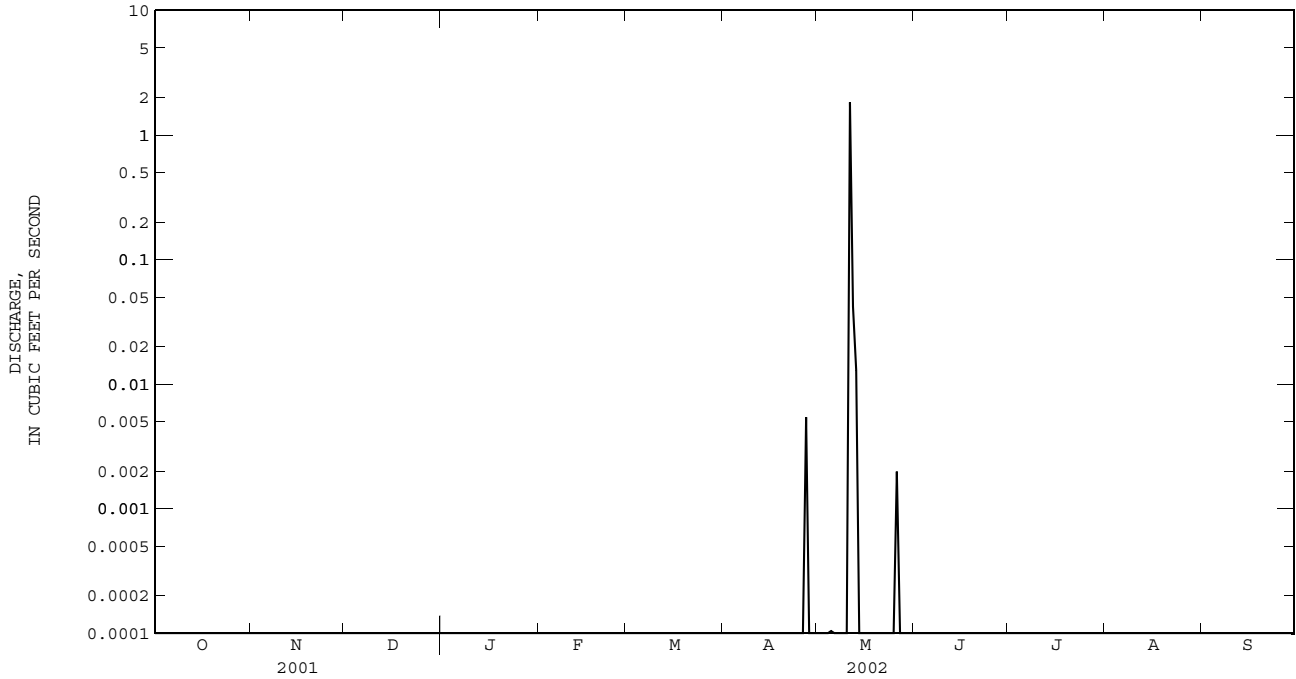
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.8	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.85	0.00	0.00	0.00	0.00
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.060	0.000	0.000	0.000	0.000
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.8	0.00	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.7	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2002, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000	2001	2002
MEAN	3.251	5.773	3.906	3.020	4.608	7.409	19.13
MAX	19.4	23.1	14.4	9.50	14.0	23.2	66.7
(WY)	1998	1998	1998	1998	1998	1998	2001
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.060
(WY)	1997	2000	2001	2002	2001	2001	1996

06772775 WARM SLOUGH NEAR CENTRAL CITY, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1996 - 2002
ANNUAL TOTAL	1741.35	1.85	
ANNUAL MEAN	4.771	0.005	7.905
HIGHEST ANNUAL MEAN			23.1 1998
LOWEST ANNUAL MEAN			0.005 2002
HIGHEST DAILY MEAN	240 May 6	1.8 May 11	413 Apr 8 1998
LOWEST DAILY MEAN	0.00 Jan 1	0.00 Oct 1	0.00 Apr 1 1996
ANNUAL SEVEN-DAY MINIMUM	0.00 Jan 12	0.00 Oct 1	0.00 Apr 1 1996
MAXIMUM PEAK FLOW		8.6 May 11	443 Apr 8 1998
MAXIMUM PEAK STAGE		3.62 May 11	8.04 Apr 8 1998
ANNUAL RUNOFF (AC-FT)	3450	3.7	5730
10 PERCENT EXCEEDS	5.7	0.00	19
50 PERCENT EXCEEDS	0.00	0.00	0.23
90 PERCENT EXCEEDS	0.00	0.00	0.00



PLATTE RIVER BASIN

06774000 PLATTE RIVER NEAR DUNCAN, NE

LOCATION.--Lat 41°22'04", long 097°29'40", in SE ¼ SW ¼ sec.12, T.16 N., R.2 W., Platte County, Hydrologic Unit 10200103, on left bank near northwest corner of county bridge, 1.5 mi south of Duncan, and 15.3 mi upstream from Loup River, and at mile 114.

DRAINAGE AREA.--59,300 mi², of which about 54,630 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--June 1895 to December 1909 (irrigation seasons only 1885-1900). July 1910 to December 1911 (gage heights and discharge measurements only), April 1912 to September 1915, June 1928 to current year. Published as "near Columbus" 1895-1915.

REVISED RECORDS.--WSP 956: 1935. WSP 1390: 1897, 1899-1901, 1903-05, 1929-32, 1935(M), 1936. WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 1,476.82 ft above sea level. June 1895 to December 1909, April 1912 to September 1915, and June to October 1928, nonrecording gage at site 7 mi downstream at different datums. Oct. 25, 1928, to Feb. 20, 1935, nonrecording gage, and Feb. 20, 1935 to Mar. 21, 1984, recording gage both at present site at 2.00 ft higher datum. Mar. 22, 1984, to Mar. 4, 1987, at site 300 ft downstream at present datum. Data collection platform at station.

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

EXTREMES PRIOR TO REGULATION.--Maximum discharge, 44,100 ft³/s June 23, 1905, gage height 6.50 ft, site and datum than in use. No flow at times in 1896, 1902, 1904-05, 1910-11, 1913-14, 1928, all at site downstream, 1931, 1933-41.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1570	782	608	e960	e900	e840	689	519	413	15	0.00	0.00
2	1530	794	1030	e1000	e1000	e720	652	528	329	15	0.00	0.00
3	1500	661	1030	e1080	e1100	e660	614	516	257	12	0.00	0.00
4	1580	560	1490	e1280	e1140	e740	597	514	246	8.6	0.00	0.00
5	1570	537	1740	e1450	e1180	e800	756	536	225	1.7	0.00	0.00
6	1360	538	1770	e1500	e1200	e900	1430	827	215	1.2	0.00	0.00
7	1280	517	1630	e1600	e1250	e1180	1540	874	215	0.11	0.00	0.00
8	1200	483	1640	e1750	e1500	e1300	1650	903	205	0.00	0.00	0.00
9	1250	462	1690	e1800	e1450	e1500	1690	749	191	0.00	0.00	0.00
10	1720	435	1650	e1700	e1500	e1800	1550	723	191	0.00	0.00	0.00
11	1540	414	1690	e1700	e1600	e2200	1640	1010	600	0.00	0.00	0.00
12	1200	409	1670	e1650	e1750	e2300	1430	1040	581	0.00	0.00	0.00
13	1060	432	1620	e1600	e1850	e2400	1960	1110	539	0.00	0.00	0.00
14	1010	426	1630	e1500	e1850	e2600	1310	1140	416	0.00	0.00	0.00
15	1030	428	1640	e1500	e1800	e2600	966	955	403	0.00	0.00	0.00
16	1040	449	1600	e1500	e1650	2580	887	833	403	0.00	0.00	0.00
17	1130	459	1570	e1500	e1650	2240	766	779	390	0.00	0.00	0.00
18	1200	432	1600	e1550	e1500	2160	719	752	420	0.00	0.00	0.00
19	1120	407	1610	e1400	e1500	2390	660	726	378	0.00	0.00	0.00
20	1080	399	1560	e1400	e1450	2600	562	776	352	0.00	0.00	0.00
21	1040	414	1520	e1600	e1450	2300	662	699	315	0.00	0.00	0.00
22	1040	434	1530	e1650	e1500	2190	681	617	293	0.00	0.00	0.30
23	828	533	e1500	e1700	e1450	2140	659	527	202	0.00	0.00	134
24	940	872	e1500	e1700	e1450	2050	510	615	120	0.00	0.00	142
25	868	1280	e1500	e1700	e1300	1380	449	689	77	0.00	0.00	118
26	810	1710	e1500	e1700	e1100	1050	450	609	56	0.00	0.00	132
27	870	1390	e1350	e1750	e880	941	652	772	45	0.00	0.00	138
28	756	810	e1300	e1750	e840	895	830	692	35	0.00	0.00	144
29	922	597	e1200	e1400	---	1030	687	706	27	0.00	0.00	214
30	931	546	e1140	e700	---	1220	609	632	21	0.00	0.00	184
31	709	---	e920	e820	---	890	---	521	---	0.00	0.00	---
TOTAL	35684	18610	45428	45890	38790	50596	28257	22889	8160	53.61	0.00	1206.30
MEAN	1151	620.3	1465	1480	1385	1632	941.9	738.4	272.0	1.729	0.000	40.21
MAX	1720	1710	1770	1800	1850	2600	1960	1140	600	15	0.00	214
MIN	709	399	608	700	840	660	449	514	21	0.00	0.00	0.00
AC-FT	70780	36910	90110	91020	76940	100400	56050	45400	16190	106	0.00	2390

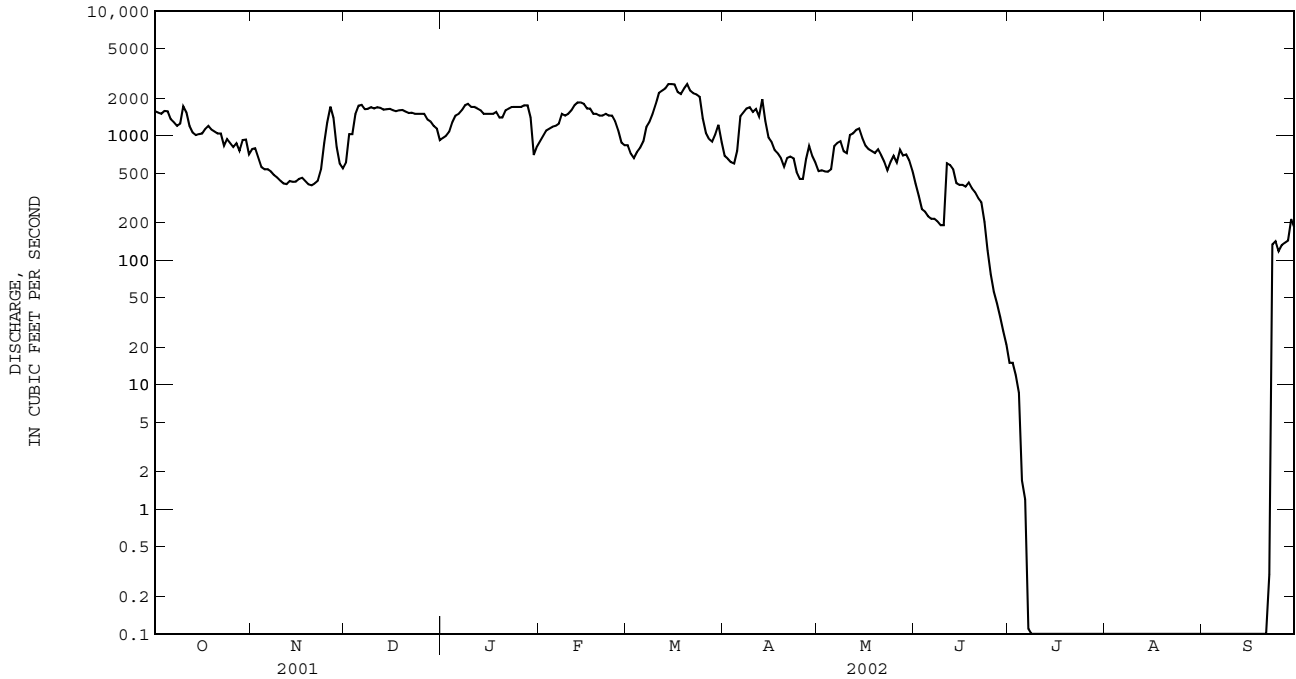
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2002, BY WATER YEAR (WY)

MEAN	1394	1555	1519	1578	2313	2935	2525	2625	2888	1433	660.4	967.5
MAX	6673	5617	5107	5603	8795	9531	13410	15450	18320	12590	6135	6785
(WY)	1974	1985	1985	1984	1984	1984	1984	1984	1983	1983	1983	1983
MIN	0.000	0.000	15.7	44.5	269	820	574	150	11.3	0.000	0.000	0.000
(WY)	1957	1957	1942	1942	1942	1957	1967	1955	1956	1956	1956	1956

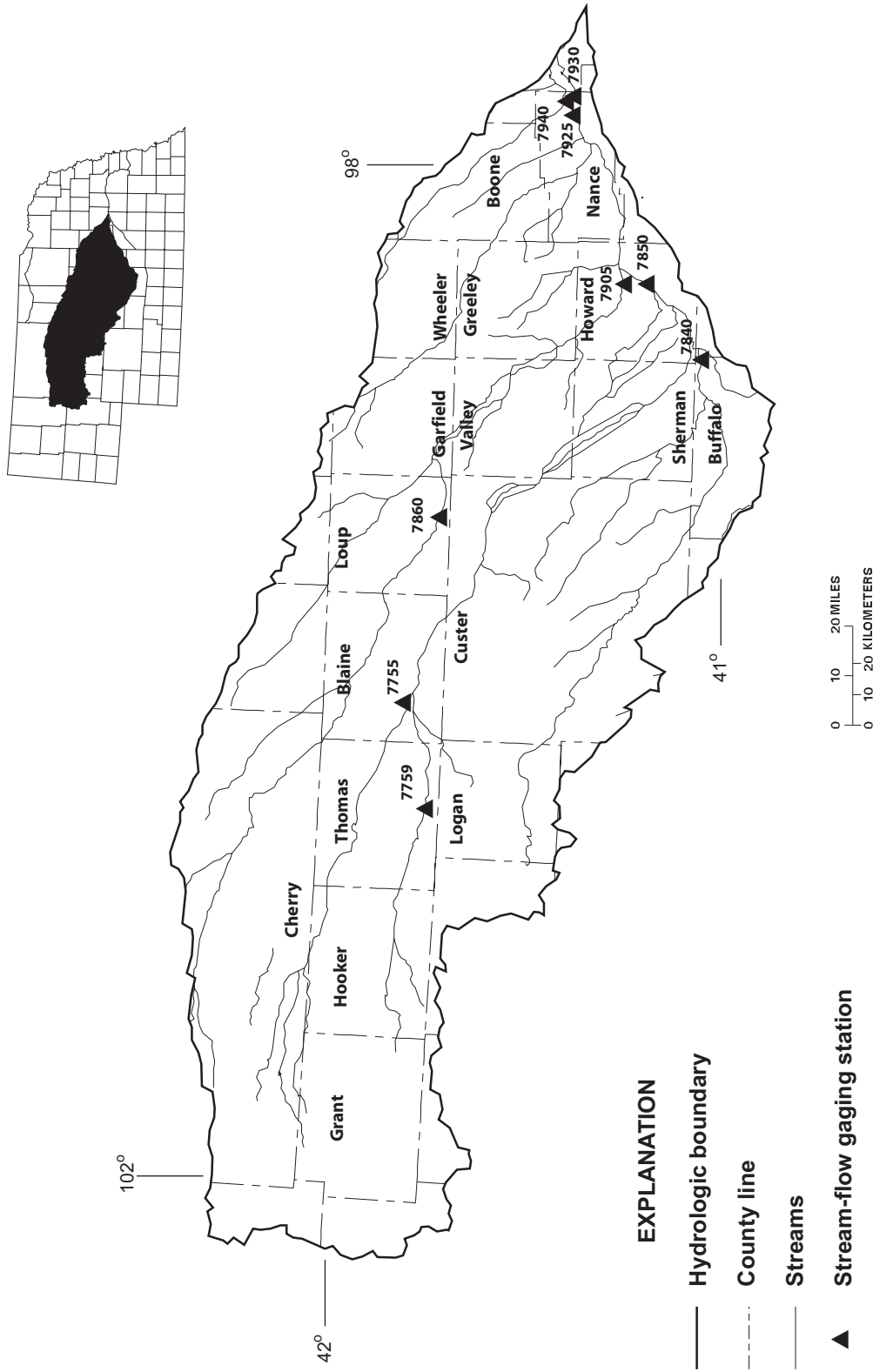
06774000 PLATTE RIVER NEAR DUNCAN, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1942 - 2002	
ANNUAL TOTAL	552779		295563.91		1861	
ANNUAL MEAN	1514		809.8		6652	
HIGHEST ANNUAL MEAN					1984	
LOWEST ANNUAL MEAN					494	
HIGHEST DAILY MEAN	7070	Mar 17	2600	Mar 14	23800	Jul 1 1983
LOWEST DAILY MEAN	125	Jul 5	0.00	Jul 8	0.00	Jan 4 1942
ANNUAL SEVEN-DAY MINIMUM	152	Jul 4	0.00	Jul 8	0.00	Oct 1 1943
MAXIMUM PEAK FLOW			2620	Mar 15	*25400	Mar 28 1960
MAXIMUM PEAK STAGE			**5.16	Mar 15	**7.86	Mar 11 1993
ANNUAL RUNOFF (AC-FT)	1096000		586300		1349000	
10 PERCENT EXCEEDS	2820		1690		3920	
50 PERCENT EXCEEDS	1390		726		1290	
90 PERCENT EXCEEDS	429		0.00		103	

e Estimated.
 * Stage 6.36 ft.
 ** Backwater from ice.



SURFACE-WATER DISCHARGE RECORDS
PLATTE RIVER BASIN
LOUP RIVER BASIN



SURFACE-WATER DISCHARGE RECORDS
PLATTE RIVER BASIN
LOUP RIVER BASIN

*Station number	Station name	Page
7755	Middle Loup River at Dunning.....	128
7759	Dismal River near Thedford.....	130
7840	South Loup River at St. Michael.....	136
7850	Middle Loup River at St. Paul.....	140
7860	North Loup River at Taylor.....	144
7905	North Loup River near St. Paul.....	146
7925	Loup River Power Canal near Genoa.....	150
7930	Loup River near Genoa.....	152
7940	Beaver Creek at Genoa.....	154

* NOTE: To change abbreviated station number to complete station number, prefix with "06" and add zeros required to give eight digits.

PLATTE RIVER BASIN

06775500 MIDDLE LOUP RIVER AT DUNNING, NE

LOCATION.--Lat 41°49'50", long 100°06'20", in NW ¼ SE ¼ sec.33, T.22 N., R.24 W., Blaine County, Hydrologic Unit 10210001, on left bank near upstream end of bridge on State Highway 2 at north edge of Dunning, 1.0 mi upstream from Dismal River, and at mile 204.

DRAINAGE AREA.--1,830 mi², of which about 79 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--September 1945 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 2,604.14 ft above sea level. Prior to Sept. 12, 1946, nonrecording gage, and Sept. 12, 1946, to Sept. 30, 1962, water-stage recorder at site 0.2 mi upstream at datum 3.03 ft higher. Oct. 1, 1962, to May 15, 1989, at present site, and May 15, 1989, to Mar. 20, 1990, at site 0.2 mi upstream, both at datum 3.00 ft higher. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	466	476	431	461	455	433	509	541	484	382	391	447
2	469	480	446	435	463	e430	491	515	478	391	387	444
3	463	478	480	435	461	e420	460	510	477	397	395	431
4	470	476	497	455	466	e420	465	520	477	396	412	433
5	472	472	500	448	483	e440	477	512	472	390	429	459
6	472	477	491	468	457	e460	481	506	456	401	416	432
7	466	484	489	469	432	468	490	508	455	437	401	425
8	468	473	477	489	451	467	500	510	463	426	407	417
9	481	461	480	509	480	470	480	487	451	422	467	444
10	480	465	497	502	429	455	486	478	450	416	432	473
11	461	465	500	453	443	456	506	502	451	410	424	455
12	475	479	494	475	450	498	514	489	437	409	431	485
13	472	488	489	512	449	530	513	480	434	405	421	513
14	459	482	481	493	467	529	519	479	422	402	416	479
15	452	483	498	484	460	498	517	482	432	393	409	459
16	435	476	509	479	481	518	521	487	434	389	407	443
17	447	482	495	472	502	512	502	487	424	387	398	440
18	456	489	495	468	510	527	504	482	429	386	403	450
19	469	471	481	448	507	507	489	477	429	385	411	449
20	462	466	478	451	505	520	483	473	431	384	408	438
21	468	462	481	464	503	492	496	463	427	387	422	440
22	470	466	480	478	492	469	491	482	417	396	425	433
23	484	490	419	492	493	499	485	476	421	393	425	438
24	475	522	409	485	506	511	492	477	416	392	449	432
25	451	486	426	465	485	494	471	470	410	397	424	440
26	446	492	417	470	393	498	469	486	406	423	468	445
27	446	416	423	480	391	514	516	485	403	414	533	445
28	462	407	454	459	444	514	510	521	398	408	484	449
29	474	439	446	452	---	515	498	504	389	401	470	451
30	467	458	474	466	---	508	516	502	387	395	466	451
31	471	---	468	431	---	516	---	490	---	389	456	---
TOTAL	14409	14161	14605	14548	13058	15088	14851	15281	13060	12403	13287	13440
MEAN	464.8	472.0	471.1	469.3	466.4	486.7	495.0	492.9	435.3	400.1	428.6	448.0
MAX	484	522	509	512	510	530	521	541	484	437	533	513
MIN	435	407	409	431	391	420	460	463	387	382	387	417
AC-FT	28580	28090	28970	28860	25900	29930	29460	30310	25900	24600	26350	26660

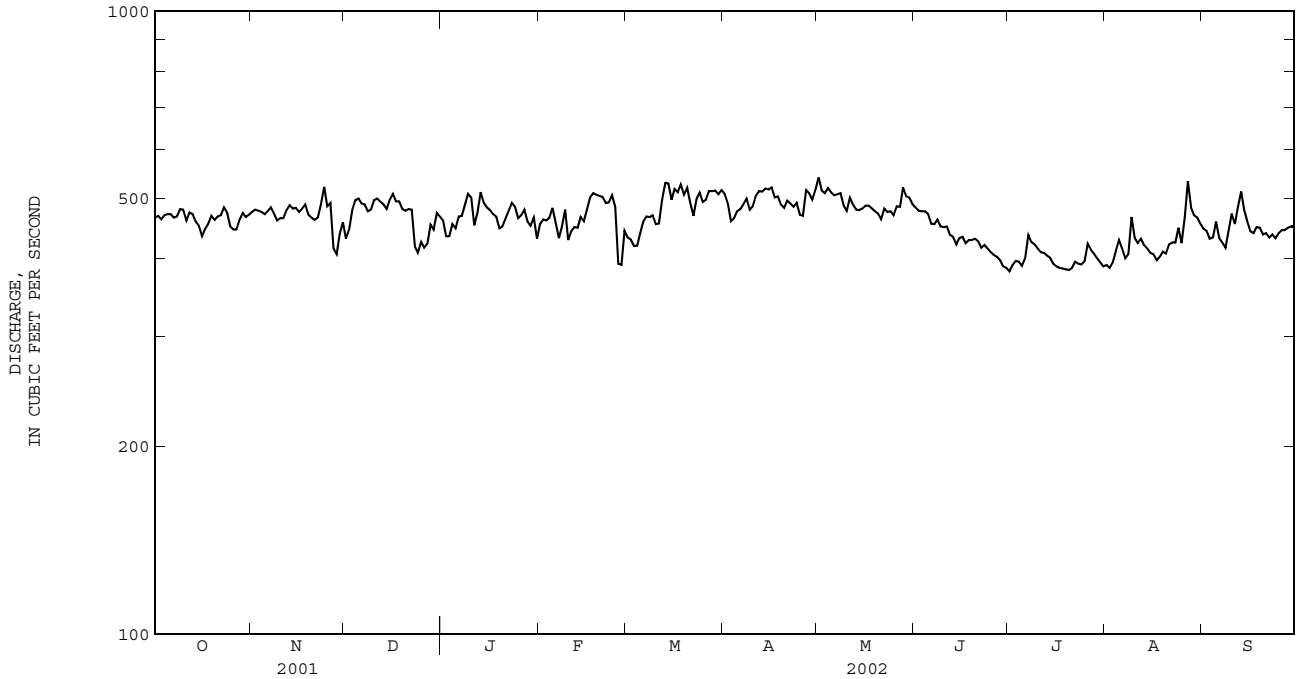
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2002, BY WATER YEAR (WY)

MEAN	412.6	422.0	417.4	413.2	433.0	457.8	458.3	446.6	422.7	399.1	399.8	402.8
MAX	519	517	509	519	543	556	573	590	545	491	490	504
(WY)	1997	1992	1994	2001	2001	2001	2001	1995	1995	1999	1998	1996
MIN	346	364	336	322	365	359	334	353	342	324	341	330
(WY)	1951	1948	1950	1949	1994	1968	1951	1948	1948	1970	1947	1955

06775500 MIDDLE LOUP RIVER AT DUNNING, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1946 - 2002	
ANNUAL TOTAL	181860		168191			
ANNUAL MEAN	498.2		460.8		423.7	
HIGHEST ANNUAL MEAN					502 2001	
LOWEST ANNUAL MEAN					365 1950	
HIGHEST DAILY MEAN	656	Apr 7	541	May 1	778	Apr 20 1971
LOWEST DAILY MEAN	407	Nov 28	382	Jul 1	100	Dec 5 1950
ANNUAL SEVEN-DAY MINIMUM	428	Dec 23	387	Jul 15	231	Jan 1 1949
MAXIMUM PEAK FLOW			*578 May 1		**2480 Mar 25 1996	
MAXIMUM PEAK STAGE			***6.21 Mar 3		***7.02 Mar 31 1949	
ANNUAL RUNOFF (AC-FT)	360700		333600		306900	
10 PERCENT EXCEEDS	569		507		504	
50 PERCENT EXCEEDS	485		467		418	
90 PERCENT EXCEEDS	446		407		352	

e Estimated.
 * Stage 3.50 ft.
 ** Caused by ice jam release upstream, stage 6.15 ft.
 *** Backwater from ice.



PLATTE RIVER BASIN

06775900 DISMAL RIVER NEAR THEDFORD, NE
(Hydrologic bench-mark station)

LOCATION.--Lat 41°46'45", long 100°31'30", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.23, T.21 N., R.28 W., Thomas County, Hydrologic Unit 10210002, on right bank 1,400 ft downstream from bridge on U.S. Highway 83, 2 mi upstream from boundary of Nebraska National Forest (Bessey Division), 14 mi south of Thedford, and at mile 32.9.

DRAINAGE AREA.--966 mi², approximately, of which about 30 mi² contributes directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1966 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 2,800.13 ft above sea level. Data collection platform at station.

REMARKS.--Records fair.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	209	212	211	196	218	225	223	218	211	208	209	212
2	209	211	212	199	218	222	223	218	210	211	208	213
3	208	210	214	205	219	223	221	218	210	214	209	211
4	206	211	214	208	220	223	222	218	211	213	210	210
5	210	211	211	207	220	224	221	217	210	214	212	213
6	215	213	210	211	220	224	222	218	209	e212	211	214
7	213	212	212	212	221	226	222	218	209	e210	210	213
8	212	210	212	212	221	226	222	216	208	e208	210	212
9	214	209	212	213	221	227	215	216	208	e206	214	213
10	208	210	214	213	219	225	e216	215	208	e206	210	215
11	209	210	214	212	218	226	216	216	208	e204	209	213
12	211	215	211	211	221	224	221	216	206	204	209	214
13	209	215	211	211	223	226	221	216	205	205	206	214
14	209	214	210	212	224	226	221	216	205	205	208	213
15	208	216	212	213	224	226	220	215	208	205	210	212
16	206	212	210	211	224	227	220	216	214	204	210	213
17	208	214	208	212	222	225	219	216	212	204	209	212
18	210	213	212	212	223	224	220	214	209	203	209	212
19	209	209	209	210	223	225	218	215	208	203	210	209
20	212	211	209	212	223	226	217	216	206	204	211	211
21	212	214	210	214	224	225	220	214	207	203	212	209
22	212	211	209	215	224	224	219	214	208	203	213	208
23	210	216	206	216	224	225	217	213	206	200	213	214
24	210	224	203	216	223	225	219	213	207	204	214	214
25	207	220	207	216	222	222	217	212	209	205	212	215
26	208	213	205	217	220	223	218	213	208	209	212	215
27	209	209	208	217	223	223	218	213	207	208	215	218
28	211	207	205	217	225	223	218	215	205	208	215	218
29	211	208	201	217	---	223	218	214	205	209	213	219
30	210	211	202	218	---	223	218	212	204	209	214	220
31	212	---	200	218	---	223	---	211	---	208	213	---
TOTAL	6507	6371	6484	6573	6207	6959	6582	6672	6241	6409	6540	6399
MEAN	209.9	212.4	209.2	212.0	221.7	224.5	219.4	215.2	208.0	206.7	211.0	213.3
MAX	215	224	214	218	225	227	223	218	214	214	215	220
MIN	206	207	200	196	218	222	215	211	204	200	206	208
AC-FT	12910	12640	12860	13040	12310	13800	13060	13230	12380	12710	12970	12690

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2002, BY WATER YEAR (WY)

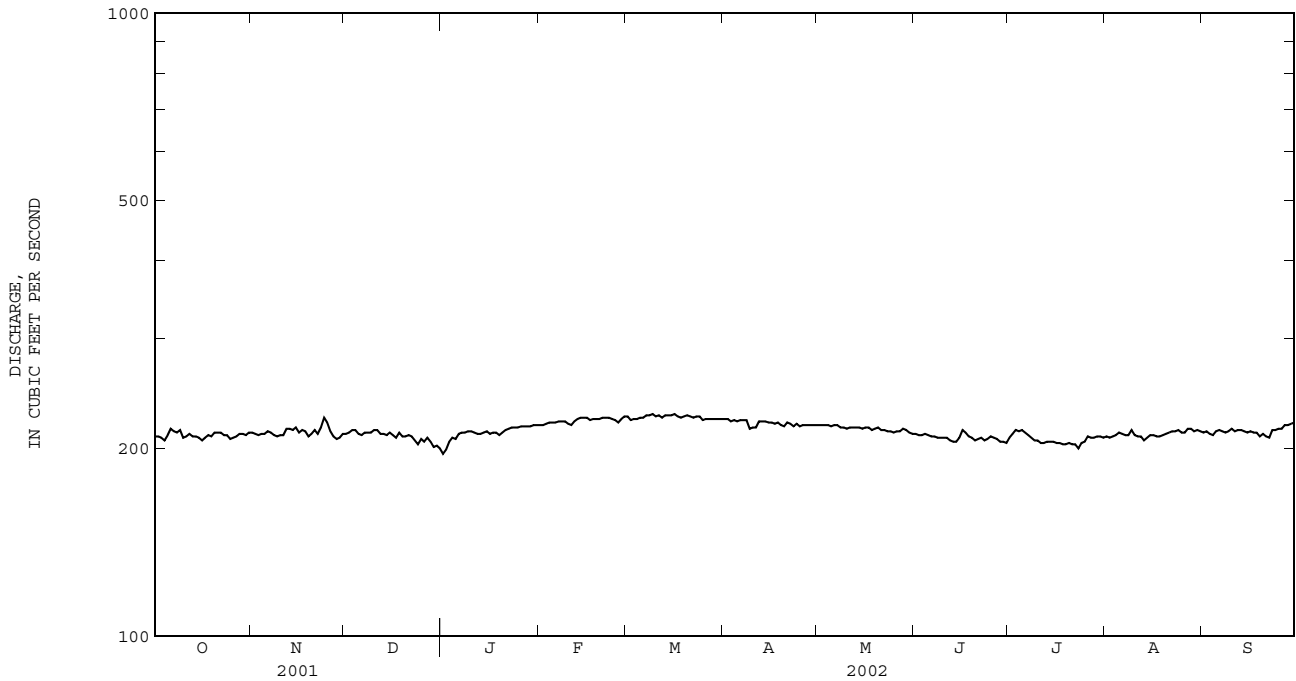
	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)
	201.4	235	181	1974	204.8	237	183	1970	202.5	231	170	1979	201.9	230	175	1972	204.4	251	185	1968
	209.5	239	188	1971	211.5	254	191	1985	208.8	246	183	1967	202.4	242	179	1975	201.0	245	172	1980
	199.4	237	179	1974	198.4	234	176	1974	199.4	234	176	1974	199.4	234	176	1974	199.4	234	176	1974

PLATTE RIVER BASIN

06775900 DISMAL RIVER NEAR THEDFORD, NE--Continued
(Hydrologic bench-mark station)

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1967 - 2002	
ANNUAL TOTAL	80829		77944		203.8	
ANNUAL MEAN	221.4		213.5		188	
HIGHEST ANNUAL MEAN					231	
LOWEST ANNUAL MEAN					188	
HIGHEST DAILY MEAN	264	Apr 7	227	Mar 9	463	Aug 23 1983
LOWEST DAILY MEAN	200	Dec 31	196	Jan 1	125	Feb 3 1989
ANNUAL SEVEN-DAY MINIMUM	204	Dec 25	201	Dec 28	153	Dec 29 1982
MAXIMUM PEAK FLOW					*1160	
MAXIMUM PEAK STAGE			0.82		**5.10	
ANNUAL RUNOFF (AC-FT)	160300		154600		147700	
10 PERCENT EXCEEDS	241		223		229	
50 PERCENT EXCEEDS	218		212		201	
90 PERCENT EXCEEDS	209		206		183	

e Estimated.
* Stage 3.83 ft.
** Backwater from ice.



PLATTE RIVER BASIN

06775900 DISMAL RIVER NEAR THEDFORD, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968-98, current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	BARO-METRIC PRES-SURE (MM HG) OF (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)
OCT													
10...	1200	206	9.6	685	9.4	96	8.1	175	10.0	11.5	74	89	0
NOV													
01...	1100	208	7.9	683	9.5	97	7.9	166	15.0	11.0	73	88	0
DEC													
04...	1100	214	10	--	10.3	--	8.0	174	9.0	7.0	64	78	0
JAN													
07...	1300	212	9.6	685	10.9	96	8.1	172	13.0	5.5	63	76	0
FEB													
11...	1100	220	9.0	684	11.0	97	8.0	170	9.0	5.5	65	78	--
MAR													
11...	1200	227	11	685	--	--	7.9	168	7.0	0	60	72	0
APR													
08...	1400	222	14	685	8.9	94	7.8	170	13.0	13.0	62	74	--
MAY													
07...	1300	218	11	683	9.3	96	8.0	173	12.0	12.0	72	88	0
JUN													
13...	1300	208	10	690	8.5	98	8.2	174	22.0	17.5	72	87	--
JUL													
09...	1200	E206	12	687	7.6	96	8.2	177	32.0	21.5	71	84	1
AUG													
13...	1200	204	7.9	688	8.7	102	8.3	173	25.5	18.0	67	81	0
SEP													
04...	1100	212	12	690	8.9	105	8.2	179	22.5	18.5	79	95	--

Date	HY-DROXIDE WATER DIS IT FIELD MG/L AS OH (71834)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, PAR TICULTE WAT FLT SUSP (MG/L AS N) (49570)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)
OCT													
10...	0	1.12	6.2	<.04	.19	.48	E.004	.15	.67	.386	.13	.189	1.1
NOV													
01...	0	1.51	5.8	<.04	.20	.50	<.008	.36	.70	.340	.11	.20	1.8
DEC													
04...	0	1.85	6.1	<.04	.20	.58	<.008	.13	.78	.414	.14	.19	1.8
JAN													
07...	0	1.71	6.1	<.04	.22	.63	E.004	.14	.86	.420	.14	.19	1.3
FEB													
11...	--	1.96	5.9	<.04	.17	.59	<.008	.12	.76	.411	.13	.19	1.4
MAR													
11...	0	.94	6.0	<.04	.24	.60	<.008	.16	.84	.408	.13	.22	1.6
APR													
08...	--	.85	5.9	<.04	.24	.45	E.004	.18	.69	.383	.12	.179	1.6
MAY													
07...	--	1.55	6.3	<.04	.26	.45	<.008	.20	.70	.402	.13	.23	1.6
JUN													
13...	--	1.26	5.8	<.04	.17	.41	<.008	.11	.58	.383	.12	.190	1.0
JUL													
09...	--	1.45	5.8	<.04	.21	.49	E.005	.13	.71	.438	.14	.20	1.2
AUG													
13...	--	1.43	5.5	<.04	.18	.43	E.004	.09	.61	.389	.13	.181	.7
SEP													
04...	--	1.09	6.0	<.04	.21	.44	<.008	.12	.64	.396	.13	.199	1.2

PLATTE RIVER BASIN

06775900 DISMAL RIVER NEAR THEDFORD, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)
OCT 10...	<.1	.9	1.1	--	--	--	--	--	--	--	--	--	--
NOV 01...	<.1	.8	1.8	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	<.005
DEC 04...	<.1	1.1	1.7	--	--	--	--	--	--	--	--	--	--
JAN 07...	<.1	1.1	1.2	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	<.005
FEB 11...	<.1	.8	1.4	--	--	--	--	--	--	--	--	--	--
MAR 11...	<.1	1.2	1.6	<.006	<.006	<.004	<.005	<.007	<.010	<.002	<.041	<.020	<.005
APR 08...	<.1	1.2	1.5	--	--	--	--	--	--	--	--	--	--
MAY 07...	<.1	1.5	1.6	<.006	.007	<.004	<.005	.008	<.010	<.002	<.041	<.020	<.005
JUN 13...	<.1	.9	1.0	<.006	<.006	<.004	<.005	<.007	<.010	<.002	<.041	<.020	<.005
JUL 09...	<.1	1.5	1.2	<.006	<.006	<.004	<.005	<.007	<.010	<.002	<.041	<.020	<.005
AUG 13...	<.1	1.1	.7	<.006	<.006	<.004	<.005	<.007	<.010	<.002	<.041	<.020	<.005
SEP 04...	<.1	1.1	1.2	<.006	<.006	<.004	<.005	<.007	<.010	<.002	<.041	<.020	<.005
Date	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THON, DIS- SOLVED (UG/L) (39532)
OCT 10...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 01...	<.018	<.003	<.006	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027
DEC 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 07...	<.018	<.003	<.006	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027
FEB 11...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 11...	<.018	<.003	<.006	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027
APR 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 07...	<.018	<.003	E.004	<.005	<.005	<.02	.004	<.009	<.005	<.003	<.004	<.035	<.027
JUN 13...	<.018	<.003	<.006	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027
JUL 09...	<.018	<.003	<.006	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027
AUG 13...	<.018	<.003	<.006	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027
SEP 04...	<.018	<.003	<.006	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027

PLATTE RIVER BASIN

06775900 DISMAL RIVER NEAR THEDFORD, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)
OCT 10...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 01...	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.01
DEC 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 07...	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.01
FEB 11...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 11...	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006	<.011	<.01
APR 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 07...	<.050	<.006	E.009	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006	<.011	<.01
JUN 13...	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006	<.011	<.01
JUL 09...	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006	<.011	<.01
AUG 13...	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006	<.011	<.01
SEP 04...	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006	<.011	<.01
Date	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TER- BUTHYL- AZINE, WATER, DISS, REC (UG/L) (04022)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	SED. SUSP. SIEVE DIAM. % FINER THAN (70331)
OCT 10...	--	--	--	--	--	--	--	--	--	--	--	--	18
NOV 01...	<.004	<.010	<.011	<.02	<.011	<.02	<.034	<.02	U	<.005	<.002	<.009	12
DEC 04...	--	--	--	--	--	--	--	--	--	--	--	--	18
JAN 07...	<.004	<.010	<.011	<.02	<.011	<.02	<.034	<.02	U	<.005	<.002	<.009	19
FEB 11...	--	--	--	--	--	--	--	--	--	--	--	--	16
MAR 11...	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	U	<.005	<.002	<.009	19
APR 08...	--	--	--	--	--	--	--	--	--	--	--	--	28
MAY 07...	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	--	<.005	<.002	<.009	12
JUN 13...	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	--	<.005	<.002	<.009	30
JUL 09...	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	--	<.005	<.002	<.009	--
AUG 13...	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	--	<.005	<.002	<.009	17
SEP 04...	<.004	<.010	<.011	<.02	<.005	<.02	<.034	<.02	--	<.005	<.002	<.009	18

PLATTE RIVER BASIN

135

06775900 DISMAL RIVER NEAR THEDFORD, NE--Continued
 (National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
OCT		
10...	292	162
NOV		
01...	371	208
DEC		
04...	391	226
JAN		
07...	432	247
FEB		
11...	594	353
MAR		
11...	479	294
APR		
08...	383	230
MAY		
07...	578	340
JUN		
13...	136	76.4
JUL		
09...	--	--
AUG		
13...	232	128
SEP		
04...	232	133

Remark codes used in this report:
 < -- Less than
 E -- Estimated value
 U -- Analyzed for, not detected

PLATTE RIVER BASIN

06784000 SOUTH LOUP RIVER AT ST. MICHAEL, NE

LOCATION.--Lat 41°01'53", long 098°44'25", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.12, T.12 N., R.13 W., Buffalo County, Hydrologic Unit 10210004, 5 ft downstream and 30 ft shoreward from left downstream corner of county highway bridge, 0.6 mi northeast of St. Michael, 3.4 mi upstream from Sweet Creek, and at mile 9.0.

DRAINAGE AREA.--2,350 mi², of which about 1,610 mi² contributes directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1943 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 1,921.26 ft above sea level. Prior to June 22, 1947, water-stage recorder, and June 25 to Sept. 30, 1947, nonrecording gage, at present site at datum 2.00 ft higher. Oct. 1, 1947 to July 3, 1958, nonrecording gage at present site and datum. July 4, 1958 to Sept. 7, 1960, water-stage recorder at site 600 ft upstream at present datum. Sept. 8, 1960 to June 24, 1968, water-stage recorder at site 100 ft upstream at present datum. June 25 to Nov. 21, 1968, nonrecording gage at present site and datum. Nov. 22, 1968 to May 19, 1981, water-stage recorder at site 40 ft upstream at present datum. May 20 to July 16, 1981, water-stage recorder at site 70 ft upstream at present datum. Data collection platform at station.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Minor irrigation developments above station.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	135	150	185	e215	e160	e190	214	217	150	57	e10	72
2	135	157	223	e210	e170	e175	217	225	140	51	e8.0	71
3	132	158	250	e215	e170	e165	213	224	132	53	e6.0	67
4	132	162	238	e225	e175	e170	202	222	135	52	e7.0	64
5	137	166	244	e235	e170	e190	197	210	139	51	e9.0	59
6	137	170	239	e240	e170	e220	191	208	138	50	e10	54
7	142	167	203	e235	e175	e210	191	198	137	47	e12	52
8	147	162	197	e235	e190	e210	201	200	122	44	e13	48
9	152	164	195	e240	e200	e205	204	190	116	41	e14	51
10	151	166	194	e240	e215	e220	203	176	112	39	23	53
11	150	166	197	e245	e230	e240	203	200	109	36	28	53
12	147	160	200	e245	e245	e260	195	286	107	37	24	64
13	152	160	204	e250	e260	e280	197	252	147	39	27	69
14	147	162	209	e250	277	298	199	219	131	38	26	72
15	147	159	205	e260	236	248	193	192	114	38	22	75
16	142	158	203	e270	241	277	187	187	120	36	16	74
17	137	158	200	e280	216	282	183	186	118	33	24	70
18	138	156	198	295	215	267	181	190	114	30	31	69
19	139	155	196	220	219	259	172	191	108	26	30	67
20	136	157	194	198	211	244	173	186	123	21	34	67
21	136	160	203	227	211	246	187	180	118	20	31	64
22	136	159	208	280	214	243	184	164	103	32	30	65
23	137	177	212	286	211	241	186	156	96	31	27	65
24	137	230	e210	249	215	231	175	154	90	e27	30	65
25	137	220	e210	229	223	225	165	168	88	22	107	65
26	136	214	e205	250	e210	217	165	172	85	21	241	73
27	139	232	e210	239	e150	207	196	199	79	19	185	72
28	140	165	e225	188	e170	204	217	192	73	e18	113	74
29	142	107	e220	116	---	206	230	160	73	e17	109	80
30	142	141	e220	75	---	210	222	200	63	e16	89	78
31	143	---	e215	112	---	214	---	165	---	e14	79	---
TOTAL	4360	5018	6512	7054	5749	7054	5843	6069	3380	1056	1415.0	1972
MEAN	140.6	167.3	210.1	227.5	205.3	227.5	194.8	195.8	112.7	34.06	45.65	65.73
MAX	152	232	250	295	277	298	230	286	150	57	241	80
MIN	132	107	185	75	150	165	165	154	63	14	6.0	48
AC-FT	8650	9950	12920	13990	11400	13990	11590	12040	6700	2090	2810	3910

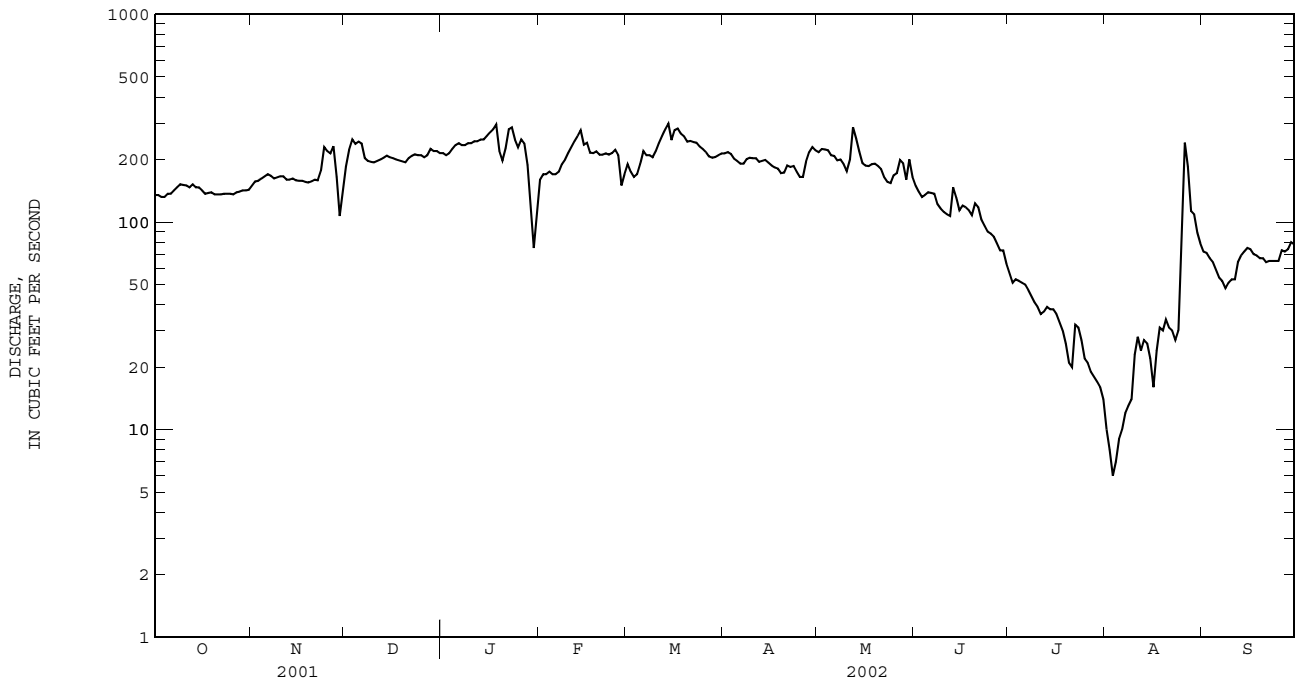
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2002, BY WATER YEAR (WY)

MEAN	173.4	192.8	182.4	185.3	258.7	350.3	280.4	303.2	410.1	216.8	148.0	147.6
MAX	619	276	275	281	543	1747	549	562	2741	1121	482	370
(WY)	1947	1999	1994	1973	1966	1978	1984	1951	1947	1993	1962	1949
MIN	87.5	129	116	96.5	138	201	171	176	113	26.5	21.3	51.0
(WY)	1957	1957	1956	1972	1989	1981	1992	1975	2002	1980	1955	1956

06784000 SOUTH LOUP RIVER AT ST. MICHAEL, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1944 - 2002	
ANNUAL TOTAL	85245		55482.0		237.1	
ANNUAL MEAN	233.5		152.0		483	
HIGHEST ANNUAL MEAN					152	
LOWEST ANNUAL MEAN					28000	
HIGHEST DAILY MEAN	1320	Apr 23	298	Mar 14	2002	1947
LOWEST DAILY MEAN	25	Jul 22	6.0	Aug 3	0.00	Aug 5 1980
ANNUAL SEVEN-DAY MINIMUM	37	Jul 17	8.9	Aug 1	0.65	Aug 4 1980
MAXIMUM PEAK FLOW			*442		**50000	
MAXIMUM PEAK STAGE			***4.60		***12.00	
ANNUAL RUNOFF (AC-FT)	169100		110000	Mar 13	171700	Jun 22 1947
10 PERCENT EXCEEDS	481		240		340	
50 PERCENT EXCEEDS	183		165		192	
90 PERCENT EXCEEDS	73		32		102	

e Estimated.
 * Stage 3.97 ft.
 ** Estimated. Maximum computed discharge 27,500 ft³/s, June 24, 1968, gage height 11.00 ft.
 *** Backwater from ice.



PLATTE RIVER BASIN

06784000 SOUTH LOUP RIVER AT ST. MICHAEL, NE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04) (00660)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
OCT								
25...	--	--	--	--	--	--	--	--
NOV								
23...	--	--	--	--	--	--	--	--
JAN								
28...	--	--	--	--	--	--	--	--
MAR								
15...	E.004	.334	.10	.11	2.3	40	15	9.2
APR								
16...	--	--	--	--	--	--	--	--
MAY								
23...	--	--	--	--	--	--	--	--
JUL								
01...	<.008	--	<.06	E.01	.8	50	E5	E1.7
AUG								
09...	--	--	--	--	--	--	--	--
SEP								
17...	--	--	--	--	--	--	--	--

Remark codes used in this report:

< -- Less than
E -- Estimated value

PLATTE RIVER BASIN

06785000 MIDDLE LOUP RIVER AT ST. PAUL, NE

LOCATION.--Lat 41°12'13", long 098°26'46", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.10, T.14 N., R.10 W., Howard County, Hydrologic Unit 10210003, on left bank at St. Paul, 50 ft upstream from bridge on U.S. Highway 281, 6 mi upstream from confluence with North Loup River, and at mile 74.0.

DRAINAGE AREA.--8,075 mi², of which about 3,130 mi² contributes directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1894 to September 1915, August 1928 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1036: 1943. WSP 1390: 1896, 1903, 1928(M), 1944. WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,776.61 ft above sea level. See WSP 1918 for history of changes prior to June 5, 1957. June 5, 1957, to Mar. 16, 1978, water-stage recorder on left bank approximately 410 ft upstream at same datum. Mar. 17 to May 31, 1978, nonrecording gage on railroad bridge immediately upstream at same datum. Data collection platform at station.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions above station for irrigation.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	781	1170	1450	1100	e450	e800	1340	737	648	163	e150	764
2	782	1190	2030	1050	e600	e880	1290	848	624	155	e170	641
3	765	1160	1980	992	e760	e800	1060	1420	574	174	e190	519
4	813	1120	1830	1090	e940	e860	872	1020	710	206	e220	453
5	877	1120	1750	1080	e1100	e960	730	871	807	197	e250	404
6	929	1080	1970	958	e1250	e1200	1140	1060	902	220	344	331
7	912	1090	1630	1370	e1350	e1500	1410	918	911	233	253	250
8	842	1130	1240	1550	e1400	e1600	1340	905	708	210	166	235
9	869	1000	1390	1390	1520	e1600	1320	979	1560	198	177	193
10	922	896	1060	e1450	1190	e1500	1090	891	1130	182	228	326
11	885	719	1070	e1450	731	e1700	1270	1170	878	195	217	331
12	1050	736	1120	e1500	1150	e2000	1340	1640	809	202	478	400
13	1680	752	1340	e1600	1510	e2500	1430	1240	1030	241	693	901
14	1500	991	1530	e1700	1200	3180	1780	911	1150	273	409	916
15	1430	1210	1430	e1500	e1200	2180	1370	839	854	264	138	970
16	1280	1270	1320	e1250	e1250	2330	1080	767	689	257	96	719
17	1250	1260	1280	999	e1200	2160	1210	800	848	214	113	692
18	1170	1240	1200	914	e1150	2070	1040	752	865	211	135	642
19	1230	1230	1320	819	1150	1820	909	805	1000	211	160	534
20	1250	1040	1390	539	1040	1510	971	875	1060	259	127	517
21	1260	786	1320	871	1190	1370	1020	694	827	209	126	488
22	1310	831	1460	1020	1380	1450	1140	741	875	205	129	470
23	1400	887	1350	1110	1330	1430	845	682	860	200	116	413
24	1440	1240	666	1130	1380	1100	758	721	757	168	157	470
25	1690	1320	466	1000	1440	1200	809	720	595	137	422	428
26	1280	1040	544	1110	e900	901	847	807	403	173	1040	424
27	1010	556	801	1190	e740	795	896	967	306	161	2380	415
28	1010	794	e900	1290	672	894	1420	1130	285	157	2940	475
29	1090	727	e1000	960	---	1250	1030	1180	218	144	2610	500
30	1190	1060	e1100	462	---	1200	713	1050	207	128	1660	524
31	1230	---	1150	363	---	1240	---	777	---	121	821	---
TOTAL	35127	30645	40087	34807	31173	45980	33470	28917	23090	6068	17115	15345
MEAN	1133	1022	1293	1123	1113	1483	1116	932.8	769.7	195.7	552.1	511.5
MAX	1690	1320	2030	1700	1520	3180	1780	1640	1560	273	2940	970
MIN	765	556	466	363	450	795	713	682	207	121	96	193
AC-FT	69670	60780	79510	69040	61830	91200	66390	57360	45800	12040	33950	30440

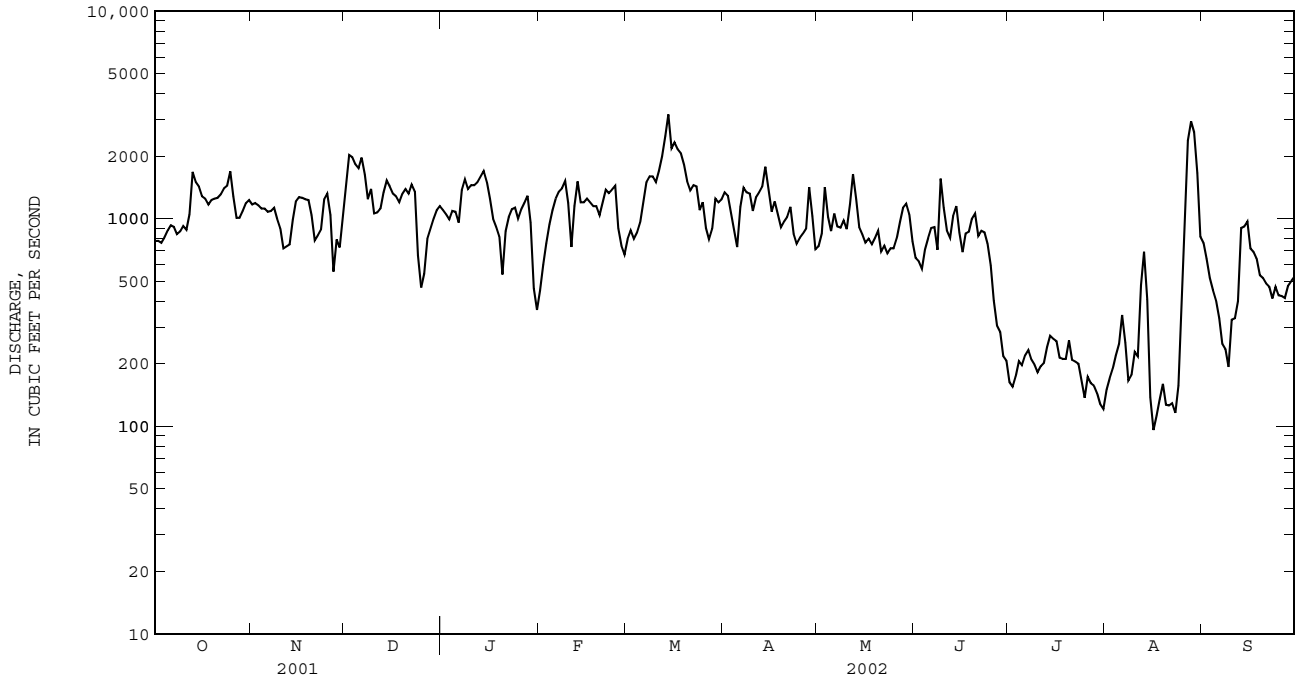
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2002, BY WATER YEAR (WY)

MEAN	1170	1292	1162	1177	1534	1769	1358	1153	1175	645.4	575.5	758.6
MAX	2444	1922	1836	1844	2478	4022	2291	2476	3253	3642	1171	1790
(WY)	1993	1999	1971	1990	1984	1978	1984	1995	1967	1993	1992	1985
MIN	404	771	686	770	969	1181	767	519	395	124	174	240
(WY)	1964	1965	1969	1972	1979	1970	1981	1975	1972	1980	1980	1980

06785000 MIDDLE LOUP RIVER AT ST. PAUL, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1963 - 2002	
ANNUAL TOTAL	445222		341824		1145	
ANNUAL MEAN	1220		936.5		1832	
HIGHEST ANNUAL MEAN					831	
LOWEST ANNUAL MEAN					1993	
HIGHEST DAILY MEAN	6230	Mar 15	3180	Mar 14	21800	Jun 12 1984
LOWEST DAILY MEAN	304	Sep 6	96	Aug 16	23	Aug 9 1980
ANNUAL SEVEN-DAY MINIMUM	362	Sep 2	127	Aug 16	31	Aug 4 1980
MAXIMUM PEAK FLOW			*4540	Aug 27	72000	Jun 23 1947
MAXIMUM PEAK STAGE			**4.74	Mar 13	12.69	Jun 23 1947
ANNUAL RUNOFF (AC-FT)	883100		678000		829100	
10 PERCENT EXCEEDS	2030		1500		1850	
50 PERCENT EXCEEDS	1170		918		1080	
90 PERCENT EXCEEDS	464		208		366	

e Estimated.
 * Stage 3.86 ft.
 ** Backwater from ice.



PLATTE RIVER BASIN

143

06785000 MIDDLE LOUP RIVER AT ST. PAUL, NE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
OCT 22...	--	--	--	--	--	--	--	--	--	--	--
DEC 07...	--	--	--	--	--	--	--	--	--	--	--
JAN 14...	--	--	--	--	--	--	--	--	--	--	--
MAR 19...	--	--	18	--	5.1	--	--	--	--	--	--
APR 15...	--	--	--	--	--	--	--	--	--	--	--
MAY 28...	--	--	--	--	--	--	--	--	--	--	--
JUN 28...	.15	1.8	E7	.42	6.3	2.7	.57	E1	<1	3	2.31
AUG 14...	--	--	--	--	--	--	--	--	--	--	--
SEP 16...	--	--	--	--	--	--	--	--	--	--	--

Remark codes used in this report:

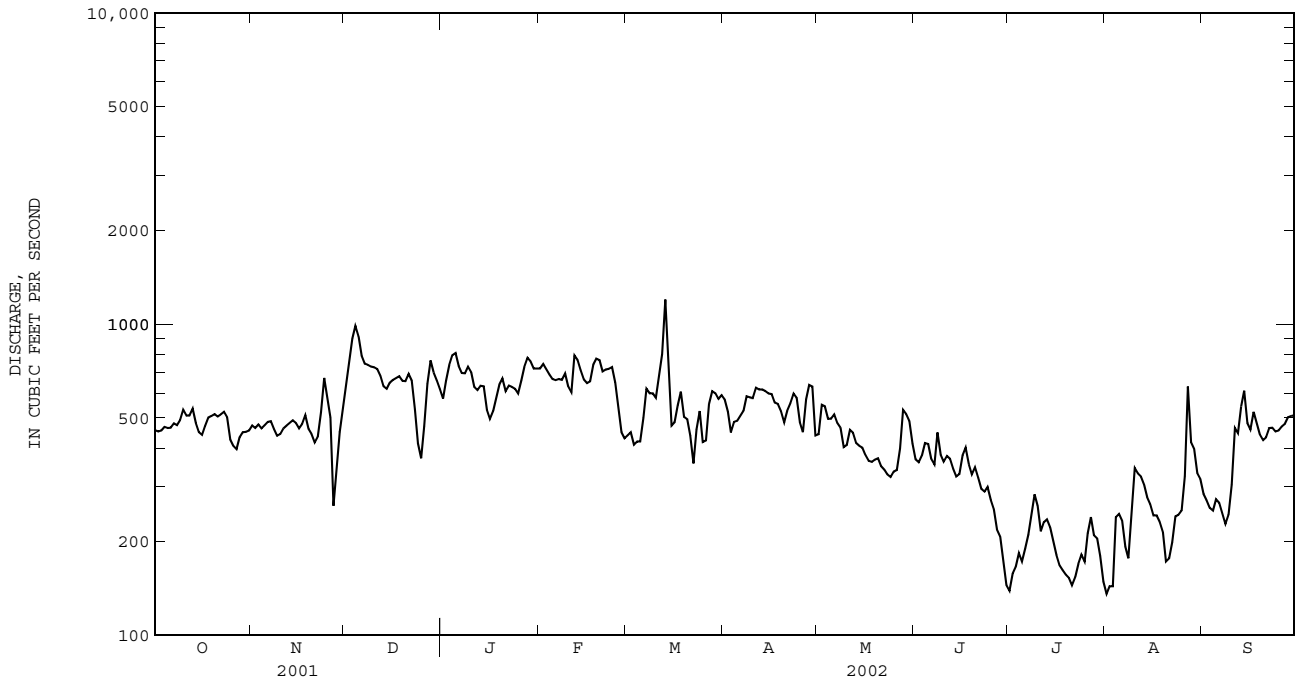
< -- Less than

E -- Estimated value

06786000 NORTH LOUP RIVER AT TAYLOR, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1937 - 2002	
ANNUAL TOTAL	214230		172641		486.3	
ANNUAL MEAN	586.9		473.0		644	
HIGHEST ANNUAL MEAN					354 1940	
LOWEST ANNUAL MEAN					2690 May 28 1995	
HIGHEST DAILY MEAN	1710	Apr 8	1200	Mar 13	74	Jul 11 1981
LOWEST DAILY MEAN	184	Aug 9	136	Aug 1	45	Jul 26 1941
ANNUAL SEVEN-DAY MINIMUM	192	Aug 5	158	Jul 17	74	Jul 11 1981
MAXIMUM PEAK FLOW			*1280	Mar 14	**3480	May 28 1995
MAXIMUM PEAK STAGE			***6.33	Mar 8, 11	****9.50	Feb 25 1957
ANNUAL RUNOFF (AC-FT)	424900		342400		352300	
10 PERCENT EXCEEDS	894		708		689	
50 PERCENT EXCEEDS	560		472		480	
90 PERCENT EXCEEDS	290		218		270	

e Estimated.
 * Stage 4.24 ft.
 ** Stage 5.59 ft.
 *** Backwater from ice.
 **** From floodmark, ice jam.



PLATTE RIVER BASIN

06790500 NORTH LOUP RIVER NEAR ST. PAUL, NE

LOCATION.--Lat 41°15'48", long 098°26'56", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.22, T.15 N., R.10 W., Howard County, Hydrologic Unit 10210007, on right bank 310 ft downstream from bridge on U.S. Highway 281, 3 mi north of St. Paul, and 2.9 mi upstream from confluence with Middle Loup River.

DRAINAGE AREA.--4,302 mi², of which about 1,240 mi² contributes directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1894 to September 1915, August 1928 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 976: 1942. WSP 1390: 1896. WDR NE-75-1: 1974. WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,759.29 ft, adjusted, above sea level. See WSP 1918 for history of changes prior to Oct. 1, 1954. Data collection platform at station.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow affected by diversions and ground-water withdrawals for irrigation and return flow from irrigated areas.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1190	825	806	e580	826	907	1130	595	607	433	447	845
2	1140	823	915	e580	983	e1000	1210	521	577	441	411	824
3	1110	810	978	e600	1220	e900	1110	524	549	445	399	792
4	1140	774	1050	e640	1320	e940	1020	703	581	427	403	733
5	1240	758	1050	e700	1360	e980	966	702	674	456	568	664
6	1220	726	1020	e800	1310	e1100	921	701	647	462	579	649
7	1210	722	1070	e900	1320	e1250	935	666	592	468	564	659
8	1150	726	942	e860	1230	e1200	960	668	899	470	523	649
9	1180	710	926	e980	1130	e1200	960	672	2110	449	549	639
10	1230	734	896	e1200	911	e1150	976	665	805	460	557	701
11	1270	731	866	e1300	973	e1200	997	751	642	475	652	729
12	1390	746	872	e1350	1110	e1350	1010	800	568	472	846	780
13	1470	752	840	e1400	1060	e1500	984	763	564	512	834	951
14	1480	759	805	1380	1090	e1700	983	736	566	555	805	1020
15	1420	803	763	1130	1030	1710	997	638	556	537	730	1060
16	1340	801	775	1050	1060	1590	977	601	547	503	683	1110
17	1220	780	780	896	982	1470	957	601	544	501	741	1110
18	842	787	768	885	1070	1420	892	584	538	480	688	1070
19	764	803	772	720	1130	1400	911	566	522	414	652	990
20	755	854	731	756	1270	1370	884	566	569	409	600	925
21	744	831	738	979	1300	1290	893	556	565	381	594	888
22	748	787	783	1070	1290	1150	812	537	554	429	590	864
23	751	849	710	1160	1290	1130	765	538	515	373	539	866
24	752	1130	591	1180	1310	1140	621	539	483	367	528	770
25	759	1130	484	1190	1250	1210	566	556	476	367	570	770
26	748	1180	481	1150	965	1180	587	547	476	454	590	734
27	694	1060	565	1030	319	1130	623	591	414	446	675	754
28	682	718	e620	955	597	1100	629	627	418	416	854	747
29	690	474	e640	932	---	1060	559	684	337	441	1040	765
30	676	507	e620	809	---	1070	601	704	383	464	880	762
31	779	---	e600	790	---	1120	---	634	---	460	866	---
TOTAL	31784	24090	24457	29952	30706	37917	26436	19536	18278	13967	19957	24820
MEAN	1025	803.0	788.9	966.2	1097	1223	881.2	630.2	609.3	450.5	643.8	827.3
MAX	1480	1180	1070	1400	1360	1710	1210	800	2110	555	1040	1110
MIN	676	474	481	580	319	900	559	521	337	367	399	639
AC-FT	63040	47780	48510	59410	60910	75210	52440	38750	36250	27700	39580	49230

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2002, BY WATER YEAR (WY)

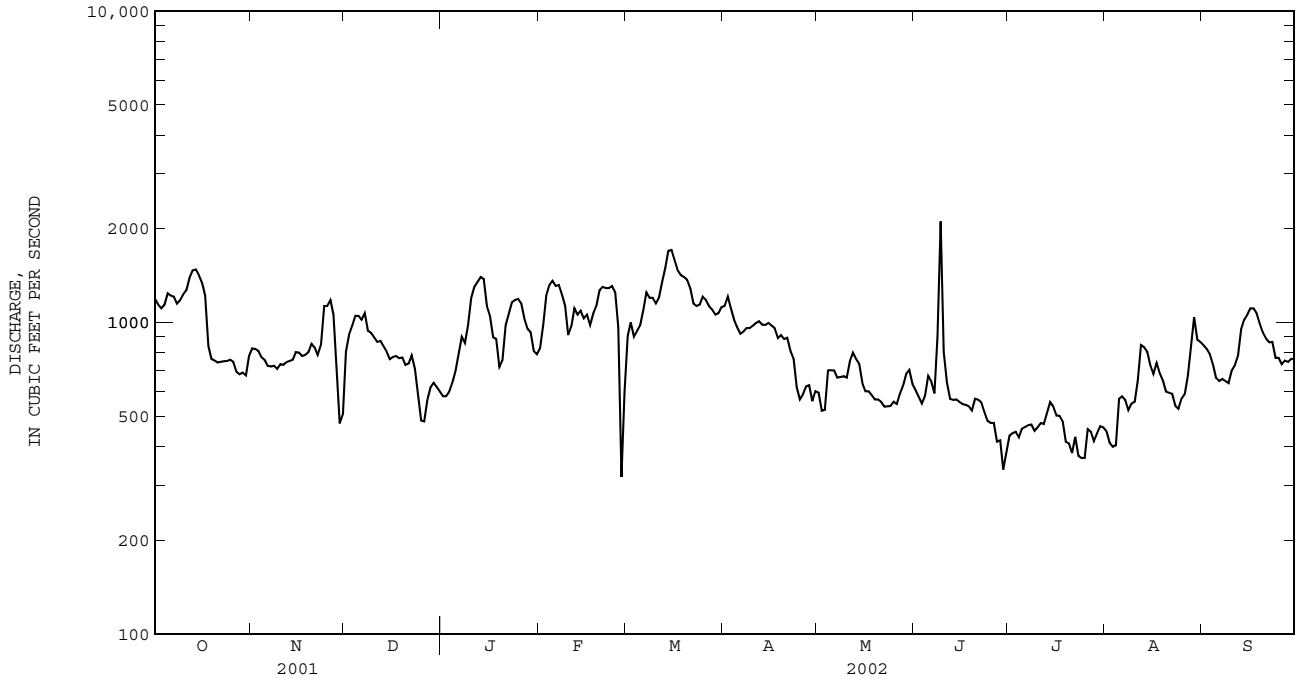
	MEAN	897.9	926.8	873.1	883.0	1117	1268	1121	1060	1044	710.1	683.0	830.4
MAX	1224	1330	1385	1703	1861	2589	2315	1743	2516	2471	1812	1384	
(WY)	1996	1999	1998	1998	1998	1998	1936	2001	1995	1947	1993	1966	1965
MIN	568	647	433	517	603	787	702	576	606	199	221	326	
(WY)	1940	1938	1930	1940	1942	1934	1946	1943	1934	1974	1941	1940	

PLATTE RIVER BASIN

06790500 NORTH LOUP RIVER NEAR ST. PAUL, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1928 - 2002	
ANNUAL TOTAL	414614		301900		949.7	
ANNUAL MEAN	1136		827.1		1223	
HIGHEST ANNUAL MEAN					1993	
LOWEST ANNUAL MEAN					668	
HIGHEST DAILY MEAN	4280	Mar 15	2110	Jun 9	21300	Jun 22 1947
LOWEST DAILY MEAN	468	Jun 18	319	Feb 27	85	Aug 8 1941
ANNUAL SEVEN-DAY MINIMUM	572	Dec 24	391	Jul 19	98	Aug 6 1941
MAXIMUM PEAK FLOW			*3470	Jun 9	90000	Jun 6 1896
MAXIMUM PEAK STAGE			**4.99	Mar 12	***14.90	Jun 6 1896
ANNUAL RUNOFF (AC-FT)	822400		598800		688000	
10 PERCENT EXCEEDS	1960		1220		1370	
50 PERCENT EXCEEDS	920		772		894	
90 PERCENT EXCEEDS	653		476		510	

e Estimated.
 * Stage 4.17 ft.
 ** Backwater from ice.
 *** From floodmark, datum then in use.



06790500 NORTH LOUP RIVER NEAR ST. PAUL, NE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04) (00660)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)
OCT 22...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 23...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 14...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 18...	.279	.10	.09	2.0	--	--	--	--	--	30	--	--	--
APR 15...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 24...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 28...	.064	E.04	.02	.5	21	.35	9	104	<.06	30	.06	<.8	.17
AUG 14...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 16...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
OCT 22...	--	--	--	--	--	--	--	--	--	--
NOV 23...	--	--	--	--	--	--	--	--	--	--
JAN 14...	--	--	--	--	--	--	--	--	--	--
MAR 18...	--	23	--	5.4	--	--	--	--	--	--
APR 15...	--	--	--	--	--	--	--	--	--	--
MAY 24...	--	--	--	--	--	--	--	--	--	--
JUN 28...	1.4	13	.26	3.2	2.2	.51	<2	<1	5	2.26
AUG 14...	--	--	--	--	--	--	--	--	--	--
SEP 16...	--	--	--	--	--	--	--	--	--	--

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

PLATTE RIVER BASIN

06792500 LOUP RIVER POWER CANAL NEAR GENOA, NE

LOCATION.--Lat 41°25'03", long 097°47'37", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.32, T.17 N., R.4 W., Nance County, Hydrologic Unit 10210009, at skimming weir on downstream end of settling basin on left bank, 2 mi downstream from point of diversion and 3.5 mi southwest of Genoa.

PERIOD OF RECORD.--December 1936 to current year.

GAGE.--Water-stage recorder and concrete weir. Datum of gage is 1,566.26 ft above sea level. Prior to Oct. 1, 1956, at datum 3.0 feet higher.

REMARKS.--Records good. Canal diverts from Loup River in sec.6, T.16 N., R.4 W.; water is used in power plants near Monroe and Columbus and is returned to Platte River 1.5 mi downstream from Loup River. Diversion began Dec. 2, 1936.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

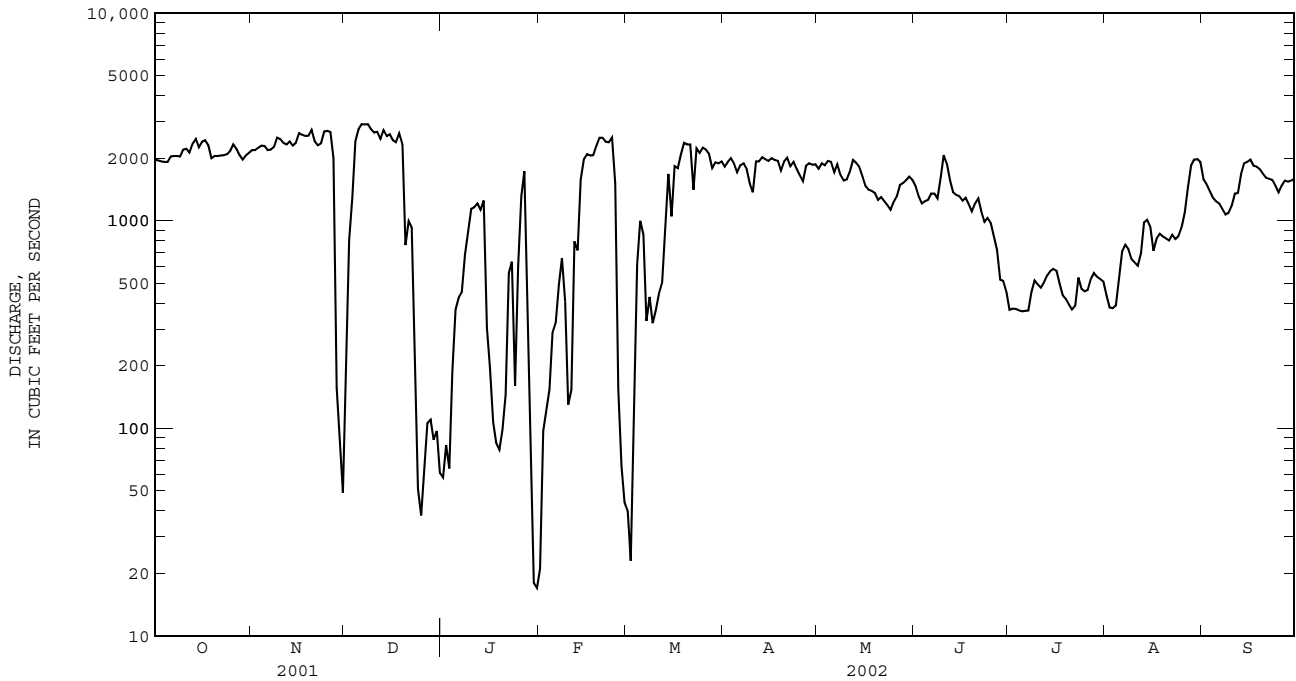
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1970	2190	283	58	21	40	1820	1780	1470	372	435	1580
2	1950	2190	807	83	97	23	1920	1890	1310	377	382	1500
3	1930	2250	1300	64	123	169	2000	1850	1210	376	379	1390
4	1920	2300	2420	188	154	616	1880	1940	1240	370	390	1290
5	1920	2290	2770	373	288	1000	1710	1920	1260	366	525	1240
6	2040	2190	2920	427	322	859	1850	1710	1350	368	709	1210
7	2050	2200	2910	453	494	329	1890	1870	1350	369	765	1140
8	2050	2270	2920	687	661	429	1780	1660	1280	453	731	1070
9	2040	2510	2760	883	408	321	1510	1560	1610	515	653	1090
10	2200	2470	2660	1140	130	372	1370	1580	2070	494	629	1180
11	2220	2370	2680	1160	153	444	1930	1730	1880	476	607	1350
12	2130	2330	2480	1210	795	502	1930	1960	1560	504	698	1360
13	2350	2410	2730	1130	719	931	2020	1900	1370	544	980	1680
14	2480	2300	2560	1250	1570	1680	1980	1820	1330	570	1010	1890
15	2260	2370	2610	305	1980	1050	1940	1640	1310	586	938	1920
16	2400	2640	2440	196	2090	1830	2000	1470	1250	574	717	1970
17	2440	2590	2390	107	2060	1790	1960	1410	1290	499	822	1840
18	2310	2560	2640	85	2070	2080	1940	1390	1200	437	865	1820
19	2000	2570	2340	79	2290	2370	1740	1360	1110	420	840	1770
20	2050	2740	763	98	2510	2330	1930	1260	1210	394	822	1680
21	2050	2410	995	145	2510	2330	2010	1300	1280	373	803	1610
22	2060	2310	929	560	2400	1410	1830	1240	1110	389	856	1590
23	2070	2360	193	634	2390	2230	1920	1190	986	532	816	1570
24	2090	2690	51	160	2520	2120	1780	1130	1030	470	841	1470
25	2170	2710	38	598	1510	2250	1650	1230	974	457	930	1370
26	2330	2670	64	1310	155	2200	1550	1310	846	463	1100	1480
27	2220	2000	106	1730	66	2100	1840	1490	725	524	1440	1560
28	2070	157	110	452	44	1790	1890	1520	520	559	1840	1540
29	1970	93	88	71	---	1910	1860	1570	513	537	1970	1560
30	2060	49	97	18	---	1890	1870	1630	454	524	1980	1590
31	2120	---	61	17	---	1930	---	1570	---	509	1920	---
TOTAL	65920	65189	48115	15671	30530	41325	55300	48880	36098	14401	28393	45310
MEAN	2126	2173	1552	505.5	1090	1333	1843	1577	1203	464.5	915.9	1510
MAX	2480	2740	2920	1730	2520	2370	2020	1960	2070	586	1980	1970
MIN	1920	49	38	17	21	23	1370	1130	454	366	379	1070
AC-FT	130800	129300	95440	31080	60560	81970	109700	96950	71600	28560	56320	89870

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2002, BY WATER YEAR (WY)

	1945	1847	1002	1165	1526	1823	2138	1995	1930	1372	1251	1572
MEAN	1945	1847	1002	1165	1526	1823	2138	1995	1930	1372	1251	1572
MAX	2730	2811	1886	2194	2375	2673	2778	2767	2944	2706	2382	2640
(WY)	1987	1999	1982	1983	1987	1990	1977	1957	1962	1962	1996	1951
MIN	544	508	155	129	438	506	537	378	534	309	417	526
(WY)	1938	1939	1975	1985	1958	1939	1939	1984	1938	1980	1971	1998

06792500 LOUP RIVER POWER CANAL NEAR GENOA, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1938 - 2002	
ANNUAL TOTAL	679506		495132		1629	
ANNUAL MEAN	1862		1357		2006	
HIGHEST ANNUAL MEAN					1999	
LOWEST ANNUAL MEAN					1938	
HIGHEST DAILY MEAN	2970	Apr 15	2920	Dec 6	3560	Nov 3 1994
LOWEST DAILY MEAN	38	Dec 25	17	Jan 31	0.00	Aug 16 1966
ANNUAL SEVEN-DAY MINIMUM	79	Dec 24	72	Jan 29	11	Dec 3 1978
ANNUAL RUNOFF (AC-FT)	1348000		982100		1180000	
10 PERCENT EXCEEDS	2710		2370		2580	
50 PERCENT EXCEEDS	2000		1410		1740	
90 PERCENT EXCEEDS	984		191		511	



PLATTE RIVER BASIN

06793000 LOUP RIVER NEAR GENOA, NE

LOCATION.--Lat 41°25'05", long 097°43'25", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.25, T.17 N., R.4 W., Nance County, Hydrologic Unit 10210009, on right bank 12 ft downstream from bridge on State Highway 39, 2 mi south of Genoa, 3 mi upstream from Beaver Creek, 6 mi downstream from diversion dam of Loup River Public Power District and at mile 26.8.

DRAINAGE AREA --14,320 mi², of which about 5,620 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--August 1928 to June 1932, October 1943 to current year (October 1953 to April 1955, monthly discharge only).

REVISED RECORDS.--WDR NE-94-1: Drainage area. WDR NE-99-1: 1993 (maximum stage).

NOTE: The maximum stage for the 1993 water year had been revised in 1994 and is listed in the peak flow file, but the change was never actually shown in the 1994 water year report. The stage was changed from 11.01 ft July 24, 1993, to 12.69 ft Mar.8, 1993, affected by backwater from ice.

GAGE.--Water-stage recorder. Datum of gage is 1,540.13 ft above sea level. Aug. 17, 1928, to June 30, 1932, nonrecording gage at present site at datum 1.49 ft higher. Oct. 1, 1943, to Sept. 16, 1974, (Apr. 26 to Dec. 22, 1949, wire-weight gage only), at present site and datum. Sept. 17, 1974, to Nov. 21, 1977, at site 300 ft upstream at present datum. Data collection platform at station.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. Records do not include flow of Loup River power canal (station 06792500), which diverts at point 6 mi upstream and returns to Platte River below mouth of Loup River; diversion began Dec. 2, 1936.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	81	745	e1200	e1300	e380	1460	163	78	167	56	131
2	15	60	1020	e1200	e1400	e270	1360	125	75	235	70	116
3	14	102	1470	e1200	e1300	e250	1580	72	76	284	62	114
4	15	68	690	e1100	e1200	e220	1430	111	79	267	71	108
5	46	69	465	e1200	e1400	e280	1100	87	81	223	129	111
6	27	100	486	e1100	e1500	e780	698	221	77	305	62	95
7	22	67	454	e1100	e1700	e740	802	92	78	300	72	98
8	26	63	307	e1400	e1700	e680	1180	78	66	241	70	101
9	25	130	135	e1800	e1500	e680	1520	69	166	109	53	101
10	58	76	197	e1900	e1300	e680	1930	66	382	96	63	109
11	37	71	119	e1900	e1700	2910	778	111	88	81	71	102
12	20	74	184	e2000	e1500	3310	893	186	52	88	88	112
13	46	66	149	e2100	e1700	6630	808	386	50	93	86	126
14	301	81	187	e1900	e1400	6440	519	251	115	71	78	117
15	512	96	104	e1800	1750	4560	992	80	63	74	103	95
16	306	79	107	e1900	1570	1930	482	71	59	70	118	79
17	202	69	262	e1700	1880	1770	328	67	66	75	90	96
18	122	64	112	e1700	1460	1940	301	63	56	109	68	65
19	74	66	180	e1800	1220	1980	464	61	73	84	68	86
20	87	140	1560	e1900	532	1750	270	159	63	70	54	74
21	78	118	1270	e2000	583	1360	411	74	54	65	65	86
22	79	80	1480	e2000	727	1820	552	70	57	84	64	80
23	72	88	e1400	e1800	684	644	299	69	197	92	69	75
24	77	561	e1200	e1800	447	513	165	86	74	81	55	78
25	81	1580	e1000	e1600	e340	940	127	114	55	66	55	44
26	141	1120	e900	e1000	e260	945	183	86	65	65	112	31
27	70	1440	e980	e500	e430	790	216	132	71	122	133	28
28	62	1950	e1100	e1200	e520	791	220	101	130	95	150	25
29	73	1250	e1200	e1500	---	795	599	92	195	67	755	24
30	76	904	e1100	e1400	---	1220	222	92	71	70	867	20
31	100	---	e1000	e1200	---	1280	---	148	---	63	189	---
TOTAL	2880	10713	21563	47900	33003	49278	21889	3583	2812	3912	4046	2527
MEAN	92.90	357.1	695.6	1545	1179	1590	729.6	115.6	93.73	126.2	130.5	84.23
MAX	512	1950	1560	2100	1880	6630	1930	386	382	305	867	131
MIN	14	60	104	500	260	220	127	61	50	63	53	20
AC-FT	5710	21250	42770	95010	65460	97740	43420	7110	5580	7760	8030	5010

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2002, BY WATER YEAR (WY)

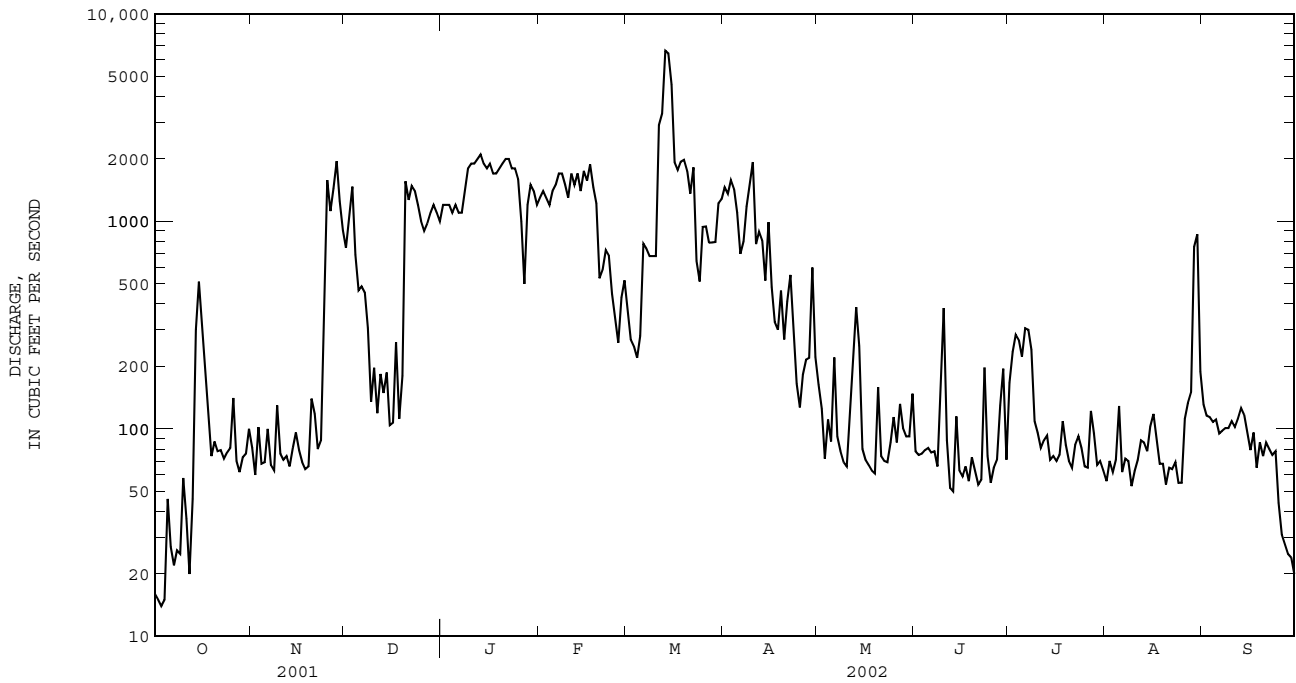
	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)
1944	152.5	1084	3.76	1999	444.7	1650	41.1	1992	1058	2533	177	1956
1945	971.3	2632	67.5	1990	1366	4762	72.4	1997	1687	5650	95.0	1981
1946	705.1	3745	18.5	1984	628.1	4777	8.18	1947	705.1	3745	8.18	1981
1947	628.1	4777	7.54	1984	884.5	7365	0.17	1993	884.5	7365	0.17	1993
1948	884.5	7365	0.17	1993	250.8	4253	1.15	1966	250.8	4253	1.15	1966
1949	250.8	4253	1.15	1966	233.8	2055	0.000	1998	233.8	2055	0.000	1998
1950	233.8	2055	0.000	1998	1977	1953	1956	1982	1977	1953	1956	1982

PLATTE RIVER BASIN

06793000 LOUP RIVER NEAR GENOA, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1944 - 2002	
ANNUAL TOTAL	308273		204106		725.7	
ANNUAL MEAN	844.6		559.2		1993	1993
HIGHEST ANNUAL MEAN					182	1963
LOWEST ANNUAL MEAN					70800	Aug 13 1966
HIGHEST DAILY MEAN	12000	Mar 17	6630	Mar 13	0.00	Aug 20 1956
LOWEST DAILY MEAN	14	Oct 3	14	Oct 3	0.00	Aug 20 1956
ANNUAL SEVEN-DAY MINIMUM	18	Sep 28	22	Oct 1	129000	Aug 13 1966
MAXIMUM PEAK FLOW			14800	Mar 13	13.93	Aug 13 1966
MAXIMUM PEAK STAGE			8.24	Mar 13	525700	
ANNUAL RUNOFF (AC-FT)	611500		404800			
10 PERCENT EXCEEDS	2200		1590		2080	
50 PERCENT EXCEEDS	187		133		124	
90 PERCENT EXCEEDS	40		63		14	

e Estimated.



PLATTE RIVER BASIN

06794000 BEAVER CREEK AT GENOA, NE

LOCATION.--Lat 41°26'32", long 097°44'11", in NE ¼ SE ¼ sec.14, T.17 N., R.4 W., Nance County, Hydrologic Unit 10210009, on left bank in city park at southwest corner of Genoa, 0.2 mi downstream from Union Pacific Railroad bridge, 0.2 mi upstream from bridge on State Highway 39, and 4.0 mi upstream from mouth.

DRAINAGE AREA.--677 mi², of which about 429 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1940 to current year.

REVISED RECORDS.--WSP 1310: 1942(M). WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,542.13 ft above sea level. October 1940 to Nov. 5, 1942, nonrecording gage and Nov. 6, 1942, to Nov. 1, 1955, water-stage recorder, at site 0.4 mi upstream at datum 4.62 ft higher. Data collection platform at station.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow affected slightly by ground-water and surface-water withdrawals for irrigation.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	90	e92	e60	e68	e62	118	170	92	33	4.6	36
2	65	88	e100	e60	e82	e50	118	151	88	25	3.3	35
3	61	86	130	e62	e86	e50	113	142	83	26	3.1	33
4	60	87	137	e82	e102	e72	110	155	84	27	5.7	32
5	60	88	141	e94	e96	e84	110	146	85	27	14	30
6	61	88	145	e98	e92	e74	108	143	89	27	42	28
7	62	87	181	e96	e100	e70	112	137	85	23	34	26
8	63	84	166	e96	e90	e66	115	121	83	24	25	25
9	65	84	148	e98	e94	e68	111	111	81	19	21	25
10	317	84	136	e102	e88	e68	110	111	90	16	16	28
11	131	85	130	e98	e92	e78	109	138	504	16	19	38
12	95	86	125	e96	e102	e96	109	183	178	16	19	45
13	90	89	120	e84	e110	e108	109	171	103	13	17	46
14	86	91	119	e86	e112	e150	112	156	89	16	15	56
15	87	91	117	e82	e110	199	114	143	80	17	13	55
16	83	90	114	e86	e112	164	111	129	78	15	16	47
17	83	90	112	e82	e114	134	105	121	75	12	16	44
18	84	90	111	e86	e112	134	101	110	74	8.0	14	42
19	86	87	107	e100	e114	140	95	105	73	5.1	14	41
20	85	87	104	e100	e98	138	92	101	69	4.0	17	41
21	84	88	106	e92	e92	136	98	99	69	4.6	14	39
22	85	90	104	e90	e90	129	99	97	72	8.5	13	40
23	85	95	e82	e92	e90	124	109	97	71	13	14	40
24	84	118	e74	e108	e80	121	110	95	62	12	48	40
25	82	164	e72	e106	e74	119	104	93	58	4.7	38	41
26	81	216	e72	e98	e68	118	99	95	52	6.1	44	42
27	82	175	e72	e90	e66	116	108	97	44	4.8	65	44
28	83	141	e66	e80	e66	117	116	95	42	7.4	58	44
29	84	96	e66	e70	---	120	203	98	39	6.9	41	48
30	84	e94	e64	e72	---	123	193	99	36	7.4	38	46
31	86	---	e62	e60	---	121	---	96	---	7.8	38	---
TOTAL	2708	3029	3375	2706	2600	3349	3421	3805	2728	452.3	739.7	1177
MEAN	87.35	101.0	108.9	87.29	92.86	108.0	114.0	122.7	90.93	14.59	23.86	39.23
MAX	317	216	181	108	114	199	203	183	504	33	65	56
MIN	60	84	62	60	66	50	92	93	36	4.0	3.1	25
AC-FT	5370	6010	6690	5370	5160	6640	6790	7550	5410	897	1470	2330

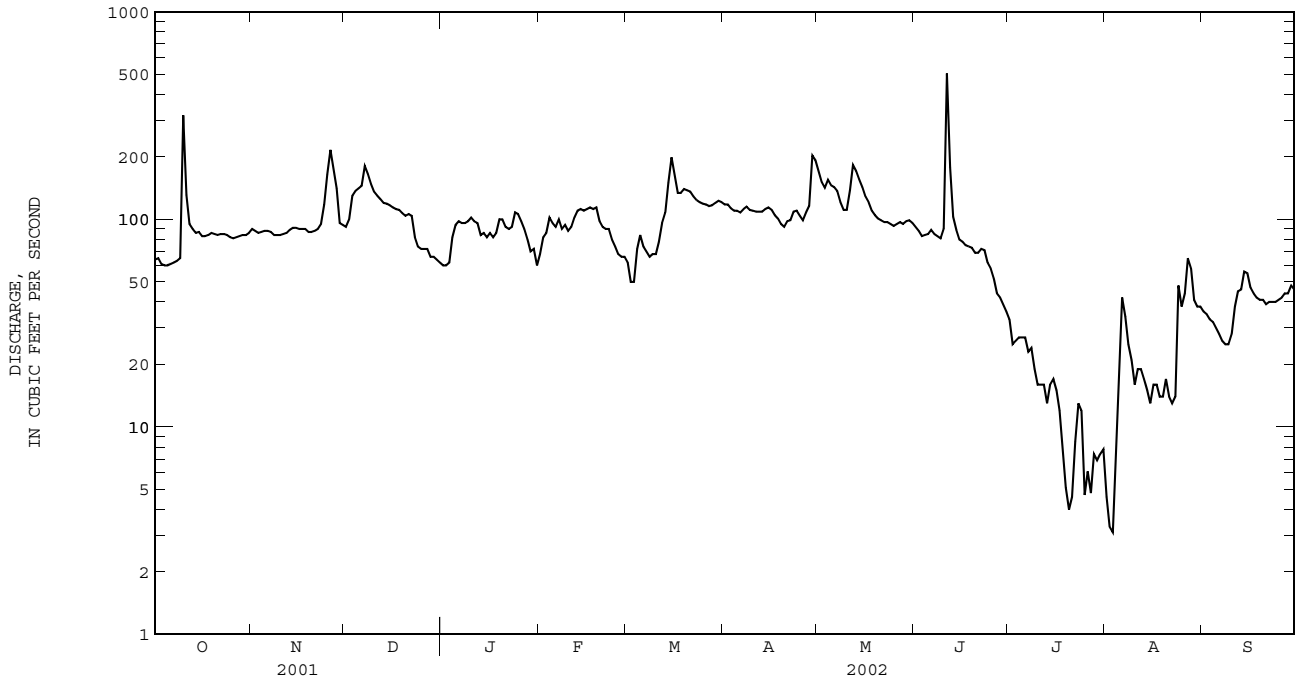
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2002, BY WATER YEAR (WY)

	MEAN	184	173	150	197	537	688	519	432	808	1248	601	216
MEAN	81.52	88.68	85.31	84.02	134.2	197.6	168.6	176.6	229.8	138.7	92.72	80.99	
MAX	184	173	150	197	537	688	519	432	808	1248	601	216	
(WY)	1987	1983	1973	1973	1971	1993	1984	1984	1967	1950	1966	1993	
MIN	43.4	47.6	42.2	48.0	57.4	78.0	74.2	67.3	64.0	12.9	8.72	29.8	
(WY)	1981	1941	1977	1957	1979	1981	1981	1981	1980	1980	1976	1976	

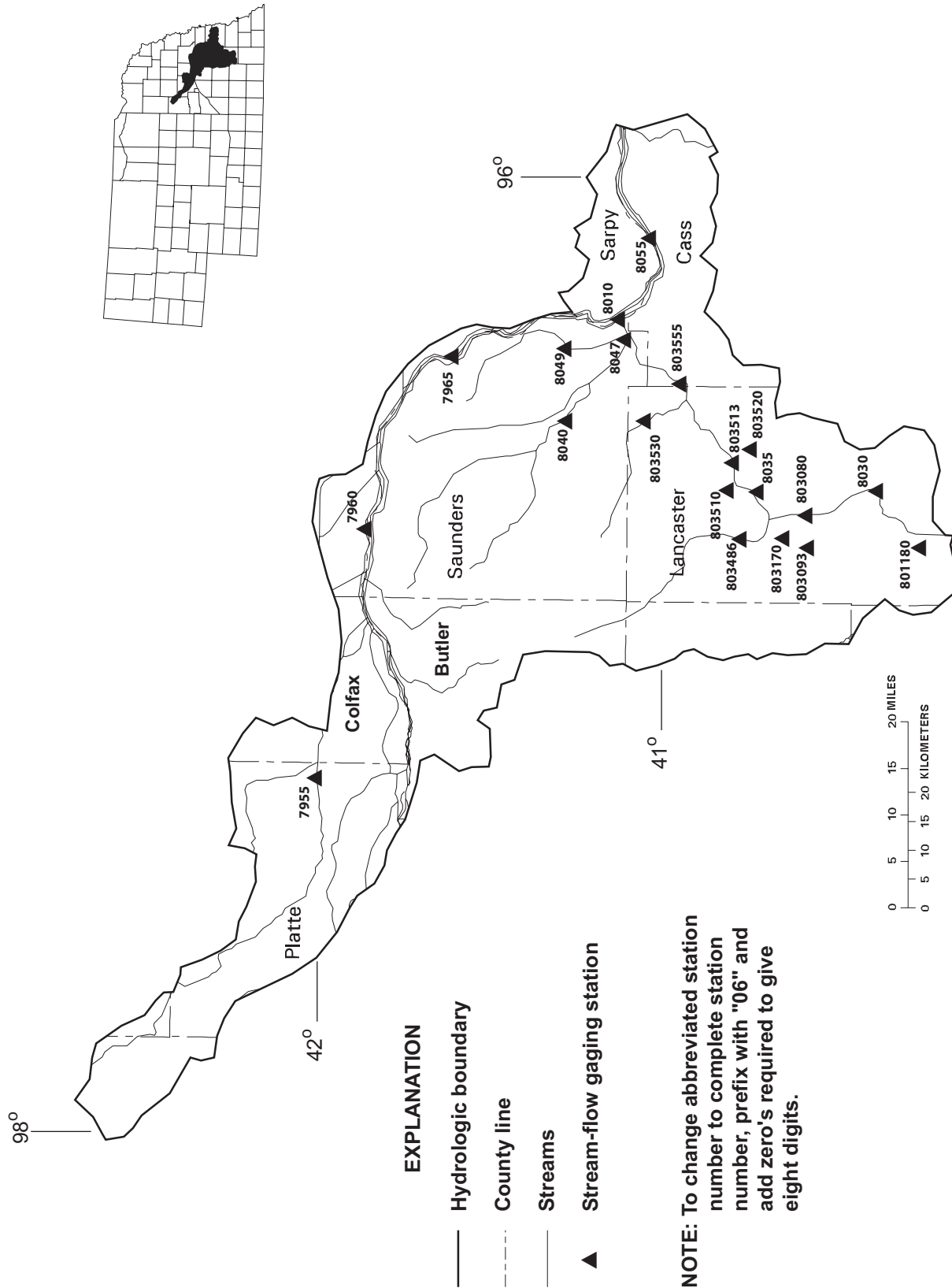
06794000 BEAVER CREEK AT GENOA, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1941 - 2002	
ANNUAL TOTAL	46493.4		30090.0		129.7	
ANNUAL MEAN	127.4		82.44		268	
HIGHEST ANNUAL MEAN					70.9	
LOWEST ANNUAL MEAN					10000	
HIGHEST DAILY MEAN	1010	Mar 15	504	Jun 11	10000	Jul 19 1950
LOWEST DAILY MEAN	2.5	Aug 11	3.1	Aug 3	0.41	Jul 25 1974
ANNUAL SEVEN-DAY MINIMUM	6.5	Aug 6	5.5	Jul 29	0.90	Jul 24 1974
MAXIMUM PEAK FLOW			1160		21200	
MAXIMUM PEAK STAGE			9.34		*18.70	
ANNUAL RUNOFF (AC-FT)	92220		59680		93980	
10 PERCENT EXCEEDS	257		132		210	
50 PERCENT EXCEEDS	89		86		90	
90 PERCENT EXCEEDS	43		17		48	

e Estimated.
 * Site and datum then in use.



SURFACE-WATER DISCHARGE RECORDS
 PLATTE RIVER BASIN
 LOWER PLATTE RIVER BASIN



SURFACE-WATER DISCHARGE RECORDS
 PLATTE RIVER BASIN
 LOWER PLATTTE RIVER BASIN

*Station number	Station name	Page
7955	Shell Creek near Columbus.....	158
7960	Platte River at North Bend.....	160
7965	Platte River near Leshara.....	162
	(Elkhorn River Basin stations).....	166-203
8010	Platte River near Ashland.....	204
801180	Olive Branch near Hallam.....	208
8030	Salt Creek at Roca.....	212
803080	Salt Creek at Pioneers Blvd at Lincoln.....	214
803093	Haines Branch at SW 56th St. at Lincoln.....	216
803170	Middle Creek at SW 40th St. at Lincoln.....	218
803486	Oak Creek at Air Park Rd. at Lincoln.....	220
8035	Salt Creek at Lincoln.....	222
803510	Little Salt Creek near Lincoln.....	224
803513	Salt Creek at 70th St. at Lincoln.....	226
803520	Stevens Creek near Lincoln.....	228
803530	Rock Creek near Ceresco.....	230
803555	Salt Creek at Greenwood.....	232
8040	Wahoo Creek at Ithaca.....	234
8047	Wahoo Creek at Ashland.....	238
8049	Johnson Creek near Memphis.....	240
8055	Platte River at Louisville.....	242

*NOTE: To change abbreviated station number to complete station number, prefix with "06" and add zeros required to give eight digits.

PLATTE RIVER BASIN

06795500 SHELL CREEK NEAR COLUMBUS, NE

LOCATION.--Lat 41°31'33", long 097°16'55", in NE 1/4 NW 1/4 sec.23, T.18 N., R.1 E., Platte County, Hydrologic Unit 10200201, on right bank 10 ft upstream from county road bridge, 1 mi upstream from Loseke Creek, 7 mi northeast of Columbus, and at mile 32.2.

DRAINAGE AREA.--294 mi².

PERIOD OF RECORD.--August 1947 to September 1975, October 1977 to current year.

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

GAGE.--Water-stage recorder. Elevation of gage is 1,435 ft above sea level. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	14	25	e13	e16	e19	28	34	26	15	9.5	4.5
2	7.8	13	24	e12	e20	e19	28	32	24	15	7.3	4.2
3	6.8	14	23	e20	e18	e20	28	33	24	16	e6.0	4.4
4	7.2	13	23	e19	e19	e21	28	31	25	16	8.1	4.3
5	7.4	13	24	e19	e18	e27	27	31	26	18	10	3.8
6	7.5	14	24	e19	e19	e27	27	30	25	15	27	4.8
7	6.9	15	23	e19	e19	e26	27	39	24	15	55	4.1
8	6.9	15	23	e19	e19	e26	28	36	24	15	20	3.6
9	7.3	16	23	e19	e16	e25	29	31	23	14	12	4.0
10	71	15	23	e19	e17	e23	28	e42	29	12	8.3	3.3
11	224	16	23	e19	e18	e22	28	e60	340	12	7.7	3.1
12	21	16	23	e18	e21	e24	29	88	891	12	9.0	3.3
13	12	16	23	e18	e26	e27	28	65	e590	12	8.0	4.4
14	11	17	23	e19	e25	e39	28	39	e190	14	7.2	4.4
15	11	17	22	e19	e25	66	29	33	54	13	7.0	4.3
16	11	17	23	e19	e24	41	28	34	44	13	7.0	7.5
17	10	17	23	e20	e23	34	30	31	38	12	7.6	6.4
18	10	17	22	e22	e22	33	28	29	35	12	6.9	5.1
19	10	17	23	e22	e23	36	27	28	34	12	7.9	4.3
20	11	18	e20	e22	e21	37	28	27	34	11	6.8	3.8
21	11	22	e19	e22	e21	32	28	27	34	10	5.6	4.1
22	12	18	e18	e22	e21	30	30	28	29	10	4.9	3.6
23	11	19	e20	e23	e21	31	30	27	26	13	5.1	3.5
24	11	26	e20	e23	e21	31	30	27	24	16	5.7	3.6
25	11	81	e20	e19	e20	29	28	e26	23	13	19	3.7
26	12	58	e21	e19	e19	e27	27	e29	22	14	11	4.0
27	12	43	e20	e18	e18	e25	30	28	21	12	6.8	4.4
28	12	33	e16	e16	e20	e25	38	28	20	11	5.4	4.5
29	12	25	e14	e14	---	29	40	27	19	11	5.3	4.5
30	13	e25	e14	e14	---	29	35	29	16	11	5.9	4.1
31	13	---	e14	e14	---	28	---	27	---	11	4.9	---
TOTAL	597.9	660	656	580	570	908	877	1076	2734	406	317.9	127.6
MEAN	19.29	22.00	21.16	18.71	20.36	29.29	29.23	34.71	91.13	13.10	10.25	4.253
MAX	224	81	25	23	26	66	40	88	891	18	55	7.5
MIN	6.8	13	14	12	16	19	27	26	16	10	4.9	3.1
AC-FT	1190	1310	1300	1150	1130	1800	1740	2130	5420	805	631	253

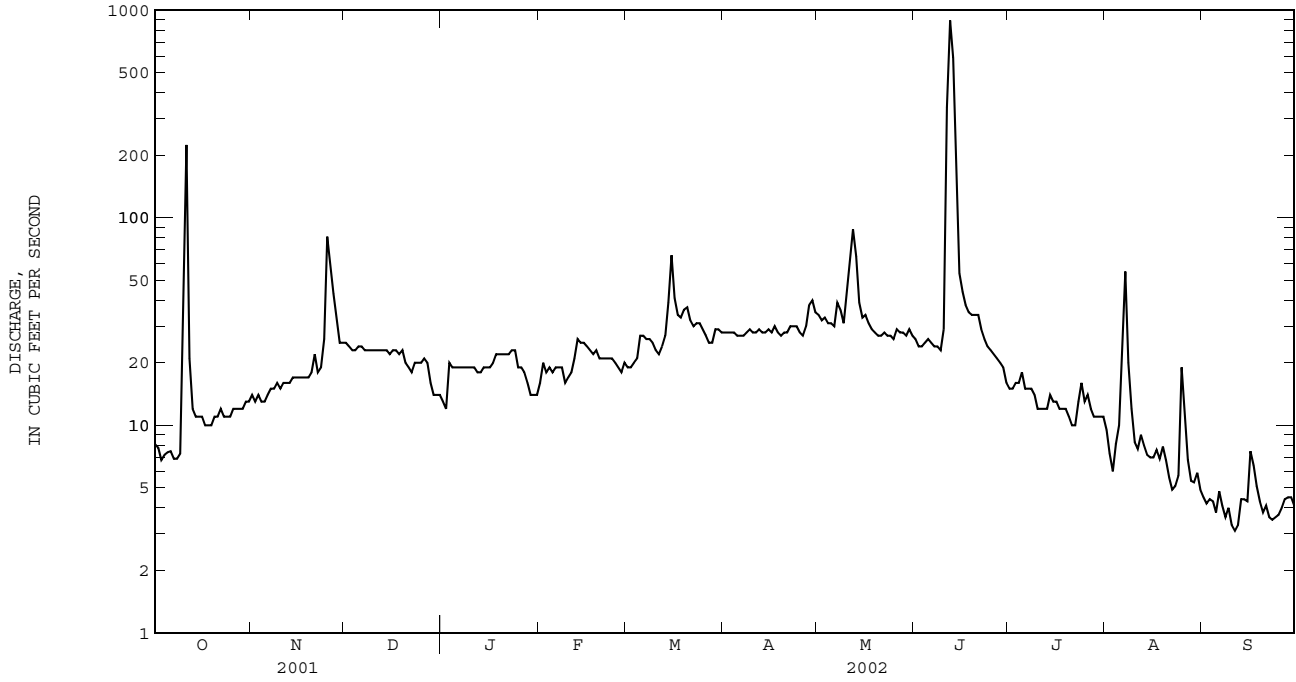
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2002, BY WATER YEAR (WY)

MEAN	18.01	17.97	15.66	19.05	50.99	95.55	43.00	68.59	124.0	65.36	38.21	24.14
MAX	74.6	62.9	42.2	84.7	322	469	210	552	702	515	202	195
(WY)	1983	1999	1994	1973	1971	1993	1984	1982	1990	1993	1951	1989
MIN	2.90	5.21	5.38	6.03	3.00	13.1	8.14	8.59	9.25	3.77	3.03	3.23
(WY)	1959	1959	1981	1957	1950	1981	1981	1981	1980	1974	1955	1980

06795500 SHELL CREEK NEAR COLUMBUS, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1948 - 2002	
ANNUAL TOTAL	18261.7		9510.4		48.31	
ANNUAL MEAN	50.03		26.06		136	
HIGHEST ANNUAL MEAN					1993	
LOWEST ANNUAL MEAN					13.6	
HIGHEST DAILY MEAN	1190	Mar 14	891	Jun 12	4900	Jun 17 1990
LOWEST DAILY MEAN	5.7	Sep 13	3.1	Sep 11	0.00	Dec 22 1989
ANNUAL SEVEN-DAY MINIMUM	7.1	Sep 8	3.7	Sep 7	0.86	Jul 22 1954
MAXIMUM PEAK FLOW			1130		8000	
MAXIMUM PEAK STAGE			11.00		22.76	
ANNUAL RUNOFF (AC-FT)	36220		18860		35000	
10 PERCENT EXCEEDS	70		33		66	
50 PERCENT EXCEEDS	23		19		17	
90 PERCENT EXCEEDS	9.8		6.0		6.0	

e Estimated.



PLATTE RIVER BASIN

06796000 PLATTE RIVER AT NORTH BEND, NE

LOCATION.--Lat 41°27'10", long 096°45'50", in SE $\frac{1}{4}$ sec. 7., T. 17 N., R. 6 E., Douglas County, Hydrologic Unit 10200202, on left bank 80 ft upstream from bridge on State Highway 79, 1 mi south of North Bend, 5 mi downstream from Shell Creek, and at mile 73.0.

DRAINAGE AREA.--70,400 mi², of which about 57,800 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--April 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,262.32 ft above sea level. Prior to Sept. 12, 1951, nonrecording gage and Sept. 12, 1951 to Sept. 30, 1970 water-stage recorder, at present site at datum 2.00 ft higher. Data collection platform at station.

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

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

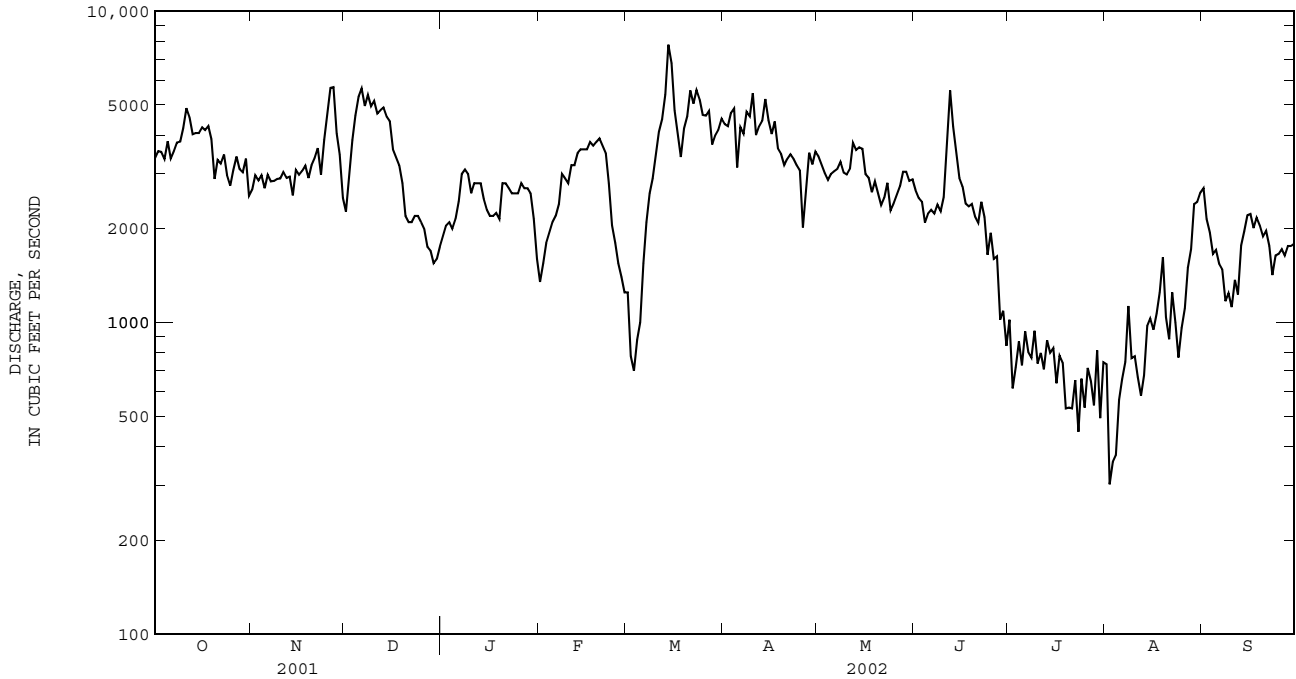
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3370	2670	2270	e1900	e1350	e1250	4340	3410	2660	1020	734	2700
2	3550	2970	2900	e2050	e1550	e780	4270	3210	2510	614	302	2150
3	3530	2860	3850	e2100	e1800	e700	4710	3020	2440	717	357	1950
4	3350	2970	4620	e2000	e1950	e880	4870	2870	2090	869	375	1660
5	3820	2700	5310	e2150	e2100	e1000	3150	3000	2240	728	564	1710
6	3360	2980	5640	e2450	e2200	e1550	4240	3060	2300	936	657	1540
7	3550	2840	4960	e3000	e2400	e2100	4040	3110	2240	802	747	1480
8	3780	2850	5380	e3100	e3000	e2600	4750	3280	2390	770	1130	1170
9	3810	2890	4950	e3000	e2900	e2900	4590	3030	2280	940	768	1240
10	4210	2900	5150	e2600	e2800	e3500	5450	2990	2530	738	779	1120
11	4880	3040	4690	e2800	e3200	e4100	4000	3120	3880	798	667	1370
12	4570	2910	4810	e2800	e3200	e4500	4260	3780	5560	707	582	1230
13	4020	2940	4900	e2800	e3500	e5400	4450	3580	4250	877	676	1770
14	4060	2560	4580	e2500	e3600	e7800	5220	3650	3540	800	975	1960
15	4060	3090	4430	e2300	e3600	e6800	4460	3610	2910	828	1030	2210
16	4230	2980	e3600	e2200	e3600	e4800	4030	3000	2730	638	948	2230
17	4150	3070	e3400	e2200	e3800	e4000	4420	2920	2410	783	1070	2010
18	4270	3190	e3200	e2250	e3700	e3400	3620	2620	2360	742	1250	2170
19	3880	2910	e2800	e2150	e3800	e4200	3480	2840	2400	530	1620	2050
20	2890	3200	e2200	e2800	e3900	e4600	3200	2600	2190	533	1040	1890
21	3330	3380	e2100	e2800	e3700	5560	3350	2380	2090	530	883	1970
22	3240	3630	e2100	e2700	e3500	5050	3470	2520	2440	653	1250	1760
23	3460	2980	e2200	e2600	e2800	5580	3350	2810	2180	446	1000	1420
24	2970	3860	e2200	e2600	e2050	5200	3200	2290	1650	660	772	1640
25	2750	4620	e2100	e2600	e1800	4640	3080	2410	1940	533	960	1660
26	3090	5670	e2000	e2800	e1550	4620	2020	2570	1600	715	1110	1720
27	3410	5700	e1750	e2700	e1400	4780	2700	2740	1630	648	1500	1640
28	3110	4050	e1700	e2700	e1250	3730	3510	3050	1020	542	1720	1760
29	3040	3460	e1550	e2600	---	4000	3220	3050	1090	814	2400	1760
30	3360	2510	e1600	e2150	---	4160	3540	2850	841	493	2440	1790
31	2550	---	e1750	e1600	---	4510	---	2880	---	745	2610	---
TOTAL	111650	98380	104690	77000	76000	118690	116990	92250	72391	22149	32916	52730
MEAN	3602	3279	3377	2484	2714	3829	3900	2976	2413	714.5	1062	1758
MAX	4880	5700	5640	3100	3900	7800	5450	3780	5560	1020	2610	2700
MIN	2550	2510	1550	1600	1250	700	2020	2290	841	446	302	1120
AC-FT	221500	195100	207700	152700	150700	235400	232000	183000	143600	43930	65290	104600

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2002, BY WATER YEAR (WY)												
MEAN	3843	4195	3623	3484	5324	7390	6118	5954	6622	3694	2522	3084
MAX (WY)	10130	9462	8581	7361	11850	16870	19400	21770	25340	17070	8021	9022
MIN (WY)	1974	1985	1985	1984	1984	1993	1984	1984	1983	1993	1983	1986
MIN (WY)	1624	1938	1413	1206	2689	3685	2881	1952	1932	381	442	936
(WY)	1980	1956	1956	1957	1979	1957	1967	1955	1981	1974	1955	1955

06796000 PLATTE RIVER AT NORTH BEND, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1949 - 2002	
ANNUAL TOTAL	1475569		975836		4637	
ANNUAL MEAN	4043		2674		10070	
HIGHEST ANNUAL MEAN					2168	
LOWEST ANNUAL MEAN					82300	
HIGHEST DAILY MEAN	18400	May 7	7800	Mar 14	82300	Mar 10 1993
LOWEST DAILY MEAN	813	Aug 9	302	Aug 2	36	Jul 29 1974
ANNUAL SEVEN-DAY MINIMUM	1020	Aug 7	510	Jul 30	146	Jul 24 1974
MAXIMUM PEAK FLOW			*7800	Mar 14	**112000	Mar 29 1960
MAXIMUM PEAK STAGE			***6.56	Jan 14	***15.55	Mar 19 1978
ANNUAL RUNOFF (AC-FT)	2927000		1936000		3359000	
10 PERCENT EXCEEDS	6950		4500		8340	
50 PERCENT EXCEEDS	3400		2700		3780	
90 PERCENT EXCEEDS	1900		792		1430	

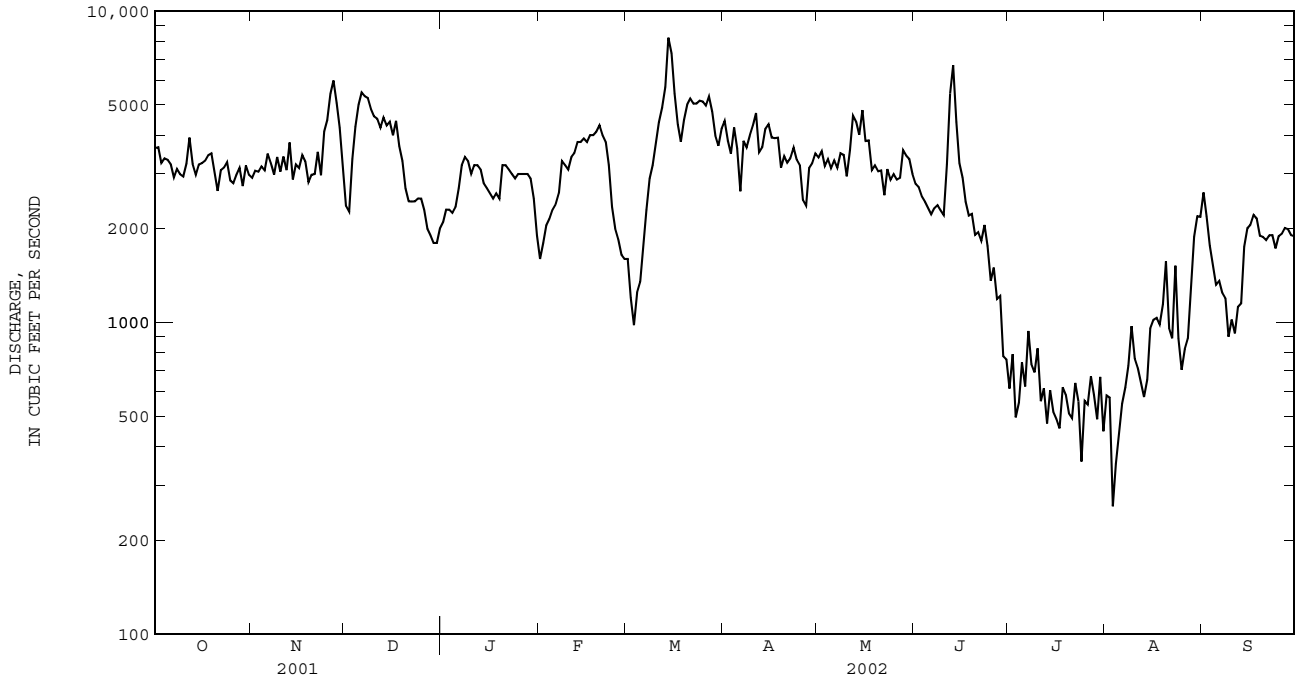
e Estimated.
 * Ice jam, discharge may have been higher.
 ** Stage 10.04 ft.
 *** Backwater from ice.



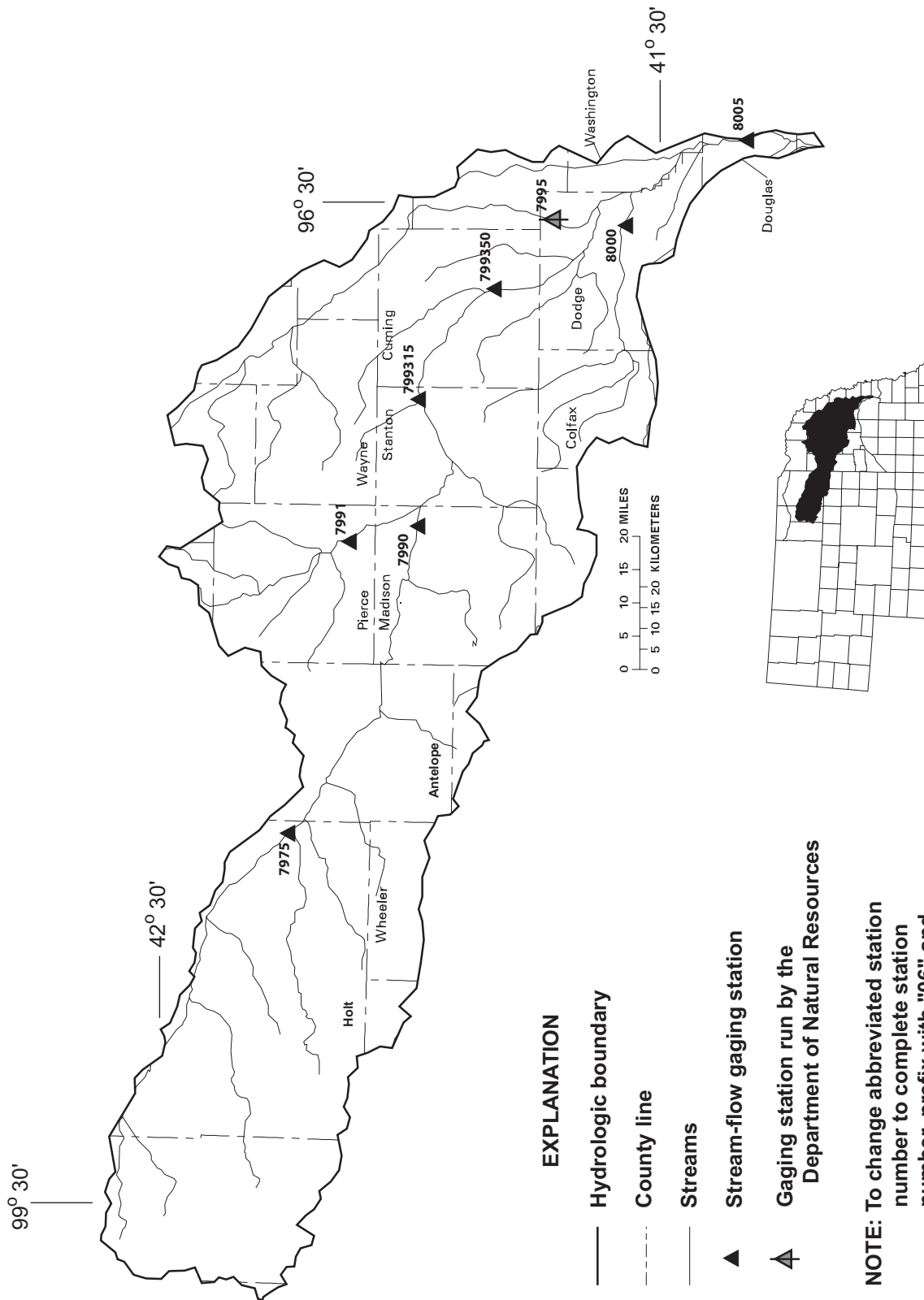
06796500 PLATTE RIVER NEAR LESHARA, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1994 - 2002	
ANNUAL TOTAL	1629379		993548		5727	
ANNUAL MEAN	4464		2722		7444	
HIGHEST ANNUAL MEAN					2722	
LOWEST ANNUAL MEAN					29600	
HIGHEST DAILY MEAN	19200	May 7	8220	Mar 14	29600	Jun 28 1999
LOWEST DAILY MEAN	776	Aug 13	257	Aug 3	257	Aug 3 2002
ANNUAL SEVEN-DAY MINIMUM	1040	Aug 8	458	Jul 31	458	Jul 31 2002
MAXIMUM PEAK FLOW			*10900		**32600	
MAXIMUM PEAK STAGE			*** 6.28		***11.84	
ANNUAL RUNOFF (AC-FT)	3232000		1971000		4149000	
10 PERCENT EXCEEDS	8260		4400		9430	
50 PERCENT EXCEEDS	3700		2940		5300	
90 PERCENT EXCEEDS	1990		699		2220	

e Estimated.
 * Stage 5.33 ft.
 ** Stage 7.47 ft.
 *** Backwater from ice.



SURFACE-WATER DISCHARGE RECORDS
 PLATTE RIVER BASIN
 ELKHORN RIVER BASIN



EXPLANATION

- Hydrologic boundary
- - - County line
- Streams
- ▲ Stream-flow gaging station
- ▲ Department of Natural Resources

NOTE: To change abbreviated station number to complete station number, prefix with "06" and add zero's required to give eight digits.

SURFACE-WATER DISCHARGE RECORDS
PLATTE RIVER BASIN
ELKHORN RIVER BASIN

*Station number	Station name	Page
7975	Elkhorn River at Ewing.....	166
7990	Elkhorn River at Norfolk.....	168
7991	North Fork Elkhorn near Pierce.....	170
799315	Elkhorn River at Pilger.....	172
799350	Elkhorn River at West Point.....	174
7995	Logan Creek near Uehling.....	176
8000	Maple Creek near Nickerson.....	178
8005	Elkhorn River at Waterloo.....	194

* NOTE: To change abbreviated station number to complete station number, prefix with "06" and add zeros required to give eight digits.

PLATTE RIVER BASIN

06797500 ELKHORN RIVER AT EWING, NE

LOCATION.--Lat 42°16'07", long 098°20'22", in NE ¼ SW ¼ sec.35, T.27 N., R.9 W., Holt County, Hydrologic Unit 10220001, on left bank 10 ft downstream from bridge on State Highway L-45B, 0.8 mi north of Ewing, 1.5 mi upstream from South Fork Elkhorn River, and at mile 199.

DRAINAGE AREA.--1,400 mi², approximately, of which about 740 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--August 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,836.24 ft above sea level, levels by Nebraska Department of Roads. From August 1, 1947 to October 22, 1952 at site 300 ft downstream at same datum. From October 23, 1952 to Sept. 30, 1996 at site 800 ft downstream at same datum. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	56	e92	e94	e114	e120	175	180	74	19	15	20
2	57	56	e96	e92	e120	e116	168	198	71	18	13	19
3	56	56	e102	e94	e120	e120	162	206	67	17	11	17
4	56	56	e108	e100	e118	e125	158	211	66	17	14	16
5	56	56	e110	e104	e118	e135	153	204	62	15	22	16
6	56	58	e110	e104	e120	e145	143	193	59	14	23	15
7	57	57	e110	e100	e130	e140	143	179	58	13	20	12
8	56	57	e108	e104	e135	e140	140	164	65	12	16	11
9	57	58	e110	e110	e135	e135	135	154	77	12	15	12
10	58	58	e112	e110	e130	e135	130	151	68	11	17	15
11	57	58	e108	e108	e130	e140	132	155	61	10	18	12
12	58	59	e110	e108	e140	e160	132	153	57	11	17	12
13	61	60	e106	e108	e140	e180	132	150	53	12	16	24
14	60	61	e108	e106	e150	e175	127	140	50	11	14	26
15	59	61	e110	e102	167	e175	125	133	48	9.8	13	29
16	58	62	e110	e100	157	e180	118	126	47	8.5	12	27
17	58	63	e108	e100	158	e185	114	121	46	8.3	11	25
18	58	63	e112	e100	153	189	110	116	45	8.4	11	23
19	56	61	e106	e100	151	192	104	112	43	8.4	11	21
20	56	62	e108	e102	150	210	102	106	46	8.4	10	20
21	56	62	e110	e104	146	e195	109	99	40	8.4	12	19
22	56	62	e110	e108	143	e175	113	91	37	7.4	11	19
23	56	69	e102	e108	142	e185	117	90	35	6.0	11	18
24	55	91	e102	e106	140	e185	114	87	32	5.7	15	18
25	54	96	e100	e112	e114	e185	108	83	32	6.5	15	18
26	52	e94	e98	e120	e110	e190	104	79	34	7.7	25	18
27	52	e92	e102	e130	e110	192	122	78	30	7.3	24	19
28	52	e90	e100	e118	e116	194	151	80	27	5.9	25	20
29	53	e88	e98	e112	---	193	171	78	24	5.5	25	20
30	54	e90	e96	e116	---	189	172	75	21	10	23	21
31	55	---	e94	e118	---	182	---	75	---	18	22	---
TOTAL	1742	2012	3256	3298	3757	5162	3984	4067	1475	332.2	507	562
MEAN	56.19	67.07	105.0	106.4	134.2	166.5	132.8	131.2	49.17	10.72	16.35	18.73
MAX	61	96	112	130	167	210	175	211	77	19	25	29
MIN	52	56	92	92	110	116	102	75	21	5.5	10	11
AC-FT	3460	3990	6460	6540	7450	10240	7900	8070	2930	659	1010	1110

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2002, BY WATER YEAR (WY)

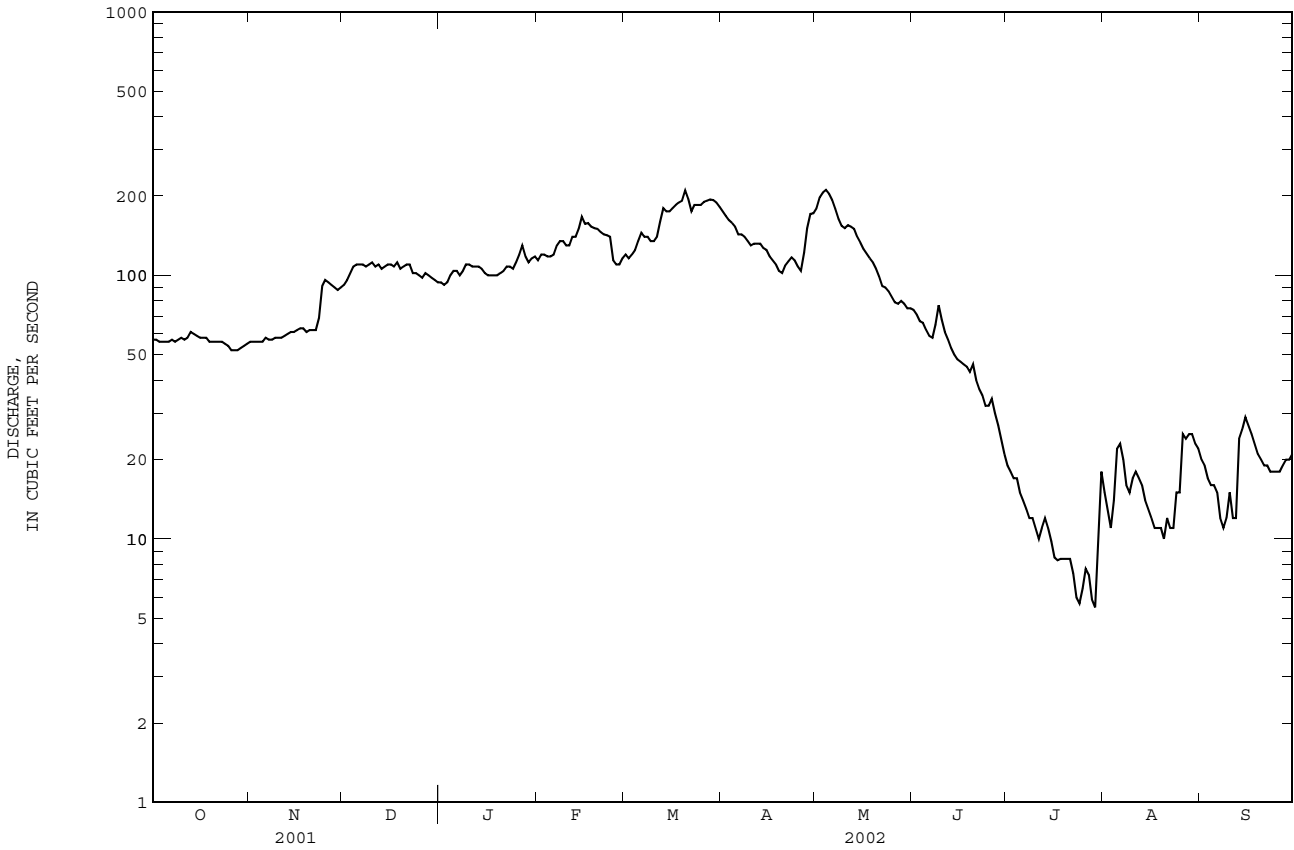
MEAN	88.46	94.05	81.58	71.56	141.1	353.1	502.6	415.8	312.5	162.8	75.66	76.71
MAX	671	443	250	226	1172	2144	2081	2243	2690	1993	444	882
(WY)	1952	1999	1952	1995	1952	1987	1987	1995	1962	1993	1993	1986
MIN	19.4	27.0	27.3	19.4	26.0	61.1	59.7	51.8	45.8	10.7	12.0	9.33
(WY)	1976	1977	1956	1977	1975	1981	1981	1981	1976	2002	1976	1975

PLATTE RIVER BASIN

06797500 ELKHORN RIVER AT EWING, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1947 - 2002	
ANNUAL TOTAL	99071		30154.2		198.0	
ANNUAL MEAN	271.4		82.61		543	
HIGHEST ANNUAL MEAN					1995	
LOWEST ANNUAL MEAN					42.8	
HIGHEST DAILY MEAN	4200	Apr 25	211	May 4	8480	May 30 1995
LOWEST DAILY MEAN	37	Aug 12	5.5	Jul 29	5.2	Sep 6 1976
ANNUAL SEVEN-DAY MINIMUM	39	Jan 1	6.4	Jul 23	6.0	Sep 15 2000
MAXIMUM PEAK FLOW			*214	Mar 20, May 4	9050	May 29 1995
MAXIMUM PEAK STAGE			**4.26	Jan 16	11.09	May 29 1995
ANNUAL RUNOFF (AC-FT)	196500		59810		143400	
10 PERCENT EXCEEDS	714		157		418	
50 PERCENT EXCEEDS	76		83		79	
90 PERCENT EXCEEDS	48		12		31	

e Estimated.
 * Stage 3.69 ft for Mar. 20; 3.83 ft for May 4.
 ** Backwater from ice.



PLATTE RIVER BASIN

06799000 ELKHORN RIVER AT NORFOLK, NE

LOCATION.--Lat 42°00'14", long 97°25'31", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.34, T.24 N., R.1 W., Madison County, Hydrologic Unit 10220001, on left bank 200 ft downstream from U.S. Highway 81 bridge, 1 mi south of intersection of U.S. Highways 81 and 275, and 3.6 mi upstream from North Fork Elkhorn River, and at mile 129.

DRAINAGE AREA.--2,790 mi², approximately, of which about 1,790 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--July 1896 to November 1903 (no winter records), October 1945 to current year. Gage height records collected at site 200 ft upstream from May 10, 1941 to Sept. 26, 1945 are contained in reports of U.S. Weather Bureau. Published as "near Norfolk" from October 1957 to September 1977.

REVISED RECORDS.--WSP 1390: 1898-1900. WSP 1730: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,500.95 ft above sea level. See WSP 1918 for history of changes prior to Aug. 30, 1958. Aug. 30, 1958, to July 27, 1978, water-stage recorder at site 3.2 mi upstream at datum 19.88 ft higher and July 28, 1978 to Mar. 18, 1987, present site at datum 4.00 ft higher. Mar. 19, 1987, to Mar. 31, 1995, present site at datum 2.00 ft higher. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	258	286	427	e330	e330	e390	507	593	273	144	63	164
2	257	284	432	e340	e320	369	484	591	261	138	87	156
3	246	287	450	e340	e320	e380	462	575	256	139	88	144
4	244	288	454	e350	e360	e380	414	565	265	136	110	137
5	237	287	476	e360	e350	e410	407	592	267	134	227	128
6	234	291	505	e390	e340	e450	403	570	261	130	217	123
7	235	302	522	e440	e350	e480	399	557	258	124	184	119
8	238	301	520	e400	e370	e470	399	533	247	118	166	114
9	261	298	511	e420	e400	e470	397	491	253	112	153	110
10	270	298	489	e480	e400	e450	388	461	295	108	181	124
11	278	295	484	e500	e400	e450	380	529	457	106	171	130
12	276	296	479	e480	e420	e470	399	611	404	107	153	137
13	276	299	464	e480	e470	e500	420	597	307	104	152	163
14	279	310	443	e490	523	e560	425	545	265	104	148	173
15	279	314	432	e500	500	573	424	510	253	101	138	179
16	271	319	429	e470	494	542	402	477	242	95	133	186
17	270	318	437	e450	486	535	388	442	233	92	134	172
18	272	318	438	e450	486	530	380	416	234	89	129	167
19	276	304	417	e450	501	548	372	388	225	86	129	166
20	278	296	395	e440	485	534	352	371	238	81	125	164
21	279	294	385	e450	475	531	364	353	270	82	127	158
22	286	299	392	e460	464	502	374	338	278	104	126	155
23	284	318	358	e470	464	493	387	326	233	80	124	152
24	281	452	277	e480	470	481	384	320	207	77	130	153
25	274	601	e300	e440	453	521	375	315	191	75	131	156
26	269	569	e320	e450	453	523	361	305	181	78	139	159
27	270	505	e320	e470	e430	498	397	303	174	76	158	163
28	276	387	e350	e480	e410	495	478	314	177	76	160	166
29	279	375	e360	e380	---	502	571	326	164	74	178	172
30	284	397	e350	253	---	514	581	303	153	70	181	170
31	288	---	e350	e320	---	517	---	284	---	64	173	---
TOTAL	8305	10188	12966	13213	11924	15068	12474	13901	7522	3104	4515	4560
MEAN	267.9	339.6	418.3	426.2	425.9	486.1	415.8	448.4	250.7	100.1	145.6	152.0
MAX	288	601	522	500	523	573	581	611	457	144	227	186
MIN	234	284	277	253	320	369	352	284	153	64	63	110
AC-FT	16470	20210	25720	26210	23650	29890	24740	27570	14920	6160	8960	9040

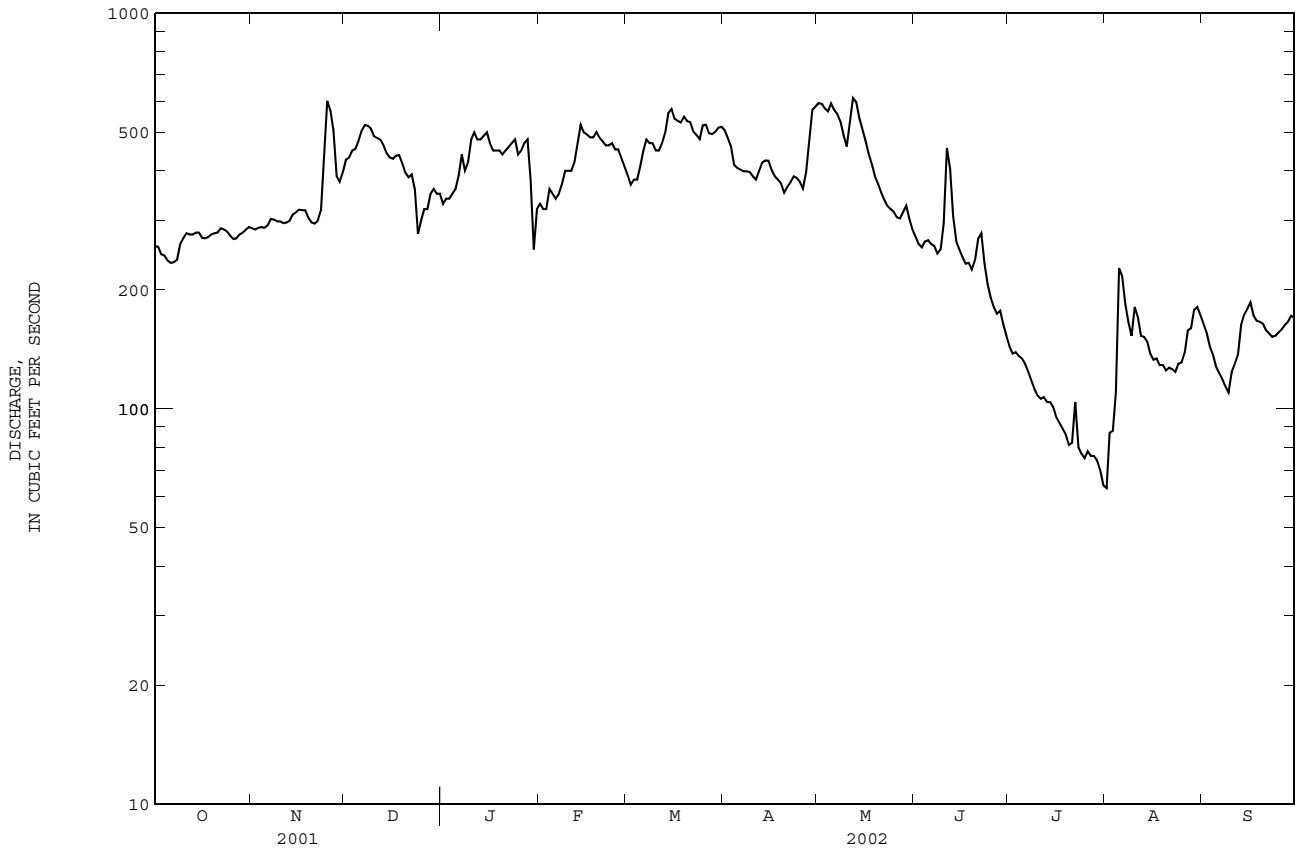
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2002, BY WATER YEAR (WY)

	MEAN	MAX	MIN	(WY)	(WY)	(WY)	(WY)	(WY)	(WY)	(WY)	(WY)	(WY)
MEAN	319.9	338.3	305.6	294.1	494.8	886.0	1050	891.8	912.2	483.3	312.9	273.4
MAX	1418	985	609	624	1862	3819	3715	4615	4673	3663	1398	1444
(WY)	1952	1999	1996	1983	1952	1987	1984	1995	1962	1993	1951	1986
MIN	125	163	151	146	129	298	254	228	201	99.1	61.9	87.3
(WY)	1981	1979	1977	1977	1978	1981	1981	1981	1989	1980	1976	1956

06799000 ELKHORN RIVER AT NORFOLK, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1946 - 2002	
ANNUAL TOTAL	236467		117740		546.2	
ANNUAL MEAN	647.9		322.6		1355	
HIGHEST ANNUAL MEAN					224	
LOWEST ANNUAL MEAN					17500	
HIGHEST DAILY MEAN	4420	Apr 26	611	May 12	17500	May 31 1995
LOWEST DAILY MEAN	155	Aug 12	63	Aug 1	33	Aug 3 1980
ANNUAL SEVEN-DAY MINIMUM	166	Aug 8	72	Jul 26	40	Aug 24 1976
MAXIMUM PEAK FLOW			*640		16900	Jun 14 1967
MAXIMUM PEAK STAGE			**5.42		**15.63	Mar 11 1949
ANNUAL RUNOFF (AC-FT)	469000		233500		395700	
10 PERCENT EXCEEDS	1440		503		1070	
50 PERCENT EXCEEDS	392		319		319	
90 PERCENT EXCEEDS	235		126		163	

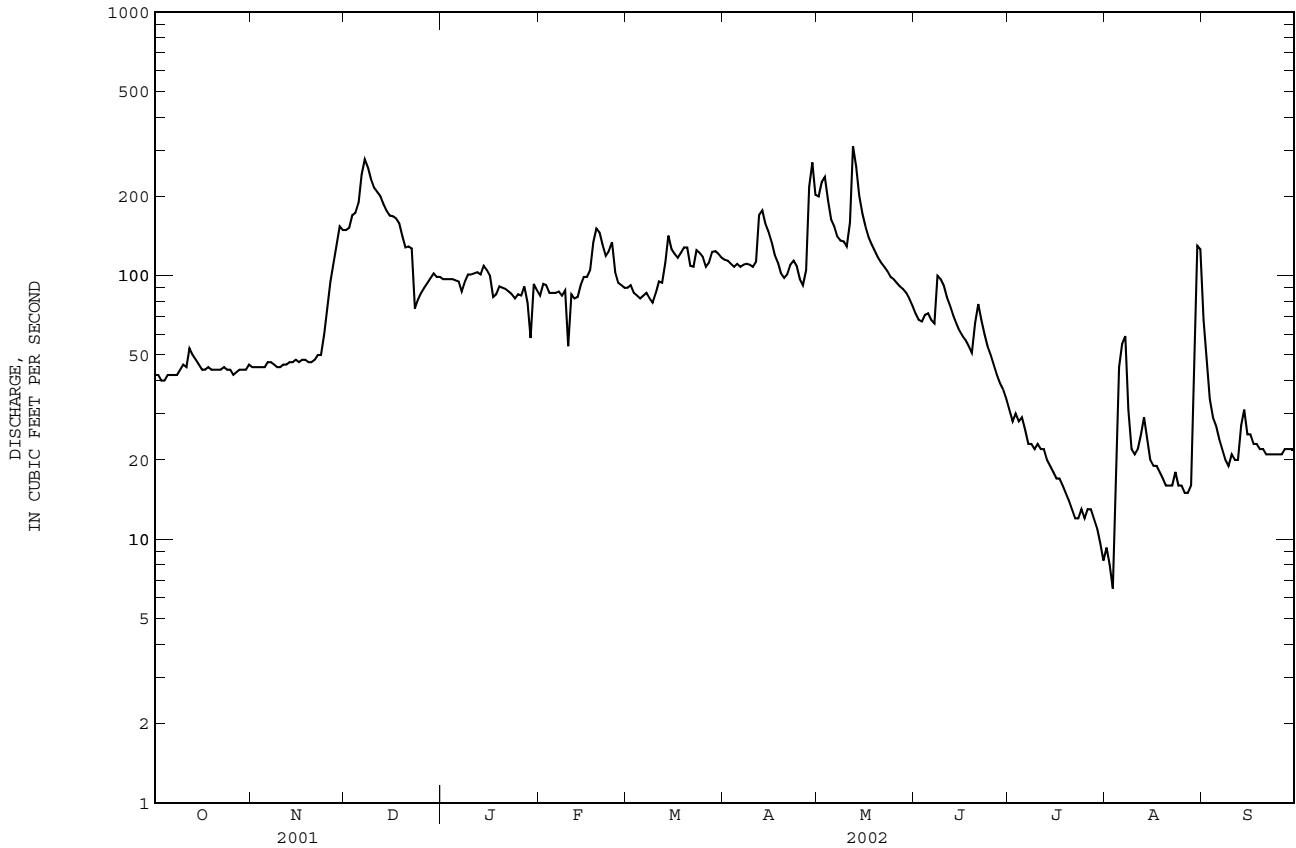
e Estimated.
 * Stage 4.84 ft.
 ** Backwater from ice.



06799100 NORTH FORK ELKHORN RIVER NEAR PIERCE, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1960 - 2002	
ANNUAL TOTAL	46331		29589.8		106.2	
ANNUAL MEAN	126.9		81.07		287	
HIGHEST ANNUAL MEAN					21.5	
LOWEST ANNUAL MEAN					10400	
HIGHEST DAILY MEAN	1660	Mar 16	310	May 12	10400	Mar 28 1962
LOWEST DAILY MEAN	23	Aug 12	6.5	Aug 3	2.7	Jul 29 1989
ANNUAL SEVEN-DAY MINIMUM	26	Aug 8	9.3	Jul 28	3.7	Aug 15 1990
MAXIMUM PEAK FLOW			338		15200	
MAXIMUM PEAK STAGE			4.45		15.10	
ANNUAL RUNOFF (AC-FT)	91900		58690		76970	
10 PERCENT EXCEEDS	254		151		204	
50 PERCENT EXCEEDS	66		82		48	
90 PERCENT EXCEEDS	39		20		22	

e Estimated.



06799315 ELKHORN RIVER AT PILGER, NE--Continued

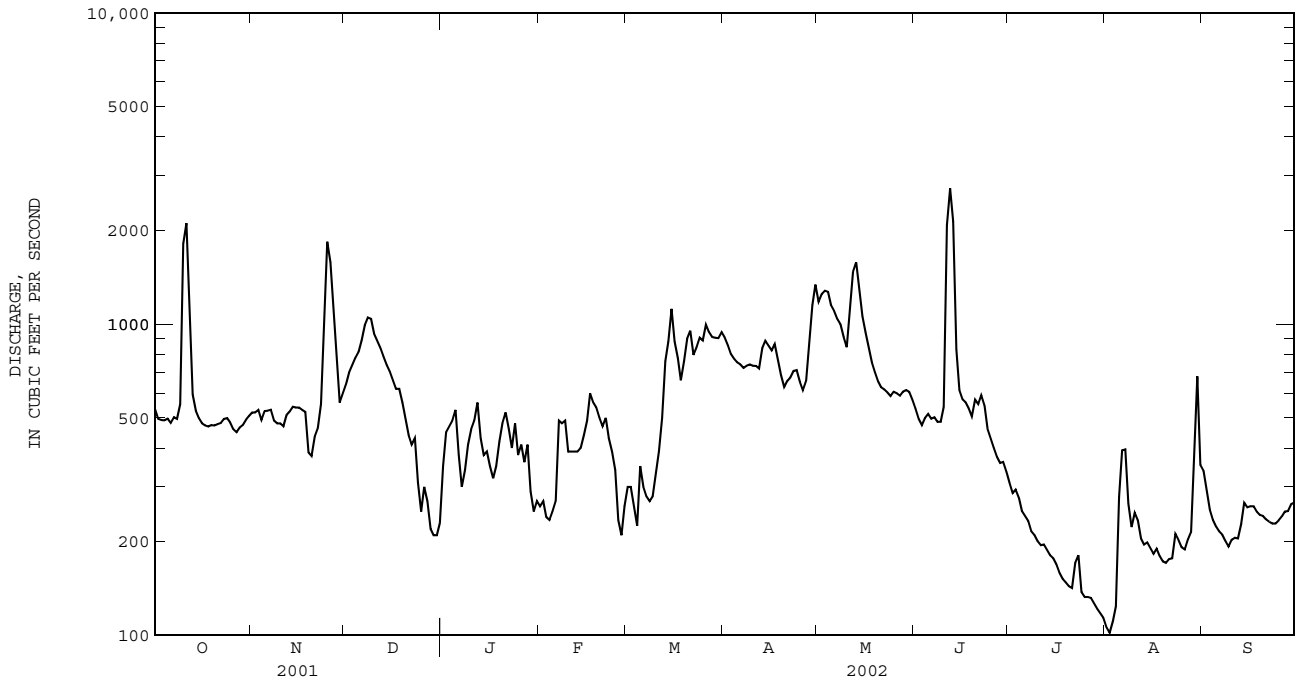
SUMMARY STATISTICS

FOR 2002 WATER YEAR

WATER YEARS 2001 - 2002

ANNUAL TOTAL	193019			
ANNUAL MEAN	528.8		528.8	
HIGHEST ANNUAL MEAN			529	2002
LOWEST ANNUAL MEAN			529	2002
HIGHEST DAILY MEAN	2730	Jun 12	2730	Jun 12 2002
LOWEST DAILY MEAN	102	Aug 2	102	Aug 2 2002
ANNUAL SEVEN-DAY MINIMUM	114	Jul 29	114	Jul 29 2002
MAXIMUM PEAK FLOW	*5220	Jun 11	6660	Sep 15 2001
MAXIMUM PEAK STAGE	**19.85	Feb 26	**19.85	Feb 26 2002
ANNUAL RUNOFF (AC-FT)	382900		383100	
10 PERCENT EXCEEDS	908		908	
50 PERCENT EXCEEDS	480		480	
90 PERCENT EXCEEDS	196		196	

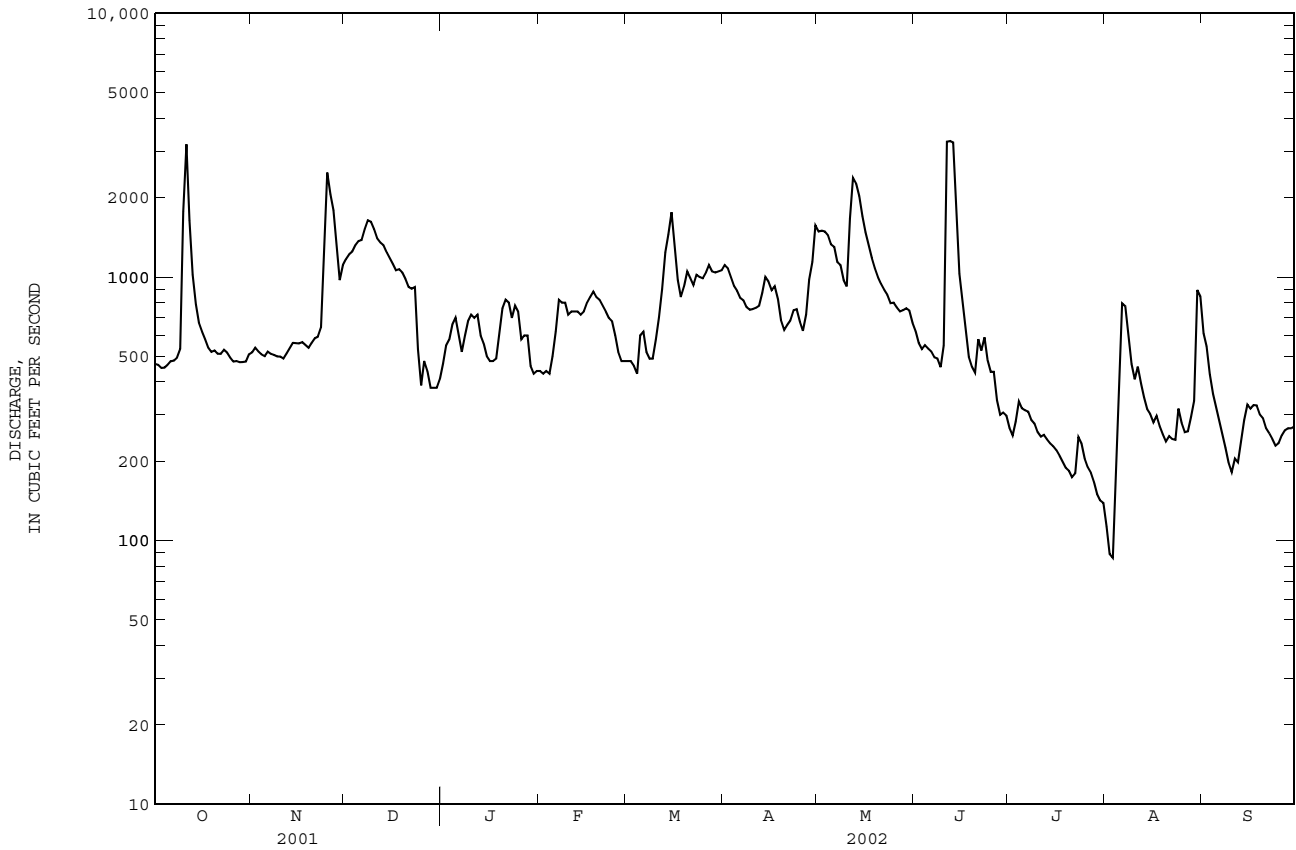
e Estimated.
 * Stage 9.66 ft.
 ** Backwater from ice.



06799350 ELKHORN RIVER AT WEST POINT, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1973 - 2002	
ANNUAL TOTAL	431623		257981		1029	
ANNUAL MEAN	1183		706.8		2253	
HIGHEST ANNUAL MEAN					332	
LOWEST ANNUAL MEAN					26000	
HIGHEST DAILY MEAN	7060	May 7	3280	Jun 12	41	1981
LOWEST DAILY MEAN	205	Aug 13	86	Aug 3	45	1993
ANNUAL SEVEN-DAY MINIMUM	258	Aug 8	127	Jul 28	41	1976
MAXIMUM PEAK FLOW			4830		33000	
MAXIMUM PEAK STAGE			9.74		*18.60	
ANNUAL RUNOFF (AC-FT)	856100		511700		745600	
10 PERCENT EXCEEDS	2900		1310		2080	
50 PERCENT EXCEEDS	621		566		604	
90 PERCENT EXCEEDS	368		249		235	

e Estimated.
 * From floodmark, ice jam.



PLATTE RIVER BASIN

06799500 LOGAN CREEK NEAR UEHLING, NE

LOCATION.--Lat 41°42'46", long 096°31'18", in SE ¼ SE ¼ sec.9, T.20 N., R.8 E., Dodge County, Hydrologic Unit 10220004, near left bank on upstream side of bridge on county road, 2 mi southwest of Uehling and 8.8 mi upstream from mouth.

DRAINAGE AREA.--1,015 mi².

PERIOD OF RECORD.--March 1941 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 1,208.73 ft above sea level. See WSP 1918 for history of changes prior to July 15, 1963. July 16, 1963 to Mar. 27, 1989, near right bank on downstream side of bridge at present site and datum. Mar. 28, 1989 to Mar. 22, 1990, 250 ft upstream on left bank at same datum. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor.

COOPERATION.--Records provided by Nebraska Department of Natural Resources and reviewed by the U.S. Geological Survey.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	168	175	317	e155	e145	e155	224	325	232	198	99	142
2	167	172	306	e150	e165	e160	224	360	224	184	91	130
3	164	170	300	e155	e155	e165	219	353	226	179	89	123
4	165	170	301	e210	e175	e170	213	327	245	182	105	122
5	169	171	302	e225	e175	e180	217	299	244	187	130	121
6	169	171	303	e245	e195	e210	215	301	239	e185	222	119
7	170	171	305	e230	e210	e215	222	282	223	e180	248	116
8	171	167	289	e240	e220	e215	218	279	217	e170	156	114
9	176	167	284	e235	e235	e210	214	274	241	e165	136	114
10	282	169	278	e250	e235	e210	214	265	285	e160	134	112
11	264	169	276	e260	e230	e250	214	422	2520	157	134	113
12	202	170	275	e280	e235	e380	222	691	2580	155	133	114
13	192	173	271	e280	e225	520	232	771	999	153	143	115
14	185	172	266	e270	e220	687	225	469	528	149	137	125
15	181	169	267	e240	e235	706	218	407	427	139	127	123
16	176	168	266	e205	e240	576	215	376	387	139	123	121
17	177	169	251	e185	e260	476	245	351	359	128	165	118
18	179	170	247	e200	e260	287	239	331	339	122	149	119
19	178	169	238	e205	e260	300	217	317	319	114	140	121
20	177	170	237	e235	e250	284	210	307	302	110	129	117
21	176	176	234	e243	e230	253	220	298	335	114	131	115
22	175	178	244	e245	e215	232	228	297	326	122	133	114
23	177	184	e240	e245	e215	245	235	295	285	125	132	115
24	176	292	e230	e230	e210	252	236	285	266	126	133	114
25	172	651	e215	e230	e205	240	222	289	256	130	158	115
26	168	868	e195	e225	e165	224	207	276	247	127	152	119
27	168	489	e185	e200	e160	232	235	267	234	122	131	121
28	175	449	e185	e175	e155	242	316	264	223	115	129	121
29	174	349	e170	e165	---	241	397	272	210	110	131	120
30	173	330	e160	e135	---	234	339	253	200	104	134	121
31	174	---	e160	e145	---	230	---	242	---	103	140	---
TOTAL	5620	7368	7797	6693	5880	8981	7052	10545	13718	4454	4294	3574
MEAN	181.3	245.6	251.5	215.9	210.0	289.7	235.1	340.2	457.3	143.7	138.5	119.1
MAX	282	868	317	280	260	706	397	771	2580	198	248	142
MIN	164	167	160	135	145	155	207	242	200	103	89	112
AC-FT	11150	14610	15470	13280	11660	17810	13990	20920	27210	8830	8520	7090

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2002, BY WATER YEAR (WY)

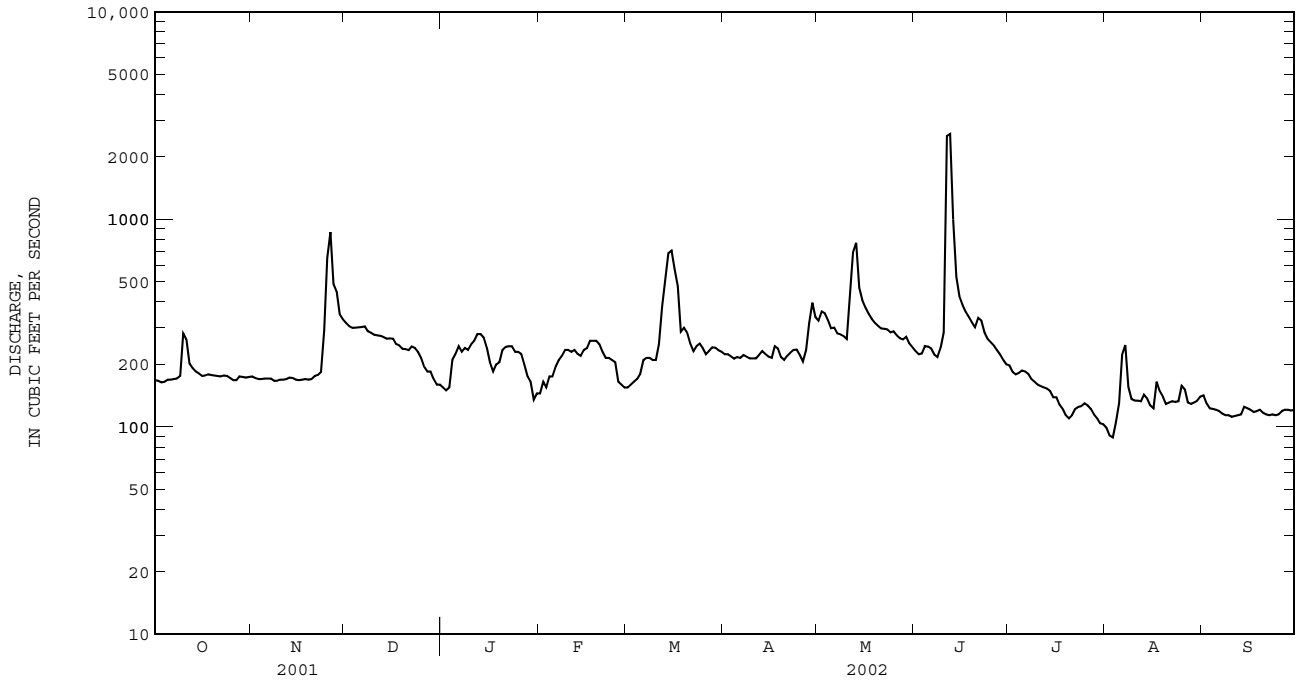
MEAN	122.5	117.4	102.1	111.4	264.7	407.9	289.9	321.9	501.7	262.9	168.2	129.2
MAX	499	453	337	583	2177	2388	1742	1417	2766	1843	1056	613
(WY)	1993	1999	1994	1973	1971	1962	1984	1984	1984	1993	1951	1993
MIN	32.8	38.2	31.9	34.1	38.1	57.4	42.8	39.9	56.6	17.3	15.0	31.6
(WY)	1944	1949	1944	1957	1979	1943	1957	1943	1976	1976	1976	1943

PLATTE RIVER BASIN

06799500 LOGAN CREEK NEAR UEHLING, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1942 - 2002	
ANNUAL TOTAL	118805		85976		232.8	
ANNUAL MEAN	325.5		235.6		710	1984
HIGHEST ANNUAL MEAN					66.4	1943
LOWEST ANNUAL MEAN					20100	Feb 20 1971
HIGHEST DAILY MEAN	2670	Jul 4	2580	Jun 12	6.1	Jul 26 1976
LOWEST DAILY MEAN	110	Jan 1	89	Aug 3	8.8	Jul 12 1976
ANNUAL SEVEN-DAY MINIMUM	126	Jan 1	100	Jul 29	*25200	Feb 20 1971
MAXIMUM PEAK FLOW			3230	Jun 12	20.86	Feb 20 1997
MAXIMUM PEAK STAGE			10.65	Jun 12		
ANNUAL RUNOFF (AC-FT)	235600		170500		168600	
10 PERCENT EXCEEDS	551		321		417	
50 PERCENT EXCEEDS	229		210		103	
90 PERCENT EXCEEDS	155		122		45	

e Estimated.
 * Stage 20.15 ft, from floodmark.



PLATTE RIVER BASIN

06800000 MAPLE CREEK NEAR NICKERSON, NE
(National Water-Quality Assessment, NAWQA, station)

LOCATION.--Lat 41°33'39", long 096°32'27", in SW ¼ NW ¼ sec.4, T.18 N., R.8 E., Dodge County, Hydrologic Unit 10220003, on right bank 8 ft downstream from county road bridge 2 mi upstream from U.S. Highways 77 and 275, 5 mi northwest of Nickerson, and 4 mi upstream from mouth.

DRAINAGE AREA.--369 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1951 to current year.

REVISED RECORDS.--WSP 1630: 1957-58. WDR NE-98: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,211.62 ft above sea level. Prior to July 28, 1960, nonrecording gage at highway bridge, July 28, 1960 to July 28, 1987, water-stage recorder 180 ft upstream from highway bridge and July 29, 1987 to July 23, 1991 water-stage recorder 30 ft downstream from highway bridge. All at/near U.S. Highway 77 bridge, 2 mi downstream from present gage, at datum 17.06 ft lower. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	35	75	e32	e47	e47	61	66	69	42	14	30
2	45	34	73	e32	e49	e62	61	68	65	e40	14	19
3	44	35	72	e39	e50	e62	59	72	65	39	13	15
4	44	36	72	45	e51	66	56	63	67	40	15	12
5	43	36	70	41	e52	56	55	59	83	39	19	11
6	44	38	67	43	49	63	56	59	76	34	30	9.8
7	46	39	64	65	46	69	58	68	70	34	32	8.9
8	46	38	62	45	47	66	60	59	68	33	20	8.5
9	44	39	61	48	50	77	56	55	66	32	15	7.5
10	41	40	61	49	41	62	52	53	68	28	14	7.5
11	191	42	61	54	48	51	54	77	974	27	13	7.5
12	72	43	62	55	35	61	55	370	1180	29	15	8.8
13	49	48	60	54	35	94	55	140	1180	29	14	9.3
14	40	49	57	57	48	175	54	101	512	29	13	11
15	36	45	62	53	60	127	55	88	199	29	12	12
16	35	40	58	48	64	94	55	83	132	26	12	12
17	34	39	56	45	71	101	58	75	101	24	14	10
18	34	39	57	44	78	100	77	71	86	23	14	9.8
19	35	38	55	44	90	105	52	70	80	22	16	10
20	35	39	48	48	92	107	51	71	77	23	15	9.1
21	34	39	55	49	79	82	58	72	73	21	15	7.9
22	36	39	60	48	75	64	62	75	72	21	15	7.2
23	37	44	36	49	73	75	63	85	67	21	18	7.1
24	37	74	37	48	67	73	55	78	64	22	36	7.6
25	34	336	e37	45	61	68	52	82	60	20	34	8.2
26	33	178	e38	47	36	66	49	82	56	19	21	9.4
27	33	106	e36	54	e39	66	62	78	52	19	16	10
28	33	87	e38	41	e41	68	99	81	52	19	15	9.4
29	32	76	e36	40	---	68	102	103	e49	19	21	9.5
30	33	80	e36	e44	---	65	73	79	e46	17	162	8.4
31	34	---	e34	e45	---	63	---	73	---	15	102	---
TOTAL	1381	1851	1696	1451	1574	2403	1815	2656	5809	835	779	313.4
MEAN	44.55	61.70	54.71	46.81	56.21	77.52	60.50	85.68	193.6	26.94	25.13	10.45
MAX	191	336	75	65	92	175	102	370	1180	42	162	30
MIN	32	34	34	32	35	47	49	53	46	15	12	7.1
AC-FT	2740	3670	3360	2880	3120	4770	3600	5270	11520	1660	1550	622

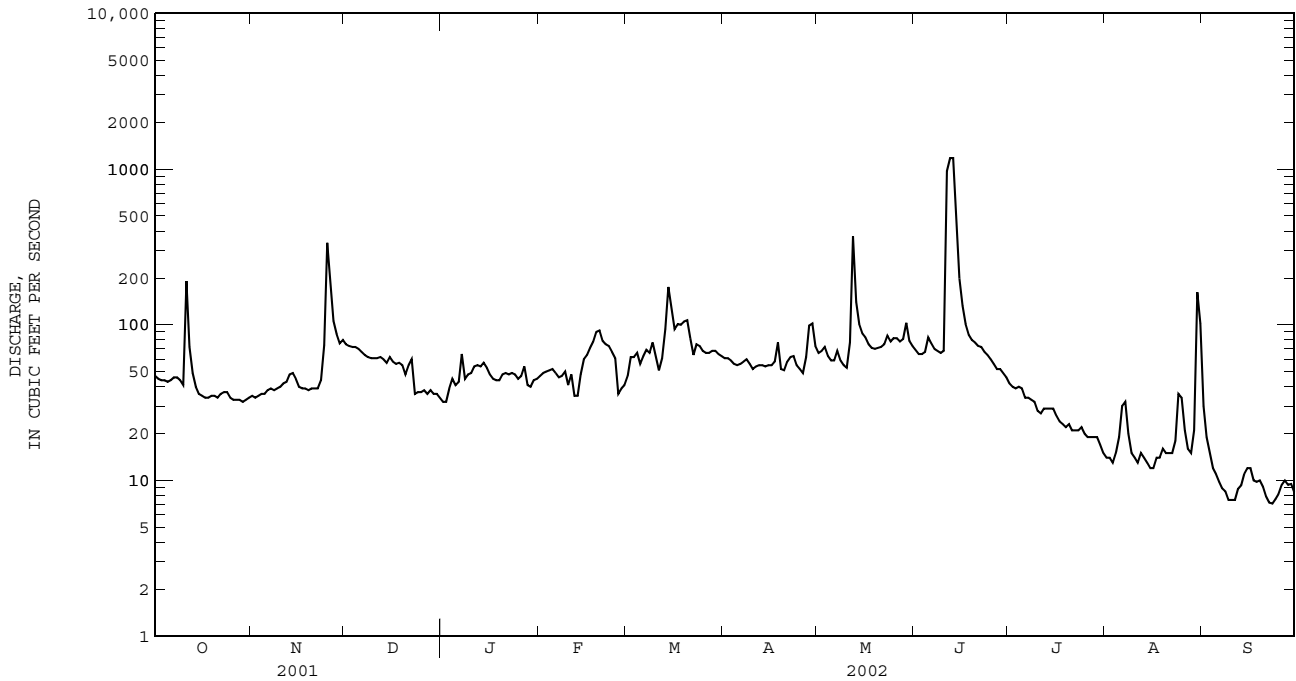
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2002, BY WATER YEAR (WY)

MEAN	37.48	30.35	24.04	24.47	70.64	133.8	94.94	118.8	218.4	101.7	68.76	46.54
MAX	323	158	102	82.8	446	674	590	642	1252	1023	762	383
(WY)	1983	1999	1999	1999	1971	1962	1984	1984	1960	1993	1996	1965
MIN	0.38	0.66	0.50	0.42	0.55	1.36	1.01	0.72	3.00	1.19	0.59	0.26
(WY)	1982	1982	1981	1982	1979	1957	1981	1981	1956	1976	1976	1981

06800000 MAPLE CREEK NEAR NICKERSON, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1952 - 2002	
ANNUAL TOTAL	34453		22563.4		80.71	
ANNUAL MEAN	94.39		61.82		264	
HIGHEST ANNUAL MEAN					5.19	
LOWEST ANNUAL MEAN					1984	
HIGHEST DAILY MEAN	1010	Mar 14	1180	Jun 12	10400	Aug 6 1996
LOWEST DAILY MEAN	17	Jan 1	7.1	Sep 23	0.10	Jan 15 1956
ANNUAL SEVEN-DAY MINIMUM	23	Jan 1	8.1	Sep 20	0.19	Sep 17 1981
MAXIMUM PEAK FLOW			2220		*13700	
MAXIMUM PEAK STAGE			9.33		**17.65	
ANNUAL RUNOFF (AC-FT)	68340		44750		58470	
10 PERCENT EXCEEDS	178		82		131	
50 PERCENT EXCEEDS	54		48		24	
90 PERCENT EXCEEDS	29		14		1.4	

e Estimated.
* Stage 17.33 ft.
** Site and datum then in use.



PLATTE RIVER BASIN

06800000 MAPLE CREEK NEAR NICKERSON, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)
OCT													
12...	1015	73	950	724	9.2	89	7.8	444	10.0	11.5	160	194	1
NOV													
14...	1000	49	16	727	9.5	98	8.2	761	18.5	14.5	309	371	3
DEC													
11...	1000	61	32	723	12.9	95	8.4	789	2.0	.5	360	429	5
JAN													
08...	0950	44	8.6	722	12.1	90	8.0	789	4.0	1.0	348	420	2
FEB													
13...	1030	34	10	728	12.8	95	8.0	697	-.5	1.0	297	361	0
MAR													
12...	0930	57	13	727	10.1	77	8.1	784	2.5	2.0	347	420	2
APR													
09...	0945	57	290	736	8.8	78	8.5	697	5.0	8.5	311	373	3
23...	0930	63	41	726	7.9	79	8.5	729	12.0	13.0	333	394	6
MAY													
08...	1200	58	40	719	8.5	100	8.2	701	21.5	20.0	309	368	5
14...	1030	101	460	735	9.1	92	8.2	777	14.5	14.0	338	403	4
21...	1030	72	79	737	9.8	97	8.5	841	15.0	13.5	360	423	8
29...	1115	103	980	724	7.5	97	8.1	637	22.5	25.5	268	316	5
JUN													
06...	1145	74	100	727	8.4	105	8.4	698	31.0	24.0	319	370	9
11...	1130	117	610	723	7.2	91	8.1	545	21.0	24.0	232	276	3
18...	0930	94	210	720	7.5	93	8.3	765	23.0	22.5	331	391	6
25...	1030	60	24	728	8.2	104	8.3	670	28.5	24.5	280	314	13
JUL													
01...	1145	47	17	728	5.4	70	8.3	586	26.5	26.0	236	274	6
09...	1200	33	12	730	8.9	120	8.2	592	27.0	28.0	241	283	6
17...	1000	25	7.9	728	9.3	122	8.5	559	25.5	26.5	216	249	7
23...	1000	21	8.5	734	9.5	118	8.4	519	19.0	24.0	207	246	3
30...	1000	17	7.4	728	8.2	105	8.4	533	32.9	25.5	205	245	3
AUG													
14...	1200	13	11	723	9.4	108	8.8	574	20.5	19.5	241	283	6
27...	1200	16	9.6	734	8.0	100	7.8	535	29.0	25.0	203	240	4
SEP													
10...	1030	7.7	9.2	736	8.6	93	7.6	535	17.5	17.5	205	248	0
23...	1030	7.3	3.1	736	12.3	127	7.8	528	13.5	15.0	208	252	0

PLATTE RIVER BASIN

06800000 MAPLE CREEK NEAR NICKERSON, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	HY-DROXIDE WATER DIS IT FIELD MG/L AS OH (71834)	CHLO- RIDE, DIS- SOLVED MG/L AS AS CL) (00940)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS AS SO4) (00945)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS AS NH4) (71846)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS AS NO3) (71851)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS AS NO2) (71856)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS AS N) (00613)	NITRO- GEN, ORGANIC TOTAL (MG/L AS AS N) (00605)
OCT													
12...	0	10.9	--	34.0	.11	3.4	.15	3.01	13.3	3.06	.191	.058	3.2
NOV													
14...	0	28.9	--	56.1	<.04	.76	--	4.14	18.3	4.17	.092	.028	--
DEC													
11...	0	9.76	--	57.2	.20	.97	.26	5.93	26.2	5.96	.122	.037	.77
JAN													
08...	0	9.86	--	58.4	.04	.46	.06	6.90	30.5	6.92	.076	.023	.41
FEB													
13...	0	9.75	--	53.2	.09	.52	.11	5.71	25.3	5.75	.118	.036	.44
MAR													
12...	--	9.54	--	54.8	.29	.98	.38	5.63	24.9	5.69	.177	.054	.69
APR													
09...	--	9.60	--	54.3	<.04	.63	--	4.02	17.8	4.03	.056	.017	--
23...	--	--	--	--	.05	1.2	.06	3.83	17.0	3.89	.204	.062	1.1
MAY													
08...	--	10.5	--	49.0	.10	1.5	.12	4.26	18.9	4.40	.437	.133	1.5
14...	--	11.2	--	56.2	.56	3.9	.71	5.20	23.0	5.31	.378	.115	3.4
21...	--	--	--	--	<.04	1.1	--	5.54	24.5	5.58	.128	.039	--
29...	--	--	--	--	<.04	3.2	--	4.53	20.1	4.59	.197	.060	--
JUN													
06...	--	--	--	--	<.04	1.1	--	5.16	22.8	5.21	.161	.049	--
11...	--	7.70	14.0	42.2	.05	2.5	.07	3.32	14.7	3.37	.138	.042	2.4
18...	--	--	--	--	E.03	1.5	--	5.43	24.0	5.49	.207	.063	--
25...	--	--	--	--	<.04	.77	--	3.80	16.8	3.84	.128	.039	--
JUL													
01...	--	--	--	--	<.04	1.0	--	2.20	9.75	2.23	.105	.032	--
09...	--	9.62	--	53.6	<.04	.71	--	1.93	8.54	1.97	.135	.041	--
17...	--	--	--	--	<.04	.86	--	1.82	8.03	1.86	.161	.049	--
23...	--	--	--	--	<.04	.81	--	.89	3.92	.91	.089	.027	--
30...	--	--	14.9	--	<.04	.91	--	.93	4.12	.96	.112	.034	--
AUG													
14...	--	10.9	--	50.3	<.04	1.4	--	.83	3.70	.86	.069	.021	--
27...	--	--	--	--	<.04	.99	--	2.23	9.87	2.27	.135	.041	--
SEP													
10...	--	10.4	--	51.2	<.04	.82	--	1.15	5.11	1.17	.059	.018	--
23...	--	--	--	--	<.04	.46	--	1.40	6.21	1.42	.066	.020	--

PLATTE RIVER BASIN

06800000 MAPLE CREEK NEAR NICKERSON, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITRO- GEN, PAR TICULATE WAT FLT SUSP (MG/L AS N) (49570)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04) (00660)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	2,4-D METHYL ESTER, WATER FLTRD REC (UG/L) (50470)	2,4-D, DIS- SOLVED REC (UG/L) (39732)	2,4-DB WATER, FLTRD, GF 0.7U REC (UG/L) (38746)
OCT													
12...	2.63	6.4	.852	.28	1.36	24.2	.1	11.7	24.1	--	E.531	.67	<.02
NOV													
14...	.35	4.9	.580	.19	.132	2.0	<.1	3.9	2.0	--	<.009	E.01	<.02
DEC													
11...	.18	6.9	.837	.27	.39	1.8	<.1	3.5	1.8	--	<.009	<.02	<.02
JAN													
08...	.08	7.4	.632	.21	.23	.8	<.1	2.8	.8	--	<.009	E.01	<.02
FEB													
13...	.07	6.3	.564	.18	.22	.9	<.1	3.2	.9	--	<.009	E.02	<.02
MAR													
12...	.19	6.7	.822	.27	.34	1.3	<.1	3.6	1.3	--	<.009	<.02	<.02
APR													
09...	.28	4.7	.518	.17	.27	2.0	<.1	3.5	2.0	--	<.009	E.01	<.02
23...	--	5.0	.843	.28	.48	--	--	--	--	--	<.009	.07	<.02
MAY													
08...	.49	5.9	.898	.29	.45	3.5	<.1	5.8	3.5	--	E.332	E1.60	<.02
14...	--	9.2	.993	.32	1.10	--	--	--	--	--	.060	.58	<.02
21...	--	6.7	1.04	.34	.55	--	--	--	--	--	<.009	.15	<.02
29...	--	7.8	.935	.30	1.17	--	--	--	--	--	.100	.87	<.02
JUN													
06...	--	6.3	.938	.31	.53	--	--	--	--	--	.214	.87	<.02
11...	1.87	5.9	.751	.24	1.09	17.8	1.5	3.8	16.4	<10	<.009	.11	<.02
18...	--	7.0	1.17	.38	.68	--	--	--	--	--	<.009	.19	<.02
25...	--	4.6	.576	.19	.17	--	--	--	--	--	.117	.30	<.02
JUL													
01...	--	3.2	.181	.06	.20	--	--	--	--	--	<.009	<.02	<.02
09...	.43	2.7	.242	.08	.189	2.5	<.1	4.0	2.5	--	<.009	.05	<.02
17...	--	2.7	.202	.07	.155	--	--	--	--	--	<.009	.03	<.02
23...	--	1.7	.156	.05	.149	--	--	--	--	--	<.009	.07	<.02
30...	--	1.9	.178	.06	.163	--	--	--	--	<10	<.009	.09	<.02
AUG													
14...	.90	2.3	.209	.07	.25	4.3	<.1	5.4	4.3	--	<.009	.05	<.02
27...	--	3.3	.877	.29	.34	--	--	--	--	--	<.009	.40	<.02
SEP													
10...	.34	2.0	.383	.12	.20	1.9	<.1	4.2	1.8	--	<.009	.03	<.02
23...	--	1.9	.294	.10	.137	--	--	--	--	--	<.009	.03	<.02

PLATTE RIVER BASIN

06800000 MAPLE CREEK NEAR NICKERSON, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	3HYDRXY CARBO-FURAN WAT,FLT GF 0.7U REC (UG/L) (49308)	3-KETO CARBO-FURAN WATER FLTRD 0.7 UM REC (UG/L) (50295)	ACETO-CHLOR ESA FLTRD 0.7 UM GF REC (UG/L) (61029)	ACETO-CHLOR OA FLTRD 0.7 UM GF REC (UG/L) (61030)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ACIFL-UORFEN WATER, FLTRD, GF 0.7U REC (UG/L) (49315)	ALA-CHLOR OA FLTRD 0.7 UM GF REC (UG/L) (61031)	ALA-CHLOR ESA WAT FLT GF 0.7U REC (UG/L) (50009)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALDI-CARB SULFONE WAT,FLT GF 0.7U REC (UG/L) (49313)	ALDICA-RB SULFOXIDE, WAT,FLT GF 0.7U REC (UG/L) (49314)	ALDI-CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (49312)
OCT													
12...	<.002	<.006	<2	--	--	.043	<.007	--	--	<.010	<.02	<.008	<.04
NOV													
14...	<.002	<.006	<2	<.05	<.05	<.004	<.007	<.05	.24	.007	<.02	<.008	<.04
DEC													
11...	<.002	<.006	<2	.12	.07	<.004	<.007	<.05	.16	<.002	<.02	<.008	<.04
JAN													
08...	<.002	<.006	<2	.05	<.05	.004	<.007	<.05	.15	<.002	<.02	<.008	<.04
FEB													
13...	<.006	<.006	<2	.05	.05	<.006	<.007	<.05	.17	<.004	<.02	<.008	<.04
MAR													
12...	<.006	<.006	<2	.06	<.05	<.006	<.007	<.05	.10	<.004	<.02	<.008	<.04
APR													
09...	<.006	<.006	<2	.06	<.05	E.005	<.007	<.05	.14	<.004	<.02	<.008	<.04
23...	<.006	<.006	<2	.09	.09	.116	<.007	<.05	.12	.009	<.02	<.008	<.04
MAY													
08...	<.006	<.006	<2	.78	1.41	14.4	<.007	<.05	.11	.024	<.02	<.008	<.04
14...	<.006	<.006	<2	--	--	3.61	<.007	--	--	.054	<.02	<.008	<.04
21...	<.006	<.006	<2	.26	.33	.275	<.007	<.05	.13	E.004	<.02	<.008	<.04
29...	<.006	<.006	<2	--	--	8.48	<.007	--	--	.638	<.02	<.008	<.04
JUN													
06...	<.006	<.006	<2	--	--	8.81	<.007	--	--	4.17	<.02	<.008	<.04
11...	<.006	<.006	<2	.19	.53	.438	<.007	<.05	.09	.050	<.02	<.008	<.04
18...	<.006	<.006	<2	--	--	1.31	<.007	--	--	.059	<.02	<.008	<.04
25...	<.006	<.006	<2	.38	.71	.212	<.007	<.05	.09	.009	<.02	<.008	<.04
JUL													
01...	<.006	<.006	<2	--	--	.111	<.007	--	--	.013	<.02	<.008	<.04
09...	<.006	<.006	<2	.39	.58	.131	<.007	<.05	.09	.014	<.02	<.008	<.04
17...	<.006	<.006	<2	--	--	.036	<.007	--	--	<.004	<.02	<.008	<.04
23...	<.006	<.006	<2	.32	.48	.046	<.007	<.05	.07	<.004	<.02	<.008	<.04
30...	<.006	<.006	<2	--	--	.034	<.007	--	--	<.004	<.02	<.008	<.04
AUG													
14...	<.006	<.006	<2	.16	.30	.016	<.007	<.05	.17	<.004	<.02	<.008	<.04
27...	<.006	<.006	<2	.38	.69	.062	<.007	<.05	.14	<.004	<.02	<.008	<.04
SEP													
10...	<.006	<.006	<2	.13	.25	.014	<.007	<.05	.15	<.004	<.02	<.008	<.04
23...	<.006	<.006	<2	.10	.15	.010	<.007	<.05	.15	<.004	<.02	<.008	<.04

PLATTE RIVER BASIN

06800000 MAPLE CREEK NEAR NICKERSON, NE--Continued
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WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BENDIO- CARB, WATER FLTRD (UG/L) (50299)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BENOMYL WATER FLTRD REC (UG/L) (50300)	BEN- SUL- FURON METHYL WAT FLT REC (UG/L) (61693)	BENTA- ZON, WATER, FLTRD, GF 0.7U REC (UG/L) (38711)	BRO- MACIL, WATER, DISS, REC (UG/L) (04029)	BRO- MOXYNIL WATER, FLTRD, GF 0.7U REC (UG/L) (49311)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAF- FEINE, WATER FLTRD REC (UG/L) (50305)	CAR- BARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49310)	CAR- BARYL WATER FLTRD GF, REC (UG/L) (82680)
OCT													
12...	<.005	E.085	<.03	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041
NOV													
14...	<.005	.014	<.03	<.010	<.004	<.02	M	<.03	<.02	<.002	<.010	<.03	<.041
DEC													
11...	<.005	.012	<.03	<.010	<.004	<.02	E.01	<.03	<.02	<.002	<.010	<.03	<.041
JAN													
08...	<.005	.020	<.03	<.010	<.004	<.02	M	<.03	<.02	<.002	<.010	<.03	<.041
FEB													
13...	<.005	.031	<.03	<.010	<.004	<.02	M	<.03	<.02	<.002	<.010	<.03	<.041
MAR													
12...	<.005	.020	<.03	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041
APR													
09...	<.005	.020	<.03	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041
23...	<.005	.160	<.03	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041
MAY													
08...	<.005	16.4	<.03	<.010	<.004	<.02	E.01	<.03	<.02	<.002	<.010	<.03	<.041
14...	<.005	5.48	<.03	<.010	<.004	<.02	<.01	E.01	<.02	<.002	<.010	E.01	<.041
21...	<.005	.874	<.03	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041
29...	<.005	8.63	<.03	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041
JUN													
06...	<.005	8.68	<.03	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041
11...	<.005	4.27	<.03	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041
18...	<.005	4.51	<.03	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041
25...	<.005	1.58	<.03	<.010	<.004	<.02	E.01	<.03	<.02	<.002	<.010	<.03	<.041
JUL													
01...	<.005	1.47	<.03	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041
09...	<.005	.788	<.03	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041
17...	<.005	.417	<.03	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041
23...	<.005	.449	<.03	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041
30...	<.005	.462	<.03	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041
AUG													
14...	<.005	.273	<.03	<.010	<.004	<.02	<.01	<.03	<.02	<.002	.048	<.03	<.041
27...	<.005	.285	<.03	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041
SEP													
10...	<.005	.218	<.03	<.010	<.004	<.02	M	<.03	<.02	<.002	<.010	<.03	<.041
23...	<.005	.141	<.03	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041

PLATTE RIVER BASIN

06800000 MAPLE CREEK NEAR NICKERSON, NE--Continued
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WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	CARBO- FURAN, WATER, FLTRD, GF 0.7U REC (UG/L) (49309)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- AMBEN, METHYL ESTER WATER FLTRD (UG/L) (61188)	CHLORI- MURON, WATER FLTRD REC (UG/L) (50306)	CHLORO- THALO- NIL, WAT, FLT GF 0.7U REC (UG/L) (49306)	CHLOR- PYRIFOS DIS- SOLVED REC (UG/L) (38933)	CLOPYR- ALID, WATER, FLTRD, GF 0.7U REC (UG/L) (49305)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	CY- CLOATE, WATER, DISS, REC (UG/L) (04031)	DACTHAL MONO- ACID, WAT, FLT GF 0.7U REC (UG/L) (49304)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DEETHYL DEISO- PROPYL ATRAZIN DISS, REC (UG/L) (04039)
OCT													
12...	<.006	<.400	<.02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.03	E.17
NOV													
14...	<.006	<.020	<.02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.01	E.15
DEC													
11...	<.006	<.020	<.02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.01	<.01
JAN													
08...	<.006	<.020	<.02	<.010	<.04	<.005	E.01	<.018	<.01	<.01	<.003	E.008	E.03
FEB													
13...	<.006	<.020	<.02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.019	E.02
MAR													
12...	<.006	<.020	<.02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.008	<.01
APR													
09...	<.006	<.020	<.02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.005	E.15
23...	<.006	<.020	<.02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.012	<.01
MAY													
08...	E.003	<.020	<.02	<.010	<.04	.006	<.01	.441	<.01	<.01	<.003	E.237	E.08
14...	<.006	<.020	<.02	<.010	<.04	.007	<.01	.021	<.01	<.01	<.003	E.108	<.01
21...	<.006	<.020	<.02	<.010	<.04	E.003	<.01	<.018	<.01	<.01	<.003	E.023	<.01
29...	<.006	<.020	<.02	<.010	<.04	.006	<.01	E.014	<.01	<.01	<.003	E.507	<.01
JUN													
06...	<.006	<.020	<.02	<.010	<.04	<.005	.06	<.018	<.01	<.01	<.003	E.447	<.01
11...	<.006	<.020	<.02	<.010	<.04	E.004	<.01	<.018	<.01	<.01	<.003	E.218	<.01
18...	<.006	<.020	<.02	<.010	<.04	.009	<.01	.075	<.01	<.01	<.003	E.282	E.01
25...	<.006	<.020	<.02	<.010	<.04	<.005	<.01	.021	<.01	<.01	<.003	E.153	E.15
JUL													
01...	<.006	<.020	<.02	<.010	<.04	<.005	<.01	E.016	<.01	<.01	<.003	E.094	E.10
09...	<.006	<.020	<.02	<.010	<.04	<.005	<.01	E.014	<.01	<.01	<.003	E.073	<.01
17...	<.006	<.020	<.02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.045	<.01
23...	<.006	<.020	<.02	<.010	<.04	<.005	<.01	E.007	<.01	<.01	<.003	E.044	E.03
30...	<.006	<.020	<.02	<.010	<.04	<.005	<.01	E.010	<.01	<.01	<.003	E.064	<.01
AUG													
14...	<.006	<.020	<.02	<.010	<.04	<.005	<.01	E.008	<.01	<.01	<.003	E.035	<.01
27...	<.006	<.020	<.02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.055	E.01
SEP													
10...	<.006	<.020	<.02	<.010	<.04	<.005	<.01	E.009	<.01	<.01	<.003	E.026	E.02
23...	<.006	<.020	<.02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.028	E.06

PLATTE RIVER BASIN

06800000 MAPLE CREEK NEAR NICKERSON, NE--Continued
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WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	DEISO- PROPYL ATRAZIN WATER, DISS, REC (UG/L) (04038)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DICAMBA WATER, FLTRD, GF 0.7U REC (UG/L) (38442)	DICHLOR PROP, WATER, FLTRD, GF 0.7U REC (UG/L) (49302)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DIMETH- ENAMID OA, WATER FLTRD, ESA, WAT FLT REC (UG/L) (62482)	DIMETH- ENAMID, ESA, WAT FLT REC (UG/L) (61951)	DINOSEB WATER, FLTRD, GF 0.7U REC (UG/L) (49301)	DIPHEN- AMID, WATER, DISS, REC (UG/L) (04033)	DISUL- FOTON WATER FLTRD, GF, REC (UG/L) (82677)	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49300)	EPTC WATER FLTRD, GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT GF, REC (UG/L) (82663)
OCT													
12...	<.04	<.005	<.01	<.01	<.005	--	--	<.01	<.03	<.02	<.01	<.002	<.009
NOV													
14...	<.04	E.004	<.01	<.01	<.005	<.05	<.05	<.01	<.03	<.02	<.01	<.002	<.009
DEC													
11...	E.01	<.005	<.01	<.01	<.005	<.05	<.05	<.01	<.03	<.02	<.01	<.002	<.009
JAN													
08...	E.01	<.005	<.01	<.01	<.005	<.05	<.05	<.01	<.03	<.02	<.01	<.002	<.009
FEB													
13...	<.04	<.005	<.01	<.01	<.005	<.05	<.05	<.01	<.03	<.02	<.01	<.002	<.009
MAR													
12...	<.04	<.005	<.01	<.01	<.005	<.05	<.05	<.01	<.03	<.02	E.01	<.002	<.009
APR													
09...	<.04	<.005	<.01	<.01	<.005	<.05	<.05	<.01	<.03	<.02	<.01	<.002	<.009
23...	E.02	<.005	<.01	<.01	<.005	<.05	<.05	<.01	<.03	<.02	E.01	.004	<.009
MAY													
08...	E.05	<.005	.28	<.01	<.005	<.05	<.05	<.01	<.03	<.02	.09	.007	<.009
14...	<.04	E.004	.05	<.01	<.005	--	--	<.01	<.03	<.02	.10	.002	<.009
21...	E.03	E.003	<.01	<.01	<.005	<.05	<.05	<.01	<.03	<.02	.02	<.002	<.009
29...	E.23	<.005	<.01	<.01	<.005	--	--	<.01	<.03	<.02	.03	<.002	<.009
JUN													
06...	E.24	<.005	.68	<.01	<.005	--	--	<.01	<.03	<.02	.02	<.002	<.009
11...	E.21	E.003	<.01	<.01	<.005	<.05	<.05	<.01	<.03	<.02	E.01	<.002	<.009
18...	E.20	<.005	<.01	<.01	<.005	--	--	<.01	<.03	<.02	<.01	<.002	<.009
25...	E.02	<.005	<.01	<.01	<.005	<.05	<.05	<.01	<.03	<.02	<.01	<.002	<.009
JUL													
01...	E.02	<.005	<.01	<.01	<.005	--	--	<.01	<.03	<.02	<.01	<.002	<.009
09...	E.04	<.005	<.01	<.01	<.005	<.05	<.05	<.01	<.03	<.02	<.01	<.002	<.009
17...	E.03	<.005	<.01	<.01	<.005	--	--	<.01	<.03	<.02	<.01	<.002	<.009
23...	E.03	<.005	<.01	<.01	<.005	<.05	<.05	<.01	<.03	<.02	<.01	<.002	<.009
30...	E.03	<.005	<.01	<.01	<.005	--	--	<.01	<.03	<.02	<.01	<.002	<.009
AUG													
14...	<.04	<.005	E.01	<.01	<.005	<.05	<.05	<.01	<.03	<.02	<.01	<.002	<.009
27...	E.04	<.005	<.01	<.01	<.005	<.05	<.05	<.01	<.03	<.02	<.01	<.002	<.009
SEP													
10...	E.03	<.005	<.01	<.01	<.005	<.05	<.05	<.01	<.03	<.02	<.01	<.002	<.009
23...	<.04	<.005	<.01	<.01	<.005	<.05	<.05	<.01	<.03	<.02	<.01	<.002	<.009

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Date	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FEN- URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49297)	FLUFEN- ACET, ESA, WAT FLT (UG/L) (61952)	FLUFE- NACET OA, WATER FLT, REC (UG/L) (62483)	FLUMET- SULAM WATER FLTRD REC (UG/L) (61694)	FLUO- METURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)	FONOFOS WATER DISS REC (UG/L) (04095)	HYDROXY ATRA- ZINE WATER FLTRD REC (UG/L) (50355)	IMAZ- AQUIN WATER FLTRD REC (UG/L) (50356)	IMAZE- THAPYR WATER FLTRD REC (UG/L) (50407)	IMID- ACLOP- RID WATER FLTRD REC (UG/L) (61695)	LINDANE DIS- SOLVED (UG/L) (39341)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L) (38478)
OCT													
12...	<.005	<.03	--	--	<.01	<.03	<.003	E1.18	<.02	<.02	<.007	<.004	<.01
NOV													
14...	<.005	<.03	<.05	<.05	<.01	<.03	<.003	E.129	<.02	<.02	<.007	<.004	<.01
DEC													
11...	<.005	<.03	<.05	<.05	<.01	<.03	<.003	E.130	<.02	E.01	<.007	<.004	<.01
JAN													
08...	<.005	<.03	<.05	<.05	<.01	<.03	<.003	E.065	E.02	M	<.007	<.004	<.01
FEB													
13...	<.005	<.03	<.05	<.05	<.01	<.03	<.003	E.059	E.03	E.01	<.007	<.004	<.01
MAR													
12...	<.005	<.03	<.05	<.05	<.01	<.03	.005	E.052	<.02	<.02	<.007	<.004	<.01
APR													
09...	<.005	<.03	<.05	<.05	<.01	<.03	<.003	E.546	<.02	<.02	<.007	<.004	<.01
23...	<.005	<.03	<.05	<.05	<.01	<.03	<.003	E.184	<.02	<.02	<.007	<.004	<.01
MAY													
08...	<.005	<.03	<.05	<.05	<.01	<.03	<.003	E3.67	<.02	<.02	<.007	<.004	<.01
14...	<.005	<.03	--	--	<.01	<.03	.004	<.008	<.02	<.02	<.007	<.004	<.01
21...	<.005	<.03	<.05	<.05	<.01	<.03	<.003	E.142	<.02	<.02	<.007	<.004	<.01
29...	<.005	<.03	--	--	<.01	<.03	<.003	E1.48	<.02	<.02	<.007	<.004	<.01
JUN													
06...	<.005	<.03	--	--	E.06	<.03	<.003	E1.05	<.02	<.02	<.007	<.004	<.01
11...	<.005	<.03	<.05	<.05	<.01	<.03	<.003	E.539	<.02	<.02	<.007	<.004	<.01
18...	<.005	<.03	--	--	<.01	<.03	<.003	E.885	<.02	<.02	<.007	<.004	<.01
25...	<.005	<.03	<.05	<.05	<.01	<.03	<.003	E1.16	<.02	<.02	<.007	<.004	<.01
JUL													
01...	<.005	<.03	--	--	<.01	<.03	<.003	E.684	<.02	<.02	<.007	<.004	<.01
09...	<.005	<.03	<.05	<.05	E.01	<.03	<.003	E.516	<.02	E.03	<.007	<.004	<.01
17...	<.005	<.03	--	--	<.01	<.03	<.003	E.376	<.02	E.01	<.007	<.004	<.01
23...	<.005	<.03	<.05	<.05	<.01	<.03	<.003	E.529	<.02	--	<.007	<.004	<.01
30...	<.005	<.03	--	--	<.01	<.03	<.003	E.339	<.02	<.02	<.007	<.004	<.01
AUG													
14...	<.005	<.03	<.05	<.05	<.01	<.03	<.003	E.712	<.02	<.02	<.007	<.004	<.01
27...	<.005	<.03	<.05	<.05	<.01	<.03	<.003	E.467	<.02	--	<.007	<.004	<.01
SEP													
10...	<.005	<.03	<.05	<.05	<.01	<.03	<.003	E.377	<.02	<.02	<.007	<.004	<.01
23...	<.005	<.03	<.05	<.05	<.01	<.03	<.003	E.210	<.02	<.02	<.007	<.004	<.01

PLATTE RIVER BASIN

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Date	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	MCPA, WATER, FLTRD, GF 0.7U REC (UG/L) (38482)	MCPB, WATER, FLTRD, GF 0.7U REC (UG/L) (38487)	METAL- AXYL WATER FLTRD REC (UG/L) (50359)	METHIO- CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (38501)	METH- OMYL OXIME WATER FLTRD REC (UG/L) (61696)	METH- OMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49296)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METOLA- CHLOR ESA FLTRD GF REC (UG/L) (61043)	METOLA- CHLOR OA FLTRD GF REC (UG/L) (61044)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)
OCT													
12...	<.035	<.027	<.02	<.01	<.02	<.008	<.01	<.004	<.050	<.006	--	--	.015
NOV													
14...	<.035	<.027	<.02	<.01	<.02	<.008	<.01	<.004	<.050	<.006	.16	.07	E.005
DEC													
11...	<.035	<.027	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	.14	.05	E.005
JAN													
08...	<.035	<.027	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	.14	<.05	E.004
FEB													
13...	<.035	<.027	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	.16	.05	E.006
MAR													
12...	<.035	<.027	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	.09	<.05	E.004
APR													
09...	<.035	<.027	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	.13	.05	E.007
23...	<.035	<.027	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	.13	.06	.041
MAY													
08...	<.035	<.027	<.02	<.01	E.02	<.008	--	<.004	<.050	<.006	.15	.11	.817
14...	<.035	<.027	<.02	E.01	<.02	<.008	--	<.004	<.050	<.006	--	--	.878
21...	<.035	<.027	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	.19	<.05	.084
29...	<.035	<.027	<.02	<.01	.02	<.008	--	<.004	<.050	<.006	--	--	.322
JUN													
06...	<.035	<.027	<.02	<.01	E.01	<.008	--	<.004	<.050	<.006	--	--	.196
11...	<.035	<.027	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	.18	.11	1.11
18...	<.035	<.027	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	--	--	.562
25...	<.035	<.027	<.02	<.01	E.01	<.008	--	<.004	<.050	<.006	.20	.08	.187
JUL													
01...	<.035	<.027	<.02	<.01	E.01	<.008	--	<.004	<.050	<.006	--	--	.131
09...	<.035	<.027	<.02	<.01	E.01	<.008	--	<.004	<.050	<.006	.20	.05	.065
17...	<.035	<.027	<.02	<.01	E.01	<.008	--	<.004	<.050	<.006	--	--	.082
23...	<.035	<.027	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	.18	.06	.051
30...	<.035	<.027	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	--	--	.062
AUG													
14...	<.035	<.027	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	.22	.09	.030
27...	<.035	<.027	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	.25	.18	.056
SEP													
10...	<.035	<.027	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	.19	.06	.022
23...	<.035	<.027	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	.17	.05	.017

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WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MET- SUL- FURON METHYL WAT FLT REC (UG/L) (61697)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	NEB- URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49294)	NICOSUL FURON WATER FLTRD REC (UG/L) (50364)	NORFLUR AZON, WATER, FLTRD, GF 0.7U REC (UG/L) (49293)	ORY- ZALIN, WATER, FLTRD, GF 0.7U REC (UG/L) (49292)	OXAMYL OXIME WATER FLTRD REC (UG/L) (50410)	OXAMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (38866)	P, P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)
OCT													
12...	<.006	<.03	<.002	<.007	<.01	E.03	<.02	<.02	<.01	<.01	<.003	<.007	<.002
NOV													
14...	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.01	<.003	<.007	<.002
DEC													
11...	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.007	<.002
JAN													
08...	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.007	<.002
FEB													
13...	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004
MAR													
12...	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004
APR													
09...	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004
23...	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004
MAY													
08...	.019	<.03	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004
14...	.085	<.03	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004
21...	.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004
29...	.025	<.03	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004
JUN													
06...	.172	<.03	<.002	<.007	<.01	E.06	<.02	<.02	--	<.01	<.003	<.010	<.004
11...	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004
18...	.039	<.03	<.002	<.007	<.01	E.10	<.02	<.02	--	<.01	<.003	<.010	<.004
25...	.009	<.03	<.002	<.007	<.01	E.02	<.02	<.02	--	<.01	<.003	<.010	<.004
JUL													
01...	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004
09...	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004
17...	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004
23...	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004
30...	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004
AUG													
14...	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004
27...	<.006	<.03	<.002	<.007	<.01	E.08	<.02	<.02	--	<.01	<.003	<.010	<.004
SEP													
10...	<.006	<.03	<.002	<.007	<.01	E.01	<.02	<.02	--	<.01	<.003	<.010	<.004
23...	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004

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Date	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PIC- LORAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49291)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR ESA, WAT FLT GF 0.7U REC (UG/L) (62766)	PROPA- CHLOR OA, WAT FLT GF 0.7U REC (UG/L) (62767)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	PRO- PHAM, WATER, GF 0.7U REC (UG/L) (49236)	PROP- ICONA- ZOLE, WATER FLTRD REC (UG/L) (50471)
OCT													
12...	<.010	<.006	<.011	<.02	<.01	<.004	--	--	<.010	<.011	<.02	<.010	<.02
NOV													
14...	<.010	<.006	<.011	<.02	M	<.004	--	--	<.010	<.011	<.02	<.010	<.02
DEC													
11...	<.010	<.006	<.011	<.02	<.01	<.004	<.05	<.05	<.010	<.011	<.02	<.010	<.02
JAN													
08...	<.010	<.006	<.011	.03	<.01	<.004	<.05	<.05	<.010	<.011	<.02	<.010	<.02
FEB													
13...	<.022	<.006	<.011	<.02	<.01	<.004	<.05	<.05	<.010	<.011	<.02	<.010	<.02
MAR													
12...	<.022	<.006	<.011	<.02	<.01	<.004	<.05	<.05	<.010	<.011	<.02	<.010	<.02
APR													
09...	<.022	<.006	<.011	<.02	M	<.004	<.05	<.05	<.010	<.011	<.02	<.010	<.02
23...	E.014	<.006	<.011	<.02	E.01	<.004	<.05	<.05	<.010	<.011	<.02	<.010	<.02
MAY													
08...	<.022	<.006	<.011	<.02	.02	<.004	<.05	<.05	<.010	<.011	<.02	<.010	<.02
14...	E.009	<.006	<.011	<.02	.05	<.004	--	--	<.010	<.011	<.02	<.010	<.02
21...	.022	<.006	<.011	<.02	E.01	<.004	<.05	<.05	<.010	<.011	<.02	<.010	<.02
29...	E.009	<.006	<.011	<.02	.02	<.004	--	--	<.010	<.011	<.02	<.010	<.02
JUN													
06...	<.022	<.006	<.011	<.02	.02	<.004	--	--	<.010	<.011	<.02	<.010	<.02
11...	.023	<.006	<.011	<.02	M	<.004	--	--	<.010	<.011	<.02	<.010	<.02
18...	E.013	<.006	<.011	<.02	E.01	<.004	--	--	<.010	<.011	<.02	<.010	<.02
25...	E.007	<.006	<.011	<.02	M	<.004	--	--	<.010	<.011	<.02	<.010	<.02
JUL													
01...	<.022	<.006	<.011	<.02	E.01	<.004	--	--	<.010	<.011	<.02	<.010	<.02
09...	<.022	<.006	<.011	<.02	E.01	<.004	--	--	<.010	<.011	<.02	<.010	<.02
17...	<.022	<.006	<.011	<.02	<.01	<.004	--	--	<.010	<.011	<.02	<.010	<.02
23...	<.022	<.006	<.011	<.02	M	<.004	--	--	<.010	<.011	<.02	<.010	<.02
30...	<.022	<.006	<.011	<.02	.02	<.004	--	--	<.010	<.011	<.02	<.010	<.02
AUG													
14...	<.022	<.006	<.011	<.02	E.01	<.004	--	--	<.010	<.011	<.02	<.010	<.02
27...	<.022	<.006	<.011	.13	.02	<.004	--	--	<.010	<.011	<.02	<.010	<.02
SEP													
10...	<.022	<.006	<.011	<.02	.02	<.004	--	--	<.010	<.011	<.02	<.010	<.02
23...	<.022	<.006	<.011	<.02	E.01	<.004	--	--	<.010	<.011	<.02	<.010	<.02

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(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PRO- POXUR, WATER, FLTRD, GF 0.7U REC (UG/L) (38538)	SIDURON WATER FLTRD REC (UG/L) (38548)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	SULFO- MET- RURON METHYL WTR FLT REC (UG/L) (50337)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL, WATER, DISS, REC (UG/L) (04032)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TER- BUTHYL- AZINE, WATER, DISS, REC (UG/L) (04022)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- BENURON METHYL WATER FLTRD (UG/L) (61159)	TRI- CLOPYR, WATER, FLTRD, GF 0.7U REC (UG/L) (49235)
OCT													
12...	<.008	<.02	<.011	<.009	<.006	<.010	<.034	<.02	U	<.005	<.002	<.009	<.02
NOV													
14...	<.008	<.02	<.011	<.009	<.006	<.010	<.034	<.02	U	<.005	<.002	<.009	<.02
DEC													
11...	<.008	<.02	<.011	<.009	<.006	<.010	<.034	<.02	U	<.005	<.002	<.009	<.02
JAN													
08...	<.008	<.02	<.011	<.009	<.02	<.010	<.034	<.02	U	<.005	<.002	--	<.02
FEB													
13...	<.008	<.02	<.005	<.009	<.02	<.010	<.034	<.02	U	<.005	<.002	--	<.02
MAR													
12...	<.008	<.02	<.005	<.009	<.02	<.010	<.034	<.02	U	<.005	<.002	--	<.02
APR													
09...	<.008	<.02	<.005	<.009	<.02	<.010	<.034	<.02	--	<.005	<.002	--	<.02
23...	<.008	<.02	<.005	<.009	<.02	<.010	<.034	<.02	--	<.005	<.002	--	<.02
MAY													
08...	<.008	<.02	.057	<.009	E.01	<.010	<.034	<.02	--	<.005	<.002	--	<.02
14...	<.008	<.02	.021	<.009	<.02	E.019	<.034	<.02	--	<.005	<.002	--	<.02
21...	<.008	<.02	E.004	<.009	<.02	<.010	<.034	<.02	--	<.005	<.002	--	<.02
29...	<.008	<.02	.039	<.009	<.02	<.010	<.034	<.02	--	<.005	<.002	--	<.02
JUN													
06...	<.008	<.02	.043	<.009	<.02	<.010	<.034	<.02	--	<.005	<.002	--	<.02
11...	<.008	<.02	.024	<.009	<.02	<.010	<.034	<.02	--	<.005	<.002	--	<.02
18...	<.008	<.02	.024	<.009	<.02	<.010	<.034	<.02	--	<.005	<.002	--	<.02
25...	<.008	<.02	<.005	<.009	<.02	<.010	<.034	<.02	--	<.005	<.002	--	<.02
JUL													
01...	<.008	<.02	.008	<.009	<.02	<.010	<.034	<.02	--	<.005	<.002	--	<.02
09...	<.008	<.02	.006	<.009	<.02	<.010	<.034	<.02	--	<.005	<.002	--	<.02
17...	<.008	<.02	<.005	<.009	<.02	<.010	<.034	<.02	--	<.005	<.002	--	<.02
23...	<.008	<.02	E.004	<.009	<.02	E.061	<.034	<.02	--	<.005	<.002	--	<.02
30...	<.008	<.02	<.005	<.009	<.02	<.010	<.034	<.02	--	<.005	<.002	--	<.02
AUG													
14...	<.008	<.02	<.005	<.009	<.02	<.010	<.034	<.02	--	<.005	<.002	--	<.02
27...	<.008	<.02	<.005	<.009	<.02	<.010	<.034	<.02	--	<.005	<.002	--	<.02
SEP													
10...	<.008	<.02	<.005	<.009	<.02	<.010	<.034	<.02	--	<.005	<.002	--	<.02
23...	<.008	<.02	<.005	<.009	<.02	<.010	<.034	<.02	--	<.005	<.002	--	<.02

PLATTE RIVER BASIN

06800000 MAPLE CREEK NEAR NICKERSON, NE--Continued
 (National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	UREA 3(4-CHLOR OPHENYL METHYL WAT FLT REC (UG/L) (61692)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
OCT					
12...	<.009	<.02	92	767	151
NOV					
14...	E.005	<.02	44	150	19.8
DEC					
11...	<.009	<.02	53	208	34.3
JAN					
08...	<.009	<.02	70	30	3.6
FEB					
13...	<.009	<.02	90	31	2.8
MAR					
12...	<.009	<.02	91	67	10.3
APR					
09...	<.009	<.02	85	97	14.9
23...	E.007	<.02	92	94	16.0
MAY					
08...	E.001	<.02	90	109	17.1
14...	E.004	<.02	93	628	171
21...	<.009	<.02	27	504	98.0
29...	<.010	<.02	93	812	226
JUN					
06...	<.009	<.02	95	144	28.8
11...	E.001	<.02	98	778	246
18...	E.002	<.02	85	288	73.1
25...	<.009	<.02	93	50	8.1
JUL					
01...	<.009	<.02	96	28	3.6
09...	<.009	<.02	97	24	2.1
17...	<.009	<.02	97	18	1.2
23...	<.009	<.02	97	14	.79
30...	<.009	<.02	90	13	.60
AUG					
14...	<.009	<.02	98	13	.46
27...	<.009	<.02	98	18	.78
SEP					
10...	<.009	<.02	97	10	.21
23...	<.009	<.02	100	4.0	.08

Remark codes used in this report:
 < -- Less than
 E -- Estimated value
 M -- Presence verified, not quantified
 U -- Analyzed for, not detected

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PLATTE RIVER BASIN

06800500 ELKHORN RIVER AT WATERLOO, NE

LOCATION.--Lat 41°17'37", long 096°17'00", in SW $\frac{1}{4}$ sec.3, T.15 N., R.10 E., Douglas County, Hydrologic Unit 10220003, on right bank at Nebraska Highway 64 bridge at north edge of Waterloo, 3.5 mi downstream from Rawhide Creek, and at mile 13.8.

DRAINAGE AREA.--6,900 mi², approximately, of which about 5,870 mi² contributes directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1899 to November 1903, May 1911 to September 1915, August 1928 to current year. Published as "at Arlington" 1899-1903, July 1913 to September 1915. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1390: 1914 (M), 1915, 1936, 1943(M). WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,104.73 ft above sea level. Oct. 1, 1960, to July 27, 1978, at datum 2.00 ft higher. See WSP 1918 for history of changes prior to Oct. 1, 1960. July 28, 1978 to Nov. 17, 1993, at site 800 ft downstream at present datum. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor. Some small diversions above station for irrigation.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	896	979	1490	e1000	e900	e800	1440	1920	1330	911	273	801
2	893	990	1540	e1100	e920	e700	1430	2100	1290	879	263	722
3	878	981	1530	e1200	e940	e660	1420	2100	1250	850	251	602
4	870	964	1540	e1300	e960	e760	1380	2040	1240	834	402	544
5	867	961	1590	e1500	e1040	1060	1350	1910	1270	824	460	539
6	870	970	1640	e1550	e1200	1310	1330	1810	1310	816	422	516
7	867	977	1650	e1300	e1350	1460	1310	1810	1250	785	523	502
8	862	989	1710	e1300	e1300	1540	1330	1740	1190	778	839	449
9	878	989	1790	e1300	e1300	1170	1330	1660	1160	758	716	423
10	963	983	1810	e1350	e1250	1170	1310	1630	1160	737	579	399
11	2010	979	1780	e1350	e1100	1280	1310	2200	5390	726	490	420
12	3820	976	1700	e1400	e1020	1490	1350	4130	9870	710	511	447
13	2030	995	1660	e1450	e1000	1970	1360	4040	6050	700	522	513
14	1300	1020	1640	e1300	e1100	2580	1350	2920	3490	697	510	513
15	1140	1030	1610	e1060	e1300	2890	1370	2450	2550	678	471	488
16	1050	1030	1560	e960	1940	2410	1390	2140	2030	641	437	490
17	1020	1030	1520	e980	2290	2370	1380	1880	1750	608	498	513
18	1000	1020	1490	e1000	2720	2080	1460	1740	1570	597	473	517
19	990	1010	1470	e1080	2680	1840	1460	1630	1450	583	458	536
20	976	999	1430	e1250	2220	1980	1330	1550	1370	564	502	536
21	967	997	1410	e1450	2000	1830	1290	1500	1310	543	506	499
22	983	1010	1420	e1450	1880	1640	1310	1440	1340	648	521	500
23	982	1040	1330	e1300	1760	1590	1350	1430	1300	516	758	473
24	971	1210	1160	e1100	1720	1540	1360	1520	1230	440	556	475
25	958	3340	e860	e1200	e1300	1490	1330	1450	1190	523	502	473
26	945	4720	e900	e1400	e900	1470	1280	1430	1140	520	497	478
27	936	3350	e980	e1400	e760	1440	1310	1380	1080	499	496	488
28	931	2880	e1020	e1150	e760	1490	1540	1380	1030	425	488	504
29	938	2140	e1020	e1060	---	1510	1830	1380	989	363	473	518
30	955	1630	e1000	e920	---	1460	1920	1410	945	333	470	519
31	965	---	e1000	e920	---	1440	---	1350	---	308	629	---
TOTAL	34711	42189	44250	38080	39610	48420	41910	59070	59524	19794	15496	15397
MEAN	1120	1406	1427	1228	1415	1562	1397	1905	1984	638.5	499.9	513.2
MAX	3820	4720	1810	1550	2720	2890	1920	4130	9870	911	839	801
MIN	862	961	860	920	760	660	1280	1350	945	308	251	399
AC-FT	68850	83680	87770	75530	78570	96040	83130	117200	118100	39260	30740	30540

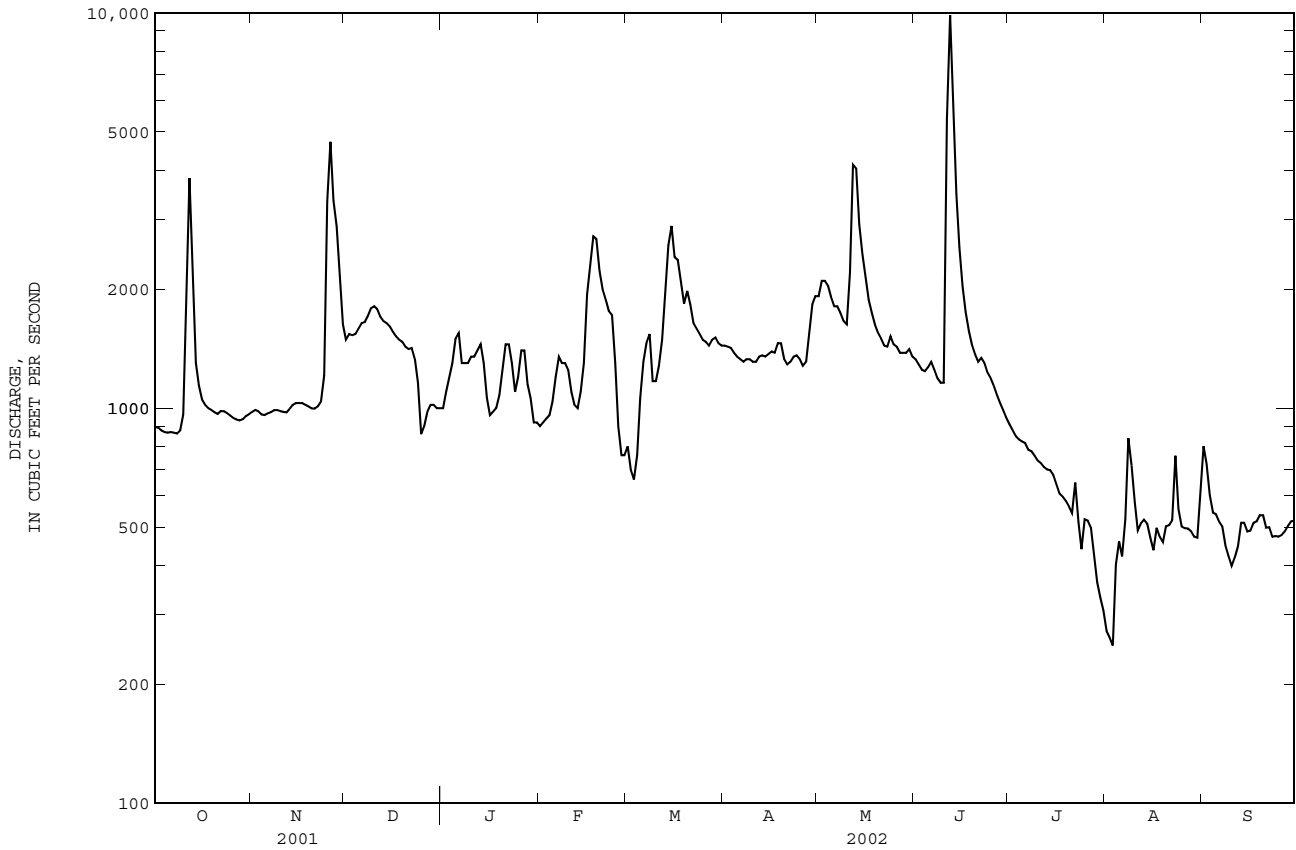
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2002, BY WATER YEAR (WY)

	MEAN	731.4	763.4	665.6	626.7	1199	2273	2075	2068	2831	1447	957.3	734.4
MAX	2780	2792	1803	1650	6439	8082	10450	7565	11950	11470	4755	2705	
(WY)	1987	1999	1994	1973	1971	1993	1984	1995	1984	1993	1951	1951	
MIN	150	240	150	180	256	489	512	327	405	173	117	87.8	
(WY)	1940	1940	1930	1977	1940	1981	1981	1934	1933	1936	1976	1939	

06800500 ELKHORN RIVER AT WATERLOO, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1929 - 2002	
ANNUAL TOTAL	779384		458451		1363	
ANNUAL MEAN	2135		1256		3870	
HIGHEST ANNUAL MEAN					417	
LOWEST ANNUAL MEAN					1939	
HIGHEST DAILY MEAN	12000	May 6	9870	Jun 12	93800	Jun 12 1944
LOWEST DAILY MEAN	540	Jan 4	251	Aug 3	64	Sep 16 1939
ANNUAL SEVEN-DAY MINIMUM	600	Jan 1	313	Jul 29	66	Sep 15 1939
MAXIMUM PEAK FLOW			*14000	Jun 12	100000	Jun 12 1944
MAXIMUM PEAK STAGE			**11.71	Feb 2	***16.60	Jun 12 1944
ANNUAL RUNOFF (AC-FT)	1546000		909300		987400	
10 PERCENT EXCEEDS	4670		1930		2730	
50 PERCENT EXCEEDS	1300		1150		740	
90 PERCENT EXCEEDS	740		500		303	

e Estimated.
 * Stage 9.75 ft.
 ** Backwater from ice.
 *** From floodmark, site and datum then in use.



PLATTE RIVER BASIN

06800500 ELKHORN RIVER AT WATERLOO, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1948-49, 1960, 1967-95, current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY FIELD WATER UNFLTRD (61028)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	
OCT														
11...	1015	1040	50	731	9.9	100	8.5	610	14.0	14.0	241	284	4	
NOV														
13...	1030	993	--	731	10.1	98	8.4	648	15.5	12.0	247	302	--	
DEC														
13...	1000	1650	86	729	12.3	93	8.3	652	-6.0	2.0	259	312	2	
JAN														
09...	1000	2090	32	724	11.2	81	8.0	668	3.5	.0	261	316	1	
FEB														
14...	1000	1340	55	725	13.2	96	--	593	5.0	.3	212	256	1	
MAR														
13...	1030	1920	85	726	10.4	80	8.3	612	6.0	2.5	239	288	2	
APR														
10...	1000	1310	55	732	8.0	76	8.7	611	14.0	11.5	223	264	4	
24...	1030	1360	69	730	8.8	89	8.8	609	11.5	14.0	253	294	7	
MAY														
09...	1100	1660	120	736	9.7	99	8.6	628	12.5	14.5	251	294	6	
22...	1040	1450	130	729	9.8	104	8.5	659	17.0	16.0	250	292	6	
JUN														
12...	1000	10200	5300	727	1.5	18	7.3	286	23.0	23.0	92	111	0	
26...	1100	1140	110	729	6.1	81	8.4	598	32.0	27.5	210	240	8	
JUL														
10...	1100	738	46	732	6.4	85	8.7	443	24.0	28.0	131	135	12	
24...	1100	458	44	734	14.3	189	9.0	396	25.0	27.5	140	149	10	
AUG														
15...	1100	493	37	724	12.6	157	9.1	484	27.5	23.6	151	166	9	
28...	1100	489	45	739	8.8	109	8.0	484	25.0	24.5	149	171	5	
SEP														
11...	1100	431	39	740	12.5	146	8.8	544	24.0	21.5	165	195	3	
24...	1130	481	20	741	13.8	140	8.7	540	12.5	14.5	185	216	5	
Date		HY-DROXIDE WATER DIS IT FIELD MG/L AS OH (71834)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, PAR-TICULATE SUSP (MG/L AS N) (49570)
OCT														
11...	0	16.8	63.8	<.04	.95	--	3.38	14.9	3.39	.043	.013	--	--	.58
NOV														
13...	--	14.8	63.5	<.04	.76	--	3.45	15.3	3.46	.046	.014	--	--	.19
DEC														
13...	0	13.1	74.0	.48	1.8	.62	4.28	18.9	4.30	.079	.024	1.4	--	.61
JAN														
09...	0	13.9	69.0	.24	.96	.31	4.79	21.2	4.82	.095	.029	.72	--	.31
FEB														
14...	0	11.8	55.1	.18	1.2	.23	3.45	15.3	3.48	.072	.022	1.0	--	.43
MAR														
13...	--	11.5	56.2	.30	2.0	.38	4.10	18.2	4.14	.112	.034	1.7	--	1.06
APR														
10...	--	10.5	62.5	<.04	.93	--	3.33	14.7	3.34	.043	.013	--	--	.52
24...	--	--	--	<.04	2.4	--	2.05	9.06	2.07	.072	.022	--	--	--
MAY														
09...	--	12.1	69.4	<.04	1.7	--	3.17	14.0	3.19	.085	.026	--	--	1.17
22...	--	--	--	<.04	2.2	--	3.64	16.1	3.66	.069	.021	--	--	--
JUN														
12...	--	6.38	19.8	1.17	18	1.51	3.05	13.5	3.28	.759	.231	17	--	12.2
26...	--	--	--	E.04	2.1	--	2.62	11.6	2.67	.151	.046	--	--	--
JUL														
10...	--	17.4	72.5	<.04	3.4	--	.21	.934	.25	.125	.038	--	--	2.19
24...	--	--	--	<.04	2.6	--	--	--	<.05	--	<.008	--	--	--
AUG														
15...	M	18.9	68.1	<.04	2.4	--	--	--	<.05	--	<.008	--	--	1.96
28...	--	--	--	<.04	2.0	--	--	--	<.05	--	<.008	--	--	--
SEP														
11...	--	22.7	73.5	<.04	2.3	--	--	--	<.05	--	<.006	--	--	1.43
24...	--	--	--	<.04	2.2	--	.48	2.13	.50	.069	.021	--	--	--

PLATTE RIVER BASIN

06800500 ELKHORN RIVER AT WATERLOO, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC TOTAL (MG/L AS C) (00694)	CARBON, INOR- GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	2,4-D METHYL ESTER, WATER FLTRD (UG/L) (50470)	2,4-D, DIS- SOLVED (UG/L) (39732)	2,4-DB WATER, FLTRD, GF 0.7U REC (UG/L) (38746)	2,6-DI- ETHYL ANILINE WAT FLT GF, REC (UG/L) (82660)	3HYDRXY CARBO- FURAN WAT, FLT GF 0.7U REC (UG/L) (49308)
OCT													
11...	4.3	1.12	.36	.53	4.7	<.1	3.2	4.7	<.009	.04	<.02	<.002	<.006
NOV													
13...	4.2	.935	.30	.43	1.3	<.1	3.2	1.3	<.009	.05	<.02	<.002	<.006
DEC													
13...	6.2	1.00	.33	.62	5.5	<.1	4.4	5.4	<.009	.06	<.02	<.002	<.006
JAN													
09...	5.8	.932	.30	.41	2.6	<.1	2.9	2.6	<.009	E.01	<.02	<.006	<.006
FEB													
14...	4.7	.862	.28	.49	3.8	<.1	4.1	3.7	<.009	.03	<.02	<.006	<.006
MAR													
13...	6.1	.960	.31	.69	9.1	.2	5.0	8.9	<.009	<.02	<.02	<.006	<.006
APR													
10...	4.3	.874	.28	.51	4.4	<.1	3.5	4.3	<.009	E.01	<.02	<.006	<.006
24...	4.5	.632	.21	.59	--	--	--	--	<.009	.07	<.02	<.006	<.006
MAY													
09...	4.9	.954	.31	.70	8.8	.1	5.7	8.7	<.009	.28	<.02	<.006	<.006
22...	5.9	.610	.20	.66	--	--	--	--	.015	.11	<.02	<.006	<.006
JUN													
12...	21	1.02	.33	7.61	105	1.9	12.6	103	.174	.98	<.02	<.006	<.006
26...	4.7	.843	.28	.63	--	--	--	--	.010	.18	<.02	<.006	<.006
JUL													
10...	3.6	.126	.04	.51	10.8	<.1	4.9	10.8	<.009	.08	<.02	<.006	<.006
24...	--	.337	.11	.52	--	--	--	--	<.009	.04	<.02	<.006	<.006
AUG													
15...	--	.512	.17	.62	11.6	<.1	5.0	11.6	<.009	.16	<.02	<.006	<.006
28...	--	.515	.17	.63	--	--	--	--	<.009	.10	<.02	<.006	<.006
SEP													
11...	--	.693	.23	.59	7.8	<.1	4.3	7.7	<.009	.03	<.02	<.002	<.006
24...	2.7	.454	.15	.47	--	--	--	--	<.009	<.02	<.02	<.006	<.006

Date	3-KETO CARBO- FURAN WATER FLTRD REC (UG/L) (50295)	ACETO- CHLOR ESA FLTRD GF REC (UG/L) (61029)	ACETO- CHLOR OA FLTRD GF REC (UG/L) (61030)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ACIFL- UORFEN WATER, FLTRD, GF 0.7U REC (UG/L) (49315)	ALA- CHLOR OA FLTRD GF REC (UG/L) (61031)	ALA- CHLOR ESA WAT FLT GF 0.7U REC (UG/L) (50009)	ALA- CHLOR, WATER, WAT, FLT DISS, REC, (UG/L) (46342)	ALDI- CARB SULFONE WAT, FLT GF 0.7U REC (UG/L) (49313)	ALDICA- RB SUL- FOXIDE, WAT, FLT GF 0.7U REC (UG/L) (49314)	ALDI- CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (49312)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)
OCT													
11...	<2	--	--	<.004	<.007	--	--	<.002	<.02	<.008	<.04	<.005	.028
NOV													
13...	<2	<.05	<.05	<.004	<.007	<.05	.21	<.002	<.02	<.008	<.04	<.005	.014
DEC													
13...	<2	.06	<.05	<.004	<.007	<.05	.13	<.002	<.02	<.008	<.04	<.005	.026
JAN													
09...	<2	.07	<.05	<.006	<.007	<.05	.15	<.004	<.02	<.008	<.04	<.005	.029
FEB													
14...	<2	.07	<.05	<.006	<.007	.06	.16	<.004	<.02	<.008	<.04	<.005	.029
MAR													
13...	<2	--	--	<.006	<.007	--	--	<.004	<.02	<.008	<.04	<.005	.027
APR													
10...	<2	.05	<.05	.006	<.007	<.05	.14	<.004	<.02	<.008	<.04	<.005	.033
24...	<2	.05	.05	.091	<.007	.06	.16	<.004	<.02	<.008	<.04	<.005	.202
MAY													
09...	<2	.17	.19	1.17	<.007	.05	.09	.043	<.02	<.008	<.04	<.005	1.98
22...	<2	.07	.19	.159	<.007	.07	.27	.007	<.02	<.008	<.04	<.005	.672
JUN													
12...	<2	1.53	3.50	13.6	<.007	.06	.08	.312	<.02	<.008	<.04	<.005	19.9
26...	<2	.13	.23	.074	<.007	<.05	.14	.007	<.02	<.008	<.04	<.005	1.33
JUL													
10...	<2	<.05	.17	.014	<.007	.05	.29	<.004	<.02	<.008	<.04	<.005	.408
24...	<2	.15	.12	<.013	<.007	.06	.19	<.004	<.02	<.008	<.04	<.005	.318
AUG													
15...	<2	.08	.14	.008	<.007	.06	.19	<.004	<.02	<.008	<.04	<.005	.144
28...	<2	.21	.34	.026	<.007	.05	.19	<.004	<.02	<.008	<.04	<.005	.132
SEP													
11...	<2	.05	.07	<.004	<.007	.07	.18	<.002	<.02	<.008	<.04	<.005	.088
24...	<2	<.05	.05	<.006	<.007	.06	.16	<.004	<.02	<.008	<.04	<.005	.069

PLATTE RIVER BASIN

06800500 ELKHORN RIVER AT WATERLOO, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BENDIO-CARB, WATER FLTRD REC (UG/L) (50299)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BENOMYL WATER FLTRD REC (UG/L) (50300)	BEN-SUL-FURON METHYL WAT FLT REC (UG/L) (61693)	BENTA-ZON, WATER, FLTRD, GF 0.7U REC (UG/L) (38711)	BRO-MACIL, WATER, DISS, REC (UG/L) (04029)	BRO-MOXYNIL, WATER, FLTRD, GF 0.7U REC (UG/L) (49311)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAF-FEINE, WATER FLTRD REC (UG/L) (50305)	CAR-BARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49310)	CAR-BARYL, WATER, FLTRD, GF, REC (UG/L) (82680)	CARBO-FURAN, WATER, FLTRD, GF 0.7U REC (UG/L) (49309)	CARBO-FURAN, WATER, FLTRD, GF, REC (UG/L) (82674)
OCT													
11...	<.03	<.010	<.004	<.02	E.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020
NOV													
13...	<.03	<.010	<.004	<.02	E.01	<.03	<.02	<.002	.024	<.03	<.041	<.006	<.020
DEC													
13...	<.03	<.010	<.004	<.02	E.01	<.03	<.02	<.002	.017	<.03	<.041	<.006	<.020
JAN													
09...	<.03	<.010	<.004	<.02	E.01	<.03	<.02	<.002	E.009	<.03	<.041	<.006	<.020
FEB													
14...	<.03	<.010	<.004	<.02	E.01	<.03	<.02	<.002	.031	<.03	<.041	<.006	<.020
MAR													
13...	<.03	<.010	<.004	<.02	E.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020
APR													
10...	<.03	<.010	<.004	<.02	E.01	<.03	<.02	<.002	.032	<.03	<.041	<.006	<.020
24...	<.03	<.010	<.004	<.02	E.02	<.03	<.02	<.002	.032	<.03	<.041	<.006	<.020
MAY													
09...	<.03	<.010	<.004	<.02	E.01	<.03	<.02	<.002	.010	<.03	<.041	<.006	<.020
22...	<.03	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020
JUN													
12...	<.03	<.010	<.004	<.02	<.01	<.03	E.04	<.002	<.010	<.03	<.041	.307	E.337
26...	<.03	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020
JUL													
10...	<.03	<.010	<.004	<.02	E.02	<.03	<.02	<.002	.093	<.03	<.041	<.006	<.020
24...	<.03	<.010	<.004	<.02	E.02	<.03	<.02	<.002	.046	<.03	<.041	<.006	<.020
AUG													
15...	<.03	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020
28...	<.03	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	E.007	<.006	<.020
SEP													
11...	<.03	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020
24...	<.03	<.010	<.004	<.02	<.01	<.03	<.02	<.002	E.024	<.03	<.041	<.006	<.020

Date	CHLOR-AM BEN, METHYL ESTER WATER FLTRD REC (UG/L) (61188)	CHLORIMURON, WATER FLTRD REC (UG/L) (50306)	CHLOROTHALONIL, WAT, FLT GF 0.7U REC (UG/L) (49306)	CHLOROPYRIFOS, DIS-SOLVED REC (UG/L) (38933)	CLOPYRALID, WATER, FLTRD, GF 0.7U REC (UG/L) (49305)	CYANAZINE, WATER, DISS, REC (UG/L) (04041)	CYCLOATE, WATER, DISS, REC (UG/L) (04031)	DACTHAL MONO-ACID, WAT, FLT GF 0.7U REC (UG/L) (49304)	DCPA WATER FLTRD GF, REC (UG/L) (82682)	DEETHYL ATRAZINE, WATER, DISS, REC (UG/L) (04040)	DEETHYL DEISO-PROPYL ATRAZIN, WATER, DISS, REC (UG/L) (04039)	DEISO-PROPYL ATRAZIN, WATER, DISS, REC (UG/L) (04038)	DI-AZINON, DIS-SOLVED (UG/L) (39572)
OCT													
11...	<.02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.01	E.04	<.04	<.005
NOV													
13...	<.02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.01	E.03	<.04	<.005
DEC													
13...	<.02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.011	E.03	<.04	<.005
JAN													
09...	<.02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.012	E.02	<.04	<.005
FEB													
14...	<.02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.014	E.01	<.04	<.005
MAR													
13...	<.02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.008	E.01	<.04	<.005
APR													
10...	<.02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.007	E.02	<.04	E.002
24...	<.02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.013	<.01	E.01	<.005
MAY													
09...	<.02	<.010	<.04	<.005	<.01	.051	<.01	<.01	<.003	E.029	E.01	E.01	<.005
22...	<.02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.023	<.01	E.02	<.005
JUN													
12...	<.02	<.010	<.04	.012	<.01	.116	<.01	<.01	<.003	E1.04	<.01	E.47	<.005
26...	<.02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.099	<.01	E.06	<.005
JUL													
10...	<.02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.038	<.01	<.04	<.005
24...	<.02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.029	<.01	<.04	<.005
AUG													
15...	<.02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.026	<.01	E.02	.009
28...	<.02	<.010	<.04	<.005	<.01	.026	<.01	<.01	<.003	E.030	<.01	E.02	<.005
SEP													
11...	<.02	<.010	<.04	<.005	<.01	E.015	<.01	<.01	<.003	E.018	<.01	<.04	<.005
24...	<.02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.022	E.03	<.04	<.005

PLATTE RIVER BASIN

06800500 ELKHORN RIVER AT WATERLOO, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	DICAMBA WATER, FLTRD, GF 0.7U REC (UG/L) (38442)	DICHLOR PROP, WATER, FLTRD, GF 0.7U REC (UG/L) (49302)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DIMETH- ENAMID WATER FLT, REC (UG/L) (62482)	DIMETH- ENAMID, ESA, WAT FLT (UG/L) (61951)	DINOSEB WATER, FLTRD, GF 0.7U REC (UG/L) (49301)	DIPHEN- AMID, WATER, DISS, REC (UG/L) (04033)	DISUL- FOTON WATER FLTRD GF, REC (UG/L) (82677)	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49300)	EPTC WATER FLTRD GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD GF, REC (UG/L) (82672)	FEN- URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49297)
OCT													
11...	<.01	<.01	<.005	--	--	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03
NOV													
13...	<.01	<.01	<.005	<.05	<.05	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03
DEC													
13...	.02	<.01	<.005	<.05	<.05	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03
JAN													
09...	<.01	<.01	<.005	<.05	<.05	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03
FEB													
14...	.02	<.01	<.005	<.05	<.05	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03
MAR													
13...	<.01	<.01	<.005	--	--	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03
APR													
10...	<.01	<.01	<.005	<.05	<.05	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03
24...	<.01	<.01	<.005	<.05	<.05	<.01	<.03	<.02	E.01	<.002	<.009	<.005	<.03
MAY													
09...	.04	<.01	<.005	<.05	<.05	<.01	<.03	<.02	E.01	.002	<.009	<.005	<.03
22...	<.01	<.01	<.005	<.05	<.05	<.01	<.03	<.02	E.01	<.002	<.009	<.005	<.03
JUN													
12...	E1.22	<.01	<.005	.13	.11	<.01	<.03	<.02	.02	<.002	<.009	<.005	<.03
26...	<.01	<.01	<.005	<.05	<.05	<.01	<.03	<.02	.02	<.002	<.009	<.005	<.03
JUL													
10...	<.01	<.01	<.005	<.05	<.05	<.01	<.03	<.02	E.01	<.002	<.009	<.005	<.03
24...	.03	<.01	<.005	<.05	<.05	<.01	<.03	<.02	.04	<.002	<.009	<.005	<.03
AUG													
15...	<.01	<.01	<.005	<.05	<.05	<.01	<.03	<.02	.02	<.002	<.009	<.005	<.03
28...	<.01	<.01	<.005	<.05	<.05	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03
SEP													
11...	<.01	<.01	<.005	<.05	<.05	<.01	<.03	<.02	E.01	<.002	<.009	<.005	<.03
24...	<.01	<.01	<.005	<.05	<.05	<.01	<.03	<.02	E.01	<.002	<.009	<.005	<.03

Date	FLUFEN- ACET, ESA, WAT FLT (UG/L) (61952)	FLUFE- NACET OA, WATER FLT, REC (UG/L) (62483)	FLUMET- SULAM WATER FLTRD REC (UG/L) (61694)	FLUO- METURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)	FONOFOS WATER DISS REC (UG/L) (04095)	HYDROXY ATRA- ZINE WATER FLTRD REC (UG/L) (50355)	IMAZ- AQUIN WATER FLTRD REC (UG/L) (50356)	IMAZE- THAPYR WATER FLTRD REC (UG/L) (50407)	IMID- ACLOP- RID WATER FLTRD LINDANE DIS- SOLVED (UG/L) (39341)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L) (38478)	LIN- URON WATER FLTRD GF, REC (UG/L) (82666)	MALA- THON, DIS- SOLVED (UG/L) (39532)	
OCT													
11...	--	--	<.01	<.03	<.003	E.116	<.02	<.02	<.007	<.004	<.01	<.035	E.010
NOV													
13...	<.05	<.05	<.01	<.03	<.003	E.075	<.02	<.02	<.007	<.004	<.01	<.035	<.027
DEC													
13...	<.05	<.05	<.01	<.03	<.003	E.092	<.02	E.01	<.007	<.004	<.01	<.035	<.027
JAN													
09...	<.05	<.05	<.01	<.03	<.003	E.051	<.02	<.02	<.007	<.004	<.01	<.035	<.027
FEB													
14...	<.05	<.05	<.01	<.03	<.003	E.043	E.03	<.02	<.007	<.004	<.01	<.035	<.027
MAR													
13...	--	--	<.01	<.03	<.003	E.049	<.02	<.02	<.007	<.004	<.01	<.035	<.027
APR													
10...	<.05	<.05	<.01	<.03	<.003	E.107	<.02	<.02	<.007	<.004	<.01	<.035	<.027
24...	<.05	<.05	<.01	<.03	<.003	E.144	<.02	<.02	<.007	<.004	<.01	<.035	<.027
MAY													
09...	<.05	<.05	<.01	<.03	.005	<.008	<.02	<.02	<.007	<.004	<.01	<.035	<.027
22...	<.05	<.05	<.01	<.03	.005	E.139	<.02	<.02	<.007	<.004	<.01	<.035	<.027
JUN													
12...	<.05	<.05	<.01	<.03	<.003	E3.62	<.02	E.19	<.007	<.004	<.01	<.035	<.027
26...	<.05	<.05	<.01	<.03	.003	E.425	<.02	<.02	<.007	<.004	<.01	<.035	<.027
JUL													
10...	<.05	<.05	<.01	<.03	.007	E.264	M	E.02	<.007	<.004	<.01	<.035	<.027
24...	<.05	<.05	<.01	<.03	<.003	E.262	<.02	<.02	<.007	<.004	<.01	<.035	<.027
AUG													
15...	<.05	<.05	<.01	<.03	<.003	E.196	<.02	<.02	<.007	<.004	<.01	<.035	<.027
28...	<.05	<.05	<.01	<.03	.010	E.236	<.02	<.02	<.007	<.004	<.01	<.035	<.027
SEP													
11...	<.05	<.05	<.01	<.03	.006	E.125	<.02	<.02	<.007	<.004	<.01	<.035	<.027
24...	<.05	<.05	<.01	<.03	<.003	E.083	<.02	<.02	<.007	<.004	<.01	<.035	<.027

PLATTE RIVER BASIN

06800500 ELKHORN RIVER AT WATERLOO, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	MCPA, WATER, FLTRD, GF 0.7U REC (UG/L) (38482)	MCPB, WATER, FLTRD, GF 0.7U REC (UG/L) (38487)	METAL- AXYL WATER FLTRD REC (UG/L) (50359)	METHIO- CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (38501)	METH- OMYL WATER FLTRD REC (UG/L) (61696)	METH- OMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49296)	METHYL AZIN- PHOS WAT FLT GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT GF, REC (UG/L) (82667)	METOLA- CHLOR ESA FLTRD GF REC (UG/L) (61043)	METOLA- CHLOR OA FLTRD GF REC (UG/L) (61044)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MET- SUL- FURON METHYL WAT FLT REC (UG/L) (61697)
	OCT												
11...	<.02	<.01	<.02	<.008	<.01	<.004	<.050	<.006	--	--	.083	<.006	<.03
NOV													
13...	<.02	<.01	<.02	<.008	<.01	<.004	<.050	<.006	.23	.12	E.005	<.006	<.03
DEC													
13...	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	.32	.11	.021	.018	<.03
JAN													
09...	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	.23	.08	E.006	.028	E.06
FEB													
14...	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	.22	.11	.035	.011	<.03
MAR													
13...	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	--	--	.014	.007	<.03
APR													
10...	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	.21	.06	E.012	<.006	<.03
24...	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	.20	.09	.152	<.006	<.03
MAY													
09...	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	.25	.09	.138	<.007	<.03
22...	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	.38	.06	.208	<.006	<.03
JUN													
12...	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	.39	.49	3.47	.131	<.03
26...	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	.25	.16	.339	<.006	<.03
JUL													
10...	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	.31	.14	.091	<.006	<.03
24...	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	.31	.22	.084	<.006	<.03
AUG													
15...	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	.26	.20	.060	<.006	<.03
28...	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	.25	.18	.064	.011	<.03
SEP													
11...	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	.20	.15	.044	.007	<.03
24...	<.02	<.01	<.02	<.008	--	<.004	<.050	<.006	<.05	.11	.033	.025	<.03

Date	MOL- INATE WATER FLTRD GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD GF, REC (UG/L) (82684)	NEB- URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49294)	NICOSUL FURON WATER FLTRD REC (UG/L) (50364)	NORFLUR AZON, WATER, FLTRD, GF 0.7U REC (UG/L) (49293)	ORY- ZALIN, WATER, FLTRD, GF 0.7U REC (UG/L) (49292)	OXAMYL OXIME WATER FLTRD REC (UG/L) (50410)	OXAMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (38866)		P, P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT GF, REC (UG/L) (82687)
	OCT													
11...	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.01	<.003	<.007	<.002	<.010	<.006	
NOV														
13...	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.01	<.003	<.007	<.002	<.010	<.006	
DEC														
13...	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.007	<.002	<.010	<.006	
JAN														
09...	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004	<.022	<.006	
FEB														
14...	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004	<.022	<.006	
MAR														
13...	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004	<.022	<.006	
APR														
10...	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004	<.022	<.006	
24...	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004	<.022	<.006	
MAY														
09...	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004	<.022	<.006	
22...	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004	<.022	<.006	
JUN														
12...	<.002	<.007	<.01	E.15	<.02	<.02	--	<.01	<.003	<.010	<.004	.059	<.006	
26...	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004	<.022	<.006	
JUL														
10...	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004	<.022	<.010	
24...	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004	<.022	<.006	
AUG														
15...	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004	<.022	<.006	
28...	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004	<.022	<.006	
SEP														
11...	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.007	<.002	<.010	<.006	
24...	<.002	<.007	<.01	<.01	<.02	<.02	--	<.01	<.003	<.010	<.004	<.022	<.006	

PLATTE RIVER BASIN

06800500 ELKHORN RIVER AT WATERLOO, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PHOSPHATE WATER, FLTRD 0.7 U GF, REC (UG/L) (82664)	PIC- LORAM, WATER, FLTRD 0.7 U GF, REC (UG/L) (49291)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR ESA, WAT FLT GF 0.7U REC (UG/L) (62766)	PROPA- CHLOR OA, WAT FLT GF 0.7U REC (UG/L) (62767)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	PRO- PHAM, WATER, FLTRD 0.7 U GF, REC (UG/L) (49236)	PROP- ICONA- ZOLE, WATER FLTRD REC (UG/L) (50471)	PRO- POXUR, WATER, FLTRD, GF 0.7U REC (UG/L) (38538)	SIDURON WATER FLTRD REC (UG/L) (38548)
OCT													
11...	<.011	<.02	<.01	<.004	--	--	<.010	<.011	<.02	<.010	<.02	<.008	<.02
NOV													
13...	<.011	<.02	<.01	<.004	--	--	<.010	<.011	<.02	<.010	<.02	<.008	<.02
DEC													
13...	<.011	.16	<.01	<.004	<.05	<.05	<.010	<.011	<.02	<.010	<.02	<.008	<.02
JAN													
09...	<.011	<.02	<.01	<.004	<.05	<.05	<.010	<.011	<.02	<.010	<.02	<.008	E.01
FEB													
14...	<.011	<.02	<.01	<.004	<.05	<.05	<.010	<.011	<.02	<.010	<.02	<.008	<.02
MAR													
13...	<.011	<.02	<.01	<.004	--	--	<.010	<.011	<.02	<.010	<.02	<.008	<.02
APR													
10...	<.011	<.02	M	<.004	<.05	<.05	<.010	<.011	<.02	<.010	<.02	<.008	<.02
24...	<.011	<.02	E.01	<.004	<.05	<.05	<.010	<.011	<.02	<.010	<.02	<.008	<.02
MAY													
09...	<.011	.07	E.01	<.004	<.05	<.05	<.010	<.011	<.02	<.010	<.02	<.008	<.02
22...	<.011	<.02	E.01	<.004	<.05	<.05	<.010	<.011	<.02	<.010	<.02	<.008	<.02
JUN													
12...	<.011	<.02	E.01	<.004	--	--	<.010	<.011	<.02	<.010	<.02	<.008	<.02
26...	<.011	<.02	.02	<.004	--	--	<.010	<.011	<.02	<.010	<.02	<.008	<.02
JUL													
10...	<.011	<.02	E.01	<.004	--	--	<.010	<.011	<.02	<.010	<.02	<.008	<.02
24...	<.011	<.02	E.01	<.004	--	--	<.010	<.011	<.02	<.010	<.02	<.008	<.02
AUG													
15...	<.011	<.02	.03	<.004	--	--	<.010	<.011	<.02	<.010	<.02	<.008	<.02
28...	<.011	<.02	E.01	<.004	--	--	<.010	<.011	<.02	<.010	<.02	<.008	<.02
SEP													
11...	<.011	<.02	E.01	<.004	--	--	<.010	<.011	<.02	<.010	<.02	<.008	<.02
24...	<.011	<.02	E.01	<.004	--	--	<.010	<.011	<.02	<.010	<.02	<.008	<.02

Date	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	SULFO- MET- RURON METHYL WTR FLT (UG/L) (50337)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL, WATER, DISS, REC (UG/L) (04032)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TER- BUTHYL- AZINE, WATER, DISS, REC (UG/L) (04022)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- BENURON METHYL WATER FLTRD REC (UG/L) (61159)	TRI- CLOPYR, WATER, FLTRD, GF 0.7U (UG/L) (49235)	TRI- FLUR- ALIN WAT FLT GF, REC (UG/L) (82661)	UREA 3 (4- CHLOR OPHENYL METHYL WAT FLT REC (UG/L) (61692)
OCT													
11...	<.011	<.009	<.006	<.010	<.034	<.02	U	<.005	<.002	<.009	<.02	<.009	<.02
NOV													
13...	<.011	<.009	<.006	<.010	<.034	<.02	U	<.005	<.002	<.009	<.02	<.009	<.02
DEC													
13...	E.004	<.009	<.02	<.010	<.034	<.02	E.3	<.005	<.002	--	<.02	<.009	<.02
JAN													
09...	E.003	<.009	<.02	<.010	<.034	<.02	U	<.005	<.002	--	<.02	<.009	<.02
FEB													
14...	<.005	<.009	<.02	<.010	<.034	<.02	E.1	<.005	<.002	--	<.02	<.009	<.02
MAR													
13...	<.005	<.009	<.02	<.010	<.034	<.02	M	<.005	<.002	<.009	<.02	<.009	<.02
APR													
10...	<.005	<.009	<.02	<.010	<.034	<.02	--	<.005	<.002	--	<.02	<.009	<.02
24...	<.005	<.009	<.02	<.010	<.034	<.02	--	<.005	<.002	--	<.02	<.009	<.02
MAY													
09...	.008	<.009	<.02	<.010	<.034	<.02	--	<.005	<.002	--	<.02	<.009	<.02
22...	.015	<.009	<.02	<.010	<.034	<.02	--	<.005	<.002	--	<.02	<.009	<.02
JUN													
12...	.095	<.009	<.02	<.010	<.034	<.02	--	<.005	<.002	--	<.02	.024	<.02
26...	.010	<.009	E.01	<.010	<.034	<.02	--	<.005	<.002	--	<.02	<.009	<.02
JUL													
10...	.007	<.009	<.02	<.010	<.034	<.02	--	<.005	<.002	--	<.02	<.009	<.02
24...	<.005	<.009	<.02	<.010	<.034	<.02	--	<.005	<.002	--	<.02	<.009	<.02
AUG													
15...	<.005	<.009	.03	<.010	<.034	<.02	--	<.005	<.002	--	<.02	<.009	<.02
28...	<.005	<.009	<.02	<.010	<.034	<.02	--	<.005	<.002	--	<.02	<.009	<.02
SEP													
11...	E.005	<.009	<.02	<.010	<.034	<.02	--	<.005	<.002	--	<.02	<.009	<.02
24...	<.010	<.009	<.02	<.010	<.034	<.02	--	<.005	<.002	--	<.02	<.009	<.02

PLATTE RIVER BASIN

06800500 ELKHORN RIVER AT WATERLOO, NE--Continued
 (National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)
OCT			
11...	54	192	539
NOV			
13...	98	63	169
DEC			
13...	25	586	2610
JAN			
09...	77	81	457
FEB			
14...	54	196	709
MAR			
13...	68	510	2640
APR			
10...	51	206	729
24...	74	264	969
MAY			
09...	68	334	1500
22...	29	45	176
JUN			
12...	89	6910	190000
26...	83	271	834
JUL			
10...	67	95	189
24...	89	56	69.2
AUG			
15...	18	324	431
28...	93	51	67.3
SEP			
11...	92	85	98.9
24...	91	57	74.0

Remark codes used in this report:

< -- Less than
 E -- Estimated value
 M -- Presence verified, not quantified
 U -- Analyzed for, not detected

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PLATTE RIVER BASIN

06801000 PLATTE RIVER NEAR ASHLAND, NE

LOCATION.--Lat 41°03'44", long 096°19'28", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.29, T.13 N., R.10 E., Sarpy County, Hydrologic Unit 10200202, on left bank upstream side and 35 ft northeast of Highway 6 bridge, 3 mi northeast of Ashland, 2 mi upstream from Salt Creek, and at mile 27.9.

DRAINAGE AREA.--84,200 mi² from state base maps, scale 1:1,000,000.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1928 to May 1953, July 1988 to current year.

REVISED RECORDS.--WDR NE-94-1: 1993 (M).

GAGE.--Water-stage recorder. Datum of gage is 1,040.00 ft above sea level. Prior to Oct. 1, 1929, chain gage at former highway bridge $\frac{1}{2}$ mi upstream at datum 15.83 ft higher. Oct. 1, 1929 to Oct. 7, 1933 staff or chain gage at former bridge datum 14.79 ft higher. Oct. 14, 1933 to Dec. 10, 1938 water-stage recorder at site 950 ft upstream from former bridge at datum 14.79 ft higher. Dec. 11, 1938 to June 16, 1948 water-stage recorder at site of former bridge $\frac{1}{2}$ mi upstream at datum 14.79 ft higher. June 17, 1948 to May 11, 1953 $\frac{1}{2}$ mi downstream on Highway 6 bridge at datum 12.51 ft higher. Data collection platform at station.

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

DISCHARGE ,PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4490	3640	4470	e2900	e2500	e2300	6160	5610	4740	1700	577	3260
2	4570	3980	4230	e3100	e2700	e1900	5850	5760	4500	1660	683	3880
3	4610	4160	4660	e3300	e2800	e1500	5640	5640	4310	1580	697	2750
4	4550	3970	5520	e3200	e3000	e2000	5950	5340	4140	1360	416	2360
5	4290	4050	6300	e3300	e3100	e2200	6050	5190	3680	1400	563	1840
6	4470	3910	6840	e3800	e3200	e2600	4490	5300	3770	1490	734	1780
7	4110	4140	6870	e4100	e3600	e3000	5070	5290	3710	1400	901	1650
8	4020	3930	6360	e4200	e4300	e3700	5200	5250	3490	1480	1250	1520
9	4170	3830	6630	e4200	e4300	e4200	5830	5430	3540	1240	1610	1330
10	4350	3900	6300	e4000	e4300	e4800	5570	5250	3450	1280	1420	1180
11	4350	3740	6360	e4200	e4500	e5600	6760	6220	6150	1420	1180	1160
12	7110	4020	6020	e4200	e4600	e6200	5290	8190	19500	1230	1090	1440
13	6160	3930	6150	e4100	e4700	e7200	5370	9270	16000	1150	1230	1170
14	4820	4160	6270	e3900	e4600	e11000	5370	7970	11200	1090	998	1740
15	4540	3630	6110	e3700	e4700	e14500	6110	7500	7390	1100	995	2100
16	4560	4050	6020	e3600	e4800	13100	5270	7140	5800	1010	1260	2390
17	4780	3980	6220	e3500	e4800	11000	5000	6070	5160	972	1370	2300
18	4760	4120	6080	e3400	e4800	9820	5350	5650	4550	921	1300	2200
19	4980	4150	e5000	e3400	e4900	9000	4770	5030	4260	869	1260	2430
20	4820	3940	e5400	e4200	e4700	9010	4470	4920	4130	781	1910	2250
21	3950	4140	e4600	e4100	e4600	9230	4560	4500	3720	627	1720	2190
22	4390	4380	e4300	e4000	e4600	8420	4620	4300	3540	730	1400	2150
23	4450	4790	e4300	e4000	e4000	7420	4890	4450	3960	778	2470	1970
24	4560	4900	e3500	e3900	e3300	7970	4830	4920	3570	696	2020	1720
25	4310	6130	e3100	e3900	e2800	7360	4540	4690	2950	596	1230	1890
26	3930	8400	e2800	e4100	e2700	6630	4380	4580	3130	904	1230	1940
27	4200	8530	e2400	e3800	e2500	6700	3810	4690	2730	937	1450	2010
28	4410	7780	e2400	e3800	e2400	6820	4560	5070	2690	859	1460	2030
29	4170	6420	e2400	e3700	---	5550	5280	5300	2280	825	1870	2330
30	4030	5420	e2500	e3400	---	5720	5390	5310	2090	673	2870	2220
31	4330	---	e2700	e2600	---	5720	---	4950	---	827	2880	---
TOTAL	141240	140120	152810	115600	107800	202170	156430	174780	154130	33585	42044	61180
MEAN	4556	4671	4929	3729	3850	6522	5214	5638	5138	1083	1356	2039
MAX	7110	8530	6870	4200	4900	14500	6760	9270	19500	1700	2880	3880
MIN	3930	3630	2400	2600	2400	1500	3810	4300	2090	596	416	1160
AC-FT	280100	277900	303100	229300	213800	401000	310300	346700	305700	66620	83390	121400

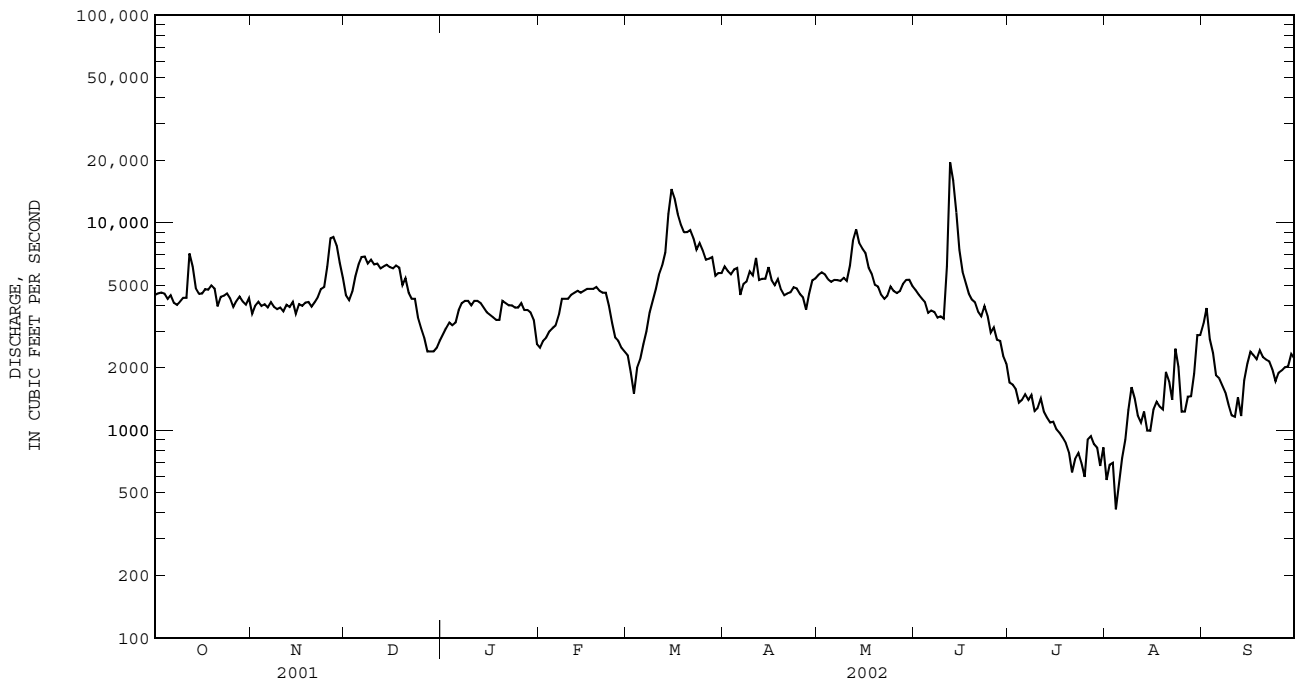
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2002, BY WATER YEAR (WY)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	5437	6043	5437	5048	6923	9492	8821	8990	11160	7594	5045	4715		
MAX	8325	9403	8778	9022	11390	23190	15470	19330	23270	31980	10730	9825		
(WY)	1998	1999	1998	1998	1997	1993	1998	1995	1995	1993	1996	1993		
MIN	2433	3620	2879	2939	3850	5233	4618	2969	2928	1083	1288	1533		
(WY)	1992	1989	1990	1991	2002	1991	1989	1989	1989	2002	1991	1991		

06801000 PLATTE RIVER NEAR ASHLAND, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1989 - 2002	
ANNUAL TOTAL	2254100		1481889			
ANNUAL MEAN	6176		4060		*7053	
HIGHEST ANNUAL MEAN					11820 1993	
LOWEST ANNUAL MEAN					4060 2002	
HIGHEST DAILY MEAN	32200	May 7	19500	Jun 12	110000	Mar 10 1993
LOWEST DAILY MEAN	1490	Aug 14	416	Aug 4	416	Aug 4 2002
ANNUAL SEVEN-DAY MINIMUM	1900	Aug 9	634	Jul 30	634	Jul 30 2002
MAXIMUM PEAK FLOW			**22600	Jun 12	***130000	Mar 10 1993
MAXIMUM PEAK STAGE			***18.79	Jan 14	***23.05	Feb 20 1997
ANNUAL RUNOFF (AC-FT)	4471000		2939000		5109000	
10 PERCENT EXCEEDS	10600		6320		11600	
50 PERCENT EXCEEDS	4700		4100		5900	
90 PERCENT EXCEEDS	3190		1230		2560	

e Estimated.
 * Average discharge for water years 1942-52, 5,961 ft³/s.
 ** Stage 17.49 ft.
 *** Estimated; discharge includes overbank flow, stage 19.23 ft., backwater from ice.
 **** Backwater from ice.



PLATTE RIVER BASIN

06801000 PLATTE RIVER NR ASHLAND, NE--Continued

WATER-QUALITY RECORDS
(Ashland Well Field Study)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM AD- SORP- TION RATIO (00931)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
DEC													
10...	1000	10.7	83	7.8	536	10.0	3.0	--	--	--	--	--	--
JAN													
07...	1200	10.7	78	7.0	613	--	1.1	--	--	--	--	--	--
FEB													
11...	1000	10.8	78	7.9	504	2.0	.5	180	52.6	12.5	7.60	1	30.6
MAR													
11...	1000	10.2	78	8.0	554	4.0	2.5	--	--	--	--	--	--
APR													
08...	1100	8.7	82	8.5	495	10.5	10.5	--	--	--	--	--	--
MAY													
06...	1030	7.9	83	8.9	492	21.0	15.5	200	58.3	13.3	8.68	.8	25.4
06...	1100	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
11...	1030	6.6	78	8.9	453	29.5	20.5	--	--	--	--	--	--
JUL													
09...	1000	6.9	84	9.0	445	31.0	23.0	--	--	--	--	--	--
AUG													
12...	1130	5.9	77	8.9	462	26.0	27.0	180	49.9	12.5	12.3	.8	23.9
21...	1100	6.9	80	8.9	336	--	20.0	130	33.8	10.0	8.45	.7	18.4
SEP													
09...	0930	6.3	74	8.5	398	23.0	21.0	--	--	--	--	--	--

Date	SODIUM PERCENT (00932)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)
DEC													
10...	--	--	--	--	--	--	6.5	--	--	<1	<.5	<.5	E.1
JAN													
07...	--	--	--	--	--	--	3.4	--	--	<1	<.5	<.5	<.5
FEB													
11...	26	14.0	.5	35.6	73.6	346	3.8	<10	4.1	<1	<.5	<.5	<.5
MAR													
11...	--	--	--	--	--	--	4.4	--	--	<1	<.5	<.5	M
APR													
08...	--	--	--	--	--	--	4.9	--	--	<1	<.5	<.5	M
MAY													
06...	21	10.7	.3	28.5	59.2	333	--	<10	E1.3	--	--	--	--
06...	--	--	--	--	--	--	11.2	--	--	<1	<.5	<.5	E.1
JUN													
11...	--	--	--	--	--	--	13.2	--	--	<1	<.5	<.5	E.1
JUL													
09...	--	--	--	--	--	--	17.5	--	--	<1	<.5	<.5	E.3
AUG													
12...	21	14.7	.4	23.7	45.7	306	16.4	<10	E2.1	<1	<.5	<.5	E.1
21...	23	10.3	.3	22.4	30.1	217	14.9	<10	<2.0	<1	<.5	<.5	E.1
SEP													
09...	--	--	--	--	--	--	18.3	--	--	<1	<.5	<.5	M

06801000 PLATTE RIVER NR ASHLAND, NE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PRO- METON, WATER, DISS, REC (UG/L) (04037)
DEC	
10...	<.5
JAN	
07...	<.5
FEB	
11...	<.5
MAR	
11...	<.5
APR	
08...	<.5
MAY	
06...	--
06...	<.5
JUN	
11...	<.5
JUL	
09...	<.5
AUG	
12...	<.5
21...	<.5
SEP	
09...	<.5

Remark codes used in this report:

< -- Less than
E -- Estimated value
M -- Presence verified, not quantified

PLATTE RIVER BASIN

06801180 OLIVE BRANCH NEAR HALLAM, NE

LOCATION.--Lat 40°35'44", long 096°47'42", in NE ¼ NW ¼ sec.7, T.7 N., R.6 E., Lancaster County, Hydrologic Unit 10200203, on right bank, 4.75 mi west of U.S. Highway 77 on West Panama Road , south of Lincoln, and at mile 3.5.

DRAINAGE AREA.--37.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1997 to current year.

GAGE.--Water-stage recorder, water temperature, and specific conductance sensors. Datum of gage is 1,273.75 ft above sea level. Datum lowered to 1,271.75 ft above sea level July 24, 2002. Data collection platform at station.

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

COOPERATION.--Station operated in cooperation with the Nebraska Public Power District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

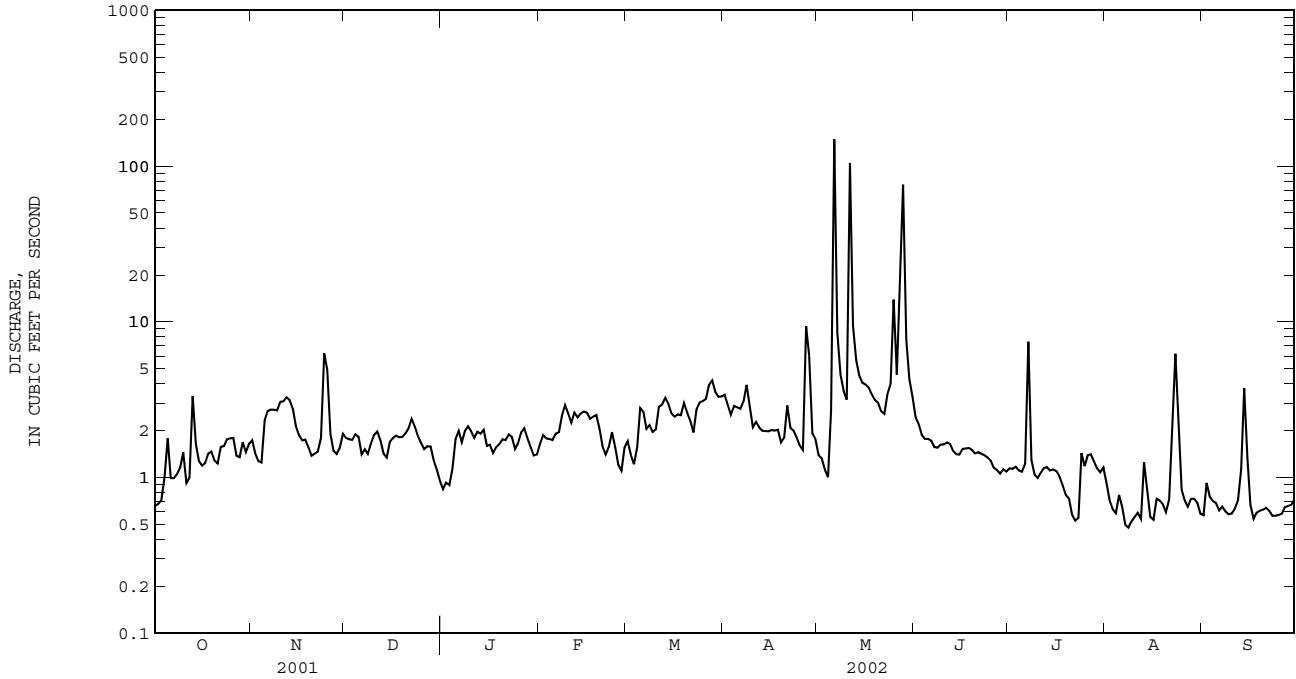
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.66	1.7	1.8	0.84	1.6	1.7	3.4	1.4	2.5	1.1	0.92	0.57
2	0.68	1.4	1.8	0.93	1.9	1.4	2.9	1.3	2.2	1.1	0.71	0.92
3	0.71	1.3	1.7	0.89	1.8	1.2	2.5	1.1	1.9	1.2	0.62	0.75
4	1.00	1.2	1.9	1.1	1.8	1.6	2.9	1.0	1.8	1.1	0.59	0.70
5	1.8	2.3	1.8	1.8	1.7	2.8	2.8	2.7	1.8	1.1	0.77	0.68
6	0.99	2.7	1.4	2.0	1.9	2.6	2.8	149	1.7	1.2	0.65	0.61
7	0.99	2.7	1.5	1.7	2.0	2.1	3.1	8.5	1.6	7.5	0.50	0.65
8	1.0	2.7	1.4	2.0	2.5	2.2	3.9	4.6	1.6	1.3	0.48	0.60
9	1.2	2.7	1.7	2.1	2.9	2.0	2.9	3.6	1.6	1.0	0.52	0.58
10	1.5	3.1	1.9	2.0	2.6	2.0	2.1	3.2	1.6	0.99	0.56	0.59
11	0.92	3.1	2.0	1.8	2.2	2.9	2.3	105	1.7	1.1	0.59	0.63
12	1.00	3.3	1.7	2.0	2.6	2.9	2.1	9.4	1.6	1.1	0.54	0.71
13	3.3	3.1	1.4	1.9	2.4	3.2	2.0	5.7	1.5	1.2	1.2	1.1
14	1.6	2.8	1.3	2.0	2.6	3.0	2.0	4.5	1.4	1.1	0.83	3.7
15	1.3	2.1	1.7	1.6	2.7	2.6	2.0	4.1	1.4	1.1	0.56	1.3
16	1.2	1.9	1.8	1.6	2.6	2.5	2.0	4.0	1.5	1.1	0.54	0.66
17	1.2	1.7	1.9	1.4	2.4	2.5	2.0	3.8	1.5	1.0	0.73	0.54
18	1.4	1.8	1.8	1.6	2.5	2.5	2.0	3.4	1.5	0.89	0.71	0.59
19	1.5	1.6	1.8	1.6	2.5	3.0	1.7	3.1	1.5	0.77	0.67	0.61
20	1.3	1.4	1.9	1.8	2.1	2.6	1.8	3.0	1.4	0.73	0.60	0.62
21	1.2	1.4	2.1	1.7	1.6	2.3	2.9	2.7	1.5	0.58	0.72	0.64
22	1.6	1.5	2.4	1.9	1.4	1.9	2.1	2.6	1.4	0.53	1.9	0.61
23	1.6	1.8	2.1	1.8	1.6	2.7	2.0	3.4	1.4	0.55	6.2	0.57
24	1.8	6.3	1.8	1.5	2.0	3.0	1.8	4.0	1.3	1.4	2.1	0.57
25	1.8	4.9	1.7	1.7	1.6	3.1	1.6	14	1.3	1.2	0.84	0.57
26	1.8	1.9	1.5	2.0	1.2	3.2	1.5	4.6	1.2	1.4	0.71	0.58
27	1.4	1.5	1.6	2.1	1.1	3.9	9.4	16	1.1	1.4	0.65	0.64
28	1.4	1.4	1.6	1.8	1.6	4.2	6.1	76	1.1	1.3	0.73	0.66
29	1.7	1.5	1.3	1.6	---	3.5	1.9	7.7	1.1	1.1	0.73	0.67
30	1.5	1.9	1.1	1.4	---	3.3	1.8	4.3	1.1	1.1	0.69	0.72
31	1.6	---	0.95	1.4	---	3.3	---	3.3	---	1.2	0.59	---
TOTAL	42.65	68.7	52.35	51.56	57.4	81.7	80.3	461.0	45.8	39.44	29.15	23.34
MEAN	1.376	2.290	1.689	1.663	2.050	2.635	2.677	14.87	1.527	1.272	0.940	0.778
MAX	3.3	6.3	2.4	2.1	2.9	4.2	9.4	149	2.5	7.5	6.2	3.7
MIN	0.66	1.2	0.95	0.84	1.1	1.2	1.5	1.0	1.1	0.53	0.48	0.54
AC-FT	85	136	104	102	114	162	159	914	91	78	58	46

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2002, BY WATER YEAR (WY)

	1997	1998	1999	2000	2001	2002
MEAN	4.971	10.42	3.230	2.392	5.463	10.21
MAX	17.2	35.6	6.37	4.21	18.1	28.6
(WY)	1999	1999	1999	1998	1998	1999
MIN	0.98	0.96	0.43	0.96	1.07	0.74
(WY)	2000	2001	2001	2000	2000	2000

06801180 OLIVE BRANCH NEAR HALLAM, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1997 - 2002	
ANNUAL TOTAL	4447.96	1033.39	9.869	
ANNUAL MEAN	12.19	2.831	13.4	1998
HIGHEST ANNUAL MEAN			2.83	2002
LOWEST ANNUAL MEAN			537	May 20 2001
HIGHEST DAILY MEAN	537 May 20	149 May 6	0.06	Jun 22 2000
LOWEST DAILY MEAN	0.16 Jan 1	0.48 Aug 8	0.12	Dec 11 2000
ANNUAL SEVEN-DAY MINIMUM	0.74 Aug 31	0.55 Aug 6	1880	May 20 2001
MAXIMUM PEAK FLOW		568 May 6	13.90	May 20 2001
MAXIMUM PEAK STAGE		8.03 May 6	7150	
ANNUAL RUNOFF (AC-FT)	8820	2050		
10 PERCENT EXCEEDS	20	3.3		
50 PERCENT EXCEEDS	2.1	1.6		
90 PERCENT EXCEEDS	0.96	0.66		



PLATTE RIVER BASIN

06801180 OLIVE BRANCH NEAR HALLAM, NE--Continued

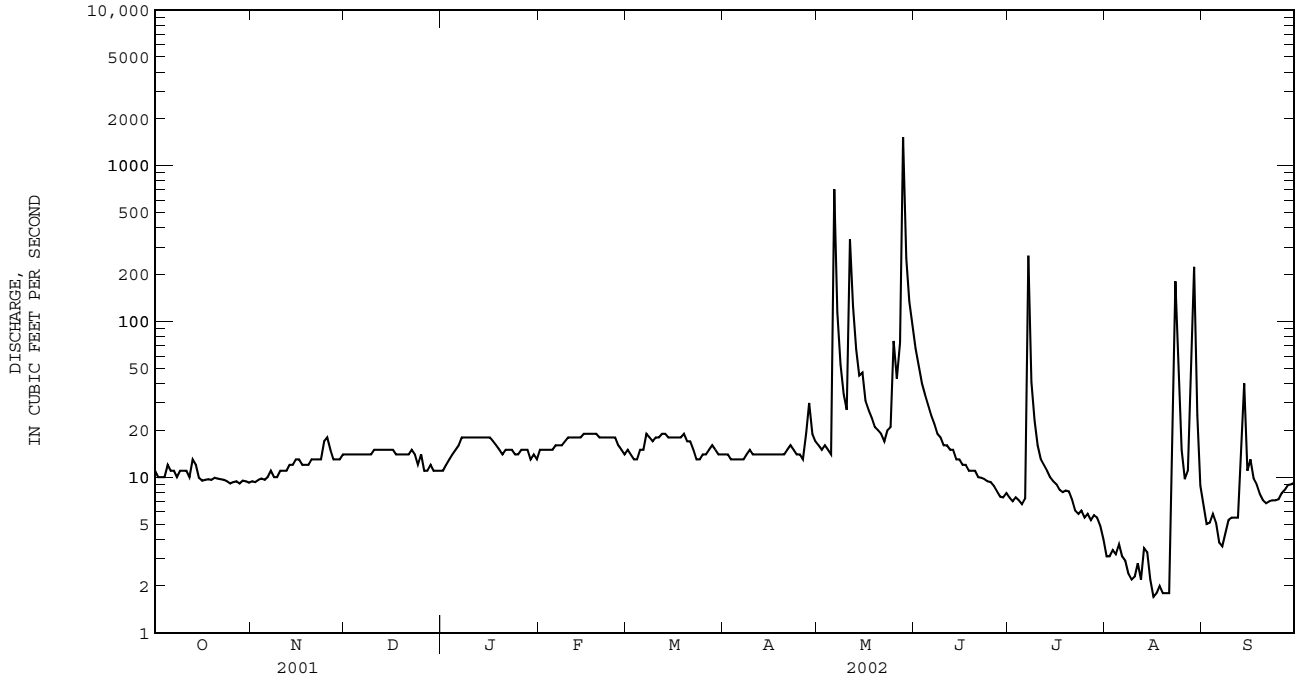
SPECIFIC CONDUCTANCE ,FROM YSI PROBE, in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	584	478	475	508	---	---	732	660	713	778	816	798
2	583	476	473	510	---	---	727	673	734	778	829	757
3	580	476	475	508	---	---	730	697	749	778	837	805
4	570	479	481	504	---	---	729	717	755	778	832	830
5	531	480	490	491	---	---	728	717	760	781	810	839
6	539	482	489	483	---	---	725	458	763	768	805	852
7	552	485	489	484	---	---	726	429	768	480	851	839
8	562	483	489	479	---	---	730	526	772	636	857	849
9	564	481	491	462	---	746	735	601	771	701	848	858
10	560	482	490	454	---	745	741	652	770	728	833	864
11	557	479	491	452	---	742	740	341	771	733	818	864
12	553	482	492	442	---	736	747	378	770	740	827	841
13	516	489	494	438	---	734	751	551	770	746	703	768
14	514	491	494	427	---	733	755	660	776	760	757	631
15	526	490	494	432	---	732	763	717	776	768	818	643
16	532	485	498	435	---	735	767	775	776	769	837	730
17	534	486	496	441	---	735	757	739	775	774	786	797
18	528	487	494	438	---	734	756	745	775	772	783	785
19	525	486	490	437	---	729	757	750	779	781	787	771
20	522	487	491	439	---	734	750	748	783	788	807	781
21	522	488	488	440	---	730	727	745	778	800	789	770
22	517	487	480	440	---	735	736	739	779	805	631	782
23	508	488	475	434	---	734	750	709	780	799	442	809
24	501	460	481	438	---	728	746	679	764	788	458	809
25	500	446	489	439	---	725	738	423	769	794	682	810
26	495	458	496	428	---	727	732	568	774	780	729	810
27	492	464	491	418	---	728	677	355	775	774	762	787
28	491	466	482	---	---	729	609	273	777	787	735	793
29	485	470	483	---	---	733	633	494	778	794	735	805
30	482	479	491	---	---	729	655	623	780	799	742	813
31	478	---	501	---	---	730	---	680	---	802	781	---
MEAN	529	479	488	---	---	---	728	607	769	760	765	796
MAX	584	491	501	---	---	---	767	775	783	805	857	864
MIN	478	446	473	---	---	---	609	273	713	480	442	631

06803000 SALT CREEK AT ROCA, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1952 - 2002	
ANNUAL TOTAL	28622.3		9043.4		50.95	
ANNUAL MEAN	78.42		24.78		200	
HIGHEST ANNUAL MEAN					1987	
LOWEST ANNUAL MEAN					6.15	
HIGHEST DAILY MEAN	2490	May 5	1530	May 28	6070	Jul 14 1952
LOWEST DAILY MEAN	7.4	Feb 1	1.7	Aug 16	0.20	Jul 23 1955
ANNUAL SEVEN-DAY MINIMUM	8.5	Feb 8	1.9	Aug 15	0.61	Sep 6 1955
MAXIMUM PEAK FLOW			3150		16700	
MAXIMUM PEAK STAGE			18.71		22.70	
ANNUAL RUNOFF (AC-FT)	56770		17940		36910	
10 PERCENT EXCEEDS	147		22		78	
50 PERCENT EXCEEDS	15		14		11	
90 PERCENT EXCEEDS	9.2		5.6		4.0	

e Estimated.



PLATTE RIVER BASIN

06803080 SALT CREEK AT PIONEERS BOULEVARD AT LINCOLN, NE

LOCATION.--Lat 40°46'13", long 096°43'05", in SW ¼ SW ¼, sec.2, T.9 N., R.6 E., Lancaster County, Hydrologic Unit 10200203, on left bank downstream from bridge.

DRAINAGE AREA.--220 mi².

PERIOD OF RECORD.--August 1994 to current year. Published as "above Beal Slough", August-September 1994.

GAGE.--Water-stage recorder. Elevation of gage is 1,140 ft above sea level. Data collection platform at station.

REMARKS.--Record fair except for estimated daily discharges, which are poor.

DISCHARGE PUBLISHED, FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	14	20	e11	e14	e17	23	38	122	16	8.7	13
2	11	14	20	e12	e15	e16	23	34	101	14	7.9	11
3	11	14	20	e13	e16	e17	23	28	84	14	6.9	11
4	28	14	20	e14	e17	e18	23	24	73	14	8.1	11
5	17	16	21	e14	e18	20	24	21	66	15	7.7	9.7
6	14	14	20	16	18	21	27	762	60	22	8.6	9.5
7	13	15	20	17	19	22	28	473	55	341	8.3	9.1
8	13	15	20	16	21	22	33	136	49	114	8.1	11
9	14	16	20	18	27	25	31	88	44	51	9.2	11
10	19	15	20	18	30	26	31	64	40	37	9.6	11
11	13	14	19	19	27	26	34	584	40	25	8.9	11
12	12	16	16	18	26	22	30	447	36	21	7.5	12
13	51	17	16	18	22	27	30	140	34	18	9.9	32
14	20	18	16	18	25	23	30	93	32	17	7.2	95
15	16	18	16	16	23	22	30	71	29	15	7.5	18
16	12	18	15	20	21	22	31	64	28	14	7.0	18
17	12	17	15	19	23	22	32	56	26	14	11	15
18	12	17	16	17	21	22	30	48	25	13	6.4	14
19	12	16	16	16	20	24	29	43	24	12	6.8	13
20	12	16	14	15	20	23	38	39	22	12	8.2	13
21	14	17	15	15	20	23	43	36	20	11	22	13
22	13	17	19	17	19	22	45	34	19	10	337	13
23	13	20	16	14	19	22	50	68	18	9.3	1120	13
24	15	89	13	18	19	26	50	56	17	9.0	125	13
25	13	43	16	20	18	31	46	108	17	9.6	44	13
26	12	31	e12	19	17	27	46	102	17	10	26	13
27	12	22	e12	18	e17	29	157	80	16	10	23	14
28	14	20	e12	15	e17	30	81	1560	15	9.6	67	14
29	13	19	e12	20	---	31	67	677	14	10	170	14
30	13	20	e12	e16	---	23	47	279	15	9.6	56	15
31	15	---	e12	e15	---	22	---	169	---	9.2	18	---
TOTAL	471	612	511	512	569	723	1212	6422	1158	906.3	2171.5	483.3
MEAN	15.19	20.40	16.48	16.52	20.32	23.32	40.40	207.2	38.60	29.24	70.05	16.11
MAX	51	89	21	20	30	31	157	1560	122	341	1120	95
MIN	11	14	12	11	14	16	23	21	14	9.0	6.4	9.1
AC-FT	934	1210	1010	1020	1130	1430	2400	12740	2300	1800	4310	959

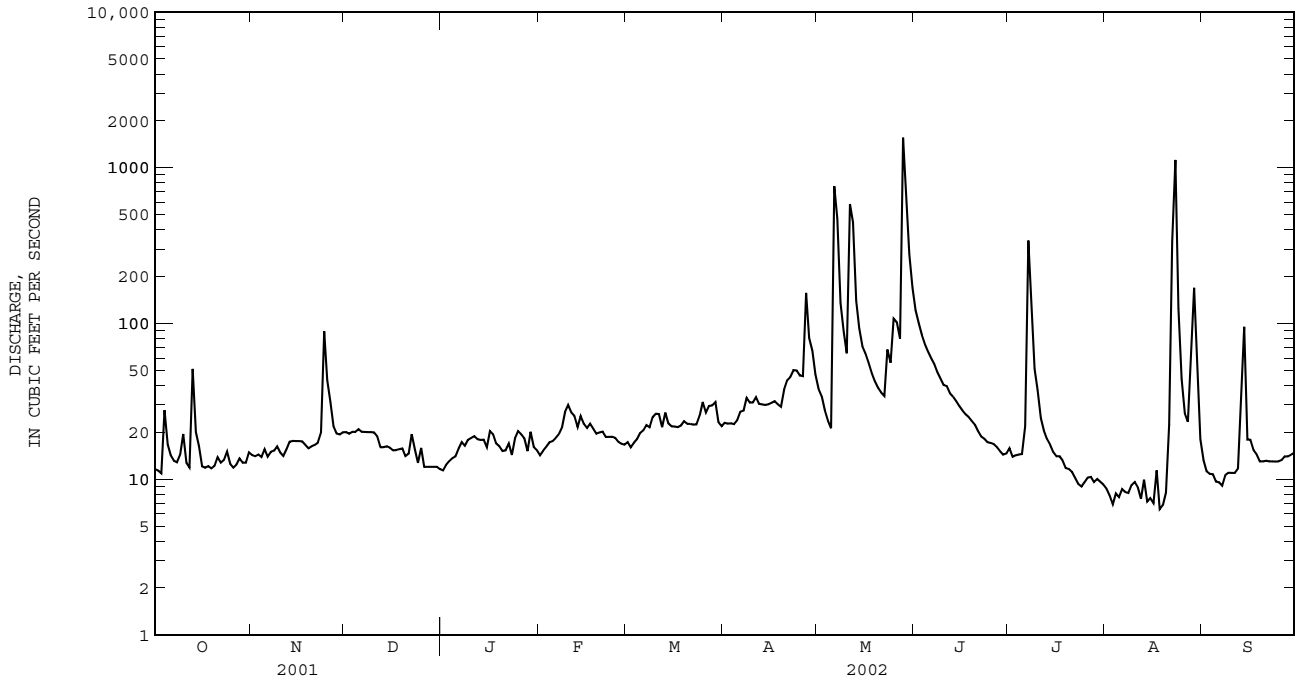
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2002, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1999	2000	2001	2002			
MEAN	27.87	63.34	34.44	27.59	52.92	72.95	106.1	316.6	153.8	77.32	37.41	26.82
MAX	83.8	172	97.1	49.5	194	202	272	689	288	220	90.6	55.8
(WY)	1999	1999	1998	1995	1998	1998	1998	1995	2001	1996	1996	1996
MIN	11.0	13.6	9.15	14.5	16.5	16.2	22.1	17.1	38.6	29.2	13.6	9.12
(WY)	1996	2001	2001	2001	1996	1996	1996	2000	2002	2002	2001	2000

06803080 SALT CREEK AT PIONEERS BOULEVARD AT LINCOLN, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1994 - 2002	
ANNUAL TOTAL	37886.1		15751.1		83.15	
ANNUAL MEAN	103.8		43.15		124	
HIGHEST ANNUAL MEAN					23.5	
LOWEST ANNUAL MEAN					2000	
HIGHEST DAILY MEAN	2350	May 5	1560	May 28	3380	May 9 1996
LOWEST DAILY MEAN	3.6	Sep 13	6.4	Aug 18	3.6	Sep 13 2001
ANNUAL SEVEN-DAY MINIMUM	4.8	Aug 31	7.7	Aug 14	4.8	Aug 31 2001
MAXIMUM PEAK FLOW			2740		6360	
MAXIMUM PEAK STAGE			15.29		22.92	
ANNUAL RUNOFF (AC-FT)	75150		31240		60240	
10 PERCENT EXCEEDS	260		62		161	
50 PERCENT EXCEEDS	20		18		28	
90 PERCENT EXCEEDS	8.8		11		11	

e Estimated.



PLATTE RIVER BASIN

06803093 HAINES BRANCH AT SW 56th ST. AT LINCOLN, NE

LOCATION.--Lat 40°45'59", long 096°47'48", in SE ¼ NE ¼, sec.12, T.9 N., R.5 E., Lancaster County, Hydrologic Unit 10200203, on right upstream bank.

DRAINAGE AREA.--60 mi².

PERIOD OF RECORD.--October 1994 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,170 ft above sea level. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE PUBLISHED, FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	2.7	3.5	e1.5	e2.4	e2.0	3.4	5.3	7.1	0.91	0.27	0.43
2	2.9	2.8	3.2	e1.6	e2.6	e1.9	3.1	4.7	5.7	0.82	0.25	0.44
3	2.4	2.5	3.1	e1.6	e2.6	e1.9	2.9	4.2	5.0	1.0	0.24	0.33
4	3.6	2.6	3.3	e1.7	e2.9	e2.9	2.8	3.9	4.6	0.96	0.30	0.30
5	4.4	2.7	3.4	2.2	3.4	4.7	3.2	3.8	4.5	0.90	0.44	0.29
6	2.3	2.9	3.2	2.8	3.7	6.2	3.2	62	4.1	1.0	0.33	0.30
7	2.0	3.1	3.2	2.8	4.2	4.4	3.5	14	3.5	3.1	0.31	0.29
8	1.9	2.7	3.0	3.4	4.8	4.1	3.9	7.9	3.2	1.9	0.31	0.28
9	2.1	2.7	2.9	4.1	5.3	3.8	3.7	5.7	3.4	1.3	0.32	0.26
10	3.0	2.8	3.0	4.3	5.0	4.2	3.4	4.7	3.3	1.4	0.34	0.27
11	2.3	2.6	3.1	3.8	5.1	5.2	3.6	22	3.3	1.2	0.31	0.29
12	2.3	2.9	3.0	4.1	5.2	6.6	3.5	11	3.0	1.5	0.39	0.33
13	4.3	3.1	2.8	4.0	4.7	5.3	3.2	7.0	2.9	1.5	0.66	1.1
14	4.2	3.2	2.9	4.4	7.6	4.4	3.4	5.6	3.1	1.1	0.42	7.7
15	4.5	3.2	3.6	3.8	5.9	3.9	3.5	4.9	2.7	0.92	0.37	1.8
16	4.3	3.0	3.0	3.1	8.4	3.6	3.4	4.6	2.5	0.74	0.40	1.1
17	4.5	3.0	2.7	2.7	7.7	3.4	3.4	4.1	2.4	0.67	0.88	0.82
18	4.7	3.5	3.2	3.0	5.5	3.4	3.4	3.6	2.3	0.54	0.72	0.67
19	4.8	3.1	2.7	3.1	5.2	3.7	2.9	3.4	2.8	0.53	0.66	0.53
20	5.1	3.0	3.1	3.4	4.5	3.5	3.0	3.3	2.2	0.52	1.0	0.46
21	5.3	3.2	3.2	3.6	4.4	2.8	4.8	3.1	2.1	0.44	1.8	0.45
22	5.4	3.4	4.1	4.0	4.0	2.6	4.4	3.3	1.8	0.48	6.4	0.36
23	5.5	3.7	2.9	4.1	4.2	3.3	3.8	5.5	1.6	0.51	13	0.34
24	8.0	7.0	e2.2	2.8	4.1	3.2	4.2	4.5	1.4	0.56	5.0	0.33
25	7.3	7.3	e2.3	3.9	3.1	3.7	3.4	13	1.4	0.55	1.7	0.34
26	6.4	4.7	e2.4	4.1	2.7	4.0	3.4	6.0	1.3	0.75	0.90	0.38
27	5.6	4.6	e2.6	e4.0	2.8	4.3	7.3	5.6	1.2	0.87	0.62	0.46
28	5.5	3.3	e2.1	e3.0	e2.7	4.9	8.8	194	1.2	0.92	0.74	0.52
29	4.8	3.8	e1.8	e2.2	---	4.2	6.1	44	1.1	0.71	3.8	0.56
30	3.9	3.5	e1.6	e2.3	---	3.5	5.3	20	1.0	0.54	0.78	0.62
31	3.2	---	e1.6	e2.5	---	3.4	---	11	---	0.35	0.56	---
TOTAL	129.7	102.6	88.7	97.9	124.7	119.0	117.9	495.7	85.7	29.19	44.22	22.35
MEAN	4.184	3.420	2.861	3.158	4.454	3.839	3.930	15.99	2.857	0.942	1.426	0.745
MAX	8.0	7.3	4.1	4.4	8.4	6.6	8.8	194	7.1	3.1	13	7.7
MIN	1.9	2.5	1.6	1.5	2.4	1.9	2.8	3.1	1.0	0.35	0.24	0.26
AC-FT	257	204	176	194	247	236	234	983	170	58	88	44

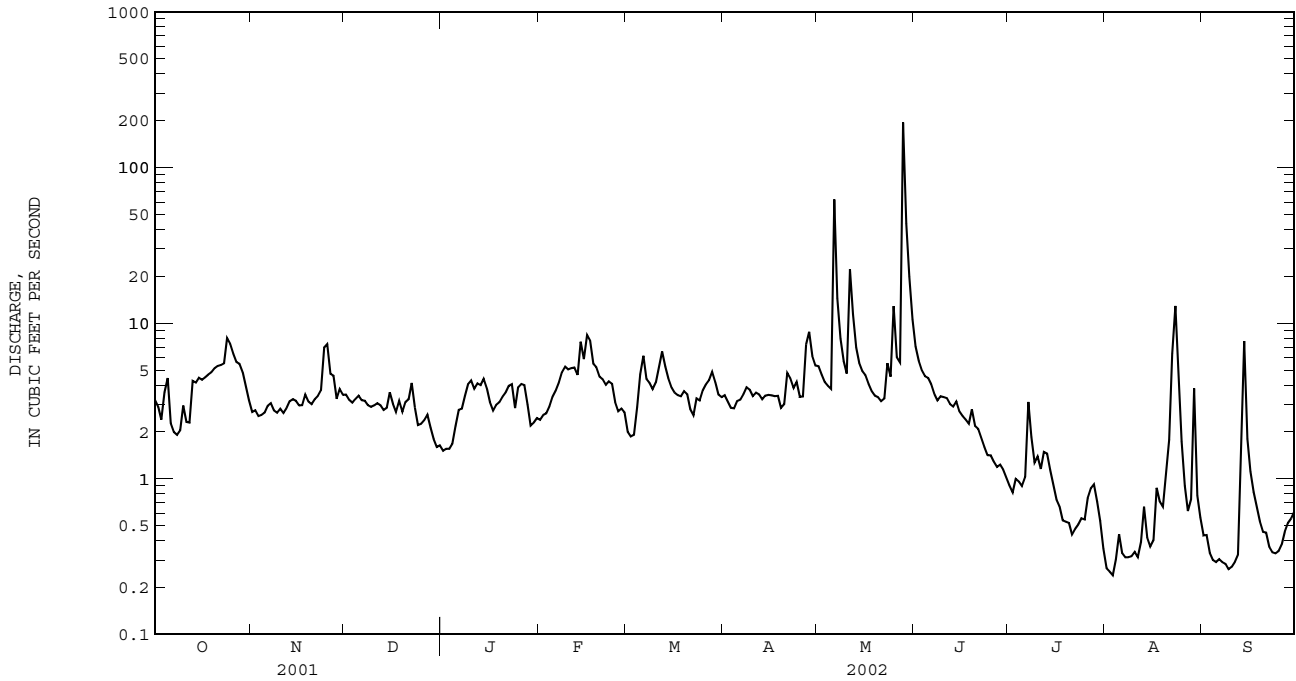
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2002, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
MEAN	3.836	8.671	5.075	5.066	8.922	10.95	15.29	48.99	30.49	11.93	5.180	3.681
MAX	12.2	34.8	10.9	9.65	25.6	31.9	37.4	139	74.0	17.2	19.2	9.46
(WY)	1999	1999	1999	1999	1998	1998	1998	1995	1998	1998	1998	1996
MIN	1.15	1.55	1.47	1.96	2.37	3.23	3.91	2.30	2.86	0.94	1.43	0.37
(WY)	2001	2001	2001	2001	2001	1996	2000	2000	2002	2002	2002	2000

06803093 HAINES BRANCH AT SW 56th ST. AT LINCOLN, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1994 - 2002	
ANNUAL TOTAL	5645.41	1457.66		
ANNUAL MEAN	15.47	3.994	13.19	
HIGHEST ANNUAL MEAN			22.2	1998
LOWEST ANNUAL MEAN			3.99	2002
HIGHEST DAILY MEAN	732 Jun 14	194 May 28	786	May 8 1995
LOWEST DAILY MEAN	0.68 Sep 4	0.24 Aug 3	0.04	Sep 19 2000
ANNUAL SEVEN-DAY MINIMUM	1.1 Aug 31	0.28 Sep 5	0.09	Sep 7 2000
MAXIMUM PEAK FLOW		644 May 28	1970	Jun 14 2001
MAXIMUM PEAK STAGE		7.60 May 28	12.89	Jun 14 2001
ANNUAL RUNOFF (AC-FT)	11200	2890	9560	
10 PERCENT EXCEEDS	25	5.5	25	
50 PERCENT EXCEEDS	4.3	3.1	4.6	
90 PERCENT EXCEEDS	1.8	0.46	1.5	

e Estimated.



PLATTE RIVER BASIN

06803170 MIDDLE CREEK AT SW 40th ST. AT LINCOLN, NE

LOCATION.--Lat 40°48'20", long 096°46'39", in NW ¼ SW ¼, sec.29, T.10 N., R.6 E., Lancaster County, Hydrologic Unit 10200203, on right downstream side of bridge.

DRAINAGE AREA.--94 mi².

PERIOD OF RECORD.--October 1994 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,144.45 ft above sea level. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE PUBLISHED, FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	2.7	2.6	e2.9	e2.8	3.6	3.0	4.2	4.2	1.9	1.9	2.0
2	8.6	2.6	2.6	e3.0	e2.8	e2.8	2.8	3.9	4.4	1.9	1.9	1.9
3	8.8	2.6	2.7	e3.1	e2.9	e2.3	2.1	3.7	4.3	2.0	2.0	1.7
4	9.0	2.6	2.8	e3.2	e3.1	e2.8	2.2	3.6	4.2	1.9	2.2	1.9
5	9.2	2.6	2.9	3.3	e3.2	3.1	2.3	3.5	3.9	1.8	2.4	1.9
6	8.8	2.6	2.7	3.4	3.2	3.3	2.4	50	3.5	1.8	2.4	1.9
7	8.7	2.6	2.7	3.3	3.2	3.1	2.6	12	3.2	2.2	2.4	1.8
8	8.8	2.5	2.7	3.2	3.2	e3.3	2.7	4.1	3.0	1.7	2.2	1.8
9	9.3	2.5	2.7	3.3	3.6	e3.4	2.6	3.5	3.1	1.5	2.4	1.9
10	9.9	2.9	2.7	3.6	4.2	3.1	2.6	3.5	3.0	1.6	2.5	1.9
11	9.2	2.8	2.8	3.6	3.4	3.1	2.7	36	3.0	1.8	2.5	2.1
12	8.9	2.7	2.8	3.5	3.4	3.4	2.7	12	2.9	2.0	2.6	2.2
13	11	2.8	2.8	3.6	3.4	3.8	2.6	5.5	3.0	1.7	2.7	2.8
14	9.6	2.9	2.7	3.7	3.4	3.8	2.6	4.5	2.8	1.5	2.6	7.9
15	8.9	2.7	2.9	3.6	3.5	3.4	2.6	4.5	2.7	1.3	2.6	3.4
16	3.3	2.7	2.8	3.6	3.6	3.2	2.6	4.6	2.6	1.3	2.8	2.9
17	2.6	2.7	2.7	e4.4	3.6	3.1	2.7	4.3	2.6	1.1	3.6	2.7
18	2.6	2.7	2.8	e4.3	3.7	3.1	2.6	4.3	2.5	1.1	3.4	2.7
19	2.7	2.6	2.8	3.5	3.7	3.2	2.5	4.2	2.4	1.1	3.2	2.9
20	2.7	2.6	2.9	3.5	3.6	3.1	2.8	4.4	2.3	1.0	3.7	2.8
21	2.8	2.6	2.9	3.5	3.3	2.9	3.3	4.4	2.3	1.1	3.8	2.9
22	2.7	2.6	3.0	3.6	3.1	2.9	2.9	4.7	2.2	1.3	477	2.8
23	3.1	3.4	3.0	3.6	3.1	3.0	2.8	5.3	2.2	1.5	13	3.0
24	2.9	7.2	3.0	3.9	3.0	3.1	2.5	7.0	2.0	1.4	5.1	3.0
25	2.7	5.0	e3.0	3.4	3.1	3.1	3.5	17	2.0	1.4	3.8	3.0
26	2.6	3.2	e2.9	3.5	e2.6	3.1	4.2	8.6	2.0	1.8	2.4	3.3
27	2.8	2.8	e2.8	3.5	e2.6	3.3	8.7	9.3	2.1	2.1	2.1	3.4
28	2.6	2.6	e2.8	3.4	2.8	3.7	8.5	13	2.1	1.9	2.1	3.4
29	2.6	2.6	e2.7	3.4	---	3.7	5.7	6.2	2.1	1.7	2.0	3.3
30	2.8	2.6	e2.8	e3.1	---	3.2	4.4	5.0	2.0	1.8	1.9	3.3
31	2.8	---	e2.8	e2.9	---	2.9	---	4.5	---	1.8	1.9	---
TOTAL	181.4	88.0	86.8	107.4	91.1	98.9	98.2	261.3	84.6	50.0	567.1	82.5
MEAN	5.852	2.933	2.800	3.465	3.254	3.190	3.273	8.429	2.820	1.613	18.29	2.750
MAX	11	7.2	3.0	4.4	4.2	3.8	8.7	50	4.4	2.2	477	7.9
MIN	2.6	2.5	2.6	2.9	2.6	2.3	2.1	3.5	2.0	1.0	1.9	1.7
AC-FT	360	175	172	213	181	196	195	518	168	99	1120	164

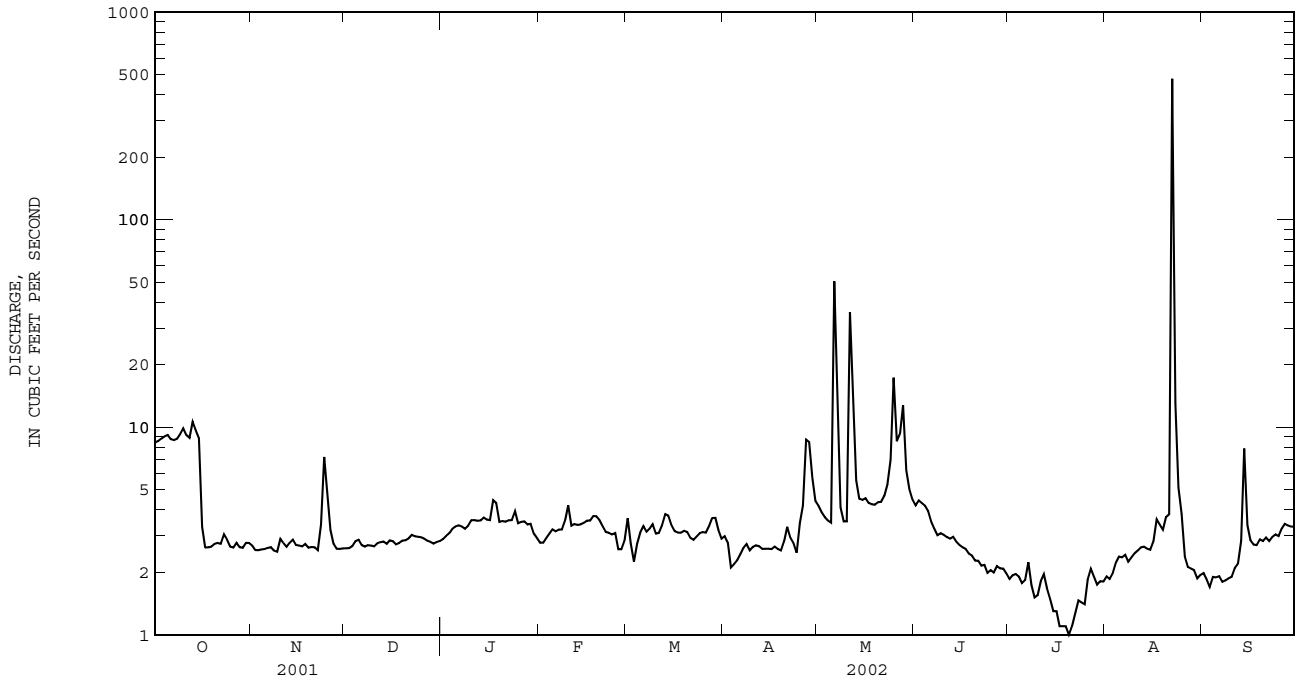
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2002, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
MEAN	6.858	8.073	6.856	6.619	8.742	11.35	14.74	60.24	51.48	16.81	8.806	7.433
MAX	13.0	17.7	19.8	9.86	14.3	23.1	37.4	136	151	56.7	18.3	16.4
(WY)	1997	1999	1998	2000	1998	1998	1998	1995	1998	1999	2002	1996
MIN	2.60	2.45	2.51	2.45	3.25	3.19	1.98	4.50	2.82	1.61	2.35	2.23
(WY)	2001	2001	2001	2001	2002	2002	1996	2000	2002	2002	2000	2000

06803170 MIDDLE CREEK AT SW 40th ST. AT LINCOLN, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1994 - 2002	
ANNUAL TOTAL	5376.3		1797.3			
ANNUAL MEAN	14.73		4.924		17.36	
HIGHEST ANNUAL MEAN					32.6	1998
LOWEST ANNUAL MEAN					4.92	2002
HIGHEST DAILY MEAN	1240	Jun 14	477	Aug 22	1840	Jun 14 1998
LOWEST DAILY MEAN	1.9	Feb 18	1.0	Jul 20	0.92	Aug 29 1995
ANNUAL SEVEN-DAY MINIMUM	2.1	Feb 16	1.1	Jul 15	1.1	Jul 15 2002
MAXIMUM PEAK FLOW			1800 Aug 22		4030	Jun 14 1998
MAXIMUM PEAK STAGE			10.69 Aug 22		16.25	Jun 14 1998
ANNUAL RUNOFF (AC-FT)	10660		3560		12580	
10 PERCENT EXCEEDS	21		5.0		30	
50 PERCENT EXCEEDS	3.8		2.9		6.0	
90 PERCENT EXCEEDS	2.5		1.9		2.6	

e Estimated.



PLATTE RIVER BASIN

06803486 OAK CREEK AT AIR PARK ROAD AT LINCOLN, NE

LOCATION.--Lat 40°51'20", long 096°46'46", in NE $\frac{1}{4}$ NE $\frac{1}{4}$, sec.7, T.10 N., R.6 E., Lancaster County, Hydrologic Unit 10200203, on left bank at downstream of bridge on Air Park Road immediately west of NW 42nd Street in West Lincoln Industrial Park.

DRAINAGE AREA.--240 mi².

PERIOD OF RECORD.--October 1999 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,142.86 ft above sea level. Nebraska Department of Natural Resources operated gage May 1987 to March 25, 1999 at present site and March 26, 1999 to March 14, 2000 at temporary site 1.0 mi downstream, both at same datum. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 8,730 ft³/s, July 24, 1993, gage height 22.66 ft; minimum daily discharge, 2.6 ft³/s July 24, 1990, during period of gage operation by Nebraska Department of Natural Resources.

DISCHARGE PUBLISHED, FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	64	64	e7.6	e11	e12	16	14	19	7.1	6.3	10
2	9.9	63	64	e9.3	e5.2	e9.0	16	13	18	7.5	5.8	9.3
3	10	61	64	e10	e6.9	e10	17	13	16	7.1	5.0	9.9
4	10	61	66	e12	e14	e16	17	12	16	6.8	5.6	8.1
5	11	64	66	e13	e11	e18	16	12	17	5.9	6.7	7.9
6	12	70	63	e16	e13	18	16	43	17	6.3	5.1	8.1
7	12	70	63	e21	e15	17	16	46	15	10	5.7	8.0
8	12	70	62	18	16	20	17	19	14	7.2	6.5	7.5
9	14	69	61	18	17	29	16	15	15	6.0	5.9	7.7
10	17	69	61	20	26	21	15	14	15	6.2	7.1	7.2
11	23	69	72	e18	20	16	15	76	15	7.7	7.5	7.2
12	19	69	71	19	17	17	15	122	21	9.2	8.3	7.2
13	21	69	94	18	22	18	14	40	45	9.0	8.4	12
14	18	66	94	18	16	19	14	30	40	7.7	8.1	16
15	16	64	92	e17	16	18	14	24	19	7.8	7.9	11
16	66	65	91	e16	16	16	15	24	16	8.6	9.3	9.0
17	76	64	91	e16	16	16	16	22	15	8.1	11	7.6
18	75	61	38	e18	18	16	16	21	14	6.8	6.9	7.2
19	75	62	23	e18	17	16	14	20	13	6.3	5.2	6.8
20	74	62	20	18	17	16	14	20	13	6.4	48	6.8
21	74	65	20	17	16	16	15	20	11	5.4	25	6.2
22	76	64	21	16	15	15	15	20	11	8.3	1000	5.9
23	75	64	20	15	15	16	15	25	13	13	219	6.0
24	72	81	e18	18	15	16	14	25	11	15	52	5.8
25	72	83	e16	16	14	17	14	33	9.9	12	23	6.1
26	71	72	e12	14	16	19	14	28	11	10	18	6.3
27	70	66	e12	14	16	20	25	34	10	9.6	16	6.2
28	71	63	e12	10	16	19	20	43	11	8.5	54	7.4
29	71	63	e9.8	14	---	18	18	32	9.1	6.7	87	7.3
30	69	65	e5.9	17	---	17	16	25	8.2	6.9	17	7.2
31	67	---	e6.4	e14	---	16	---	21	---	6.4	12	---
TOTAL	1368.5	1998	1473.1	485.9	433.1	527.0	475	906	478.2	249.5	1703.3	238.9
MEAN	44.15	66.60	47.52	15.67	15.47	17.00	15.83	29.23	15.94	8.048	54.95	7.963
MAX	76	83	94	21	26	29	25	122	45	15	1000	16
MIN	9.6	61	5.9	7.6	5.2	9.0	14	12	8.2	5.4	5.0	5.8
AC-FT	2710	3960	2920	964	859	1050	942	1800	949	495	3380	474

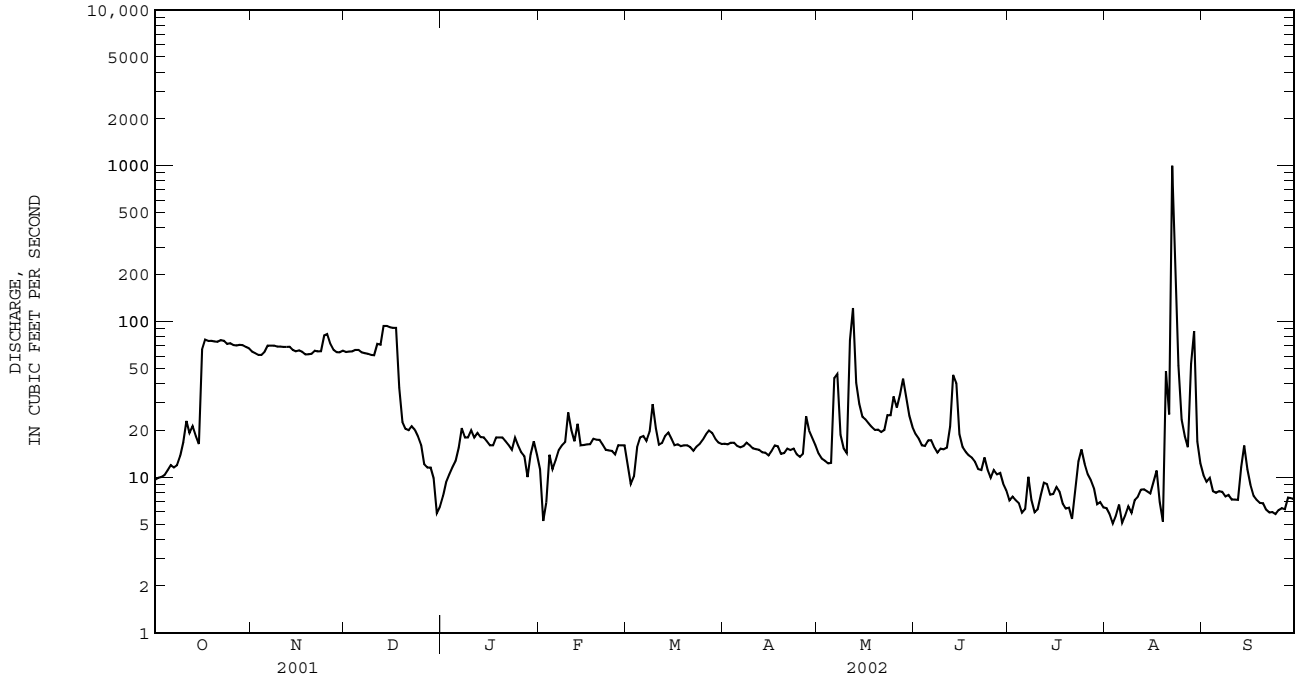
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2002, BY WATER YEAR (WY)

	2000	2001	2002	2000	2001	2002	2000	2001	2002	2000	2001	2002
MEAN	34.40	50.71	28.68	27.25	32.25	28.10	23.21	45.08	58.08	19.55	27.10	9.686
MAX	48.3	71.6	47.5	43.1	59.8	45.1	29.9	83.0	125	26.5	54.9	13.8
(WY)	2000	2000	2002	2000	2001	2001	2001	2001	2001	2000	2002	2001
MIN	10.7	13.9	11.6	15.7	15.5	17.0	15.8	23.0	15.9	8.05	12.1	7.27
(WY)	2001	2001	2001	2002	2002	2002	2002	2000	2002	2002	2001	2000

06803486 OAK CREEK AT AIR PARK ROAD AT LINCOLN, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 2000 - 2002	
ANNUAL TOTAL	17364.9		10336.5			
ANNUAL MEAN	47.58		28.32		31.97	
HIGHEST ANNUAL MEAN					37.4	2001
LOWEST ANNUAL MEAN					28.3	2002
HIGHEST DAILY MEAN	978	Jun 14	1000	Aug 22	1000	Aug 22 2002
LOWEST DAILY MEAN	5.9	Dec 30	5.0	Aug 3	3.3	Oct 1 2000
ANNUAL SEVEN-DAY MINIMUM	9.0	Aug 6	5.7	Aug 1	4.7	Sep 29 2000
MAXIMUM PEAK FLOW			3290		1870	Jun 14 2001
MAXIMUM PEAK STAGE			12.95		9.21	Jun 14 2001
ANNUAL RUNOFF (AC-FT)	34440		20500		23160	
10 PERCENT EXCEEDS	81		69		69	
50 PERCENT EXCEEDS	30		16		20	
90 PERCENT EXCEEDS	11		7.0		8.3	

e Estimated.



PLATTE RIVER BASIN

06803500 SALT CREEK AT LINCOLN, NE

LOCATION.--Lat 40°50'49", long 096°40'54", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.7, T.10 N., R.7 E., Lancaster County, Hydrologic Unit 10200203
on right bank 135 ft downstream from bridge on North 27th Street at north edge of Lincoln, 1 mi downstream from Oak Creek and
at mile 31.0.

DRAINAGE AREA.--685 mi².

PERIOD OF RECORD.--October 1949 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 1,113.90 ft above sea level. Prior to July 27, 1979, water-stage recorder for
stages above 6.2 ft on downstream side of bridge pier, 135 ft upstream at same datum, and nonrecording gage read twice daily.
Data collection platform at station.

REMARKS.--Records good, except for estimated daily discharge (May 28), which is poor. Flood flow affected by several detention
dams.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	159	147	69	84	64	68	110	198	48	52	89
2	100	160	146	69	89	60	68	102	165	47	44	77
3	98	157	145	69	89	70	63	88	145	46	40	73
4	125	156	147	71	85	78	64	82	131	41	48	84
5	126	155	148	79	82	84	62	77	118	34	55	79
6	104	155	149	82	85	88	61	817	111	29	56	78
7	98	152	146	85	96	87	61	729	104	159	54	76
8	97	150	143	91	106	84	87	251	95	228	49	73
9	111	146	140	97	128	85	73	173	90	169	41	74
10	156	146	143	104	125	88	68	133	87	119	39	74
11	113	144	147	100	115	98	91	742	92	105	34	72
12	98	144	153	107	115	86	70	795	94	88	33	75
13	206	145	169	108	100	92	62	294	101	76	58	166
14	116	148	186	109	104	90	61	201	122	65	56	379
15	102	148	193	98	101	84	65	154	107	60	46	115
16	107	145	195	100	101	77	75	136	85	62	42	95
17	151	142	194	92	98	71	91	123	80	66	70	88
18	151	138	164	93	105	70	61	108	82	67	59	84
19	154	137	101	101	103	75	60	98	80	63	41	82
20	154	137	90	99	101	67	123	91	77	57	105	79
21	155	138	88	99	94	65	181	85	77	52	135	77
22	157	136	93	105	87	61	115	84	74	53	1610	70
23	164	139	89	102	81	63	109	178	70	55	998	73
24	171	315	76	93	80	67	125	124	71	60	450	67
25	154	280	76	98	78	103	104	213	70	64	223	59
26	153	201	82	103	64	99	102	202	65	73	138	56
27	156	168	85	101	65	100	421	200	60	79	117	55
28	155	152	82	92	75	96	196	e1790	60	66	283	61
29	157	149	79	89	---	90	160	983	54	61	682	64
30	156	148	81	82	---	77	128	416	49	60	259	64
31	160	---	76	74	---	70	---	266	---	55	118	---
TOTAL	4205	4790	3953	2861	2636	2489	3075	9845	2814	2307	6035	2658
MEAN	135.6	159.7	127.5	92.29	94.14	80.29	102.5	317.6	93.80	74.42	194.7	88.60
MAX	206	315	195	109	128	103	421	1790	198	228	1610	379
MIN	97	136	76	69	64	60	60	77	49	29	33	55
AC-FT	8340	9500	7840	5670	5230	4940	6100	19530	5580	4580	11970	5270

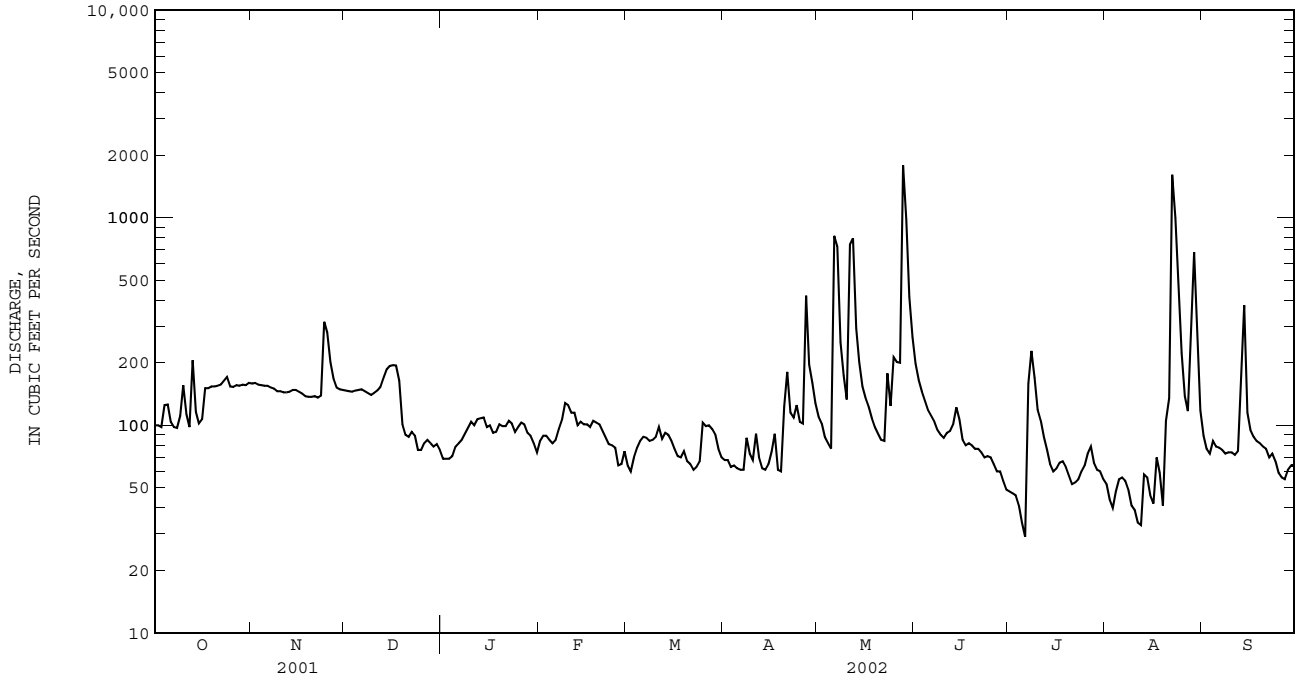
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2002, BY WATER YEAR (WY)

MEAN	171.1	117.7	97.06	104.9	169.8	327.7	278.2	408.6	496.3	334.0	185.1	172.8
MAX	1621	442	349	350	577	1972	1383	1693	3061	3205	704	1075
(WY)	1974	1999	1987	1974	1958	1987	1987	1996	1951	1993	1987	1989
MIN	35.2	36.3	30.6	33.6	39.9	45.5	52.6	49.9	58.8	48.8	44.6	47.0
(WY)	1956	1956	1957	1957	1957	1957	1956	1955	1958	1955	1955	1953

06803500 SALT CREEK AT LINCOLN, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1950 - 2002	
ANNUAL TOTAL	88538		47668		238.8	
ANNUAL MEAN	242.6		130.6		721	
HIGHEST ANNUAL MEAN					1987	
LOWEST ANNUAL MEAN					81.4	
HIGHEST DAILY MEAN	5490	May 5	1790	May 28	22100	Jun 2 1951
LOWEST DAILY MEAN	48	Feb 2	29	Jul 6	21	Jul 10 1977
ANNUAL SEVEN-DAY MINIMUM	56	Feb 15	42	Jun 30	26	May 19 1956
MAXIMUM PEAK FLOW			2850		28400	
MAXIMUM PEAK STAGE			8.03		26.52	
ANNUAL RUNOFF (AC-FT)	175600		94550		173000	
10 PERCENT EXCEEDS	443		175		394	
50 PERCENT EXCEEDS	134		95		98	
90 PERCENT EXCEEDS	75		60		52	

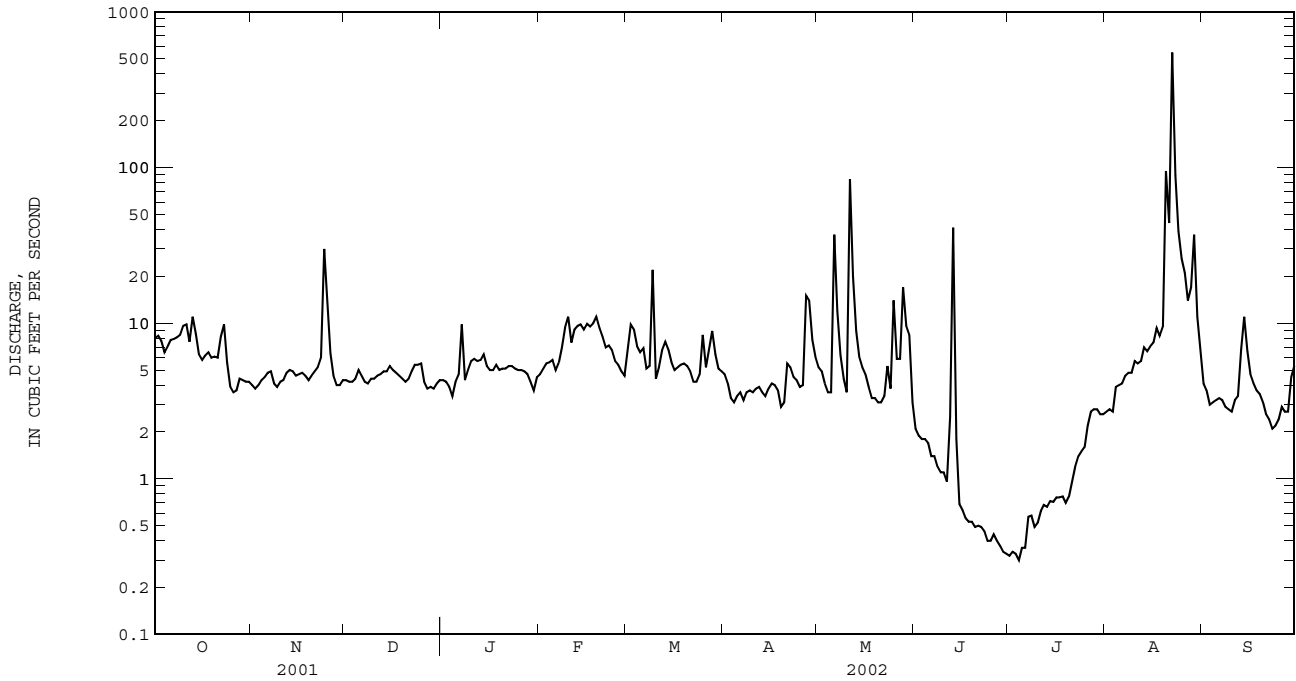
e Estimated.



06803510 LITTLE SALT CREEK NEAR LINCOLN, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1969 - 2002	
ANNUAL TOTAL	3274.2		2813.69		14.92	
ANNUAL MEAN	8.970		7.709		51.7	
HIGHEST ANNUAL MEAN					1993	
LOWEST ANNUAL MEAN					3.59	
HIGHEST DAILY MEAN	288	May 5	547	Aug 22	5020	Jul 24 1993
LOWEST DAILY MEAN	1.2	May 18	0.30	Jul 4	0.20	Sep 29 1969
ANNUAL SEVEN-DAY MINIMUM	1.7	May 13	0.33	Jun 29	0.28	Sep 28 1969
MAXIMUM PEAK FLOW			1970		8480	
MAXIMUM PEAK STAGE			14.03		20.58	
ANNUAL RUNOFF (AC-FT)	6490		5580		10810	
10 PERCENT EXCEEDS	11		9.6		18	
50 PERCENT EXCEEDS	4.3		4.6		5.6	
90 PERCENT EXCEEDS	2.2		0.88		2.3	

e Estimated.



PLATTE RIVER BASIN

06803513 SALT CREEK AT 70th STREET AT LINCOLN, NE

LOCATION.--Lat 40°53'10", long 096°37'26", in SW ¼ SW ¼ sec. 27, T.11 N., R.7 W., Lancaster County, Hydrologic Unit 10200203, on left bank downstream from bridge.

DRAINAGE AREA.--753 mi².

PERIOD OF RECORD.--August 1994 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,095.85 ft above sea level. Data collection platform at station.

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

DISCHARGE PUBLISHED, FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

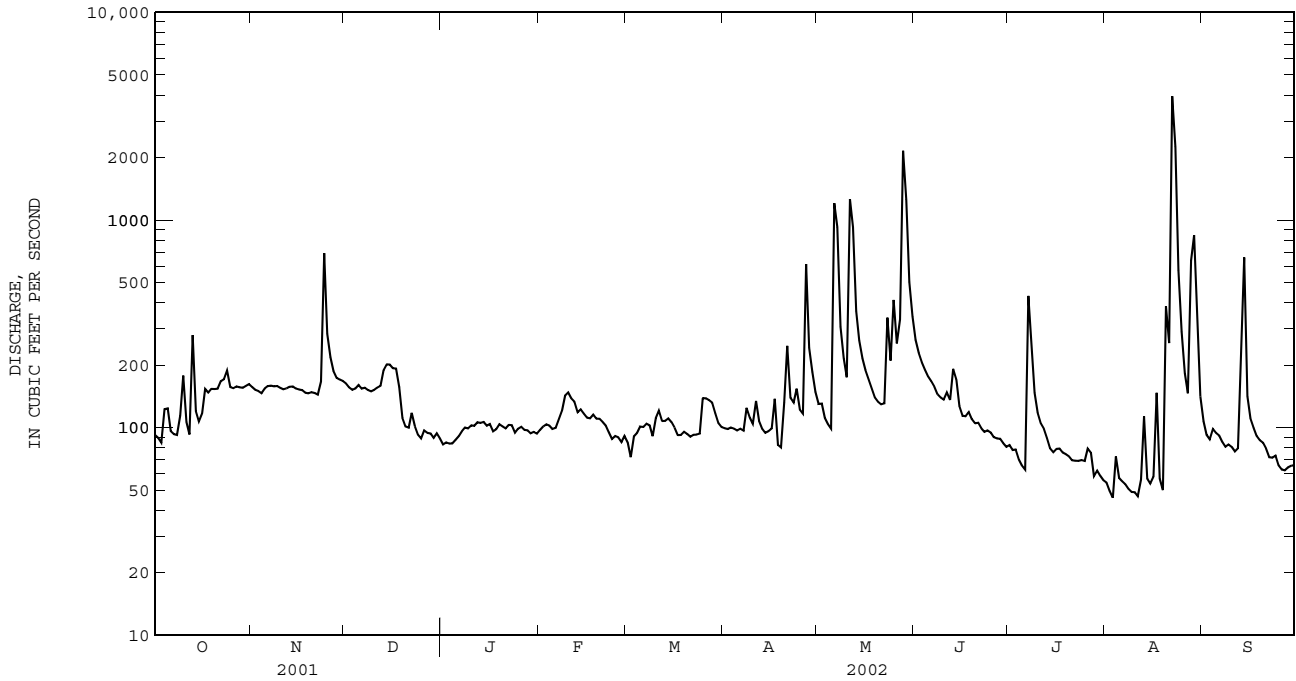
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	157	163	83	97	85	99	130	265	82	54	107
2	89	152	156	85	101	72	98	131	229	78	50	92
3	85	150	152	84	104	91	100	111	206	78	46	88
4	123	147	154	84	102	94	99	104	190	70	72	98
5	124	154	160	87	98	101	97	99	176	66	57	94
6	96	158	154	91	100	101	99	1210	167	63	55	92
7	93	159	155	96	109	104	97	924	157	431	53	85
8	92	158	152	100	120	103	124	306	145	272	51	81
9	114	159	149	99	143	91	112	216	140	147	49	83
10	178	155	152	103	148	111	104	175	136	118	49	81
11	107	153	156	102	138	121	134	1260	148	105	47	77
12	93	155	159	106	133	108	108	925	136	99	56	80
13	279	157	189	105	119	108	99	364	192	89	113	234
14	120	158	202	106	122	111	94	263	171	79	57	660
15	107	154	201	102	117	106	96	216	127	76	54	142
16	117	152	193	104	112	100	99	189	114	79	58	111
17	154	151	193	96	111	92	138	171	113	79	147	100
18	147	147	156	98	116	92	83	155	119	76	57	91
19	154	146	111	104	110	96	80	140	110	75	50	87
20	153	148	101	101	110	93	132	133	105	73	384	84
21	154	147	100	99	107	90	248	129	105	70	255	79
22	167	144	118	103	102	92	139	131	99	69	3950	72
23	171	167	101	103	95	93	132	339	95	69	2250	72
24	188	692	92	95	88	94	154	210	97	70	573	73
25	157	283	89	99	91	139	122	412	95	69	290	66
26	155	218	97	101	90	138	117	254	90	79	183	63
27	158	187	94	98	85	136	614	332	89	76	146	62
28	156	174	94	97	91	132	242	2160	88	58	638	64
29	156	170	89	94	---	117	185	1250	84	62	845	65
30	159	168	94	95	---	105	149	503	81	59	280	66
31	162	---	89	94	---	101	---	343	---	56	141	---
TOTAL	4300	5420	4265	3014	3059	3217	4194	13285	4069	2972	11110	3249
MEAN	138.7	180.7	137.6	97.23	109.2	103.8	139.8	428.5	135.6	95.87	358.4	108.3
MAX	279	692	202	106	148	139	614	2160	265	431	3950	660
MIN	85	144	89	83	85	72	80	99	81	56	46	62
AC-FT	8530	10750	8460	5980	6070	6380	8320	26350	8070	5890	22040	6440

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2002, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
MEAN	147.0	216.3	137.3	134.3	180.4	219.4	302.0	801.3	585.3	302.5	202.3	153.1
MAX	307	471	220	162	327	455	621	1644	1199	628	367	279
(WY)	1999	1999	1998	1998	1998	1998	1998	1995	1998	1999	1996	1996
MIN	96.4	99.3	71.1	96.7	97.7	104	126	122	136	95.9	101	82.1
(WY)	1996	1996	2001	2001	2001	2002	2000	2000	2002	2002	2001	2000

06803513 SALT CREEK AT 70th STREET AT LINCOLN, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1994 - 2002	
ANNUAL TOTAL	103165		62154		281.9	
ANNUAL MEAN	282.6		170.3		400	
HIGHEST ANNUAL MEAN					1998	
LOWEST ANNUAL MEAN					137	
HIGHEST DAILY MEAN	5140	May 5	3950	Aug 22	10200	Jun 14 1998
LOWEST DAILY MEAN	49	Sep 5	46	Aug 3	46	Aug 3 2002
ANNUAL SEVEN-DAY MINIMUM	55	Aug 31	51	Aug 6	51	Aug 6 2002
MAXIMUM PEAK FLOW			6920		15800	
MAXIMUM PEAK STAGE			15.54		23.65	
ANNUAL RUNOFF (AC-FT)	204600		123300		204200	
10 PERCENT EXCEEDS	518		222		487	
50 PERCENT EXCEEDS	155		107		152	
90 PERCENT EXCEEDS	81		72		89	



PLATTE RIVER BASIN

06803520 STEVENS CREEK NEAR LINCOLN, NE

LOCATION.--Lat 40°51'25", long 096°35'42", in NW ¼ NE ¼ sec.11, T.10 N., R.7 E., Lancaster County, Hydrologic Unit 10200203, on left bank 10 ft upstream, 20 ft west from county road bridge on Havelock Avenue, 1.6 mi east of 70th Street at east edge of Lincoln, and at mile 3.2.

DRAINAGE AREA.--47.8 mi².

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,123.57 ft above sea level. Oct. 1968 to Aug. 14, 1997 at present site and datum 2.0 ft higher. Data collection platform at station.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	1.9	2.9	e1.4	2.4	2.1	2.1	3.9	7.2	0.90	0.93	3.2
2	1.8	2.5	3.0	e1.4	2.6	2.0	1.9	3.8	6.0	0.80	0.79	1.9
3	1.4	1.8	3.0	e1.5	2.6	2.1	1.9	3.4	5.3	0.86	0.86	1.4
4	1.7	1.5	3.2	e1.7	2.4	2.5	1.8	2.9	4.5	0.87	0.90	1.1
5	2.4	1.7	4.1	e1.9	e2.3	3.7	2.0	2.7	4.4	0.87	1.0	1.1
6	2.6	1.9	3.5	e2.2	e2.3	4.4	2.1	86	4.3	0.84	0.93	0.94
7	1.9	1.9	3.4	2.3	e3.0	4.0	2.0	16	3.5	1.0	0.92	0.82
8	1.7	1.6	3.0	2.8	3.7	3.2	2.9	7.1	2.9	0.93	0.81	0.75
9	2.5	1.6	2.8	3.1	4.3	3.3	2.6	4.8	2.4	0.84	0.72	0.75
10	3.4	1.7	2.7	3.3	4.6	3.0	2.6	3.9	2.5	0.79	0.66	0.68
11	2.1	1.5	2.9	3.3	4.8	3.3	3.4	230	2.7	0.76	0.72	0.60
12	1.7	1.6	3.0	3.4	4.0	2.9	3.2	40	2.5	0.82	0.93	0.61
13	6.6	1.8	2.7	3.5	3.9	4.1	2.8	16	2.4	0.79	1.2	1.6
14	4.0	2.0	2.9	3.5	3.9	3.4	2.7	8.5	1.9	0.80	0.93	8.3
15	2.0	2.0	3.0	4.2	3.7	2.9	2.8	6.5	2.1	0.75	0.88	1.2
16	2.0	2.0	2.6	3.2	3.5	2.4	3.1	5.9	1.8	0.81	0.89	0.90
17	1.6	2.0	2.7	3.0	3.7	2.1	4.5	5.1	1.7	0.70	1.5	0.80
18	1.6	2.0	2.8	2.9	3.8	2.5	2.5	5.0	1.6	0.61	0.86	0.81
19	1.7	2.2	2.9	3.1	4.3	2.4	2.0	4.5	1.5	0.61	0.89	0.80
20	1.7	2.3	2.9	3.2	3.7	2.7	2.2	4.2	1.2	0.53	6.7	0.95
21	1.5	2.4	2.9	3.3	3.3	2.1	4.8	4.0	1.1	0.52	5.6	0.65
22	1.7	3.2	3.5	3.4	3.2	1.8	5.1	4.1	1.1	0.43	37	0.59
23	2.1	3.4	3.6	3.3	3.0	2.6	3.6	9.0	1.1	0.43	173	0.59
24	2.4	18	3.0	3.0	3.1	2.5	3.3	7.3	1.1	0.32	17	0.60
25	2.0	13	2.4	3.5	2.3	3.2	2.7	17	0.99	0.70	8.2	0.58
26	1.6	5.1	2.3	3.7	2.6	3.0	2.6	8.7	0.95	0.94	6.5	0.57
27	1.5	3.2	e2.1	3.7	1.3	3.8	21	11	0.94	1.0	3.3	0.60
28	1.7	2.7	e1.9	3.8	1.7	4.6	13	162	0.94	1.0	70	0.61
29	1.8	2.6	e1.7	3.2	---	3.8	6.0	28	0.93	0.95	118	0.66
30	2.2	2.8	e1.6	2.5	---	2.8	4.5	14	0.93	1.0	10	0.63
31	1.9	---	e1.5	2.2	---	2.4	---	10	---	0.91	5.4	---
TOTAL	66.7	93.9	86.5	90.5	90.0	91.6	117.7	735.3	72.48	24.08	478.02	35.29
MEAN	2.152	3.130	2.790	2.919	3.214	2.955	3.923	23.72	2.416	0.777	15.42	1.176
MAX	6.6	18	4.1	4.2	4.8	4.6	21	230	7.2	1.0	173	8.3
MIN	1.4	1.5	1.5	1.4	1.3	1.8	1.8	2.7	0.93	0.32	0.66	0.57
AC-FT	132	186	172	180	179	182	233	1460	144	48	948	70

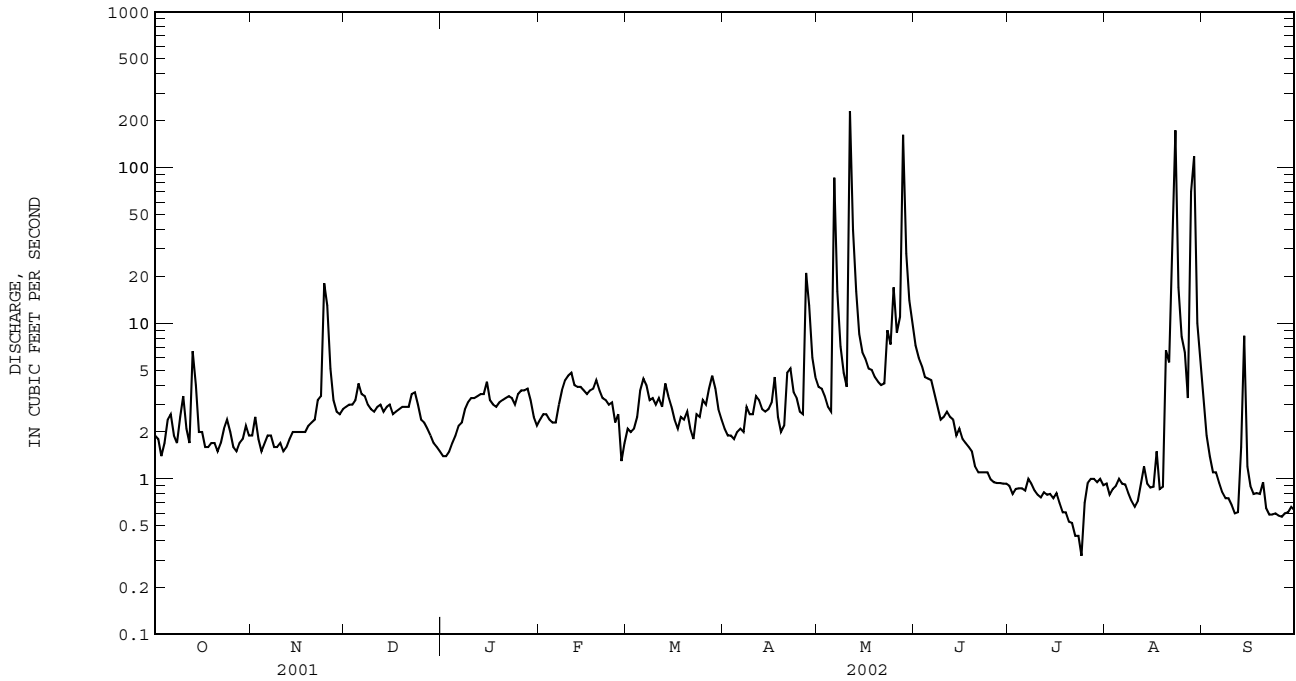
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2002, BY WATER YEAR (WY)

	MEAN	13.12	6.827	6.250	7.004	12.97	30.17	25.17	39.04	31.32	30.97	11.56	15.74
MAX	151	29.9	30.7	34.9	59.9	192	118	239	228	402	89.6	260	
(WY)	1974	1997	1987	1974	1983	1979	1987	1995	1984	1993	1982	1989	
MIN	0.28	0.57	0.64	0.83	1.13	1.33	1.28	1.29	0.41	0.27	0.066	0.13	
(WY)	1977	1977	1977	1982	1978	1981	1981	1981	1981	1976	1976	1976	

06803520 STEVENS CREEK NEAR LINCOLN, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1969 - 2002	
ANNUAL TOTAL	5317.92		1982.07		19.22	
ANNUAL MEAN	14.57		5.430		69.3	
HIGHEST ANNUAL MEAN					1993	
LOWEST ANNUAL MEAN					1976	
HIGHEST DAILY MEAN	936	May 5	230	May 11	4810	Sep 8 1989
LOWEST DAILY MEAN	0.89	Aug 12	0.32	Jul 24	0.00	Jul 31 1977
ANNUAL SEVEN-DAY MINIMUM	1.0	Aug 17	0.49	Jul 18	0.00	Jul 29 1977
MAXIMUM PEAK FLOW			741	May 11	*12900	Sep 8 1989
MAXIMUM PEAK STAGE			8.66	May 11	19.57	Jun 13 1984
ANNUAL RUNOFF (AC-FT)	10550		3930		13920	
10 PERCENT EXCEEDS	26		5.7		24	
50 PERCENT EXCEEDS	3.5		2.4		4.0	
90 PERCENT EXCEEDS	1.5		0.81		0.88	

e Estimated.
 * Stage 19.42 ft.



PLATTE RIVER BASIN

06803530 ROCK CREEK NEAR CERESCO, NE

LOCATION.--Lat 41°00'56", long 096°32'39", in NE ¼ NE ¼ sec.17, T.12 N., R.8 E., Lancaster County, Hydrologic Unit 10200203, on right bank 20 ft downstream from bridge on east-west county road, 5.7 mi southeast of Ceresco, and at mile 7.6.

DRAINAGE AREA.--120 mi².

PERIOD OF RECORD.--April 1970 to current year.

REVISED RECORDS.--WDR NE-76-1: 1975(M). WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,109.18 ft above sea level. Apr. 1970 to Feb. 6, 1980 at present site and datum 6.0 ft higher; Feb 7, 1980 to July 13, 1981 at present site and datum 3.0 ft higher; July 14, 1981 to Feb. 29, 1984 on left bank 30 ft downstream from bridge at datum 3.0 ft higher; Mar. 1, 1984 to May 28, 1984 wire weight gage only, at datum 3.0 ft higher; May 28, 1984 to Apr. 4, 1997 at datum 3.0 ft higher. Data collection platform at station.

REMARKS.--Record good except for estimated daily discharges, which are poor.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.9	7.4	10	e10	e9.8	e9.8	13	15	16	7.0	3.8	5.7
2	6.1	7.0	10	e10	e9.9	e10	13	16	16	7.0	4.0	5.3
3	5.6	7.4	10	10	e10	e11	12	15	15	6.8	4.1	5.0
4	4.9	7.7	10	10	e10	e11	12	14	15	6.6	4.0	5.0
5	5.2	8.3	11	11	e10	e12	13	14	15	6.4	4.0	4.9
6	5.3	9.4	11	12	e11	e12	12	31	14	7.4	4.1	5.0
7	5.7	9.7	11	11	12	e11	13	23	14	11	3.7	5.0
8	5.9	8.5	10	12	12	e11	13	17	14	7.5	3.6	4.8
9	6.1	8.3	10	12	12	e13	13	16	13	6.6	3.3	4.8
10	8.3	9.0	11	12	12	e11	13	15	13	6.4	3.4	4.9
11	8.3	9.3	11	12	12	12	13	70	18	6.2	3.5	5.1
12	5.8	9.2	11	12	12	13	13	43	26	6.1	3.6	5.1
13	7.2	9.4	11	12	13	15	13	23	70	5.9	4.4	5.7
14	6.6	9.7	11	12	13	14	13	19	22	5.6	4.3	7.3
15	5.2	9.7	11	e11	13	13	13	18	16	5.3	4.0	6.5
16	5.3	9.7	11	10	14	12	13	17	15	5.1	4.1	5.6
17	5.6	9.5	11	10	14	12	13	16	14	4.9	4.0	5.5
18	5.8	9.4	11	10	14	12	13	16	13	4.5	3.9	5.3
19	5.6	9.3	11	11	14	13	12	16	12	4.4	3.9	5.2
20	5.9	9.3	11	11	14	12	12	16	12	4.3	4.8	5.2
21	6.3	9.7	10	11	12	12	14	16	11	4.1	4.6	5.4
22	6.7	9.9	11	11	12	12	14	16	11	4.3	19	5.3
23	9.3	10	11	10	12	12	13	17	10	4.7	193	5.2
24	6.6	18	10	10	12	12	13	16	10	4.6	15	5.3
25	5.5	21	10	11	11	12	12	22	9.5	4.6	6.6	5.5
26	5.2	13	10	11	e10	13	12	19	8.5	4.6	5.6	5.6
27	5.3	11	11	e10	e11	14	19	19	8.1	4.9	5.0	5.8
28	6.6	10	11	e9.8	e11	16	24	24	7.7	4.7	5.8	5.8
29	6.4	10	10	e9.3	---	15	18	23	7.2	4.3	100	6.4
30	6.9	11	10	e9.5	---	14	16	18	7.3	4.2	9.4	6.5
31	7.5	---	10	e9.6	---	13	---	17	---	3.9	6.7	---
TOTAL	192.6	300.8	328	333.2	332.7	384.8	410	637	453.3	173.9	449.2	163.7
MEAN	6.213	10.03	10.58	10.75	11.88	12.41	13.67	20.55	15.11	5.610	14.49	5.457
MAX	9.3	21	11	12	14	16	24	70	70	11	193	7.3
MIN	4.9	7.0	10	9.3	9.8	9.8	12	14	7.2	3.9	3.3	4.8
AC-FT	382	597	651	661	660	763	813	1260	899	345	891	325

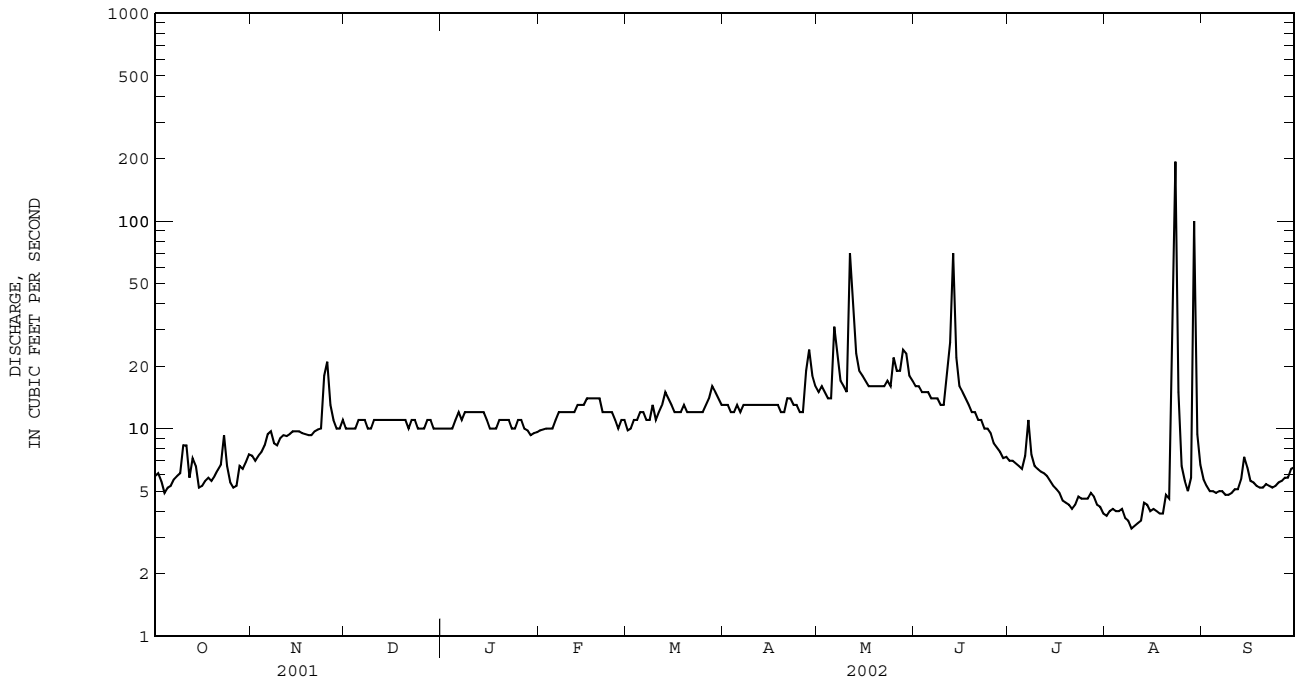
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2002, BY WATER YEAR (WY)

	MEAN	MAX	MIN	(WY)
MEAN	22.07	16.41	14.40	15.23
MAX	191	45.5	44.8	63.3
(WY)	1987	1978	1985	1973
MIN	3.85	5.23	5.26	3.93
(WY)	1977	1977	1977	1977

06803530 ROCK CREEK NEAR CERESCO, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1971 - 2002	
ANNUAL TOTAL	9613.8	4159.2	37.64	
ANNUAL MEAN	26.34	11.40	123	1987
HIGHEST ANNUAL MEAN			8.68	1976
LOWEST ANNUAL MEAN			11400	Aug 25 1987
HIGHEST DAILY MEAN	694 May 31	193 Aug 23	0.25	Jul 13 1976
LOWEST DAILY MEAN	4.8 Sep 24	3.3 Aug 9	1.1	Jul 11 1976
ANNUAL SEVEN-DAY MINIMUM	5.2 Sep 21	3.6 Aug 6	*23300	Aug 25 1987
MAXIMUM PEAK FLOW		639 Aug 23	20.50	May 22 1998
MAXIMUM PEAK STAGE		8.24 Aug 23	27270	
ANNUAL RUNOFF (AC-FT)	19070	8250		
10 PERCENT EXCEEDS	52	16	45	
50 PERCENT EXCEEDS	11	10	13	
90 PERCENT EXCEEDS	5.9	4.9	5.9	

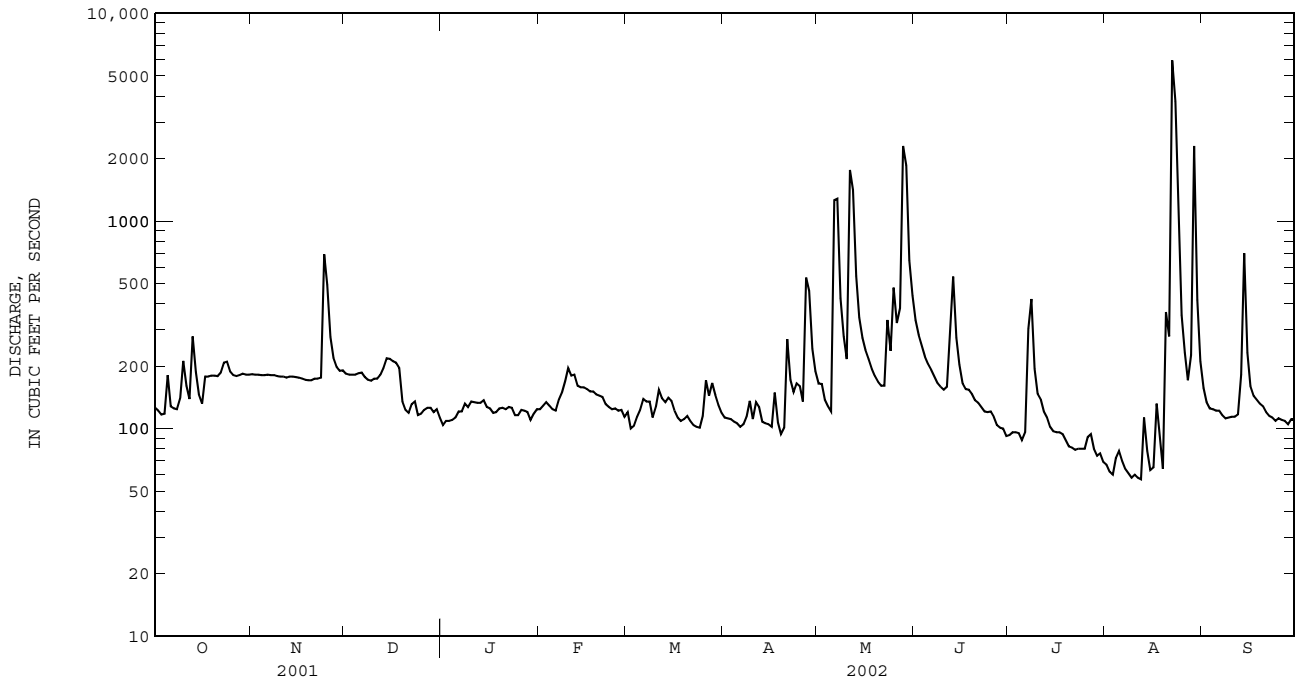
e Estimated.
 * Includes road overflow; stage 19.60 ft, from floodmark.



06803555 SALT CREEK AT GREENWOOD, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1952 - 2002	
ANNUAL TOTAL	131153		79826		357.9	
ANNUAL MEAN	359.3		218.7		1054	
HIGHEST ANNUAL MEAN					1987	
LOWEST ANNUAL MEAN					107	
HIGHEST DAILY MEAN	7380	May 5	5940	Aug 22	37100	Jun 13 1984
LOWEST DAILY MEAN	84	Aug 12	57	Aug 12	14	Jan 10 1957
ANNUAL SEVEN-DAY MINIMUM	88	Aug 31	61	Aug 6	17	Jan 10 1957
MAXIMUM PEAK FLOW			11800		*46800	
MAXIMUM PEAK STAGE			15.70		**26.57	
ANNUAL RUNOFF (AC-FT)	260100		158300		259200	
10 PERCENT EXCEEDS	678		277		575	
50 PERCENT EXCEEDS	181		135		146	
90 PERCENT EXCEEDS	110		96		72	

e Estimated.
 * Stage 26.50 ft, datum then in use.
 ** Datum then in use.



PLATTE RIVER BASIN

06804000 WAHOO CREEK AT ITHACA, NE

LOCATION.--Lat 41°08'40", long 096°32'10", in NW ¼ NW ¼ sec.33, T.14 N., R.8 E., Saunders County, Hydrologic Unit 10200203, on right bank 16 ft downstream from bridge on State Highway 63, 0.5 mi south of Ithaca, and at mile 20.3.

DRAINAGE AREA.--273 mi², of which 268 mi² contributes directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1949 to current year.

REVISED RECORDS.--WDR NE-78-1: 1977(P). WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,110.48 ft above sea level. Prior to Oct. 27, 1959, nonrecording gages at same site and datum. Oct. 28, 1959 to Feb. 22, 1961 nonrecording gage at site 1.5 mi upstream at datum 8.21 ft higher. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	29	34	e30	e34	e32	36	38	38	27	21	22
2	25	29	33	e31	e32	e36	36	37	36	27	18	21
3	25	28	33	e32	e31	e40	36	37	35	27	18	19
4	25	28	34	e32	e32	e44	34	35	35	27	19	20
5	25	28	35	e33	e34	48	34	34	35	27	20	20
6	25	29	34	e35	e39	44	34	36	33	27	20	21
7	26	29	33	e37	37	44	35	38	33	28	20	19
8	26	28	32	36	38	41	36	36	33	30	19	18
9	27	28	32	35	40	43	35	34	32	26	18	18
10	35	28	32	36	38	39	35	34	32	25	18	17
11	31	28	32	36	38	41	35	852	38	24	18	16
12	29	29	33	36	39	42	35	834	73	25	18	16
13	31	28	32	35	38	53	34	141	395	25	21	18
14	28	e30	32	37	41	62	33	90	86	23	19	21
15	27	29	e32	34	42	52	33	72	41	23	18	18
16	27	30	e32	35	43	44	34	66	36	23	19	16
17	26	e29	32	32	45	42	36	57	34	23	19	16
18	28	e30	32	32	47	42	33	51	33	23	19	17
19	27	29	32	33	49	43	32	48	32	23	19	16
20	28	29	32	33	49	43	32	46	31	21	22	15
21	28	29	32	33	45	39	35	44	31	21	21	14
22	29	29	33	34	42	37	36	44	31	26	28	14
23	31	31	31	34	41	40	34	44	31	28	289	14
24	28	80	33	32	41	39	33	45	30	23	49	13
25	27	142	e30	33	39	39	33	53	30	22	23	13
26	27	55	e28	34	e38	38	33	54	29	22	21	13
27	27	38	e28	34	e40	37	40	56	29	22	20	14
28	28	35	e29	34	e36	38	52	70	28	22	34	14
29	30	33	e28	32	---	37	49	53	27	21	132	14
30	29	33	e28	34	---	37	40	48	27	21	44	13
31	30	---	e29	e34	---	36	---	40	---	21	23	---
TOTAL	860	1080	982	1048	1108	1292	1073	3167	1434	753	1067	500
MEAN	27.74	36.00	31.68	33.81	39.57	41.68	35.77	102.2	47.80	24.29	34.42	16.67
MAX	35	142	35	37	49	62	52	852	395	30	289	22
MIN	25	28	28	30	31	32	32	34	27	21	18	13
AC-FT	1710	2140	1950	2080	2200	2560	2130	6280	2840	1490	2120	992

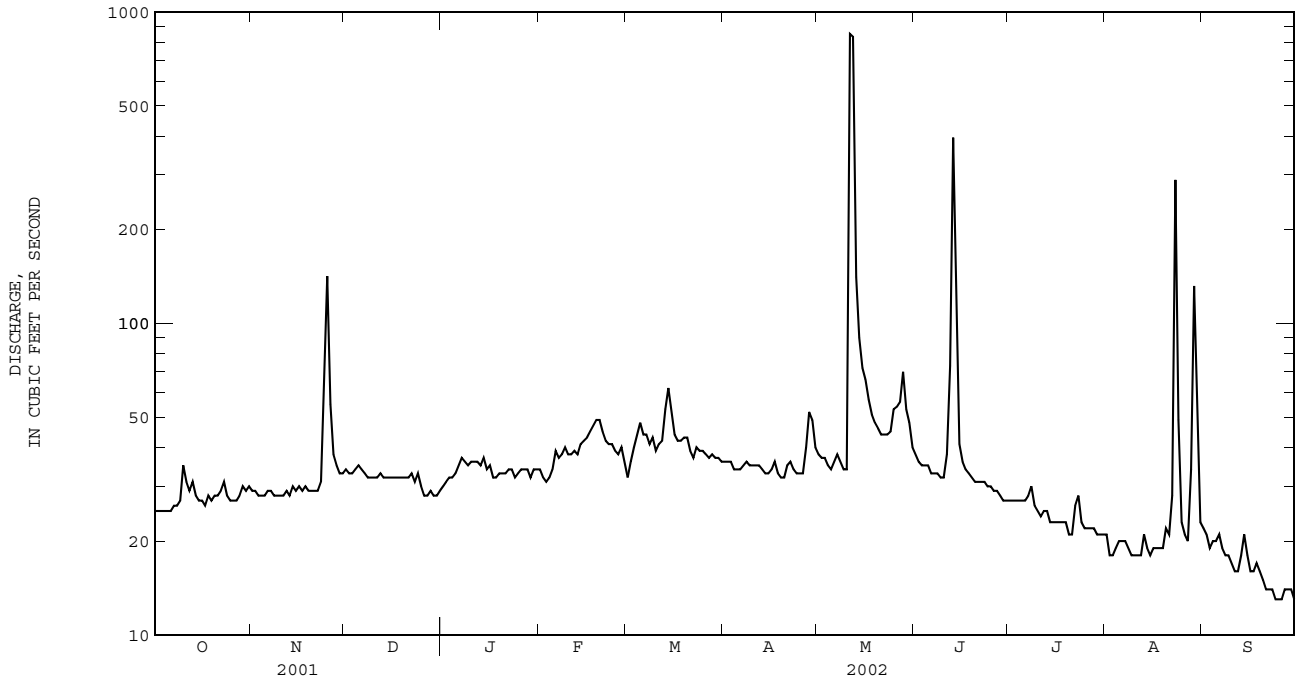
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2002, BY WATER YEAR (WY)

	50.25	40.37	35.49	39.29	72.70	119.5	88.53	120.7	222.3	87.65	94.44	68.90
MEAN	50.25	40.37	35.49	39.29	72.70	119.5	88.53	120.7	222.3	87.65	94.44	68.90
MAX	343	110	96.3	125	276	518	430	401	1051	728	640	663
(WY)	1987	1987	1985	1983	1983	1979	1978	1984	1963	1993	1959	1965
MIN	8.39	11.3	10.1	10.7	13.2	16.6	19.6	16.3	18.6	10.6	9.27	6.95
(WY)	1956	1956	1977	1957	1957	1957	1956	1955	1976	1956	1956	1956

06804000 WAHOO CREEK AT ITHACA, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1950 - 2002	
ANNUAL TOTAL	23385		14364		86.58	
ANNUAL MEAN	64.07		39.35		207	
HIGHEST ANNUAL MEAN					1987	
LOWEST ANNUAL MEAN					15.3	
HIGHEST DAILY MEAN	1800	Jun 14	852	May 11	22100	Jun 24 1963
LOWEST DAILY MEAN	23	Sep 3	13	Sep 24	3.3	Jun 11 1955
ANNUAL SEVEN-DAY MINIMUM	25	Sep 1	13	Sep 24	4.4	Oct 12 1955
MAXIMUM PEAK FLOW			3110		77400	
MAXIMUM PEAK STAGE			18.19		22.93	
ANNUAL RUNOFF (AC-FT)	46380		28490		62720	
10 PERCENT EXCEEDS	96		45		113	
50 PERCENT EXCEEDS	38		32		36	
90 PERCENT EXCEEDS	26		19		18	

e Estimated.



PLATTE RIVER BASIN

06804000 WAHOO CREEK AT ITHACA, NE--Continued

WATER-QUALITY RECORDS
Pesticide Reconnaissance Study

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Station number	Local identifier	Latitude	Longitude	Hydrologic unit code	Date	Time	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)
MAY 13...	06804000	WAHOO CREEK AT ITHACA, NEB	41 08 40 N	096 32 10 W	10200203	20020513	1330	1110.48	134
JUN 12...	06804000	WAHOO CREEK AT ITHACA, NEB	41 08 40 N	096 32 10 W	10200203	20020612	0840	1110.48	93

Date	DRAIN-AGE AREA (SQ. MI.) (81024)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, SATUR-ATION (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-AIR (DEG C) (00020)	TEMPER-WATER (DEG C) (00010)	ACETO-CHLOR ESA FLTRD (UG/L) (61029)	ACETO-CHLOR OA FLTRD (UG/L) (61030)	ACETO-CHLOR, WATER FLTRD (UG/L) (49260)	ALA-CHLOR OA FLTRD (UG/L) (61031)	ALA-CHLOR ESA WAT FLTRD (UG/L) (50009)
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MAY 13...	273.00	740	8.8	85	7.9	464	22.5	12.5	.61	1.15	18.0	<.05	.08
JUN 12...	273.00	727	5.1	62	7.3	478	23.0	23.0	1.02	1.75	10.0	.19	.15

Date	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	AMETRYN WATER, DISS, REC (UG/L) (38401)	AMINO-METHYL-PHOS-ONIC ACID, WAT FLT (UG/L) (62649)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	CYANA-ZINE, AMIDE WATER, FLTRD REC (UG/L) (61709)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DEISO-PROPYL ATRAZIN WATER, DISS, REC (UG/L) (04038)	DIMETH-ENAMID, WATER, FLT, REC (UG/L) (62482)	DI-METHEN-AMID WATER, FLTRD REC (UG/L) (61588)	FLUFEN-ACET, ESA, WAT FLT (UG/L) (61952)	FLUFE-NACET OA, WATER, FLT, REC (UG/L) (62483)
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MAY 13...	.34	<.05	.2	34.0	<.05	<.05	.89	.37	<.05	<.05	.53	.06	.11
JUN 12...	.77	<.05	.4	55.0	<.05	<.05	.30	3.32	.10	.09	1.59	.09	.08

Date	FLUFE-NACET, WATER, FLT, REC (UG/L) (62481)	GLUFO-SINATE, WATER, FLTRD, GF 0.7U (UG/L) (62721)	GLYPHO-SATE, WATER, FLTRD, GF 0.7U (UG/L) (62722)	METOLA-CHLOR ESA FLTRD 0.7 UM (UG/L) (61043)	METOLA-CHLOR OA FLTRD 0.7 UM (UG/L) (61044)	METO-LACHLOR WATER, DISSOLV (UG/L) (39415)	METRI-BUZIN WATER, DISSOLV (UG/L) (82630)	PENDI-METH-ALIN WAT FLT 0.7 U (UG/L) (82683)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRO-METRYN, WATER, DISS, REC (UG/L) (04036)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PROP-AZINE, WATER, DISS, REC (UG/L) (38535)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)
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MAY 13...	.93	<.1	.1	.11	.11	1.47	<.05	<.050	<.05	<.05	<.050	.52	.06
JUN 12...	1.60	<.1	.1	.08	.13	3.00	.18	<.050	.07	<.05	<.050	.29	.21

Date TER-BUTRYN WATER, DISS, REC (UG/L) (38888)

MAY 13...	<.05
JUN 12...	<.05

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PLATTE RIVER BASIN

06804700 WAHOO CREEK AT ASHLAND, NE

LOCATION.--Lat 41°03'13", long 096°22'04", in SE 1/4 NE 1/4 sec.35, T.13 N., R.9 E., Saunders County, Hydrologic Unit 10200203, at right upstream side of bridge near end of guard rail on State Highway 63, 1 mi north of Ashland, and at mile 2.6.

DRAINAGE AREA.--416 mi².

PERIOD OF RECORD.--September 1990 to current year.

REVISED RECORDS.--WDR NE-99-1: Datum.

GAGE.--Water-stage recorder. Datum of gage is 1,048.77 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	46	56	e48	e60	e54	60	70	74	42	28	45
2	39	45	57	e50	e61	e52	59	62	72	43	25	41
3	39	45	56	e52	e67	e54	60	62	70	38	25	39
4	39	44	57	e52	e69	e60	59	60	69	38	27	37
5	39	45	56	e52	e73	e64	58	58	69	39	27	38
6	39	45	58	e50	e76	e68	58	62	69	41	28	38
7	40	48	56	e50	e81	70	59	64	69	50	29	36
8	40	46	54	e50	e86	67	61	65	67	50	25	35
9	41	46	54	e50	e86	109	62	58	67	46	26	34
10	49	45	54	e50	e84	175	60	56	67	38	23	32
11	54	46	54	e52	84	69	59	83	66	38	25	31
12	47	47	57	e50	84	63	61	1160	92	39	26	31
13	48	46	e56	48	80	63	61	239	238	40	28	32
14	48	46	54	48	78	71	60	155	265	38	30	38
15	43	47	54	48	79	77	59	117	103	35	29	39
16	43	46	53	48	78	70	58	98	84	32	28	35
17	43	42	53	47	78	64	62	95	73	29	30	30
18	43	45	54	e51	78	62	59	85	69	30	31	31
19	45	45	53	e61	78	63	55	81	67	31	31	37
20	44	50	53	e54	77	64	55	78	63	30	34	33
21	43	47	52	48	74	62	58	76	62	28	44	32
22	47	47	54	47	69	57	60	72	61	29	306	33
23	48	48	55	48	66	60	61	73	61	36	440	30
24	47	63	e54	46	63	60	58	71	60	35	232	32
25	44	167	e54	48	62	63	56	75	57	30	78	32
26	44	120	e54	47	e58	62	55	78	53	28	51	33
27	43	75	e52	48	e56	61	64	80	50	30	44	34
28	44	60	e50	49	e54	62	77	87	46	30	37	34
29	44	57	e50	50	---	61	79	90	43	32	208	34
30	46	55	e50	e52	---	60	77	83	41	29	126	33
31	45	---	e50	e58	---	59	---	79	---	27	58	---
TOTAL	1357	1654	1674	1552	2039	2106	1830	3672	2347	1101	2179	1039
MEAN	43.77	55.13	54.00	50.06	72.82	67.94	61.00	118.5	78.23	35.52	70.29	34.63
MAX	54	167	58	61	86	175	79	1160	265	50	440	45
MIN	39	42	50	46	54	52	55	56	41	27	23	30
AC-FT	2690	3280	3320	3080	4040	4180	3630	7280	4660	2180	4320	2060

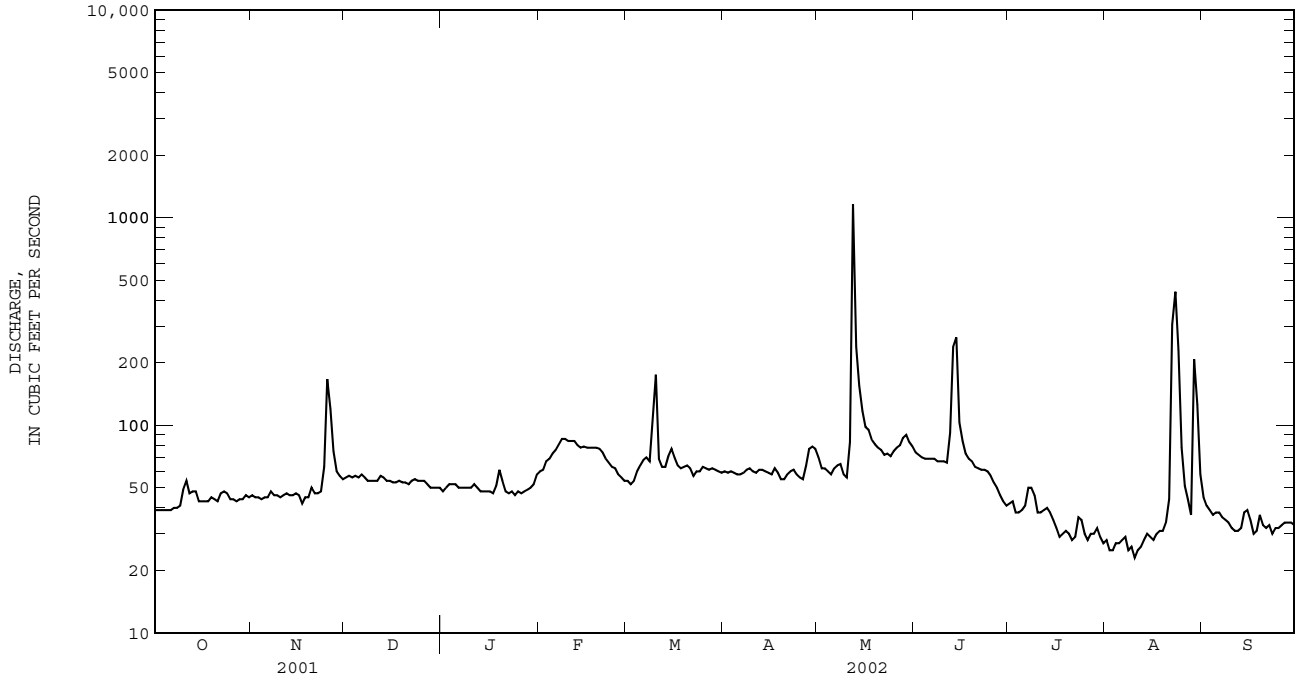
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2002, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	56.45	68.09	60.20	62.47	94.30	148.4	119.0	198.5	351.4	212.4	104.4	61.30	
MAX	98.2	125	85.9	91.5	199	580	247	552	1031	1032	341	150	
(WY)	1994	1999	1999	1995	1997	1993	1999	1995	1991	1993	1998	1993	
MIN	36.0	42.5	40.1	40.4	42.8	57.3	61.0	67.5	55.9	35.5	39.1	28.0	
(WY)	1992	1991	1993	1993	1992	1992	2002	1997	1992	2002	1997	1990	

06804700 WAHOO CREEK AT ASHLAND, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1990 - 2002	
ANNUAL TOTAL	36234		22550		128.3	
ANNUAL MEAN	99.27		61.78		223	
HIGHEST ANNUAL MEAN					61.8	
LOWEST ANNUAL MEAN					2002	
HIGHEST DAILY MEAN	1370	May 5	1160	May 12	7000	Jun 15 1991
LOWEST DAILY MEAN	34	Aug 10	23	Aug 10	21	Sep 16 1990
ANNUAL SEVEN-DAY MINIMUM	36	Aug 8	26	Aug 6	24	Sep 11 1990
MAXIMUM PEAK FLOW			2210		7000	Jun 15 1991
MAXIMUM PEAK STAGE			14.68		20.50	Jun 15 1991
ANNUAL RUNOFF (AC-FT)	71870		44730		92960	
10 PERCENT EXCEEDS	167		79		180	
50 PERCENT EXCEEDS	54		54		70	
90 PERCENT EXCEEDS	40		32		40	

e Estimated.



PLATTE RIVER BASIN

06804900 JOHNSON CREEK NEAR MEMPHIS, NE

LOCATION.--Lat 41°08'48", long 096°23'12", in NW 1/4 NW 1/4 sec.35, T.14 N., R.9 E., Saunders County, Hydrologic Unit 10200203, on left downstream bank on Saunders County road No. 37, 3.5 mi north and 2 mi east of Memphis, and at mile 0.9.

DRAINAGE AREA.--21.5 mi².

PERIOD OF RECORD.--September 1990 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,070.00 ft above sea level. Data collection platform at station, June 14, 2001.

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

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.90	1.8	1.9	1.7	2.2	2.3	1.6	1.8	1.1	2.4	0.46	0.52
2	0.90	1.8	1.9	1.7	2.2	2.3	1.5	1.7	1.3	2.5	0.41	0.55
3	0.94	1.8	1.9	1.8	2.2	2.2	1.5	1.6	1.5	2.4	0.43	0.57
4	1.1	1.7	1.9	1.9	2.2	2.3	1.5	1.6	1.7	2.2	0.55	0.57
5	1.1	1.9	2.0	1.9	2.2	2.6	1.5	1.6	1.8	2.3	0.57	0.56
6	1.1	1.9	1.9	2.0	2.3	2.7	1.5	1.7	1.9	2.1	0.55	0.57
7	1.1	1.9	1.9	2.0	2.4	2.5	1.5	1.7	2.1	1.8	0.54	0.56
8	1.1	1.7	1.9	2.0	2.7	2.5	1.5	1.7	2.2	1.5	0.53	0.59
9	1.2	1.8	1.9	2.0	2.8	2.6	1.3	1.5	2.5	1.4	0.54	0.62
10	1.9	1.8	1.9	2.0	3.2	2.4	1.2	1.5	3.0	1.3	0.59	0.65
11	1.4	1.8	1.9	2.0	2.9	2.5	1.4	4.1	3.4	1.2	0.54	0.69
12	1.3	1.9	1.9	2.0	2.9	2.5	1.3	2.8	3.9	1.2	0.57	0.72
13	1.6	1.9	1.9	2.2	3.0	2.5	1.3	2.2	4.4	1.1	0.61	0.92
14	1.4	1.9	1.9	2.1	3.0	2.3	1.3	2.0	3.9	1.0	0.47	1.1
15	1.3	1.9	1.9	2.0	2.9	2.2	1.3	2.0	3.8	1.1	0.37	0.88
16	1.3	1.8	1.8	2.0	2.9	2.1	1.3	2.1	4.0	1.0	0.42	0.90
17	1.4	1.8	1.9	2.0	2.8	2.1	1.3	2.0	3.9	0.82	0.49	0.97
18	1.4	1.8	1.9	2.0	2.8	2.0	1.3	2.0	3.9	0.69	0.44	1.1
19	1.4	1.8	1.8	2.1	2.8	2.0	1.2	2.0	3.8	0.68	0.42	1.1
20	1.4	1.9	1.8	2.1	2.6	1.9	1.2	2.1	3.7	0.70	0.68	1.2
21	1.4	2.0	1.9	2.1	2.5	1.8	1.5	2.1	3.7	0.65	0.59	1.1
22	1.8	2.0	2.0	2.1	2.5	1.7	1.3	2.1	3.4	0.76	2.8	1.1
23	1.9	2.0	1.9	2.1	2.5	1.7	1.4	1.9	3.1	0.76	5.2	1.1
24	1.6	4.0	1.7	2.0	2.5	1.8	1.3	1.5	2.7	0.65	0.55	1.1
25	1.5	2.5	1.7	2.1	2.3	2.0	1.2	1.5	3.1	0.77	0.40	1.2
26	1.6	2.2	1.7	2.1	2.1	1.9	1.3	1.1	3.4	0.85	0.39	1.2
27	1.6	2.0	1.9	2.1	2.2	1.9	2.6	1.0	3.3	0.93	0.41	1.1
28	1.7	2.0	1.9	2.1	2.3	2.0	2.5	1.2	3.1	0.73	0.45	1.1
29	1.7	2.0	1.8	2.1	---	1.8	2.0	0.90	3.0	0.70	0.52	1.3
30	1.8	2.0	1.7	2.1	---	1.7	1.9	0.87	2.6	0.68	0.50	1.1
31	1.8	---	1.7	2.3	---	1.6	---	0.96	---	0.59	0.52	---
TOTAL	43.64	59.3	57.7	62.7	71.9	66.4	44.5	54.83	89.2	37.46	22.51	26.74
MEAN	1.408	1.977	1.861	2.023	2.568	2.142	1.483	1.769	2.973	1.208	0.726	0.891
MAX	1.9	4.0	2.0	2.3	3.2	2.7	2.6	4.1	4.4	2.5	5.2	1.3
MIN	0.90	1.7	1.7	1.7	2.1	1.6	1.2	0.87	1.1	0.59	0.37	0.52
AC-FT	87	118	114	124	143	132	88	109	177	74	45	53

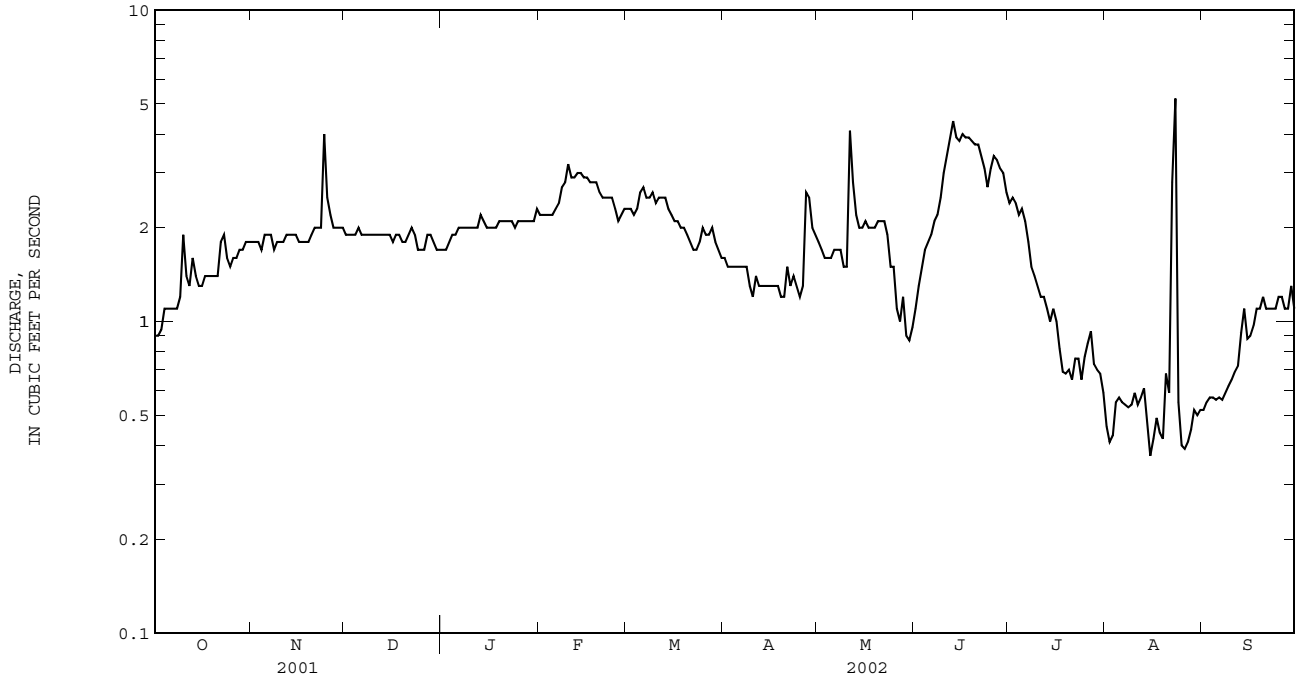
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2002, BY WATER YEAR (WY)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	1.641	1.803	1.817	1.734	2.299	4.206	2.787	3.298	9.797	4.889	2.612	2.100
MAX	2.56	3.04	3.82	2.24	5.20	17.8	7.67	6.61	26.9	26.1	11.1	5.11
(WY)	1994	1998	1998	1998	1998	1993	1999	2001	1991	1993	1998	1999
MIN	1.02	1.22	1.33	1.29	0.97	1.54	1.21	1.42	2.15	1.21	0.73	0.72
(WY)	1993	1991	2001	2001	2001	1992	2000	1997	1992	1991	2002	1992

06804900 JOHNSON CREEK NEAR MEMPHIS, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1991 - 2002	
ANNUAL TOTAL	929.39	636.88	3.216	
ANNUAL MEAN	2.546	1.745	6.79	1993
HIGHEST ANNUAL MEAN			1.74	2002
LOWEST ANNUAL MEAN			240	Jul 23 1993
HIGHEST DAILY MEAN	55 May 5	5.2 Aug 23	0.36	Jul 22 1995
LOWEST DAILY MEAN	0.61 Aug 14	0.37 Aug 15	0.46	Aug 25 2002
ANNUAL SEVEN-DAY MINIMUM	0.67 Aug 8	0.46 Aug 25	*269	Jun 14 1991
MAXIMUM PEAK FLOW		16 Aug 23	10.49	Jun 1 1994
MAXIMUM PEAK STAGE		5.89 Aug 23	2330	
ANNUAL RUNOFF (AC-FT)	1840	1260		
10 PERCENT EXCEEDS	3.2	2.7	3.7	
50 PERCENT EXCEEDS	1.8	1.8	1.9	
90 PERCENT EXCEEDS	0.90	0.60	1.1	

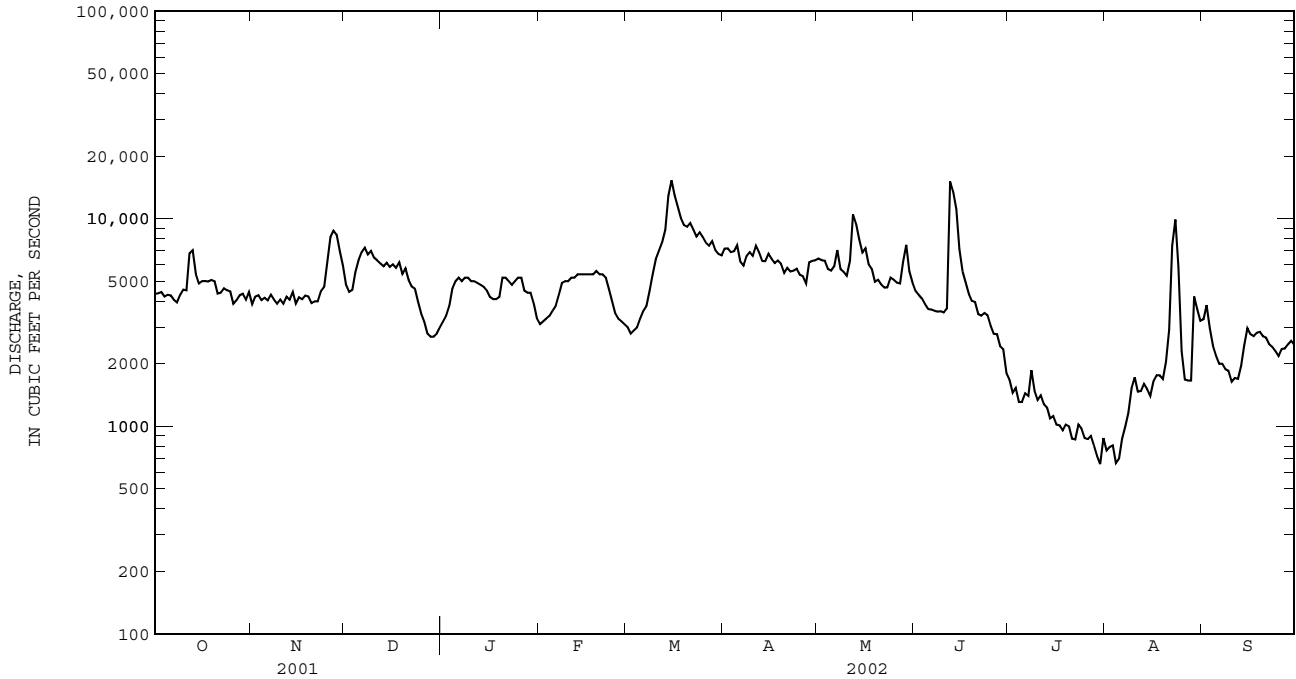
* Stage 10.25 ft.



06805500 PLATTE RIVER AT LOUISVILLE, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1953 - 2002	
ANNUAL TOTAL	2634170		1641191		7105	
ANNUAL MEAN	7217		4496		16210	
HIGHEST ANNUAL MEAN					2885	
LOWEST ANNUAL MEAN					1984	
HIGHEST DAILY MEAN	39700	Mar 16	15300	Mar 15	138000	Jul 25 1993
LOWEST DAILY MEAN	1650	Aug 14	658	Jul 30	131	Sep 3 1976
ANNUAL SEVEN-DAY MINIMUM	1950	Aug 9	752	Jul 30	159	Aug 29 1976
MAXIMUM PEAK FLOW			17000		*160000	
MAXIMUM PEAK STAGE			5.62		12.45	
ANNUAL RUNOFF (AC-FT)	5225000		3255000		5147000	
10 PERCENT EXCEEDS	13300		7090		13000	
50 PERCENT EXCEEDS	5760		4370		5360	
90 PERCENT EXCEEDS	3390		1460		2060	

e Estimated.
* Stage 11.90 ft.



PLATTE RIVER BASIN

06805500 PLATTE RIVER AT LOUISVILLE, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1974 to September 1981.

WATER TEMPERATURES: November 1974 to September 1981.

SUSPENDED SEDIMENT DISCHARGE: October 1971 to September 1981.

REMARKS.--Prior to July 1, 1971, sediment records were obtained by the U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 3,450 microsiemens Sept. 1, 1976; minimum daily, 254 microsiemens Aug. 7, 1981.

WATER TEMPERATURES: Maximum, 36.0°C July 24, 1977, Aug. 19, 1979; minimum 0.0°C on many days during winter periods.

SEDIMENT CONCENTRATIONS: Maximum daily, 11,600 mg/L May 19, 1974; minimum daily, 60 mg/L July 19, 1976.

SEDIMENT LOADS: Maximum daily, 1,180,000 tons Mar. 21, 1978; minimum daily, 64 tons July 19, 1976.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR- BID- ITY FIELD WATER UNFLTRD (NTU) (61028)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED OF SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)
OCT													
10...	1000	4450	54	731	9.4	98	8.6	567	13.0	15.5	178	208	4
NOV													
15...	1030	3510	26	736	9.7	100	8.4	547	13.0	15.0	195	233	2
DEC													
12...	1030	6020	75	730	12.5	100	8.3	654	6.5	4.0	182	216	3
JAN													
10...	1000	11000	24	734	12.3	88	8.1	766	4.3	.0	183	220	1
FEB													
15...	1020	8750	73	736	14.0	99	--	599	2.5	.0	162	196	1
MAR													
14...	1000	13300	86	718	10.7	85	8.4	485	13.0	3.5	176	212	2
APR													
11...	1000	7390	54	732	7.7	75	8.5	628	15.5	12.5	170	201	3
25...	1000	4930	43	742	9.5	87	8.9	626	8.5	10.0	190	220	6
MAY													
10...	1030	5160	77	744	10.1	99	8.6	594	13.6	13.5	204	237	6
23...	1050	4450	79	734	11.2	118	9.1	766	13.5	16.0	199	232	6
JUN													
13...	0930	13800	2200	733	5.5	67	7.8	410	22.0	23.0	112	136	0
27...	0930	3150	91	732	7.9	104	8.7	786	28.0	27.0	173	196	8
JUL													
11...	1100	1290	72	735	9.3	118	8.6	839	22.0	25.0	152	155	14
25...	1100	878	59	733	11.7	151	9.0	1240	24.0	26.0	163	179	12
AUG													
16...	1200	2010	49	736	8.5	99	8.9	733	20.5	21.0	163	190	4
29...	1100	6060	1100	740	6.6	82	7.7	1990	25.0	24.0	158	190	2
SEP													
12...	1200	2160	48	740	10.3	123	8.8	789	18.0	22.5	164	189	5
25...	1030	2180	50	739	11.0	114	8.9	685	18.0	15.5	155	181	4

PLATTE RIVER BASIN

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06805500 PLATTE RIVER AT LOUISVILLE, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	HY-DROXIDE WATER DIS IT FIELD MG/L AS OH (71834)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, PAR TICULATE SUSP (MG/L AS N) (49570)
Date	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	ORTHO- PHOS- PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR ESA FLTRD 0.7 UM GF REC (UG/L) (61029)	ACETO-CHLOR OA FLTRD 0.7 UM GF REC (UG/L) (61030)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR OA FLTRD 0.7 UM GF REC (UG/L) (61031)
OCT 10...	0	41.1	67.5	E.02	.97	--	.89	3.92	.90	.046	.014	--	1.05
NOV 15...	0	67.5	58.5	<.04	.55	--	1.79	7.92	1.80	.036	.011	--	.31
DEC 12...	0	52.3	72.5	.13	1.2	.16	2.20	9.72	2.21	.059	.018	1.0	.55
JAN 10...	0	76.6	87.0	.16	.66	.21	1.74	7.71	1.76	.062	.019	.50	.15
FEB 15...	0	47.5	77.0	.10	1.1	.13	1.84	8.14	1.85	.033	.010	1.0	.59
MAR 14...	--	24.4	61.4	.05	1.8	.06	2.03	8.97	2.04	.053	.016	1.7	1.32
APR 11...	--	48.6	83.5	<.04	.99	--	1.47	6.51	1.49	.046	.014	--	.69
25...	--	--	--	<.04	1.5	--	.32	1.43	.35	.089	.027	--	--
MAY 10...	M	28.9	64.9	<.04	1.6	--	1.23	5.43	1.24	.053	.016	--	.95
23...	--	--	--	<.04	1.8	--	1.25	5.53	1.27	.069	.021	--	--
JUN 13...	--	29.6	30.1	.45	10	.58	1.57	6.95	1.79	.710	.216	9.9	3.86
27...	--	--	--	<.04	2.4	--	.36	1.61	.38	.066	.020	--	--
JUL 11...	--	125	74.8	<.04	2.9	--	.05	.204	.08	.108	.033	--	2.37
25...	--	--	--	E.03	2.5	--	--	--	<.05	--	<.008	--	--
AUG 16...	--	102	53.8	<.04	2.2	--	.05	.217	.08	.115	.035	--	1.46
29...	--	--	--	.94	6.1	1.22	1.10	4.88	1.66	1.84	.559	5.2	--
SEP 12...	--	111	48.6	<.04	1.8	--	--	--	<.05	--	<.008	--	.91
25...	--	--	--	<.04	1.7	--	--	--	<.05	.049	.015	--	--

PLATTE RIVER BASIN

06805500 PLATTE RIVER AT LOUISVILLE, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ALA-CHLOR ESA WAT FLT GF 0.7U REC (UG/L) (50009)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)
	OCT												
10...	--	<.002	<.005	.046	<.010	<.002	<.041	<.020	<.005	<.018	<.003	E.020	<.005
NOV													
15...	.14	<.002	<.005	.050	<.010	<.002	<.041	<.020	<.005	<.018	<.003	E.018	<.005
DEC													
12...	.11	<.002	<.005	.047	<.010	<.002	<.041	<.020	<.005	<.018	<.003	E.017	E.004
JAN													
10...	.12	<.004	<.005	.029	<.010	<.002	<.041	<.020	<.005	<.018	<.003	<.006	<.005
FEB													
15...	.11	<.004	<.005	.039	<.010	<.002	<.041	<.020	<.005	<.018	<.003	E.029	<.005
MAR													
14...	.11	<.004	<.005	.030	<.010	<.002	<.041	<.020	<.005	<.018	<.003	E.013	<.005
APR													
11...	.12	E.004	<.005	.040	<.010	<.002	<.041	<.020	<.005	<.018	<.003	E.009	<.005
25...	.12	<.005	<.005	.153	<.010	<.002	<.041	<.020	<.005	<.018	<.003	E.020	<.005
MAY													
10...	.08	.076	<.005	2.00	<.010	<.002	<.041	<.020	<.005	.019	<.003	E.045	<.005
23...	.20	.019	<.005	.943	<.010	<.002	E.004	<.020	<.005	<.018	<.003	E.066	E.004
JUN													
13...	.10	.157	<.005	14.3	<.010	<.002	<.041	E.052	<.010	<.050	<.003	E.539	<.005
27...	.09	.005	<.005	1.14	<.010	<.002	<.041	<.020	<.005	<.018	<.003	E.132	<.005
JUL													
11...	.20	.005	<.005	.850	<.010	<.002	<.041	<.020	<.005	E.008	<.003	E.075	E.004
25...	.10	<.004	<.005	.442	<.010	<.002	<.041	<.020	<.005	<.018	<.003	E.048	<.005
AUG													
16...	.11	<.004	<.005	.262	<.010	<.002	<.041	<.020	E.001	E.004	<.003	E.041	.006
29...	.17	<.004	<.005	.249	<.010	<.002	E.023	<.020	<.005	<.018	<.003	E.050	.024
SEP													
12...	.10	<.004	<.005	.118	<.010	<.002	<.041	<.020	<.005	<.018	<.003	E.027	E.002
25...	.09	<.004	<.005	.086	<.010	<.002	<.041	<.020	<.005	<.018	<.003	E.020	E.004
Date	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DIMETH- ENAMID OA, WATER FLT, REC (UG/L) (62482)	DIMETH- ENAMID, ESA, WAT FLT (UG/L) (61951)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FLUFEN- ACET, ESA, WAT FLT (UG/L) (61952)	FLUFE- NACET OA, WATER FLT, REC (UG/L) (62483)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)
	OCT												
10...	<.005	--	--	<.02	<.002	<.009	<.005	--	--	<.003	<.004	<.035	E.013
NOV													
15...	<.005	<.05	<.05	<.02	<.002	<.009	<.005	<.05	<.05	<.003	<.004	<.035	<.027
DEC													
12...	<.005	<.05	<.05	<.02	.004	<.009	<.005	<.05	<.05	<.003	<.004	<.035	<.027
JAN													
10...	<.005	<.05	<.05	<.02	<.002	<.009	<.005	<.05	<.05	<.003	<.004	<.035	<.027
FEB													
15...	<.005	<.05	<.05	<.02	<.002	<.009	<.005	<.05	<.05	<.003	<.004	<.035	<.027
MAR													
14...	<.005	<.05	<.05	<.02	<.002	<.009	<.005	<.05	<.05	<.003	<.004	<.035	<.027
APR													
11...	<.005	<.05	<.05	<.02	<.002	<.009	<.005	<.05	<.05	<.003	<.004	<.035	<.027
25...	<.005	<.05	<.05	<.02	<.002	<.009	<.005	<.05	<.05	<.003	<.004	<.035	<.027
MAY													
10...	<.005	<.05	<.05	<.02	<.002	<.009	<.005	<.05	<.05	E.002	<.004	<.035	<.027
23...	<.005	<.05	<.05	<.02	<.002	<.009	<.005	<.05	<.05	<.003	<.004	<.035	<.027
JUN													
13...	<.005	<.05	<.05	<.02	<.002	<.009	<.005	<.05	<.05	<.003	<.004	<.035	<.027
27...	<.005	<.05	<.05	<.02	<.002	<.009	<.005	<.05	<.05	<.003	<.004	<.035	<.027
JUL													
11...	<.005	<.05	<.05	<.02	<.002	<.009	<.005	<.05	<.05	<.003	<.004	<.035	<.027
25...	<.005	<.05	<.05	<.02	<.002	<.009	<.005	<.05	<.05	<.003	<.004	<.035	<.027
AUG													
16...	<.005	<.05	<.05	<.02	<.002	<.009	<.005	<.05	<.05	<.003	<.004	<.035	<.027
29...	<.005	<.05	<.05	<.02	<.002	<.009	<.005	<.05	<.05	<.003	<.004	<.035	<.027
SEP													
12...	<.005	<.05	<.05	<.02	<.002	<.009	<.005	<.05	<.05	<.003	<.004	<.035	<.027
25...	<.005	<.05	<.05	<.02	<.002	<.009	<.005	<.05	<.05	<.003	<.004	<.035	<.027

PLATTE RIVER BASIN

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06805500 PLATTE RIVER AT LOUISVILLE, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	METHYL- AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL- PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METOLA- CHLOR ESA FLTRD 0.7 UM GF REC (UG/L) (61043)	METOLA- CHLOR OA FLTRD 0.7 UM GF REC (UG/L) (61044)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P, P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)
OCT													
10...	<.050	<.006	--	--	E.011	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006
NOV													
15...	<.050	<.006	.14	.09	E.007	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006
DEC													
12...	<.050	<.006	.18	.07	E.012	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006
JAN													
10...	<.050	<.006	.13	<.05	<.013	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006
FEB													
15...	<.050	<.006	.13	.07	E.012	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006
MAR													
14...	<.050	<.006	.12	.05	E.009	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006
APR													
11...	<.050	<.006	.15	.05	E.012	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006
25...	<.050	<.006	.16	.09	.077	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006
MAY													
10...	<.050	<.006	.18	.10	.241	.012	<.002	<.007	<.003	<.010	<.004	<.022	<.006
23...	<.050	<.006	.29	.05	.184	E.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006
JUN													
13...	<.050	<.006	.27	.23	2.37	.133	<.002	<.007	<.003	<.010	<.004	.027	<.006
27...	<.050	<.006	.24	.12	.183	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006
JUL													
11...	<.050	<.006	.27	.17	.148	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006
25...	<.050	<.006	.22	.13	.053	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006
AUG													
16...	<.050	<.006	.14	.12	.036	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006
29...	<.050	<.006	.18	.17	.075	<.010	<.002	<.007	<.005	<.010	<.004	<.022	<.006
SEP													
12...	<.050	<.006	.13	.09	.014	<.006	<.002	<.007	<.003	<.010	<.004	<.022	<.006
25...	<.050	<.006	.09	.07	.015	E.005	<.002	<.007	<.003	<.010	<.004	<.022	<.006

Date	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR ESA, WAT FLT 0.7U GF REC (UG/L) (62766)	PROPA- CHLOR OA, WAT FLT 0.7U GF REC (UG/L) (62767)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TER- BUTHYL- AZINE, WATER, DISS, REC (UG/L) (04022)
OCT													
10...	<.011	M	<.004	--	--	<.010	<.011	<.02	<.011	<.02	<.034	<.02	M
NOV													
15...	<.011	M	<.004	--	--	<.010	<.011	<.02	<.011	<.02	<.034	<.02	M
DEC													
12...	<.011	<.01	<.004	<.05	<.05	<.010	<.011	<.02	<.011	<.02	<.034	<.02	E.1
JAN													
10...	<.011	<.01	<.004	<.05	<.05	<.010	<.011	<.02	<.005	<.02	<.034	<.02	M
FEB													
15...	<.011	E.01	<.004	<.05	<.05	<.010	<.011	<.02	<.005	<.02	<.034	<.02	M
MAR													
14...	<.011	M	<.004	<.05	<.05	<.010	<.011	<.02	<.005	<.02	<.034	<.02	U
APR													
11...	<.011	M	<.004	<.05	<.05	<.010	<.011	<.02	<.005	M	<.034	<.02	--
25...	<.011	E.01	<.004	<.05	<.05	<.010	<.011	<.02	<.005	<.02	<.034	<.02	--
MAY													
10...	<.011	E.01	<.004	<.05	<.05	<.010	<.011	<.02	<.010	M	<.034	<.02	--
23...	<.011	E.01	<.004	<.05	<.05	<.010	<.011	<.02	.014	E.01	<.034	<.02	--
JUN													
13...	<.011	.03	<.004	--	--	<.010	<.011	<.02	.052	<.02	<.034	<.02	--
27...	<.011	E.01	<.004	--	--	<.010	<.011	<.02	.008	M	<.034	<.02	--
JUL													
11...	<.011	.02	<.004	--	--	<.010	<.011	<.02	.110	<.02	<.034	<.02	--
25...	<.011	.02	<.004	--	--	<.010	<.011	<.02	<.005	<.02	<.034	<.02	--
AUG													
16...	<.011	.02	<.004	--	--	<.010	<.011	<.02	.081	.02	<.034	<.02	--
29...	<.011	E.01	<.004	--	--	<.010	<.011	<.02	.017	<.02	<.034	<.02	--
SEP													
12...	<.011	E.01	<.004	--	--	<.010	<.011	<.02	.012	<.02	<.034	<.02	--
25...	<.011	E.01	<.004	--	--	<.010	<.011	<.02	.007	<.02	<.034	<.02	--

PLATTE RIVER BASIN

06805500 PLATTE RIVER AT LOUISVILLE, NE--Continued
 (National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

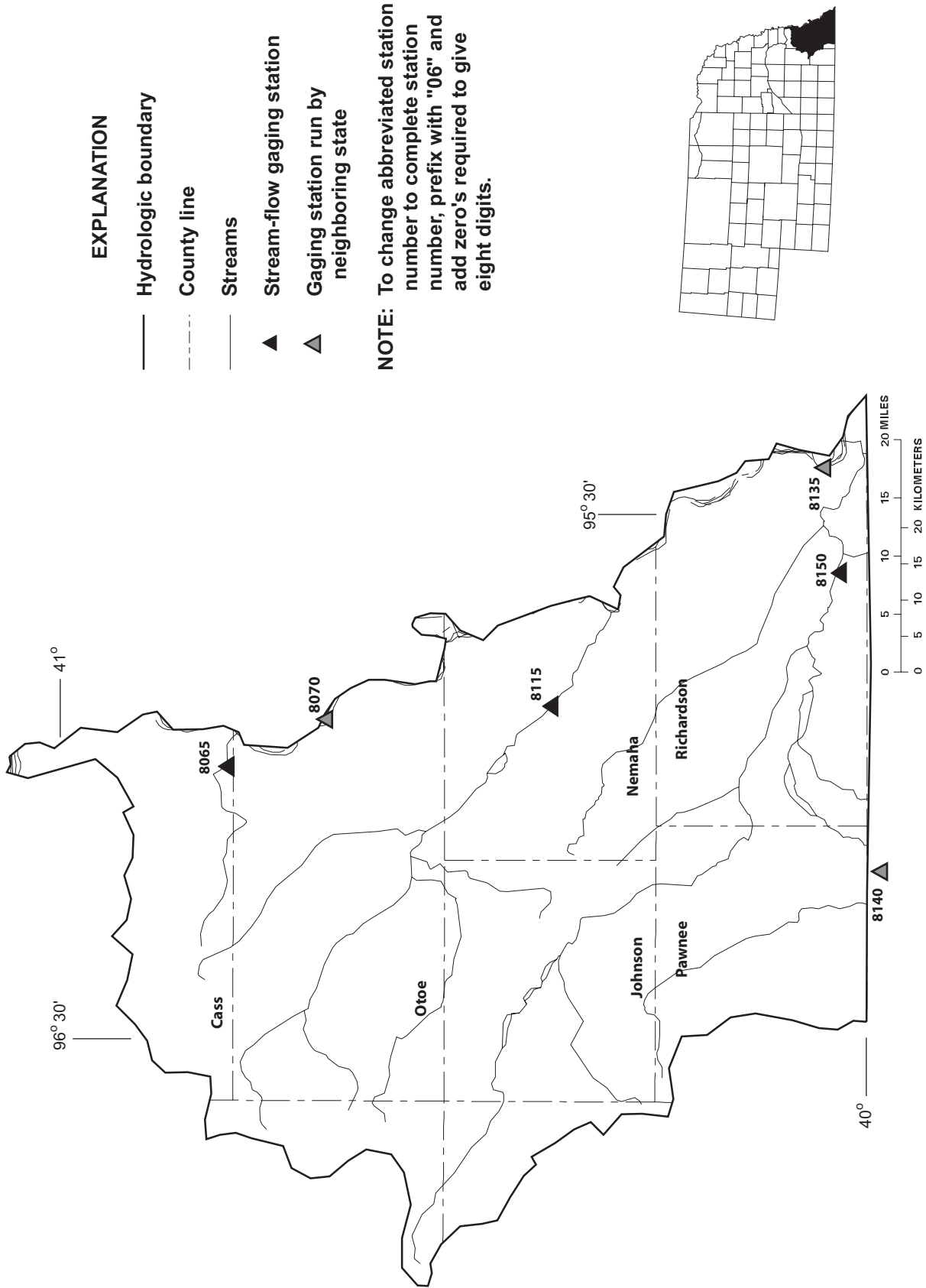
Date	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)
OCT						
10...	<.005	<.002	<.009	62	221	2660
NOV						
15...	<.005	<.002	<.009	53	127	1200
DEC						
12...	<.005	<.002	<.009	25	559	9090
JAN						
10...	<.005	<.002	<.009	45	135	4010
FEB						
15...	<.005	<.002	<.009	16	1270	30000
MAR						
14...	<.005	<.002	<.009	57	1420	51000
APR						
11...	<.005	<.002	<.009	41	345	6880
25...	<.005	<.002	<.009	44	223	2970
MAY						
10...	<.005	<.002	<.009	75	195	2720
23...	<.005	<.002	E.001	68	195	2340
JUN						
13...	<.005	<.002	.013	7	324	12100
27...	<.005	<.002	<.009	53	309	2630
JUL						
11...	<.005	<.002	<.009	88	139	484
25...	<.005	<.002	<.009	84	109	258
AUG						
16...	<.005	<.002	<.009	69	168	912
29...	<.005	<.002	<.009	94	1940	31700
SEP						
12...	<.005	<.002	<.009	90	31	181
25...	<.005	<.002	<.009	63	157	924

Remark codes used in this report:

< -- Less than
 E -- Estimated value
 M -- Presence verified, not quantified
 U -- Analyzed for, not detected

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SURFACE-WATER DISCHARGE RECORDS
MISSOURI RIVER BASIN
MISSOURI RIVER AND AND TRIBUTARIES



SURFACE-WATER DISCHARGE RECORDS
MISSOURI RIVER BASIN
MISSOURI RIVER AND AND TRIBUTARIES

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*Station number	Station name	Page
	WEEPING WATER CREEK BASIN	
8065	Weeping Water Creek at Union.....	252
	MISSOURI RIVER MAIN STEM	
8070	Missouri River at Nebraska City.....	254
	LITTLE NEMAHA RIVER BASIN	
8115	Little Nemaha River at Auburn.....	260
	MISSOURI RIVER MAIN STEM	
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	BIG NEMAHA RIVER BASIN	
8140	Turkey Creek near Seneca, KS.....	264
8150	Big Nemaha River at Falls City.....	266

*NOTE: To change abbreviated station number to complete station number, prefix with "06" and add zeros required to give eight digits.

WEEPING WATER CREEK BASIN

06806500 WEEPING WATER CREEK AT UNION, NE

LOCATION.--Lat 40°47'35", long 095°54'40", in SW 1/4 NW 1/4 sec.36, T.10 N., R.13 E., Cass County, Hydrologic unit 10240001, on left bank near downstream side of bridge on U.S. Highways 73 and 75, 1.5 mi southeast of Union, 2.8 mi downstream from South Branch Weeping Water Creek, and at mile 6.2.

DRAINAGE AREA.--241 mi².

PERIOD OF RECORD.--February 1950 to current year.

REVISED RECORDS.--WSP 2118: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 926.72 ft above sea level. Prior to May 14, 1951, nonrecording gage at site 2 mi upstream at different datum. May 15, 1951 to Aug. 22, 1968 water-stage recorder for stages above 7.9 ft and nonrecording gage, Aug. 23, 1968 to Aug. 22, 1980 water-stage recorder on downstream side of bridge pier, Aug. 23, 1980 to Nov. 4, 1980 at present site, all at datum 3.00 ft higher. Nov. 5, 1980 to Aug. 23, 1984 at present site and datum. Aug. 24, 1984 to Mar. 5, 1986 on left bank 200 ft upstream at present datum. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	37	40	e32	e36	e32	28	38	35	9.5	5.3	20
2	34	37	39	e33	e37	e32	27	35	31	9.0	5.3	19
3	32	36	39	e33	e38	e33	25	33	28	8.7	5.4	17
4	32	35	39	e34	e38	e35	25	34	26	8.8	5.4	16
5	38	36	39	e35	e40	36	25	30	25	9.6	4.8	15
6	37	35	38	e36	40	40	26	374	24	8.5	4.4	15
7	36	36	38	e36	40	37	27	143	23	8.2	4.0	15
8	34	36	37	e36	41	36	28	60	21	7.9	4.3	14
9	34	35	37	e37	45	34	31	41	20	8.1	4.2	13
10	34	35	37	e37	57	38	30	34	20	8.4	4.3	13
11	34	36	37	e37	56	36	31	388	23	8.5	4.3	12
12	34	36	38	e37	46	34	32	398	25	8.1	4.2	12
13	49	37	37	e37	44	34	30	90	57	8.0	4.6	13
14	47	37	37	e38	45	34	29	60	24	7.5	4.3	20
15	40	37	37	e39	43	33	29	49	20	7.5	5.1	20
16	36	36	37	e40	42	31	28	47	18	6.8	6.6	16
17	35	35	36	e40	42	30	28	40	18	6.5	11	14
18	35	34	36	e41	42	30	27	35	17	6.4	13	13
19	35	34	35	41	42	30	26	33	15	7.2	7.5	12
20	36	33	34	51	41	30	25	31	14	6.2	2210	12
21	36	34	34	49	39	29	30	30	12	5.9	65	12
22	36	35	35	45	37	26	32	29	12	5.6	347	11
23	37	35	33	43	37	27	31	96	13	5.4	2880	11
24	37	60	e33	45	37	28	31	67	11	5.5	426	11
25	37	83	e33	54	35	29	32	108	11	6.5	105	11
26	37	58	e32	40	32	30	29	61	11	8.2	61	11
27	36	48	e32	40	e32	30	39	47	10	12	40	11
28	36	42	e31	37	e32	32	90	45	10	9.3	30	12
29	36	39	e32	e36	---	33	60	58	9.6	7.6	26	12
30	36	40	e32	e36	---	31	44	57	9.6	6.8	24	12
31	37	---	e32	e36	---	29	---	42	---	5.7	21	---
TOTAL	1128	1187	1106	1211	1136	999	975	2633	593.2	237.9	6343.0	415
MEAN	36.39	39.57	35.68	39.06	40.57	32.23	32.50	84.94	19.77	7.674	204.6	13.83
MAX	49	83	40	54	57	40	90	398	57	12	2880	20
MIN	32	33	31	32	32	26	25	29	9.6	5.4	4.0	11
AC-FT	2240	2350	2190	2400	2250	1980	1930	5220	1180	472	12580	823

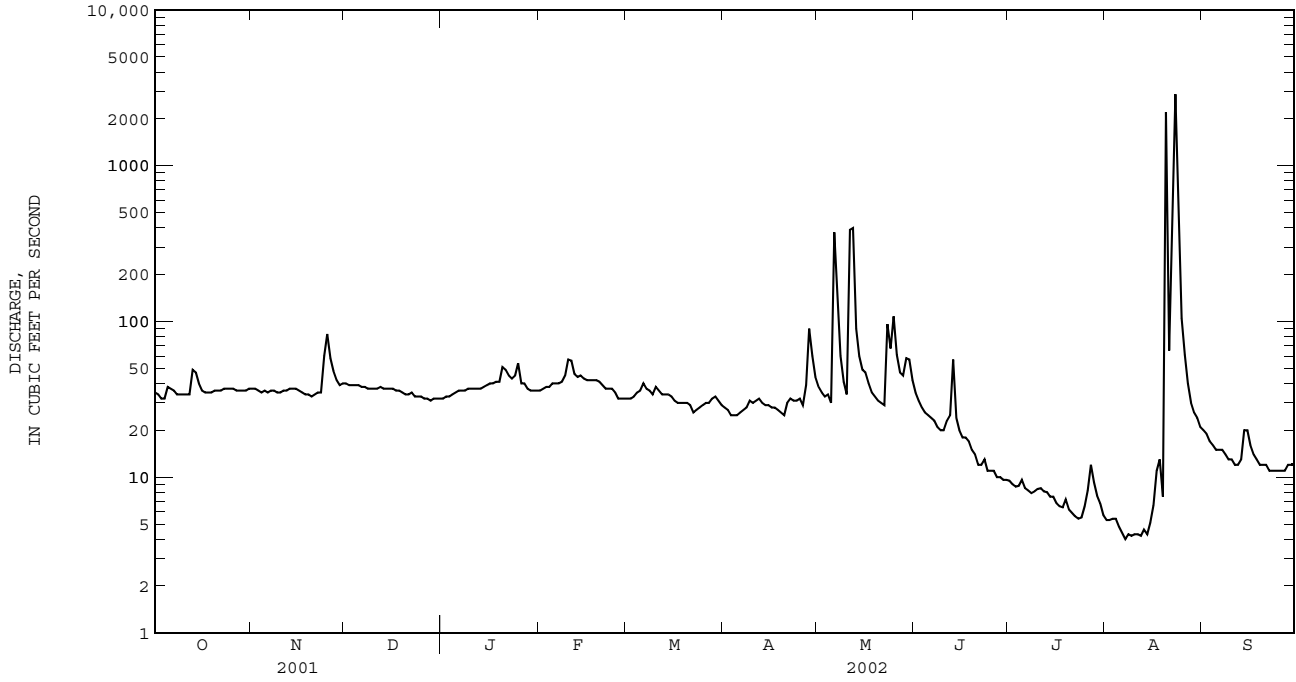
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2002, BY WATER YEAR (WY)

	MEAN	MAX	MIN	(WY)
MEAN	60.76	46.11	40.13	41.46
MAX	579	148	136	177
(WY)	1987	1974	1987	1974
MIN	0.55	1.26	2.09	2.01
(WY)	1957	1957	1957	1957

06806500 WEeping WATER CREEK AT UNION, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1951 - 2002	
ANNUAL TOTAL	40434		17964.1		103.7	
ANNUAL MEAN	110.8		49.22		433	
HIGHEST ANNUAL MEAN					1993	
LOWEST ANNUAL MEAN					1956	
HIGHEST DAILY MEAN	3430	May 5	2880	Aug 23	34000	Jul 23 1993
LOWEST DAILY MEAN	20	Jan 26	4.0	Aug 7	0.10	Sep 10 1955
ANNUAL SEVEN-DAY MINIMUM	21	Jan 21	4.2	Aug 6	0.13	Sep 9 1955
MAXIMUM PEAK FLOW			7490		65100	
MAXIMUM PEAK STAGE			22.69		30.97	
ANNUAL RUNOFF (AC-FT)	80200		35630		75100	
10 PERCENT EXCEEDS	203		47		171	
50 PERCENT EXCEEDS	40		34		40	
90 PERCENT EXCEEDS	28		8.2		9.6	

e Estimated.



MISSOURI RIVER MAIN STEM

06807000 MISSOURI RIVER AT NEBRASKA CITY, NE

LOCATION.--Lat 40°40'55", long 95°50'48", in NW¼ NE¼ sec.9, T.8 N., R.14 E., Otoe County, Hydrologic Unit 10240001, on right bank 1.0 mi upstream from Highway 2 Bridge at Nebraska City, and at mile 562.6.

DRAINAGE AREA.--410,000 mi², approximately. The 3,959 mi² in Great Divide basin are not included.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1929 to current year. Gage-height records collected in this vicinity from August 1878 to December 1899 are contained in reports of Missouri River Commission.

REVISED RECORDS.--WSP 761: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 905.36 ft above NGVD of 1929, supplementary adjustment of 1954. See WSP 1918 or 1919 for history of changes prior to Apr. 1, 1963.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by upstream main-stem reservoirs. Fort Randall Dam was completed in July 1952, with storage beginning in December 1952. Gavins Point Dam was completed in July 1955, with storage beginning in December 1955. U.S. Army Corps of Engineers rain gage and satellite data collection platform at station. Records provided by the U.S. Geological Survey, Iowa District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 414,000 ft³/s Apr. 19, 1952; maximum gage height, 27.66 ft Apr. 18, 1952; minimum discharge, 1,600 ft³/s Dec. 31, 1946 (discharge measurement); minimum gage height observed, -0.28 ft Dec. 24, 1960, result of freezeup.

DISCHARGE FROM THE DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33100	35500	33200	19100	19000	20500	33900	33600	34500	30500	27300	33800
2	33100	35500	31400	19100	17600	20800	34600	33200	33200	30100	27000	33800
3	33400	35800	29800	19100	18600	20300	35000	33300	32700	29700	26900	34400
4	33400	35900	28200	19100	18900	18300	35000	33600	33000	29700	27000	34000
5	33600	35600	27600	19500	18900	18700	34600	32900	32700	29500	27600	33800
6	33500	35600	27700	20000	19800	20700	34000	33000	32300	29400	29100	33700
7	33700	35400	27800	21600	20500	21700	32800	33400	32000	29200	32000	33800
8	33600	35700	27600	23000	22100	22700	33300	33800	31500	29100	30500	33800
9	34300	35700	26600	21700	23400	22200	33700	32900	31900	29200	29100	33700
10	35800	35800	26400	21300	24300	22100	33800	33100	32700	28900	28900	33600
11	35700	35800	26000	23300	24300	22500	34200	35000	33600	29300	28700	33700
12	35900	35600	25800	24300	24500	22900	35200	39400	40200	30800	28700	33700
13	38400	35700	25200	24900	24900	23900	34100	41600	50800	31000	31300	33800
14	36700	35900	25200	25500	25400	27900	34000	39500	45700	29400	29000	34200
15	35500	36300	25200	25900	24900	32900	33500	38000	39000	29200	29100	34400
16	35000	35800	24900	25100	24900	30900	34000	37600	37100	29000	29200	34600
17	34700	36300	24500	24100	25700	28200	34200	36700	36000	28600	30300	33600
18	34900	36100	24600	23400	25200	26800	34200	36300	35000	28200	34200	32900
19	35000	36000	24600	23900	25400	26400	34800	36300	34200	27900	37400	33400
20	35100	35700	24000	23500	25600	26300	34100	35400	33600	27700	38900	34000
21	34900	35500	24100	22400	25300	27000	33800	34800	33300	27400	36200	33500
22	34900	35800	23100	22200	24800	29100	33200	34100	33500	27200	39000	32600
23	36000	35800	23100	22500	24100	30200	33600	34200	33600	27500	51200	32100
24	35300	37400	23700	22300	23900	31200	33400	33900	32700	27700	43400	31400
25	35300	38900	22200	22100	24000	33100	32900	35000	31900	27800	40500	31300
26	35100	40500	20200	22400	24600	32900	32800	34200	31500	28100	37500	31600
27	34900	39700	19700	23100	23900	33300	33700	33700	31400	30100	35300	32400
28	35000	38000	19300	23900	21700	34100	33800	35000	31600	28900	34500	32500
29	34900	37200	19000	23300	---	34300	33900	35900	31400	27700	34000	32900
30	34900	35600	20100	21800	---	33600	34200	36100	31000	27600	35600	33800
31	34900	---	19500	21200	---	34000	---	36200	---	27400	34500	---
TOTAL	1080500	1090100	770300	694600	646200	829500	1018300	1091700	1033600	893800	1023900	1000800
MEAN	34850	36340	24850	22410	23080	26760	33940	35220	34450	28830	33030	33360
MAX	38400	40500	33200	25900	25700	34300	35200	41600	50800	31000	51200	34600
MIN	33100	35400	19000	19100	17600	18300	32800	32900	31000	27200	26900	31300
AC-FT	2143000	2162000	1528000	1378000	1282000	1645000	2020000	2165000	2050000	1773000	2031000	1985000
CFSM	0.09	0.09	0.06	0.05	0.06	0.07	0.08	0.09	0.08	0.07	0.08	0.08
IN.	0.10	0.10	0.07	0.06	0.06	0.08	0.09	0.10	0.09	0.08	0.09	0.09

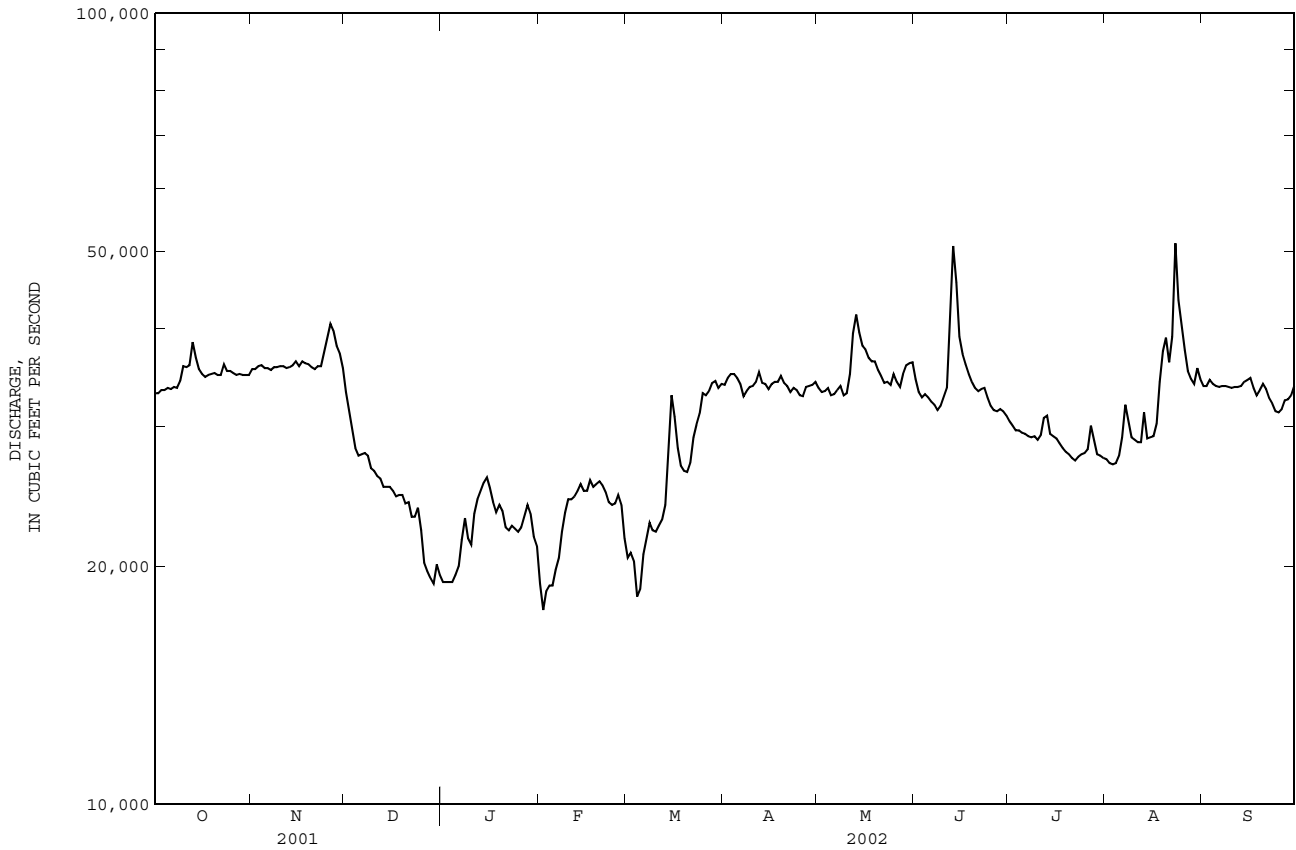
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2002, BY WATER YEAR (WY)

MEAN	42820	39030	25620	21540	26570	37900	47820	47700	52170	46240	42650	42520
MAX	76760	79410	52410	39970	48630	66730	98960	90280	117500	116700	71540	73410
(WY)	1998	1998	1987	1987	1983	1983	1997	1997	1984	1993	1996	1997
MIN	22420	14380	10510	10160	12780	15310	21850	32470	33530	28830	29870	32560
(WY)	1962	1962	1956	1957	1957	1957	1957	1955	1958	2002	1955	1958

06807000 MISSOURI RIVER AT NEBRASKA CITY, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1953 - 2002a	
ANNUAL TOTAL	13785000		11173300		39410	
ANNUAL MEAN	37770		30610		66450	
HIGHEST ANNUAL MEAN					1997	
LOWEST ANNUAL MEAN					25370	
HIGHEST DAILY MEAN	95500	May 6	51200	Aug 23	188000	Jul 25 1993
LOWEST DAILY MEAN	18800	Feb 5	17600	Feb 2	4320	Jan 11 1957
ANNUAL SEVEN-DAY MINIMUM	20000	Dec 25	19000	Feb 1	5590	Nov 29 1955
MAXIMUM PEAK FLOW			58400		196000	Jul 23 1993
MAXIMUM PEAK STAGE			14.33		27.19	Jul 23 1993
INSTANTANEOUS LOW FLOW			17500			
ANNUAL RUNOFF (AC-FT)	27340000		22160000		28550000	
ANNUAL RUNOFF (CFSM)	0.092		0.075		0.096	
ANNUAL RUNOFF (INCHES)	1.25		1.01		1.31	
10 PERCENT EXCEEDS	57800		36000		61700	
50 PERCENT EXCEEDS	35400		32800		37100	
90 PERCENT EXCEEDS	21700		22200		18000	

a Post regulation.



WATER-QUALITY RECORDS

LOCATION.--Water quality samples were collected from Highway 2 bridge, 2.0 miles downstream of gage.

PERIOD OF RECORD.--May 1951 to current year. Daily sediment loads August 1957 to September 1971 in reports of U.S. Army Corps of Engineers.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1951 to December 1977, October 1991 to current year.
 WATER TEMPERATURES: May 1951 to December 1977, October 1991 to current year.
 SUSPENDED SEDIMENT DISCHARGE: October 1971 to September 1976, October 1991 to current year.

REMARKS.--Records of specific conductance are obtained from suspended-sediment samples at time of analysis.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 994 microsiemens Dec. 17, 1962; minimum daily, 273 microsiemens June 17, 1964.
 WATER TEMPERATURES: Maximum daily, 31.0°C July 26, 1977, and July 25, 1997; minimum daily, 0.0°C on many days during winter periods.
 SEDIMENT CONCENTRATIONS: Maximum daily mean, 8,420 mg/L Aug. 7, 1996; minimum daily mean, 80 mg/L Aug. 3, 2002.
 SEDIMENT LOADS: Maximum daily, 3,120,000 tons June 24, 1996; minimum daily, 4,050 tons Jan. 17, 1972.

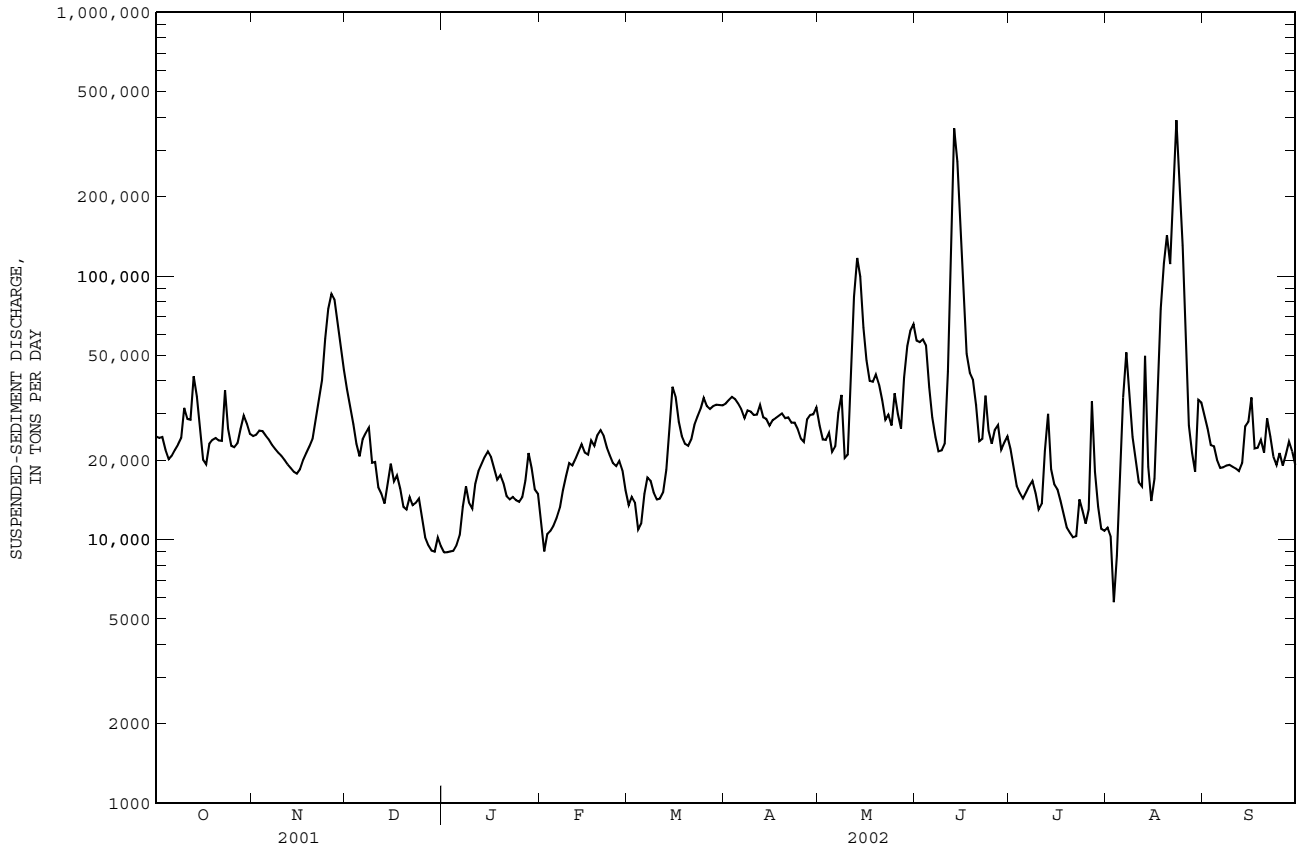
EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 840 microsiemens Aug. 30; minimum daily, 586 microsiemens June 14.
 WATER TEMPERATURES: Maximum daily, 30.5°C July 8; minimum daily, 0.5°C Jan. 8.
 SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,800 mg/L Aug. 23; minimum daily, 80 mg/L Aug. 3.
 SEDIMENT LOADS: Maximum daily, 390,000 tons Aug. 23; minimum daily, 5,790 tons Aug. 3.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	NUMBER OF SAM-PLING POINTS (COUNT)	BED MAT.	BED MAT.	BED MAT.	BED MAT.	BED MAT.	BED MAT.	BED MAT.	BED MAT.
			SIEVE DIAM.	SIEVE DIAM.	SIEVE DIAM.	SIEVE DIAM.	SIEVE DIAM.	SIEVE DIAM.	SIEVE DIAM.	SIEVE DIAM.
			% FINER THAN .125 MM (80165)	% FINER THAN .250 MM (80166)	% FINER THAN .500 MM (80167)	% FINER THAN 1.00 MM (80168)	% FINER THAN 2.00 MM (80169)	% FINER THAN 4.00 MM (80170)	% FINER THAN 8.00 MM (80171)	% FINER THAN 16.0 MM (80172)
OCT										
10...	1025	3	0	17	61	70	86	98	100	--
NOV										
06...	1100	3	0	14	39	56	76	93	100	--
DEC										
10...	1601	3	0	8	48	75	87	93	99	100
JAN										
08...	1100	3	0	8	49	78	94	98	100	--
FEB										
13...	1500	3	0	20	68	83	91	97	100	--
20...	1415	3	0	19	67	90	98	100	--	--
MAR										
07...	1040	3	0	23	89	98	99	100	--	--
APR										
09...	0930	3	0	12	45	70	84	94	98	100
MAY										
03...	0920	3	0	18	62	81	94	99	100	--
JUL										
05...	0930	3	0	9	41	63	81	96	100	--
AUG										
02...	0850	3	0	13	47	71	90	98	100	--

06807000 MISSOURI RIVER AT NEBRASKA CITY, NE.--Continued



LITTLE NEMAHA RIVER BASIN

06811500 LITTLE NEMAHA RIVER AT AUBURN, NE

LOCATION.--Lat 40°23'33", long 095°48'46", in NE ¼ NW ¼ sec.23, T.5 N., R.14 E., Nemaha County, Hydrologic Unit 10240006, on left bank at downstream side of bridge on U.S. Highway 136, 1 mi downstream from Longs Creek and Willow Creek, 1 mi east of Auburn, and at mile 10.4.

DRAINAGE AREA.--792 mi².

PERIOD OF RECORD.--August 1949 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 889.87 ft above sea level. See WSP 2119 for history of changes prior to July 24, 1967. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	88	89	e78	e62	e70	81	72	150	31	15	90
2	74	82	90	e74	e60	e68	75	65	127	31	15	61
3	71	80	90	e74	e60	e70	70	58	110	30	15	47
4	79	83	93	e80	e62	e70	73	53	103	30	15	40
5	120	82	93	e84	e66	e76	73	49	96	43	16	37
6	103	85	90	e86	e68	e78	75	707	91	36	16	34
7	88	86	89	e92	e72	e80	74	1170	86	33	17	32
8	82	81	86	e92	e78	e78	80	343	83	29	17	29
9	84	79	84	e92	e78	e76	81	195	80	27	16	28
10	86	82	87	e90	e78	e75	79	142	79	27	17	27
11	85	82	91	e90	e82	e76	80	260	78	28	19	27
12	82	83	106	e94	e84	e78	83	1600	96	27	29	27
13	105	86	101	e98	e86	e82	77	763	80	28	33	33
14	126	86	94	e98	e92	e90	74	315	67	27	33	45
15	103	84	98	e96	e96	95	72	203	60	24	26	48
16	88	82	95	e90	e100	89	70	166	57	22	25	41
17	84	81	89	e86	107	87	68	148	55	23	33	35
18	82	83	90	e84	110	85	63	128	52	25	28	36
19	79	78	89	e84	115	84	55	112	52	21	25	36
20	82	78	87	e84	109	84	53	102	50	20	39	37
21	82	82	89	e86	101	76	e65	98	49	19	154	34
22	84	82	96	e86	93	79	68	96	45	18	130	30
23	84	84	85	e80	95	82	62	607	42	17	887	29
24	83	126	76	e76	92	86	56	546	37	16	898	28
25	76	148	e74	e78	80	89	50	1190	36	16	326	28
26	74	130	e74	e80	e74	90	47	637	33	17	178	28
27	74	102	e78	e72	e72	98	83	293	34	21	121	36
28	79	90	e80	e64	e72	97	136	281	35	25	85	37
29	79	89	e78	e62	---	92	126	523	34	21	67	34
30	101	91	e76	e64	---	84	88	303	32	19	115	31
31	97	---	e76	e64	---	82	---	196	---	17	167	---
TOTAL	2693	2675	2713	2558	2344	2546	2237	11421	2029	768	3577	1105
MEAN	86.87	89.17	87.52	82.52	83.71	82.13	74.57	368.4	67.63	24.77	115.4	36.83
MAX	126	148	106	98	115	98	136	1600	150	43	898	90
MIN	71	78	74	62	60	68	47	49	32	16	15	27
AC-FT	5340	5310	5380	5070	4650	5050	4440	22650	4020	1520	7090	2190

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2002, BY WATER YEAR (WY)

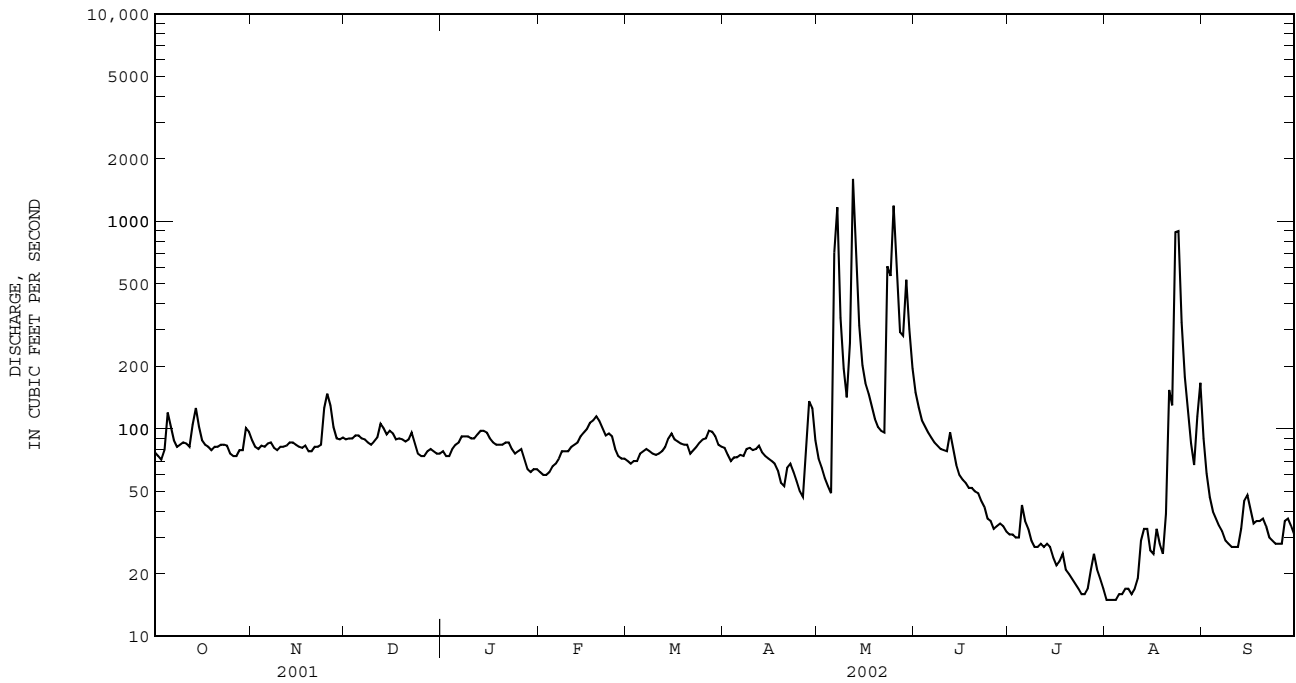
MEAN	216.7	134.2	113.4	116.8	224.4	448.9	366.7	603.7	551.7	582.5	221.6	234.4
MAX	2003	493	509	562	747	2870	1589	2949	3524	9419	1256	1546
(WY)	1974	1999	1987	1974	1993	1979	1984	1996	1951	1993	1982	1977
MIN	25.4	25.7	23.4	19.7	28.4	49.1	30.6	29.9	14.8	16.2	14.0	26.6
(WY)	1992	1956	1957	1957	1956	1957	1956	1956	1977	1977	1955	1991

LITTLE NEMAHA RIVER BASIN

06811500 LITTLE NEMAHA RIVER AT AUBURN, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1950 - 2002	
ANNUAL TOTAL	191918		36666		318.6	
ANNUAL MEAN	525.8		100.5		1389	
HIGHEST ANNUAL MEAN					1993	
LOWEST ANNUAL MEAN					64.4	
HIGHEST DAILY MEAN	23400	May 5	1600	May 12	70400	Jul 24 1993
LOWEST DAILY MEAN	39	Jul 18	15	Aug 1	0.87	Jul 6 1977
ANNUAL SEVEN-DAY MINIMUM	46	Jan 29	16	Jul 31	1.1	Jul 3 1977
MAXIMUM PEAK FLOW			2900	Aug 23	164000	May 9 1950
MAXIMUM PEAK STAGE			9.26	Aug 23	*27.65	May 9 1950
ANNUAL RUNOFF (AC-FT)	380700		72730		230800	
10 PERCENT EXCEEDS	1160		126		472	
50 PERCENT EXCEEDS	99		80		100	
90 PERCENT EXCEEDS	64		27		35	

e Estimated.
 * From floodmark.



MISSOURI RIVER MAIN STEM

06813500 MISSOURI RIVER AT RULO, NE

LOCATION.--Lat 40°03'13", long 95°25'19", in NW¹/₄ NW¹/₄ sec.17, T.1 N., R.18 E., Richardson County, Hydrologic Unit 10240005, on right bank at downstream side of bridge on U.S. Highway 159 at Rulo, 3.2 mi upstream from Big Nemaha River, and at mile 498.0.

DRAINAGE AREA.--414,900 mi², approximately. The 3,959 mi² in Great Divide basin are not included.

PERIOD OF RECORD.--October 1949 to current year in reports of U.S. Geological Survey. Gage- height record collected at site 80 ft upstream January 1886 to December 1899 published in reports of Missouri River Commission; September 1929 to September 1950 in files of Kansas City office of U.S. Army Corps of Engineers.

GAGE.--Water-stage recorder. Datum of gage is 837.23 ft above NGVD of 1929. Oct. 1949 to Sept. 12, 1950, nonrecording gage at site 80 ft upstream and Sept. 13, 1950 to Apr. 19, 1983, recording gage on downstream end of middle pier, all at same datum.

REMARKS.--Records good, except those for estimated daily discharges, which are poor. Flow regulated by upstream main-stem reservoirs. Fort Randall Dam was completed in July 1952, with storage beginning in December 1952. Gavins Point Dam was completed in July 1955, with storage beginning in December 1955. U.S. Army Corps of Engineers satellite data collection platform at station. Records provided by the U.S. Geological Survey, Iowa District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 358,000 ft³/s Apr. 22, 1952, gage height, 25.60 ft; minimum daily discharge, 4,420 ft³/s Jan. 13, 1957; minimum gage height, -0.19 ft Dec. 25, 1990, result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1881 reached a stage of 22.9 ft, from floodmark, discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35000	35700	34700	21300	22100	22900	35100	35000	37100	31500	28000	35100
2	35100	36000	32300	21200	19800	22100	35500	34300	35400	31200	27800	34400
3	35500	36200	30600	21200	19200	22200	36200	34100	34600	30900	27600	34300
4	35600	36400	28800	21300	20000	21600	36800	34500	34400	30900	27600	34500
5	35700	36500	27900	21500	20200	20000	36200	34200	34300	30800	28000	34200
6	35600	36500	27900	21900	20200	20900	35600	36700	33800	30300	29200	34000
7	35300	36300	27900	22500	20900	22600	34700	36200	33400	30100	31000	34000
8	35100	36400	28100	24200	21700	23600	33500	34400	32900	30100	32700	34200
9	35000	36400	27700	24800	23300	24000	34200	33900	32200	30000	30900	34100
10	35700	36300	27100	23500	24600	23400	34300	33500	32600	30500	29900	34000
11	36800	36400	26700	23600	25300	23100	34500	34300	33100	30300	29900	33900
12	36200	36400	26600	25100	25300	23400	35200	41400	35300	30900	29700	34200
13	37400	36300	26200	25900	25800	23700	35600	44600	47300	32400	30400	34400
14	38500	36200	25700	26400	25900	25300	34700	43000	49800	31500	32200	34700
15	36900	36700	25800	26900	26500	30300	34500	39900	43300	29800	30300	34800
16	36100	36500	25800	26600	25800	33600	34400	38600	39000	29600	30200	35300
17	35800	36600	25400	25800	26100	30500	34700	38100	37900	29100	30600	34900
18	35500	36800	25000	24700	26700	28100	34700	37100	37100	28700	31800	34100
19	35500	36800	25200	24500	26600	26900	34800	37100	36000	28400	35300	33900
20	35600	36600	25000	24700	27000	26600	35100	35900	35300	28200	37600	34200
21	35400	36000	24800	24100	27000	26800	34700	35100	34600	27900	38300	34600
22	35000	36000	24800	23100	26600	28100	34400	34500	34300	27600	36700	33900
23	35700	36200	24100	23000	26000	30500	33800	34800	34500	27600	44400	33200
24	35800	36700	24200	23100	25500	31800	34000	35600	34000	27900	51500	32600
25	35500	38300	24300	22900	25300	33400	33800	36000	33300	28100	42900	32100
26	35500	39700	23300	23200	25400	34200	33200	37300	32500	28600	41100	32000
27	35300	40400	21900	23700	25500	33500	33200	35800	32000	29300	38400	32600
28	35300	38900	21700	24700	24700	33900	34400	35800	32100	30800	36600	33400
29	35400	38000	21300	25000	---	34900	34400	37700	32200	29400	35600	33400
30	35100	36800	21200	24000	---	34600	34800	37900	32000	28400	35300	33800
31	35100	---	21900	22900	---	34600	---	37400	---	28300	36100	---
TOTAL	1107000	1105000	803900	737300	679000	851100	1041000	1134700	1066300	919100	1047600	1018800
MEAN	35710	36830	25930	23780	24250	27450	34700	36600	35540	29650	33790	33960
MAX	38500	40400	34700	26900	27000	34900	36800	44600	49800	32400	51500	35300
MIN	35000	35700	21200	21200	19200	20000	33200	33500	32000	27600	27600	32000
AC-FT	2196000	2192000	1595000	1462000	1347000	1688000	2065000	2251000	2115000	1823000	2078000	2021000
CFSM	0.09	0.09	0.06	0.06	0.06	0.07	0.08	0.09	0.09	0.07	0.08	0.08
IN.	0.10	0.10	0.07	0.07	0.06	0.08	0.09	0.10	0.10	0.08	0.09	0.09

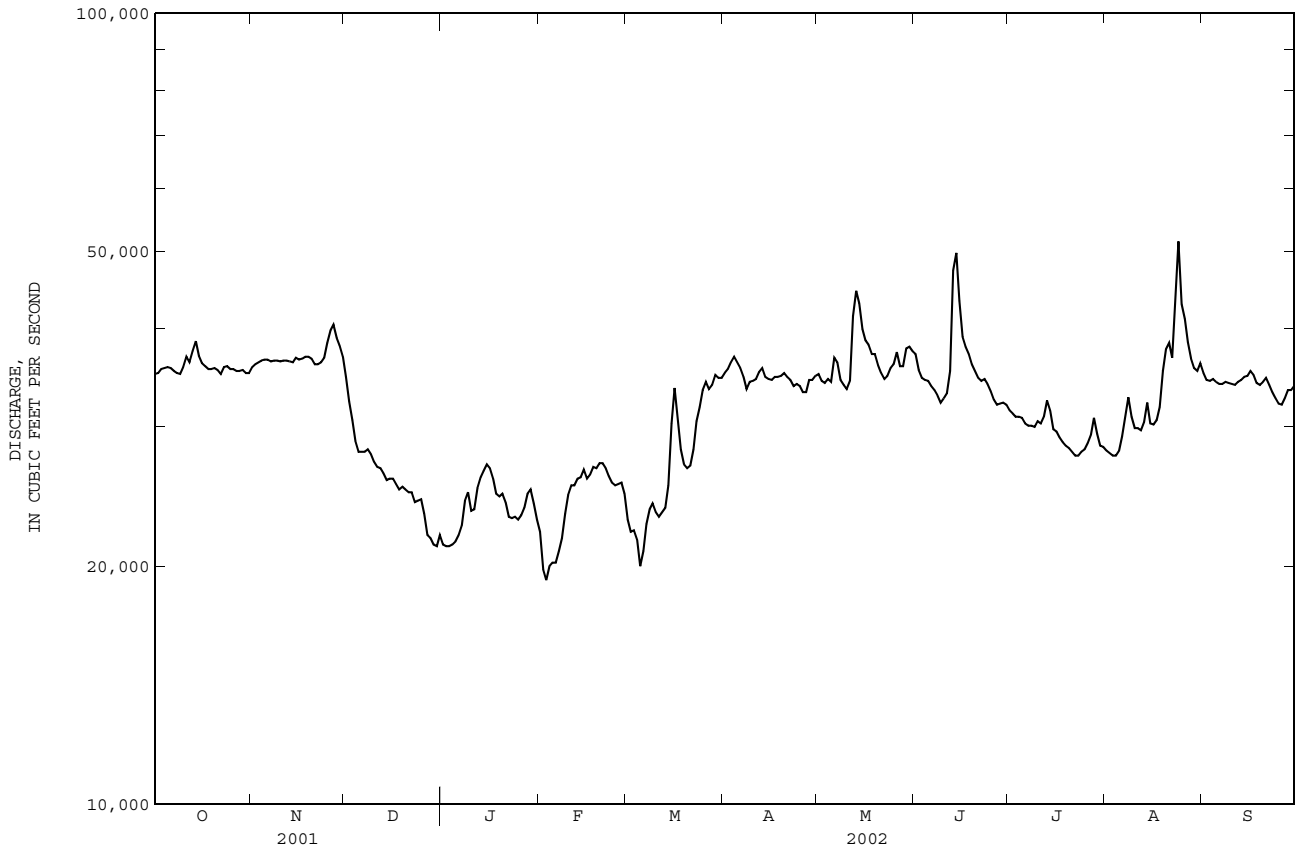
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2002, BY WATER YEAR (WY)

MEAN	44780	41100	27350	22870	28600	41190	51370	51900	56710	50730	44890	45060
MAX	80050	83880	57380	42280	53140	79590	106100	97280	130600	164800	78730	76410
(WY)	1998	1998	1998	1973	1997	1979	1997	1997	1984	1993	1996	1997
MIN	25580	17000	9953	10800	13220	15380	21820	33790	33710	29650	29820	33960
(WY)	1962	1962	1956	1957	1957	1957	1957	1956	1956	2002	1955	2002

06813500 MISSOURI RIVER AT RULO, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1953 - 2002a	
ANNUAL TOTAL	14811100		11510800		42250	
ANNUAL MEAN	40580		31540		71880	
HIGHEST ANNUAL MEAN					26340	
LOWEST ANNUAL MEAN					289000	
HIGHEST DAILY MEAN	103000	May 6	51500	Aug 24	289000	Jul 24 1993
LOWEST DAILY MEAN	20600	Feb 19	19200	Feb 3	4420	Jan 13 1957
ANNUAL SEVEN-DAY MINIMUM	21700	Jan 31	20300	Feb 2	5560	Nov 30 1955
MAXIMUM PEAK FLOW			59500		307000	
MAXIMUM PEAK STAGE			13.71		25.37	
INSTANTANEOUS LOW FLOW			18900		25.37	
ANNUAL RUNOFF (AC-FT)	29380000		22830000		30610000	
ANNUAL RUNOFF (CFSM)	0.098		0.076		0.10	
ANNUAL RUNOFF (INCHES)	1.33		1.03		1.38	
10 PERCENT EXCEEDS	65600		36800		66900	
50 PERCENT EXCEEDS	36300		33500		38700	
90 PERCENT EXCEEDS	22700		23400		19000	

a Post regulation.



MISSOURI RIVER BASIN

BIG NEMAHA RIVER BASIN

06814000 TURKEY CREEK NEAR SENECA, KS

LOCATION.--Lat 39°56'52", long 96°06'30", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.20, T.1 S., R.12 E., Nemaha County, Hydrologic Unit 10240007, on left bank at downstream side of county highway bridge, 2.0 mi downstream from Clear Creek, 5.0 mi upstream from Big Nemaha River, and 8.0 mi northwest of Seneca.

DRAINAGE AREA.--276 mi².

PERIOD OF RECORD.--October 1948 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 1,037.53 ft above NGVD of 1929. Prior to Oct. 19, 1956, water-stage recorder (occasional operation only) and nonrecording gage on former channel 400 ft south of present site at present datum. Oct. 19, 1956, to June 15, 1957, nonrecording gage at highway bridge 1.2 mi upstream at different datum. June 16, 1957, to Mar. 27, 1958, nonrecording gage at present site and datum.

REMARKS.--Records good except those periods of daily discharges, Apr. 1-16, and May 8-11, which are fair, and those for estimated daily discharges, which are poor. Satellite telemeter at station. Records provided by the U.S. Geological Survey, Kansas District.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 12	0545	*2,550	*12.96	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	40	31	e22	e20	e20	22	35	64	7.3	2.0	1.4
2	61	35	30	e22	e20	e15	21	31	56	6.9	1.8	0.96
3	58	32	30	e25	e25	e15	19	26	50	6.9	2.0	0.88
4	56	32	30	e25	e25	e15	19	23	48	7.2	1.3	0.82
5	69	31	29	e25	e30	e20	19	22	46	7.8	1.5	0.78
6	69	32	27	e27	e35	e25	19	544	40	7.5	1.6	0.75
7	59	33	28	e27	e45	e30	19	314	37	6.6	1.4	0.73
8	55	32	27	e27	51	35	24	96	34	6.2	1.3	0.76
9	62	30	28	e27	52	33	31	72	32	5.5	1.4	0.69
10	62	31	28	e27	51	32	26	62	31	5.6	1.4	0.67
11	46	30	28	e30	43	38	24	65	42	6.1	1.5	0.75
12	42	30	34	e30	53	32	22	1390	49	6.5	2.1	0.73
13	46	32	36	e30	40	30	20	329	45	6.2	2.4	0.99
14	51	33	34	e30	46	29	19	127	34	5.5	3.6	1.2
15	76	32	31	30	44	26	19	83	27	5.1	2.5	1.5
16	119	30	30	36	39	25	18	72	25	4.6	43	0.88
17	70	29	28	30	36	23	17	63	23	4.4	158	0.64
18	52	30	28	31	35	23	16	58	21	4.0	25	0.71
19	47	29	28	34	39	23	17	54	19	3.8	10	0.73
20	e52	28	27	34	46	25	19	53	17	3.7	8.4	0.81
21	e48	29	27	36	39	23	26	50	16	3.2	4.2	0.69
22	e48	29	28	37	33	19	28	48	15	3.0	2.8	0.66
23	e46	31	23	34	31	24	25	51	13	2.8	3.1	0.60
24	e45	45	e23	27	30	24	23	87	12	2.7	2.0	0.52
25	e42	50	e20	29	28	28	19	484	11	2.7	1.9	0.73
26	e41	45	e20	36	e25	26	18	206	11	4.2	1.7	0.55
27	e42	34	e20	30	e20	28	30	547	9.7	8.4	1.8	0.52
28	34	32	e21	29	e20	27	108	718	9.1	14	1.6	0.56
29	35	31	e21	20	---	29	62	296	8.6	7.2	1.5	0.65
30	37	32	e21	e15	---	28	44	126	8.2	3.4	1.4	0.64
31	47	---	e22	e15	---	24	---	81	---	2.4	1.2	---
MEAN	54.19	32.97	27.03	28.29	35.75	25.61	26.43	200.4	28.45	5.529	9.529	0.783
MAX	119	50	36	37	53	38	108	1390	64	14	158	1.5
MIN	34	28	20	15	20	15	16	22	8.2	2.4	1.2	0.52
AC-FT	3330	1960	1660	1740	1990	1570	1570	12320	1690	340	586	47

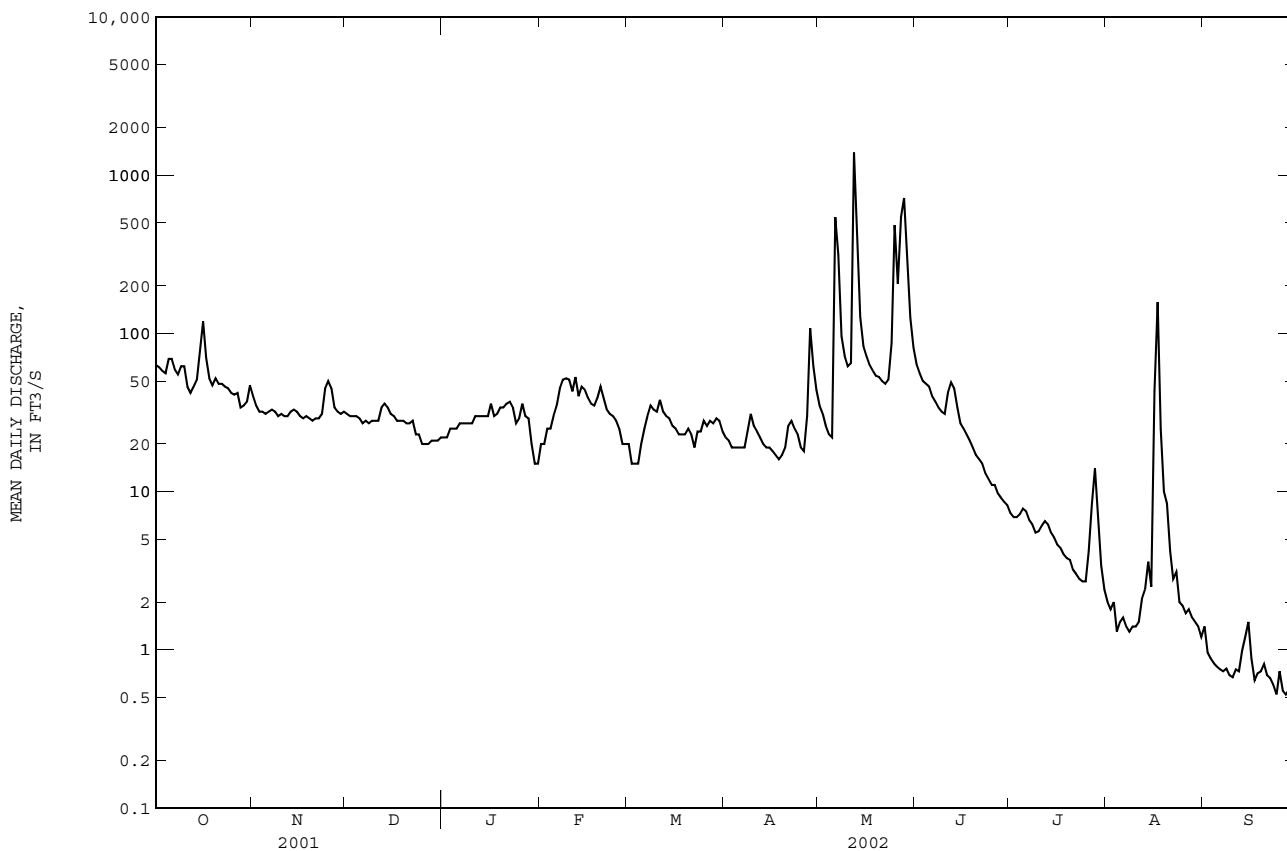
BIG NEMAHA RIVER BASIN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	83.04	49.00	33.47	40.39	93.67	206.8	176.8	228.2	240.6	205.6	80.43	133.1
MAX	1050	419	206	310	372	1297	1079	1354	2067	3193	914	1057
(WY)	1974	1999	1974	1962	1982	1979	1984	1995	1951	1993	1954	1958
MIN	0.000	0.000	0.000	0.000	0.018	0.065	0.28	2.43	2.75	0.92	1.48	0.000
(WY)	1957	1957	1957	1957	1957	1957	1956	1989	1977	1989	1988	1956

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1949 - 2002	
ANNUAL MEAN	227.6		39.81		129.4	
HIGHEST ANNUAL MEAN					547	
LOWEST ANNUAL MEAN					3.24	
HIGHEST DAILY MEAN	6850		1390		16700	
LOWEST DAILY MEAN	0.75		0.52		0.00	
ANNUAL SEVEN-DAY MINIMUM	1.7		0.59		0.00	
MAXIMUM PEAK FLOW			2550		21400	
MAXIMUM PEAK STAGE			12.96		24.77	
INSTANTANEOUS LOW FLOW			0.45		0.00	
ANNUAL RUNOFF (AC-FT)	164700		28820		93760	
10 PERCENT EXCEEDS	468		57		203	
50 PERCENT EXCEEDS	39		27		22	
90 PERCENT EXCEEDS	3.5		1.5		2.0	

e Estimated



BIG NEMAHA RIVER BASIN

06815000 BIG NEMAHA RIVER AT FALLS CITY, NE

LOCATION.--Lat 40°02'08", long 95°35'45", in NE ¼ SE ¼ sec.22, T.1 N., R.16 E., Richardson County, Hydrologic Unit 10240008, on right bank near upstream side of bridge on U.S. Highway 73, 1 mi south of Falls City and 14.5 mi upstream from mouth.

DRAINAGE AREA.--1,339 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1944 to current year. Prior to October 1967, published as Nemaha River at Falls City.

REVISED RECORDS.--WSP 1086: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 858.24 ft above sea level. Prior to Oct. 16, 1952, nonrecording gage and Oct. 17, 1952 to Aug. 24, 1982 water-stage recorder for stages above 6.1 ft at site 150 ft downstream at datum 3.0 ft higher. Aug. 25, 1982 to Sept. 30, 1997 at present site, at datum 3.0 ft higher. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	325	253	206	e110	e65	e105	127	185	443	48	29	74
2	308	241	205	e115	e67	e105	120	159	355	47	20	45
3	295	230	197	e115	e72	e105	113	144	295	55	16	37
4	293	222	200	e115	e78	e105	107	138	270	63	15	38
5	343	223	205	e118	e86	e110	104	131	242	72	11	32
6	350	227	194	e120	e94	e110	104	2140	220	61	16	30
7	325	227	187	e120	e94	e110	108	1710	201	62	10	28
8	294	228	185	e120	e98	e110	121	809	182	54	10	26
9	284	222	182	e120	e110	e110	141	413	168	51	7.1	26
10	311	212	180	e120	e110	e110	151	280	157	83	11	26
11	340	217	182	e120	e110	e110	149	316	166	72	13	28
12	305	219	195	e120	e115	e115	140	2640	209	57	16	28
13	304	223	208	e120	e120	e115	136	2030	234	53	46	34
14	328	225	210	e120	e125	e120	128	835	176	52	67	55
15	342	222	204	e120	e135	e125	121	477	155	45	57	54
16	541	216	203	e120	e150	130	115	347	139	35	489	39
17	493	207	195	e120	e160	125	111	281	128	35	1010	35
18	386	202	189	e120	169	123	114	237	130	29	498	38
19	332	188	184	e125	181	124	111	202	118	32	281	57
20	304	183	188	e130	199	126	111	174	104	27	163	45
21	296	178	190	e130	191	121	136	153	94	23	114	34
22	289	182	195	e130	171	119	137	140	85	22	102	29
23	292	186	193	e130	161	107	139	134	76	20	90	27
24	287	221	e190	150	152	120	131	387	72	16	85	24
25	269	247	e170	143	144	140	117	893	70	19	120	25
26	247	255	e145	164	126	141	107	1390	70	21	104	26
27	229	235	e135	176	e115	141	157	979	65	60	68	28
28	229	211	e125	156	e110	148	256	1600	58	56	55	33
29	233	202	e115	140	---	157	293	1980	59	87	51	36
30	241	204	e110	e64	---	150	252	1020	56	56	60	30
31	254	---	e110	e66	---	137	---	615	---	39	87	---
TOTAL	9669	6508	5577	3837	3508	3774	4157	22939	4797	1452	3721.1	1067
MEAN	311.9	216.9	179.9	123.8	125.3	121.7	138.6	740.0	159.9	46.84	120.0	35.57
MAX	541	255	210	176	199	157	293	2640	443	87	1010	74
MIN	229	178	110	64	65	105	104	131	56	16	7.1	24
AC-FT	19180	12910	11060	7610	6960	7490	8250	45500	9510	2880	7380	2120

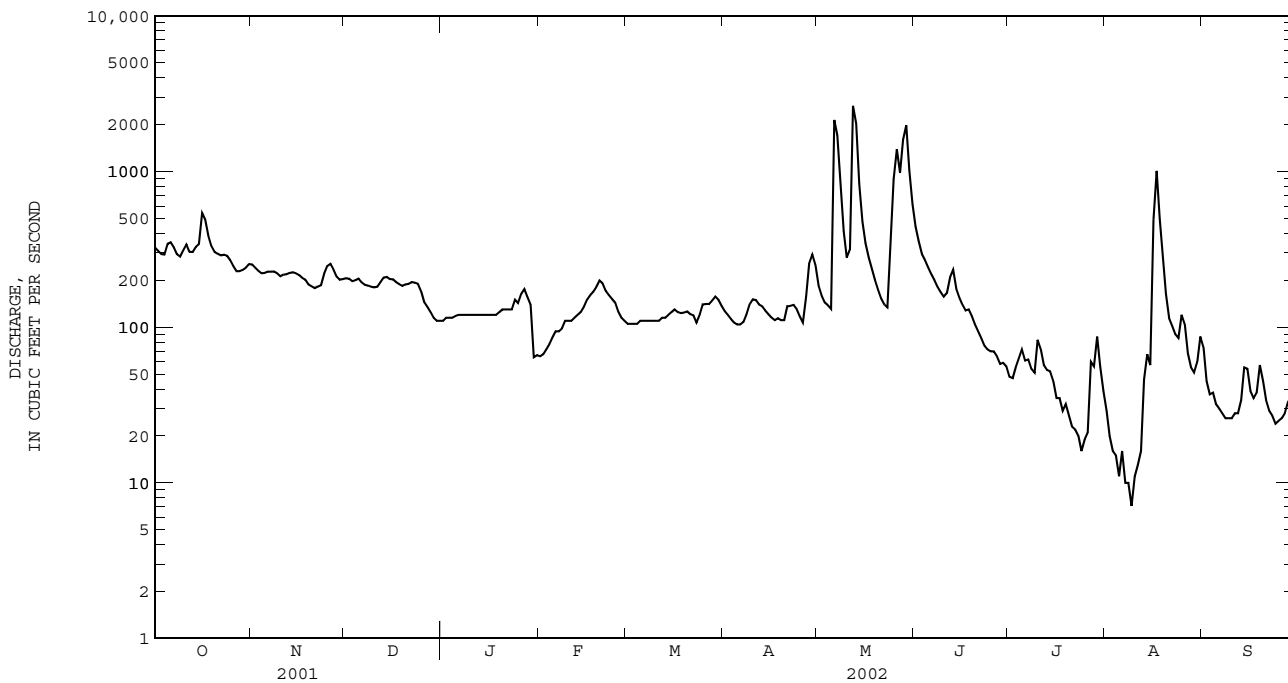
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2002, BY WATER YEAR (WY)

MEAN	413.5	271.4	186.2	225.5	447.0	884.3	803.4	1077	1150	998.9	465.6	633.2
MAX	5229	1851	1036	1446	2998	5819	4462	6166	7816	15690	3898	3408
(WY)	1974	1999	1974	1974	1949	1979	1984	1995	1951	1993	1954	1958
MIN	21.0	28.1	24.1	19.9	42.2	42.5	32.3	44.5	46.4	20.7	29.8	16.6
(WY)	1957	1957	1957	1957	1957	1956	1956	1989	1981	1977	1991	1956

06815000 BIG NEMAHA RIVER AT FALLS CITY, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1944 - 2002	
ANNUAL TOTAL	412220		71006.1		627.1	
ANNUAL MEAN	1129		194.5		2559	
HIGHEST ANNUAL MEAN					1993	
LOWEST ANNUAL MEAN					86.7	
HIGHEST DAILY MEAN	17500	Jun 6	2640	May 12	57600	Oct 11 1973
LOWEST DAILY MEAN	43	Feb 1	7.1	Aug 9	3.0	Jul 9 1977
ANNUAL SEVEN-DAY MINIMUM	46	Jan 1	11	Aug 5	4.0	Jul 4 1977
MAXIMUM PEAK FLOW			4120		71600	
MAXIMUM PEAK STAGE			10.81		*31.40	
ANNUAL RUNOFF (AC-FT)	817600		140800		454300	
10 PERCENT EXCEEDS	2440		306		1050	
50 PERCENT EXCEEDS	293		130		160	
90 PERCENT EXCEEDS	81		33		45	

e Estimated.
 * Datum then in use.



BIG NEMAHA RIVER BASIN

06815000 BIG NEMAHA AT FALLS CITY, NE--Continued

WATER-QUALITY RECORDS
Pesticide Reconnaissance Study

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	ACETO-CHLOR ESA FLTRD (UG/L) (61029)	ACETO-CHLOR OA FLTRD (UG/L) (61030)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR OA FLTRD 0.7 UM GF REC (UG/L) (61031)
MAY 06...	1400	4090	731	4.0	44	7.6	350	25.0	17.5	1.06	1.85	7.63	.16
JUL 12...	1400	52	736	8.3	102	8.5	690	22.0	23.5	.47	1.05	.070	.14

Date	Time	ALA-CHLOR ESA WAT FLT GF 0.7U REC (UG/L) (50009)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	AMETRYN WATER, DISS, REC, (UG/L) (38401)	AMINO-METHYL-PHOS-PHONIC ACID, WAT FLT (UG/L) (62649)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	CYANA-ZINE AMIDE, WATER FLTRD REC (UG/L) (61709)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DEISO-PROPYL ATRAZIN WATER, DISS, REC (UG/L) (04038)	DIMETH-ENAMID OA, WATER FLT, REC (UG/L) (62482)	DI-METHEN-AMID WATER FLTRD REC WAT FLT (UG/L) (61951)	FLUFEN-ACET, ESA, WAT FLT (UG/L) (61588)	FLUFEN-ACET, ESA, WAT FLT (UG/L) (61952)
MAY 06...	.19	.98	<.05	<.1	41.0	<.05	<.05	2.88	1.02	.23	.20	.29	.06	
JUL 12...	.13	<.05	<.05	.2	.99	<.05	<.05	.34	.16	<.05	<.05	<.05	<.05	

Date	Time	FLUFE-NACET OA, WATER FLT, REC (UG/L) (62483)	FLUFE-NACET, WATER, FLT, REC (UG/L) (62481)	GLUFO-SINATE, WATER, FLTRD, REC (UG/L) (62721)	GLYPHO-SATE, WATER, FLTRD, REC (UG/L) (62722)	METOLA-CHLOR ESA FLTRD GF REC (UG/L) (61043)	METOLA-CHLOR OA FLTRD GF REC (UG/L) (61044)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	PENDI-METH-ALIN WAT FLT GF, REC (UG/L) (82683)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRO-METRYN, WATER, DISS, REC (UG/L) (04036)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PROP-AZINE WATER DISS REC (UG/L) (38535)
MAY 06...	.05	.47	<.1	<.1	.10	.07	.98	.50	<.050	<.05	<.05	<.050	.26	
JUL 12...	<.05	<.05	<.1	<.1	.26	.25	.14	<.05	<.050	<.05	<.05	<.050	<.05	

Date	Time	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TER-BUTRYN WATER, DISS, REC (UG/L) (38888)
MAY 06...		<.05	<.05
JUL 12...		<.05	<.05

Remark codes used in this report:
< -- Less than

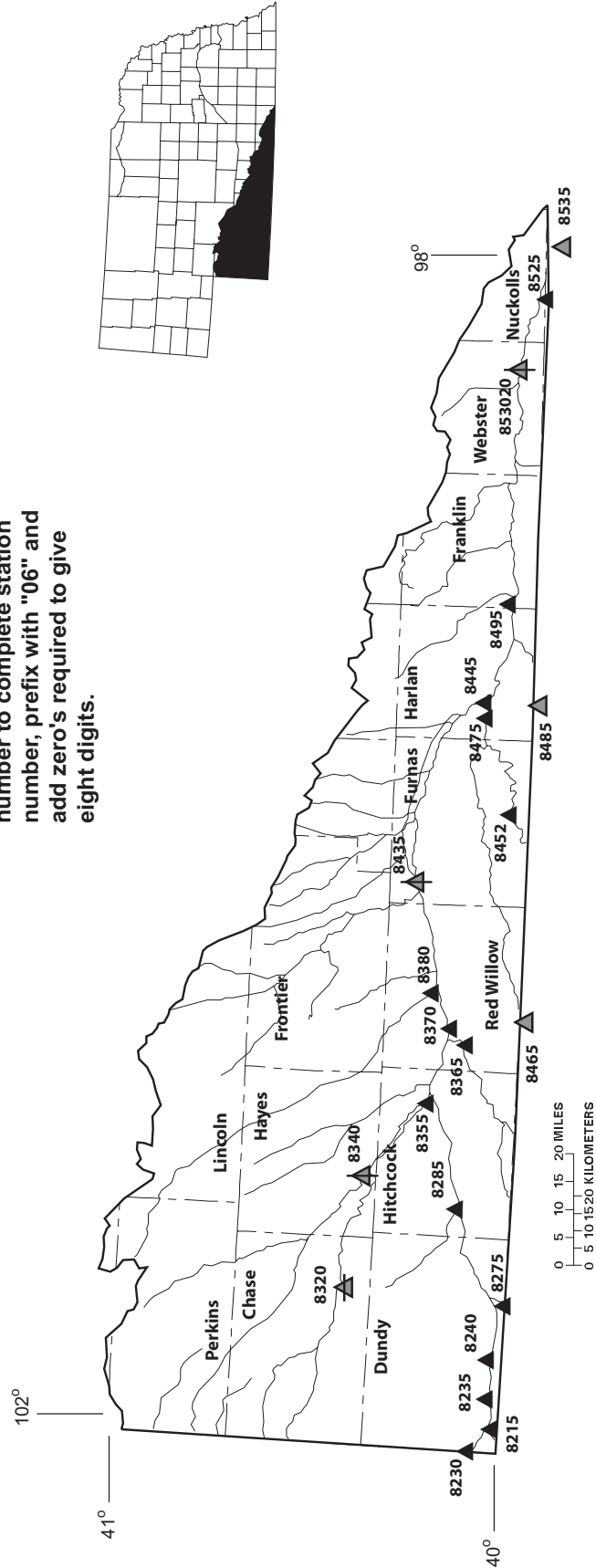
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SURFACE-WATER DISCHARGE RECORDS
 KANSAS RIVER BASIN
 REPUBLICAN RIVER BASIN

EXPLANATION

- Hydrologic boundary
- - - County line
- Streams
- ▲ Stream-flow gaging station
- ▲ Reservoir station
- ▲ Gaging station run by neighboring state
- ▲ Gaging station run by the Department of Natural Resources

NOTE: To change abbreviated station number to complete station number, prefix with "06" and add zero's required to give eight digits.



SURFACE-WATER DISCHARGE RECORDS
KANSAS RIVER BASIN
REPUBLICAN RIVER BASIN

271

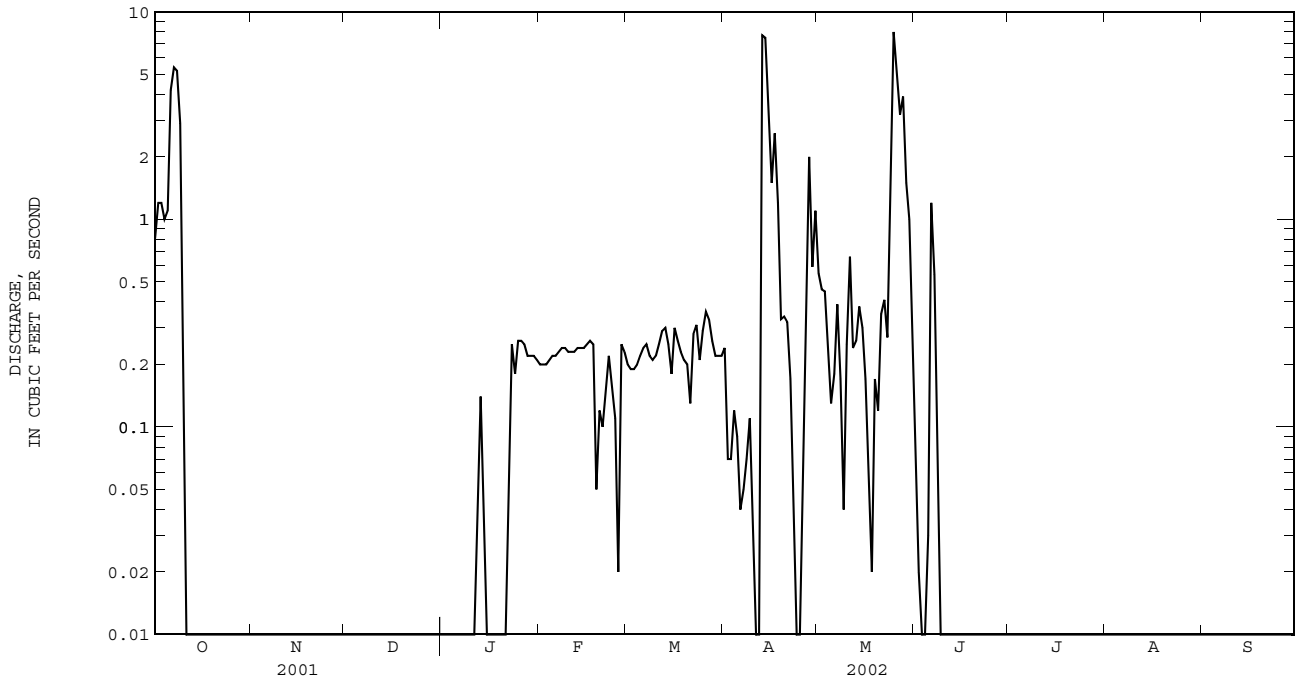
* Station number	Station name	Page
8215	Arikaree River at Haigler.....	272
8230	N.F. Republican River at Colorado-Nebraska State Line.....	274
8235	Buffalo Creek near Haigler.....	276
8240	Rock Creek at Parks.....	278
8275	South Fork Republican River near Benkelman.....	280
8285	Republican River at Stratton.....	282
8320	Enders Reservoir near Enders.....	284
8340	Frenchman Creek at Palisade.....	286
8355	Frenchman Creek at Culbertson.....	288
8365	Driftwood Creek near McCook.....	290
8370	Republican River at McCook.....	292
8380	Red Willow Creek near Red Willow.....	294
8435	Republican River at Cambridge.....	296
8445	Republican River near Orleans.....	298
8452	Sappa Creek near Beaver City.....	302
8465	Beaver Creek at Cedar Bluffs, KS.....	304
8475	Sappa Creek near Stamford.....	306
8485	Prairie Dog Creek near Woodruff, KS.....	308
8495	Republican River below Harlan County Dam.....	310
8525	Courtland Canal at Nebraska-Kansas State Line.....	312
853020	Republican River at Guide Rock.....	314
8535	Republican River near Hardy.....	316

* NOTE: To change abbreviated station number to complete station number, prefix with "06" and add zeros required to give eight digits.

06821500 ARIKAREE RIVER AT HAIGLER, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1932 - 2002	
ANNUAL TOTAL	278.34		101.31		18.83	
ANNUAL MEAN	0.763		0.278		127	
HIGHEST ANNUAL MEAN					1935	
LOWEST ANNUAL MEAN					0.28	
HIGHEST DAILY MEAN	15	May 5	8.0	May 25	17000	May 31 1935
LOWEST DAILY MEAN	0.00	Jun 20	0.00	Oct 11	0.00	Jul 21 1932
ANNUAL SEVEN-DAY MINIMUM	0.00	Jun 26	0.00	Oct 11	0.00	Jul 30 1934
MAXIMUM PEAK FLOW			14		50000	
MAXIMUM PEAK STAGE			4.64		*11.20	
ANNUAL RUNOFF (AC-FT)	552		201		13640	
10 PERCENT EXCEEDS	1.6		0.35		30	
50 PERCENT EXCEEDS	0.40		0.00		8.1	
90 PERCENT EXCEEDS	0.00		0.00		0.58	

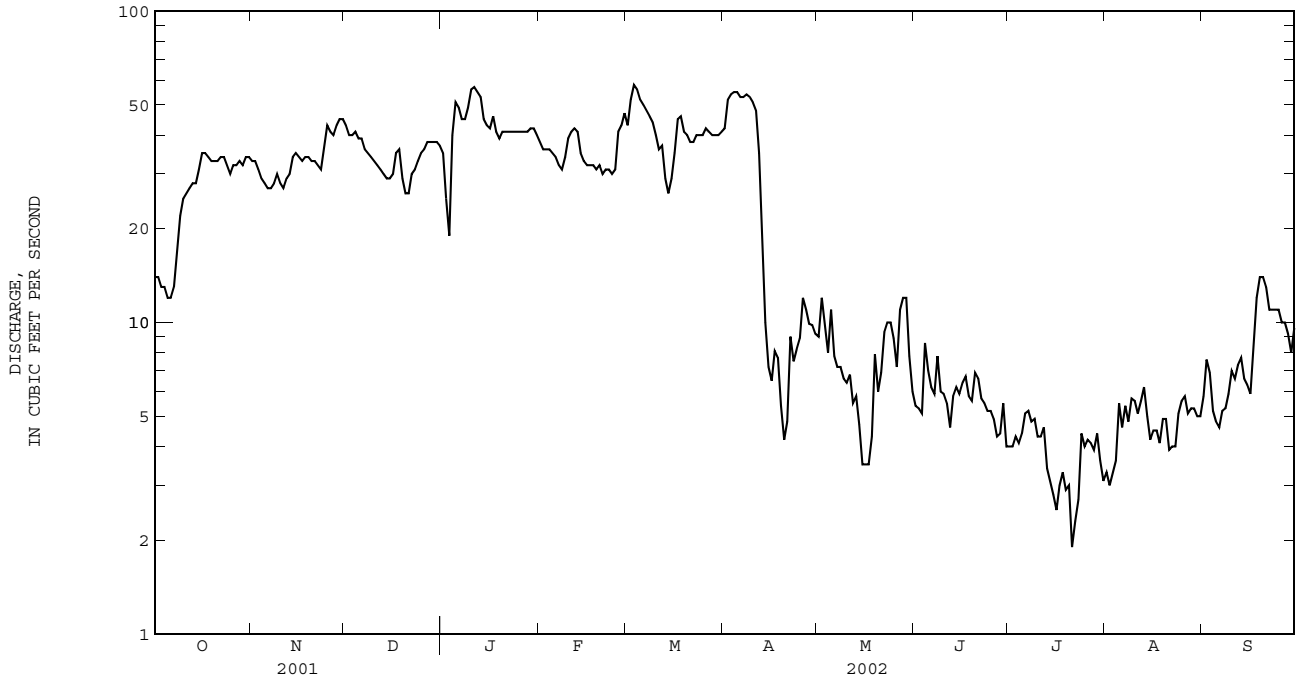
e Estimated.
 * Site and datum then in use.



06823000 NORTH FORK REPUBLICAN RIVER AT COLORADO-NEBRASKA STATE LINE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1935 - 2002	
ANNUAL TOTAL	9956.0		8195.8		43.72	
ANNUAL MEAN	27.28		22.45		65.3	
HIGHEST ANNUAL MEAN					22.5	
LOWEST ANNUAL MEAN					761	
HIGHEST DAILY MEAN	56	Apr 13	58	Mar 3	761	May 15 1951
LOWEST DAILY MEAN	1.5	Aug 5	1.9	Jul 21	1.5	Sep 12 1999
ANNUAL SEVEN-DAY MINIMUM	3.0	Aug 3	2.7	Jul 16	2.3	Aug 5 1940
MAXIMUM PEAK FLOW			*59		2110	Apr 28 1947
MAXIMUM PEAK STAGE			**1.84		5.92	Apr 28 1947
ANNUAL RUNOFF (AC-FT)	19750		16260		31680	
10 PERCENT EXCEEDS	49		43		72	
50 PERCENT EXCEEDS	30		25		48	
90 PERCENT EXCEEDS	5.7		4.3		8.5	

e Estimated.
 * Stage 1.24 ft.
 ** Backwater from ice.



KANSAS RIVER BASIN

06823500 BUFFALO CREEK NEAR HAIGLER, NE

LOCATION.--Lat 40°02'22", long 101°51'57", in SE 1/4 NW 1/4 sec.20, T.1 N., R.40 W., Dundy County, Hydrologic Unit 10250002, on upstream side of bridge, 0.4 mi upstream from mouth, and 4 mi northeast of Haigler.

DRAINAGE AREA.--172 mi², of which about 8.6 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1940 to current year.

REVISED RECORDS.--WSP 2119: 1948-50(M), 1957(M). WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,189.00 ft above sea level. Prior to Sept. 19, 1980, at site 0.5 mi upstream at datum 15.57 ft higher. Sept. 18, 1980 to June 4, 1996 on left bank 15 ft upstream from county highway bridge at datum 0.10 ft lower. June 4, 1996 to Nov. 7, 1996 135 ft downstream from county highway bridge, at datum 0.10 ft lower. Data collection platform at station.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow affected by diversion about 1 mi upstream for irrigation of 880 acres.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	4.7	e7.6	e5.2	e3.1	e3.6	4.3	4.7	1.3	0.17	0.00	0.93
2	1.2	4.7	e6.6	e4.9	e3.0	e3.1	3.4	2.3	2.3	0.00	0.00	0.87
3	1.2	4.9	e5.6	e6.0	e3.1	e3.7	3.2	1.1	3.1	0.00	0.00	0.69
4	1.2	5.1	e5.4	e7.2	e3.3	e4.7	3.5	1.7	4.6	0.00	0.00	0.00
5	1.4	5.7	e6.2	e6.6	e3.4	e5.0	3.9	1.2	5.8	0.02	0.00	0.00
6	1.6	6.0	e4.9	e5.4	e3.3	e4.9	3.9	1.0	4.8	0.02	0.00	0.00
7	2.5	6.3	e4.6	e6.2	e3.5	e4.5	4.0	0.94	3.8	0.00	0.00	0.00
8	4.0	7.5	e4.5	e5.4	e3.8	e4.4	4.2	1.6	3.2	0.00	0.00	0.00
9	3.8	7.2	e4.8	e5.4	e3.5	e4.7	4.3	1.0	3.1	0.00	0.00	0.00
10	3.2	6.8	e5.2	e4.8	e3.5	e5.0	4.6	1.2	2.6	0.00	0.00	0.04
11	2.4	6.9	e5.4	e4.4	e3.5	e5.2	4.6	1.3	2.6	0.00	0.00	0.16
12	2.4	7.1	e5.6	e4.4	e3.5	5.3	4.4	1.2	2.9	0.00	0.05	0.09
13	3.2	6.9	e5.4	e4.7	e4.0	5.3	4.6	1.2	2.9	0.00	1.6	0.25
14	3.7	7.0	e5.0	e4.1	e3.7	5.1	4.6	1.4	3.1	0.00	0.00	1.4
15	4.1	7.0	e5.6	e3.9	e3.5	5.2	4.8	1.5	3.3	0.00	0.00	0.35
16	4.5	6.9	e5.0	e3.7	3.5	5.0	4.8	1.7	3.4	0.00	0.00	0.16
17	4.2	7.1	e4.7	e3.5	3.7	5.2	4.7	2.0	2.2	0.00	0.00	0.33
18	3.7	6.3	e4.6	e3.3	4.7	4.7	4.8	2.3	1.5	0.00	0.00	0.19
19	3.6	6.3	e4.5	e3.2	4.5	3.3	4.3	2.6	2.4	0.00	0.00	0.23
20	3.5	6.7	e4.4	e2.9	4.4	3.3	5.2	2.5	2.1	0.00	0.37	0.10
21	3.1	7.1	e4.3	e3.3	3.9	3.1	5.3	3.1	3.0	0.00	0.0	0.08
22	2.4	6.9	e4.9	e3.5	4.2	3.2	5.0	3.5	4.3	0.00	0.23	0.31
23	2.3	6.2	e4.9	e3.2	4.7	3.5	5.4	3.8	4.5	0.00	1.8	0.45
24	2.0	5.7	e4.7	e3.0	4.1	3.4	4.5	3.6	4.3	0.00	1.7	0.19
25	2.2	5.2	e4.3	e3.0	e3.9	3.9	4.0	3.6	5.5	e0.00	3.5	0.77
26	2.4	e4.8	e3.9	e3.1	e3.7	3.8	3.9	3.9	8.2	e0.00	3.6	0.65
27	3.6	e5.6	e4.0	e2.8	e4.2	4.0	5.1	2.4	7.5	e0.00	3.4	0.54
28	4.5	e5.8	e3.9	e2.8	e4.3	4.0	5.3	1.6	5.3	e0.00	1.7	0.62
29	4.3	e6.6	e4.0	e2.6	---	3.7	5.1	1.7	3.4	e0.00	3.0	0.24
30	4.4	e9.0	e4.7	e2.7	---	3.6	4.8	2.1	2.7	0.00	1.7	0.27
31	5.0	---	e5.2	e2.9	---	3.9	---	2.5	---	0.00	0.71	---
TOTAL	93.0	190.0	154.4	128.1	105.5	131.3	134.5	66.24	109.7	0.21	23.36	9.91
MEAN	3.000	6.333	4.981	4.132	3.768	4.235	4.483	2.137	3.657	0.007	0.754	0.330
MAX	5.0	9.0	7.6	7.2	4.7	5.3	5.4	4.7	8.2	0.17	3.6	1.4
MIN	1.2	4.7	3.9	2.6	3.0	3.1	3.2	0.94	1.3	0.00	0.00	0.00
AC-FT	184	377	306	254	209	260	267	131	218	0.4	46	20

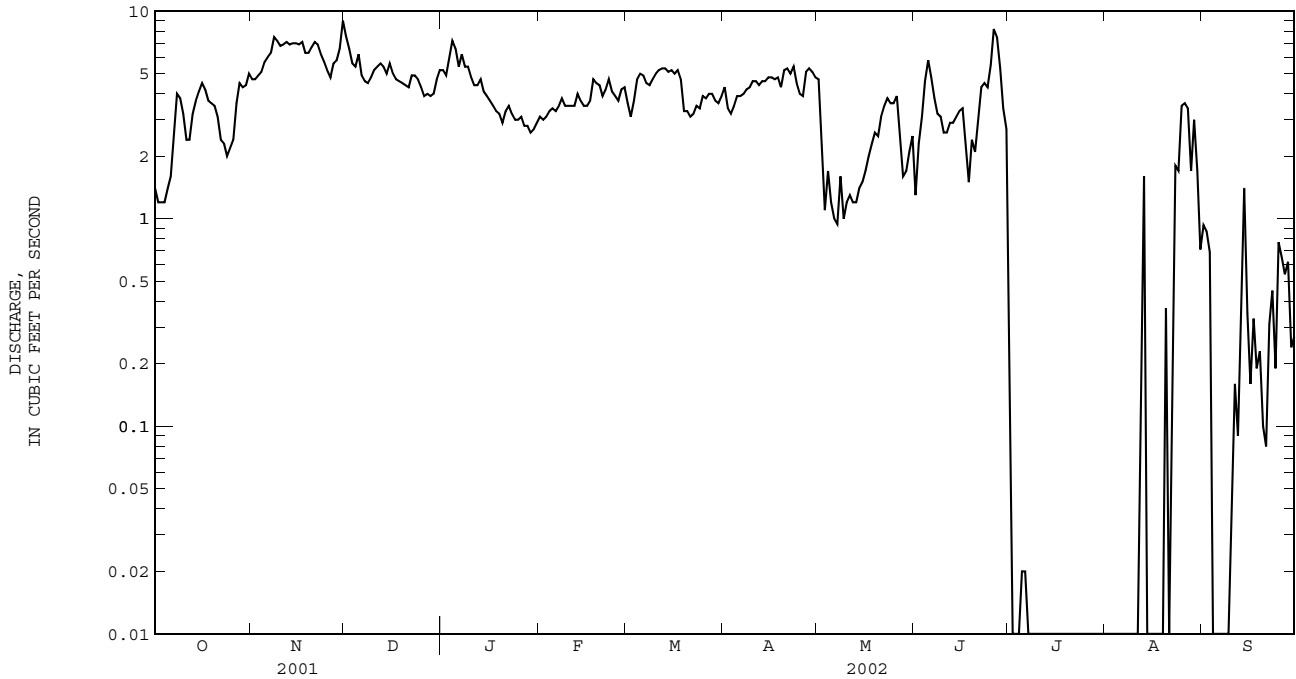
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2002, BY WATER YEAR (WY)

	MEAN	6.662	7.829	7.965	8.205	8.763	9.031	8.902	7.626	5.497	2.590	2.430	4.128
MAX	12.6	12.1	13.7	12.7	12.9	14.3	14.2	12.5	13.2	11.0	19.7	15.2	
(WY)	1943	1947	1946	1942	1960	1952	1944	1944	1962	1948	1950	1951	
MIN	2.84	1.95	3.15	2.68	0.89	2.72	3.72	2.11	0.000	0.000	0.000	0.23	
(WY)	1965	2000	1999	1998	1998	1998	2000	1965	1994	1997	2000	1998	

06823500 BUFFALO CREEK NEAR HAIGLER, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1941 - 2002	
ANNUAL TOTAL	1511.68		1146.22		6.620	
ANNUAL MEAN	4.142		3.140		10.9	
HIGHEST ANNUAL MEAN					1951	
LOWEST ANNUAL MEAN					2.51	
HIGHEST DAILY MEAN	21	Aug 24	9.0	Nov 30	90	Aug 11 1950
LOWEST DAILY MEAN	0.00	Jun 15	0.00	Jul 2	0.00	Aug 3 1955
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 7	0.00	Jul 7	0.00	Aug 14 1973
MAXIMUM PEAK FLOW			*9.3		**140	
MAXIMUM PEAK STAGE			***2.08		***5.93	
ANNUAL RUNOFF (AC-FT)	3000		2270		4800	
10 PERCENT EXCEEDS	6.9		5.6		11	
50 PERCENT EXCEEDS	4.5		3.5		7.2	
90 PERCENT EXCEEDS	0.00		0.00		0.20	

e Estimated.
 * Stage 1.32 ft.
 ** Stage 4.37 ft.
 *** Backwater from ice.



KANSAS RIVER BASIN

06824000 ROCK CREEK AT PARKS, NE

LOCATION.--Lat 40°02'30", long 101°43'40", in SW ¼ NE ¼ sec.21, T.1 N., R.39 W., Dundy County, Hydrologic Unit 10250002, on right bank at west edge of Parks, 100 ft downstream from county road bridge and 0.5 mi upstream from mouth.

DRAINAGE AREA.--23.6 mi², of which about 20 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1940 to current year.

REVISED RECORDS.--WSP 1630: 1951(M). WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,093.35 ft above sea level. Data collection platform at station.

REMARKS.--Records fair except for estimated daily discharges, which are poor. One diversion about 2 mi above station for irrigation of 215 acres; flow regulated at times by reservoir at State fish hatchery 7 mi upstream.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	6.6	7.2	e8.0	e8.4	e11	9.7	7.8	7.0	8.4	6.0	8.2
2	6.1	6.5	8.1	e8.1	8.5	e10	9.1	7.8	6.9	8.1	6.2	8.6
3	6.0	6.5	e8.6	e8.3	8.2	e9.8	9.6	7.8	6.8	8.1	6.2	8.0
4	6.2	6.5	e8.7	e8.5	8.3	e9.8	9.9	7.7	9.5	8.3	6.5	7.8
5	6.6	6.4	e8.9	8.5	8.4	e10	9.9	7.7	9.3	8.4	9.7	7.7
6	6.7	6.5	e9.0	8.5	8.5	e10	9.9	8.0	8.1	9.0	7.9	6.3
7	6.5	6.4	e9.0	8.6	8.5	e10	10	8.1	7.3	9.3	6.6	3.6
8	6.5	20	e9.0	8.6	8.6	e9.8	10	7.8	6.9	9.0	6.5	3.4
9	6.4	13	e9.0	8.9	9.2	e12	10	7.3	6.6	8.6	8.3	4.1
10	6.4	15	e9.0	9.0	9.0	12	9.9	7.4	6.1	8.2	8.4	5.5
11	6.4	14	e9.0	8.9	10	10	9.8	7.7	6.0	8.0	7.7	5.1
12	6.5	7.0	e9.1	8.7	14	8.0	9.5	7.5	7.3	7.7	7.1	5.0
13	6.7	14	e9.1	8.1	13	7.6	9.9	7.9	7.7	7.8	7.2	5.9
14	6.7	16	e9.2	8.1	19	8.5	9.8	7.6	8.1	7.8	7.4	5.6
15	7.1	9.8	9.3	e8.2	14	9.2	10	7.0	8.2	7.7	7.1	5.2
16	7.1	17	9.1	e8.2	15	9.5	9.5	7.1	7.2	7.2	7.0	5.3
17	6.9	15	9.0	e8.1	11	9.8	10	7.8	6.7	6.5	6.9	5.3
18	6.9	10	8.7	e8.0	12	9.9	9.9	7.8	6.5	6.5	7.4	5.4
19	6.8	8.9	8.6	e8.0	21	9.9	9.9	7.7	7.1	6.4	7.6	5.1
20	6.7	12	8.5	e8.2	18	9.9	10	7.8	6.9	6.4	7.4	5.1
21	6.5	14	8.5	e8.6	20	9.8	9.8	7.9	7.1	6.4	6.9	5.2
22	6.5	11	8.4	8.8	17	9.6	6.7	6.5	5.6	6.5	7.2	5.3
23	6.5	11	e8.3	12	16	9.6	6.5	4.7	5.2	6.5	7.2	5.7
24	6.4	11	e8.2	9.5	13	9.7	6.5	7.8	5.4	6.6	7.4	5.8
25	6.2	12	e8.2	8.5	12	10	6.7	8.4	8.1	6.7	8.0	6.1
26	6.4	12	8.3	19	e12	11	7.0	8.0	19	6.5	8.4	6.2
27	6.4	13	7.9	13	e12	11	8.8	7.7	12	6.4	9.6	6.6
28	6.5	9.2	8.1	10	e12	10	8.2	7.4	10	6.4	8.8	6.3
29	6.5	9.1	e8.0	9.2	---	9.5	7.6	7.3	8.8	6.3	9.6	6.5
30	6.5	7.0	e7.9	8.7	---	9.8	7.7	7.0	8.3	6.2	8.8	6.3
31	6.7	---	e7.9	e8.4	---	9.8	---	7.0	---	5.9	8.3	---
TOTAL	202.5	326.4	265.8	283.2	346.6	306.5	271.8	233.0	235.7	227.8	235.3	176.2
MEAN	6.532	10.88	8.574	9.135	12.38	9.887	9.060	7.516	7.857	7.348	7.590	5.873
MAX	7.1	20	9.3	19	21	12	10	8.4	19	9.3	9.7	8.6
MIN	6.0	6.4	7.2	8.0	8.2	7.6	6.5	4.7	5.2	5.9	6.0	3.4
AC-FT	402	647	527	562	687	608	539	462	468	452	467	349

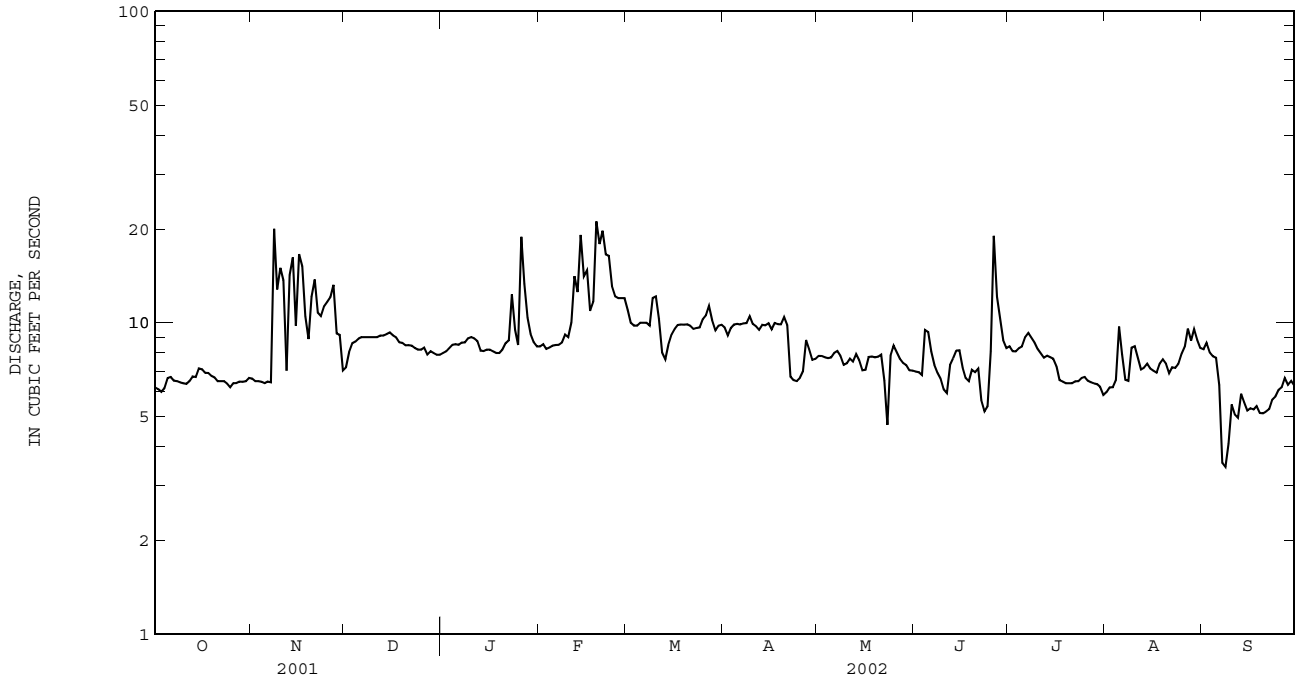
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2002, BY WATER YEAR (WY)

MEAN	12.26	13.17	13.05	13.17	13.47	13.55	13.43	13.41	12.81	11.64	11.22	11.50
MAX	16.2	19.7	17.1	17.9	17.5	18.1	18.1	19.0	19.0	30.3	17.7	18.8
(WY)	1966	1943	1941	1942	1949	1949	1949	1969	1965	1965	1950	1951
MIN	6.53	6.53	7.93	8.24	7.68	7.49	7.97	5.90	5.96	5.18	5.15	5.87
(WY)	2002	2000	1999	1999	1999	1999	2001	2000	2001	2001	2001	2002

06824000 ROCK CREEK AT PARKS, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1941 - 2002	
ANNUAL TOTAL	2850.0		3110.8		12.72	
ANNUAL MEAN	7.808		8.523		15.8	
HIGHEST ANNUAL MEAN					7.57	
LOWEST ANNUAL MEAN					111	
HIGHEST DAILY MEAN	26	Mar 22	21	Feb 19	111	Jul 6 1965
LOWEST DAILY MEAN	3.0	Apr 9	3.4	Sep 8	2.6	Nov 19 1975
ANNUAL SEVEN-DAY MINIMUM	3.6	Jul 8	4.7	Sep 7	3.1	Feb 17 1943
MAXIMUM PEAK FLOW			*29		493	Jul 5 1965
MAXIMUM PEAK STAGE			**3.09		6.00	Jul 5 1965
ANNUAL RUNOFF (AC-FT)	5650		6170		9210	
10 PERCENT EXCEEDS	10		11		16	
50 PERCENT EXCEEDS	7.8		8.1		13	
90 PERCENT EXCEEDS	4.8		6.3		8.9	

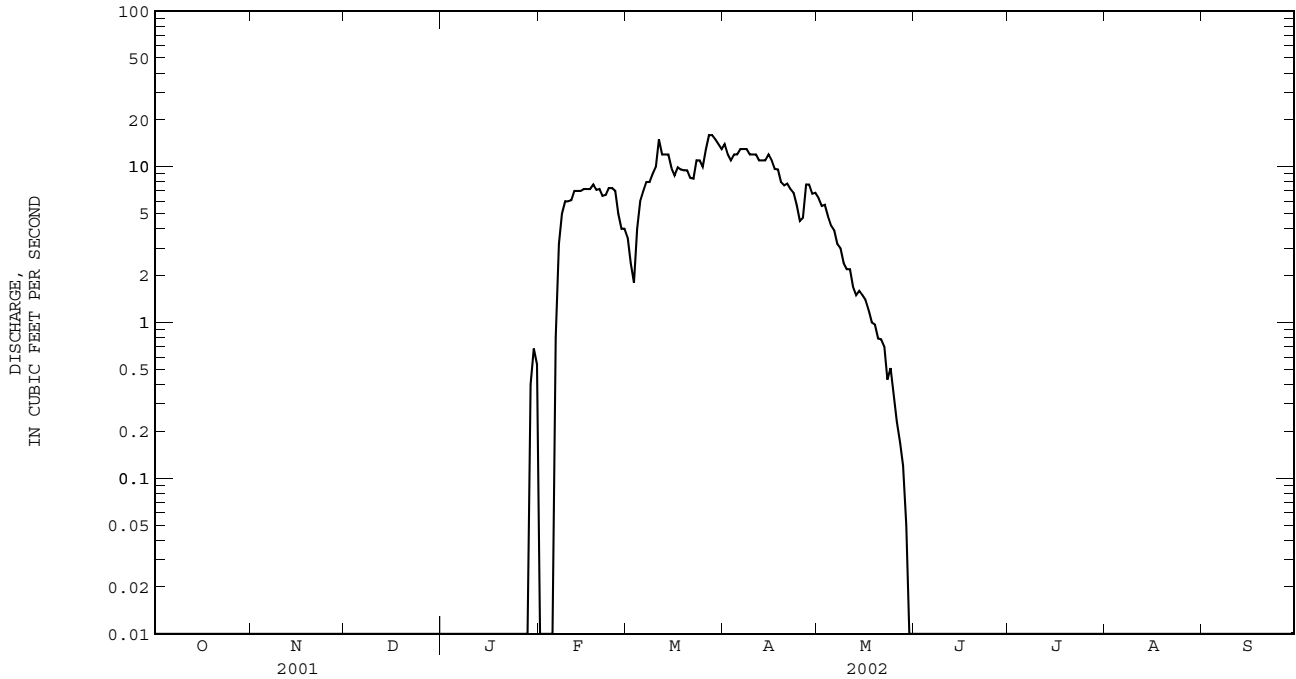
e Estimated.
 * Stage 2.07 ft.
 ** Backwater from ice.



06827500 SOUTH FORK REPUBLICAN RIVER NEAR BENKELMAN, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1938 - 2002	
ANNUAL TOTAL	1562.84	795.71		
ANNUAL MEAN	4.282	2.180	39.69	
HIGHEST ANNUAL MEAN			121	1951
LOWEST ANNUAL MEAN			2.18	2002
HIGHEST DAILY MEAN	18 May 6	16 Mar 27	6220	Aug 16 1958
LOWEST DAILY MEAN	0.00 Jan 1	0.00 Oct 1	0.00	Jul 3 1938
ANNUAL SEVEN-DAY MINIMUM	0.00 Jan 1	0.00 Oct 1	0.00	Aug 1 1938
MAXIMUM PEAK FLOW		*16.9 Mar 27	19600	Aug 16 1958
MAXIMUM PEAK STAGE		**2.23 Mar 7	***8.70	Aug 16 1958
ANNUAL RUNOFF (AC-FT)	3100	1580	28750	
10 PERCENT EXCEEDS	15	9.5	84	
50 PERCENT EXCEEDS	0.00	0.00	18	
90 PERCENT EXCEEDS	0.00	0.00	0.00	

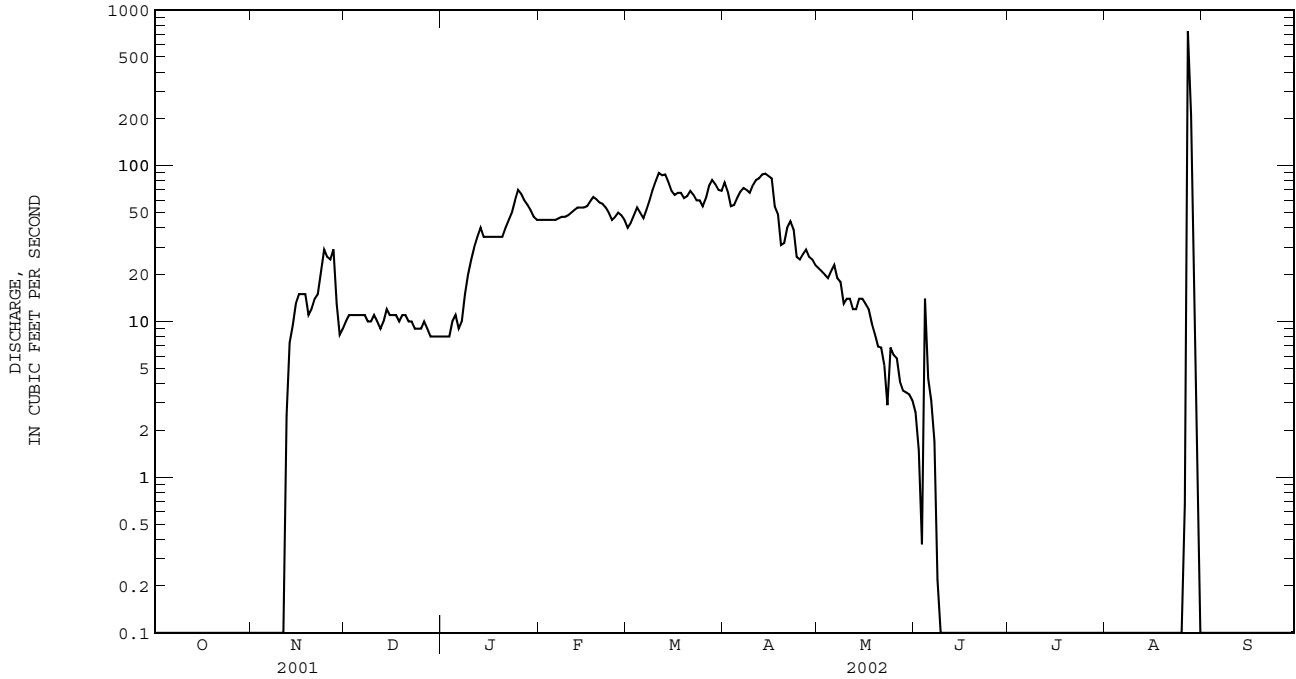
e Estimated.
 * Stage 1.71 ft.
 ** Backwater from ice.
 *** May have been higher during flood of June 24, 1945, site and datum then in use.



06828500 REPUBLICAN RIVER AT STRATTON, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1950 - 2002	
ANNUAL TOTAL	10717.31	8098.26	107.5	
ANNUAL MEAN	29.36	22.19	304	1951
HIGHEST ANNUAL MEAN			22.2	2002
LOWEST ANNUAL MEAN			8180	Aug 1 1962
HIGHEST DAILY MEAN	97 May 6	732 Aug 27	0.00	Jun 18 1952
LOWEST DAILY MEAN	0.00 Jun 24	0.00 Oct 1	0.00	Jun 18 1952
ANNUAL SEVEN-DAY MINIMUM	0.00 Jun 24	0.00 Oct 1	*26800	Jul 31 1962
MAXIMUM PEAK FLOW		1660 Aug 27	9.36	Aug 27 2002
MAXIMUM PEAK STAGE		9.36 Aug 27	77870	
ANNUAL RUNOFF (AC-FT)	21260	16060	212	
10 PERCENT EXCEEDS	78	62	80	
50 PERCENT EXCEEDS	11	8.3	0.00	
90 PERCENT EXCEEDS	0.00	0.00		

e Estimated.
 * Stage 9.34 ft., site then in use.



KANSAS RIVER BASIN

06832000 ENDERS RESERVOIR NEAR ENDERS, NE

LOCATION.--Lat 40°25'05", long 101°30'55", in NE $\frac{1}{4}$ sec.9, T.5 N., R.37 W., Chase County, Hydrologic Unit 10250005, near right bank in control house at outlet tube of Enders Dam on Frenchman Creek, 2.2 mi southeast of Enders.

DRAINAGE AREA.--950 mi², approximately, of which about 790 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1950 to current year.

REVISED RECORDS.--WSP 2119: Drainage area.

GAGE.--Water-stage recorder: Electronic data-logger. Datum of gage is sea level. Prior to Sept. 3, 1960, mercury-column pressure gage at same datum.

REMARKS.--Reservoir is formed by earthfill dam; storage began Oct. 23, 1950. Capacity, 36,010 acre-ft between elevations 3,080.0 ft, sill of outlet gates, and 3,112.3 ft, top of storage pool. Top of flood-control pool at elevation 3,127.0 ft, capacity, 74,520 acre-ft. Top of superstorage flood-control pool at elevation 3,129.5 ft, capacity, 80,730 acre-ft. Dead storage, 8,470 acre-ft. Figures given herein represent total contents. Water used for irrigation in Frenchman-Cambridge irrigation project.

COOPERATION.--Capacity table furnished by Bureau of Reclamation (Effective Jan. 1, 1999).

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 55,330 acre-ft Mar. 25, 1960, elevation, 3,118.20 ft; minimum since operation of reservoir began, 8,870 acre-ft Aug. 28, 1978, elevation, 3,080.67 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 15,260 acre-ft June 6, elevation, 3,090.87 ft; minimum, 9,970 acre-ft Oct. 1, elevation, 3,083.97 ft.

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

3,080	7,516	3,090	14,510
3,085	10,670	3,100	25,000

RESERVOIR STORAGE, 2400 HR, in (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9966	10590	11280	12050	12960	13580	14300	14860	15180	14470	10350	10320
2	9973	10620	11300	12080	13020	13590	14360	14880	15180	14320	10310	10310
3	9993	10640	11330	12110	13040	13610	14360	14900	15180	14160	10290	10320
4	9993	10660	11340	12130	13060	13630	14390	14900	15240	13950	10350	10320
5	10010	10690	11360	12160	13050	13650	14370	14920	15240	13790	10330	10320
6	10040	10710	11380	12190	13060	13660	14400	14940	15240	13730	10300	10300
7	10050	10750	11400	12220	13080	13710	14440	14970	15230	13570	10280	10280
8	10060	10770	11430	12250	13110	13760	14460	14970	15180	13410	10260	10290
9	10120	10800	11460	12270	13150	13760	14470	14970	15180	13230	10270	10300
10	10090	10810	11490	12300	13130	13800	14530	14970	15190	13040	10260	10300
11	10090	10830	11520	12340	13150	13840	14550	15000	15180	12820	10220	10320
12	10140	10850	11540	12360	13180	13850	14560	14990	15170	12630	10240	10340
13	10180	10890	11540	12400	13200	13900	14580	15010	15180	12440	10240	10320
14	10190	10930	11600	12420	13200	13900	14600	15020	15150	12250	10240	10330
15	10260	10950	11620	12450	13230	13940	14610	15050	15140	12060	10230	10340
16	10280	10970	11650	12480	13240	13970	14620	15070	15130	11860	10240	10320
17	10300	11000	11670	12510	13260	14000	14630	15090	15120	11650	10220	10320
18	10320	11030	11700	12540	13300	14010	14630	15090	15100	11420	10220	10350
19	10320	11020	11730	12560	13320	14030	14630	15090	15070	11170	10210	10320
20	10360	11040	11760	12590	13350	14040	14640	15100	15120	11100	10220	10300
21	10380	11060	11780	12620	13380	14070	14660	15090	15090	10860	10220	10300
22	10410	11080	11810	12660	13380	14100	14670	15110	15060	10710	10240	10320
23	10440	11120	11840	12690	13410	14110	14680	15110	15060	10700	10220	10300
24	10450	11180	11860	12720	13450	14150	14680	15120	15050	10550	10240	10290
25	10440	11210	11880	12750	13510	14180	14700	15120	15050	10530	10240	10310
26	10480	11250	11900	12770	13480	14200	14700	15140	15050	10500	10310	10300
27	10490	11230	11930	12800	13500	14210	14780	15170	15050	10480	10320	10300
28	10510	11240	11960	12830	13510	14230	14800	15170	14960	10470	10360	10310
29	10530	11240	11980	12860	---	14240	14830	15170	14760	10460	10340	10320
30	10560	11260	12000	12900	---	14260	14840	15180	14610	10420	10330	10320
31	10580	---	12030	12930	---	14290	---	15180	---	10370	10320	---
MEAN	10260	10950	11650	12480	13240	13940	14580	15040	15100	12040	10270	10310
MAX	10580	11260	12030	12930	13510	14290	14840	15180	15240	14470	10360	10350
MIN	9966	10590	11280	12050	12960	13580	14300	14860	14610	10370	10210	10280
(*)	3084.87	3085.83	3086.87	3088.05	3088.79	3089.74	3090.39	3090.78	3090.12	3084.56	3084.50	3084.50
(**)	+610	+680	+770	+900	+580	+780	+550	+340	-570	-4240	-50	0
CAL YR 2001	MAX	17760	MIN	8999	(**)	-1200						
CAL YR 2002	MAX	15240	MIN	10210	(**)	+350						

(*) Elevation, in feet, at end of month.

(**) Change in contents, in acre-feet.

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KANSAS RIVER BASIN

06834000 FRENCHMAN CREEK AT PALISADE, NE

LOCATION.--Lat 40°21'07", long 101°07'24", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.36, T.5 N., R.34 W., Hayes County, Hydrologic Unit 10250005, on right bank at upstream side of bridge on U.S. Highway 6, 0.7 mi west of Palisade, 1.5 mi upstream from Stinking Water Creek, and at mile 30.2.

DRAINAGE AREA.--1,300 mi², approximately, of which about 1,110 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1894 to October 1896, June 1950 to current year. Published as Frenchman River at Palisade, October 1894 to October 1896 and October 1965 to September 1972.

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

GAGE.--Water-stage recorder. Datum of gage is 2,743.49 ft above sea level. October 1894 to October 1896, nonrecording gage at railroad bridge 0.4 mi downstream at different datum; June 1950 to Feb. 7, 1977 recording gage at site 2,000 ft upstream at datum 4.0 ft higher.

REMARKS.--Records good except for periods of estimated record, which are poor. Natural flow affected by irrigation development above station and, since Oct. 23, 1950, by storage in Enders Reservoir (station 06832000).

COOPERATION.--Records provided by Nebraska Department of Natural Resources and reviewed by the U.S. Geological Survey.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	20	e25	e21	e31	e28	26	19	12	31	6.0	1.3
2	13	19	e26	e20	e32	e25	26	20	12	39	5.4	0.96
3	12	19	e27	e20	e32	e22	26	20	12	43	5.3	1.2
4	13	20	e28	e20	e33	e19	26	20	17	44	4.9	1.1
5	14	20	29	e22	e34	e21	26	19	16	55	5.4	0.68
6	14	20	25	e25	e32	e22	25	19	15	68	6.6	0.21
7	15	20	25	e28	e30	e23	25	18	14	86	5.0	0.06
8	15	20	25	e31	28	e24	25	18	13	73	5.4	0.05
9	15	20	26	e34	28	e25	25	17	11	66	7.8	0.04
10	14	21	24	35	28	e26	25	17	11	69	7.5	0.04
11	15	20	24	39	e28	e27	25	17	10	73	7.0	0.97
12	15	21	23	28	28	28	24	17	9.4	80	5.8	2.3
13	16	21	25	27	29	26	24	17	8.7	81	5.8	2.4
14	17	21	29	27	28	26	24	16	8.4	80	4.1	2.4
15	19	21	26	e26	28	26	24	16	8.3	84	1.9	2.1
16	19	21	25	e25	28	27	23	17	8.6	76	0.53	1.6
17	19	20	26	e25	27	26	23	17	8.1	77	0.17	1.3
18	18	21	23	e25	28	26	22	16	6.9	81	0.21	1.1
19	18	21	25	e24	28	26	22	16	5.9	91	0.17	1.5
20	17	21	26	e24	28	26	22	16	5.2	97	0.31	1.7
21	17	22	23	e24	27	26	22	15	6.0	98	0.50	2.5
22	18	22	24	e24	26	27	22	15	6.4	100	0.14	2.8
23	18	22	25	e24	26	26	23	14	3.8	54	0.08	3.6
24	18	25	e24	e25	26	26	23	14	3.0	28	0.17	4.0
25	19	25	e24	e25	26	27	21	15	2.9	21	0.08	4.2
26	19	24	e23	e25	38	27	20	15	5.4	16	0.07	4.6
27	19	e24	e23	26	34	27	22	14	4.4	14	0.18	4.9
28	20	e23	e23	27	e31	27	22	14	3.5	11	9.6	5.9
29	20	e23	e22	29	---	27	22	14	2.8	10	4.4	6.0
30	20	e24	e22	e30	---	26	20	14	7.6	8.8	3.1	5.9
31	20	---	e21	e31	---	26	---	13	---	6.8	2.2	---
TOTAL	519	641	766	816	822	791	705	509	258.3	1761.6	105.81	67.41
MEAN	16.74	21.37	24.71	26.32	29.36	25.52	23.50	16.42	8.610	56.83	3.413	2.247
MAX	20	25	29	39	38	28	26	20	17	100	9.6	6.0
MIN	12	19	21	20	26	19	20	13	2.8	6.8	0.07	0.04
AC-FT	1030	1270	1520	1620	1630	1570	1400	1010	512	3490	210	134

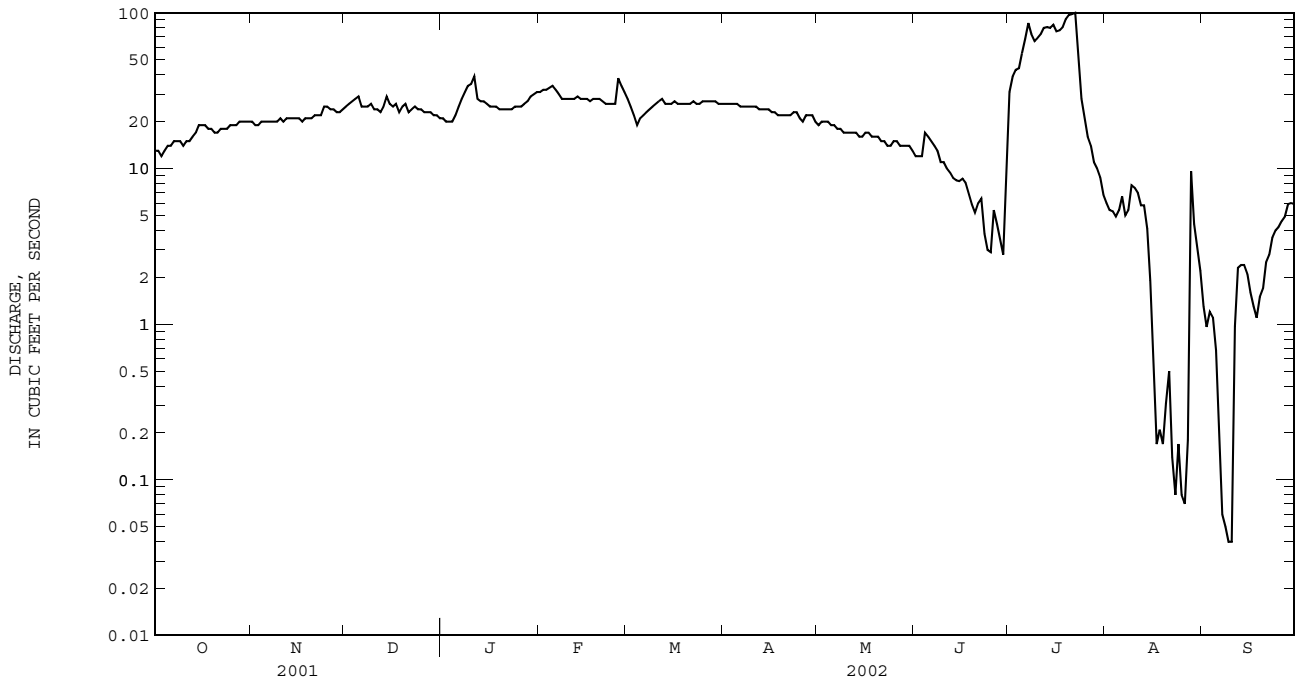
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2002, BY WATER YEAR (WY)

MEAN	38.83	34.94	35.02	36.93	41.97	46.70	46.15	51.38	69.20	179.8	164.5	65.91
MAX	120	88.9	97.4	102	147	247	198	151	270	340	367	232
(WY)	1963	1959	1959	1953	1952	1960	1960	1957	1967	1968	1962	1962
MIN	16.5	21.4	21.6	19.3	23.9	25.5	21.6	16.4	8.61	56.8	3.41	2.25
(WY)	1991	2002	1990	1979	1993	2002	1972	2002	2002	2002	2002	2002

06834000 FRENCHMAN CREEK AT PALISADE, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1950 - 2002a	
ANNUAL TOTAL	11223.3		7762.12		68.18	
ANNUAL MEAN	30.75		21.27		115 1960	
HIGHEST ANNUAL MEAN					21.3 2002	
LOWEST ANNUAL MEAN					2090 Jun 17 1956	
HIGHEST DAILY MEAN	197	Jul 27	100	Jul 22	0.04 Sep 9 2002	
LOWEST DAILY MEAN	2.1	Sep 6	0.04	Sep 9	0.17 Aug 21 2002	
ANNUAL SEVEN-DAY MINIMUM	2.9	Sep 1	0.17	Aug 21	5560 Jun 17 1956	
MAXIMUM PEAK FLOW			*106	Jul 22	***8.79 Jun 17 1956	
MAXIMUM PEAK STAGE			**4.41	Mar 8		
ANNUAL RUNOFF (AC-FT)	22260		15400		49400	
10 PERCENT EXCEEDS	38		31		159	
50 PERCENT EXCEEDS	25		21		36	
90 PERCENT EXCEEDS	9.4		2.8		22	

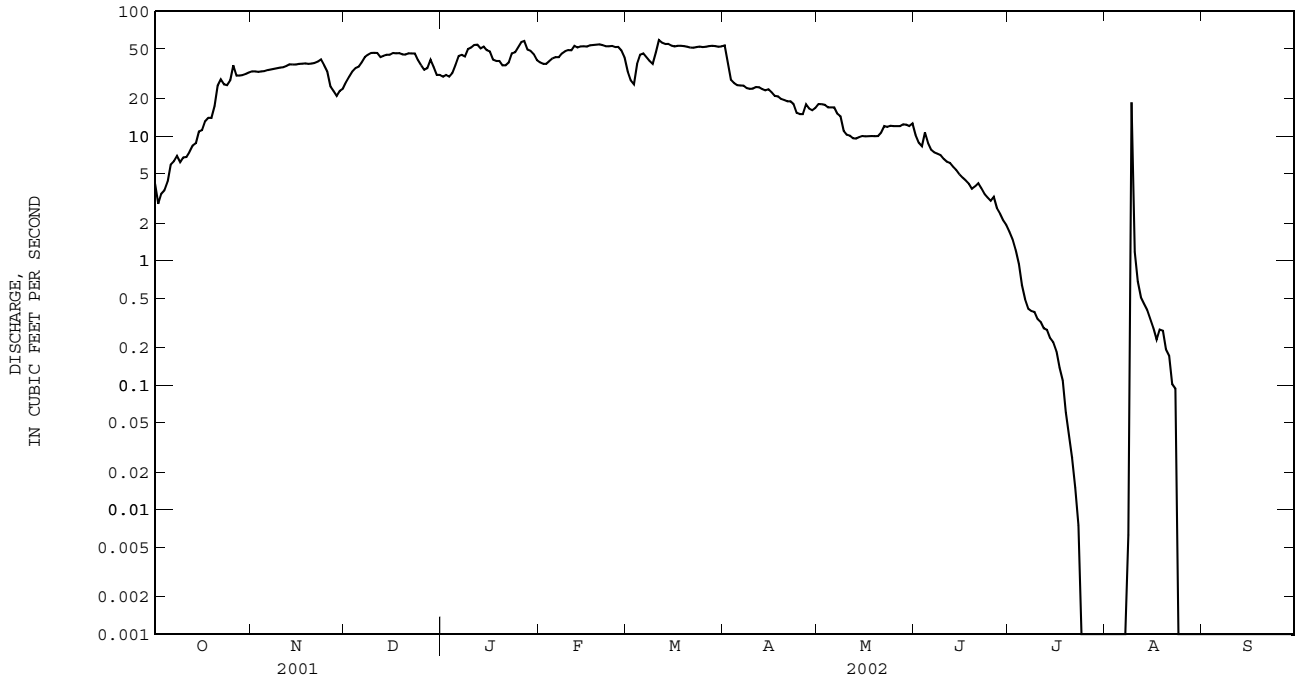
e Estimated.
a Since beginning of storage in Enders Reservoir.
* Stage 4.39 ft.
** Backwater from ice.
*** Site and datum then in use.



06835500 FRENCHMAN CREEK AT CULBERTSON, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1951 - 2002a	
ANNUAL TOTAL	10525.30	8272.22	72.47	
ANNUAL MEAN	28.84	22.66	165	1960
HIGHEST ANNUAL MEAN			22.7	2002
LOWEST ANNUAL MEAN			3060	Jun 18 1956
HIGHEST DAILY MEAN	74 Mar 5	59 Mar 11	0.00	Aug 7 1980
LOWEST DAILY MEAN	0.25 Sep 5	0.00 Jul 23	0.00	Aug 18 2000
ANNUAL SEVEN-DAY MINIMUM	0.31 Aug 31	0.00 Jul 23	5260	Jun 17 1951
MAXIMUM PEAK FLOW		*70 Aug 9	10.43	Jun 17 1951
MAXIMUM PEAK STAGE		**3.62 Mar 4	52500	
ANNUAL RUNOFF (AC-FT)	20880	16410		
10 PERCENT EXCEEDS	61	52		
50 PERCENT EXCEEDS	26	19		
90 PERCENT EXCEEDS	0.98	0.00		

e Estimated.
a Since start of storage in Enders Reservoir.
* Stage 3.37 ft.
** Backwater from ice.



KANSAS RIVER BASIN

06836500 DRIFTWOOD CREEK NEAR MCCOOK, NE

LOCATION.--Lat 40°08'45", long 100°40'22", in SW ¼ SE ¼ sec.11, T.2 N., R.30 W., Red Willow County, Hydrologic Unit 10250004, on right bank downstream from county road bridge, 5.8 mi upstream from mouth, and 3.5 mi southwest of McCook.

DRAINAGE AREA.--361 mi², of which about 351 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--March 1946 to current year.

REVISED RECORDS.--WSP 1210: 1950. WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,502.78 ft above sea level. Prior to Oct. 12, 1962, at site 1.5 mi downstream in old channel at datum 9.00 ft lower, Oct. 12, 1962 to Apr. 11, 1963 at site 1.8 mi downstream at datum 12.75 ft lower, Apr. 12, 1963 to Apr. 22, 1982 at site 1.3 mi downstream at datum 9.00 ft lower, and Apr. 22, 1982 to May 29, 1992 at site 3.2 mi downstream at datum 17.55 ft lower. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow affected by waste from Meeker-Driftwood Canal and by irrigation development above station.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	3.7	e2.6	e2.3	e2.2	e1.7	2.9	2.7	1.7	7.5	0.73	0.96
2	2.5	3.9	e2.7	e2.2	e2.1	e1.9	2.9	2.7	1.6	3.0	0.66	0.84
3	2.5	4.0	e2.9	e2.2	e2.2	e1.8	2.9	2.7	1.7	2.2	0.66	0.71
4	2.5	3.8	e3.1	e2.2	e2.3	e1.6	2.9	2.7	2.2	2.4	0.76	0.78
5	2.5	3.8	e3.2	e2.2	e2.4	e1.5	2.9	2.7	2.4	2.6	0.94	0.82
6	2.7	3.8	e3.2	e2.7	e2.4	e1.9	2.9	2.7	2.1	2.8	0.63	0.82
7	3.0	3.8	e3.1	e2.8	e2.2	e2.4	2.9	2.6	2.0	3.1	0.52	0.80
8	3.4	e3.7	e3.2	e2.6	e2.1	e2.3	2.9	2.7	1.9	3.2	0.80	0.81
9	3.6	e3.6	e3.1	e2.4	e2.2	e2.1	2.9	2.6	1.9	3.6	5.3	0.85
10	3.6	e3.4	e3.1	e2.3	e2.4	e2.6	2.9	2.6	1.7	4.1	1.3	0.85
11	3.4	e3.1	e3.0	e2.2	e2.4	e2.8	2.9	2.7	1.5	4.5	6.2	0.86
12	3.1	e3.1	e2.9	e2.2	e2.2	e3.0	2.9	2.7	1.5	4.1	3.3	1.8
13	2.8	e3.1	e3.1	e2.3	e2.3	3.1	2.9	2.6	1.4	5.8	1.5	13
14	2.7	e3.2	e2.9	e2.4	e2.3	3.3	2.9	2.6	1.3	5.8	0.97	4.9
15	2.5	e3.3	e2.7	e2.5	e2.2	3.1	2.8	2.6	1.3	5.2	0.63	1.1
16	2.3	e3.4	e2.9	e2.4	e2.3	3.0	2.7	2.6	1.3	6.0	0.56	1.1
17	2.2	e3.3	e3.2	e2.3	e2.3	2.9	2.7	2.6	1.7	4.8	0.43	0.96
18	2.6	e3.1	e3.1	e2.3	e2.4	3.2	2.7	2.6	1.5	3.2	0.44	0.86
19	2.7	e3.3	e3.1	e2.3	e2.4	3.1	2.7	2.5	1.5	5.1	0.42	0.83
20	2.8	e3.6	e3.2	e2.3	e2.6	3.2	2.7	2.5	1.2	5.6	0.55	0.81
21	2.8	e3.4	e2.8	e2.3	e2.5	3.0	2.7	2.5	1.1	5.3	0.53	0.77
22	2.9	e3.1	e2.9	e2.4	e2.4	3.2	2.7	2.5	1.1	9.4	0.52	0.69
23	3.0	e3.3	e3.1	e2.6	e2.3	3.1	2.8	2.3	1.0	8.9	0.51	0.78
24	2.5	e3.2	e2.9	e2.7	e2.2	3.3	2.7	2.4	1.0	7.6	0.55	0.73
25	2.2	e3.1	e2.7	e2.6	e2.1	3.6	2.7	2.6	0.93	3.7	0.43	0.80
26	2.3	e2.9	e2.6	e2.4	e2.0	3.7	2.7	2.5	1.5	1.7	0.39	0.85
27	2.5	e2.8	e2.5	e2.6	e1.9	3.6	2.9	2.3	1.6	1.2	0.49	0.85
28	3.0	e2.7	e2.6	e2.8	e1.8	3.2	2.9	2.2	4.2	1.1	207	0.85
29	3.1	e2.6	e2.8	e2.7	---	3.0	2.8	2.0	2.4	0.86	14	0.86
30	3.2	e2.5	e2.5	e2.5	---	3.0	2.7	1.9	9.9	0.95	2.4	0.89
31	3.5	---	e2.3	e2.2	---	2.9	---	2.0	---	0.84	1.0	---
TOTAL	86.7	99.6	90.0	74.9	63.1	86.1	84.5	77.9	58.13	126.15	255.12	42.53
MEAN	2.797	3.320	2.903	2.416	2.254	2.777	2.817	2.513	1.938	4.069	8.230	1.418
MAX	3.6	4.0	3.2	2.8	2.6	3.7	2.9	2.7	9.9	9.4	207	13
MIN	2.2	2.5	2.3	2.2	1.8	1.5	2.7	1.9	0.93	0.84	0.39	0.69
AC-FT	172	198	179	149	125	171	168	155	115	250	506	84

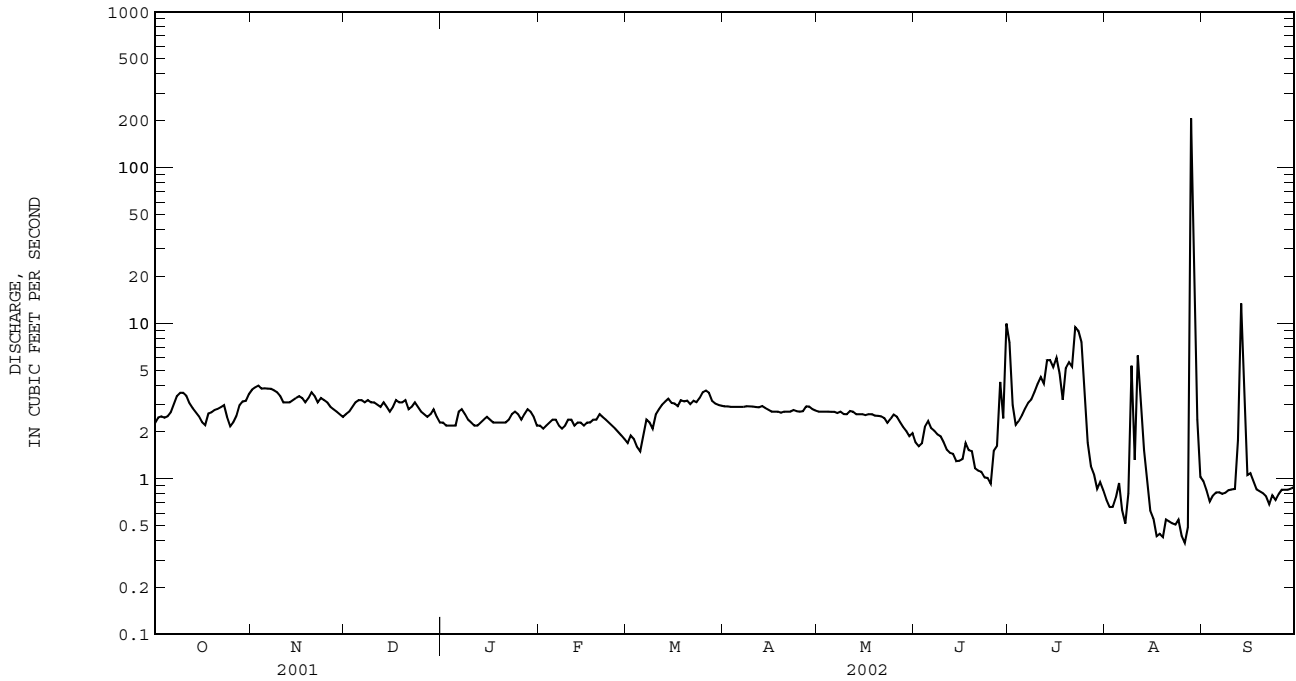
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2002, BY WATER YEAR (WY)

MEAN	6.990	3.689	3.586	3.548	5.652	7.708	4.244	9.475	17.23	19.57	16.28	13.03
MAX	137	7.71	7.44	7.96	31.4	209	13.3	112	85.8	100	156	302
(WY)	1947	1998	1974	1974	1960	1960	1977	1957	1947	1956	1950	1951
MIN	0.071	0.083	0.077	0.052	0.048	0.039	0.20	0.19	0.23	0.052	0.055	0.040
(WY)	1956	1956	1955	1955	1956	1956	1948	1956	1954	1955	1946	1953

06836500 DRIFTWOOD CREEK NEAR MCCOOK, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1946 - 2002	
ANNUAL TOTAL	1304.5		1144.73		9.280	
ANNUAL MEAN	3.574		3.136		35.0	
HIGHEST ANNUAL MEAN					1951	
LOWEST ANNUAL MEAN					1953	
HIGHEST DAILY MEAN	47	Jul 27	207	Aug 28	3950	Aug 7 1950
LOWEST DAILY MEAN	1.3	Aug 30	0.39	Aug 26	0.00	Apr 25 1946
ANNUAL SEVEN-DAY MINIMUM	1.4	Aug 26	0.49	Aug 17	0.00	Jun 12 1946
MAXIMUM PEAK FLOW			421		4740	
MAXIMUM PEAK STAGE			10.62		25.43	
ANNUAL RUNOFF (AC-FT)	2590		2270		6720	
10 PERCENT EXCEEDS	4.1		3.6		11	
50 PERCENT EXCEEDS	3.2		2.6		4.7	
90 PERCENT EXCEEDS	2.2		0.85		0.30	

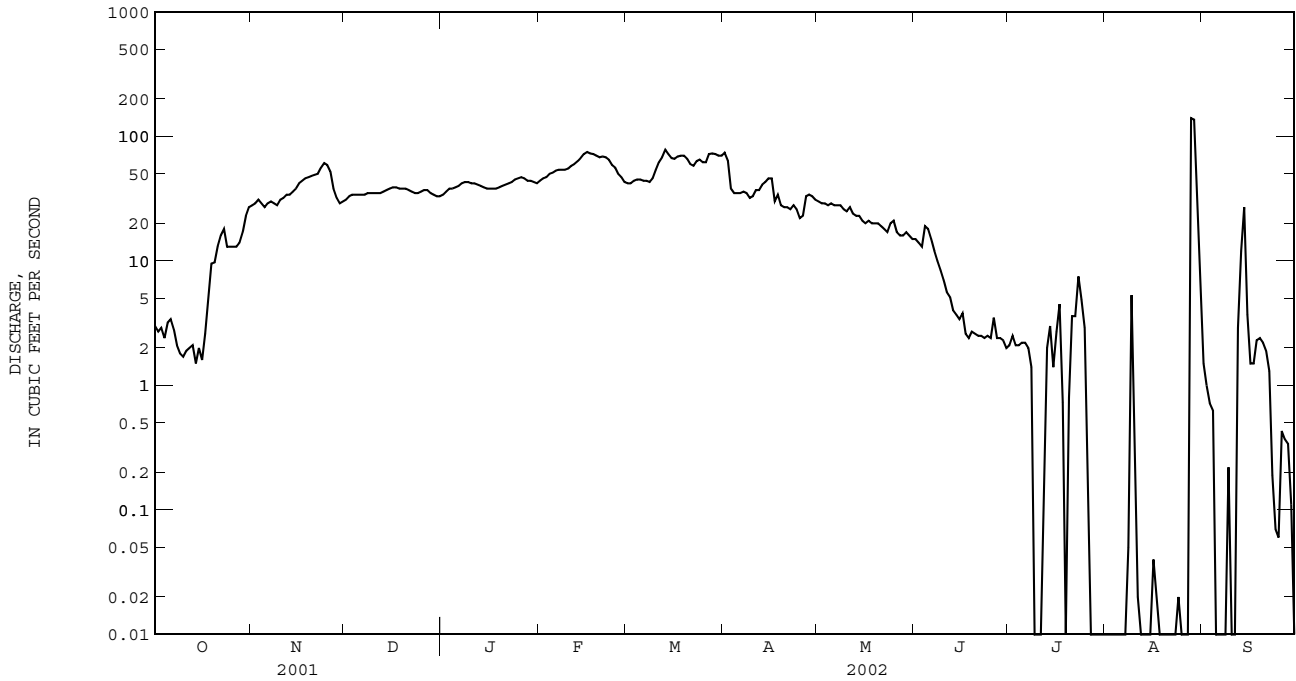
e Estimated.



06837000 REPUBLICAN RIVER AT MCCOOK, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1955 - 2002	
ANNUAL TOTAL	14559.38		9648.20		142.3	
ANNUAL MEAN	39.89		26.43		383	
HIGHEST ANNUAL MEAN					26.4	
LOWEST ANNUAL MEAN					5020	
HIGHEST DAILY MEAN	139	May 5	140	Aug 28	5020	Mar 21 1960
LOWEST DAILY MEAN	0.00	Aug 10	0.00	Jul 9	0.00	Sep 24 2000
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 29	0.00	Jul 28	0.00	Aug 29 2001
MAXIMUM PEAK FLOW			470		5890	
MAXIMUM PEAK STAGE			5.28		9.14	
ANNUAL RUNOFF (AC-FT)	28880		19140		103100	
10 PERCENT EXCEEDS	81		60		252	
50 PERCENT EXCEEDS	36		28		104	
90 PERCENT EXCEEDS	1.6		0.02		50	

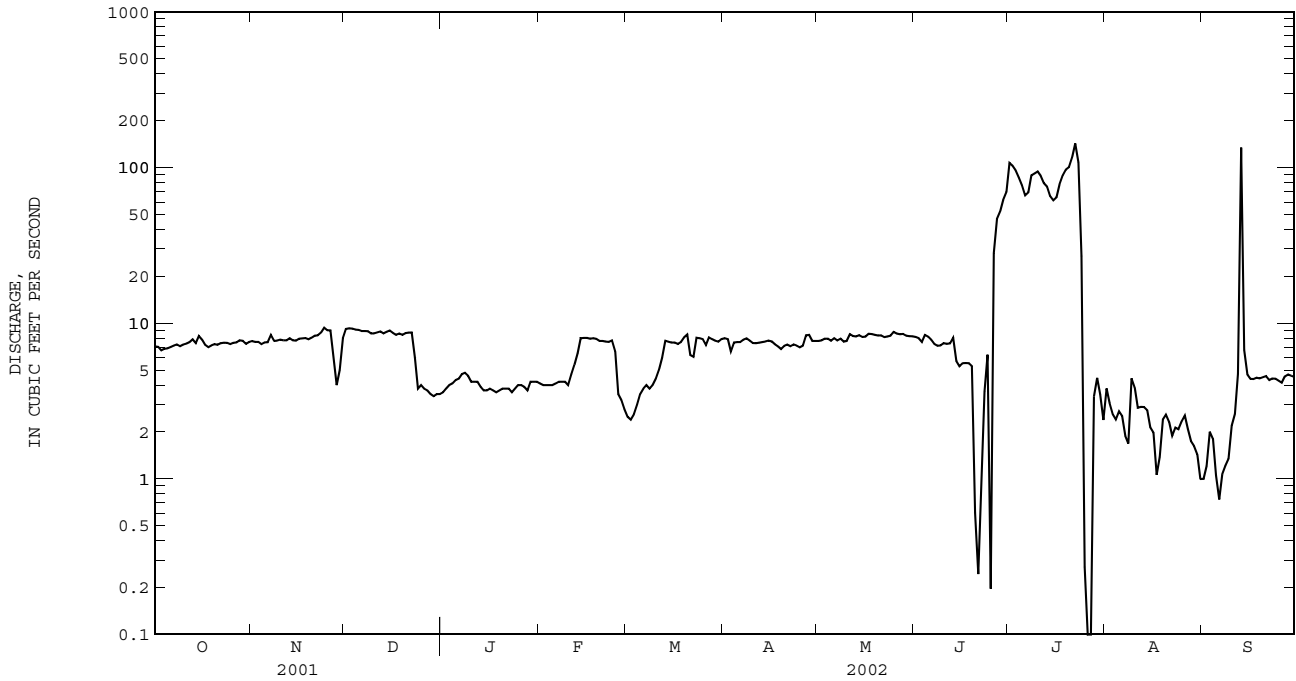
e Estimated.



06838000 RED WILLOW CREEK NEAR RED WILLOW, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1962 - 2002a	
ANNUAL TOTAL	6074.0		4432.31		13.10	
ANNUAL MEAN	16.64		12.14		25.5 1967	
HIGHEST ANNUAL MEAN					7.90 1992	
LOWEST ANNUAL MEAN					668 Jul 18 1962	
HIGHEST DAILY MEAN	139	Aug 13	143	Jul 22	0.00 Sep 2 1995	
LOWEST DAILY MEAN	2.9	Sep 1	0.00	Jul 26	0.29 Dec 31 1998	
ANNUAL SEVEN-DAY MINIMUM	3.6	Dec 25	1.2	Aug 31	30000 Jun 22 1947	
MAXIMUM PEAK FLOW			330	Sep 13	18.36 Jun 22 1947	
MAXIMUM PEAK STAGE			10.01	Sep 13	9490	
ANNUAL RUNOFF (AC-FT)	12050		8790			
10 PERCENT EXCEEDS	47		9.0		20	
50 PERCENT EXCEEDS	9.2		7.3		9.2	
90 PERCENT EXCEEDS	5.0		2.4		5.6	

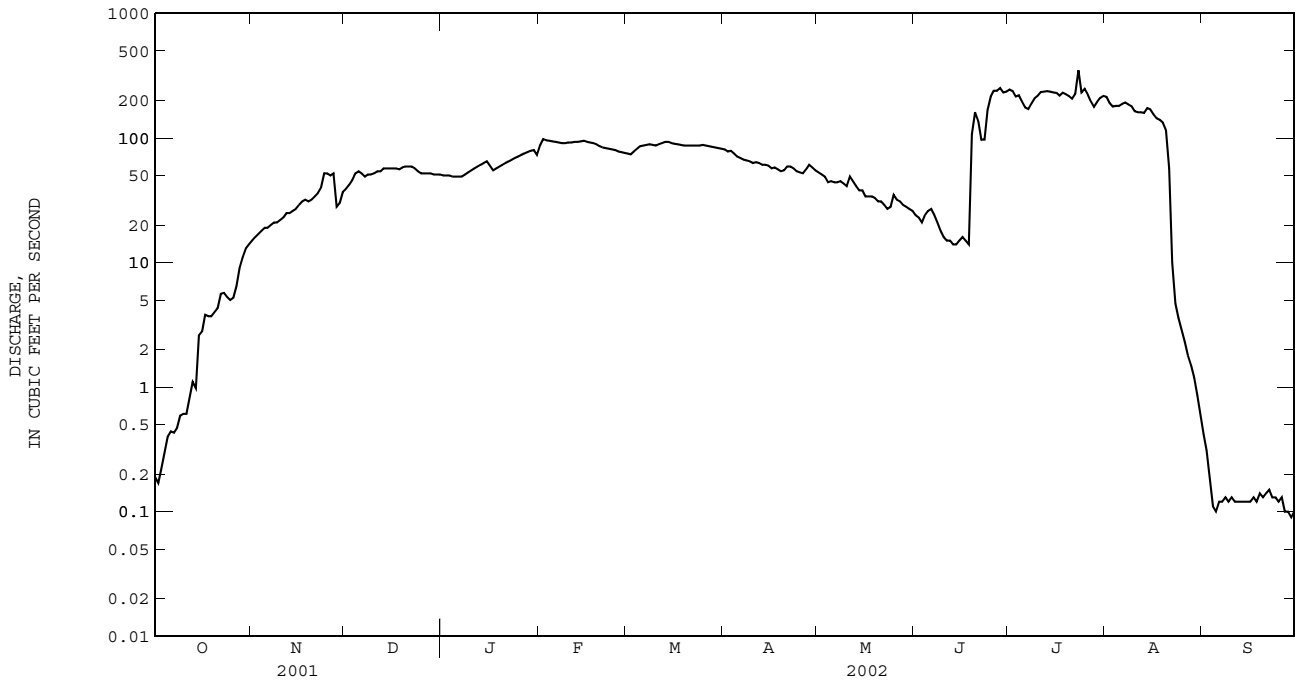
e Estimated.
a Since beginning of storage in Hugh Butler Lake.



06843500 REPUBLICAN RIVER AT CAMBRIDGE, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1950 - 2002a	
ANNUAL TOTAL	37408.55		25560.16		231.9	
ANNUAL MEAN	102.5		70.03		686 1951	
HIGHEST ANNUAL MEAN					70.0 2002	
LOWEST ANNUAL MEAN					8610 Mar 22 1960	
HIGHEST DAILY MEAN	307	Apr 23	349	Jul 23		
LOWEST DAILY MEAN	0.15	Sep 30	0.09	Sep 29	0.06 Oct 9 2000	
ANNUAL SEVEN-DAY MINIMUM	0.20	Sep 27	0.11	Sep 24	0.08 Oct 5 2000	
MAXIMUM PEAK FLOW			525 Jul 23		*11000 Sep 4 1951	
MAXIMUM PEAK STAGE			4.78 Jul 23		9.35 Mar 22 1960	
ANNUAL RUNOFF (AC-FT)	74200		50700		168000	
10 PERCENT EXCEEDS	195		190		404	
50 PERCENT EXCEEDS	106		54		163	
90 PERCENT EXCEEDS	1.4		0.44		71	

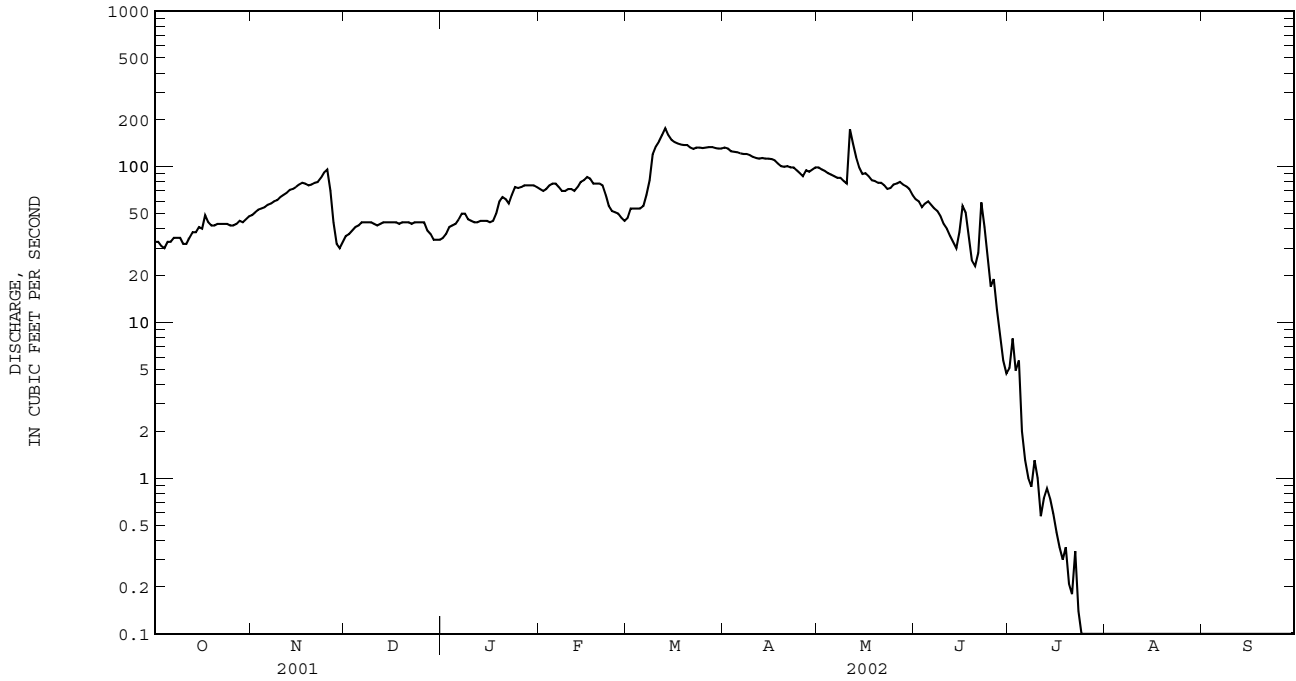
e Estimated.
 a Since beginning of storage in Harry Strunk Lake (Medicine Creek).
 * Stage 7.02 ft.



06844500 REPUBLICAN RIVER NEAR ORLEANS, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1948 - 2002	
ANNUAL TOTAL	40503.0		18988.72		250.4	
ANNUAL MEAN	111.0		52.02		746	
HIGHEST ANNUAL MEAN					1951	
LOWEST ANNUAL MEAN					2002	
HIGHEST DAILY MEAN	846	Aug 24	177	Mar 13	18400	Jun 22 1948
LOWEST DAILY MEAN	5.5	Aug 11	0.00	Jul 24	0.00	Sep 15 1952
ANNUAL SEVEN-DAY MINIMUM	7.9	Aug 6	0.00	Jul 24	0.00	Sep 15 1952
MAXIMUM PEAK FLOW			*224	May 11	**40600	Jun 22 1948
MAXIMUM PEAK STAGE			***3.69	Mar 1	**12.95	Mar 8 1993
ANNUAL RUNOFF (AC-FT)	80340		37660		181400	
10 PERCENT EXCEEDS	238		114		470	
50 PERCENT EXCEEDS	85		45		158	
90 PERCENT EXCEEDS	30		0.00		43	

e Estimated.
 * Stage 2.27 ft.
 ** Stage 11.25 ft.
 *** Backwater from ice.



KANSAS RIVER BASIN

06844500 REPUBLICAN RIVER NEAR ORLEANS, NE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969-94, October 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATURATION) (00301)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	POTASSIUM, DIS-SOLVED (MG/L) (00935)	SODIUM, DIS-SOLVED (MG/L) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L) (90410)	CHLORIDE, DIS-SOLVED (MG/L) (00940)	FLUORIDE, DIS-SOLVED (MG/L) (00950)
DEC 05...	1000	46	13.7	109	8.4	733	9.5	2.5	14.4	35.7	274	27.8	.6
MAR 12...	1500	188	11.5	102	8.3	704	15.0	6.5	15.9	36.9	276	25.0	.7
MAY 14...	1300	100	8.3	101	8.4	793	26.0	21.5	18.0	45.6	296	30.3	.6

Date	SILICA, DIS-SOLVED (MG/L) (00955)	SULFATE DIS-SOLVED (MG/L) (00945)	NITROGEN, AMMONIA DIS-SOLVED (MG/L) (00608)	NITROGEN, AMMONIA DIS-SOLVED (MG/L) (71846)	NITROGEN, NITRATE DIS-SOLVED (MG/L) (00618)	NITROGEN, NITRATE DIS-SOLVED (MG/L) (71851)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	NITROGEN, NITRITE DIS-SOLVED (MG/L) (71856)	NITROGEN, NITRITE DIS-SOLVED (MG/L) (00613)	PHOSPHATE, ORTHO, DIS-SOLVED (MG/L) (00660)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L) (00666)	ORTHO-PHOSPHATE, DIS-SOLVED (MG/L) (00671)	CARBON DIOXIDE, DIS-SOLVED (MG/L) (00405)
DEC 05...	39.5	83.6	.12	.15	2.07	9.15	2.08	.056	.017	.414	.13	.14	2.1
MAR 12...	40.0	77.3	.04	.06	2.33	10.3	2.34	.036	.011	.331	.10	.11	2.7
MAY 14...	34.3	97.5	<.04	--	1.47	6.50	1.49	.069	.021	.527	.16	.17	2.2

Date	BORON, DIS-SOLVED (UG/L) (01020)	IRON, DIS-SOLVED (UG/L) (01046)	MANGANESE, DIS-SOLVED (UG/L) (01056)
DEC 05...	100	<10	E2.5
MAR 12...	100	<10	11.3
MAY 14...	140	<10	8.2

Remark codes used in this report:
 < -- Less than
 E -- Estimated value

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KANSAS RIVER BASIN

06845200 SAPPA CREEK NEAR BEAVER CITY, NE

LOCATION.--Lat 40°02'45", long 99°53'24", in SW ¼ SW ¼ sec. 14, T.1 N., R.23 W., Furnas County, Hydrologic Unit 10250011, on left downstream side of bridge on U.S. Highway 283, 3 mi north of the Kansas-Nebraska State line, and 7 mi southwest of Beaver City.

DRAINAGE AREA.--(REVISED) 1,481 mi², of which an unknown portion is noncontributing.

PERIOD OF RECORD.--October 1936 to September 1972. July 2001 to September 2002 (discontinued). Monthly estimates only, October 1936 to April 1937, published in WSP 1310.

REVISED RECORDS.--WSP 1310: 1937 (M) 1939-42 (M) 1947 (M) 1949 (M) WSP 2119: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,157.63 ft above sea level. October 1936 to September 1945 at datum 0.44 ft lower. From September 1945 to September 1972 at site 200 ft downstream at datum 3.00 ft lower. Data collection platform at station.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions above station for irrigation.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	2.5	2.5	e2.4	e3.1	e6.1	6.7	6.5	4.4	0.57	0.00	0.00
2	1.1	3.9	2.6	e2.5	e3.0	e6.1	6.2	6.2	4.0	0.27	0.00	0.00
3	1.0	3.2	2.7	e2.5	e3.2	e7.0	5.5	6.1	3.7	0.33	0.00	0.00
4	0.98	1.9	2.8	e2.5	e3.6	7.4	5.7	6.1	4.0	0.28	0.00	0.00
5	0.76	1.4	3.4	e2.9	4.1	8.7	5.7	5.9	3.9	0.22	0.00	0.00
6	0.75	1.9	2.6	e3.3	e4.5	8.2	5.9	6.0	3.7	0.09	0.00	0.00
7	0.85	2.0	3.3	e3.6	e5.4	8.3	6.2	5.6	3.6	0.14	0.00	0.00
8	0.66	2.0	3.1	e3.4	e6.0	8.2	6.2	5.5	3.2	0.09	0.00	0.00
9	0.75	e2.0	4.1	e3.2	e6.2	7.9	6.2	5.3	3.2	e0.08	0.00	0.00
10	0.62	e2.0	3.6	e3.5	e6.6	7.0	6.4	5.4	2.9	e0.06	0.00	0.00
11	0.58	e2.1	4.0	e3.3	e6.6	9.6	6.4	12	2.7	e0.04	0.00	0.00
12	0.57	2.0	4.1	e3.1	e6.6	7.8	6.3	12	2.5	e0.02	0.00	0.00
13	0.62	1.5	3.8	e3.0	e6.6	8.2	6.4	11	2.2	e0.01	0.00	0.00
14	0.73	2.0	5.0	e2.9	e6.6	9.2	6.7	9.8	2.0	e0.00	0.00	0.00
15	0.99	2.1	4.4	e2.8	e6.6	7.8	6.7	8.9	2.4	e0.00	0.00	0.00
16	0.96	2.1	4.0	e2.7	e6.6	7.3	6.7	8.0	2.5	e0.00	0.00	0.00
17	1.2	2.2	4.5	e2.9	e7.0	7.8	6.7	7.7	2.0	e0.00	0.00	0.00
18	1.0	2.2	3.7	e3.0	7.3	7.3	6.4	7.7	2.3	e0.00	0.00	0.00
19	0.99	1.9	3.7	e3.2	7.7	6.3	5.9	7.0	2.1	e0.00	0.00	0.00
20	1.4	2.2	2.8	e3.1	e5.8	6.3	5.9	7.1	1.7	e0.00	0.00	0.00
21	1.4	2.0	e2.8	e3.0	e6.0	5.9	6.3	6.8	1.6	e0.00	0.00	0.00
22	2.9	2.0	e2.6	e2.9	e6.0	6.1	6.0	5.9	1.5	e0.00	0.00	0.00
23	1.9	2.5	e2.6	e2.5	e6.0	6.0	6.0	5.1	1.3	0.00	0.00	0.00
24	1.4	3.1	2.6	e3.0	e5.8	5.6	5.8	5.2	1.3	0.00	0.00	0.00
25	1.0	e2.9	e2.6	e2.8	e5.4	5.5	5.7	5.6	1.1	0.00	0.00	0.00
26	0.96	e2.7	e2.6	e2.5	5.1	7.0	5.5	5.1	0.93	0.00	0.00	0.00
27	1.0	e2.6	e2.5	e2.2	e5.6	6.2	5.8	5.5	0.91	0.00	0.00	0.00
28	1.2	2.8	e2.4	e2.1	e5.6	6.2	6.3	5.4	0.80	0.00	0.00	0.00
29	1.3	2.8	e2.4	e2.3	---	6.1	6.5	5.1	0.82	0.00	0.00	0.00
30	1.8	2.6	e2.4	e2.8	---	6.0	6.7	4.7	0.77	0.00	0.00	0.00
31	2.5	---	e2.4	e3.1	---	6.0	---	4.6	---	0.00	0.00	---
TOTAL	34.97	69.1	98.6	89.0	158.6	219.1	185.4	208.8	70.03	2.20	0.00	0.00
MEAN	1.128	2.303	3.181	2.871	5.664	7.068	6.180	6.735	2.334	0.071	0.000	0.000
MAX	2.9	3.9	5.0	3.6	7.7	9.6	6.7	12	4.4	0.57	0.00	0.00
MIN	0.57	1.4	2.4	2.1	3.0	5.5	5.5	4.6	0.77	0.00	0.00	0.00
AC-FT	69	137	196	177	315	435	368	414	139	4.4	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2002, BY WATER YEAR (WY)

MEAN	26.20	6.734	5.340	4.982	11.77	21.93	15.75	40.21	128.4	95.00	47.69	37.34
MAX	454	63.8	35.5	22.5	84.7	359	102	221	557	632	271	277
(WY)	1947	1947	1947	1966	1949	1960	1942	1949	1941	1944	1950	1951
MIN	0.000	0.000	0.000	0.000	0.000	0.010	0.017	0.39	2.33	0.071	0.000	0.000
(WY)	1939	1939	1939	1940	1957	1957	1956	1956	2002	2002	2002	1939

06845200 SAPPA CREEK NEAR BEAVER CITY, NE--Continued

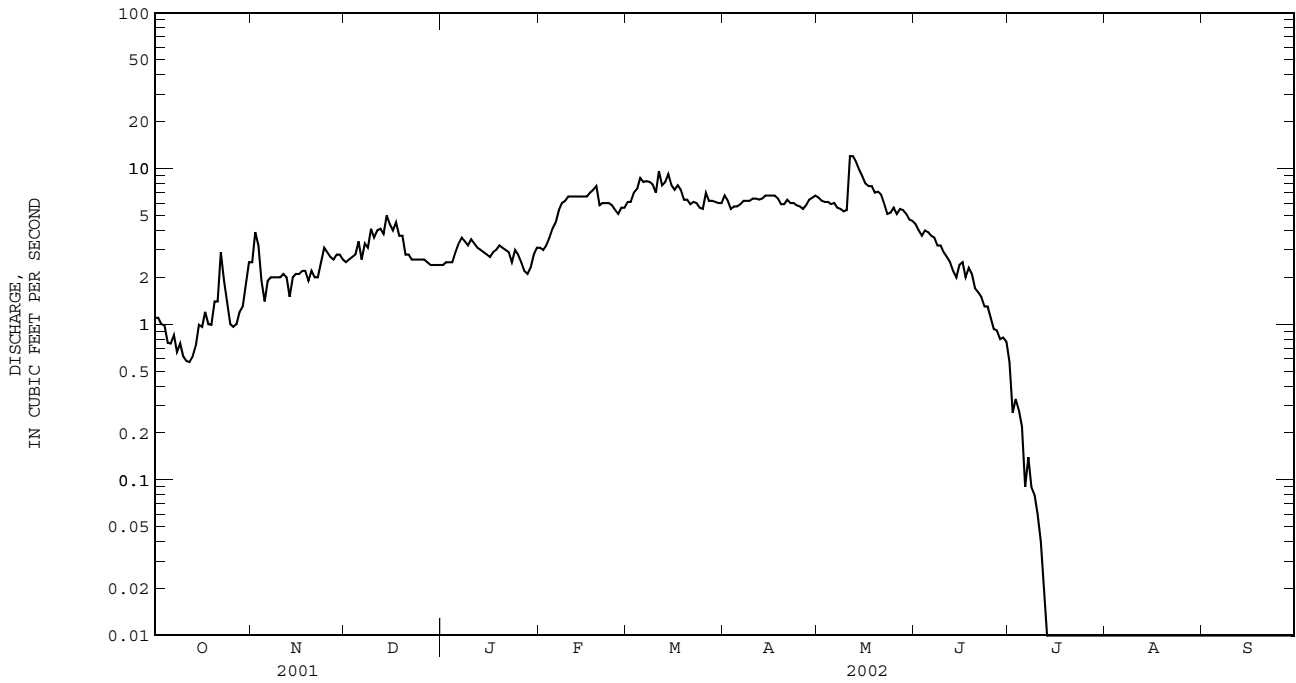
SUMMARY STATISTICS

FOR 2002 WATER YEAR

WATER YEARS 1938 - 2002

ANNUAL TOTAL	1135.80		
ANNUAL MEAN	3.112		37.27
HIGHEST ANNUAL MEAN			107
LOWEST ANNUAL MEAN			2.62
HIGHEST DAILY MEAN	12	May 11	4700
LOWEST DAILY MEAN	0.00	Jul 14	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 14	0.00
MAXIMUM PEAK FLOW	*16.0	May 11	**9500
MAXIMUM PEAK STAGE	***1.61	Feb 16	20.85
ANNUAL RUNOFF (AC-FT)	2250		27000
10 PERCENT EXCEEDS	6.7		58
50 PERCENT EXCEEDS	2.6		4.9
90 PERCENT EXCEEDS	0.00		0.00

e Estimated.
 * Stage 1.39 ft.
 ** From rating curve extended above 4,900 ft³/s.
 *** Backwater from ice.



KANSAS RIVER BASIN

06846500 BEAVER CREEK AT CEDAR BLUFFS, KS

LOCATION.--Lat 39°59'06", long 100°33'35", in NW ¼ NE ¼ sec.10, T.1 S., R.29 W., Decatur County, Hydrologic Unit 10250014, on right bank at downstream side of bridge on U.S. Highway 83, 0.2 mi north of Cedar Bluffs, 1.0 mi south of Kansas-Nebraska State line, and at mile 107.4.

DRAINAGE AREA.--1,618 mi², of which 294 mi² is probably noncontributing.

PERIOD OF RECORD.--October 1945 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1510: 1947, 1950-51.

GAGE.--Water-stage recorder. Datum of gage is 2,520.33 ft above NGVD of 1929. Prior to Aug. 19, 1971, at site 0.1 mi upstream at same datum. Aug. 19, 1971, to July 12, 1972, at site 0.8 mi downstream at datum 5.00 ft lower.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Satellite telemeter at station. Records provided by the U.S. Geological Survey, Kansas District.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in July 1944 reached a stage of 18.16 ft, from floodmark.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jul 25	2000	*1.2	*3.04	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.0	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.00
27	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00
28	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	e0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.025	0.000	0.000
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.5	0.00	0.00

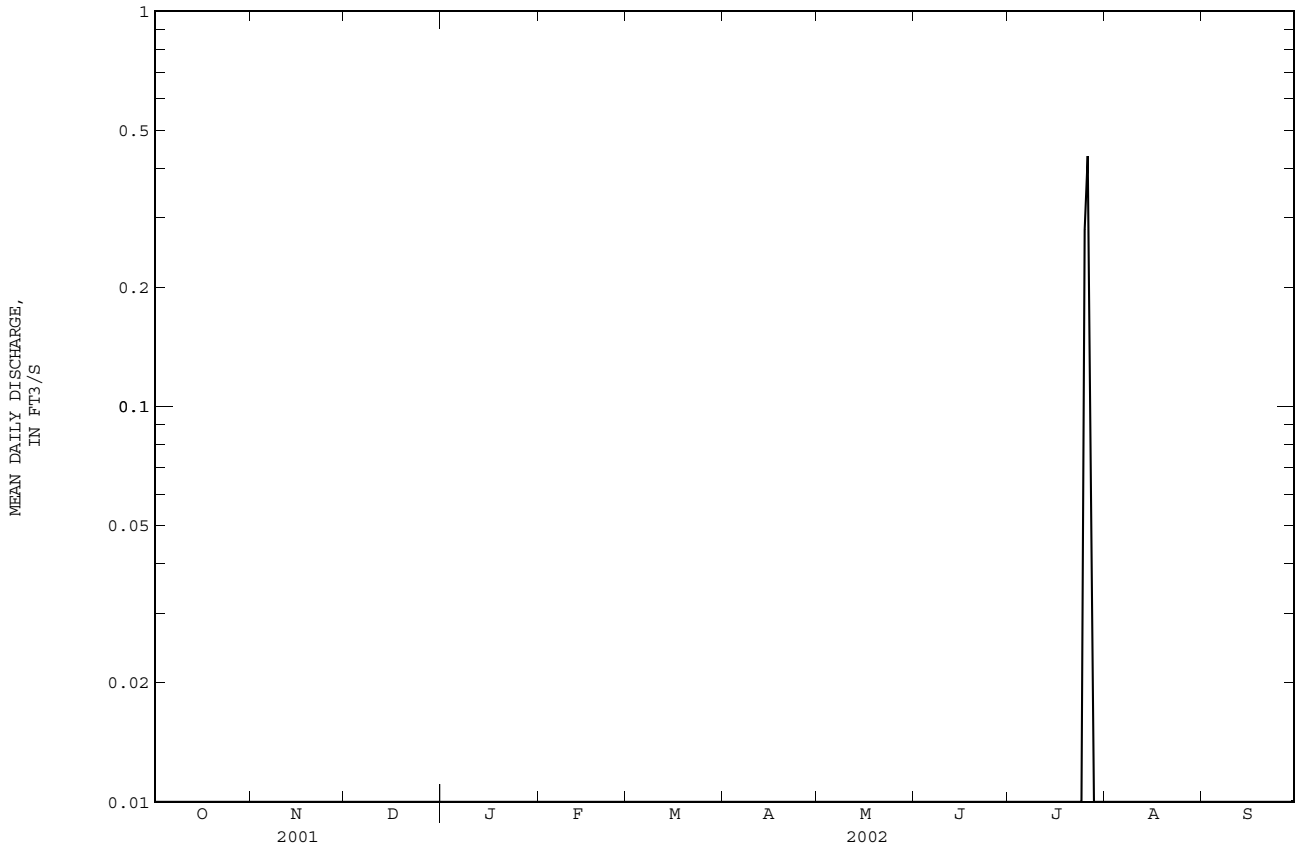
06846500 BEAVER CREEK AT CEDAR BLUFFS, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	8.517	2.810	2.410	2.096	3.695	11.30	6.934	22.58	37.28	28.57	14.98	15.43
MAX	231	39.6	30.4	28.4	28.1	369	61.7	432	278	391	146	421
(WY)	1947	1966	1966	1966	1966	1960	1960	1957	1960	1951	1962	1951
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	1954	1955	1955	1955	1956	1955	1955	1955	1979	1980	1955	1953

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1946 - 2002
ANNUAL MEAN	0.150	0.002	13.11
HIGHEST ANNUAL MEAN			106 1951
LOWEST ANNUAL MEAN			0.000 1991
HIGHEST DAILY MEAN	17 Sep 17	0.43 Jul 26	4560 Jun 11 1960
LOWEST DAILY MEAN	0.00 Jan 1	0.00 Oct 1	0.00 Sep 3 1946
ANNUAL SEVEN-DAY MINIMUM	0.00 Jan 1	0.00 Oct 1	0.00 Sep 23 1947
MAXIMUM PEAK FLOW		1.2 Jul 25	127 Sep 17 2001
MAXIMUM PEAK STAGE		3.04 Jul 25	18.71 Jun 11 1960
INSTANTANEOUS LOW FLOW		0.00 Oct 1	
ANNUAL RUNOFF (AC-FT)	109	1.5	9500
10 PERCENT EXCEEDS	0.00	0.00	22
50 PERCENT EXCEEDS	0.00	0.00	0.00
90 PERCENT EXCEEDS	0.00	0.00	0.00

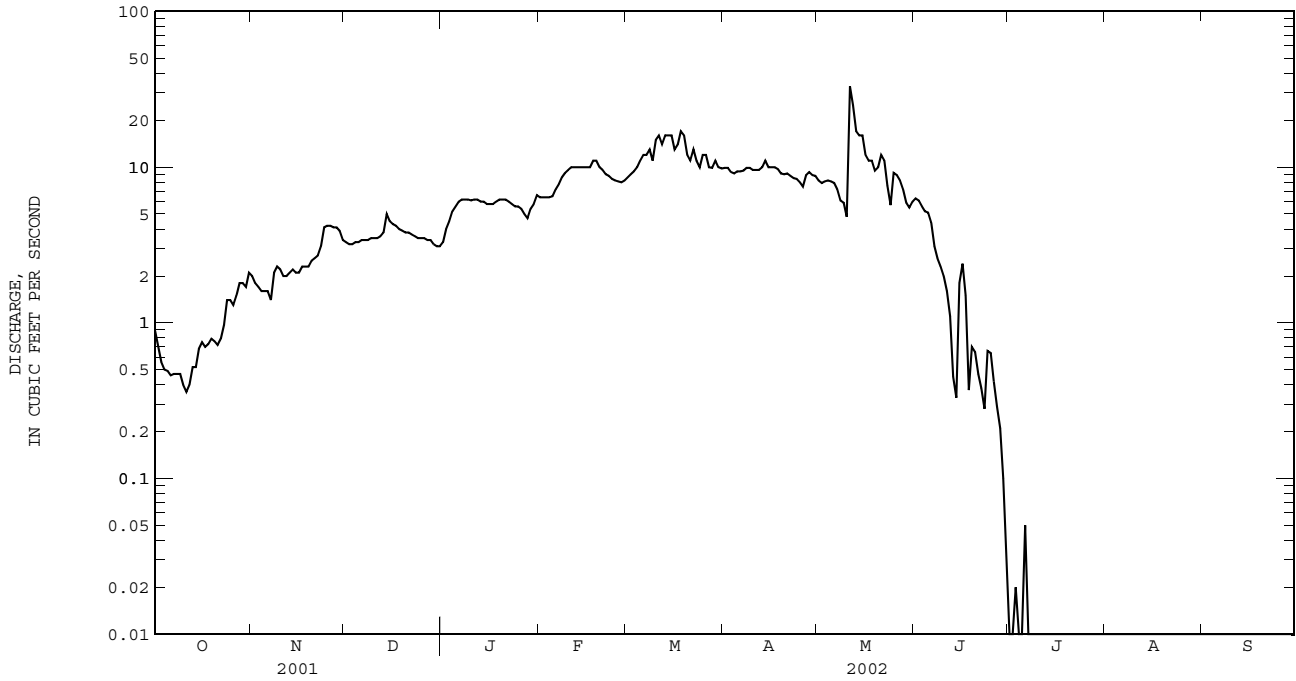
e Estimated



06847500 SAPPA CREEK NEAR STAMFORD, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1946 - 2002	
ANNUAL TOTAL	3639.79		1674.06		44.28	
ANNUAL MEAN	9.972		4.586		229	
HIGHEST ANNUAL MEAN					1951	
LOWEST ANNUAL MEAN					0.59	
HIGHEST DAILY MEAN	76	May 7	33	May 11	16600	Jun 24 1966
LOWEST DAILY MEAN	0.02	Aug 11	0.00	Jul 1	0.00	Sep 12 1953
ANNUAL SEVEN-DAY MINIMUM	0.05	Aug 24	0.00	Jul 13	0.00	Sep 12 1953
MAXIMUM PEAK FLOW			59		43400	
MAXIMUM PEAK STAGE			4.97		*22.13	
ANNUAL RUNOFF (AC-FT)	7220		3320		32080	
10 PERCENT EXCEEDS	31		10		79	
50 PERCENT EXCEEDS	2.4		3.4		6.6	
90 PERCENT EXCEEDS	0.25		0.00		0.00	

e Estimated.
 * From floodmark.



KANSAS RIVER BASIN

06848500 PRAIRIE DOG CREEK NEAR WOODRUFF, KS

LOCATION.--Lat 39°59'09", long 99°28'39", in NW ¼ NW ¼ sec.9, T.1 S., R.19 W., Phillips County, Hydrologic Unit 10250015, on left bank at downstream side of bridge on U.S. Highway 383, 1.0 mi south of Kansas-Nebraska State line, 2.5 mi west of Woodruff, and at mile 26.5.

DRAINAGE AREA.--1,007 mi².

PERIOD OF RECORD.--October 1928 to September 1932, October 1944 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 2,016.20 ft above NGVD of 1929. See WSP 1919 for history of changes prior to Oct. 7, 1955.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated to some extent since 1964 by Keith Sebelius Lake (station 06847950), 48.4 mi upstream, and by irrigation development upstream from station. Satellite telemeter at station. Records provided by the U.S. Geological Survey, Kansas District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 47 ft³/s, Mar. 2, gage height, 4.15 ft; minimum discharge, 0.00 ft³/s, on many days, gage height, 2.13 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	5.0	8.4	e9.0	e9.0	e7.0	8.9	5.9	4.0	e3.0	0.00	0.00
2	2.3	5.2	7.9	e9.1	e9.0	e8.0	8.1	5.7	3.0	3.3	0.00	0.00
3	2.2	6.2	8.1	e9.2	e9.0	9.9	7.5	5.9	3.6	2.6	0.00	0.00
4	2.2	5.6	8.0	e9.2	e9.0	13	14	6.0	3.7	5.9	0.00	0.00
5	1.9	6.2	8.6	e9.2	e9.1	14	13	5.3	2.9	7.2	0.21	0.00
6	2.0	6.1	8.3	e9.1	e9.2	13	10	4.9	3.7	e5.0	0.28	0.00
7	2.2	5.7	7.7	e9.0	e9.3	12	7.8	3.7	3.6	e3.0	0.60	0.00
8	2.4	6.0	7.8	e8.9	e9.4	e11	7.0	4.1	3.6	e2.0	1.3	0.00
9	2.6	6.1	8.1	e8.9	e9.5	e11	6.8	4.1	3.4	e1.0	3.8	0.00
10	2.4	6.2	7.9	e8.8	e9.6	13	6.7	3.2	3.2	e0.50	3.6	0.00
11	2.4	6.2	7.7	e9.0	e9.8	13	6.6	4.4	3.3	0.32	0.87	0.00
12	2.4	6.8	7.7	12	e9.9	13	6.3	5.1	3.1	0.49	0.06	0.00
13	2.5	7.3	7.5	12	e10	12	6.1	5.5	3.1	0.25	0.00	0.00
14	2.6	7.2	7.8	12	e10	11	6.2	12	3.4	0.30	0.00	0.00
15	3.2	6.9	e7.7	e10	e10	11	6.2	5.8	3.6	0.10	0.00	0.00
16	3.3	6.7	7.5	e10	e10	11	6.0	4.9	4.3	0.02	0.00	0.00
17	3.1	6.9	7.3	e9.0	e10	9.5	5.1	4.7	5.9	0.00	0.00	0.00
18	2.9	6.8	7.6	e9.0	e10	8.2	4.8	4.6	7.5	0.0	0.00	0.00
19	3.1	6.8	7.9	e9.0	10	7.3	4.5	4.6	5.5	0.71	0.00	0.00
20	2.9	6.5	e7.9	e9.0	11	7.2	3.8	4.5	3.7	1.3	0.00	0.00
21	2.9	6.7	e7.9	e9.3	11	7.0	4.6	4.6	1.9	2.6	0.00	0.00
22	2.7	6.7	e7.8	e9.8	9.8	6.6	5.1	4.3	0.72	2.7	0.00	0.00
23	2.8	7.0	e7.8	e9.8	8.2	6.9	5.9	4.1	3.8	1.6	0.00	0.00
24	2.5	8.2	e7.8	e9.8	8.2	6.9	6.5	4.3	0.91	1.3	0.00	0.00
25	2.5	8.5	e7.8	e9.8	7.8	6.9	6.2	4.7	0.35	0.26	0.00	0.00
26	4.0	8.5	e7.9	11	e7.4	7.0	6.3	5.0	0.20	0.12	0.00	0.00
27	12	8.1	e8.0	10	e7.2	7.2	6.8	7.0	0.79	0.09	0.00	0.00
28	7.4	e7.5	e8.3	e9.5	e7.0	7.2	6.6	5.6	e1.0	0.01	0.00	0.00
29	5.3	e7.5	e8.6	e9.3	---	7.0	6.5	5.1	e2.0	0.00	0.00	0.00
30	4.5	8.4	e8.9	e9.1	---	6.9	6.1	4.5	e2.5	0.00	0.00	0.00
31	4.4	---	e9.0	e9.0	---	12	---	4.2	---	0.00	0.00	---
MEAN	3.287	6.783	7.974	9.606	9.264	9.571	6.867	5.106	3.076	1.473	0.346	0.000
MAX	12	8.5	9.0	12	11	14	14	12	7.5	7.2	3.8	0.00
MIN	1.9	5.0	7.3	8.8	7.0	6.6	3.8	3.2	0.20	0.00	0.00	0.00
AC-FT	202	404	490	591	515	589	409	314	183	91	21	0.00

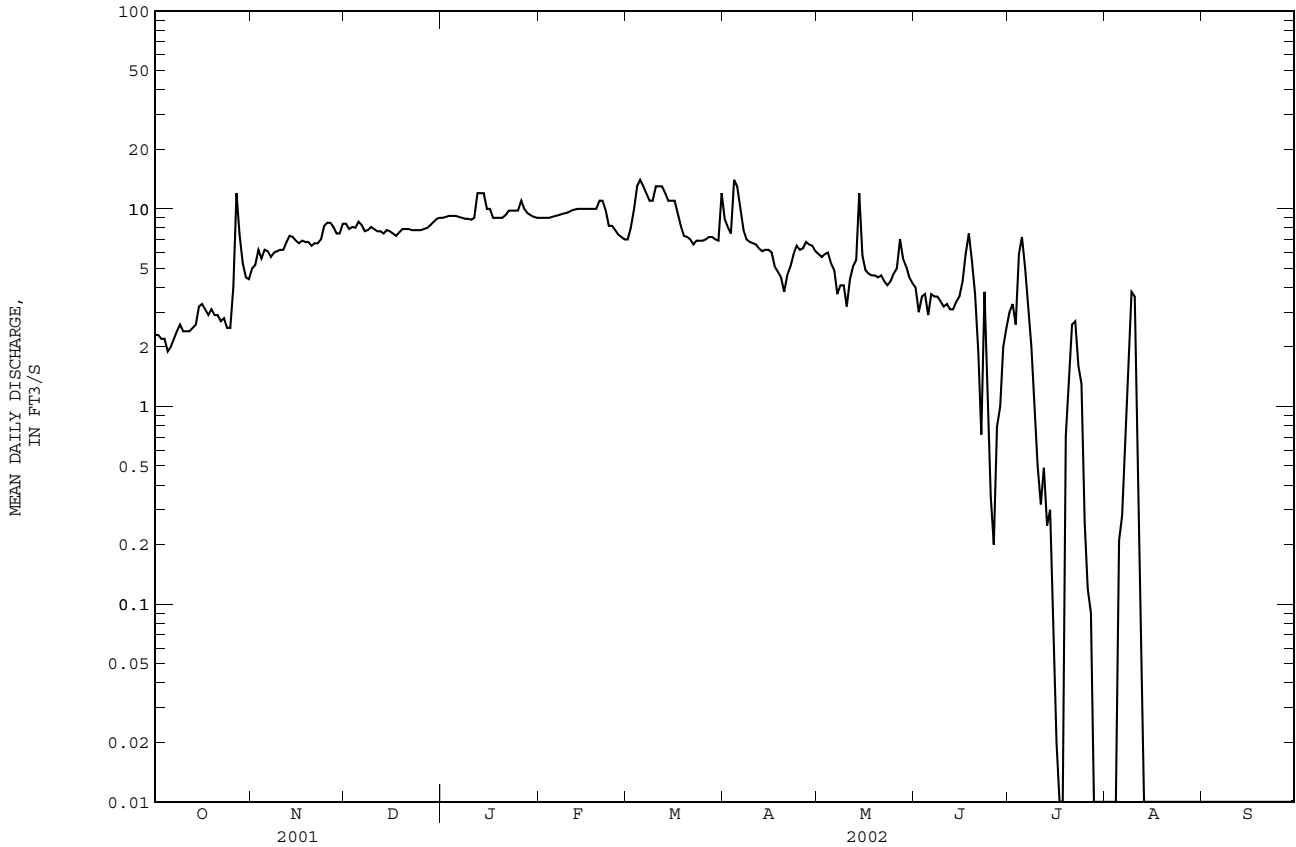
06848500 PRAIRIE DOG CREEK NEAR WOODRUFF, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	19.04	6.562	5.469	5.505	15.96	17.69	10.20	42.49	85.49	61.28	34.15	22.68
MAX	429	56.5	26.0	22.5	230	240	36.6	422	1041	1070	430	402
(WY)	1947	1931	1947	1931	1932	1960	1952	1949	1947	1951	1950	1951
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	1955	1956	1956	1956	1957	1957	1985	1992	1984	1984	1959	1960

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1929 - 2002
ANNUAL MEAN	13.70	5.259	26.52
HIGHEST ANNUAL MEAN			208
LOWEST ANNUAL MEAN			0.051
HIGHEST DAILY MEAN	569	Jul 5	9700
LOWEST DAILY MEAN	1.9	Oct 5	0.00
ANNUAL SEVEN-DAY MINIMUM	2.2	Oct 1	0.00
MAXIMUM PEAK FLOW			15000
MAXIMUM PEAK STAGE			3.42
INSTANTANEOUS LOW FLOW			0.00
ANNUAL RUNOFF (AC-FT)	9920	3810	19210
10 PERCENT EXCEEDS	24	9.9	27
50 PERCENT EXCEEDS	7.7	5.8	4.2
90 PERCENT EXCEEDS	3.0	0.00	0.00

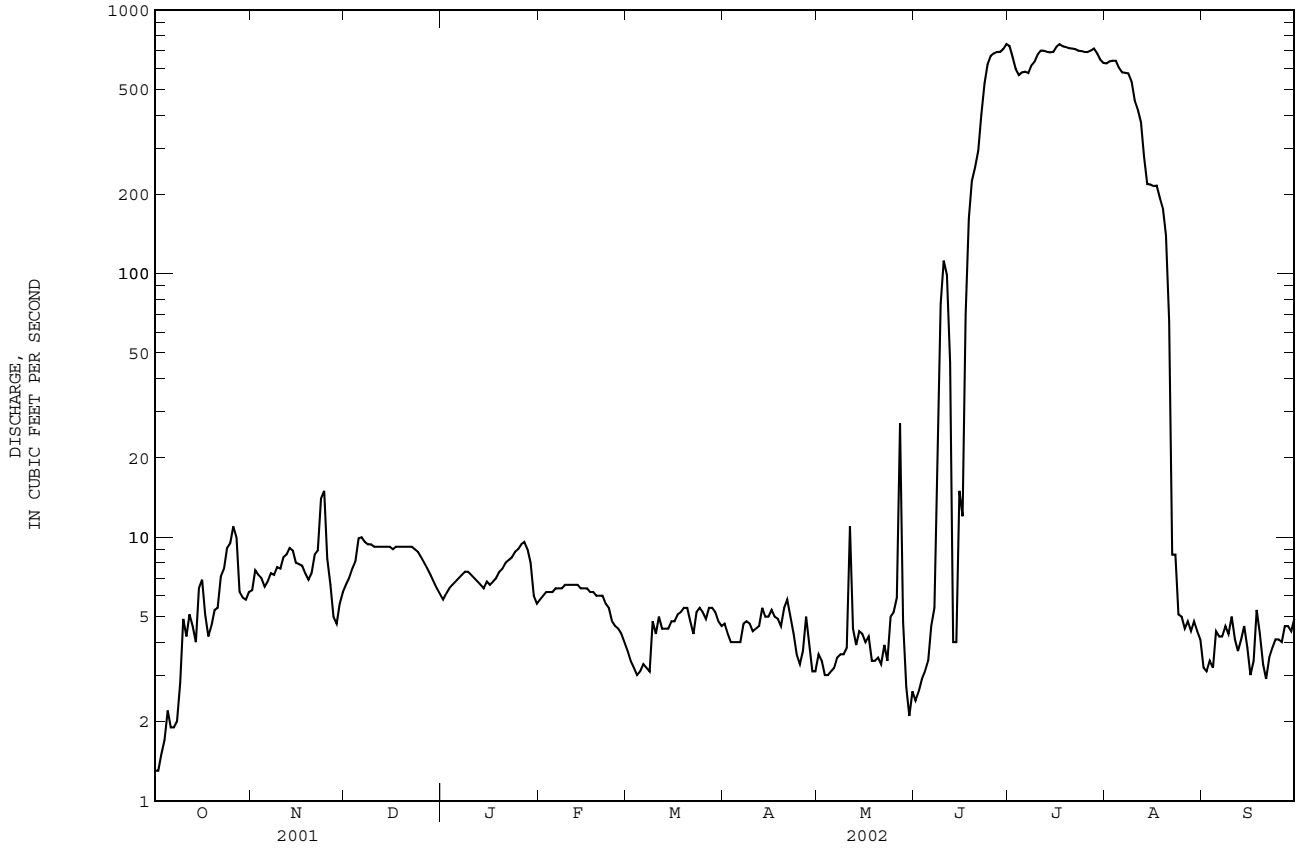
e Estimated



06849500 REPUBLICAN RIVER BELOW HARLAN COUNTY DAM, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1953 - 2002	
ANNUAL TOTAL	29287.40		38169.2		217.6	
ANNUAL MEAN	80.24		104.6		690	
HIGHEST ANNUAL MEAN					37.4	
LOWEST ANNUAL MEAN					1992	
HIGHEST DAILY MEAN	621	Aug 6	744	Jun 30	4210	Nov 2 1965
LOWEST DAILY MEAN	0.35	Sep 12	1.3	Oct 1	0.29	Jun 3 1996
ANNUAL SEVEN-DAY MINIMUM	0.67	Sep 21	1.7	Oct 1	0.38	Jun 1 1996
MAXIMUM PEAK FLOW			762		4320	
MAXIMUM PEAK STAGE			2.90		8.65	
ANNUAL RUNOFF (AC-FT)	58090		75710		157600	
10 PERCENT EXCEEDS	362		618		645	
50 PERCENT EXCEEDS	8.4		6.2		14	
90 PERCENT EXCEEDS	3.4		3.4		4.2	

e Estimated.



KANSAS RIVER BASIN

06852500 COURTLAND CANAL AT NEBRASKA-KANSAS STATE LINE

LOCATION.--Lat 40°00'15", long 098°07'55", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.32, T.1 N., R.7 W., Nuckolls County, Nebraska, Hydrologic Unit 10250016, on left bank 0.2 mi upstream from Nebraska-Kansas State line and 3.5 mi southwest of Superior, NE.

PERIOD OF RECORD.--October 1954 to current year.

GAGE.--Water-stage recorder and concrete Parshall flume. Datum of gage is 1,612.46 ft above sea level. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor. Canal diverts from Republican River at Courtland diversion dam in sec.7, T.1 N., R.9 W. Water is used for irrigation in Nebraska and Kansas; figures published herein represent that portion which flows into Kansas.

DISCHARGE , PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	20	0.0	0.0	0.0	0.0	0.0	85	88	315	399	67
2	83	11	0.0	0.0	0.0	0.0	0.0	84	84	316	379	66
3	79	0.0	0.0	0.0	0.0	0.0	0.0	84	61	318	381	65
4	76	0.0	0.0	0.0	0.0	0.0	0.0	81	43	319	382	64
5	76	0.0	0.0	0.0	0.0	0.0	0.0	80	43	297	387	63
6	79	0.0	0.0	0.0	0.0	0.0	0.0	167	40	302	380	62
7	83	0.0	0.0	0.0	0.0	0.0	0.0	120	42	310	356	61
8	83	0.0	0.0	0.0	0.0	0.0	4.8	103	39	312	347	58
9	84	0.0	0.0	0.0	0.0	0.0	89	96	34	310	352	36
10	95	0.0	0.0	0.0	0.0	0.0	95	87	32	337	362	30
11	241	0.0	0.0	0.0	0.0	0.0	93	100	38	337	354	30
12	170	0.0	0.0	0.0	0.0	0.0	91	129	42	360	291	34
13	130	0.0	0.0	0.0	0.0	0.0	91	127	46	389	284	53
14	115	0.0	0.0	0.0	0.0	0.0	91	139	43	403	289	160
15	119	0.0	0.0	0.0	0.0	0.0	90	116	46	405	258	91
16	121	0.0	0.0	0.0	0.0	0.0	90	107	46	399	217	58
17	117	0.0	0.0	0.0	0.0	0.0	84	100	44	396	207	42
18	112	0.0	0.0	0.0	0.0	0.0	84	91	46	425	219	34
19	105	0.0	0.0	0.0	0.0	0.0	78	87	45	441	219	30
20	103	0.0	0.0	0.0	0.0	0.0	78	86	63	432	192	30
21	102	0.0	0.0	0.0	0.0	0.0	87	83	107	430	151	30
22	102	0.0	0.0	0.0	0.0	0.0	91	82	131	439	125	29
23	102	0.0	0.0	0.0	0.0	0.0	94	91	138	444	128	29
24	101	0.0	0.0	0.0	0.0	0.0	93	125	198	439	87	28
25	94	0.0	0.0	0.0	0.0	0.0	82	119	270	e450	103	27
26	77	0.0	0.0	0.0	0.0	0.0	80	117	298	e460	145	27
27	21	0.0	0.0	0.0	0.0	0.0	92	105	315	e460	109	27
28	20	0.0	0.0	0.0	0.0	0.0	96	140	323	e460	71	27
29	20	0.0	0.0	0.0	---	0.0	95	81	318	e470	76	27
30	20	0.0	0.0	0.0	---	0.0	88	159	314	475	70	27
31	20	---	0.0	0.0	---	0.0	---	111	---	433	69	---
TOTAL	2835	31.0	0.0	0.0	0.0	0.0	1956.8	3282	3377	12083	7389	1412
MEAN	91.45	1.033	0.000	0.000	0.000	0.000	65.23	105.9	112.6	389.8	238.4	47.07
MAX	241	20	0.00	0.00	0.00	0.00	96	167	323	475	399	160
MIN	20	0.00	0.00	0.00	0.00	0.00	0.00	80	32	297	69	27
AC-FT	5620	61	0.00	0.00	0.00	0.00	3880	6510	6700	23970	14660	2800

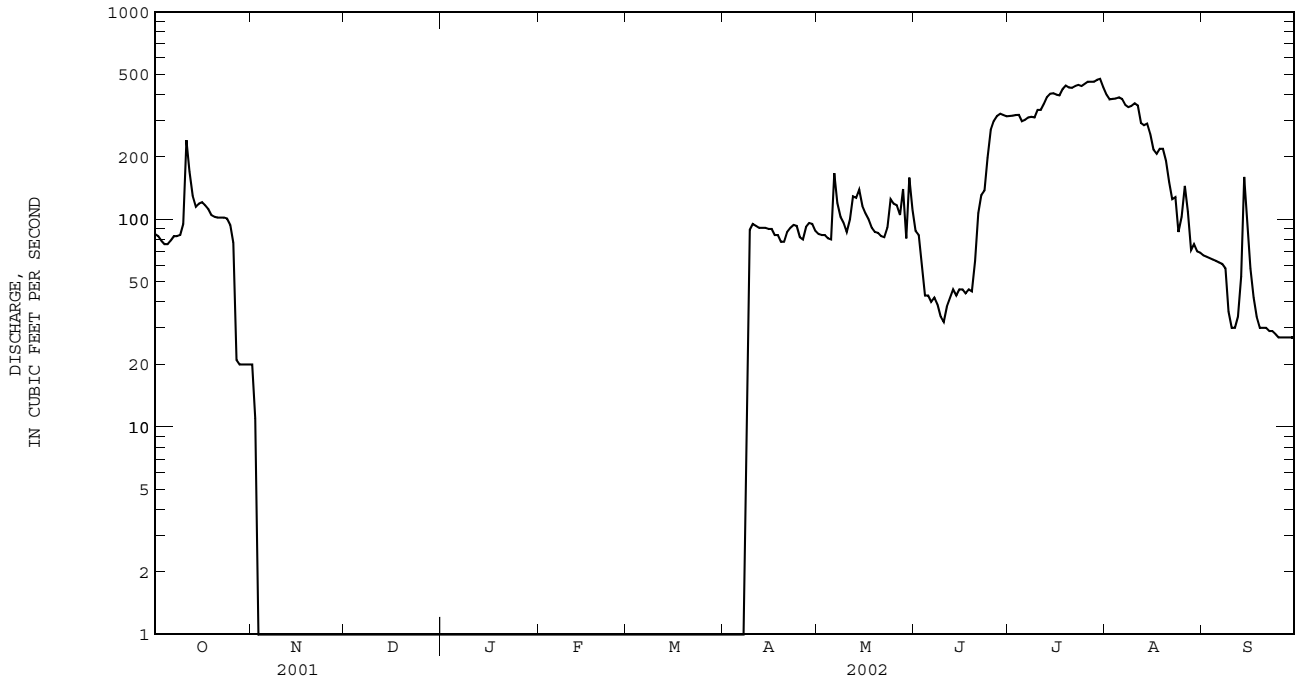
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2002, BY WATER YEAR (WY)

	30.06	10.72	4.081	4.675	3.951	9.724	14.11	52.20	115.7	350.2	279.4	66.10
MEAN	30.06	10.72	4.081	4.675	3.951	9.724	14.11	52.20	115.7	350.2	279.4	66.10
MAX	464	212	75.0	84.4	82.9	187	109	237	362	627	570	205
(WY)	1958	1967	2001	1992	1992	2000	2000	1958	1988	1976	1976	1995
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	21.2	44.4	80.3	0.000
(WY)	1955	1955	1955	1955	1955	1955	1955	1957	1957	1955	1992	1977

06852500 COURTLAND CANAL AT NEBRASKA-KANSAS STATE LINE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1955 - 2002	
ANNUAL TOTAL	28453.0		32365.8		79.27	
ANNUAL MEAN	77.95		88.67		138	
HIGHEST ANNUAL MEAN					19.5 1955	
LOWEST ANNUAL MEAN					731 Oct 22 1957	
HIGHEST DAILY MEAN	338	Aug 8	475	Jul 30	*0.00 Oct 1 1954	
LOWEST DAILY MEAN	0.00	Feb 7	0.00	Nov 3	0.00 Oct 1 1954	
ANNUAL SEVEN-DAY MINIMUM	0.00	Feb 7	0.00	Nov 3	781 Sep 2 1973	
MAXIMUM PEAK FLOW					5.05 Sep 2 1973	
MAXIMUM PEAK STAGE					56440	
ANNUAL RUNOFF (AC-FT)	56440		64200		57430	
10 PERCENT EXCEEDS	265		318		294	
50 PERCENT EXCEEDS	0.00		36		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated.
 * No flow for many days each year.



KANSAS RIVER BASIN

06853020 REPUBLICAN RIVER AT GUIDE ROCK, NE

LOCATION.--Lat 40°03'49", long 98°19'53", in NE ¼ SE ¼ sec.9, T.1 N., R.9 W., Webster County, Hydrologic Unit 10250016, on left downstream bank at Nebraska State Highway 78 bridge, 0.2 mi downstream from Minnie Creek and 0.5 mi south of Guide Rock. Station is 3.1 river miles downstream from station 06853000, Republican River near Guide Rock, previous site, and at mile 176.

DRAINAGE AREA.--22,100 mi², approximately, of which about 14,610 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--August 1950 to current year. August 1950 to September 1984 published as Republican River near Guide Rock (06853000).

REVISED RECORDS.--WDR NE-97-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,616.15 ft above sea level, levels by U.S. Corps of Engineers. Prior to Oct. 1, 1959, at datum 12.98 ft higher, and Oct. 1, 1959 to Nov. 28, 1984, at datum 7.98 ft higher, both at site 3.1 miles upstream. Data collection platform at station

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow affected by irrigation development above station, by regulation of upstream reservoirs, and since Nov. 14, 1952, by storage in Harlan County Lake (station 06849000).

COOPERATION.--Records provided by Nebraska Department of Natural Resources and reviewed by the U.S. Geological Survey.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	102	109	e70	e52	e88	127	7.8	23	45	1.7	1.1
2	3.3	84	127	e68	e50	e70	122	7.1	15	90	2.7	0.90
3	3.2	84	125	e66	e52	e62	100	7.2	19	82	9.7	0.78
4	3.4	87	114	e70	e52	e90	115	7.7	28	62	13	0.72
5	3.5	89	117	e76	e52	e110	119	7.7	16	60	16	0.67
6	3.5	92	112	e64	e54	e135	120	7.9	13	17	13	0.65
7	3.5	91	110	e66	e56	e140	125	6.6	8.1	20	4.1	0.63
8	3.4	86	109	e70	e66	e130	87	6.3	6.7	20	2.6	0.59
9	3.7	84	109	e76	e72	e110	30	5.6	7.9	17	29	0.61
10	4.7	88	109	e76	e82	e90	26	6.5	9.1	24	72	0.58
11	3.7	89	111	e72	e92	e120	23	11	17	8.2	15	0.52
12	4.3	94	114	e76	e100	e135	18	8.9	49	35	13	0.61
13	4.2	99	113	e70	e110	130	15	8.2	71	42	33	1.8
14	3.5	102	115	e64	e120	124	13	7.6	33	34	51	1.1
15	5.2	98	118	e60	e125	119	10	6.8	12	26	7.6	0.84
16	4.0	95	120	e62	e130	117	8.7	7.6	9.1	18	2.0	0.66
17	3.7	95	117	e62	130	121	6.8	7.7	9.1	13	3.0	0.64
18	3.6	97	119	e60	130	122	8.0	8.6	14	32	2.2	0.57
19	3.5	92	119	e54	129	121	8.3	8.7	6.2	9.7	2.9	0.56
20	3.3	92	119	e56	126	119	8.4	8.2	27	4.8	2.5	0.52
21	3.2	96	125	e62	123	114	8.2	7.7	33	3.1	6.6	0.47
22	3.3	99	e116	e66	121	111	8.6	7.6	4.7	18	16	0.46
23	3.6	110	e106	e68	122	119	9.0	8.0	8.2	24	4.1	0.39
24	3.6	127	e84	e70	120	119	8.0	11	30	14	3.5	0.39
25	3.7	127	e80	e72	e110	127	7.4	11	29	11	79	0.38
26	23	118	e78	e74	e100	145	7.3	9.3	9.8	9.6	162	0.39
27	74	105	e74	e74	e86	136	8.0	8.4	15	10	7.7	0.39
28	79	e90	e72	e66	e78	138	6.7	195	18	16	4.2	0.39
29	84	e82	e72	e60	---	133	7.7	221	11	28	3.0	0.43
30	84	e92	e72	e58	---	126	8.1	53	13	24	1.7	0.41
31	89	---	e70	e54	---	127	---	19	---	4.5	1.3	---
TOTAL	525.0	2886	3255	2062	2640	3648	1169.2	704.7	564.9	821.9	585.1	19.15
MEAN	16.94	96.20	105.0	66.52	94.29	117.7	38.97	22.73	18.83	26.51	18.87	0.638
MAX	89	127	127	76	130	145	127	221	71	90	162	1.8
MIN	3.2	82	70	54	50	62	6.7	5.6	4.7	3.1	1.3	0.38
AC-FT	1040	5720	6460	4090	5240	7240	2320	1400	1120	1630	1160	38

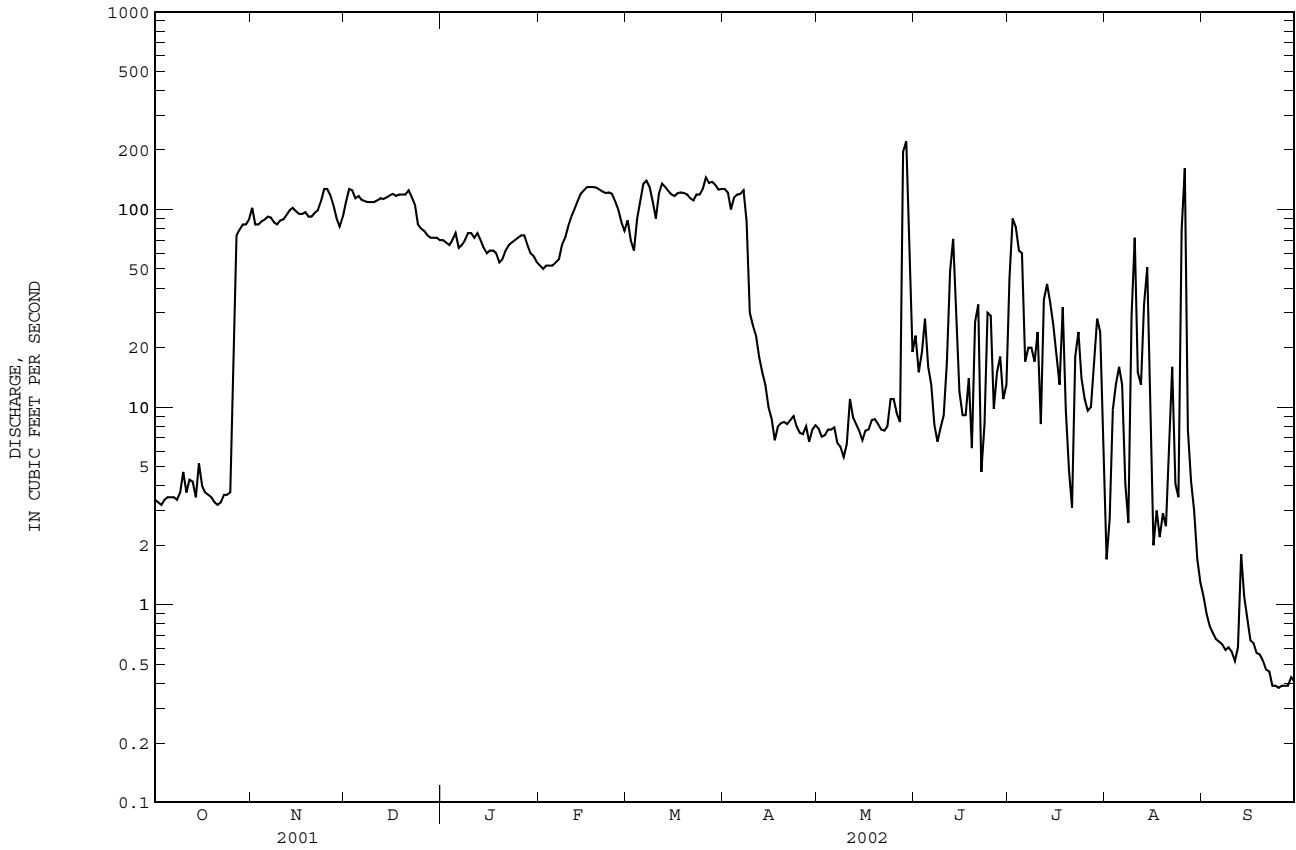
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2002, BY WATER YEAR (WY)

MEAN	200.7	181.6	158.0	151.1	245.7	312.0	358.6	405.7	464.6	504.3	236.4	272.1
MAX	2073	1245	819	588	948	1077	2484	2511	3619	4298	1712	3602
(WY)	1966	1994	1994	1952	1952	1952	1960	1960	1951	1951	1962	1951
MIN	1.19	2.41	3.13	4.11	3.86	22.5	6.86	7.04	11.5	23.3	18.9	0.64
(WY)	1992	1992	1992	1992	1992	1992	1992	1989	1992	1970	2002	2002

06853020 REPUBLICAN RIVER AT GUIDE ROCK, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1950 - 2002	
ANNUAL TOTAL	59907.2		18880.95		290.0	
ANNUAL MEAN	164.1		51.73		1495	
HIGHEST ANNUAL MEAN					2002	
LOWEST ANNUAL MEAN					1951	
HIGHEST DAILY MEAN	2240	Mar 10	221	May 29	20900	Jun 16 1957
LOWEST DAILY MEAN	3.2	Oct 3	0.38	Sep 25	0.10	May 26 1964
ANNUAL SEVEN-DAY MINIMUM	3.4	Oct 1	0.39	Sep 23	0.39	Sep 23 2002
MAXIMUM PEAK FLOW			367		29200	
MAXIMUM PEAK STAGE			5.38		*20.73	
ANNUAL RUNOFF (AC-FT)	118800		37450		210100	
10 PERCENT EXCEEDS	297		120		670	
50 PERCENT EXCEEDS	92		33		117	
90 PERCENT EXCEEDS	5.0		2.6		19	

e Estimated.
 * Site and datum then in use.



KANSAS RIVER BASIN

06853500 REPUBLICAN RIVER NEAR HARDY, NE

LOCATION.--Lat 39°59'33", long 97°55'53", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.1, T.1 S., R.6 W., in Kansas, Republic County, Hydrologic Unit 10250016, on right bank at upstream side of county highway bridge, 1.2 mi southwest of Hardy, NE, and at mile 141.2.

DRAINAGE AREA.--22,401 mi², of which about 7,500 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--June 1904 to September 1915 (no winter records), April 1931 to current year. Prior to May 1932, published as "at Bostwick." Records for June 1896 to November 1903 published as "near Superior" in 18th to 22nd Ann. Repts., inclusive, Pt. 4, and WSP 75, 84, and 99, have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 806: Drainage area. WSP 1006: 1941. WSP 1340: 1905(M), 1907-09, 1912, 1914-15, 1931. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 1,501.46 ft above NGVD of 1929. Prior to May 19, 1932, nonrecording gage at site at Bostwick, 20 mi upstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow affected by irrigation development upstream from station and by storage in reservoirs in Colorado, Kansas, and Nebraska. Considerable regulation since 1952 by Harlan County Lake (station 06849000). Satellite telemeter at station. Records provided by the U.S. Geological Survey, Kansas District.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stages since at least 1895, that of June 2, 1935, and 17.00 ft June 24, 1947, discharge, 100,000 ft³/s, based on records for upstream stations.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 532 ft³/s, Dec. 29, gage height, 4.03 ft; minimum discharge, 12 ft³/s, Aug. 8, gage height, 1.94 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	140	139	e130	e115	e140	146	48	81	e34	35	21
2	49	149	154	e130	e122	e130	145	48	69	e33	23	19
3	47	141	166	e130	e130	e128	134	47	58	e60	19	17
4	45	138	167	e132	e132	e140	121	46	52	e90	16	17
5	46	139	160	e135	e133	e160	130	46	61	e80	18	14
6	47	140	156	e136	e133	e160	133	49	58	e100	15	15
7	48	141	152	e140	e134	e150	136	74	46	57	14	15
8	47	140	148	e145	e137	e140	152	61	40	58	13	14
9	51	134	146	e155	e150	136	125	48	35	52	16	14
10	50	134	145	e161	159	161	81	43	34	43	26	15
11	51	136	145	e167	167	e180	71	51	42	41	53	15
12	50	138	146	184	192	e184	67	56	128	41	57	15
13	53	140	145	184	194	e182	62	57	89	49	34	42
14	51	143	145	181	190	177	57	48	102	68	39	38
15	64	144	147	161	187	167	55	43	92	68	46	24
16	67	142	149	138	180	161	52	44	77	57	32	21
17	62	141	147	133	176	154	49	46	64	44	17	19
18	58	139	145	137	174	152	48	39	44	35	16	18
19	55	136	145	142	175	151	44	40	43	40	20	18
20	53	133	144	146	172	148	47	42	33	34	20	18
21	51	134	144	149	167	144	56	40	35	23	18	17
22	50	137	148	e149	163	137	53	39	67	24	26	17
23	51	143	142	e149	162	137	56	55	39	22	23	17
24	49	159	130	e152	161	141	53	66	31	30	25	16
25	47	172	138	154	158	140	45	134	32	26	34	16
26	47	172	e144	172	108	139	45	99	46	22	27	16
27	48	160	e147	175	e140	158	56	181	35	22	75	17
28	110	146	e146	166	e144	153	55	180	e33	30	104	17
29	128	135	e144	153	---	154	51	180	e39	81	36	17
30	137	133	e138	138	---	148	48	238	e37	101	26	16
31	136	---	e134	94	---	142	---	131	---	68	23	---
MEAN	61.23	142.6	146.6	149.0	155.5	151.4	79.10	74.81	54.73	49.45	30.52	18.50
MAX	137	172	167	184	194	184	152	238	128	101	104	42
MIN	45	133	130	94	108	128	44	39	31	22	13	14
AC-FT	3760	8490	9020	9160	8640	9310	4710	4600	3260	3040	1880	1100

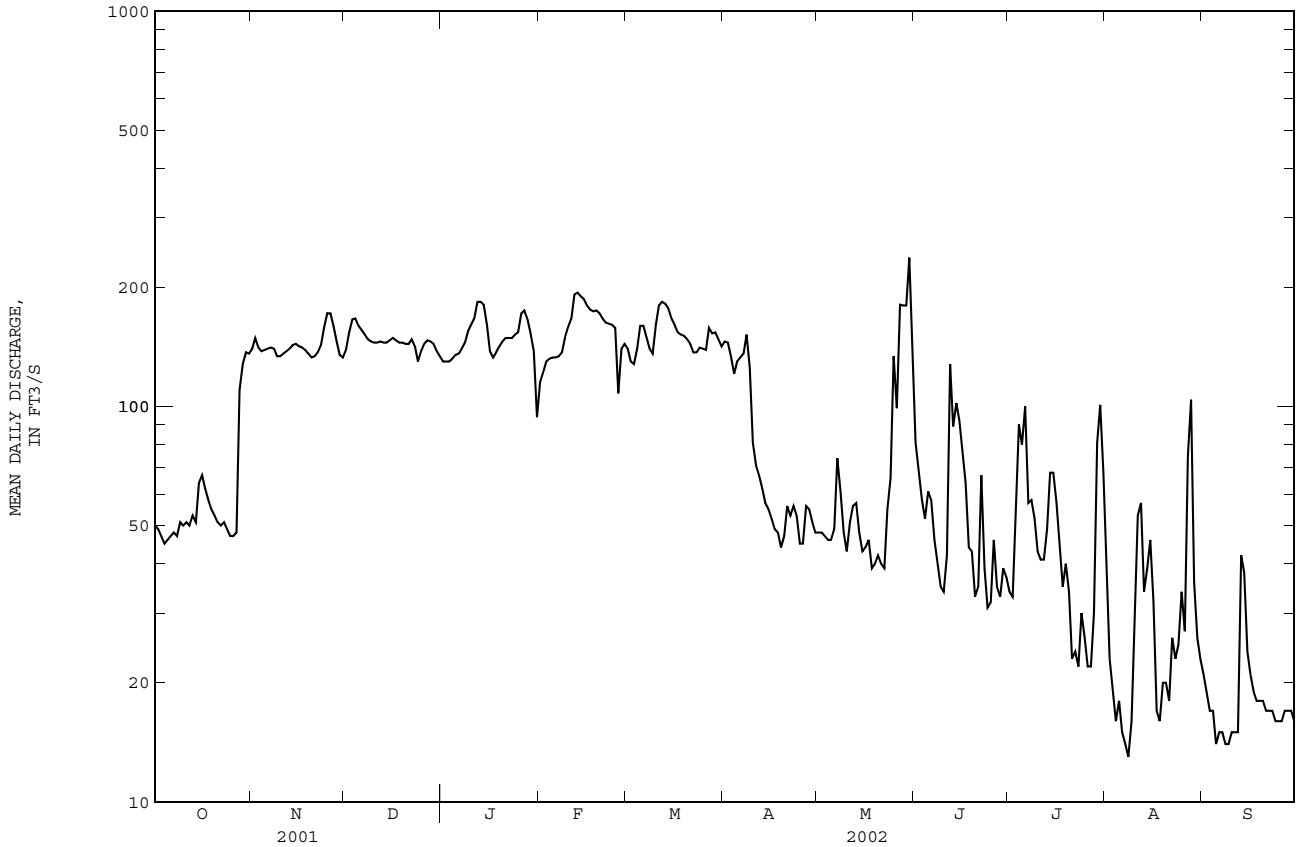
06853500 REPUBLICAN RIVER NEAR HARDY, NE--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	273.6	227.6	198.0	189.0	295.5	414.4	437.3	482.4	485.4	509.9	309.8	311.0
MAX	1970	1308	928	636	968	1584	2415	2523	2031	3210	1800	1455
(WY)	1966	1994	1994	1966	1966	1993	1960	1960	1960	1993	1962	1973
MIN	17.2	22.3	24.3	33.7	27.0	66.5	39.1	29.6	46.5	49.5	30.5	15.3
(WY)	1992	1992	2001	1992	1992	1991	1991	1992	1992	2002	2002	1991

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1958 - 2002
ANNUAL MEAN	246.0	92.49	344.6
HIGHEST ANNUAL MEAN			800
LOWEST ANNUAL MEAN			72.5
HIGHEST DAILY MEAN			15000
LOWEST DAILY MEAN	3830	May 5	4.8
ANNUAL SEVEN-DAY MINIMUM	20	Jan 2	9.0
MAXIMUM PEAK FLOW	29	Jan 1	225000
MAXIMUM PEAK STAGE			19.40
INSTANTANEOUS LOW FLOW			0.00
ANNUAL RUNOFF (AC-FT)	178100		249700
10 PERCENT EXCEEDS	467		767
50 PERCENT EXCEEDS	141		167
90 PERCENT EXCEEDS	43		60

e Estimated

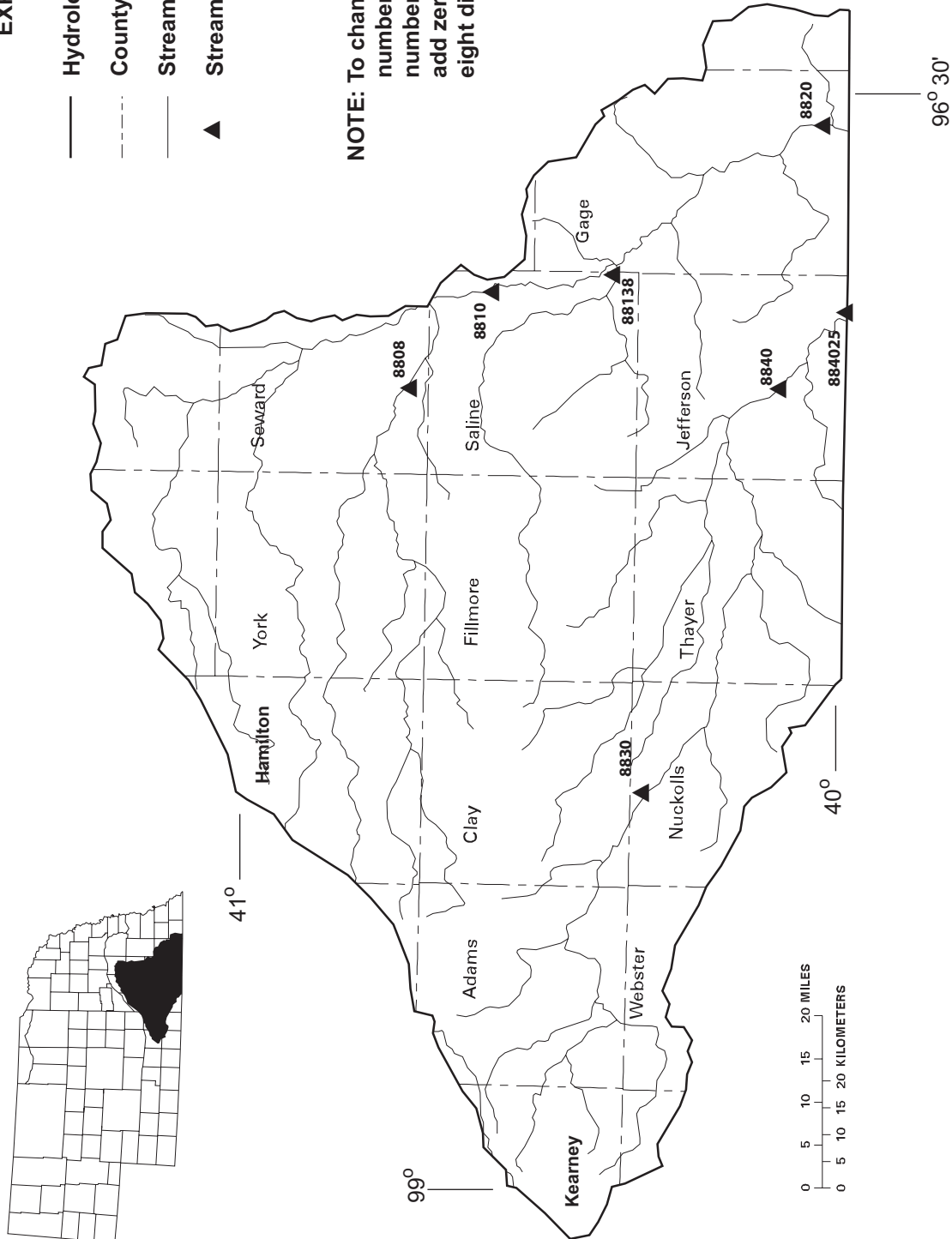


SURFACE-WATER DISCHARGE RECORDS
 KANSAS RIVER BASIN
 BLUE RIVER BASIN

EXPLANATION

- Hydrologic boundary
- - - County line
- Streams
- ▲ Stream-flow gaging station

NOTE: To change abbreviated station number to complete station number, prefix with "06" and add zero's required to give eight digits.



SURFACE-WATER DISCHARGE RECORDS
KANSAS RIVER BASIN
BLUE RIVER BASIN

* Station number	Station name	Page
BIG BLUE RIVER BASIN		
8808	West Fork Big Blue River near Dorchester.....	320
8810	Big Blue River near Crete.....	324
881380	Turkey Creek near DeWitt.....	326
8820	Big Blue River at Barneston.....	328
LITTLE BLUE RIVER BASIN		
8830	Little Blue River near Deweese.....	332
8840	Little Blue River near Fairbury.....	334
884025	Little Blue River at Hollenberg, KS.....	338

*NOTE: To change abbreviated station number to complete station number, prefix with "06" and add zeros required to give eight digits.

KANSAS RIVER BASIN

06880800 WEST FORK BIG BLUE RIVER NEAR DORCHESTER, NE

LOCATION.--Lat 40°43'52", long 097°10'38", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.23, T.9 N., R.2 E., Seward County, Hydrologic Unit 10270203, on right bank 60 ft downstream from bridge on county road, 6.2 mi northwest of Dorchester, and 22.8 mi upstream from mouth.

DRAINAGE AREA.--1,192 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1958 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 1,403.48 ft above sea level. Prior to Apr. 14, 1970, on bridge pier 60 ft upstream at same datum. Data collection platform at station.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Some diversion by pumping for irrigation above station. Natural flow of stream affected by ground-water withdrawals for irrigation and return flow from irrigated areas.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	77	83	e56	e60	e56	91	118	385	62	68	73
2	100	76	84	e68	e70	e60	90	100	235	64	65	69
3	95	75	81	e70	e78	e68	91	96	192	66	71	75
4	93	75	80	e76	e78	e86	91	90	163	68	79	67
5	92	76	81	e66	e84	e98	91	87	147	68	81	59
6	90	77	80	e64	e96	106	90	270	137	69	71	56
7	88	76	79	e66	e102	99	88	350	130	77	71	55
8	87	74	79	e78	e88	97	90	167	126	72	71	52
9	87	75	79	e78	e70	e84	89	115	122	64	72	50
10	99	75	79	e78	e66	e88	89	101	119	63	81	50
11	91	76	80	e76	e66	95	88	236	118	65	86	51
12	89	77	80	e80	69	100	89	843	118	66	89	53
13	87	79	80	e78	72	100	89	719	118	78	81	61
14	84	78	81	e74	74	100	89	512	135	74	85	61
15	86	76	82	e68	76	94	87	382	169	76	87	65
16	92	74	81	e64	74	93	87	271	133	77	90	60
17	98	74	80	e62	75	92	89	183	115	68	99	62
18	91	74	80	e70	77	90	88	148	107	72	101	62
19	86	72	81	76	79	89	89	131	102	74	100	57
20	84	73	81	e80	78	89	88	120	94	78	87	58
21	82	74	82	82	78	87	93	113	92	79	79	56
22	84	74	84	78	78	88	92	121	88	90	122	54
23	85	78	82	e76	79	88	92	133	84	104	136	53
24	80	87	e60	74	e74	90	87	206	78	95	113	53
25	78	95	e66	76	e70	92	86	507	75	80	91	53
26	77	99	e60	77	65	90	86	419	68	74	85	54
27	77	87	e62	78	e60	90	97	454	63	76	80	55
28	78	82	e60	80	e52	91	99	397	64	83	82	56
29	78	79	e54	e78	---	90	104	642	62	76	91	58
30	78	81	e58	e64	---	89	107	478	62	74	83	56
31	78	---	e56	e54	---	90	---	438	---	66	76	---
TOTAL	2700	2345	2335	2245	2088	2769	2726	8947	3701	2298	2673	1744
MEAN	87.10	78.17	75.32	72.42	74.57	89.32	90.87	288.6	123.4	74.13	86.23	58.13
MAX	106	99	84	82	102	106	107	843	385	104	136	75
MIN	77	72	54	54	52	56	86	87	62	62	65	50
AC-FT	5360	4650	4630	4450	4140	5490	5410	17750	7340	4560	5300	3460

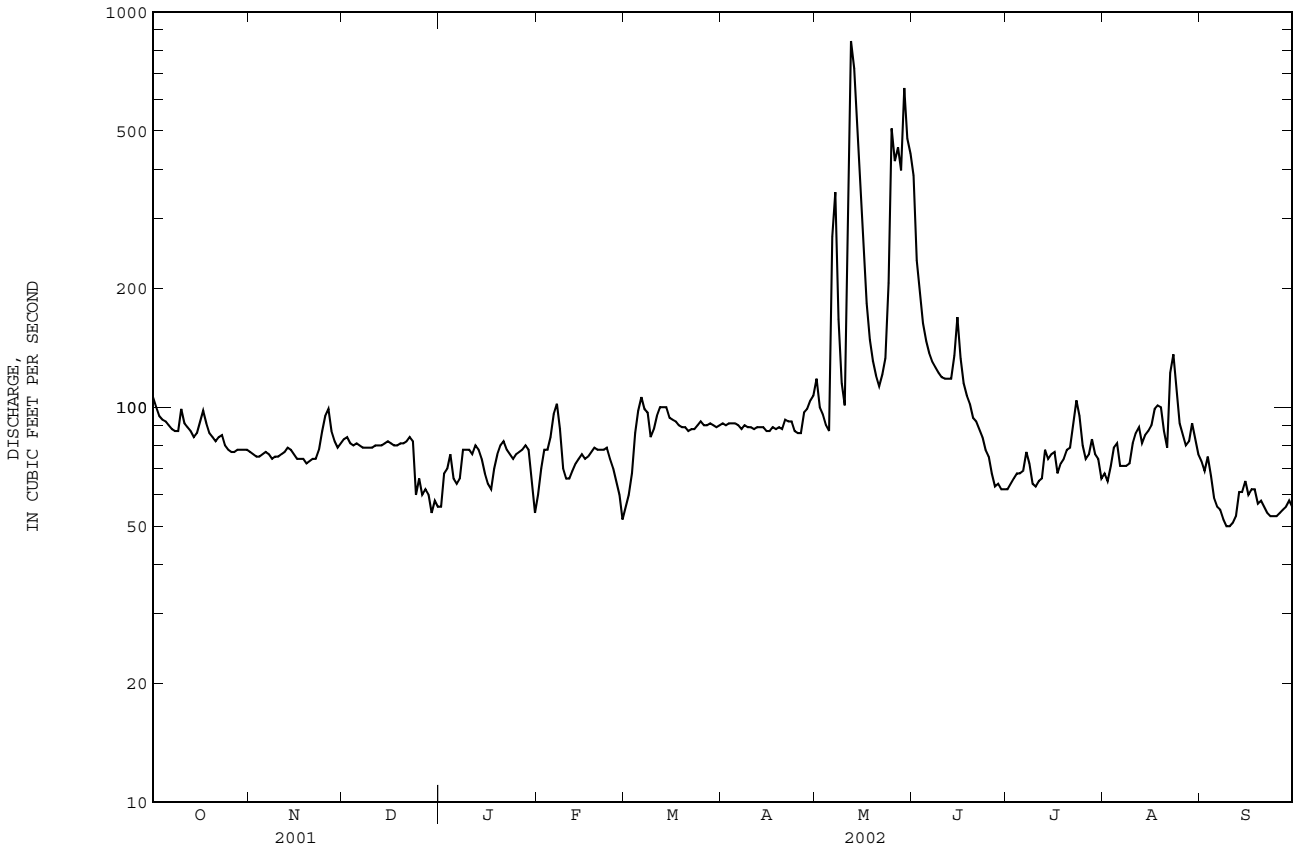
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2002, BY WATER YEAR (WY)

MEAN	117.5	82.44	70.04	74.59	141.9	303.5	172.5	265.8	357.4	327.2	188.2	151.6
MAX	812	224	202	377	671	1762	887	1147	1749	1395	480	855
(WY)	1974	1997	1998	1973	1984	1993	1984	1984	1967	1986	1993	1989
MIN	35.7	33.6	26.4	25.4	40.1	41.6	50.0	60.4	43.1	46.7	34.8	33.1
(WY)	1982	1981	1977	1977	1979	1981	1981	1989	1981	1980	1976	1976

06880800 WEST FORK BIG BLUE RIVER NEAR DORCHESTER, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1958 - 2002	
ANNUAL TOTAL	60790		36571		187.6	
ANNUAL MEAN	166.5		100.2		441 1984	
HIGHEST ANNUAL MEAN					54.4 1976	
LOWEST ANNUAL MEAN					11100 Mar 11 1993	
HIGHEST DAILY MEAN	1520	Jun 15	843	May 12	12 Dec 31 1976	
LOWEST DAILY MEAN	54	Dec 29	50	Sep 9	17 Jul 11 1976	
ANNUAL SEVEN-DAY MINIMUM	59	Dec 25	52	Sep 6	*12400 Mar 11 1993	
MAXIMUM PEAK FLOW			947 May 12		22.62 Jul 1 1986	
MAXIMUM PEAK STAGE			8.20 May 12			
ANNUAL RUNOFF (AC-FT)	120600		72540		135900	
10 PERCENT EXCEEDS	285		120		310	
50 PERCENT EXCEEDS	107		80		84	
90 PERCENT EXCEEDS	78		62		48	

e Estimated.
 * Stage 21.71 ft.



KANSAS RIVER BASIN

06880800 WEST FORK BIG BLUE RIVER NEAR DORCHESTER, NE--Continued

WATER-QUALITY RECORDS
Pesticide Reconnaissance Study

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	ACETO-CHLOR ESA FLTRD (UG/L) (61029)	ACETO-CHLOR OA FLTRD (UG/L) (61030)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR OA FLTRD 0.7 UM GF REC (UG/L) (61031)
MAY 07...	0900	380	720	5.2	58	7.6	325	14.0	18.0	.39	.54	5.43	.09
JUL 26...	1100	75	722	6.4	83	8.3	617	23.5	25.5	.16	.27	.050	.18

Date	Time	ALA-CHLOR ESA WAT FLT GF 0.7U REC (UG/L) (50009)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	AMETRYN WATER, DISS, REC, (UG/L) (38401)	AMINO-METHYL-PHOS-PHONIC ACID, WAT FLT (UG/L) (62649)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	CYANA-ZINE AMIDE WATER FLTRD REC (UG/L) (61709)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DEISO-PROPYL ATRAZIN WATER, DISS, REC (UG/L) (04038)	DIMETH-ENAMID OA, WATER FLT, REC (UG/L) (62482)	DI-METHEN-AMID WATER FLTRD REC (UG/L) (61588)	FLUFEN-ACET, ESA, WAT FLT (UG/L) (61952)
MAY 07...	.12	.38	<.05	1.3	48.0	<.05	<.05	2.40	.89	.20	.15	4.14	<.05
JUL 26...	.27	.05	.22	2.0	.58	<.05	<.05	<.05	.22	<.05	<.05	<.05	<.05

Date	Time	FLUFE-NACET OA, WATER FLT, REC (UG/L) (62483)	FLUFE-NACET, WATER, FLT, REC (UG/L) (62481)	GLUFO-SINATE, WATER, FLTRD, REC (UG/L) (62721)	GLYPHO-SATE, WATER, FLTRD, REC (UG/L) (62722)	METOLA-CHLOR ESA GF REC (UG/L) (61043)	METOLA-CHLOR OA GF REC (UG/L) (61044)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	PENDI-METH-ALIN WAT FLT GF, REC (UG/L) (82683)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRO-METRYN, WATER, DISS, REC (UG/L) (04036)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PROP-AZINE WATER DISS REC (UG/L) (38535)
MAY 07...	<.05	.39	<.1	.1	.63	.65	16.0	.11	<.050	<.05	<.05	<.050	.24	
JUL 26...	<.05	.10	<.1	.2	.28	.33	.21	<.05	<.050	<.05	<.05	<.050	<.05	

Date	Time	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TER-BUTRYN WATER, DISS, REC (UG/L) (38888)
MAY 07...		<.05	<.05
JUL 26...		<.05	<.05

Remark codes used in this report:
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KANSAS RIVER BASIN

06881000 BIG BLUE RIVER NEAR CRETE, NE

LOCATION.--Lat 40°35'47", long 096°57'33", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.3, T.7 N., R.4 E., Saline County, Hydrologic Unit 10270202, on right bank near downstream side of county road bridge, 1.8 mi south of Missouri Pacific Railroad station in Crete, 3.3 mi downstream from Walnut Creek, 3.6 mi upstream from Squaw Creek, and at mile 167.

DRAINAGE AREA.--2,710 mi².

PERIOD OF RECORD.--March 1945 to current year. Prior to Oct. 1, 1953, discharge published only for stages above 12.0 ft because of variable backwater from dam downstream until 1952 and diurnal fluctuation from powerplant upstream in 1952-53.

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

GAGE.--Water-stage recorder. Datum of gage is 1,311.7 ft above sea level. Prior to Jan. 20, 1954, nonrecording gage and Jan. 21, 1954 to Mar. 27, 1986, recording gage on right bank at downstream side of county road bridge at present datum. Mar. 28, 1986 to May 11, 1988 at temporary location, on right bank 250 ft downstream from bridge at present datum. Data collection platform at station.

REMARKS.--Records good except for those from Dec. 20 to Mar. 10, which are poor. Natural flow of stream affected by ground-water and surface-water withdrawals for irrigation and return flow from irrigated areas.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	189	128	142	e116	e88	e132	164	197	843	77	59	109
2	177	127	142	e114	e106	e90	163	213	564	72	55	107
3	169	126	144	e116	e114	e114	160	187	396	68	55	98
4	168	125	144	121	e124	e145	158	174	311	66	64	99
5	164	125	141	126	e125	169	159	167	271	65	78	97
6	157	126	140	131	139	182	158	278	249	67	76	90
7	155	127	139	143	146	191	154	522	231	72	65	84
8	153	128	136	127	152	189	156	537	215	102	61	84
9	153	126	135	138	159	161	154	353	203	92	61	84
10	156	125	135	140	148	163	153	261	195	76	65	83
11	178	125	136	145	160	181	155	256	192	64	81	82
12	179	127	136	145	155	199	156	1030	279	57	90	84
13	170	130	136	146	154	195	155	1980	756	58	181	103
14	155	132	136	149	167	192	152	1480	761	69	121	174
15	147	133	135	143	165	193	154	896	463	75	98	113
16	145	132	135	137	161	194	153	623	408	80	92	104
17	154	130	136	130	159	192	154	459	346	78	102	100
18	157	129	136	128	163	189	153	355	371	72	106	100
19	156	127	136	125	168	183	152	297	306	68	121	101
20	150	126	134	126	171	176	154	260	241	69	121	98
21	145	126	134	138	169	173	156	237	201	68	115	98
22	141	126	135	145	171	169	152	220	172	69	416	97
23	141	129	128	142	170	168	156	285	145	79	1950	96
24	141	154	105	139	e160	168	158	344	120	103	650	96
25	133	160	108	136	e145	174	153	453	110	105	370	96
26	130	169	e106	140	e106	169	151	723	101	88	332	97
27	128	166	e122	143	e114	169	173	741	88	77	167	98
28	126	158	e122	131	e135	169	175	876	83	72	134	99
29	127	153	e124	126	---	170	178	939	82	77	131	100
30	128	146	e122	107	---	169	187	1360	78	76	120	102
31	128	---	e112	75	---	165	---	1010	---	72	115	---
TOTAL	4700	4041	4072	4068	4094	5293	4756	17713	8781	2333	6252	2973
MEAN	151.6	134.7	131.4	131.2	146.2	170.7	158.5	571.4	292.7	75.26	201.7	99.10
MAX	189	169	144	149	171	199	187	1980	843	105	1950	174
MIN	126	125	105	75	88	90	151	167	78	57	55	82
AC-FT	9320	8020	8080	8070	8120	10500	9430	35130	17420	4630	12400	5900

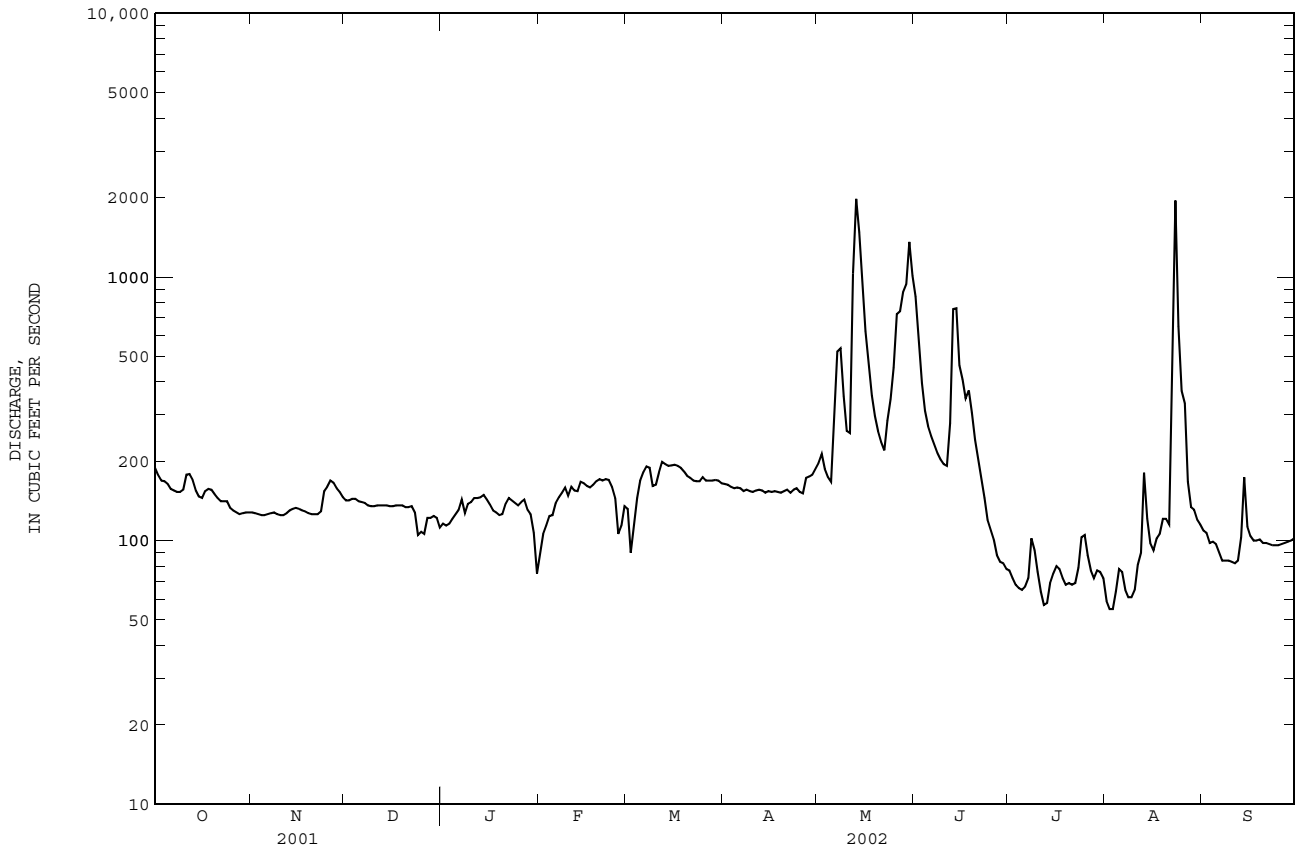
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2002, BY WATER YEAR (WY)

	MEAN	234.8	158.3	134.1	143.5	305.0	687.6	400.0	562.1	919.5	666.6	339.2	310.8
MAX	1864	439	390	865	1576	3968	2257	2339	5808	4739	1048	2065	
(WY)	1974	1974	1998	1973	1984	1993	1984	1984	1967	1986	1987	1989	
MIN	46.5	41.1	60.3	52.2	66.8	86.3	92.2	84.5	70.7	48.6	28.4	51.2	
(WY)	1957	1957	1977	1978	1977	1977	1967	1967	1981	1970	1955	1976	

06881000 BIG BLUE RIVER NEAR CRETE, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1954 - 2002	
ANNUAL TOTAL	119103		69076		405.4	
ANNUAL MEAN	326.3		189.2		1030 1984	
HIGHEST ANNUAL MEAN					96.6 1976	
LOWEST ANNUAL MEAN					21400 Jun 19 1957	
HIGHEST DAILY MEAN	4670	Jun 15	1980	May 13		
LOWEST DAILY MEAN	105	Dec 24	55	Aug 2	6.0 Aug 1 1980	
ANNUAL SEVEN-DAY MINIMUM	110	Aug 8	65	Aug 1	11 Jul 12 1976	
MAXIMUM PEAK FLOW			2830	Aug 23	*27600 Jul 10 1950	
MAXIMUM PEAK STAGE			16.63	Aug 23	**29.86 Jul 3 1986	
ANNUAL RUNOFF (AC-FT)	236200		137000		293700	
10 PERCENT EXCEEDS	499		281		731	
50 PERCENT EXCEEDS	191		141		161	
90 PERCENT EXCEEDS	126		79		79	

e Estimated.
 * Stage 28.74 ft.
 ** From floodmark.



KANSAS RIVER BASIN

06881380 TURKEY CREEK NEAR DEWITT, NE

LOCATION.--Lat 40°22'03", long 096°53'36", in NW ¼ SW ¼ sec. 29, T.5N., R.5E., Gage County, Hydrologic Unit 10270202, on right downstream end of county road bridge, 2.2 mi southeast of Dewitt.

DRAINAGE AREA.--740 mi² approximately.

PERIOD OF RECORD.--April to September 2002. Miscellaneous measurements made at this location from 1989 to 2001.

GAGE.--Water-stage recorder. Datum of gage is 1,253.80 ft above sea level. Data collection platform at station.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR CURRENT YEAR.--Maximum discharge *1,030 ft³/s, May 28, gage height *16.85 ft. Minimum daily discharge 5.9 ft³/s Aug. 2.

DISCHARGE FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	65	287	19	8.2	18
2	---	---	---	---	---	---	---	59	224	20	5.9	16
3	---	---	---	---	---	---	---	50	175	18	8.7	15
4	---	---	---	---	---	---	---	46	114	17	9.4	13
5	---	---	---	---	---	---	---	43	87	16	9.4	13
6	---	---	---	---	---	---	---	182	73	15	8.2	13
7	---	---	---	---	---	---	---	e280	65	50	8.7	13
8	---	---	---	---	---	---	---	e125	59	68	11	13
9	---	---	---	---	---	---	---	e66	55	28	11	13
10	---	---	---	---	---	---	---	e46	52	21	13	13
11	---	---	---	---	---	---	---	129	51	15	10	12
12	---	---	---	---	---	---	---	156	51	18	9.5	12
13	---	---	---	---	---	---	---	e280	50	16	28	15
14	---	---	---	---	---	---	---	e320	72	16	15	107
15	---	---	---	---	---	---	---	217	55	13	10	230
16	---	---	---	---	---	---	---	95	44	12	9.3	50
17	---	---	---	---	---	---	---	66	41	11	24	22
18	---	---	---	---	---	---	---	37	55	e35	11	22
19	---	---	---	---	---	---	---	36	49	33	9.5	e17
20	---	---	---	---	---	---	---	38	e50	30	7.7	e13
21	---	---	---	---	---	---	---	40	42	26	8.6	e13
22	---	---	---	---	---	---	---	37	e46	27	9.8	e21
23	---	---	---	---	---	---	---	39	47	23	8.9	e48
24	---	---	---	---	---	---	---	39	54	23	12	e52
25	---	---	---	---	---	---	---	36	142	19	9.9	e98
26	---	---	---	---	---	---	---	e37	193	18	30	e114
27	---	---	---	---	---	---	---	45	e280	18	20	e48
28	---	---	---	---	---	---	---	75	e560	20	15	27
29	---	---	---	---	---	---	---	91	e460	21	14	46
30	---	---	---	---	---	---	---	78	e360	22	12	33
31	---	---	---	---	---	---	---	e340	---	8.6	22	---
TOTAL	---	---	---	---	---	---	---	4903	1870	550.0	773.3	744
MEAN	---	---	---	---	---	---	---	158.2	62.33	17.74	24.95	24.80
MAX	---	---	---	---	---	---	---	560	287	68	114	230
MIN	---	---	---	---	---	---	---	42	18	7.7	5.9	10
AC-FT	---	---	---	---	---	---	---	9730	3710	1090	1530	1480

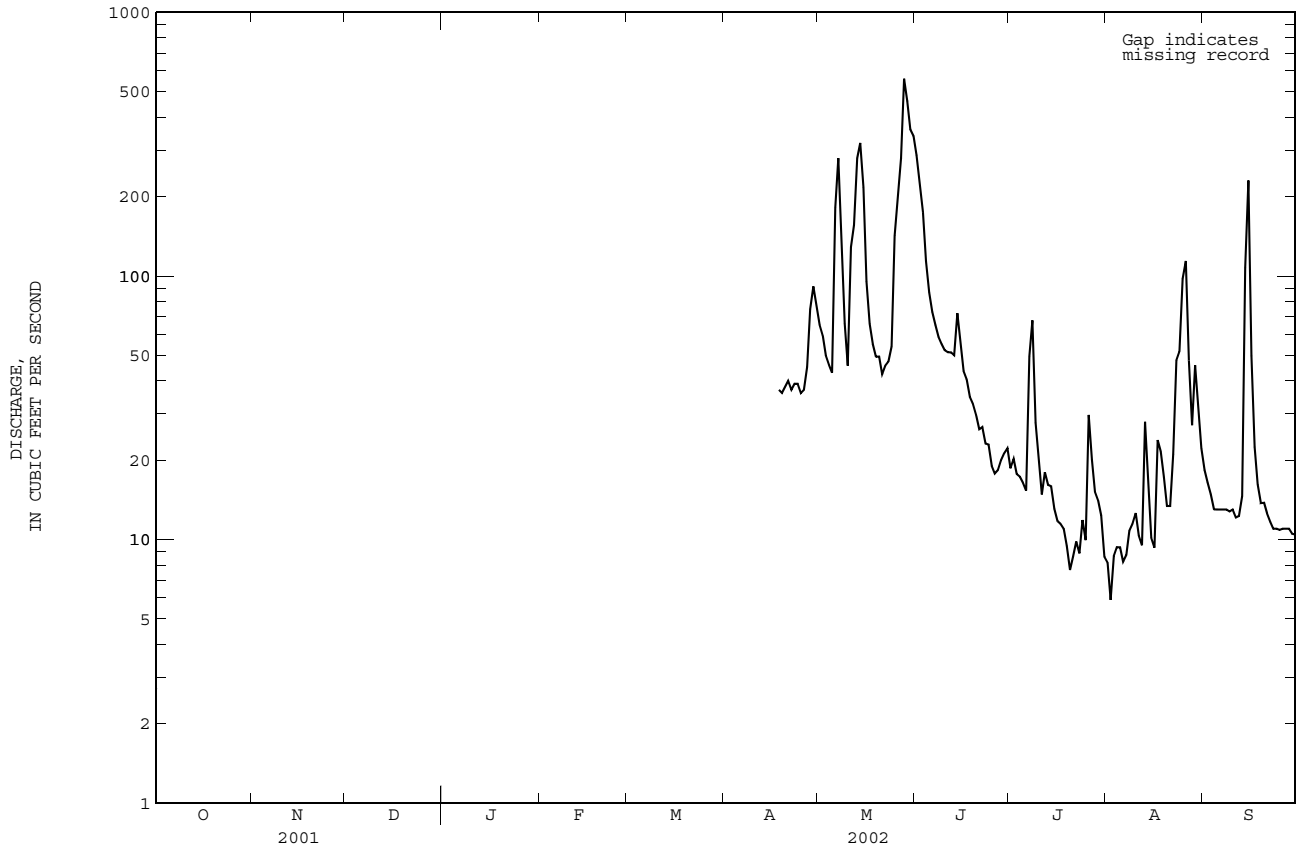
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2002, BY WATER YEAR (WY)

	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	158.2	62.33	17.74	24.95	24.80
MAX	---	---	---	---	---	---	---	158	62.3	17.7	24.9	24.8
(WY)	---	---	---	---	---	---	---	2002	2002	2002	2002	2002
MIN	---	---	---	---	---	---	---	158	62.3	17.7	24.9	24.8
(WY)	---	---	---	---	---	---	---	2002	2002	2002	2002	2002

e Estimated.

* Affected by backwater from Big Blue River.

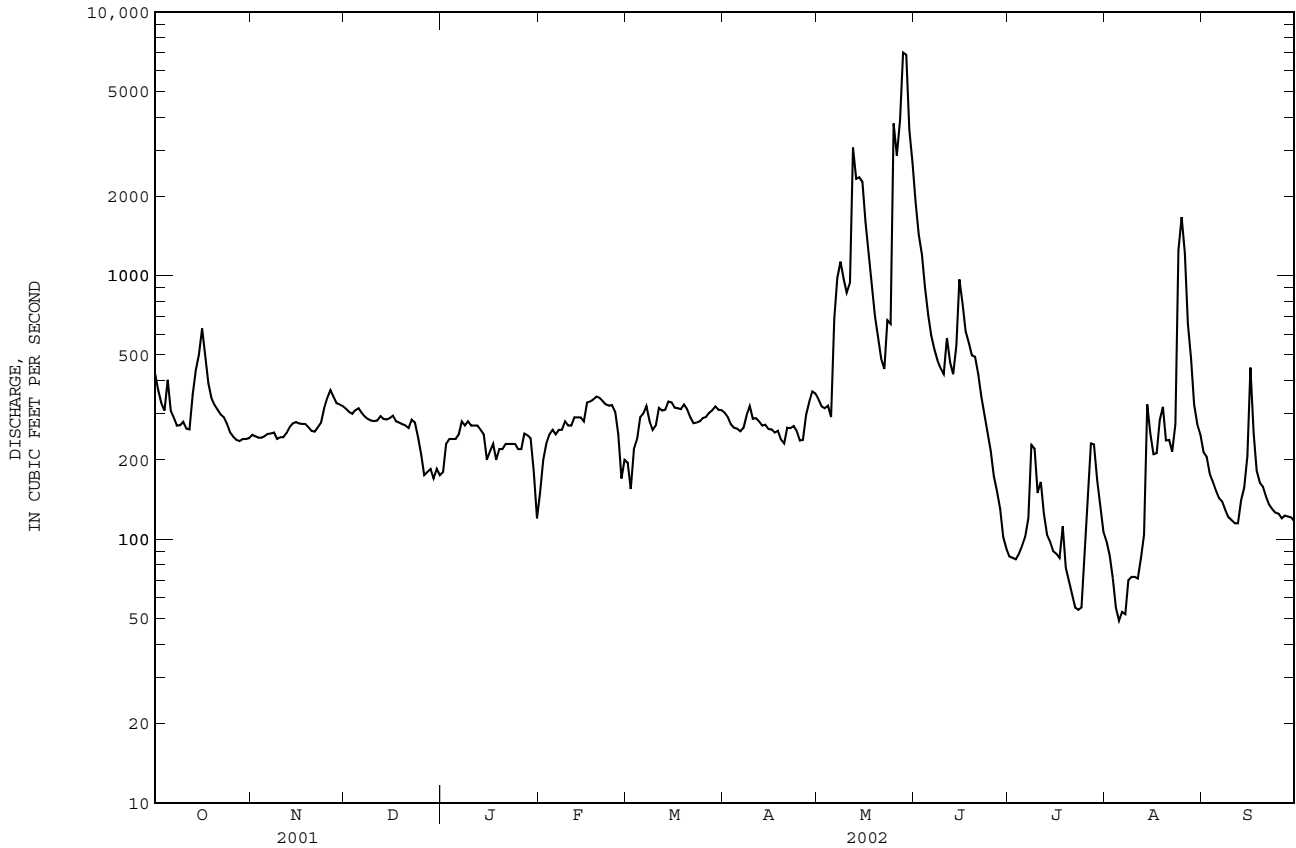
06881380 TURKEY CREEK NEAR DEWITT, NE--Continued



06882000 BIG BLUE RIVER AT BARNESTON, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1933 - 2002	
ANNUAL TOTAL	426723		148653		865.2	
ANNUAL MEAN	1169		407.3		2781	
HIGHEST ANNUAL MEAN					115	
LOWEST ANNUAL MEAN					1934	
HIGHEST DAILY MEAN	13200	Sep 17	7020	May 28	50000	Jun 9 1941
LOWEST DAILY MEAN	170	Dec 29	49	Aug 5	1.0	Nov 30 1945
ANNUAL SEVEN-DAY MINIMUM	183	Dec 25	60	Aug 3	15	Aug 3 1934
MAXIMUM PEAK FLOW			9990		57700	
MAXIMUM PEAK STAGE			14.75		34.30	
ANNUAL RUNOFF (AC-FT)	846400		294900		626800	
10 PERCENT EXCEEDS	2730		602		1790	
50 PERCENT EXCEEDS	440		270		280	
90 PERCENT EXCEEDS	245		115		104	

e Estimated.



KANSAS RIVER BASIN

06882000 BIG BLUE RIVER AT BARNESTON, NE--Continued

WATER-QUALITY RECORDS
Pesticide Reconnaissance Study

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	ACETO-CHLOR ESA FLTRD (UG/L) (61029)	ACETO-CHLOR OA FLTRD (UG/L) (61030)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR OA FLTRD 0.7 UM GF REC (UG/L) (61031)	
MAY 07...	1530	1290	726	7.8	91	8.1	583	22.2	20.2	.44	.54	4.17	.10	
JUN 15...	0900	993	728	8.5	100	8.0	700	19.0	21.0	.23	.50	.200	.28	
Date		ALA-CHLOR ESA WAT FLT GF 0.7U REC (UG/L) (50009)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	AMETRYN WATER, DISS, REC, (UG/L) (38401)	AMINO-METHYL-PHOS-PHONIC ACID, WAT FLT (UG/L) (62649)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	CYANA-ZINE AMIDE WATER FLTRD REC (UG/L) (61709)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DEISO-PROPYL ATRAZIN WATER, DISS, REC (UG/L) (04038)	DIMETH-ENAMID OA, WATER FLT, REC (UG/L) (62482)	DI-METHEN-AMID WATER FLTRD REC WAT FLT (UG/L) (61951)	FLUFEN-ACET, ESA, WAT FLT (UG/L) (61588)	
MAY 07...	.17	.38	<.05	1.3	29.0	<.05	<.05	1.05	.45	<.05	<.05	.72	<.05	
JUN 15...	.29	.11	<.05	1.8	1.90	<.05	<.05	.82	.38	<.05	<.05	.16	<.05	
Date		FLUFE-NACET OA, WATER FLT, REC (UG/L) (62483)	FLUFE-NACET, WATER, FLT, REC (UG/L) (62481)	GLUFO-SINATE, WATER, FLTRD, REC (UG/L) (62721)	GLYPHO-SATE, WATER, FLTRD, REC (UG/L) (62722)	METOLA-CHLOR ESA GF REC (UG/L) (61043)	METOLA-CHLOR OA GF REC (UG/L) (61044)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	PENDI-METH-ALIN WAT FLT GF, REC (UG/L) (82683)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRO-METRYN, WATER, DISS, REC (UG/L) (04036)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PROP-AZINE WATER DISS REC (UG/L) (38535)
MAY 07...	<.05	.80	<.1	.3	.40	.31	4.31	.31	<.050	.37	<.05	<.050	<.05	
JUN 15...	.13	.08	<.1	.2	.34	.35	1.57	.07	<.050	<.05	<.05	<.050	<.05	
Date						SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TER-BUTRYN WATER, DISS, REC (UG/L) (38888)							
MAY 07...						<.05	<.05							
JUN 15...						<.05	<.05							

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KANSAS RIVER BASIN

06883000 LITTLE BLUE RIVER NEAR DEWEESE, NE

LOCATION.--Lat 40°19'58", long 98°04'00", in SW ¼ NW ¼ sec.12, T.4 N., R.7 W., Nuckolls County, Hydrologic Unit 10270206, on right bank 10 ft downstream from bridge on State Highway 14, 1 mi upstream from Walnut Creek, 3.2 mi southeast of Deweese, 6 mi northwest of Angus, and at mile 122.57.

DRAINAGE AREA.--984 mi².

PERIOD OF RECORD.--February 1953 to September 1972, October 1974 to current year.

REVISED RECORDS.--WDR NE-97-1: Drainage area.

GAGE.--Water-stage recorder and peak-stage indicator gage. Datum of gage is 1,632.67 ft above sea level. Datum lowered to 1,630.67 ft above sea level on Aug. 5, 2002. Prior to May 16, 1957, non-recording gage and Oct. 1, 1974 to Mar. 24, 1981, recording gage at present site and at datum 2.00 ft higher; May 16, 1957 to Sept. 30, 1972 and Mar. 25, 1981 to Mar. 24, 1982 at site 1,500 ft upstream from bridge at datum 2.00 ft higher. Data collection platform at station.

REMARKS.--Records good except those for winter period and estimated daily discharges, which are poor. Natural flow affected by irrigation development above station.

DISCHARGE PUBLISHED, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	79	71	e54	e44	e56	73	74	104	25	9.7	31
2	53	78	71	e56	e42	e56	70	71	99	23	11	22
3	53	77	71	e66	e46	e62	63	68	94	26	10	15
4	53	77	73	e70	e54	e68	65	67	91	26	12	12
5	51	79	76	e74	e64	e70	67	68	89	23	8.0	12
6	50	81	71	77	70	e74	68	134	87	19	3.3	12
7	52	82	70	69	73	77	71	99	88	16	4.5	13
8	55	78	70	71	76	77	71	75	86	14	4.3	13
9	58	74	70	72	78	e74	68	68	84	13	4.0	13
10	66	76	71	73	76	75	68	65	83	15	6.2	17
11	62	76	72	72	72	76	70	380	83	16	4.0	17
12	72	78	72	72	74	75	69	560	97	18	3.4	18
13	139	82	70	74	73	78	69	459	131	e16	2.4	37
14	81	83	70	73	76	75	70	248	92	e14	2.5	36
15	96	82	72	71	75	72	71	159	104	e10	2.4	38
16	90	81	72	71	77	71	71	129	93	e7.4	2.1	26
17	100	81	70	72	78	74	69	112	86	5.7	3.9	25
18	152	82	71	72	81	74	69	116	82	7.2	3.2	25
19	108	74	70	72	83	74	67	106	79	5.9	4.0	27
20	90	74	70	73	81	73	67	98	77	7.5	2.7	27
21	83	76	71	72	78	67	74	94	72	8.7	2.0	27
22	81	77	73	74	78	70	71	102	79	16	5.9	25
23	81	83	71	74	81	74	71	259	77	14	61	25
24	80	91	e68	72	81	74	71	176	66	12	276	26
25	74	82	e66	70	e72	71	71	169	60	8.3	189	27
26	72	79	e68	75	e62	69	68	139	51	13	160	30
27	73	72	73	75	e56	72	75	137	45	17	129	31
28	78	74	69	72	e52	76	72	145	39	53	114	31
29	78	79	e68	76	---	74	70	208	34	46	92	34
30	77	72	e66	e74	---	73	70	150	29	15	52	34
31	79	---	e58	e56	---	74	---	109	---	13	34	---
TOTAL	2390	2359	2174	2194	1953	2225	2089	4844	2381	523.7	1218.5	726
MEAN	77.10	78.63	70.13	70.77	69.75	71.77	69.63	156.3	79.37	16.89	39.31	24.20
MAX	152	91	76	77	83	78	75	560	131	53	276	38
MIN	50	72	58	54	42	56	63	65	29	5.7	2.0	12
AC-FT	4740	4680	4310	4350	3870	4410	4140	9610	4720	1040	2420	1440

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2002, BY WATER YEAR (WY)

	MEAN	MAX	MIN	(WY)								
MEAN	81.42	69.70	64.98	68.68	94.09	195.5	128.4	248.5	260.7	266.6	147.5	127.6
MAX	347	193	115	207	245	1140	762	1348	1145	2655	883	911
(WY)	1966	1997	1998	1984	1982	1993	1984	1965	1957	1993	1985	1969
MIN	29.1	39.3	41.7	44.6	46.7	56.5	59.3	50.5	36.0	15.6	14.0	10.7
(WY)	1992	1992	1981	1978	1981	1981	1972	1992	1988	1970	1991	1991

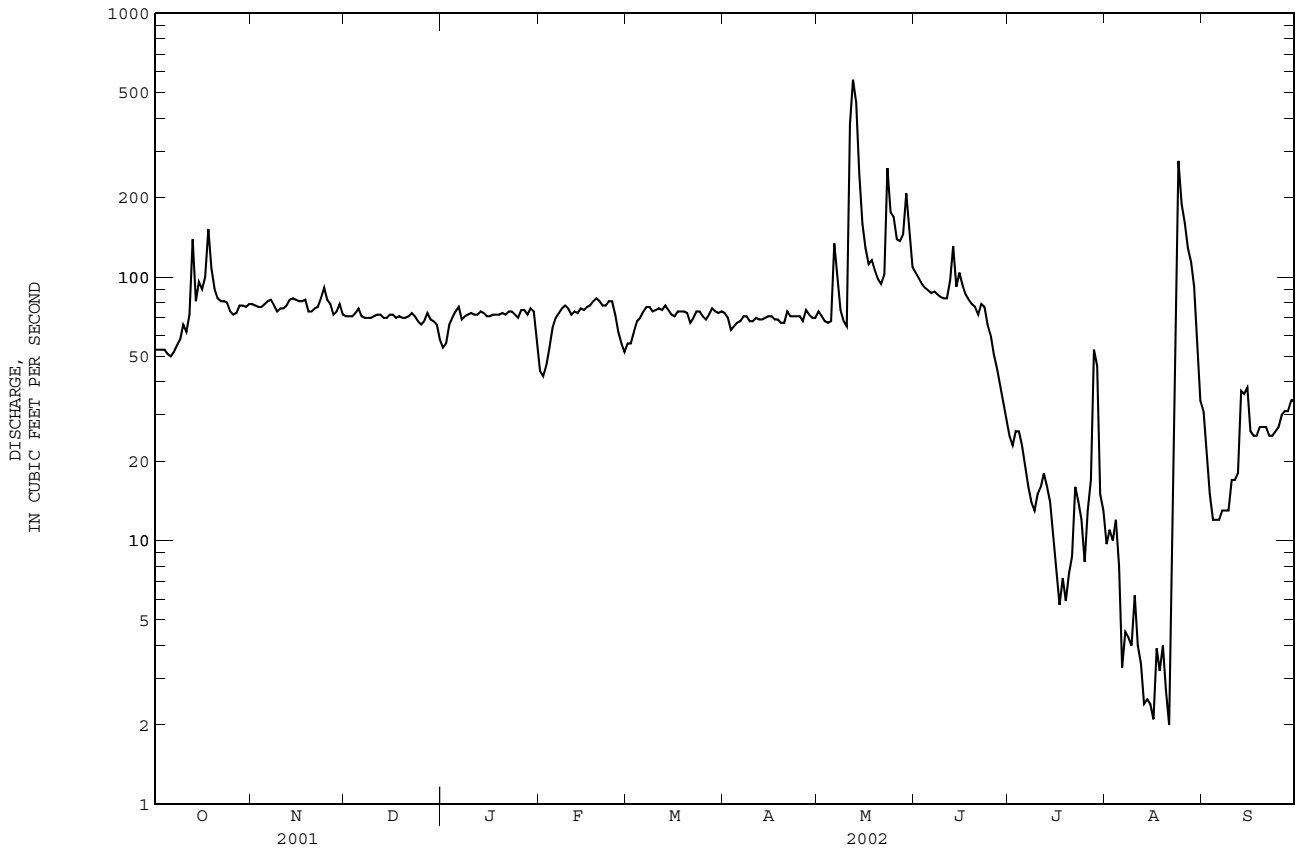
06883000 LITTLE BLUE RIVER NEAR DEWEESE, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1954 - 2002	
ANNUAL TOTAL	53452		25077.2		146.5	
ANNUAL MEAN	146.4		68.70		464	
HIGHEST ANNUAL MEAN					1993	
LOWEST ANNUAL MEAN					1976	
HIGHEST DAILY MEAN	3360	Mar 14	560	May 12	14300	Sep 1 1969
LOWEST DAILY MEAN	16	Aug 22	2.0	Aug 21	0.00	Jan 1 1997
ANNUAL SEVEN-DAY MINIMUM	29	Aug 8	2.8	Aug 12	2.8	Aug 12 2002
MAXIMUM PEAK FLOW			1110		25100	
MAXIMUM PEAK STAGE			*6.19		**18.57	
ANNUAL RUNOFF (AC-FT)	106000		49740	May 11	106100	Aug 31 1969
10 PERCENT EXCEEDS	183		96		190	
50 PERCENT EXCEEDS	79		71		71	
90 PERCENT EXCEEDS	46		13		43	

e Estimated.

* Adjusted to current datum.

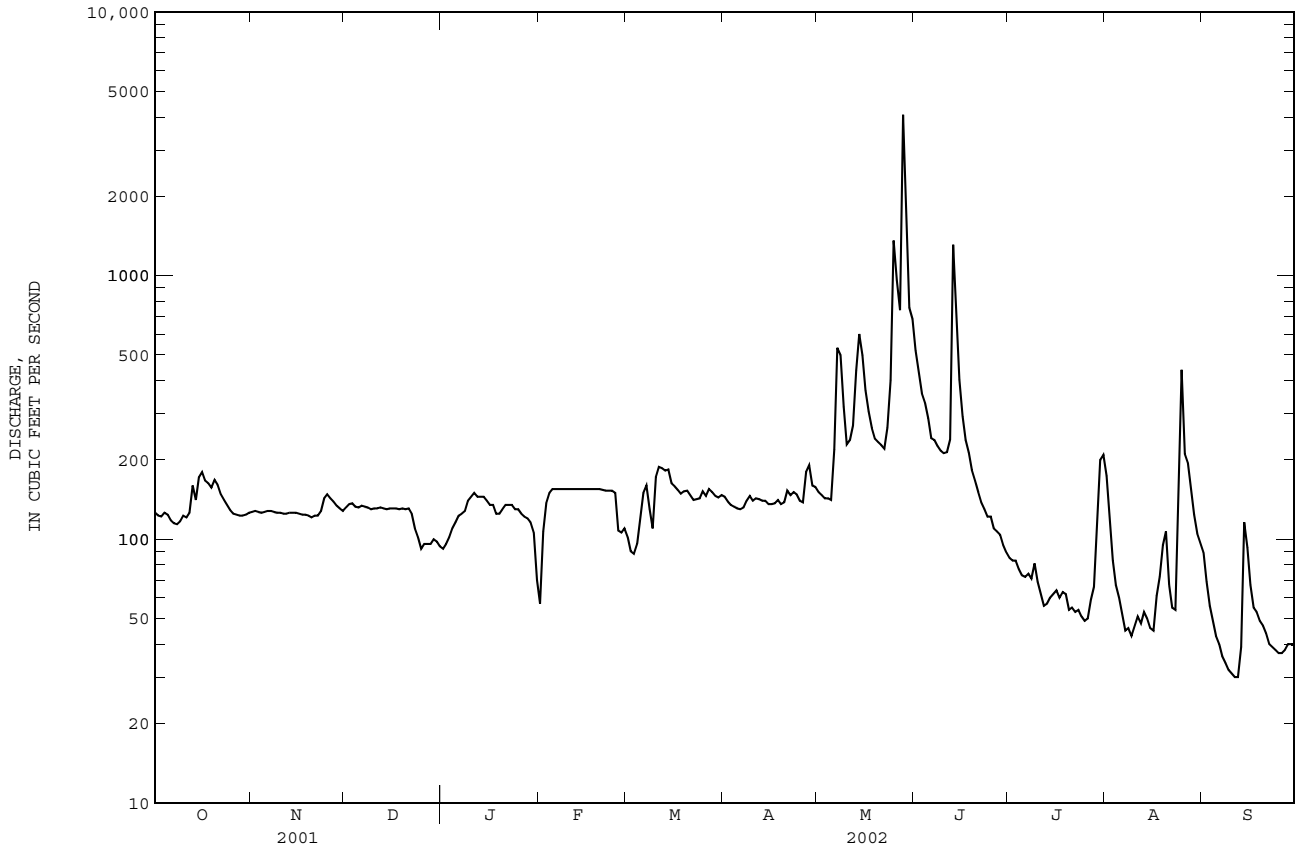
** Datum then in use.



06884000 LITTLE BLUE RIVER NEAR FAIRBURY, NE--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1910 - 2002	
ANNUAL TOTAL	175303		60789		383.0	
ANNUAL MEAN	480.3		166.5		1239	1993
HIGHEST ANNUAL MEAN					107	1940
LOWEST ANNUAL MEAN					36400	Jul 26 1992
HIGHEST DAILY MEAN	9690	May 5	4080	May 28	14	Nov 22 1929
LOWEST DAILY MEAN	78	Jan 1	33	Sep 7	24	Sep 14 1991
ANNUAL SEVEN-DAY MINIMUM	83	Jan 1	8250	May 28	54000	Jul 25 1992
MAXIMUM PEAK FLOW			15.56	May 28	24.33	Jul 25 1992
MAXIMUM PEAK STAGE						
ANNUAL RUNOFF (AC-FT)	347700		120600		277500	
10 PERCENT EXCEEDS	913		231		582	
50 PERCENT EXCEEDS	163		131		160	
90 PERCENT EXCEEDS	100		53		91	

e Estimated.



KANSAS RIVER BASIN

06884000 LITTLE BLUE RIVER NEAR FAIRBURY, NE--Continued

WATER-QUALITY RECORDS
Pesticide Reconnaissance Study

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	ACETO-CHLOR ESA FLTRD (UG/L) (61029)	ACETO-CHLOR OA FLTRD (UG/L) (61030)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR OA FLTRD 0.7 UM GF REC (UG/L) (61031)
MAY 07...	1230	600	722	6.6	76	7.6	241	21.0	18.9	.19	.28	6.42	.07
JUN 13...	0930	1620	--	--	--	7.7	157	19.0	22.5	.47	1.09	.990	.29

Date	Time	ALA-CHLOR ESA WAT FLT GF 0.7U REC (UG/L) (50009)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	AMETRYN WATER, DISS, REC, (UG/L) (38401)	AMINO-METHYL-PHOS-PHONIC ACID, WAT FLT (UG/L) (62649)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	CYANA-ZINE-AMIDE WATER FLTRD REC (UG/L) (61709)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DEISO-PROPYL ATRAZIN WATER, DISS, REC (UG/L) (04038)	DIMETH-ENAMID OA, WATER FLT, REC (UG/L) (62482)	DIMETH-ENAMID, ESA, WAT FLT (UG/L) (61951)	DI-METHEN-AMID WATER FLTRD REC (UG/L) (61588)	FLUFEN-ACET, ESA, WAT FLT (UG/L) (61952)
MAY 07...	.07	.98	<.05	.4	39.0	<.05	<.05	1.70	.69	.11	.11	4.71	<.05	
JUN 13...	.23	1.71	<.05	.6	20.0	<.05	<.05	2.35	1.48	.08	.05	1.01	<.05	

Date	Time	FLUFE-NACET OA, WATER FLT, REC (UG/L) (62483)	FLUFE-NACET, WATER, FLT, REC (UG/L) (62481)	GLUFO-SINATE, WATER, FLTRD, REC (UG/L) (62721)	GLYPHO-SATE, WATER, FLTRD, REC (UG/L) (62722)	METOLA-CHLOR ESA FLTRD GF REC (UG/L) (61043)	METOLA-CHLOR OA FLTRD GF REC (UG/L) (61044)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	PENDI-METH-ALIN WAT FLT GF, REC (UG/L) (82683)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRO-METRYN, WATER, DISS, REC (UG/L) (04036)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PROP-AZINE WATER DISS REC (UG/L) (38535)
MAY 07...	<.05	.27	<.1	.1	.24	.20	5.81	.17	<.050	<.05	<.05	<.050	.28	
JUN 13...	<.05	<.05	<.1	.5	.78	.87	5.35	<.05	<.050	<.05	<.05	<.050	.14	

Date	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TER-BUTRYN WATER, DISS, REC (UG/L) (38888)
MAY 07...	<.05	<.05
JUN 13...	.08	<.05

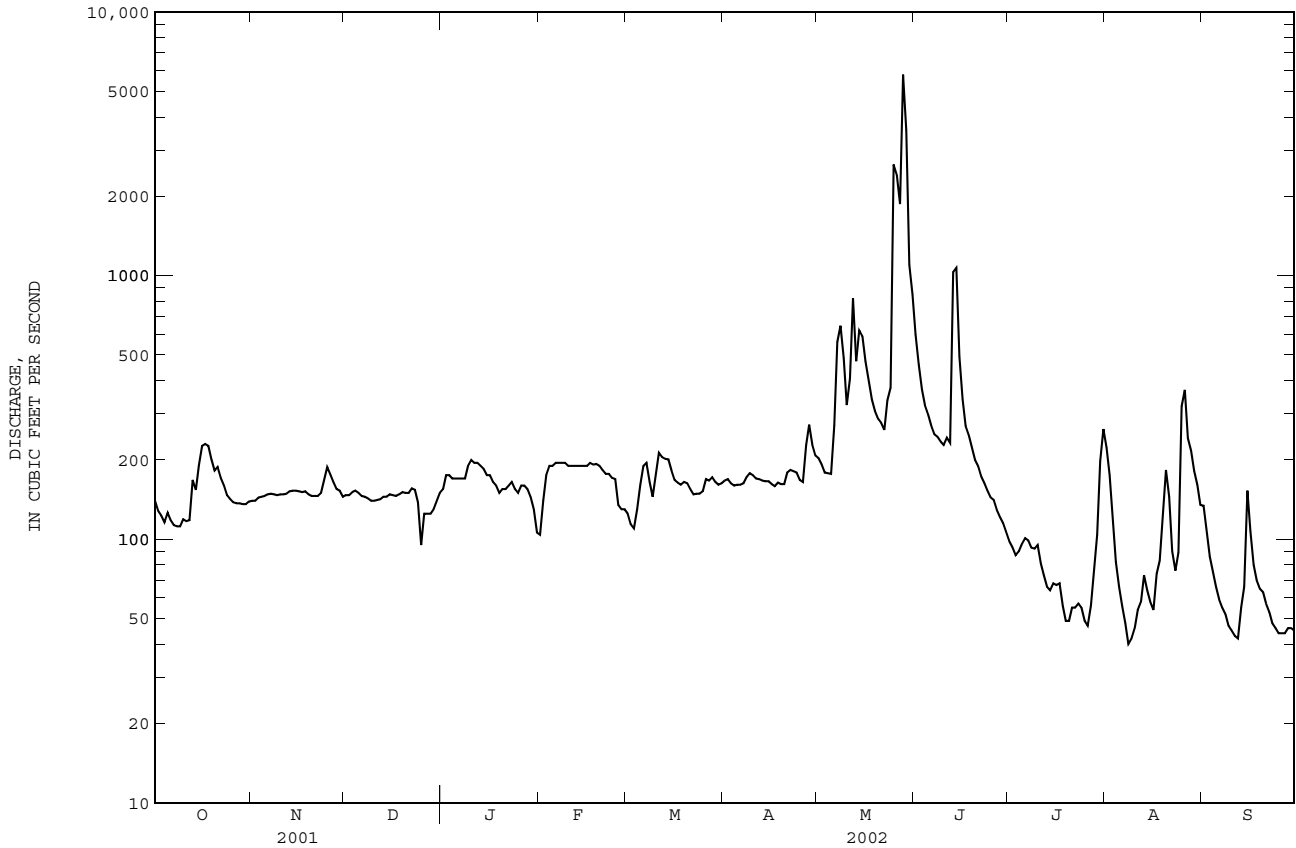
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06884025 LITTLE BLUE RIVER AT HOLLENBERG, KS--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1975 - 2002	
ANNUAL TOTAL	214571		78831		525.3	
ANNUAL MEAN	587.9		216.0		1891	
HIGHEST ANNUAL MEAN					1993	
LOWEST ANNUAL MEAN					195	
HIGHEST DAILY MEAN	9960	May 6	5790	May 28	39300	Jul 26 1992
LOWEST DAILY MEAN	80	Feb 3	40	Aug 8	26	Oct 1 1991
ANNUAL SEVEN-DAY MINIMUM	91	Jan 28	45	Sep 24	27	Sep 27 1991
MAXIMUM PEAK FLOW			9940		47800	
MAXIMUM PEAK STAGE			11.52		21.21	
ANNUAL RUNOFF (AC-FT)	425600		156400		380500	
10 PERCENT EXCEEDS	1160		271		870	
50 PERCENT EXCEEDS	191		154		206	
90 PERCENT EXCEEDS	117		59		107	

e Estimated.



Discharge at Partial-Record Stations and Miscellaneous Sites

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 2002

[mi², square mile; ft, foot; ft³/s, cubic feet per second]

Station number	Station name	Location	Drainage area (mi ²)	Period of record	Date	Annual maximum	
						Gage height (ft)	Discharge (ft ³ /s)
Big Nemaha River Basin							
06814500	North Fork Big Nemaha River, at Humboldt, NE	Lat 40° 09' 25", long 095° 56' 40", in NW ¹ / ₄ NE ¹ / ₄ sec. 10, T. 2N., R. 13 E., Richardson County, on right bank on bridge on State Highway 105 at south edge of Humboldt	548	*1952-96 1997-2002	05-11-02	9.61	3,520
Kansas River Basin							
06838200	Coon Creek at Indianola, NE	Lat 40° 14' 03", long 100° 25' 37", in NW ¹ / ₄ NE ¹ / ₄ sec. 13, T. 3 N., R. 28 W., Red Willow County, at bridge on U.S. Highways 6 and 34, 0.5 mile west of Indianola	69	1961-2002	07-22-02	3.84	^e 5
06838550	Dry Creek at Bartley, NE	Lat 40° 15' 02", long 100° 19' 02", in SW ¹ / ₄ SE ¹ / ₄ sec. 1, T. 3 N., R. 27 W., Red Willow County, at bridge on U.S. Highway 6 and 34, 0.5 mile west of Bartley	42	1961-2002		below gage	0
06850000	Turkey Creek at Naponee, NE	Lat 40° 04' 34", long 099° 08' 17", in SW ¹ / ₄ SW ¹ / ₄ sec. 4, T. 1 N., R. 16 W., Franklin County, on downstream side of county bridge at east side of Naponee	129	*1948-53 ^a 1954-61 ^b 1962-77 ^a 1978-89 1991-2002	07-31-02	3.93	^e 380
06881450	Indian Creek at Beatrice, NE	Lat 40° 17' 08", long 096° 44' 47", in SE ¹ / ₄ NE ¹ / ₄ sec. 28, T. 4 N., R. 6 E., Gage County, at bridge on U.S. Highway 77 at north edge of Beatrice	74.7	1960-89, 1991-2002	05-27-02	12.09	1,900

* Operated as a continuous-record gaging station.

^a Discharge measurements published in table for miscellaneous sites.

^b Discharge measurements published in table for low flow partial record sites.

^c Estimate.

Measurements of streamflow at points other than gaging stations are given in the following table. Some measurements were made during periods of base flow when streamflow is primarily from ground-water storage and may be correlated with the simultaneous discharge of a nearby stream where continuous records are available to give a picture of the low-flow potentiality of the stream.

Discharge measurements made at miscellaneous sites during water year 2002

[mi², square miles; ft³/s, cubic feet per second; lat, latitude; long, longitude; sec., section; mi, mile; Nebr., Nebraska

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
Niobrara River Basin						
Niobrara River (06454100)	Missouri River	Lat 42°25'22" Long 103°47'28", in SW 1/4 sec. 6, T.28N., R.55W., Sioux County, 300 ft upstream of bridge on State Highway 29, 0.2 mi northwest of Agate.	840	1957-91	08-07-02	3.4
Platte River Basin						
*Dane Creek (06788495)	North Loup River	Lat 41°36'31", long 098°56'36", in NE 1/4 NE 1/4 sec.20, T.19 N., R.14 W., Valley County, at bridge on State Highway 11 at northwest edge of Ord	--	1962 1977-2001	11-01-01 05-09-02	0.98 13
*Mira Creek (06788990)	North Loup River	Lat 41°29'54", long 098°46'46", in SE 1/4 SW 1/4 sec.26, T.18 N., R.13 W., Valley County, at bridge on State Highway 11 at west edge of North Loup	--	1977-2001	11-01-01 05-09-02	2.4 3.6

* Additional data published in "Miscellaneous Surface-Water Quality Data section.

Low-Flow Investigations

Platte River Basin

Discharge measurements were made during water year 2002 at numerous locations within the Maple Creek Basin in Platte County, Stanton County, Colfax County, and Dodge County, Nebraska, to determine low-flow characteristics.

Maple Creek Basin

Location	Date	Discharge
Dry Creek, 5.5 miles southeast of Leigh, in SE ¹ / ₄ SE ¹ / ₄ sec. 35, T.20N., R.2E.	10-24-01	0.02
Dry Creek, 9.0 miles southeast of Leigh, in NE ¹ / ₄ NE ¹ / ₄ sec. 8, T.19N., R.3E.	10-24-01	0.50
Dry Creek at Colfax County Road O in NE ¹ / ₄ NE ¹ / ₄ sec. 28, T.19N., R.3E.	10-24-01	0.92
Dry Creek Tributary at Colfax County Road O in NW ¹ / ₄ NE ¹ / ₄ sec. 28, T.19N., R.3E.	10-24-01	0.13
Dry Creek Tributary at Colfax County Road 10 in SE ¹ / ₄ NE ¹ / ₄ sec. 33, T.19N., R.3E.	10-24-01	0.30
Dry Creek at Highway 15, 11.5 miles northwest of Rogers, in NW ¹ / ₄ SW ¹ / ₄ sec. 2, T.18N., R.3E.	10-25-01	1.8
South Fork Dry Creek, 11 miles southeast of Leigh, in SW ¹ / ₄ NW ¹ / ₄ sec. 1, T.18N. R.2E.	10-24-01	0.02
South Fork Dry Creek, 13 miles northwest of Rogers, in NW ¹ / ₄ NW ¹ / ₄ sec. 17, T.18N., R.2E.	10-24-01	0.18
South Fork Dry Creek at Highway 15 in SE ¹ / ₄ SE ¹ / ₄ sec. 2, T.18N., R.3E.	10-25-01	0.33
Dry Creek on County Road J in NW ¹ / ₄ NW ¹ / ₄ sec. 21, T.18N., R.4E.	10-25-01	2.0
West Fork Maple Creek, 3.0 miles north of Leigh, in NE ¹ / ₄ NE ¹ / ₄ sec. 36, T.21N., R.1E.	10-24-01	0.38
West Fork Maple Creek, 0.5 mile northwest of Leigh, in NE ¹ / ₄ NE ¹ / ₄ sec. 13, T.20N., R.1E.	10-24-01	1.2
West Fork Maple Creek, 2.5 miles east of Leigh, in NW ¹ / ₄ NW ¹ / ₄ sec. 22, T.20N., R.2E.	10-24-01	2.2
West Fork Maple Creek, 1.5 miles west of Clarkson, in NE ¹ / ₄ NE ¹ / ₄ sec. 11, T.20N., R.2E.	10-24-01	3.2
West Fork Maple Creek Tributary, 2.6 miles northwest of Clarkson, in NW ¹ / ₄ NW ¹ / ₄ sec. 2, T.20N., R.2E.	10-24-01	0.75
West Fork Maple Creek Tributary, 6.0 miles north of Leigh, in SW ¹ / ₄ SE ¹ / ₄ sec. 17, T.21N., R.2E.	10-24-01	0.15
West Fork Maple Creek Tributary, 6.5 miles northeast of Leigh, in NE ¹ / ₄ NW ¹ / ₄ sec. 22, T.21N., R.2E.	10-24-01	0.74
West Fork Maple Creek Tributary, 2.0 miles northwest of Clarkson, in NW ¹ / ₄ NW ¹ / ₄ sec. 1, T.20N., R.2E.	10-24-01	1.8

LOW-FLOW INVESTIGATIONS

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Maple Creek Basin--Continued

Location	Date	Discharge
West Fork Maple Creek Tributary, 6.5 miles north of Clarkson, in NE ¹ / ₄ NW ¹ / ₄ sec. 12, T.21N., R.2E.	10-24-01	0.13
West Fork Maple Creek Tributary, 4.5 miles north of Clarkson, in NE ¹ / ₄ NW ¹ / ₄ sec. 19, T.21N., R.2E.	10-24-01	0.54
West Fork Maple Creek Tributary, 1.2 miles north of Clarkson, in NE ¹ / ₄ NE ¹ / ₄ sec. 1, T.20N., R.2E.	10-24-01	1.2
West Fork Maple Creek Tributary, 1.1 miles north of Clarkson, in NW ¹ / ₄ NW ¹ / ₄ sec. 6, T.20N. R.3E.	10-24-01	1.1
West Fork Maple Creek Tributary, 1.0 mile north of Clarkson, in NE ¹ / ₄ NE ¹ / ₄ sec. 6, T.20N., R.3E.	10-24-01	0.80
West Fork Maple Creek, 1.0 mile east of Clarkson, in NE ¹ / ₄ NE ¹ / ₄ sec. 17, T.20N., R.3E.	10-24-01 10-25-01	8.0 7.4
West Fork Maple Creek, 5.0 miles southeast of Clarkson, in NE ¹ / ₄ NE ¹ / ₄ sec. 34, T.20N., R.3E.	10-25-01	8.8
West Fork Maple Creek, 8.5 miles southeast of Clarkson, in NW ¹ / ₄ NE ¹ / ₄ sec. 13, T.19N., R.3E.	10-25-01	11
West Fork Maple Creek, 11.0 miles northeast of Rogers, in NW ¹ / ₄ NE ¹ / ₄ sec. 31, T.19N., R.4E.	10-25-01	11
West Fork Maple Creek, 6.4 miles northeast of Rogers, in SW ¹ / ₄ NW ¹ / ₄ sec. 15, T.18N., R.4E.	10-25-01	12
East Fork Maple Creek, 9.0 miles southeast of Stanton, in NE ¹ / ₄ SE ¹ / ₄ sec. 30, T.22N., R.3E.	10-24-01	0.22
East Fork Maple Creek, 11.0 miles southeast of Stanton, in SE ¹ / ₄ SW ¹ / ₄ sec. 21, T.22N., R.3E.	10-24-01	0.69
East Fork Maple Creek, 8.5 miles northeast of Clarkson, in NW ¹ / ₄ NE ¹ / ₄ sec. 3, T.21N., R.3E.	10-24-01	1.4
East Fork Maple Creek, 8.0 miles northeast of Clarkson, in NE ¹ / ₄ SE ¹ / ₄ sec. 3, T.21N., R.3E.	10-24-01	3.5
East Fork Maple Creek, 5.0 miles north of Howells, in NW ¹ / ₄ NE ¹ / ₄ sec. 24, T.21N., R.3E.	10-24-01	4.7
East Fork Maple Creek Tributary, 4.6 miles north of Howells, in SW ¹ / ₄ NW ¹ / ₄ sec. 24, T.21N., R.3E.	10-24-01	0.48
East Fork Maple Creek, 1.6 miles north of Howells, in SW ¹ / ₄ SW ¹ / ₄ sec. 31, T.21N., R.4E.	10-24-01 10-25-01	7.2 6.8
East Fork Maple Creek Tributary, 0.6 mile northwest of Howells, in SW ¹ / ₄ SW ¹ / ₄ sec. 6, T.20N., R.4E.	10-24-01	1.1
East Fork Maple Creek, 0.4 mile southeast of Howells, in NW ¹ / ₄ NE ¹ / ₄ sec. 17, T.20N., R.4E.	10-25-01	7.6
East Fork Maple Creek, 3.8 miles south of Howells, in NE ¹ / ₄ NE ¹ / ₄ sec. 33, T.20N., R.4E.	10-25-01	9.0
East Fork Maple Creek, 7.2 miles south of Howells, in SW ¹ / ₄ SE ¹ / ₄ sec. 10, T.19N., R.4E.	10-25-01	10
East Fork Maple Creek, 9.5 miles north of Rogers, in SW ¹ / ₄ SW ¹ / ₄ sec. 26, T.19N., R.4E.	10-25-01	10

LOW-FLOW INVESTIGATIONS

Maple Creek Basin--Continued

Location	Date	Discharge
Maple Creek Tributary, 5.5 miles north of Rogers at Colfax County Roads 19 and N, in NE ¹ / ₄ NE ¹ / ₄ sec. 12, T.18N., R.4E.	12-10-01	0.41
Maple Creek, 5.5 miles north of Rogers, in NW ¹ / ₄ SW ¹ / ₄ sec. 7, T.18N., R.5E.	12-10-01	26
	12-10-01	44
	12-10-01	41
	12-10-01	43
	12-10-01	43
Maple Creek, 7.0 miles northwest of North Bend, in SE ¹ / ₄ NE ¹ / ₄ sec. 4, T.18N., R.5E.	10-25-01	29
	12-10-01	44
	12-10-01	46
	12-10-01	46
	12-10-01	46
Maple Creek Tributary at Dodge Co. Road M, 0.5 mile west of Dodge Co. Road 4, in SE ¹ / ₄ SW ¹ / ₄ sec. 33, T.19N., R.5E.	12-10-01	0.24
Maple Creek Tributary at Dodge Co. Road M, 0.2 mile west of Dodge Co. Road 4, in SE ¹ / ₄ SE ¹ / ₄ sec. 33, T.19N., R.5E.	12-10-01	0.32
Crystal Creek at Dodge Co. Road 6, 7.0 miles north of North Bend, in NW ¹ / ₄ SW ¹ / ₄ sec. 36, T.19N., R.5E.	10-25-01	0.52
	12-10-01	0.70
Maple Creek at State Highway 79, 7.0 miles north of North Bend, in NW ¹ / ₄ SW ¹ / ₄ sec. 31, T.19N., R.6E.	10-25-01	30
	12-10-01	49
	12-10-01	47
	12-10-01	47
	12-10-01	46
Maple Creek at Dodge Co. Road 8, 7.0 miles north of North Bend, in SW ¹ / ₄ NW ¹ / ₄ sec. 32, T.19N., R.6E.	12-11-01	54
	12-11-01	53
	12-11-01	52
Maple Creek at Dodge Co. Road 9, 7.0 miles north of North Bend, in SW ¹ / ₄ SW ¹ / ₄ sec. 33, T.19N., R.6E.	12-11-01	54
	12-11-01	52
	12-11-01	57
Maple Creek at Dodge Co. Road 10, 7.5 miles northeast of North Bend, in NW ¹ / ₄ SW ¹ / ₄ sec. 34, T.19N., R.6E.	12-11-01	51
	12-11-01	54
	12-11-01	51
Maple Creek at Dodge Co. Road 11, 7.2 miles northeast of North Bend, in SW ¹ / ₄ NW ¹ / ₄ sec. 2, T.18N., R.6E.	10-25-01	30
	12-10-01	51
	12-10-01	50
	12-10-01	51
	12-10-01	48
	12-10-01	55
	12-10-01	53
	12-10-01	51
Maple Creek Tributary, 6.5 miles northeast of North Bend, in SW ¹ / ₄ NW ¹ / ₄ sec. 6, T.18N., R.7E.	12-11-01	0.18
Maple Creek at Dodge Co. Road 14, 9.0 miles northeast of North Bend, in SW ¹ / ₄ SW ¹ / ₄ sec. 32, T.19N., R.7E.	10-25-01	36
	12-10-01	52
	12-10-01	52
	12-10-01	48
	12-10-01	52

LOW-FLOW INVESTIGATIONS

Maple Creek Basin--Continued

Location	Date	Discharge
Maple Creek at Dodge Co. Road 17, 8.0 miles northwest of Nickerson, in SW ¹ / ₄ SW ¹ / ₄ sec. 35, T.19N., R.7E.	10-25-01	34
	12-10-01	53
	12-10-01	54
	12-10-01	54
	12-10-01	54
Maple Creek near Nickerson (06800000) in SW ¹ / ₄ NW ¹ / ₄ sec. 4, T.18N., R.8E.	10-25-01	36

MISCELLANEOUS SURFACE-WATER QUALITY DATA

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (PER-CENT SATURATION) (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATURATION) (MG/L) (00301)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	HARDNESS TOTAL (MG/L AS CaCO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg) (00925)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM ADSORPTION RATIO (00931)
06788495 DANE C AT ORD, NEBR. (LAT 41 36 31N LONG 098 56 36W)													
NOV 2001 01...	1005	.98	--	--	7.5	1070	14.5	10.5	500	150	31.6	27.4	.6
MAY 2002 09...	0810	13	--	--	8.1	340	5.5	9.5	140	40.6	8.22	9.04	.4
06788990 MIRA C AT NORTH LOUP, NEBR. (LAT 41 29 54N LONG 098 46 46W)													
NOV 2001 01...	1405	2.4	--	--	7.8	709	20.0	12.5	320	91.3	21.7	17.5	.7
MAY 2002 09...	1020	3.6	--	--	8.0	896	10.0	8.5	380	104	29.2	20.6	.8
06803525 SALT CR BL STEVENS CR NR WAVERLY NEBR (LAT 40 54 18N LONG 096 35 09W)													
OCT 2001 09...	1000	E83	6.2	68	7.6	5250	18.0	17.0	320	78.4	30.6	16.5	29
NOV 05...	1000	E136	7.9	75	7.6	3930	15.5	11.0	280	69.4	25.0	13.6	21
DEC 18...	1000	E174	10.2	85	7.5	3270	5.5	5.0	260	64.8	23.6	11.8	17
JAN 2002 15...	1100	E90	10.4	79	7.6	5300	-3.5	2.0	340	89.3	27.5	13.8	24
FEB 07...	1000	E97	10.1	84	7.2	5840	.0	5.0	330	88.3	27.4	14.1	26
MAR 07...	1000	E98	9.9	76	6.8	5500	1.0	2.0	340	89.7	27.8	12.7	23
APR 16...	1030	E84	5.4	67	7.9	6360	25.5	22.0	340	86.1	29.8	16.6	28
MAY 14...	1000	E268	8.9	98	7.8	2900	17.0	18.0	240	63.9	18.3	11.6	13
JUN 06...	1200	E163	10.2	121	7.9	5170	26.0	21.0	320	86.0	25.7	12.9	24
JUL 11...	1100	E100	8.7	105	7.8	5500	23.5	22.0	280	70.9	24.6	15.6	27
AUG 08...	1230	E33	8.9	117	7.9	7660	29.0	26.0	320	78.9	30.2	18.2	37
SEP 05...	0830	E91	5.1	59	7.8	6120	24.0	20.0	290	74.0	25.9	16.6	30

MISCELLANEOUS SURFACE-WATER QUALITY DATA

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ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)
06788495 DANE C AT ORD, NEBR. (LAT 41 36 31N LONG 098 56 36W)													
NOV 2001 01...	32.1	11	408	15.8	.3	34.1	177	.98	1.91	723	<.04	--	--
MAY 2002 09...	10.8	14	129	2.83	.3	26.9	38.5	.29	7.59	216	<.04	--	--
06788990 MIRA C AT NORTH LOUP, NEBR. (LAT 41 29 54N LONG 098 46 46W)													
NOV 2001 01...	27.4	15	353	8.62	.3	28.7	47.1	.62	2.93	459	<.04	--	--
MAY 2002 09...	33.7	15	390	13.7	.2	22.0	87.7	.75	5.27	548	.05	--	.07
06803525 SALT CR BL STEVENS CR NR WAVERLY NEBR (LAT 40 54 18N LONG 096 35 09W)													
OCT 2001 09...	1210	88	263	1650	.9	21.8	277	4.70	--	3450	5.42	7.0	6.98
NOV 05...	815	86	248	1170	.7	16.9	215	3.39	--	2490	1.21	2.3	1.55
DEC 18...	621	83	226	915	.7	14.9	181	2.70	--	1980	2.91	4.1	3.75
JAN 2002 15...	994	86	273	1540	.8	23.7	271	4.28	--	3150	7.43	8.6	9.57
FEB 07...	1110	87	297	1570	.8	23.5	274	4.50	--	3310	3.77	4.7	4.85
MAR 07...	992	86	283	1470	.7	22.8	258	4.16	--	3060	2.85	3.7	3.67
APR 16...	1200	88	283	1750	.7	19.0	291	4.87	--	3580	7.07	9.2	9.10
MAY 14...	451	80	197	693	.5	16.7	145	2.09	--	1530	1.30	3.5	1.67
JUN 06...	973	86	257	1340	.7	20.6	242	3.91	--	2880	1.86	3.2	2.40
JUL 11...	1040	88	226	1500	.7	20.7	243	4.16	--	3060	1.78	4.5	2.30
AUG 08...	1520	91	259	2140	1.0	21.7	326	5.87	--	4310	10.0	11	12.9
SEP 05...	1170	89	214	1690	.8	22.0	276	4.66	--	3420	7.89	9.1	10.2

MISCELLANEOUS SURFACE-WATER QUALITY DATA

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
06788495 DANE C AT ORD, NEBR. (LAT 41 36 31N LONG 098 56 36W)													
NOV 2001 01...	1.97	8.71	2.03	.200	.061	--	--	1.15	.39	.38	--	25	--
MAY 2002 09...	.18	.797	.19	.036	.011	--	--	.457	.18	.15	--	2.0	--
06788990 MIRA C AT NORTH LOUP, NEBR. (LAT 41 29 54N LONG 098 46 46W)													
NOV 2001 01...	.62	2.75	.63	.026	.008	--	--	1.12	.38	.37	--	11	--
MAY 2002 09...	.10	.429	.12	.066	.020	--	--	2.17	.77	.71	--	7.5	--
06803525 SALT CR BL STEVENS CR NR WAVERLY NEBR (LAT 40 54 18N LONG 096 35 09W)													
OCT 2001 09...	1.29	5.71	1.99	2.28	.694	1.5	8.9	4.58	--	1.50	1.87	12	10.0
NOV 05...	1.99	8.82	2.76	2.53	.769	1.1	5.1	1.55	--	.51	.68	12	9.6
DEC 18...	1.56	6.90	1.85	.973	.296	1.2	6.0	2.02	--	.66	.81	13	7.3
JAN 2002 15...	3.08	13.6	3.64	1.86	.567	1.1	12	1.67	--	.55	.72	13	6.5
FEB 07...	2.30	10.2	2.76	1.51	.461	.96	7.5	2.99	--	.97	1.11	33	7.9
MAR 07...	2.31	10.2	2.72	1.32	.403	.83	6.4	2.76	--	.90	1.03	79	8.3
APR 16...	.85	3.78	1.50	2.13	.649	2.1	11	3.67	--	1.20	1.48	7.5	9.4
MAY 14...	2.46	10.9	3.00	1.78	.543	2.2	6.4	1.33	--	.43	.87	5.9	16.7
JUN 06...	2.29	10.2	2.91	2.02	.616	1.3	6.1	2.50	--	.82	1.05	6.7	9.0
JUL 11...	.32	1.43	.66	1.09	.333	2.7	5.1	4.82	--	1.57	2.17	7.4	18.5
AUG 08...	.97	4.29	2.03	3.48	1.06	.86	13	3.03	--	.99	1.15	6.6	--
SEP 05...	1.07	4.74	2.32	4.12	1.25	1.2	11	3.12	--	1.02	1.28	6.0	9.6

MISCELLANEOUS SURFACE-WATER QUALITY DATA

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
06788495	DANE C AT ORD, NEBR. (LAT 41 36 31N LONG 098 56 36W)			
NOV 2001 01...	--	--	--	--
MAY 2002 09...	--	--	--	--
06788990	MIRA C AT NORTH LOUP, NEBR. (LAT 41 29 54N LONG 098 46 46W)			
NOV 2001 01...	--	--	--	--
MAY 2002 09...	--	--	--	--
06803525	SALT CR BL STEVENS CR NR WAVERLY NEBR (LAT 40 54 18N LONG 096 35 09W)			
OCT 2001 09...	--	--	--	--
NOV 05...	E.01	<4	<.3	<20
DEC 18...	--	--	--	--
JAN 2002 15...	--	--	--	--
FEB 07...	.01	2	<.5	<80
MAR 07...	--	--	--	--
APR 16...	<.01	E3	E.2	<80
MAY 14...	--	--	--	--
JUN 06...	--	--	--	--
JUL 11...	--	--	--	--
AUG 08...	<.01	2	<.3	<20
SEP 05...	--	--	--	--

Remark codes used in this report:

< -- Less than
 > -- Greater than
 E -- Estimated value
 M -- Presence verified, not quantified
 S -- Most probable value

NATIONAL WATER-QUALITY ASSESSMENT PROGRAM--CENTRAL NEBRASKA BASINS STUDY UNIT
ECOLOGICAL TRENDS SAMPLING

COUNTIES.--Dodge, Douglas, Sarpy, and Thomas

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Hydro- logic unit code	Time	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	DRAIN- AGE AREA (SQ. MI.) (81024)	OXYGEN, DIS- SOLVED OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT- SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)
06800000 MAPLE CREEK NEAR NICKERSON, NE (LAT 41 33 39N LONG 096 32 27W)													
OCT 2001													
12...	10220003	1015	1211.62	73	369.00	9.2	89	7.8	444	11.5	.15	3.01	13.3
NOV													
14...	10220003	1000	1211.62	49	369.00	9.5	98	8.2	761	14.5	--	4.14	18.3
DEC													
11...	10220003	1000	1211.62	61	369.00	12.9	95	8.4	789	.5	.26	5.93	26.2
JAN 2002													
08...	10220003	0950	1211.62	44	369.00	12.1	90	8.0	789	1.0	.06	6.90	30.5
FEB													
13...	10220003	1030	1211.62	34	369.00	12.8	95	8.0	697	1.0	.11	5.71	25.3
MAR													
12...	10220003	0930	1211.62	57	369.00	10.1	77	8.1	784	2.0	.38	5.63	24.9
APR													
09...	10220003	0945	1211.62	57	369.00	8.8	78	8.5	697	8.5	--	4.02	17.8
23...	10220003	0930	1211.62	63	369.00	7.9	79	8.5	729	13.0	.06	3.83	17.0
MAY													
08...	10220003	1200	1211.62	58	369.00	8.5	100	8.2	701	20.0	.12	4.26	18.9
14...	10220003	1030	1211.62	101	369.00	9.1	92	8.2	777	14.0	.71	5.20	23.0
21...	10220003	1030	1211.62	72	369.00	9.8	97	8.5	841	13.5	--	5.54	24.5
29...	10220003	1115	1211.62	103	369.00	7.5	97	8.1	637	25.5	--	4.53	20.1
JUN													
06...	10220003	1145	1211.62	74	369.00	8.4	105	8.4	698	24.0	--	5.16	22.8
11...	10220003	1130	1211.62	117	369.00	7.2	91	8.1	545	24.0	.07	3.32	14.7
18...	10220003	0930	1211.62	94	369.00	7.5	93	8.3	765	22.5	--	5.43	24.0
25...	10220003	1030	1211.62	60	369.00	8.2	104	8.3	670	24.5	--	3.80	16.8
JUL													
01...	10220003	1145	1211.62	47	369.00	5.4	70	8.3	586	26.0	--	2.20	9.75
09...	10220003	1200	1211.62	33	369.00	8.9	120	8.2	592	28.0	--	1.93	8.54
16...	10220003	1030	1211.62	32	369.00	8.8	108	7.9	575	23.2	--	--	--
16...	10220003	1030	1211.62	--	369.00	--	--	--	--	--	--	--	--
16...	10220003	1030	1211.62	--	369.00	--	--	--	--	--	--	--	--
17...	10220003	1000	1211.62	25	369.00	9.3	122	8.5	559	26.5	--	1.82	8.03
23...	10220003	1000	1211.62	21	369.00	9.5	118	8.4	519	24.0	--	.89	3.92
30...	10220003	1000	1211.62	17	369.00	8.2	105	8.4	533	25.5	--	.93	4.12
AUG													
14...	10220003	1200	1211.62	13	369.00	9.4	108	8.8	574	19.5	--	.83	3.70
22...	10220003	0900	1211.62	17	369.00	9.8	--	8.6	531	29.1	--	--	--
22...	10220003	1300	1211.62	16	369.00	10.0	--	8.7	504	33.2	--	--	--
22...	10220003	1600	1211.62	16	369.00	7.6	--	8.7	499	30.9	--	--	--
27...	10220003	1200	1211.62	16	369.00	8.0	100	7.8	535	25.0	--	2.23	9.87
SEP													
10...	10220003	1030	1211.62	7.7	369.00	8.6	93	7.6	535	17.5	--	1.15	5.11
23...	10220003	1030	1211.62	7.3	369.00	12.3	127	7.8	528	15.0	--	1.40	6.21
06800500 ELKHORN RIVER AT WATERLOO, NE (LAT 41 17 37N LONG 096 17 00W)													
OCT 2001													
11...	10220003	1015	1104.73	1040	6900.00	9.9	100	8.5	610	14.0	--	3.38	14.9

MISCELLANEOUS SURFACE-WATER QUALITY DATA

NATIONAL WATER-QUALITY ASSESSMENT PROGRAM--CENTRAL NEBRASKA BASINS STUDY UNIT--Continued
ECOLOGICAL TRENDS SAMPLING

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PERI- PHYTON BIOMASS ASH WEIGHT (G/SQ M 00572)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT (G/SQ M 00573)	PERI- PHYTON BIOMASS ASH FREE DRY WEIGHT (G/SQ M 49954)	BIOMASS CHLORO- PHYLL RATIO PERI- PHYTON (UNITS) (70950)	PHEO- PHYTIN A, PERI- PHYTON (MG/M2) (62359)	CHLOR-A PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2) (70957)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
06800000 MAPLE CREEK NEAR NICKERSON, NE (LAT 41 33 39N LONG 096 32 27W)											
OCT 2001											
12...	.191	3.2	6.4	.852	--	--	--	--	--	--	151
NOV											
14...	.092	--	4.9	.580	--	--	--	--	--	--	19.8
DEC											
11...	.122	.77	6.9	.837	--	--	--	--	--	--	34.3
JAN 2002											
08...	.076	.41	7.4	.632	--	--	--	--	--	--	3.6
FEB											
13...	.118	.44	6.3	.564	--	--	--	--	--	--	2.8
MAR											
12...	.177	.69	6.7	.822	--	--	--	--	--	--	10.3
APR											
09...	.056	--	4.7	.518	--	--	--	--	--	--	14.9
23...	.204	1.1	5.0	.843	--	--	--	--	--	--	16.0
MAY											
08...	.437	1.5	5.9	.898	--	--	--	--	--	--	17.1
14...	.378	3.4	9.2	.993	--	--	--	--	--	--	171
21...	.128	--	6.7	1.04	--	--	--	--	--	--	98.0
29...	.197	--	7.8	.935	--	--	--	--	--	--	226
JUN											
06...	.161	--	6.3	.938	--	--	--	--	--	--	28.8
11...	.138	2.4	5.9	.751	--	--	--	--	--	--	246
18...	.207	--	7.0	1.17	--	--	--	--	--	--	73.1
25...	.128	--	4.6	.576	--	--	--	--	--	--	8.1
JUL											
01...	.105	--	3.2	.181	--	--	--	--	--	--	3.6
09...	.135	--	2.7	.242	--	--	--	--	--	--	2.1
16...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
17...	.161	--	2.7	.202	--	--	--	--	--	--	1.2
23...	.089	--	1.7	.156	--	--	--	--	--	--	.79
30...	.112	--	1.9	.178	--	--	--	--	--	--	.60
AUG											
14...	.069	--	2.3	.209	--	--	--	--	--	--	.46
22...	--	--	--	--	120	133.6	9.400	470	12	20.0	--
22...	--	--	--	--	180	206.4	21.700	273	39	79.4	--
22...	--	--	--	--	180	200.7	21.600	231	29	93.3	--
27...	.135	--	3.3	.877	--	--	--	--	--	--	.78
SEP											
10...	.059	--	2.0	.383	--	--	--	--	--	--	.21
23...	.066	--	1.9	.294	--	--	--	--	--	--	.08
06800500 ELKHORN RIVER AT WATERLOO, NE (LAT 41 17 37N LONG 096 17 00W)											
OCT 2001											
11...	.043	--	4.3	1.12	--	--	--	--	--	--	539

MISCELLANEOUS SURFACE-WATER QUALITY DATA

NATIONAL WATER-QUALITY ASSESSMENT PROGRAM--CENTRAL NEBRASKA BASINS STUDY UNIT--Continued
ECOLOGICAL TRENDS SAMPLING

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Hydro-logic unit code	Time	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	DRAIN-AGE AREA (SQ. MI.) (81024)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, SATURATION (PER-CENT) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-WATER (DEG C) (00010)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)
06800500 ELKHORN RIVER AT WATERLOO, NE (LAT 41 17 37N LONG 096 17 00W)													
NOV 2001													
13...	10220003	1030	1104.73	993	6900.00	10.1	98	8.4	648	12.0	--	3.45	15.3
DEC 13...	10220003	1000	1104.73	1650	6900.00	12.3	93	8.3	652	2.0	.62	4.28	18.9
JAN 2002													
09...	10220003	1000	1104.73	2090	6900.00	11.2	81	8.0	668	.0	.31	4.79	21.2
FEB 14...	10220003	1000	1104.73	1340	6900.00	13.2	96	--	593	.3	.23	3.45	15.3
MAR 13...	10220003	1030	1104.73	1920	6900.00	10.4	80	8.3	612	2.5	.38	4.10	18.2
APR 10...	10220003	1000	1104.73	1310	6900.00	8.0	76	8.7	611	11.5	--	3.33	14.7
24...	10220003	1030	1104.73	1360	6900.00	8.8	89	8.8	609	14.0	--	2.05	9.06
MAY 09...	10220003	1100	1104.73	1660	6900.00	9.7	99	8.6	628	14.5	--	3.17	14.0
22...	10220003	1040	1104.73	1450	6900.00	9.8	104	8.5	659	16.0	--	3.64	16.1
JUN 12...	10220003	1000	1104.73	10200	6900.00	1.5	18	7.3	286	23.0	1.51	3.05	13.5
26...	10220003	1100	1104.73	1140	6900.00	6.1	81	8.4	598	27.5	--	2.62	11.6
JUL 10...	10220003	1100	1104.73	738	6900.00	6.4	85	8.7	443	28.0	--	.21	.934
17...	10220003	0930	1104.73	645	6900.00	--	--	8.5	467	25.7	--	--	--
17...	10220003	0930	1104.73	--	6900.00	--	--	--	--	--	--	--	--
17...	10220003	0930	1104.73	--	6900.00	--	--	--	--	--	--	--	--
24...	10220003	1100	1104.73	458	6900.00	14.3	189	9.0	396	27.5	--	--	--
AUG 15...	10220003	1100	1104.73	493	6900.00	12.6	157	9.1	484	23.6	--	--	--
19...	10220003	1200	1104.73	605	6900.00	17.6	--	9.5	497	23.9	--	--	--
20...	10220003	1000	1104.73	650	6900.00	15.8	--	9.2	495	24.6	--	--	--
20...	10220003	1500	1104.73	650	6900.00	16.7	--	9.4	492	26.8	--	--	--
28...	10220003	1100	1104.73	489	6900.00	8.8	109	8.0	484	24.5	--	--	--
SEP 11...	10220003	1100	1104.73	431	6900.00	12.5	146	8.8	544	21.5	--	--	--
24...	10220003	1130	1104.73	481	6900.00	13.8	140	8.7	540	14.5	--	.48	2.13
06805500 PLATTE R AT LOUISVILLE NE (LAT 41 00 55N LONG 096 09 28W)													
OCT 2001													
10...	10200202	1000	1007.10	4450	85370	9.4	98	8.6	567	15.5	--	.89	3.92
NOV 15...	10200202	1030	1007.10	3510	85370	9.7	100	8.4	547	15.0	--	1.79	7.92
DEC 12...	10200202	1030	1007.10	6020	85370	12.5	100	8.3	654	4.0	.16	2.20	9.72
JAN 2002													
10...	10200202	1000	1007.10	11000	85370	12.3	88	8.1	766	.0	.21	1.74	7.71
FEB 15...	10200202	1020	1007.10	8750	85370	14.0	99	--	599	.0	.13	1.84	8.14
MAR 14...	10200202	1000	1007.10	13300	85370	10.7	85	8.4	485	3.5	.06	2.03	8.97
APR 11...	10200202	1000	1007.10	7390	85370	7.7	75	8.5	628	12.5	--	1.47	6.51
25...	10200202	1000	1007.10	4930	85370	9.5	87	8.9	626	10.0	--	.32	1.43
MAY 10...	10200202	1030	1007.10	5160	85370	10.1	99	8.6	594	13.5	--	1.23	5.43
23...	10200202	1050	1007.10	4450	85370	11.2	118	9.1	766	16.0	--	1.25	5.53
JUN 13...	10200202	0930	1007.10	13800	85370	5.5	67	7.8	410	23.0	.58	1.57	6.95

MISCELLANEOUS SURFACE-WATER QUALITY DATA

NATIONAL WATER-QUALITY ASSESSMENT PROGRAM--CENTRAL NEBRASKA BASINS STUDY UNIT--Continued
ECOLOGICAL TRENDS SAMPLING

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Hydro-logic unit code	Time	ELEV. OF LAND SURFACE (FT. ABOVE NGVD) (72000)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	DRAIN-AGE AREA (SQ. MI.) (81024)	OXYGEN, DIS-SOLVED (PER-CENT) (MG/L) (00300)	OXYGEN, SATUR-ATION (00301)	PH WATER WHOLE FIELD (STAND-ARD) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L) AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L) AS NO3) (71851)
06805500 PLATTE R AT LOUISVILLE NE (LAT 41 00 55N LONG 096 09 28W)													
JUN 2002													
27...	10200202	0930	1007.10	3150	85370	7.9	104	8.7	786	27.0	--	.36	1.61
JUL													
11...	10200202	1100	1007.10	1290	85370	9.3	118	8.6	839	25.0	--	.05	.204
25...	10200202	1100	1007.10	878	85370	11.7	151	9.0	1240	26.0	--	--	--
AUG													
16...	10200202	1200	1007.10	2010	85370	8.5	99	8.9	733	21.0	--	.05	.217
21...	10200202	1000	1007.10	3000	85370	6.8	--	8.7	1130	28.0	--	--	--
29...	10200202	1100	1007.10	6060	85370	6.6	82	7.7	1990	24.0	1.22	1.10	4.88
SEP													
12...	10200202	1200	1007.10	2160	85370	10.3	123	8.8	789	22.5	--	--	--
25...	10200202	1030	1007.10	2180	85370	11.0	114	8.9	685	15.5	--	--	--
06775900 DISMAL RIVER NEAR THEDFORD, NE (LAT 41 46 45N LONG 100 31 30W)													
OCT 2001													
10...	10210002	1200	2800.13	206	966.00	9.4	96	8.1	175	11.5	--	--	--
NOV													
01...	10210002	1100	2800.13	208	966.00	9.5	97	7.9	166	11.0	--	--	--
DEC													
04...	10210002	1100	2800.13	214	966.00	10.3	--	8.0	174	7.0	--	--	--
JAN 2002													
07...	10210002	1300	2800.13	212	966.00	10.9	96	8.1	172	5.5	--	--	--
FEB													
11...	10210002	1100	2800.13	220	966.00	11.0	97	8.0	170	5.5	--	--	--
MAR													
11...	10210002	1200	2800.13	227	966.00	--	--	7.9	168	0	--	--	--
APR													
08...	10210002	1400	2800.13	222	966.00	8.9	94	7.8	170	13.0	--	--	--
MAY													
07...	10210002	1300	2800.13	218	966.00	9.3	96	8.0	173	12.0	--	--	--
JUN													
13...	10210002	1300	2800.13	208	966.00	8.5	98	8.2	174	17.5	--	--	--
JUL													
09...	10210002	1200	2800.13	151	966.00	7.6	96	8.2	177	21.5	--	--	--
22...	10210002	1000	2800.13	210	966.00	7.5	89	7.3	169	18.7	--	--	--
22...	10210002	1000	2800.13	--	966.00	--	--	--	--	--	--	--	--
22...	10210002	1000	2800.13	--	966.00	--	--	--	--	--	--	--	--
AUG													
13...	10210002	1200	2800.13	204	966.00	8.7	102	8.3	173	18.0	--	--	--
27...	10210002	1900	2800.13	217	966.00	6.1	--	8.0	158	--	--	--	--
28...	10210002	1030	2800.13	218	966.00	6.8	--	7.9	164	17.9	--	--	--
28...	10210002	1300	2800.13	218	966.00	6.7	--	8.0	160	20.3	--	--	--
SEP													
04...	10210002	1100	2800.13	212	966.00	8.9	105	8.2	179	18.5	--	--	--

MISCELLANEOUS SURFACE-WATER QUALITY DATA

NATIONAL WATER-QUALITY ASSESSMENT PROGRAM--CENTRAL NEBRASKA BASINS STUDY UNIT--Continued
ECOLOGICAL TRENDS SAMPLING

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PERI- PHYTON BIOMASS ASH WEIGHT (G/SQ M 00572)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT (G/SQ M 00573)	PERI- PHYTON BIOMASS ASH FREE DRY (G/SQ M 49954)	BIOMASS CHLORO- PHYLL RATIO PERI- PHYTON (UNITS) (70950)	PHEO- PHYTIN A, PERI- PHYTON (MG/M2) (62359)	CHLOR-A PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2) (70957)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
06805500 PLATTE R AT LOUISVILLE NE (LAT 41 00 55N LONG 096 09 28W)											
JUN 2002											
27...	.066	--	2.8	.454	--	--	--	--	--	--	2630
JUL											
11...	.108	--	3.0	.423	--	--	--	--	--	--	484
25...	--	--	--	.463	--	--	--	--	--	--	258
AUG											
16...	.115	--	2.3	--	--	--	--	--	--	--	912
21...	--	--	--	--	110	125.6	12.600	1160	7.5	10.9	--
29...	1.84	5.2	7.8	1.12	--	--	--	--	--	--	31700
SEP											
12...	--	--	--	.481	--	--	--	--	--	--	181
25...	.049	--	--	.236	--	--	--	--	--	--	924
06775900 DISMAL RIVER NEAR THEDFORD, NE (LAT 41 46 45N LONG 100 31 30W)											
OCT 2001											
10...	--	--	.67	.386	--	--	--	--	--	--	162
NOV											
01...	--	--	.70	.340	--	--	--	--	--	--	208
DEC											
04...	--	--	.78	.414	--	--	--	--	--	--	226
JAN 2002											
07...	--	--	.86	.420	--	--	--	--	--	--	247
FEB											
11...	--	--	.76	.411	--	--	--	--	--	--	353
MAR											
11...	--	--	.84	.408	--	--	--	--	--	--	294
APR											
08...	--	--	.69	.383	--	--	--	--	--	--	230
MAY											
07...	--	--	.70	.402	--	--	--	--	--	--	340
JUN											
13...	--	--	.58	.383	--	--	--	--	--	--	76.4
JUL											
09...	--	--	.71	.438	--	--	--	--	--	--	
22...	--	--	--	--	--	--	--	--	--	--	159
22...	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--
AUG											
13...	--	--	.61	.389	--	--	--	--	--	--	128
27...	--	--	--	--	180	197.7	13.900	145	16	95.9	--
28...	--	--	--	--	250	273.8	25.300	280	18	90.2	--
28...	--	--	--	--	310	334.6	24.500	208	22	118	--
SEP											
04...	--	--	.64	.396	--	--	--	--	--	--	133

NATIONAL WATER-QUALITY ASSESSMENT PROGRAM--CENTRAL NEBRASKA BASINS STUDY UNIT--Continued
WATER-QUALITY MONITORING-MERCURY SYNOPTIC

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)
06803555	SALT CREEK AT GREENWOOD, NEBR. (LAT 40 57 56N LONG 096 27 01W)
JUL 2002	
15...	--
15...	--
15...	100
06800000	MAPLE CREEK NEAR NICKERSON, NE (LAT 41 33 39N LONG 096 32 27W)
JUL 2002	
16...	--
16...	--
16...	100
06800500	ELKHORN RIVER AT WATERLOO, NE (LAT 41 17 37N LONG 096 17 00W)
JUL 2002	
17...	--
17...	--
17...	100
06791500	CEDAR RIVER NEAR SPALDING, NE (LAT 41 42 41N LONG 098 26 48W)
JUL 2002	
18...	--
18...	--
18...	100
06785000	MIDDLE LOUP R. AT ST. PAUL, NEBR. (LAT 41 12 13N LONG 098 26 46W)
JUL 2002	
25...	--
25...	--
25...	100
06786000	NORTH LOUP RIVER AT TAYLOR, NEBR. (LAT 41 46 37N LONG 099 22 45W)
JUL 2002	
23...	--
23...	--
23...	100
06787000	CALAMUS RIVER NR HARROP, NE (LAT 41 56 48N LONG 099 23 10W)
JUL 2002	
23...	--
23...	--
23...	100
06775900	DISMAL RIVER NEAR THEDFORD, NE (LAT 41 46 45N LONG 100 31 30W)
JUL 2002	
22...	--
22...	--
22...	100

Remark codes used in this report:

< -- Less than
E -- Estimated value

GROUND-WATER LEVELS

ADAMS COUNTY

403403098244001. Local number 7N 10W 23AB.

LOCATION.--Lat 40°34'03", long 098°24'40", NW ¼ NE ¼ sec.23, T.7 N., R.10 W., Hydrologic Unit 10270206, 0.5 mi west of the west junction of Routes 281 and 6, in the south part of Hastings. Owner: Henry Fricke.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled unused irrigation water-table well, diameter 8 in., depth 155 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,927 ft. Measuring point: Top of casing 1.0 ft above land-surface datum.

REMARKS.--Large amounts of ground water are pumped from municipal and industrial wells located east and northeast of the well and from irrigation wells in other directions.

PERIOD OF RECORD.--August 1934 to October 1938; August 1948 to December 1950; January 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 99.95 ft below land-surface datum, Jan. 22, Mar.14, 1935; lowest, 128.82 ft below land-surface datum, July 10, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	110.95	DEC 12	110.28	FEB 05	109.88	APR 03	109.64	JUN 05	109.38	AUG 01	116.07
NOV 06	110.50	JAN 07	110.00	MAR 11	109.77	MAY 06	109.22	JUL 15	113.56	SEP 09	113.50
WATER YEAR 2002		HIGHEST	109.22	MAY 06, 2002		LOWEST	116.07	AUG 01, 2002			

BLAINE COUNTY

414958100061501. Local number 22N 24W 33CA.

LOCATION.--Lat 41°49'58", long 100°06'15", NE ¼ SW ¼ sec. 33, T. 22 N., R. 24 W., Hydrologic Unit 10210001, approximately 500 ft west of junction of State Highways 91 and 2 north of Dunning. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits, undifferentiated, of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1 in., depth 13 ft, screened 11 to 13 ft.

DATUM.--Altitude of land-surface datum is 2,618 ft. Measuring point: Top of casing 1.40 ft above land-surface datum.

PERIOD OF RECORD.--December 1934 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.04 ft below land-surface datum, Mar. 8, 1950; lowest, 6.97 ft below land-surface datum, Aug. 8, 1951.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL
MAY 09	4.48

BOONE COUNTY

413323098074501. Local number 18N 7W 4CA.

LOCATION.--Lat 41°33'23", long 098°07'45", NE ¼ SW ¼ sec.4, T.18 N., R.7 W., Hydrologic Unit 10210010, at junction of State Highways 52 and 56 approximately 1 mi east of Cedar Rapids. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1 in., depth 22 ft, screened 20 to 22 ft.

DATUM.--Altitude of land-surface datum is 1,762 ft. Measuring point: Top of casing 2.90 ft above land-surface datum.

PERIOD OF RECORD.--November 1936 to October 1942; April 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.15 ft below land-surface datum, May 17, 1984; lowest, 15.17 ft below land-surface datum, Oct. 26, 1940.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL
MAY 06	11.45

BUFFALO COUNTY

404618098504401. Local number 9N 14W 1DC.

LOCATION.--Lat 40°46'18", long 098°50'44", SW ¼ SE ¼ sec.1, T.9 N., R.14 W., Hydrologic Unit 10200102, 1.3 mi north of the intersection of Route 30 and the North-South range-line road on the east side of Gibbon, then 0.5 mi west on section-line road. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in., depth 38 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 2,060.43 ft. Measuring point: Top of casing 0.80 ft above land-surface datum.

BUFFALO COUNTY--Continued

REMARKS.--Water levels in well are affected by pumpage from nearby irrigation wells.

PERIOD OF RECORD.--July 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water-level depth below land surface, 11.17 ft below land-surface datum, July 13, 1999; lowest daily maximum water-level, 29.22 ft below land-surface datum, Aug. 10, 1980.

EXTREMES FOR CURRENT YEAR.--Highest daily maximum water-level depth below land surface, 17.82 ft, June 18; lowest daily maximum water-level depth below land surface, 22.67 ft, Aug. 28, 29, 30, 31, Sept. 1.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.94	18.84	18.73	18.61	18.55	18.40	18.36	18.25	18.02	19.29	21.88	22.65
10	18.92	18.77	18.66	18.63	18.68	18.54	18.33	18.24	17.86	19.98	22.21	22.65
15	18.94	18.75	18.66	18.64	18.52	18.47	18.18	18.08	17.91	20.39	22.35	22.62
20	18.81	18.79	18.71	18.52	18.46	18.44	18.30	18.15	18.06	20.90	22.40	22.54
25	18.91	18.79	18.70	18.60	18.57	18.42	18.32	18.09	18.17	21.04	22.61	22.52
EOM	18.74	18.72	18.68	18.54	18.45	18.36	18.23	17.94	18.67	21.68	22.67	22.45

404345098560001. Local number 9N 14W 19DD.

LOCATION.--Lat 40°43'45", long 098°56'10", SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 19, T.9 N., R.14 W., Hydrologic Unit 10200102, 4.7 mi west-southwest of Gibbon on U.S. Highway 30. Owner: Robert D. Lewis.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 24 in., depth 54 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 2,103.75 ft. Measuring point: Hole in pump base 0.33 ft above land-surface datum.

REMARKS.--Water levels in well are affected by pumping of well and of nearby wells for irrigation supplies.

PERIOD OF RECORD.--October 1930 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 22.55 ft below land-surface datum, June 9, 1931; lowest, 35.20 ft below land-surface datum, Aug. 30, 1974.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL
APR 15	26.51

CHASE COUNTY

403220101384001. Local number 7N 38W 28CC.

LOCATION.--Lat 40°32'20", long 101°38'40", SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.28, T.7 N., R.38 W., Hydrologic Unit 10250005, about 0.5 mi north of Imperial. Owner: Roy Hust.

AQUIFER.--Ogallala Formation of Pliocene age.

WELL CHARACTERISTICS.--Drilled unused observation water-table well, diameter 18 in., depth 143 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 3,284.6 ft. Measuring point: Top of casing 0.30 ft above land-surface datum.

REMARKS.--Recording gage was installed on this well from December 1948 to December 1963. Water levels in well are affected by irrigation pumpage in area.

PERIOD OF RECORD.--December 1944; December 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 72.82 ft below land-surface datum, June 29, 1964; lowest measured, 112.06 ft below land-surface datum, Oct. 15, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL
MAY 01	112.06

403235101395501. Local number 7N 38W 29CBB.

LOCATION.--Lat 40°32'35", long 101°39'55", NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.29, T.7 N., R.38 W., Hydrologic Unit 10250005, 0.5 mi north and 1 mi west of Imperial on U.S. Highway 6, then 0.5 mi north on gravel road. Owner: U.S. Geological Survey.

AQUIFER.--Ogallala Formation of Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 5.50 in., depth 230 ft, perforated 190 to 230 ft.

DATUM.--Altitude of land-surface datum is 3,290.30 ft. Measuring point: Top of casing 0.50 ft above land-surface datum.

REMARKS.--Water levels in well are affected by irrigation pumpage in area.

PERIOD OF RECORD.--June 1964 to current year.

GROUND-WATER LEVELS

CHASE COUNTY--Continued

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water-level, 55.87 ft below land-surface datum, July 4, 1964; lowest daily maximum water-level, 104.64 ft below land-surface datum, Sept. 7, 2002.

EXTREMES FOR CURRENT YEAR.--Highest daily maximum water-level depth below land surface, 98.06 ft, July 2; lowest daily maximum water-level depth below land surface, 104.64 ft, Sept. 7.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	99.91	99.71	99.33	98.97	98.61	98.46	98.76	99.41	---	104.02	104.53
10	100.29	99.83	99.48	99.33	99.19	98.86	98.54	98.76	99.63	---	104.17	104.19
15	100.29	99.94	99.53	99.27	98.93	98.73	98.36	99.60	100.53	102.53	104.49	103.88
20	100.04	99.78	99.51	99.04	98.85	98.63	98.51	98.73	100.83	102.99	104.56	103.84
25	100.18	99.85	99.43	99.16	98.94	98.64	98.88	99.06	101.43	103.28	104.18	103.66
EOM	99.81	99.68	99.39	99.09	98.60	98.58	98.54	99.74	101.66	103.74	104.42	103.60

CHERRY COUNTY

423205100321501. Local number 30N 28W 36AAA.

LOCATION.--Lat 42°32'05", long 100°32'15", NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 36, T.30 N., R.28 W., Hydrologic Unit 10150004, 8 mi south of the intersection of U.S. Highway 83 and State Highway 483, south of Valentine. Owner: U.S. Geological Survey.

AQUIFER.--Sand deposits of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation water-table well, diameter 1.25 in., depth 12.25 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 2,897.26 ft. Measuring point: Top of casing 3.00 ft above land-surface datum.

REMARKS.--Water levels affected by evapotranspiration.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, +0.30 ft above land-surface datum, Feb. 6, 1985. Lowest, 1.99 ft below land-surface datum, Oct. 4, 1976.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL
MAY 20	1.57

COLFAX COUNTY

412810097054501. Local number 17N 3E 4CC.

LOCATION.--Lat 41°28'10", long 097°05'45", SW $\frac{1}{4}$ SW $\frac{1}{4}$, sec. 4, T.17 N., R.3 E., Hydrologic Unit 10200201, 2 mi west and 1 mi north of intersection of U.S. Highway 30 and State Highway 15 in Schuyler. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Driven observation water-table well, diameter 1.25 in., depth 16 ft, screened 14 to 16 ft.

DATUM.--Altitude of land-surface datum is 1,370.58 ft. Measuring point: Top of casing 1.00 ft above land-surface datum.

PERIOD OF RECORD.--September 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water-level value measured, 3.70 ft below land-surface datum, May. 9, 1995; lowest daily maximum water-level value, 10.68 ft below land-surface datum, Oct. 29, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 16	8.46	APR 15	7.49

DAWSON COUNTY

404949099445701. Local number 10N 21W 18DDD.

LOCATION.--Lat 40°49'49", long 099°44'57", SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 18, T. 10 N., R. 21 W., Hydrologic Unit 10200101, 3.5 mi north of the intersection of Route 21 and U.S. Highway 30 in Lexington. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 120 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 2,420.58 ft. Measuring point: Top of casing 0.50 ft above land-surface datum.

REMARKS.--Water levels in well affected by pumpage from nearby irrigation wells and by seepage from irrigation canals.

PERIOD OF RECORD.--July 1964 to current year.

GROUND-WATER LEVELS

363

DAWSON COUNTY--Continued

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level depth, 6.20 ft below land-surface datum, July 24-25, 1993; lowest daily maximum water level depth, 21.50 ft below land-surface datum, July 16, 1981.

EXTREMES FOR CURRENT YEAR.--Highest daily maximum water-level depth below land surface, 9.81 ft, Oct. 1; lowest daily maximum water-level value depth below land surface, 16.17 ft, July 24.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.93	10.56	11.00	11.33	11.66	11.87	12.08	12.21	12.36	13.52	15.04	11.26
10	10.10	10.66	11.04	11.39	11.75	11.93	12.12	12.32	12.49	13.40	13.85	11.58
15	10.18	10.75	11.12	11.41	11.75	11.97	12.16	12.31	12.53	13.61	14.07	11.36
20	10.21	10.80	11.18	11.45	11.80	11.97	12.19	12.41	12.49	15.16	13.35	11.52
25	10.36	10.90	11.18	11.51	11.81	12.00	12.23	12.38	12.70	16.04	11.25	11.62
EOM	10.43	10.97	11.26	11.53	11.83	12.04	12.20	12.39	12.79	15.32	10.69	11.80

DUNDY COUNTY

400155101521302. Local number 1N 40W 29BB2.

LOCATION.--Lat 40°01'55", long 101°52'13", NW ¼ NW ¼ sec.29, T.1 N., R.40 W., Hydrologic Unit 10250002, 3.5 mi east of Haigler on U.S. Highway 34 and 0.5 mi north. Well is within 0.5 mi of Republican River. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits, undifferentiated, of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 48.8 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 3,205 ft. Measuring point: South side of casing 1.6 ft above land-surface datum.

REMARKS.--Replacement for well 400155101521301, local number 1N 40W 29BB1 with period of record from May 1946 to June 1975. Water levels in well are affected by pumping from nearby irrigation wells, evapotranspiration, and changes in stage of Republican River.

PERIOD OF RECORD.--October 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level depth, 15.41 ft below land-surface datum, June 21, 1984; lowest daily maximum water-level depth, 31.67 ft below land-surface datum, Aug. 12 and 13, 2002.

EXTREMES FOR CURRENT YEAR.--Highest daily maximum water-level depth, 19.24 ft below land surface, Apr. 22; lowest daily maximum water-level depth, 31.67 ft below land surface, Aug. 12, 13.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.57	21.15	20.46	19.95	19.61	19.36	24.56	20.02	22.61	24.65	30.62	25.71
10	25.02	21.00	20.31	19.90	19.61	19.35	19.97	20.03	22.78	29.03	31.59	24.45
15	22.21	20.87	20.26	19.83	19.53	20.14	20.11	25.95	28.18	29.18	31.55	24.06
20	21.67	20.74	20.17	19.76	19.47	19.50	20.63	27.43	29.05	29.53	30.88	23.79
25	21.44	20.62	20.08	19.72	19.75	19.34	24.24	26.58	29.29	30.36	---	28.39
EOM	21.53	20.52	20.00	19.65	19.48	19.25	20.45	27.32	24.04	---	24.97	27.82

FILLMORE COUNTY

402504097432201. Local number 5N 4W 12BDC.

LOCATION.--Lat 40°25'04", long 097°43'22", SW ¼ SE ¼ NW ¼ sec.12, T. 5 N., R. 4 W., Hydrologic Unit 10270206, one-half block south of fire station on principal north-south street in Shickley. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 5 in., depth 260.0 ft, perforated 100 to 260 ft.

DATUM.--Altitude of land-surface datum is 1651 ft. Measuring point: Top of casing 2.45 ft above land-surface datum.

REMARKS.--Replacement for 402450097434001, local number 5N 4W 12BC, period of record October 1956 to September 1977. Water levels in well affected by pumping from nearby municipal and irrigation wells.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 90.53 ft below land-surface datum, May 4, 1999; lowest, 101.45 ft (corrected) below land-surface datum, Sept. 15, 1991 (corrected).

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	94.97	DEC 04	94.73	FEB 18	92.18	APR 09	91.91	JUN 04	91.22	AUG 01	95.96
NOV 05	94.38	JAN 09	93.14	MAR 06	92.27	MAY 08	91.15	JUL 11	93.87	SEP 05	96.89
WATER YEAR 2002		HIGHEST	91.15	MAY 08, 2002		LOWEST	96.89	SEP 05, 2002			

GROUND-WATER LEVELS

FILLMORE COUNTY--Continued

403800097300701. Local number 8N 2W 26AD.

LOCATION.--Lat 40°38'00", long 097°30'07", SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.26, T.8 N., R.2 W., Hydrologic Unit 10270203, 2.5 mi west on Route 6 from the principal street of Exeter, then 0.4 mi south. Owner: U.S. Geological Survey.

AQUIFER.--Loess of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in., depth 40 ft, perforated 25 to 40 ft.

DATUM.--Altitude of land-surface datum is 1,610 ft. Measuring point: Top of casing at land-surface datum.

REMARKS.--Perched aquifer, water levels affected by infiltration and deep percolation of applied irrigation water pumped from deeper aquifer.

PERIOD OF RECORD.--October 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.03 ft below land-surface datum, Mar. 24, 1987; lowest, 24.16 ft below land-surface datum, July 10, 1958.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	9.64	DEC 04	9.31	FEB 18	9.51	APR 09	9.47	JUN 04	6.65	AUG 07	10.65
NOV 05	9.56	JAN 09	9.48	MAR 05	9.51	MAY 09	8.39	JUL 11	8.15	SEP 05	12.55
WATER YEAR 2002		HIGHEST	6.65	JUN 04, 2002	LOWEST	12.55	SEP 05, 2002				

GARFIELD COUNTY

414718099083201. Local number 21N 16W 14CB.

LOCATION.--Lat 41°47'18", long 099°08'32", NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.14, T.21 N., R.16 W., Hydrologic Unit 10210007, 5 mi east and 1 mi north of Burwell. Owner: Frank Smolik.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 18 in., depth 154 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 2,174 ft. Measuring point: Hole in turbine base 2.00 ft above land-surface datum.

REMARKS.--Water levels affected by pumping during irrigation season.

PERIOD OF RECORD.--October 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.07 ft below land-surface datum, Oct. 13, 1983; lowest, 24.92 ft below land-surface datum, Oct. 28, 1959.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL
MAY 02	24.80

GOSPER COUNTY

403626099451401. Local number 7N 21W 6BC.

LOCATION.--Lat 40°36'26", long 099°45'14", SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 6, T.7 N., R.21 W., Hydrologic Unit 10200101, 1 mi west and 2 mi north of Smithfield. Owner: Andy Larson Estate.

AQUIFER.--Ogallala Formation of Pliocene age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 4 in., depth 132 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 2,466.95 ft. Measuring point: Top of casing 0.40 ft above land-surface datum.

REMARKS.--Water levels in well affected by pumping from nearby irrigation wells and by infiltration and deep percolation from nearby irrigation canal.

PERIOD OF RECORD.--September 1934 to July 1940; January 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.92 ft below land-surface datum, May 10, 2000; lowest, 117.80 ft below land-surface datum, Sept. 26, 1935.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL
APR 24	31.00

GROUND-WATER LEVELS

365

HALL COUNTY

405315098304302. Local number 11N 11W 25CC2.

LOCATION.--Lat 40°53'15", long 098°30'43", SW ¼ SW ¼ sec.25, T.11 N., R.11 W., Hydrologic Unit 10200103, 1.0 mi north and 2.0 mi west of Alda. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 65 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,924.0 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

REMARKS.--Replacement for 405315098304301, local number 11N 11W 25°CC, period of record October 1946 to November 1977. Water levels in wells affected by pumping from nearby wells during irrigation season.

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

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level depth, 11.12 ft below land-surface datum, June 27, 29, 1999; lowest, 25.98 ft below land-surface datum, Aug. 31, 1981.

EXTREMES FOR CURRENT YEAR.--Highest daily maximum water-level depth, 16.69 ft below land surface, Oct. 2, 8; lowest daily maximum water level depth, 21.10 ft below land surface, Sept. 27, 28, 29, 30.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.73	16.78	16.85	16.89	16.96	16.93	16.99	16.96	17.09	17.22	19.52	20.90
10	16.72	16.78	16.83	16.93	16.98	16.99	16.99	16.97	17.10	17.50	19.86	20.99
15	16.75	16.80	16.87	16.94	16.93	16.98	16.91	16.93	17.12	17.85	20.17	21.04
20	16.73	16.81	16.90	16.89	16.92	17.00	16.97	17.01	17.13	18.26	20.41	21.05
25	16.76	16.82	16.90	16.94	16.97	16.97	16.99	17.02	17.12	18.68	20.61	21.07
EOM	16.73	16.83	16.90	16.93	16.93	16.95	16.94	17.02	17.11	19.19	20.80	21.10

HAMILTON COUNTY

404836097584101 Local number 10N 6W 27ACAA.

LOCATION.--Lat 40°48'36", long 097°58'41", NE ¼ NE ¼ SW ¼ NE ¼ sec.27, T.10 N., R.6 W., Hydrologic Unit 10270203, 4.0 mi south of junction of Route 14 and U.S. Highway 34 in Aurora, then 1.0 mi east and 0.3 mi south. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of the Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 170 ft, casing perforated below water-table.

DATUM.--Altitude of land surface datum is 1791.3 ft. Measuring point: Top of casing 1.5 ft above land surface datum.

REMARKS.--Replacement for well 404825097583301. Local number 10N-6W-26BC with period of record March 1956 to March 1982 located across the county road to the east.

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

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water-level depth measured, 82.31 ft below land-surface datum, June 5, 2000; lowest daily maximum water-level depth, 107.40 ft below land-surface datum, Aug. 24, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05	89.68	DEC 10	88.26	FEB 20	87.15	APR 20	86.57	JUN 15	86.18	AUG 15	93.67
10	89.55	15	88.17	25	87.18	25	86.60	20	86.08	20	93.41
15	89.38	20	88.13	28	87.02	27	86.57*	25	86.07	25	93.90
20	89.30	25	87.95	MAR 05	86.93	30	86.42	30	86.80	31	94.50
NOV 01	89.16*	31	87.89	10	87.19	MAY 05	86.38	JUL 05	87.86	SEP 04	94.04*
05	89.05	JAN 05	87.79	15	87.00	06	86.34*	10	88.90	05	94.01
10	88.95	08	87.62*	20	86.96	10	86.42	15	89.80	10	93.86
15	88.83	10	87.75	25	86.86	15	86.34	20	90.82	15	93.61
20	88.63	15	87.69	27	86.57*	20	86.32	25	91.44	20	93.31
25	88.70	20	87.50	31	86.78	25	86.23	31	92.28	25	93.04
30	88.47	25	87.43	APR 05	86.75	31	86.17	AUG 01	92.44*	30	92.81
DEC 03	88.29*	31	87.37	10	86.63	JUN 03	86.18*	05	92.67		
05	88.44	FEB 05	87.29	15	86.52	05	86.24	10	92.86		

WATER YEAR 2002 HIGHEST 86.07 JUN 25, 2002 LOWEST 94.47 AUG 31, 2002

* Hand measurement.

GROUND-WATER LEVELS

HAMILTON COUNTY--Continued

405514097573901. Local number 11N 6W 13CB.

LOCATION.--Lat 40°55'14", long 097°57'39", NW ¼ SW ¼ sec.13, T.11 N., R.6 W., Hydrologic Unit 10270201, 2 mi east and 3.5 mi north of Aurora. Owner: O. S. Swedberg.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 24 in., depth 194 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,812.2 ft. Measuring point: Hole in south side turbine base at land-surface datum.

REMARKS.--Water levels affected by pumping during irrigation season.

PERIOD OF RECORD.--September 1934 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 89.30 ft below land-surface datum, May 15, 1995; lowest, 117.18 ft below land-surface datum, Nov. 15, 1976.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL
APR 23	97.93

HOLT COUNTY

421605098203001. Local number 27N 9W 34DA.

LOCATION.--Lat 42°16'05", long 098°20'30", NE ¼ SE ¼ sec.34, T.27 N., R.9 W., Hydrologic Unit 10220001, 0.5 mi north of Ewing. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1 in., depth 17 ft, screened 15 to 17 ft.

DATUM.--Altitude of land-surface datum is 1,841 ft. Measuring point: Top of casing 1.10 ft above land-surface datum.

PERIOD OF RECORD.--December 1934 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.34 ft below land-surface datum, Apr. 9, 1984; lowest, 9.90 ft below land-surface datum, Sept. 1, 1948.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL
MAY 22	8.41

423148098300601. Local number 30N 10W 32DAA.

LOCATION.--Lat 42°31'48", long 098°30'06", NE ¼ NE ¼ SE ¼ sec.32, T.30 N., R.10 W., Hydrologic Unit 10150007, 2 mi east on paved road from O'Neill, then 2 mi north, 4 mi east, 2 mi north, 2 mi east, and 0.5 mi north. Owner: William J. Murphy.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in., depth 85 ft, perforated 25.5 to 85 ft.

DATUM.--Altitude of land-surface datum is 1,952 ft. Measuring point: Top of casing 1.00 ft above land-surface datum.

REMARKS.--Water levels in this well affected by withdrawals by nearby irrigation wells completed in this aquifer and withdrawals from a deeper aquifer which has resulted in water movement from the upper aquifer to the deeper aquifer.

PERIOD OF RECORD.--October 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level depth, 35.41 ft below land-surface datum, Oct. 21, 1966; lowest daily maximum water level depth, 53.72 ft below land-surface datum, Sept. 15, 20, 25, 1982.

EXTREMES FOR CURRENT YEAR.--Highest daily maximum water level depth below land surface, 42.85 ft, May 22; lowest daily maximum water-level depth below land surface, 46.51 ft, Sept. 30.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	44.21	43.93	43.71	43.53	43.38	43.23	43.14	42.98	43.02	43.49	44.83	46.05
10	44.15	43.89	43.68	43.52	43.43	43.28	43.08	42.98	43.00	43.67	45.02	46.21
15	44.13	43.84	43.64	43.52	43.34	43.23	43.01	42.90	43.05	43.86	45.23	46.33
20	44.03	43.82	43.64	43.42	43.31	43.24	43.07	42.95	43.15	44.08	45.44	46.41
25	44.06	43.78	43.62	43.42	43.34	43.19	43.06	42.91	43.19	44.31	45.68	46.48
EOM	43.92	43.72	43.59	43.40	43.27	43.15	42.98	42.93	43.32	44.59	45.90	46.51

GROUND-WATER LEVELS

367

HOLT COUNTY--Continued

423730098560001. Local number 31N 14W 27DDD.

LOCATION.--Lat 42°37'30", long 098°56'00", SE ¼ SE ¼ SE ¼ sec.27, T.31 N., R.14 W., Hydrologic Unit 10150007, 6 mi north from Atkinson on Route 11, then 2 mi east. Owner: Elmer Goldfuss.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in., depth 72 ft, perforated 32 to 72 ft.

DATUM.--Altitude of land-surface datum is 2,080 ft. Measuring point: Top of casing at land-surface datum.

REMARKS.--Water levels in well affected by pumping of nearby wells during irrigation season.

PERIOD OF RECORD.--July 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water-level depth, 28.72 ft below land-surface datum, July 3, 1995; lowest daily maximum water-level depth, 43.30 ft below land-surface datum, Sept. 10, 1976.

EXTREMES FOR CURRENT YEAR.--Highest daily maximum water-level depth below land surface, 30.70 ft below land surface, May 3, 6, 8; lowest daily maximum water-level depth, 37.47 ft, Sept. 6.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	32.22	---	---	---	31.00	30.87	30.80	30.72	31.07	32.82	35.90	37.46
10	32.09	---	---	---	31.01	30.89	30.76	30.76	31.20	33.34	36.28	37.44
15	31.98	---	---	---	30.96	30.84	30.71	30.78	31.32	33.83	36.60	37.37
20	31.87	---	---	31.05	30.92	30.84	30.77	30.86	31.46	34.37	36.97	37.27
25	31.79	---	---	31.04	30.94	30.81	30.76	30.91	31.83	34.89	37.24	37.17
EOM	---	---	---	31.03	30.90	30.79	30.72	31.02	32.33	35.51	37.29	37.09

HOOKER COUNTY

420204101200502. Local number 24N 35W 23DC2.

LOCATION.--Lat 42°02'04", long 101°20'05", SW ¼ SE ¼ sec.23, T.24 N., R.35 W., Hydrologic Unit 10210001, Approximately 5.2 mi west of Hecla on the south side of State Highway 2. Owner: U.S. Geological Survey.

AQUIFER.--Fine sand of Pleistocene age.

WELL CHARACTERISTICS.--Driven observation water-table well, diameter 2 in., depth 18 ft, perforated 15 to 18 ft.

DATUM.--Altitude of land-surface datum is 3,437 ft. Measuring point: Top of casing 1.90 ft above land-surface datum.

REMARKS.--Starting in December 1998, recorder instrument set to and read as depth below measuring point.

PERIOD OF RECORD.--December 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water-level depth, 3.64 ft below land-surface datum, April 29-30, 2001; lowest daily maximum water-level depth, 7.84 ft below land-surface datum, Sept. 30, 2002.

EXTREMES FOR CURRENT YEAR.--Highest daily maximum water-level depth, 4.48 ft below land surface, May 14; lowest daily maximum water-level depth, 7.84 ft below land surface, Sept. 30.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.50	5.77	5.07	5.72	5.62	5.56	5.12	4.61	5.15	6.46	7.15	7.17
10	5.45	5.54	5.29	5.69	5.62	5.60	5.02	4.88	5.33	6.61	7.26	7.45
15	5.54	5.46	5.48	5.60	5.53	5.58	4.92	4.49	5.63	6.50	7.37	7.57
20	5.44	5.60	5.52	5.53	5.45	5.69	5.13	4.76	5.79	6.62	7.47	7.66
25	5.57	5.52	5.61	5.55	5.50	4.85	5.14	4.86	5.95	6.82	7.57	7.76
EOM	5.60	4.70	5.62	5.58	5.51	5.07	4.57	4.93	6.22	7.01	7.02	7.84

KEARNEY COUNTY

402625098594501. Local number 6N 15W 34DC.

LOCATION.--Lat 40°26'16", long 098°59'40", SW ¼ SE ¼ sec.34, T.6 N., R.15 W., Hydrologic Unit 10270206, 4.5 mi south and 2.5 mi west of the junction of Route 10 and U.S. Highway 34 near Minden. Owner: Conservation and Survey Division, University of Nebraska-Lincoln.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 210 ft, cased with steel, perforated 190 to 210 ft.

DATUM.--Altitude of land-surface datum is 2,181 ft. Measuring point: Top of casing 1.00 ft above land-surface datum.

REMARKS.--Replacement for 402615099000001, local number 5N 15W 3BA1, period of record August 1947 to September 1967. Water levels in well affected by seepage losses from nearby canals and by pumping of nearby wells during irrigation season.

PERIOD OF RECORD.--October 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 62.82 ft below land-surface datum, June 2, 1999; lowest, 119.05 ft below land-surface datum, July 25, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL
APR 26	63.86

GROUND-WATER LEVELS

KIMBALL COUNTY

411416103361101. Local number 15N 55W 26CCC.

LOCATION.--Lat 41°14'10", long 103°36'19", SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.26, T.15 N., R.55 W., Hydrologic Unit 10190016, east of intersection of U.S. Highway 30 and State Highway 71 in Kimball. Owner: Henry Meier.

AQUIFER.--Ogallala Formation of Pliocene age.

WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 24 in., depth 124 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 4,658.3 ft. Measuring point: Top of casing 0.00 ft above land-surface datum.

REMARKS.--Local well number formerly listed as 15N 55W 26°CC. Replacement for 411600103393501, local number 15N 55W 17CC1, period of record January 1935 to November 1942; June 1950 to October 1975.

PERIOD OF RECORD.--January 1936 to October 1937; January 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.13 ft below land-surface datum, Apr. 2, 2002; lowest water level measured, 54.86 ft below land-surface datum, Nov. 4, 1996.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL
APR 02	39.13

LANCASTER COUNTY

403929096401001. Local number 8N 7E 18DDB.

LOCATION.--Lat 40°39'29", long 096°40'10", NW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.18, T.8 N., R.7 E., Hydrologic Unit 10200203, 0.6 mi west of Roca. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits, undifferentiated, of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in., depth 41 ft, perforated 36 to 41 ft.

DATUM.--Altitude of land-surface datum is 1,215 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

REMARKS.--Water level not measured during 1984 water year.

PERIOD OF RECORD.--June 1954 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.63 ft below land-surface datum, Aug. 25, 1954; lowest, 14.87 ft below land-surface datum, Oct. 18, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	12.11	APR 09	11.79

403833096385501. Local number 8N 7E 20DDA.

LOCATION.--Lat 40°38'33", long 096°38'55", NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.20, T.8 N., R.7 E., Hydrologic Unit 10200203, 0.5 mi east and 1.1 mi south of Roca. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits, undifferentiated, of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in., depth 32.5 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,243 ft. Measuring point: Top of casing 1.00 ft above land-surface datum.

REMARKS.--Water level not measured during 1984 water year.

PERIOD OF RECORD.--June 1954 to current year.

REVISED RECORDS.--WDR NE-97: Highest water level above land-surface datum.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, +0.16 ft above land-surface datum, Mar. 27, 1960; lowest, 12.28 ft below land-surface datum, Oct. 17, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	5.20	APR 09	6.50

404706096413001. Local number 10N 6E 36CDD.

LOCATION.--Lat 40°47'06", long 096°41'30", SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.36, T.10 N., R.6 E., Hydrologic Unit 10200203, in Irvingdale Park on the north side of Van Dorn Street between 19th and 20th Streets in Lincoln. Owner: City of Lincoln.

AQUIFER.--Dakota Formation of Lower Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 16 in., depth 170 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,200 ft. Measuring point: Top of casing 1.60 ft above land-surface datum.

REMARKS.--Recorder removed in January 1983. Well measured in spring and fall thereafter.

LANCASTER COUNTY--Continued

PERIOD OF RECORD.--August 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 45.07 ft below land-surface datum, Oct. 26, 1987; lowest 71.19 ft below land-surface datum, Sept. 5, 1956.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	46.48	APR 09	46.64

MC PHERSON COUNTY

413130100531201. Local number 18N 31W 16DD.

LOCATION.--Lat 41°31'30", long 100°53'18", SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.16, T.18 N., R.31 W., Hydrologic Unit 10210004, Approximately 4.0 mi east and 2.0 mi south of Tryon. Owner: U.S. Geological Survey.

AQUIFER.--Fine sand of Pleistocene age.

WELL CHARACTERISTICS.--Observation water-table well, diameter 2 in., depth 120 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 3,219.6 ft. Measuring point: Top of casing 0.30 ft above land-surface datum.

PERIOD OF RECORD.--November 1934 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 104.19 ft below land-surface datum, Apr. 21, 2002; lowest daily maximum water-level value, 112.25 ft below land-surface datum, November 14, 1986.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05	104.32	APR 21	104.19

NUCKOLLS COUNTY

400240098111301. Local number 1N 8W 23AB.

LOCATION.--Lat 40°02'40", long 098°11'13", NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.23, T.1 N., R.8 W., Hydrologic Unit 10250016, 0.5 mi south and 0.5 mi west of Bostwick. Owner: U.S. Geological Survey.

AQUIFER.--Loess of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in., depth 18 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,598.15 ft. Measuring point: Top of casing 1.50 ft above land-surface datum.

PERIOD OF RECORD.--April 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.02 ft below land-surface datum, July 29, 1951; lowest, 7.91 ft below land-surface datum, July 8-9, 1950.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL
MAY 13	4.11

PHELPS COUNTY

403123099261501. Local number 6N 19W 2AA.

LOCATION.--Lat 40°31'28", long 099°26'13", NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.2, T.6 N., R.19 W., Hydrologic Unit 10200101, 10 mi east of Bertrand. Owner: Central Nebraska Public Power and Irrigation District.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1 in., depth 151 ft, screened 149 to 151 ft.

DATUM.--Altitude of land-surface datum is 2,359.1 ft. Measuring point: Top of casing 1.00 ft above land-surface datum.

REMARKS.--Water levels in well affected by seepage losses from nearby irrigation canal.

PERIOD OF RECORD.--March 1945 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 31.59 ft below land-surface datum, Oct. 15, 1996; lowest, 123.70 ft below land-surface datum, Mar. 9, 1945.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL
APR 24	37.78

GROUND-WATER LEVELS

PLATTE COUNTY

412955097192001. Local number 18N 1E 28CD.

LOCATION.--Lat 41°29'55", long 097°19'20", SE ¼ SW ¼ sec.28, T.18 N., R.1 E., Hydrologic Unit 10200201, 3 mi south and 8.5 mi east of Platte Center. Owner: Loup River Public Power District.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2 in., depth 99 ft, screened 97 to 99 ft.

DATUM.--Altitude of land-surface datum is 1,511.8 ft. Measuring point: Top of casing 3.50 ft above land-surface datum.

PERIOD OF RECORD.--November 1935 to August 1940; March 1942 to November 1953; November 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 57.30 ft (corrected) below land-surface datum, Mar. 27, Apr.24, 1940; lowest, 69.81 ft (corrected) below land-surface datum, Oct. 9, 1958.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL
MAY 13	65.02

SALINE COUNTY

403855097072501. Local number 8N 3E 19ADA.

LOCATION.--Lat 40°38'55", long 097°07'25", NE ¼ SE ¼ NE ¼ sec.19, T.8 N., R.3 E., Hydrologic Unit 10270202, west edge of Dorchester, on west side of Route 15 between U.S. Highway and Route 33. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 5 in., depth 151 ft, perforated 142 to 151 ft.

DATUM.--Altitude of land-surface datum is 1,496 ft. Measuring point: Top of casing at land-surface datum.

REMARKS.--Water levels in well affected by pumping of nearby wells during irrigation season.

PERIOD OF RECORD.--October 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 93.26 ft below land-surface datum, May 4, 1999; lowest, 107.15 ft below land-surface datum, Aug. 05, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	99.31	DEC 04	98.17	FEB 18	96.93	APR 09	97.11	JUN 04	96.55	AUG 07	103.45
NOV 05	98.70	JAN 09	97.60	MAR 05	96.93	MAY 09	96.88	JUL 11	100.90	SEP 03	102.82
WATER YEAR 2002		HIGHEST	96.55	JUN 04, 2002		LOWEST	103.45	AUG 07, 2002			

SARPY COUNTY

410308096190701. Local number 13N 10E 32DBBA.

LOCATION.--Lat 41°03'08", long 096°19'07", NE ¼ NW ¼ NW ¼ SE ¼ sec.32, T.13N., R.10 E., Hydrologic Unit 10200202, 0.5 mi south of northern end of Platte River Island 2.5 mi northeast of Ashland and approximately 1 mi south of U.S. Highway 6 and Linoma Beach Road. Owner: City of Lincoln, NE.

AQUIFER.--Alluvial sand and gravel deposits of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 83 ft, screened 43 to 83 ft., casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1056.4 ft. Measuring point: Top of casing 4.40 ft above land-surface datum.

REMARKS.--Water levels in well affected by Platte River stages. GOES system installed 1992.

PERIOD OF RECORD.--August 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water-level depth, +2.13 ft above land-surface datum, July 25, 1993; lowest daily maximum water-level depth, 7.70 ft below land-surface datum, Nov. 4-5, 1993.

EXTREMES FOR CURRENT YEAR.--Highest daily maximum water-level depth, 2.29 ft below land surface, Jan. 13; lowest daily maximum water-level depth, 5.55 ft below land surface, Aug. 5.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.30	4.26	3.91	2.99	3.47	4.65	3.84	4.00	4.50	5.06	5.55	4.82
10	4.39	4.32	3.74	2.55	2.86	3.71	3.82	4.10	4.58	5.14	5.09	5.08
15	4.17	4.37	3.79	2.52	3.62	2.87	3.83	3.72	3.83	5.23	5.22	4.76
20	4.14	4.43	3.85	3.20	3.58	3.41	4.04	4.11	4.29	5.31	4.97	4.63
25	4.27	4.01	4.02	3.10	3.79	3.64	4.03	4.15	4.56	5.39	5.06	4.75
EOM	4.27	4.01	3.86	3.68	4.49	3.86	3.81	4.22	4.78	5.38	4.61	4.65

GROUND-WATER LEVELS

SAUNDERS COUNTY

410558096210601. Local number 13N 9E 13ADBA.

LOCATION.--Lat 41°05'58", long 096°21'06", NE ¼ NW ¼ SE ¼ NE ¼ sec.13, T.13 N., R.9E., Hydrologic Unit 10200202, approximately 3.75 mi north and 0.85 mi east of Ashland. Owner: City of Lincoln.

AQUIFER.--Alluvial sand and gravel deposits of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in., depth 91 ft, screened 80 to 91 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,075 ft. Measuring point: Top of casing 4.40 ft above land-surface datum.

REMARKS.--Well drilled June 1990. Starting in April 1991, recorder instrument set to read depth below measuring point.

PERIOD OF RECORD.--August 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water-level depth, 6.77 ft below land-surface datum, Mar 13, 1993; lowest daily maximum water-level depth, 14.39 ft below land-surface datum, Oct. 1, 1991.

EXTREMES FOR CURRENT YEAR.--Highest daily maximum water-level depth below land surface, 11.67 ft, Feb. 23; lowest daily maximum water-level depth below land surface, 14.16 ft, Aug. 17, 18.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.19	12.78	12.23	12.53	11.90	12.15	12.54	12.64	12.42	13.21	13.87	13.36
10	13.15	12.68	12.27	12.48	11.86	12.22	12.65	12.60	12.46	13.41	14.01	13.40
15	13.18	12.59	12.23	12.29	11.77	12.16	12.69	12.39	12.29	13.49	14.13	13.33
20	13.22	12.47	12.24	12.12	11.71	12.03	12.71	12.43	12.46	13.55	14.14	13.33
25	13.10	12.27	12.36	12.01	11.74	11.94	12.73	12.40	12.76	13.66	13.37	13.33
EOM	12.94	12.22	12.54	11.91	11.82	12.29	12.66	12.33	13.01	13.76	13.28	13.33

410427096202501. Local number 13N 10E 19CDDD.

LOCATION.--Lat 41°04'27", long 096°20'25", SE ¼ SE ¼ SE ¼ SW ¼ sec.19, T.13 N., R.10E., Hydrologic Unit 10200202, 2 mi north and 1.4 mi east of Ashland. Located on Nebraska National Guard camp approximately 400 ft from right bank of Platte River. Owner: City of Lincoln.

AQUIFER.--Alluvial sand and gravel deposits of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in., depth 56 ft., screened 45 to 56 ft., casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,065 ft. Measuring point: Top of casing 4.0 ft above land-surface datum.

REMARKS.--Water levels affected by Platte River stage. Starting in April 1991, recorder instrument set to read depth below measuring point. GOES system installed in September 1992.

PERIOD OF RECORD.--August 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water-level depth, +0.18 ft above land-surface datum, July 10, 1993; lowest daily maximum water-level depth, 17.38 ft below land-surface datum, Oct. 27, 1991.

EXTREMES FOR CURRENT YEAR.--Highest daily maximum water-level depth, 7.28 ft below land surface, Jan. 15; lowest daily maximum water-level depth, 12.93 ft below land surface, Aug. 12.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.60	8.89	8.22	8.13	8.01	8.66	8.06	8.45	9.27	11.55	12.81	10.36
10	9.40	8.88	8.04	7.86	7.58	8.26	8.11	8.45	9.64	11.55	12.85	10.69
15	9.02	9.02	8.15	7.28	7.73	7.46	8.11	8.32	9.33	11.36	12.65	---
20	8.95	9.14	8.27	7.53	7.81	7.68	8.83	8.59	10.34	11.78	12.30	10.64
25	9.09	8.77	8.43	7.53	8.00	7.80	8.62	9.10	10.89	12.31	11.42	10.86
EOM	8.98	8.41	8.82	8.08	8.36	7.99	8.37	9.59	11.26	12.40	10.79	10.48

410340096202201. Local number 13N 10E 30CDDA.

LOCATION.--Lat 41°03'40", long 096°20'22", NE ¼ SE ¼ SE ¼ SW ¼ sec.30, T.13 N., R.10E., Hydrologic Unit 10200202, 1.1 mi north and 1.5 mi east of Ashland on Lincoln north well field by Nebraska National Guard Camp. Owner: City of Lincoln.

AQUIFER.--Alluvial sand and gravel deposits of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in., depth 70 ft., screened 55 to 70 ft., casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,059 ft. Measuring point: Top of casing 6.6 ft above land-surface datum (changed from 4.10 ft on 04-25-94).

REMARKS.--Water levels in area affected by nearby pumping of municipal wells. Starting in April 1991, recorder instrument set to read depth below measuring point. GOES system installed in August 1994.

PERIOD OF RECORD.--August 1990 to current year.

REVISED RECORDS.--WDR NE-96: Water levels for 1995 water year,

GROUND-WATER LEVELS

SAUNDERS COUNTY--Continued

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water-level depth, +4.13 ft above land-surface datum, July 24, 1993; lowest daily maximum water-level depth, 26.00 ft below land-surface datum, Oct. 11, 1991.

EXTREMES FOR CURRENT YEAR.--Highest daily maximum water-level depth below land surface, 5.31 ft, Mar. 27; lowest daily maximum water-level depth below land surface, 20.35 ft, July 20, 21, .

DAY	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002 DAILY MAXIMUM VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.68	13.15	8.86	10.23	6.17	6.36	7.22	10.28	11.19	18.60	15.74	13.63
10	13.07	12.87	9.05	8.57	6.86	6.59	7.81	10.94	11.93	18.96	15.30	15.82
15	13.17	12.74	10.13	8.16	6.96	6.33	6.34	10.91	12.11	19.32	15.03	15.91
20	14.03	13.27	9.82	7.00	6.84	5.93	7.96	10.09	13.23	20.35	14.78	14.35
25	13.73	10.91	9.54	6.33	6.57	5.38	9.62	10.41	14.93	19.37	13.86	13.98
EOM	13.34	9.71	9.97	5.95	6.42	6.41	10.23	10.31	17.14	16.86	12.65	14.72

410303096192901. Local number 13N 10E 32CABC.

LOCATION.--Lat 41°03'03", long 096°19'29", SW ¼ NW ¼ NE ¼ SW ¼ sec.32, T.13 N., R.10E., Hydrologic Unit 10200202, 2.0 mi north and 0.6 mi south of Ashland. One-sixth mile south of highway 6 gate for Willow Point Community Housing. Northern end of Willow Point lake, approximately 400 feet from right bank of Platte River. Owner: City of Lincoln.

AQUIFER.--Alluvial sand and gravel deposits of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in., depth 86 ft., screened 51 to 86 ft., casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,056 ft. Measuring point: Top of casing 3.60 ft above land-surface datum.

REMARKS.--Water levels affected by nearby pumping of municipal wells and Platte River stage. Starting in April 1991, recorder instrument set to read depth below measuring point. GOES unit installed in September 1992.

PERIOD OF RECORD.--December 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water-level value measured, 0.18 ft below land-surface datum, July 25, 1993; lowest daily maximum water-level value, 11.81 ft below land-surface datum, Oct 23, 1991.

EXTREMES FOR CURRENT YEAR.--Highest daily maximum water level depth below land surface, 5.35 ft, Jan. 15; lowest daily maximum water-level depth below land surface, 10.91 ft , Aug. 5.

DAY	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002 DAILY MAXIMUM VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.32	7.39	6.50	6.09	6.18	7.30	6.45	6.94	7.70	8.97	10.91	8.28
10	8.04	6.85	6.35	5.84	5.95	6.72	6.66	6.92	7.83	8.84	10.42	8.54
15	6.71	6.82	6.42	5.35	6.31	6.14	7.00	6.58	7.22	8.94	9.29	8.74
20	6.58	7.34	7.36	6.49	6.33	6.32	7.25	7.57	8.28	10.10	8.77	7.93
25	6.79	7.36	6.48	6.54	6.49	6.28	7.11	7.59	8.31	10.44	8.46	8.50
EOM	7.27	6.62	6.48	6.33	7.06	6.46	6.85	7.48	8.74	10.06	7.95	8.04

411005096281502. Local number 14N 8E 24ACD2.

LOCATION.--Lat 41°10'05", long 096°28'15", SE ¼ SW ¼ NE ¼ sec.24, T.14 N., R.8 E., Hydrologic Unit 10200203, 4 mi south from the intersection of Routes 92 and 692 near Mead, then 0.65 mi east and 0.4 mi south to the south end of load line 2 of the Mead Field Station. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 80 ft, screened 60 to 80 ft.

DATUM.--Altitude of land-surface datum is 1,171 ft. Measuring point: Top of casing 0.5 ft above land-surface datum.

REMARKS.--Replacement for well 411005096281501, local number 14N-8E-24ACD1, with period of record July 1964 to November 1970. Water levels in well affected by pumping of nearby wells during irrigation season.

PERIOD OF RECORD.--April 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level below land-surface datum, 39.22 ft , Mar. 31, 1988; lowest daily maximum water level below land-surface datum, 46.98 ft, Sept. 25, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002											
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05	41.96	NOV 05	41.96	DEC 03	41.87*	JAN 05	41.88	FEB 05	41.82	JUL 15	42.07*
08	41.90*	06	41.93*	05	41.92	08	41.83*	10	41.84	AUG 07	42.45*
10	41.96	10	41.95	10	41.88	10	41.90	18	41.64*	SEP 11	43.02*
15	41.98	15	41.93	15	41.89	15	41.92	MAR 04	41.63*		
20	41.98	20	41.95	20	41.92	20	41.83	APR 01	41.52*		
25	41.99	25	41.96	25	41.91	25	41.86	MAY 07	41.71*		
31	41.91	30	41.92	31	41.92	31	41.83	JUN 04	41.89*		
WATER YEAR 2002			HIGHEST	41.52	APR 01, 2002	LOWEST	43.02	SEP 11, 2002			

* Hand measured.

GROUND-WATER LEVELS

373

SCOTTS BLUFF COUNTY

415325103392801. Local number 22N 55W 11DDC.

LOCATION.--Lat 41°53'25", long 103°39'28", SW ¼ SE ¼ SE ¼ sec.11, T.22 N., R.55 W., Hydrologic Unit 10180009, 0.5 mi north of the west intersection of Routes 71 and 26 in Scottsbluff, then 0.8 mi east. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits, undifferentiated, of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 32 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 3,953 ft. Measuring point: Top of casing 0.00 ft above land-surface datum.

REMARKS.--Recorder removed in January 1984. Well measured monthly until recorder reinstalled January 1985.

PERIOD OF RECORD.--August 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level below land-surface datum, 21.27 ft, Sept. 9, 1986; lowest daily maximum water level below land-surface datum, 28.08 ft, May 31, 1994.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05	25.41	DEC 05	25.18	FEB 20	25.56	APR 20	25.92	JUN 20	26.58	AUG 20	26.95
10	25.36	10	25.25	25	25.59	25	25.98	25	26.65	25	26.85
15	25.30	25	25.23	28	25.60	30	26.04	30	26.73	31	26.66
20	25.25	31	25.27	MAR 05	25.63	MAY 05	26.05	JUL 05	26.79	SEP 05	26.52
25	25.22	JAN 05	25.29	10	25.65	10	26.10	10	26.84	10	26.44
31	25.21	15	25.34	15	25.67	15	26.15	15	26.86	15	26.35
NOV 05	25.19	20	25.38	20	25.70	20	26.21	20	26.88	20	26.40
10	25.21	25	25.36	25	25.75	25	26.25	25	26.92	25	26.41
15	25.20	31	25.45	31	25.77	31	26.38	31	26.99	30	26.35
20	25.20	FEB 05	25.50	APR 05	25.80	JUN 05	26.42	AUG 05	27.03		
25	25.18	10	25.52	10	25.83	10	26.45	10	27.01		
30	25.19	15	25.55	15	25.87	15	26.53	15	27.01		
WATER YEAR 2002		HIGHEST	25.18	NOV 25, 2001	DEC 05, 2001	LOWEST	27.03	AUG 05, 2002			

SEWARD COUNTY

405406097115001. Local number 11N 2E 21DD.

LOCATION.--Lat 40°54'06", long 097°11'50", SE ¼ SE ¼ sec.21, T.11 N., R.2 E., Hydrologic Unit 10270201, 4.5 mi west of Seward. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 5 in., depth 123 ft, perforated 112 to 123 ft.

DATUM.--Altitude of land-surface datum is 1,550 ft. Measuring point: Top of casing 0.00 ft above land-surface datum.

REMARKS.--Water levels in well affected by withdrawals from nearby irrigation wells.

PERIOD OF RECORD.--May 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 72.02 ft below land-surface datum, May 10, 2000; lowest, 90.17 ft below land-surface datum, Aug. 5, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	78.35*	DEC 15	76.76	FEB 15	76.33	APR 20	75.93	JUN 20	75.92	AUG 20	84.24
10	78.18	20	76.72	20	76.19	25	76.00	25	77.01	25	83.78
15	77.96	25	76.68	25	76.23	30	75.94	30	78.55	30	83.37
20	77.86	31	76.68	28	76.29	MAY 02	75.90*	JUL 05	80.50	31	83.40
NOV 01	77.45*	JAN 05	76.68	MAR 05	76.29	05	75.92	10	81.63	SEP 04	82.89*
05	74.47	08	76.60*	10	76.23	10	75.93	15	82.53	05	82.85
10	77.39	10	76.56	15	76.09	15	75.96	20	83.02	10	82.52
15	77.23	15	76.45	20	76.17	20	76.00	25	83.44	15	82.23
20	77.16	20	76.48	25	76.20	25	75.92	30	83.76	20	81.88
25	76.75	25	76.36	31	76.06	31	75.80	31	83.85	25	81.85
30	76.91	31	76.36	APR 01	76.04*	JUN 03	75.74*	AUG 05	84.38	30	81.64
DEC 03	76.90*	FEB 05	76.46	05	76.14	05	75.75	08	84.46*		
05	76.87	06	76.45*	10	76.06	10	75.73	10	84.48		
10	76.86	10	76.33	15	75.95	15	75.76	15	84.47		
WATER YEAR 2002		HIGHEST	74.47	NOV 05, 2001	LOWEST	84.48	AUG 10, 2002				

* Hand measured.

GROUND-WATER LEVELS

VALLEY COUNTY

412955099123201. Local number 18N 16W 30CC.

LOCATION.--Lat 41°29'55", long 099°12'32", SW $\frac{1}{4}$ SW $\frac{1}{4}$, sec.30, T.18 N., R.16 W., Hydrologic Unit 10210003, 4 mi west and 5 mi north of Arcadia. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 0.75 in., depth 14 ft, screened from 12 to 14 ft.

DATUM.--Altitude of land-surface datum is 2,217.61 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

REMARKS.--Water levels in well affected by evapotranspiration.

PERIOD OF RECORD.--August 1949 to June 1956; June 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.25 ft below land-surface datum, May 3, 1983; lowest water level measured, 5.90 ft below land-surface datum, Mar. 1, 1973.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL
MAY 07	3.65

WEBSTER COUNTY

400423098314001. Local number 1N 11W 11AB.

LOCATION.--Lat 40°04'23", long 098°31'40", NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.11, T.1 N., R.11 W., Hydrologic Unit 10250016, 1 mi south and 0.25 mi west of intersection of U.S. Highways 136 and 281 in Red Cloud. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in., depth 16.9 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,686 ft. Measuring point: Top of casing 1.7 ft above land-surface datum.

PERIOD OF RECORD.--May 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.74 ft (corrected) below land-surface datum, July 11-12, 1951; lowest, 9.96 ft (corrected) below land-surface datum, Apr. 5, 1957.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL
MAY 14	5.64

YORK COUNTY

405305097351503. Local number 11N 2W 31BA3.

LOCATION.--Lat 40°53'05", long 097°35'15", NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.31, T.11 N., R.2 W., Hydrologic Unit 10270203, south edge of York County Fairgrounds on the north side of York. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in., depth 165 ft, perforated below water table.

DATUM.--Altitude of land-surface datum is 1,659 ft. Measuring point: Top of casing 1.6 ft above land-surface datum.

REMARKS.--Replacement for well 405305097351501, local number 11N 2W 31BA1, with period of record October 1957 to January 1969. Water levels in well affected by withdrawals from nearby municipal well and by withdrawals from nearby irrigation wells.

PERIOD OF RECORD.--May 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 78.96 ft below land-surface datum, Mar. 1, 1999; lowest, 120.81 ft below land-surface datum, July 15, 1974.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	84.13	DEC 03	81.90	FEB 18	82.41	APR 01	82.46	JUN 03	82.95	AUG 08	100.90
NOV 01	83.37	JAN 08	82.50	MAR 05	82.40	MAY 02	82.35	JUL 10	101.38	SEP 04	86.75
WATER YEAR 2002		HIGHEST	81.90	DEC 03, 2001	LOWEST	101.38	JUL 10, 2002				

PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT STUDY
WATER-QUALITY MONITORING

(Local identifier: indicates location by township, range, and section. Geologic unit: 110QRNR, Quaternary system deposits, undifferentiated; 112PLSC, Pleistocene series deposits; 112SDGV, Pleistocene sand and gravel deposits.)

COUNTIES.--Burt, Dakota, Douglas, Sarpy, Thurston, and Washington

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Station number	Local identifier	Latitude	Longitude	Geologic unit	Hydrologic unit code	Date	Time	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)
BURT COUNTY									
414645096134301	21N 11E19BBCD1	41 46 45 N	096 13 43 W	211DKOT	10230001	07-17-02	1410	172	1148
414850096133401	21N 11E 7BABB1	41 48 50 N	096 13 34 W	110QRNR	10230001	07-23-02	0945	115	1028
415023096190901	22N 10E32BA 1	41 50 23 N	096 19 09 W	--	--	07-02-02	1030	187	--
415043096172701	22N 10E28DDAC1	41 50 43 N	096 17 27 W	--	--	07-02-02	1210	80	1150
415835096190901	23N 10E 8DCBB1	41 58 35 N	096 19 09 W	--	--	07-01-02	1910	111	1200
420129096180101	24N 10E28CAAA1	42 01 29 N	096 18 01 W	--	--	07-01-02	1730	140	1200
DAKOTA COUNTY									
421749096312201	27N 7E21DADC1	42 17 49 N	096 31 22 W	--	--	07-01-02	1100	247	1410
421848096371801	27N 7E16CABD1	42 18 48 N	096 37 18 W	211DKOT	10230001	07-16-02	1125	565	1410
421917096333501	27N 7E13ABAC1	42 19 17 N	096 33 35 W	--	--	07-01-02	1240	193	1270
422316096353301	28N 7E22ADCD1	42 23 15 N	096 35 33 W	211DKOT	10230001	07-16-02	0840	149	1200
422618096401501	28N 6E36DCCD1	42 26 18 N	096 40 15 W	--	--	07-01-02	1420	61	1280
422722096392801	29N 7E30CACCC1	42 27 22 N	096 39 28 W	--	--	07-01-02	1520	100	1190
DOUGLAS COUNTY									
411218096082101	14N 11E11AAAA1	41 12 18 N	096 08 21 W	211DKOT	10200202	07-17-02	0950	290	1065.60
411500096160101	15N 10E23CDCB1	41 15 00 N	096 16 01 W	211DKOT	10220003	07-18-02	1400	50	1115
411738096140601	15N 10E 1DDAD1	41 17 38 N	096 14 06 W	211DKOT	10230006	07-18-02	1100	230	1282
412018096084501	16N 11E23DCBA1	41 20 18 N	096 08 47 W	110QRNR	10230006	07-18-02	1000	56	1090
SARPY COUNTY									
410350096081001	13N 11E25CBCD1	41 03 50 N	096 08 10 W	112SDGV	10200202	07-17-02	1500	66	1035
410503096073801	13N 11E24ACBD1	41 05 03 N	096 07 38 W	211DKOT	10200202	07-17-02	1330	195	1144
410651096134801	13N 11E 7BCAA1	41 06 51 N	096 13 48 W	112SDGV	10200202	07-16-02	1545	198	1270
410818096001201	14N 13E31CBBC1	41 08 18 N	096 00 12 W	211DKOT	10230006	07-16-02	0930	134	1078

CHEMICAL ANALYSES OF GROUND WATER

PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT STUDY--Continued
WATER-QUALITY MONITORING

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	FLOW RATE (G/M) (00059)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	PH WATER FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	
BURT COUNTY													
07-17-02	--	727	6.1	59	6.9	758	12.0	--	--	E8.33	--	--	
07-23-02	--	739	.2	2	7.0	858	12.0	--	--	E.03	--	--	
07-02-02	8.0	731	.1	1	7.1	855	12.5	.32	.41	<.05	<.008	.092	.03
07-02-02	--	--	.1	--	7.1	685	12.0	.20	.26	<.05	<.008	.181	.06
07-01-02	--	--	3.6	--	7.0	707	11.5	<.04	--	12.5	E.004	--	E.02
07-01-02	8.0	731	3.9	38	7.0	500	12.0	<.04	--	.55	<.008	--	E.01
DAKOTA COUNTY													
07-01-02	--	731	.1	1	7.0	802	12.5	.09	.11	E.04	<.008	--	E.01
07-16-02	--	730	M	0	7.1	1900	15.0	--	--	<.05	--	--	--
07-01-02	8.0	731	.1	1	7.0	771	13.0	.10	.13	<.05	<.008	--	E.01
07-16-02	--	730	3.1	30	7.0	806	12.0	--	--	E2.12	--	--	--
07-01-02	9.0	731	2.1	21	7.2	661	12.0	<.04	--	4.21	<.008	.264	.09
07-01-02	3.0	731	.1	1	7.3	663	12.5	<.04	--	<.05	<.008	.883	.29
DOUGLAS COUNTY													
07-17-02	--	--	4.5	--	7.2	606	13.5	--	--	E.27	--	--	--
07-18-02	1.0	--	--	--	7.2	--	--	--	--	<.05	--	--	--
07-18-02	--	--	5.9	--	7.0	754	12.5	--	--	E5.35	--	--	--
07-18-02	10.0	--	1.4	--	6.8	941	12.0	--	--	E13.4	--	--	--
SARPY COUNTY													
07-17-02	10.0	--	6.9	--	7.1	545	18.0	--	--	2.82	--	--	--
07-17-02	--	--	6.5	--	6.9	539	13.0	--	--	3.30	--	--	--
07-16-02	--	--	14.0	--	6.8	605	12.5	--	--	E11.1	--	--	--
07-16-02	10.0	--	9.0	--	7.0	463	13.0	--	--	E1.51	--	--	--

PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT STUDY--Continued
WATER-QUALITY MONITORING

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

VERNO-
LATE,
WATER,
DISS,
Date REC
(UG/L)
(04034)

BURT COUNTY

07-17-02 <.05
07-23-02 --
07-02-02 --
07-02-02 --
07-01-02 --
07-01-02 <.05

DAKOTA COUNTY

07-01-02 --
07-16-02 <.05
07-01-02 --
07-16-02 --
07-01-02 --
07-01-02 --

DOUGLAS COUNTY

07-17-02 <.05
07-18-02 --
07-18-02 --
07-18-02 --

SARPY COUNTY

07-17-02 --
07-17-02 --
07-16-02 --
07-16-02 --

Station number	Local ident- i- fier	Lat- i- tude	Long- i- tude	Geo- logic unit	Hydro- logic unit code	Date	Time	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)
THURSTON COUNTY									
420825096292401	25N 8E11DCCC1	42 08 25 N	096 29 24 W	112SDGV	--	07-16-02	1625	155	1227
420840096292402	25N 8E11DBCBC2	42 08 40 N	096 29 24 W	211DKOT	10230001	07-16-02	1740	200	1225
420844096245701	25N 9E16BAAA1	42 08 44 N	096 24 57 W	--	10230001	07-17-02	1135	--	1230
421412096282101	26N 8E12CDAD1	42 14 12 N	096 28 21 W	110SDGV	10230001	07-16-02	1345	275	1170
WASHINGTON COUNTY									
412454096122601	17N 11E29CABA1	41 24 54 N	096 12 26 W	112SDGV	10230006	08-09-02	0930	144	1160
413053096205401	18N 9E24DADA1	41 30 53 N	096 20 54 W	112SDGV	10220003	08-09-02	1130	131	1178
413656096230901	19N 9E14CBBB1	41 36 56 N	096 23 09 W	211DKOT	10220003	07-23-02	1200	398	--

CHEMICAL ANALYSES OF GROUND WATER

PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT STUDY--Continued
WATER-QUALITY MONITORING

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC (UG/L) (46342)	ALPHA- HCH, D6 SUR SCD 1379 WTR, FLTRD, REC PERCENT (UG/L) (90505) (38401)	AMETRYN WATER, DISS, REC (UG/L) (38401)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BRO- MACIL, WATER, DISS, REC (UG/L) (04029)	
THURSTON COUNTY													
07-16-02	730	.4	4	7.1	837	12.0	.03	--	--	--	--	--	--
07-16-02	730	.2	2	7.1	834	12.0	E.03	<.05	<.05	81.3	<.05	<.05	<.05
07-17-02	727	4.0	39	7.0	776	12.0	--	--	--	--	--	--	--
07-16-02	730	9.0	89	7.3	1610	13.0	<.05	--	--	--	--	--	--
WASHINGTON COUNTY													
08-09-02	--	16.4	--	7.2	650	--	8.15	<.05	<.05	77.6	<.05	M	<.05
08-09-02	--	3.6	--	7.6	924	--	E.04	<.05	<.05	77.3	<.05	<.05	<.05
07-23-02	739	4.6	45	7.2	1950	13.0	<.05	--	--	--	--	--	--
Date	BUTA- CHLOR, WATER, DISS, REC (UG/L) (04026)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BOXIN, WATER, DISS, REC (UG/L) (04027)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	CY- CLOATE, WATER, DISS, REC (UG/L) (04031)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DEISO- PROPYL WATER, DISS, REC (UG/L) (04038)	DIAZI- NON D10 SUR SCD 1379 WTR, FLTRD REC PERCENT (UG/L) (90670)	DIPHEN- AMID, WATER, DISS, REC (UG/L) (04033)	HEXA- ZINONE, WATER, DISS, REC (UG/L) (04025)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	PRO- METON, WATER, DISS, REC (UG/L) (04037)
THURSTON COUNTY													
07-16-02	--	--	--	--	--	--	--	--	--	--	--	--	--
07-16-02	<.05	<.05	<.05	<.02	<.05	<.05	<.05	91.4	<.05	<.05	<.05	<.05	<.05
07-17-02	--	--	--	--	--	--	--	--	--	--	--	--	--
07-16-02	--	--	--	--	--	--	--	--	--	--	--	--	--
WASHINGTON COUNTY													
08-09-02	<.05	<.05	<.05	<.02	<.05	E.02	.05	82.1	<.05	<.05	<.05	<.05	<.05
08-09-02	<.05	<.05	<.05	<.02	<.05	<.05	<.05	82.5	<.05	<.05	<.05	<.05	<.05
07-23-02	--	--	--	--	--	--	--	--	--	--	--	--	--
Date	PRO- METRYN, WATER, DISS, REC (UG/L) (04036)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PROP- AZINE WATER DISS REC (UG/L) (38535)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	SIMA- TRYN, WATER, DISS, REC (UG/L) (04030)	TER- BACIL, WATER, DISS, REC (UG/L) (04032)	TRI- FLUR- ALIN, WATER, DISS, REC (UG/L) (04023)	VERNO- LATE, WATER, DISS, REC (UG/L) (04034)					
THURSTON COUNTY													
07-16-02	--	--	--	--	--	--	--	--	--	--	--	--	--
07-16-02	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
07-17-02	--	--	--	--	--	--	--	--	--	--	--	--	--
07-16-02	--	--	--	--	--	--	--	--	--	--	--	--	--
WASHINGTON COUNTY													
08-09-02	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
08-09-02	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
07-23-02	--	--	--	--	--	--	--	--	--	--	--	--	--

Remark codes used in this report:

E -- Less than

E -- Estimated value

M -- Presence verified, not quantified

PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT STUDY
WATER QUALITY FROM WELL NESTS

(Local identifier: indicates location by township, range, and section. Geologic unit: 112SDGV, Pleistocene sand and gravel deposits; 211DKOT, Upper Cretaceous Dakota Formation deposits.)

COUNTIES.--Burt, Dakota, Douglas, Sarpy, Thurston, and Washington

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Station number	Local identifier	Latitude	Longitude	Geologic unit	Hydrologic unit code	Date	Time	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DEPTH OF WELL, TOTAL (FEET) (72008)
BURT COUNTY									
414700096134901	21N 11E19BBBC1	41 47 00 N	096 13 49 W	211DKOT	10230001	10-17-01	1530	47.33	171
		41 47 00 N	096 13 49 W	211DKOT	10230001	12-05-01	1545	47.13	171
		41 47 00 N	096 13 49 W	211DKOT	10230001	02-05-02	1600	46.91	171
		41 47 00 N	096 13 49 W	211DKOT	10230001	04-04-02	1630	45.51	171
		41 47 00 N	096 13 49 W	211DKOT	10230001	06-04-02	1750	45.34	171
		41 47 00 N	096 13 49 W	211DKOT	10230001	08-22-02	1600	24.66	171
414700096134902	21N 11E19BBBC2	41 47 00 N	096 13 49 W	211DKOT	10230001	10-17-01	1600	47.23	139
		41 47 00 N	096 13 49 W	211DKOT	10230001	12-05-01	1615	47.05	139
		41 47 00 N	096 13 49 W	211DKOT	10230001	02-05-02	1630	46.95	139
		41 47 00 N	096 13 49 W	211DKOT	10230001	04-04-02	1700	45.23	139
		41 47 00 N	096 13 49 W	211DKOT	10230001	06-04-02	1830	44.99	139
		41 47 00 N	096 13 49 W	211DKOT	10230001	08-22-02	1635	64.63	139
414700096134903	21N 11E19BBBC3	41 47 00 N	096 13 49 W	211DKOT	10230001	10-17-01	1620	37.61	80
		41 47 00 N	096 13 49 W	211DKOT	10230001	12-05-01	1630	38.72	80
		41 47 00 N	096 13 49 W	211DKOT	10230001	02-05-02	1640	38.68	80
		41 47 00 N	096 13 49 W	211DKOT	10230001	04-04-02	1720	38.82	80
		41 47 00 N	096 13 49 W	211DKOT	10230001	06-04-02	1850	38.54	80
		41 47 00 N	096 13 49 W	211DKOT	10230001	08-22-02	1700	39.90	80
DAKOTA COUNTY									
422035096281901	27N 8E 1ACCC1	42 20 35 N	096 28 19 W	112SDGV	10230001	10-17-01	1300	21.77	129
		42 20 35 N	096 28 19 W	112SDGV	10230001	12-05-01	1330	21.41	129
		42 20 35 N	096 28 19 W	112SDGV	10230001	02-05-02	1330	21.23	129
		42 20 35 N	096 28 19 W	112SDGV	10230001	04-04-02	1330	22.71	129
		42 20 35 N	096 28 19 W	112SDGV	10230001	06-04-02	1440	22.27	129
		42 20 35 N	096 28 19 W	112SDGV	10230001	08-22-02	0805	22.47	129
422035096281902	27N 8E 1ACCC2	42 20 35 N	096 28 19 W	112SDGV	10230001	10-17-01	1320	22.05	93
		42 20 35 N	096 28 19 W	112SDGV	10230001	12-05-01	1350	21.55	93
		42 20 35 N	096 28 19 W	112SDGV	10230001	02-05-02	1350	21.47	93
		42 20 35 N	096 28 19 W	112SDGV	10230001	04-04-02	1400	22.51	93
		42 20 35 N	096 28 19 W	112SDGV	10230001	06-04-02	1510	22.34	93
		42 20 35 N	096 28 19 W	112SDGV	10230001	08-22-02	0840	22.53	93
422035096281903	27N 8E 1ACCC3	42 20 35 N	096 28 19 W	112SDGV	10230001	10-17-01	1340	21.92	53
		42 20 35 N	096 28 19 W	112SDGV	10230001	12-05-01	1400	21.72	53
		42 20 35 N	096 28 19 W	112SDGV	10230001	02-05-02	1400	21.56	53
		42 20 35 N	096 28 19 W	112SDGV	10230001	04-04-02	1410	22.28	53
		42 20 35 N	096 28 19 W	112SDGV	10230001	06-04-02	1530	22.10	53
		42 20 35 N	096 28 19 W	112SDGV	10230001	08-22-02	0900	22.23	53
DOUGLAS COUNTY									
411231096193201	14N 10E 5CBDD1	41 12 31 N	096 19 32 W	112SDGV	10220003	10-16-01	1415	5.38	98
		41 12 31 N	096 19 32 W	112SDGV	10220003	12-04-01	1340	6.79	98
		41 12 31 N	096 19 32 W	112SDGV	10220003	02-04-02	1320	6.62	98
		41 12 31 N	096 19 32 W	112SDGV	10220003	04-03-02	1400	5.80	98
		41 12 31 N	096 19 32 W	112SDGV	10220003	06-03-02	1720	5.98	98
		41 12 31 N	096 19 32 W	112SDGV	10220003	08-21-02	1805	6.78	98
411231096193202	14N 10E 5CBDD2	41 12 31 N	096 19 32 W	112SDGV	10220003	10-16-01	1430	5.61	58
		41 12 31 N	096 19 32 W	112SDGV	10220003	12-04-01	1400	6.76	58
		41 12 31 N	096 19 32 W	112SDGV	10220003	02-04-02	1340	6.83	58
		41 12 31 N	096 19 32 W	112SDGV	10220003	04-03-02	1420	5.98	58
		41 12 31 N	096 19 32 W	112SDGV	10220003	06-03-02	1750	5.96	58

CHEMICAL ANALYSES OF GROUND WATER

PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT STUDY--Continued
WATER QUALITY FROM WELL NESTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	FLOW RATE (G/M) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	SAM- PLING METHOD, CODES (82398)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED CENT SATUR- ATION (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	
BURT COUNTY													
10-17-01	1135	6.0	40	4040	730	.2		7.1	--	--	--	12.0	
12-05-01	1135	7.0	36	4040	720	.4		7.0	--	--	--	12.2	
02-05-02	1135	6.0	45	4040	730	.1	0	7.1	--	--	1000	12.0	
04-04-02	1135	7.0	35	4040	740	.2	2	7.1	--	--	1140	12.5	
06-04-02	1135	6.0	41	4040	724	.2	2	7.0	7.3	1080	1150	21.0	12.0
08-22-02	1135	6.0	48	4040	730	1.0	10	7.0	--	--	1200	31.0	12.5
10-17-01	1135	6.0	30	4040	730	.1		7.0	--	--	--	12.0	
12-05-01	1135	6.0	30	4040	720	.1		7.0	--	--	--	12.0	
02-05-02	1135	6.0	30	4040	730	.1		6.9	--	--	--	12.0	
04-04-02	1135	7.0	26	4040	740	.2	2	7.0	--	--	1050	12.5	
06-04-02	1135	5.0	37	4040	724	.1	1	7.0	7.2	1000	1070	21.0	12.0
08-22-02	1135	6.0	24	4040	730	.3	3	7.0	--	--	1080	31.0	12.5
10-17-01	1135	6.0	10	4040	730	8.5		7.2	--	--	--	12.5	
12-05-01	1135	6.0	10	4040	720	7.3		7.2	--	--	--	12.2	
02-05-02	1135	7.0	15	4040	730	4.7	46	7.1	--	--	945	12.0	
04-04-02	1135	7.0	15	4040	740	12.9	125	7.2	--	--	924	12.5	
06-04-02	1135	6.0	15	4040	724	8.8	87	7.2	7.4	875	921	21.0	12.5
08-22-02	1135	6.0	15	4040	730	9.3	92	7.0	--	--	927	31.0	12.5
DAKOTA COUNTY													
10-17-01	1092	7.0	30	4040	729	.1		7.1	--	--	--	12.0	
12-05-01	1092	7.0	26	4040	724	.2		7.0	--	--	--	11.5	
02-05-02	1092	7.0	35	4040	729	.1	0	7.1	7.3	1130	1160	11.5	
04-04-02	1092	6.0	35	4040	739	.1	1	7.0	--	--	1100	12.0	
06-04-02	1092	7.0	30	4040	724	.2	2	7.1	--	--	1200	21.0	12.0
08-22-02	1092	7.0	30	4040	730	.1	1	7.0	--	--	1240	22.0	11.5
10-17-01	1092	7.0	20	4040	729	.1		7.1	--	--	--	11.5	
12-05-01	1092	6.0	20	4040	724	.2		7.1	--	--	--	11.5	
02-05-02	1092	7.0	20	4040	729	.1	0	7.2	7.3	899	918	11.5	
04-04-02	1092	5.0	30	4040	739	.1	1	7.1	--	--	875	11.5	
06-04-02	1092	6.0	25	4040	724	.7	7	7.1	--	--	915	21.0	11.5
08-22-02	1092	6.0	25	4040	730	.5	5	7.1	--	--	936	22.0	11.5
10-17-01	1092	7.0	10	4040	729	1.9		7.1	--	--	--	11.5	
12-05-01	1092	7.0	8	4040	724	1.1		7.1	--	--	--	11.5	
02-05-02	1092	7.0	10	4040	729	.5	5	7.2	7.2	1090	1030	11.5	
04-04-02	1092	6.0	10	4040	739	.7	7	7.1	--	--	1090	11.5	
06-04-02	1092	5.0	15	4040	724	1.9	19	7.1	--	--	1150	21.0	12.0
08-22-02	1092	6.0	10	4040	730	1.9	18	7.0	--	--	1160	22.0	12.0
DOUGLAS COUNTY													
10-16-01	1107	7.0	30	4040	742	.1	--	7.2	7.6	566	S566	--	12.0
12-04-01	1107	7.0	25	4040	731	.2		7.1	--	--	--	12.0	
02-04-02	1107	7.0	30	4040	734	.1	0	7.3	--	--	560	12.0	
04-03-02	1107	7.0	30	4040	744	.1	0	7.3	--	--	549	12.0	
06-03-02	1107	7.0	30	4040	711	.1	0	7.3	--	--	565	31.5	12.0
08-21-02	1107	6.0	30	4040	727	.1	1	7.3	--	--	577	31.5	12.0
10-16-01	1107	7.0	15	4040	742	.1	--	7.3	7.5	589	S589	--	12.5
12-04-01	1107	7.0	15	4040	731	.1		7.3	--	--	--	12.0	
02-04-02	1107	7.0	15	4040	734	.1	0	7.4	--	--	570	12.0	
04-03-02	1107	7.0	20	4040	744	.1	0	7.3	--	--	561	12.0	
06-03-02	1107	7.0	15	4040	711	.1	0	7.3	--	--	598	31.5	12.0

CHEMICAL ANALYSES OF GROUND WATER

PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT STUDY--Continued
WATER QUALITY FROM WELL NESTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS NH4) (71846)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L) AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L) AS NO3) (71851)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS NO2) (71856)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS N) (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L) AS PO4) (00660)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L) AS P) (00671)	CARBON DIOXIDE SOLVED (MG/L) AS CO2) (00405)	IRON, DIS- SOLVED (UG/L) AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L) AS MN) (01056)
BURT COUNTY													
10-17-01	--	--	--	--	--	.29	--	--	--	--	--	--	--
12-05-01	--	--	--	--	--	2.16	--	--	--	--	--	--	--
02-05-02	--	--	--	--	--	<.05	--	--	--	--	--	--	--
04-04-02	--	.40	.52	--	--	<.05	--	<.008	--	<.02	--	--	--
06-04-02	750	--	--	--	--	<.05	--	--	--	--	55	91	1150
08-22-02	--	.29	.37	--	--	E.05	--	<.008	--	E.01	--	--	--
10-17-01	--	--	--	--	--	<.05	--	--	--	--	--	--	--
12-05-01	--	--	--	--	--	.18	--	--	--	--	--	--	--
02-05-02	--	--	--	--	--	<.05	--	--	--	--	--	--	--
04-04-02	--	.24	.31	--	--	<.05	--	<.008	.074	.02	--	--	--
06-04-02	691	--	--	--	--	<.05	--	--	--	--	57	147	295
08-22-02	--	.11	.14	--	--	.05	--	<.008	--	E.01	--	--	--
10-17-01	--	--	--	--	--	21.3	--	--	--	--	--	--	--
12-05-01	--	--	--	--	--	21.2	--	--	--	--	--	--	--
02-05-02	--	--	--	--	--	22.6	--	--	--	--	--	--	--
04-04-02	--	<.04	--	--	--	22.7	--	<.008	3.07	1.00	--	--	--
06-04-02	566	--	--	--	--	20.0	--	--	--	--	45	E5	5.3
08-22-02	--	<.04	--	--	--	40.6	--	<.008	.273	.09	--	--	--
DAKOTA COUNTY													
10-17-01	--	--	--	--	--	E.03	--	--	--	--	--	--	--
12-05-01	--	--	--	--	--	<.05	--	--	--	--	--	--	--
02-05-02	767	--	--	--	--	<.05	--	--	--	--	51	5420	353
04-04-02	--	.47	.60	--	--	<.05	--	E.006	.071	.02	--	--	--
06-04-02	--	--	--	--	--	<.05	--	--	--	--	--	--	--
08-22-02	--	.49	.63	--	--	<.05	--	<.008	--	E.02	--	--	--
10-17-01	--	--	--	--	--	<.05	--	--	--	--	--	--	--
12-05-01	--	--	--	--	--	<.05	--	--	--	--	--	--	--
02-05-02	569	--	--	--	--	<.05	--	--	--	--	56	5470	469
04-04-02	--	.41	.53	--	--	<.05	--	<.008	.184	.06	--	--	--
06-04-02	--	--	--	--	--	<.05	--	--	--	--	--	--	--
08-22-02	--	.27	.34	--	--	<.05	--	<.008	--	E.01	--	--	--
10-17-01	--	--	--	--	--	.06	--	--	--	--	--	--	--
12-05-01	--	--	--	--	--	<.05	--	--	--	--	--	--	--
02-05-02	687	--	--	--	--	<.05	--	--	--	--	69	8290	994
04-04-02	--	.10	.14	--	--	<.05	--	<.008	--	<.02	--	--	--
06-04-02	--	--	--	--	--	<.05	--	--	--	--	--	--	--
08-22-02	--	.10	.13	--	--	<.05	--	<.008	.077	.03	--	--	--
DOUGLAS COUNTY													
10-16-01	369	--	--	--	--	2.79	--	--	--	--	21	13	48.2
12-04-01	--	--	--	--	--	2.76	--	--	--	--	--	--	--
02-04-02	--	--	--	--	--	2.78	--	--	--	--	--	--	--
04-03-02	--	<.04	--	2.59	11.5	2.60	.030	.009	.313	.10	--	--	--
06-03-02	--	--	--	--	--	2.50	--	--	--	--	--	--	--
08-21-02	--	<.04	--	--	--	.68	--	E.007	.141	.05	--	--	--
10-16-01	346	--	--	--	--	2.83	--	--	--	--	17	E6	220
12-04-01	--	--	--	--	--	2.96	--	--	--	--	--	--	--
02-04-02	--	--	--	--	--	2.83	--	--	--	--	--	--	--
04-03-02	--	<.04	--	3.37	14.9	3.39	.089	.027	.227	.07	--	--	--
06-03-02	--	--	--	--	--	3.14	--	--	--	--	--	--	--

PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT STUDY--Continued
WATER QUALITY FROM WELL NESTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Station number	Local identifier	Latitude	Longitude	Geologic unit	Hydrologic unit code	Date	Time	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DEPTH OF WELL, TOTAL (FEET) (72008)	
DOUGLAS COUNTY										
411231096193202	14N 10E 5CBDD2	41 12 31 N	096 19 32 W	112SDGV	10220003	08-21-02	1830	6.88	58	
411231096193203	14N 10E 5CBDB3	41 12 31 N	096 19 32 W	112SDGV	10220003	10-16-01	1440	6.14	22	
		41 12 31 N	096 19 32 W	112SDGV	10220003	12-04-01	1410	7.15	22	
		41 12 31 N	096 19 32 W	112SDGV	10220003	02-04-02	1350	7.19	22	
		41 12 31 N	096 19 32 W	112SDGV	10220003	04-03-02	1430	5.73	22	
		41 12 31 N	096 19 32 W	112SDGV	10220003	06-03-02	1810	5.83	22	
		41 12 31 N	096 19 32 W	112SDGV	10220003	08-21-02	1845	6.65	22	
412151096180801	16N 10E16BAAA1	41 21 51 N	096 18 08 W	112SDGV	10220003	10-18-01	1250	5.26	33	
		41 21 51 N	096 18 08 W	112SDGV	10220003	12-06-01	1240	5.12	33	
		41 21 51 N	096 18 08 W	112SDGV	10220003	02-06-02	1320	5.06	33	
		41 21 51 N	096 18 08 W	112SDGV	10220003	04-05-02	1400	6.98	33	
		41 21 51 N	096 18 08 W	112SDGV	10220003	06-05-02	1300	8.69	33	
		41 21 51 N	096 18 08 W	112SDGV	10220003	08-25-02	1115	10.43	33	
412151096180802	16N 10E16BAAA2	41 21 51 N	096 18 08 W	112SDGV	10220003	10-18-01	1300	5.38	25	
		41 21 51 N	096 18 08 W	112SDGV	10220003	12-06-01	1250	5.30	25	
		41 21 51 N	096 18 08 W	112SDGV	10220003	02-06-02	1330	5.48	25	
		41 21 51 N	096 18 08 W	112SDGV	10220003	04-05-02	1410	6.73	25	
		41 21 51 N	096 18 08 W	112SDGV	10220003	06-05-02	1320	8.43	25	
		41 21 51 N	096 18 08 W	112SDGV	10220003	08-25-02	1140	10.19	25	
SARPY COUNTY										
410243096082001	12N 11E 1BBBB1	41 02 43 N	096 08 20 W	112SDGV	10200202	10-16-01	1200	13.15	83	
		41 02 43 N	096 08 20 W	112SDGV	10200202	12-04-01	1120	15.74	83	
		41 02 43 N	096 08 20 W	112SDGV	10200202	02-04-02	1120	15.51	83	
		41 02 43 N	096 08 20 W	112SDGV	10200202	04-03-02	1120	15.25	83	
		41 02 43 N	096 08 20 W	112SDGV	10200202	06-03-02	1500	15.58	83	
		41 02 43 N	096 08 20 W	112SDGV	10200202	08-21-02	1425	17.09	83	
410243096082002	12N 11E 1BBBB2	41 02 43 N	096 08 20 W	112SDGV	10200202	10-16-01	1220	13.15	70	
		41 02 43 N	096 08 20 W	112SDGV	10200202	12-04-01	1140	15.65	70	
		41 02 43 N	096 08 20 W	112SDGV	10200202	02-04-02	1140	15.50	70	
		41 02 43 N	096 08 20 W	112SDGV	10200202	04-03-02	1140	14.98	70	
		41 02 43 N	096 08 20 W	112SDGV	10200202	06-03-02	1530	15.38	70	
		41 02 43 N	096 08 20 W	112SDGV	10200202	08-21-02	1455	16.96	70	
410243096082003	12N 11E 1BBBB3	41 02 43 N	096 08 20 W	112SDGV	10200202	10-16-01	1240	13.22	55	
		41 02 43 N	096 08 20 W	112SDGV	10200202	12-04-01	1200	15.32	55	
		41 02 43 N	096 08 20 W	112SDGV	10200202	02-04-02	1200	15.52	55	
		41 02 43 N	096 08 20 W	112SDGV	10200202	04-03-02	1200	14.98	55	
		41 02 43 N	096 08 20 W	112SDGV	10200202	06-03-02	1550	15.13	55	
		41 02 43 N	096 08 20 W	112SDGV	10200202	08-21-02	1525	16.66	55	
410334096182801	13N 10E33BBAB1	41 03 34 N	096 18 28 W	112SDGV	10200202	10-16-01	0945	3.39	55	
		41 03 34 N	096 18 28 W	112SDGV	10200202	12-04-01	0840	--	55	
		41 03 34 N	096 18 28 W	112SDGV	10200202	02-04-02	0930	3.20	55	
		41 03 34 N	096 18 28 W	112SDGV	10200202	04-03-02	0900	4.12	55	
		41 03 34 N	096 18 28 W	112SDGV	10200202	06-18-02	1420	--	55	
		41 03 34 N	096 18 28 W	112SDGV	10200202	08-21-02	1055	5.92	55	
410334096182802	13N 10E33BBAB2	41 03 34 N	096 18 28 W	112SDGV	10200202	10-16-01	1000	3.80	37.5	
		41 03 34 N	096 18 28 W	112SDGV	10200202	12-04-01	0850	3.58	37.5	
		41 03 34 N	096 18 28 W	112SDGV	10200202	02-04-02	0940	3.54	37.5	
		41 03 34 N	096 18 28 W	112SDGV	10200202	04-03-02	0920	4.50	37.5	
		41 03 34 N	096 18 28 W	112SDGV	10200202	06-18-02	1450	--	37.5	
		41 03 34 N	096 18 28 W	112SDGV	10200202	08-21-02	1120	6.69	37.5	

CHEMICAL ANALYSES OF GROUND WATER

PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT STUDY--Continued
WATER QUALITY FROM WELL NESTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	FLOW RATE (G/M) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	SAM- PLING METHOD, CODES (82398)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	
DOUGLAS COUNTY													
08-21-02	1107	6.0	15	4040	727	.1	1	7.3	--	--	604	31.5	12.5
10-16-01	1107	7.0	5	4040	742	.6	--	6.8	7.1	384	S384	--	14.0
12-04-01	1107	7.0	5	4040	731	.6	6	6.9	--	--	502	--	14.0
02-04-02	1107	6.0	10	4040	734	.1	--	7.0	--	--	--	--	12.5
04-03-02	1107	7.0	10	4040	744	.1	0	6.9	--	--	460	--	11.5
06-03-02	1107	6.0	6	4040	711	.6	6	6.8	--	--	488	31.5	11.0
08-21-02	1107	7.0	5	4040	727	.7	7	6.9	--	--	476	31.5	13.0
10-18-01	1136	7.0	10	4040	728	1.2	--	7.2	7.5	554	S554	--	12.0
12-06-01	1136	7.0	10	4040	725	1.3	12	7.2	--	--	540	--	12.5
02-06-02	1136	6.0	10	4040	732	.8	8	7.2	--	--	556	--	12.0
04-05-02	1136	7.0	10	4040	730	1.2	11	7.2	--	--	535	--	12.0
06-05-02	1136	6.0	10	4040	740	1.3	12	7.3	--	--	542	25.0	11.5
08-25-02	1136	6.0	8	4040	730	1.4	13	7.3	--	--	562	29.0	12.0
10-18-01	1136	7.0	10	4040	728	.7	--	7.2	7.5	583	S583	--	12.0
12-06-01	1136	7.0	10	4040	725	.5	5	7.2	--	--	564	--	12.0
02-06-02	1136	6.0	10	4040	732	.3	3	7.2	--	--	590	--	12.0
04-05-02	1136	7.0	10	4040	730	.4	4	7.2	--	--	561	--	12.0
06-05-02	1136	6.0	10	4040	740	.7	6	7.2	--	--	578	25.0	12.0
08-25-02	1136	6.0	5	4040	730	.2	2	7.2	--	--	599	29.0	12.0
SARPY COUNTY													
10-16-01	1020	7.0	20	4040	742	5.8	--	7.0	--	--	--	--	12.5
12-04-01	1020	7.0	20	4040	732	6.4	--	7.2	7.4	515	S515	--	12.5
02-04-02	1020	7.0	20	4040	734	4.0	39	7.2	--	--	511	--	12.5
04-03-02	1020	7.0	20	4040	745	5.7	55	7.1	--	--	508	--	12.5
06-03-02	1020	5.0	27	4040	711	7.5	76	7.2	--	--	510	31.5	12.5
08-21-02	1020	6.0	22	4040	727	6.4	63	7.1	--	--	521	30.0	12.5
10-16-01	1020	7.0	18	4040	742	5.7	--	7.1	--	--	--	--	12.5
12-04-01	1020	7.0	20	4040	732	6.1	--	7.1	7.4	516	S516	--	12.5
02-04-02	1020	6.0	20	4040	734	3.7	36	7.1	--	--	512	--	12.5
04-03-02	1020	7.0	15	4040	745	5.2	50	7.1	--	--	494	--	12.5
06-03-02	1020	6.0	20	4040	711	5.8	58	7.1	--	--	509	31.5	12.5
08-21-02	1020	6.0	20	4040	727	6.0	59	7.1	--	--	521	30.0	12.5
10-16-01	1020	7.0	12	4040	742	2.9	--	7.1	--	--	--	--	12.5
12-04-01	1020	7.0	12	4040	732	3.6	--	7.0	7.5	504	S504	--	12.5
02-04-02	1020	7.0	20	4040	734	2.0	20	7.2	--	--	496	--	12.5
04-03-02	1020	7.0	12	4040	745	2.0	19	7.1	--	--	485	--	12.5
06-03-02	1020	6.0	17	4040	711	3.8	38	7.1	--	--	498	31.5	12.5
08-21-02	1020	6.0	15	4040	727	3.9	39	7.1	--	--	514	30.0	13.0
10-16-01	1055	7.0	15	4040	742	.1	--	7.5	--	--	--	--	12.5
12-04-01	1055	--	--	4040	731	.2	--	7.5	7.7	489	S489	--	12.5
02-04-02	1055	7.0	15	4040	734	.3	3	7.4	--	--	490	--	12.0
04-03-02	1055	7.0	20	4040	745	.7	7	7.2	--	--	487	--	12.5
06-18-02	1055	--	--	4040	727	.1	0	7.6	--	--	496	--	13.0
08-21-02	1055	7.0	15	4040	727	.1	1	7.5	--	--	496	25.5	13.0
10-16-01	1055	7.0	10	4040	742	.1	0	7.5	--	--	450	--	12.5
12-04-01	1055	6.0	10	4040	731	.8	8	7.4	7.6	491	462	--	12.5
02-04-02	1055	7.0	10	4040	734	.4	--	7.5	--	--	--	--	12.5
04-03-02	1055	7.0	20	4040	745	.3	3	7.4	--	--	458	--	12.5
06-18-02	1055	--	--	4040	727	.7	7	7.5	--	--	511	--	13.0
08-21-02	1055	7.0	8	4040	727	.2	2	7.3	--	--	502	25.5	13.0

CHEMICAL ANALYSES OF GROUND WATER

PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT STUDY--Continued
WATER QUALITY FROM WELL NESTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS NH4) (71846)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L) AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L) AS NO3) (71851)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS NO2) (71856)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS N) (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L) AS PO4) (00660)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L) AS P) (00671)	CARBON DIOXIDE DIS- SOLVED (MG/L) AS CO2) (00405)	IRON, DIS- SOLVED (UG/L) AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L) AS MN) (01056)
DOUGLAS COUNTY													
08-21-02	--	<.04	--	.61	2.69	.62	.036	.011	--	E.01	--	--	--
10-16-01	246	--	--	--	--	3.02	--	--	--	--	30	E6	332
12-04-01	--	--	--	--	--	2.75	--	--	--	--	--	--	--
02-04-02	--	--	--	--	--	3.45	--	--	--	--	--	--	--
04-03-02	--	<.04	--	2.69	11.9	2.77	.253	.077	.077	.03	--	--	--
06-03-02	--	--	--	--	--	1.05	--	--	--	--	--	--	--
08-21-02	--	<.04	--	.41	1.83	.44	.099	.030	--	E.01	--	--	--
10-18-01	344	--	--	--	--	<.05	--	--	--	--	27	1780	1110
12-06-01	--	--	--	--	--	<.05	--	--	--	--	--	--	--
02-06-02	--	--	--	--	--	<.05	--	--	--	--	--	--	--
04-05-02	--	.22	.28	--	--	<.05	--	<.008	1.03	.34	--	--	--
06-05-02	--	--	--	--	--	<.05	--	--	--	--	--	--	--
08-25-02	--	.13	.16	--	--	<.05	--	<.008	.708	.23	--	--	--
10-18-01	367	--	--	--	--	<.05	--	--	--	--	30	2120	1590
12-06-01	--	--	--	--	--	<.05	--	--	--	--	--	--	--
02-06-02	--	--	--	--	--	<.05	--	--	--	--	--	--	--
04-05-02	--	.32	.41	--	--	<.05	--	<.008	1.12	.36	--	--	--
06-05-02	--	--	--	--	--	E.02	--	--	--	--	--	--	--
08-25-02	--	.09	.12	--	--	<.05	--	<.008	.806	.26	--	--	--
SARPY COUNTY													
10-16-01	--	--	--	--	--	5.00	--	--	--	--	--	--	--
12-04-01	315	--	--	--	--	5.67	--	--	--	--	28	<10	3.2
02-04-02	--	--	--	--	--	5.63	--	--	--	--	--	--	--
04-03-02	--	<.04	--	--	--	5.75	--	<.008	.445	.14	--	--	--
06-03-02	--	--	--	--	--	5.95	--	--	--	--	--	--	--
08-21-02	--	<.04	--	--	--	6.09	--	E.004	.377	.12	--	--	--
10-16-01	--	--	--	--	--	5.68	--	--	--	--	--	--	--
12-04-01	317	--	--	--	--	5.84	--	--	--	--	32	<10	E1.0
02-04-02	--	--	--	--	--	5.90	--	--	--	--	--	--	--
04-03-02	--	<.04	--	--	--	5.88	--	<.008	.524	.17	--	--	--
06-03-02	--	--	--	--	--	5.70	--	--	--	--	--	--	--
08-21-02	--	<.04	--	--	--	5.83	--	E.004	.377	.12	--	--	--
10-16-01	--	--	--	--	--	2.42	--	--	--	--	--	--	--
12-04-01	313	--	--	--	--	2.46	--	--	--	--	41	187	192
02-04-02	--	--	--	--	--	2.45	--	--	--	--	--	--	--
04-03-02	--	.06	.07	--	--	2.57	--	<.008	2.00	.65	--	--	--
06-03-02	--	--	--	--	--	2.81	--	--	--	--	--	--	--
08-21-02	--	<.04	--	--	--	2.85	--	<.008	1.67	.54	--	--	--
10-16-01	--	--	--	--	--	<.05	--	--	--	--	--	--	--
12-04-01	299	--	--	--	--	<.05	--	--	--	--	13	1080	664
02-04-02	--	--	--	--	--	<.05	--	--	--	--	--	--	--
04-03-02	--	.53	.68	--	--	<.05	--	<.008	.494	.16	--	--	--
06-18-02	--	--	--	--	--	<.05	--	--	--	--	--	--	--
08-21-02	--	.53	.69	--	--	<.05	--	<.008	.261	.09	--	--	--
10-16-01	--	--	--	--	--	<.05	--	--	--	--	--	--	--
12-04-01	298	--	--	--	--	<.05	--	--	--	--	15	1930	777
02-04-02	--	--	--	--	--	<.05	--	--	--	--	--	--	--
04-03-02	--	.28	.35	--	--	<.05	--	<.008	.058	.02	--	--	--
06-18-02	--	--	--	--	--	<.05	--	--	--	--	--	--	--
08-21-02	--	.19	.24	--	--	E.02	--	<.008	--	E.01	--	--	--

PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT STUDY--Continued
WATER QUALITY FROM WELL NESTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Station number	Local identifier	Latitude	Longitude	Geologic unit	Hydrologic unit code	Date	Time	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DEPTH OF WELL, TOTAL (FEET) (72008)
SARPY COUNTY									
410334096182803	13N 10E33BBAB3	41 03 34 N	096 18 28 W	112SDGV	10200202	10-16-01	1010	3.50	21
		41 03 34 N	096 18 28 W	112SDGV	10200202	12-04-01	0900	3.29	21
		41 03 34 N	096 18 28 W	112SDGV	10200202	02-04-02	0950	3.26	21
		41 03 34 N	096 18 28 W	112SDGV	10200202	04-03-02	0930	4.93	21
		41 03 34 N	096 18 28 W	112SDGV	10200202	06-18-02	1620	--	21
41 03 34 N	096 18 28 W	112SDGV	10200202	08-21-02	1135	6.83	21		
THURSTON COUNTY									
420840096290901	25N 8E14ADBA1	42 08 40 N	096 29 09 W	211DKOT	10230001	10-17-01	1020	13.40	162
		42 08 40 N	096 29 09 W	211DKOT	10230001	12-05-01	1030	14.29	162
		42 08 40 N	096 29 09 W	211DKOT	10230001	02-05-02	1050	14.22	162
		42 08 40 N	096 29 09 W	211DKOT	10230001	04-04-02	1030	15.21	162
		42 08 40 N	096 29 09 W	211DKOT	10230001	06-04-02	1120	15.93	162
42 08 40 N	096 29 09 W	211DKOT	10230001	08-22-02	1125	15.71	162		
420840096290902	25N 8E14ADBA2	42 08 40 N	096 29 09 W	211DKOT	10230001	10-17-01	1100	13.76	133
		42 08 40 N	096 29 09 W	211DKOT	10230001	12-05-01	1110	14.66	133
		42 08 40 N	096 29 09 W	211DKOT	10230001	02-05-02	1130	14.58	133
		42 08 40 N	096 29 09 W	211DKOT	10230001	04-04-02	1120	14.87	133
		42 08 40 N	096 29 09 W	211DKOT	10230001	06-04-02	1210	15.58	133
42 08 40 N	096 29 09 W	211DKOT	10230001	08-22-02	1215	15.36	133		
420840096290903	25N 8E14ADBA3	42 08 40 N	096 29 09 W	211DKOT	10230001	10-17-01	1130	13.68	104.5
		42 08 40 N	096 29 09 W	211DKOT	10230001	12-05-01	1140	14.60	104.5
		42 08 40 N	096 29 09 W	211DKOT	10230001	02-05-02	1200	14.60	104.5
		42 08 40 N	096 29 09 W	211DKOT	10230001	04-04-02	1150	15.34	104.5
		42 08 40 N	096 29 09 W	211DKOT	10230001	06-04-02	1250	16.05	104.5
42 08 40 N	096 29 09 W	211DKOT	10230001	08-22-02	1250	15.01	104.5		
WASHINGTON COUNTY									
412527096081201	17N 11E24CCBC1	41 25 27 N	096 08 12 W	112SDGV	10230006	10-18-01	1110	162.20	225
		41 25 27 N	096 08 12 W	112SDGV	10230006	12-06-01	1040	168.56	225
		41 25 27 N	096 08 12 W	112SDGV	10230006	02-06-02	1130	168.28	225
		41 25 27 N	096 08 12 W	112SDGV	10230006	04-05-02	1130	161.51	225
		41 25 27 N	096 08 12 W	112SDGV	10230006	06-05-02	1100	161.48	225
41 25 27 N	096 08 12 W	112SDGV	10230006	08-23-02	1520	164.03	225		
412527096081202	17N 11E24CCBC2	41 25 27 N	096 08 12 W	112SDGV	10230006	10-18-01	1140	160.20	193.5
		41 25 27 N	096 08 12 W	112SDGV	10230006	12-06-01	1110	164.58	193.5
		41 25 27 N	096 08 12 W	112SDGV	10230006	02-06-02	1200	164.47	193.5
		41 25 27 N	096 08 12 W	112SDGV	10230006	04-05-02	1200	160.30	193.5
		41 25 27 N	096 08 12 W	112SDGV	10230006	06-05-02	1130	159.65	193.5
41 25 27 N	096 08 12 W	112SDGV	10230006	08-23-02	1705	163.05	193.5		
412527096081203	17N 11E24CCBC3	41 25 27 N	096 08 12 W	112SDGV	10230006	04-05-02	1220	160.15	168
		41 25 27 N	096 08 12 W	112SDGV	10230006	06-05-02	1140	159.02	168
		41 25 27 N	096 08 12 W	112SDGV	10230006	08-23-02	1730	161.87	168
412637095565901	17N 13E16BDAA1	41 26 37 N	095 56 59 W	112SDGV	10230006	10-18-01	0840	8.76	100
		41 26 37 N	095 56 59 W	112SDGV	10230006	12-06-01	0830	8.38	100
		41 26 37 N	095 56 59 W	112SDGV	10230006	02-06-02	0850	8.82	100
		41 26 37 N	095 56 59 W	112SDGV	10230006	04-05-02	0840	10.90	100
		41 26 37 N	095 56 59 W	112SDGV	10230006	06-05-02	0820	11.02	100
41 26 37 N	095 56 59 W	112SDGV	10230006	08-23-02	1910	10.18	100		

CHEMICAL ANALYSES OF GROUND WATER

PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT STUDY--Continued
WATER QUALITY FROM WELL NESTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	FLOW RATE (G/M) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	SAM- PLING METHOD, CODES (82398)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)
SARPY COUNTY													
10-16-01	1055	7.0	5	4040	742	.1		7.3	--	--	--	--	13.5
12-04-01	1055	7.0	5	4040	731	.5	--	7.2	7.5	587	S587	--	14.0
02-04-02	1055	7.0	5	4040	734	.3	3	7.2	--	--	608	--	12.5
04-03-02	1055	7.0	10	4040	745	.2	2	7.2	--	--	585	--	11.5
06-18-02	1055	--	--	4040	727	.8	8	7.2	--	--	788	--	12.0
08-21-02	1055	6.0	5	4040	727	.5	4	7.2	--	--	641	25.5	13.0
THURSTON COUNTY													
10-17-01	1212	7.0	45	4040	729	.1		7.0	--	--	--	--	11.0
12-05-01	1212	7.0	47	4040	724	.4		7.0	--	--	--	--	11.0
02-05-02	1212	6.0	50	4040	729	.3		7.2	--	--	--	--	11.0
04-04-02	1212	7.0	45	4040	739	.1	0	7.1	--	--	948	--	11.0
06-04-02	1212	6.0	50	4040	727	.1	1	7.1	7.3	912	969	21.0	11.0
08-22-02	1212	6.0	50	4040	730	.1	1	7.2	--	--	987	29.0	11.5
10-17-01	1212	7.0	40	4040	729	.1		7.1	--	--	--	--	11.0
12-05-01	1212	6.0	40	4040	724	.1		6.9	--	--	--	--	11.0
02-05-02	1212	6.0	40	4040	729	.4		7.1	--	--	--	--	11.0
04-04-02	1212	6.0	40	4040	739	.2	2	6.9	--	--	830	--	11.0
06-04-02	1212	6.0	40	4040	727	.5	5	7.1	7.3	821	867	21.0	11.0
08-22-02	1212	6.0	40	4040	730	.4	4	7.4	--	--	883	29.0	11.5
10-17-01	1212	6.0	30	4040	729	.1		7.1	--	--	--	--	11.0
12-05-01	1212	6.0	28	4040	724	.1		6.9	--	--	--	--	11.0
02-05-02	1212	6.0	30	4040	729	.3	3	7.0	--	--	800	--	11.0
04-04-02	1212	6.0	30	4040	739	.4	4	7.1	--	--	784	--	11.0
06-04-02	1212	6.0	30	4040	727	.6	6	7.1	7.3	757	794	21.0	11.0
08-22-02	1212	6.0	29	4040	730	.2	2	7.4	--	--	812	29.0	11.0
WASHINGTON COUNTY													
10-18-01	1210	3.0	45	4040	727	3.8		7.3	--	--	--	--	13.5
12-06-01	1210	3.0	45	4040	724	4.2		7.1	--	--	--	--	13.3
02-06-02	1210	3.0	40	4040	732	2.6	26	7.3	--	--	760	--	13.0
04-05-02	1210	2.2	60	4040	734	5.5	55	7.3	7.5	744	720	--	14.0
06-05-02	1210	2.5	50	4040	740	3.9	39	7.3	--	--	749	25.0	14.0
08-23-02	1210	5.0	25	4040	731	4.4	44	7.3	--	--	773	33.5	14.0
10-18-01	1208	3.0	25	4040	727	2.6		7.6	--	--	--	--	13.5
12-06-01	1208	3.0	25	4040	724	1.6		7.6	--	--	--	--	13.0
02-06-02	1208	2.0	30	4040	732	1.7	17	7.5	--	--	628	--	12.5
04-05-02	1208	2.5	30	4040	734	2.7	27	7.6	7.7	622	602	--	13.5
06-05-02	1208	2.5	26	4040	740	2.6	26	7.6	--	--	621	25.0	14.0
08-23-02	1208	3.0	28	4040	731	3.2	33	7.3	--	--	606	33.5	14.0
04-05-02	1206	2.0	20	4040	734	2.4	24	7.7	7.8	634	614	--	13.5
06-05-02	1206	2.5	10	4040	740	2.8	28	7.6	--	--	638	25.0	13.5
08-23-02	1206	2.0	3	4040	731	2.8	28	7.6	--	--	652	33.5	13.5
10-18-01	995	7.0	25	4040	728	.1		7.1	--	--	--	--	12.5
12-06-01	995	7.0	25	4040	726	.1		7.7	--	--	--	--	12.5
02-06-02	995	6.0	30	4040	732	.3	--	7.1	7.4	1100	S1100	--	12.0
04-05-02	995	7.0	25	4040	734	.1	1	7.1	--	--	1070	--	12.5
06-05-02	995	7.0	25	4040	740	.1	1	7.2	--	--	1180	17.5	12.5
08-23-02	995	7.0	25	4040	731	.1	1	7.1	--	--	1260	33.5	12.5

CHEMICAL ANALYSES OF GROUND WATER

PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT STUDY--Continued
WATER QUALITY FROM WELL NESTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS NH4 (71846)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS N (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L) AS PO4 (00660)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L) AS P (00671)	CARBON DIOXIDE DIS- SOLVED (MG/L) AS CO2 (00405)	IRON, DIS- SOLVED (UG/L) AS FE (01046)	MANGA- NESE, DIS- SOLVED (UG/L) AS MN (01056)
SARPY COUNTY										
10-16-01	--	--	--	E.02	--	--	--	--	--	--
12-04-01	365	--	--	<.05	--	--	--	33	3220	845
02-04-02	--	--	--	<.05	--	--	--	--	--	--
04-03-02	--	.21	.27	<.05	<.008	--	<.02	--	--	--
06-18-02	--	--	--	<.05	--	--	--	--	--	--
08-21-02	--	.16	.20	<.05	<.008	.282	.09	--	--	--
THURSTON COUNTY										
10-17-01	--	--	--	<.05	--	--	--	--	--	--
12-05-01	--	--	--	<.05	--	--	--	--	--	--
02-05-02	--	--	--	.05	--	--	--	--	--	--
04-04-02	--	.41	.53	<.05	<.008	.089	.03	--	--	--
06-04-02	605	--	--	<.05	--	--	--	53	804	177
08-22-02	--	.29	.38	<.05	<.008	.095	.03	--	--	--
10-17-01	--	--	--	<.05	--	--	--	--	--	--
12-05-01	--	--	--	<.05	--	--	--	--	--	--
02-05-02	--	--	--	<.05	--	--	--	--	--	--
04-04-02	--	.32	.41	<.05	<.008	.064	.02	--	--	--
06-04-02	533	--	--	<.05	--	--	--	50	801	170
08-22-02	--	.31	.40	<.05	<.008	.055	.02	--	--	--
10-17-01	--	--	--	<.05	--	--	--	--	--	--
12-05-01	--	--	--	<.05	--	--	--	--	--	--
02-05-02	--	--	--	<.05	--	--	--	--	--	--
04-04-02	--	.34	.43	<.05	<.008	.058	.02	--	--	--
06-04-02	474	--	--	<.05	--	--	--	49	951	239
08-22-02	--	.35	.45	.06	<.008	.209	.07	--	--	--
WASHINGTON COUNTY										
10-18-01	--	--	--	E.03	--	--	--	--	--	--
12-06-01	--	--	--	<.05	--	--	--	--	--	--
02-06-02	--	--	--	<.05	--	--	--	--	--	--
04-05-02	453	.44	.57	<.05	<.008	.129	.04	39	707	227
06-05-02	--	--	--	<.05	--	--	--	--	--	--
08-23-02	--	.40	.51	<.05	<.008	--	E.02	--	--	--
10-18-01	--	--	--	E.03	--	--	--	--	--	--
12-06-01	--	--	--	<.05	--	--	--	--	--	--
02-06-02	--	--	--	<.05	--	--	--	--	--	--
04-05-02	377	.45	.58	<.05	<.008	.196	.06	16	173	184
06-05-02	--	--	--	<.05	--	--	--	--	--	--
08-23-02	--	.31	.40	<.05	<.008	--	<.02	--	--	--
04-05-02	391	.28	.37	<.05	<.008	.156	.05	11	30	135
06-05-02	--	--	--	.07	--	--	--	--	--	--
08-23-02	--	.41	.53	<.05	<.008	.166	.05	--	--	--
10-18-01	--	--	--	<.05	--	--	--	--	--	--
12-06-01	--	--	--	<.05	--	--	--	--	--	--
02-06-02	674	--	--	<.05	--	--	--	86	6050	297
04-05-02	--	1.15	1.48	E.04	<.008	.202	.07	--	--	--
06-05-02	--	--	--	<.05	--	--	--	--	--	--
08-23-02	--	1.21	1.56	E.03	<.008	.221	.07	--	--	--

CHEMICAL ANALYSES OF GROUND WATER

PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT STUDY--Continued
WATER QUALITY FROM WELL NESTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	NITRO- GEN, AMMONIA DIS-SOLVED (MG/L) AS NH4 (71846)	NITRO- GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO- GEN, NITRITE DIS-SOLVED (MG/L) AS N (00613)	PHOS- PHATE, ORTHO, DIS-SOLVED (MG/L) AS PO4 (00660)	ORTHO- PHOS- PHATE, DIS-SOLVED (MG/L) AS P (00671)	CARBON DIOXIDE DIS-SOLVED (MG/L) AS CO2 (00405)	IRON, DIS-SOLVED (UG/L) AS FE (01046)	MANGA- NESE, DIS-SOLVED (UG/L) AS MN (01056)
WASHINGTON COUNTY										
10-18-01	--	--	--	<.05	--	--	--	--	--	--
12-06-01	--	--	--	<.05	--	--	--	--	--	--
02-06-02	705	--	--	<.05	--	--	--	100	9330	262
04-05-02	--	1.24	1.59	<.05	<.008	.521	.17	--	--	--
06-05-02	--	--	--	<.05	--	--	--	--	--	--
08-23-02	--	.94	1.21	<.05	<.008	.343	.11	--	--	--
10-18-01	--	--	--	<.05	--	--	--	--	--	--
12-06-01	--	--	--	<.05	--	--	--	--	--	--
02-06-02	550	--	--	<.05	--	--	--	89	1400	1390
04-05-02	--	.20	.26	<.05	<.008	--	E.01	--	--	--
06-05-02	--	--	--	<.05	--	--	--	--	--	--
08-23-02	--	.19	.24	<.05	<.008	--	<.02	--	--	--

Remark codes used in this report:

< -- Less than

E -- Estimated value

S -- Most probable value

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY
GROUND-WATER QUALITY

(Local identifier: indicates location by township, range, and section. Geologic unit: 112SDGV, Pleistocene sand and gravel deposits; 123BRUL, Oligocene Brule Formation.)

COUNTIES.-- Banner, Garden, Morrill, Scotts Bluff, Sioux

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Station number	Local identifier	Latitude	Longitude	Geologic unit	Hydrologic unit code	Date	Time	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DEPTH OF WELL, TOTAL (FEET) (72008)
BANNER COUNTY									
413528103233401	19N 53W26DBAA1	41 35 28 N	103 23 34 W	112SDGV	10180013	03-27-02	1830	33.32	77
413543103242401	19N 53W26BBCC1	41 35 43 N	103 24 24 W	123BRUL	10180013	03-27-02	1600	27.80	91
413611103242401	19N 53W23CBCC1	41 36 11 N	103 24 24 W	123BRUL	10180013	06-04-02	1400	13.53	70
413611103242402	19N 53W23CBCC2	41 36 11 N	103 24 24 W	123BRUL	10180013	06-04-02	1430	13.16	52
413611103242403	19N 53W23CBCC3	41 36 11 N	103 24 24 W	112SDGV	10180013	06-04-02	1700	13.13	30
413611103242404	19N 53W23CBCC4	41 36 11 N	103 24 24 W	112SDGV	10180013	06-04-02	1500	13.21	17
413900103352301	19N 54W 6ACCC1	41 39 00 N	103 35 23 W	123BRUL	10180013	06-04-02	1800	10.56	95
413900103352302	19N 54W 6ACCC2	41 39 00 N	103 35 23 W	123BRUL	10180013	03-26-02	1430	12.04	30
				123BRUL	10180013	06-04-02	1900	13.64	30
413916103392602	19N 55W 4AABA2	41 39 16 N	103 39 26 W	123BRUL	10180013	03-26-02	1730	5.45	76
413922103382201	20N 55W34DDBC1	41 39 22 N	103 38 22 W	123BRUL	10180009	06-05-02	1000	14.60	109
GARDEN COUNTY									
412041102095201	16N 42W25CACB1	41 19 40 N	102 05 16 W	112SDGV	--	06-10-02	1130	30.72	103
412041102095202	16N 42W25CACB2	41 19 40 N	102 05 16 W	112SDGV	--	06-10-02	1200	30.62	42
412137102130201	16N 43W14BDDA1	41 21 37 N	102 13 02 W	--	--	06-10-02	1300	8.80	140.
412434102214202	17N 44W35BBAA2	41 24 33 N	102 21 44 W	112SDGV	--	06-10-02	1400	13.80	28.00
412605102211001	17N 44W23ACAA1	41 26 09 N	102 21 09 W	112SDGV	--	06-07-02	0700	12.60	70.00
MORRILL COUNTY									
412924102390402	18N 46W32BDCC2	41 29 24 N	102 39 04 W	112SDGV	--	06-06-02	1930	32.21	50
413018102392501	18N 46W30ADAC1	41 30 18 N	102 39 25 W	112SDGV	--	06-06-02	1800	5.25	143
413018102392502	18N 46W30ADAC2	41 30 18 N	102 39 25 W	112SDGV	--	06-06-02	1830	5.25	22
413228103161801	18N 52W11DDDD2	41 32 28 N	103 16 18 W	123BRUL	10180013	03-25-02	1400	--	128.5
413344103161601	18N 52W 1CBBB1	41 33 44 N	103 16 16 W	123BRUL	10180013	03-27-02	1300	27.62	120
413502103103702	19N 51W27DDDD2	41 35 02 N	103 10 37 W	123BRUL	10180013	06-04-02	0900	23.27	65
413502103103704	19N 51W27DDDD4	41 35 02 N	103 10 37 W	112SDGV	10180013	06-04-02	0930	23.38	37.5
413504103153102	19N 52W25DCDD2	41 35 04 N	103 15 31 W	112SDGV	10180013	06-04-02	1130	24.60	30

CHEMICAL ANALYSES OF GROUND WATER

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM AD- SORP- TION RATIO (00931)	
BANNER COUNTY													
03-27-02	3998	--	7.6	--	7.3	517	--	12.5	180	55.6	11.2	5.05	.7
03-27-02	3998	649	7.8	87	7.4	468	--	13.0	150	44.0	9.60	5.38	1
06-04-02	3978	655	3.1	34	7.5	678	20.0	12.0	210	64.6	13.0	9.27	2
06-04-02	3978	655	2.7	29	7.3	842	20.0	12.0	270	82.6	15.6	10.0	2
06-04-02	3978	655	.1	0	7.0	1320	18.0	10.5	450	136	26.5	16.0	2
06-04-02	3978	655	.1	2	7.2	1060	20.0	13.0	350	106	20.3	12.3	2
06-04-02	4140	655	1.5	16	8.4	575	18.0	12.5	17	4.94	1.19	5.38	14
03-26-02	4140	654	3.3	36	7.4	630	--	12.0	150	43.1	9.76	8.43	3
06-04-02	4140	655	2.2	24	8.0	640	19.0	12.0	150	43.1	9.55	8.66	3
03-26-02	4200	654	4.1	44	7.5	566	--	12.0	110	32.6	8.02	8.00	3
06-05-02	4190	--	4.5	--	7.8	464	19.0	12.5	48	13.3	3.70	7.58	6
GARDEN COUNTY													
06-10-02	3315	660	2.3	26	7.3	631	21.0	13.5	280	92.2	11.2	14.3	.4
06-10-02	3315	660	4.7	52	7.3	723	--	14.0	330	106	15.3	21.3	.4
06-10-02	3332.	660	3.0	34	7.2	925	25.0	14.0	320	104	15.0	19.9	2
06-10-02	3394.	660	2.8	30	7.3	718	25.0	11.5	260	80.9	13.9	16.4	1
06-07-02	3445.	662	3.7	40	7.1	370	17.0	12.5	150	50.3	6.30	7.53	.4
MORRILL COUNTY													
06-06-02	3500	--	5.3	--	7.5	420	18.0	14.0	180	56.0	9.83	10.6	.3
06-06-02	3496.05	--	.6	--	7.3	1120	20.0	12.5	340	103	19.5	8.15	3
06-06-02	3496.05	--	M	--	7.4	1110	19.0	12.0	220	57.2	19.3	15.1	4
03-25-02	3988	660	5.2	56	7.5	404	--	12.0	44	11.9	3.38	5.25	5
03-27-02	3923	--	6.6	--	7.4	778	--	13.5	130	35.1	10.2	9.23	4
06-04-02	3788	655	2.8	30	7.4	672	15.5	11.5	290	89.0	15.5	8.13	.7
06-04-02	3788	655	4.5	48	7.3	773	17.0	11.5	290	91.2	15.6	8.61	1
06-04-02	3882	655	4.7	52	7.4	519	18.0	13.0	220	68.4	12.4	7.06	.5

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)
BANNER COUNTY													
03-27-02	22.1	20	186	182	19.3	.6	56.8	20.5	321	<.04	--	--	--
03-27-02	29.1	29	172	169	16.8	.6	57.7	17.8	297	<.04	--	--	--
06-04-02	57.7	36	233	--	34.2	.5	54.0	41.6	459	<.04	.28	10	--
06-04-02	67.7	34	263	--	50.6	.4	53.1	50.1	559	<.04	.33	16	--
06-04-02	110	34	545	--	68.3	.6	39.2	103	830	.15	1.2	1.8	.56
06-04-02	87.5	34	372	--	53.4	.4	50.3	65.1	695	<.04	.53	18	--
06-04-02	131	92	252	--	12.5	.9	62.6	32.9	413	<.04	E.07	--	--
03-26-02	81.8	53	267	--	24.8	.6	59.8	30.8	433	<.04	--	--	--
06-04-02	85.2	54	274	--	24.2	.6	57.8	30.9	438	<.04	.13	3.3	--
03-26-02	83.6	59	256	280	13.5	.5	60.0	28.3	418	<.04	--	--	--
06-05-02	88.5	77	214	--	9.30	.5	63.0	17.7	344	<.04	E.05	--	--
GARDEN COUNTY													
06-10-02	16.6	11	301	--	6.22	.3	51.2	20.3	413	<.04	.14	4.6	--
06-10-02	14.7	8	368	--	4.56	.5	53.2	17.2	473	<.04	.19	4.6	--
06-10-02	66.2	29	300	--	15.6	.5	61.0	126	643	<.04	.23	13	--
06-10-02	42.6	25	250	--	19.2	.9	54.4	74.4	487	<.04	.14	8.0	--
06-07-02	10.1	12	141	--	4.41	.4	52.4	18.8	264	<.04	E.06	--	--
MORRILL COUNTY													
06-06-02	9.31	9	173	--	5.29	.8	49.7	16.2	287	<.04	.11	5.7	5.63
06-06-02	111	41	322	--	21.3	.2	36.2	216	754	<.04	.28	11	--
06-06-02	143	56	316	--	20.1	1.2	31.7	218	722	<.04	.27	6.3	6.06
03-25-02	75.9	77	184	168	5.02	1.0	62.3	22.0	299	<.04	--	--	--
03-27-02	105	62	305	333	18.9	.4	50.0	55.0	491	<.04	--	--	--
06-04-02	25.3	16	241	--	45.6	.4	51.4	28.2	433	<.04	.13	5.8	--
06-04-02	43.1	24	276	--	46.4	.5	52.2	45.8	499	<.04	.23	7.0	--
06-04-02	17.5	14	223	--	19.9	.4	44.0	21.1	337	<.04	.10	3.0	--

CHEMICAL ANALYSES OF GROUND WATER

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	2,4-D METHYL ESTER, WATER FLTRD REC (UG/L) (50470)	2,4-D, DIS- SOLVED (UG/L) (39732)	2,4-DB WATER, FLTRD, GF 0.7U REC (UG/L) (38746)
BANNER COUNTY													
03-27-02	--	4.62	--	<.008	--	--	E.01	18	<10	<2.0	--	--	--
03-27-02	--	3.23	--	<.008	--	--	E.01	13	<10	<2.0	--	--	--
06-04-02	--	10.0	--	<.008	--	<.06	E.01	16	<10	<2.0	<.009	<.02	<.02
06-04-02	--	16.1	--	<.008	.074	<.06	.02	25	<10	<2.0	<.009	<.02	<.02
06-04-02	2.50	.58	.036	.011	.150	E.05	.05	103	71	575	<.009	<.02	<.02
06-04-02	--	17.2	--	<.008	.153	E.05	.05	43	<10	6.0	<.009	<.02	<.02
06-04-02	--	2.50	--	<.008	--	<.06	E.02	1.9	<10	<2.0	<.009	<.02	<.02
03-26-02	--	3.25	--	<.008	--	--	E.02	21	<10	<2.0	--	--	--
06-04-02	--	3.15	--	<.008	--	<.06	E.01	5.9	<10	<2.0	<.009	<.02	<.02
03-26-02	--	3.56	--	<.008	.055	--	.02	16	<10	E.8	--	--	--
06-05-02	--	2.71	--	<.008	--	<.06	<.02	7.4	<10	<2.0	<.009	<.02	<.02
GARDEN COUNTY													
06-10-02	--	4.51	--	<.008	.181	E.06	.06	26	<10	<2.0	<.009	<.02	<.02
06-10-02	--	4.45	--	<.008	.359	.11	.12	39	<10	<2.0	<.009	<.02	<.02
06-10-02	--	12.5	--	<.008	.117	E.04	.04	34	<10	<2.0	<.009	<.02	<.02
06-10-02	--	7.89	--	<.008	.086	E.03	.03	23	<10	<2.0	<.009	<.02	<.02
06-07-02	--	6.70	--	<.008	.080	E.03	.03	22	<10	<2.0	<.009	<.02	<.02
MORRILL COUNTY													
06-06-02	24.9	5.63	.026	.008	.077	<.06	.03	10	<10	<2.0	<.009	<.02	<.02
06-06-02	--	10.4	--	<.008	.061	<.06	.02	30	<10	<2.0	<.009	<.02	<.02
06-06-02	26.8	6.07	.030	.009	--	<.06	E.02	27	<10	13.0	<.009	<.02	<.02
03-25-02	--	2.54	--	<.008	.113	--	.04	11	<10	E2.0	--	--	--
03-27-02	--	1.66	--	<.008	.083	--	.03	24	<10	48.9	--	--	--
06-04-02	--	5.62	--	<.008	--	<.06	E.02	20	<10	<2.0	<.009	<.02	<.02
06-04-02	--	6.75	--	<.008	.064	<.06	.02	28	<10	<2.0	<.009	<.02	<.02
06-04-02	--	2.85	--	<.008	.074	<.06	.02	17	<10	<2.0	<.009	<.02	<.02

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	3HYDRXY CARBO-FURAN WAT,FLT GF 0.7U REC (UG/L) (49308)	3-KETO CARBO-FURAN WATER FLTRD REC (UG/L) (50295)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ACIFL-UORFEN WATER, FLTRD, GF 0.7U REC (UG/L) (49315)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALDI-CARB SULFONE WAT, FLT GF 0.7U REC (UG/L) (49313)	ALDICA-RB SUL-FOXIDE, WAT, FLT GF 0.7U REC (UG/L) (49314)	ALDI-CARB, WATER, FLTRD, BHC DIS-SOLVED (UG/L) (49312)	ALPHA (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BENDIO-CARB, WATER, FLTRD REC (UG/L) (50299)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)
BANNER COUNTY													
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-04-02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	E.006	<.03	<.010
06-04-02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	.009	<.03	<.010
06-04-02	E.001	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	E.006	<.03	<.010
06-04-02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	.012	<.03	<.010
06-04-02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	<.007	<.03	<.010
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-04-02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	<.007	<.03	<.010
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-05-02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	<.007	<.03	<.010
GARDEN COUNTY													
06-10-02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	.045	<.03	<.010
06-10-02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	.177	<.03	<.010
06-10-02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	.093	<.03	<.010
06-10-02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	E.002	<.03	<.010
06-07-02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	<.007	<.03	<.010
MORRILL COUNTY													
06-06-02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	<.007	<.03	<.010
06-06-02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	.198	<.03	<.010
06-06-02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	.033	<.03	<.010
03-25-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-04-02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	<.007	<.03	<.010
06-04-02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	<.007	<.03	<.010
06-04-02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	E.005	<.03	<.010

CHEMICAL ANALYSES OF GROUND WATER

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BENOMYL WATER FLTRD REC (UG/L) (50300)	BEN- SUL- FURON METHYL WAT FLT REC (UG/L) (61693)	BENTA- ZON, WATER, FLTRD, GF 0.7U REC (UG/L) (38711)	BRO- MACIL, WATER, DISS, REC (UG/L) (04029)	BRO- MOXYNIL WATER, FLTRD, GF 0.7U REC (UG/L) (49311)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAF- FEINE, WATER FLTRD REC (UG/L) (50305)	CAR- BARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49310)	CAR- BARYL WATER FLTRD GF, REC (UG/L) (82680)	CARBO- FURAN, WATER, FLTRD, GF 0.7U REC (UG/L) (49309)	CARBO- FURAN WATER FLTRD GF, REC (UG/L) (82674)	CHLOR- AMBEN, METHYL ESTER WATER FLTRD (UG/L) (61188)	CHLORI- MURON, WATER FLTRD REC (UG/L) (50306)
BANNER COUNTY													
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-04-02	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02	<.010
06-04-02	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02	<.010
06-04-02	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02	<.010
06-04-02	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02	<.010
06-04-02	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02	<.010
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-04-02	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02	<.010
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-05-02	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02	<.010
GARDEN COUNTY													
06-10-02	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02	<.010
06-10-02	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02	<.010
06-10-02	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02	<.010
06-10-02	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02	<.010
06-07-02	<.004	<.02	<.01	<.03	<.02	<.002	E.004	<.03	<.041	<.006	<.020	<.02	<.010
MORRILL COUNTY													
06-06-02	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02	<.010
06-06-02	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02	<.010
06-06-02	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02	<.010
03-25-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-04-02	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02	<.010
06-04-02	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02	<.010
06-04-02	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02	<.010

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	CHLORO- THALO- NIL, WAT, FLT GF 0.7U REC (UG/L) (49306)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CLOPYR- ALID, WATER, FLTRD, GF 0.7U REC (UG/L) (49305)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	CY- CLOATE, WATER, DISS, REC (UG/L) (04031)	DACTHAL MONO- ACID, WAT, FLT GF 0.7U REC (UG/L) (49304)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DEETHYL DEISO- PROPYL ATRAZIN WATER, DISS, REC (UG/L) (04039)	DEISO- PROPYL ATRAZIN WATER, DISS, REC (UG/L) (04038)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DICAMBA WATER, FLTRD, GF 0.7U REC (UG/L) (38442)	DICHLOR PROP, WATER, FLTRD, GF 0.7U REC (UG/L) (49302)
BANNER COUNTY													
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-04-02	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.009	E.01	<.04	<.005	<.01	<.01
06-04-02	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.028	E.02	E.01	<.005	<.01	<.01
06-04-02	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.005	<.01	<.04	<.005	<.01	<.01
06-04-02	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.033	E.01	<.04	<.005	<.01	<.01
06-04-02	<.04	<.005	<.01	<.018	<.01	<.01	<.003	<.006	<.01	<.04	<.005	<.01	<.01
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-04-02	<.04	<.005	<.01	<.018	<.01	<.01	<.003	<.006	<.01	<.04	<.005	<.01	<.01
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-05-02	<.04	<.005	<.01	<.018	<.01	<.01	<.003	<.006	<.01	<.04	<.005	<.01	<.01
GARDEN COUNTY													
06-10-02	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.160	E.01	E.01	<.005	<.01	<.01
06-10-02	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.417	E.02	E.02	<.005	<.01	<.01
06-10-02	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.396	E.02	E.05	<.005	<.01	<.01
06-10-02	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.039	<.01	<.04	<.005	<.01	<.01
06-07-02	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.013	E.01	<.04	<.005	<.01	<.01
MORRILL COUNTY													
06-06-02	<.04	<.005	<.01	<.018	<.01	<.01	<.003	<.006	M	<.04	<.005	<.01	<.01
06-06-02	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.907	E.89	E.10	<.005	<.01	<.01
06-06-02	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.153	E.14	E.01	<.005	<.01	<.01
03-25-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-04-02	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.028	E.01	<.04	<.005	<.01	<.01
06-04-02	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.016	E.01	<.04	<.005	<.01	<.01
06-04-02	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.013	<.01	<.04	<.005	<.01	<.01

CHEMICAL ANALYSES OF GROUND WATER

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DINOSEB WATER, FLTRD, GF 0.7U REC (UG/L) (49301)	DIPHEN- AMID, WATER, DISS, REC (UG/L) (04033)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49300)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT FLTRD 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FEN- URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49297)	FLUMET- SULAM WATER FLTRD REC (UG/L) (61694)	FLUO- METURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)	FONOFOS WATER DISS REC (UG/L) (04095)	HYDROXY ATRA- ZINE WATER FLTRD REC (UG/L) (50355)
BANNER COUNTY													
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-04-02	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003	<.008
06-04-02	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003	<.008
06-04-02	<.005	<.01	<.03	<.02	.02	.002	<.009	<.005	<.03	<.01	<.03	<.003	<.008
06-04-02	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003	<.008
06-04-02	<.005	<.01	<.03	<.02	M	<.002	<.009	<.005	<.03	<.01	<.03	<.003	<.008
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-04-02	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003	<.008
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-05-02	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003	<.008
GARDEN COUNTY													
06-10-02	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003	<.008
06-10-02	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003	E.005
06-10-02	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003	E.004
06-10-02	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003	<.008
06-07-02	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003	<.008
MORRILL COUNTY													
06-06-02	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003	<.008
06-06-02	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003	E.031
06-06-02	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003	E.042
03-25-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-04-02	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003	<.008
06-04-02	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003	<.008
06-04-02	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003	<.008

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	IMAZ- AQUIN WATER FLTRD REC (UG/L) (50356)	IMAZE- THAPYR WATER FLTRD REC (UG/L) (50407)	IMID- ACLOP- RID WATER FLTRD REC (UG/L) (61695)	LINDANE DIS- SOLVED (UG/L) (39341)	LINURON WATER, FLTRD, GF 0.7U (UG/L) (38478)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	MCPA, WATER, FLTRD, GF 0.7U REC (UG/L) (38482)	MCPB, WATER, FLTRD, GF 0.7U REC (UG/L) (38487)	METAL- AXYL WATER FLTRD REC (UG/L) (50359)	METHIO- CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (38501)	METH- OMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49296)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)
BANNER COUNTY													
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-04-02	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004	<.050
06-04-02	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004	<.050
06-04-02	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004	<.050
06-04-02	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004	<.050
06-04-02	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004	<.050
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-04-02	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004	<.050
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-05-02	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004	<.050
GARDEN COUNTY													
06-10-02	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004	<.050
06-10-02	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004	<.050
06-10-02	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004	<.050
06-10-02	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004	<.050
06-07-02	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004	<.050
MORRILL COUNTY													
06-06-02	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004	<.050
06-06-02	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004	<.050
06-06-02	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004	<.050
03-25-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-04-02	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004	<.050
06-04-02	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004	<.050
06-04-02	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004	<.050

CHEMICAL ANALYSES OF GROUND WATER

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MET- SUL- FURON METHYL WAT FLT REC (UG/L) (61697)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	NEB- URON, WATER, FLTRD, 0.7U GF REC (UG/L) (49294)	NICOSUL FURON WATER FLTRD REC (UG/L) (50364)	NORFLUR AZON, WATER, FLTRD, 0.7U GF REC (UG/L) (49293)	ORY- ZALIN, WATER, FLTRD, 0.7U GF REC (UG/L) (49292)	OXAMYL, WATER, FLTRD, 0.7U GF REC (UG/L) (38866)	P, P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)
BANNER COUNTY													
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-04-02	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003	<.010
06-04-02	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003	<.010
06-04-02	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003	<.010
06-04-02	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003	<.010
06-04-02	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003	<.010
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-04-02	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003	<.010
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-05-02	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003	<.010
GARDEN COUNTY													
06-10-02	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003	<.010
06-10-02	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003	<.010
06-10-02	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003	<.010
06-10-02	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003	<.010
06-07-02	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003	<.010
MORRILL COUNTY													
06-06-02	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003	<.010
06-06-02	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003	<.010
06-06-02	<.006	E.008	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003	<.010
03-25-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-04-02	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003	<.010
06-04-02	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003	<.010
06-04-02	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003	<.010

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PIC- LORAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49291)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	PRO- PHAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49236)	PROP- ICONA- ZOLE , WATER FLTRD REC (UG/L) (50471)	PRO- POXUR, WATER, FLTRD, GF 0.7U REC (UG/L) (38538)
BANNER COUNTY													
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-04-02	<.004	<.022	<.006	<.011	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02	<.008
06-04-02	<.004	<.022	<.006	<.011	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02	<.008
06-04-02	<.004	<.022	<.006	<.011	.67	M	<.004	<.010	<.011	<.02	<.010	<.02	<.008
06-04-02	<.004	<.022	<.006	<.011	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02	<.008
06-04-02	<.004	<.022	<.006	<.011	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02	<.008
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-04-02	<.004	<.022	<.006	<.011	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02	<.008
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-05-02	<.004	<.022	<.006	<.011	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02	<.008
GARDEN COUNTY													
06-10-02	<.004	<.022	<.006	<.011	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02	<.008
06-10-02	<.004	<.022	<.006	<.011	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02	<.008
06-10-02	<.004	<.022	<.006	<.011	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02	<.008
06-10-02	<.004	<.022	<.006	<.011	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02	<.008
06-07-02	<.004	<.022	<.006	<.011	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02	<.008
MORRILL COUNTY													
06-06-02	<.004	<.022	<.006	<.011	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02	<.008
06-06-02	<.004	<.022	<.006	<.011	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02	<.008
06-06-02	<.004	<.022	<.006	<.011	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02	<.008
03-25-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-04-02	<.004	<.022	<.006	<.011	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02	<.008
06-04-02	<.004	<.022	<.006	<.011	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02	<.008
06-04-02	<.004	<.022	<.006	<.011	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02	<.008

CHEMICAL ANALYSES OF GROUND WATER

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	SIDURON WATER FLTRD REC (UG/L) (38548)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	SULFO- MET- RURON METHYL WTR FLT (UG/L) (50337)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL, WATER, DISS, REC (UG/L) (04032)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- CLOPYR, WATER, FLTRD, WAT FLT 0.7 U GF, REC (UG/L) (49235)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	UREA 3(4-CHLOR OPHENYL METHYL WAT FLT REC (UG/L) (61692)	C-13 / C-12 STABLE ISOTOPE RATIO PER MIL (82081)
BANNER COUNTY													
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	-8.75
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	-7.48
06-04-02	<.02	<.005	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02	--
06-04-02	<.02	<.005	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02	--
06-04-02	<.02	<.005	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02	--
06-04-02	<.02	<.005	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02	--
06-04-02	<.02	<.008	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02	--
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	-9.83
06-04-02	<.02	<.005	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02	--
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	-8.76
06-05-02	<.02	<.005	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02	--
GARDEN COUNTY													
06-10-02	<.02	E.003	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02	--
06-10-02	<.02	<.005	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02	--
06-10-02	<.02	<.005	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02	--
06-10-02	<.02	<.005	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02	--
06-07-02	<.02	<.005	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02	--
MORRILL COUNTY													
06-06-02	<.02	.007	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02	--
06-06-02	<.02	.006	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02	--
06-06-02	<.02	<.005	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02	--
03-25-02	--	--	--	--	--	--	--	--	--	--	--	--	-7.63
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	-11.14
06-04-02	<.02	.012	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02	--
06-04-02	<.02	<.005	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02	--
06-04-02	<.02	<.005	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02	--

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	CARBON-14 CNT ERR WATER FLTRD PERCENT (49934)	CARBON-14 WATER FLTRD PERCENT (49933)
------	--	---

BANNER COUNTY

03-27-02	.490	86.75
03-27-02	.470	82.77
06-04-02	--	--
06-04-02	--	--
06-04-02	--	--
06-04-02	--	--
06-04-02	--	--
03-26-02	.530	93.97
06-04-02	--	--
03-26-02	.500	88.78
06-05-02	--	--

GARDEN COUNTY

06-10-02	--	--
06-10-02	--	--
06-10-02	--	--
06-10-02	--	--
06-07-02	--	--

MORRILL COUNTY

06-06-02	--	--
06-06-02	--	--
06-06-02	--	--
03-25-02	.290	36.16
03-27-02	.110	6.870
06-04-02	--	--
06-04-02	--	--
06-04-02	--	--

CHEMICAL ANALYSES OF GROUND WATER

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Station number	Local ident- ifier	Lat- i- tude	Long- i- tude	Geo- logic unit	Hydro- logic unit code	Date	Time	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DEPTH OF WELL, TOTAL (FEET) (72008)
MORRILL COUNTY									
413504103161703	19N 52W25CCCC3	41 35 04 N	103 16 17 W	112SDGV	10180013	06-04-02	1300	33.18	45
413556103161901	19N 52W25BBBB1	41 35 56 N	103 16 19 W	112SDGV	10180013	03-27-02	1030	10.90	95
414624103195801	21N 52W22DCCC1	41 46 24 N	103 19 58 W	112SDGV	10180013	06-06-02	1400	10.89	193
414624103195802	21N 52W22DCCC2	41 46 24 N	103 19 58 W	112SDGV	10180013	06-06-02	1430	11.00	110
414624103195803	21N 52W22DCCC3	41 46 24 N	103 19 58 W	112SDGV	10180013	06-06-02	1500	11.30	30
SCOTTS BLUFF COUNTY									
414321103550801	20N 57W 8BDDA1	41 43 21 N	103 55 08 W	123BRUL	10180013	03-28-02	1030	--	110
414720103413801	21N 55W16DADD1	41 47 19 N	103 41 38 W	123BRUL	10180009	06-05-02	0800	50.60	75
415058103393201	22N 55W26DABD1	41 50 58 N	103 39 31 W	112SDGV	10180009	03-26-02	0930	7.46	81
415058103393202	22N 55W26DABD2	41 50 58 N	103 39 31 W	112SDGV	10180009	03-26-02	1100	7.46	30
415408103451502	22N 55W 6CCCC2	41 54 07 N	103 45 17 W	112SDGV	--	06-02-02	1000	6.46	30
415625103480201	23N 56W27ABDC1	41 56 26 N	103 48 02 W	112SDGV	10180009	03-22-02	1630	4.82	115
415625103480202	23N 56W27ABDC2	41 56 25 N	103 48 02 W	112SDGV	10180009	03-22-02	1700	5.33	30
415628103554901	23N 57W28AAAA1	41 56 28 N	103 55 49 W	112SDGV	10180009	06-02-02	1400	5.73	106
415628103554902	23N 57W28AAAA2	41 56 28 N	103 55 49 W	112SDGV	10180009	06-02-02	1500	5.72	68
415628103554903	23N 57W28AAAA3	41 56 28 N	103 55 49 W	112SDGV	10180009	06-02-02	1530	5.73	30
415738103554701	23N 57W15CBCB1	41 57 39 N	103 55 49 W	112SDGV	10180009	06-03-02	1000	16.26	195
415738103554702	23N 57W15CBCB2	41 57 38 N	103 55 49 W	112SDGV	10180009	06-02-02	1100	16.26	108
		41 57 38 N	103 55 49 W	112SDGV	10180009	06-03-02	1100	--	108
415738103554703	23N 57W15CBCB3	41 57 38 N	103 55 49 W	112SDGV	10180009	06-03-02	1130	16.28	30
SIOUX COUNTY									
420004103555301	24N 57W33DDDD1	42 00 04 N	103 55 53 W	112SDGV	10180009	06-03-02	1330	20.62	118
420004103555302	24N 57W33DDDD2	42 00 04 N	103 55 53 W	112SDGV	10180009	06-03-02	1400	20.63	73
420004103555303	24N 57W33DDDD3	42 00 04 N	103 55 53 W	112SDGV	10180009	06-03-02	1430	20.64	35
420148103555201	24N 57W22CCCC1	42 01 48 N	103 55 52 W	112SDGV	10180009	06-05-02	1530	39.18	110.
420148103555202	24N 57W22CCCC2	42 01 48 N	103 55 52 W	112SDGV	10180009	06-05-02	1600	39.20	82.

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	BAROMETRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATURATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPECIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CaCO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)
MORRILL COUNTY													
06-04-02	3888	655	4.7	53	7.3	764	23.0	14.0	330	104	17.7	15.8	.5
03-27-02	3860	656	4.2	46	7.5	596	--	12.5	72	19.8	5.50	7.38	5
06-06-02	3800	--	3.5	--	7.4	973	20.0	13.5	320	96.7	19.4	11.7	2
06-06-02	3800	--	3.8	--	7.3	1080	23.0	13.5	380	116	21.9	18.1	2
06-06-02	3800	--	3.9	--	7.2	1170	22.0	12.0	430	130	25.4	19.5	2
SCOTTS BLUFF COUNTY													
03-28-02	4413	--	6.8	--	8.2	879	--	12.0	38	10.6	2.87	6.51	11
06-05-02	4012.50	--	5.0	--	7.2	1050	17.0	13.0	240	68.8	16.3	10.3	4
03-26-02	3875.67	--	3.6	--	7.7	975	--	11.5	310	84.0	23.7	7.87	2
03-26-02	3875.8	665	8.7	88	7.8	1000	--	9.5	340	94.1	25.9	8.37	2
06-02-02	3916.90	665	M	0	7.5	932	24.0	11.0	260	72.7	18.5	6.72	3
03-22-02	3946	--	6.5	--	7.5	927	--	13.5	--	--	--	--	--
03-22-02	3948	--	5.9	--	7.5	948	--	12.0	--	--	--	--	--
06-02-02	3980	650	.1	0	7.5	1010	25.0	12.5	380	112	23.7	5.21	2
06-02-02	3980	665	.1	0	7.4	1080	25.0	12.5	420	130	24.3	5.57	2
06-02-02	3980	665	.1	0	7.2	1390	25.0	10.5	490	133	38.9	11.6	2
06-03-02	3993.71	657	.5	6	7.5	780	19.0	14.5	260	69.6	20.1	11.8	2
06-02-02	3993.71	657	.1	1	7.2	942	--	14.0	--	--	--	--	--
06-03-02	3993.71	--	--	--	--	--	--	--	350	94.0	27.2	13.0	2
06-03-02	3993.71	657	3.3	37	7.2	1090	--	13.5	400	119	26.0	7.59	2
SIOUX COUNTY													
06-03-02	4094	657	2.6	30	7.3	731	25.0	14.0	240	67.3	18.0	10.4	2
06-03-02	4096.8	657	2.9	33	7.5	909	25.0	14.0	340	97.6	24.2	13.2	1
06-03-02	4096.8	657	3.1	36	7.4	884	20.0	14.5	330	98.9	19.2	11.3	1
06-05-02	4138.55	--	4.0	--	7.4	580	23.0	14.5	190	59.5	10.5	7.03	1
06-05-02	4138.55	--	4.0	--	7.4	626	--	14.5	220	62.8	14.5	7.64	1

CHEMICAL ANALYSES OF GROUND WATER

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)
MORRILL COUNTY													
06-04-02	20.8	11	270	--	47.0	.6	51.9	24.2	491	<.04	.27	11	--
03-27-02	92.7	71	244	259	8.27	.9	63.3	31.5	393	<.04	--	--	1.75
06-06-02	76.7	33	252	--	18.0	.4	56.9	216	674	<.04	.17	6.3	--
06-06-02	79.7	30	280	--	19.4	.5	51.2	238	756	<.04	.25	9.9	--
06-06-02	85.7	29	308	--	20.5	.5	45.8	264	821	<.04	.44	10	--
SCOTTS BLUFF COUNTY													
03-28-02	160	88	363	380	11.4	.8	58.3	38.5	524	<.04	--	--	--
06-05-02	132	53	266	--	23.0	.2	66.8	218	743	<.04	.28	11	--
03-26-02	94.0	39	279	310	21.2	.4	26.7	219	678	<.04	--	--	--
03-26-02	89.9	36	285	273	21.6	1.2	27.9	226	677	<.04	--	--	--
06-02-02	95.6	44	250	--	16.8	.6	22.7	210	611	<.04	.16	4.0	3.74
03-22-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-22-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-02-02	80.5	31	261	--	17.8	.3	23.9	246	684	<.04	.15	4.2	--
06-02-02	78.7	28	292	--	20.3	.2	24.2	258	743	<.04	.18	6.1	--
06-02-02	104	31	317	--	44.0	.6	26.3	320	944	<.04	.46	18	17.1
06-03-02	62.0	33	197	--	13.0	.4	48.1	188	541	<.04	E.07	--	--
06-02-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-03-02	66.1	28	249	--	15.0	.4	47.4	222	655	<.04	.15	4.6	4.33
06-03-02	72.5	28	231	--	13.6	.8	48.0	204	786	.07	.50	36	35.2
SIOUX COUNTY													
06-03-02	55.9	32	181	--	12.4	.5	52.4	169	506	<.04	E.07	--	--
06-03-02	54.2	25	215	--	15.0	.4	51.5	214	641	<.04	.14	9.6	--
06-03-02	52.2	25	224	--	15.2	.4	38.7	174	599	<.04	.32	13	--
06-05-02	45.3	33	160	--	9.50	.4	42.1	121	401	<.04	E.06	--	--
06-05-02	47.4	31	164	--	10.5	.4	48.6	142	444	<.04	E.06	--	--

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	2,4-D METHYL ESTER, WATER FLTRD REC (UG/L) (50470)	2,4-D, DIS- SOLVED REC (UG/L) (39732)
MORRILL COUNTY													
06-04-02	--	10.8	--	<.008	.083	<.06	.03	29	--	<10	<2.0	<.009	<.02
03-27-02	7.74	1.76	.026	.008	.589	--	.19	15	--	<10	E.8	--	--
06-06-02	--	6.16	--	<.008	--	<.06	E.02	20	--	<10	<2.0	<.009	<.02
06-06-02	--	9.64	--	<.008	.071	<.06	.02	27	--	<10	<2.0	<.009	<.02
06-06-02	--	10.1	--	<.008	.169	E.04	.06	37	--	<10	<2.0	<.009	<.02
SCOTTS BLUFF COUNTY													
03-28-02	--	1.73	--	<.008	--	--	E.01	4.4	--	49	7.6	--	--
06-05-02	--	10.9	--	<.008	--	<.06	E.01	33	--	<10	<2.0	<.009	<.02
03-26-02	--	3.42	--	<.008	.095	--	.03	11	--	<10	<2.0	--	--
03-26-02	--	4.11	--	<.008	.153	--	.05	8.7	--	<10	<2.0	--	--
06-02-02	16.5	3.79	.171	.052	--	<.06	E.01	17	--	<10	498	<.009	<.02
03-22-02	--	--	--	--	--	--	--	--	5	--	--	--	--
03-22-02	--	--	--	--	--	--	--	--	4	--	--	--	--
06-02-02	--	4.04	--	<.008	--	<.06	E.01	16	--	<10	E2.0	<.009	<.02
06-02-02	--	5.93	--	<.008	--	<.06	E.01	22	--	<10	3.8	<.009	<.02
06-02-02	75.7	17.1	.053	.016	--	<.06	E.01	40	--	<10	26.3	<.009	<.02
06-03-02	--	2.12	--	<.008	.071	<.06	.02	14	--	<10	<2.0	<.009	<.02
06-02-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-03-02	19.2	4.40	.227	.069	.071	<.06	.02	--	--	<10	123	<.009	<.02
06-03-02	156	35.3	.240	.073	.178	E.03	.06	25	--	<10	<2.0	<.009	<.02
SIOUX COUNTY													
06-03-02	--	2.54	--	<.008	.058	<.06	.02	17	--	<10	<2.0	<.009	<.02
06-03-02	--	9.49	--	<.008	.067	<.06	.02	14	--	<10	<2.0	<.009	<.02
06-03-02	--	12.4	--	<.008	.353	.11	.12	18	--	<50	<8.0	<.009	<.02
06-05-02	--	2.14	--	E.005	--	<.06	E.02	14	--	<10	<2.0	<.009	<.02
06-05-02	--	2.51	--	<.008	--	<.06	E.01	12	--	<10	<2.0	<.009	<.02

CHEMICAL ANALYSES OF GROUND WATER

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	2,4-DB WATER, FLTRD, GF 0.7U REC (UG/L) (38746)	2,6-DI- ETHYL- ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	3HYDRXY CARBO- FURAN WAT, FLT GF 0.7U REC (UG/L) (49308)	3-KETO CARBO- FURAN WATER FLTRD REC (UG/L) (50295)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ACIFL- UORFEN WATER, FLTRD, GF 0.7U REC (UG/L) (49315)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALDI- CARB SULFONE WAT, FLT GF 0.7U REC (UG/L) (49313)	ALDICA- RB SUL- FOXIDE, WAT, FLT GF 0.7U REC (UG/L) (49314)	ALDI- CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (49312)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BENDIO- CARB, WATER FLTRD REC (UG/L) (50299)
MORRILL COUNTY													
06-04-02	<.02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	.049	<.03
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-06-02	<.02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	.008	<.03
06-06-02	<.02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	.033	<.03
06-06-02	<.02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	.021	<.03
SCOTTS BLUFF COUNTY													
03-28-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-05-02	<.02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	E.005	<.03
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-02-02	<.02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	E.005	<.03
03-22-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-22-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-02-02	<.02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	E.006	<.03
06-02-02	<.02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	E.006	<.03
06-02-02	<.02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	E.007	<.03
06-03-02	<.02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	<.007	<.03
06-02-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-03-02	<.02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	<.007	<.03
06-03-02	<.02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	<.007	<.03
SIOUX COUNTY													
06-03-02	<.02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	<.007	<.03
06-03-02	<.02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	<.007	<.03
06-03-02	<.02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	.166	<.03
06-05-02	<.02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	E.004	<.03
06-05-02	<.02	<.006	<.006	<2	<.006	<.007	<.004	<.02	<.008	<.04	<.005	<.007	<.03

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BENOMYL WATER FLTRD REC (UG/L) (50300)	BEN- SUL- FURON METHYL WAT FLT REC (UG/L) (61693)	BENTA- ZON, WATER, FLTRD, GF 0.7U REC (UG/L) (38711)	BRO- MACIL, WATER, DISS, REC (UG/L) (04029)	BRO- MOXYNIL WATER, FLTRD, GF 0.7U REC (UG/L) (49311)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAF- FEINE, WATER FLTRD REC (UG/L) (50305)	CAR- BARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49310)	CAR- BARYL WATER FLTRD GF, REC (UG/L) (82680)	CARBO- FURAN, WATER, FLTRD, GF 0.7U REC (UG/L) (49309)	CARBO- FURAN WATER FLTRD GF, REC (UG/L) (82674)	CHLOR- AMBEN, METHYL ESTER WATER FLTRD (UG/L) (61188)
MORRILL COUNTY													
06-04-02	<.010	<.004	<.02	<.01	E.01	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-06-02	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02
06-06-02	<.010	<.004	<.02	<.01	<.03	<.02	<.002	E.006	<.03	<.041	<.006	<.020	<.02
06-06-02	<.010	<.004	<.02	<.01	<.03	<.02	<.002	.013	<.03	<.041	<.006	<.020	<.02
SCOTTS BLUFF COUNTY													
03-28-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-05-02	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-02-02	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02
03-22-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-22-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-02-02	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02
06-02-02	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02
06-02-02	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02
06-03-02	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02
06-02-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-03-02	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02
06-03-02	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02
SIOUX COUNTY													
06-03-02	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02
06-03-02	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02
06-03-02	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02
06-05-02	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02
06-05-02	<.010	<.004	<.02	<.01	<.03	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02

CHEMICAL ANALYSES OF GROUND WATER

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	CHLORIMURON, WATER FLTRD REC (UG/L) (50306)	CHLOROTHALONIL, WAT, FLT GF 0.7U REC (UG/L) (49306)	CHLOROPYRIFOS DIS- SOLVED REC (UG/L) (38933)	CLOPYRALID, WATER, FLTRD, GF 0.7U REC (UG/L) (49305)	CYANAZINE, WATER, DISS, REC (UG/L) (04041)	CYCLOATE, WATER, DISS, REC (UG/L) (04031)	DACTHAL MONO- ACID, WAT, FLT GF 0.7U REC (UG/L) (49304)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DEETHYL DEISO- PROPYL ATRAZIN WATER, DISS, REC (UG/L) (04039)	DEISO- PROPYL ATRAZIN WATER, DISS, REC (UG/L) (04038)	DI- AZINON, DIS- SOLVED REC (UG/L) (39572)	DICAMBA WATER, FLTRD, GF 0.7U REC (UG/L) (38442)
MORRILL COUNTY													
06-04-02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.084	<.01	<.04	<.005	<.01
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-06-02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.020	E.04	<.04	<.005	<.01
06-06-02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.056	E.10	<.04	<.005	<.01
06-06-02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.036	E.13	<.04	<.005	<.01
SCOTTS BLUFF COUNTY													
03-28-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-05-02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.005	E.02	<.04	<.005	<.01
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-02-02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.009	<.01	<.04	<.005	<.01
03-22-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-22-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-02-02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.006	<.01	<.04	<.005	<.01
06-02-02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.009	<.01	<.04	<.005	<.01
06-02-02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.013	E.13	E.01	<.005	<.01
06-03-02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.021	<.01	<.04	<.005	<.01
06-02-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-03-02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	<.006	<.01	<.04	<.005	<.01
06-03-02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	<.006	<.01	<.04	<.005	<.01
SIOUX COUNTY													
06-03-02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	<.006	<.01	<.04	<.005	<.01
06-03-02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	<.006	<.01	<.04	<.005	<.01
06-03-02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.422	E.03	E.01	<.005	<.01
06-05-02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.013	E.01	<.04	<.005	<.01
06-05-02	<.010	<.04	<.005	<.01	<.018	<.01	<.01	<.003	E.009	E.01	<.04	<.005	<.01

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	DICHLOR PROP, WATER, FLTRD, GF 0.7U REC (UG/L) (49302)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DINOSEB WATER, FLTRD, GF 0.7U REC (UG/L) (49301)	DIPHEN- AMID, WATER, DISS, REC (UG/L) (04033)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49300)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FEN- URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49297)	FLUMET- SULAM WATER FLTRD REC (UG/L) (61694)	FLUO- METURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)	FONOFOS WATER DISS REC (UG/L) (04095)
MORRILL COUNTY													
06-04-02	<.01	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-06-02	<.01	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003
06-06-02	<.01	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003
06-06-02	<.01	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003
SCOTTS BLUFF COUNTY													
03-28-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-05-02	<.01	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-02-02	<.01	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003
03-22-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-22-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-02-02	<.01	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003
06-02-02	<.01	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003
06-02-02	<.01	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003
06-03-02	<.01	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003
06-02-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-03-02	<.01	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003
06-03-02	<.01	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003
SIOUX COUNTY													
06-03-02	<.01	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003
06-03-02	<.01	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003
06-03-02	<.01	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003
06-05-02	<.01	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003
06-05-02	<.01	<.005	<.01	<.03	<.02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003

CHEMICAL ANALYSES OF GROUND WATER

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	HYDROXY ATRA- ZINE WATER FLTRD REC (UG/L) (50355)	IMAZ- AQUIN WATER FLTRD REC (UG/L) (50356)	IMAZE- THAPYR WATER FLTRD REC (UG/L) (50407)	IMID- ACLOP- RID WATER FLTRD REC (UG/L) (61695)	LINDANE DIS- SOLVED (UG/L) (39341)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L) (38478)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	MCPA, WATER, FLTRD, GF 0.7U REC (UG/L) (38482)	MCPB, WATER, FLTRD, GF 0.7U REC (UG/L) (38487)	METAL- AXYL WATER FLTRD REC (UG/L) (50359)	METHIO- CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (38501)	METH- OMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49296)
MORRILL COUNTY													
06-04-02	<.008	<.02	<.02	<.007	<.004	<.01	--	--	<.02	<.01	<.02	<.008	<.004
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-06-02	<.008	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004
06-06-02	E.008	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004
06-06-02	E.006	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004
SCOTTS BLUFF COUNTY													
03-28-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-05-02	<.008	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-02-02	E.008	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004
03-22-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-22-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-02-02	<.008	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004
06-02-02	<.008	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004
06-02-02	E.016	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004
06-03-02	<.008	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004
06-02-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-03-02	<.008	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004
06-03-02	<.008	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004
SIOUX COUNTY													
06-03-02	<.008	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004
06-03-02	<.008	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004
06-03-02	E.055	<.02	E.05	<.007	<.004	<.01	<.035	<.027	<.02	<.01	M	<.008	<.004
06-05-02	<.008	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004
06-05-02	<.008	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	MET- SUL- FURON WAT FLT REC (UG/L) (61697)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	NEB- URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49294)	NICOSUL FURON WATER FLTRD REC (UG/L) (50364)	NORFLUR AZON, WATER, FLTRD, GF 0.7U REC (UG/L) (49293)	ORY- ZALIN, WATER, FLTRD, GF 0.7U REC (UG/L) (49292)	OXAMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (38866)	P, P' DDE DISSOLV (UG/L) (34653)
MORRILL COUNTY													
06-04-02	<.050	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-06-02	<.050	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003
06-06-02	<.050	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003
06-06-02	<.050	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003
SCOTTS BLUFF COUNTY													
03-28-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-05-02	<.050	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-02-02	<.050	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003
03-22-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-22-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-02-02	<.050	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003
06-02-02	<.050	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003
06-02-02	<.050	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003
06-03-02	<.050	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003
06-02-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-03-02	<.050	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003
06-03-02	<.050	<.006	E.009	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003
SIOUX COUNTY													
06-03-02	<.050	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003
06-03-02	<.050	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003
06-03-02	<.050	<.006	E.011	<.006	<.03	<.002	<.007	<.01	E.01	<.02	<.02	<.01	<.003
06-05-02	<.050	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003
06-05-02	<.050	<.006	<.013	<.006	<.03	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003

CHEMICAL ANALYSES OF GROUND WATER

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FILTRD 0.7 U GF, REC (UG/L) (82664)	PIC- LORAM, WATER, FLTRD, WATER, GF 0.7U REC (UG/L) (49291)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	PRO- PHAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49236)	PROP- ICONA- ZOLE , WATER FLTRD REC (UG/L) (50471)
MORRILL COUNTY													
06-04-02	<.010	<.004	<.022	<.006	<.011	<.02	.03	<.004	<.010	<.011	<.02	<.010	<.02
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-06-02	<.010	<.004	<.022	<.006	<.011	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02
06-06-02	<.010	<.004	<.022	<.006	<.011	<.02	M	<.004	<.010	<.011	<.02	<.010	<.02
06-06-02	<.010	<.004	<.022	<.006	<.011	<.02	E.01	<.004	<.010	<.011	<.02	<.010	<.02
SCOTTS BLUFF COUNTY													
03-28-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-05-02	<.010	<.004	<.022	<.006	<.011	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-02-02	<.010	<.004	<.022	<.006	<.011	<.02	E.01	<.004	<.010	<.011	<.02	<.010	<.02
03-22-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-22-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-02-02	<.010	<.004	<.022	<.006	<.011	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02
06-02-02	<.010	<.004	<.022	<.006	<.011	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02
06-02-02	<.010	<.004	<.022	<.006	<.011	<.02	E.01	<.004	<.010	<.011	<.02	<.010	<.02
06-03-02	<.010	<.004	<.022	<.006	<.011	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02
06-02-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-03-02	<.010	<.004	<.022	<.006	<.011	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02
06-03-02	<.010	<.004	<.022	<.006	<.011	<.02	E.01	<.004	<.010	<.011	<.02	<.010	<.02
SIOUX COUNTY													
06-03-02	<.010	<.004	<.022	<.006	<.011	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02
06-03-02	<.010	<.004	<.022	<.006	<.011	<.02	E.01	<.004	<.010	<.011	<.02	<.010	<.02
06-03-02	<.010	<.004	<.022	<.006	<.011	<.02	.07	<.004	<.010	<.011	<.02	<.010	<.02
06-05-02	<.010	<.004	<.022	<.006	<.011	<.02	E.01	<.004	<.010	<.011	<.02	<.010	<.02
06-05-02	<.010	<.004	<.022	<.006	<.011	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PRO-POXUR, WATER, FLTRD, GF 0.7U REC (UG/L) (38538)	SIDURON WATER FLTRD REC (UG/L) (38548)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	SULFO-MET-RURON METHYL WTR FLT REC (UG/L) (50337)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL, WATER, DISS, REC (UG/L) (04032)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-CLOPYR, WATER, FLTRD, GF 0.7U REC (UG/L) (49235)	TRI-FLUR-ALIN WAT FLT GF, REC (UG/L) (82661)	UREA 3(4-CHLOR OPHENYL METHYL WAT FLT REC (UG/L) (61692)
MORRILL COUNTY													
06-04-02	<.008	<.02	.069	<.009	E.03	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02
03-27-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-06-02	<.008	<.02	E.004	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02
06-06-02	<.008	<.02	.013	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02
06-06-02	<.008	<.02	.010	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02
SCOTTS BLUFF COUNTY													
03-28-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-05-02	<.008	<.02	<.005	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-26-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-02-02	<.008	<.02	<.005	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02
03-22-02	--	--	--	--	--	--	--	--	--	--	--	--	--
03-22-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-02-02	<.008	<.02	<.005	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02
06-02-02	<.008	<.02	<.005	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02
06-02-02	<.008	<.02	<.005	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02
06-03-02	<.008	<.02	.010	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02
06-02-02	--	--	--	--	--	--	--	--	--	--	--	--	--
06-03-02	<.008	<.02	<.005	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02
06-03-02	<.008	<.02	<.005	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02
SIOUX COUNTY													
06-03-02	<.008	<.02	<.005	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02
06-03-02	<.008	<.02	<.005	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02
06-03-02	<.008	<.02	<.005	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02
06-05-02	<.008	<.02	<.005	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02
06-05-02	<.008	<.02	<.005	<.009	<.02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02

CHEMICAL ANALYSES OF GROUND WATER

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	C-13 / C-12 STABLE ISOTOPE RATIO PER MIL (82081)	CARBON- 14 CNT ERR WATER FLTRD PERCENT (49934)	CARBON- 14 CNT ERR WATER FLTRD PERCENT (49933)	TRITIUM TOTAL (PCI/L) (07000)	TRITIUM 2 SIGMA WATER, WHOLE, TOTAL (PCI/L) (75985)
MORRILL COUNTY					
06-04-02	--	--	--	--	--
03-27-02	-9.13	.140	8.850	--	--
06-06-02	--	--	--	--	--
06-06-02	--	--	--	--	--
06-06-02	--	--	--	--	--
SCOTTS BLUFF COUNTY					
03-28-02	-8.52	.340	49.70	M	1.8
06-05-02	--	--	--	--	--
03-26-02	-10.59	.680	103.1	--	--
03-26-02	-10.88	.630	105.2	--	--
06-02-02	--	--	--	--	--
03-22-02	--	--	--	--	--
03-22-02	--	--	--	--	--
06-02-02	--	--	--	--	--
06-02-02	--	--	--	--	--
06-02-02	--	--	--	--	--
06-02-02	--	--	--	--	--
06-03-02	--	--	--	--	--
06-02-02	--	--	--	--	--
06-03-02	--	--	--	--	--
06-03-02	--	--	--	--	--
SIOUX COUNTY					
06-03-02	--	--	--	--	--
06-03-02	--	--	--	--	--
06-03-02	--	--	--	--	--
06-05-02	--	--	--	--	--
06-05-02	--	--	--	--	--

Station number	Local ident- i- fier	Lat- i- tude	Long- i- tude	Geo- logic unit	Hydro- logic unit code	Date	Time	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DEPTH OF WELL, TOTAL (FEET) (72008)
SIOUX COUNTY									
420148103555203	24N 57W22CCCC3	42 01 48 N	103 55 52 W	112SDGV	10180009	06-05-02	1630	39.22	55.
420234103555501	24N 57W22BBCC1	42 02 34 N	103 55 55 W	112SDGV	10180009	06-06-02	1030	55.80	63.
420301103554802	24N 57W15CBBD2	42 03 00 N	103 55 48 W	112SDGV	10180009	06-05-02	1830	82.85	113.5
420301103554803	24N 57W15CBBD3	42 03 00 N	103 55 48 W	112SDGV	10180009	06-05-02	1900	81.83	95.
420316103563201	24N 57W16BDAA1	42 03 16 N	103 56 32 W	112SDGV	10180009	06-06-02	0700	82.54	103.
420516103562501	25N 57W35DCDD1	42 05 16 N	103 56 25 W	112SDGV	10180009	06-06-02	0900	31.63	80

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	BAROMETRIC PRESURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH (PERCENT SATURATION) (00301)	PH WATER FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	HARDNESS TOTAL (MG/L AS CaCO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg) (00925)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM ADSORPTION RATIO (00931)
SIOUX COUNTY													
06-05-02	4138.55	--	4.7	--	7.2	831	21.0	14.0	310	95.4	16.3	10.5	1
06-06-02	4169.15	655	5.1	57	7.2	1030	20.0	13.5	410	127	21.6	9.61	1
06-05-02	4210.15	--	2.9	--	7.4	587	20.0	19.0	210	53.6	18.0	4.06	1
06-05-02	4210.15	--	3.5	--	7.4	592	18.0	19.0	210	56.6	16.2	4.89	1
06-06-02	4225.	--	6.0	--	7.3	428	15.0	12.5	140	40.3	10.0	6.17	1
06-06-02	4248	--	5.5	--	7.7	425	20.0	13.0	93	22.5	9.03	4.96	2
Date	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	SODIUM PERCENT (00932)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CaCO3) (90410)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SiO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITROGEN, DIS-SOLVED (MG/L AS N) (00602)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
SIOUX COUNTY													
06-05-02	55.3	27	206	14.1	.4	42.6	194	579	<.04	.21	6.3	6.07	<.008
06-06-02	66.6	26	251	15.0	.5	46.6	247	726	<.04	.33	9.8	9.43	<.008
06-05-02	40.0	29	153	10.1	.4	18.3	138	376	<.04	E.08	--	.31	<.008
06-05-02	40.3	29	156	10.2	.5	30.5	137	392	<.04	E.09	--	.33	E.006
06-06-02	31.4	31	156	11.4	.4	58.6	25.1	307	<.04	E.09	--	6.71	<.008
06-06-02	53.4	54	158	8.52	.7	61.3	32.6	309	<.04	<.10	--	4.81	<.008
Date	PHOSPHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOSPHORUS, DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOSPHATE, DIS-SOLVED (MG/L AS P) (00671)	CARBON DIOXIDE, DIS-SOLVED (MG/L AS CO2) (00405)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	2,4-D METHYL ESTER, WATER FLTRD REC (UG/L) (50470)	2,4-D, DIS-SOLVED (UG/L) (39732)	2,4-DB WATER, FLTRD, GF 0.7U REC (UG/L) (38746)	2,6-DIETHYL ANILINE, WAT FLT GF, REC (UG/L) (82660)	3HYDRXY CARBOFURAN, WAT, FLT GF, REC (UG/L) (49308)	3-KETO CARBOFURAN, WATER FLTRD REC (UG/L) (50295)	ACETOCHLOR, WATER, FLTRD REC (UG/L) (49260)
SIOUX COUNTY													
06-05-02	.055	<.06	.02	23	<10	<2.0	<.009	<.02	<.02	<.006	<.006	<2	<.006
06-06-02	.055	<.06	.02	28	<10	<2.0	<.009	<.02	<.02	<.006	<.006	<2	<.006
06-05-02	--	<.06	<.02	13	<10	<2.0	<.009	<.02	<.02	<.006	<.006	<2	<.006
06-05-02	.077	<.06	.03	13	<10	<2.0	<.009	<.02	<.02	<.006	<.006	<2	<.006
06-06-02	--	<.06	E.01	17	<10	<2.0	<.009	<.02	<.02	<.006	<.006	<2	<.006
06-06-02	--	<.06	<.02	5.9	<10	<2.0	<.009	<.02	<.02	<.006	<.006	<2	<.006

CHEMICAL ANALYSES OF GROUND WATER

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ACIFL- UORFEN WATER, FLTRD, GF 0.7U REC (UG/L) (49315)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALDI- CARB SULFONE WAT, FLT GF 0.7U REC (UG/L) (49313)	ALDICA- RB SUL- FOXIDE, WAT, FLT GF 0.7U REC (UG/L) (49314)	ALDI- CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (49312)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BENDIO- CARB, WATER FLTRD REC (UG/L) (50299)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BENOMYL WATER FLTRD REC (UG/L) (50300)	BEN- SUL- FURON METHYL WAT FLT REC (UG/L) (61693)	BENTA- ZON, WATER, FLTRD, GF 0.7U REC (UG/L) (38711)	BRO- MACIL, WATER, DISS, REC (UG/L) (04029)
SIOUX COUNTY													
06-05-02	<.007	<.004	<.02	<.008	<.04	<.005	E.005	<.03	<.010	<.004	<.02	<.01	<.03
06-06-02	<.007	<.004	<.02	<.008	<.04	<.005	<.007	<.03	<.010	<.004	<.02	<.01	<.03
06-05-02	<.007	<.004	<.02	<.008	<.04	<.005	<.007	<.03	<.010	<.004	<.02	<.01	<.03
06-05-02	<.007	<.004	<.02	<.008	<.04	<.005	<.007	<.03	<.010	<.004	<.02	<.01	<.03
06-06-02	<.007	<.004	<.02	<.008	<.04	<.005	<.007	<.03	<.010	<.004	<.02	<.01	<.03
06-06-02	<.007	<.004	<.02	<.008	<.04	<.005	<.007	<.03	<.010	<.004	<.02	<.01	<.03
Date	BRO- MOXYNIL WATER, FLTRD, GF 0.7U REC (UG/L) (49311)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAF- FEINE, WATER, FLTRD REC (UG/L) (50305)	CAR- BARYL, WATER, FLTRD GF 0.7U REC (UG/L) (49310)	CAR- BARYL WATER FLTRD GF, REC (UG/L) (82680)	CARBO- FURAN, WATER, FLTRD GF 0.7U REC (UG/L) (49309)	CARBO- FURAN WATER FLTRD GF, REC (UG/L) (82674)	CHLOR- AMBEN, METHYL ESTER WATER FLTRD REC (UG/L) (61188)	CHLORI- MURON, WATER FLTRD REC (UG/L) (50306)	CHLORO- THALO- NIL, WAT, FLT GF 0.7U REC (UG/L) (49306)	CHLOR- PYRIFOS DIS- SOLVED REC (UG/L) (38933)	CLOPYR- ALID, WATER, FLTRD, GF 0.7U REC (UG/L) (49305)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)
SIOUX COUNTY													
06-05-02	<.02	<.002	E.005	<.03	<.041	<.006	<.020	<.02	<.010	<.04	<.005	<.01	<.018
06-06-02	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02	<.010	<.04	<.005	<.01	<.018
06-05-02	<.02	<.002	<.002	<.03	<.041	<.006	<.020	<.02	<.010	<.04	<.005	<.01	<.018
06-05-02	<.02	<.002	E.009	<.03	<.041	<.006	<.020	<.02	<.010	<.04	<.005	<.01	<.018
06-06-02	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02	<.010	<.04	<.005	<.01	<.018
06-06-02	<.02	<.002	<.010	<.03	<.041	<.006	<.020	<.02	<.010	<.04	<.005	<.01	<.018
Date	CY- CLOATE, WATER, DISS, REC (UG/L) (04031)	DACTHAL MONO- ACID, WAT, FLT GF 0.7U REC (UG/L) (49304)	DCPA WATER FLTRD GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DEETHYL DEISO- PROPYL ATRAZIN WATER, DISS, REC (UG/L) (04039)	DEISO- PROPYL ATRAZIN WATER, DISS, REC (UG/L) (04038)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DICAMBA WATER, FLTRD, REC GF 0.7U (UG/L) (38442)	DICHLOR PROP, WATER, FLTRD, REC GF 0.7U (UG/L) (49302)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DINOSEB WATER, FLTRD, REC GF 0.7U (UG/L) (49301)	DIPHEN- AMID, WATER, DISS, REC (UG/L) (04033)	DISUL- FOTON WATER FLTRD GF, REC (UG/L) (82677)
SIOUX COUNTY													
06-05-02	<.01	<.01	<.003	E.017	E.04	E.01	<.005	<.01	<.01	<.005	<.01	<.03	<.02
06-06-02	<.01	<.01	<.003	<.006	E.03	M	<.005	<.01	<.01	<.005	<.01	<.03	<.02
06-05-02	<.01	<.01	<.003	<.006	<.01	<.04	<.005	<.01	<.01	<.005	<.01	<.03	<.02
06-05-02	<.01	<.01	<.003	<.006	<.01	<.04	<.005	<.01	<.01	<.005	<.01	<.03	<.02
06-06-02	<.01	<.01	<.003	<.006	<.01	<.04	<.005	<.01	<.01	<.005	<.01	<.03	<.02
06-06-02	<.01	<.01	<.003	<.006	<.01	<.04	<.005	<.01	<.01	<.005	<.01	<.03	<.02

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49300)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FEN- URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49297)	FLUMET- SULAM WATER FLTRD REC (UG/L) (61694)	FLUO- METURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)	FONOFOS WATER DISS REC (UG/L) (04095)	HYDROXY ATRA- ZINE WATER FLTRD REC (UG/L) (50355)	IMAZ- AQUIN WATER FLTRD REC (UG/L) (50356)	IMAZE- THAPYR WATER FLTRD REC (UG/L) (50407)	IMID- ACLOP- RID WATER FLTRD REC (UG/L) (61695)	LINDANE DIS- SOLVED (UG/L) (39341)
SIOUX COUNTY													
06-05-02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003	<.008	<.02	<.02	<.007	<.004
06-06-02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003	<.008	<.02	<.02	<.007	<.004
06-05-02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003	<.008	<.02	<.02	<.007	<.004
06-05-02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003	<.008	<.02	<.02	<.007	<.004
06-06-02	M	<.002	<.009	<.005	<.03	<.01	<.03	<.003	<.008	<.02	<.02	<.007	<.004
06-06-02	<.01	<.002	<.009	<.005	<.03	<.01	<.03	<.003	<.008	<.02	<.02	<.007	<.004
Date	LINURON WATER, FLTRD, GF 0.7U REC (UG/L) (38478)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	MCPA, WATER, FLTRD, GF 0.7U REC (UG/L) (38482)	MCPB, WATER, FLTRD, GF 0.7U REC (UG/L) (38487)	METAL- AXYL, WATER FLTRD, REC (UG/L) (50359)	METHIO- CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (38501)	METH- OMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49296)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	MET- SUL- FURON METHYL WAT FLT REC (UG/L) (61697)
SIOUX COUNTY													
06-05-02	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004	<.050	<.006	<.013	<.006	<.03
06-06-02	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004	<.050	<.006	<.013	<.006	<.03
06-05-02	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.010	<.050	<.006	<.013	<.006	<.03
06-05-02	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004	<.050	<.006	<.013	<.006	<.03
06-06-02	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004	<.050	<.006	<.013	<.006	<.03
06-06-02	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004	<.050	<.006	<.013	<.006	<.03
Date	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	NEB- URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49294)	NICOSUL FURON WATER FLTRD, REC (UG/L) (50364)	NORFLUR AZON, WATER, FLTRD, GF 0.7U REC (UG/L) (49293)	ORY- ZALIN, WATER, FLTRD, GF 0.7U REC (UG/L) (49292)	OXAMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (38866)	P, P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)
SIOUX COUNTY													
06-05-02	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003	<.010	<.004	<.022	<.006	<.011
06-06-02	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003	<.010	<.004	<.022	<.006	<.011
06-05-02	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003	<.010	<.004	<.022	<.006	<.011
06-05-02	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003	<.010	<.004	<.022	<.006	<.011
06-06-02	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003	<.010	<.004	<.022	<.006	<.011
06-06-02	<.002	<.007	<.01	<.01	<.02	<.02	<.01	<.003	<.010	<.004	<.022	<.006	<.011

CHEMICAL ANALYSES OF GROUND WATER

NORTH PLATTE NATURAL RESOURCES DISTRICT STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	PIC-LORAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49291)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER, FLTRD, 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER, FLTRD, 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER, FLTRD, 0.7 U GF, REC (UG/L) (82685)	PRO-PHAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49236)	PROP-ICONA-ZOLE, WATER, FLTRD, REC (UG/L) (50471)	PRO-POXUR, WATER, FLTRD, GF 0.7U REC (UG/L) (38538)	SIDURON WATER, FLTRD, REC (UG/L) (38548)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	SULFO-MET-RURON METHYL WTR FLT REC (UG/L) (50337)	TEBU-THIURON WATER, FLTRD, 0.7 U GF, REC (UG/L) (82670)
SIOUX COUNTY													
06-05-02	<.02	.07	<.004	<.010	<.011	<.02	<.010	<.02	<.008	<.02	<.005	<.009	<.02
06-06-02	<.02	E.01	<.004	<.010	<.011	<.02	<.010	<.02	<.008	<.02	<.005	<.009	<.02
06-05-02	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02	<.008	<.02	<.005	<.009	<.02
06-05-02	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02	<.008	<.02	<.005	<.009	<.02
06-06-02	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02	<.008	<.02	<.005	<.009	<.02
06-06-02	<.02	<.01	<.004	<.010	<.011	<.02	<.010	<.02	<.008	<.02	<.007	<.009	<.02

Date	TER-BACIL, WATER, DISS, REC (UG/L) (04032)	TER-BACIL WATER, FLTRD, 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER, FLTRD, 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER, FLTRD, 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER, FLTRD, 0.7 U GF, REC (UG/L) (82678)	TRI-CLOPYR, WATER, FLTRD, GF 0.7U REC (UG/L) (49235)	TRI-FLUR-ALIN WAT FLT REC (UG/L) (82661)	UREA 3 (4-CHLOR OPHENYL METHYL WAT FLT REC (UG/L) (61692)
SIOUX COUNTY								
06-05-02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02
06-06-02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02
06-05-02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02
06-05-02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02
06-06-02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02
06-06-02	<.010	<.034	<.02	<.005	<.002	<.02	<.009	<.02

Remark codes used in this report:
 < -- Less than
 E -- Estimated value
 M -- Presence verified, not quantified

ASHLAND WELL FIELD STUDY
GROUND-WATER QUALITY

(Local identifier: indicates location by township, range, and section. Geologic unit: 110QRTR, Quaternary system deposits, undifferentiated; 112SDGV, Pleistocene sand and gravel deposits.)

COUNTIES.-- Sarpy and Saunders

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Station number	Local identifier	Latitude	Longitude	Geologic unit	Hydrologic unit code	Date	Time	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)
SARPY COUNTY									
410159096181001	12N 10E 4CDA1	41 01 59 N	096 18 10 W	112SDGV	10200202	09-03-02	1250	--	1052.
410233096181801	12N 10E 4BADB1	41 02 33 N	096 18 18 W	--	10200202	09-03-02	1030	--	1052
410312096183901	13N 10E32ADDD1	41 03 12 N	096 18 39 W	110SDGV	10200202	09-03-02	1150	46.00	1056.
410324096191801	13N 10E32BADC1	41 03 24 N	096 19 18 W	112SDGV	10200202	09-03-02	1420	--	1060.21
SAUNDERS COUNTY									
410303096192901	13N 10E32CABC1	41 03 03 N	096 19 29 W	112SDGV	10200203	09-04-02	0830	86.	1056.
410427096202501	13N 10E19CDDD1	41 04 27 N	096 20 25 W	110SDGV	10200202	09-03-02	0830	56.	1065.
410612096220601	13N 9E14AAAA1	41 06 11 N	096 22 06 W	110QRNR	10200203	09-04-02	0940	98.00	1075.00
410703096205301	13N 10E 7BBBB1	41 07 03 N	096 20 53 W	110QRNR	10200203	09-04-02	1230	96.00	1075.00
410707096220601	13N 9E 2DDDD1	41 07 07 N	096 22 06 W	110QRNR	10200203	09-04-02	1110	130.00	1077.00

Date	BAROMETRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
SARPY COUNTY													
09-03-02	737	.1	0	7.7	601	30.0	11.0	230	63.4	16.3	8.45	.9	31.4
09-03-02	737	.1	0	7.7	555	28.0	11.5	210	59.8	14.1	7.99	.9	28.6
09-03-02	737	.1	0	7.7	501	29.0	10.0	170	43.5	15.4	8.15	1	30.4
09-03-02	737	.1	0	7.6	574	31.0	13.5	200	60.1	13.1	8.27	1	34.7
SAUNDERS COUNTY													
09-04-02	737	.2	2	7.7	486	24.0	12.0	160	42.9	12.3	8.37	1	28.4
09-03-02	737	.1	1	7.7	454	20.0	11.5	150	41.0	12.2	8.11	1	30.4
09-04-02	737	.1	0	7.1	674	27.0	12.0	--	--	--	--	--	--
09-04-02	737	.1	0	7.3	440	30.0	20.0	--	--	--	--	--	--
09-04-02	737	.1	0	7.1	684	28.0	13.0	--	--	--	--	--	--

CHEMICAL ANALYSES OF GROUND WATER

ASHLAND WELL FIELD STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	2,2-DI CHLORO- PRO- PANE WAT, WH TOTAL (UG/L) (77170)	ACRYLO- NITRILE TOTAL (UG/L) (34215)	1,2,3- TRI- CHLORO BENZENE WAT, WH REC (UG/L) (77613)	BENZENE 1,2,4- TRI- CHLORO- WAT UNF REC (UG/L) (34551)	BENZENE 124-TRI METHYL UNFILTRD RECOVER (UG/L) (77222)	BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226)	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	ISO- PROPYL- BENZENE WATER WHOLE REC (UG/L) (77223)	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	BENZENE SEC BUTYL- WATER UNFLTRD REC (UG/L) (77350)
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SARPY COUNTY

09-03-02	--	--	--	--	--	--	--	--	--	--	--	--	--
09-03-02	--	--	--	--	--	--	--	--	--	--	--	--	--
09-03-02	--	--	--	--	--	--	--	--	--	--	--	--	--
09-03-02	--	--	--	--	--	--	--	--	--	--	--	--	--

SAUNDERS COUNTY

09-04-02	--	--	--	--	--	--	--	--	--	--	--	--	--
09-03-02	--	--	--	--	--	--	--	--	--	--	--	--	--
09-04-02	<.2	<2.5	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2
09-04-02	<.2	<2.5	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2
09-04-02	<.2	<2.5	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2

Date	BENZENE TERT- BUTYL- WATER UNFLTRD REC (UG/L) (77353)	BENZENE TOTAL (UG/L) (34030)	BROMO- BENZENE WATER, WHOLE, TOTAL (UG/L) (81555)	BROMO- FORM TOTAL (UG/L) (32104)	CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102)	CHLORO- BENZENE TOTAL (UG/L) (34301)	CHLORO- DI- METHANE TOTAL (UG/L) (32105)	CHLORO- ETHANE TOTAL (UG/L) (34311)	CHLORO- FORM TOTAL (UG/L) (32106)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)	DIBROMO CHLORO- PROPANE WATER TOT.REC (UG/L) (82625)	DI- BROMO- METHANE WATER WHOLE RECOVER (UG/L) (30217)
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SARPY COUNTY

09-03-02	--	--	--	--	--	--	--	--	--	--	--	--	--
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09-03-02	--	--	--	--	--	--	--	--	--	--	--	--	--

SAUNDERS COUNTY

09-04-02	--	--	--	--	--	--	--	--	--	--	--	--	--
09-03-02	--	--	--	--	--	--	--	--	--	--	--	--	--
09-04-02	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<1	<.2
09-04-02	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<1	<.2
09-04-02	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<1	<.2

CHEMICAL ANALYSES OF GROUND WATER

ASHLAND WELL FIELD STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BROMO-DI-CHLORO-METHANE TOTAL (UG/L) (32101)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	ETHANE, 1112-TETRA-CHLORO-WAT REC (UG/L) (77562)	ETHANE, 1,1,2,2-TETRA-CHLORO-WAT UNF REC (UG/L) (34516)	ETHYL-BENZENE TOTAL (UG/L) (34371)	FREON-113 WATER UNFLTRD REC (UG/L) (77652)	HEXA-BUT-ADIENE TOTAL (UG/L) (39702)	METHANE BROMO-CHLORO-WAT UNFLTRD REC (UG/L) (77297)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L) (78032)	METHYL-BROMIDE TOTAL (UG/L) (34413)	METHYL-CHLORIDE TOTAL (UG/L) (34418)	METHYL-CHLORIDE TOTAL (UG/L) (34423)	NAPHTH-ALENE TOTAL (UG/L) (34696)
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SARPY COUNTY

09-03-02	--	--	--	--	--	--	--	--	--	--	--	--	--
09-03-02	--	--	--	--	--	--	--	--	--	--	--	--	--
09-03-02	--	--	--	--	--	--	--	--	--	--	--	--	--
09-03-02	--	--	--	--	--	--	--	--	--	--	--	--	--

SAUNDERS COUNTY

09-04-02	--	--	--	--	--	--	--	--	--	--	--	--	--
09-03-02	--	--	--	--	--	--	--	--	--	--	--	--	--
09-04-02	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.3	<.2	<.2	<.5
09-04-02	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.3	<.2	<.2	<.5
09-04-02	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.3	<.2	<.2	<.5

Date	O-CHLORO-TOLUENE WATER WHOLE TOTAL (UG/L) (77275)	P-ISO-PROPYL-TOLUENE WATER WHOLE TOTAL (UG/L) (77356)	1,3-DI-CHLORO-PROPANE WAT. WH TOTAL (UG/L) (77173)	STYRENE TOTAL (UG/L) (77128)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TOLUENE P-CHLOR WATER UNFLTRD REC (UG/L) (77277)	TOLUENE TOTAL (UG/L) (34010)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34699)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	VINYL CHLORIDE TOTAL (UG/L) (39175)
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SARPY COUNTY

09-03-02	--	--	--	--	--	--	--	--	--	--	--
09-03-02	--	--	--	--	--	--	--	--	--	--	--
09-03-02	--	--	--	--	--	--	--	--	--	--	--
09-03-02	--	--	--	--	--	--	--	--	--	--	--

SAUNDERS COUNTY

09-04-02	--	--	--	--	--	--	--	--	--	--	--
09-03-02	--	--	--	--	--	--	--	--	--	--	--
09-04-02	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2
09-04-02	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2
09-04-02	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2

Remark codes used in this report:

- < -- Less than
- E -- Estimated value
- M -- Presence verified, not quantified

A		Dorchester, West Fork Big Blue	
Arikaree River at Haigler	272	River near	320
Arrangement of Records (SW Quality)	19	Downstream Order System	13
Ashland, Platte River near	204	Driftwood Creek near McCook	290
Ashland, Wahoo Creek at	238	Duncan, Platte River near	124
Auburn, Little Nemaha River at	260	Dunning, Middle Loup River at	128
B		E	
Barneston, Big Blue River at	328	Elkhorn River at Ewing	166
Beaver City, Sappa Creek near	302	Elkhorn River at Norfolk	168
Beaver Creek at Cedar Bluffs	304	Elkhorn River at Pilger	172
Beaver Creek at Genoa	154	Elkhorn River at Waterloo	194
Benkelman, South Fork Republican		Elkhorn River at West Point	174
River near	280	Elm Creek near Elm Creek	108
Big Blue River at Barneston	328	Elm Creek, Elm Creek near	108
Big Blue River near Crete	324	Enders Reservoir near Enders	284
Big Nemaha River at Falls City	266	Enders, Enders Reservoir near	284
Buffalo Creek near Haigler	276	Ewing, Elkhorn River at	166
Buffalo Creek near Overton	106	Explanation of the Records	12
C		F	
Cambridge, Republican River at	296	Fairbury, Little Blue River near	334
Cedar Bluffs, Beaver Creek at	304	Falls City, Big Nemaha River at	266
Central City, Warm Slough near	122	Fort Kearney Slough near Newark, NE	114
Ceresco, Rock Creek near	230	Frenchman Creek at Culbertson	288
Classification of records (SW Quality)	19	Frenchman Creek at Palisade	286
Colorado-Nebraska state line, North		G	
Fork Republican River at	274	Genoa, Beaver Creek at	154
Columbus, Shell Creek near	158	Genoa, Loup River near	152
Cottonwood Ranch, near Elm Creek,		Genoa, Loup River Power Canal near	150
Platte River Middle Channel at	104	Greenwood, Salt Creek at	232
Courtland Canal at Nebraska-Kansas		Ground-water records, by county	
State line	312	Adams	360
Crete, Big Blue River near	324	Blaine	360
Culbertson, Frenchman Creek at	288	Boone	360
D		Buffalo	360, 361
Data Collection and Computation		Chase	361
(GW Levels)	22	Cherry	362
Data Collection and Computation (Stage		Colfax	362
and Water Discharge)	13	Dawson	362
Data Presentation (GW Levels)	24	Dundy	363
Data Presentation (GW Quality)	25	Fillmore	363, 364
Data Presentation (SW Quality)	21	Garfield	364
Decatur, Missouri River at	72	Gosper	364
Deweese, Little Blue River near	332	Hall	365
Dewitt, Turkey Creek near	326	Hamilton	365, 366
Dismal River near Thedford	130	Holt	366, 367
Doniphan, Platte River near	118	Hooker	367
		Kearney	367

Kimball	368	Lincoln, Salt Creek at	222
Lancaster	368	Lincoln, Salt Creek at 70th St. at	226
McPherson	369	Lincoln, Salt Creek at Pioneers	
Nuckolls	369	Boulevard at	214
Phelps	369	Lincoln, Stevens Creek near	228
Platte	370	Little Blue River at Hollenberg, KS	338
Saline	370	Little Blue River near Deweese	332
Sarpy	370	Little Blue River near Fairbury	334
Saunders	371, 372	Little Nemaha River at Auburn	260
Scotts Bluff	373	Little Salt Creek near Lincoln	224
Seward	373	Logan Creek near Uehling	176
Valley	374	Long Pine Creek near Riverview	54
Webster	374	Louisville, Platte River at	242
York	374	Loup River near Genoa	152
Guide Rock, Republican River at	314	Loup River Power Canal near Genoa	150
H		M	
Haigler, Arikaree River at	272	Maple Creek near Nickerson	178
Haigler, Buffalo Creek near	276	McCook, Driftwood Creek near	290
Haines Branch at SW 56th St. at Lincoln	216	McCook, Republican River at	292
Hallam, Olive Branch near	208	Memphis, Johnson Creek near	240
Hardy, Republican River near	316	Middle Creek at SW 40th St. at Lincoln	218
Harlan County Dam, Republican		Middle Loup River at Dunning	128
River below	310	Middle Loup River at St. Paul	140
Hollenberg, KS, Little Blue River at	338	Missouri River at Decatur	72
Homer, Omaha Creek at	70	Missouri River at Nebraska City	254
Hydrologic Bench-Mark Network	12	Missouri River at Omaha	74
I		Missouri River at Rulo	262
Ithaca, Wahoo Creek at	234	Missouri River at Sioux City	68
J		N	
Johnson Creek near Memphis	240	National Stream-Quality Accounting	
K		Network	12
Kearney, North Dry Creek 2 mi SW of		National Water-Quality Assessment	
Platte River Bridge S of	110	Program	12
Kearney, Platte River near	112	Nebraska City, Missouri River at	254
Keya Paha River at Wewela	58	Nebraska-Kansas State line, Courtland	
L		Canal at	312
Laboratory Measurements (SW Quality)	21	Newark, NE, Fort Kearney Slough near	114
Lakes and reservoirs		Newark, Platte River near	116
Lewis and Clark Lake near Yankton	66	Nickerson, Maple Creek near	178
Enders Reservoir near Enders	284	Niobrara River Basin near Sparks	50
Latitude-Longitude System	13	Niobrara River near Verdel	60
Leshara, Platte River near	162	Norfolk, Elkhorn River at	168
Lewis and Clark Lake near Yankton	66	North Bend, Platte River at	160
Lincoln, Haines Branch at SW 56th St. at	216	North Dry Creek 2 mi SW of Platte	
Lincoln, Little Salt Creek near	224	River Bridge south of Kearney	110
Lincoln, Middle Creek at SW 40th St. at	218	North Fork Elkhorn River near Pierce	170
Lincoln, Oak Creek at Air Park Road at	220		

North Fork Republican River at Colorado-Nebraska state line	274	Republican River at Cambridge	296
North Loup River at Taylor	144	Republican River at Guide Rock	314
North Loup River near St. Paul	146	Republican River at McCook	292
North Platte River at Wyoming-Nebraska State line	86	Republican River at Stratton	282
O		Republican River below Harlan County Dam	310
Oak Creek at Air Park Road at Lincoln	220	Republican River near Hardy	316
Olive Branch near Hallam	208	Republican River near Orleans	298
Omaha Creek at Homer	70	Riverview, Long Pine Creek near	54
Omaha, Missouri River at	74	Roca, Salt Creek at	212
On-site Measurements and Sample Collection (SW Quality)	19	Rock Creek at Parks	278
Orleans, Republican River near	298	Rock Creek near Ceresco	230
Overton, Buffalo Creek near	106	Roscoe, South Platte River at	94
Overton, Platte River near	98	Rulo, Missouri River at	262
Overton, Spring Creek near	102	S	
P		Salt Creek at 70th St. at Lincoln	226
Palisade, Frenchman Creek at	286	Salt Creek at Greenwood	232
Parks, Rock Creek at	278	Salt Creek at Lincoln	222
Pierce, North Fork Elkhorn River near	170	Salt Creek at Pioneers Boulevard at Lincoln	214
Pilger, Elkhorn River at	172	Salt Creek at Roca	212
Platte River at Louisville	242	Sappa Creek near Beaver City	302
Platte River at North Bend	160	Sappa Creek near Stamford	306
Platte River Middle Channel at Cottonwood Ranch, near Elm Creek	104	Sediment (SW Quality)	21
Platte River near Ashland	204	Seneca, Turkey Creek near	264
Platte River near Doniphan	118	Shell Creek near Columbus	158
Platte River near Duncan	124	Sioux City, Missouri River at	68
Platte River near Kearney	112	Smithfield, Plum Creek near	96
Platte River near Leshara	162	South Fork Republican River near Benkelman	280
Platte River near Newark	116	South Loup River at St. Michael	136
Platte River near Overton	98	South Platte River at Roscoe	94
Platte River near Prosser	117	South Platte River, at Julesburg	90, 92
Plum Creek near Smithfield	96	Sparks, Niobrara River Basin near	50
Ponca Creek at Verdel	48	Spring Creek near Overton	102
Prairie Dog Creek near Woodruff	308	St. Michael, South Loup River at	136
Prosser, Platte River near	117	St. Paul, Middle Loup River at	140
R		St. Paul, North Loup River near	146
Records of Ground-Water Levels	22	Stamford, Sappa Creek near	306
Records of Ground-Water Quality	24	Station Identification Numbers	13
Records of Stage and Water Discharge	13	Stevens Creek near Lincoln	228
Records of Surface-Water Quality	19	Stratton, Republican River at	282
Red Willow Creek near Red Willow	294	T	
Red Willow, Red Willow Creek near	294	Taylor, North Loup River at	144
		Thedford, Dismal River near	130

Turkey Creek near Dewitt	326
Turkey Creek near Seneca	264
U	
Uehling, Logan Creek near	176
Union, Weeping Water Creek at	252
V	
Verdel, Niobrara River near	60
Verdel, Ponca Creek at	48
Verdigre Creek near Verdigre	62
Verdigre, Verdigre Creek near	62
W	
Wahoo Creek at Ashland	238
Wahoo Creek at Ithaca	234
Warm Slough near Central City	122
Water temperature (SW Quality)	21
Waterloo, Elkhorn River at	194
Weeping Water Creek at Union	252
West Fork Big Blue River near Dorchester	320
West Point, Elkhorn River at	174
Wewela, Keya Paha River at	58
Woodruff, Prairie Dog Creek	308
Y	
Yankton, Lewis and Clark Lake near	66

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CONVERSION FACTORS

Multiply	By	To obtain
<i>Length</i>		
inch (in.)	2.54×10^1	millimeter
	2.54×10^{-2}	meter
foot (ft)	3.048×10^{-1}	meter
mile (mi)	1.609×10^0	kilometer
<i>Area</i>		
acre	4.047×10^3	square meter
	4.047×10^{-1}	square hectometer
	4.047×10^{-3}	square kilometer
square mile (mi ²)	2.590×10^0	square kilometer
<i>Volume</i>		
gallon (gal)	3.785×10^0	liter
	3.785×10^0	cubic decimeter
	3.785×10^{-3}	cubic meter
million gallons (Mgal)	3.785×10^3	cubic meter
	3.785×10^{-3}	cubic hectometer
cubic foot (ft ³)	2.832×10^1	cubic decimeter
	2.832×10^{-2}	cubic meter
cubic-foot-per-second day [(ft ³ /s) d]	2.447×10^3	cubic meter
	2.447×10^{-3}	cubic hectometer
acre-foot (acre-ft)	1.233×10^3	cubic meter
	1.233×10^{-3}	cubic hectometer
	1.233×10^{-6}	cubic kilometer
<i>Flow</i>		
cubic foot per second (ft ³ /s)	2.832×10^1	liter per second
	2.832×10^1	cubic decimeter per second
	2.832×10^{-2}	cubic meter per second
gallon per minute (gal/min)	6.309×10^{-2}	liter per second
	6.309×10^{-2}	cubic decimeter per second
	6.309×10^{-5}	cubic meter per second
million gallons per day (Mgal/d)	4.381×10^1	cubic decimeter per second
	4.381×10^{-2}	cubic meter per second
<i>Mass</i>		
ton (short)	9.072×10^{-1}	megagram or metric ton

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows:

$$^{\circ}\text{F} = (1.8 \times ^{\circ}\text{C}) + 32$$