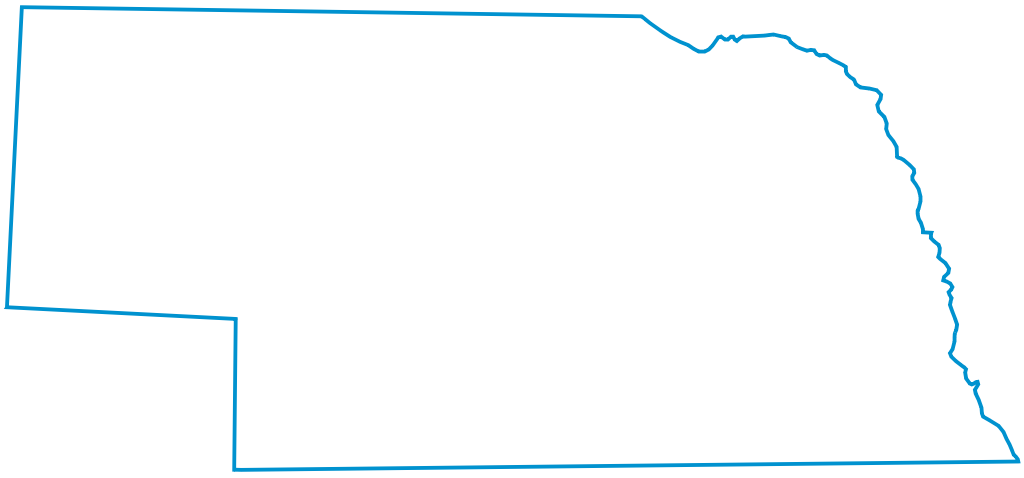
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Prepared in cooperation with the Nebraska Department of Natural Resources, the Conservation and Survey Division of the University of Nebraska, the Nebraska Department of Environmental Quality, and other Federal, State, and local agencies

Water Resources Data Nebraska Water Year 2003



Water-Data Report NE-03-1

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

CALENDAR FOR WATER YEAR 2003

2002

OCTOBER

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
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NOVEMBER

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DECEMBER

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2003

JANUARY

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FEBRUARY

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APRIL

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AUGUST

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SEPTEMBER

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21	22	23	24	25	26	27
28	29	30				

Water Resources Data
Nebraska
Water Year 2003

By D.E. Hitch, S.H. Hull, V.C. Walczyk, J.D. Miller, and R.A. Drudik

Water-Data Report NE-03-1

Prepared in cooperation with the Nebraska Department of Natural Resources,
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U.S. Geological Survey

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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, D.L. Curtis, G.V. Steele, J.S. Stanton, 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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The Nebraska water resources data report for water year 2003 includes records of stage, discharge, and water quality of streams; water elevation 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 103 continuous and 5 crest-stage gaging stations, and 5 miscellaneous sites; stream water quality for 14 gaging stations and 5 miscellaneous sites; water elevation and/or contents for 2 lakes and 1 reservoir; ground-water levels for 40 observation wells; and ground-water quality for 132 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.

14. SUBJECT TERMS
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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 preceeding the number has been left off as well as the 00 following a 4-digt number]

	Station number	*Page*
MISSOURI RIVER BASIN		
MISSOURI RIVER:		
PONCA CREEK BASIN		
Ponca Creek at Verdel (d)	4536	60
NIOBRARA RIVER BASIN		
Niobrara River near Sparks (d c t)	4615	62
Long Pine Creek near Riverview (d c t)	4635	66
Keya Paha River at Wewela, SD (d)	4645	70
Niobrara River near Verdel (d)	4655	72
Verdigre Creek near Verdigre (d)	4657	74
BAZILLE CREEK BASIN		
Bazile Creek at Center (d)	4664	78
Bazile Creek near Niobrara (d)	4665	80
Lewis and Clark Lake near Yankton, SD (e)	4670	82
Missouri River at Sioux City, IA (d)	4860	84
OMAHA CREEK BASIN		
South Omaha Creek at Walthill (d)	6009	86
Omaha Creek at Homer (d)	6010	88
Missouri River at Decatur (d)	601290	
Missouri River at Omaha (d)	610092	
PLATTE RIVER BASIN		
North Platte River (head of Platte River) at Wyoming-Nebraska State line (d c t s)	6745	96
South Platte River:		
Lodgepole Creek at Bushnell (d)	7625	100
South Platte River at Julesburg, CO (d)	7640	102
South Platte River at Roscoe (d)	764880	104
Platte River:		
Platte River near Overton (d c t)	7680	106
Spring Creek near Overton (d)	768020	110
Platte River Middle Channel at Cottonwood Ranch, near Elm Creek (d)	768035	112
Buffalo Creek near Overton (d)	7690	114
Elm Creek near Elm Creek (d)	769525	116
North Dry Creek 2 mi SW of Platte River Bridge S of Kearney (d)	770195	118
Platte River near Kearney (d)	7702	120
Fort Kearney Slough near Newark (d)	770240	122
Platte River near Newark (st)	770253	124
Platte River near Prosser (st)	770375	125
Platte River near Doniphan (st)	770470	126

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

	Station number	*Page*
MISSOURI RIVER BASIN		
MISSOURI RIVER--Continued		
PLATTE RIVER BASIN--Continued		
Platte River--Continued		
Platte River near Grand Island (d)	7705	128
Warm Slough near Central City (d)	772775	130
Silver Creek at 4 mile, near Silver Creek (d)	772898	132
Prairie Creek near Silver Creek (d)	773500	134
Platte River near Duncan (d)	7740	136
Middle Loup River (head of Loup River) at Dunning (d)	7755	140
Dismal River near Thedford (d c t s)	7759	142
South Loup River at St. Michael (d)	7840	150
Middle Loup River at St. Paul (d)	7850	152
North Loup River at Taylor (d)	7860	154
North Loup River near St. Paul (d)	7905	156
Loup River:		
Loup River Power Canal near Genoa (d)	7925	158
Loup River near Genoa (d)	7930	160
Beaver Creek at Genoa (d)	7940	162
Clear Creek, 1.75 miles west of the Polk County line	794650	164
Shell Creek near Columbus (d)	7955	168
Platte River at North Bend (d)	7960	170
Platte River near Leshara (d)	7965	172
Elkhorn River at Ewing (d)	7975	176
Elkhorn River at Norfolk (d)	7990	178
North Fork Elkhorn River near Pierce (d)	7991	180
Elkhorn River at Pilger (d)	799315	182
Elkhorn River at West Point (d)	799350	184
Logan Creek at Wakefield (d)	799445	186
Logan Creek near Bancroft (d)	799460	188
Logan Creek near Uehling (d)	7995	190
Maple Creek near Nickerson (d c t s)	8000	192
Elkhorn River at Waterloo (d c t s)	8005	214
Platte River near Ashland (d)	8010	228
Olive Branch (head of Salt Creek) near Hallam (d c t)	801180	230
Salt Creek at Roca (d)	8030	236
Salt Creek at Pioneers Boulevard at Lincoln (d)	803080	238
Haines Branch at SW 56th St. at Lincoln (d)	803093	240
Middle Creek at SW 40th St at Lincoln (d)	803170	242
Oak Creek at Air Park Rd at Lincoln (d)	803486	244

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

	Station number	*Page*
MISSOURI RIVER BASIN		
MISSOURI RIVER--Continued		
PLATTE RIVER BASIN--Continued		
Salt Creek--Continued		
Salt Creek at Lincoln (d)	8035	246
Little Salt Creek near Lincoln (d)	803510	248
Salt Creek at 70th St. at Lincoln (d)	803513	250
Stevens Creek near Lincoln (d)	803520	252
Rock Creek near Ceresco (d)	803530	254
Salt Creek at Greenwood (d)	803555	256
Wahoo Creek at Ithaca (d c)	8040	258
Wahoo Creek at Ashland (d)	8047	262
Johnson Creek near Memphis (d)	8049	264
Platte River at Louisville (d c t s)	8055	266
WEEPING WATER CREEK BASIN		
Weeping Water Creek at Union (d)	8065	276
Missouri River at Nebraska City (d)	8070	278
LITTLE NEMAHA RIVER BASIN		
Little Nemaha River at Auburn (d)	8115	280
Missouri River at Rulo (d)	8135	282
BIG NEMAHA RIVER BASIN		
Big Nemaha River:		
Turkey Creek near Seneca, KS (d)	8140	284
Big Nemaha River at Falls City (d c t)	8150	286
KANSAS RIVER BASIN		
Arikaree River (head of Kansas River) at Haigler (d)	8215	292
North Fork Republican River at Colorado-Nebraska State line (d)	8230	294
Republican River (continuation of Arikaree River):		
Buffalo Creek near Haigler (d)	8235	296
Rock Creek at Parks (d)	8240	298
South Fork Republican River near Benkelman (d)	8275	300
Republican River at Stratton (d)	8285	302
Enders Reservoir near Enders (e)	8320	304
Frenchman Creek at Palisade (d)	8340	306
Frenchman Creek at Culbertson (d)	8355	308
Driftwood Creek near McCook (d)	8365	310
Republican River at McCook (d)	8370	312
Red Willow Creek near Red Willow (d)	8380	314
Republican River at Cambridge (d)	8435	316

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

	Station number	*Page*
MISSOURI RIVER BASIN		
MISSOURI RIVER--Continued		
KANSAS RIVER BASIN--Continued		
Republican River--Continued		
Republican River near Orleans (d)	8445	318
Sappa Creek:		
Beaver Creek at Cedar Bluffs, KS (d)	8465	320
Sappa Creek near Stamford (d)	8475	322
Prairie Dog Creek near Woodruff, KS (d)	8485	324
Harlan County Lake Near Republican City (e)	8490	326
Republican River below Harlan County Dam (d)	8495	336
Courtland Canal at Nebraska-Kansas State line (d)	8525	338
Republican River at Guide Rock (d)	853020	340
Republican River near Hardy (d)	8535	342
Kansas River:		
Big Blue River:		
West Fork Big Blue River near Dorchester (d c t)	8808	346
Big Blue River near Crete (d)	8810	350
Turkey Creek near DeWitt (d)	881380	352
Big Blue River at Barneston (d c t)	8820	354
Little Blue River near Deweese (d)	8830	358
Little Blue River at Fairbury (d)	883995	360
Little Blue River near Fairbury (d c t)	8840	362
Little Blue River at Hollenberg, KS (d)	884025	364

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); mi^2, 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 Colclesser (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); mi^2, 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
Niobrara River near Spencer (d)	4650	11,070	1913, 14, 1927-36, 1940-2001
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
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); mi^2, 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 Sidney (d)	7630	2,190	1931-32
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

DISCONTINUED SURFACE-WATER GAGING STATIONS--Continued

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only); mi^2, 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			
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
Plum Creek near Smithfield (d)	7675	224	1946-53, 1968-75, 1981-1991, 1996-2002
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
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

DISCONTINUED SURFACE-WATER GAGING STATIONS--Continued

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only); mi^2, 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			
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
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

DISCONTINUED SURFACE-WATER GAGING STATIONS--Continued

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only); mi^2, 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			
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
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

DISCONTINUED SURFACE-WATER GAGING STATIONS--Continued

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only); mi^2, square mile; --, not available; WYO, Wyoming; NE, Nebraska]

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
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)	837390	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, 2002
Beaver Creek near Beaver City (d)	8470	2,080	1937-94
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
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

DISCONTINUED SURFACE-WATER GAGING STATIONS--Continued

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only); mi^2, square mile; --, not available; WYO, Wyoming; NE, Nebraska]

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
Kansas River Basin--Continued			
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 the number has been left off as well as the 00 following a 4-digit number.

DISCONTINUED SURFACE-WATER CREST STAGE STATIONS

[mi^2, 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

[mi^2, 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

[mi^2, 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

[mi^2, 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

DISCONTINUED SURFACE-WATER CREST STAGE STATIONS--Continued

[mi^2, square mile; No., number]

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
Big Nemaha River Basin			
Muddy Creek at Verdon	8155	186	1973
Temple Creek near Falls City	815510	3.02	1968-78
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	8341	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

[mi^2, 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
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 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						
Minnechaduza 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	1973-94	c	m		
		1972-94			s	t
		1972-81			s	
Niobrara River near Verdel	4655	1976-80	c			
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	c		
		1970-73	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	c
		1947-52	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	c s t
		1996-99	c 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	c			
		1948-51			s	
**North Loup River at Taylor	7860	*1956	c			
		*1949, *1977			s	
		1974-81	c			t
North Loup River near Burwell	7865	*1944, 1952	c			
		*1949-57			s	
Calamus River near Burwell	7875	*1944, *1952-56	c			
		*1949-55			s	
		1972-81	c			t
North Loup River at Ord	7885	1944	c			
		1949-55			s	
North Loup River at Scotia	7890	*1944	c			
		*1949			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	c			
		1946-47			s	
		1957-63	c		s	
Cedar River at Belgrade	7918	*1959	c			
		1958-63			s	
Cedar River near Fullerton	7920	1958-59, 1974-96	c			
Loup River Power Canal at Diversion near Genoa	792499	1973-86	c	m	s	t
		1974-83				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	c			
		1946-51			s	
Beaver Creek near Albion	7936	1973-78	c	m		t
**Beaver Creek at Genoa	7940	*1977			s	
		1978-89	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	c
		*1961, 1963-64	s
North Fork Elkhorn River at Hadar	799110	*1968-69	c
North Fork Elkhorn River at Norfolk	799130	*1965, 1968-69	c
		1965-68	s
Union Creek near Stanton	799290	*1964, *1968-69	c
		1962-65	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 Plattesmouth	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	c
		1973-78	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	c
		1988-93	s
Big Blue River at Crete	880950	*1951, *1963	c s
**Big Blue River near Crete	8810	1961-62, *1964, 1968-84	c m
		1960-62, *1964	s
		1962, 1968-84	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,	s
		1966-70, 1973-89	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	c
		*1960-61, *1963	s
		1978-83	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.
*** Current reservoir stations.
**** Station operated by Nebraska USGS.

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 2003 includes records of stage, discharge, and water quality of streams; water elevation 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 103 continuous and 5 crest-stage gaging stations, and 5 miscellaneous sites; stream water quality for 14 gaging stations and 5 miscellaneous sites; water elevation and/or contents for 2 lakes and 1 reservoir; ground-water levels for 40 observation wells; and ground-water quality for 132 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 District 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 USGS 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; the Omaha, Santee Sioux, and Winnebago tribes; 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 2003 at selected locations is discussed in this summary section.

Precipitation

Precipitation data from published reports and the web site of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA), National Climatic Data Center for the eight climate divisions in Nebraska are listed in table 1. The locations of the NOAA divisions in Nebraska are shown in figure 1. Precipitation for the normal period (1971-2000), water year 2003, 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 2001, 2002, and 2003 and normal precipitation (1971-2000) are shown in figure 2. Precipitation for water year 2003 was slightly higher than for water year 2002, but 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 2003 and normal precipitation are shown in figure 3.

Two divisions (South Central and Southeast) received greater-than-normal precipitation during the first quarter. The Panhandle received greater than normal precipitation during the second quarter. All divisions received greater than normal precipitation during the third quarter, but only the Northeast division received slightly greater than normal precipitation during the fourth quarter. For the year, precipitation for the divisions in Nebraska was from 3 percent to 20 percent less than normal.

Streamflow

Streamflow during water year 2003 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 NOAA division boundaries. The monthly mean flows for water year 2003 for each of these representative stations are compared below to the monthly mean flows for the long-term record for each of these stations and to the precipitation data for the appropriate NOAA 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 2003. For stations with significant streamflow regulation—06461500 (Niobrara River near Sparks), 06805555 (Salt Creek at Greenwood) and 06844500 (Republican River at Orleans)—the period of record used for the long-term mean is from the completion of the last known relatively substantial 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 and table 1 for precipitation data.

Station 06461500, Niobrara River near Sparks, lies east of the Panhandle division, but most of its drainage area is in the Panhandle division. Streamflow was near normal for the entire year.

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 4.44 inches less than normal for the water year. Streamflow was at or above normal in October through December, and March through June. A significant part of the streamflow is derived from ground-water discharge in sandhills streams, and therefore streamflow can remain relatively stable even in drier-than-normal conditions. However, less than half the normal precipitation was received during July through September, and streamflow was less than two thirds of the long-term mean during August.

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. Streamflow was near normal in October through January. Thereafter, streamflow was less than normal except for May, which had substantially greater than normal streamflow despite near-normal precipitation during April and May.

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. Precipitation was 14 percent less than normal for the year, but streamflow was much less than the long-term mean in all months except May. Precipitation was substantially above normal in April (nearly 5 inches) in the Central division, which led to this one exception for the 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 long-term mean for all months except October and June. Precipitation during April through June was above normal.

Table 1. Average precipitation and departures from normal, water year 2003

[All values are in inches. Period of record for normal, 1971-2000. Source: U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Climatic Data Center published reports and web site, accessed March 3, 2004]

Climate divisions for Nebraska	Precipitation														
	First quarter (October-December 2002)			Second quarter (January-March 2003)			Third quarter (April-June 2003)			Fourth quarter (July-September 2003)			Totals (October-September 2003)		
	Normal	Actual	Departure	Normal	Actual	Departure	Normal	Actual	Departure	Normal	Actual	Departure	Normal	Actual	Departure
Panhandle	2.12	1.31	-0.81	1.92	2.37	0.45	7.62	7.76	0.14	5.52	4.01	-1.51	17.18	15.45	-1.73
North Central	3.04	2.76	-0.28	2.50	1.95	-0.55	9.36	10.14	0.78	7.84	3.45	-4.39	22.74	18.30	-4.44
Northeast	4.10	3.57	-0.53	3.25	2.73	-0.52	10.87	10.91	0.04	8.84	8.93	0.09	27.06	26.14	-0.92
Central	3.35	2.89	-0.46	2.98	1.58	-1.40	10.23	12.91	2.68	8.36	4.04	-4.32	24.92	21.42	-3.50
East Central	4.65	3.91	-0.74	3.62	2.52	-1.10	11.50	12.32	0.82	9.81	7.44	-2.37	29.58	26.19	-3.39
Southwest	2.54	2.25	-0.29	2.33	2.13	-0.20	8.45	9.81	1.36	6.87	3.86	-3.01	20.19	18.05	-2.14
South Central	3.27	4.24	0.97	2.94	1.99	-0.95	9.74	12.27	2.53	8.88	4.17	-4.71	24.83	22.67	-2.16
Southeast	4.95	5.25	0.30	3.92	2.41	-1.51	11.17	13.80	2.63	10.99	7.16	-3.83	31.03	28.62	-2.41

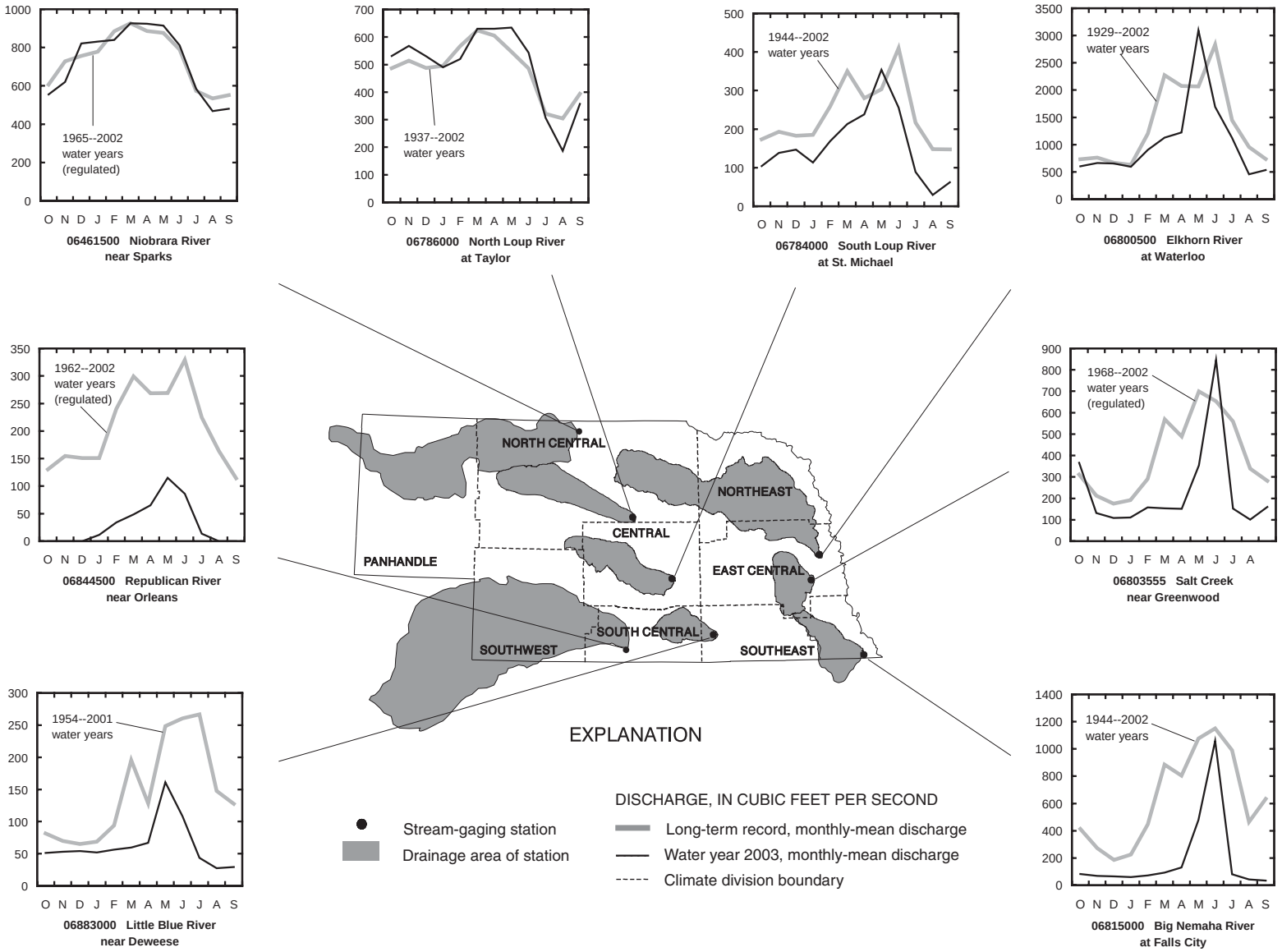


Figure 1. Streamflow data for selected stream-gaging stations to compare water year 2003 with the long-term record. Refer to corresponding precipitation data (fig. 3).

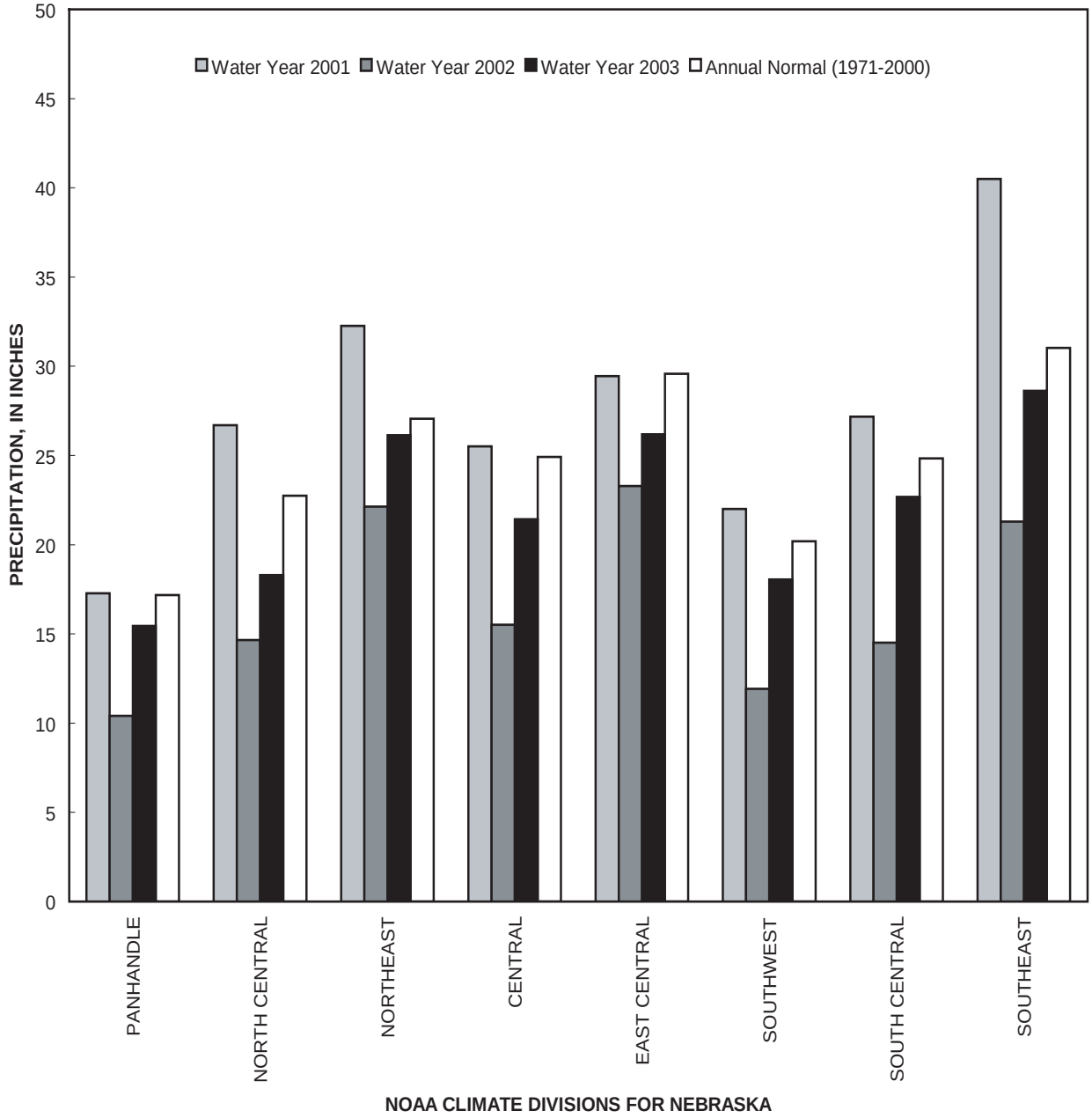


Figure 2. Precipitation for water years 2001–2003 and normal precipitation (1971–2000) for the eight National Oceanic and Atmospheric Administration climate divisions in Nebraska.

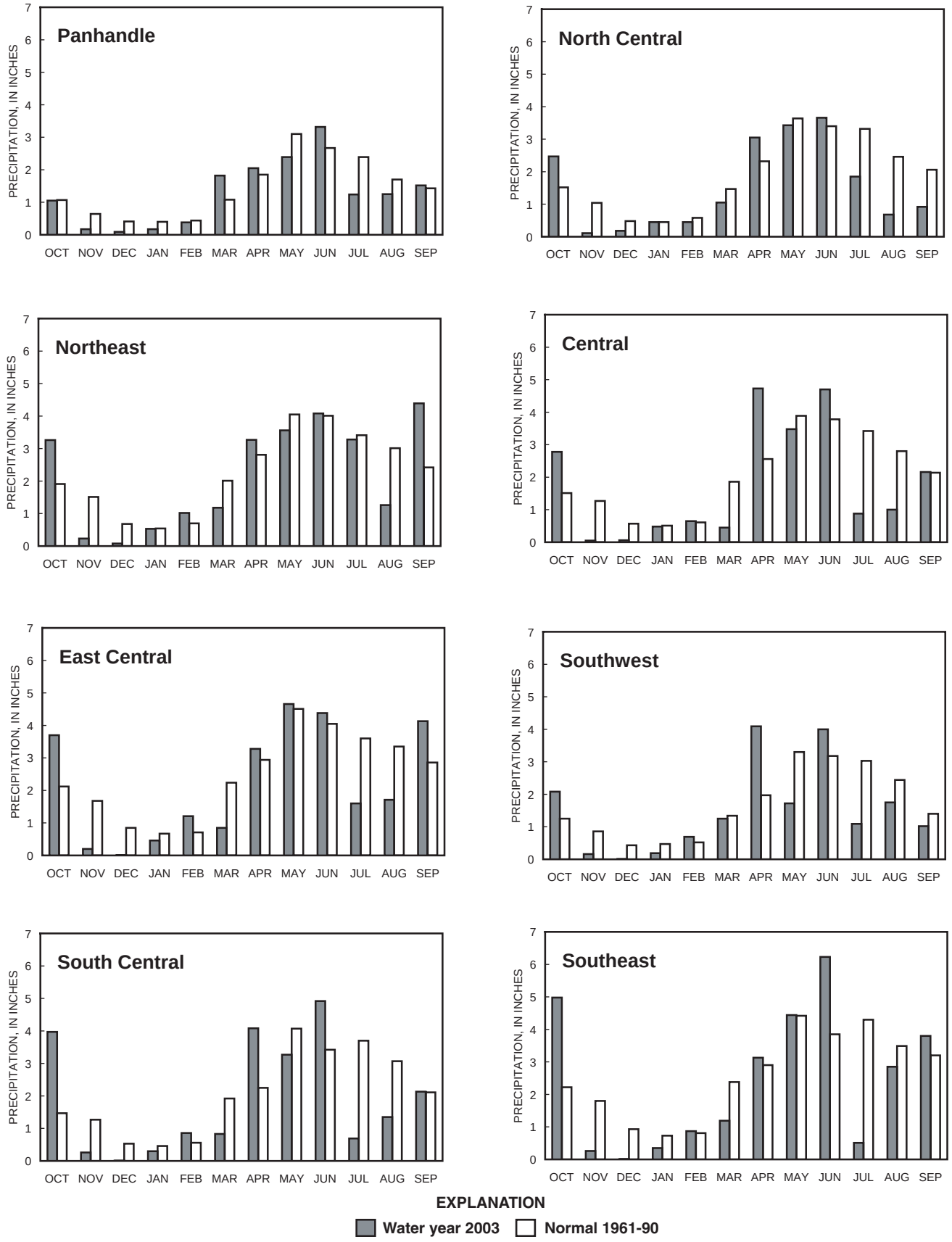


Figure 3. Monthly precipitation for water year 2003 and normal precipitation (1971–2000) for each National Oceanic and Atmospheric Administration climate division in Nebraska.

Station 06844500, Republican River near Orleans lies slightly east 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 substantially less than the long-term record for the entire water year. Although annual precipitation was only 11 percent below normal, streamflow was 85 percent below the long-term record.

Station 06883000, Little Blue River near Deweese, is located in the Southeast division, but it receives runoff from areas mostly in the South Central division. Flows were slightly below the long-term mean for the first quarter, but were much less than the long-term mean for the remainder of the year. Streamflow was only 37 percent of the long-term mean for the water year, although annual precipitation was only about 9 percent less than normal.

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, although it was near the long-term mean in June when precipitation was over 2 inches greater than normal. 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 2003 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 76 wells equipped with continuous recorders. Data from 40 observation wells are included in this report; 15 of these wells are equipped with continuous recorders.

In areas of Nebraska where ground water is not affected substantially by irrigation, 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.

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 from five such recorder wells for water years 2002 and 2003 are shown in figure 4. In water year 2003, total precipitation was less than normal in all divisions (fig. 2), providing less water for recharge to the aquifers. To varying degrees, all five wells show declining water levels from 2002 to the 2003 water year.

Typically, ground-water levels for these wells reach their highest levels in early to late spring (April through June) prior to ground-water withdrawals for irrigation, which causes sharp declines in water levels until August or September. Exceptions to this can occur when leakage from surface-water irrigation canals, typically operating from May-June through September, recharge shallow aquifers and offset some of the loss from irrigation withdrawals.

The hydrograph for the observation well in Scotts Bluff County (fig. 4) shows the influences of recharge from nearby surface-water irrigation canals. The water-level fluctuations are much less for this well than the other four, and the decline from water year 2002 to 2003 is less than 1 foot based on the maximum and minimum levels for each year.

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 20 percent below normal for the year (table 1). The lack of normal precipitation likely created a greater demand for ground-water withdrawals for irrigation. Based on the maximum and minimum water levels for the two water years, declines ranged from about 3 to 5 feet.

In the Central division in Nebraska, precipitation was only 86 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. Insufficient precipitation coupled with ground-water withdrawals for irrigation resulted in a steady decline in 2002, followed by only a modest recovery and then another steady decline in water year 2003. Overall decline from 2002 to 2003 ranged from about 3 to 4 feet.

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 2002 and 2003. Precipitation for water year 2003 was 89 percent of normal, with November, December, July, and August substantially below normal (fig. 3). Cessation of ground-water withdrawals for irrigation and recharge after August 2002 resulted in a recovery of about 5 feet, but following the start-up of withdrawals in June 2003, levels declined by about 7 feet. The overall decline from 2002 to 2003, based on maximum and minimum levels for each year, ranged from about 2 to 3 1/2 feet.

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 2002 and 2003. Precipitation was 11 percent below normal in the Southwest division for the year (table 1). Ground-water levels recovered about 3 feet from the lowest level in 2002 by the beginning of the 2003 irrigation season, but below normal precipitation in July, August, and September (fig. 3) along with irrigation demands, resulted in a new decline of over 6 feet by the end of the irrigation season. Maximum and minimum levels for both years indicate an overall decline of about 3 to 3 1/2 feet from 2002 to 2003.

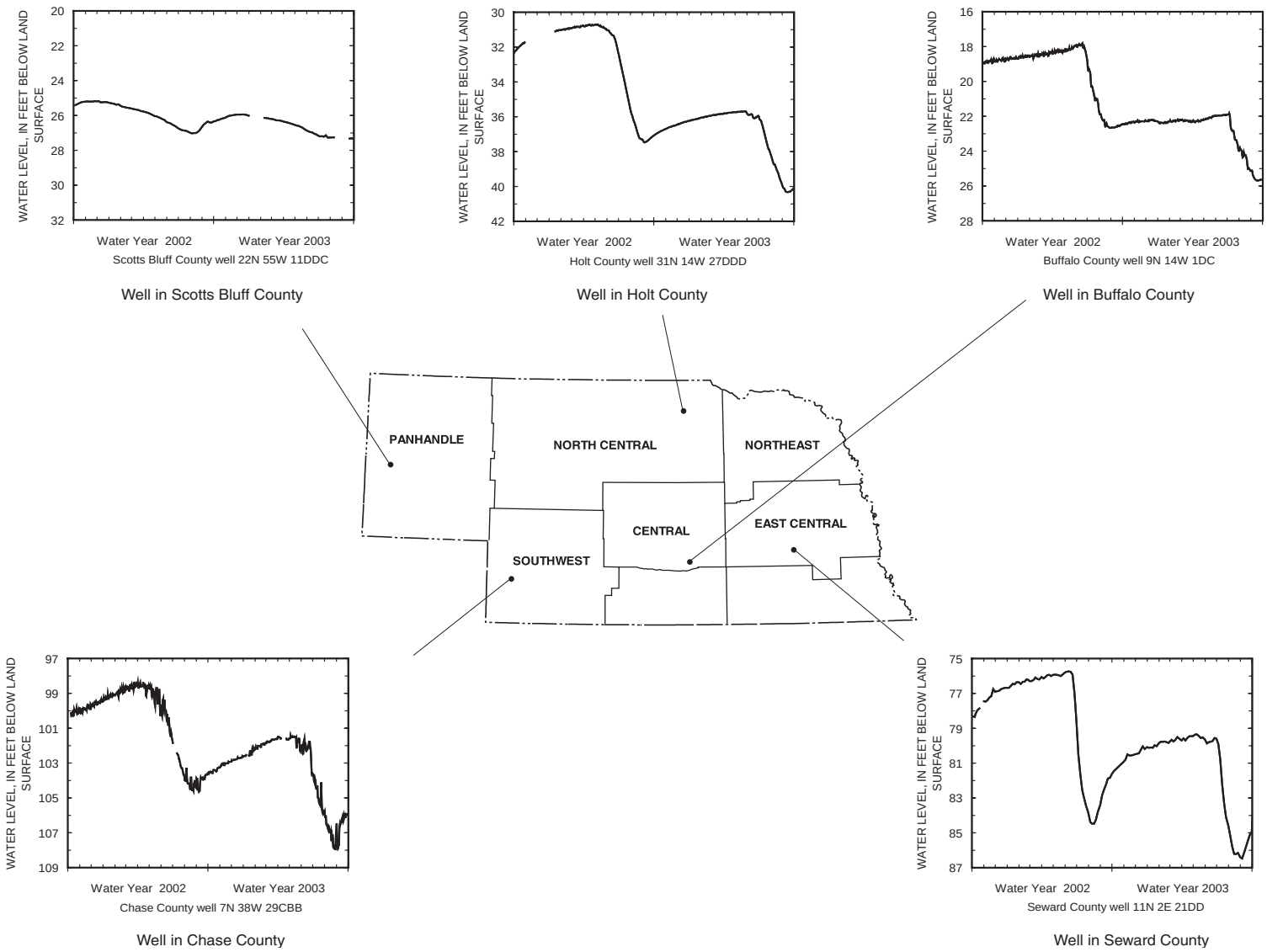


Figure 4. Water levels in selected observation wells, water years 2002 and 2003.

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]

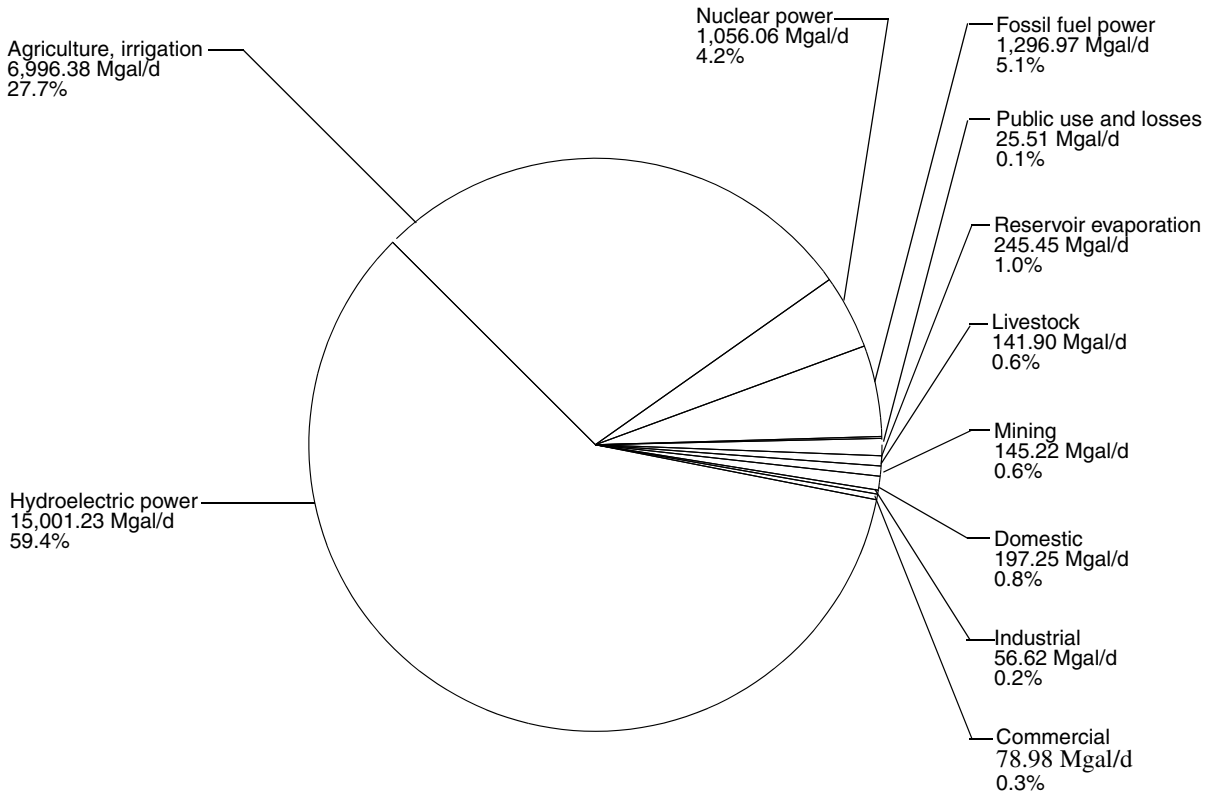


Figure 5. (a) Estimated total water use in Nebraska, 1995.

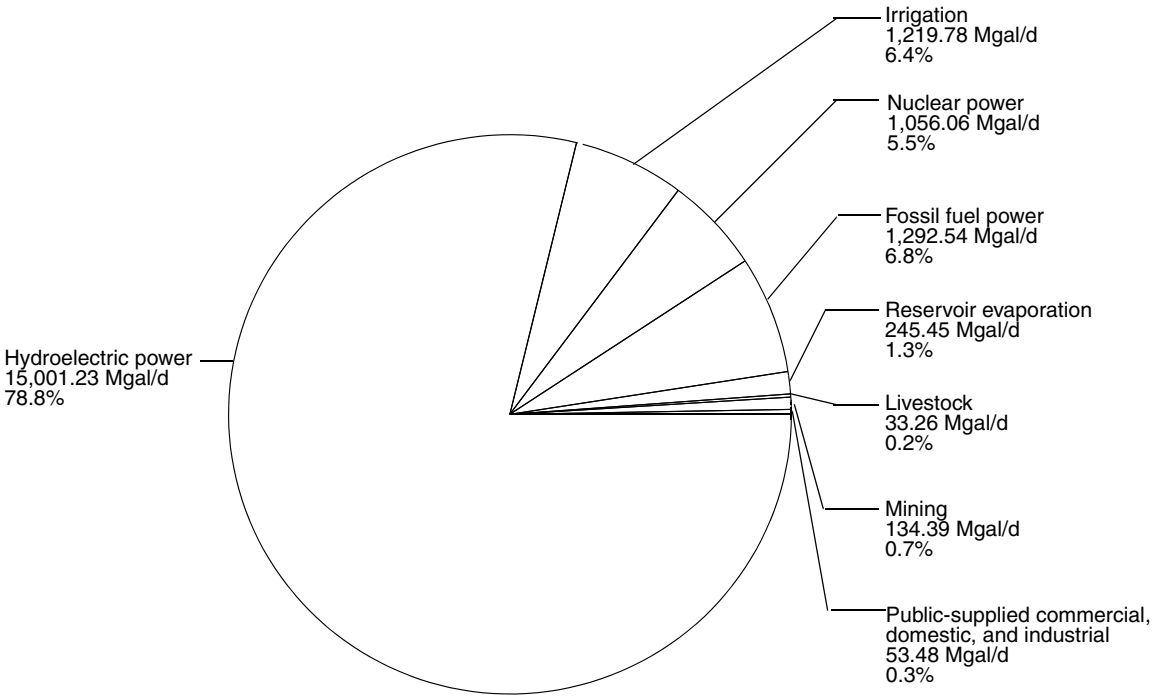


Figure 5. (b) Estimated total surface-water use in Nebraska, 1995.

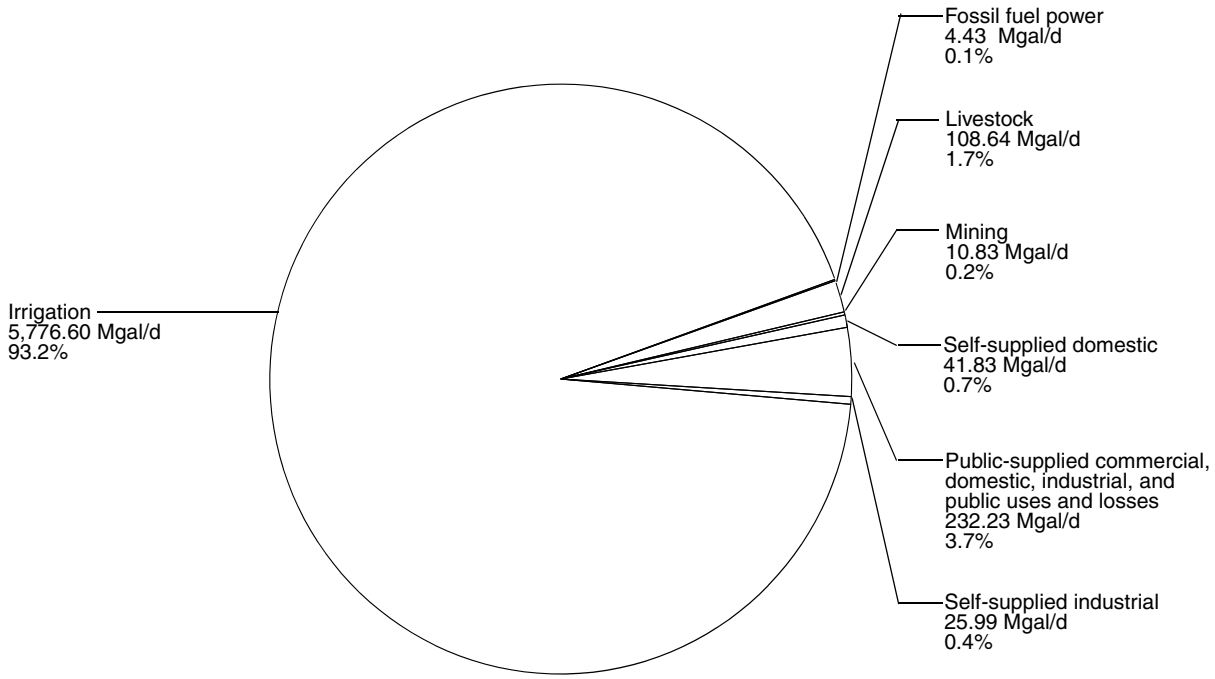


Figure 5. (c) Estimated total ground-water use in Nebraska, 1995

DOWNSTREAM ORDER AND STATION NUMBER

Since October 1, 1950, hydrologic-station records in USGS reports have been listed in order of downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary entering between two main-stream stations is listed between those stations. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is located with respect to the stream to which it is immediately tributary is indicated by an indention in that list of stations in the front of this report. Each indentation represents one rank. This downstream order and system of indentation indicates which stations are on tributaries between any two stations and the rank of the tributary on which each station is located.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These station numbers are in the same downstream order used in this report. In assigning a station number, 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 composed of both types of stations. Gaps are consecutive. The complete 8-digit (or 10-digit) number for each station such as 06461500, which appears just to the left of the station name, includes a 2-digit part number “06” plus the 6-digit (or 8-digit) downstream order number “461500.” In areas of high station density, an additional two digits may be added to the station identification number to yield a 10-digit number. The stations are numbered in downstream order as described above between stations of consecutive 8-digit numbers.

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The USGS well and miscellaneous site-numbering system is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, and the next 7 digits denote degrees, minutes, and seconds of longitude; the last 2 digits are a sequential number for wells within a 1-second grid. In the event that the latitude-longitude coordinates for a well and miscellaneous site are the same, a sequential number such as “01,” “02,” and so forth, would be assigned as one would for wells (see fig. 6). The 8-digit, downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

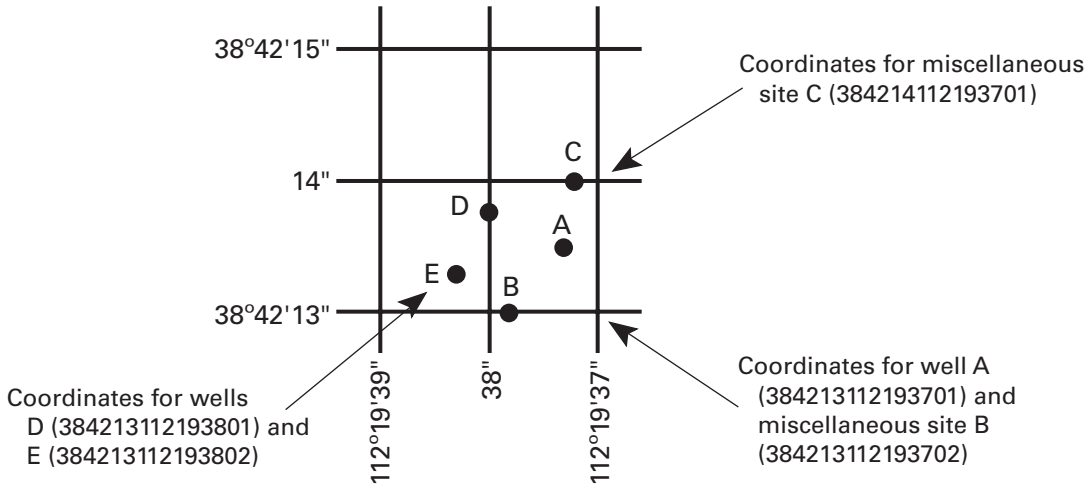


Figure 6. System for numbering wells and miscellaneous sites (latitude and longitude).

In addition to the well number that is based on latitude and longitude given for each well, another well number is given that is based on the U.S. Bureau of Land Management's system of land subdivision. This well number is familiar to the water users of Nebraska and shows the location of the well by quadrant, township, range section, and position within the section (see fig. 7). The first numeral indicates the township, the second the range, and the third the section in which the well is located. The letter N or S following the township numeral indicates north or south of the baseline and the letter E or W following the range numeral indicates east or west of the principal meridian. Uppercase letters following the section number locate the well within the section. The first letter denotes the quarter section, the second the quarter-quarter section, and the third the quarter-quarter-quarter section, and the fourth the quarter-quarter-quarter-quarter section. The letters are assigned within the section in a counter-clockwise direction beginning with (A) in the northeast quarter of the section. Letters are assigned within each quarter section and quarter-quarter section in the same manner. Where two or more wells are located within the smallest subdivision, consecutive numbers beginning with 1 are added to the letters in the order in which the wells are inventoried. For example, 17N 44W 29DAAA1 indicates a well in the northeast quarter of the northeast quarter of the northeast quarter of the southeast quarter of sec. 29, T. 17N., R.44 W., and shows that this is the first well inventoried in the quarter-quarter-quarter-quarter section.

Location of water wells also is based on the land-net subdivisions in the Bureau of Land Management's (BLM) survey of Nebraska (fig. 7). The number preceding N (north) indicates the township or tier, the numeral preceding E (east) or W (west) indicates the range, and the number preceding the terminal letters indicates the section in which the well is located (17N 44W 29DAAA1, for example). The terminal letters designated A, B, C, and D, denote the quarter section, the quarter-quarter section, the quarter-quarter-quarter section, and the quarter-quarter-quarter-quarter section. The designation is given in a counterclockwise direction beginning with "A" in the northeast corner of each subdivision.

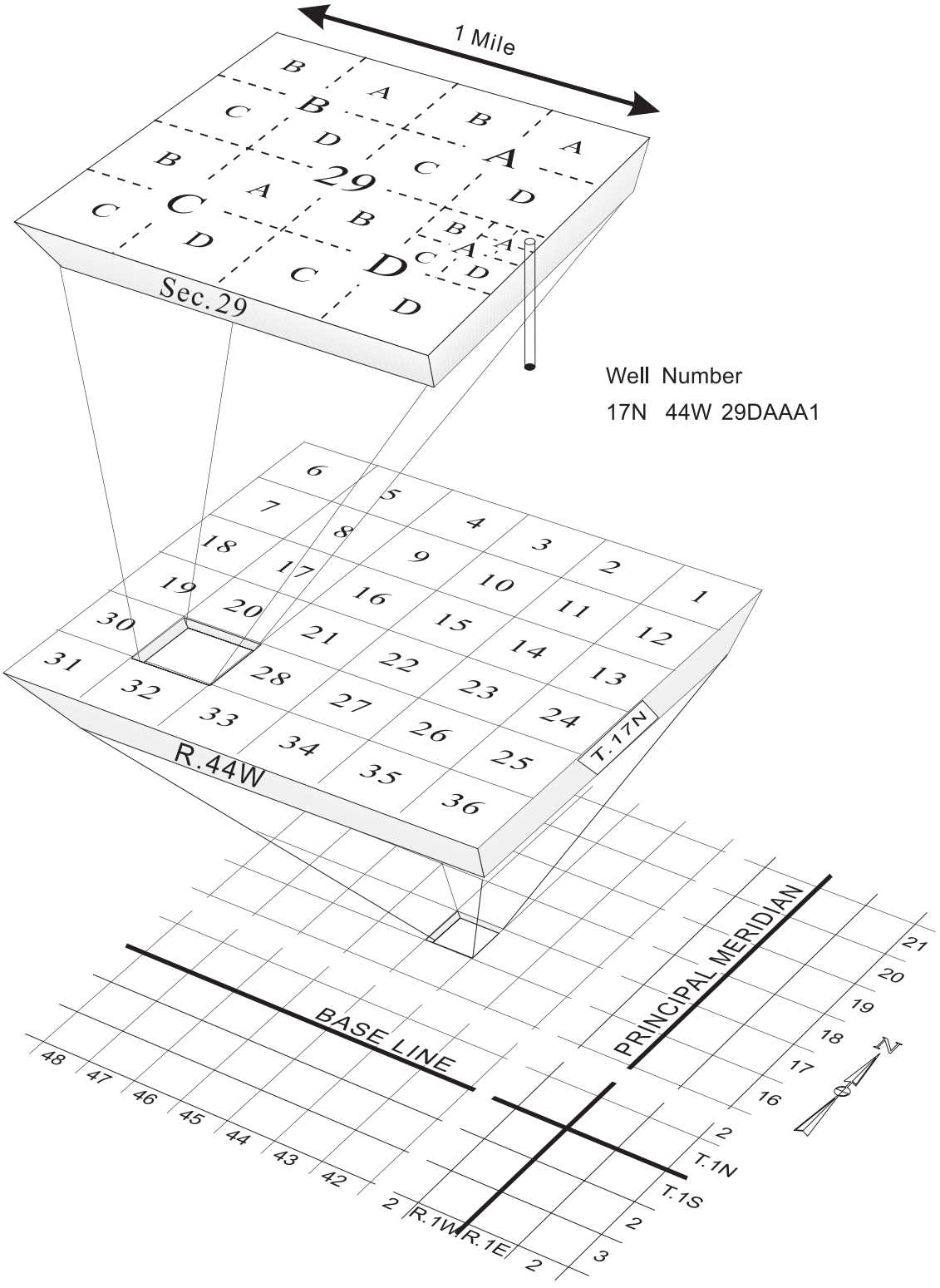


Figure 7. System for numbering wells and miscellaneous sites (township and range).

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Benchmark Network is a network of 61 sites in small drainage basins in 39 States that was established in 1963 to provide consistent streamflow data representative of undeveloped watersheds nationwide, and from which data could be analyzed on a continuing basis for use in comparison and contrast with conditions observed in basins more obviously affected by human activities. At selected sites, water-quality information is being gathered on major ions and nutrients, primarily to assess the effects of acid deposition on stream chemistry. Additional information on the Hydrologic Benchmark Program may be accessed from *http://water.usgs.gov/hbn/*.

National Stream-Quality Accounting Network (NASQAN) is a network of sites used to monitor the water quality of large rivers within the Nation's largest river basins. From 1995 through 1999, a network of approximately 40 stations was operated in the Mississippi, Columbia, Colorado, and Rio Grande River basins. For the period 2000 through 2004, sampling was reduced to a few index stations on the Colorado and Columbia Rivers 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 (NAWQA) Program; (3) to characterize processes unique to large-river systems such as storage and re-mobilization 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 may be accessed from *http://water.usgs.gov/nasqan/*.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) is a network of monitoring sites that provide 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 this network of 250 precipitation-chemistry monitoring sites. The USGS supports 74 of these 250 sites. This long-term, nationally consistent monitoring program, coupled with ecosystem research, provides critical information toward a national scorecard 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 data from the individual sites, may be accessed from *http://bqs.usgs.gov/acidrain/*.

The USGS National Water-Quality Assessment (NAWQA) Program 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; to provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and to provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 42 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 is 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 water-resources managers to use in making decisions 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 may be accessed from *http://water.usgs.gov/nawqa/*.

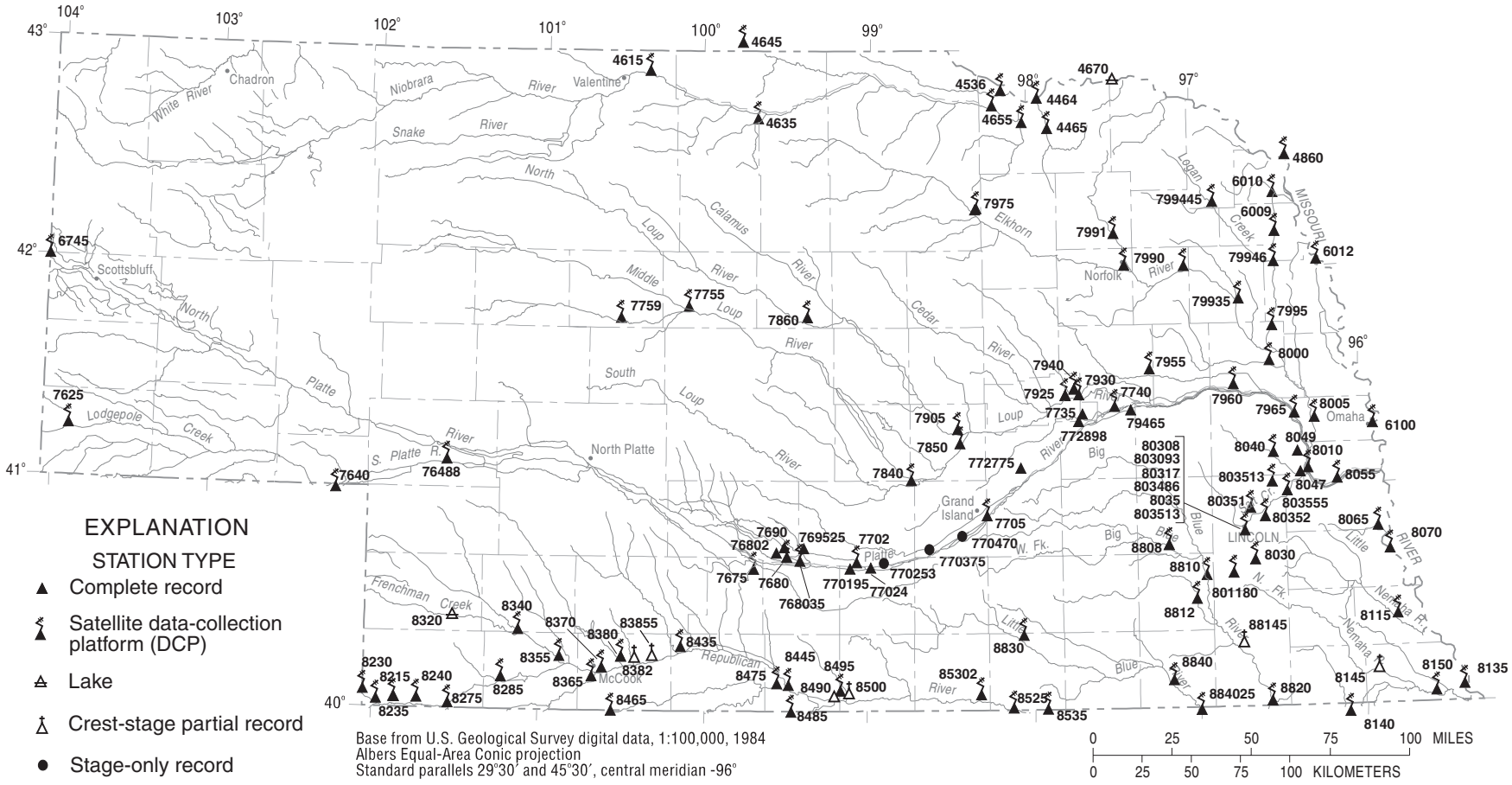
The USGS National Streamflow Information Program (NSIP) is a long-term program with goals to provide framework streamflow data across the Nation. Included in the program are creation of a permanent Federally funded streamflow network, research on the nature of streamflow, regional assessments of streamflow data and databases, and upgrades in the streamflow information delivery systems. Additional information about NSIP may be accessed from *http://water.usgs.gov/nsip/*.

EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS

Data Collection and Computation

The base data collected at gaging stations (fig. 8) consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and volume of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from a water-stage recorder that is either downloaded electronically in the field to a laptop computer or similar device or is transmitted using telemetry such as GOES satellite, land-line or cellular-phone modems, or by radio transmission. Measurements of discharge are made with a current meter or acoustic Doppler current profiler, using the general methods adopted by the USGS. These methods are described in standard textbooks, USGS Water-Supply Paper 2175, and the Techniques of Water-Resources Investigations of the United States Geological Survey (TWRIs), Book 3, Chapters 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).

For stream-gaging stations, discharge-rating tables for any stage are prepared from stage-discharge curves. If extensions to the rating curves are necessary to express discharge greater than measured, the extensions are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, or computation of flow over dams and weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily values. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features of the stream channel, the daily mean discharge is computed by the shifting-control method in which correction factors based on individual discharge measurements and notes by engineers and observers are used when applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the controlling section, the daily mean discharge is computed by the shifting-control method.



EXPLANATION

STATION TYPE

- ▲ Complete record
- Satellite data-collection platform (DCP)
- ▲ Lake
- Crest-stage partial record
- ● Stage-only record

8230 Abbreviated station number

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

Base from U.S. Geological Survey digital data, 1:100,000, 1984
Albers Equal-Area Conic projection
Standard parallels 29°30′ and 45°30′, central meridian -96°

Figure 8. Location of active surface-water gaging stations.

The stage-discharge relation at some stream-gaging stations is affected by backwater from reservoirs, tributary streams, or other sources. Such an occurrence necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage at some distance from the base gage.

An index velocity is measured using ultrasonic or acoustic instruments at some stream-gaging stations and this index velocity is used to calculate an average velocity for the flow in the stream. This average velocity along with a stage-area relation is then used to calculate average discharge.

At some stations, stage-discharge relation is affected by changing stage. At these stations, the rate of change in stage is used as a factor in computing discharge.

At some stream-gaging stations in the northern United States, the stage-discharge relation is affected by ice in the winter; therefore, computation of the discharge in the usual manner is impossible. Discharge for periods of ice effect is computed on the basis of gage-height record and occasional winter-discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge from other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the volume or contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly changes are computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys, the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some stream-gaging stations, periods of time occur when no gage-height record is obtained or the recorded gage height is faulty and cannot be used to compute daily discharge or contents. Such a situation can happen when the recorder stops or otherwise fails to operate properly, the intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records from other stations in the same or nearby basins. Likewise, lake or reservoir volumes may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

Data Presentation

The records published for each continuous-record surface-water discharge station (stream-gaging station) consist of five parts: (1) the station manuscript or description; (2) the data table of daily mean values of discharge for the current water year with summary data; (3) a tabular statistical summary of monthly mean flow data for a designated period, by water year; (4) a summary statistics table that includes statistical data of annual, daily, and instantaneous flows as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration; and (5) a hydrograph of discharge.

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 follow that clarify information presented under the various headings of the station description.

LOCATION.—Location information is obtained from the most accurate maps available. The location of the gaging station 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 term indicates the time period for which records have been published 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 its flow reasonably can be considered equivalent to flow at the present station.

REVISED RECORDS.—If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

GAGE.—The type of gage in current use, the datum of the current gage referred to a standard datum, 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 either will be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily discharge table. (See section titled Identifying Estimated Daily Discharge.) Information is presented relative to the accuracy of the records, to special methods of computation, and to conditions that affect natural flow at the station. In addition, information may be presented pertaining to average discharge data for the period of record; to extremes data for the period of record and the current year; and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, the outlet works and spillway, and the purpose and use of the reservoir.

COOPERATION.—Records provided by a cooperating organization or obtained for the USGS by a cooperating organization are identified here.

EXTREMES OUTSIDE PERIOD OF RECORD.—Information here documents 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 USGS.

REVISIONS.—Records are revised if errors in published records are discovered. Appropriate updates are made in the USGS distributed data system, NWIS, and subsequently to its Web-based National data system, NWISWeb (*http://water.usgs.gov/nwis/nwis*). Users are encouraged to obtain all required data from NWIS or NWISWeb to ensure that they have the most recent data updates. Updates to NWISWeb are made on an annual basis.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because no current or, possibly, future station manuscript would be published for these stations 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 District Office (address given on the back of the title page of this report) to determine if the published records were revised after the station was discontinued. If, however, the data for a discontinued station were obtained by computer retrieval, the data would be current. 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 stage-capacity table when daily volumes are given.

Peak Discharge Greater than Base Discharge

Tables of peak discharge above base discharge are included for some stations where secondary instantaneous peak discharge data are used in flood-frequency studies of highway and bridge design, flood-control structures, and other flood-related projects. The base discharge value is selected so an average of three peaks a year will be reported. This base discharge value has a recurrence interval of approximately 1.1 years or a 91-percent chance of exceedence in any 1 year.

Data Table of Daily Mean Values

The daily table of discharge records for stream-gaging stations gives mean discharge 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 arithmetic average flow in cubic feet per second for the month; and the lines headed MAX and MIN give the maximum and minimum daily mean discharges, respectively, for each month. Discharge for the month is expressed in cubic feet per second per square mile (line headed CFSM); or in inches (line headed IN); or in acre-feet (line headed AC-FT). Values for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if extensive regulation or diversion is in effect 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 volumes are given. These values are identified by a symbol and a corresponding footnote.

Statistics of Monthly Mean Data

A tabular summary of the mean (line headed MEAN), maximum (MAX), and minimum (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 values. 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. The designated period will consist of all of the station record within the specified water years, including complete months of record for partial water years, and may coincide with the period of record for the station. The water years for which the statistics are computed are 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 of the station records within the specified water years, including complete months of record for partial water years, and may coincide with

the period of record for the station. The water years for which the statistics are computed are 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 heading. When the dates of occurrence do not fall within the selected water years listed in the heading, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration-curve statistics and runoff data also are given. Runoff data may be omitted if extensive regulation or diversion of flow is in effect in the drainage basin.

The following summary statistics data are provided with each continuous record of discharge. Comments that 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.

ANNUAL MEAN.—The arithmetic mean for the individual daily mean discharges for the year noted or 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.

MAXIMUM PEAK FLOW.—The maximum instantaneous peak discharge occurring for the water year or designated period. Occasionally the maximum flow for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak flow is given in the table and the maximum flow may be reported in a footnote or in the REMARKS paragraph in the manuscript.

MAXIMUM PEAK STAGE.—The maximum instantaneous peak stage occurring for the water year or designated period. Occasionally the maximum stage for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak stage is given in the table and the maximum stage may be reported in the REMARKS paragraph in the manuscript or in a footnote. If the dates of occurrence of the maximum peak stage and maximum peak flow

are different, 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 equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.
>
> Cubic feet 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) indicate the depth to which the drainage area would be covered if all of 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 table lists annual maximum stage and discharge at crest-stage stations, and the second table lists 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 often made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for a 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. This identification is shown either by flagging individual daily values with the letter "e" and noting in a table footnote, "e–Estimated," or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of Field Data and Computed Results

The accuracy of streamflow data 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 observations of stage, measurements of discharge, and interpretations of records.

The degree of accuracy of the records is stated in the REMARKS in the station description. "Excellent" indicates that about 95 percent of the daily discharges are within 5 percent of the true value; "good" within 10 percent; and "fair," within 15 percent. "Poor" indicates that daily discharges have less than "fair" accuracy. Different accuracies may be attributed to different parts of a given record.

Values of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft^3/s; to the nearest tenths between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures above 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharge values listed for partial-record stations.

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, values 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 Data Records Available

Information of a more detailed nature than that published for most of the stream-gaging stations such as discharge measurements, gage-height records, and rating tables is available from the District office. Also, most stream-gaging station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the District office (see address that is shown on the back of the title page of this report).

EXPLANATION OF PRECIPITATION RECORDS

Data Collection and Computation

Rainfall data generally are collected using electronic data loggers that measure the rainfall in 0.01-inch increments every 15 minutes using either a tipping-bucket rain gage or a collection well gage. Twenty-four hour rainfall totals are tabulated and presented. A 24-hour period extends from just past midnight of the previous day to midnight of the current day. Snowfall-affected data can result during cold weather when snow fills the rain-gage funnel and then melts as temperatures rise. Snowfall-affected data are subject to errors. Missing values are indicated by this symbol "---" in the table.

Data Presentation

Precipitation records collected at surface-water gaging stations are identified with the same station number and name as the stream-gaging station. Where a surface-water daily-record station is not available, the precipitation record is published with its own name and latitude-longitude identification number.

Information pertinent to the history of a precipitation station is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, period of record, and general remarks.

The following information is provided with each precipitation station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.—See Data Presentation in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

PERIOD OF RECORD.—See Data Presentation in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

INSTRUMENTATION.—Information on the type of rainfall collection system is given.

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

EXPLANATION OF WATER-QUALITY RECORDS

Collection and Examination of Data

Surface-water samples for analysis usually are collected at or near stream-gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, water temperature, sediment discharge, and so forth); extremes for the current year; and general remarks.

For ground-water records, no descriptive statements are given; however, the well number, depth of well, sampling date, or other pertinent data are given in the table containing the chemical analyses of the ground water.

Water Analysis

Most of the methods used for collecting and analyzing water samples are described in the TWRIs. A list of TWRIs is provided in this report.

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 at several verticals to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

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.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum and minimum values (and sometimes mean or median values) for each constituent measured, and are based on 15-minute or 1-hour intervals of recorded data beginning at 0000 hours and ending at 2400 hours for the day of record.

SURFACE-WATER-QUALITY RECORDS

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because discharge data is useful in the interpretation of surface-water quality. Records of surface-water quality in this report 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 *continuous-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 continuous- or partial-record station, where 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 *continuous records* as used in this report and *continuous recordings* that refer to a continuous graph or a series of discrete values recorded at short intervals. 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 figures 9 and 10.

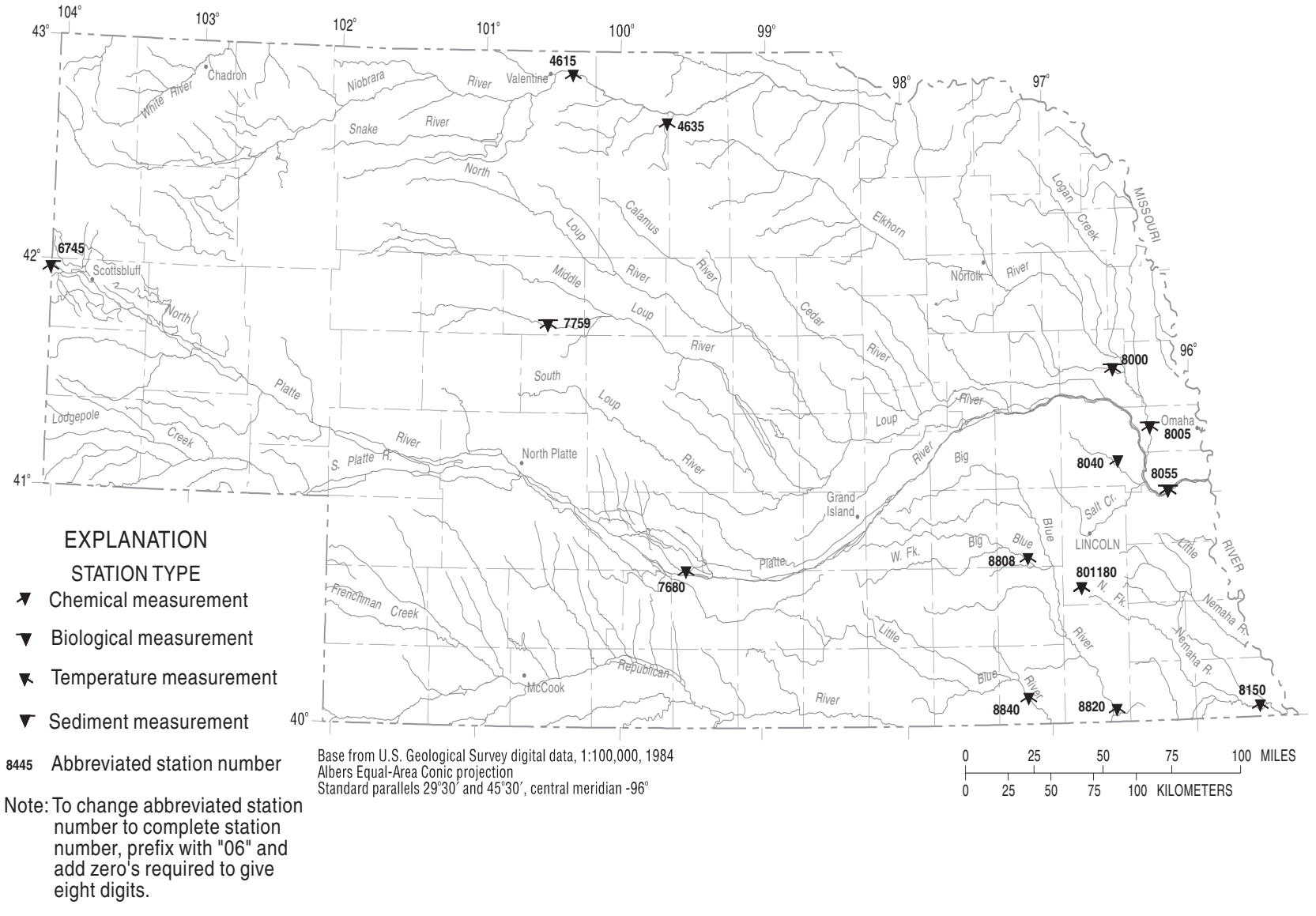


Figure 9. Location of active surface-water quality stations.

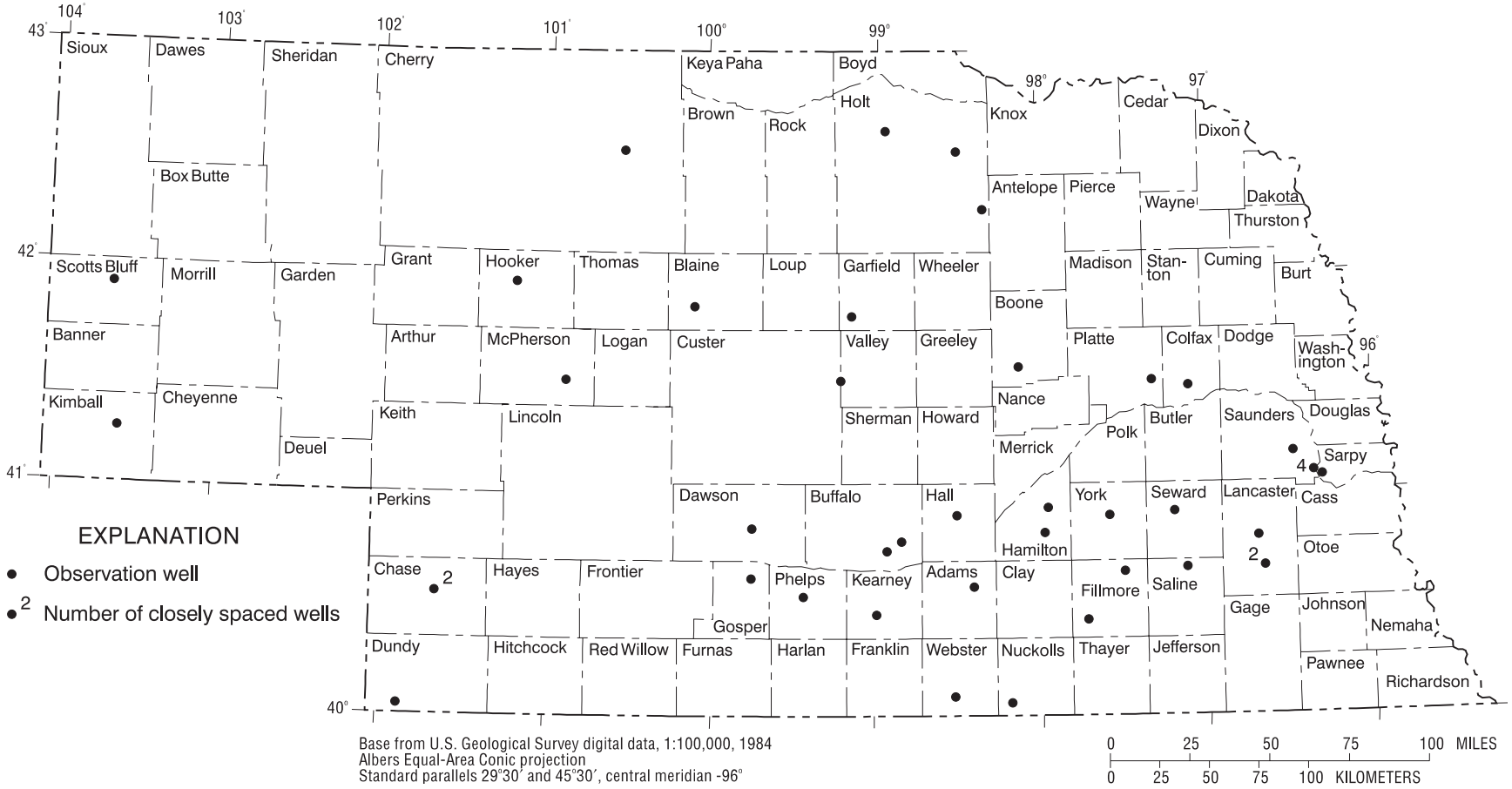


Figure 10. Location of selected observation wells.

Accuracy of the Records

One of four accuracy classifications is applied for measured physical properties at continuous-record stations on a scale ranging from poor to excellent. The accuracy rating is based on data values recorded before any shifts or corrections are made. Additional consideration also is given to the amount of publishable record and to the amount of data that have been corrected or shifted.

Rating classifications for continuous water-quality records

[≤less than or equal to; ±, plus or minus value shown; °C, degree Celsius; >, greater than; %, percent; mg/L, milligram per liter; pH unit, standard pH unit]

Measured physical property	Rating			
	Excellent	Good	Fair	Poor
Water temperature	≤±0.2 °C	> ±0.2 to 0.5 °C	> ±0.5 to 0.8 °C	> ±0.8 °C
Specific conductance	≤±3%	> ±3 to 10%	> ±10 to 15%	> ±15%
Dissolved oxygen	≤±0.3 mg/L	> ±0.3 to 0.5 mg/L	> ±0.5 to 0.8 mg/L	> ±0.8 mg/L
pH	≤±0.2 unit	> ±0.2 to 0.5 unit	> ±0.5 to 0.8 unit	> ±0.8 unit
Turbidity	≤±5%	> ±5 to 10%	> ±10 to 15%	> ±15%

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.

On-Site Measurements and Sample Collection

In obtaining water-quality data, a major concern is assuring that the data obtained represent the naturally occurring quality of the water. To ensure this, certain measurements, such as water temperature, pH, and dissolved oxygen, must be made on site when the samples are taken. To assure that measurements made in the laboratory also represent the naturally occurring water, carefully prescribed procedures must 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. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRIs Book 1, Chapter D2; Book 3, Chapters A1, A3, and A4; and Book 9, Chapters A1-A9. These TWRIs are listed in this report. Also, detailed information on collecting, treating, and shipping samples can be obtained from the USGS District office (see address that is shown on the back of title page in this report).

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 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 section.

During periods of rapidly changing flow or rapidly changing concentration, samples may be collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples are collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observation, 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

Samples for biochemical oxygen demand (BOD) and indicator bacteria are analyzed locally. All other samples are analyzed in the USGS laboratory in Lakewood, Colorado, unless otherwise noted. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chapter C1. Methods used by the USGS laboratories are given in the TWRIs, Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters 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 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 information in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

DRAINAGE AREA.—See Data Presentation information in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

PERIOD OF RECORD.—This indicates the time periods for which published water-quality records for the station are available. 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 USGS by a cooperating organization are identified here.

EXTREMES.—Maximums and minimums are given only for parameters measured daily or more frequently. For parameters measured weekly or less frequently, true maximums or minimums may not have been obtained. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.—Records are revised if errors in published water-quality records are discovered. Appropriate updates are made in the USGS distributed data system, NWIS, and subsequently to its Web-based National data system, NWISWeb (*http://waterdata.usgs.gov/nwis*). Users of USGS water-quality data are encouraged to obtain all required data from NWIS or NWISWeb to ensure that they have the most recent updates. Updates to the NWISWeb are made on an annual basis.

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.

Remark Codes

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

Printed Output	Remark
E or 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).
V	Analyte was detected in both the environmental sample and the associated blanks.
&	Biological organism estimated as dominant.

Water-Quality Control Data

The USGS National Water Quality Laboratory collects quality-control data on a continuing basis to evaluate selected analytical methods to determine long-term method detection levels (LT-MDLs) and laboratory reporting levels (LRLs). These values are re-evaluated each year on the basis of the most recent quality-control data and, consequently, may change from year to year.

This reporting procedure limits the occurrence of false positive error. Falsely reporting a concentration greater than the LT-MDL for a sample in which the analyte is not present is 1 percent or less. Application of the LRL limits the occurrence of false negative error. The chance of falsely reporting a non-detection for a sample in which the analyte is present at a concentration equal to or greater than the LRL is 1 percent or less.

Accordingly, concentrations are reported as less than LRL for samples in which the analyte was either not detected or did not pass identification. Analytes detected at concentrations between the LT-MDL and the LRL and that pass identification criteria are estimated. Estimated concentrations will be noted with a remark code of “E.” These data should be used with the understanding that their uncertainty is greater than that of data reported without the E remark code.

Data generated from quality-control (QC) samples are a requisite for evaluating the quality of the sampling and processing techniques as well as data from the actual samples themselves. Without QC data, environmental sample data cannot be adequately interpreted because the errors associated with the sample data are unknown. The various types of QC samples collected by this District office are described in the following section. Procedures have been established for the storage of water-quality-control data within the USGS. These procedures allow for storage of all derived QC data and are identified so that they can be related to corresponding environmental samples. These data are not presented in this report but are available from the District office.

Blank Samples

Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated in the overall data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analytes of interest. Any measured value signal in a blank

sample for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. Many types of blank samples are possible; each is designed to segregate a different part of the overall data-collection process. The types of blank samples collected in this district are:

Field blank—A blank solution that is subjected to all aspects of sample collection, field processing preservation, transportation, and laboratory handling as an environmental sample.

Trip blank—A blank solution that is put in the same type of bottle used for an environmental sample and kept with the set of sample bottles before and after sample collection.

Equipment blank—A blank solution that is processed through all equipment used for collecting and processing an environmental sample (similar to a field blank but normally done in the more controlled conditions of the office).

Sampler blank—A blank solution that is poured or pumped through the same field sampler used for collecting an environmental sample.

Filter blank—A blank solution that is filtered in the same manner and through the same filter apparatus used for an environmental sample.

Splitter blank—A blank solution that is mixed and separated using a field splitter in the same manner and through the same apparatus used for an environmental sample.

Preservation blank—A blank solution that is treated with the sampler preservatives used for an environmental sample.

Reference Samples

Reference material is a solution or material prepared by a laboratory. The reference material composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to ensure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties.

Replicate Samples

Replicate samples are a set of environmental samples collected in a manner such that the samples are thought to be essentially identical in composition. Replicate is the general case for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. Many types of replicate samples are possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected in this district are:

Concurrent samples—A type of replicate sample in which the samples are collected simultaneously with two or more samplers or by using one sampler and alternating the collection of samples into two or more compositing containers.

Sequential samples—A type of replicate sample in which the samples are collected one after the other, typically over a short time.

Split sample—A type of replicate sample in which a sample is split into subsamples, each subsample contemporaneous in time and space.

Spike Samples

Spike samples are samples to which known quantities of a solution with one or more well-established analyte concentrations have been added. These samples are analyzed to determine the extent of matrix interference or degradation on the analyte concentration during sample processing and analysis.

EXPLANATION OF GROUND-WATER-LEVEL RECORDS

Generally, only ground-water-level data from selected wells with continuous recorders from a basic network of observation wells are published in this report. This basic network contains observation wells located so that the most significant data are obtained from the fewest wells in the most important aquifers.

Site Identification Numbers

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is produced for local needs. (See NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES in this report for a detailed explanation).

Data Collection and Computation

Measurements are made in many types of wells, under varying conditions of access and at different temperatures; hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Most methods for collecting and analyzing water samples are described in the TWRIs referred to in the On-site Measurements and Sample Collection and the Laboratory Measurements sections in this report. In addition, TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground-water samples for selected unstable constituents. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRIs Book 1, Chapter D2; Book 3, Chapters A1, A3, and A4; and Book 9, Chapters A1 through A9. The values in this report represent water-quality conditions at the time of sampling, as much as possible, and that are consistent with available sampling techniques and methods of analysis. These methods are consistent with ASTM standards and generally follow ISO standards. Trained personnel collected all samples. The wells sampled were pumped long enough to ensure 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.

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 above sea level 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 of water of several hundred feet, the error in 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 only to a tenth of a foot or a larger unit.

Data Presentation

Water-level data are presented in alphabetical order by county. The primary identification number for a given well is the 15-digit site identification number that appears in the upper left corner of the table. The secondary identification number is the local or county well number. Selected well locations are shown in figure 4*;* each well is identified on the map by its local well or county well number.

Each well record consists of three parts: the well description, the data table of water levels observed during the water year, and, for most wells, a hydrograph following the data table. Well descriptions are presented in the headings preceding the tabular data.

The following comments clarify information presented in these various headings.

LOCATION.—This paragraph follows the well-identification number and reports the hydrologic-unit number and a geographic point of reference. Latitudes and longitudes used in this report are reported as North American Datum of 1927 unless otherwise specified.

AQUIFER.—This entry designates by name and geologic age the aquifer that the well taps.

WELL CHARACTERISTICS.—This entry describes the well in terms of depth, casing diameter and depth or screened interval, method of construction, use, and changes since construction.

INSTRUMENTATION.—This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on continuous, monthly, or some other frequency of measurement.

DATUM.—This entry describes both the measuring point and the land-surface elevation at the well. The altitude of the land-surface datum is described in feet above the altitude datum; it is reported with a precision depending on the method of determination. The measuring point is described physically (such as top of casing, top of instrument shelf, and so forth), 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 National Geodetic Vertical Datum of 1929 (NGVD 29); 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, when various methods of measurement were begun, and the network (climatic, terrane, local, or areal effects) or the special project to which the well belongs.

PERIOD OF RECORD.—This entry indicates the time period for which records are published for the well, the month and year at the start of publication of water-level records by the USGS, and the words “to current year” if the records are to be continued into the following year. Time periods for which water-level records are available, but are not published by the USGS, may be noted.

EXTREMES FOR PERIOD OF RECORD.—This entry contains the highest and lowest instantaneously recorded or measured water levels of the period of published record, with respect to land-surface datum or sea level, and the dates of occurrence.

Water-Level Tables

A table of water levels follows the well description for each well. Water-level measurements in this report are given in feet with reference to either sea level or land-surface datum (lsd). Missing records are indicated by dashes in place of the water-level value.

For wells not equipped with recorders, water-level measurements were obtained periodically by steel or electric tape. Tables of periodic water-level measurements in these wells show the date of measurement and the measured water-level value.

Hydrographs

Hydrographs are a graphic display of water-level fluctuations over a period of time. In this report, current water year and, when appropriate, period-of-record hydrographs are shown. Hydrographs that display periodic water-level measurements show points that may be connected with a dashed line from one measurement to the next. Hydrographs that display recorder data show a solid line representing the mean water level recorded for each day. Missing data are indicated by a blank space or break in a hydrograph. Missing data may occur as a result of recorder malfunctions, battery failures, or mechanical problems related to the response of the recorder's float mechanism to water-level fluctuations in a well.

GROUND-WATER-QUALITY DATA

Data Collection and Computation

The ground-water-quality data in this report were obtained as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some wells within a county but not for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality Statewide.

Most methods for collecting and analyzing water samples are described in the TWRIs. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRI, Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. Also, detailed information on collecting, treating, and shipping samples may be obtained from the USGS District office (see address shown on back of title page in this report).

Laboratory Measurements

Analysis for sulfide and measurement of alkalinity, pH, water temperature, specific conductance, and dissolved oxygen are performed on site. All other sample analyses are performed at the USGS laboratory in Lakewood, Colorado, unless otherwise noted. Methods used by the USGS laboratory are given in TWRI, Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4.

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 from *http://water.usgs.gov*.

Water-quality data and ground-water data also are available through the WWW. In addition, data can be provided in various machine-readable formats on various media. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each Water Discipline District Office (See address that is shown on the back of the title page of this report.)

DEFINITION OF TERMS

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. Terms such as algae, water level, and precipitation are used in their common everyday meanings, definitions of which are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting English units to International System (SI) Units. Other glossaries that also define water-related terms are accessible from *http://water.usgs.gov/glossaries.html*.

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.

Adjusted discharge is discharge data that have been mathematically adjusted (for example, to remove the effects of a daily tide cycle or reservoir storage).

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 purposely is 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 multiplate 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 a 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.

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

Bedload is material in transport that primarily is supported by the streambed. In this report, bedload is considered to consist of particles in transit from the bed to the top of the bedload sampler nozzle (an elevation ranging from 0.25 to 0.5 foot). These particles 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")

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 also is called the Autotrophic Index.

Blue-green algae (*Cyanophyta*) are a group of phytoplankton and periphyton organisms with a blue pigment in addition to a green pigment called chlorophyll. Blue-green algae can cause nuisance water-quality conditions in lakes and slow-flowing rivers; however, they are found commonly in streams throughout the year. The abundance of blue-green algae in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter (μm^3/mL). The abundance of blue-green algae in periphyton samples is given in cells per square centimeter (cells/cm^2) or biovolume per square centimeter ($\mu m^3/cm^2$). (See also "Phytoplankton"and "Periphyton")

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 the lithology and porosity of the rock.

Canadian Geodetic Vertical Datum 1928 is a geodetic datum derived from a general adjustment of Canada's first order level network in 1928.

Cell volume (biovolume) determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell members of algae are used frequently 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:

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

pi (π) is the ratio of the circumference to the diameter of a circle; pi = 3.14159….

From cell volume, total algal biomass expressed as biovolume (μm^3/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.

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 generally are reported as cells or units per milliliter (mL) or liter (L).

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 the 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, ft^3/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, [$(ft^3/s)/d$]) 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 numerically are 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, $(ft^3/s)/mi^2$] 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 mean concentration of suspended sediment passing 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 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 usually are 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 Universal Transverse Mercator (UTM) coordinates. (See also "Gage datum," "Land-surface datum," "National Geodetic Vertical Datum of 1929," and "North American Vertical Datum of 1988")

Diatoms *(Bacillariophyta)* are unicellular or colonial algae with a siliceous cell wall. The abundance of diatoms in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter (μm^3/mL). The abundance of diatoms in periphyton samples is given in cells per square centimeter

(cells/cm^2) or biovolume per square centimeter (µm^3/cm^2). (See also "Phytoplankton" and "Periphyton")

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, and so forth, 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 $CaCO_3$) 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 commonly are 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 generally are 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) value of a concentration 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 identified qualitatively 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 (<). For bacteriological data, concentrations are reported as estimated when results are based on non-ideal colony counts.

Euglenoids (*Euglenophyta*) are a group of algae that usually are 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 is not an actual physical object, the datum is usually 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 *(Chlorophyta)* are unicellular or colonial algae with chlorophyll pigments similar to those in terrestrial green plants. Some forms of green algae produce mats or floating "moss" in lakes. The abundance of green algae in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter (μm^3/mL). The abundance of green algae in periphyton samples is given in cells per square centimeter (cells/cm^2) or biovolume per square centimeter ($\mu m^3/cm^2$). (See also "Phytoplankton" and "Periphyton")

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 typically are 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 ($CaCO_3$).

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:

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

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.), in reference to streamflow, 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 distributed uniformly on it. (See also "Annual runoff")

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

International Boundary Commission Survey Datum refers to a geodetic datum established at numerous monuments along the United States-Canada boundary by the International Boundary Commission.

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) generally is 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. The LRL replaces the term 'non-detection value' (NDV).

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.

Megahertz is a unit of frequency. One megahertz equals one million cycles per second.

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.

Method of Cubatures is a method of computing discharge in tidal estuaries based on the conservation of mass equation.

Methylene blue active substances (MBAS) indicate the presence of detergents (anionic surfactants). 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, µg/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, µg/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, µg/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, µS/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 29) is a fixed reference adopted as a standard geodetic datum for elevations determined by leveling. It formerly was 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 Datum of 1927 (NAD 27) is the horizontal control datum for the United States that was defined by a location and azimuth on the Clarke spheroid of 1866.

North American Datum of 1983 (NAD 83) is the horizontal control datum for the United States, Canada, Mexico, and Central America that is based on the adjustment of 250,000 points including 600 satellite Doppler stations that constrain the system to a geocentric origin. NAD 83 has been officially adopted as the legal horizontal datum for the United States by the Federal government.

North American Vertical Datum of 1988 (NAVD 88) 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 (m^2), 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 uses 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 usually are 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 [mg C/(m^2/time)] for periphyton and macrophytes or per volume [mg C/(m^3/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 [mg O/(m^2/time)] for periphyton and macrophytes or per volume [mg O/(m^3/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 (<2 mm, 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.

Surrogate is an analyte that behaves similarly to a target analyte, but that is highly unlikely to occur in a sample. A surrogate is added to a sample in known amounts before extraction and is measured with the same laboratory procedures used to measure the target analyte. Its purpose is to monitor method performance for an individual sample.

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 (ft^3/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 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.

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")

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 hierarchial 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:	Arthropeda
Class:	Insecta
Order:	Ephemeroptera
Family:	Ephemeridae
Genus:	*Hexagenia*
Species:	*Hexagenia limbata*

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 ton 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 because of 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 USEPA 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 path length 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 often are 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."

Watershed (See "Drainage basin")

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.

3–A3.*Measurement of peak discharge at culverts by indirect methods,* by G.L. Bodhaine: USGS–TWRI book 3, chap. A3. 1968. 60 p.

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.

3–A5.*Measurement of peak discharge at dams by indirect methods,* by Harry Hulsing: USGS–TWRI book 3, chap. A5. 1967. 29 p.

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.

3–A8.*Discharge measurements at gaging stations,* by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A8. 1969. 65 p.

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.

3–Al0.*Discharge ratings at gaging stations,* by E.J. Kennedy: USGS–TWRI book 3, chap. A10. 1984. 59 p.

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.

3–A12.*Fluorometric procedures for dye tracing*, Revised, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS–TWRI book 3, chap. A12. 1986. 34 p.

3–A13.*Computation of continuous records of streamflow*, by E.J. Kennedy: USGS–TWRI book 3, chap. A13. 1983. 53 p.

3–A14.*Use of flumes in measuring discharge,* by F.A. Kilpatrick and V.R. Schneider: USGS–TWRI book 3, chap. A14. 1983. 46 p.

3–A15.*Computation of water-surface profiles in open channels,* by Jacob Davidian: USGS–TWRI book 3, chap. A15. 1984. 48 p.

3–A16.*Measurement of discharge using tracers*, by F.A. Kilpatrick and E.D. Cobb: USGS–TWRI book 3, chap. A16. 1985. 52 p.

3–A17.*Acoustic velocity meter systems,* by Antonius Laenen: USGS–TWRI book 3, chap. A17. 1985. 38 p.

3–A18.*Determination of stream reaeration coefficients by use of tracers,* by F.A. Kilpatrick, R.E. Rathbun, Nobuhiro Yotsukura, G.W. Parker, and L.L. DeLong: USGS–TWRI book 3, chap. A18. 1989. 52 p.

3–A19.*Levels at streamflow gaging stations*, by E.J. Kennedy: USGS–TWRI book 3, chap. A19. 1990. 31 p.

3–A20.*Simulation of soluble waste transport and buildup in surface waters using tracers*, by F.A. Kilpatrick: USGS–TWRI book 3, chap. A20. 1993. 38 p.

3–A21*Stream-gaging cableways,* by C. Russell Wagner: USGS–TWRI book 3, chap. A21. 1995. 56 p.

Section B. Ground-Water Techniques

3–B1. *Aquifer-test design, observation, and data analysis,* by R.W. Stallman: USGS–TWRI book 3, chap. B1. 1971. 26 p.

3–B2.*Introduction to ground-water hydraulics, a programed text for self-instruction*, by G.D. Bennett: USGS–TWRI book 3, chap. B2. 1976. 172 p.

3–B3.*Type curves for selected problems of flow to wells in confined aquifers*, by J.E. Reed: USGS–TWRI book 3, chap. B3. 1980. 106 p.

3–B4.*Regression modeling of ground-water flow,* by R.L. Cooley and R.L. Naff: USGS–TWRI book 3, chap. B4. 1990. 232 p.

3–B4.*Supplement 1. Regression modeling of ground-water flow—Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems,* by R.L. Cooley: USGS–TWRI book 3, chap. B4. 1993. 8 p.

3–B5.*Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems—An introduction*, by O.L. Franke, T.E. Reilly, and G.D. Bennett: USGS–TWRI book 3, chap. B5. 1987. 15 p.

3–B6.*The principle of superposition and its application in ground-water hydraulics,* by T.E. Reilly, O.L. Franke, and G.D. Bennett: USGS–TWRI book 3, chap. B6. 1987. 28 p.

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.

Section C. Sedimentation and Erosion Techniques

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.

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.

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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.

*Station number	Station name	Page
	PONCA CREEK BASIN	
4536	Ponca Creek at Verdel	60
	NIOBRARA RIVER BASIN	
4615	Niobrara River near Sparks	62
4635	Long Pine Creek near Riverview	66
4645	Keya Paha River at Wewela, SD	70
4655	Niobrara River near Verdel	72
4657	Verdigre Creek near Verdigre	74

*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

LOCATION.--Lat 42° 48'38", long 98° 10'32", in NE 1/4 NE 1/4 sec.30, T.33 N., R.7 W., Knox County, Hydrologic Unit 10150001, near right bank at right downstream end of bridge on State Highway 12, 0.6 mi east of Verdel and 3.8 mi upstream from mouth.

DRAINAGE AREA.--812 mi^2.

PERIOD OF RECORD.--October 1957 to current year.

REVISED RECORDS.--WSP 2117: Drainage area. WDR NE-96-1 (M).

GAGE.--Water-stage recorder and nonrecording gage read once daily. Datum of gage 1,232.9 ft above sea level (Nebraska Department of Roads reference marks). See WSP 1917 for history of changes prior to Nov. 15, 1962. Data collection platform at station.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Minor diversions for irrigation above station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.83	e9.2	e11	e11	e9.0	e13	26	49	19	15	0.96	0.74
2	1.2	e9.6	e10	e11	e9.0	e14	25	49	20	12	0.93	0.60
3	2.0	10	e11	e11	e9.8	e15	23	54	20	10	0.79	0.55
4	5.8	11	e10	e10	e9.2	e16	22	63	20	11	0.99	0.60
5	9.7	14	e9.4	e11	e8.6	e16	22	61	20	11	0.88	0.55
6	8.5	12	e8.6	e10	e9.4	e16	23	71	20	31	0.77	0.48
7	6.2	12	e8.8	e10	e9.4	e20	24	70	18	134	0.81	0.49
8	6.1	13	e9.2	e11	e8.0	e28	29	62	17	36	0.98	0.46
9	6.3	12	e9.2	e12	e8.2	e28	31	64	17	17	1.0	1.0
10	5.7	12	e9.0	e12	e8.2	e28	32	75	19	11	1.2	1.1
11	4.8	12	e9.2	e10	e8.4	e40	40	85	17	8.7	1.4	0.92
12	4.0	11	e9.4	e9.0	e8.4	e54	45	110	16	6.5	1.1	0.95
13	3.7	12	e9.4	e8.8	e8.8	67	41	111	15	5.4	0.48	0.68
14	3.6	11	e9.4	e9.4	e9.2	62	35	108	15	4.5	0.29	0.78
15	3.8	11	e9.6	e9.0	e10	91	31	84	14	3.9	0.51	0.52
16	4.0	11	e9.9	e8.8	e9.6	96	30	71	12	3.3	0.97	0.53
17	5.1	11	e11	e8.4	e9.4	96	35	63	11	2.9	0.73	0.77
18	5.0	11	e11	e7.6	e9.8	83	39	54	11	2.7	0.54	0.93
19	4.4	11	e10	e7.8	e11	72	38	47	10	2.6	0.64	0.70
20	4.2	11	e10	e8.2	e11	66	39	41	9.1	2.3	0.90	0.61
21	4.1	10	e11	e8.8	e12	59	37	36	12	1.9	0.75	0.59
22	4.4	9.7	e10	e8.4	e13	53	36	37	20	1.7	0.79	0.49
23	4.3	10	e9.6	e8.0	e12	47	35	35	27	1.4	0.72	0.53
24	5.2	9.4	e9.6	e7.0	e11	42	36	34	28	1.3	0.66	0.44
25	5.6	9.6	e9.2	e7.4	e11	38	37	31	31	1.1	0.80	0.47
26	5.8	10	e8.8	e8.4	e10	35	37	29	32	1.1	0.76	0.55
27	e6.2	e9.8	e9.2	e8.0	e11	34	41	27	73	1.3	0.63	0.51
28	e6.8	e9.6	e9.6	e8.0	e12	33	42	25	45	1.3	0.79	0.54
29	e7.4	e9.8	e11	e8.8	---	29	38	23	27	1.1	0.67	0.56
30	e8.0	10	e12	e8.8	---	27	45	21	19	1.1	0.69	0.55
31	e8.6	---	e13	e8.6	---	27	---	19	---	1.0	0.80	---
TOTAL	161.33	324.7	308.1	286.2	276.4	1,345	1,014	1,709	634.1	345.1	24.93	19.19
MEAN	5.20	10.8	9.94	9.23	9.87	43.4	33.8	55.1	21.1	11.1	0.80	0.64
MAX	9.7	14	13	12	13	96	45	111	73	134	1.4	1.1
MIN	0.83	9.2	8.6	7.0	8.0	13	22	19	9.1	1.0	0.29	0.44
AC-FT	320	644	611	568	548	2,670	2,010	3,390	1,260	685	49	38

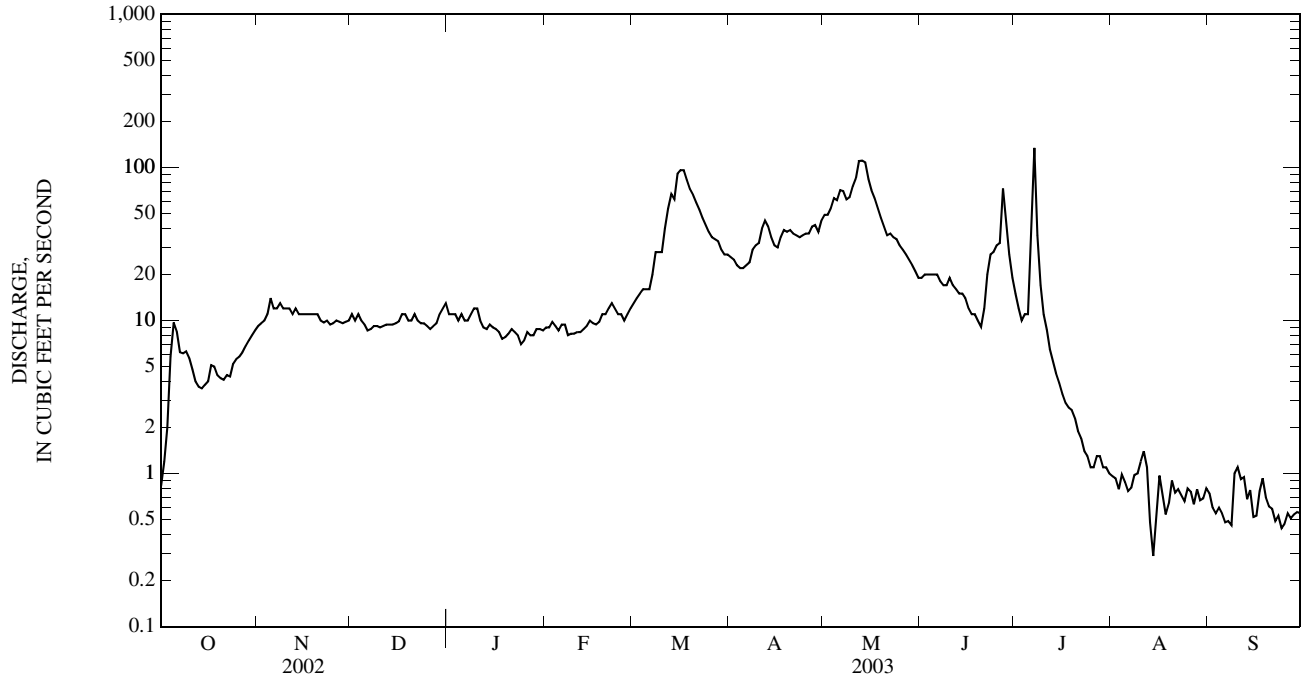
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2003, BY WATER YEAR (WY)

MEAN	26.7	30.6	21.8	18.6	53.6	233	209	187	145	91.8	39.8	30.0
MAX	229	181	105	94.0	239	1,333	818	1,405	1,237	742	327	251
(WY)	(1996)	(1999)	(1997)	(1997)	(1996)	(1960)	(1984)	(1995)	(1962)	(1993)	(1962)	(1996)
MIN	0.000	0.000	0.000	0.000	0.000	6.53	4.77	4.02	5.64	0.006	0.000	0.000
(WY)	(1959)	(1977)	(1971)	(1959)	(1969)	(1965)	(1981)	(1981)	(1976)	(1966)	(1968)	(1958)

06453600 PONCA CREEK AT VERDEL, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1958 - 2003	
ANNUAL TOTAL	11,532.86		6,448.05			
ANNUAL MEAN	31.6		17.7		90.8	
HIGHEST ANNUAL MEAN					343	1962
LOWEST ANNUAL MEAN					3.75	1981
HIGHEST DAILY MEAN	379	Mar 31	134	Jul 7	14,800	Mar 28, 1960
LOWEST DAILY MEAN	0.00	Jul 20	0.29	Aug 14	*0.00	Oct 1, 1957
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 20	0.50	Sep 22	0.00	Oct 1, 1957
MAXIMUM PEAK FLOW			217	Jul 7	**15,700	Mar 27, 1960
MAXIMUM PEAK STAGE			6.26	Jul 7	***17.30	Mar 6, 1993
ANNUAL RUNOFF (AC-FT)	22,880		12,790		65,750	
10 PERCENT EXCEEDS	77		43		196	
50 PERCENT EXCEEDS	12		10		23	
90 PERCENT EXCEEDS	0.96		0.77		0.30	

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



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 Minnechaduza Creek, 6.5 mi southwest of Sparks, and at mile 142.5.

DRAINAGE AREA .--7,150 mi^2.

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). Additonal water-quality data available under Miscellaneous Surface-Water Quality Data.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	532	561	761	825	839	e820	938	970	711	927	490	487
2	525	598	758	869	856	e840	937	1,000	713	915	490	482
3	534	586	837	837	890	838	901	1,020	707	747	488	473
4	543	605	848	822	847	e840	891	1,140	718	637	504	472
5	538	613	e780	825	880	e820	889	1,090	725	666	491	470
6	536	615	e740	793	854	e800	912	1,040	738	676	478	464
7	537	610	758	799	876	834	928	986	732	637	474	463
8	526	613	774	801	809	876	899	1,020	734	654	469	458
9	527	622	774	826	828	885	933	1,040	717	605	483	453
10	537	614	816	876	836	842	958	978	716	592	482	478
11	536	621	818	e840	841	820	969	979	743	574	484	478
12	532	635	826	e800	836	861	1,000	946	757	565	477	481
13	523	610	844	e840	833	865	973	937	742	556	467	473
14	524	605	828	867	849	894	998	918	806	556	456	466
15	533	608	837	e900	860	921	1,020	892	761	549	458	467
16	545	601	854	e840	838	940	1,030	887	762	530	458	489
17	556	613	853	e780	849	945	1,000	872	741	524	451	470
18	564	602	855	e780	856	992	860	874	720	537	446	509
19	563	608	850	e820	857	1,100	914	893	737	560	469	516
20	564	629	841	880	862	1,100	900	877	747	532	473	498
21	558	603	861	e900	878	1,050	909	868	750	526	474	500
22	555	601	e840	e840	887	1,030	908	837	1,080	535	476	503
23	563	603	e820	e800	855	1,020	891	818	887	513	469	504
24	581	612	e780	e760	818	1,000	896	933	1,040	499	456	496
25	568	605	e780	e800	723	1,000	870	855	1,150	493	500	483
26	574	596	e800	e800	e760	957	869	842	999	496	470	480
27	572	635	e820	e800	e780	986	880	830	916	493	449	474
28	587	636	e860	851	e800	992	876	741	943	493	429	470
29	601	758	e900	868	---	966	866	772	933	495	422	468
30	661	796	904	869	---	953	899	745	910	517	427	473
31	601	---	841	844	---	949	---	727	---	500	442	---
TOTAL	17,196	18,614	25,458	25,752	23,497	28,736	27,714	28,327	24,335	18,099	14,502	14,398
MEAN	555	620	821	831	839	927	924	914	811	584	468	480
MAX	661	796	904	900	890	1,100	1,030	1,140	1,150	927	504	516
MIN	523	561	740	760	723	800	860	727	707	493	422	453
AC-FT	34,110	36,920	50,500	51,080	46,610	57,000	54,970	56,190	48,270	35,900	28,760	28,560

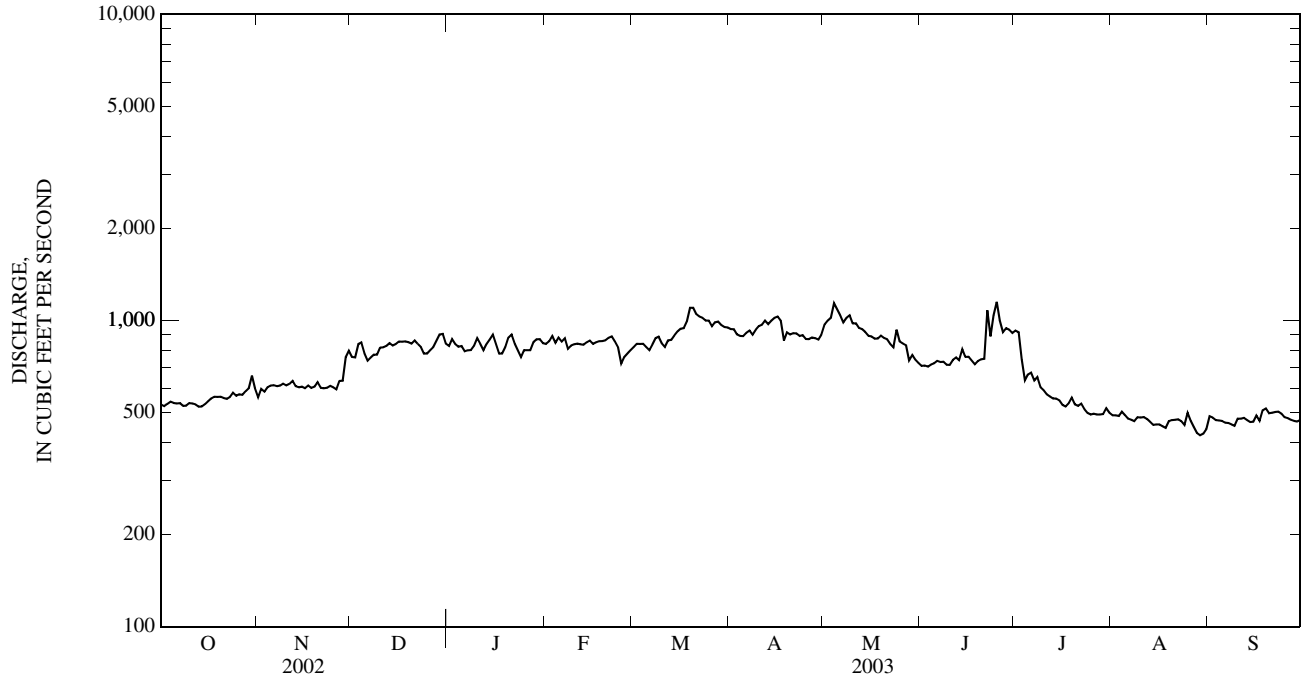
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2003, BY WATER YEAR (WY)

MEAN	665	754	766	777	886	971	909	900	817	630	588	606
MAX	879	1,092	950	1,208	1,403	1,464	1,214	1,385	1,470	1,122	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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1946 - 2003	
ANNUAL TOTAL	255,793		266,628			
ANNUAL MEAN	701		730		772	
HIGHEST ANNUAL MEAN					911	1962
LOWEST ANNUAL MEAN					598	1976
HIGHEST DAILY MEAN	1,170	May 2	1,150	Jun 25	5,000	Feb 5, 1984
LOWEST DAILY MEAN	376	Aug 2	422	Aug 29	100	Jan 10, 1957
ANNUAL SEVEN-DAY MINIMUM	389	Jul 28	447	Aug 26	327	Dec 8, 1949
MAXIMUM PEAK FLOW			*1,310	Jun 25	**10,200	Mar 5, 1949
MAXIMUM PEAK STAGE			***3.45	Dec 28	***10.06	Feb 7, 1973
ANNUAL RUNOFF (AC-FT)	507,400		528,900		559,100	
10 PERCENT EXCEEDS	945		951		1,030	
50 PERCENT EXCEEDS	757		774		764	
90 PERCENT EXCEEDS	425		478		505	

e Estimated.
* Stage 3.33 ft.
** From rating curve extended above 3,800 ft^3/s, stage 6.73 ft.
***Backwater from ice.



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 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)
NOV													
13...	1400	601	8.7	228	16.0	7.0	94	31.0	4.11	5.48	0.4	9.11	16
FEB													
13...	1410	892	7.9	218	11.5	4.5	85	27.6	3.89	6.11	0.4	7.88	16

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L (00660)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)
NOV													
13...	E87	2.24	0.26	53.3	4.9	0.13	<0.04	--	0.033	0.010	0.392	0.13	0.13
FEB													
13...	E118	0.86	0.35	56.1	6.3	0.16	<0.04	0.51	--	E.005	0.187	0.06	0.07

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Boron, water, fltrd, ug/L (01020)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)
NOV					
13...	0.12	--	24	E8	E2.2
FEB					
13...	0.15	0.67	17	16	2.6

Remark codes used in this table:
< -- Less than
E -- Estimated value

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06463500 LONG PINE CREEK NEAR RIVERVIEW, NE

LOCATION.--Lat 42°41'21", long 99°40'43", in SE 1/4 NE 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 mi^2.

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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	138	159	159	160	166	161	159	198	159	197	203	180
2	141	161	162	158	168	159	157	210	169	178	180	181
3	149	163	159	159	164	163	156	212	161	177	185	184
4	162	163	159	161	162	161	155	287	167	205	209	181
5	151	163	153	158	161	159	154	419	175	207	201	185
6	148	161	163	157	160	164	156	348	172	215	177	180
7	148	161	163	160	154	163	162	251	181	210	194	169
8	151	162	160	159	166	159	160	213	187	221	192	167
9	153	164	158	154	163	155	168	444	183	215	203	171
10	155	160	159	148	162	156	174	513	179	203	284	173
11	156	158	159	147	162	159	172	343	180	176	238	166
12	153	159	159	153	162	159	162	268	174	191	204	183
13	151	159	158	155	164	159	158	224	164	199	198	181
14	153	157	160	151	169	164	157	198	164	199	194	187
15	152	159	161	155	165	163	157	185	164	194	182	184
16	156	158	163	149	164	162	161	180	164	182	175	173
17	159	158	163	150	167	162	160	174	239	198	184	174
18	158	159	163	159	168	168	164	171	228	183	181	180
19	157	158	160	160	167	173	165	171	189	191	175	176
20	157	159	157	161	168	178	164	168	176	196	189	165
21	157	159	158	157	167	173	162	173	180	188	193	164
22	156	157	155	150	164	167	159	194	333	178	188	165
23	157	159	155	160	154	162	168	202	268	182	200	165
24	159	158	152	157	157	158	187	211	270	188	203	161
25	158	156	155	156	155	156	204	209	292	190	203	161
26	158	157	156	152	158	157	198	201	253	183	198	163
27	163	158	158	159	162	171	179	195	230	215	189	158
28	165	161	160	163	163	165	167	177	222	230	178	153
29	169	164	161	160	---	157	165	179	214	213	181	153
30	173	159	162	161	---	159	182	173	208	207	186	151
31	163	---	158	163	---	160	---	158	---	205	187	---
TOTAL	4,826	4,789	4,928	4,852	4,562	5,032	4,992	7,249	6,045	6,116	6,054	5,134
MEAN	156	160	159	157	163	162	166	234	202	197	195	171
MAX	173	164	163	163	169	178	204	513	333	230	284	187
MIN	138	156	152	147	154	155	154	158	159	176	175	151
AC-FT	9,570	9,500	9,770	9,620	9,050	9,980	9,900	14,380	11,990	12,130	12,010	10,180

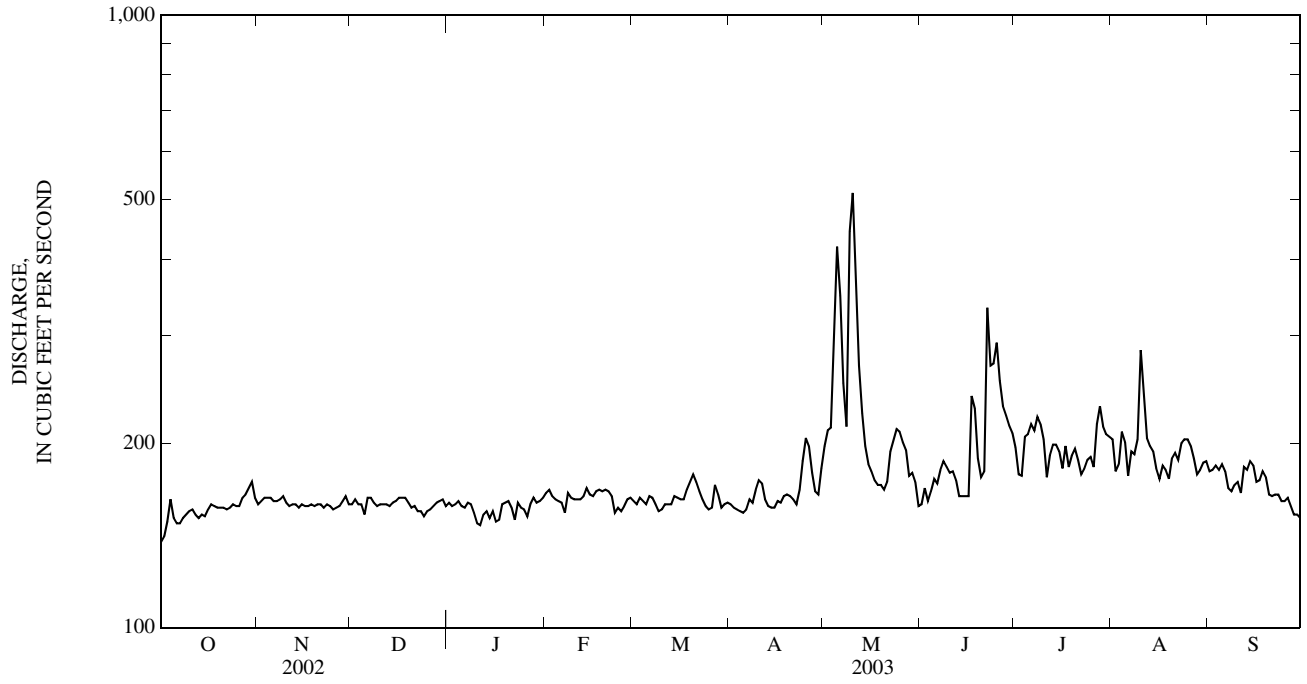
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2003, BY WATER YEAR (WY)

MEAN	142	143	141	138	148	168	173	185	174	165	163	158
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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1948 - 2003	
ANNUAL TOTAL	59,873		64,579			
ANNUAL MEAN	164		177		159	
HIGHEST ANNUAL MEAN					231	1995
LOWEST ANNUAL MEAN					111	1949
HIGHEST DAILY MEAN	213	May 3	513	May 10	3,050	Jul 1, 1962
LOWEST DAILY MEAN	132	Sep 23	138	Oct 1	44	Jan 10, 1963
ANNUAL SEVEN-DAY MINIMUM	135	Sep 22	148	Oct 1	76	Jan 10, 1963
MAXIMUM PEAK FLOW			563	May 10	9,650	Jul 1, 1962
MAXIMUM PEAK STAGE			2.52	May 10	*15.68	Jul 1, 1962
ANNUAL RUNOFF (AC-FT)	118,800		128,100		115,100	
10 PERCENT EXCEEDS	181		207		203	
50 PERCENT EXCEEDS	161		164		150	
90 PERCENT EXCEEDS	152		155		112	

* Backwater from fallen bridge.



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 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)
NOV													
14...	1040	159	8.3	200	9.0	8.5	80	25.8	3.69	5.32	0.4	7.58	16
FEB													
13...	0930	161	8.1	198	-1.0	4.0	77	24.8	3.60	5.47	0.3	6.94	15

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L (00660)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)
NOV													
14...	E113	2.05	0.37	53.7	6.7	0.14	<0.04	0.65	E.004	0.175	0.06	0.05	0.10
FEB													
13...	E98	1.50	0.25	60.9	4.8	0.10	E.02	2.30	E.007	0.435	0.14	0.12	0.17

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Total nitrogen, water, fltrd, mg/L (00602)	Boron, water, fltrd, ug/L (01020)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)
NOV				
14...	0.79	20	<10	E2.0
FEB				
13...	2.4	14	E7	2.6

Remark codes used in this table:
< -- Less than
E -- Estimated value

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06464500 KEYA PAHA RIVER AT WEWELA, SD

LOCATION.--Lat 43°01'44", long 99°46'49", in NW$^1/_4$ SW$^1/_4$ SE$^1/_4$ sec.24, T.95 N., R.76 W., Tripp County, Hydrologic Unit 10150006, on right bank at downstream side of bridge on U.S. Highway 183, 1.0 mi north of Wewela, 4.5 mi upstream from Holt Creek, and 11.5 mi downstream from Lost Creek.

DRAINAGE AREA.--1,070 mi^2, approximately.

PERIOD OF RECORD.--November 1937 to September 1940, October 1947 to current year. Monthly discharge only for October 1947, published in WSP 1309.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 2,049.78 ft above NGVD of 1929. Prior to June 21, 1957, nonrecording gage at site 13 ft upstream at same datum. Prior to Aug. 23, 1984, recording gage on left bank 13 ft downstream from bridge at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite data-collection platform at station. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	e50	e43	e48	e50	e52	68	99	50	92	14	11
2	26	e45	e40	e47	e52	e51	66	114	49	77	14	12
3	27	e53	e39	e46	e55	e50	64	118	50	65	13	11
4	31	50	e38	e47	e53	e51	e62	151	53	55	13	11
5	30	50	e38	e48	e52	e50	e60	210	51	50	16	10
6	30	50	e39	e48	e50	e49	e60	229	55	48	15	9.8
7	29	47	e39	e49	e49	e50	e66	206	55	46	13	9.5
8	28	47	e40	e49	e48	e52	75	189	51	43	13	8.3
9	28	47	e40	e48	e48	e51	83	276	49	43	13	7.8
10	28	45	e40	e46	e47	e49	100	302	48	42	17	8.3
11	28	43	e41	e43	e47	e52	111	284	47	40	18	7.9
12	27	44	e42	e44	e46	e55	102	240	e45	36	14	8.2
13	25	45	e43	e45	e46	e65	91	201	e42	34	13	9.0
14	26	45	e44	e46	e47	e80	80	167	e42	29	12	9.4
15	26	44	e45	e45	e48	e100	71	141	e41	26	12	10
16	28	44	e46	e44	e47	125	71	123	e42	23	12	12
17	30	45	e47	e45	e48	110	69	108	e41	22	11	13
18	29	44	e46	e46	e52	109	69	97	39	22	10	15
19	30	44	e45	e47	e58	113	73	90	38	23	11	16
20	30	43	e40	e48	e70	123	78	81	35	23	17	16
21	31	44	e38	e47	e85	135	80	75	34	23	15	17
22	32	44	e39	e46	e90	136	78	72	50	21	12	17
23	33	43	e42	e45	e76	127	75	70	69	19	11	16
24	35	e40	e44	e44	e63	113	87	77	118	18	9.4	16
25	36	e36	e45	e44	e54	103	103	76	220	16	9.3	16
26	37	e38	e44	e44	e53	89	105	71	226	16	9.4	17
27	39	e44	e45	e45	e52	84	96	67	194	16	9.0	18
28	40	e50	e46	e46	e52	78	87	62	168	16	8.2	18
29	41	e55	e47	e45	---	72	79	57	135	16	8.5	18
30	43	e48	e48	e46	---	73	81	55	111	17	8.6	18
31	38	---	e49	e47	---	72	---	51	---	16	9.9	---
TOTAL	965	1,367	1,322	1,428	1,538	2,519	2,390	4,159	2,248	1,033	381.3	386.2
MEAN	31.1	45.6	42.6	46.1	54.9	81.3	79.7	134	74.9	33.3	12.3	12.9
MAX	43	55	49	49	90	136	111	302	226	92	18	18
MIN	24	36	38	43	46	49	60	51	34	16	8.2	7.8
AC-FT	1,910	2,710	2,620	2,830	3,050	5,000	4,740	8,250	4,460	2,050	756	766

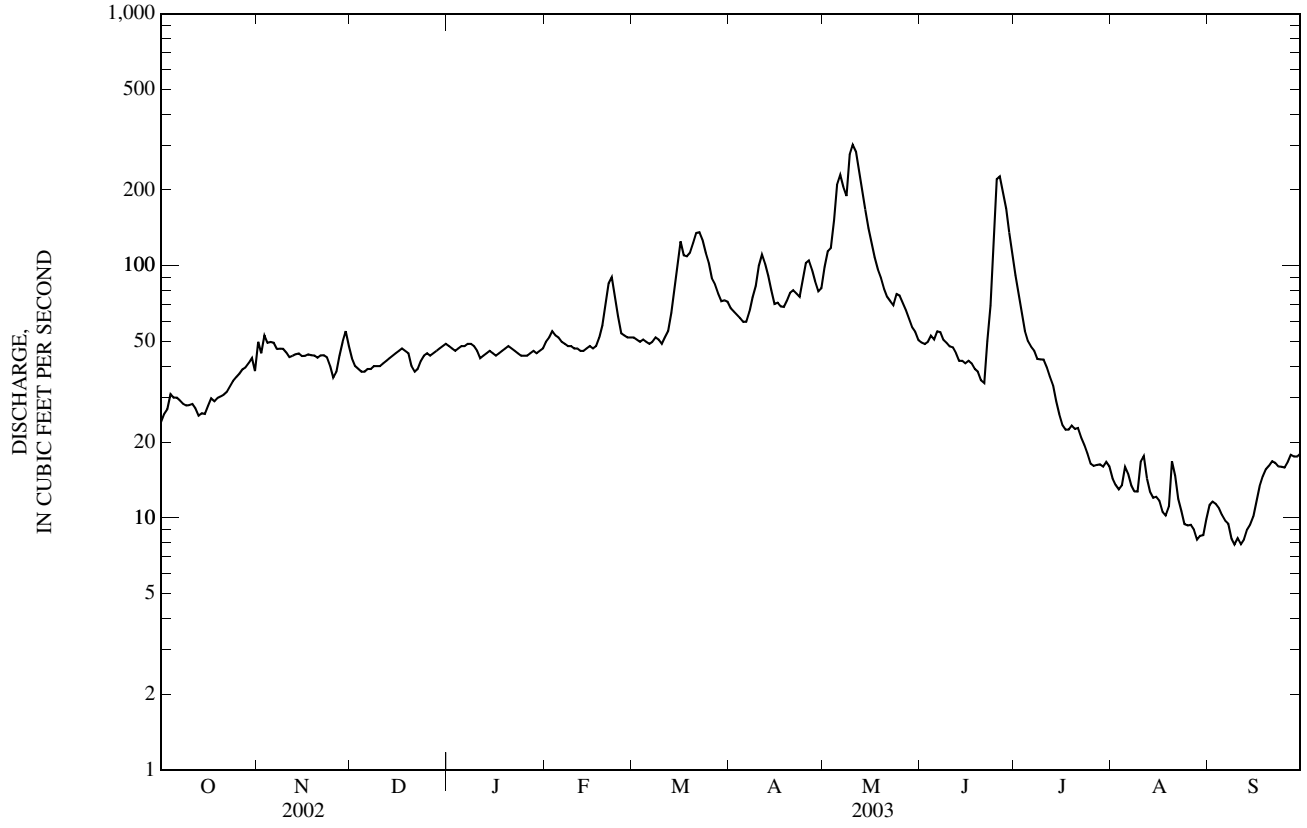
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1940, 1948 - 2003, BY WATER YEAR (WY)

MEAN	41.2	47.5	39.1	33.8	76.1	176	166	148	108	65.3	36.7	31.2
MAX	141	204	120	135	546	598	605	754	512	607	178	89.2
(WY)	(1996)	(1999)	(2002)	(1997)	(1997)	(1960)	(1952)	(1995)	(1962)	(1962)	(1998)	(1999)
MIN	8.49	12.0	8.74	1.61	5.08	33.5	31.3	27.4	12.2	3.55	0.80	3.71
(WY)	(1977)	(1977)	(1956)	(1949)	(1979)	(1975)	(1976)	(1981)	(1976)	(1940)	(1976)	(1976)

06464500 KEYA PAHA RIVER AT WEWELA, SD—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1939-1940, 1948-2003	
ANNUAL TOTAL	22,977		19,736.5			
ANNUAL MEAN	63.0		54.1		[a]80.6	
HIGHEST ANNUAL MEAN					188	1997
LOWEST ANNUAL MEAN					19.5	1976
HIGHEST DAILY MEAN	500	Mar 31	302	May 10	4,930	Mar 30, 1952
LOWEST DAILY MEAN	11	Jul 31	7.8	Sep 9	[b]0.00	Jan 10, 1949
ANNUAL SEVEN-DAY MINIMUM	12	Jul 28	8.4	Sep 8	0.00	Jan 10, 1949
MAXIMUM PEAK FLOW			[c]331	May 9	[d]5,430	Mar 31, 1952
MAXIMUM PEAK STAGE			[f]3.43	Mar 14	[f]13.50	Mar 25, 1950
ANNUAL RUNOFF (AC-FT)	45,570		39,150		58,410	
10 PERCENT EXCEEDS	122		102		166	
50 PERCENT EXCEEDS	45		46		43	
90 PERCENT EXCEEDS	17		13		16	

a Median of annual mean discharges, 70 ft^3/s.
b Also Jan. 11 to Feb. 15, 1949, and Aug. 19 to Sept. 14, 1976.
c Gage height, 3.04 ft.
d Gage height, 13.08 ft.
e Estimated.
f Backwater from ice.



06465500 NIOBRARA RIVER NEAR VERDEL, NE

LOCATION.--Lat 42° 44'23", long 098° 13'26", in NW 1/4 NW 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 mi^2 .

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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,090	1,450	1,390	3,220	e1,450	e1,250	1,950	3,260	1,850	1,670	1,020	887
2	1,100	1,290	1,990	2,800	e1,500	e1,300	1,960	3,010	1,970	1,610	1,030	879
3	1,200	1,290	1,550	2,020	e1,650	e1,250	1,690	2,720	1,900	1,610	1,050	853
4	2,000	1,330	1,710	2,160	e1,500	e1,250	1,470	3,210	1,710	1,830	1,050	824
5	1,660	1,350	1,050	2,490	e1,350	e1,300	1,190	3,730	1,680	1,960	1,090	809
6	1,410	1,390	908	2,400	e1,300	e1,150	1,120	2,970	1,510	2,420	1,040	781
7	1,370	1,410	1,480	1,870	e1,300	e1,200	1,440	1,910	1,410	1,740	1,100	753
8	1,350	1,390	1,900	1,490	e1,200	e1,350	1,560	1,770	1,310	1,560	1,040	736
9	1,480	1,370	1,770	1,520	e1,200	e1,300	1,590	2,900	1,160	1,400	1,070	757
10	1,400	1,360	1,600	1,220	e1,200	e1,200	1,580	3,040	1,130	1,270	1,170	843
11	1,280	1,220	1,700	886	e1,250	e1,250	1,490	2,990	1,140	1,170	1,410	914
12	1,230	1,460	1,740	798	e1,250	e1,400	1,610	2,220	1,320	1,070	1,490	949
13	1,190	1,690	1,900	e840	e1,300	e1,600	1,610	2,120	1,430	1,030	1,270	936
14	894	1,600	1,990	e960	e1,300	e1,550	1,380	2,510	1,590	1,010	1,130	944
15	1,130	1,510	1,980	e920	e1,500	e1,800	1,670	1,860	1,570	958	997	954
16	1,180	1,580	2,050	e900	e1,450	e2,050	1,760	1,750	1,560	881	918	908
17	1,120	1,500	2,050	e900	e1,250	2,200	1,810	1,510	1,840	865	865	913
18	1,090	1,460	2,020	921	e1,300	1,980	1,620	1,350	1,990	836	831	898
19	1,020	1,260	2,040	949	e1,400	1,990	1,740	1,520	1,760	873	839	935
20	1,190	1,450	1,740	e1,000	e1,400	1,810	1,520	1,600	1,500	914	845	936
21	1,370	1,410	1,850	e1,300	e1,500	1,800	1,500	1,500	1,490	934	859	956
22	1,400	1,450	1,990	e1,200	e1,500	1,940	1,310	1,610	2,090	966	850	934
23	1,040	1,470	1,820	e1,100	e1,350	2,230	1,440	1,400	3,000	946	856	935
24	1,230	1,450	1,480	e960	e1,250	2,650	1,360	1,450	2,330	941	857	933
25	1,060	1,440	1,610	e980	e1,200	2,590	1,680	1,650	2,920	935	878	858
26	1,030	1,480	1,790	e1,060	e1,040	2,640	1,580	1,670	2,520	910	900	829
27	1,370	1,590	2,160	e1,040	e1,100	2,970	1,840	1,520	2,240	922	898	696
28	1,900	1,430	2,490	e1,100	e1,200	2,440	2,050	1,510	1,990	1,010	906	695
29	1,900	1,390	2,530	e1,300	---	1,920	2,060	1,350	1,830	1,100	887	719
30	1,960	1,240	2,960	e1,250	---	1,700	2,820	1,390	1,800	1,070	839	803
31	1,670	---	3,020	e1,200	---	1,840	---	1,620	---	1,010	856	---
TOTAL	41,314	42,710	58,258	42,754	37,190	54,900	49,400	64,620	53,540	37,421	30,841	25,767
MEAN	1,333	1,424	1,879	1,379	1,328	1,771	1,647	2,085	1,785	1,207	995	859
MAX	2,000	1,690	3,020	3,220	1,650	2,970	2,820	3,730	3,000	2,420	1,490	956
MIN	894	1,220	908	798	1,040	1,150	1,120	1,350	1,130	836	831	695
AC-FT	81,950	84,720	115,600	84,800	73,770	108,900	97,980	128,200	106,200	74,220	61,170	51,110

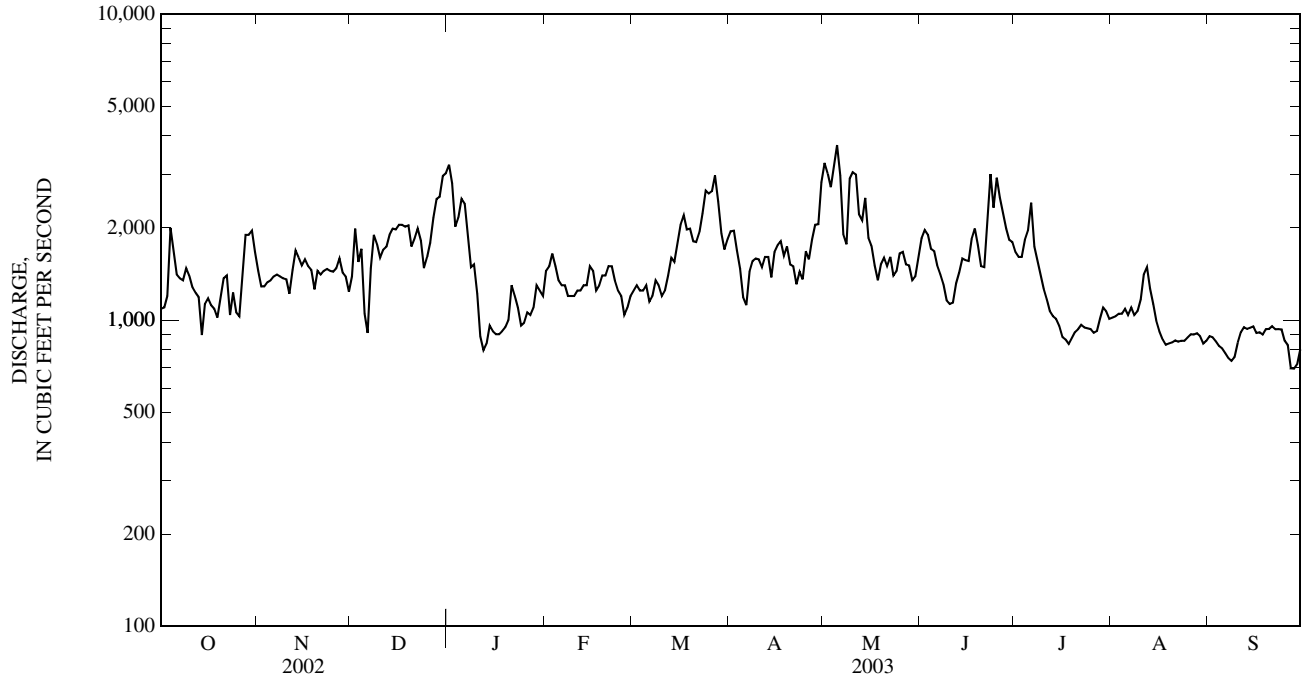
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2003, BY WATER YEAR (WY)

MEAN	1,433	1,534	1,411	1,453	1,910	2,570	2,350	2,209	1,870	1,402	1,129	1,249
MAX	2,480	2,762	2,118	2,148	3,557	4,425	4,693	5,290	4,442	5,370	2,049	2,094
(WY)	(1996)	(1999)	(1997)	(1999)	(1997)	(1960)	(1995)	(1995)	(1962)	(1962)	(1962)	(1986)
MIN	1,009	943	787	706	941	1,444	1,282	1,228	1,044	551	644	704
(WY)	(1977)	(1977)	(1969)	(1940)	(1939)	(1981)	(1939)	(1969)	(1976)	(1974)	(1971)	(1939)

06465500 NIOBRARA RIVER NEAR VERDEL, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1938 - 2003	
ANNUAL TOTAL	597,193		538,715			
ANNUAL MEAN	1,636		1,476		1,717	
HIGHEST ANNUAL MEAN					2,461	1962
LOWEST ANNUAL MEAN					1,269	1976
HIGHEST DAILY MEAN	3,430	Apr 23	3,730	May 5	25,100	Mar 27, 1960
LOWEST DAILY MEAN	608	Jul 22	695	Sep 28	104	Nov 30, 1960
ANNUAL SEVEN-DAY MINIMUM	648	Jul 19	786	Sep 4	210	Nov 27, 1976
MAXIMUM PEAK FLOW			*4,340	May 5	39,000	Mar 27, 1960
MAXIMUM PEAK STAGE			**5.52	Jan 31	10.62	Mar 12, 1966
ANNUAL RUNOFF (AC-FT)	1,185,000		1,069,000		1,244,000	
10 PERCENT EXCEEDS	2,740		2,100		2,700	
50 PERCENT EXCEEDS	1,550		1,400		1,520	
90 PERCENT EXCEEDS	817		896		900	

e Estimated.
* Stage 3.58 ft.
** Backwater from ice.



06465700 VERDIGRE CREEK NEAR VERDIGRE, NE

LOCATION.--Lat 42° 39'16", long 98° 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 mi^2 approximately.

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

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

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	128	104	e104	e92	e98	133	191	128	127	75	36
2	106	117	123	e106	e96	e100	136	165	137	107	79	30
3	113	129	143	e110	e102	e96	122	158	140	99	70	27
4	190	122	133	e110	e98	e94	122	185	140	158	72	34
5	156	111	e120	e118	e92	e96	130	191	139	169	73	34
6	142	110	e100	111	e90	e90	130	175	135	511	60	30
7	130	114	e104	e110	e92	e92	150	159	137	294	57	28
8	133	110	e112	e114	e88	e98	129	163	137	180	53	28
9	136	118	e110	e125	e90	e96	141	176	139	154	55	50
10	134	115	e108	e118	e90	e92	147	179	196	123	94	113
11	129	114	e110	e104	e92	e94	152	198	153	96	97	169
12	128	135	e114	96	e92	e100	143	176	132	81	83	139
13	112	123	e116	e94	e94	e108	149	186	125	85	66	119
14	127	120	e114	e100	e94	e106	146	263	125	76	54	108
15	120	123	e114	e98	e102	e112	149	177	124	57	52	95
16	110	113	e120	e92	e98	e120	172	162	119	48	50	93
17	124	116	e125	e88	e94	e135	177	149	122	58	47	92
18	121	113	e125	e82	e96	e145	153	144	124	68	46	99
19	103	114	e120	e86	e100	146	174	146	114	62	48	84
20	99	118	122	e88	e100	143	165	134	107	48	54	72
21	112	99	108	e94	e104	142	149	141	107	44	48	80
22	117	95	93	e92	e104	121	166	152	101	42	37	77
23	113	96	e104	e88	e98	120	151	155	112	53	31	71
24	113	103	e100	e80	e90	113	162	162	569	58	26	74
25	116	130	e94	e82	e88	99	174	162	795	49	25	85
26	124	123	e90	e88	e86	101	156	154	376	46	25	98
27	128	107	e94	e86	e92	142	148	147	245	69	20	102
28	129	116	e98	e86	e96	135	145	141	195	94	27	102
29	130	101	e102	e92	---	114	146	133	171	86	25	92
30	137	104	e110	e90	---	119	179	123	147	83	32	86
31	115	---	e109	e88	---	130	---	120	---	78	38	---
TOTAL	3,850	3,437	3,439	3,020	2,650	3,497	4,496	5,067	5,491	3,303	1,619	2,347
MEAN	124	115	111	97.4	94.6	113	150	163	183	107	52.2	78.2
MAX	190	135	143	125	104	146	179	263	795	511	97	169
MIN	99	95	90	80	86	90	122	120	101	42	20	27
AC-FT	7,640	6,820	6,820	5,990	5,260	6,940	8,920	10,050	10,890	6,550	3,210	4,660

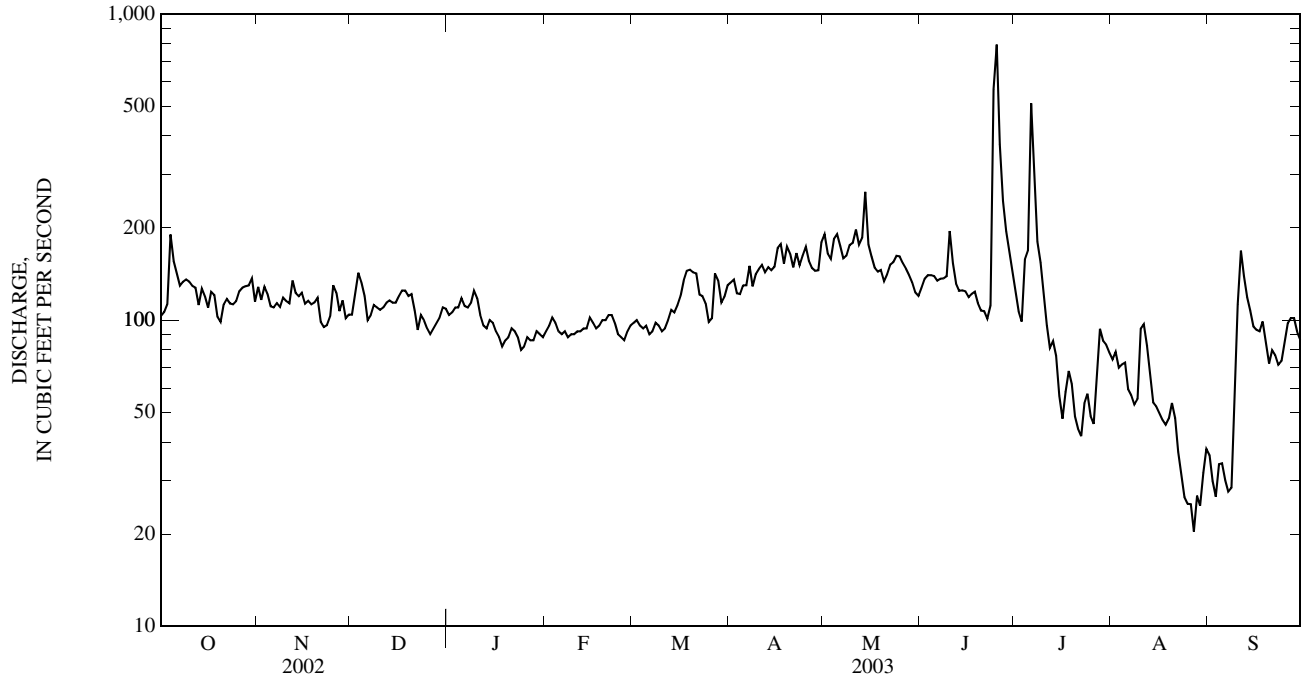
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2003, BY WATER YEAR (WY)

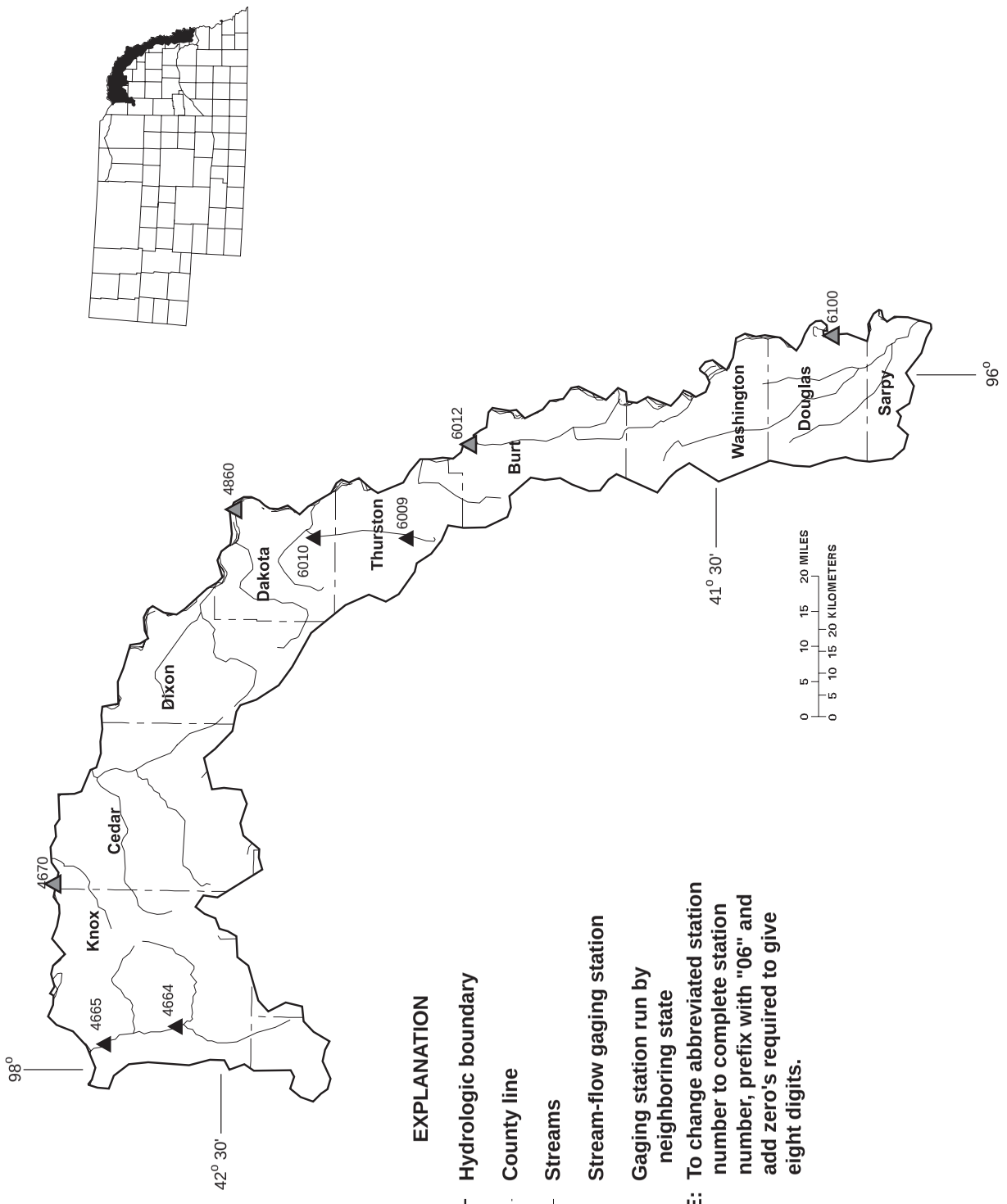
MEAN	124	115	111	97.4	94.6	113	150	157	144	80.2	85.0	86.8
MAX	124	115	111	97.4	94.6	113	150	163	183	107	118	95.4
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)
MIN	124	115	111	97.4	94.6	113	150	150	106	53.8	52.2	78.2
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)	(2003)	(2003)

06465700 VERDIGRE CREEK NEAR VERDIGRE, NE—Continued

SUMMARY STATISTICS	FOR 2003 WATER YEAR		WATER YEARS 2002 - 2003	
ANNUAL TOTAL	42,216			
ANNUAL MEAN	116		116	
HIGHEST ANNUAL MEAN			116	2003
LOWEST ANNUAL MEAN			116	2003
HIGHEST DAILY MEAN	795	Jun 25	795	Jun 25, 2003
LOWEST DAILY MEAN	20	Aug 27	20	Aug 27, 2003
ANNUAL SEVEN-DAY MINIMUM	26	Aug 23	26	Aug 23, 2003
MAXIMUM PEAK FLOW	*1,190	Jun 25	*1,190	Jun 25, 2003
MAXIMUM PEAK STAGE	**4.90	Feb 19	**4.90	Feb 19, 2003
ANNUAL RUNOFF (AC-FT)	83,740		83,790	
10 PERCENT EXCEEDS	162		162	
50 PERCENT EXCEEDS	110		110	
90 PERCENT EXCEEDS	56		56	

e Estimated.
* Stage 4.62 ft. From rating extended above 475 ft^3/s.
** Backwater from ice.




98°
42° 30'
4670
4665
4664
Knox
Cedar
Dixon
Dakota
4860
6010
6009
Thurston
6012
Burt
41° 30'
Washington
Douglas
Sarpy
6100
96°
0 5 10 15 20 MILES
0 5 10 15 20 KILOMETERS
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.

*Station number	Station name	Page
	BAZILE CREEK BASIN	
4664	Bazile Creek at Center	78
4665	Bazile Creek near Niobrara	80
	MISSOURI RIVER MAIN STEM	
4670	Lewis and Clark Lake near Yankton, SD	82
4860	Missouri River at Sioux City, IA	84
	OMAHA CREEK BASIN	
6009	South Omaha Creek at Walthill	86
6010	Omaha Creek at Homer	88
	MISSOURI RIVER MAIN STEM	
6012	Missouri River at Decatur	90
6100	Missouri River at Omaha	92

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

06466400 BAZILE CREEK AT CENTER, NE

LOCATION.--Lat 42° 36' 58", long 97° 52'41", in SE$^{1}/_{4}$ sec.34, T.31 N., R.5 W., Knox County, Hydrologic Unit 10170101, on right bank 40 ft shoreward and 40 ft downstream from centerline of State Highway 84 bridge, and 0.4 mi north of Center.

DRAINAGE AREA .--315 mi^2 approximately.

PERIOD OF RECORD.--October 2002 to September 2003.

GAGE.--Water-stage recorder. Elevation of gage is 1,380 ft above sea level, from topographic map. Data collection platform at station.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. Maximum instantaneous discharge and stage for peak of June 24 are unknown.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	e44	47	e36	e40	e52	68	74	54	e74	33	23
2	38	e44	46	e35	e43	e54	66	72	59	66	32	22
3	43	e45	47	e35	e44	e56	64	65	59	64	33	22
4	55	e45	49	e36	e43	e54	59	71	59	70	33	21
5	52	e47	39	e36	e42	e56	56	82	59	85	33	21
6	46	e48	e44	e35	e42	e52	54	80	60	966	32	21
7	41	e49	e46	e38	e43	e54	55	74	58	203	31	20
8	40	e51	e46	e40	e42	e60	57	68	57	121	30	20
9	42	e50	e45	e41	e43	e58	62	69	56	89	30	23
10	41	e49	e47	e39	e43	e56	73	71	66	77	41	39
11	39	e50	e49	e37	e44	e60	69	85	81	70	35	97
12	39	e53	51	e37	e43	e68	63	91	69	64	32	52
13	38	e52	51	e39	e47	75	58	85	60	60	29	40
14	37	e52	51	e39	e50	79	55	106	58	56	29	34
15	37	e52	52	e38	e56	89	56	103	58	54	28	33
16	39	e52	52	e37	e54	82	56	89	58	51	27	32
17	e46	e50	54	e35	e49	77	55	76	57	49	27	31
18	e44	e47	55	e36	e50	76	56	72	56	48	25	34
19	e43	e46	55	e37	e54	77	92	71	55	47	25	33
20	e43	e46	51	e40	e54	76	87	68	54	46	27	32
21	e42	47	49	e39	e58	74	71	69	51	44	26	32
22	e42	46	47	e37	e58	72	62	71	64	42	25	31
23	e41	46	46	e34	e52	75	58	70	79	40	25	31
24	e41	46	e41	e35	e49	73	58	64	e1,800	39	24	31
25	e40	43	e36	e37	e48	70	60	73	e540	37	23	30
26	e41	47	e36	e36	e47	68	60	63	e240	36	24	31
27	e45	46	e37	e36	e48	82	56	57	e140	37	23	30
28	e46	45	e36	e38	e50	96	53	58	e110	37	26	30
29	e46	48	e37	e38	---	84	52	61	e94	35	25	31
30	e47	45	e36	e37	---	72	64	53	e82	35	23	31
31	e45	---	e35	e39	---	69	---	57	---	34	23	---
TOTAL	1,315	1,431	1,413	1,152	1,336	2,146	1,855	2,268	4,393	2,776	879	958
MEAN	42.4	47.7	45.6	37.2	47.7	69.2	61.8	73.2	146	89.5	28.4	31.9
MAX	55	53	55	41	58	96	92	106	1,800	966	41	97
MIN	36	43	35	34	40	52	52	53	51	34	23	20
AC-FT	2,610	2,840	2,800	2,280	2,650	4,260	3,680	4,500	8,710	5,510	1,740	1,900

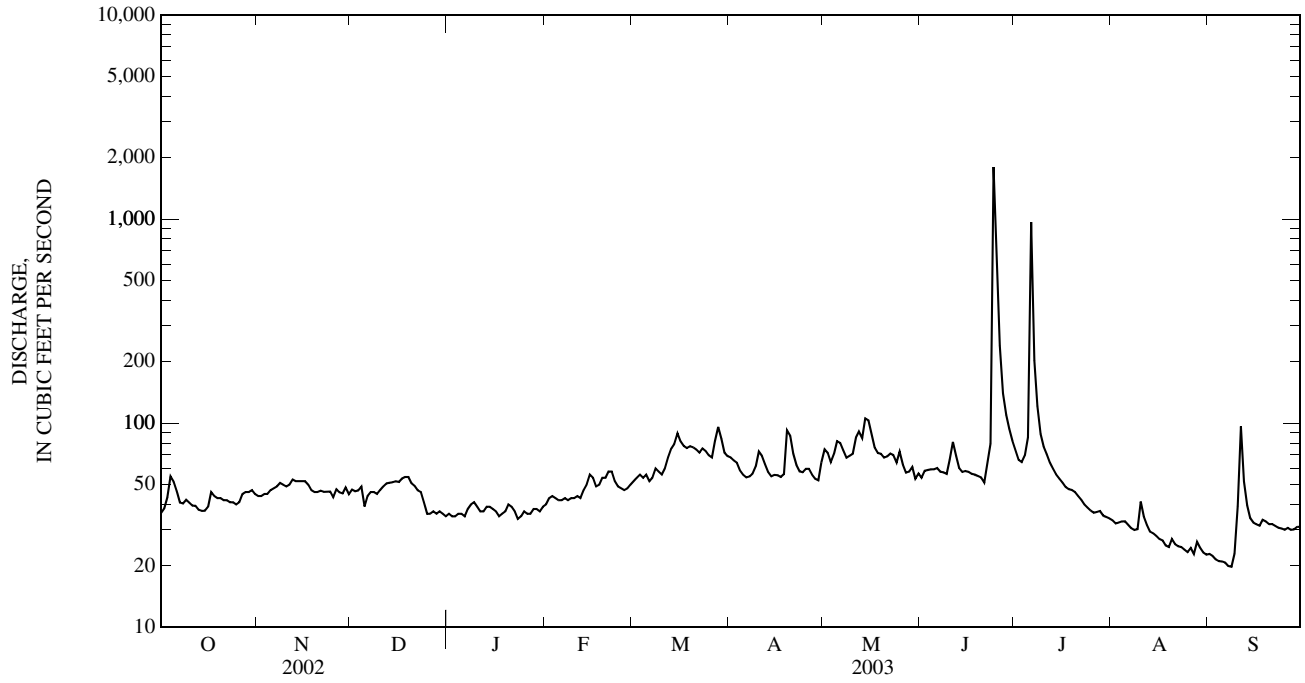
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2003, BY WATER YEAR (WY)

MEAN	42.4	47.7	45.6	37.2	47.7	69.2	61.8	73.2	146	89.5	28.4	31.9
MAX	42.4	47.7	45.6	37.2	47.7	69.2	61.8	73.2	146	89.5	28.4	31.9
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)
MIN	42.4	47.7	45.6	37.2	47.7	69.2	61.8	73.2	146	89.5	28.4	31.9
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)

06466400 BAZILE CREEK AT CENTER, NE—Continued

SUMMARY STATISTICS	FOR 2003 WATER YEAR	
ANNUAL TOTAL	21,922	
ANNUAL MEAN	60.1	
HIGHEST DAILY MEAN	1,800	Jun 24
LOWEST DAILY MEAN	20	Sep 7
ANNUAL SEVEN-DAY MINIMUM	21	Sep 2
ANNUAL RUNOFF (AC-FT)	43,480	
10 PERCENT EXCEEDS	76	
50 PERCENT EXCEEDS	48	
90 PERCENT EXCEEDS	31	

e Estimated.



06466500 BAZILE CREEK NEAR NIOBRARA, NE

LOCATION.--Lat 42° 43' 56", long 97° 55'21", in SE$^{1}/_{4}$ sec.20, T.32 N., R.5 W., Knox County, Hydrologic Unit 10170101, on right bank 50 ft shoreward and 10 ft downstream from centerline of county bridge 0.8 mi south of State Highway 12, and 8.5 mi north of Center.

DRAINAGE AREA .--457 mi^2 approximately.

PERIOD OF RECORD.--May 1952 to September 1995. October 2002 to September 2003. Records for October 1931 to September 1932, published in WSP 731, have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 1279: 1952. WSP 1729: 1958(M). WDR NE-81-1: 1977, 1979-80. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 1,243.32 ft above sea level. Prior to Dec. 16, 1952, nonrecording gage only. December 16, 1952 to June 16, 1957, water stage recorder at site 1.8 mi downstream at datum 28.51 ft lower. June 17, 1957 to September 14, 1958 at site 1.8 mi downstream at datum 24.31 ft lower. September 15, 1958 to September 30, 1995 at site 1.8 mi downstream at datum 32.51 ft lower. Data collection platform at station.

REMARKS.--Records good, except for estimated daily discharges, which are poor. Minor diversions for irrigation above station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	49	57	e42	e48	e64	84	88	77	89	59	34
2	36	49	59	e41	e50	e66	84	88	81	85	57	34
3	39	50	57	e41	e56	e66	78	86	83	78	54	34
4	46	51	59	e45	e52	e64	74	88	84	84	55	33
5	41	52	e50	e43	e48	e66	75	92	82	84	56	33
6	40	54	e52	e42	e48	e62	75	95	83	934	55	32
7	37	56	e54	e45	e49	e64	74	90	80	367	53	33
8	38	57	e54	e50	e47	e70	73	86	80	209	52	32
9	37	57	e52	e54	e50	e68	76	84	78	138	52	35
10	37	56	e54	e47	e50	e64	79	87	81	107	71	53
11	37	57	e54	e43	e52	e68	81	95	96	100	49	112
12	36	59	e54	e43	e56	e76	76	98	92	94	34	75
13	36	59	e52	e47	e60	e88	72	96	84	91	32	51
14	37	59	e54	e45	e62	e94	73	109	83	87	31	39
15	37	59	e56	e43	e68	112	76	120	85	86	28	34
16	39	59	e60	e43	e62	104	77	105	88	82	27	32
17	50	59	e64	e39	e56	102	78	91	87	78	27	33
18	49	58	67	e40	e58	101	78	86	88	78	29	37
19	49	59	64	e42	e64	96	99	83	84	78	27	36
20	49	59	61	e46	e64	93	105	82	81	73	31	33
21	48	59	58	e44	e70	91	90	82	79	71	30	34
22	48	56	61	e42	e74	91	85	83	86	71	30	34
23	48	57	59	e37	e66	89	82	83	85	69	30	34
24	47	56	e52	e39	e58	86	83	86	1,860	69	29	35
25	46	54	e42	e42	e56	82	84	87	687	66	29	35
26	46	61	e38	e40	e54	80	83	86	325	63	31	36
27	49	60	e39	e41	e58	87	79	83	154	65	31	35
28	49	56	e41	e45	e60	91	75	80	122	65	33	34
29	50	58	e42	e44	---	87	74	79	105	62	34	35
30	52	55	e43	e43	---	85	81	76	97	61	33	35
31	50	---	e40	e47	---	84	---	76	---	59	33	---
TOTAL	1,337	1,690	1,649	1,345	1,596	2,541	2,403	2,750	5,277	3,743	1,222	1,182
MEAN	43.1	56.3	53.2	43.4	57.0	82.0	80.1	88.7	176	121	39.4	39.4
MAX	52	61	67	54	74	112	105	120	1,860	934	71	112
MIN	34	49	38	37	47	62	72	76	77	59	27	32
AC-FT	2,650	3,350	3,270	2,670	3,170	5,040	4,770	5,450	10,470	7,420	2,420	2,340

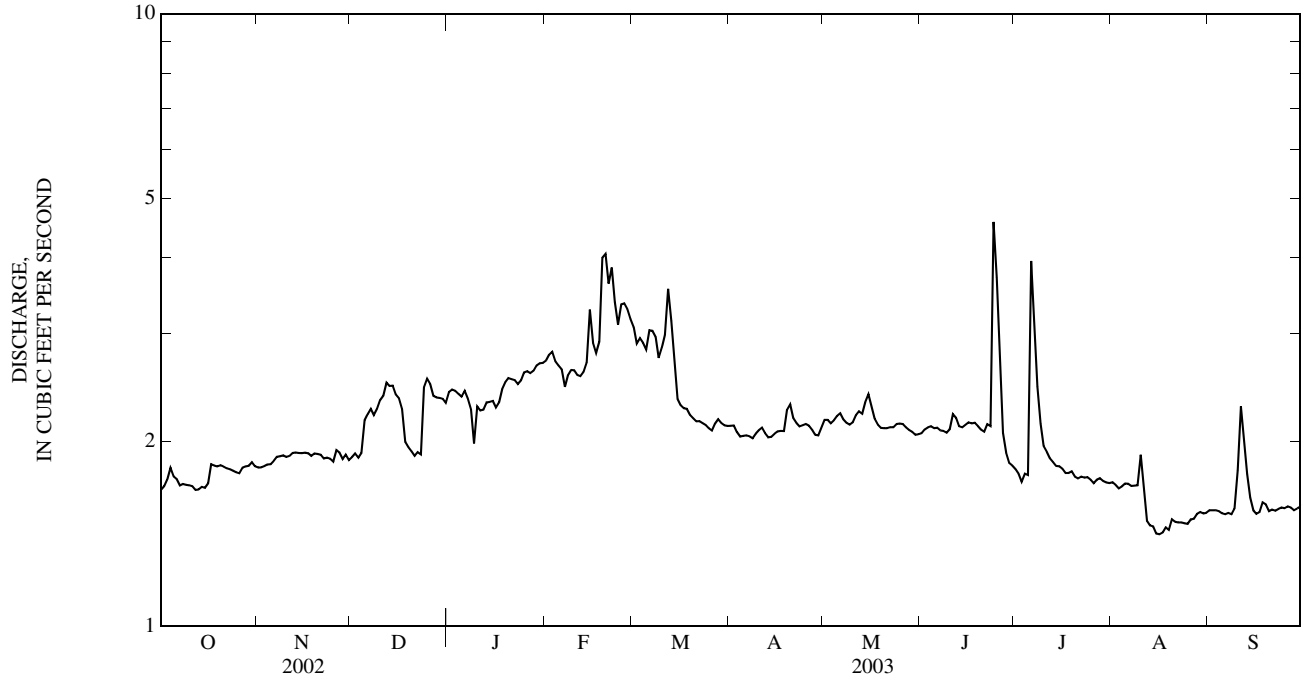
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2003, BY WATER YEAR (WY)

MEAN	48.6	52.5	46.0	45.7	78.2	153	133	127	161	76.7	57.4	45.0
MAX	108	96.4	96.3	108	213	621	587	469	933	388	326	118
(WY)	(1985)	(1994)	(1994)	(1995)	(1971)	(1962)	(1960)	(1960)	(1957)	(1993)	(1960)	(1992)
MIN	24.4	25.9	24.5	18.4	26.0	48.0	37.9	30.6	24.6	8.44	7.95	9.48
(WY)	(1990)	(1990)	(1990)	(1979)	(1978)	(1981)	(1981)	(1981)	(1956)	(1980)	(1991)	(1991)

06466500 BAZILE CREEK NEAR NIOBRARA, NE—Continued

SUMMARY STATISTICS	FOR 2003 WATER YEAR		WATER YEARS 1952 - 2003	
ANNUAL TOTAL	26,735			
ANNUAL MEAN	73.2		85.6	
HIGHEST ANNUAL MEAN			194	1960
LOWEST ANNUAL MEAN			34.9	1981
HIGHEST DAILY MEAN	1,860	Jun 24	12,300	Jun 16, 1957
LOWEST DAILY MEAN	27	Aug 16	0.00	Jul 24, 1976
ANNUAL SEVEN-DAY MINIMUM	28	Aug 15	0.77	Aug 25, 1976
MAXIMUM PEAK FLOW	4,840	Jun 24	68,600	Jun 16, 1957
MAXIMUM PEAK STAGE	6.15	Jun 24	*20.25	Feb 19, 1971
ANNUAL RUNOFF (AC-FT)	53,030		61,980	
10 PERCENT EXCEEDS	91		140	
50 PERCENT EXCEEDS	59		52	
90 PERCENT EXCEEDS	34		22	

e Estimated.
* Backwater from ice.



06467000 LEWIS AND CLARK LAKE NEAR YANKTON, SD

LOCATION.--Lat 42°50'56", long 97°28'54", in SW$^1/_4$ 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 mi^2, 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. Elevations listed to 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 ft^3/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 ft^3/s at pool elevation, 1,210.0 ft. Water is used for flood control, navigation, power, and incidental uses.

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, 416,000 acre-ft, Dec. 4; minimum contents, 339,000 acre-ft, Jan. 24.

MONTHEND ELEVATION AND CONTENTS AT 2400 HOURS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	1,207.08	386,000	--
Oct. 31	1,207.83	405,000	+19,000
Nov. 30	1,208.00	412,000	+7,000
Dec. 31	1,206.97	384,000	-28,000
CAL YR 2002	--	--	-10,000
Jan. 31	1,206.69	376,000	-8,000
Feb. 28	1,206.32	366,000	-10,000
Mar. 31	1,205.85	355,000	-11,000
Apr. 30	1,205.98	357,000	+2,000
May 31	1,205.62	349,000	-8,000
June 30	1,206.59	374,000	+25,000
July 31	1,206.41	368,000	-6,000
Aug. 31	1,206.40	368,000	0
Sept. 30	1,207.35	393,000	+25,000
WTR YR 2003	--	--	+7,000

NOTE.--Lake frozen over Dec. 24 to Mar. 24.

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06486000 MISSOURI RIVER AT SIOUX CITY, IA

LOCATION.--Lat. 42° 29'09", long 96° 24'49", in NW$^{1}/_{4}$ SE$^{1}/_{4}$ sec.16, T.29 N., R.9 E., sixth prinicipal 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 mi^2, approximately. The 3,959 mi^2 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 441,000 ft^3/s Apr. 14, 1952, gage height, 24.28 ft, datum then in use; minimum, 2,500 ft^3/s Dec. 29, 1941; minimum gage height, 7.02 ft Jan. 19, 1996.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32,900	28,700	13,800	14,200	14,400	16,800	25,000	28,800	27,800	31,500	26,900	24,400
2	33,000	28,100	14,000	14,200	14,700	15,600	24,900	28,300	28,100	31,100	26,800	25,500
3	33,200	27,400	14,200	14,100	14,700	14,000	25,100	28,100	28,100	30,400	26,800	27,700
4	32,900	27,400	14,300	14,300	13,300	14,200	25,200	28,600	27,700	29,800	26,800	29,100
5	32,000	27,600	14,100	14,400	13,900	11,500	25,100	29,200	27,800	29,800	27,300	29,600
6	31,500	27,900	14,000	14,300	16,400	12,100	25,300	28,500	27,700	29,600	27,400	29,600
7	32,000	27,900	14,300	14,100	15,300	15,000	25,800	28,200	27,500	29,200	26,900	29,500
8	31,800	28,100	14,100	14,200	15,800	14,600	25,900	28,300	27,600	28,500	27,000	29,400
9	31,000	28,400	14,000	14,200	15,300	11,600	26,300	28,900	27,600	30,800	27,100	29,700
10	e31,400	28,600	14,300	13,400	14,000	11,300	26,300	28,800	32,200	34,000	27,100	32,700
11	31,000	28,600	14,100	13,000	13,700	13,700	26,200	29,700	32,200	33,000	27,000	35,000
12	31,400	28,400	14,200	13,700	13,700	15,900	26,300	28,900	28,900	31,300	26,000	33,500
13	31,400	28,500	14,000	14,300	13,900	15,400	26,200	29,200	28,600	30,100	24,000	31,100
14	31,000	28,600	13,900	13,900	14,400	15,200	26,100	30,300	28,300	28,400	21,600	29,400
15	31,500	28,500	13,900	13,300	14,400	14,500	26,200	30,700	28,200	27,700	21,100	28,900
16	31,700	28,500	13,900	13,400	13,900	15,100	26,500	30,600	28,000	26,800	22,300	28,600
17	32,000	28,400	13,900	13,500	13,800	17,900	27,000	30,500	27,800	26,600	24,300	28,400
18	31,800	28,500	14,100	15,200	14,500	21,600	26,400	30,400	27,700	26,200	25,300	28,900
19	31,700	28,400	14,200	15,900	14,100	24,000	27,000	30,500	27,300	25,900	25,400	28,800
20	31,800	28,300	14,000	17,400	15,200	24,200	27,500	30,100	27,100	25,800	25,200	28,100
21	32,000	28,300	13,700	16,100	18,500	23,400	28,400	29,400	27,000	25,600	25,100	28,100
22	e31,800	28,300	13,900	15,800	15,700	23,400	28,100	29,200	27,200	25,700	24,900	28,200
23	e32,100	28,400	13,900	15,400	13,900	23,900	27,500	29,200	27,300	25,600	24,700	27,800
24	31,800	e28,200	13,400	15,500	11,500	24,100	27,500	29,000	30,100	25,500	24,800	27,400
25	31,100	e24,800	13,200	16,200	10,100	23,800	27,400	28,900	33,500	25,700	24,700	27,200
26	31,000	22,500	14,400	16,000	11,500	24,100	26,100	28,600	32,000	25,800	24,700	27,100
27	31,200	19,300	14,900	15,800	15,200	25,400	26,100	28,300	31,500	25,800	24,500	27,100
28	31,800	16,400	14,900	16,800	16,800	26,200	26,300	28,200	31,500	25,900	24,500	27,100
29	30,500	14,600	14,700	15,700	---	25,400	26,900	27,800	31,800	25,700	24,700	27,200
30	29,100	14,100	14,500	13,700	---	24,900	28,900	27,900	31,700	26,300	24,400	27,300
31	29,200	---	14,200	14,400	---	25,000	---	27,800	---	26,800	24,400	---
TOTAL	978,600	789,700	437,000	456,400	402,600	583,800	793,500	900,900	869,800	870,900	783,700	862,400
MEAN	31,570	26,320	14,100	14,720	14,380	18,830	26,450	29,060	28,990	28,090	25,280	28,750
MAX	33,200	28,700	14,900	17,400	18,500	26,200	28,900	30,700	33,500	34,000	27,400	35,000
MIN	29,100	14,100	13,200	13,000	10,100	11,300	24,900	27,800	27,000	25,500	21,100	24,400
AC-FT	1,941,000	1,566,000	866,800	905,300	798,600	1,158,000	1,574,000	1,787,000	1,725,000	1,727,000	1,554,000	1,711,000
CFSM	0.10	0.08	0.04	0.05	0.05	0.06	0.08	0.09	0.09	0.09	0.08	0.09
IN.	0.12	0.09	0.05	0.05	0.05	0.07	0.09	0.11	0.10	0.10	0.09	0.10

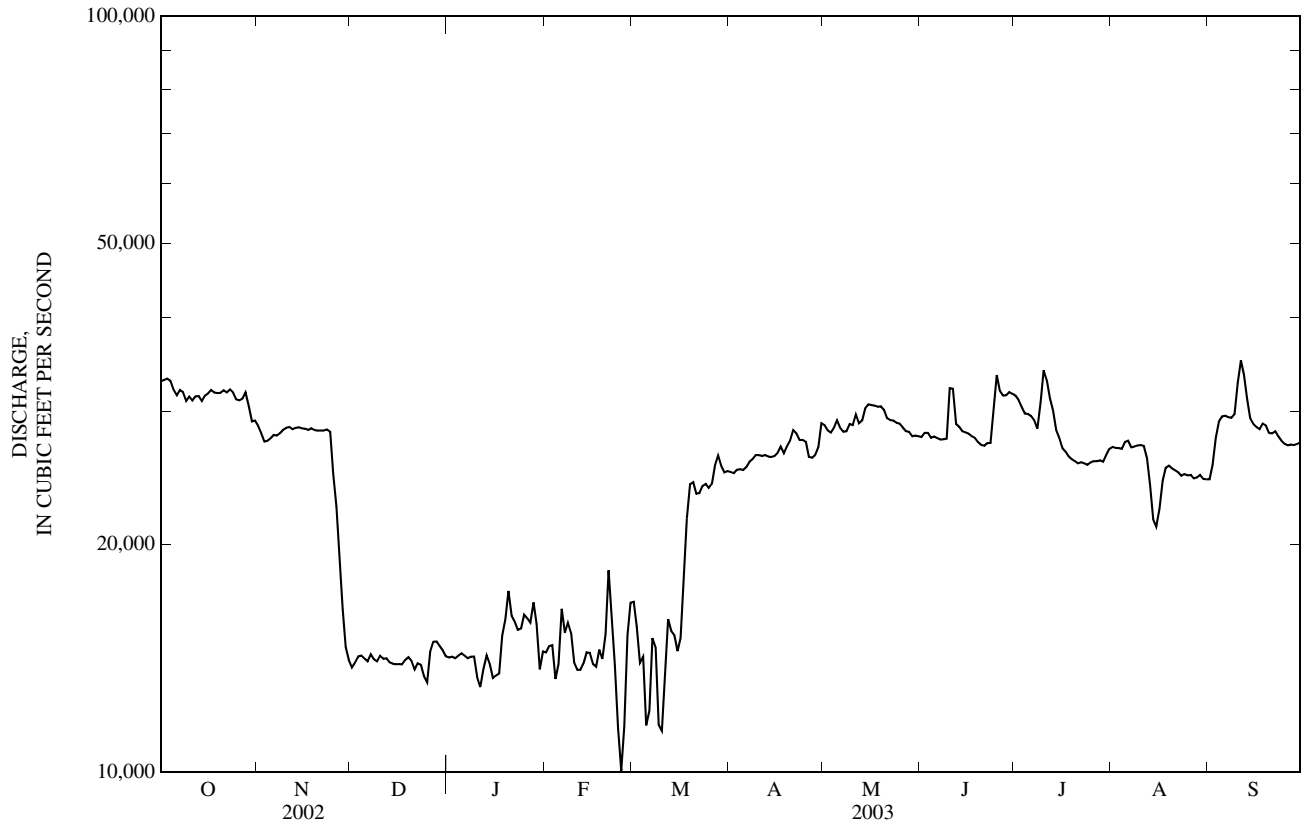
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2003, BY WATER YEAR (WY)

MEAN	36,060	31,260	18,830	16,110	17,220	23,210	33,250	33,800	35,410	35,930	36,250	36,560
MAX	69,300	71,600	39,880	27,720	31,120	47,020	88,040	78,720	66,400	65,550	65,360	66,400
(WY)	(1998)	(1998)	(1998)	(1987)	(1997)	(1997)	(1997)	(1997)	(1997)	(1997)	(1997)	(1997)
MIN	14,350	6,951	8,271	7,316	6,293	9,135	17,450	23,820	23,270	26,380	24,270	25,790
(WY)	(1962)	(1962)	(1962)	(1964)	(1963)	(1957)	(1957)	(1962)	(1960)	(2002)	(1993)	(1962)

06486000 MISSOURI RIVER AT SIOUX CITY, IA—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1953 - 2003a	
ANNUAL TOTAL	8,771,100		8,729,300			
ANNUAL MEAN	24,030		23,920		29,530	
HIGHEST ANNUAL MEAN					55,890	1997
LOWEST ANNUAL MEAN					19,770	1957
HIGHEST DAILY MEAN	34,700	Aug 23	35,000	Sep 11	105,000	Jun 25, 1953
LOWEST DAILY MEAN	13,200	Dec 25	10,100	Feb 25	3,000	Dec 11, 1961
ANNUAL SEVEN-DAY MINIMUM	13,800	Dec 19	12,800	Mar 5	5,430	Feb 22, 1963
MAXIMUM PEAK FLOW			36,200	Sep 11	101,000	Apr 3, 1960
MAXIMUM PEAK STAGE			16.83	Sep 11	30.65	Feb 19, 1971
INSTANTANEOUS LOW FLOW			9,610	Feb 25		
ANNUAL RUNOFF (AC-FT)	17,400,000		17,310,000		21,400,000	
ANNUAL RUNOFF (CFSM)	0.076		0.076		0.094	
ANNUAL RUNOFF (INCHES)	1.04		1.03		1.28	
10 PERCENT EXCEEDS	31,600		31,300		46,200	
50 PERCENT EXCEEDS	26,200		26,600		29,900	
90 PERCENT EXCEEDS	14,700		14,000		12,100	

a Post regulation.
e Estimated.



06600900 SOUTH OMAHA CREEK AT WALTHILL, NE

LOCATION.--Lat 42° 08'53", long 96° 28'58", in SE$^{1}/_{4}$ SE$^{1}/_{4}$ sec.11, T.25 N., R.8 E., Thurston County, Hydrologic Unit 10230001, near the right upstream end of the bridge, on Nebraska Highway 94. The station is 1.5 miles below the confluence with Cow Creek and 1.7 miles upstream of the confluence with North Omaha Creek at Walthill.

DRAINAGE AREA.--51.2 mi^2.

PERIOD OF RECORD.--October 2002 to September 2003. Annual maximum discharge only, 1951-78.

GAGE.--Water-stage recorder. Elevation of gage is 1,200 ft above sea level from topographic map. Data collection platform at station.

REMARKS.--Records fair except for estimated daily discharges and discharges above 27 ft^3/s, which are poor.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	e10	e11	e7.2	e9.6	e12	14	14	11	13	12	11
2	15	10	e7.8	e7.4	e9.2	e11	14	13	13	13	12	10
3	15	10	e8.8	e7.4	e9.0	e8.2	14	12	12	12	12	10
4	21	10	9.9	e7.4	e8.8	e6.8	14	23	12	13	12	9.9
5	14	10	e10	e7.4	e8.2	e9.4	14	26	11	190	14	9.7
6	13	10	e10	e7.2	e8.0	e11	14	17	11	379	14	9.4
7	12	10	10	e7.4	e7.4	e11	16	16	12	36	13	9.0
8	12	10	9.8	e7.2	e7.6	e14	14	16	13	26	13	8.8
9	12	10	10	e7.0	e7.6	14	13	16	29	26	13	16
10	11	10	9.7	e6.8	e7.6	13	14	15	284	21	13	25
11	11	10	e9.8	e6.2	e7.0	66	14	19	26	19	15	37
12	11	10	9.9	e6.0	e6.8	34	12	16	21	17	14	15
13	10	10	e9.8	e6.0	e6.4	30	12	15	19	17	14	9.9
14	10	10	e10	e6.0	e6.0	64	11	16	18	16	14	9.2
15	10	9.9	9.6	e6.0	e5.4	19	11	15	17	15	14	8.7
16	11	10	9.8	e5.8	e5.2	16	11	14	16	15	13	8.3
17	11	9.9	10	e5.8	e6.8	15	11	14	16	14	13	7.9
18	10	10	10	e5.4	e10	14	11	13	16	14	13	8.9
19	9.8	9.9	9.8	e5.4	e11	14	11	15	15	14	15	8.4
20	9.8	10	9.5	e5.2	e14	17	11	13	14	14	9.8	8.0
21	9.8	10	e9.6	e5.4	e30	14	10	13	14	14	10	9.0
22	9.7	10	e9.6	e5.2	e9.8	13	10	12	15	13	11	8.4
23	9.9	10	e9.0	e4.7	e7.6	13	10	13	14	13	11	8.1
24	10	9.8	e8.6	e5.0	e5.0	13	11	13	15	13	10	7.7
25	10	10	e6.6	e6.2	e6.0	13	11	13	14	12	9.8	7.3
26	10	9.9	e6.0	e6.6	e8.2	13	10	12	14	11	10	7.8
27	11	e11	e6.6	e7.2	e12	16	10	12	14	16	11	7.6
28	e10	e8.8	e7.2	e7.4	e12	16	10	12	15	13	11	7.3
29	10	e9.8	e7.2	e8.4	---	14	10	11	14	12	10	7.3
30	e11	e8.5	e7.4	e8.8	---	13	18	11	14	11	10	7.3
31	e10	---	e7.4	e9.2	---	14	---	11	---	12	10	---
TOTAL	355.0	297.5	280.4	204.3	252.2	551.4	366	451	729	1,024	376.6	317.9
MEAN	11.5	9.92	9.05	6.59	9.01	17.8	12.2	14.5	24.3	33.0	12.1	10.6
MAX	21	11	11	9.2	30	66	18	26	284	379	15	37
MIN	9.7	8.5	6.0	4.7	5.0	6.8	10	11	11	11	9.8	7.3
AC-FT	704	590	556	405	500	1,090	726	895	1,450	2,030	747	631

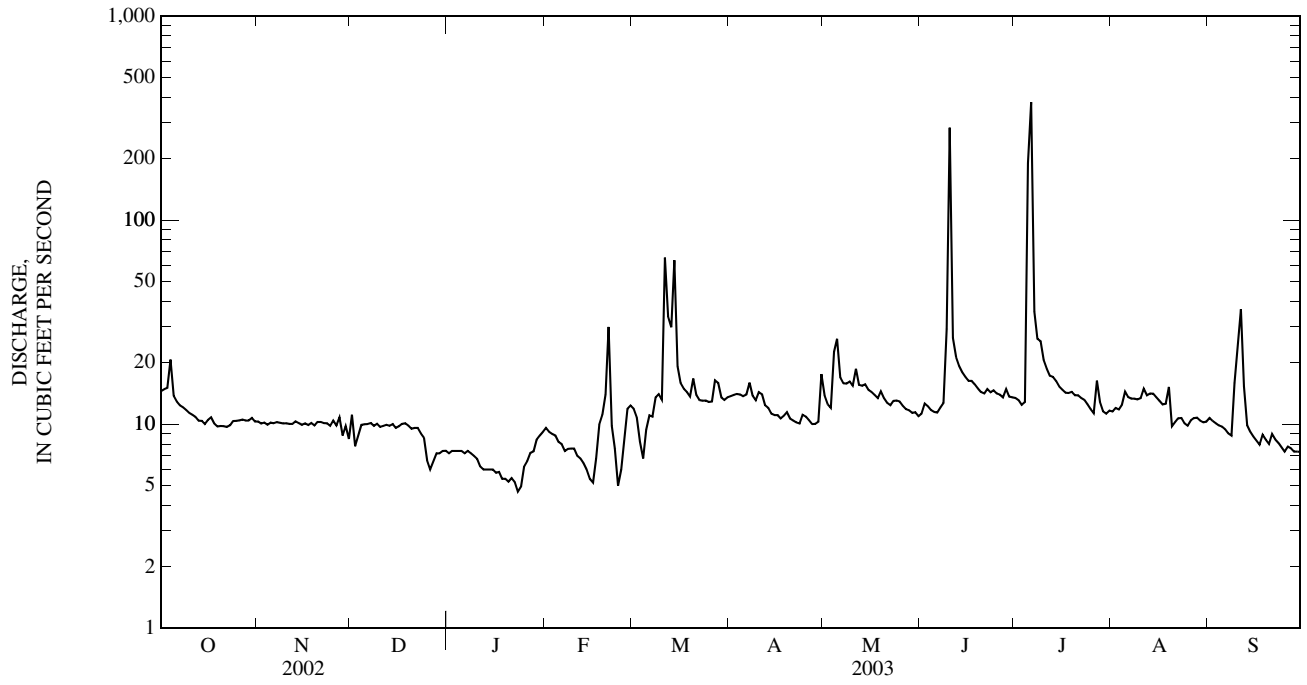
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2003, BY WATER YEAR (WY)

MEAN	11.5	9.92	9.05	6.59	9.01	17.8	12.2	14.5	24.3	33.0	12.1	10.6
MAX	11.5	9.92	9.05	6.59	9.01	17.8	12.2	14.5	24.3	33.0	12.1	10.6
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)
MIN	11.5	9.92	9.05	6.59	9.01	17.8	12.2	14.5	24.3	33.0	12.1	10.6
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)

06600900 SOUTH OMAHA CREEK AT WALTHILL, NE—Continued

SUMMARY STATISTICS	FOR 2003 WATER YEAR	
ANNUAL TOTAL	5,205.3	
ANNUAL MEAN	14.3	
HIGHEST DAILY MEAN	379	Jul 6
LOWEST DAILY MEAN	4.7	Jan 23
MAXIMUM PEAK FLOW	*1,370	Jul 6
MAXIMUM PEAK STAGE	21.20	Jul 6
ANNUAL SEVEN-DAY MINIMUM	5.2	Jan 18
ANNUAL RUNOFF (AC-FT)	10,320	
10 PERCENT EXCEEDS	16	
50 PERCENT EXCEEDS	11	
90 PERCENT EXCEEDS	7.2	

e Estimated.
* Based on rating extended above 13.6 ft^3/s on basis of channel stability profile, and records for (06601000) Omaha Creek at Homer.



06601000 OMAHA CREEK AT HOMER, NE

LOCATION.--Lat 42° 19'29", long 96° 29'43", in SW $^{1}/_{4}$ SE $^{1}/_{4}$ sec.11, T.27 N., R.8 E., Dakota County, Hydrologic Unit 10230001, on left bank 80 ft downstream from bridge on main street of Homer and at mile 4.7.

DRAINAGE AREA.--174 mi^2.

PERIOD OF RECORD.--October 1945 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WDR NE-75-1: 1971-73. WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,080.45 ft above sea level. Prior to Aug. 4, 1952, at bridge 0.5 mi downstream at datum 6.03 ft lower. Aug. 4, 1952 to Nov. 3, 1966 at site 80 ft upstream at datum 2.0 ft higher. Nov. 4, 1966 to Sept. 30, 1989 at present site at datum 2.0 ft higher. June 27, 1984 to Aug. 28, 1984 at temporary site 700 ft downstream at present datum. Data collection platform at station.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	30	32	16	e18	e18	65	60	34	40	35	22
2	25	30	31	13	e20	e16	65	41	41	45	34	21
3	29	29	25	16	e20	e16	e68	37	40	50	33	20
4	57	28	28	16	e20	e15	e68	104	37	59	31	19
5	32	29	22	12	e20	e14	e59	133	36	925	36	19
6	24	29	31	13	e19	e15	e55	65	35	1,300	35	19
7	23	28	29	12	e18	e17	e73	56	35	45	32	18
8	24	28	22	11	e18	e16	e47	53	46	31	31	18
9	25	28	23	9.8	e18	e28	e40	68	37	32	30	31
10	25	28	27	e13	e18	33	51	57	853	32	30	131
11	24	26	26	e17	e18	146	54	80	92	34	32	133
12	25	26	24	e19	e16	89	43	58	68	38	29	79
13	24	27	23	e21	e17	25	40	54	60	41	28	37
14	25	27	23	e20	e19	164	38	54	54	45	28	29
15	24	26	23	e22	e17	69	37	49	50	48	27	28
16	27	26	22	e22	e14	37	37	47	48	50	25	27
17	33	27	22	e19	e14	32	35	45	47	47	25	26
18	28	27	22	e21	e17	22	35	43	46	46	34	30
19	26	27	20	e22	e18	21	40	44	43	47	53	e27
20	26	27	18	e24	e21	40	37	43	41	45	30	26
21	26	26	15	e23	e22	e62	35	40	40	45	26	29
22	26	26	16	e20	e21	54	33	41	44	43	25	29
23	26	27	14	e19	e19	51	32	46	44	41	25	26
24	28	25	17	e17	e18	52	36	44	56	40	24	25
25	29	23	15	e17	e20	53	37	44	43	38	23	23
26	29	27	14	e17	e20	53	33	39	40	36	22	23
27	30	26	14	e18	e18	83	31	37	37	53	22	23
28	36	28	15	e19	e17	94	30	38	41	50	21	22
29	33	33	17	e19	---	76	29	35	39	39	21	22
30	34	28	15	e21	---	72	65	35	36	37	20	22
31	34	---	12	e20	---	68	---	33	---	36	20	---
TOTAL	880	822	657	548.8	515	1,551	1,348	1,623	2,163	3,458	887	1,004
MEAN	28.4	27.4	21.2	17.7	18.4	50.0	44.9	52.4	72.1	112	28.6	33.5
MAX	57	33	32	24	22	164	73	133	853	1,300	53	133
MIN	23	23	12	9.8	14	14	29	33	34	31	20	18
AC-FT	1,750	1,630	1,300	1,090	1,020	3,080	2,670	3,220	4,290	6,860	1,760	1,990

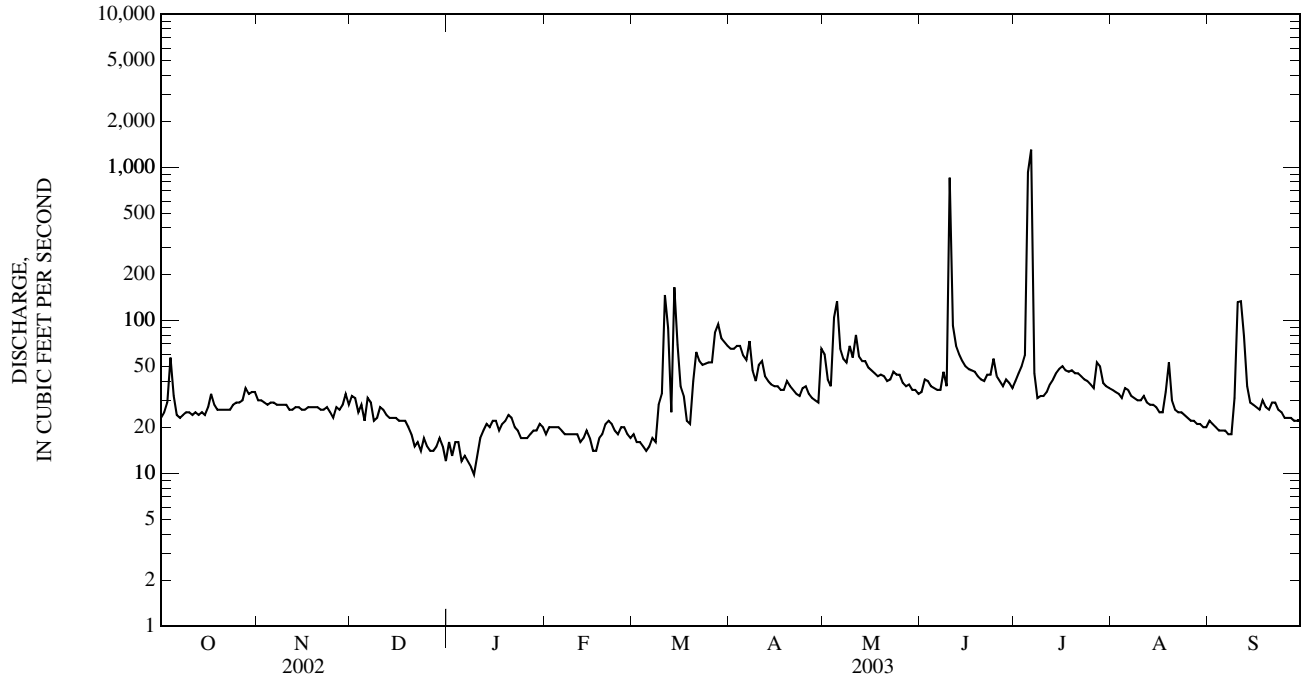
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2003, BY WATER YEAR (WY)

MEAN	23.9	23.0	19.3	19.3	47.8	73.2	57.3	60.4	95.5	59.8	34.1	26.9
MAX	89.6	75.2	62.4	82.0	472	315	426	248	370	331	181	131
(WY)	(1994)	(1994)	(1995)	(1973)	(1971)	(1993)	(1985)	(1984)	(1999)	(1996)	(1993)	(1993)
MIN	1.17	2.36	2.46	1.99	1.49	6.33	4.14	4.04	7.60	4.34	2.55	0.75
(WY)	(1957)	(1956)	(1977)	(1957)	(1956)	(1956)	(1956)	(1981)	(1981)	(1976)	(1968)	(1948)

06601000 OMAHA CREEK AT HOMER, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1946 - 2003	
ANNUAL TOTAL	15,184		15,456.8			
ANNUAL MEAN	41.6		42.3		45.0	
HIGHEST ANNUAL MEAN					130	1993
LOWEST ANNUAL MEAN					6.20	1981
HIGHEST DAILY MEAN	687	Jun 11	1,300	Jul 6	6,840	Feb 18, 1971
LOWEST DAILY MEAN	12	Dec 31	9.8	Jan 9	0.10	Sep 16, 1948
ANNUAL SEVEN-DAY MINIMUM	15	Dec 25	12	Jan 4	0.16	Sep 8, 1955
MAXIMUM PEAK FLOW			*4,570	Jul 6	**21,500	Jul 17, 1996
MAXIMUM PEAK STAGE			9.32	Jul 6	28.47	Feb 19, 1971
ANNUAL RUNOFF (AC-FT)	30,120		30,660		32,570	
10 PERCENT EXCEEDS	67		56		82	
50 PERCENT EXCEEDS	34		29		20	
90 PERCENT EXCEEDS	22		17		4.5	

e Estimated.
* From rating curve extended above 1,100 ft^3/s.
** Stage 22.30 ft from floodmark, discharge from rating curve extension based on slope-area measurements at 16.38 ft and 23.62 ft.



06601200 MISSOURI RIVER AT DECATUR, NE

LOCATION.--Lat 42° 00'26", long 96° 14'29", in NE$^{1}/_{4}$ SW$^{1}/_{4}$ 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 mi^2, approximately. The 3,959 mi^2 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.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

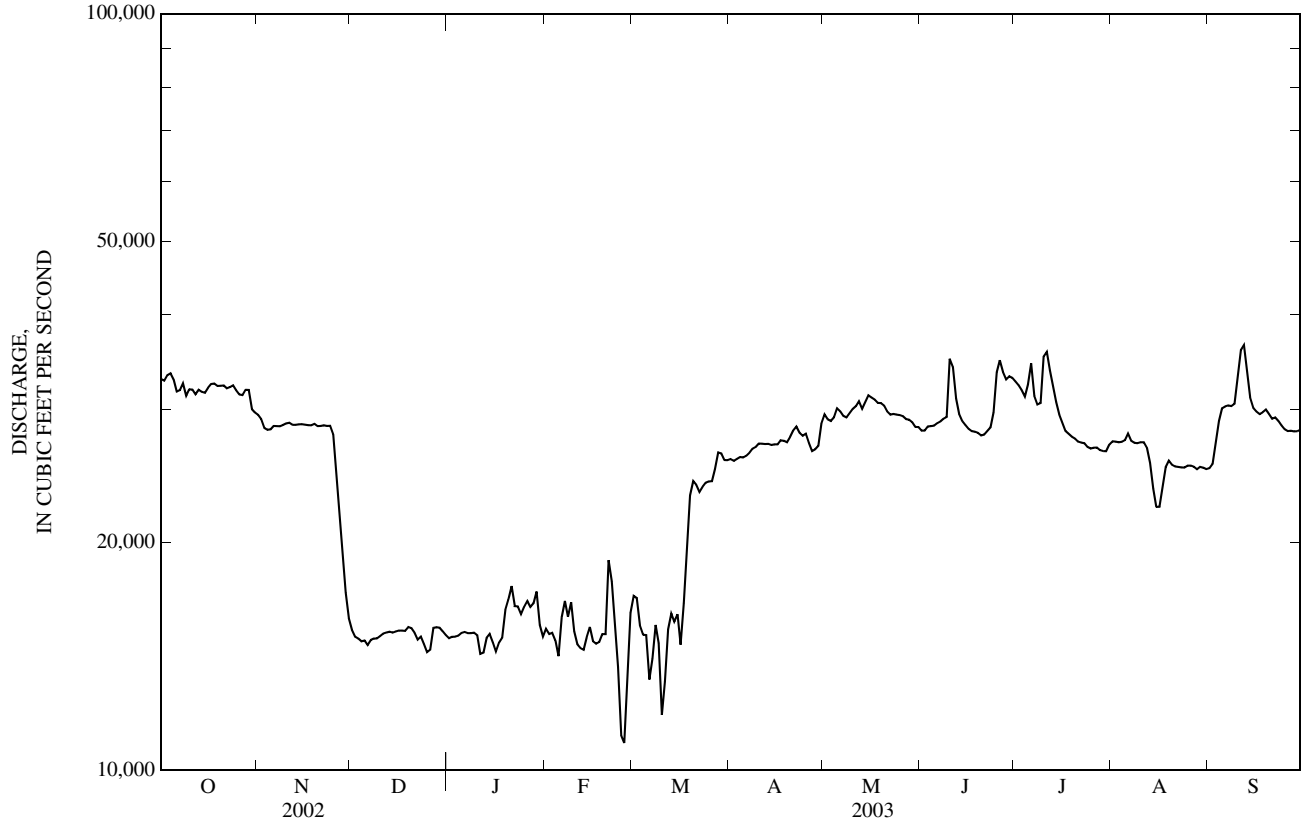
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32,900	29,500	15,300	14,900	15,400	17,000	25,800	29,500	28,100	32,600	27,200	25,100
2	32,700	29,100	15,000	15,000	15,100	16,900	25,600	29,100	28,100	32,300	27,200	25,400
3	33,300	28,300	14,900	15,000	15,200	15,500	25,800	28,900	28,500	31,800	27,100	27,200
4	33,500	28,200	14,800	15,100	14,800	15,100	25,900	29,300	28,500	31,200	27,200	29,000
5	32,800	28,200	14,800	15,200	14,100	15,100	25,900	30,100	28,500	32,300	27,300	30,100
6	31,600	28,500	14,600	15,200	15,900	13,200	26,000	29,800	28,700	34,500	27,900	30,200
7	31,800	28,500	14,900	15,200	16,700	14,000	26,300	29,400	28,900	31,200	27,200	30,300
8	32,500	28,500	14,900	15,200	15,900	15,600	26,600	29,200	29,100	30,400	27,100	30,300
9	31,200	28,600	14,900	15,200	16,700	14,700	26,700	29,600	29,300	30,600	27,000	30,500
10	31,900	28,700	15,000	15,100	15,300	11,800	27,000	30,000	35,000	35,200	27,100	32,900
11	31,800	28,800	15,100	14,200	14,700	13,100	27,000	30,300	34,100	35,700	27,100	35,900
12	31,400	28,600	15,200	14,300	14,500	15,400	27,000	30,700	31,000	33,800	26,600	36,500
13	31,800	28,600	15,200	15,000	14,400	16,100	27,000	30,000	29,600	32,200	25,500	33,400
14	31,600	28,700	15,200	15,100	15,000	15,700	26,900	30,600	28,900	30,700	23,500	31,100
15	31,500	28,700	15,200	14,700	15,500	16,100	26,900	31,300	28,600	29,500	22,300	30,100
16	32,000	28,600	15,300	14,300	14,800	14,600	26,900	31,100	28,300	28,800	22,300	29,800
17	32,400	28,600	15,300	14,700	14,700	16,600	27,300	30,900	28,100	28,100	23,700	29,600
18	32,400	28,600	15,300	15,000	14,800	19,800	27,200	30,600	28,000	27,800	25,100	29,700
19	32,200	28,700	15,400	16,300	15,100	23,100	27,100	30,600	27,900	27,600	25,600	30,000
20	32,200	28,500	15,400	16,800	15,100	24,100	27,600	30,300	27,700	27,400	25,300	29,600
21	32,200	28,500	15,200	17,500	18,900	23,800	28,100	29,800	27,800	27,200	25,200	29,100
22	32,000	28,600	14,900	16,500	17,700	23,300	28,400	29,500	28,100	27,100	25,200	29,300
23	32,100	28,500	15,000	16,500	15,600	23,700	27,900	29,600	28,400	27,000	25,100	29,000
24	32,300	28,500	14,700	16,100	13,700	24,000	27,700	29,500	29,700	26,700	25,100	28,500
25	31,800	27,800	14,300	16,400	11,100	24,100	27,900	29,500	33,600	26,600	25,300	28,200
26	31,400	25,100	14,400	16,700	10,900	24,100	27,100	29,400	34,800	26,700	25,300	28,100
27	31,300	22,500	15,400	16,400	13,200	25,000	26,400	29,100	33,600	26,700	25,200	28,100
28	31,800	19,700	15,400	16,600	16,100	26,300	26,500	29,100	32,800	26,500	25,000	28,000
29	31,800	17,200	15,400	17,200	---	26,200	26,800	28,800	33,100	26,400	25,200	28,000
30	30,000	15,900	15,300	15,600	---	25,700	28,700	28,400	33,000	26,400	25,100	28,200
31	29,700	---	15,100	15,000	---	25,700	---	28,400	---	26,900	25,000	---
TOTAL	989,900	814,800	466,800	482,000	420,900	595,400	808,000	922,400	899,800	917,900	796,000	891,200
MEAN	31,930	27,160	15,060	15,550	15,030	19,210	26,930	29,750	29,990	29,610	25,680	29,710
MAX	33,500	29,500	15,400	17,500	18,900	26,300	28,700	31,300	35,000	35,700	27,900	36,500
MIN	29,700	15,900	14,300	14,200	10,900	11,800	25,600	28,400	27,700	26,400	22,300	25,100
AC-FT	1,963,000	1,616,000	925,900	956,000	834,900	1,181,000	1,603,000	1,830,000	1,785,000	1,821,000	1,579,000	1,768,000
CFSM	0.10	0.09	0.05	0.05	0.05	0.06	0.09	0.09	0.09	0.09	0.08	0.09
IN.	0.12	0.10	0.05	0.06	0.05	0.07	0.10	0.11	0.11	0.11	0.09	0.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2003, BY WATER YEAR (WY)

MEAN	37,560	32,820	21,540	18,810	19,950	25,010	35,950	37,220	37,860	37,940	36,040	37,710
MAX	70,150	72,350	41,350	26,850	32,380	49,450	90,050	80,690	67,970	66,520	66,170	67,290
(WY)	(1998)	(1998)	(1998)	(1998)	(1997)	(1997)	(1997)	(1997)	(1997)	(1997)	(1997)	(1997)
MIN	24,250	10,470	12,070	12,360	12,210	11,580	24,410	26,080	27,010	26,620	25,680	26,750
(WY)	(1993)	(1991)	(1991)	(1990)	(1991)	(1991)	(1991)	(2002)	(2002)	(2002)	(2003)	(1993)

06601200 MISSOURI RIVER AT DECATUR, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1988 - 2003	
ANNUAL TOTAL	8,955,600		9,005,100			
ANNUAL MEAN	24,540		24,670		31,570	
HIGHEST ANNUAL MEAN					57,440	1997
LOWEST ANNUAL MEAN					21,450	1991
HIGHEST DAILY MEAN	36,200	Aug 23	36,500	Sep 12	99,900	Apr 15, 1997
LOWEST DAILY MEAN	14,300	Dec 25	10,900	Feb 26	7,130	Dec 22, 1990
ANNUAL SEVEN-DAY MINIMUM	14,800	Dec 3	13,900	Mar 5	9,660	Dec 12, 1990
MAXIMUM PEAK FLOW			37,700	Sep 12	100,000	Apr 15, 1997
MAXIMUM PEAK STAGE			23.84	Jul 12	32.31	Jul 18, 1996
INSTANTANEOUS LOW FLOW			10,600	Feb 26		
ANNUAL RUNOFF (AC-FT)	17,760,000		17,860,000		22,870,000	
ANNUAL RUNOFF (CFSM)	0.078		0.078		0.10	
ANNUAL RUNOFF (INCHES)	1.05		1.06		1.36	
10 PERCENT EXCEEDS	31,800		31,800		52,200	
50 PERCENT EXCEEDS	26,700		27,100		29,900	
90 PERCENT EXCEEDS	15,400		15,000		14,800	



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

LOCATION.--Lat 41° 15'32", long 95° 55'20", in SE$^{1}/_{4}$ NW$^{1}/_{4}$ 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 mi^2, approximately. The 3,959 mi^2 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 396,000 ft^3/s Apr. 18, 1952, gage height, 40.20 ft, present datum; minimum, about 2,200 ft^3/s Jan. 6, 1937; minimum gage height, 6.85 ft, present datum, Feb. 5, 1989, result of freeze-up.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33,600	31,400	17,500	16,100	15,800	16,600	26,800	34,300	31,200	38,700	29,400	25,200
2	33,700	31,400	17,100	15,900	16,000	17,500	26,900	32,100	31,100	37,500	29,400	25,300
3	33,500	30,800	16,800	15,900	15,800	17,500	26,700	30,600	31,100	36,300	29,100	25,800
4	35,000	30,000	16,400	15,800	15,700	16,400	26,800	33,300	31,300	34,900	28,900	27,600
5	35,900	29,700	16,300	15,900	15,400	15,500	26,900	39,400	31,300	33,900	28,900	29,500
6	34,600	29,600	16,200	16,000	14,800	14,900	27,000	36,600	30,900	39,700	28,800	30,800
7	33,400	29,700	16,000	16,000	15,800	13,200	27,200	34,800	30,900	48,300	29,300	31,200
8	33,300	29,500	16,000	16,000	16,900	14,100	27,200	33,900	31,300	39,600	28,600	31,500
9	33,800	29,300	16,100	16,000	16,300	15,800	27,400	34,000	31,300	36,400	28,300	31,600
10	32,900	29,200	16,000	15,900	16,700	14,900	27,500	33,900	33,700	40,700	28,300	32,000
11	33,200	29,200	16,000	15,600	15,900	12,700	27,900	33,800	40,800	54,500	28,400	34,400
12	33,400	29,100	16,000	15,000	15,200	13,600	28,200	33,900	38,600	53,100	28,300	37,400
13	32,900	29,000	16,000	14,900	15,000	16,400	28,500	34,200	34,100	43,000	27,700	37,000
14	33,200	29,000	15,900	15,600	15,100	18,000	28,700	34,700	32,400	39,900	26,400	33,800
15	33,100	29,100	15,800	15,800	16,300	19,100	28,700	35,000	31,700	37,600	24,400	31,400
16	33,000	29,300	15,800	15,400	17,600	19,400	28,800	35,500	31,200	35,400	23,100	30,500
17	33,200	29,400	15,800	15,100	16,100	17,400	28,800	35,300	30,800	33,900	23,100	30,200
18	33,300	29,300	15,800	15,200	15,300	18,500	29,000	35,000	30,900	32,700	24,400	30,000
19	33,200	29,400	15,700	15,400	15,100	21,100	29,000	34,900	30,700	32,100	26,000	30,100
20	32,900	29,500	15,900	16,600	15,200	24,600	28,900	35,000	30,100	31,500	26,600	30,200
21	32,900	29,200	15,800	17,400	17,100	25,900	29,200	34,500	29,700	31,300	26,300	30,400
22	33,000	29,000	15,400	18,000	22,300	25,600	29,600	33,600	30,100	31,100	26,000	29,900
23	32,900	28,800	15,300	17,200	20,900	24,900	29,600	33,100	31,200	30,700	25,800	29,900
24	33,100	28,700	15,400	17,000	17,500	24,800	29,000	33,200	30,500	30,600	25,600	29,600
25	33,400	28,400	15,200	16,700	15,400	25,100	28,600	33,200	34,600	30,100	25,700	29,200
26	33,100	27,500	14,900	16,700	13,300	25,100	28,700	32,900	41,100	29,800	25,800	28,800
27	32,700	25,300	15,000	17,100	12,900	25,100	27,800	32,800	45,200	29,900	25,700	28,700
28	32,900	23,100	16,000	17,000	14,200	25,800	26,900	32,300	45,200	30,200	25,600	28,700
29	33,500	20,700	16,300	17,100	---	27,100	27,000	32,200	41,100	29,900	25,400	28,600
30	33,600	18,700	16,400	17,800	---	27,400	30,200	31,900	39,600	29,400	25,400	28,700
31	32,100	---	16,300	16,700	---	26,800	---	31,300	---	29,100	25,400	---
TOTAL	1,034,300	852,300	495,100	502,800	449,600	620,800	843,500	1,051,200	1,013,700	1,111,800	830,100	908,000
MEAN	33,360	28,410	15,970	16,220	16,060	20,030	28,120	33,910	33,790	35,860	26,780	30,270
MAX	35,900	31,400	17,500	18,000	22,300	27,400	30,200	39,400	45,200	54,500	29,400	37,400
MIN	32,100	18,700	14,900	14,900	12,900	12,700	26,700	30,600	29,700	29,100	23,100	25,200
AC-FT	2,052,000	1,691,000	982,000	997,300	891,800	1,231,000	1,673,000	2,085,000	2,011,000	2,205,000	1,647,000	1,801,000
CFSM	0.10	0.09	0.05	0.05	0.05	0.06	0.09	0.11	0.10	0.11	0.08	0.09
IN.	0.12	0.10	0.06	0.06	0.05	0.07	0.10	0.12	0.12	0.13	0.10	0.10

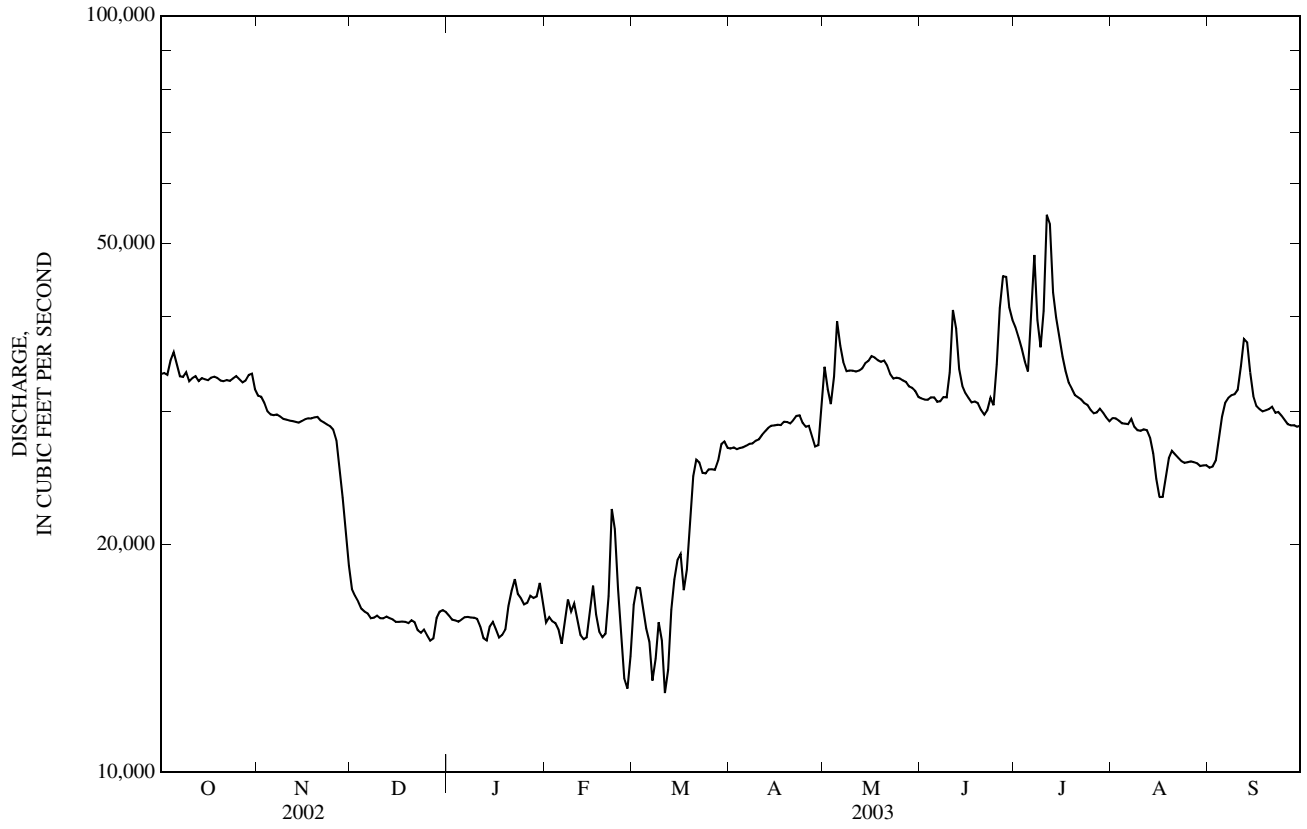
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2003, BY WATER YEAR (WY)

MEAN	38,410	34,100	21,000	17,740	19,770	27,860	38,650	38,550	41,700	40,320	38,750	38,790
MAX	74,070	75,040	44,260	33,250	40,410	54,660	93,840	87,620	76,120	78,560	68,890	69,770
(WY)	(1998)	(1998)	(1998)	(1987)	(1997)	(1997)	(1997)	(1997)	(1997)	(1993)	(1997)	(1997)
MIN	16,920	8,324	8,296	8,425	8,162	10,170	16,480	26,450	26,890	27,150	26,780	28,290
(WY)	(1962)	(1962)	(1962)	(1964)	(1963)	(1957)	(1957)	(1961)	(1961)	(1958)	(2003)	(1958)

06610000 MISSOURI RIVER AT OMAHA, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1953 - 2003a	
ANNUAL TOTAL	9,482,000		9,713,200			
ANNUAL MEAN	25,980		26,610		33,010	
HIGHEST ANNUAL MEAN					62,150	1997
LOWEST ANNUAL MEAN					20,490	1957
HIGHEST DAILY MEAN	40,000	Jun 12	54,500	Jul 11	116,000	Apr 4, 1960
LOWEST DAILY MEAN	14,900	Dec 26	12,700	Mar 11	2,440	Dec 14, 1961
ANNUAL SEVEN-DAY MINIMUM	15,300	Dec 21	14,200	Mar 6	4,300	Nov 28, 1955
MAXIMUM PEAK FLOW			58,400	Jul 11	120,000	Apr 1, 1960
MAXIMUM PEAK STAGE			22.07	Jul 11	30.26	Jul 10, 1993
INSTANTANEOUS LOW FLOW			12,300	Mar 11		
ANNUAL RUNOFF (AC-FT)	18,810,000		19,270,000		23,910,000	
ANNUAL RUNOFF (CFSM)	0.080		0.082		0.10	
ANNUAL RUNOFF (INCHES)	1.09		1.12		1.39	
10 PERCENT EXCEEDS	33,000		34,600		52,400	
50 PERCENT EXCEEDS	28,500		28,800		32,400	
90 PERCENT EXCEEDS	16,300		15,800		14,100	

a Post regulation.



EXPLANATION

- **Hydrologic boundary**
- **County line**
- **Streams**
- ▲ **Stream-flow gaging station**
- △ Gaging station run by neighboring state
- ● **Stage-only station**

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

*Station number	Station name	Page
6745	North Platte River at Wyoming-Nebraska State Line	96
7625	Lodgepole Creek at Bushnell	100
7640	South Platte River at Julesburg, CO	102
764880	South Platte River at Roscoe	104
7680	Platte River near Overton	106
768020	Spring Creek near Overton	110
768035	Platte River Middle Channel at Cottonwood Ranch, near Elm Creek	112
7690	Buffalo Creek near Overton	114
769525	Elm Creek near Elm Creek	116
770195	North Dry Creek 2 mi SW of Platte River bridge S of Kearney	118
7702	Platte River near Kearney	120
770240	Fort Kearney Slough near Newark	122
770253	Platte River near Newark	124
770375	Platte River near Prosser	125
770470	Platte River near Doniphan	126
7705	Platte River near Grand Island	128
772775	Warm Slough near Central City	130
772898	Silver Creek at mile 4 near Silver Creek	132
773500	Prairie Crek near Silver Creek	134
7740	Platte River near Duncan	136
794650	Clear Creek 1.75 miles west of Polk County line (Record listed in Lower Platte River Basin)	164

*NOTE: To change abbreviated station number to complete station number, prefix with “06” and add zeros required to give eight digits.

06674500 NORTH PLATTE RIVER AT WYOMING-NEBRASKA STATE LINE

LOCATION.--Lat 41° 59'19", long 104° 03'10", in SE¼ SE¼ SE¼ 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 mi^2, of which 1,929 mi^2 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.

COOPERATION.--Five discharge measurements provided by Wyoming State Engineer's Office.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	766	200	165	148	134	136	135	145	4.5	1,040	1,260	312
2	441	199	165	147	136	135	134	145	4.6	1,220	1,160	298
3	289	199	171	146	135	134	132	146	4.2	1,410	1,170	301
4	229	197	170	147	132	135	130	141	3.8	1,520	1,250	262
5	186	196	169	145	132	135	130	63	4.1	1,510	1,270	230
6	160	193	166	145	e130	135	135	23	5.2	1,520	1,310	204
7	143	193	166	145	e130	136	134	22	7.0	1,400	1,300	184
8	130	193	166	145	130	132	132	23	7.0	1,380	1,270	170
9	117	190	166	144	133	130	130	22	7.8	1,350	1,280	164
10	108	187	165	e140	130	130	128	21	9.5	1,330	1,280	147
11	96	186	165	e140	129	131	126	20	10	1,290	1,300	115
12	89	185	164	e140	130	126	125	19	12	1,370	1,300	97
13	85	182	162	146	130	126	122	18	11	1,400	1,250	87
14	82	182	161	145	130	126	122	17	12	1,420	1,210	87
15	81	180	162	e140	129	126	122	15	11	1,480	1,230	81
16	79	177	160	e140	128	127	122	14	11	1,580	1,250	76
17	76	176	160	e140	133	131	120	13	11	1,660	1,310	72
18	66	176	160	141	135	157	122	13	11	1,650	1,320	76
19	61	175	158	141	135	166	122	13	11	2,130	1,340	67
20	59	172	e150	142	135	152	122	13	11	1,770	1,330	62
21	55	172	151	140	135	155	120	13	11	1,730	1,280	56
22	46	176	154	e140	135	157	120	12	11	1,690	1,150	58
23	53	176	e150	e140	e135	151	140	12	16	1,610	954	84
24	58	176	e150	139	e130	143	137	10	195	1,550	735	375
25	54	176	e150	140	e130	138	132	8.8	375	1,460	625	553
26	49	e170	e150	139	e135	135	130	8.5	538	1,470	557	631
27	47	168	148	140	135	148	130	7.2	649	1,590	580	534
28	46	171	149	139	135	146	127	5.5	756	1,600	523	288
29	49	170	150	135	---	140	126	5.1	890	1,540	438	197
30	146	166	150	135	---	139	130	4.3	957	1,390	334	232
31	203	---	150	135	---	138	---	4.5	---	1,370	341	---
TOTAL	4,149	5,459	4,923	4,389	3,706	4,296	3,837	996.9	4,566.7	46,430	32,907	6,100
MEAN	134	182	159	142	132	139	128	32.2	152	1,498	1,062	203
MAX	766	200	171	148	136	166	140	146	957	2,130	1,340	631
MIN	46	166	148	135	128	126	120	4.3	3.8	1,040	334	56
AC-FT	8,230	10,830	9,760	8,710	7,350	8,520	7,610	1,980	9,060	92,090	65,270	12,100

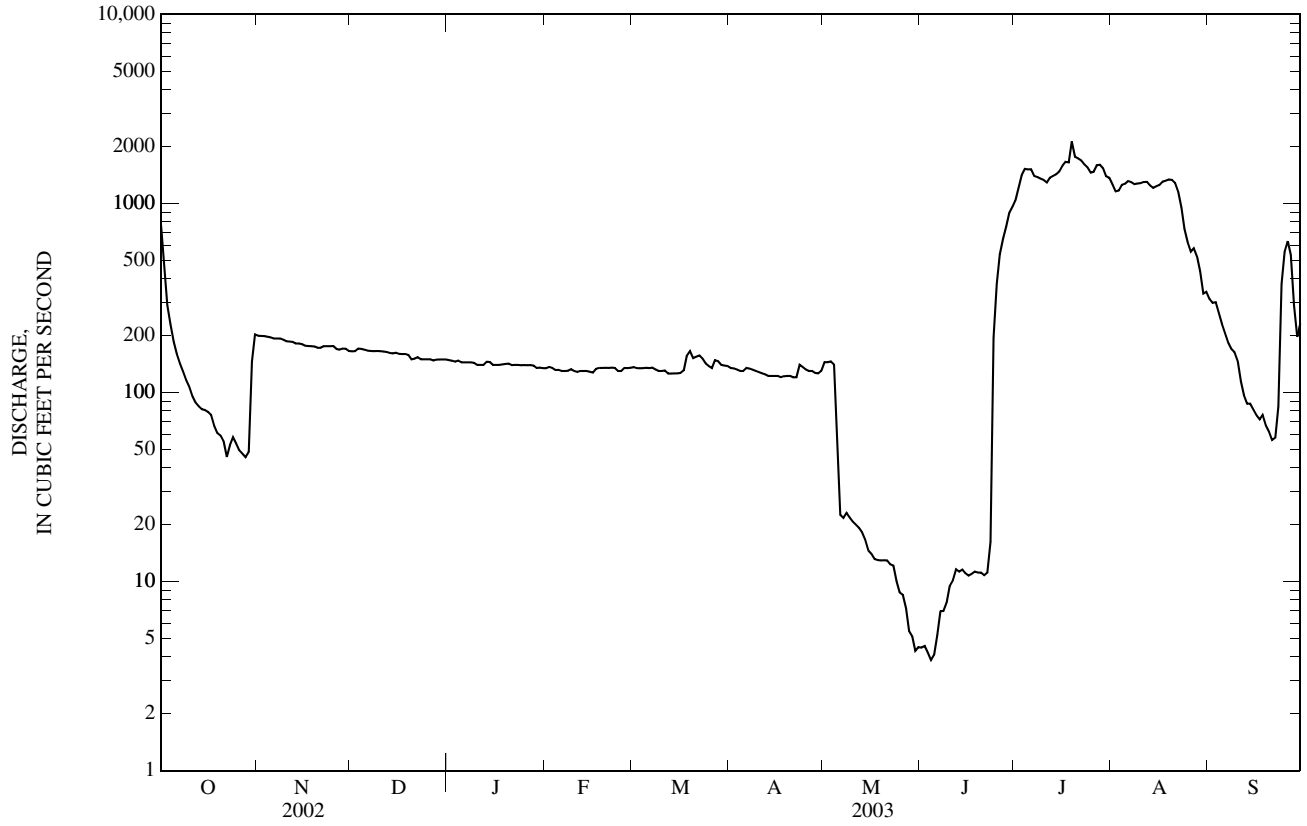
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2003, BY WATER YEAR (WY)

MEAN	498	415	366	325	329	495	647	1,161	1,651	1,546	1,257	846
MAX	1,666	1,454	895	751	1,063	4,202	4,407	7,226	10,360	7,170	5,751	4,766
(WY)	(1987)	(1987)	(1930)	(1930)	(1984)	(1974)	(1974)	(1971)	(1929)	(1983)	(1983)	(1983)
MIN	134	174	159	142	132	139	89.6	12.2	49.1	611	154	203
(WY)	(2003)	(1935)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(1992)	(1934)	(1934)	(2003)

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

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1929 - 2003	
ANNUAL TOTAL	122,753.9		121,759.6		--	
ANNUAL MEAN	336		334		779	
HIGHEST ANNUAL MEAN	--		--		2,863	1984
LOWEST ANNUAL MEAN	--		--		334	2003
HIGHEST DAILY MEAN	1,800	Jul 4	2,130	Jul 19	17,600	Jun 2, 1929
LOWEST DAILY MEAN	0.00	May 14-27	3.8	Jun 4	0.00	May 14-17, 2002
ANNUAL SEVEN-DAY MINIMUM	0.00	May 14	4.3	May 30	0.00	May 14, 2002
MAXIMUM PEAK FLOW	--		2,820	Jul 19	17,900 [a]	Jun 2, 1929
MAXIMUM PEAK STAGE	--		3.91	Jul 19	7.04[b]	Jun 2, 1929
ANNUAL RUNOFF (AC-FT)	243,500		241,500		564,300	
10 PERCENT EXCEEDS	876		1,290		1,430	
50 PERCENT EXCEEDS	179		141		474	
90 PERCENT EXCEEDS	16		13		199	

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 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)
OCT													
18...	0750	54	657	10.6	104	7.8	903	-3.5	8.0	E.02	2.17	0.028	<0.02
MAR													
06...	0945	133	653	11.9	106	8.1	963	10.0	4.0	0.15	2.46	0.026	0.02
MAY													
30...	1130	4.7	663	7.3	83	7.6	852	25.5	14.5	<0.04	0.42	0.016	<0.02
SEP													
08...	1025	168	660	8.6	104	8.1	899	20.0	17.5	0.04	1.94	0.019	<0.02

Date	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
OCT		
18...	25	3.6
MAR		
06...	50	18
MAY		
30...	20	0.25
SEP		
08...	5	2.3

E -- Estimated value

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06762500 LODGEPOLE CREEK AT BUSHNELL, NE

LOCATION.--Lat 41° 13' 50" long 103° 53' 28", in SE$^{1}/_{4}$ NE$^{1}/_{4}$ sec. 31, T.15 N., R.57 W., Kimball County, Hydrologic Unit 10190016, on left bank 0.1 mi south of Bushnell at north end of highway bridge on State Highway 53c.

DRAINAGE AREA.--1,350 mi^2.

PERIOD OF RECORD.--October 1931 to September 1991. October 2002 to September 2003. Records for March to September 1931 at site 1.5 mi upstream not equivalent owing to diversions. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1390: 1933, 1935, 1937-38, 1941, 1948-49. WSP 1730: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,843,31 ft above sea level. Prior to Mar. 16, 1938, nonrecording gage; Mar. 26, 1938 to July 2, 1981, water stage recorder; July 3, 1981 to Sept. 30, 1981, a nonrecording gage at previous site 1.7 mi downstream from present site at datum 31.01 ft lower. October 1, 1981 to September 30, 1991, recording gage at present site at datum 2.00 ft higher. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, and those over 2.0 ft^3/s, which are poor. Natural flow of stream affected by ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. Diversions for irrigation of about 12,600 acres above station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.35	e0.52	0.74	0.78	1.2	1.1	0.53	0.30	0.14	0.00
2	0.00	0.00	0.36	e0.52	0.72	0.80	1.2	1.1	0.58	0.25	0.14	0.00
3	0.00	0.00	0.36	e0.53	0.53	0.81	1.1	1.1	0.65	0.24	0.12	0.00
4	0.00	0.00	0.36	0.55	0.72	0.84	1.0	0.97	0.70	0.21	0.09	0.00
5	0.00	0.00	0.37	0.56	0.74	0.89	1.1	0.96	0.72	0.19	0.26	0.00
6	0.00	0.08	0.37	0.55	0.74	0.86	1.1	0.99	0.65	0.18	0.15	0.00
7	0.00	0.11	0.38	0.55	e0.74	0.82	1.2	1.1	0.66	0.19	0.11	0.00
8	0.00	0.12	0.36	0.56	e0.74	0.77	1.1	1.3	0.62	0.19	0.09	0.00
9	0.00	0.13	0.36	0.55	e0.74	0.75	1.1	1.2	0.58	0.13	0.09	0.00
10	0.00	0.13	0.35	e0.54	e0.76	0.75	1.1	1.3	0.58	0.09	0.09	0.00
11	0.00	0.12	0.36	e0.53	e0.78	0.74	1.0	1.3	0.61	0.07	0.08	0.00
12	0.00	0.12	0.36	e0.53	e0.78	0.75	0.98	1.2	0.57	0.07	0.06	0.00
13	0.00	0.14	0.36	e0.53	0.79	0.73	0.98	1.1	0.53	0.06	0.05	0.00
14	0.00	0.15	0.36	e0.54	0.79	0.75	0.97	1.0	0.53	0.00	0.04	0.00
15	0.00	0.15	0.36	e0.54	0.78	0.75	0.95	1.1	0.48	0.00	0.00	0.00
16	0.00	0.14	0.37	e0.56	0.79	0.77	0.90	1.1	0.44	0.00	0.00	0.00
17	0.00	0.16	0.37	e0.58	0.79	0.81	0.93	1.0	0.42	0.00	0.00	0.00
18	0.00	0.16	0.37	e0.58	0.78	1.5	1.2	1.1	0.48	0.00	0.00	0.00
19	0.00	0.17	0.39	e0.58	0.76	0.67	1.0	1.1	0.51	0.00	0.00	0.00
20	0.00	0.18	0.51	e0.60	0.73	0.38	0.97	0.99	0.46	0.00	0.00	0.00
21	0.00	0.19	0.57	e0.62	0.73	0.89	0.95	0.95	0.39	0.00	0.00	0.00
22	0.00	0.21	0.56	e0.62	0.75	1.1	0.94	0.88	0.34	0.00	0.00	0.00
23	0.00	0.22	e0.53	e0.63	0.73	1.2	1.1	0.84	0.33	0.00	0.00	0.00
24	0.00	0.23	e0.51	e0.66	e0.72	1.3	1.2	0.82	0.35	0.00	0.00	0.00
25	0.00	0.26	e0.51	0.68	e0.72	1.2	1.0	0.83	0.33	0.00	0.00	0.00
26	0.00	0.27	e0.51	0.69	e0.73	1.3	0.97	0.79	0.30	0.00	0.00	0.00
27	0.00	0.32	e0.51	0.71	e0.74	1.3	0.91	0.76	0.28	0.00	0.00	0.00
28	0.00	0.34	e0.51	0.71	e0.76	1.2	0.91	0.73	0.26	0.00	0.00	0.00
29	0.00	0.34	e0.50	0.72	---	1.2	0.96	0.65	0.62	8.8	0.00	0.00
30	0.00	0.34	e0.50	0.73	---	1.2	1.1	0.58	0.40	1.2	0.00	0.00
31	0.00	---	e0.51	0.75	---	1.2	---	0.55	---	0.20	0.00	---
TOTAL	0.00	4.78	13.15	18.52	20.82	29.01	31.12	30.49	14.90	12.37	1.51	0.00
MEAN	0.000	0.16	0.42	0.60	0.74	0.94	1.04	0.98	0.50	0.40	0.049	0.000
MAX	0.00	0.34	0.57	0.75	0.79	1.5	1.2	1.3	0.72	8.8	0.26	0.00
MIN	0.00	0.00	0.35	0.52	0.53	0.38	0.90	0.55	0.26	0.00	0.00	0.00
AC-FT	0.00	9.5	26	37	41	58	62	60	30	25	3.0	0.00

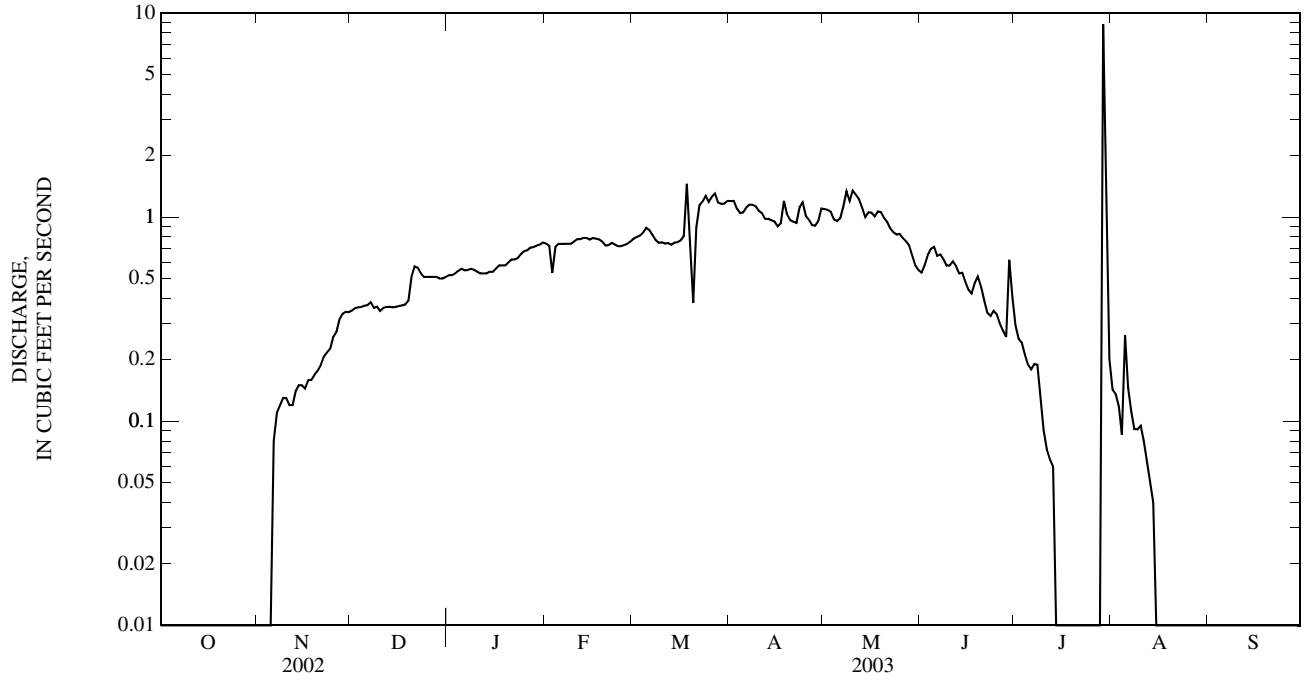
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2003, BY WATER YEAR (WY)

MEAN	8.08	8.80	8.46	8.39	10.1	11.4	11.4	11.4	12.4	9.72	7.41	9.28
MAX	15.1	18.5	15.5	16.2	17.0	21.2	21.5	40.4	69.9	56.2	18.5	58.8
(WY)	(1939)	(1936)	(1939)	(1936)	(1936)	(1949)	(1939)	(1983)	(1935)	(1981)	(1953)	(1951)
MIN	0.000	0.16	0.42	0.60	0.74	0.94	1.04	0.98	0.50	0.40	0.049	0.000
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)

06762500 LODGEPOLE CREEK AT BUSHNELL, NE—Continued

SUMMARY STATISTICS	FOR 2003 WATER YEAR		WATER YEARS 1934 - 2003	
ANNUAL TOTAL	176.67			
ANNUAL MEAN	0.48		9.73	
HIGHEST ANNUAL MEAN			18.1	1935
LOWEST ANNUAL MEAN			0.48	2003
HIGHEST DAILY MEAN	8.8	Jul 29	1,170	Sep 15, 1950
LOWEST DAILY MEAN	0.00	Oct 1	0.00	Oct 1, 2002
ANNUAL SEVEN-DAY MINIMUM	0.00	Oct 1	0.00	Oct 1, 2002
MAXIMUM PEAK FLOW	18	Jul 29	*16,500	Sep 15, 1950
MAXIMUM PEAK STAGE	4.96	Jul 29	**10.06	Jul 2, 1981
ANNUAL RUNOFF (AC-FT)	350		7,050	
10 PERCENT EXCEEDS	1.1		15	
50 PERCENT EXCEEDS	0.46		8.6	
90 PERCENT EXCEEDS	0.00		3.3	

e Estimated.
* Stage 9.98 ft. datum then in use. From rating curve extended above 2,700 ft^3/s on basis of slope-area measurement.
** Site and datum then in use.



06764000 SOUTH PLATTE RIVER AT JULESBURG, CO

LOCATION.--Lat 40° 58'46", long 102° 15'15", in NW¼ NE¼ and NE¼ SE¼ (three channels) sec.33, T.12 N., R.44 W., Sedgwick County, Hydrologic Unit 10190018, on left bank of channel no. 4 (left channel) 215 ft downstream from bridge, on right bank of channel no. 2, 5 ft downstream from bridge on U.S. Highway 385, and on left bank of channel no. 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.--22,821 mi^2 (revised).

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. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06764000

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 channel no. 4 gage is 3,446.76 ft above NGVD of 1929. 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 good except for periods Nov. 26 to Mar. 10, and July 15 to Aug. 12, which are fair, 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.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	16	14	21	64	e84	44	138	31	27	20	17
2	27	20	14	27	57	e112	55	152	33	25	24	18
3	24	17	14	36	53	116	61	157	32	25	24	16
4	28	16	14	54	51	104	71	149	33	24	24	e17
5	31	16	14	33	50	86	84	140	32	25	24	15
6	29	16	17	35	47	81	110	134	34	21	26	15
7	26	e16	15	27	44	72	138	127	47	26	26	17
8	26	e16	13	27	46	42	149	141	61	38	26	19
9	26	e16	15	25	47	34	116	146	104	26	25	35
10	27	e15	17	27	44	32	150	147	103	21	23	34
11	27	e16	20	e29	44	30	141	120	108	e20	22	38
12	26	e16	16	e37	44	29	137	114	132	e20	21	42
13	26	16	17	38	44	26	114	84	107	e18	20	44
14	26	16	17	39	44	25	93	78	98	e18	19	51
15	26	16	17	44	43	24	89	69	78	17	18	56
16	29	15	19	e38	42	24	98	69	61	16	18	62
17	19	15	21	e39	43	25	94	69	55	16	18	68
18	18	14	20	e40	44	30	96	67	56	15	e18	79
19	17	15	19	51	49	33	94	67	56	16	19	93
20	16	14	21	56	46	29	92	65	50	17	19	101
21	17	14	20	66	43	27	89	57	42	16	16	107
22	16	14	22	e63	46	27	90	47	38	15	15	108
23	17	15	e29	e64	e39	28	92	43	38	15	15	107
24	16	15	e38	e65	e60	29	101	40	38	21	14	105
25	19	15	e38	e65	e59	29	103	36	36	22	14	111
26	18	15	e49	67	61	27	124	37	34	19	12	116
27	20	15	e48	87	63	27	139	34	31	24	12	114
28	16	14	e48	96	67	26	115	33	31	30	e16	103
29	26	14	e37	91	---	49	104	31	34	25	15	95
30	20	14	35	76	---	44	115	32	30	22	14	91
31	16	---	26	75	---	40	---	30	---	20	14	---
TOTAL	696	462	724	1,538	1,384	1,391	3,098	2,653	1,663	660	591	1,894
MEAN	22.5	15.4	23.4	49.6	49.4	44.9	103	85.6	55.4	21.3	19.1	63.1
MAX	31	20	49	96	67	116	150	157	132	38	26	116
MIN	16	14	13	21	39	24	44	30	30	15	12	15
AC-FT	1,380	916	1,440	3,050	2,750	2,760	6,140	5,260	3,300	1,310	1,170	3,760

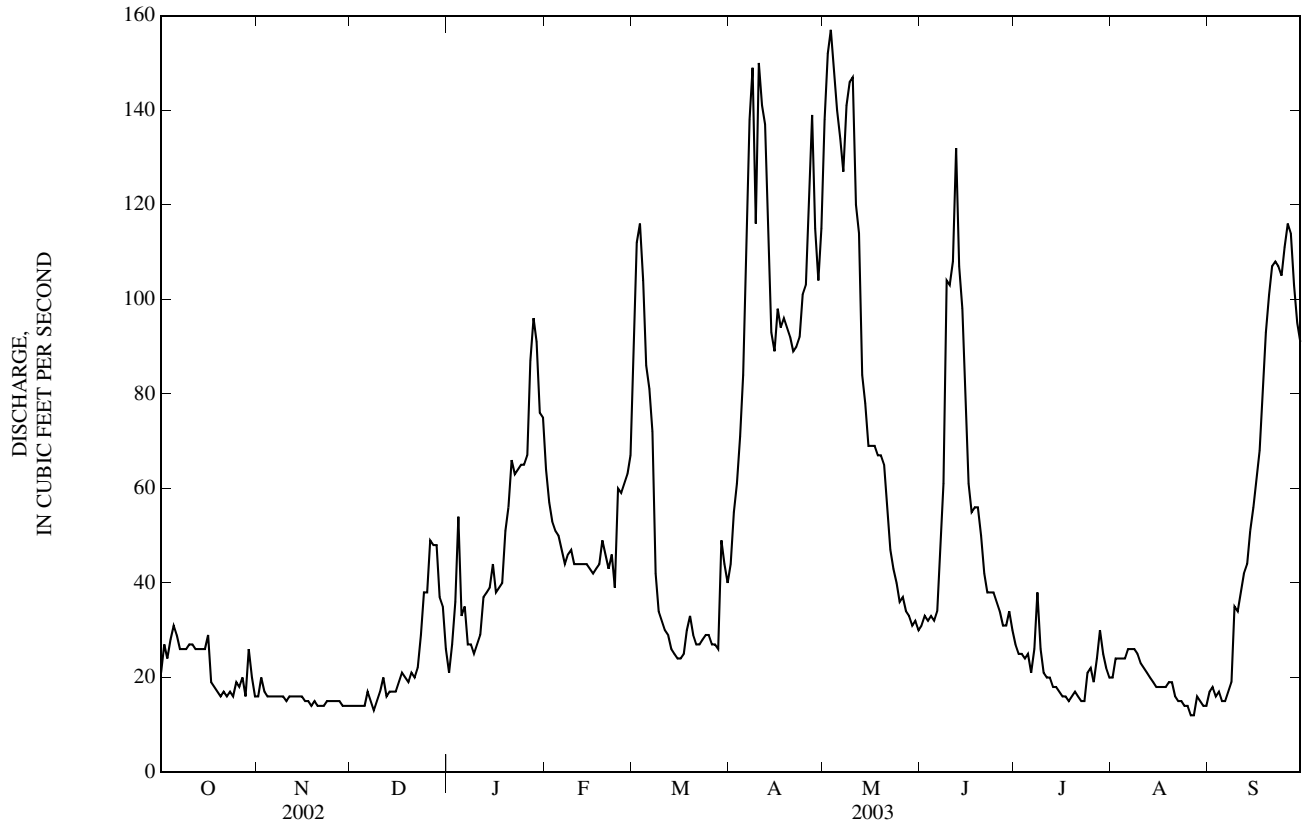
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1902 - 2003, BY WATER YEAR (WY)

MEAN	313	353	415	530	610	550	545	1,054	1,474	303	186	247
MAX	2,427	2,358	1,371	1,571	1,864	2,200	2,808	9,922	12,200	5,059	1,882	1,964
(WY)	(1985)	(1985)	(1985)	(1998)	(1930)	(1939)	(1983)	(1980)	(1983)	(1983)	(1997)	(1984)
MIN	5.85	15.4	18.8	49.6	49.4	44.9	17.3	24.1	8.33	2.15	2.52	5.60
(WY)	(1904)	(2003)	(1912)	(2003)	(2003)	(2003)	(1904)	(1911)	(1910)	(1903)	(1902)	(1903)

06764000 SOUTH PLATTE RIVER AT JULESBURG, CO—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1902 - 2003	
ANNUAL TOTAL	33,705		16,754			
ANNUAL MEAN	92.3		45.9		551	
HIGHEST ANNUAL MEAN					2,882	1983
LOWEST ANNUAL MEAN					45.9	2003
HIGHEST DAILY MEAN	550	Feb 5	157	May 3	30,800	Jun 16, 1921
LOWEST DAILY MEAN	13	Dec 8	12	Aug 26	a0.00	Aug 18, 1902
ANNUAL SEVEN-DAY MINIMUM	14	Nov 28	14	Aug 24	0.00	Jul 25, 1903
MAXIMUM PEAK FLOW			174	May 2	37,600	Jun 20, 1965
MAXIMUM PEAK STAGE			b3.46	May 2	c10.44	Jun 20, 1965
ANNUAL RUNOFF (AC-FT)	66,850		33,230		399,500	
10 PERCENT EXCEEDS	279		104		1,170	
50 PERCENT EXCEEDS	26		31		227	
90 PERCENT EXCEEDS	16		15		28	

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.



06764880 SOUTH PLATTE RIVER AT ROSCOE, NE

LOCATION.--Lat 41°07'33" long 101°34'35", in NW 1/4 SW 1/4 sec.4, T.13 N., R.37 W., Keith County, Hydrologic Unit 10190018, on left bank 20 ft downstream from bridge on Highway L-51B connecting Interstate 80 and U.S. Highway 30, 0.5 mi southeast of Roscoe and at mile 54.1.

DRAINAGE AREA.--23,900 mi^2.

PERIOD OF RECORD.--October 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,150 ft, from topographic map. Data collection platform at station.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	5.7	12	21	e60	e14	58	129	29	13	0.02	0.00
2	2.4	5.6	12	18	e52	e20	56	157	31	11	2.4	0.00
3	2.4	5.2	13	20	e40	e40	56	163	30	9.9	0.00	0.00
4	2.6	5.0	11	25	e29	e60	63	159	28	8.9	0.00	0.00
5	2.4	5.4	12	26	e23	e80	68	144	26	7.9	0.00	0.00
6	1.9	6.6	11	31	e20	e74	82	110	25	6.7	0.00	0.00
7	1.8	6.1	11	34	e15	e70	92	118	32	6.3	0.00	0.00
8	2.2	7.1	11	35	e13	e66	103	153	31	13	0.00	0.00
9	3.3	7.2	13	36	e12	e62	122	145	39	8.6	0.00	0.00
10	3.8	7.5	13	e18	e12	65	123	169	59	6.1	0.00	0.00
11	3.7	7.6	13	e15	e14	53	120	164	83	4.9	0.22	0.00
12	3.0	7.5	14	e14	e17	50	132	145	81	4.1	0.05	0.00
13	3.0	7.3	14	e14	e20	48	135	120	91	3.4	0.00	0.00
14	3.5	7.5	15	e14	e21	46	131	121	62	2.8	0.00	0.00
15	4.2	7.9	17	e15	e22	43	115	104	51	2.5	0.00	0.00
16	5.2	8.0	19	e15	e20	41	124	106	47	2.2	0.00	0.00
17	4.4	8.3	18	e14	e22	43	118	90	48	2.0	0.00	0.00
18	3.7	8.2	17	e13	e25	50	125	86	43	1.6	0.00	0.00
19	3.5	8.4	16	e17	e29	62	130	93	39	1.7	0.00	0.00
20	3.2	8.6	13	e25	e32	54	118	87	39	2.0	0.00	0.00
21	3.1	8.9	14	e31	e34	49	112	84	54	3.3	0.00	0.00
22	3.1	9.2	11	e25	e20	45	110	77	40	7.4	0.00	0.00
23	3.6	9.1	10	e23	e12	43	110	71	32	8.2	0.00	0.00
24	3.7	10	e8.0	e23	e10	43	108	65	30	12	0.00	0.00
25	3.4	10	e7.4	e28	e9.2	44	110	52	28	7.9	0.00	0.00
26	3.2	8.7	e7.0	e25	e9.2	44	105	43	27	4.0	0.00	7.0
27	4.8	9.2	e8.0	e34	e10	53	105	37	23	4.5	0.00	14
28	5.2	9.3	e11	e40	e12	53	92	34	20	3.2	0.00	17
29	6.4	9.5	12	e44	---	48	122	33	17	1.2	0.00	19
30	7.7	11	14	e46	---	46	143	30	15	0.99	0.00	22
31	6.3	---	15	e54	---	55	---	27	---	0.50	0.00	---
TOTAL	112.6	235.6	392.4	793	614.4	1,564	3,188	3,116	1,200	171.79	2.69	79.00
MEAN	3.63	7.85	12.7	25.6	21.9	50.5	106	101	40.0	5.54	0.087	2.63
MAX	7.7	11	19	54	60	80	143	169	91	13	2.4	22
MIN	1.8	5.0	7.0	13	9.2	14	56	27	15	0.50	0.00	0.00
AC-FT	223	467	778	1,570	1,220	3,100	6,320	6,180	2,380	341	5.3	157

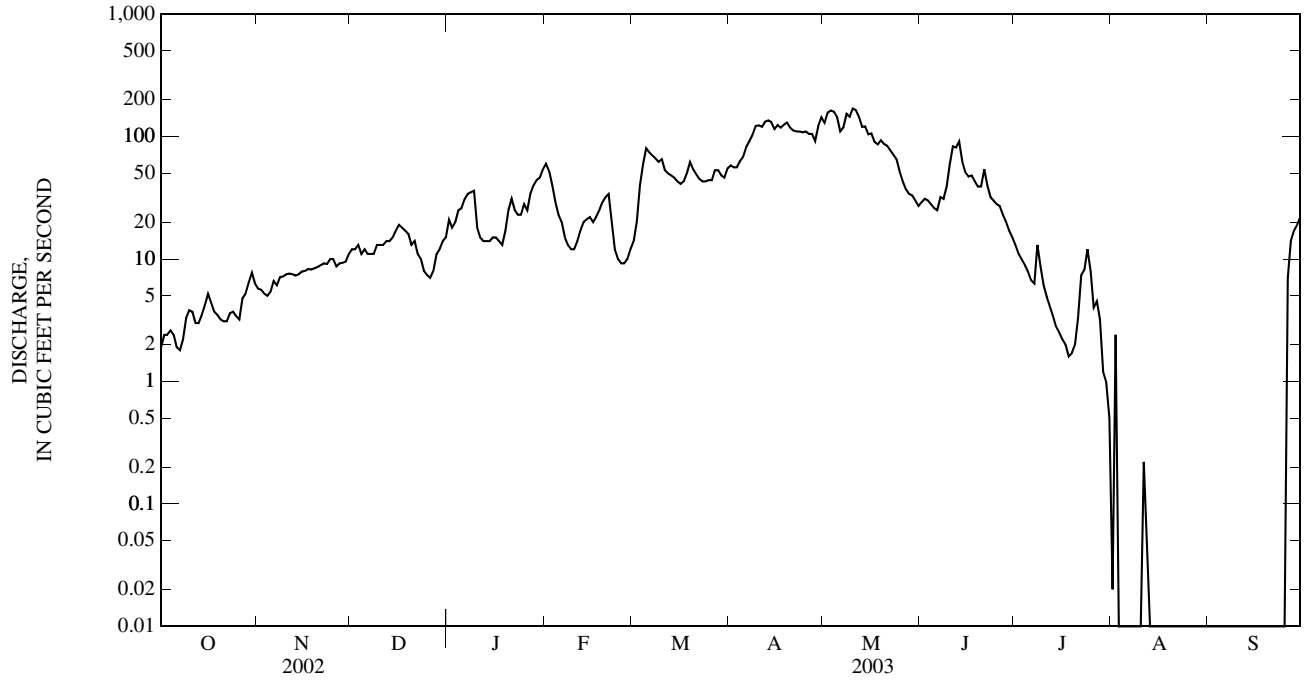
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2003, BY WATER YEAR (WY)

MEAN	534	445	543	844	1,001	765	795	1,364	2,493	699	333	507
MAX	2,392	2,183	1,418	1,867	2,280	1,519	2,767	7,044	13,800	6,081	1,924	2,189
(WY)	(1985)	(1985)	(2000)	(1998)	(1984)	(1987)	(1984)	(1983)	(1995)	(1995)	(1997)	(1996)
MIN	3.63	7.85	12.7	25.6	21.9	50.5	106	21.2	18.3	4.49	0.087	0.12
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2000)	(2003)	(1994)

06764880 SOUTH PLATTE RIVER AT ROSCOE, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1983 - 2003	
ANNUAL TOTAL	34,327.59		11,469.48			
ANNUAL MEAN	94.0		31.4		857	
HIGHEST ANNUAL MEAN					2,941	1983
LOWEST ANNUAL MEAN					31.4	2003
HIGHEST DAILY MEAN	4,740	Jul 6	169	May 10	18,100	Jun 6, 1995
LOWEST DAILY MEAN	0.23	Jul 4	0.00	Aug 3	0.00	Sep 11, 1994
ANNUAL SEVEN-DAY MINIMUM	1.5	Jun 29	0.00	Aug 3	0.00	Sep 11, 1994
MAXIMUM PEAK FLOW			*182	May 10	20,100	Jun 6, 1995
MAXIMUM PEAK STAGE			**3.81	Mar 5	11.29	Jun 6, 1995
ANNUAL RUNOFF (AC-FT)	68,090		22,750		620,900	
10 PERCENT EXCEEDS	256		104		1,810	
50 PERCENT EXCEEDS	15		14		349	
90 PERCENT EXCEEDS	3.2		0.00		20	

e Estimated.
* Stage 3.68 ft.
** Backwater from ice.



06768000 PLATTE RIVER NEAR OVERTON, NE

LOCATION.--Lat 40° 40'57", long 99° 32'27", in NE 1/4 NW 1/4 sec.12, T.8 N., R.20 W., Dawson County, Hydrologic Unit 10200101, on left bank 25 ft upstream from county highway bridge, 4 mi south of Overton, 4 mi downstream from Plum Creek and at mile 142.

DRAINAGE AREA.--56,300 mi^2, of which about 51,620 mi^2 contributes directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July to September 1914 (gage heights only), October 1914 to 1994, October 1997 to September 1998. Monthly discharge only for some periods, published in WSP 1310. Published as "near Elm Creek" 1914-15.

REVISED RECORDS.--WDR NE-67, WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,297.83 ft above sea level. July 1914 to October 1917, nonrecording gages at site 8 mi downstream at different datum. June 1918 to Sept. 12, 1928, nonrecording gage at present site (south channel only) at datum 4.0 ft higher. Sept. 13, 1928 to Sept. 30, 1930, nonrecording gage and Oct. 1, 1930 to Sept. 30, 1968, water-stage recorder, at present site (south channel only) at datum 2.0 ft higher. Oct. 1, 1968 to Feb. 3, 1976, water-stage recorder on south channel at present site at datum 2.0 ft higher, and Feb. 4 to June 2, 1976 (south channel gage discontinued), at datum 1.0 ft higher. Oct. 1, 1968 to July 10, 1974, north channel gage at present site at datum 2.0 ft higher and July 11, 1974 to June 1, 1976, at datum 1.0 ft higher. June 2, 1976 to Aug. 19, 1984, at site 600 ft downstream, at datum 1.0 ft higher. Aug. 20, 1984 to Oct. 6, 1986, at site 600 ft downstream. Data collection platform at station.

REMARKS.--Records fair 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 OUTSIDE REGULATED PERIOD.-- Maximum discharge 37,600 ft^3/s, June 5, 1935, gage height, 6.25 ft., south channel, datum then in use; no flow at times in 1919, 1922, 1925, 1927-28, 1930-41.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	801	262	691	704	515	607	376	684	190	171	109	79
2	777	267	682	773	638	574	397	1,120	218	161	105	71
3	836	267	649	823	493	967	365	867	204	160	100	65
4	1,010	267	642	625	315	869	326	793	292	149	98	63
5	675	266	815	613	296	862	336	731	223	136	96	241
6	542	264	457	693	e450	950	366	502	184	128	92	210
7	537	261	242	631	e600	885	446	614	184	124	88	69
8	796	261	388	660	e570	656	325	430	166	131	85	60
9	1,150	267	933	492	e550	554	391	575	160	161	86	523
10	1,340	261	513	620	e600	682	431	428	153	149	120	218
11	1,540	249	807	412	869	590	510	546	151	140	156	574
12	1,210	244	718	447	880	628	429	609	194	135	133	275
13	1,230	284	997	758	731	655	517	357	191	133	116	124
14	950	1,470	716	454	778	645	727	567	186	135	123	105
15	212	1,140	724	586	852	655	907	483	182	129	106	102
16	194	988	771	567	803	742	1,150	335	174	122	96	104
17	175	876	586	756	702	e400	1,110	323	169	121	87	119
18	174	799	722	594	e500	e380	608	332	166	118	81	101
19	177	748	754	610	e420	297	e780	522	156	119	100	273
20	179	284	641	703	e440	309	e700	239	139	123	111	494
21	173	317	724	506	e400	331	e660	167	144	126	107	231
22	185	760	637	670	e540	807	e720	186	164	141	98	245
23	182	514	662	459	e480	713	749	213	162	156	86	240
24	243	218	733	700	e510	643	897	330	466	159	82	123
25	219	635	237	507	e600	524	887	393	665	133	78	106
26	215	265	226	485	e800	610	926	329	1,140	110	80	103
27	236	367	538	776	1,020	670	810	266	386	106	78	101
28	236	468	883	423	464	613	902	228	217	133	76	101
29	243	573	1,040	658	---	531	666	211	192	131	76	110
30	260	662	711	569	---	693	1,030	201	177	120	71	129
31	262	---	904	460	---	674	---	187	---	115	78	---
TOTAL	16,959	14,504	20,743	18,734	16,816	19,716	19,444	13,768	7,395	4,175	2,998	5,359
MEAN	547	483	669	604	601	636	648	444	246	135	96.7	179
MAX	1,540	1,470	1,040	823	1,020	967	1,150	1,120	1,140	171	156	574
MIN	173	218	226	412	296	297	325	167	139	106	71	60
AC-FT	33,640	28,770	41,140	37,160	33,350	39,110	38,570	27,310	14,670	8,280	5,950	10,630

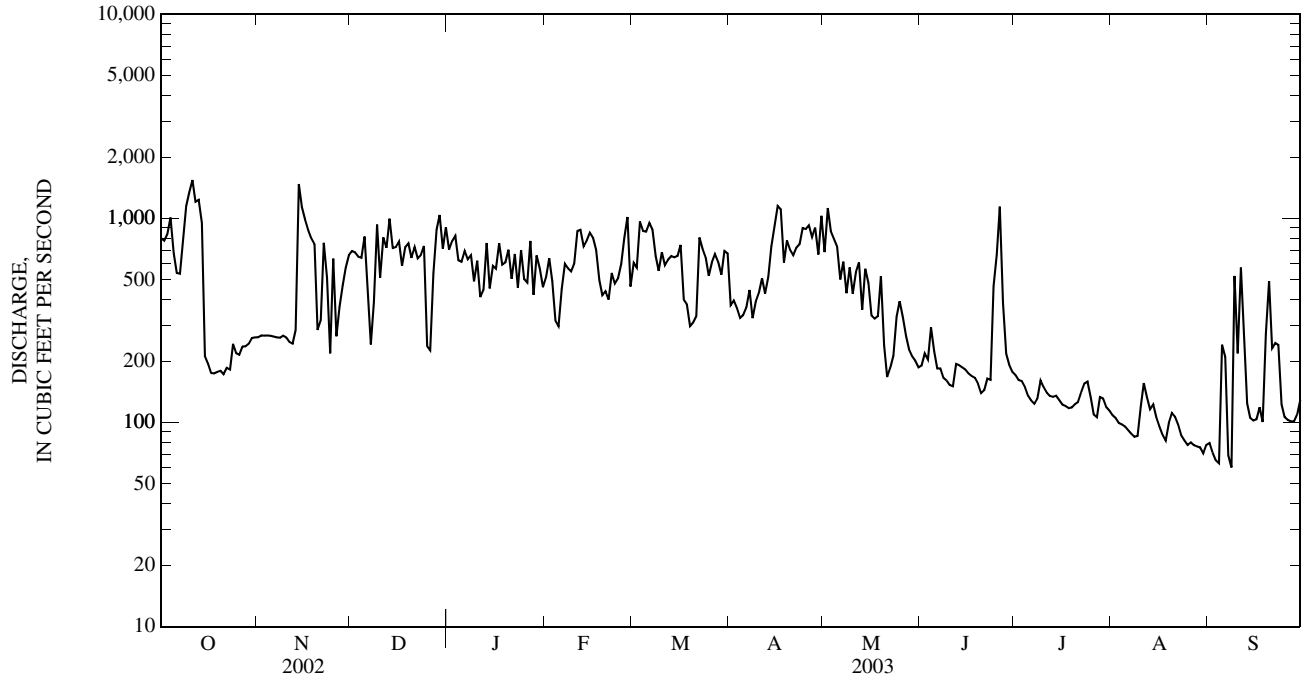
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2003, BY WATER YEAR (WY)

MEAN	1,396	1,459	1,568	1,647	1,922	2,067	1,900	2,136	2,393	1,060	713	1,201
MAX	6,330	5,765	5,012	4,281	6,730	7,206	10,050	12,590	18,970	11,380	6,635	8,040
(WY)	(1974)	(1985)	(1985)	(1984)	(1984)	(1984)	(1984)	(1984)	(1983)	(1983)	(1983)	(1983)
MIN	75.1	169	156	336	474	636	519	171	232	135	83.7	54.9
(WY)	(1942)	(1942)	(1942)	(1942)	(1942)	(2003)	(1967)	(1956)	(1959)	(2003)	(1956)	(1956)

06768000 PLATTE RIVER NEAR OVERTON, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1942 - 2003a	
ANNUAL TOTAL	229,370		160,611			
ANNUAL MEAN	628		440		1,618	
HIGHEST ANNUAL MEAN					5,835	1983
LOWEST ANNUAL MEAN					440	2003
HIGHEST DAILY MEAN	1,750	Mar 12	1,540	Oct 11	22,300	Jun 22, 1983
LOWEST DAILY MEAN	83	Aug 22	60	Sep 8	2.0	Aug 31, 1942
ANNUAL SEVEN-DAY MINIMUM	92	Aug 17	72	Aug 29	5.4	Aug 25, 1942
MAXIMUM PEAK FLOW			2,010	Apr 17	*22,900	Jun 28, 1983
MAXIMUM PEAK STAGE			2.56	Apr 17	**7.44	Jun 22, 1983
ANNUAL RUNOFF (AC-FT)	455,000		318,600		1,172,000	
10 PERCENT EXCEEDS	1,240		842		3,000	
50 PERCENT EXCEEDS	530		391		1,190	
90 PERCENT EXCEEDS	134		106		276	

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



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 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)
DEC													
16...	1100	996	695	12.5	104	8.2	793	7.5	3.5	10.9	73.2	E175	30.5

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L (00660)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Boron, water, fltrd, ug/L (01020)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)
DEC												
16...	0.50	31.0	166	<0.04	3.01	E.006	0.969	0.32	0.34	117	<10	E2.4

Remark codes used in this table:
< -- Less than
E -- Estimated value

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06768020 SPRING CREEK NEAR OVERTON, NE

LOCATION.--Lat 40° 42'26", long 99° 33'34", in SE 1/4 SE 1/4, sec.35, T.9 N., R.20 W., Dawson County, Hydrologic Unit 10200101, on upstream side of county road bridge, 1.0 mi west and 2.5 mi south of Overton.

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

GAGE.--Water-stage recorder. Elevation of gage is 2,310 ft above sea level, from topographic map.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.58	0.00	e0.00	e0.00	e0.35	0.08	15	12	26	27	e21
2	0.00	1.9	0.00	e0.00	e0.00	e0.30	0.01	16	18	27	23	e20
3	0.07	1.4	0.00	e0.00	e0.00	e0.35	0.00	16	15	22	23	e20
4	7.5	1.3	0.00	e0.00	e0.00	e0.45	0.00	12	38	19	30	e20
5	0.23	1.2	0.00	e0.00	e0.00	e0.40	0.00	12	20	23	32	e20
6	0.00	1.1	0.00	e0.00	e0.00	e0.35	0.01	11	17	17	28	e24
7	0.00	0.80	0.00	e0.00	e0.00	e0.30	3.7	8.9	20	22	32	e30
8	0.00	0.25	0.00	e0.00	e0.00	e0.35	2.5	8.5	17	31	39	e32
9	0.00	0.00	0.00	e0.00	e0.10	e0.35	1.7	9.6	16	30	40	e34
10	0.00	0.00	0.64	e0.00	e0.10	e0.40	1.2	10	15	36	45	e30
11	0.00	0.00	0.36	e0.00	e0.15	e0.45	1.7	11	14	42	51	e20
12	0.00	0.00	1.2	e0.00	e0.15	e0.70	1.5	9.1	28	45	44	0.70
13	0.00	0.00	0.72	e0.00	e0.14	e1.0	0.72	7.8	39	51	42	0.00
14	0.00	0.00	0.03	e0.00	e0.10	e1.5	0.34	6.8	36	50	37	0.00
15	0.00	0.00	0.47	e0.00	e0.10	1.6	0.16	14	33	45	46	0.00
16	0.00	0.00	1.6	0.00	e0.12	0.63	9.2	17	31	44	46	0.00
17	0.00	0.00	1.0	0.00	e0.15	0.42	2.6	15	32	37	36	0.00
18	0.00	0.00	0.65	0.00	e0.20	17	4.3	13	31	30	24	0.00
19	0.00	0.00	0.07	0.00	e0.20	6.1	3.8	26	33	27	32	0.00
20	0.00	0.00	0.00	0.00	e0.20	4.9	2.7	13	33	36	26	0.00
21	0.00	0.00	0.00	0.00	e0.15	4.3	2.6	11	32	37	27	0.00
22	0.00	0.00	0.00	0.00	e0.14	2.3	1.2	10	32	42	40	0.00
23	0.00	0.00	0.00	0.00	e0.14	1.2	8.5	6.3	33	37	44	0.00
24	0.00	0.00	0.00	0.00	e0.14	0.66	23	37	97	34	37	0.00
25	0.00	0.00	0.00	0.00	e0.20	0.30	20	24	102	38	40	0.00
26	0.00	0.00	e0.00	0.00	e0.25	0.27	15	30	66	43	38	0.00
27	0.15	0.00	e0.00	0.00	e0.30	0.16	11	28	50	44	34	0.00
28	3.8	0.00	0.00	0.00	e0.40	0.39	7.9	32	46	45	31	0.00
29	0.84	0.00	0.00	0.00	---	0.39	17	29	45	48	29	0.00
30	3.1	0.00	0.00	e0.00	---	0.41	13	18	38	43	36	0.00
31	1.9	---	e0.00	e0.00	---	0.25	---	11	---	33	24	---
TOTAL	17.59	8.53	6.74	0.00	3.43	48.53	155.42	488.0	1,039	1,104	1,083	271.70
MEAN	0.57	0.28	0.22	0.000	0.12	1.57	5.18	15.7	34.6	35.6	34.9	9.06
MAX	7.5	1.9	1.6	0.00	0.40	17	23	37	102	51	51	34
MIN	0.00	0.00	0.00	0.00	0.00	0.16	0.00	6.3	12	17	23	0.00
AC-FT	35	17	13	0.00	6.8	96	308	968	2,060	2,190	2,150	539

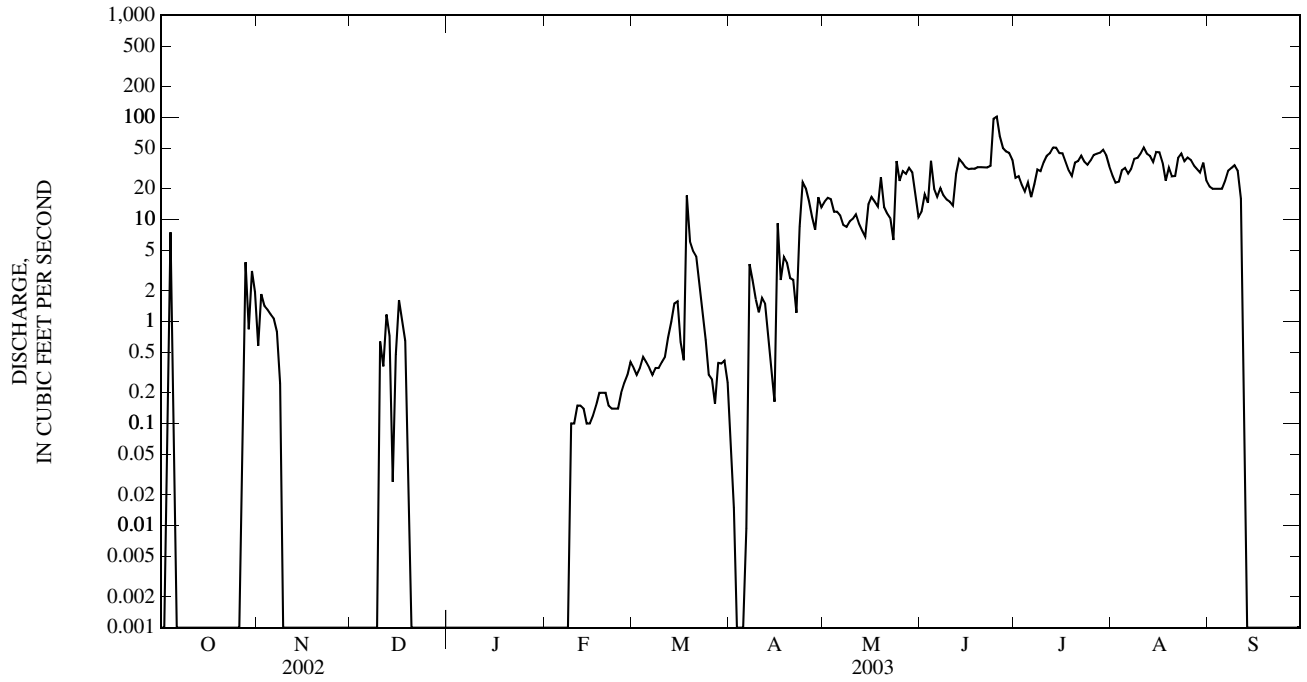
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2003, BY WATER YEAR (WY)

MEAN	12.9	13.4	10.5	10.4	12.1	13.9	18.3	33.2	56.4	63.1	84.2	25.8
MAX	26.8	24.7	20.6	21.4	25.1	22.2	38.1	74.7	117	98.4	162	70.8
(WY)	(1997)	(1997)	(1997)	(1997)	(1997)	(1997)	(2001)	(2001)	(1999)	(1999)	(1999)	(1996)
MIN	0.57	0.28	0.22	0.000	0.12	1.57	5.18	14.5	25.7	7.07	5.73	0.068
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)	(2002)	(2002)

06768020 SPRING CREEK NEAR OVERTON, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1996 - 2003	
ANNUAL TOTAL	2,704.64		4,225.94			
ANNUAL MEAN	7.41		11.6		28.5	
HIGHEST ANNUAL MEAN					45.4	1999
LOWEST ANNUAL MEAN					9.56	2002
HIGHEST DAILY MEAN	64	Aug 25	102	Jun 25	431	Aug 19, 1999
LOWEST DAILY MEAN	0.00	Jul 17	0.00	Oct 1	0.00	Jul 17, 2002
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 10	0.00	Oct 6	0.00	Aug 10, 2002
MAXIMUM PEAK FLOW			171	Jun 4	453	Aug 19, 1999
MAXIMUM PEAK STAGE			5.62	Jun 4	7.62	Aug 19, 1999
ANNUAL RUNOFF (AC-FT)	5,360		8,380		20,660	
10 PERCENT EXCEEDS	20		37		74	
50 PERCENT EXCEEDS	6.1		0.66		16	
90 PERCENT EXCEEDS	0.00		0.00		1.1	

e Estimated.



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

LOCATION.--Lat 40° 41'10", long 99° 26'23", in SE 1/4 SE 1/4, sec.2, T.8 N., R.19 W., Dawson County, Hydrologic Unit 10200101, on left bank of island on middle channel, at Cottonwood Ranch, and 3.7 miles southwest of Elm Creek, NE.

PERIOD OF RECORD.--May 2001 to current year.

GAGE.--Water-stage recorder. Dataum of gage is 2,261.92 ft above sea level. Data collection platform at station.

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

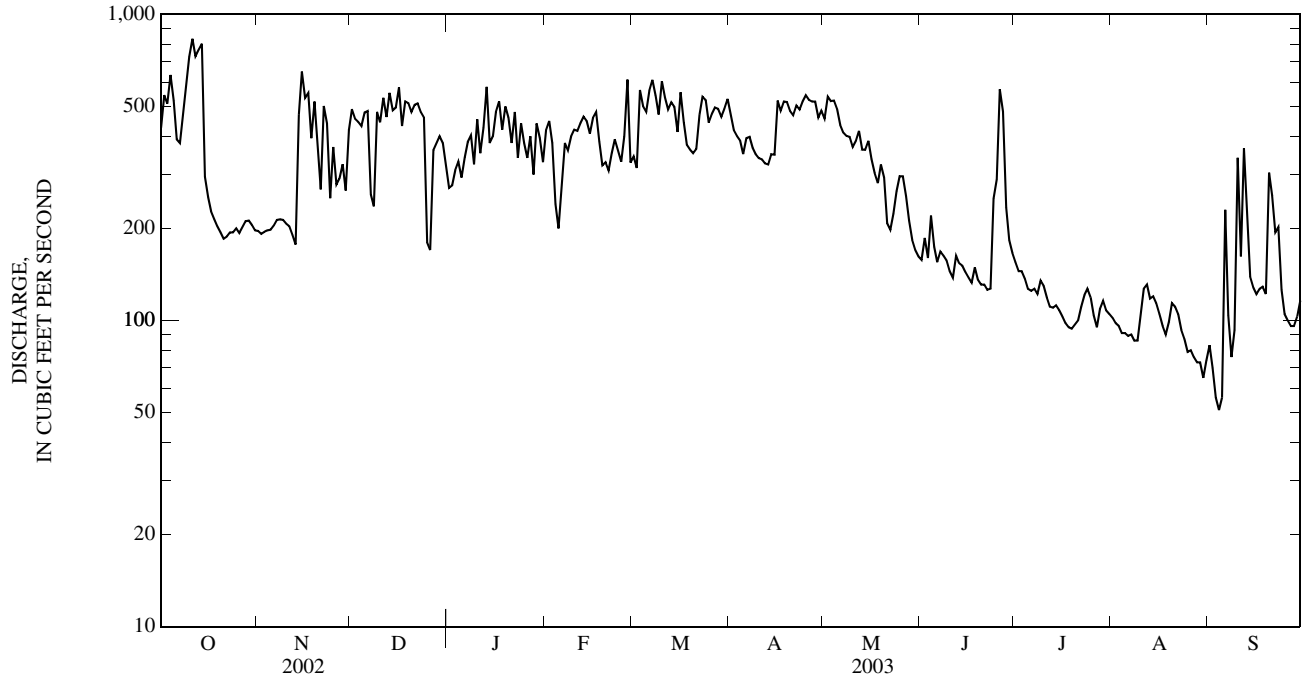
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	426	196	490	271	418	343	473	457	158	155	102	83
2	545	192	456	276	448	315	418	539	186	145	98	70
3	511	195	445	310	e380	566	401	521	160	145	96	56
4	634	197	432	330	e240	e500	387	523	220	137	91	51
5	522	198	478	293	e200	e480	350	491	174	127	91	56
6	391	204	483	341	e280	564	394	435	155	125	89	230
7	380	213	258	383	e380	611	398	411	168	127	90	104
8	478	214	236	402	e360	542	367	401	163	122	86	76
9	602	213	480	324	e400	471	349	398	157	135	86	93
10	727	207	444	454	e420	605	339	369	145	130	105	340
11	832	203	534	352	416	536	336	386	138	119	127	162
12	729	190	462	426	441	489	326	416	163	111	131	365
13	767	177	554	e580	463	516	323	362	154	110	118	212
14	802	470	486	e380	449	499	349	361	151	112	120	139
15	295	650	496	e400	408	413	348	386	144	108	114	128
16	253	534	577	e480	460	557	523	337	138	103	105	122
17	227	554	432	e520	480	444	484	303	133	98	96	127
18	214	394	520	e420	384	375	519	281	149	95	90	129
19	203	519	513	e500	321	362	517	323	136	94	99	122
20	194	371	480	e460	329	352	483	293	131	97	114	304
21	185	268	506	e380	309	363	468	208	131	100	111	256
22	188	502	512	e480	353	469	504	198	126	111	105	194
23	194	440	479	e340	391	538	489	223	127	121	93	202
24	194	251	e460	e440	e360	525	519	265	250	127	87	126
25	200	369	e180	e380	e330	443	544	296	289	119	79	105
26	193	278	e170	e340	e400	473	526	296	569	104	80	100
27	202	291	e360	e400	612	496	519	255	481	95	76	96
28	211	324	e380	e300	328	491	519	212	234	109	73	96
29	212	266	e400	e440	---	463	460	183	183	116	73	103
30	205	419	e380	395	---	492	485	170	166	108	65	116
31	197	---	326	329	---	529	---	162	---	105	74	---
TOTAL	11,913	9,499	13,409	12,126	10,760	14,822	13,117	10,461	5,679	3,610	2,964	4,363
MEAN	384	317	433	391	384	478	437	337	189	116	95.6	145
MAX	832	650	577	580	612	611	544	539	569	155	131	365
MIN	185	177	170	271	200	315	323	162	126	94	65	51
AC-FT	23,630	18,840	26,600	24,050	21,340	29,400	26,020	20,750	11,260	7,160	5,880	8,650
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2003, BY WATER YEAR (WY)												
MEAN	503	361	593	556	556	598	454	267	267	355	289	423
MAX	622	406	753	721	728	718	472	337	415	551	635	690
(WY)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2003)	(2001)	(2001)	(2001)	(2001)
MIN	384	317	433	391	384	478	437	196	189	116	95.6	145
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2003)	(2003)	(2003)	(2003)

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

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2001 - 2003	
ANNUAL TOTAL	155,577		112,723			
ANNUAL MEAN	426		309		395	
HIGHEST ANNUAL MEAN					481	2002
LOWEST ANNUAL MEAN					309	2003
HIGHEST DAILY MEAN	1,000	Apr 10	832	Oct 11	1,080	Aug 17, 2001
LOWEST DAILY MEAN	50	Jun 1	51	Sep 4	50	Jun 1, 2002
ANNUAL SEVEN-DAY MINIMUM	53	May 29	65	Aug 30	53	May 29, 2002
MAXIMUM PEAK FLOW			*986	Oct 13	**1,130	Aug 16, 2002
MAXIMUM PEAK STAGE			***6.01	Jan 27	***6.99	Mar 4, 2002
ANNUAL RUNOFF (AC-FT)	308,600		223,600		286,100	
10 PERCENT EXCEEDS	763		519		740	
50 PERCENT EXCEEDS	391		323		375	
90 PERCENT EXCEEDS	110		101		103	

e Estimated.
* Stage 4.48 ft. Also on Oct 14.
** Stage 4.78 ft.
*** Backwater from ice.



06769000 BUFFALO CREEK NEAR OVERTON, NE

LOCATION.--Lat 40° 44'04", long 99° 30'20", in NE 1/4 SE 1/4, sec.20, T.9 N., R.19 W., Dawson County, Hydrologic Unit 10200101, on downstream side of State Highway 30 bridge, 1.7 mi east of Overton.

DRAINAGE AREA.--175 mi^2.

PERIOD OF RECORD.--October 1949 to September 1958. April 1996 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,296.67 ft above sea level. October 1949 to September 1958 at datum 0.41 ft higher.

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31	87	93	18
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44	66	83	14
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	48	66	66	14
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	53	86	55	11
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	54	84	53	10
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.7	54	77	58	14
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14	56	72	57	38
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49	56	59	48	60
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59	57	59	42	71
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56	57	57	48	66
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59	60	57	58	58
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39	61	62	71	18
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27	47	76	75	2.7
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34	50	85	77	0.62
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30	74	87	85	0.19
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14	79	85	91	0.14
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29	68	76	89	0.14
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34	59	71	78	0.08
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	37	56	64	73	0.07
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	37	61	57	82	0.07
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17	63	62	77	0.06
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.2	64	62	74	0.05
23	0.00	0.00	0.00	0.00	0.00	0.00	0.01	3.0	66	57	64	0.04
24	0.00	0.00	0.00	0.00	0.00	0.00	0.01	6.9	70	57	72	0.03
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12	73	61	79	0.02
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35	65	70	78	0.01
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32	77	73	76	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32	73	84	71	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.02	35	74	85	68	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.01	21	92	89	39	0.00
31	0.00	---	0.00	0.00	---	0.00	---	18	---	93	30	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.05	742.83	1,842	2,226	2,110	396.22
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.002	24.0	61.4	71.8	68.1	13.2
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.02	59	92	93	93	71
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31	57	30	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	0.1	1,470	3,650	4,420	4,190	786

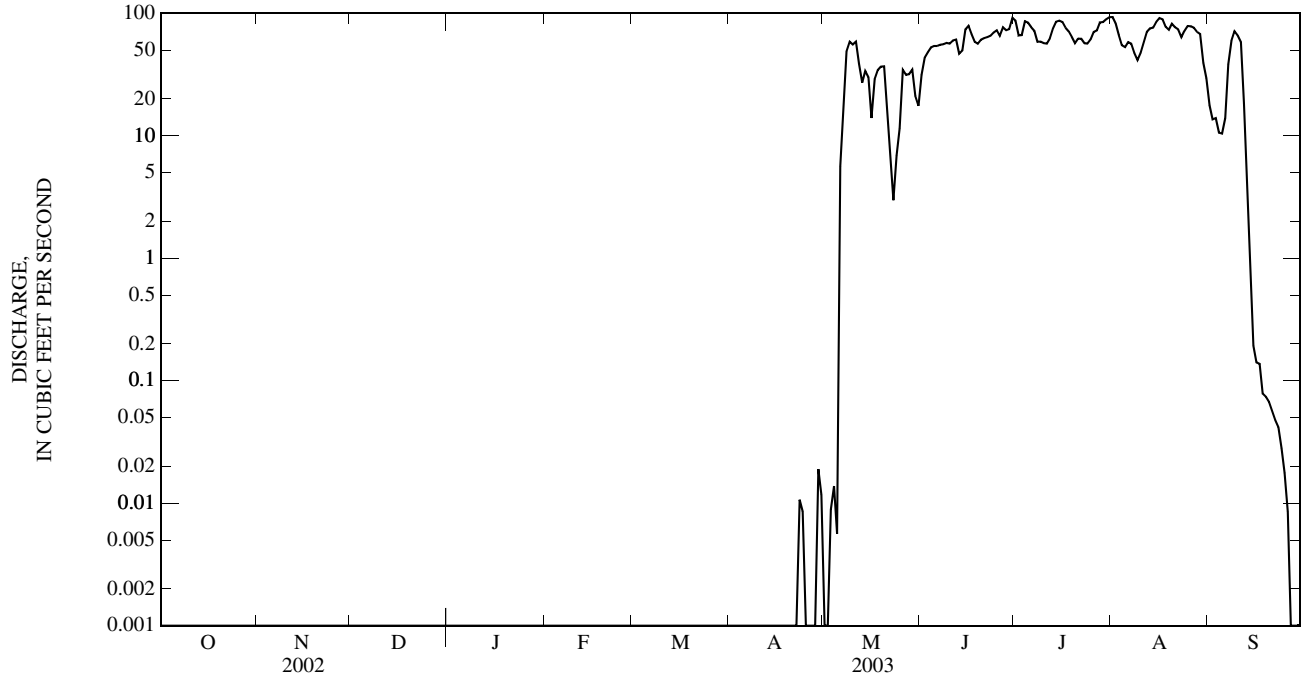
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2003, BY WATER YEAR (WY)

MEAN	9.13	3.80	3.02	2.53	3.45	4.46	5.31	24.6	49.5	49.9	59.0	31.7
MAX	33.1	15.4	13.4	10.9	10.1	15.3	17.1	54.7	130	106	174	71.1
(WY)	(1951)	(1998)	(1997)	(1998)	(2000)	(1952)	(2001)	(2001)	(1999)	(1951)	(1996)	(1950)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.12	10.4	2.04	0.000	0.46
(WY)	(2003)	(1955)	(1955)	(1954)	(1955)	(1956)	(1955)	(1958)	(1956)	(1954)	(1955)	(2002)

06769000 BUFFALO CREEK NEAR OVERTON, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1949 - 2003a	
ANNUAL TOTAL	3,886.96		7,317.10			
ANNUAL MEAN	10.6		20.0		19.4	
HIGHEST ANNUAL MEAN					40.9	1999
LOWEST ANNUAL MEAN					3.07	1955
HIGHEST DAILY MEAN	123	Aug 26	93	Jul 31	472	Jun 12, 1999
LOWEST DAILY MEAN	0.00	Sep 5	0.00	Oct 1	0.00	Apr 26, 1953
ANNUAL SEVEN-DAY MINIMUM	0.00	Sep 5	0.00	Oct 1	0.00	Jul 16, 1953
MAXIMUM PEAK FLOW			98	Aug 1	509	Jun 12, 1999
MAXIMUM PEAK STAGE			6.33	Aug 1	10.79	Jun 12, 1999
ANNUAL RUNOFF (AC-FT)	7,710		14,510		14,040	
10 PERCENT EXCEEDS	41		72		63	
50 PERCENT EXCEEDS	1.5		0.00		4.5	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a Water years 1949-58, 1996-2003.



06769525 ELM CREEK NEAR ELM CREEK, NE

LOCATION.--Lat 40° 43'44", long 99° 23'53", in NW 1/4 NE 1/4, 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, except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
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	0.32	e8.0	10	e3.2	0.67
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	e10	10	4.2	0.02
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	e12	6.8	2.9	0.24
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.4	e10	e3.0	1.1	3.1
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.6	e8.0	e2.8	1.6	8.2
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	8.1	e3.6	1.6	9.7
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	8.4	8.0	1.0	9.9
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	8.7	9.4	1.3	8.0
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	8.6	8.2	4.5	7.3
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	7.8	6.2	4.5	9.8
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	3.9	8.6	4.2	11
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	e1.2	8.5	3.3	6.9
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66	e1.0	7.8	4.2	0.46
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.9	e1.0	5.5	4.9	0.01
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11	e1.0	5.2	3.5	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	4.1	11	e1.2	e3.0	3.9	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15	e3.0	e2.8	4.3	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15	14	e2.8	4.3	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77	13	e3.0	4.9	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11	12	e3.0	4.3	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.7	13	e2.8	4.8	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.6	14	e3.0	2.2	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.02	2.5	16	e2.8	3.7	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e204	28	e2.6	4.3	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e28	24	e3.2	3.8	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e12	23	e3.0	6.0	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e10	14	e3.6	5.6	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e8.0	13	e3.0	6.3	0.00
29	0.00	0.00	0.00	0.00	---	0.00	1.7	e10	12	e2.8	4.8	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.29	e8.0	11	e3.2	2.0	0.00
31	0.00	---	0.00	0.00	---	0.00	---	e7.0	---	e4.0	2.4	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	6.11	465.43	308.9	152.2	113.6	75.30
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.20	15.0	10.3	4.91	3.66	2.51
MAX	0.00	0.00	0.00	0.00	0.00	0.00	4.1	204	28	10	6.3	11
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	1.0	2.6	1.0	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	12	923	613	302	225	149

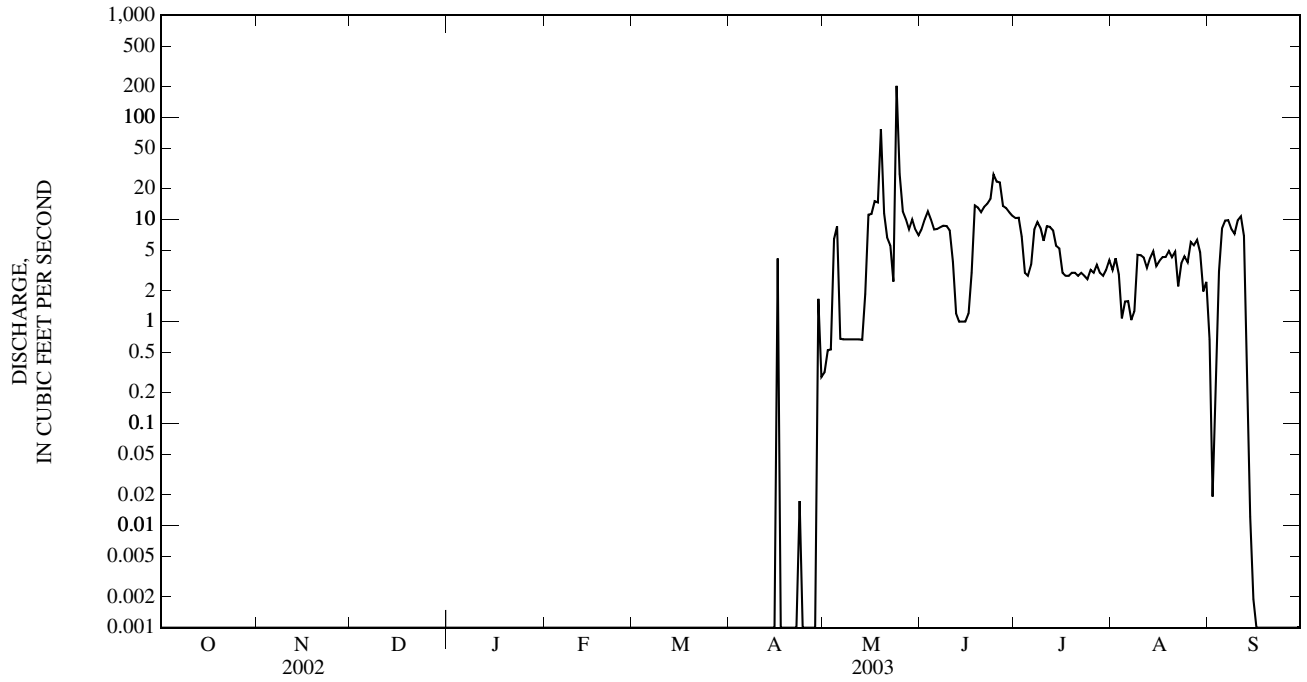
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2003, BY WATER YEAR (WY)

MEAN	0.000	0.010	0.000	0.000	0.000	2.16	0.21	7.01	11.4	7.01	8.21	2.24
MAX	0.000	0.073	0.000	0.000	0.000	13.4	1.50	15.0	31.3	13.8	14.4	5.86
(WY)	(1997)	(1997)	(1997)	(1997)	(1997)	(2001)	(2001)	(2003)	(1999)	(2000)	(1999)	(1999)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.14	4.41	0.39	3.41	0.030
(WY)	(1997)	(1998)	(1997)	(1997)	(1997)	(1997)	(1996)	(2002)	(2001)	(2002)	(2000)	(2002)

06769525 ELM CREEK NEAR ELM CREEK, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1996 - 2003	
ANNUAL TOTAL	566.25		1,121.54			
ANNUAL MEAN	1.55		3.07		3.25	
HIGHEST ANNUAL MEAN					5.89	1999
LOWEST ANNUAL MEAN					1.55	2002
HIGHEST DAILY MEAN	148	Aug 25	204	May 24	204	May 24, 2003
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			322	May 24	322	May 24, 2003
MAXIMUM PEAK STAGE			10.59	May 24	10.59	May 24, 2003
ANNUAL RUNOFF (AC-FT)	1,120		2,220		2,350	
10 PERCENT EXCEEDS	3.1		8.6		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

LOCATION.--Lat 40° 38'28", long 99° 06'56", in SE 1/4 SW 1/4, sec.22, T.8 N., R.16 W., Kearney County, Hydrologic Unit 10200101, on downstream side of county road bridge, 1.1 mi south of Platte River bridge on Highway 44, and 1.6 mi west of Highway 44, and approximately 2 mi south of Kearney.

DRAINAGE AREA.--77.7 mi^2.

PERIOD OF RECORD.--March 1996 to September 2003. (discontinued)

GAGE.--Water-stage recorder. Datum of gage is 2,140 ft above sea level.

REMARKS.--Records good except for estimated daily discharges and daily discharges for September 1-30, which are poor.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	2.5	e0.22	e1.4	e2.1	e1.1	5.3	5.9	11	12	5.7
2	0.00	0.00	2.6	e0.20	e1.5	e1.9	e1.1	4.0	5.9	12	14	7.2
3	0.00	0.00	2.8	e0.22	e1.7	e1.9	e1.3	3.5	5.8	15	13	5.4
4	0.00	0.00	2.9	e0.22	e1.5	e2.0	e1.5	4.1	6.0	15	13	5.1
5	0.00	0.00	3.0	e0.20	e1.2	e2.2	2.9	4.7	6.2	15	15	5.9
6	0.00	0.00	3.1	e0.20	e1.2	e2.3	5.9	7.6	6.4	13	17	6.1
7	0.00	0.00	3.3	e0.20	e1.1	e1.9	3.8	6.4	7.5	14	17	e1.7
8	0.00	0.00	3.3	e0.24	e1.1	e1.8	3.2	5.5	7.4	17	13	e1.2
9	0.00	0.00	3.4	e0.28	e1.0	e2.3	2.9	4.7	7.3	18	12	e1.3
10	0.00	0.00	3.6	e0.24	e1.0	e2.0	3.1	4.8	7.2	17	13	e1.6
11	0.00	0.00	3.7	e0.22	e1.0	e1.8	3.3	4.7	7.1	16	13	e1.6
12	0.00	0.00	3.6	e0.28	e0.80	e1.6	2.9	3.9	11	19	14	e1.5
13	0.00	0.00	e3.3	e0.34	e0.80	e1.4	2.0	3.5	11	16	14	e1.5
14	0.00	0.00	e3.2	e0.40	e1.1	e1.6	1.9	3.7	11	18	14	e1.4
15	0.00	0.00	e3.1	e0.38	e1.3	e1.6	2.3	3.6	9.7	17	13	e1.3
16	0.00	0.00	e3.2	e0.36	e1.7	e1.6	3.1	3.6	9.2	16	12	e1.0
17	0.00	3.1	3.4	e0.30	e1.6	e1.4	3.8	3.6	8.9	18	11	e0.70
18	0.00	1.7	2.5	e0.28	e1.5	e1.3	4.0	3.5	14	16	9.9	e0.40
19	0.00	1.7	e0.60	e0.30	e1.5	e1.2	3.5	23	11	13	14	e0.30
20	0.00	1.5	e0.42	e0.38	e1.9	e1.2	2.7	20	9.9	11	16	e0.30
21	0.00	1.4	e0.34	e0.38	e2.0	e1.2	2.1	9.7	8.9	13	15	e0.20
22	0.00	1.4	e0.32	e0.32	e2.2	e1.1	1.6	6.5	8.9	14	11	e0.10
23	0.00	1.6	e0.26	e0.30	e2.4	e1.0	3.1	6.4	49	14	8.0	e0.00
24	0.00	1.7	e0.22	e0.40	e2.6	e1.0	4.6	214	42	15	7.1	e0.00
25	0.00	1.8	e0.20	e0.56	e2.6	e0.96	3.9	65	20	16	7.3	e0.00
26	0.00	1.9	e0.22	e0.56	e2.4	e0.92	3.0	14	16	15	9.5	e0.00
27	0.00	2.1	e0.24	e0.80	e2.3	e0.90	2.7	7.8	14	16	9.9	e0.00
28	0.00	2.3	e0.26	e1.0	e2.1	e0.90	2.2	6.6	9.8	15	9.9	e0.00
29	0.00	2.4	e0.24	e1.1	---	e0.90	8.4	5.9	8.9	19	7.5	e0.00
30	0.00	2.5	e0.22	e1.0	---	e0.96	7.7	5.5	11	18	6.3	e0.00
31	0.00	---	e0.22	e1.4	---	e1.0	---	6.2	---	16	5.7	---
TOTAL	0.00	27.10	60.26	13.28	44.50	45.94	95.6	471.3	356.9	478	367.1	51.50
MEAN	0.000	0.90	1.94	0.43	1.59	1.48	3.19	15.2	11.9	15.4	11.8	1.72
MAX	0.00	3.1	3.7	1.4	2.6	2.3	8.4	214	49	19	17	7.2
MIN	0.00	0.00	0.20	0.20	0.80	0.90	1.1	3.5	5.8	11	5.7	0.00
AC-FT	0.00	54	120	26	88	91	190	935	708	948	728	102

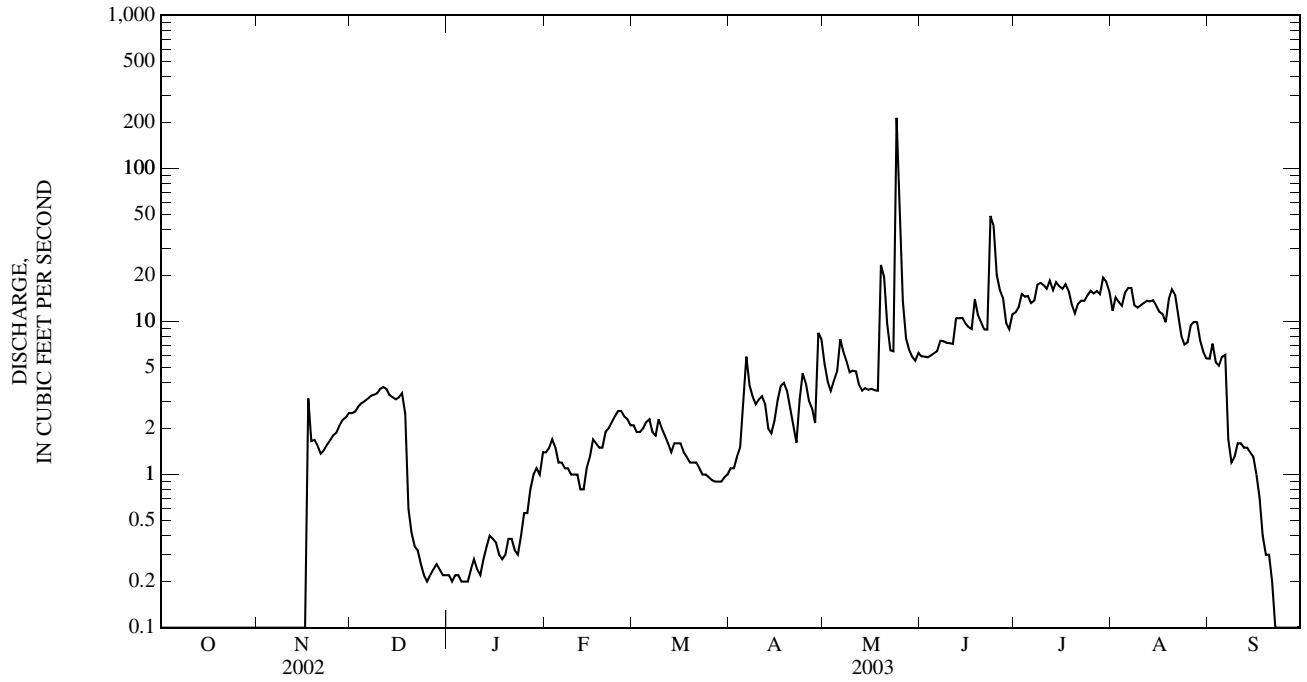
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2003, BY WATER YEAR (WY)

MEAN	9.34	11.9	10.2	9.12	10.8	15.5	17.0	24.2	24.9	38.7	23.0	8.95
MAX	17.0	22.6	18.0	13.9	16.9	24.7	33.7	47.7	50.2	84.8	44.8	30.1
(WY)	(1997)	(1998)	(1998)	(1998)	(1997)	(1998)	(1998)	(1996)	(1999)	(1996)	(1999)	(1996)
MIN	0.000	0.90	1.94	0.43	1.59	1.48	3.19	10.2	10.5	15.4	6.71	0.33
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)	(2002)	(2002)

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

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1996 - 2003	
ANNUAL TOTAL	2,270.50		2,011.48			
ANNUAL MEAN	6.22		5.51		15.6	
HIGHEST ANNUAL MEAN					24.7	1998
LOWEST ANNUAL MEAN					5.51	2003
HIGHEST DAILY MEAN	26	May 11	214	May 24	470	Jul 5, 2000
LOWEST DAILY MEAN	0.00	Sep 21	0.00	Oct 1	0.00	Sep 21, 2002
ANNUAL SEVEN-DAY MINIMUM	0.00	Sep 21	0.00	Oct 1	0.00	Sep 21, 2002
MAXIMUM PEAK FLOW			421	May 24	862	Jul 5, 2000
MAXIMUM PEAK STAGE			6.07	May 24	6.68	Jul 5, 2000
ANNUAL RUNOFF (AC-FT)	4,500		3,990		11,270	
10 PERCENT EXCEEDS	13		14		27	
50 PERCENT EXCEEDS	6.1		2.1		13	
90 PERCENT EXCEEDS	0.00		0.00		2.5	

e Estimated.



06770200 PLATTE RIVER NEAR KEARNEY, NE

LOCATION.--Lat 40° 39'32", long 99° 05'08", in SE 1/4 SE 1/4 sec.14, T.8 N., R.16 W., Kearney County, Hydrologic Unit 10200101, on right bank near downstream side of bridge on State Highway 44, 2 mi south of Kearney, and at mile 117.

DRAINAGE AREA.--57,260 mi^2, of which about 52,540 mi^2 contributes directly to surface runoff.

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

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

GAGE.--Water-stage recorder. Datum of gage is 2,134.11 ft above sea level. Data collection platform at station.

REMARKS.--Records fair 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.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	318	308	717	877	e560	e730	770	1,100	98	68	20	5.5
2	376	287	705	773	e540	e800	543	1,050	116	60	14	5.8
3	356	293	712	832	e680	e760	480	1,160	95	58	13	4.6
4	560	309	725	860	e400	e880	451	1,160	94	54	12	4.1
5	435	328	691	643	e330	e920	349	1,020	106	49	13	5.1
6	298	334	806	667	e300	e940	580	863	91	46	13	5.6
7	214	348	571	728	e300	e960	531	631	110	46	13	4.1
8	283	344	401	743	e320	e880	549	602	98	47	12	3.9
9	376	358	592	586	e400	e640	588	509	98	45	12	4.9
10	714	361	848	558	e660	675	623	584	99	42	11	4.8
11	952	351	697	459	e740	739	581	559	90	36	10	55
12	1,140	354	856	506	e320	729	544	500	101	34	10	57
13	968	346	797	522	e680	679	525	441	87	33	9.9	135
14	1,000	473	929	915	e600	676	620	366	78	35	9.4	31
15	512	1,150	788	563	e520	639	809	348	74	30	8.9	19
16	167	1,050	775	e350	e600	689	1,060	232	68	27	8.4	15
17	96	917	782	e400	e540	736	1,160	161	69	26	8.0	13
18	65	801	731	e500	e400	496	1,220	142	79	24	7.6	9.5
19	57	795	791	e500	e320	515	1,160	269	76	21	7.8	8.4
20	55	774	765	e600	e370	442	1,080	349	73	20	9.6	7.6
21	54	435	783	e720	e250	411	872	173	68	20	8.9	71
22	54	610	e580	e680	e400	546	830	147	65	19	7.6	29
23	57	713	e620	e400	e560	791	916	136	126	18	6.5	19
24	55	533	e560	e680	e500	751	997	505	125	18	5.8	15
25	95	364	e600	e720	e490	630	1,020	819	259	20	5.9	12
26	256	697	348	e640	e600	668	961	321	519	21	6.5	10
27	308	377	321	e600	e720	681	1,020	190	659	23	6.4	21
28	328	453	643	e800	e780	623	922	134	167	23	7.0	42
29	333	534	957	e600	---	581	1,100	110	88	27	6.0	54
30	349	604	993	e680	---	673	1,060	105	75	25	5.9	74
31	327	---	844	e640	---	851	---	95	---	22	5.7	---
TOTAL	11,158	15,601	21,928	19,742	13,880	21,731	23,921	14,781	3,951	1,037	294.8	745.9
MEAN	360	520	707	637	496	701	797	477	132	33.5	9.51	24.9
MAX	1,140	1,150	993	915	780	960	1,220	1,160	659	68	20	135
MIN	54	287	321	350	250	411	349	95	65	18	5.7	3.9
AC-FT	22,130	30,940	43,490	39,160	27,530	43,100	47,450	29,320	7,840	2,060	585	1,480

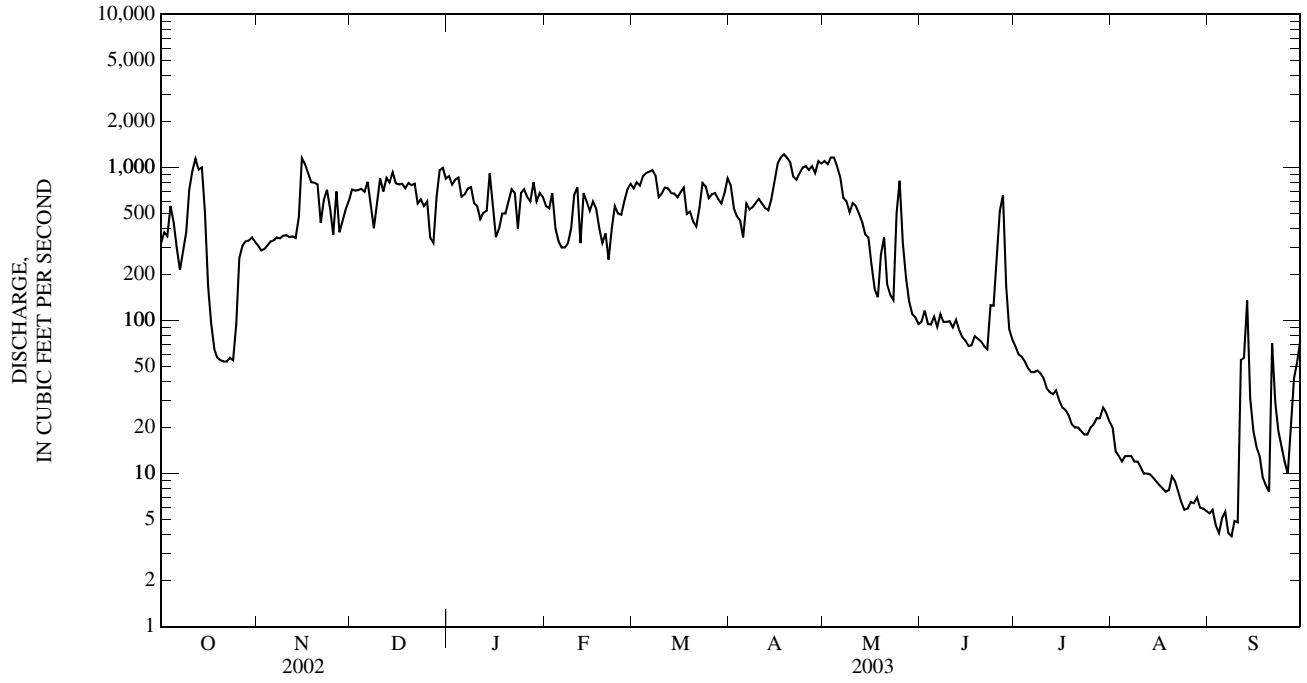
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2003, BY WATER YEAR (WY)

MEAN	1,650	1,698	1,815	2,029	2,331	2,424	2,263	2,393	3,223	1,729	1,229	1,749
MAX	3,859	4,717	4,404	4,487	6,612	7,148	9,535	11,770	17,660	10,910	6,393	7,903
(WY)	(1987)	(1985)	(1985)	(1984)	(1984)	(1984)	(1984)	(1984)	(1983)	(1983)	(1983)	(1983)
MIN	360	421	707	637	496	701	702	282	132	33.5	9.51	24.9
(WY)	(2003)	(2002)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2003)	(2003)	(2003)	(2003)

06770200 PLATTE RIVER NEAR KEARNEY, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1983 - 2003	
ANNUAL TOTAL	202,007.9		148,770.7			
ANNUAL MEAN	553		408		2,040	
HIGHEST ANNUAL MEAN					5,418	1983
LOWEST ANNUAL MEAN					408	2003
HIGHEST DAILY MEAN	1,640	Mar 21	1,220	Apr 18	22,300	Jun 29, 1983
LOWEST DAILY MEAN	5.6	Sep 10	3.9	Sep 8	3.0	Sep 7, 1990
ANNUAL SEVEN-DAY MINIMUM	12	Aug 17	4.6	Sep 3	4.6	Sep 3, 2003
MAXIMUM PEAK FLOW			*1,570	Apr 18	**23,700	Jun 29, 1983
MAXIMUM PEAK STAGE			***4.95	Mar 6	***8.62	Feb 24, 1994
ANNUAL RUNOFF (AC-FT)	400,700		295,100		1,478,000	
10 PERCENT EXCEEDS	1,210		867		3,910	
50 PERCENT EXCEEDS	417		370		1,500	
90 PERCENT EXCEEDS	58		12		345	

e Estimated.
* Stage 3.54 ft.
** Stage 7.42 ft.
***Backwater from ice.



06770240 FORT KEARNEY SLOUGH NEAR NEWARK, NE

LOCATION.--Lat 40° 38'28", long 98° 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 September 2003. (discontinued).

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

REMARKS.--Records good except for estimated daily discharges and discharges for May 25 to June 30, which are poor.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
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	0.48	e1.0	1.9	4.0	6.2	4.1	0.09	0.00
2	0.00	0.00	0.00	0.00	0.58	e1.1	2.0	4.0	6.1	5.4	0.54	0.31
3	0.00	0.00	0.00	0.00	0.40	e1.1	2.0	4.1	5.7	4.3	0.10	0.94
4	0.00	0.00	0.00	0.00	e0.30	e1.0	1.6	4.3	5.2	3.0	0.00	0.85
5	0.00	0.00	0.00	0.00	e0.20	e0.90	1.5	4.2	4.9	2.0	0.02	0.36
6	0.00	0.00	0.00	0.00	e0.10	e0.90	1.6	4.0	4.8	1.7	0.31	0.48
7	0.00	0.00	0.00	0.00	e0.10	e1.0	1.6	3.8	4.8	1.3	1.2	0.26
8	0.00	0.00	0.00	0.00	e0.10	e1.0	1.4	4.0	5.5	0.99	1.0	0.04
9	0.00	0.00	0.00	0.00	e0.10	e0.90	1.8	4.3	6.0	1.2	0.88	0.07
10	0.00	0.00	0.00	0.00	e0.10	e1.1	2.2	4.3	5.8	1.7	0.12	0.14
11	0.00	0.00	0.00	0.00	e0.20	e1.3	2.3	4.2	5.4	1.7	0.08	0.00
12	0.00	0.00	0.00	0.00	e0.30	e1.5	2.3	4.3	5.4	1.9	0.29	0.00
13	0.00	0.00	0.00	0.00	e0.40	1.4	2.3	4.4	5.2	0.69	0.13	0.00
14	0.00	0.00	0.00	0.00	e0.30	1.7	2.3	4.1	5.1	0.67	0.46	0.00
15	0.00	0.00	0.00	0.00	e0.30	1.9	2.3	3.9	5.1	0.43	0.20	0.00
16	0.00	0.00	0.00	0.00	e0.40	2.0	2.1	3.7	5.1	0.34	0.23	0.00
17	0.00	0.00	0.00	0.00	e0.50	2.1	1.8	3.6	5.2	0.18	1.2	0.00
18	0.00	0.00	0.00	0.00	e0.60	2.0	1.9	3.5	5.4	0.52	0.90	0.00
19	0.00	0.00	0.00	0.00	e0.70	1.7	1.7	4.6	5.9	0.19	0.37	0.00
20	0.00	0.00	0.00	0.00	e0.80	1.5	1.6	4.8	6.9	0.55	0.47	0.00
21	0.00	0.00	0.00	0.00	e0.80	1.5	1.6	4.8	6.8	0.93	0.28	0.00
22	0.00	0.00	0.00	0.00	e0.90	1.7	1.7	4.7	3.6	0.40	0.22	0.00
23	0.00	0.00	0.00	0.00	e0.90	1.8	1.9	4.9	12	0.21	0.00	0.00
24	0.00	0.00	0.00	0.00	e0.80	1.5	2.3	40	14	0.31	0.00	0.00
25	0.00	0.00	0.00	0.00	e0.70	1.4	2.7	21	12	0.14	0.06	0.00
26	0.00	0.00	0.00	0.00	e0.70	1.5	3.0	14	11	0.00	0.74	0.00
27	0.00	0.00	0.00	0.04	e0.80	1.5	3.0	11	11	0.11	1.2	0.00
28	0.00	0.00	0.00	0.06	e0.90	1.2	3.0	9.4	6.7	0.12	0.71	0.00
29	0.00	0.00	0.00	0.09	---	1.1	3.6	8.5	3.5	0.68	0.49	0.00
30	0.00	0.00	0.00	0.14	---	1.2	4.1	7.8	2.4	0.70	0.36	0.00
31	0.00	---	0.00	0.30	---	1.6	---	6.8	---	0.69	0.04	---
TOTAL	0.00	0.00	0.00	0.63	13.46	43.10	65.1	215.0	192.7	37.15	12.69	3.45
MEAN	0.000	0.000	0.000	0.020	0.48	1.39	2.17	6.94	6.42	1.20	0.41	0.12
MAX	0.00	0.00	0.00	0.30	0.90	2.1	4.1	40	14	5.4	1.2	0.94
MIN	0.00	0.00	0.00	0.00	0.10	0.90	1.4	3.5	2.4	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	1.2	27	85	129	426	382	74	25	6.8

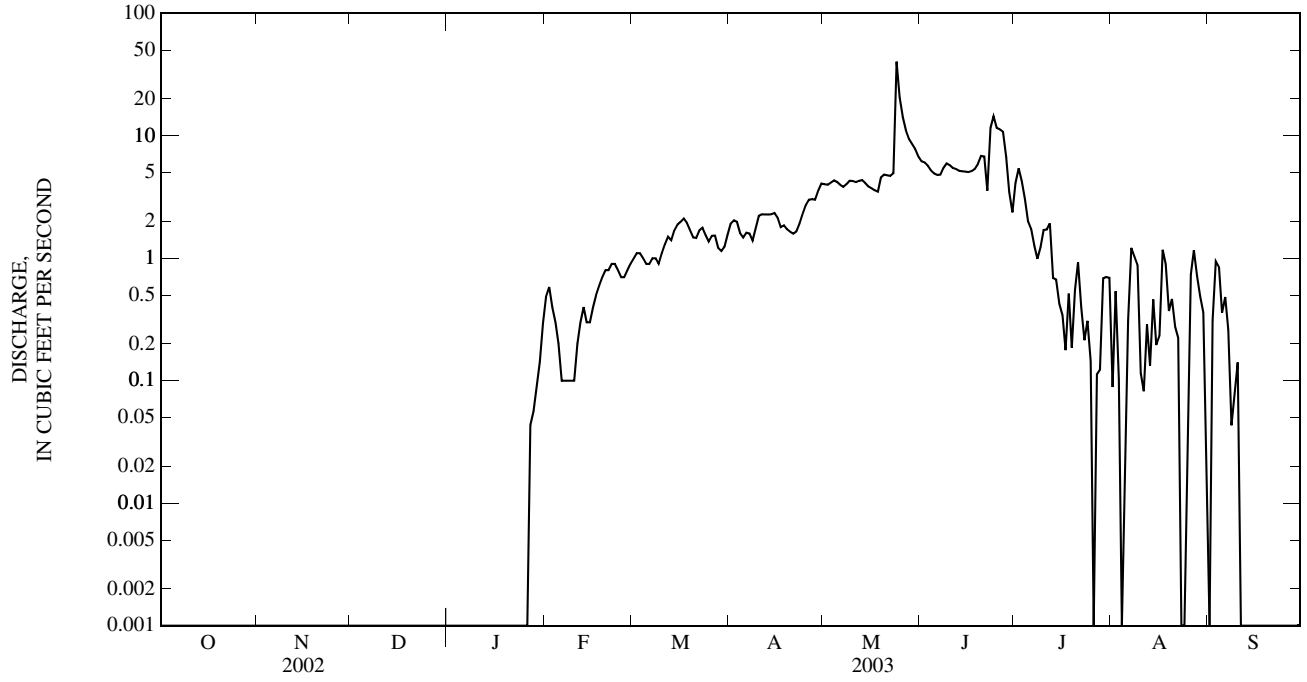
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2003, BY WATER YEAR (WY)

MEAN	2.68	4.36	4.22	3.65	4.35	5.80	7.71	9.21	9.56	4.38	3.09	1.30
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	0.000	0.000	0.000	0.020	0.48	1.39	2.17	3.56	3.17	0.080	0.000	0.001
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2001)	(2002)	(2002)

06770240 FORT KEARNEY SLOUGH NEAR NEWARK, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1996 - 2003	
ANNUAL TOTAL	564.72		583.28			
ANNUAL MEAN	1.55		1.60		4.54	
HIGHEST ANNUAL MEAN					8.82	1998
LOWEST ANNUAL MEAN					1.60	2003
HIGHEST DAILY MEAN	5.2	Jul 7	40	May 24	80	Jun 16, 1996
LOWEST DAILY MEAN	0.00	Jul 29	0.00	Oct 1	0.00	Mar 26, 1996
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 29	0.00	Oct 1	0.00	Sep 12, 2000
MAXIMUM PEAK FLOW			60	May 24	140	Jun 16, 1996
MAXIMUM PEAK STAGE			5.90	May 24	7.70	Jun 20, 2000
ANNUAL RUNOFF (AC-FT)	1,120		1,160		3,290	
10 PERCENT EXCEEDS	3.4		4.8		9.6	
50 PERCENT EXCEEDS	1.5		0.31		3.3	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated.



06770253 PLATTE RIVER NEAR NEWARK, NE

LOCATION.--Lat 40° 40'06", long 98° 54'53", in NE 1/4 NE 1/4 sec.17, T.8 N., R.14 W., Buffalo County, Hydrologic Unit 10200101, on left bank, at Platte River Whooping Crane Maintenance Trust, 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 May 1 to July 5, which are poor. Channel dry July 6 to September 30.

EXTREMES FOR CURRENT YEAR.--Maximum instantaneous gage height, 4.61 ft Feb. 4; minimum instantaneous gage height, 1.40 ft (point of zero flow) on many days.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.29	2.11	2.48	2.72	3.05	3.11	2.48	2.67	1.91	1.52	---	---
2	2.26	2.11	2.51	2.56	2.88	3.03	2.31	2.67	1.92	1.48	---	---
3	2.41	2.11	2.49	2.56	3.13	2.78	2.27	2.78	1.89	1.46	---	---
4	2.48	2.12	2.53	2.62	4.16	2.69	2.27	2.73	1.88	1.44	---	---
5	2.56	2.12	2.52	2.53	3.95	2.49	2.24	2.64	1.87	1.41	---	---
6	2.39	2.11	2.62	2.47	3.65	2.88	2.35	2.56	1.84	---	---	---
7	2.17	2.12	2.55	2.54	3.17	2.86	2.53	2.49	1.88	---	---	---
8	2.11	2.14	2.24	2.50	3.17	2.55	2.44	2.55	1.83	---	---	---
9	2.28	2.16	2.23	2.50	3.37	2.36	2.41	2.44	1.79	---	---	---
10	2.54	2.15	2.63	2.29	3.28	2.42	2.40	2.46	1.75	---	---	---
11	2.71	2.14	2.49	2.56	3.37	2.70	2.38	2.44	1.72	---	---	---
12	2.84	2.13	2.61	2.37	3.43	2.47	2.39	2.44	1.76	---	---	---
13	2.70	2.14	2.56	2.49	3.43	2.45	2.37	2.40	1.70	---	---	---
14	2.72	2.15	2.68	2.61	2.98	2.46	2.42	2.32	1.68	---	---	---
15	2.68	2.68	2.53	2.78	2.95	2.46	2.55	2.30	1.64	---	---	---
16	2.03	2.82	2.51	3.19	3.77	2.42	2.62	2.24	1.61	---	---	---
17	1.86	2.73	2.60	3.27	3.47	2.57	2.70	2.14	1.59	---	---	---
18	1.78	2.74	2.44	3.36	2.61	2.33	2.72	2.12	1.60	---	---	---
19	1.73	2.53	2.52	3.35	2.40	2.29	2.70	2.27	1.60	---	---	---
20	1.69	2.62	2.53	3.30	2.43	2.25	2.67	2.28	1.57	---	---	---
21	1.66	2.30	2.47	3.26	2.37	2.24	2.54	2.12	1.54	---	---	---
22	1.68	2.17	2.53	2.99	2.41	2.27	2.54	2.05	1.50	---	---	---
23	1.68	2.49	2.48	2.95	2.56	2.58	2.67	2.08	1.71	---	---	---
24	1.69	2.41	2.52	2.85	2.65	2.55	2.67	2.37	1.70	---	---	---
25	1.67	2.16	2.65	3.19	2.76	2.47	2.67	2.54	1.76	---	---	---
26	1.82	2.53	2.29	3.24	3.26	2.40	2.64	2.30	1.87	---	---	---
27	1.98	2.74	2.21	3.22	3.49	2.43	2.64	2.17	2.18	---	---	---
28	2.06	2.56	2.36	3.53	3.43	2.46	2.61	2.06	1.93	---	---	---
29	2.09	2.36	2.81	3.36	---	2.45	2.74	2.00	1.69	---	---	---
30	2.12	2.31	2.86	3.47	---	2.44	2.67	1.93	1.58	---	---	---
31	2.12	---	2.61	3.30	---	2.52	---	1.90	---	---	---	---
MAX	2.84	2.82	2.86	3.53	4.16	3.11	2.74	2.78	2.18	---	---	---
MIN	1.66	2.11	2.21	2.29	2.37	2.24	2.24	1.90	1.50	---	---	---

06770375 PLATTE RIVER NEAR PROSSER, NE

LOCATION.--Lat 40° 43'45", long 98° 38'07", in SW 1/4 SE 1/4 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. Channel dry September 5-7.

EXTREMES FOR CURRENT YEAR.--Maximum instantaneous gage height, 4.13 ft Mar. 9; minimum instantaneous gage height, 1.00 ft (point of zero flow) Sept. 5-7.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.31	2.02	2.23	2.38	2.96	3.02	2.31	2.60	2.08	2.01	1.58	1.41
2	2.28	1.98	2.29	2.39	2.95	2.78	2.20	2.42	2.14	1.96	1.59	1.37
3	2.27	2.01	2.29	2.34	2.63	2.76	2.17	2.64	2.15	1.90	1.61	1.29
4	2.34	2.00	2.31	2.41	2.62	2.82	2.15	2.56	2.17	1.85	1.57	1.15
5	2.36	2.02	2.27	2.39	2.25	3.08	2.10	2.58	2.20	1.80	1.50	---
6	2.37	2.00	2.28	2.29	2.13	3.10	1.77	2.47	2.16	1.84	1.41	---
7	2.25	1.96	2.36	2.26	2.22	3.26	2.19	2.35	2.16	1.83	1.39	---
8	2.23	1.93	2.19	2.28	2.54	3.25	2.20	2.42	2.14	1.80	1.40	1.46
9	2.27	1.93	2.01	2.28	2.94	3.84	2.17	2.36	2.09	1.77	1.45	1.34
10	2.29	1.94	2.18	2.06	2.93	3.64	2.16	2.41	2.10	1.75	1.55	1.42
11	2.39	1.92	2.28	1.90	2.87	3.32	2.16	2.36	2.06	1.72	1.48	1.87
12	2.53	1.91	2.26	2.05	2.93	2.28	2.16	2.31	2.08	1.70	1.54	1.85
13	2.54	1.89	2.34	2.03	2.95	2.20	2.11	2.31	2.08	1.68	1.59	1.82
14	2.50	1.87	2.34	2.36	3.08	2.19	2.16	2.21	2.07	1.68	1.59	1.82
15	2.57	1.95	2.38	2.83	2.38	2.18	2.20	2.24	2.04	1.70	1.57	1.67
16	2.36	2.33	2.35	2.44	2.29	2.16	2.35	2.26	2.00	1.70	1.55	1.64
17	2.10	2.34	2.36	2.55	2.62	2.29	2.52	2.17	2.00	1.67	1.54	1.62
18	2.02	2.35	2.33	2.70	2.68	2.31	2.48	2.14	2.05	1.63	1.55	1.58
19	1.96	2.29	2.31	2.79	2.26	2.25	2.51	2.29	2.04	1.61	1.56	1.57
20	1.89	2.32	2.35	2.76	2.15	2.20	2.50	2.26	1.99	1.62	1.47	1.55
21	1.86	2.29	2.23	2.74	2.21	2.12	2.37	2.20	1.96	1.64	1.47	1.59
22	1.88	2.11	2.32	2.76	2.15	2.12	2.34	2.13	1.97	1.60	1.51	1.68
23	1.91	2.19	2.35	2.50	1.69	2.20	2.47	2.16	2.13	1.58	1.52	1.73
24	1.90	2.28	2.32	2.62	2.20	2.34	2.50	2.35	2.09	1.56	1.51	1.72
25	1.90	2.23	2.33	2.52	2.12	2.32	2.52	2.58	2.15	1.53	1.47	1.63
26	1.88	1.98	2.28	2.71	2.49	2.21	2.49	2.48	2.18	1.57	1.44	1.53
27	1.91	2.16	2.10	2.65	2.89	2.30	2.48	2.35	2.35	1.58	1.40	1.46
28	1.98	2.19	2.13	2.74	3.09	2.28	2.39	2.32	2.35	1.58	1.40	1.32
29	1.98	2.20	2.34	3.02	---	2.25	2.61	2.23	2.19	1.57	1.37	1.19
30	2.04	2.16	2.45	2.86	---	2.25	2.52	2.20	2.08	1.59	1.35	1.24
31	2.01	---	2.40	2.97	---	2.32	---	2.08	---	1.58	1.41	---
MAX	2.57	2.35	2.45	3.02	3.09	3.84	2.61	2.64	2.35	2.01	1.61	---
MIN	1.86	1.87	2.01	1.90	1.69	2.12	1.77	2.08	1.96	1.53	1.35	---

06770470 PLATTE RIVER NEAR DONIPHAN, NE

LOCATION.--Lat 40° 47'18", long 98° 26'17", in SE 1/4 SE 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 those for July 1 to September 30, which are fair. Channel was dry July 13 to September 11, 16-22, 27-30.

EXTREMES FOR CURRENT YEAR.--Maximum instantaneous gage height, 3.33 ft Feb. 15; minimum instantaneous gage height, 1.60 ft (point of zero flow) on many days.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.14	2.09	2.21	2.66	2.84	2.91	2.22	2.49	2.01	1.98	---	---
2	2.21	2.02	2.25	2.59	2.90	2.79	2.17	2.43	2.01	1.91	---	---
3	2.23	2.00	2.30	2.45	3.02	2.69	2.10	2.48	1.99	1.86	---	---
4	2.32	1.99	2.33	2.38	2.98	2.67	2.06	2.46	2.00	1.80	---	---
5	2.33	2.00	2.23	2.41	2.74	2.67	2.04	2.50	2.01	1.75	---	---
6	2.37	1.98	2.51	2.35	2.63	2.49	2.19	2.47	2.02	1.72	---	---
7	2.34	1.97	2.63	2.36	2.52	2.57	2.13	2.41	2.05	1.71	---	---
8	2.30	1.94	2.47	2.30	2.69	2.63	2.23	2.42	2.04	1.71	---	---
9	2.29	1.93	2.35	2.31	2.87	2.56	2.24	2.39	1.98	1.67	---	---
10	2.32	1.93	2.37	2.51	3.11	2.36	2.20	2.37	1.92	1.64	---	---
11	2.37	1.93	2.48	2.40	3.07	2.32	2.19	2.37	1.91	1.63	---	---
12	2.43	1.93	2.30	2.42	3.01	2.42	2.16	2.31	1.92	1.62	---	1.75
13	2.51	1.91	2.34	2.65	2.99	2.37	2.16	2.28	1.88	---	---	1.71
14	2.50	1.91	2.32	2.62	3.00	2.31	2.14	2.24	1.86	---	---	1.74
15	2.54	1.90	2.37	2.42	3.01	2.29	2.16	2.20	1.84	---	---	1.68
16	2.56	2.19	2.33	2.48	2.96	2.29	2.24	2.20	1.82	---	---	---
17	2.37	2.38	2.33	2.32	2.95	2.28	2.36	2.15	1.84	---	---	---
18	2.23	2.36	2.36	2.47	2.96	2.33	2.44	2.09	1.92	---	---	---
19	2.15	2.38	2.34	2.58	2.79	2.27	2.45	2.19	1.84	---	---	---
20	2.08	2.34	2.35	2.65	2.49	2.23	2.42	2.20	1.83	---	---	---
21	2.03	2.40	2.30	2.66	2.38	2.19	2.39	2.21	1.82	---	---	---
22	2.02	2.26	2.40	2.69	2.33	2.16	2.33	2.14	1.78	---	---	---
23	2.04	2.17	2.52	2.59	2.53	2.14	2.38	2.11	1.84	---	---	1.78
24	2.01	2.30	2.56	2.61	2.51	2.24	2.49	2.23	1.90	---	---	1.74
25	2.00	2.27	2.57	2.60	2.55	2.26	2.50	2.39	1.92	---	---	1.73
26	1.96	2.21	2.53	2.68	2.53	2.18	2.49	2.41	1.99	---	---	1.62
27	1.99	2.32	2.37	2.70	2.64	2.19	2.44	2.20	2.13	---	---	---
28	2.05	2.31	2.37	2.72	2.91	2.18	2.41	2.16	2.30	---	---	---
29	2.05	2.16	2.46	2.80	---	2.23	2.51	2.11	2.18	---	---	---
30	2.11	2.20	2.75	2.80	---	2.20	2.53	2.08	2.06	---	---	---
31	2.06	---	2.81	2.84	---	2.19	---	2.03	---	---	---	---
MAX	2.56	2.40	2.81	2.84	3.11	2.91	2.53	2.50	2.30	---	---	---
MIN	1.96	1.90	2.21	2.30	2.33	2.14	2.04	2.03	1.78	---	---	---

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06770500 PLATTE RIVER NEAR GRAND ISLAND, NE

LOCATION.--Lat 40° 52'28", long 98° 16'54", in SW 1/4 SW 1/4 sec.31, T.11 N., R.8 W., Merrick County, Hydrologic Unit 10200101, southeast of Grand Island, and at mile 70.0.

DRAINAGE AREA.--57,650 mi^2, of which about 52,940 mi^2 contributes directly to surface runoff.

PERIOD OF RECORD.--October 1933 to current year.

REVISED RECORDS.--WSP 956: 1935. WSP 1390: 1942. WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,829.90 ft above sea level. (Nebraska Department of Highway's benchmark). Prior to Oct. 23, 1933, nonrecording gage at bridge 68 ft downstream, and Oct. 23, to Aug. 19, 1980, water-stage recorder at site 90 ft downstream, all at same datum. Datum lowered 2.00 ft on Aug. 22, 2002. Data collection platform at station.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs (since storage in Lake McConaughy in 1942), power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas.

EXTREMES OUTSIDE OF REGULATED PERIODS.--Maximum discharge, 30,000 ft^3/s June 6, 1935, gage height 5.99 ft, datum then in use, from rating curve extended above 18,000 ft^3/s; no flow at times during 1934-41.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	279	222	291	e960	e800	e880	556	1,110	324	497	0.00	0.00
2	405	218	419	e1,000	e740	e840	602	1,180	377	408	0.00	0.00
3	485	194	507	e1,100	e660	e840	416	1,050	351	321	0.00	0.00
4	637	184	549	e1,000	e600	e960	310	1,430	367	272	0.00	0.00
5	645	187	466	e940	e500	e1,100	282	1,330	377	231	0.00	0.00
6	660	177	539	e800	e470	e1,100	208	1,290	400	183	0.00	0.00
7	669	173	700	e840	e470	e1,200	407	1,150	465	158	0.00	0.00
8	541	166	790	e720	e450	e1,200	566	1,210	479	148	0.00	0.00
9	430	161	431	e600	e600	e1,000	509	1,120	365	140	0.00	0.00
10	458	151	313	e540	e800	e900	490	981	337	114	0.00	0.00
11	563	162	557	e540	e860	e880	475	1,020	333	87	0.00	0.00
12	729	172	540	e580	e900	e800	451	1,010	452	68	0.00	0.00
13	944	177	523	e600	e920	620	435	990	331	57	0.00	0.00
14	1,020	178	564	e680	e800	584	417	930	266	45	0.00	0.00
15	988	174	630	e600	e740	605	419	738	224	31	0.00	0.00
16	1,110	311	623	e500	e800	603	507	680	182	24	0.00	0.00
17	625	731	591	e460	e860	554	585	683	176	19	0.00	0.00
18	293	723	628	e500	e850	785	1,020	599	246	17	0.00	0.00
19	177	720	531	e520	e800	595	1,000	756	263	15	0.00	0.00
20	119	632	494	e540	e600	504	1,030	609	227	14	0.00	0.00
21	71	673	512	e620	e520	441	993	602	226	15	0.00	0.00
22	61	638	e430	e740	e440	394	787	522	209	11	0.00	0.00
23	76	415	e370	e800	e430	360	872	461	238	8.0	0.00	0.00
24	97	473	e370	e760	e520	478	1,200	599	266	3.2	0.00	0.00
25	105	485	e500	e760	e660	608	1,100	847	361	0.00	0.00	0.00
26	91	213	e540	e840	e720	625	1,070	1,240	528	0.00	0.00	0.00
27	126	112	e500	e880	e800	472	1,040	1,060	670	0.00	0.00	0.00
28	193	370	e500	e840	e860	457	1,030	745	1,040	0.00	0.00	0.00
29	199	348	e600	e820	---	454	1,250	541	1,140	0.00	0.00	0.00
30	277	287	e800	e940	---	472	1,370	410	701	0.00	0.00	0.00
31	227	---	e1,000	e880	---	450	---	307	---	0.00	0.00	---
TOTAL	13,300	9,827	16,808	22,900	19,170	21,761	21,397	27,200	11,921	2,886.20	0.00	0.00
MEAN	429	328	542	739	685	702	713	877	397	93.1	0.000	0.000
MAX	1,110	731	1,000	1,100	920	1,200	1,370	1,430	1,140	497	0.00	0.00
MIN	61	112	291	460	430	360	208	307	176	0.00	0.00	0.00
AC-FT	26,380	19,490	33,340	45,420	38,020	43,160	42,440	53,950	23,650	5,720	0.00	0.00

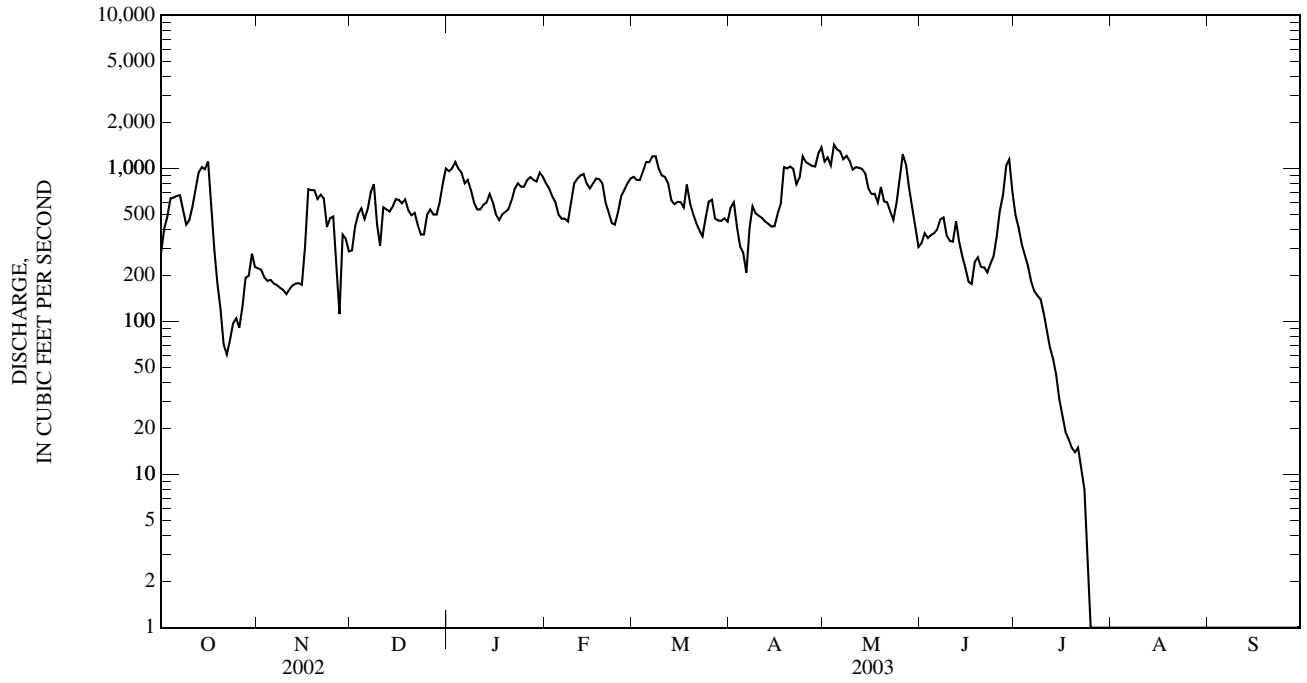
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2003, BY WATER YEAR (WY)

MEAN	1,292	1,376	1,405	1,514	2,007	2,363	2,045	2,243	2,467	1,164	608	957
MAX	6,970	5,250	4,607	4,955	7,065	7,051	9,906	12,190	17,000	10,810	5,865	6,575
(WY)	(1974)	(1985)	(1985)	(1984)	(1984)	(1984)	(1984)	(1984)	(1983)	(1983)	(1983)	(1983)
MIN	0.000	0.000	0.000	37.0	418	702	544	148	20.0	0.000	0.000	0.000
(WY)	(1942)	(1942)	(1942)	(1942)	(1942)	(2003)	(1967)	(1955)	(1956)	(1953)	(1953)	(1953)

06770500 PLATTE RIVER NEAR GRAND ISLAND, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1942 - 2003a	
ANNUAL TOTAL	201,798.39		167,170.20			
ANNUAL MEAN	553		458		1,616	
HIGHEST ANNUAL MEAN					5,380	1983
LOWEST ANNUAL MEAN					414	1956
HIGHEST DAILY MEAN	2,080	Mar 19	1,430	May 4	23,500	Jun 30, 1983
LOWEST DAILY MEAN	0.00	Aug 5	0.00	Jul 25	*0.00	Oct 1, 1941
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 5	0.00	Jul 25	0.00	Oct 1, 1941
MAXIMUM PEAK FLOW			**1,580	May 5	***23,900	Jun 30, 1983
MAXIMUM PEAK STAGE			****4.71	Jan 30	*****6.16	Mar 27, 1960
ANNUAL RUNOFF (AC-FT)	400,300		331,600		1,171,000	
10 PERCENT EXCEEDS	1,400		996		3,200	
50 PERCENT EXCEEDS	426		461		1,160	
90 PERCENT EXCEEDS	22		0.00		136	

e Estimated.
a Since beginning of storage in Lake McConaughy.
* No flow at times in many years.
** Stage 4.10 ft.
*** Stage 5.97 ft, datum then in use.
**** Backwater from ice.
*****Backwater from ice, datum then in use.



06772775 WARM SLOUGH NEAR CENTRAL CITY, NE

LOCATION.--Lat 41° 05'27", long 98° 04'39", in SW 1/4 SW 1/4 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 good except for periods of flow, which are poor.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

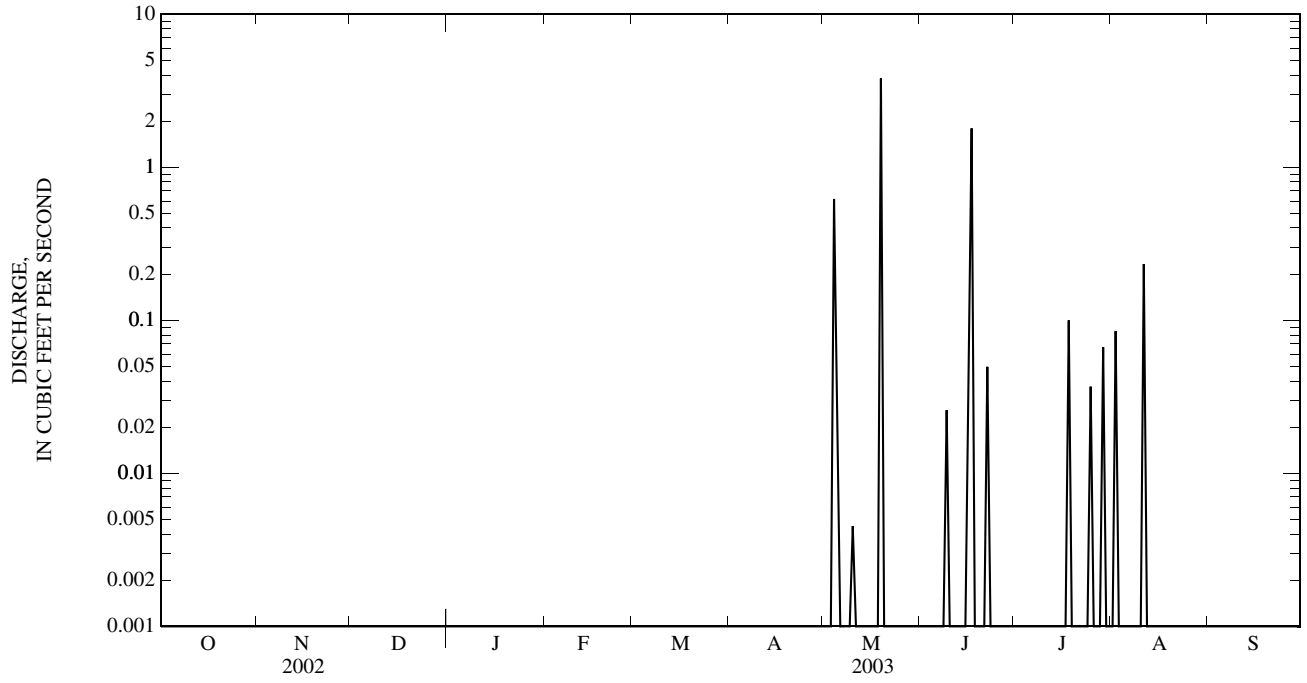
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	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	0.03	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	0.23	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	0.03	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.8	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	0.10	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.8	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	0.05	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	0.04	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	0.00	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	0.07	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	4.44	1.91	0.21	0.31	0.00
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.14	0.064	0.007	0.010	0.000
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.8	1.8	0.10	0.23	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	8.8	3.8	0.4	0.6	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2003, BY WATER YEAR (WY)

MEAN	2.79	4.95	3.35	2.59	3.95	6.35	16.7	19.3	19.0	1.96	0.42	0.28
MAX	19.4	23.1	14.4	9.50	14.0	23.2	66.7	39.1	68.2	10.8	2.73	2.26
(WY)	(1998)	(1998)	(1998)	(1998)	(1998)	(1998)	(1998)	(2001)	(1998)	(1999)	(1997)	(1997)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.060	0.000	0.000	0.000	0.000
(WY)	(1997)	(2000)	(2001)	(2002)	(2001)	(2001)	(1996)	(2002)	(2002)	(2002)	(1996)	(1996)

06772775 WARM SLOUGH NEAR CENTRAL CITY, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1996 - 2003	
ANNUAL TOTAL	1.85		6.87			
ANNUAL MEAN	0.005		0.019		6.78	
HIGHEST ANNUAL MEAN					23.1	1998
LOWEST ANNUAL MEAN					0.005	2002
HIGHEST DAILY MEAN	1.8	May 11	3.8	May 19	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 1	0.00	Oct 1	0.00	Apr 1, 1996
MAXIMUM PEAK FLOW			17	May 19	443	Apr 8, 1998
MAXIMUM PEAK STAGE			3.71	May 19	8.04	Apr 8, 1998
ANNUAL RUNOFF (AC-FT)	3.7		14		4,910	
10 PERCENT EXCEEDS	0.00		0.00		15	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	



06772898 SILVER CREEK, AT MILE 4, NEAR SILVER CREEK, NE

LOCATION.--Lat 41° 17'51", long 97° 42'50", in NW 1/4 SW 1/4 sec.6, T.15 N., R.3 W., Merrick County, Hydrologic Unit 10200103, on downstream side of county road bridge, 3 mi southwest of Silver Creek, and at mile 4.0.

DRAINAGE AREA.--160 mi^2, approximately.

PERIOD OF RECORD.--April 1996 to September 2001. October 2002 to September 2003.

REVISED RECORDS.--WDR NE-99-1: 1998(M)

GAGE.--Water-stage recorder. Elevation of gage is 1,556 ft above sea level.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
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	e16	4.0	0.68	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e17	4.9	0.38	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e19	4.3	0.26	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33	3.8	e0.23	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40	3.7	e0.33	e0.08	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e18	3.6	e0.72	e0.03	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e11	4.3	e0.52	e0.02	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e8.7	4.6	e0.43	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e8.1	4.4	e0.67	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e8.1	6.6	e0.54	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e5.3	5.5	e0.43	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e5.9	4.8	e0.41	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e7.6	4.2	e0.35	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e8.7	3.7	e0.35	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.1	3.5	e0.28	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.9	3.3	e0.28	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.5	3.1	e0.28	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.4	3.0	e0.22	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	42	2.8	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19	2.5	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12	2.4	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.9	2.5	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.1	2.7	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.2	2.2	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.3	1.8	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.6	1.6	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.0	1.5	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.4	1.5	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	e7.5	5.0	1.3	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	e19	4.8	0.96	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	4.1	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	26.50	360.7	99.06	7.36	0.13	0.00
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.88	11.6	3.30	0.24	0.004	0.000
MAX	0.00	0.00	0.00	0.00	0.00	0.00	19	42	6.6	0.72	0.08	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.4	0.96	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	53	715	196	15	0.3	0.00

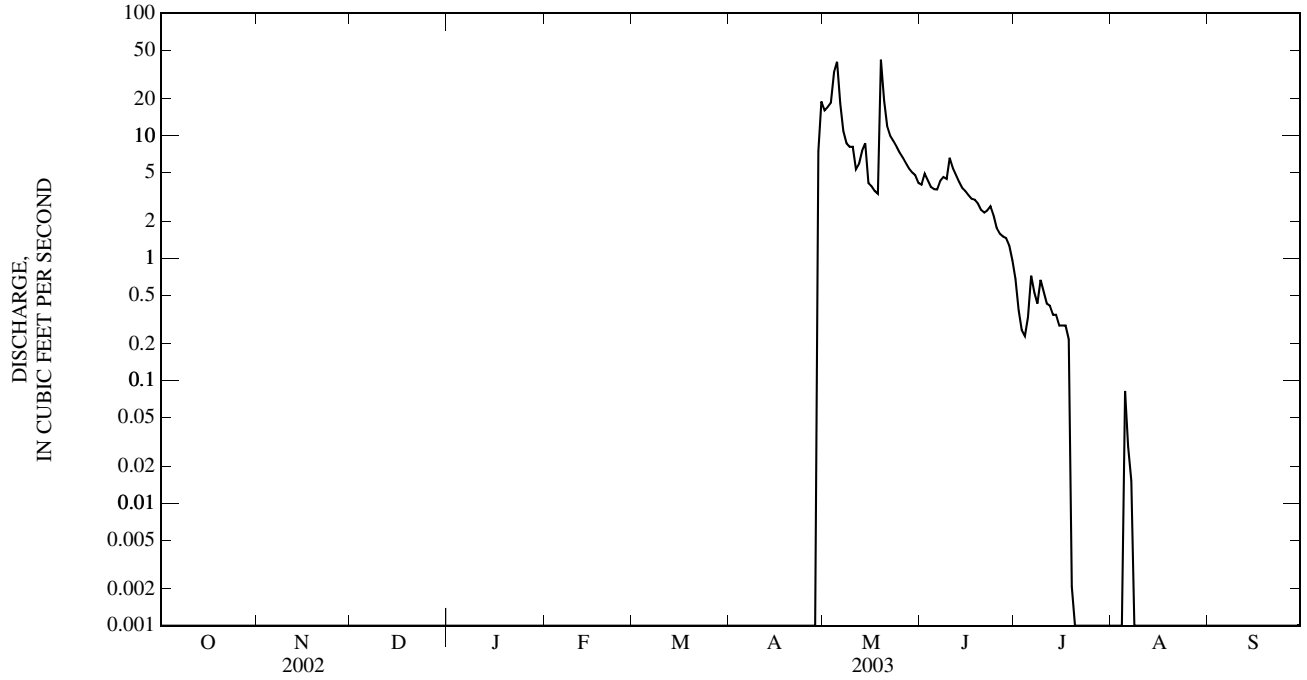
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2003, BY WATER YEAR (WY)

MEAN	2.75	10.9	6.88	6.14	9.22	17.8	46.9	38.0	74.6	11.5	3.81	1.55
MAX	6.44	31.0	16.6	14.6	21.4	68.1	197	113	307	52.6	16.2	7.15
(WY)	(1997)	(1997)	(1997)	(1999)	(1999)	(1998)	(1998)	(1999)	(1999)	(1999)	(1996)	(1996)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.88	4.70	1.52	0.042	0.000	0.000
(WY)	(2001)	(2001)	(2001)	(2001)	(2001)	(2003)	(2003)	(2000)	(2000)	(2000)	(2000)	(2000)

06772898 SILVER CREEK, AT MILE 4, NEAR SILVER CREEK, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1996 - 2003	
ANNUAL TOTAL	473.03		493.75			
ANNUAL MEAN	1.30		1.35		18.7	
HIGHEST ANNUAL MEAN					55.5	1999
LOWEST ANNUAL MEAN					1.30	2002
HIGHEST DAILY MEAN	28	May 27	42	May 19	2,100	Jun 1, 1999
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Aug 27, 1997
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 7	0.00	Oct 1	0.00	Aug 27, 1997
MAXIMUM PEAK FLOW			166	May 4	3,070	Jun 1, 1999
MAXIMUM PEAK STAGE			5.81	May 4	9.11	Jun 1, 1999
ANNUAL RUNOFF (AC-FT)	938		979		13,570	
10 PERCENT EXCEEDS	5.0		4.2		35	
50 PERCENT EXCEEDS	0.00		0.00		4.1	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated.



06773500 PRAIRIE CREEK NEAR SILVER CREEK, NE

LOCATION (REVISED).--Lat 41° 19'43", long 97° 40'30", in NW 1/4 SW 1/4 sec.28, T.16 N., R.3 W., Merrick County, Hydrologic Unit 10200103, on the downstream side of bridge on Nebraska Highway 34, 2 mi northwest of Silver Creek.

DRAINAGE AREA.--492 mi^2.

PERIOD OF RECORD.--August 1949 to September 1953. October 1996 to September 2001. October 2002 to September 2003.

REVISED RECORDS.--WDR NE-97-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 1,550 ft above sea level from topographic map. August 1949 to September 1953 at datum 0.98 ft lower.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	e0.31	e0.04	e0.12	e0.53	e0.33	e35	4.4	3.7	0.22	0.00
2	0.00	0.00	e0.39	e0.04	e0.12	e0.53	e0.33	e34	5.5	3.2	0.18	0.00
3	0.00	0.00	e0.39	e0.04	e0.10	e0.53	e0.33	e35	6.0	2.8	0.18	0.00
4	0.00	0.00	e0.39	e0.04	e0.25	e0.82	e0.33	95	5.4	2.3	0.18	0.00
5	0.00	0.00	e0.34	e0.04	e0.25	e1.1	e0.33	351	5.2	1.9	0.15	0.00
6	0.00	0.00	e0.34	e0.04	e0.25	e1.1	e0.82	128	5.3	2.4	0.08	0.00
7	0.00	0.00	e0.34	e0.04	e0.25	e1.1	e0.53	67	7.0	1.5	0.09	0.00
8	0.00	0.00	e0.34	e0.04	e0.25	e1.1	e0.40	64	8.3	1.4	0.13	0.00
9	0.00	0.00	e0.39	e0.04	e0.25	e0.82	e0.40	64	7.4	1.6	0.02	0.00
10	0.00	5.1	e0.39	e0.04	e0.25	e1.1	e0.40	34	8.8	1.2	0.26	0.00
11	0.00	0.79	e0.54	e0.04	e0.25	e1.5	e0.58	29	9.3	1.1	0.12	1.9
12	0.00	0.00	e0.54	e0.04	e0.25	e1.5	e0.58	22	8.9	0.92	0.00	1.0
13	0.00	0.00	e0.49	e0.04	e0.25	e2.0	e0.58	20	12	0.89	0.02	0.21
14	0.00	0.00	e0.54	e0.09	e0.25	e2.0	e0.58	23	12	0.72	0.06	0.01
15	0.00	0.00	e0.49	e0.09	e0.27	e1.9	e0.86	15	7.7	0.63	0.00	0.00
16	0.00	0.00	e0.54	0.00	e0.27	e1.4	e0.95	13	7.0	0.54	0.00	0.00
17	0.00	0.19	e0.60	0.00	e0.27	e1.4	e1.1	11	8.7	0.50	0.00	0.00
18	0.00	0.40	e0.60	0.00	e0.27	e1.2	e1.6	9.2	8.0	0.50	0.06	0.96
19	0.00	0.17	e0.60	0.00	e0.27	e1.1	e1.6	34	6.6	0.52	0.21	1.1
20	0.00	0.46	e0.60	0.00	e0.27	e0.82	e1.5	17	6.1	0.54	0.63	0.37
21	0.00	0.43	e0.54	0.00	e0.27	e0.82	e1.5	15	6.1	0.54	0.17	0.17
22	0.00	0.19	e0.49	0.00	e0.27	e0.82	e1.5	11	6.4	0.44	0.00	0.15
23	0.00	0.68	0.07	0.00	e0.27	e0.53	e1.5	13	8.8	0.30	0.00	0.07
24	0.00	0.44	0.00	0.00	e0.47	e0.53	e1.5	13	11	0.28	0.00	0.01
25	0.00	0.00	0.00	0.00	e0.47	e0.53	e1.5	12	7.8	0.34	0.00	0.00
26	0.00	0.00	0.00	0.00	e0.53	e0.53	e1.5	10	6.0	0.33	0.00	0.00
27	0.00	0.00	0.00	0.00	e0.53	e0.53	e1.5	8.8	5.3	0.28	0.00	0.00
28	0.00	0.26	0.00	0.00	e0.53	e0.82	e1.5	7.7	5.0	0.29	0.00	0.00
29	0.00	e0.61	0.00	0.00	---	e0.82	e26	6.7	4.5	0.20	0.00	0.00
30	0.33	e0.76	e0.04	0.00	---	e0.84	e39	5.9	4.0	0.22	0.00	0.00
31	0.03	---	e0.04	e0.12	---	e0.84	---	4.7	---	0.40	0.00	---
TOTAL	0.36	10.48	10.34	0.82	8.05	31.16	91.13	1,208.0	214.5	32.48	2.76	5.95
MEAN	0.012	0.35	0.33	0.026	0.29	1.01	3.04	39.0	7.15	1.05	0.089	0.20
MAX	0.33	5.1	0.60	0.12	0.53	2.0	39	351	12	3.7	0.63	1.9
MIN	0.00	0.00	0.00	0.00	0.10	0.53	0.33	4.7	4.0	0.20	0.00	0.00
AC-FT	0.7	21	21	1.6	16	62	181	2,400	425	64	5.5	12

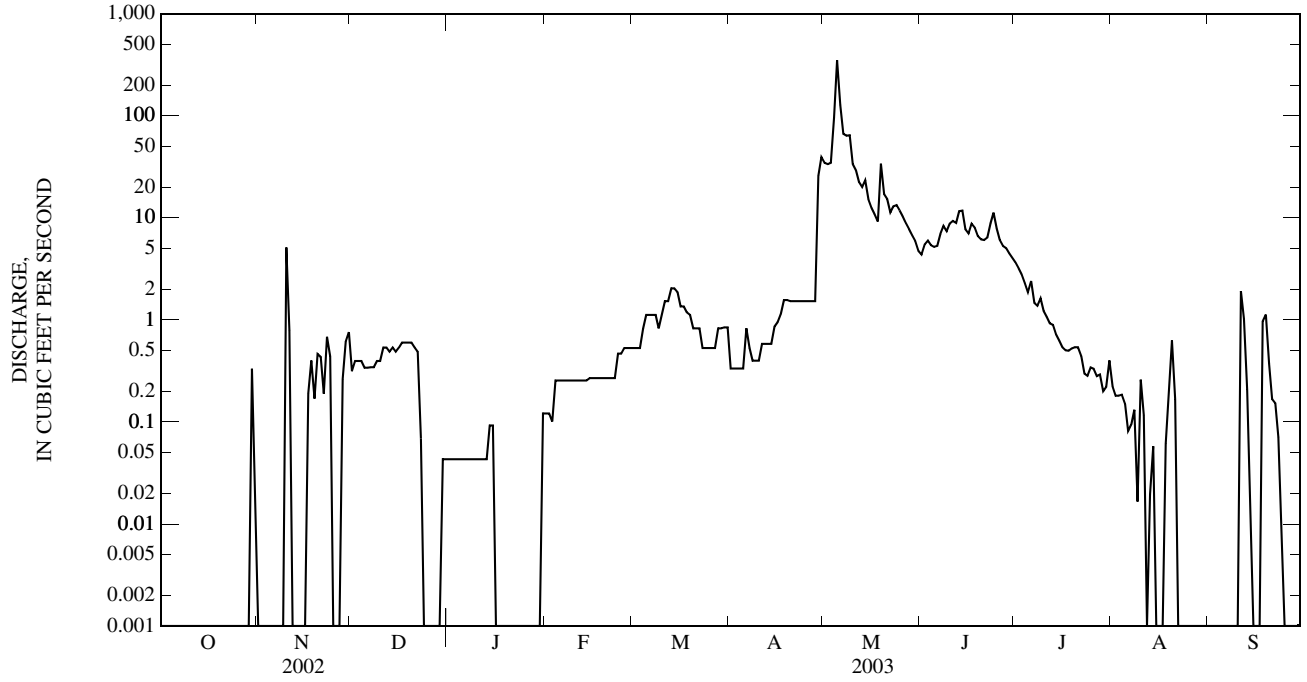
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2003, BY WATER YEAR (WY)

MEAN	17.5	28.1	14.7	14.7	17.8	38.4	101	93.3	138	44.9	24.6	19.2
MAX	90.0	80.8	36.9	29.7	38.6	133	435	182	415	146	55.3	86.8
(WY)	(1998)	(1998)	(1998)	(1998)	(1998)	(1998)	(1998)	(1999)	(1999)	(1999)	(1999)	(1997)
MIN	0.012	0.35	0.33	0.026	0.20	1.01	3.04	11.5	3.30	1.05	0.064	0.000
(WY)	(2003)	(2003)	(2003)	(2003)	(2001)	(2003)	(2003)	(2000)	(2000)	(2003)	(2000)	(2000)

06773500 PRAIRIE CREEK NEAR SILVER CREEK, NE—Continued

SUMMARY STATISTICS	FOR 2003 WATER YEAR		WATER YEARS 1996 - 2003	
ANNUAL TOTAL	16.03			
ANNUAL MEAN	4.43		46.4	
HIGHEST ANNUAL MEAN			113	1998
LOWEST ANNUAL MEAN			4.43	2003
HIGHEST DAILY MEAN	351	May 5	1,590	Apr 10, 1998
LOWEST DAILY MEAN	0.00	Oct 1	*0.00	Jul 27, 2000
ANNUAL SEVEN-DAY MINIMUM	0.00	Oct 1	0.00	Aug 7, 2000
MAXIMUM PEAK FLOW	525	May 5	1,640	Apr 10, 1998
MAXIMUM PEAK STAGE	6.43	May 5	9.29	Apr 10, 1998
ANNUAL RUNOFF (AC-FT)	3,210		33,620	
10 PERCENT EXCEEDS	8.7		97	
50 PERCENT EXCEEDS	0.33		17	
90 PERCENT EXCEEDS	0.00		0.00	

e Estimated.
* No flow for many days each year.



06774000 PLATTE RIVER NEAR DUNCAN, NE

LOCATION.--Lat 41° 22'04", long 97° 29'40", in SE 1/4 SW 1/4 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 mi^2, of which about 54,630 mi^2 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 ft^3/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.

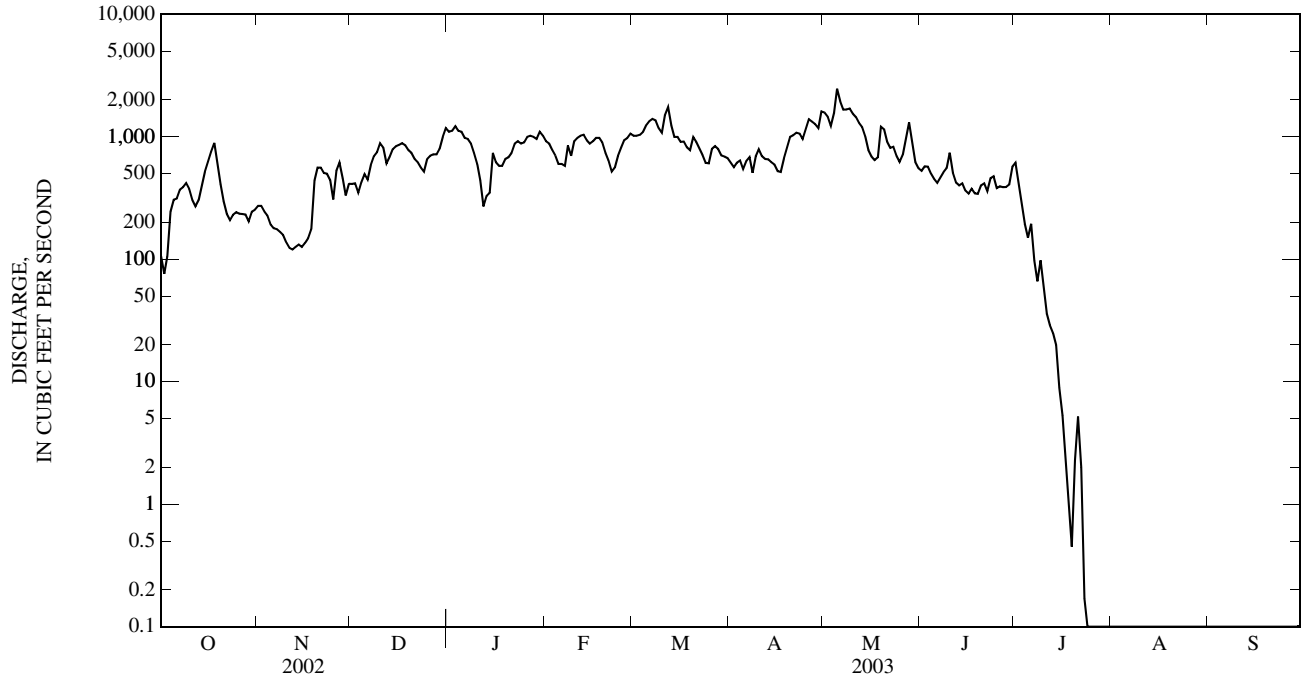
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

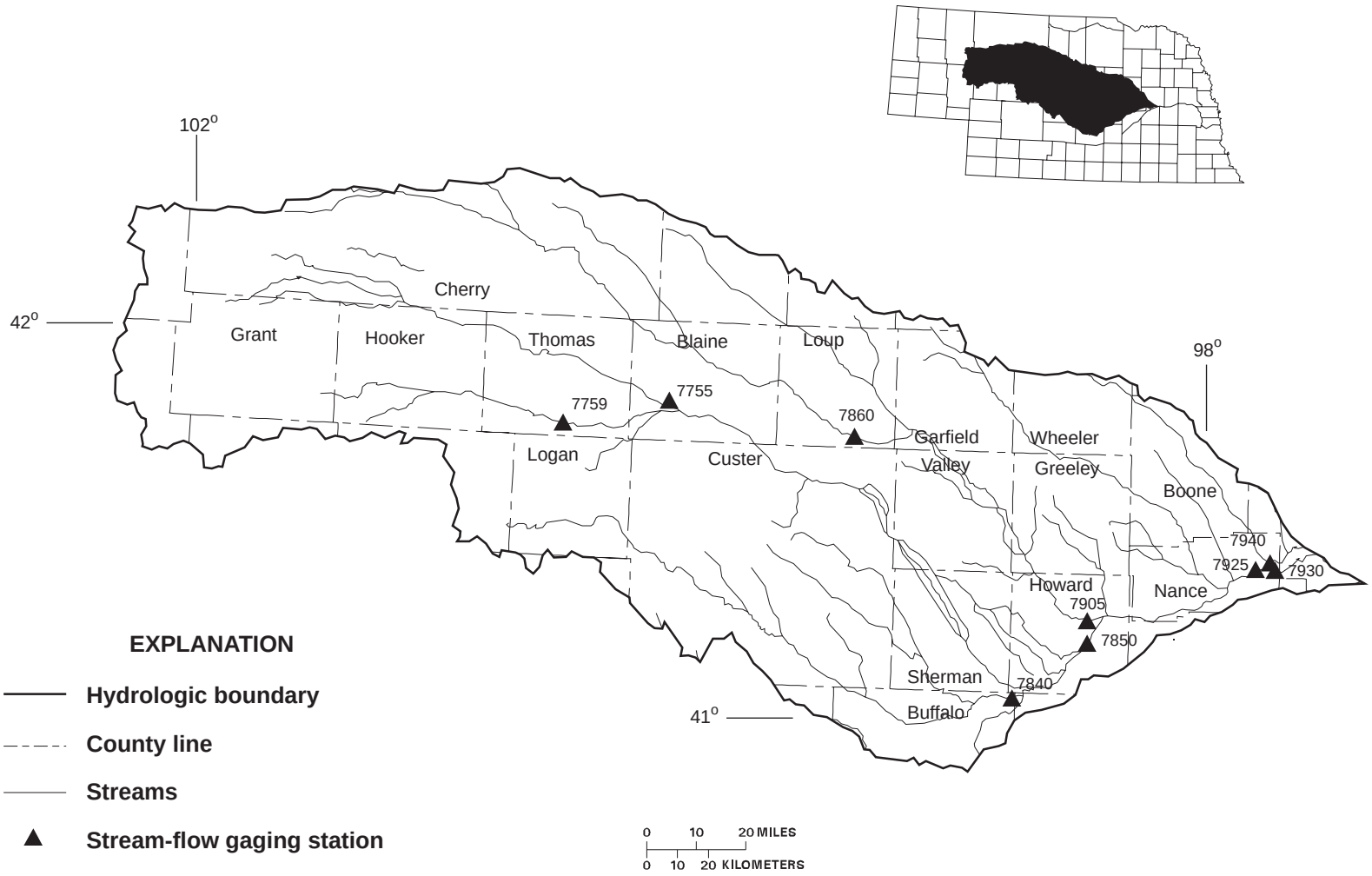
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	273	412	e1,100	e920	e1,020	617	1,580	527	614	0.00	0.00
2	76	273	417	e1,120	e880	e1,020	566	1,460	575	419	0.00	0.00
3	106	245	349	e1,220	e780	e1,040	616	1,230	570	284	0.00	0.00
4	245	227	425	e1,120	e700	e1,100	641	1,570	502	193	0.00	0.00
5	306	192	496	e1,100	e600	e1,240	546	2,470	453	150	0.00	0.00
6	313	179	447	e980	e600	e1,340	635	1,950	421	195	0.00	0.00
7	370	176	589	e960	e580	e1,400	682	1,670	466	97	0.00	0.00
8	387	167	691	e880	e850	e1,360	508	1,670	514	66	0.00	0.00
9	419	158	748	e740	e700	e1,180	694	1,700	555	98	0.00	0.00
10	376	137	886	e600	e920	e1,080	793	1,550	741	60	0.00	0.00
11	304	124	817	e440	e980	e1,500	695	1,450	509	36	0.00	0.00
12	271	120	606	e270	e1,020	e1,750	659	1,300	423	29	0.00	0.00
13	304	126	681	e330	e1,040	e1,240	655	1,200	401	25	0.00	0.00
14	404	132	792	e350	e940	e1,000	620	1,010	417	20	0.00	0.00
15	518	126	837	e740	e880	e1,000	593	777	365	8.9	0.00	0.00
16	627	136	859	e620	e920	910	525	691	344	5.3	0.00	0.00
17	754	149	887	e580	e980	915	517	645	377	2.5	0.00	0.00
18	890	176	853	e580	e980	821	666	679	345	1.0	0.00	0.00
19	600	441	778	e660	e900	778	810	1,210	342	0.45	0.00	0.00
20	409	560	e740	e680	e740	995	1,000	1,150	401	2.3	0.00	0.00
21	298	561	e660	e740	e640	911	1,030	913	418	5.2	0.00	0.00
22	235	508	e620	e880	e520	805	1,080	811	361	2.0	0.00	0.00
23	209	500	e560	e920	e560	712	1,060	829	459	0.17	0.00	0.00
24	231	443	e520	e880	e700	614	957	698	477	0.00	0.00	0.00
25	242	308	e660	e900	e820	608	1,160	624	381	0.00	0.00	0.00
26	236	529	e700	e1,000	e940	798	1,390	715	394	0.00	0.00	0.00
27	234	615	e720	e1,020	e980	838	1,330	973	388	0.00	0.00	0.00
28	232	460	e720	e1,000	e1,060	794	1,270	1,310	389	0.00	0.00	0.00
29	204	332	e800	e960	---	704	1,180	894	407	0.00	0.00	0.00
30	245	414	e1,000	e1,100	---	689	1,610	622	570	0.00	0.00	0.00
31	254	---	e1,180	e1,020	---	669	---	554	---	0.00	0.00	---
TOTAL	10,405	8,787	21,450	25,490	23,130	30,831	25,105	35,905	13,492	2,313.82	0.00	0.00
MEAN	336	293	692	822	826	995	837	1,158	450	74.6	0.000	0.000
MAX	890	615	1,180	1,220	1,060	1,750	1,610	2,470	741	614	0.00	0.00
MIN	76	120	349	270	520	608	508	554	342	0.00	0.00	0.00
AC-FT	20,640	17,430	42,550	50,560	45,880	61,150	49,800	71,220	26,760	4,590	0.00	0.00
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2003, BY WATER YEAR (WY)												
MEAN	1,377	1,535	1,506	1,566	2,289	2,904	2,497	2,601	2,849	1,411	650	952
MAX	6,673	5,617	5,107	5,603	8,795	9,531	13,410	15,450	18,320	12,590	6,135	6,785
(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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1942 - 2003	
ANNUAL TOTAL	236,483.91		196,908.82			
ANNUAL MEAN	648		539		1,840	
HIGHEST ANNUAL MEAN					6,652	1984
LOWEST ANNUAL MEAN					494	1956
HIGHEST DAILY MEAN	2,600	Mar 14	2,470	May 5	23,800	Jul 1, 1983
LOWEST DAILY MEAN	0.00	Jul 8	0.00	Jul 24	0.00	Jan 4, 1942
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 8	0.00	Jul 24	0.00	Oct 1, 1943
MAXIMUM PEAK FLOW			*2,880	May 5	**25,400	Mar 28, 1960
MAXIMUM PEAK STAGE			***4.81	Feb 20	***7.86	Mar 11, 1993
ANNUAL RUNOFF (AC-FT)	469,100		390,600		1,333,000	
10 PERCENT EXCEEDS	1,640		1,100		3,900	
50 PERCENT EXCEEDS	518		525		1,260	
90 PERCENT EXCEEDS	0.00		0.00		97	

e Estimated.
* Stage 4.40 ft.
** Stage 6.36 ft.
*** Backwater from ice.





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

*Station number	Station name	Page
7755	Middle Loup River at Dunning	142
7759	Dismal River near Thedford	144
7840	South Loup River at St. Michael	152
7850	Middle Loup River at St. Paul	154
7860	North Loup River at Taylor	156
7905	North Loup River near St. Paul	158
7925	Loup River Power Canal near Genoa	160
7930	Loup River near Genoa	162
7940	Beaver Creek at Genoa	164

*NOTE: To change abbreviated station number to complete station number, prefix with “06” and add zeros required to give eight digits.

06775500 MIDDLE LOUP RIVER AT DUNNING, NE

LOCATION.--Lat 41° 49'50", long 100° 06'20", in NW 1/4 SE 1/4 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 mi^2, of which about 79 mi^2 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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	457	450	483	467	493	500	488	513	470	437	416	420
2	469	453	496	473	513	492	498	499	481	438	419	413
3	463	476	501	484	514	484	504	522	473	439	420	406
4	471	479	506	494	490	498	512	555	475	456	421	408
5	461	480	501	485	473	490	482	553	468	440	420	410
6	460	470	490	482	479	483	497	533	467	435	419	409
7	445	479	488	486	474	484	480	539	476	434	416	411
8	451	486	494	495	465	505	467	585	471	444	414	411
9	460	495	490	481	480	495	473	591	463	479	421	419
10	459	500	492	477	477	488	482	562	462	436	456	431
11	468	488	505	504	469	485	500	537	464	429	434	436
12	467	482	512	500	472	506	514	512	468	432	427	432
13	444	482	489	449	483	512	505	516	479	423	420	420
14	455	493	494	471	501	520	500	511	474	422	413	418
15	445	488	503	481	481	539	497	499	461	411	414	417
16	450	484	507	490	463	534	527	502	460	413	410	418
17	443	476	511	e480	469	530	474	495	474	416	412	430
18	449	483	507	485	481	559	493	496	483	421	413	438
19	450	482	502	442	485	583	504	514	455	422	411	431
20	452	491	483	460	499	535	481	492	457	460	412	426
21	456	503	475	e450	498	525	459	476	483	424	412	429
22	456	505	473	e440	501	537	471	481	464	423	411	436
23	458	512	467	e430	492	546	528	483	474	424	410	441
24	451	500	e460	426	449	549	541	508	505	417	399	436
25	445	489	470	462	419	523	496	479	515	411	407	426
26	447	491	457	475	430	507	485	473	469	411	413	427
27	462	474	460	459	455	543	484	474	456	465	409	425
28	469	476	463	453	470	502	473	474	454	432	407	422
29	489	500	490	481	---	471	486	473	435	427	409	428
30	493	488	491	500	---	474	507	474	442	430	406	425
31	459	---	464	490	---	486	---	464	---	423	412	---
TOTAL	14,204	14,555	15,124	14,652	13,375	15,885	14,808	15,785	14,078	13,374	12,883	12,699
MEAN	458	485	488	473	478	512	494	509	469	431	416	423
MAX	493	512	512	504	514	583	541	591	515	479	456	441
MIN	443	450	457	426	419	471	459	464	435	411	399	406
AC-FT	28,170	28,870	30,000	29,060	26,530	31,510	29,370	31,310	27,920	26,530	25,550	25,190

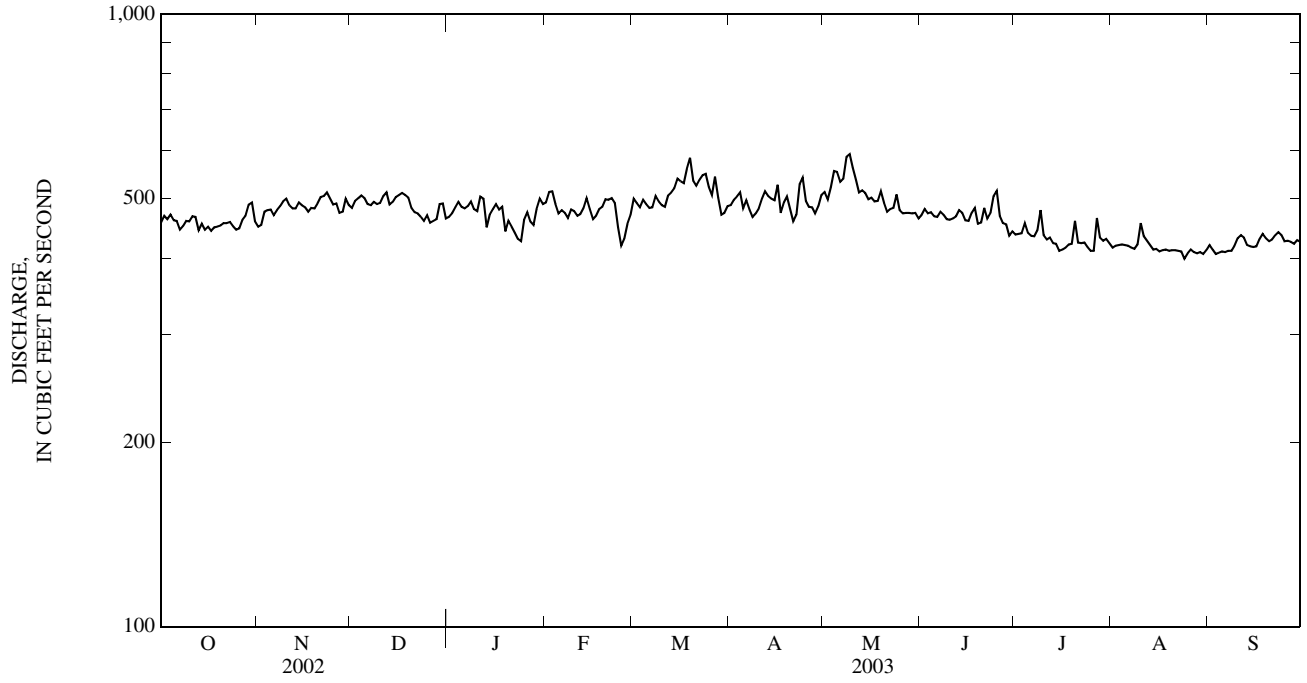
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2003, BY WATER YEAR (WY)

MEAN	413	423	419	414	434	459	459	448	424	400	400	403
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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1946 - 2003	
ANNUAL TOTAL	168,899		171,422			
ANNUAL MEAN	463		470		424	
HIGHEST ANNUAL MEAN					502	2001
LOWEST ANNUAL MEAN					365	1950
HIGHEST DAILY MEAN	541	May 1	591	May 9	778	Apr 20, 1971
LOWEST DAILY MEAN	382	Jul 1	399	Aug 24	100	Dec 5, 1950
ANNUAL SEVEN-DAY MINIMUM	387	Jul 15	407	Aug 24	231	Jan 1, 1949
MAXIMUM PEAK FLOW			*666	May 9	**2,480	Mar 25, 1996
MAXIMUM PEAK STAGE			***4.04	Jan 17	***7.02	Mar 31, 1949
ANNUAL RUNOFF (AC-FT)	335,000		340,000		307,500	
10 PERCENT EXCEEDS	508		512		504	
50 PERCENT EXCEEDS	467		473		420	
90 PERCENT EXCEEDS	407		418		352	

e Estimated.
* Stage 3.65 ft.
** Caused by ice jam release upstream, stage 6.15 ft.
***Backwater from ice.



06775900 DISMAL RIVER NEAR THEDFORD, NE
(Hydrologic bench-mark station)

LOCATION.--Lat 41° 46'45", long 100° 31'30", in SE 1/4 NW 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 mi^2, approximately, of which about 30 mi^2 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 good except for estimated daily discharges, which are fair.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	218	213	193	223	231	201	226	249	219	219	216	225
2	217	224	199	227	230	189	233	236	244	217	217	225
3	223	228	201	232	228	195	229	236	230	219	220	225
4	221	221	204	232	218	e200	228	271	229	233	220	222
5	221	220	188	244	216	e210	220	266	220	223	222	225
6	214	210	189	239	206	e210	232	240	221	215	218	223
7	217	208	192	235	195	e210	236	235	230	215	214	225
8	219	226	191	230	207	e205	234	271	233	218	209	224
9	222	219	186	231	209	e205	236	260	226	244	209	232
10	223	222	193	228	200	210	249	251	223	239	212	241
11	234	220	194	224	201	e200	241	251	219	219	236	238
12	229	216	195	229	206	194	232	245	223	215	217	228
13	222	208	187	240	206	195	234	243	260	215	216	232
14	219	213	191	229	211	195	240	242	261	218	214	232
15	214	216	204	223	212	202	241	239	236	217	212	227
16	222	212	207	213	201	207	245	236	233	212	213	228
17	222	220	211	e215	202	215	241	231	227	212	213	236
18	230	214	199	213	210	228	242	233	234	216	216	231
19	232	206	201	217	212	232	249	227	231	233	217	231
20	234	201	196	225	205	221	236	228	224	256	219	230
21	234	207	197	220	216	225	231	225	248	235	214	231
22	230	206	200	207	210	231	236	226	242	227	212	235
23	224	210	191	e210	197	229	251	223	242	219	213	235
24	220	207	203	e210	e205	227	253	243	243	215	217	232
25	230	202	203	224	e205	219	240	229	233	215	216	226
26	236	198	198	213	201	221	231	230	219	217	220	231
27	244	197	199	211	e200	232	234	226	221	235	220	229
28	247	198	206	225	195	219	234	221	225	231	219	232
29	251	196	227	219	---	208	238	217	226	222	217	232
30	252	202	227	221	---	215	246	227	224	222	218	234
31	226	---	215	226	---	219	---	220	---	219	220	---
TOTAL	7,047	6,340	6,187	6,935	5,835	6,569	7,118	7,377	6,946	6,912	6,716	6,897
MEAN	227	211	200	224	208	212	237	238	232	223	217	230
MAX	252	228	227	244	231	232	253	271	261	256	236	241
MIN	214	196	186	207	195	189	220	217	219	212	209	222
AC-FT	13,980	12,580	12,270	13,760	11,570	13,030	14,120	14,630	13,780	13,710	13,320	13,680

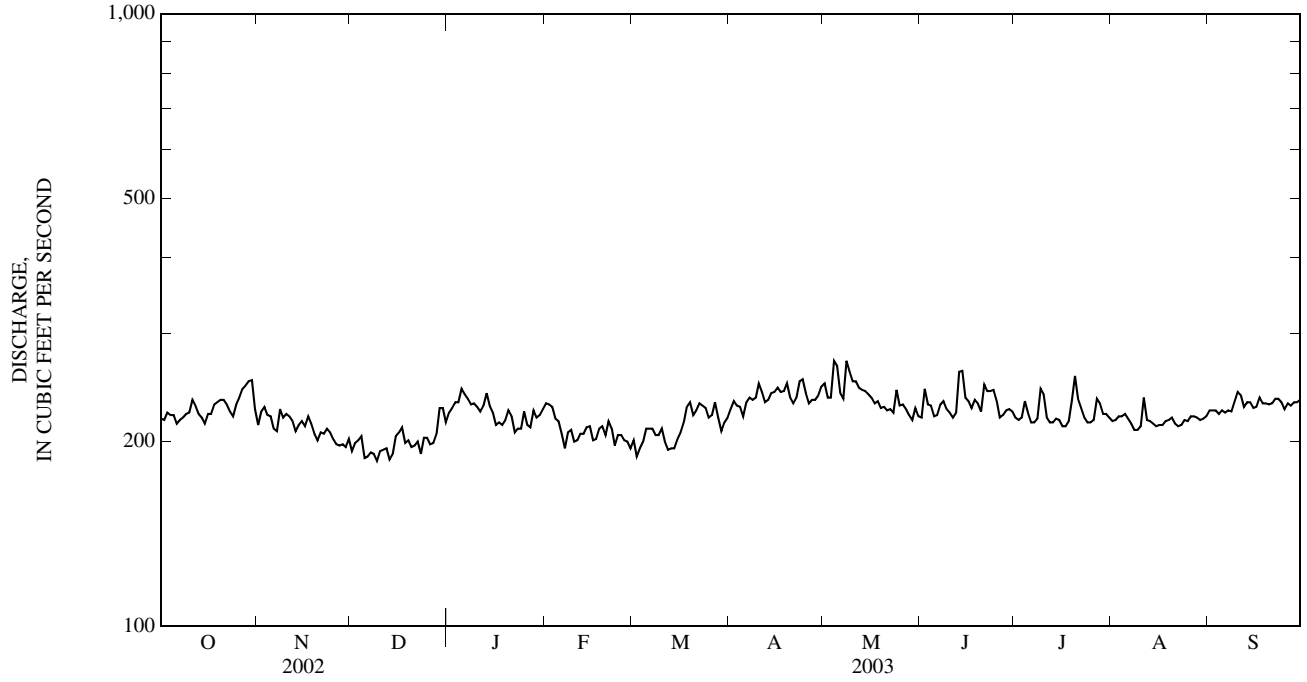
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2003, BY WATER YEAR (WY)

MEAN	202	205	202	202	205	210	212	210	203	202	199	200
MAX	235	237	231	230	251	239	254	246	242	245	234	237
(WY)	(1998)	(1999)	(2000)	(1985)	(1997)	(1997)	(1995)	(1995)	(2000)	(1999)	(1998)	(1997)
MIN	181	183	170	175	185	188	191	183	179	172	176	179
(WY)	(1974)	(1970)	(1979)	(1972)	(1968)	(1971)	(1985)	(1967)	(1975)	(1980)	(1974)	(1974)

06775900 DISMAL RIVER NEAR THEDFORD, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1967 - 2003	
ANNUAL TOTAL	78,156		80,879			
ANNUAL MEAN	214		222		204	
HIGHEST ANNUAL MEAN					231	2000
LOWEST ANNUAL MEAN					188	1970
HIGHEST DAILY MEAN	252	Oct 30	271	May 4	463	Aug 23, 1983
LOWEST DAILY MEAN	186	Dec 9	186	Dec 9	125	Feb 3, 1989
ANNUAL SEVEN-DAY MINIMUM	190	Dec 5	190	Dec 5	153	Dec 29, 1982
MAXIMUM PEAK FLOW			314	May 8	1,160	Aug 23, 1983
MAXIMUM PEAK STAGE			1.66	May 8	*5.10	Dec 18, 1983
ANNUAL RUNOFF (AC-FT)	155,000		160,400		148,000	
10 PERCENT EXCEEDS	224		240		229	
50 PERCENT EXCEEDS	214		221		202	
90 PERCENT EXCEEDS	203		201		183	

e Estimated.
* Backwater from ice.



06775900 DISMAL RIVER NEAR THEDFORD, NE—Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968-98, 2001 to current year.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	14.7	12.6	13.5	7.6	4.5	5.8	7.7	5.0	6.2	7.1	6.2	6.6
2	12.6	10.4	11.0	8.1	5.2	6.7	7.1	6.2	6.5	7.6	5.8	6.7
3	11.0	10.0	10.5	8.9	6.6	7.5	6.2	5.5	5.9	7.6	5.3	6.3
4	13.9	10.2	11.8	7.9	5.9	6.9	5.8	4.8	5.3	7.3	5.9	6.7
5	14.5	11.2	12.6	---	6.2	---	5.2	3.5	4.3	7.7	5.8	6.6
6	13.5	11.0	12.2	---	---	---	5.9	3.4	4.5	7.7	5.6	6.5
7	14.8	10.0	12.1	---	---	---	6.7	4.2	5.3	8.2	5.8	6.8
8	13.2	11.1	12.1	10.7	---	---	6.1	4.4	5.2	8.2	5.9	6.8
9	13.5	11.4	12.2	11.2	8.9	9.9	6.1	4.0	4.9	6.3	3.7	5.2
10	15.9	12.0	13.6	9.5	7.3	8.5	6.6	4.3	5.2	4.1	2.4	3.2
11	16.6	13.2	14.4	8.7	6.4	7.5	6.7	4.6	5.6	3.6	1.7	2.6
12	14.0	10.5	12.4	9.2	6.6	---	---	5.8	---	5.4	2.2	3.6
13	13.0	8.7	10.6	10.2	6.9	8.4	---	---	---	6.9	3.9	5.2
14	12.5	9.2	10.7	10.2	8.4	9.2	---	---	---	6.0	4.1	5.0
15	12.3	8.7	10.3	9.7	8.0	8.6	---	---	---	4.9	2.8	4.0
16	11.2	9.5	10.3	9.4	7.1	8.1	8.4	6.8	7.6	3.8	1.6	2.5
17	11.6	8.3	9.8	9.1	6.6	7.8	7.4	6.3	6.7	3.8	1.0	2.4
18	13.0	9.1	10.8	9.1	7.1	8.0	7.2	5.8	6.4	5.0	2.6	3.7
19	12.7	9.0	10.7	9.1	6.8	7.9	6.0	4.5	5.3	6.9	4.2	5.3
20	13.0	9.4	10.9	9.8	7.4	8.5	4.8	3.4	4.1	7.5	4.8	5.9
21	11.9	9.5	10.5	10.0	8.1	8.9	5.1	3.7	4.2	5.4	3.8	4.6
22	9.5	7.1	8.2	10.2	7.3	8.6	4.6	2.7	3.6	3.8	1.3	2.6
23	7.1	5.7	6.4	8.8	7.7	8.3	4.1	2.4	3.2	2.3	0.8	1.4
24	8.2	5.7	6.7	7.7	5.6	6.7	4.2	2.2	3.1	5.1	1.2	2.9
25	8.2	6.9	7.5	6.3	4.4	5.5	4.6	2.4	3.3	5.5	3.4	4.5
26	10.0	7.7	8.7	4.6	3.7	4.2	4.3	2.2	3.2	4.1	2.5	3.2
27	9.2	8.6	8.8	5.8	3.1	4.5	5.6	2.9	4.1	7.2	3.0	4.9
28	10.0	8.6	9.2	7.7	4.7	6.1	8.1	5.0	6.5	7.7	6.0	6.8
29	9.7	6.6	9.0	7.8	6.2	7.1	8.0	6.4	7.1	8.1	6.5	7.1
30	6.6	4.6	5.5	7.0	5.3	6.0	7.3	5.5	6.6	8.1	5.8	7.0
31	6.8	4.5	5.4	---	---	---	6.5	4.8	5.7	8.8	6.2	7.4
MONTH	16.6	4.5	10.3	11.2	3.1	7.4	8.4	2.2	5.2	8.8	0.8	5.0

06775900 DISMAL RIVER NEAR THEDFORD, NE—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	10.1	7.3	8.5	---	---	---	17.0	10.9	13.7	11.9	11.2	11.5
2	9.1	6.0	8.0	---	---	---	17.1	12.2	14.2	15.8	10.3	12.8
3	6.0	4.1	5.0	---	---	---	15.8	11.2	13.1	16.2	12.4	14.2
4	5.2	3.8	4.4	---	---	---	12.0	8.6	10.2	18.4	12.8	15.1
5	6.4	3.5	4.8	---	---	---	8.6	6.9	7.6	17.5	12.8	15.1
6	4.6	2.2	3.6	---	---	---	6.9	5.6	6.1	17.4	12.4	14.8
7	4.4	1.0	2.6	---	---	---	8.8	5.4	6.8	18.1	12.6	15.1
8	5.7	3.2	4.6	---	---	---	12.6	5.2	8.5	15.3	12.5	13.5
9	7.2	4.5	5.6	---	---	---	14.9	7.8	10.9	15.5	10.9	12.9
10	6.2	4.8	5.4	---	---	---	16.9	10.4	13.4	13.5	11.1	12.2
11	---	4.3	---	---	---	---	17.8	11.8	14.6	16.0	9.6	12.5
12	---	---	---	12.0	---	---	17.8	12.6	15.0	18.6	11.7	14.9
13	---	---	---	13.5	8.1	10.8	18.9	12.7	15.5	19.5	14.3	16.7
14	---	---	---	15.0	9.7	12.1	19.3	13.4	16.1	19.6	14.0	16.6
15	---	---	---	14.6	10.3	12.3	18.1	14.2	15.9	19.6	13.8	16.7
16	---	---	---	14.5	9.9	12.1	16.0	10.0	12.5	20.5	15.0	17.4
17	---	---	---	14.4	12.0	12.9	15.4	8.8	11.7	21.5	15.2	18.1
18	---	---	---	12.6	11.2	11.8	12.7	10.7	11.3	18.5	16.4	17.4
19	---	---	---	11.2	7.8	9.4	11.8	9.4	10.5	17.1	13.2	14.9
20	---	---	---	11.1	7.2	8.7	13.3	8.9	10.8	17.5	10.9	13.9
21	---	---	---	12.4	7.7	10	16.9	9.8	13.0	18.8	12.0	15.1
22	---	---	---	14.0	8.8	11.1	15.7	11.7	13.6	17.5	14.3	15.7
23	---	---	---	14.5	9.8	11.9	13.3	11.2	11.9	18.8	14.1	16.2
24	---	---	---	12.0	9.9	11.1	11.4	10.9	11.1	21.5	15.8	18.2
25	---	---	---	12.5	8.6	10.3	13.6	10.2	11.5	20.5	15.0	17.6
26	---	---	---	13.1	9.2	11.0	16.9	10.3	13.3	20.8	15.0	17.6
27	---	---	---	11.4	6.7	8.9	14.7	12.7	13.6	22.0	15.6	18.6
28	---	---	---	8.8	5.3	6.8	15.1	12.0	13.5	22.9	17.2	19.9
29	---	---	---	10.2	4.6	7.1	16.4	12.2	14.2	23.9	16.8	20.2
30	---	---	---	11.2	6.1	8.6	14.4	11.8	12.9	23.1	18.7	20.7
31	---	---	---	14.8	8.7	11.5	---	---	---	20.4	16.8	18.5
MONTH	10.1	1.0	5.2	15.0	4.6	10.4	19.3	5.2	12.2	23.9	9.6	16.0
		JUNE			JULY			AUGUST			SEPTEMBER	
1	19.3	15.8	17.6	24.7	18.0	21.1	22.8	18.5	20.6	20.2	14.2	16.9
2	20.4	15.5	17.7	26.0	19.6	22.6	23.0	18.2	20.3	21.3	15.9	18.3
3	20.3	16.3	18.1	25.1	19.5	22.1	24.2	18.2	21.0	18.7	15.9	16.9
4	20.5	15.4	17.7	25.1	18.9	21.7	24.9	19.3	21.8	19.8	13.7	16.5
5	18.4	14.8	16.5	25.1	19.6	22.2	24.6	19.6	22.1	21.3	15.8	18.2
6	18.1	13.7	15.7	25.8	19.3	22.4	24.6	19.0	21.7	21.5	16.7	18.9
7	16.4	14.1	15.1	23.2	19.8	21.4	24.5	19.2	21.7	20.2	16.9	18.6
8	19.0	13.1	15.8	25.1	18.6	21.6	23.1	19.6	21.4	19.8	16.4	18.0
9	21.4	14.7	17.9	25.0	20.0	22.3	24.9	18.8	21.5	20.7	16.3	18.3
10	22.2	16.3	18.9	24.5	18.8	21.6	24.7	18.8	21.6	21.4	17.6	19.1
11	23.1	16.9	19.7	23.0	18.6	20.8	23.5	19.3	21.2	18.4	15.4	16.9
12	22.7	17.6	20.0	23.8	17.8	20.6	23.4	17.8	20.4	19.0	13.9	16.2
13	19.9	17.8	18.5	24.8	18.2	21.2	23.0	17.7	20.2	17.5	14.1	15.7
14	22.4	16.8	19.2	25.8	20.2	22.7	22.9	17.8	20.2	17.1	12.5	14.6
15	23.8	17.3	20.4	24.8	19.0	21.9	23.5	17.9	20.5	18.0	12.3	14.9
16	23.1	18.6	20.6	25.9	19.2	22.4	23.9	18.2	20.9	18.4	13.1	15.6
17	20.8	17.8	19.1	26.5	20.4	23.3	23.4	18.5	20.9	18.8	14.7	16.8
18	22.2	17.0	19.2	25.5	21.4	23.3	22.6	18.5	20.5	15.0	11.8	13.4
19	20.7	16.8	18.9	26.1	20.8	22.9	23.6	18.4	20.9	16.1	10.8	13.2
20	19.8	17.4	18.4	25.2	20.3	22.5	23.8	18.2	20.8	15.5	11.9	13.6
21	23.5	16.8	19.7	23.4	19.5	21.4	21.8	18.1	19.9	16.6	12.3	14.3
22	24.6	19.2	21.5	23.9	18.8	21.0	22.6	17.0	19.6	16.5	12.3	14.3
23	22.0	18.9	20.0	23.7	18.1	20.7	23.4	18.6	20.8	17.6	12.5	14.8
24	24.0	17.8	20.5	24.4	17.9	21.0	23.9	18.5	21.0	16.1	12.8	14.3
25	20.2	15.9	17.2	25.6	19.6	22.4	21.4	18.6	19.6	15.6	10.9	13.2
26	20.4	14.1	17.1	25.0	20.4	22.4	22.9	16.6	19.4	15.4	12.2	13.6
27	21.8	15.4	18.4	22.9	19.5	21.1	23.0	17.6	20.2	14.5	11.4	12.8
28	22.1	16.5	19.2	24.3	18.9	21.3	21.6	18.7	20.0	14.4	10.6	12.4
29	22.0	17.0	19.4	24.1	18.8	21.1	21.0	16.7	18.6	12.8	10.4	11.6
30	22.9	17.4	20.1	23.6	17.7	20.6	19.5	15.8	17.5	13.6	11.0	12.1
31	---	---	---	24.0	18.5	21.0	17.3	15.3	16.3	---	---	---
MONTH	24.6	13.1	18.6	26.5	17.7	21.8	24.9	15.3	20.4	21.5	10.4	15.5
YEAR	26.5	0.8	13.0									

06775900 DISMAL RIVER NEAR THEDFORD, NE—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	194	191	193	171	168	169	162	161	161	167	166	167
2	195	191	193	171	167	168	161	161	161	168	167	167
3	192	183	187	167	162	166	161	159	160	168	165	168
4	184	181	182	163	160	162	159	159	159	168	168	168
5	189	180	186	---	---	162	160	159	160	168	167	168
6	180	173	176	---	---	---	161	160	161	168	167	167
7	173	148	164	---	---	---	162	161	161	168	167	168
8	158	151	155	---	---	162	162	161	161	170	167	168
9	160	155	157	162	161	161	161	161	161	168	167	167
10	166	158	163	162	161	162	162	161	161	170	156	166
11	169	166	167	162	161	162	162	157	161	169	161	166
12	170	165	168	---	---	162	---	---	162	170	167	168
13	171	166	169	161	160	161	---	---	---	168	164	167
14	174	170	172	160	160	160	---	---	---	168	167	167
15	174	171	173	160	160	160	---	---	---	167	165	166
16	175	174	174	161	160	160	174	173	173	166	164	165
17	176	174	175	161	160	160	173	173	173	167	165	166
18	178	176	176	161	160	161	173	171	172	167	166	166
19	180	177	179	161	161	161	172	171	171	167	166	167
20	182	179	181	162	161	161	172	171	171	168	167	168
21	186	181	185	162	162	162	171	170	171	167	165	166
22	184	181	183	162	161	162	170	169	169	165	163	164
23	182	177	179	162	161	162	170	169	169	165	164	165
24	180	177	179	162	157	161	169	168	168	168	165	166
25	180	177	178	161	155	160	169	168	168	168	165	167
26	178	175	176	161	160	160	169	168	168	166	165	166
27	175	169	172	161	160	160	168	167	168	168	166	167
28	169	162	166	161	160	161	169	168	168	168	167	168
29	176	167	172	161	161	161	168	167	167	168	167	168
30	176	172	173	161	155	161	168	167	167	169	168	168
31	172	171	171	---	---	---	167	166	167	169	168	168
MONTH	195	148	175	171	155	162	174	157	166	170	156	167
		FEBRUARY			MARCH			APRIL			MAY	
1	171	168	169	---	---	---	172	170	171	170	162	167
2	171	169	170	---	---	---	172	171	172	168	166	167
3	169	167	168	---	---	---	172	171	172	168	167	168
4	169	167	169	---	---	---	172	169	170	168	162	164
5	168	167	168	---	---	---	171	168	169	166	163	164
6	171	166	168	---	---	---	169	162	165	169	164	167
7	168	167	168	---	---	---	165	163	164	172	168	170
8	169	167	168	---	---	---	168	165	166	171	158	165
9	170	165	168	---	---	---	169	167	168	168	159	165
10	168	167	168	---	---	---	169	167	168	168	164	166
11	---	---	167	---	---	---	172	169	170	169	166	168
12	---	---	---	---	---	172	173	172	173	171	167	169
13	---	---	---	173	171	172	173	172	173	175	171	173
14	---	---	---	175	173	174	173	169	172	176	175	175
15	---	---	---	174	168	173	172	170	172	176	174	175
16	---	---	---	174	173	173	171	168	169	175	173	174
17	---	---	---	174	171	173	170	168	169	173	171	173
18	---	---	---	172	167	171	170	168	168	173	170	172
19	---	---	---	172	169	170	168	167	168	171	166	169
20	---	---	---	175	172	173	169	167	168	168	167	168
21	---	---	---	176	173	174	170	169	170	169	167	168
22	---	---	---	180	175	178	170	169	170	169	168	168
23	---	---	---	181	179	180	170	163	166	169	168	169
24	---	---	---	180	178	179	167	165	166	168	163	166
25	---	---	---	178	173	176	169	167	168	169	168	169
26	---	---	---	173	172	173	171	169	170	170	169	170
27	---	---	---	172	167	169	171	170	171	170	169	170
28	---	---	---	169	168	168	172	171	171	171	169	170
29	---	---	---	171	168	169	172	170	170	170	169	170
30	---	---	---	171	169	170	170	167	168	171	169	170
31	---	---	---	171	170	171	---	---	---	171	169	170
MONTH	171	165	168	181	167	173	173	162	169	176	158	169

06775900 DISMAL RIVER NEAR THEDFORD, NE—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	171	169	170	173	172	172	175	174	174	170	151	168
2	170	161	166	173	172	173	175	173	174	170	169	169
3	170	168	169	174	166	171	175	174	174	170	169	169
4	170	169	170	171	165	169	175	172	173	169	169	169
5	170	168	169	172	170	171	174	173	173	170	169	170
6	170	169	170	172	171	172	175	173	174	170	170	170
7	170	166	167	172	170	171	175	174	174	171	168	170
8	169	167	168	172	167	171	175	168	173	172	168	170
9	170	168	169	171	164	168	171	169	170	169	168	168
10	171	170	171	174	165	170	171	169	170	169	168	168
11	171	170	171	174	168	172	176	165	171	169	167	168
12	172	171	172	175	173	174	171	165	169	169	168	168
13	171	150	165	173	168	170	172	171	172	169	167	168
14	170	166	168	170	167	169	173	171	172	168	167	168
15	173	168	171	171	169	170	172	171	171	168	167	168
16	173	172	173	171	166	170	172	171	171	168	167	168
17	174	172	173	172	171	171	172	171	172	169	167	168
18	174	170	172	174	171	172	172	171	171	168	166	167
19	173	171	173	173	162	171	172	171	171	167	166	167
20	173	168	172	171	162	169	172	171	172	168	167	167
21	171	164	169	172	165	169	172	171	171	168	166	167
22	172	171	172	174	162	172	172	171	171	167	166	167
23	173	170	172	175	166	173	171	170	171	169	167	168
24	172	169	171	175	171	174	172	171	171	169	167	168
25	171	169	170	175	170	174	172	171	171	168	167	167
26	172	170	172	176	154	174	172	171	171	168	167	167
27	172	171	172	176	163	171	172	171	171	167	166	167
28	172	170	172	175	173	174	172	171	171	168	167	167
29	172	172	172	176	172	175	171	170	170	167	166	166
30	173	172	172	174	172	173	171	169	170	167	165	166
31	---	---	---	174	141	173	170	169	169	---	---	---
MONTH	174	150	170	176	141	172	176	165	172	172	151	168
YEAR	195	141	169									

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)
OCT													
07...	1200	0.55	209	9.6	686	9.7	101	8.3	173	20.0	12.5	77	93
NOV													
05...	1200	0.49	213	9.4	685	10.2	94	7.6	172	8.0	7.0	76	92
DEC													
13...	1300	0.45	164	7.4	695	10.8	94	7.6	178	7.0	5.5	72	87
JAN													
14...	1200	0.47	225	9.0	697	11.2	95	7.8	171	3.5	4.5	81	98
FEB													
11...	1100	0.40	196	8.5	685	10.4	90	8.2	172	3.5	4.5	73	88
MAR													
11...	1200	0.42	192	11	--	10.3	--	8.0	171	12.0	8.0	72	86
APR													
14...	1300	0.47	242	16	694	8.5	94	8.2	175	23.0	15.5	73	87
MAY													
06...	1300	0.49	221	--	693	8.8	97	8.2	174	19.0	15.5	77	2
JUN													
05...	1100	0.50	217	15	690	E8.4	--	8.1	175	22.7	16.4	66	81
JUL													
09...	1000	0.61	250	15	690	7.3	90	7.8	167	20.0	20.5	72	87
AUG													
11...	1130	0.60	259	--	700	7.8	94	7.7	174	23.0	20.0	73	88
SEP													
08...	1300	0.48	229	8.3	689	8.1	98	8.2	169	22.0	19.5	58	70

06775900 DISMAL RIVER NEAR THEDFORD, NE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L (00660)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)
OCT													
07...	--	1.11	5.9	0.20	<0.04	0.52	<0.008	0.396	0.13	0.06	0.19	0.72	--
NOV													
05...	--	0.68	6.1	0.16	<0.04	0.55	E.004	0.402	0.13	0.05	0.18	0.71	--
DEC													
13...	--	1.11	5.7	0.19	<0.04	0.58	E.004	0.405	0.13	0.03	0.19	0.77	--
JAN													
14...	0.0	0.76	5.9	0.18	<0.04	0.63	<0.008	0.426	0.14	0.04	0.20	0.81	--
FEB													
11...	0.0	0.59	5.9	0.25	<0.04	0.58	<0.008	0.411	0.13	0.10	0.18	0.83	0.9
MAR													
11...	0.0	0.56	6.0	0.22	<0.04	0.54	<0.008	0.399	0.13	0.14	0.21	0.76	1.4
APR													
14...	--	0.52	5.9	0.32	<0.04	0.40	<0.008	0.383	0.12	0.29	0.25	0.72	2.8
MAY													
06...	0.0	1.05	5.9	0.49	<0.04	0.51	<0.008	0.414	0.14	0.23	0.22	1.0	1.9
JUN													
05...	--	1.09	5.8	0.32	<0.04	0.44	E.004	0.377	0.12	0.18	0.21	0.77	1.6
JUL													
09...	0.0	1.03	5.8	0.28	<0.04	0.43	<0.008	0.377	0.12	0.23	0.21	0.71	1.4
AUG													
11...	--	1.68	6.3	0.39	<0.04	0.39	<0.008	0.386	0.13	0.12	0.19	0.77	1.1
SEP													
08...	0.0	0.93	5.7	0.18	<0.04	0.38	<0.008	--	E.13	0.08	0.168	0.55	0.6

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
OCT						
07...	<0.1	--	1.1	16	179	101
NOV						
05...	<0.1	--	1.0	--	178	102
DEC						
13...	<0.1	--	0.8	19	290	128
JAN						
14...	<0.1	--	1.0	--	281	171
FEB						
11...	<0.1	0.9	0.8	17	471	249
MAR						
11...	<0.1	1.4	1.2	--	358	186
APR						
14...	<0.1	2.8	1.4	62	120	78
MAY						
06...	<0.1	1.9	1.6	--	213	127
JUN						
05...	<0.1	1.6	1.3	--	505	296
JUL						
09...	<0.1	E1.4	1.9	--	63	42
AUG						
11...	<0.1	E1.1	1.4	17	331	231
SEP						
08...	<0.1	0.6	1.0	--	--	--

Remark codes used in this table:
< -- Less than
E -- Estimated value

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06784000 SOUTH LOUP RIVER AT ST. MICHAEL, NE

LOCATION.--Lat 41° 01'53", long 98° 44'25", in NW 1/4 NW 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 mi^2, of which about 1,610 mi^2 contributes directly to surface runoff.

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, 196 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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	142	136	e145	e150	e240	173	758	179	200	45	14
2	76	144	143	e145	e140	e260	170	587	218	171	46	19
3	82	141	e130	e155	e135	e285	167	374	189	160	43	23
4	102	139	e125	e160	e130	e300	163	495	198	166	37	23
5	149	141	140	e150	e125	138	160	745	190	118	40	20
6	117	139	144	e145	e135	e150	174	550	192	118	39	20
7	95	137	160	e155	e130	e170	197	433	208	110	37	18
8	93	138	172	e160	e130	e180	195	401	208	114	38	17
9	95	136	180	e130	e140	e185	197	357	198	109	36	24
10	92	137	178	e100	e140	e180	212	356	188	98	43	34
11	97	134	172	83	e135	e195	218	364	169	90	42	53
12	93	137	180	75	e145	208	210	339	170	90	41	166
13	91	138	175	e90	e155	205	206	300	158	91	38	328
14	90	139	177	e94	e155	213	200	266	179	89	33	110
15	89	139	174	e90	e155	215	203	240	216	84	32	77
16	93	137	160	e86	e150	221	233	220	161	79	28	69
17	93	138	157	e84	e150	223	247	203	153	74	27	65
18	95	140	156	e92	e170	235	241	191	169	67	25	62
19	96	140	147	e100	e200	243	234	228	539	69	25	61
20	97	137	144	e100	e210	246	231	244	255	71	25	59
21	96	136	e120	e96	e230	239	232	198	319	72	21	58
22	97	133	e110	e92	e240	229	213	189	202	70	20	59
23	105	130	e102	e90	e220	229	231	193	185	63	17	59
24	107	133	e100	e94	e210	224	294	403	260	58	19	58
25	111	133	e114	e98	e200	219	437	744	465	52	19	58
26	114	128	e125	e104	e210	210	374	356	810	46	17	59
27	122	119	e135	e100	e220	207	340	295	451	46	13	60
28	134	137	e155	e110	e230	200	296	301	326	47	15	60
29	136	157	e145	e120	---	186	299	241	295	48	16	63
30	147	151	e145	e130	---	197	385	209	244	46	15	68
31	144	---	e150	e135	---	179	---	180	---	43	12	---
TOTAL	3,219	4,130	4,551	3,508	4,740	6,611	7,132	10,960	7,694	2,759	904	1,864
MEAN	104	138	147	113	169	213	238	354	256	89.0	29.2	62.1
MAX	149	157	180	160	240	300	437	758	810	200	46	328
MIN	71	119	100	75	125	138	160	180	153	43	12	14
AC-FT	6,380	8,190	9,030	6,960	9,400	13,110	14,150	21,740	15,260	5,470	1,790	3,700

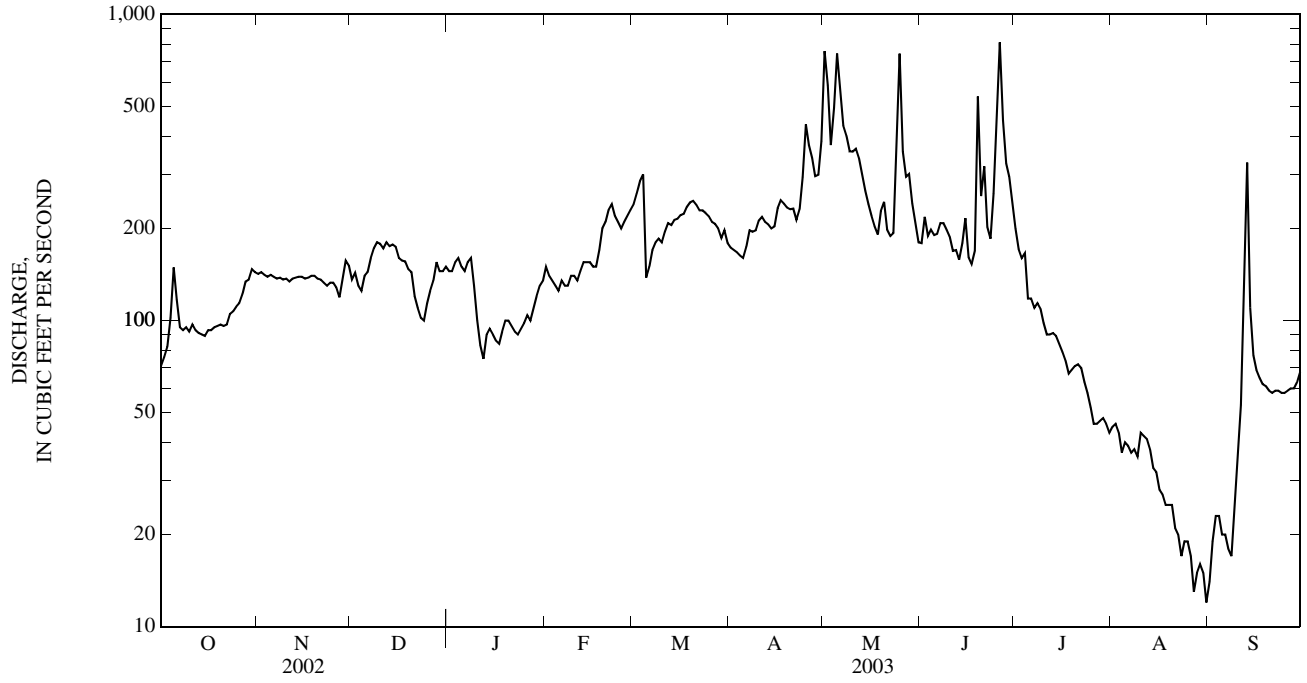
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2003, BY WATER YEAR (WY)

MEAN	172	192	182	184	257	348	280	304	408	215	146	146
MAX	619	276	275	281	543	1,747	549	562	2,741	1,121	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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1944 - 2003	
ANNUAL TOTAL	51,492.0		58,072			
ANNUAL MEAN	141		159		236	
HIGHEST ANNUAL MEAN					483	1947
LOWEST ANNUAL MEAN					152	2002
HIGHEST DAILY MEAN	298	Mar 14	810	Jun 26	28,000	Jun 23, 1947
LOWEST DAILY MEAN	6.0	Aug 3	12	Aug 31	0.00	Aug 5, 1980
ANNUAL SEVEN-DAY MINIMUM	8.9	Aug 1	15	Aug 26	0.65	Aug 4, 1980
MAXIMUM PEAK FLOW			*1,830	Jun 26	**50,000	Jun 22, 1947
MAXIMUM PEAK STAGE			***5.35	Feb 25	12.00	Jun 22, 1947
ANNUAL RUNOFF (AC-FT)	102,100		115,200		170,800	
10 PERCENT EXCEEDS	237		262		338	
50 PERCENT EXCEEDS	140		140		191	
90 PERCENT EXCEEDS	32		42		100	

e Estimated.
* Stage 5.34 ft.
** Estimated. Maximum computed discharge 27,500 ft^3/s, June 24, 1968, gage height 11.00 ft.
***Backwater from ice.



06785000 MIDDLE LOUP RIVER AT ST. PAUL, NE

LOCATION.--Lat 41° 12'13", long 98° 26'46", in SE 1/4 NW 1/4 NE 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 mi^2, of which about 3,130 mi^2 contributes directly to surface runoff.

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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	494	1,330	1,170	1,550	e1,100	e680	1,360	2,760	374	1,130	405	276
2	545	1,220	1,200	1,370	e1,200	e760	1,620	2,210	640	976	413	309
3	604	1,140	1,160	1,200	e1,400	e800	1,780	1,630	599	947	454	353
4	1,180	1,300	1,460	1,270	e1,250	e740	1,770	2,690	841	648	601	381
5	1,380	1,450	1,460	1,290	e1,100	e760	1,600	3,550	947	506	636	371
6	992	1,230	1,290	1,080	e1,040	641	1,620	2,310	910	408	560	208
7	667	993	1,430	949	e1,080	e680	1,550	1,670	968	437	541	203
8	655	1,250	1,310	989	e940	e780	1,540	1,380	1,000	510	487	238
9	688	1,460	1,100	994	e1,000	e760	1,580	1,430	1,110	494	474	259
10	654	1,580	1,050	1,060	e1,160	719	1,450	1,220	1,140	466	608	324
11	620	1,350	1,030	1,280	e1,100	e760	1,700	1,550	1,230	522	647	583
12	641	1,270	994	1,290	e1,040	e820	1,770	1,100	1,090	561	705	1,910
13	600	1,220	930	1,360	e1,180	e860	1,530	620	911	419	587	1,260
14	574	1,280	963	1,490	e1,250	899	1,680	598	840	373	470	936
15	584	1,250	932	1,650	e1,350	1,000	1,500	497	918	387	391	692
16	729	1,240	953	934	e1,300	1,100	1,770	568	989	373	385	644
17	944	990	1,050	451	e1,100	1,180	2,100	635	789	364	361	625
18	1,670	1,240	1,080	e420	e1,160	1,350	1,830	856	1,020	344	345	622
19	1,350	1,400	1,190	e470	e1,200	1,500	1,660	971	1,700	322	352	555
20	1,450	1,520	1,220	e580	e1,250	1,590	1,640	923	1,320	354	352	730
21	1,440	1,440	1,310	e760	e1,250	1,650	1,210	989	1,120	398	349	751
22	1,470	1,270	1,290	e720	1,230	1,370	1,310	909	939	432	308	777
23	1,280	1,180	1,290	e640	e1,140	1,390	1,400	1,020	851	473	327	785
24	1,100	899	1,260	e540	e900	1,670	2,190	1,200	1,230	435	300	733
25	943	1,360	1,300	e600	e700	1,740	2,170	1,930	1,910	397	251	703
26	1,010	1,480	1,230	e700	473	1,710	1,740	1,330	2,960	385	241	631
27	1,080	1,450	1,370	e740	e560	1,530	1,500	1,120	2,090	433	251	617
28	992	1,470	1,690	e700	e620	1,770	1,680	952	1,790	434	236	613
29	1,210	1,410	1,920	e800	---	1,560	1,940	764	1,480	427	226	612
30	1,250	1,030	2,200	e960	---	1,610	2,860	580	1,380	420	238	639
31	1,270	---	1,850	e1,000	---	1,350	---	495	---	477	246	---
TOTAL	30,066	38,702	39,682	29,837	30,073	35,729	51,050	40,457	35,086	15,252	12,747	18,340
MEAN	970	1,290	1,280	962	1,074	1,153	1,702	1,305	1,170	492	411	611
MAX	1,670	1,580	2,200	1,650	1,400	1,770	2,860	3,550	2,960	1,130	705	1,910
MIN	494	899	930	420	473	641	1,210	495	374	322	226	203
AC-FT	59,640	76,770	78,710	59,180	59,650	70,870	101,300	80,250	69,590	30,250	25,280	36,380

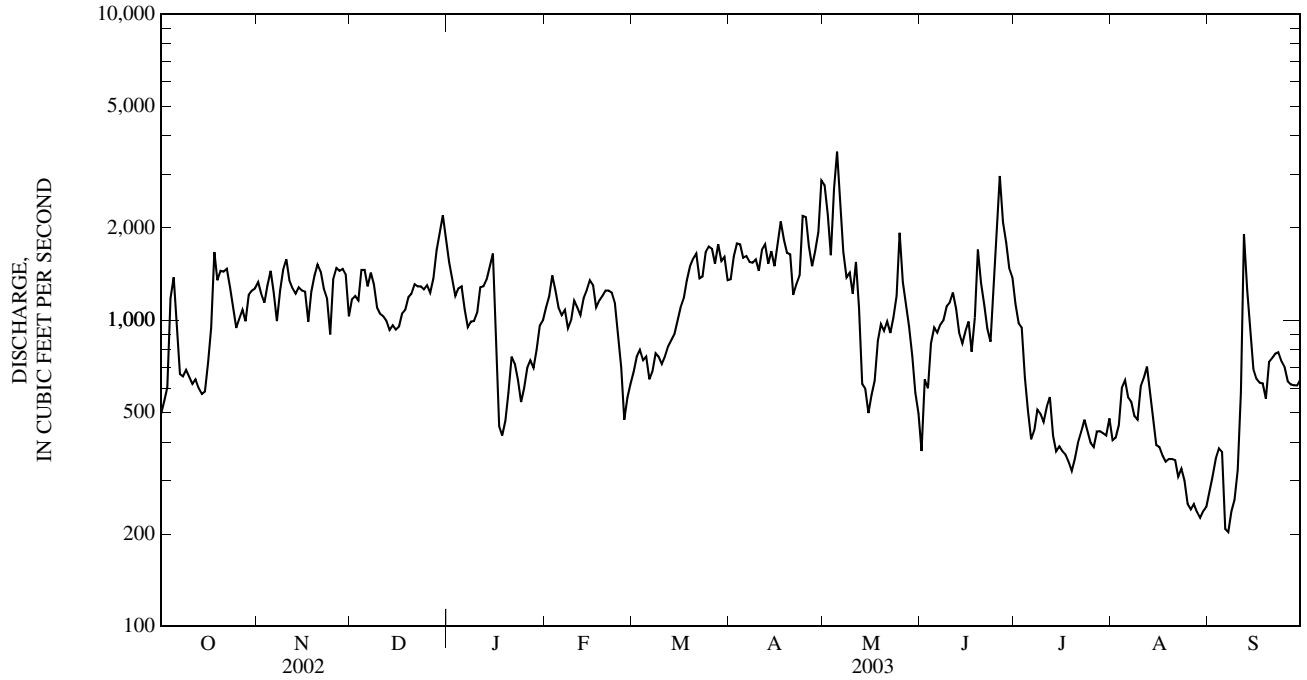
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2003, BY WATER YEAR (WY)

MEAN	1,165	1,292	1,165	1,172	1,523	1,754	1,366	1,156	1,175	642	572	755
MAX	2,444	1,922	1,836	1,844	2,478	4,022	2,291	2,476	3,253	3,642	1,171	1,790
(WY)	(1993)	(1999)	(1971)	(1990)	(1984)	(1978)	(1984)	(1995)	(1967)	(1993)	(1992)	(1985)
MIN	404	771	686	770	969	1,153	767	519	395	124	174	240
(WY)	(1964)	(1965)	(1969)	(1972)	(1979)	(2003)	(1981)	(1975)	(1972)	(1980)	(1980)	(1980)

06785000 MIDDLE LOUP RIVER AT ST. PAUL, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1963 - 2003	
ANNUAL TOTAL	344,415		377,021			
ANNUAL MEAN	944		1,033		1,142	
HIGHEST ANNUAL MEAN					1,832	1993
LOWEST ANNUAL MEAN					831	1970
HIGHEST DAILY MEAN	3,180	Mar 14	3,550	May 5	21,800	Jun 12, 1984
LOWEST DAILY MEAN	96	Aug 16	203	Sep 7	23	Aug 9, 1980
ANNUAL SEVEN-DAY MINIMUM	127	Aug 16	241	Aug 25	31	Aug 4, 1980
MAXIMUM PEAK FLOW			*5,160	May 5	72,000	Jun 23, 1947
MAXIMUM PEAK STAGE			**4.42	Feb 3	12.69	Jun 23, 1947
ANNUAL RUNOFF (AC-FT)	683,100		747,800		827,200	
10 PERCENT EXCEEDS	1,470		1,660		1,850	
50 PERCENT EXCEEDS	963		1,000		1,080	
90 PERCENT EXCEEDS	208		395		367	

e Estimated.
* Stage 3.93 ft.
** Backwater from ice.



06786000 NORTH LOUP RIVER AT TAYLOR, NE

LOCATION.--Lat 41°46'37", long 99°22'45", in NE 1/4 SE 1/4 sec.22, T.21 N., R.18 W., Loup County, Hydrologic Unit 10210006, on left bank 25 ft downstream from bridge on U.S. Highway 183, 0.4 mi north of Taylor and at mile 80.6.

DRAINAGE AREA.--2,350 mi^2, of which about 186 mi^2 contributes directly to surface runoff.

PERIOD OF RECORD.--November 1936 to current year.

REVISED RECORDS.--WSP 856: 1937. WSP 1310: 1939(M). WSP 1730: 1956-57(M). WSP 1918: 1952. WDR NE-75: 1974. WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,248.21 ft above sea level. Prior to Sept. 28, 1938, nonrecording gage at same site and datum. Sept. 28, 1938, to July 16, 1958, water-stage recorder at site 450 ft upstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. North Loup Public Power and Irrigation District canal began diversion from river in April 1939 at point 5 mi above station. Several smaller diversions above station for irrigation.

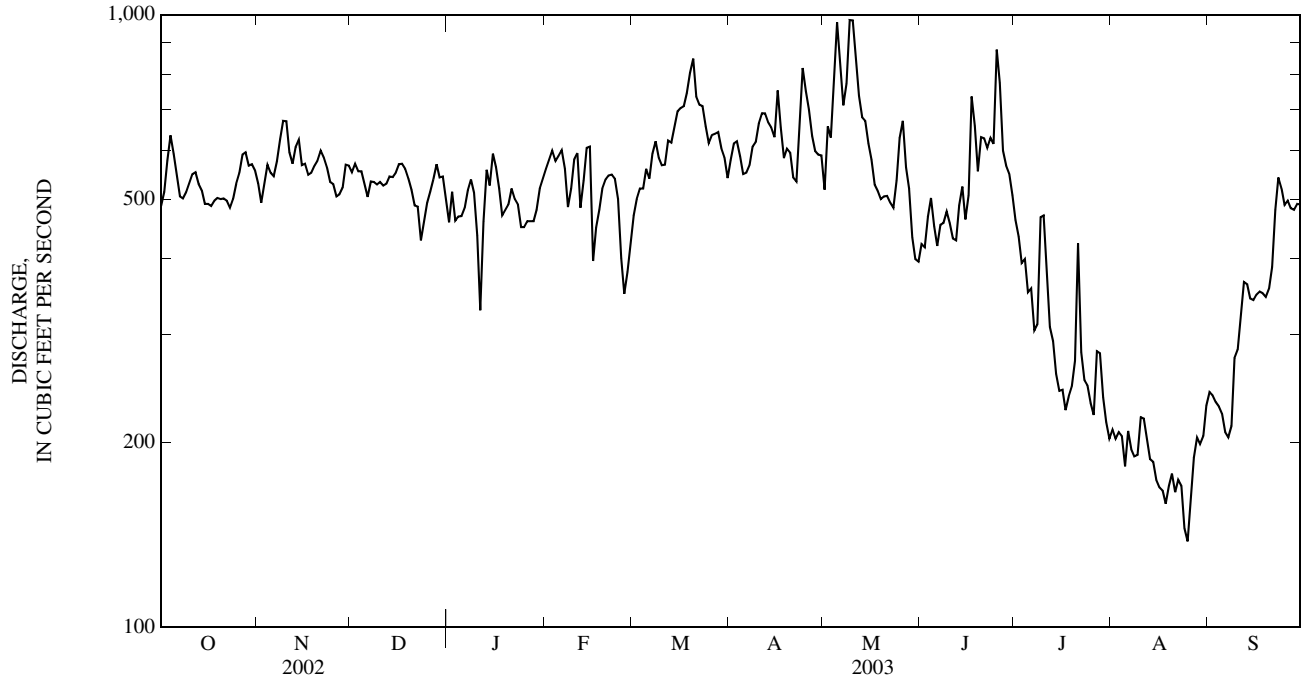
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	487	530	553	458	e560	e470	579	518	422	462	210	242
2	514	493	571	514	e580	e500	616	657	417	434	203	239
3	577	530	555	461	e600	e520	621	630	468	393	208	233
4	635	569	555	468	577	e520	587	768	502	399	205	229
5	592	552	529	469	588	e560	549	972	451	352	183	223
6	547	545	504	484	601	e540	552	834	419	357	209	208
7	505	576	534	516	e560	593	568	711	454	305	195	204
8	501	626	533	538	485	621	609	772	457	312	190	213
9	513	671	528	512	e520	585	620	980	477	467	191	275
10	530	670	533	436	e580	568	664	979	457	470	220	284
11	549	596	526	329	e594	569	690	858	431	371	219	326
12	553	571	530	459	484	623	690	737	428	309	202	366
13	529	608	544	558	536	618	667	680	488	293	188	363
14	516	625	543	526	606	653	654	671	524	259	186	344
15	491	568	552	593	609	695	631	616	463	243	174	342
16	491	571	570	564	396	704	752	580	507	244	169	349
17	487	548	571	e520	449	709	655	528	735	226	167	353
18	497	552	e560	e470	e480	745	583	515	658	238	159	351
19	502	567	e540	e480	e520	804	604	500	555	247	170	346
20	500	578	518	e490	538	848	595	505	631	272	178	357
21	501	600	488	e520	546	735	542	506	628	423	166	387
22	497	585	486	e500	548	713	534	493	606	281	174	480
23	484	563	428	e490	e540	709	653	484	629	253	170	542
24	500	533	459	e450	e500	657	818	536	615	248	145	520
25	530	529	493	e450	e400	617	750	629	877	232	138	489
26	551	505	514	e460	e350	636	700	671	774	222	163	497
27	591	509	539	e460	e380	639	634	563	600	282	189	483
28	596	522	570	e460	e420	643	599	520	567	280	204	480
29	567	569	542	e480	---	605	591	433	550	237	199	491
30	570	567	544	e520	---	585	589	399	507	216	205	490
31	557	---	503	e540	---	541	---	395	---	203	230	---
TOTAL	16,460	17,028	16,415	15,175	14,547	19,525	18,896	19,640	16,297	9,530	5,809	10,706
MEAN	531	568	530	490	520	630	630	634	543	307	187	357
MAX	635	671	571	593	609	848	818	980	877	470	230	542
MIN	484	493	428	329	350	470	534	395	417	203	138	204
AC-FT	32,650	33,780	32,560	30,100	28,850	38,730	37,480	38,960	32,330	18,900	11,520	21,240
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2003, BY WATER YEAR (WY)												
MEAN	488	515	488	495	566	625	606	548	487	321	303	394
MAX	706	730	680	738	863	896	970	1,128	870	716	527	665
(WY)	(1984)	(1987)	(2002)	(1941)	(1984)	(1993)	(2001)	(1995)	(1995)	(1962)	(1992)	(1951)
MIN	295	373	365	331	402	454	404	300	284	119	143	200
(WY)	(1941)	(1976)	(1979)	(1937)	(1939)	(1995)	(1940)	(1940)	(1940)	(1974)	(1969)	(1940)

06786000 NORTH LOUP RIVER AT TAYLOR, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1937 - 2003	
ANNUAL TOTAL	172,592		180,028			
ANNUAL MEAN	473		493		486	
HIGHEST ANNUAL MEAN					644	1993
LOWEST ANNUAL MEAN					354	1940
HIGHEST DAILY MEAN	1,200	Mar 13	980	May 9	2,690	May 28, 1995
LOWEST DAILY MEAN	136	Aug 1	138	Aug 25	45	Jul 26, 1941
ANNUAL SEVEN-DAY MINIMUM	158	Jul 17	162	Aug 20	74	Jul 11, 1981
MAXIMUM PEAK FLOW			*1,360	May 9	**3,480	May 28, 1995
MAXIMUM PEAK STAGE			***6.46	Jan 27	****9.50	Feb 25, 1957
ANNUAL RUNOFF (AC-FT)	342,300		357,100		352,400	
10 PERCENT EXCEEDS	666		657		689	
50 PERCENT EXCEEDS	502		520		481	
90 PERCENT EXCEEDS	218		223		269	

e Estimated.
* Stage 4.27 ft.
** Stage 5.59 ft.
*** Backwater from ice.
**** From floodmark, ice jam.



06790500 NORTH LOUP RIVER NEAR ST. PAUL, NE

LOCATION.--Lat 41° 15'48", long 98° 26'56", in NW 1/4 NW 1/4 NE 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 mi^2, of which about 1,240 mi^2 contributes directly to surface runoff.

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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	773	909	795	982	e880	e720	963	1,440	560	900	586	771
2	880	811	794	941	e940	e760	945	1,090	604	926	589	733
3	986	794	766	934	e1,000	e760	964	1,040	547	960	614	693
4	1,390	801	811	926	e980	e760	994	1,680	567	947	627	647
5	1,290	825	809	884	e960	e800	1,020	1,750	623	926	588	653
6	1,160	800	839	905	e960	e760	1,060	1,550	667	910	595	678
7	1,110	750	764	904	e960	e820	1,050	1,590	669	928	576	706
8	1,050	728	811	899	e900	e900	981	1,410	746	929	582	682
9	756	718	835	923	e920	e880	984	1,620	739	920	597	684
10	675	697	823	901	e960	e880	1,030	1,730	826	1,020	830	737
11	684	707	861	737	e940	e920	992	2,060	996	940	881	1,420
12	709	785	857	660	e920	e960	965	1,730	807	857	769	1,540
13	669	788	797	696	e960	988	941	1,480	663	789	711	1,170
14	638	776	799	793	e1,000	963	898	1,410	703	816	682	945
15	627	735	778	e820	e1,060	957	856	1,280	649	737	653	869
16	639	720	788	e740	e1,040	977	892	1,190	650	660	601	855
17	678	701	795	658	e1,020	1,020	1,200	974	618	557	506	865
18	714	717	1,390	e640	e1,040	1,110	1,050	853	745	554	557	866
19	747	659	1,050	e680	e1,100	1,150	1,070	755	938	542	549	821
20	743	712	884	e760	e1,160	1,210	1,030	748	800	576	514	809
21	746	740	800	e860	e1,230	1,190	960	772	750	615	530	799
22	752	718	725	e840	1,260	1,090	848	658	775	627	545	763
23	789	722	652	e800	1,210	1,030	810	558	799	736	577	774
24	842	729	586	e740	611	1,010	950	647	1,030	640	617	869
25	881	759	583	e760	e600	1,020	1,030	734	1,210	616	595	854
26	881	775	631	e820	e620	966	984	735	1,160	609	585	848
27	889	750	718	e820	e680	944	856	723	1,190	568	576	839
28	919	792	841	e800	e700	996	791	721	1,070	545	599	839
29	922	762	960	e820	---	1,020	760	656	925	583	649	833
30	929	713	1,030	e840	---	1,000	1,480	582	912	557	701	855
31	945	---	1,030	e840	---	966	---	554	---	582	757	---
TOTAL	26,413	22,593	25,602	25,323	26,611	29,527	29,354	34,720	23,938	23,072	19,338	25,417
MEAN	852	753	826	817	950	952	978	1,120	798	744	624	847
MAX	1,390	909	1,390	982	1,260	1,210	1,480	2,060	1,210	1,020	881	1,540
MIN	627	659	583	640	600	720	760	554	547	542	506	647
AC-FT	52,390	44,810	50,780	50,230	52,780	58,570	58,220	68,870	47,480	45,760	38,360	50,410

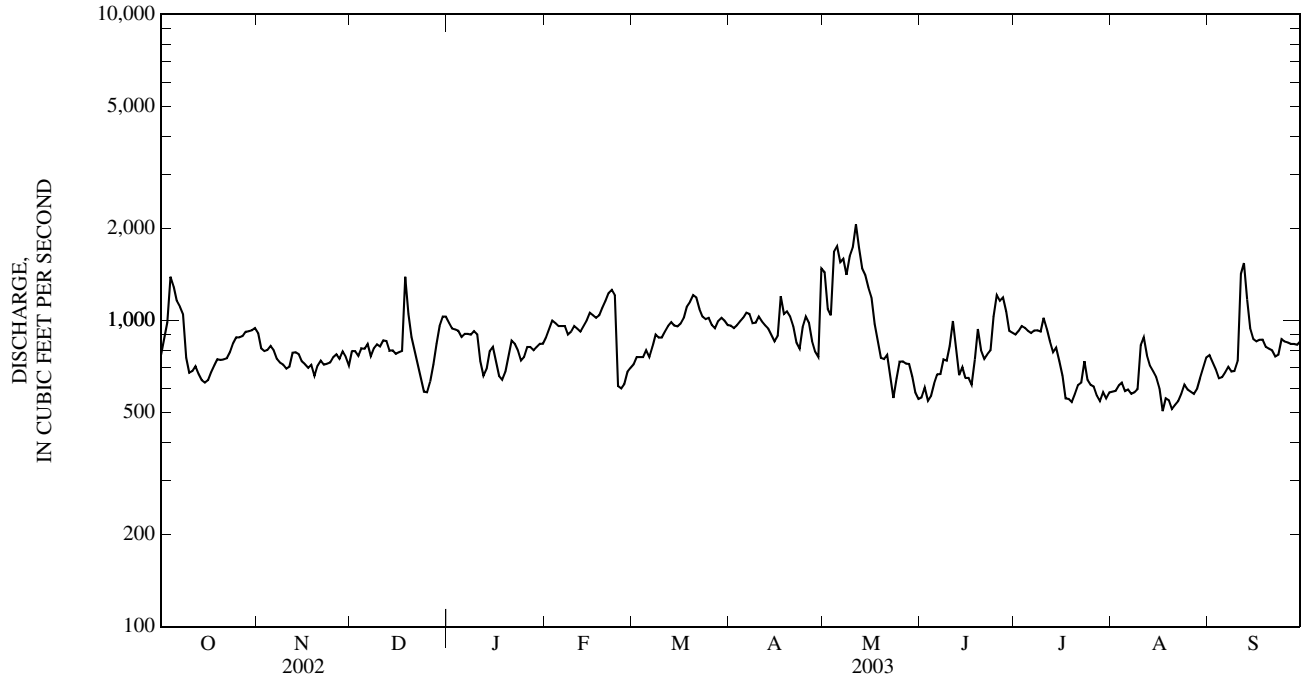
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2003, BY WATER YEAR (WY)

MEAN	897	924	873	882	1,115	1,264	1,119	1,060	1,041	711	682	831
MAX	1,224	1,330	1,385	1,703	1,861	2,589	2,315	1,743	2,516	2,471	1,812	1,384
(WY)	(1996)	(1999)	(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)

06790500 NORTH LOUP RIVER NEAR ST. PAUL, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1928 - 2003	
ANNUAL TOTAL	296,177		311,908			
ANNUAL MEAN	811		855		948	
HIGHEST ANNUAL MEAN					1,223	1993
LOWEST ANNUAL MEAN					668	1940
HIGHEST DAILY MEAN	2,110	Jun 9	2,060	May 11	21,300	Jun 22, 1947
LOWEST DAILY MEAN	319	Feb 27	506	Aug 17	85	Aug 8, 1941
ANNUAL SEVEN-DAY MINIMUM	391	Jul 19	540	Aug 17	98	Aug 6, 1941
MAXIMUM PEAK FLOW			*2,440	May 11	90,000	Jun 6, 1896
MAXIMUM PEAK STAGE			**4.12	May 1	***14.90	Jun 6, 1896
ANNUAL RUNOFF (AC-FT)	587,500		618,700		687,100	
10 PERCENT EXCEEDS	1,200		1,090		1,370	
50 PERCENT EXCEEDS	766		811		893	
90 PERCENT EXCEEDS	478		601		513	

e Estimated.
* Stage 3.86 ft.
** Backwater from ice.
***From floodmark, datum then in use.



06792500 LOUP RIVER POWER CANAL NEAR GENOA, NE

LOCATION.--Lat 41°25'03", long 97°47'37", in NE 1/4 NE 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. Data collection platform at station.

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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

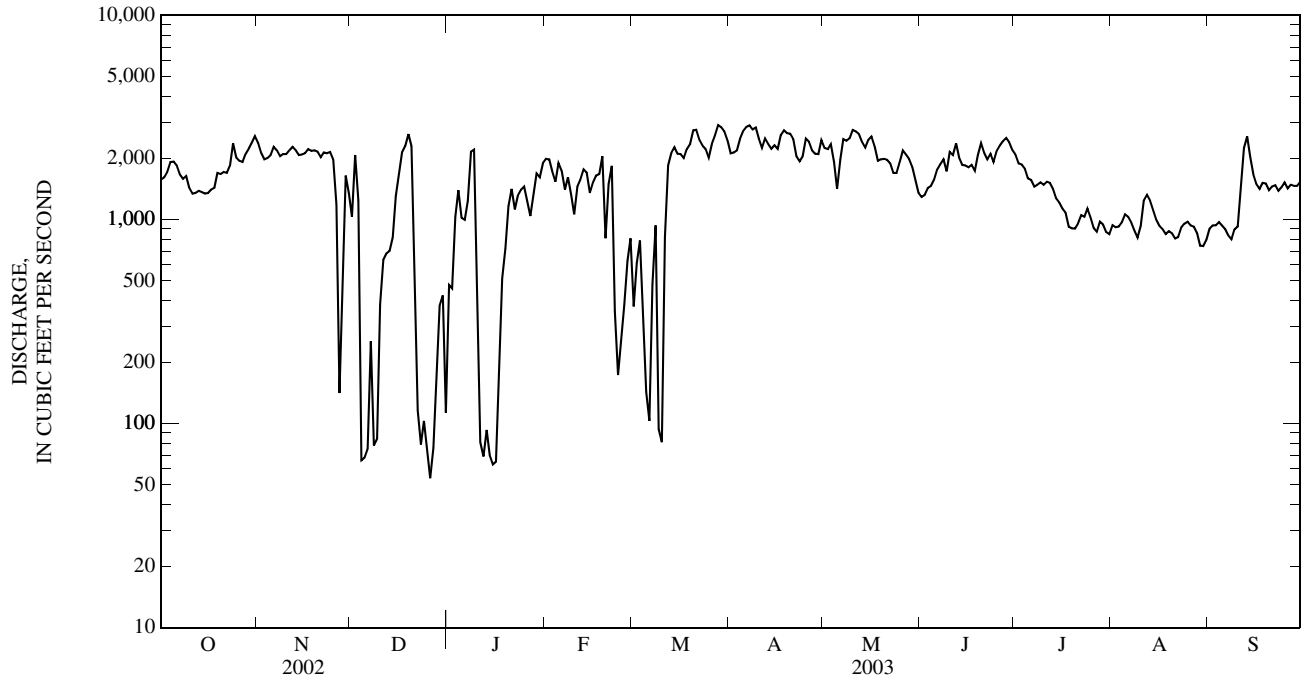
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,570	2,370	1,030	478	1,980	375	2,110	2,240	1,290	2,080	937	902
2	1,610	2,120	2,070	459	1,970	610	2,130	2,210	1,320	1,880	917	935
3	1,710	1,970	1,240	1,030	1,720	787	2,180	2,340	1,430	1,860	924	936
4	1,910	2,000	66	1,390	1,530	290	2,490	1,910	1,460	1,770	968	972
5	1,920	2,070	68	1,020	1,890	143	2,710	1,410	1,570	1,590	1,060	935
6	1,840	2,270	75	996	1,730	103	2,840	1,960	1,760	1,560	1,030	897
7	1,660	2,180	253	1,230	1,400	480	2,890	2,480	1,870	1,450	966	836
8	1,580	2,040	78	2,150	1,610	935	2,760	2,430	1,970	1,480	885	799
9	1,630	2,090	84	2,200	1,320	94	2,820	2,500	1,720	1,520	817	894
10	1,430	2,090	384	433	1,060	81	2,490	2,740	2,140	1,480	931	923
11	1,340	2,180	633	81	1,450	818	2,240	2,700	2,070	1,530	1,240	1,520
12	1,350	2,270	682	69	1,570	1,840	2,490	2,620	2,360	1,510	1,320	2,240
13	1,380	2,190	700	93	1,760	2,120	2,340	2,390	2,010	1,410	1,240	2,550
14	1,360	2,070	818	70	1,700	2,260	2,220	2,250	1,850	1,270	1,110	2,030
15	1,340	2,080	1,300	63	1,350	2,100	2,310	2,460	1,840	1,210	997	1,660
16	1,350	2,110	1,650	65	1,520	2,090	2,220	2,550	1,800	1,130	930	1,490
17	1,400	2,210	2,130	200	1,640	2,000	2,590	2,280	1,850	1,080	895	1,410
18	1,430	2,170	2,290	514	1,670	2,210	2,730	1,940	1,730	921	848	1,510
19	1,690	2,180	2,620	721	2,040	2,340	2,650	1,970	2,070	905	876	1,500
20	1,670	2,150	2,290	1,160	810	2,730	2,630	1,980	2,370	902	856	1,390
21	1,710	2,020	358	1,410	1,490	2,750	2,480	1,960	2,120	955	806	1,450
22	1,690	2,130	116	1,120	1,830	2,450	2,040	1,880	1,970	1,050	820	1,470
23	1,840	2,110	79	1,310	356	2,300	1,930	1,690	2,100	1,030	915	1,380
24	2,360	2,140	103	1,400	173	2,210	2,040	1,690	1,910	1,130	954	1,440
25	2,010	1,970	73	1,450	262	2,010	2,490	1,900	2,170	1,020	975	1,520
26	1,940	1,180	54	1,220	381	2,350	2,410	2,180	2,300	909	933	1,420
27	1,910	141	76	1,040	626	2,580	2,180	2,080	2,420	871	921	1,480
28	2,090	449	200	1,330	808	2,900	2,100	1,980	2,510	975	857	1,460
29	2,220	1,640	378	1,680	---	2,830	2,090	1,810	2,390	943	745	1,460
30	2,380	1,340	424	1,610	---	2,700	2,450	1,570	2,190	869	741	1,530
31	2,560	---	113	1,890	---	2,430	---	1,350	---	846	794	---
TOTAL	53,880	57,930	22,435	29,882	37,646	51,916	72,050	65,450	58,560	39,136	29,208	40,939
MEAN	1,738	1,931	724	964	1,344	1,675	2,402	2,111	1,952	1,262	942	1,365
MAX	2,560	2,370	2,620	2,200	2,040	2,900	2,890	2,740	2,510	2,080	1,320	2,550
MIN	1,340	141	54	63	173	81	1,930	1,350	1,290	846	741	799
AC-FT	106,900	114,900	44,500	59,270	74,670	103,000	142,900	129,800	116,200	77,630	57,930	81,200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2003, BY WATER YEAR (WY)

MEAN	1,942	1,848	998	1,162	1,523	1,821	2,142	1,997	1,930	1,370	1,246	1,569
MAX	2,730	2,811	1,886	2,194	2,375	2,673	2,778	2,767	2,944	2,706	2,382	2,640
(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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1938 - 2003	
ANNUAL TOTAL	450,153		559,032			
ANNUAL MEAN	1,233		1,532		1,627	
HIGHEST ANNUAL MEAN					2,006	1999
LOWEST ANNUAL MEAN					585	1938
HIGHEST DAILY MEAN	2,620	Dec 19	2,900	Mar 28	3,560	Nov 3, 1994
LOWEST DAILY MEAN	17	Jan 31	54	Dec 26	0.00	Aug 16, 1966
ANNUAL SEVEN-DAY MINIMUM	72	Jan 29	92	Jan 11	11	Dec 3, 1978
ANNUAL RUNOFF (AC-FT)	892,900		1,109,000		1,179,000	
10 PERCENT EXCEEDS	2,100		2,410		2,580	
50 PERCENT EXCEEDS	1,340		1,570		1,740	
90 PERCENT EXCEEDS	165		429		510	



06793000 LOUP RIVER NEAR GENOA, NE

LOCATION.--Lat 41°25'05", long 97°43'25", in SW 1/4 NE 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 mi^2, of which about 5,620 mi^2 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.

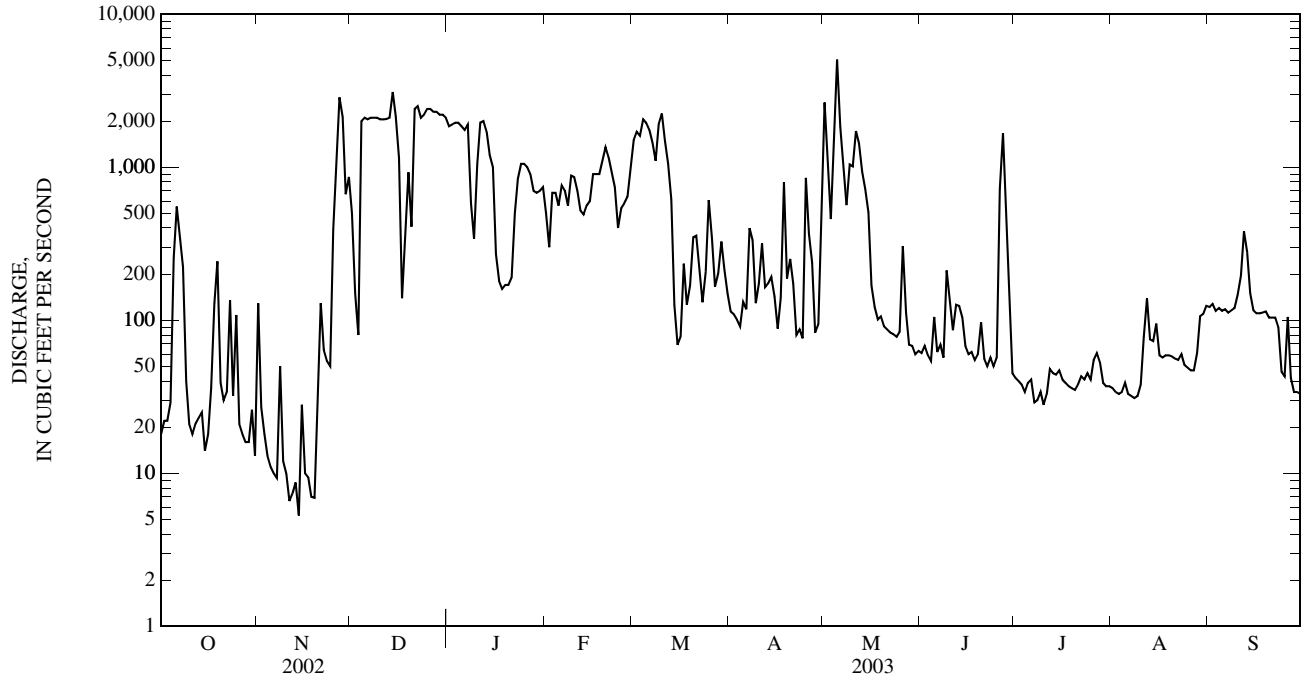
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	129	e500	e1,850	e500	e1,500	114	2,640	61	42	36	122
2	22	27	e150	e1,900	e300	e1,700	109	1,050	68	40	34	128
3	22	18	e80	e1,950	e680	e1,600	101	458	59	38	33	115
4	29	13	e2,000	e1,950	e680	e2,050	91	1,520	54	34	34	120
5	256	11	e2,100	e1,850	e560	e1,950	132	5,040	105	39	39	115
6	552	10	e2,050	e1,750	e760	e1,750	118	1,830	62	41	33	118
7	343	9.3	e2,100	e1,900	e700	e1,450	399	1,100	69	29	32	112
8	223	50	e2,100	e580	e560	e1,100	333	565	57	30	31	116
9	40	12	e2,100	e340	e880	e1,900	129	1,040	211	34	32	120
10	21	9.9	e2,050	e1,040	e860	2,240	173	1,010	134	28	38	147
11	18	6.6	e2,050	e1,950	e700	1,490	317	1,720	86	33	78	195
12	21	7.4	2,060	e2,000	e520	1,050	164	1,430	126	48	139	380
13	23	8.7	2,100	e1,700	e490	614	174	929	124	45	75	278
14	25	5.3	3,090	e1,200	e560	126	191	718	104	44	73	e150
15	14	28	2,130	e1,000	e600	69	143	506	68	47	95	e116
16	18	10	1,150	e270	e900	78	88	168	60	41	59	e111
17	36	9.4	139	e180	e900	234	140	122	62	39	57	e111
18	128	7.0	363	e160	e900	126	793	101	55	37	59	e112
19	242	6.9	924	e170	e1,100	168	187	106	60	36	59	e114
20	39	25	408	e170	e1,350	347	251	91	97	35	58	e104
21	30	129	e2,400	e190	e1,160	356	173	87	56	38	56	104
22	34	64	e2,500	e500	e920	213	80	83	50	43	55	104
23	135	54	e2,100	e840	e740	131	87	81	57	41	60	90
24	32	50	e2,200	e1,050	e400	207	76	78	50	45	51	46
25	108	391	e2,400	e1,050	e540	608	851	84	57	41	49	43
26	21	1,250	e2,400	e1,000	e580	343	368	305	717	55	47	105
27	18	2,850	e2,300	e900	e640	166	238	112	1,670	61	47	42
28	16	2,120	e2,300	e700	e1,000	202	83	69	392	53	61	34
29	16	665	e2,200	e680	---	326	94	68	118	39	106	34
30	26	862	e2,200	e700	---	213	367	60	45	37	110	33
31	13	---	e2,100	e740	---	148	---	63	---	37	124	---
TOTAL	2,539	8,838.5	54,744	32,260	20,480	24,455	6,564	23,234	4,934	1,250	1,860	3,519
MEAN	81.9	295	1,766	1,041	731	789	219	749	164	40.3	60.0	117
MAX	552	2,850	3,090	2,000	1,350	2,240	851	5,040	1,670	61	139	380
MIN	13	5.3	80	160	300	69	76	60	45	28	31	33
AC-FT	5,040	17,530	108,600	63,990	40,620	48,510	13,020	46,080	9,790	2,480	3,690	6,980
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2003, BY WATER YEAR (WY)												
MEAN	151	442	1,070	972	1,355	1,672	697	630	873	358	248	232
MAX	1,084	1,650	2,533	2,632	4,762	5,650	3,745	4,777	7,365	6,214	4,253	2,055
(WY)	(1999)	(1992)	(1998)	(1990)	(1997)	(1978)	(1984)	(1984)	(1947)	(1993)	(1966)	(1998)
MIN	3.76	41.1	177	67.5	72.4	95.0	18.5	8.18	7.54	0.17	1.15	0.000
(WY)	(1977)	(1953)	(1956)	(1982)	(1955)	(1981)	(1981)	(1963)	(1981)	(1963)	(1970)	(1956)

06793000 LOUP RIVER NEAR GENOA, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1944 - 2003	
ANNUAL TOTAL	235,071.5		184,677.5			
ANNUAL MEAN	644		506		722	
HIGHEST ANNUAL MEAN					1,993	1993
LOWEST ANNUAL MEAN					182	1963
HIGHEST DAILY MEAN	6,630	Mar 13	5,040	May 5	70,800	Aug 13, 1966
LOWEST DAILY MEAN	5.3	Nov 14	5.3	Nov 14	0.00	Aug 20, 1956
ANNUAL SEVEN-DAY MINIMUM	11	Nov 13	11	Nov 13	0.00	Aug 20, 1956
MAXIMUM PEAK FLOW			*6,340	May 5	129,000	Aug 13, 1966
MAXIMUM PEAK STAGE			**8.16	Feb 15	13.93	Aug 13, 1966
ANNUAL RUNOFF (AC-FT)	466,300		366,300		523,100	
10 PERCENT EXCEEDS	1,930		1,900		2,070	
50 PERCENT EXCEEDS	139		124		124	
90 PERCENT EXCEEDS	28		29		14	

e Estimated.
* Stage 7.14 ft.
** Backwater from ice.



06794000 BEAVER CREEK AT GENOA, NE

LOCATION.--Lat 41° 26'32", long 97° 44'11", in NE 1/4 SE 1/4 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 mi^2, of which about 429 mi^2 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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	74	69	e80	e72	e48	92	235	71	76	36	4.3
2	46	70	72	e80	e68	e54	90	187	76	74	40	3.3
3	50	68	68	e74	e72	e56	86	171	76	71	40	5.9
4	54	67	e64	e78	e68	e54	83	771	80	67	34	7.4
5	57	70	e62	e78	e60	e56	78	476	83	63	33	10
6	70	69	e70	e76	e66	e54	81	299	95	103	21	9.0
7	59	66	e74	e78	e72	e60	86	242	105	114	15	6.7
8	55	65	e74	e74	e72	e56	88	225	98	100	13	7.5
9	52	64	e76	e64	e72	e58	90	201	87	82	12	8.9
10	51	63	e74	e60	e74	e68	99	164	131	120	24	12
11	50	62	e74	e58	e74	e150	117	212	85	99	28	223
12	51	62	e74	e60	e74	109	123	202	141	71	28	214
13	53	62	e74	e60	e72	109	106	235	87	63	24	49
14	52	62	e72	e62	e72	98	90	390	113	56	14	32
15	52	61	e76	e60	e70	100	81	191	89	56	8.8	26
16	54	62	e74	e56	e70	114	76	181	88	50	7.3	26
17	57	62	74	e62	e68	109	69	148	87	48	12	26
18	59	62	75	e64	e64	101	70	124	98	42	11	31
19	60	62	74	e64	e62	98	79	114	145	39	11	30
20	57	62	79	e62	e58	102	96	101	98	43	6.7	27
21	55	61	72	e62	e56	105	130	94	93	45	4.5	29
22	55	63	e64	e56	e50	103	117	95	93	44	3.9	31
23	56	62	e60	e58	e42	99	99	96	89	39	3.8	34
24	58	62	e60	e68	e34	94	88	92	87	36	4.3	31
25	60	61	e66	e74	e32	89	81	92	89	33	3.4	31
26	61	61	e70	e78	e35	86	85	91	140	30	3.6	30
27	63	65	e74	e78	e39	86	87	87	90	35	3.1	31
28	65	175	e76	e78	e49	87	81	83	87	35	2.4	32
29	68	181	e76	e74	---	109	77	80	80	33	3.3	32
30	74	69	e82	e72	---	109	635	78	78	32	2.2	33
31	72	---	e78	e72	---	98	---	73	---	29	3.9	---
TOTAL	1,771	2,155	2,227	2,120	1,717	2,719	3,260	5,830	2,859	1,828	457.2	1,073.0
MEAN	57.1	71.8	71.8	68.4	61.3	87.7	109	188	95.3	59.0	14.7	35.8
MAX	74	181	82	80	74	150	635	771	145	120	40	223
MIN	45	61	60	56	32	48	69	73	71	29	2.2	3.3
AC-FT	3,510	4,270	4,420	4,210	3,410	5,390	6,470	11,560	5,670	3,630	907	2,130

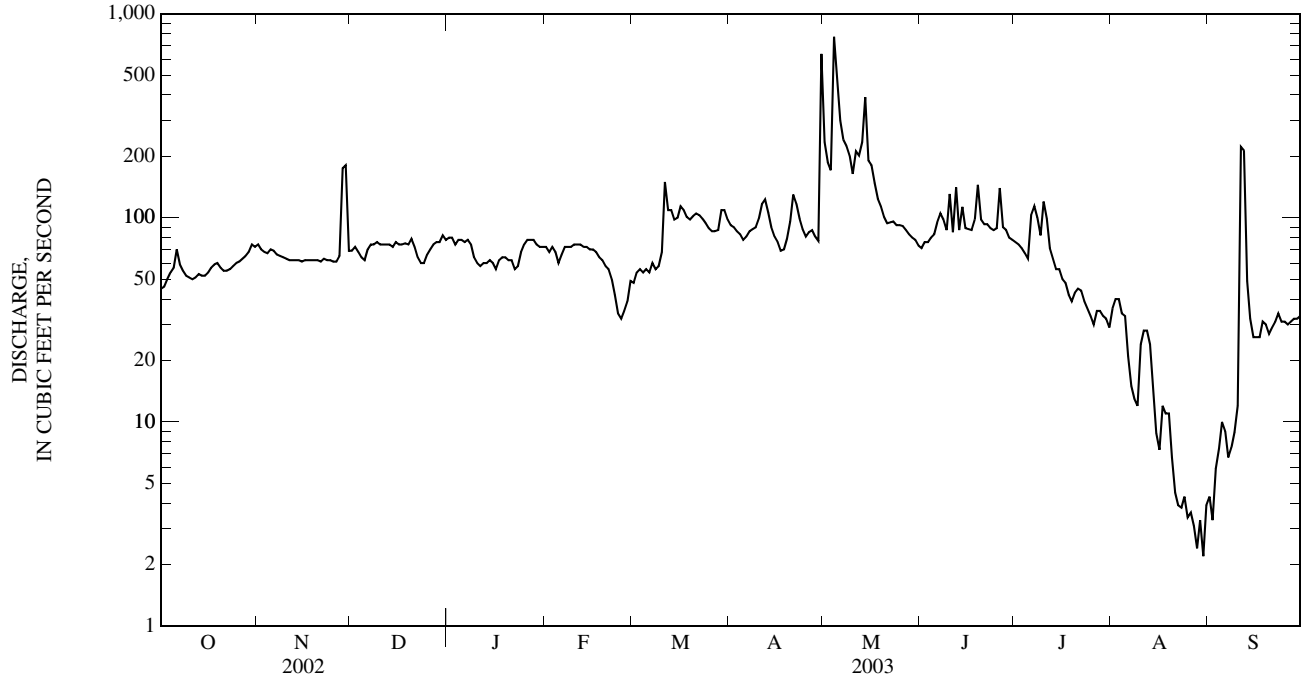
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2003, BY WATER YEAR (WY)

MEAN	81.1	88.4	85.1	83.8	133	196	168	177	228	137	91.5	80.3
MAX	184	173	150	197	537	688	519	432	808	1,248	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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1941 - 2003	
ANNUAL TOTAL	27,131.0		28,016.2			
ANNUAL MEAN	74.3		76.8		129	
HIGHEST ANNUAL MEAN					268	1993
LOWEST ANNUAL MEAN					70.9	1981
HIGHEST DAILY MEAN	504	Jun 11	771	May 4	10,000	Jul 19, 1950
LOWEST DAILY MEAN	3.1	Aug 3	2.2	Aug 30	0.41	Jul 25, 1974
ANNUAL SEVEN-DAY MINIMUM	5.5	Jul 29	3.1	Aug 25	0.90	Jul 24, 1974
MAXIMUM PEAK FLOW			1,650	May 4	21,200	Jul 19, 1950
MAXIMUM PEAK STAGE			9.61	May 4	*18.70	Jul 19, 1950
ANNUAL RUNOFF (AC-FT)	53,810		55,570		93,370	
10 PERCENT EXCEEDS	118		113		208	
50 PERCENT EXCEEDS	70		69		89	
90 PERCENT EXCEEDS	17		26		48	

e Estimated.
* Site and datum then in use.



06794650 CLEAR CREEK 1.75 MILE WEST OF POLK COUNTY LINE, NE

LOCATION.--Lat 41° 21'07", long 97° 24'11", in SE 1/4 SW 1/4, sec.19, T.16 N., R.1 W., Polk County, Hydrologic Unit 10200103, on right bank of the upstream side of bridge, 1.75 mi west of Polk County line.

PERIOD OF RECORD.--March 1996 to September 2001. October 2002 to September 2003.

GAGE.--Water-stage recorder. Elevation of gage is 1,480 ft from topographic map.

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

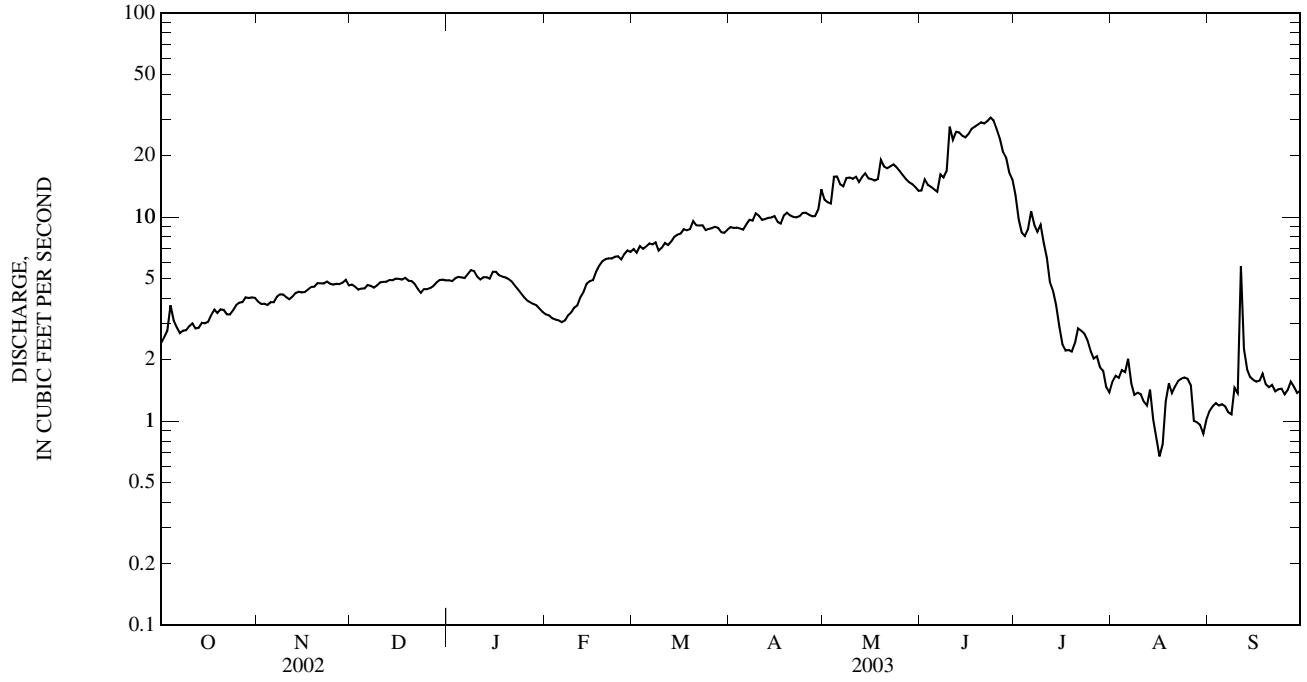
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

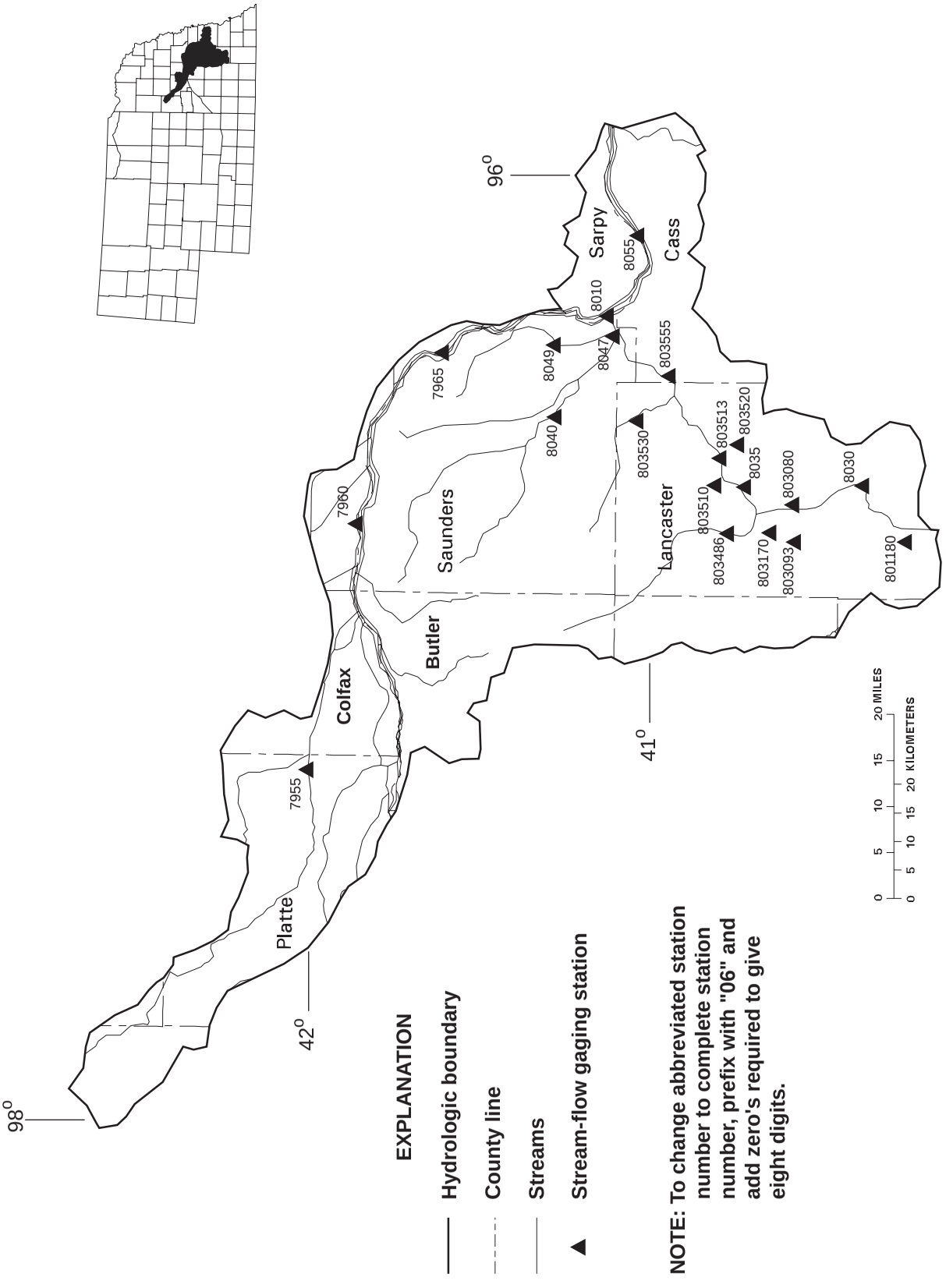
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	3.9	4.7	4.9	e3.3	7.0	8.9	12	13	13	1.6	1.1
2	2.6	3.8	4.6	4.9	e3.3	6.7	8.9	12	15	9.8	1.7	1.2
3	2.8	3.8	4.4	5.0	e3.2	7.2	8.9	12	14	8.4	1.6	1.2
4	3.7	3.7	4.5	5.1	e3.1	7.0	8.8	16	14	8.1	1.8	1.2
5	3.1	3.8	4.5	5.1	e3.1	7.2	8.7	16	14	8.7	1.7	1.2
6	2.9	3.8	4.6	5.0	3.1	7.4	9.2	14	13	11	2.0	1.2
7	2.7	4.1	4.6	5.3	3.1	7.3	9.7	14	16	9.2	1.5	1.1
8	2.8	4.2	4.5	5.5	3.3	7.5	9.6	16	16	8.5	1.3	1.1
9	2.8	4.2	4.6	5.4	3.4	6.9	10	16	17	9.2	1.4	1.5
10	2.9	4.0	4.8	5.1	3.6	7.1	10	15	28	7.5	1.4	1.4
11	3.0	4.0	4.8	4.9	3.7	7.5	9.7	16	24	6.3	1.2	5.7
12	2.8	4.1	4.8	5.1	4.1	7.3	9.8	15	26	4.8	1.2	2.3
13	2.9	4.2	4.9	e5.1	4.3	7.6	9.9	16	26	4.3	1.4	1.8
14	3.0	4.3	4.9	e5.0	4.7	8.0	9.9	16	25	3.7	1.0	1.6
15	3.0	4.3	5.0	e5.4	4.9	8.2	10	15	25	2.9	0.83	1.6
16	3.1	4.3	5.0	e5.4	4.9	8.3	9.5	15	26	2.4	0.67	1.6
17	3.3	4.4	4.9	e5.2	5.4	8.7	9.3	15	27	2.2	0.77	1.6
18	3.5	4.5	5.0	e5.1	5.8	8.6	10	15	28	2.2	1.2	1.7
19	3.4	4.6	4.9	e5.1	6.1	8.7	11	19	28	2.2	1.5	1.5
20	3.5	4.8	4.9	e5.0	6.2	9.6	10	18	29	2.4	1.4	1.5
21	3.5	4.7	4.7	e4.8	6.3	9.1	10	17	29	2.8	1.5	1.5
22	3.3	4.7	4.5	e4.6	6.3	9.1	10	18	30	2.8	1.6	1.4
23	3.3	4.8	4.3	e4.4	6.4	9.1	10	18	31	2.7	1.6	1.4
24	3.5	4.7	4.4	e4.2	6.4	8.6	10	18	30	2.5	1.6	1.4
25	3.7	4.7	4.4	e4.1	6.2	8.8	11	17	27	2.2	1.6	1.4
26	3.8	4.7	4.5	e3.9	6.6	8.8	10	16	24	2.0	1.5	1.4
27	3.8	4.7	4.6	e3.8	6.9	9.0	10	15	21	2.1	1.0	1.6
28	4.0	4.8	4.8	e3.7	6.8	8.8	10	15	20	1.8	0.99	1.5
29	4.0	4.9	4.9	e3.7	---	8.4	11	15	17	1.8	0.96	1.4
30	4.0	4.6	4.9	e3.6	---	8.4	14	14	15	1.5	0.87	1.4
31	4.0	---	4.9	e3.4	---	8.7	---	13	---	1.4	1.0	---
TOTAL	101.1	130.1	145.8	146.8	134.5	250.6	297.8	479	668	150.4	41.39	47.5
MEAN	3.26	4.34	4.70	4.74	4.80	8.08	9.93	15.5	22.3	4.85	1.34	1.58
MAX	4.0	4.9	5.0	5.5	6.9	9.6	14	19	31	13	2.0	5.7
MIN	2.4	3.7	4.3	3.4	3.1	6.7	8.7	12	13	1.4	0.67	1.1
AC-FT	201	258	289	291	267	497	591	950	1,320	298	82	94
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2003, BY WATER YEAR (WY)												
MEAN	8.30	13.6	14.0	12.9	15.6	21.1	41.6	41.9	66.7	16.4	8.60	5.68
MAX	13.2	26.0	25.0	20.1	24.1	33.5	114	75.5	234	58.6	25.8	15.2
(WY)	(1997)	(1997)	(1997)	(1999)	(1999)	(1999)	(1998)	(1999)	(1999)	(1999)	(1996)	(1996)
MIN	3.26	4.34	4.70	4.74	4.80	8.08	9.93	15.5	15.0	4.57	1.34	1.58
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2000)	(2002)	(2003)	(2003)

06794650 CLEAR CREEK 1.75 MILE WEST OF POLK COUNTY LINE, NE—Continued

SUMMARY STATISTICS	FOR 2003 WATER YEAR		WATER YEARS 1996 - 2003	
ANNUAL TOTAL	92.99			
ANNUAL MEAN	7.10		22.8	
HIGHEST ANNUAL MEAN			50.3	1999
LOWEST ANNUAL MEAN			7.10	2003
HIGHEST DAILY MEAN	31	Jun 23	1,160	Jun 2, 1999
LOWEST DAILY MEAN	0.67	Aug 16	0.67	Aug 16, 2003
ANNUAL SEVEN-DAY MINIMUM	1.0	Aug 11	1.0	Aug 11, 2003
MAXIMUM PEAK FLOW	*38	Jun 9	1,360	Jun 2, 1999
MAXIMUM PEAK STAGE	4.82	Jun 23	**8.65	Jun 2, 1999
ANNUAL RUNOFF (AC-FT)	40		16,550	
10 PERCENT EXCEEDS	16		37	
50 PERCENT EXCEEDS	4.8		15	
90 PERCENT EXCEEDS	1.5		3.4	

e Estimated.
* Stage 4.81 ft.
** From floodmark.




98°
42°
96°
41°
Platte
Colfax
Butler
Saunders
Lancaster
Sarpy
Cass
7955
7960
7965
8049
8040
8047
8010
8055
803555
803530
803513
803520
803510
8035
803080
8030
803486
803170
803093
801180
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.
0 5 10 15 20 MILES
0 5 10 15 20 KILOMETERS

*Station number	Station name	Page
7955	Shell Creek near Columbus	168
7960	Platte River at North Bend	170
7965	Platte River near Leshara	172
	(Elkhorn River Basin stations)	174-227
8010	Platte River near Ashland	228
801180	Olive Branch near Hallam	230
8030	Salt Creek at Roca	236
803080	Salt Creek at Pioneers Blvd at Lincoln	238
803093	Haines Branch at SW 56th St. at Lincoln	240
803170	Middle Creek at SW 40th St. at Lincoln	242
803486	Oak Creek at Air Park Rd. at Lincoln	244
8035	Salt Creek at Lincoln	246
803510	Little Salt Creek near Lincoln	248
803513	Salt Creek at 70th St. at Lincoln	250
803520	Stevens Creek near Lincoln	252
803530	Rock Creek near Ceresco	254
803555	Salt Creek at Greenwood	256
8040	Wahoo Creek at Ithaca	258
8047	Wahoo Creek at Ashland	262
8049	Johnson Creek near Memphis	264
8055	Platte River at Louisville	266

*NOTE: To change abbreviated station number to complete station number, prefix with “06” and add zeros required to give eight digits.

06795500 SHELL CREEK NEAR COLUMBUS, NE

LOCATION.--Lat 41° 31'33", long 97° 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 mi^2.

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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	14	15	e14	e22	e21	16	465	27	21	17	6.5
2	4.2	13	12	e14	e21	e22	16	131	27	19	18	6.6
3	5.3	11	11	e13	e20	e22	16	58	30	17	12	6.1
4	7.9	9.7	14	e14	e21	e19	16	332	30	15	13	6.3
5	8.4	11	14	e15	e19	e17	17	1,400	62	17	15	6.5
6	9.3	10	15	e14	e18	e17	17	559	84	24	18	6.6
7	8.5	11	18	e16	e18	e16	18	192	52	41	11	4.7
8	6.2	12	17	e16	e15	e14	19	104	106	31	11	3.6
9	5.9	10	17	e13	e17	e14	19	321	76	24	9.0	9.2
10	5.6	11	16	e10	e23	e15	21	181	44	50	7.7	14
11	5.2	11	17	e8.0	e23	e17	21	158	36	46	8.2	177
12	4.9	10	16	e8.0	e24	e18	21	126	40	26	10	541
13	5.2	10	16	e9.0	e26	e17	19	57	47	19	3.6	210
14	5.9	10	16	e10	e25	e16	18	121	31	16	6.8	37
15	5.6	11	16	e9.0	e20	e20	18	112	30	17	6.9	21
16	6.4	11	16	e11	e17	19	18	59	28	16	8.0	15
17	6.6	11	16	e9.0	e16	18	18	42	46	15	6.9	12
18	7.1	10	14	e7.0	e23	18	18	37	65	15	8.2	12
19	6.8	11	11	e6.0	e27	18	18	44	46	14	8.9	14
20	6.8	11	e11	e7.0	e33	18	19	47	36	15	9.2	16
21	6.5	9.7	e10	e9.0	e36	18	18	37	27	18	7.8	9.2
22	7.2	11	e9.5	e11	e37	17	17	34	26	14	6.8	6.4
23	6.9	10	e8.3	e13	e34	16	17	34	26	13	5.3	6.2
24	7.4	9.8	e6.6	e11	e26	16	17	36	25	14	6.2	6.1
25	8.0	12	e6.6	e10	e20	16	18	33	24	13	5.7	5.1
26	8.4	13	e7.8	e8.0	e18	15	18	32	28	12	5.9	5.1
27	8.6	17	e9.2	e8.0	e18	16	18	31	37	11	7.7	4.7
28	8.7	14	e9.5	e10	e19	17	17	30	26	12	10	6.6
29	9.4	12	e9.8	e13	---	17	20	29	23	13	6.0	5.8
30	11	11	e8.6	e16	---	17	306	28	22	11	6.5	6.9
31	11	---	e10	e19	---	17	---	28	---	9.9	6.6	---
TOTAL	219.0	338.2	393.9	351.0	636	538	829	4,898	1,207	598.9	282.9	1,187.2
MEAN	7.06	11.3	12.7	11.3	22.7	17.4	27.6	158	40.2	19.3	9.13	39.6
MAX	11	17	18	19	37	22	306	1,400	106	50	18	541
MIN	4.1	9.7	6.6	6.0	15	14	16	28	22	9.9	3.6	3.6
AC-FT	434	671	781	696	1,260	1,070	1,640	9,720	2,390	1,190	561	2,350

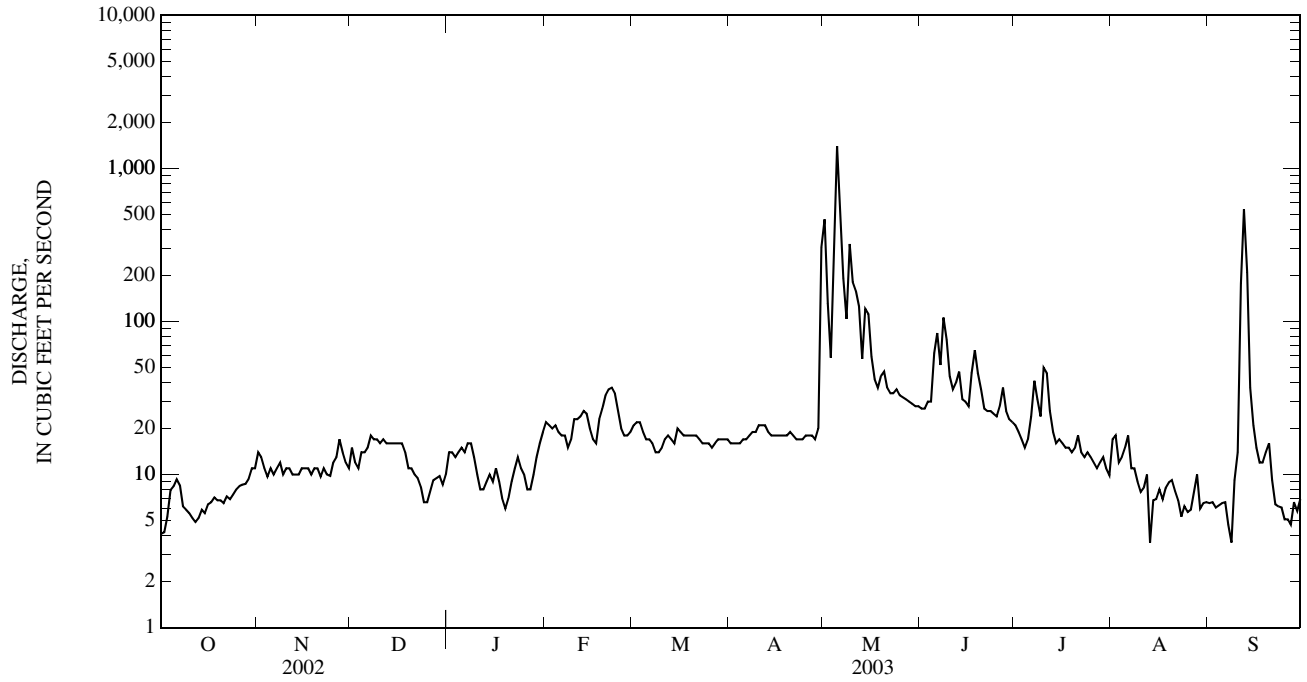
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2003, BY WATER YEAR (WY)

MEAN	17.8	17.9	15.6	18.9	50.5	94.1	42.7	70.2	122	64.5	37.7	24.4
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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1948 - 2003	
ANNUAL TOTAL	8,547.6		11,479.1			
ANNUAL MEAN	23.4		31.4		48.0	
HIGHEST ANNUAL MEAN					136	1993
LOWEST ANNUAL MEAN					13.6	1980
HIGHEST DAILY MEAN	891	Jun 12	1,400	May 5	4,900	Jun 17, 1990
LOWEST DAILY MEAN	3.1	Sep 11	3.6	Aug 13	0.00	Dec 22, 1989
ANNUAL SEVEN-DAY MINIMUM	3.7	Sep 7	5.5	Oct 9	0.86	Jul 22, 1954
MAXIMUM PEAK FLOW			1,600	May 5	8,000	Jun 17, 1990
MAXIMUM PEAK STAGE			16.06	May 5	22.76	Jun 17, 1990
ANNUAL RUNOFF (AC-FT)	16,950		22,770		34,770	
10 PERCENT EXCEEDS	31		40		66	
50 PERCENT EXCEEDS	16		16		17	
90 PERCENT EXCEEDS	5.3		6.6		6.1	

e Estimated.



06796000 PLATTE RIVER AT NORTH BEND, NE

LOCATION.--Lat 41° 27'10", long 96° 45'50", in SE 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 mi^2, of which about 57,800 mi^2 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-wateer with-drawals and diversions for irrigation, and return flow from irrigated areas.

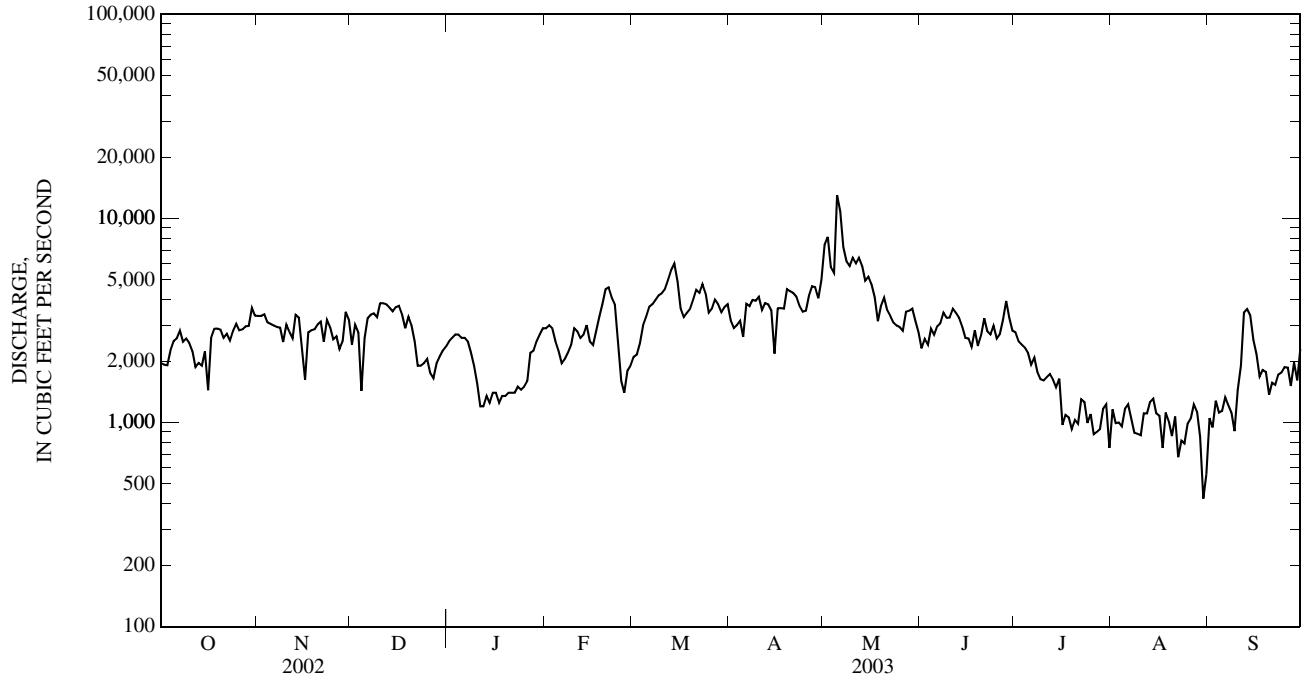
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,950	3,330	2,410	e2,500	e2,900	e2,100	3,180	7,430	2,310	2,770	1,160	1,050
2	1,920	3,330	3,020	e2,600	e3,000	e2,150	2,910	8,130	2,570	2,500	994	946
3	1,910	3,390	2,770	e2,700	e2,900	e2,450	3,000	5,780	2,400	2,410	1,000	1,280
4	2,260	3,100	1,430	e2,700	e2,500	e3,000	3,150	5,400	2,890	2,330	958	1,120
5	2,510	3,040	2,590	e2,600	e2,250	e3,300	2,630	13,000	2,690	2,200	1,170	1,140
6	2,580	2,990	3,240	e2,600	e1,950	e3,700	3,820	10,800	2,960	1,920	1,230	1,330
7	2,820	2,940	3,380	e2,500	e2,050	e3,800	3,720	7,250	3,070	2,080	1,040	1,220
8	2,490	2,920	3,430	e2,200	e2,200	e4,000	3,990	6,160	3,450	1,770	892	1,120
9	2,580	2,480	3,290	e1,900	e2,400	e4,200	3,950	5,850	3,260	1,630	881	908
10	2,460	3,020	3,850	e1,550	e2,900	e4,300	4,130	6,410	3,270	1,610	866	1,440
11	2,240	2,790	3,840	e1,200	e2,800	e4,500	3,560	6,020	3,610	1,670	1,110	1,900
12	1,870	2,590	3,790	e1,200	e2,600	e5,000	3,850	6,420	3,440	1,730	1,110	3,460
13	1,960	3,370	3,660	e1,350	e2,700	e5,600	3,790	5,850	3,260	1,620	1,260	3,600
14	1,900	3,270	3,510	e1,250	e3,000	e6,000	3,550	4,950	2,940	1,490	1,310	3,360
15	2,230	2,270	3,670	e1,400	e2,500	4,910	2,180	5,180	2,600	1,640	1,110	2,540
16	1,440	1,620	3,730	e1,400	e2,400	3,630	3,630	4,770	2,580	974	1,080	2,170
17	2,600	2,770	3,390	e1,250	e2,800	3,290	3,640	4,120	2,350	1,090	751	1,680
18	2,880	2,830	e2,900	e1,350	e3,300	3,440	3,620	3,140	2,830	1,060	1,120	1,810
19	2,890	2,860	e3,300	e1,350	e3,800	3,600	4,500	3,720	2,370	927	1,010	1,770
20	2,850	3,020	e3,000	e1,400	e4,500	4,000	4,400	4,090	2,670	1,030	859	1,370
21	2,600	3,120	e2,500	e1,400	e4,600	4,470	4,320	3,560	3,240	986	1,070	1,570
22	2,720	2,490	e1,900	e1,400	e4,100	4,320	4,140	3,330	2,800	1,300	677	1,530
23	2,520	3,190	e1,900	e1,500	e3,800	4,760	3,720	3,090	2,700	1,260	815	1,720
24	2,810	2,930	e1,950	e1,450	e2,400	4,270	3,490	2,990	2,980	996	790	1,760
25	3,050	2,560	e2,050	e1,500	e1,600	3,450	3,530	2,940	2,580	1,100	989	1,870
26	2,830	2,650	e1,750	e1,600	e1,400	3,620	4,170	2,820	2,710	875	1,050	1,860
27	2,860	2,290	e1,650	e2,200	e1,800	4,000	4,650	3,490	3,190	899	1,230	1,510
28	2,960	2,510	e1,950	e2,250	e1,900	3,800	4,610	3,530	3,940	930	1,130	1,970
29	2,980	3,490	e2,100	e2,500	---	3,480	4,060	3,620	3,270	1,170	851	1,610
30	3,650	3,190	e2,250	e2,700	---	3,680	4,990	3,160	2,820	1,230	424	2,290
31	3,340	---	e2,350	e2,900	---	3,800	---	2,770	---	753	558	---
TOTAL	78,660	86,350	86,550	58,400	77,050	120,620	112,880	159,770	87,750	45,950	30,495	52,904
MEAN	2,537	2,878	2,792	1,884	2,752	3,891	3,763	5,154	2,925	1,482	984	1,763
MAX	3,650	3,490	3,850	2,900	4,600	6,000	4,990	13,000	3,940	2,770	1,310	3,600
MIN	1,440	1,620	1,430	1,200	1,400	2,100	2,180	2,770	2,310	753	424	908
AC-FT	156,000	171,300	171,700	115,800	152,800	239,200	223,900	316,900	174,100	91,140	60,490	104,900
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2003, BY WATER YEAR (WY)												
MEAN	3,819	4,170	3,607	3,454	5,277	7,325	6,076	5,939	6,555	3,654	2,494	3,060
MAX	10,130	9,462	8,581	7,361	11,850	16,870	19,400	21,770	25,340	17,070	8,021	9,022
(WY)	(1974)	(1985)	(1985)	(1984)	(1984)	(1993)	(1984)	(1984)	(1983)	(1993)	(1983)	(1986)
MIN	1,624	1,938	1,413	1,206	2,689	3,685	2,881	1,952	1,932	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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1949 - 2003	
ANNUAL TOTAL	912,676		997,379			
ANNUAL MEAN	2,500		2,733		4,602	
HIGHEST ANNUAL MEAN					10,070	1984
LOWEST ANNUAL MEAN					2,168	1956
HIGHEST DAILY MEAN	7,800	Mar 14	13,000	May 5	82,300	Mar 10, 1993
LOWEST DAILY MEAN	302	Aug 2	424	Aug 30	36	Jul 29, 1974
ANNUAL SEVEN-DAY MINIMUM	510	Jul 30	884	Aug 27	146	Jul 24, 1974
MAXIMUM PEAK FLOW			*15,500	May 5	**112,000	Mar 29, 1960
MAXIMUM PEAK STAGE			***6.88	Mar 7	***15.55	Mar 19, 1978
ANNUAL RUNOFF (AC-FT)	1,810,000		1,978,000		3,334,000	
10 PERCENT EXCEEDS	4,000		4,150		8,290	
50 PERCENT EXCEEDS	2,520		2,650		3,730	
90 PERCENT EXCEEDS	792		1,110		1,420	

e Estimated.
* Stage 5.80 ft.
** Stage 10.04 ft.
*** Backwater from ice.



06796500 PLATTE RIVER NEAR LESHARA, NE

LOCATION.--Lat 41° 19'12", long 96° 24'14", in NW 1/4 sec.34, T.16 N., R.9 E., Douglas County, Hydrologic Unit 10200202, on left bank 25 ft downstream from bridge on Nebraska Highway 64, 1.0 mi southeast of Leshara, NE.

PERIOD OF RECORD.--June 1994 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,143.86 ft above sea level. Data collection platform at station.

REMARKS.--Records good except for those for December through March, which are poor.

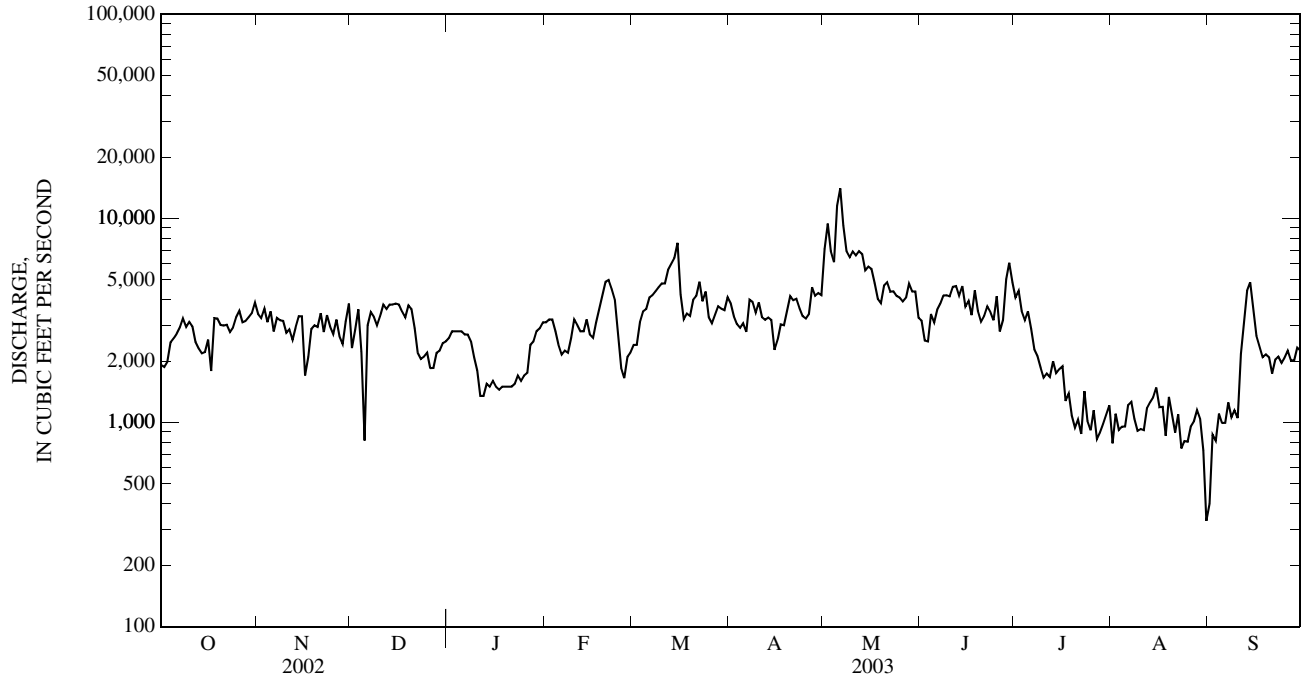
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

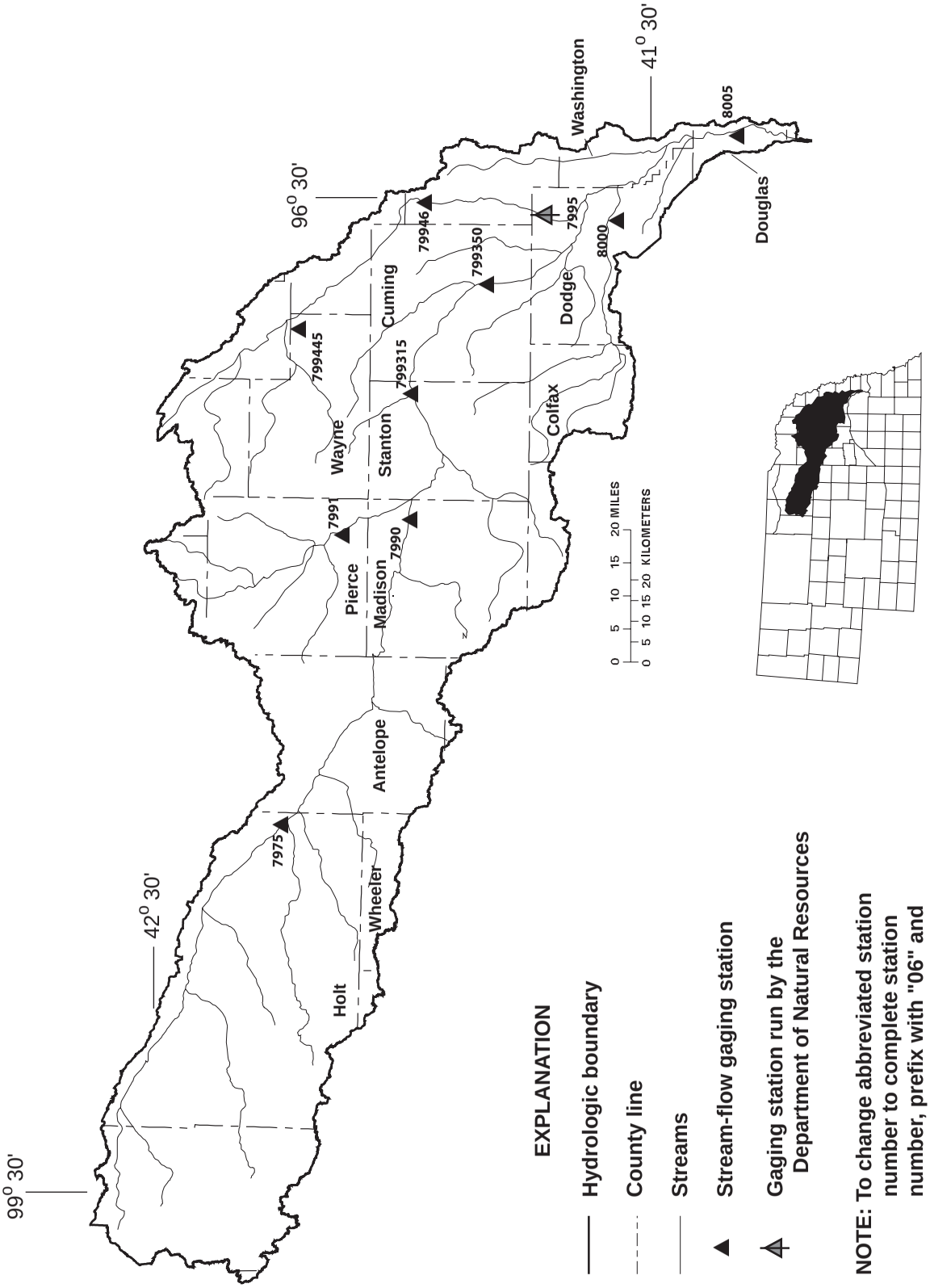
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,920	3,390	2,310	e2,600	e3,100	e2,400	3,850	7,080	3,160	4,100	792	e400
2	1,870	3,240	2,840	e2,800	e3,200	e2,400	3,320	9,430	2,520	4,410	1,110	872
3	1,980	3,610	3,580	e2,800	e3,200	e3,100	3,040	6,920	2,500	3,520	921	814
4	2,470	3,110	2,220	e2,800	e2,800	e3,500	2,910	6,100	3,400	3,170	956	1,110
5	2,580	3,510	816	e2,800	e2,400	e3,600	3,070	11,500	3,100	3,500	956	996
6	2,720	2,800	3,000	e2,700	e2,150	e4,100	2,780	14,000	3,570	2,880	1,220	998
7	2,930	3,260	3,480	e2,700	e2,250	e4,200	4,010	9,230	3,830	2,280	1,260	1,250
8	3,240	3,170	3,300	e2,500	e2,200	e4,400	3,900	6,910	4,200	2,120	1,050	1,060
9	2,950	3,150	2,990	e2,100	e2,600	e4,600	3,450	6,460	4,200	1,860	911	1,150
10	3,120	2,760	3,320	e1,800	e3,200	e4,800	3,870	6,890	4,150	1,660	930	1,050
11	2,950	2,860	3,790	e1,350	e3,000	e4,800	3,280	6,590	4,630	1,740	917	2,170
12	2,480	2,540	3,610	e1,350	e2,800	e5,600	3,190	6,900	4,670	1,670	1,180	3,030
13	2,310	2,920	3,790	e1,550	e2,800	e6,000	3,270	6,680	4,180	2,000	1,260	4,440
14	2,180	3,320	3,790	e1,500	e3,200	e6,400	3,180	5,570	4,660	1,740	1,330	4,860
15	2,210	3,320	3,830	e1,600	e2,700	e7,600	2,270	5,810	3,700	1,820	1,480	3,600
16	2,550	1,700	3,780	e1,500	e2,600	4,240	2,550	5,670	3,940	1,890	1,190	2,660
17	1,790	2,100	3,500	e1,450	e3,100	3,210	3,030	4,820	3,360	1,280	1,190	2,360
18	3,250	2,870	3,270	e1,500	e3,600	3,420	3,000	4,030	4,440	1,390	861	2,090
19	3,240	2,990	3,750	e1,500	e4,200	3,330	3,510	3,850	3,530	1,080	1,340	2,160
20	3,010	2,940	e3,600	e1,500	e4,900	4,000	4,160	4,700	3,120	943	1,090	2,090
21	2,990	3,430	e2,900	e1,500	e5,000	4,170	3,980	4,870	3,330	1,030	893	1,740
22	3,010	2,780	e2,200	e1,550	e4,500	4,900	4,040	4,380	3,700	880	1,100	2,040
23	2,780	3,360	e2,050	e1,700	e4,000	3,930	3,620	4,400	3,470	1,430	747	2,100
24	2,920	2,950	e2,100	e1,600	e2,800	4,380	3,320	4,170	3,170	1,020	811	1,960
25	3,290	2,720	e2,200	e1,700	e1,850	3,280	3,240	4,090	4,160	915	806	2,080
26	3,520	3,200	e1,850	e1,750	e1,650	3,060	3,400	3,920	2,790	1,150	959	2,250
27	3,100	2,650	e1,850	e2,400	e2,100	3,360	4,600	4,090	3,180	829	1,010	2,030
28	3,140	2,430	e2,200	e2,500	e2,200	3,710	4,180	4,810	5,030	893	1,150	2,010
29	3,280	3,130	e2,250	e2,800	---	3,610	4,310	4,390	6,060	985	1,050	2,330
30	3,440	3,830	e2,450	e2,900	---	3,560	4,210	4,390	4,870	1,090	731	2,250
31	3,870	---	e2,500	e3,100	---	4,110	---	3,270	---	1,210	e330	---
TOTAL	87,090	90,040	89,116	63,900	84,100	127,770	104,540	185,920	114,620	56,485	31,531	59,950
MEAN	2,809	3,001	2,875	2,061	3,004	4,122	3,485	5,997	3,821	1,822	1,017	1,998
MAX	3,870	3,830	3,830	3,100	5,000	7,600	4,600	14,000	6,060	4,410	1,480	4,860
MIN	1,790	1,700	816	1,350	1,650	2,400	2,270	3,270	2,500	829	330	400
AC-FT	172,700	178,600	176,800	126,700	166,800	253,400	207,400	368,800	227,300	112,000	62,540	118,900
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2003, BY WATER YEAR (WY)												
MEAN	4,746	5,237	4,812	4,487	6,077	6,208	6,926	7,023	8,080	4,424	3,542	3,695
MAX	6,733	7,784	6,762	7,552	10,040	7,960	11,300	10,650	17,460	10,540	7,163	6,793
(WY)	(1998)	(1998)	(1998)	(1998)	(1997)	(1998)	(1998)	(1995)	(1995)	(1995)	(1996)	(1996)
MIN	2,809	3,001	2,835	2,061	2,984	4,079	3,485	3,393	2,446	595	948	1,710
(WY)	(2003)	(2003)	(2001)	(2003)	(2002)	(2002)	(2003)	(2002)	(2002)	(2002)	(2002)	(2002)

06796500 PLATTE RIVER NEAR LESHARA, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1994 - 2003	
ANNUAL TOTAL	949,064		1,095,062			
ANNUAL MEAN	2,600		3,000		5,424	
HIGHEST ANNUAL MEAN					7,444	1999
LOWEST ANNUAL MEAN					2,722	2002
HIGHEST DAILY MEAN	8,220	Mar 14	14,000	May 6	29,600	Jun 28, 1999
LOWEST DAILY MEAN	257	Aug 3	330	Aug 31	257	Aug 3, 2002
ANNUAL SEVEN-DAY MINIMUM	458	Jul 31	750	Aug 30	458	Jul 31, 2002
MAXIMUM PEAK FLOW			*21,100	May 5	**32,600	Jun 2, 1999
MAXIMUM PEAK STAGE			***6.64	Feb 22	***11.84	Feb 9, 1996
ANNUAL RUNOFF (AC-FT)	1,882,000		2,172,000		3,929,000	
10 PERCENT EXCEEDS	3,990		4,610		9,000	
50 PERCENT EXCEEDS	2,760		2,950		4,970	
90 PERCENT EXCEEDS	699		1,090		2,000	

e Estimated.
* Stage 6.52 ft.
** Stage 7.47 ft.
*** Backwater from ice.




99° 30'
42° 30'
96° 30'
41° 30'
Holt
Wheeler
Antelope
Pierce
Madison
Wayne
Stanton
Cuming
Colfax
Dodge
Washington
Douglas
7975
7991
7990
799445
799315
799350
79946
7995
8000
8005
0 5 10 15 20 MILES
0 5 10 15 20 KILOMETERS
EXPLANATION
Hydrologic boundary
County line
Streams
Stream-flow gaging station
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.

*Station number	Station name	Page
7975	Elkhorn River at Ewing	176
7990	Elkhorn River at Norfolk	178
7991	North Fork Elkhorn near Pierce	180
799315	Elkhorn River at Pilger	182
799350	Elkhorn River at West Point	184
799445	Logan Creek at Wakefield	186
799460	Logan Creek near Bancroft	188
7995	Logan Creek near Uehling	190
8000	Maple Creek near Nickerson	192
8005	Elkhorn River at Waterloo	214

*NOTE: To change abbreviated station number to complete station number, prefix with “06” and add zeros required to give eight digits.

06797500 ELKHORN RIVER AT EWING, NE

LOCATION.--Lat 42° 16'07", long 98° 20'22", in NE 1/4 SW 1/4 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 mi^2, approximately, of which about 740 mi^2 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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	e43	56	e74	e50	e47	94	186	86	131	18	5.4
2	22	43	52	e74	e56	e45	88	210	88	108	17	5.2
3	26	49	81	e72	e50	e44	80	251	83	92	16	4.8
4	45	53	81	e70	e47	e43	75	356	82	84	15	4.7
5	43	53	72	66	e46	e40	73	346	82	81	22	4.6
6	40	52	e66	70	e45	e41	73	319	78	110	19	4.5
7	38	52	e64	66	e42	e48	79	333	77	96	16	4.6
8	37	52	e68	66	e44	e48	81	374	75	81	15	4.6
9	34	50	e68	66	e45	e47	89	402	73	95	15	5.3
10	34	49	e66	e64	e46	e50	95	428	71	83	16	6.2
11	34	47	e66	e60	e46	e58	96	525	67	74	16	11
12	33	47	e68	e62	e47	e70	98	539	64	67	15	9.0
13	32	48	e68	e64	e48	e68	94	543	62	61	14	7.6
14	32	47	e66	e62	e52	e76	90	526	61	54	13	7.2
15	31	47	e62	e58	e49	e86	82	473	59	48	11	6.7
16	32	47	65	e54	e44	98	99	413	55	44	10	6.1
17	32	47	73	e49	e45	92	157	349	53	40	9.1	5.8
18	32	47	66	e50	e49	90	137	295	55	38	8.4	6.7
19	32	46	58	e52	e50	90	161	261	57	36	7.8	7.0
20	32	46	53	e56	e52	89	169	225	55	34	8.0	6.6
21	32	46	59	e54	e50	91	171	198	51	31	7.4	6.7
22	31	45	70	e47	e47	96	167	186	67	29	7.2	6.4
23	31	45	e68	e42	e43	95	156	175	79	27	6.7	6.3
24	33	44	e68	e44	e41	90	152	161	91	26	6.1	5.7
25	33	46	e66	e48	e39	82	152	149	129	23	6.0	5.4
26	33	43	e64	e45	e41	79	161	138	148	21	5.9	5.7
27	37	52	e66	e46	e43	93	187	126	143	25	5.4	5.5
28	41	61	e70	e50	e45	97	184	116	145	25	5.3	5.3
29	41	60	e72	e48	---	96	161	105	149	22	5.3	5.5
30	45	52	e74	e47	---	100	163	99	148	21	5.2	5.9
31	e44	---	e78	e52	---	99	---	90	---	19	5.5	---
TOTAL	1,063	1,459	2,074	1,778	1,302	2,288	3,664	8,897	2,533	1,726	347.3	182.0
MEAN	34.3	48.6	66.9	57.4	46.5	73.8	122	287	84.4	55.7	11.2	6.07
MAX	45	61	81	74	56	100	187	543	149	131	22	11
MIN	21	43	52	42	39	40	73	90	51	19	5.2	4.5
AC-FT	2,110	2,890	4,110	3,530	2,580	4,540	7,270	17,650	5,020	3,420	689	361

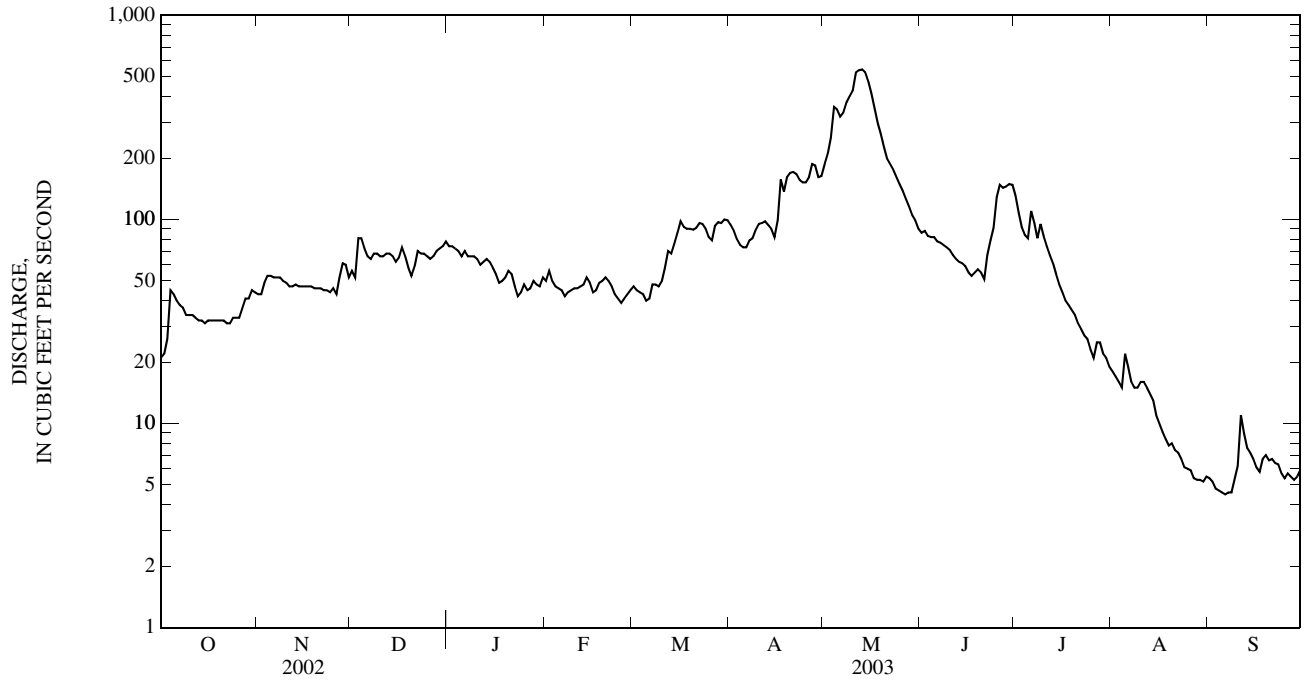
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2003, BY WATER YEAR (WY)

MEAN	87.5	93.2	81.3	71.3	139	348	496	414	308	161	74.5	75.5
MAX	671	443	250	226	1,172	2,144	2,081	2,243	2,690	1,993	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	11.2	6.07
(WY)	(1976)	(1977)	(1956)	(1977)	(1975)	(1981)	(1981)	(1981)	(1976)	(2002)	(2003)	(2003)

06797500 ELKHORN RIVER AT EWING, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1947 - 2003	
ANNUAL TOTAL	27,740.2		27,313.3			
ANNUAL MEAN	76.0		74.8		196	
HIGHEST ANNUAL MEAN					543	1995
LOWEST ANNUAL MEAN					42.8	1981
HIGHEST DAILY MEAN	211	May 4	543	May 13	8,480	May 30, 1995
LOWEST DAILY MEAN	5.5	Jul 29	4.5	Sep 6	4.5	Sep 6, 2003
ANNUAL SEVEN-DAY MINIMUM	6.4	Jul 23	4.7	Sep 2	4.7	Sep 2, 2003
MAXIMUM PEAK FLOW			567	May 13	9,050	May 29, 1995
MAXIMUM PEAK STAGE			4.71	May 13	11.09	May 29, 1995
ANNUAL RUNOFF (AC-FT)	55,020		54,180		141,900	
10 PERCENT EXCEEDS	157		152		412	
50 PERCENT EXCEEDS	64		52		78	
90 PERCENT EXCEEDS	12		7.2		30	

e Estimated.



06799000 ELKHORN RIVER AT NORFOLK, NE

LOCATION.--Lat 42° 00'14", long 97° 25'31", in SW $^{1}/_{4}$ SW $^{1}/_{4}$ 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 mi^2, approximately, of which about 1,790 mi^2 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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	167	262	279	e280	e230	e250	386	642	311	284	147	75
2	180	253	279	e280	e235	e260	386	598	326	272	137	74
3	183	254	287	e280	e245	e260	382	601	340	262	127	73
4	212	260	301	e290	e235	e250	370	762	341	253	126	70
5	228	271	292	e280	e225	255	353	981	338	245	139	69
6	247	269	280	e280	e215	e240	353	1,140	330	492	139	67
7	237	262	243	e280	e220	e250	370	1,020	328	429	132	66
8	220	259	e250	e290	e210	e280	374	974	318	382	126	64
9	213	259	e260	e290	e215	e280	385	927	318	336	120	77
10	210	258	e270	e270	e220	e280	401	952	315	336	161	97
11	204	260	e280	e230	e220	e290	402	1,050	303	349	174	506
12	203	262	e280	213	e215	e310	395	1,090	307	297	141	546
13	197	258	e290	216	e220	e350	392	1,100	326	265	129	217
14	196	266	293	e210	e220	e360	383	1,180	328	244	121	170
15	192	270	296	e215	e235	373	381	1,120	305	226	114	149
16	202	268	308	e215	e230	394	381	1,040	302	207	109	136
17	210	260	325	203	e215	411	373	960	296	194	101	130
18	212	258	318	e200	e220	401	400	815	305	187	96	138
19	213	251	323	e210	e235	401	479	701	397	182	95	142
20	209	247	318	e225	e250	403	519	609	315	174	92	127
21	204	244	317	e220	e270	398	545	549	291	165	87	127
22	208	246	291	e215	e290	393	532	506	291	157	86	124
23	216	246	279	e200	e280	387	508	489	286	152	84	119
24	226	245	260	e190	e270	386	496	476	286	145	79	119
25	230	240	194	e200	e260	387	480	444	305	138	75	111
26	232	252	e200	e200	e240	383	472	423	299	131	73	112
27	242	266	e220	e200	e250	399	453	401	315	153	72	108
28	253	246	e240	e210	e250	414	444	378	325	211	71	108
29	259	265	e280	e225	---	410	475	359	311	187	70	108
30	273	269	e281	e220	---	395	598	341	297	167	69	111
31	272	---	e280	e225	---	387	---	326	---	154	70	---
TOTAL	6,750	7,726	8,614	7,262	6,620	10,637	12,868	22,954	9,455	7,376	3,362	4,140
MEAN	218	258	278	234	236	343	429	740	315	238	108	138
MAX	273	271	325	290	290	414	598	1,180	397	492	174	546
MIN	167	240	194	190	210	240	353	326	286	131	69	64
AC-FT	13,390	15,320	17,090	14,400	13,130	21,100	25,520	45,530	18,750	14,630	6,670	8,210

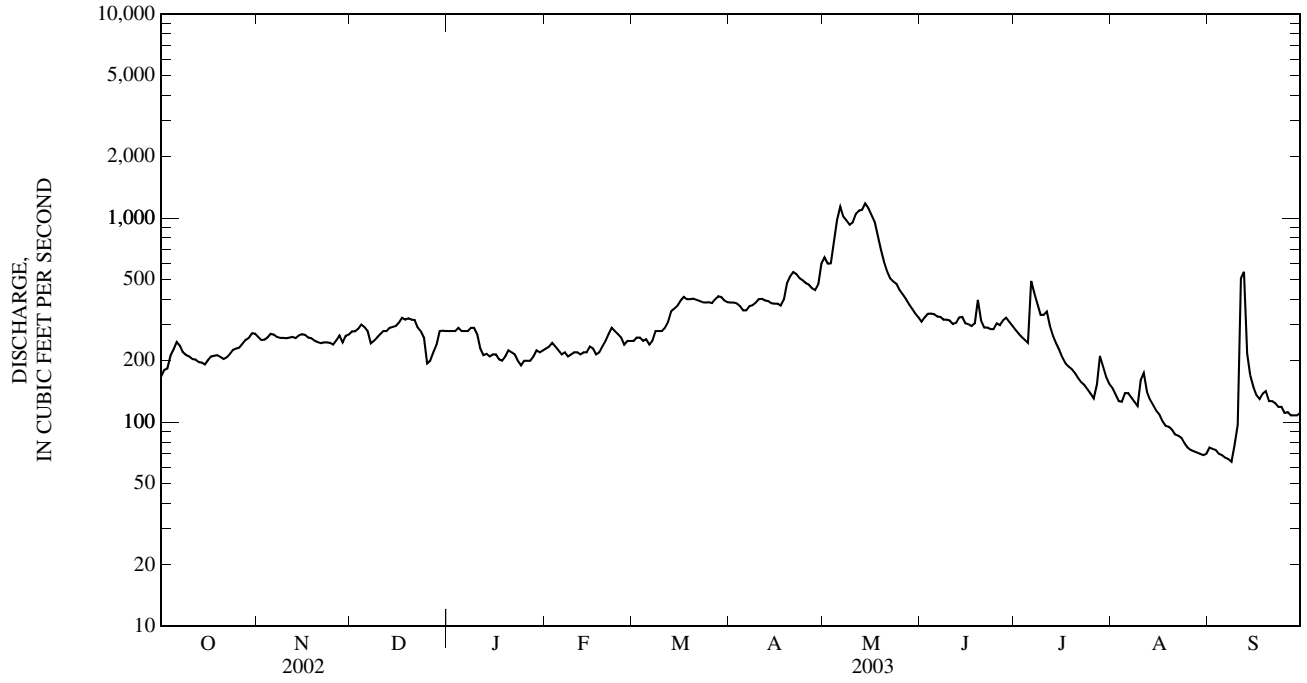
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2003, BY WATER YEAR (WY)

MEAN	318	337	305	293	490	877	1,039	889	902	479	309	271
MAX	1,418	985	609	624	1,862	3,819	3,715	4,615	4,673	3,663	1,398	1,444
(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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1946 - 2003	
ANNUAL TOTAL	109,371		107,764			
ANNUAL MEAN	300		295		542	
HIGHEST ANNUAL MEAN					1,355	1995
LOWEST ANNUAL MEAN					224	1981
HIGHEST DAILY MEAN	611	May 12	1,180	May 14	17,500	May 31, 1995
LOWEST DAILY MEAN	63	Aug 1	64	Sep 8	33	Aug 3, 1980
ANNUAL SEVEN-DAY MINIMUM	72	Jul 26	69	Sep 2	40	Aug 24, 1976
MAXIMUM PEAK FLOW			1,240	May 6	*16,900	Jun 14, 1967
MAXIMUM PEAK STAGE			5.63	May 6	**15.63	Mar 11, 1949
ANNUAL RUNOFF (AC-FT)	216,900		213,700		392,500	
10 PERCENT EXCEEDS	499		473		1,060	
50 PERCENT EXCEEDS	270		260		316	
90 PERCENT EXCEEDS	126		121		162	

e Estimated.
* Stage 8.52 ft.
** Backwater from ice.



06799100 NORTH FORK ELKHORN RIVER NEAR PIERCE, NE

LOCATION--Lat 42° 08'57", long 97° 28'41", in NW 1/4 sec.18, T.25 N., R.1 W., Pierce County, Hydrologic Unit 10220002, on right bank 4 ft downstream and 25 ft from end of bridge, 4.5 mi southeast of Pierce, and at mile 20.8.

DRAINAGE AREA .--701 mi^2, of which 671 mi^2 contributes directly to surface runoff.

PERIOD OF RECORD.--August 1960 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 1,542.88 ft above sea level (U.S. Weather Service levels). Aug. 19, 1960 to Oct. 7, 1997, water-stage recorder at site 2 mi upstream at datum 10.19 ft higher. Data collection platform at station.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	32	34	e38	e39	e45	75	130	68	84	33	11
2	22	37	41	e37	e40	e46	69	133	72	74	30	11
3	23	37	30	e37	e39	e47	64	108	77	67	28	11
4	29	37	32	e38	38	46	63	120	89	62	28	11
5	27	37	31	e38	e38	e47	62	191	108	61	29	10
6	30	37	41	e37	39	e42	60	182	88	240	26	9.9
7	31	37	37	38	e37	e41	62	157	83	628	24	9.6
8	27	36	35	39	e38	e40	57	136	84	533	22	9.3
9	25	36	34	38	e39	39	65	133	81	220	21	14
10	26	35	36	31	39	e39	93	131	81	165	28	23
11	26	34	37	e30	35	e41	115	182	99	131	27	56
12	25	34	36	e31	e36	e43	89	207	137	105	24	66
13	25	37	34	e35	e37	46	73	188	99	87	23	56
14	25	38	36	e34	e37	50	65	198	84	76	22	35
15	25	37	36	e31	38	71	60	226	77	67	18	26
16	26	37	36	e32	37	98	58	201	72	59	16	23
17	29	36	36	e29	e36	86	57	161	69	54	15	21
18	28	36	39	e28	e38	71	60	142	69	51	15	25
19	27	36	39	e30	e41	65	65	131	69	49	16	26
20	27	35	36	e33	e44	63	77	121	62	46	16	25
21	27	34	30	e33	e47	64	84	114	58	43	14	24
22	26	34	29	e32	e50	61	72	108	56	41	13	22
23	27	34	33	e31	49	59	65	107	57	37	13	22
24	29	35	36	e32	e48	57	63	106	92	36	13	21
25	29	27	37	e34	e46	57	65	102	418	34	13	20
26	29	30	38	e34	e43	56	65	98	576	31	15	21
27	30	35	35	e33	e44	66	64	92	239	37	12	21
28	32	31	36	e35	e45	119	58	87	142	37	12	20
29	32	41	38	e38	---	140	53	81	110	35	11	20
30	35	29	37	e37	---	95	78	76	94	34	11	21
31	35	---	e38	e38	---	82	---	71	---	34	11	---
TOTAL	855	1,051	1,103	1,061	1,137	1,922	2,056	4,220	3,510	3,258	599	690.8
MEAN	27.6	35.0	35.6	34.2	40.6	62.0	68.5	136	117	105	19.3	23.0
MAX	35	41	41	39	50	140	115	226	576	628	33	66
MIN	21	27	29	28	35	39	53	71	56	31	11	9.3
AC-FT	1,700	2,080	2,190	2,100	2,260	3,810	4,080	8,370	6,960	6,460	1,190	1,370

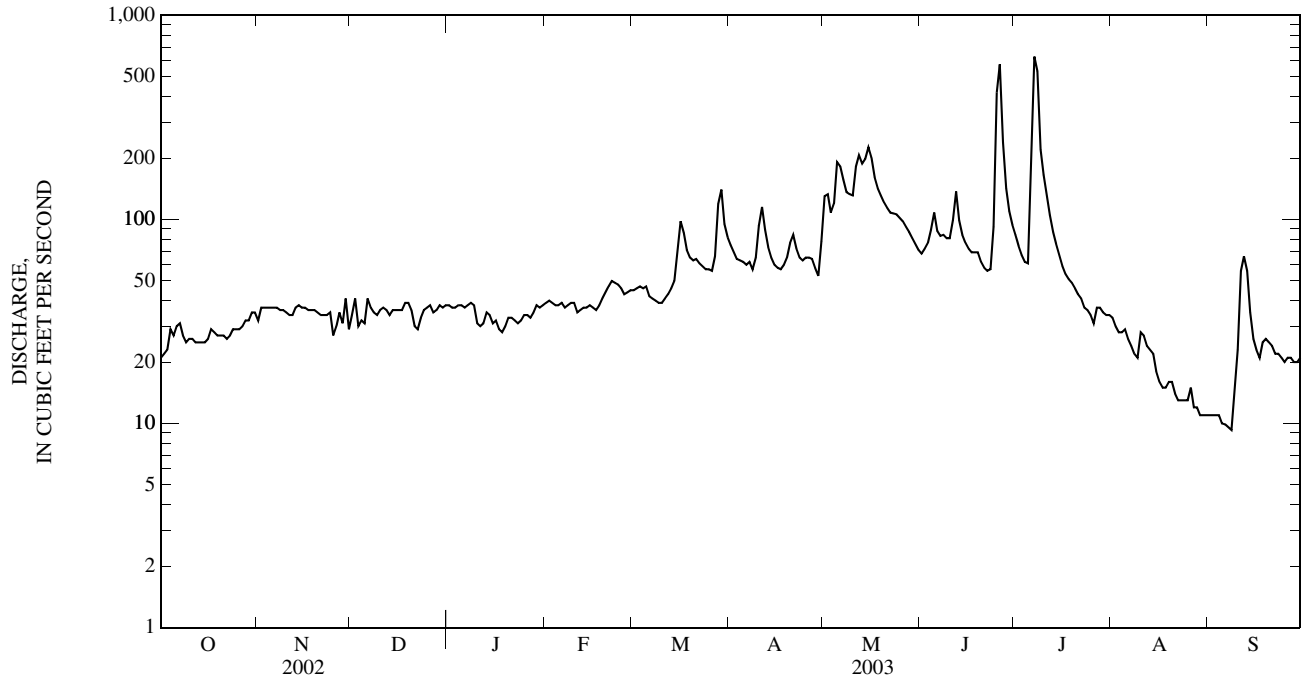
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2003, BY WATER YEAR (WY)

MEAN	52.9	59.8	54.0	49.1	114	201	190	164	182	99.5	54.7	46.3
MAX	241	233	156	111	834	1,120	1,004	663	799	834	226	191
(WY)	(1996)	(1999)	(2002)	(1973)	(1971)	(1962)	(1984)	(1995)	(1967)	(1993)	(1996)	(1992)
MIN	13.5	14.7	14.6	15.6	24.2	30.3	28.7	27.7	21.8	11.7	7.41	9.53
(WY)	(1992)	(1992)	(1992)	(1992)	(1978)	(1990)	(1990)	(1981)	(1989)	(1989)	(1990)	(1990)

06799100 NORTH FORK ELKHORN RIVER NEAR PIERCE, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1960 - 2003	
ANNUAL TOTAL	24,541.8		21,462.8			
ANNUAL MEAN	67.2		58.8		105	
HIGHEST ANNUAL MEAN					287	1993
LOWEST ANNUAL MEAN					21.5	1990
HIGHEST DAILY MEAN	310	May 12	628	Jul 7	10,400	Mar 28, 1962
LOWEST DAILY MEAN	6.5	Aug 3	9.3	Sep 8	2.7	Jul 29, 1989
ANNUAL SEVEN-DAY MINIMUM	9.3	Jul 28	10	Sep 2	3.7	Aug 15, 1990
MAXIMUM PEAK FLOW			733	Jul 8	15,200	Feb 19, 1971
MAXIMUM PEAK STAGE			6.64	Jul 8	15.10	Feb 19, 1971
ANNUAL RUNOFF (AC-FT)	48,680		42,570		76,170	
10 PERCENT EXCEEDS	126		108		201	
50 PERCENT EXCEEDS	47		38		48	
90 PERCENT EXCEEDS	20		22		22	

e Estimated.



06799315 ELKHORN RIVER AT PILGER, NE

LOCATION--Lat 41° 59'42", long 97° 03'29", in NE 1/4 SW 1/4 sec.2, T.23 N., R.3 E., Stanton County, Hydrologic Unit 10220003, on right bank near the downstream wingwall of the bridge on State Highway 15, 0.8 miles south of Pilger.

DRAINAGE AREA .--4,360 mi^2, approximately, of which about 3,360 mi^2 contributes directly to surface runoff.

PERIOD OF RECORD.--June 2001 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,388.41 ft above sea level. Data collection platform at station.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	263	418	392	e440	e560	e450	721	2,560	535	486	271	154
2	274	406	406	e480	e520	e490	700	1,300	579	472	259	156
3	297	397	395	e460	e480	e550	678	1,110	603	453	242	155
4	354	399	370	e470	e420	e380	662	2,190	588	430	231	152
5	343	411	371	e500	e400	e330	633	3,310	649	424	251	150
6	347	416	347	e500	e420	e410	623	3,000	652	800	250	147
7	362	417	e330	e520	e430	e620	649	2,130	664	1,340	239	145
8	353	408	e340	e480	e460	e940	643	1,810	618	1,360	227	144
9	329	404	e360	e390	e560	e980	622	2,820	609	1,270	220	166
10	327	392	e380	e300	e580	e940	682	2,400	595	855	224	213
11	329	382	e380	e230	e540	e860	741	2,390	562	763	296	527
12	327	378	e380	e220	e500	e720	752	2,230	563	635	275	1,570
13	328	387	e400	e210	e480	e560	699	2,030	614	521	233	794
14	331	381	e400	e160	e500	925	655	2,450	603	452	219	373
15	333	379	e400	e140	e430	585	632	2,540	568	409	211	264
16	337	383	e420	e130	e470	592	620	2,010	541	367	204	225
17	355	386	466	e120	e490	680	599	1,700	542	330	190	204
18	346	380	491	e110	e600	694	588	1,430	544	312	181	204
19	340	379	484	e110	e680	673	715	1,300	599	299	180	219
20	339	373	472	e110	e740	712	787	1,120	617	291	177	215
21	334	373	e390	e140	e820	694	850	1,010	532	279	169	207
22	321	365	e330	e215	e2,100	679	859	952	508	270	163	203
23	328	363	e260	e270	e1,300	651	804	905	497	257	165	205
24	349	352	e280	e330	e640	650	793	873	493	244	162	206
25	359	341	e270	e460	e270	640	773	838	548	238	157	207
26	358	343	e270	e520	e430	628	739	788	860	234	157	207
27	374	338	e310	e520	e450	682	714	747	1,090	250	156	207
28	406	375	e420	e500	e370	773	671	703	775	334	152	208
29	402	417	e500	e500	---	779	680	651	612	348	151	211
30	426	396	e480	e560	---	811	1,350	610	521	307	150	215
31	440	---	e450	e560	---	742	---	562	---	284	150	---
TOTAL	10,711	11,539	11,944	10,655	16,640	20,820	21,634	50,469	18,281	15,314	6,312	8,253
MEAN	346	385	385	344	594	672	721	1,628	609	494	204	275
MAX	440	418	500	560	2,100	980	1,350	3,310	1,090	1,360	296	1,570
MIN	263	338	260	110	270	330	588	562	493	234	150	144
AC-FT	21,250	22,890	23,690	21,130	33,010	41,300	42,910	100,100	36,260	30,380	12,520	16,370

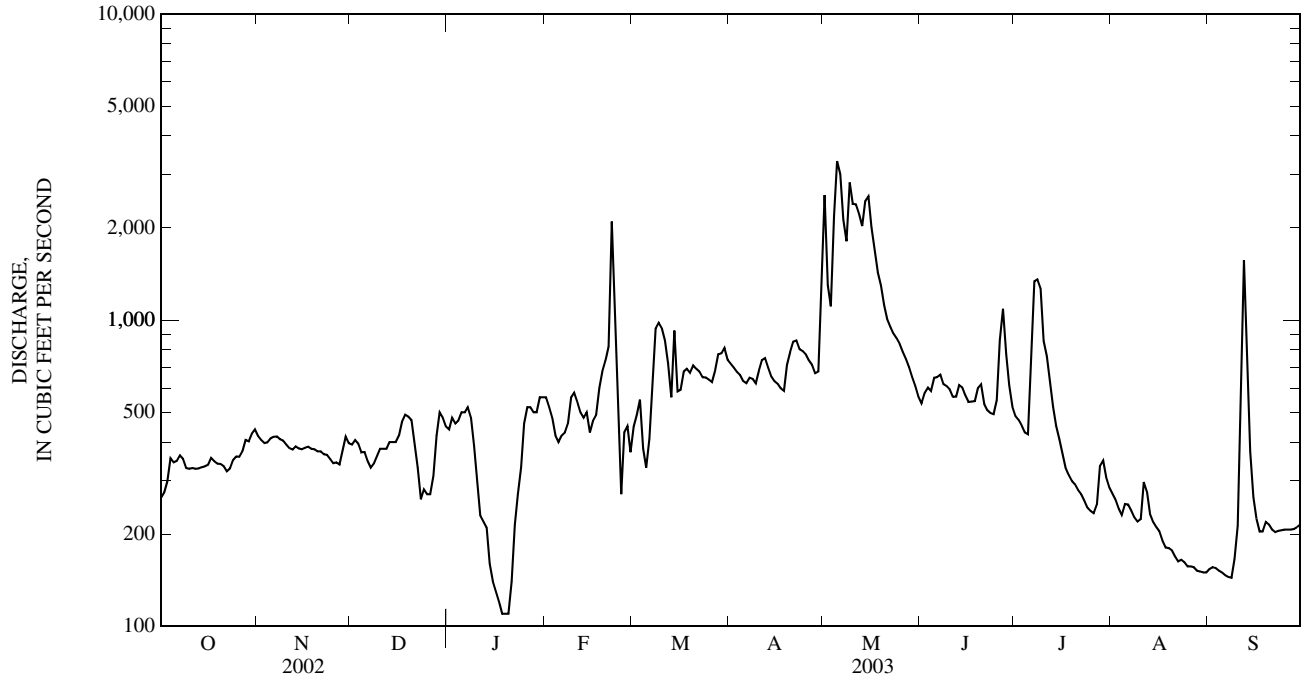
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2003, BY WATER YEAR (WY)

MEAN	477	509	495	375	492	666	754	1,267	648	493	333	385
MAX	609	633	606	406	594	672	786	1,628	686	798	566	638
(WY)	(2002)	(2002)	(2002)	(2002)	(2003)	(2003)	(2002)	(2003)	(2002)	(2001)	(2001)	(2001)
MIN	346	385	385	344	390	661	721	906	609	185	204	241
(WY)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2003)	(2002)	(2003)	(2002)	(2003)	(2002)

06799315 ELKHORN RIVER AT PILGER, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2001 - 2003	
ANNUAL TOTAL	170,581		202,572			
ANNUAL MEAN	467		555		542	
HIGHEST ANNUAL MEAN					555	2003
LOWEST ANNUAL MEAN					529	2002
HIGHEST DAILY MEAN	2,730	Jun 12	3,310	May 5	3,310	May 5, 2003
LOWEST DAILY MEAN	102	Aug 2	110	Jan 18	102	Aug 2, 2002
ANNUAL SEVEN-DAY MINIMUM	114	Jul 29	123	Jan 15	114	Jul 29, 2002
MAXIMUM PEAK FLOW			*6,840	May 4	6,840	May 4, 2003
MAXIMUM PEAK STAGE			**10.53	Feb 20	**10.53	Feb 20, 2003
ANNUAL RUNOFF (AC-FT)	338,300		401,800		392,600	
10 PERCENT EXCEEDS	862		865		905	
50 PERCENT EXCEEDS	383		424		464	
90 PERCENT EXCEEDS	196		205		203	

e Estimated.
* Stage 9.99 ft.
** Backwater from ice.



06799350 ELKHORN RIVER AT WEST POINT, NE

LOCATION.--Lat 41° 50'22", long 96° 43'38", in SW 1/4 NW 1/4 sec.34, T.22 N., R.6 E., Cuming County, Hydrologic Unit 10220003, on right bank near right downstream wingwall of bridge on State Highway 32, 1 mi west of West Point, and at mile 79.8.

DRAINAGE AREA.--4,680 mi^2, approximately, of which about 4,100 mi^2 contributes directly to surface runoff, revised.

PERIOD OF RECORD.--October 1972 to current year. March 1960 to September 1972 (no winter records 1960-68)in files of Corps of Engineers. Gage-height records collected since 1940 are in reports of U.S. Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 1,291.26 ft above sea level. Prior to May 18, 1976, at site on left bank 50 ft upstream from bridge at same datum. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor. Some small diversions above station for irrigation.

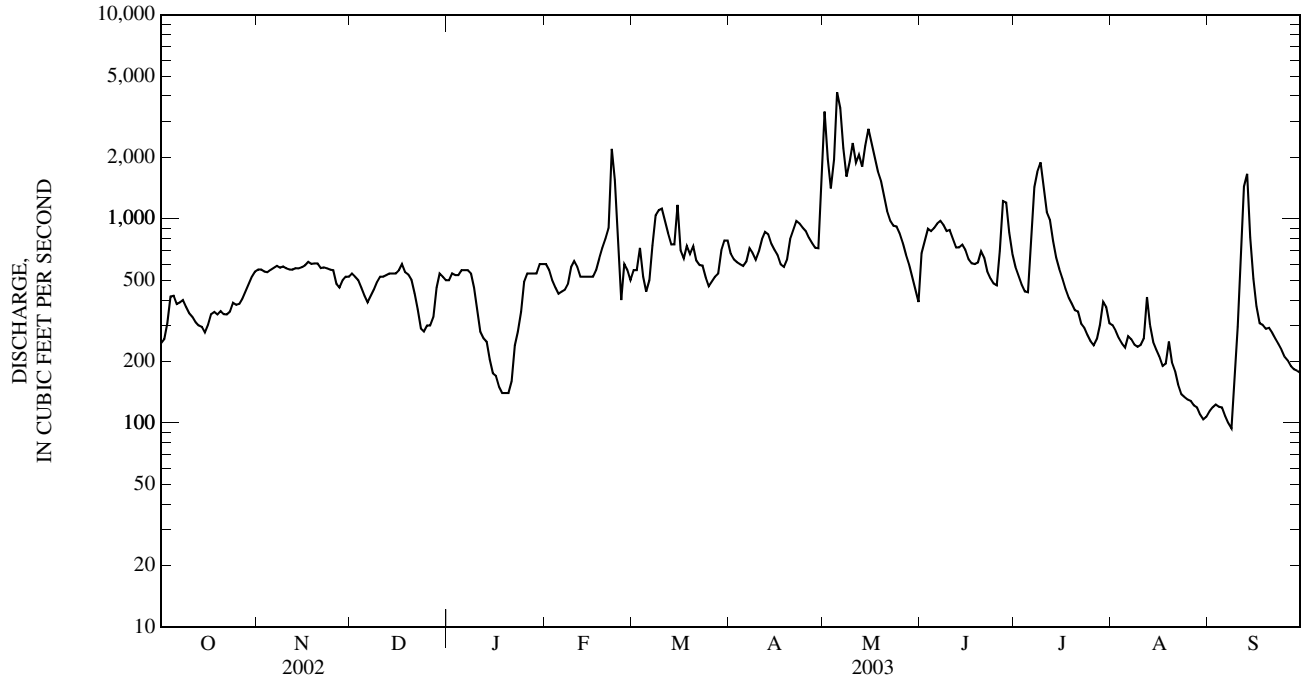
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	245	564	e540	e500	e600	e560	675	3,350	679	581	301	114
2	257	564	e520	e540	e560	e560	632	1,960	776	526	283	119
3	308	551	e500	e530	e500	e720	613	1,410	895	476	e260	123
4	416	547	e460	e530	e460	e520	599	1,950	871	441	e245	120
5	420	562	e420	e560	e430	e440	587	4,170	903	437	234	119
6	382	575	e390	e560	e440	e500	618	3,490	948	825	266	108
7	389	588	e420	e560	e450	e740	717	2,220	977	1,430	257	100
8	400	576	e450	e540	e480	e1,040	681	1,610	934	1,700	242	94
9	369	584	e490	e460	e580	e1,100	630	1,910	870	1,890	236	166
10	345	572	e520	e360	e620	e1,120	691	2,350	882	1,450	241	296
11	331	564	e520	e280	e580	979	795	1,880	799	1,080	259	682
12	312	563	e530	e260	e520	e850	862	2,060	724	991	414	1,440
13	300	573	e540	e250	e520	e750	839	1,800	724	779	301	1,660
14	295	572	e540	e205	e520	e750	756	2,280	747	648	249	813
15	277	579	e540	e175	e520	1,170	705	2,760	705	568	229	508
16	303	592	e560	e170	e520	702	663	2,360	633	508	211	373
17	341	615	600	e150	e560	641	598	2,000	606	454	190	308
18	350	601	547	e140	e640	737	581	1,710	600	411	195	302
19	340	604	533	e140	e720	672	630	1,540	610	384	250	289
20	353	605	503	e140	e800	733	796	1,300	693	356	198	292
21	341	574	e430	e160	e900	624	878	1,090	644	351	179	277
22	340	578	e360	e240	e2,200	594	976	977	552	306	154	259
23	351	572	e290	e280	e1,550	590	947	925	510	292	138	244
24	388	563	e280	e350	e800	517	906	918	482	270	134	228
25	379	560	e300	e490	e400	468	870	851	472	251	130	211
26	383	e480	e300	e540	e600	494	809	762	696	240	128	202
27	407	e460	e330	e540	e560	e520	760	667	1,220	258	122	190
28	441	e500	e460	e540	e500	e540	721	598	1,200	302	119	183
29	480	e520	e540	e540	---	701	717	522	855	392	110	180
30	521	e520	e520	e600	---	783	1,430	455	672	370	104	176
31	551	---	e500	e600	---	783	---	391	---	308	107	---
TOTAL	11,315	16,878	14,433	11,930	18,530	21,898	22,682	52,266	22,879	19,275	6,486	10,176
MEAN	365	563	466	385	662	706	756	1,686	763	622	209	339
MAX	551	615	600	600	2,200	1,170	1,430	4,170	1,220	1,890	414	1,660
MIN	245	460	280	140	400	440	581	391	472	240	104	94
AC-FT	22,440	33,480	28,630	23,660	36,750	43,430	44,990	103,700	45,380	38,230	12,860	20,180
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2003, BY WATER YEAR (WY)												
MEAN	552	641	594	541	1,024	1,766	1,821	1,639	1,543	1,004	603	482
MAX	1,606	1,802	1,314	1,106	2,744	5,256	6,171	5,618	3,844	6,945	1,994	1,646
(WY)	(1987)	(1999)	(1994)	(1995)	(1983)	(1987)	(1984)	(1995)	(1995)	(1993)	(1993)	(1986)
MIN	174	241	203	168	201	411	378	325	339	154	90.0	137
(WY)	(1977)	(1979)	(1977)	(1977)	(1979)	(1981)	(1981)	(1981)	(1976)	(1976)	(1976)	(1976)

06799350 ELKHORN RIVER AT WEST POINT, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1973 - 2003	
ANNUAL TOTAL	223,644		228,748			
ANNUAL MEAN	613		627		1,016	
HIGHEST ANNUAL MEAN					2,253	1993
LOWEST ANNUAL MEAN					332	1981
HIGHEST DAILY MEAN	3,280	Jun 12	4,170	May 5	26,000	Mar 9, 1993
LOWEST DAILY MEAN	86	Aug 3	94	Sep 8	41	Aug 31, 1976
ANNUAL SEVEN-DAY MINIMUM	127	Jul 28	112	Sep 2	45	Aug 27, 1976
MAXIMUM PEAK FLOW			*6,710	May 5	e**33,000	Jun 25, 1969
MAXIMUM PEAK STAGE			***3.46	Feb 21	****18.60	Mar 9, 1993
ANNUAL RUNOFF (AC-FT)	443,600		453,700		736,200	
10 PERCENT EXCEEDS	1,030		1,060		2,040	
50 PERCENT EXCEEDS	533		540		600	
90 PERCENT EXCEEDS	248		209		235	

e Estimated.
* Stage 10.23 ft.
** Stage 13.21 ft.
*** Backwater from ice.
**** From floodmark, ice jam.



06799445 LOGAN CREEK AT WAKEFIELD, NE

LOCATION.--Lat 42° 16'38", long 96° 51'43", in NW$^{1}/_{4}$ NW$^{1}/_{4}$ sec.33, T.27 N., R.8 E., Dixon County, Hydrologic Unit 10220004, on the left downstream shoulder of Nebraska Highway 16 bridge at the north edge of Wakefield.

DRAINAGE AREA.--543 mi^2.

PERIOD OF RECORD.--October 2002 to September 2003.

GAGE.--Water-stage recorder. Elevation of gage is 1,360 ft above sea level from topographic map. Data collection platform at station.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	81	90	87	e74	e60	101	172	115	182	92	53
2	78	80	86	88	e78	e59	100	139	123	175	88	53
3	79	80	82	88	e82	e60	94	128	126	168	85	49
4	96	79	83	89	e82	e57	93	217	120	167	85	48
5	81	79	e78	89	e80	e55	93	345	119	178	89	49
6	76	77	88	88	e80	e54	90	201	119	3,570	84	50
7	74	76	85	89	e79	e54	88	171	123	443	77	51
8	73	77	83	90	e79	e53	92	163	119	277	77	51
9	73	78	e95	92	e78	e53	105	204	161	256	75	66
10	73	80	83	e90	e78	e53	136	164	4,630	247	75	110
11	73	78	83	e86	e77	e57	129	255	887	204	71	356
12	71	77	82	e83	e77	e64	112	207	349	191	66	319
13	71	78	81	e84	e78	e70	107	183	257	179	63	132
14	71	78	83	e81	e80	103	105	193	215	171	64	98
15	71	79	83	e79	e79	137	105	177	189	163	61	88
16	74	79	84	e78	e77	118	104	164	175	154	61	84
17	75	81	87	e76	e76	108	101	157	167	147	61	81
18	73	83	87	e75	e76	103	102	145	148	142	62	82
19	73	83	86	e75	e78	102	105	141	140	136	61	81
20	73	84	84	e76	e96	102	103	133	147	134	59	78
21	75	83	84	e75	e115	96	101	132	154	127	56	81
22	77	84	84	e73	e95	89	103	125	159	120	53	79
23	79	84	e84	e71	e81	88	105	133	163	118	52	78
24	80	84	e83	e71	e69	85	112	136	2,590	117	53	78
25	79	e95	e82	e70	e62	87	113	138	799	114	52	76
26	78	85	e88	e70	e57	85	111	130	420	107	50	77
27	80	84	85	e69	e58	114	107	126	268	133	49	75
28	83	86	85	e69	e60	170	104	124	236	117	49	75
29	81	86	87	e70	---	123	102	120	219	106	50	76
30	85	85	88	e70	---	111	148	118	202	99	50	77
31	85	---	87	e71	---	106	---	106	---	96	51	---
TOTAL	2,388	2,443	2,630	2,462	2,181	2,676	3,171	5,047	13,639	8,538	2,021	2,751
MEAN	77.0	81.4	84.8	79.4	77.9	86.3	106	163	455	275	65.2	91.7
MAX	96	95	95	92	115	170	148	345	4,630	3,570	92	356
MIN	71	76	78	69	57	53	88	106	115	96	49	48
AC-FT	4,740	4,850	5,220	4,880	4,330	5,310	6,290	10,010	27,050	16,940	4,010	5,460

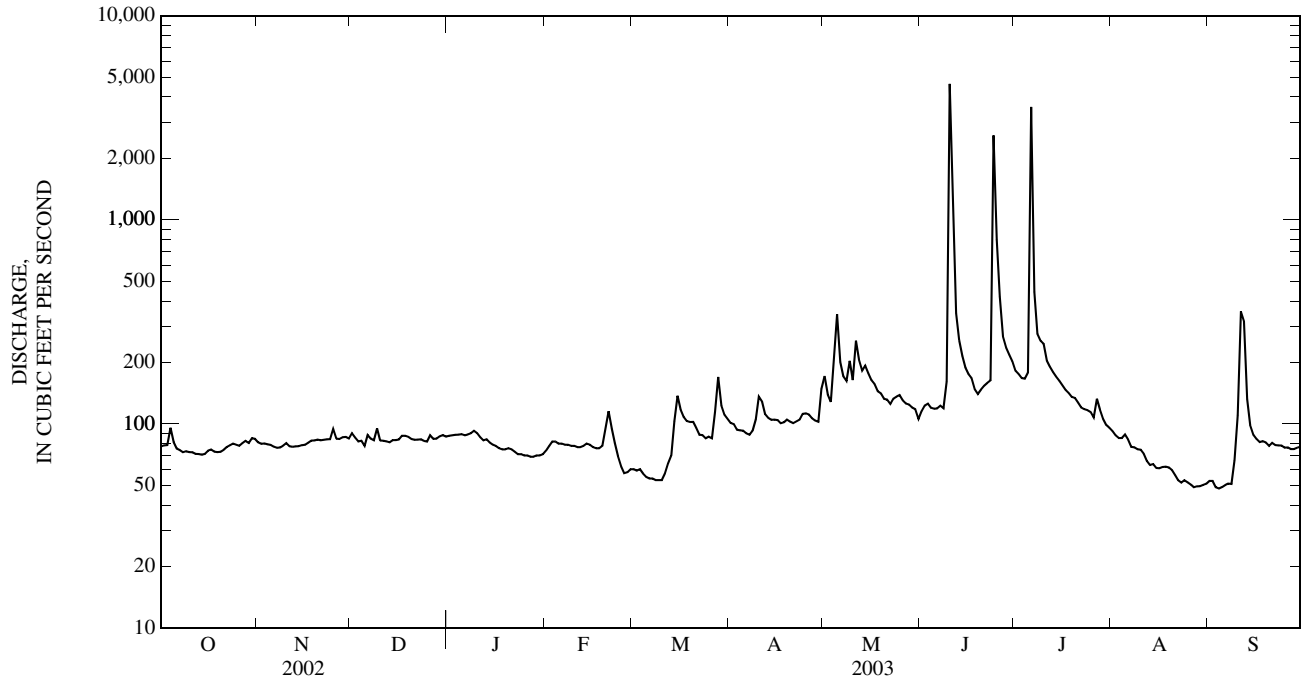
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2003, BY WATER YEAR (WY)

MEAN	77.0	81.4	84.8	79.4	77.9	86.3	106	163	455	275	65.2	91.7
MAX	77.0	81.4	84.8	79.4	77.9	86.3	106	163	455	275	65.2	91.7
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)
MIN	77.0	81.4	84.8	79.4	77.9	86.3	106	163	455	275	65.2	91.7
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)

06799445 LOGAN CREEK AT WAKEFIELD, NE—Continued

SUMMARY STATISTICS	FOR 2003 WATER YEAR	
ANNUAL TOTAL	49,947	
ANNUAL MEAN	137	
HIGHEST DAILY MEAN	4,630	Jun 10
LOWEST DAILY MEAN	48	Sep 4
ANNUAL SEVEN-DAY MINIMUM	50	Aug 25
MAXIMUM PEAK FLOW	9,550	Jun 10
MAXIMUM PEAK STAGE	23.55	Jun 10
ANNUAL RUNOFF (AC-FT)	99,070	
10 PERCENT EXCEEDS	73	
50 PERCENT EXCEEDS	85	
90 PERCENT EXCEEDS	61	

e Estimated.



06799460 LOGAN CREEK NEAR BANCROFT, NE

LOCATION.--Lat 42° 00'10", long 96° 29'25", in NW$^{1}/_{4}$NE$^{1}/_{4}$ sec.2, T.23 N., R.8 E., Burt County, Hydrologic Unit 10220004, on the left downstream shoulder of Nebraska Highway 51 bridge over Logan Creek and 3.5 miles east southeast of Bancroft, Nebraska.

DRAINAGE AREA.--854 mi^2.

PERIOD OF RECORD.--October 2002 to September 2003.

GAGE.--Water-stage recorder. Elevation of gage is 1,270 ft above sea level from topographic map. Data collection platform at station.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	129	e115	e101	e110	e135	147	283	149	261	139	66
2	93	123	e109	e102	e109	e137	138	259	165	250	136	65
3	105	125	e82	e103	e103	e126	132	209	187	237	131	65
4	128	123	e87	e103	e98	e131	128	243	194	226	131	61
5	123	125	e86	e108	e91	e137	128	970	181	538	134	60
6	106	125	e91	e103	e92	e124	125	570	170	4,910	136	57
7	101	122	e101	e102	e105	e120	135	352	168	2,280	126	57
8	101	122	e101	e101	e107	e128	130	288	167	898	120	58
9	99	121	e95	e101	e102	e135	141	350	165	644	119	73
10	101	122	e99	e89	e106	e129	180	353	5,560	585	120	134
11	101	118	e99	e88	e110	e129	230	406	2,600	480	120	335
12	98	117	e102	e87	e100	e167	193	471	1,400	411	111	831
13	98	117	e102	e80	e89	223	158	341	782	372	102	396
14	100	120	e102	e80	e102	232	141	307	624	347	98	196
15	99	118	e101	e73	e110	212	131	300	534	324	97	150
16	109	118	e102	e81	e110	225	130	271	479	295	93	133
17	e108	119	e101	e74	e118	180	128	248	435	275	89	124
18	e107	121	e103	e80	e112	150	127	232	400	261	87	125
19	105	116	e105	e93	e148	136	141	238	363	245	98	131
20	103	117	e105	e88	e265	148	146	215	329	234	94	123
21	102	114	e105	e85	e206	165	141	209	301	229	88	120
22	102	114	e108	e81	e159	141	131	207	289	216	82	119
23	108	115	e106	e86	e141	128	126	215	284	198	77	115
24	115	113	e101	e89	e139	123	133	218	1,620	190	73	109
25	118	116	e95	e89	e141	123	138	228	2,310	183	72	106
26	116	e114	e96	e90	e176	120	136	214	1,150	172	69	102
27	115	e118	e99	e85	e168	137	132	196	551	171	62	97
28	124	e117	e99	e89	e147	250	125	183	391	210	58	95
29	125	e115	e101	e85	---	268	122	173	340	183	56	96
30	130	e120	e105	e90	---	183	163	169	e297	161	57	102
31	134	---	e105	e103	---	159	---	158	---	146	63	---
TOTAL	3,358	3,574	3,108	2,809	3,564	4,901	4,256	9,076	22,585	16,132	3,038	4,301
MEAN	108	119	100	90.6	127	158	142	293	753	520	98.0	143
MAX	134	129	115	108	265	268	230	970	5,560	4,910	139	831
MIN	84	113	82	73	89	120	122	158	149	146	56	57
AC-FT	6,660	7,090	6,160	5,570	7,070	9,720	8,440	18,000	44,800	32,000	6,030	8,530

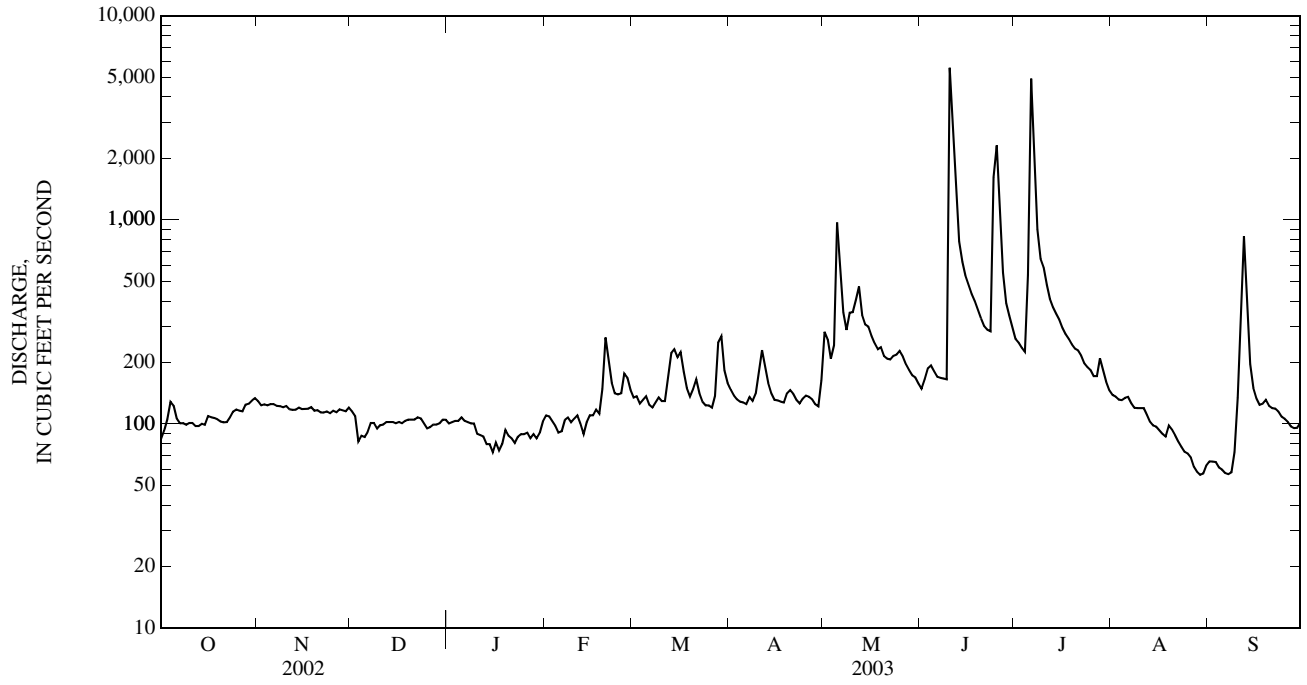
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2003, BY WATER YEAR (WY)

MEAN	108	119	100	90.6	127	158	142	293	753	520	98.0	143
MAX	108	119	100	90.6	127	158	142	293	753	520	98.0	143
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)
MIN	108	119	100	90.6	127	158	142	293	753	520	98.0	143
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)

06799460 LOGAN CREEK NEAR BANCROFT, NE—Continued

SUMMARY STATISTICS	FOR 2003 WATER YEAR	
ANNUAL TOTAL	80,702	
ANNUAL MEAN	221	
HIGHEST DAILY MEAN	5,5 60	Jun 10
LOWEST DAILY MEAN	56	Aug 29
ANNUAL SEVEN-DAY MINIMUM	60	Sep 2
MAXIMUM PEAK FLOW	9,670	Jun 10
MAXIMUM PEAK STAGE	19.99	Jun 10
ANNUAL RUNOFF (AC-FT)	160,100	
10 PERCENT EXCEEDS	37	
50 PERCENT EXCEEDS	24	
90 PERCENT EXCEEDS	88	

e Estimated.



06799500 LOGAN CREEK NEAR UEHLING, NE

LOCATION.--Lat 41° 42'46", long 96° 31'18", in SE 1/4 SE 1/4 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 mi^2.

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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	145	e150	e135	e155	e215	179	416	200	287	156	97
2	118	142	e140	e135	e150	e215	167	316	214	271	150	98
3	124	140	e125	e135	e140	e205	159	252	229	256	147	98
4	172	139	e130	e135	e130	e210	155	519	236	249	149	96
5	159	140	e140	e135	e125	e215	154	891	227	314	153	93
6	145	141	e145	e130	e130	e205	153	710	219	3,610	156	93
7	130	138	e145	e135	e140	e215	162	380	212	2,400	147	92
8	129	138	e135	e130	e145	e225	157	318	217	900	140	92
9	127	137	e150	e125	e145	e250	162	318	209	603	136	101
10	126	136	e140	e120	e150	e360	197	379	4,520	509	137	135
11	126	135	e150	e120	e145	e500	245	346	2,180	471	130	320
12	125	131	e145	e116	e135	e780	231	463	1,250	385	124	589
13	121	132	e140	e112	e125	1,280	188	363	653	353	117	504
14	122	132	e140	e110	e125	1,410	168	327	474	331	114	219
15	122	135	e135	e116	e135	1,570	156	301	397	311	112	160
16	125	132	e145	e116	e140	946	153	290	356	287	109	139
17	134	131	e140	e118	e140	272	146	269	334	270	108	129
18	135	132	e135	e118	e170	227	149	255	314	257	111	127
19	130	134	e125	e120	e215	206	157	621	294	243	132	130
20	125	134	e125	e116	e380	214	162	320	271	239	114	128
21	125	132	e125	e108	e500	223	160	268	292	235	108	150
22	123	130	e150	e106	e310	203	151	256	276	224	104	126
23	125	131	e150	e110	e250	180	144	261	254	213	101	122
24	132	131	e135	e112	e240	166	147	262	568	202	100	118
25	137	124	e125	e112	e250	162	150	266	2,340	199	100	114
26	137	125	e120	e120	e270	159	147	258	1,050	194	106	114
27	136	e108	e122	e112	e245	164	143	241	593	190	100	111
28	137	e112	e122	e112	e210	221	136	230	407	208	98	110
29	145	e112	e130	e110	---	309	134	219	355	202	95	109
30	151	e108	e130	e125	---	232	1,300	214	316	179	92	109
31	149	---	e135	e140	---	194	---	207	---	166	95	---
TOTAL	4,107	3,937	4,224	3,744	5,395	11,933	6,012	10,736	19,457	14,758	3,741	4,623
MEAN	132	131	136	121	193	385	200	346	649	476	121	154
MAX	172	145	150	140	500	1,570	1,300	891	4,520	3,610	156	589
MIN	115	108	120	106	125	159	134	207	200	166	92	92
AC-FT	8,150	7,810	8,380	7,430	10,700	23,670	11,920	21,290	38,590	29,270	7,420	9,170

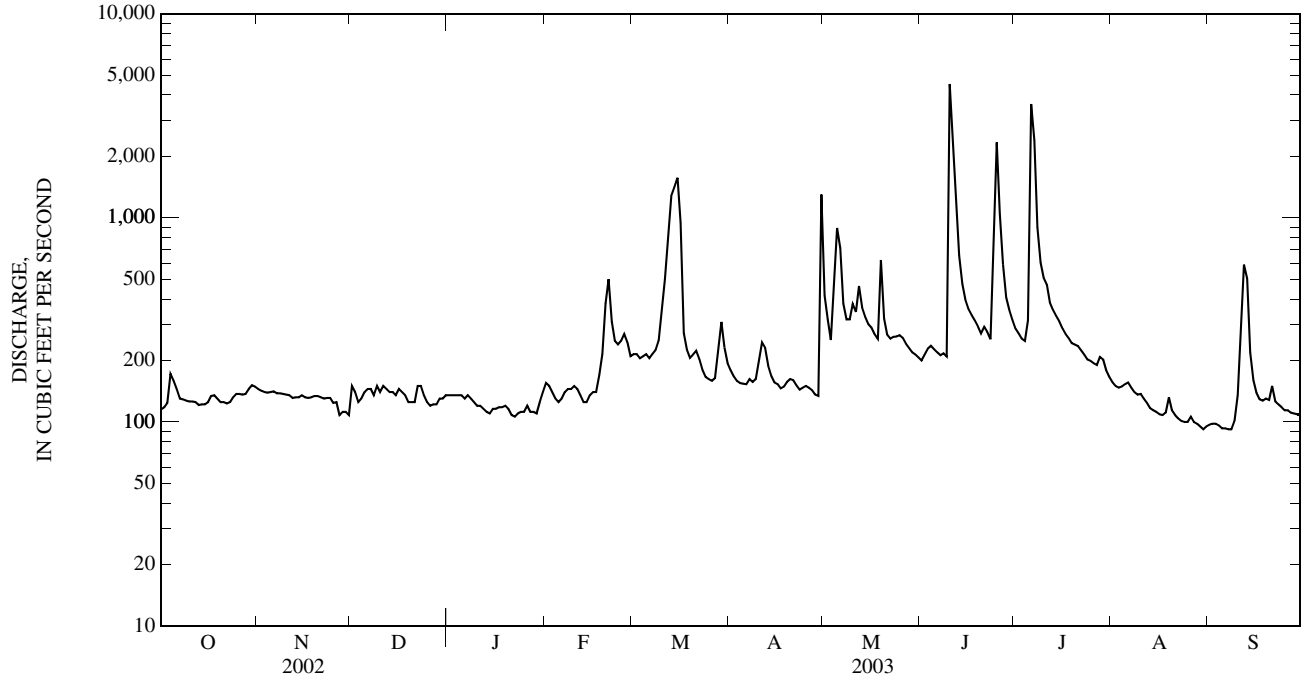
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2003, BY WATER YEAR (WY)

MEAN	123	118	103	112	264	408	288	322	504	266	167	130
MAX	499	453	337	583	2,177	2,388	1,742	1,417	2,766	1,843	1,056	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)

06799500 LOGAN CREEK NEAR UEHLING, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1942 - 2003	
ANNUAL TOTAL	77,459		92,667			
ANNUAL MEAN	212		254		233	
HIGHEST ANNUAL MEAN					710	1984
LOWEST ANNUAL MEAN					66.4	1943
HIGHEST DAILY MEAN	2,580	Jun 12	4,520	Jun 10	20,100	Feb 20, 1971
LOWEST DAILY MEAN	89	Aug 3	92	Aug 30	6.1	Jul 26, 1976
ANNUAL SEVEN-DAY MINIMUM	100	Jul 29	95	Sep 2	8.8	Jul 12, 1976
MAXIMUM PEAK FLOW			8,910	Jun 10	*25,200	Feb 20, 1971
MAXIMUM PEAK STAGE			16.30	Jun 10	20.86	Feb 20, 1997
ANNUAL RUNOFF (AC-FT)	153,600		183,800		168,900	
10 PERCENT EXCEEDS	300		379		416	
50 PERCENT EXCEEDS	165		147		105	
90 PERCENT EXCEEDS	121		112		45	

e Estimated.
* Stage 20.15 ft, from floodmark.



06800000 MAPLE CREEK NEAR NICKERSON, NE
(National Water-Quality Assessment, NAWQA, station)

LOCATION.--Lat 41° 33'39", long 96° 32'27", in SW 1/4 NW 1/4 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 mi^2, 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.

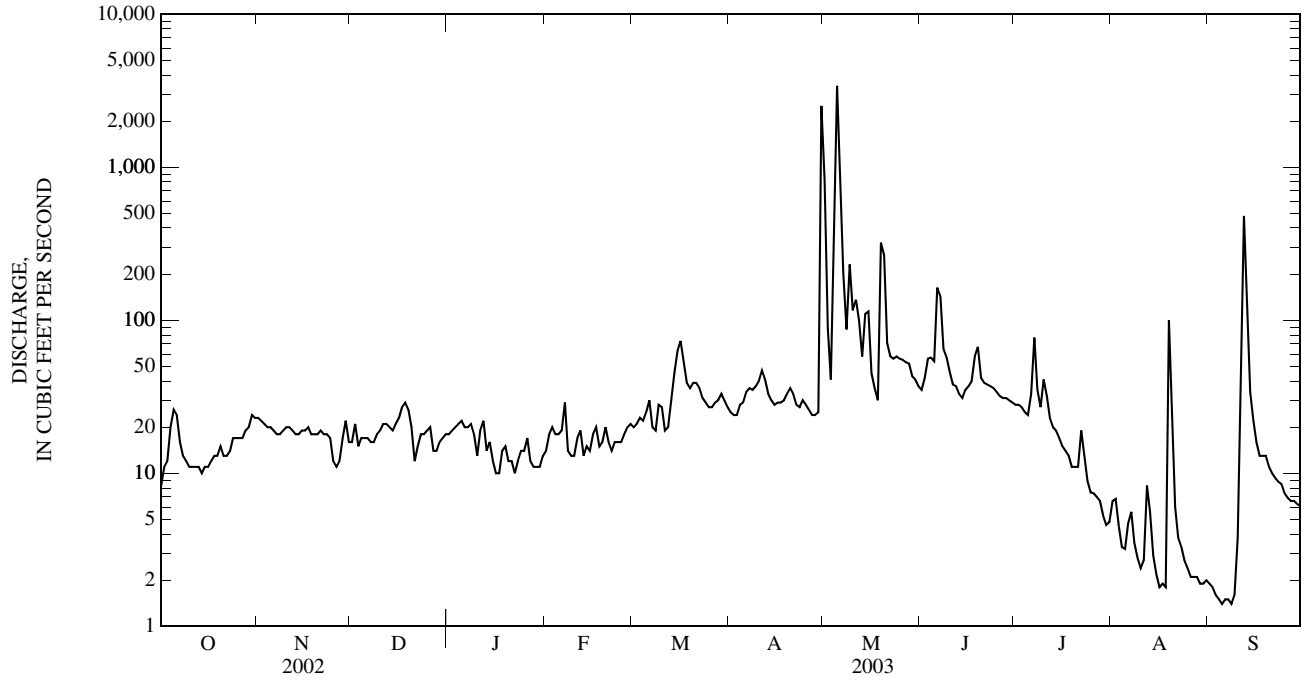
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	23	16	18	14	20	25	824	35	28	6.6	1.9
2	11	22	21	19	18	21	24	89	42	28	6.8	1.8
3	12	21	15	20	20	23	24	41	56	27	4.5	1.6
4	20	20	17	21	e18	22	28	598	57	25	3.3	1.5
5	26	20	17	22	e18	25	29	3,390	54	24	3.2	1.4
6	24	19	17	20	19	30	34	929	163	33	4.7	1.5
7	16	18	16	20	e29	20	36	201	143	77	5.6	1.5
8	13	18	16	21	14	19	35	87	65	35	3.5	1.4
9	12	19	18	18	13	28	37	231	57	27	2.8	1.6
10	11	20	19	13	13	27	40	116	46	41	2.4	3.8
11	11	20	21	19	17	19	47	136	38	32	2.7	32
12	11	19	21	22	19	20	41	100	37	23	8.3	479
13	11	18	20	14	13	30	33	58	33	20	5.6	95
14	10	18	19	16	15	45	30	110	31	19	2.9	34
15	11	19	21	e12	14	63	28	114	35	17	2.2	22
16	11	19	23	e10	18	73	29	45	37	15	1.8	16
17	12	20	27	e10	20	52	29	36	40	14	1.9	13
18	13	18	29	14	15	39	30	30	58	13	1.8	13
19	13	18	26	15	16	36	33	321	67	11	100	13
20	15	18	20	12	20	39	36	266	42	11	22	11
21	13	19	12	12	e16	39	33	71	39	11	6.0	10
22	13	18	15	e10	e14	36	28	58	38	19	3.8	9.3
23	14	18	e18	e12	e16	31	27	56	37	13	3.3	8.8
24	17	17	e18	e14	e16	29	30	58	36	8.9	2.7	8.5
25	17	12	19	14	e16	27	28	56	34	7.5	2.4	7.4
26	17	11	20	17	e18	27	26	55	32	7.4	2.1	6.9
27	17	12	14	12	e20	29	24	53	31	e7.0	2.1	6.6
28	19	17	14	11	21	30	24	52	31	6.6	2.1	6.6
29	20	22	16	11	---	33	25	43	30	5.3	1.9	6.3
30	24	16	17	11	---	30	2,510	41	29	4.6	1.9	6.1
31	23	---	18	13	---	27	---	37	---	4.8	2.0	---
TOTAL	465.2	549	580	473	480	989	3,403	8,302	1,473	615.1	222.9	822.5
MEAN	15.0	18.3	18.7	15.3	17.1	31.9	113	268	49.1	19.8	7.19	27.4
MAX	26	23	29	22	29	73	2,510	3,390	163	77	100	479
MIN	8.2	11	12	10	13	19	24	30	29	4.6	1.8	1.4
AC-FT	923	1,090	1,150	938	952	1,960	6,750	16,470	2,920	1,220	442	1,630
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2003, BY WATER YEAR (WY)												
MEAN	37.0	30.1	23.9	24.3	69.6	132	95.3	122	215	100	67.6	46.2
MAX	323	158	102	82.8	446	674	590	642	1,252	1,023	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

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1952 - 2003	
ANNUAL TOTAL	19,229.6		18,374.7			
ANNUAL MEAN	52.7		50.3		80.1	
HIGHEST ANNUAL MEAN					264	1984
LOWEST ANNUAL MEAN					5.19	1956
HIGHEST DAILY MEAN	1,180	Jun 12	3,390	May 5	10,400	Aug 6, 1996
LOWEST DAILY MEAN	7.1	Sep 23	1.4	Sep 5	0.10	Jan 15, 1956
ANNUAL SEVEN-DAY MINIMUM	8.1	Sep 20	1.5	Sep 3	0.19	Sep 17, 1981
MAXIMUM PEAK FLOW			4,960	May 5	*13,700	Aug 6, 1996
MAXIMUM PEAK STAGE			11.91	May 5	**17.65	Jun 17, 1984
ANNUAL RUNOFF (AC-FT)	38,140		36,450		58,050	
10 PERCENT EXCEEDS	79		55		130	
50 PERCENT EXCEEDS	39		19		24	
90 PERCENT EXCEEDS	12		5.5		1.4	

e Estimated.
* Stage 17.33 ft.
** Site and datum then in use.



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.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	24.6	14.8	18.3	5.1	-0.3	1.6	---	---	---	---	---	---
2	16.3	10.9	12.8	4.6	-0.3	2.2	---	---	---	---	---	---
3	15.7	10.5	12.8	7.5	3.0	4.7	---	---	---	---	---	---
4	16.2	11.1	13.6	7.1	0.5	3.7	---	---	---	---	---	---
5	16.2	9.2	12.6	6.5	3.8	4.9	---	---	---	---	---	---
6	15.8	9.5	12.8	8.3	1.5	4.6	---	---	---	---	---	---
7	16.1	6.6	10.7	10.9	2.2	6.3	---	---	---	---	---	---
8	19.0	9.5	13.6	10.2	5.0	7.4	---	---	---	---	---	---
9	18.5	10.2	14.2	11.8	5.1	8.1	---	---	---	---	---	---
10	21.1	12.3	16.0	8.6	3.4	6.3	---	---	---	---	---	---
11	20.8	12.2	16.0	6.7	1.1	3.4	---	---	---	---	---	---
12	16.2	8.6	13.3	8.1	0.4	3.9	---	---	---	---	---	---
13	15.7	5.7	10.1	---	2.1	---	---	---	---	---	---	---
14	15.9	6.7	10.6	---	---	---	---	---	---	---	---	---
15	13.9	6.2	9.6	---	---	---	---	---	---	---	---	---
16	8.7	7.3	7.9	---	---	---	---	---	---	---	---	---
17	14.2	6.5	9.6	---	---	---	---	---	---	---	---	---
18	16.1	7.5	11.1	---	---	---	---	---	---	---	---	---
19	12.6	5.5	8.8	---	---	---	---	---	---	---	---	---
20	13.5	5.4	8.7	---	---	---	---	---	---	---	---	---
21	12.5	6.6	8.9	---	---	---	---	---	---	---	---	---
22	6.6	4.1	5.4	---	---	---	---	---	---	---	---	---
23	4.1	1.2	2.9	---	---	---	---	---	---	---	---	---
24	4.2	1.2	2.6	---	---	---	---	---	---	---	---	---
25	8.3	3.3	5.4	---	---	---	---	---	---	---	---	---
26	11.9	5.4	7.9	---	---	---	---	---	---	---	---	---
27	7.6	5.2	6.4	---	---	---	---	---	---	---	---	---
28	7.9	4.9	6.3	---	---	---	---	---	---	---	---	---
29	7.3	6.4	6.8	---	---	---	---	---	---	---	---	---
30	6.4	2.9	5.4	---	---	---	---	---	---	---	---	---
31	5.3	0.6	2.4	---	---	---	---	---	---	---	---	---
MONTH	24.6	0.6	9.8	11.8	-0.3	4.8	---	---	---	---	---	---

06800000 MAPLE CREEK NEAR NICKERSON, NE—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	21.5	8.9	14.8	13.8	10.8	12.1
2	---	---	---	---	---	---	22.9	10.8	16.5	17.4	11.7	14.2
3	---	---	---	---	---	---	19.8	10.4	14.8	20.0	13.0	16.2
4	---	---	---	---	---	---	10.4	4.4	6.3	16.2	5.8	13.0
5	---	---	---	---	---	---	12.3	2.6	7.1	11.3	6.6	9.3
6	---	---	---	---	---	---	6.5	0.9	3.2	12.6	10.9	11.8
7	---	---	---	---	---	---	7.6	0.3	3.7	17.1	9.7	13.2
8	---	---	---	---	---	---	15.3	1.8	7.7	15.3	12.8	13.6
9	---	---	---	---	---	---	16.4	3.6	9.6	17.0	11.6	14.2
10	---	---	---	---	---	---	18.2	6.1	11.9	15.5	11.0	13.2
11	---	---	---	---	---	---	20.9	9.6	14.9	13.9	9.5	11.4
12	---	---	---	---	---	---	22.5	11.3	16.5	18.8	10.4	14.4
13	---	---	---	---	---	---	22.6	11.5	16.6	21.3	13.9	17.1
14	---	---	---	---	---	---	25.3	13.5	18.8	19.6	14.7	17.0
15	---	---	---	---	---	---	23.1	15.7	18.8	17.6	15.1	16.3
16	---	---	---	---	---	---	25.7	12.4	18.2	20.8	13.4	16.7
17	---	---	---	---	---	---	19.6	8.6	13.3	24.0	14.2	18.8
18	---	---	---	---	---	---	12.3	9.9	10.9	24.3	16.1	20.1
19	---	---	---	---	---	---	11.0	9.4	10.1	20.3	16.3	18.0
20	---	---	---	---	---	---	11.9	8.4	9.9	19.8	14.1	16.7
21	---	---	---	---	---	---	20.8	7.7	13.5	22.9	13.4	17.8
22	---	---	---	---	---	---	23.3	8.7	15.4	19.4	14.9	17.2
23	---	---	---	---	---	---	16.3	11.3	13.7	24.1	14.9	19.0
24	---	---	---	12.6	---	---	12.3	10.9	11.6	19.8	16.1	17.6
25	---	---	---	16.9	6.4	11.2	22.2	9.9	15.2	25.3	14.3	19.3
26	---	---	---	13.7	6.6	10.2	22.6	10.3	16.0	26.3	15.9	20.8
27	---	---	---	11.3	5.3	8.8	24.8	12.3	17.6	26.2	16.4	21.1
28	---	---	---	12.2	3.8	6.7	24.8	13.9	18.5	26.8	17.8	21.9
29	---	---	---	10.8	1.6	5.9	18.0	12.0	15.0	26.8	16.7	21.4
30	---	---	---	14.1	1.7	7.7	13.1	9.8	11.2	26.5	17.3	21.4
31	---	---	---	18.3	5.8	11.5	---	---	---	25.6	14.3	19.3
MONTH	---	---	---	18.3	1.6	8.9	25.7	0.3	13.0	26.8	5.8	16.6
		JUNE			JULY			AUGUST			SEPTEMBER	
1	25.6	17.1	20.7	32.8	20.2	25.6	31.7	20.5	24.6	---	---	---
2	19.6	13.7	16.0	33.3	20.9	26.5	33.5	19.8	25.7	---	---	---
3	18.5	13.1	15.4	36.4	22.4	28.7	34.0	18.3	25.4	---	---	---
4	22.8	13.6	18.0	28.1	22.2	25.0	32.0	18.6	23.7	---	---	---
5	24.5	15.9	19.8	33.7	20.2	25.4	34.0	19.3	25.8	---	---	---
6	24.4	17.4	20.0	35.0	19.9	26.4	30.5	21.0	24.8	---	---	---
7	18.3	14.7	15.9	---	---	---	33.6	19.4	25.7	---	---	---
8	20.2	13.0	16.5	34.5	---	---	33.4	19.8	25.6	---	---	---
9	27.0	15.7	20.6	30.4	21.4	25.7	34.4	19.1	25.3	---	---	---
10	23.4	18.4	20.9	31.3	21.0	25.9	35.0	19.3	25.9	---	---	---
11	26.7	16.9	21.6	32.5	21.2	26.3	32.3	19.6	24.6	---	---	---
12	22.0	19.1	19.7	33.7	19.2	25.8	31.5	18.0	24.1	---	---	---
13	28.8	17.5	21.6	33.2	20.5	26.2	31.8	19.0	24.4	---	---	---
14	31.1	19.7	24.7	35.0	20.8	27.3	32.1	18.9	24.7	---	---	---
15	31.3	19.8	25.0	35.4	21.8	28.0	31.6	18.8	24.9	---	---	---
16	31.4	21.0	25.4	32.2	21.0	25.8	---	---	---	---	---	---
17	29.6	20.9	24.7	---	22.1	---	---	---	---	---	---	---
18	30.1	21.4	24.7	32.0	---	---	---	---	---	---	---	---
19	29.4	20.6	24.6	35.0	21.5	27.0	---	---	---	---	---	---
20	28.1	18.1	22.5	36.4	21.8	27.7	---	---	---	---	---	---
21	26.6	17.0	21.1	28.8	20.9	24.6	---	---	---	---	---	---
22	26.8	19.3	22.0	28.5	18.4	22.9	---	---	---	---	---	---
23	31.2	19.0	24.5	32.3	17.5	23.9	---	---	---	---	---	---
24	32.0	22.0	26.6	30.4	18.3	23.7	---	---	---	---	---	---
25	25.0	17.2	21.8	33.0	19.0	25.3	---	---	---	---	---	---
26	27.6	14.3	20.5	35.5	21.0	25.1	---	---	---	---	---	---
27	30.7	16.8	23.2	---	---	---	---	---	---	---	---	---
28	31.9	18.9	25.0	---	---	---	---	---	---	---	---	---
29	29.9	20.2	24.4	---	---	---	---	---	---	---	---	---
30	30.8	18.1	24.2	35.4	---	---	---	---	---	---	---	---
31	---	---	---	30.9	18.5	23.4	---	---	---	---	---	---
MONTH	32.0	13.0	21.7	36.4	17.5	25.7	35.0	18.0	25.0	---	---	---
YEAR	36.4	-0.3	16.5									

06800000 MAPLE CREEK NEAR NICKERSON, NE—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	731	693	709	---	---	---	---	---	---
2	---	---	---	848	720	791	---	---	---	---	---	---
3	533	367	512	842	780	796	---	---	---	---	---	---
4	533	364	446	788	740	775	---	---	---	---	---	---
5	700	533	597	741	733	736	---	---	---	---	---	---
6	1,100	700	850	767	734	755	---	---	---	---	---	---
7	800	634	730	758	750	754	---	---	---	---	---	---
8	673	634	658	755	730	747	---	---	---	---	---	---
9	669	651	658	731	721	726	---	---	---	---	---	---
10	688	662	678	730	720	723	---	---	---	---	---	---
11	676	646	664	732	717	723	---	---	---	---	---	---
12	665	641	655	839	712	773	---	---	---	---	---	---
13	659	637	648	---	---	---	---	---	---	---	---	---
14	650	632	640	---	---	---	---	---	---	---	---	---
15	642	617	633	---	---	---	---	---	---	---	---	---
16	625	603	614	---	---	---	---	---	---	---	---	---
17	630	604	617	---	---	---	---	---	---	---	---	---
18	645	611	633	---	---	---	---	---	---	---	---	---
19	657	636	643	---	---	---	---	---	---	---	---	---
20	676	636	659	---	---	---	---	---	---	---	---	---
21	660	635	650	---	---	---	---	---	---	---	---	---
22	646	635	642	---	---	---	---	---	---	---	---	---
23	649	627	640	---	---	---	---	---	---	---	---	---
24	652	633	648	---	---	---	---	---	---	---	---	---
25	663	648	657	---	---	---	---	---	---	---	---	---
26	673	663	669	---	---	---	---	---	---	---	---	---
27	673	650	663	---	---	---	---	---	---	---	---	---
28	673	653	662	---	---	---	---	---	---	---	---	---
29	693	673	681	---	---	---	---	---	---	---	---	---
30	694	662	674	---	---	---	---	---	---	---	---	---
31	697	669	680	---	---	---	---	---	---	---	---	---
MONTH	1,100	364	648	848	693	751	---	---	---	---	---	---
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	---	---	---	377	214	286
2	---	---	---	---	---	---	---	---	---	564	377	475
3	---	---	---	---	---	---	---	---	---	687	564	632
4	---	---	---	---	---	---	---	---	---	698	182	611
5	---	---	---	---	---	---	679	642	663	250	148	181
6	---	---	---	---	---	---	686	591	647	---	---	---
7	---	---	---	---	---	---	654	589	624	---	---	---
8	---	---	---	---	---	---	733	560	648	---	---	---
9	---	---	---	---	---	---	1,680	733	905	---	---	---
10	---	---	---	---	---	---	1,490	906	1,130	---	---	---
11	---	---	---	---	---	---	906	736	805	---	---	---
12	---	---	---	---	---	---	854	786	817	---	---	---
13	---	---	---	---	---	---	812	782	792	---	---	---
14	---	---	---	---	---	---	785	734	752	748	312	560
15	---	---	---	---	---	---	747	710	729	697	382	512
16	---	---	---	---	---	---	722	664	698	448	426	438
17	---	---	---	---	---	---	671	638	660	523	428	488
18	---	---	---	---	---	---	664	644	653	542	523	531
19	---	---	---	---	---	---	662	630	647	---	---	---
20	---	---	---	---	---	---	656	619	638	---	---	---
21	---	---	---	---	---	---	649	612	636	---	---	---
22	---	---	---	---	---	---	702	605	653	---	---	---
23	---	---	---	---	---	---	650	608	633	772	727	754
24	---	---	---	---	---	---	636	594	627	766	719	744
25	---	---	---	---	---	669	651	627	637	768	742	754
26	---	---	---	---	---	---	---	---	634	747	715	733
27	---	---	---	---	---	---	---	---	---	718	683	705
28	---	---	---	---	---	---	---	---	---	683	643	661
29	---	---	---	---	---	---	618	530	597	643	614	624
30	---	---	---	---	---	---	538	196	315	614	592	599
31	---	---	---	---	---	---	---	---	---	632	592	612
MONTH	---	---	---	---	---	669	1,680	196	689	772	148	574

06800000 MAPLE CREEK NEAR NICKERSON, NE—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	634	658	524	598	498	449	477	---	---	---
2	645	603	622	614	524	570	512	455	486	---	---	---
3	668	626	643	606	505	566	512	443	485	---	---	---
4	746	668	720	590	541	567	475	436	460	---	---	---
5	761	711	736	---	---	---	469	397	441	---	---	---
6	778	393	705	468	373	408	471	421	455	---	---	---
7	393	323	348	578	361	---	547	449	500	---	---	---
8	571	379	458	637	561	---	518	442	491	---	---	---
9	---	---	654	626	554	582	499	413	467	---	---	---
10	---	---	762	742	626	693	475	406	446	---	---	---
11	---	---	---	715	608	671	489	336	453	---	---	---
12	---	---	---	659	596	627	603	350	530	---	---	---
13	---	---	---	674	587	641	572	485	517	---	---	---
14	786	749	774	616	540	586	536	354	496	---	---	---
15	773	690	750	612	503	565	---	---	---	---	---	---
16	740	562	679	570	435	526	---	---	---	---	---	---
17	689	635	666	---	---	508	---	---	---	---	---	---
18	---	---	606	---	---	---	---	---	---	---	---	---
19	724	508	617	516	479	495	---	---	---	---	---	---
20	704	517	606	517	468	496	---	---	---	---	---	---
21	684	586	647	511	480	496	---	---	---	---	---	---
22	643	619	634	639	491	566	---	---	---	---	---	---
23	645	604	632	638	491	578	---	---	---	---	---	---
24	639	556	614	526	435	491	---	---	---	---	---	---
25	622	602	614	488	440	463	---	---	---	---	---	---
26	638	613	625	---	---	483	---	---	---	---	---	---
27	634	600	618	---	---	---	---	---	---	---	---	---
28	632	587	612	---	---	---	---	---	---	---	---	---
29	633	600	618	---	---	---	---	---	---	---	---	---
30	666	607	634	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	459	---	---	---	---	---	---
MONTH	786	323	638	742	361	549	603	336	479	---	---	---
YEAR	1,680	148	621									

06800000 MAPLE CREEK NEAR NICKERSON, NE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Turbidity water unfltr field NTU (61028)		Turbidity, water, unfltrd field, NTU (61028)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Noncarb hardness, wat flt field, mg/L as CaCO3 (00904)
OCT															
08...	1000	4.10	14	7.0		7.0	730	9.5	89	8.1	662	10.5	10.5	280	8
NOV															
12...	1400	4.18	19	--		--	--	--	--	--	--	--	--	--	--
12...	1500	4.18	19	--		--	--	--	--	--	--	--	--	--	--
13...	1000	4.19	19	13		13	789	12.2	89	8.0	850	4.5	3.5	330	22
15...	1200	4.18	19	--		--	--	--	--	--	--	--	--	--	--
15...	1300	4.18	19	--		--	--	--	--	--	--	--	--	--	--
15...	1400	4.18	19	--		--	--	--	--	--	--	--	--	--	--
15...	1500	4.18	19	--		--	--	--	--	--	--	--	--	--	--
DEC															
10...	1030	4.15	19	6.2		6.2	733	12.9	95	8.0	800	-1.5	1.0	360	13
JAN															
14...	1000	4.29	31	8.0		8.0	737	12.9	92	7.9	831	-10.8	0.0	390	21
FEB															
11...	0930	4.24	19	6.2		6.2	729	12.4	90	7.3	809	-2.2	0.5	380	18
MAR															
11...	0930	4.20	18	16		16	725	11.4	86	7.9	698	3.0	1.5	320	26
APR															
07...	1100	4.33	36	32		32	731	13.2	99	8.0	581	-1.0	2.0	260	23
16...	1000	4.25	30	8.9		8.9	717	9.4	107	8.2	708	18.0	18.3	320	8
21...	0900	4.32	34	9.1		9.1	732	11.1	98	8.0	670	13.6	8.1	310	--
30...	1030	10.50	4350	E25000		E25000	724	0.8	8	7.3	246	16.0	10.3	84	4
MAY															
06...	1100	7.47	1460	11000		11,000	727	8.5	82	7.5	341	14.5	11.6	170	15
13...	1000	4.58	56	820		820	730	8.9	91	8.1	726	15.2	14.2	330	24
20...	1000	5.35	293	12000		12,000	742	7.7	77	7.7	490	8.3	14.1	190	16
27...	1000	4.31	52	110		110	--	E9.0	--	8.1	698	--	17.4	320	15
JUN															
02...	1000	4.20	41	39		39	727	9.2	98	8.2	610	12.0	16.0	270	12
10...	1000	4.26	47	430		430	725	8.1	95	8.4	749	21.0	21.0	340	11
17...	1100	4.19	36	67		67	733	9.8	120	8.4	700	27.0	23.4	320	25
23...	1300	4.12	36	72		72	722	8.1	110	8.5	705	28.0	28.0	300	--
JUL															
01...	0900	4.03	27	22		22	732	9.1	118	8.4	605	25.8	26.1	260	--
09...	1000	4.07	27	240		240	728	7.7	96	8.2	563	25.0	24.0	240	12
15...	1000	4.00	17	E19		E19	732	8.6	109	8.3	603	28.0	25.0	240	--
22...	1000	4.12	22	47		47	735	8.9	107	8.2	580	24.0	22.8	230	--
28...	1100	3.92		7.4	13	13	735	10.6	137	8.6	508	24.7	26.6	200	--
31...	1300	--	--	120		120	730	9.7	113	8.0	455	23.0	20.4	--	--
31...	1300	4.12	E36	120		120	730	9.7	113	8.0	455	23.0	20.4	--	--
31...	1310	--	--	120		120	730	9.7	113	8.0	455	23.0	20.4	--	--
AUG															
04...	1000	3.83		3.6	8.0	8.0	730	7.8	89	7.8	476	19.8	19.5	190	7
12...	1100	4.00	13	160		160	734	10.8	142	8.3	600	29.0	27.0	220	1
19...	1100	3.78		2.0	14	14	730	10.8	137	8.2	379	26.5	25.0	150	1
26...	0930	3.71		2.2	4.8	4.8	731	10.7	126	8.1	430	26.0	21.5	180	5
SEP															
02...	1100	3.68		1.9	2.3	2.3	731	14.3	162	8.1	399	22.6	19.4	190	18
09...	1000	3.69		2.5	20	20	731	--	--	7.2	359	21.0	16.5	150	4
16...	0930	3.80	17	64		64	730	8.5	93	7.7	592	24.0	17.5	230	6

06800000 MAPLE CREEK NEAR NICKERSON, NE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)
OCT													
08...	75.0	22.4	14.7	0.7	26.4	16	271	328	1	13.0	0.29	15.6	52.9
NOV													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	87.0	26.7	10.4	1	54.8	26	306	363	4	54.9	0.32	10.8	59.8
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
10...	97.8	27.4	7.10	0.7	31.3	16	344	413	3	10.4	0.37	15.4	60.4
JAN													
14...	105	30.5	7.25	0.7	33.7	16	367	445	1	10.6	0.37	18.0	61.6
FEB													
11...	104	27.9	8.34	0.7	31.2	15	358	430	3	12.0	0.39	17.1	58.4
MAR													
11...	89.2	23.5	9.41	0.7	28.9	16	294	356	1	17.1	0.31	19.1	47.3
APR													
07...	65.5	22.5	6.61	0.7	25.2	17	233	280	2	8.40	0.28	8.09	46.6
16...	83.3	28.2	13.6	0.8	31.1	17	316	385	0.0	13.6	0.38	8.49	57.8
21...	78.8	26.8	9.34	0.7	29.0	17	311	379	0.0	12.3	0.33	5.22	48.8
30...	24.3	5.60	11.1	0.3	6.05	12	80	97	0.0	5.55	0.53	5.14	13.0
MAY													
06...	47.4	11.3	13.9	0.4	12.3	13	150	182	0.0	7.27	0.41	8.84	35.5
13...	92.2	23.6	17.5	0.7	27.6	15	304	370	0.0	18.9	0.39	16.3	52.5
20...	54.7	14.1	15.5	0.5	17.1	15	179	218	0.0	10.4	0.5	9.20	35.7
27...	85.5	25.6	9.87	0.7	29.2	16	304	370	0.0	11.1	0.4	10.9	52.6
JUN													
02...	66.8	24.4	8.91	0.7	26.9	17	256	297	8	10.6	0.3	5.10	48.3
10...	95.0	24.7	14.9	0.7	27.7	14	328	370	14	12.8	0.5	16.1	50.8
17...	84.3	27.3	10.7	0.7	30.4	16	297	333	15	10.7	0.4	13.9	50.6
23...	80.9	23.2	9.31	0.7	28.0	16	321	363	14	10.9	0.5	15.9	50.4
JUL													
01...	62.4	25.4	9.02	0.8	28.8	19	262	319	--	10.9	0.4	12.7	52.2
09...	65.6	18.8	13.4	0.6	20.8	15	229	279	0.0	9.54	0.4	15.4	41.6
15...	59.3	22.0	12.5	0.7	26.6	18	255	282	14	11.2	0.4	11.3	53.0
22...	48.5	25.3	10.6	0.9	32.2	23	232	280	0.0	12.4	0.4	5.95	56.0
28...	44.3	22.1	11.3	0.8	27.7	22	206	234	8	12.3	0.4	5.51	48.8
31...	--	--	--	--	--	--	232	280	4	--	--	--	--
31...	--	--	--	--	--	--	232	280	4	--	--	--	--
31...	--	--	--	--	--	--	232	280	4	--	--	--	--
AUG													
04...	43.0	20.8	8.60	0.7	23.5	20	186	227	0.0	9.07	0.3	11.6	42.6
12...	50.2	23.0	11.2	1	37.1	26	217	263	2	15.2	0.4	10.8	54.5
19...	36.0	13.5	6.89	0.6	16.6	19	144	176	0.0	6.18	0.3	11.8	32.8
26...	45.8	15.3	8.83	0.5	16.4	16	173	197	7	7.02	0.3	17.3	36.5
SEP													
02...	54.1	13.6	6.18	0.5	14.9	14	172	210	0.0	4.78	0.2	24.2	32.2
09...	42.6	11.7	5.51	0.4	11.3	13	150	183	0.0	4.16	0.2	19.7	28.0
16...	61.9	18.6	29.8	0.6	20.9	14	225	275	0.0	13.8	0.4	16.5	51.0

06800000 MAPLE CREEK NEAR NICKERSON, NE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Residue water, fltrd, sum of consti-tuents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitro-gen, water, unfltrd mg/L (00605)
OCT													
08...	400	0.57	15.9	421	1.8	0.73	0.56	14.5	3.28	3.35	0.256	0.078	1.2
NOV													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	502	0.72	27.0	527	0.93	--	<0.04	13.5	3.05	3.09	0.115	0.035	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
10...	478	0.69	25.9	505	0.36	--	<0.04	21.0	4.74	4.77	0.089	0.027	--
JAN													
14...	510	0.73	44.8	535	0.39	--	E.04	20.9	4.72	4.75	0.112	0.034	--
FEB													
11...	497	0.72	27.0	527	0.50	--	E.03	21.8	4.92	4.96	0.131	0.040	--
MAR													
11...	432	0.62	22.1	454	1.6	1.03	0.80	18.7	4.22	4.28	0.191	0.058	0.84
APR													
07...	331	0.48	34.3	353	0.70	0.08	0.06	7.37	1.67	1.69	0.072	0.022	0.64
16...	432	0.62	36.7	453	1.1	--	<0.04	4.49	1.02	1.04	0.076	0.023	--
21...	403	0.57	38.8	423	0.82	--	<0.04	5.62	1.27	1.29	0.056	0.017	--
30...	139	0.21	1,850	157	65	2.64	2.05	15.6	3.52	3.73	0.677	0.206	63
MAY													
06...	245	0.36	1,060	268	33	1.00	0.78	15.9	3.58	3.67	0.296	0.090	33
13...	452	0.64	71.0	470	5.8	1.09	0.85	17.6	3.97	4.13	0.536	0.163	5.0
20...	283	0.43	252	319	33	1.15	0.89	15.9	3.60	3.83	0.753	0.229	32
27...	423	0.59	60.6	431	1.1	--	<0.04	15.3	3.46	3.48	0.082	0.025	--
JUN													
02...	355	0.50	40.5	366	0.86	--	<0.04	9.42	2.13	2.15	0.076	0.023	--
10...	460	0.65	60.6	477	2.4	0.08	0.06	19.1	4.31	4.49	0.592	0.180	2.3
17...	419	0.58	41.4	426	0.49	--	<0.04	11.8	2.67	2.70	0.092	0.028	--
23...	428	0.61	43.3	446	1.2	--	<0.04	15.3	3.47	3.48	0.059	0.018	--
JUL													
01...	368	0.52	27.8	382	0.90	--	<0.04	8.43	1.90	1.93	0.085	0.026	--
09...	339	0.47	25.1	344	1.9	0.09	0.07	14.6	3.30	3.39	0.286	0.087	1.9
15...	358	0.51	17.2	375	1.4	--	<0.04	8.27	1.87	1.90	0.105	0.032	--
22...	333	0.48	21.0	353	1.4	--	<0.04	3.01	0.68	0.70	0.069	0.021	--
28...	297	0.42	6.20	311	1.6	--	<0.04	0.806	0.18	0.20	0.043	0.013	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	276	0.39	2.82	290	0.96	--	<0.04	4.61	1.04	1.06	0.066	0.020	--
12...	334	0.46	11.9	340	2.6	--	<0.04	--	--	<0.06	--	<0.008	--
19...	214	0.31	1.23	228	0.89	--	<0.04	3.09	0.70	0.73	0.115	0.035	--
26...	259	0.36	1.56	262	0.73	--	<0.04	5.65	1.28	1.33	0.187	0.057	--
SEP													
02...	266	0.36	1.36	266	0.32	--	<0.04	9.60	2.17	2.28	0.371	0.113	--
09...	225	0.31	1.55	229	0.72	0.14	0.10	9.05	2.04	2.17	0.407	0.124	0.62
16...	362	0.52	17.6	384	2.8	0.95	0.74	9.62	2.17	2.33	0.496	0.151	2.1

06800000 MAPLE CREEK NEAR NICKERSON, NE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ortho-phos-phate, water, fltrd, mg/L (00660)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Partic-ulate nitro-gen, susp, water, mg/L (49570)	Phos-phorus, water, unfltrd mg/L (00665)	Total nitro-gen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inor-ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Biomass peri-phyton, ashfree drymass g/m2 (49954)	Biomass chloro-phyll ratio, peri-phyton, number (70950)	Iron, water, fltrd, ug/L (01046)	Mangan-ese, water, fltrd, ug/L (01056)
OCT													
08...	1.65	0.54	0.18	0.62	5.1	1.0	<0.1	1.0	7.4	--	--	E7	208
NOV													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	0.739	0.24	0.39	0.32	4.0	2.4	<0.1	2.4	5.1	--	--	E8	222
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
10...	0.626	0.20	0.07	0.23	5.1	0.6	<0.1	0.6	3.0	--	--	E8	301
JAN													
14...	0.632	0.21	0.05	0.24	5.1	0.5	<0.1	0.5	3.1	--	--	<10	343
FEB													
11...	0.626	0.20	0.10	0.23	5.5	0.7	<0.1	0.7	3.3	--	--	<10	333
MAR													
11...	1.36	0.44	0.17	0.51	5.9	1.1	<0.1	1.1	5.4	--	--	E5	296
APR													
07...	0.567	0.18	0.15	0.28	2.4	1.0	<0.1	1.0	--	--	--	E8	150
16...	1.34	0.44	0.39	0.57	2.2	2.2	<0.1	2.2	7.3	--	--	E7	72.0
21...	0.969	0.32	0.24	0.37	2.1	1.3	<0.1	1.3	--	--	--	11	80.8
30...	0.503	0.16	--	28.5	69	--	--	--	--	--	--	11	476
MAY													
06...	0.745	0.24	32.2	14.1	37	299	3.8	295	--	--	--	E7	32.5
13...	1.31	0.43	3.17	1.49	9.9	25.8	0.3	25.5	12.6	--	--	E8	4.7
20...	0.681	0.22	31.2	11.2	37	270	3.9	266	--	--	--	E5	<2.0
27...	0.665	0.22	0.42	0.45	4.6	3.6	<0.1	3.6	--	--	--	<10	32.3
JUN													
02...	0.334	0.11	0.47	0.25	3.0	3.0	<0.1	3.0	--	--	--	<8	60.7
10...	1.02	0.33	1.25	0.90	6.9	10.5	0.1	10.4	7.4	--	--	<8	8.9
17...	0.389	0.13	0.85	0.154	3.2	5.6	<0.1	5.6	--	--	--	<8	42.2
23...	0.782	0.26	0.65	0.44	4.7	4.2	<0.1	4.2	--	--	--	<8	49.1
JUL													
01...	0.276	0.09	0.52	0.21	2.8	2.9	<0.1	2.9	--	--	--	<8	52.1
09...	0.941	0.31	0.98	0.69	5.3	8.1	E.2	E7.9	5.9	--	--	<8	5.2
15...	0.399	0.13	0.51	0.24	3.3	2.6	<0.1	E2.6	--	--	--	<8	48.0
22...	0.202	0.07	0.59	0.28	2.1	4.2	<0.1	E4.1	--	--	--	<8	103
28...	0.095	0.03	0.82	0.23	1.8	4.2	<0.1	E4.1	--	--	--	E5	92.9
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	130.1	1,960	--	--
31...	--	--	--	--	--	--	--	--	--	2.8	671	--	--
AUG													
04...	0.141	0.05	0.53	0.170	2.0	2.5	<0.1	2.5	3.8	--	--	E5	495
12...	0.126	0.04	2.52	0.64	--	16.1	--	--	--	--	--	<8	205
19...	0.264	0.09	0.39	0.199	1.6	2.0	<0.1	2.0	--	--	--	<8	285
26...	0.248	0.08	0.37	0.175	2.1	1.7	<0.1	1.6	--	--	--	8	1,480
SEP													
02...	0.411	0.13	0.16	0.191	2.6	0.9	<0.1	0.9	1.5	--	--	17	1,750
09...	0.392	0.13	0.34	0.24	2.9	1.7	<0.1	1.6	--	--	--	E4	1,780
16...	2.00	0.65	0.55	0.92	5.1	3.2	<0.1	3.1	--	--	--	E7	222

06800000 MAPLE CREEK NEAR NICKERSON, NE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	1,4-Naphthoquinone, water, fltrd, ug/L (61611)	1-Naphthol, water, fltrd 0.7u GF ug/L (49295)	2-(4-t-Butylphenoxy)cyclohexanol wat flt ug/L (61637)	2,5-Dichloroaniline water, fltrd, ug/L (61614)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	2-[(2-Et-6-Me-Ph)--amino]propan-1-ol, ug/L (61615)	2Amino-N-isopropylbenzamide, wat flt ug/L (61617)	2Chloro-2,6'-'diethyl acetanilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl-6-methylaniline water, fltrd, ug/L (61620)	3-(Trifluoromethyl) aniline water, fltrd, ug/L (61630)	3,4-Dichloroaniline water fltrd, ug/L (61625)	3,5-Dichloroaniline water, fltrd, ug/L (61627)
OCT													
08...	<0.05	<0.09	<0.01	<0.03	<0.006	--	<0.005	<0.005	E.023	<0.004	<0.01	<0.004	<0.005
NOV													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	<0.05	<0.09	<0.01	<0.03	<0.006	<0.1	<0.005	<0.005	E.016	<0.004	<0.01	<0.004	<0.005
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
10...	<0.05	<0.09	<0.01	<0.03	<0.006	<0.1	<0.005	<0.005	E.017	<0.004	<0.01	<0.004	<0.005
JAN													
14...	<0.05	<0.09	<0.01	<0.03	<0.006	<0.1	<0.005	<0.005	E.015	<0.004	<0.01	<0.004	<0.005
FEB													
11...	<0.05	<0.09	<0.01	<0.03	<0.006	<0.1	<0.005	<0.005	E.016	<0.004	<0.01	<0.004	<0.005
MAR													
11...	<0.05	<0.09	<0.01	<0.03	<0.006	<0.1	<0.005	<0.005	E.020	<0.004	<0.01	<0.004	<0.005
APR													
07...	--	<0.09	--	--	<0.006	<0.1	--	<0.005	E.018	<0.004	--	<0.004	--
16...	<0.05	<0.09	<0.01	<0.03	<0.006	--	<0.005	<0.005	E.021	<0.004	<0.01	<0.004	<0.005
21...	--	<0.09	--	--	<0.006	<0.1	--	<0.005	E.016	<0.004	--	<0.004	--
30...	<0.05	<0.09	<0.01	<0.03	<0.006	<0.1	<0.005	<0.005	E.178	E.008	<0.01	<0.004	<0.005
MAY													
06...	--	<0.09	--	--	<0.006	<0.1	--	<0.005	E.236	<0.004	--	<0.004	--
13...	<0.05	<0.09	<0.01	<0.03	<0.006	<0.1	<0.005	<0.005	E.178	E.002	<0.01	<0.004	<0.005
20...	--	<0.09	--	--	<0.006	<0.1	--	<0.008	E.489	E.005	--	0.016	--
27...	<0.05	<0.09	<0.01	<0.03	<0.006	<0.1	<0.005	<0.005	E.131	<0.004	<0.01	<0.004	<0.005
JUN													
02...	--	<0.09	--	--	<0.006	<0.1	--	<0.005	E.091	<0.004	--	<0.004	--
10...	<0.05	<0.09	<0.01	<0.03	<0.006	<0.1	<0.005	<0.005	E.324	<0.004	<0.01	<0.004	<0.005
17...	--	<0.09	--	--	<0.006	<0.1	--	<0.005	E.091	E.002	--	<0.004	--
23...	<0.05	<0.09	<0.01	<0.03	<0.006	<0.1	<0.005	<0.005	E.181	<0.004	<0.01	<0.004	<0.005
JUL													
01...	--	<0.09	--	--	<0.006	<0.1	--	<0.005	E.069	<0.004	--	<0.004	--
09...	--	<0.09	<0.01	<0.03	<0.006	<0.1	<0.005	<0.005	E.241	E.004	<0.01	<0.004	<0.005
15...	--	<0.09	--	--	<0.006	<0.1	--	<0.005	E.130	E.003	--	<0.004	--
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	<0.09	--	--	<0.006	<0.1	--	<0.005	E.066	E.002	--	<0.004	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	<0.05	--	<0.01	<0.03	<0.006	<0.1	<0.005	<0.005	E.054	E.003	<0.01	<0.004	<0.005
12...	--	<0.09	--	--	<0.006	<0.1	--	<0.005	E.046	<0.004	--	<0.004	--
19...	<0.05	--	<0.01	<0.03	<0.006	<0.1	<0.005	<0.005	E.049	<0.004	<0.01	<0.004	<0.005
26...	--	<0.09	--	--	<0.006	<0.1	--	<0.005	E.038	<0.004	--	<0.004	--
SEP													
02...	<0.05	--	<0.01	<0.03	<0.006	<0.1	<0.005	<0.005	E.012	<0.004	<0.01	<0.004	<0.005
09...	--	<0.09	--	--	<0.006	<0.1	--	<0.005	E.014	<0.004	--	<0.004	--
16...	<0.05	--	<0.01	<0.03	<0.006	<0.1	<0.005	<0.005	E.048	E.002	<0.01	<0.004	<0.005

06800000 MAPLE CREEK NEAR NICKERSON, NE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	3-Phenoxybenzyl alcohol water, fltrd, ug/L (61629)	4-(MeOH)-pendimethalin, wat flt ug/L (61665)	4,4-Di'chlorobenzophenone, wat flt ug/L (61631)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	4Chlorophenylmethyl sulfone water, fltrd, ug/L (61634)	Acetochlor ESA, water, fltrd 0.7u GF ug/L (61029)	Acetochlor OA, water, fltrd 0.7u GF ug/L (61030)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor ESA, water, fltrd 0.7u GF ug/L (50009)	Alachlor OA, water, fltrd 0.7u GF ug/L (61031)	Alachlor, water, fltrd, ug/L (46342)	alpha-Endosulfan, water, fltrd, ug/L (34362)	alpha-HCH, water, fltrd, ug/L (34253)
OCT													
08...	--	--	<0.003	<0.006	--	0.13	0.20	0.142	0.13	<0.05	<0.010	<0.005	<0.005
NOV													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	<0.05	<0.1	<0.003	<0.006	<0.03	0.06	0.10	E.005	0.09	<0.05	<0.004	<0.005	<0.005
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
10...	<0.05	<0.1	<0.003	<0.006	<0.03	0.08	0.06	<0.006	0.10	<0.05	<0.004	<0.005	<0.005
JAN													
14...	<0.05	<0.1	<0.003	<0.006	<0.03	--	--	E.005	--	--	<0.004	<0.005	<0.005
FEB													
11...	<0.05	<0.1	<0.003	<0.006	<0.03	<0.05	0.07	0.007	0.07	<0.05	<0.004	<0.005	<0.005
MAR													
11...	<0.05	<0.1	<0.003	<0.006	<0.03	0.25	0.49	0.031	0.08	<0.05	<0.004	<0.005	<0.005
APR													
07...	--	--	--	<0.006	--	0.09	0.11	0.008	0.05	<0.05	<0.004	--	--
16...	--	--	<0.003	<0.006	<0.03	0.11	0.14	0.028	0.11	<0.05	0.006	<0.005	<0.005
21...	--	--	--	<0.006	--	0.08	0.11	0.017	0.07	<0.05	0.006	--	--
30...	<0.05	<0.1	<0.003	<0.006	<0.03	0.71	0.92	E61.0	<0.05	<0.05	0.071	<0.005	<0.005
MAY													
06...	--	--	--	<0.006	--	0.56	0.67	4.22	<0.05	<0.05	0.060	--	--
13...	<0.05	<0.1	<0.003	<0.006	<0.03	0.60	0.70	1.76	0.07	<0.05	0.034	<0.005	<0.005
20...	--	--	--	<0.006	--	2.34	<0.05	E27.7	<0.05	<0.05	0.379	--	--
27...	<0.05	<0.1	<0.003	<0.006	<0.03	0.28	0.62	2.29	0.10	0.05	0.053	<0.005	<0.005
JUN													
02...	--	--	--	<0.006	--	0.14	<0.05	0.606	0.06	<0.05	0.032	--	--
10...	<0.05	--	<0.003	<0.006	<0.03	0.36	1.41	4.18	<0.05	<0.05	0.018	<0.005	<0.005
17...	--	--	--	<0.006	--	0.16	0.49	0.455	<0.05	<0.05	0.009	--	--
23...	--	--	<0.003	<0.006	<0.03	0.34	0.78	0.782	0.09	<0.05	0.006	<0.005	<0.005
JUL													
01...	--	--	--	<0.006	--	0.17	0.32	0.138	0.11	<0.05	<0.004	--	--
09...	<0.05	<0.1	<0.003	<0.006	<0.03	0.86	1.53	1.10	0.17	0.10	0.070	<0.005	<0.005
15...	--	--	--	<0.006	--	0.50	1.05	0.206	0.11	<0.05	<0.004	--	--
22...	--	--	--	--	--	0.51	0.78	--	0.12	<0.05	--	--	--
28...	--	--	--	<0.006	--	0.26	0.48	0.059	0.15	0.06	0.007	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	<0.003	<0.006	<0.03	0.21	0.58	0.156	0.12	<0.05	<0.004	<0.005	<0.005
12...	--	--	--	<0.006	--	0.29	0.69	0.045	0.11	<0.05	<0.004	--	--
19...	--	--	<0.003	<0.006	<0.03	0.31	0.63	0.048	0.11	<0.05	<0.010	<0.005	<0.005
26...	--	--	--	<0.006	--	0.26	0.39	0.046	0.17	<0.05	<0.004	--	--
SEP													
02...	--	--	<0.003	<0.006	<0.03	--	--	0.016	--	--	<0.004	<0.005	<0.005
09...	--	--	--	<0.006	--	0.05	0.09	0.013	0.09	<0.05	<0.004	--	--
16...	--	--	<0.003	<0.006	<0.03	--	--	0.068	--	--	<0.004	<0.005	<0.005

06800000 MAPLE CREEK NEAR NICKERSON, NE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Amino-methyl-phos-phonic acid, wat flt ug/L (62649)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl oxon, water, fltrd, ug/L (61635)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	beta-Endo-sulfan, water, fltrd, ug/L (34357)	Bifen-thrin, water, fltrd, ug/L (61580)	Butyl-ate, water, fltrd, ug/L (04028)	Car-baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd 0.7u GF ug/L (82674)	Chlor-pyrifos oxon, water, fltrd, ug/L (61636)	Chlor-pyrifos water, fltrd, ug/L (38933)	cis-Per-methrin water fltrd 0.7u GF ug/L (82687)
OCT													
08...	0.3	0.178	<0.02	<0.050	<0.010	<0.01	<0.005	<0.002	<0.041	<0.020	<0.06	<0.005	<0.006
NOV													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	<0.1	0.072	<0.02	<0.050	<0.010	<0.01	<0.005	<0.002	<0.041	<0.020	<0.06	<0.005	<0.006
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
10...	<0.1	0.065	<0.02	<0.050	<0.010	<0.01	<0.005	<0.002	<0.041	<0.020	<0.06	<0.005	<0.006
JAN													
14...	<0.1	0.050	<0.02	<0.050	<0.010	<0.01	<0.005	<0.002	<0.041	<0.020	<0.06	<0.005	<0.006
FEB													
11...	<0.1	0.053	<0.12	<0.050	<0.010	<0.01	<0.005	<0.002	<0.041	<0.020	<0.06	<0.005	<0.006
MAR													
11...	0.1	0.064	<0.02	<0.050	<0.010	<0.01	<0.005	<0.002	<0.041	<0.020	<0.06	<0.005	<0.006
APR													
07...	--	0.043	<0.02	<0.050	<0.010	--	--	--	<0.041	--	<0.06	<0.005	<0.006
16...	0.1	0.085	<0.02	<0.050	<0.010	<0.01	<0.005	<0.004	<0.041	<0.020	<0.06	<0.005	<0.006
21...	--	0.057	<0.02	<0.050	<0.010	--	--	--	<0.041	--	<0.06	<0.005	<0.006
30...	0.6	E34.0	<0.02	<0.050	<0.010	<0.01	<0.005	<0.002	<0.041	<0.020	<0.06	<0.010	<0.006
MAY													
06...	--	9.02	<0.02	<0.050	<0.010	--	--	--	<0.041	--	<0.06	E.004	<0.006
13...	0.5	3.58	<0.02	<0.050	<0.010	<0.01	<0.005	<0.002	<0.041	<0.020	<0.06	0.007	<0.006
20...	--	E34.8	<0.02	<0.050	<0.010	--	--	--	<0.041	--	<0.06	0.005	<0.006
27...	0.3	4.67	<0.03	<0.050	<0.010	<0.01	<0.005	<0.002	<0.041	<0.020	<0.06	0.007	<0.006
JUN													
02...	--	2.04	<0.02	<0.050	<0.010	--	--	--	<0.041	--	<0.06	E.005	<0.006
10...	0.5	8.33	<0.02	<0.050	<0.010	<0.01	<0.005	<0.002	<0.041	E.110	<0.06	0.024	<0.006
17...	--	2.15	<0.02	<0.050	<0.010	--	--	--	<0.041	--	<0.06	0.008	<0.006
23...	0.7	3.33	<0.02	<0.050	<0.010	<0.01	<0.005	<0.002	<0.041	<0.020	<0.06	<0.005	<0.006
JUL													
01...	--	1.19	<0.02	<0.050	<0.010	--	--	--	<0.041	--	<0.06	E.003	<0.006
09...	1.1	2.97	<0.02	<0.050	<0.010	<0.01	<0.005	<0.002	<0.041	<0.020	<0.06	<0.005	<0.006
15...	--	1.64	<0.02	<0.050	<0.010	--	--	--	<0.041	--	<0.06	0.007	<0.006
22...	0.6	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	0.619	<0.02	<0.050	<0.010	--	--	--	<0.041	--	<0.06	E.004	<0.006
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	0.5	0.632	<0.02	<0.050	<0.010	<0.01	<0.005	<0.002	<0.041	<0.020	<0.06	<0.005	<0.006
12...	--	0.441	<0.02	<0.050	<0.010	--	--	--	<0.041	--	<0.06	<0.005	<0.006
19...	0.3	0.370	<0.02	<0.050	<0.010	<0.01	<0.005	<0.002	<0.041	<0.020	<0.06	<0.005	<0.006
26...	--	0.266	<0.02	<0.050	<0.010	--	--	--	<0.041	--	<0.06	<0.005	<0.006
SEP													
02...	0.1	0.048	<0.02	<0.050	<0.010	<0.01	<0.005	<0.002	<0.041	<0.020	<0.06	<0.005	<0.006
09...	--	0.044	<0.02	<0.050	<0.010	--	--	--	<0.041	--	<0.06	<0.005	<0.006
16...	0.3	0.330	<0.02	<0.050	<0.010	<0.01	<0.005	<0.002	<0.041	<0.020	<0.06	<0.005	<0.006

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WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	cis-Propiconazole, water, fltrd, ug/L (79846)	Cyanazine, water, fltrd, ug/L (04041)	Cycloate, water, fltrd, ug/L (04031)	Cyfluthrin, water, fltrd, ug/L (61585)	lambda-Cyhalothrin, water, fltrd, ug/L (61595)	Cypermethrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon oxon, water, fltrd, ug/L (61638)	Diazinon, water, fltrd, ug/L (39572)	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Dimethenamid ESA, water, fltrd, ug/L (61951)
OCT													
08...	<0.008	0.035	<0.005	<0.008	<0.009	<0.009	<0.003	<0.004	--	0.006	<0.08	<0.005	<0.05
NOV													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	<0.008	<0.018	<0.005	<0.008	<0.009	<0.009	<0.003	<0.004	--	<0.005	<0.08	<0.005	<0.05
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
10...	<0.008	<0.018	<0.005	<0.008	<0.009	<0.009	<0.003	<0.004	--	<0.005	<0.08	<0.005	<0.05
JAN													
14...	<0.008	<0.018	<0.005	<0.008	<0.009	<0.009	<0.003	<0.004	--	<0.005	<0.08	<0.005	--
FEB													
11...	<0.008	<0.018	<0.005	<0.008	<0.009	<0.009	<0.003	<0.004	--	<0.005	<0.08	<0.005	<0.05
MAR													
11...	<0.008	<0.018	<0.005	<0.008	<0.009	<0.009	<0.003	<0.004	--	<0.005	<0.08	<0.005	<0.05
APR													
07...	--	--	--	<0.008	--	<0.009	<0.003	<0.004	<0.04	<0.005	<0.08	<0.005	<0.05
16...	<0.008	E.007	<0.005	<0.008	<0.009	<0.009	<0.003	<0.004	--	<0.005	<0.08	<0.005	<0.05
21...	--	--	--	<0.008	--	<0.009	<0.003	<0.004	<0.04	<0.005	<0.08	<0.005	<0.05
30...	<0.008	<0.020	<0.005	<0.008	<0.009	<0.009	<0.003	<0.004	--	0.006	<0.08	<0.005	<0.05
MAY													
06...	--	--	--	<0.008	--	<0.009	<0.003	<0.004	<0.01	<0.005	<0.08	<0.005	<0.05
13...	<0.008	E.016	<0.005	<0.008	<0.009	<0.009	<0.003	<0.004	--	<0.005	<0.08	<0.005	<0.05
20...	--	--	--	<0.008	--	<0.009	<0.003	<0.004	<0.01	<0.005	<0.08	<0.005	<0.05
27...	<0.008	E.010	<0.005	<0.008	<0.009	<0.009	<0.003	<0.004	--	<0.005	<0.08	<0.005	<0.05
JUN													
02...	--	--	--	<0.008	--	<0.009	<0.003	E.004	<0.01	<0.005	<0.08	<0.005	<0.05
10...	<0.008	E.009	<0.005	<0.008	<0.009	<0.009	<0.003	<0.004	--	<0.005	<0.08	<0.005	<0.05
17...	--	--	--	<0.008	--	<0.009	<0.003	E.004	<0.01	<0.005	<0.08	<0.005	<0.05
23...	<0.008	<0.018	<0.005	<0.008	<0.009	<0.009	<0.003	<0.004	--	<0.005	<0.08	<0.005	<0.05
JUL													
01...	--	--	--	<0.008	--	<0.009	<0.003	<0.004	<0.01	<0.005	<0.08	<0.005	<0.05
09...	<0.008	<0.018	<0.005	<0.008	<0.009	<0.009	<0.003	<0.004	--	<0.005	<0.08	<0.005	<0.05
15...	--	--	--	<0.008	--	<0.009	<0.003	<0.004	<0.01	<0.005	<0.08	<0.005	<0.05
22...	--	--	--	--	--	--	--	--	--	--	--	--	<0.05
28...	--	--	--	<0.008	--	<0.009	<0.003	<0.004	<0.01	<0.005	<0.08	<0.005	<0.05
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	<0.008	<0.018	<0.005	<0.008	<0.009	<0.009	<0.003	<0.004	--	<0.005	<0.08	<0.005	<0.05
12...	--	--	--	<0.008	--	<0.009	<0.003	<0.004	<0.01	<0.005	<0.08	<0.005	<0.05
19...	<0.008	<0.018	<0.005	<0.008	<0.009	<0.009	<0.003	<0.004	--	<0.005	<0.08	<0.005	<0.05
26...	--	--	--	<0.008	--	<0.009	<0.003	<0.004	<0.01	<0.005	<0.08	<0.005	<0.05
SEP													
02...	<0.008	<0.018	<0.005	<0.008	<0.009	<0.009	<0.003	<0.004	--	<0.005	<0.08	<0.005	--
09...	--	--	--	<0.008	--	<0.009	<0.003	<0.004	<0.01	E.003	<0.08	<0.005	<0.05
16...	<0.008	<0.018	<0.005	<0.008	<0.009	<0.009	<0.003	<0.004	--	<0.005	<0.08	<0.005	--

06800000 MAPLE CREEK NEAR NICKERSON, NE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Dimeth-enamid OA, water, fltrd, ug/L (62482)	Dimeth-oate, water, fltrd 0.7u GF ug/L (82662)	Disulf-oton sulfone water, fltrd, ug/L (61640)	Disulf-oton sulf-oxide, water, fltrd, ug/L (61641)	Disul-foton, water, fltrd 0.7u GF ug/L (82677)	e-Di-metho-morph, water, fltrd, ug/L (79844)	Endo-sulfan ether, water, fltrd, ug/L (61642)	Endo-sulfan sulfate water, fltrd, ug/L (61590)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Etho-prop, water, fltrd 0.7u GF ug/L (82672)
OCT													
08...	<0.05	<0.006	<0.02	<0.002	<0.02	<0.02	<0.004	<0.006	<0.002	<0.009	<0.03	<0.004	<0.005
NOV													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	<0.05	<0.006	<0.02	<0.002	<0.02	<0.02	<0.004	<0.006	<0.002	<0.009	<0.03	<0.004	<0.005
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
10...	<0.05	<0.006	<0.02	<0.002	<0.02	<0.02	<0.004	<0.006	<0.002	<0.009	<0.03	<0.004	<0.005
JAN													
14...	--	<0.006	<0.02	<0.002	<0.02	<0.02	<0.004	<0.006	<0.002	<0.009	<0.03	<0.004	<0.005
FEB													
11...	<0.05	<0.006	<0.02	<0.002	<0.02	<0.02	<0.004	<0.006	<0.002	<0.009	<0.03	<0.004	<0.005
MAR													
11...	<0.05	<0.006	<0.02	<0.002	<0.02	<0.02	<0.004	<0.006	<0.002	<0.009	<0.03	<0.004	<0.005
APR													
07...	<0.05	<0.006	--	--	--	--	--	--	--	--	<0.03	<0.004	--
16...	<0.05	<0.006	<0.02	<0.002	<0.02	<0.02	<0.004	<0.006	<0.002	<0.009	<0.03	<0.004	<0.005
21...	<0.05	<0.006	--	--	--	--	--	--	--	--	<0.03	<0.004	--
30...	<0.05	<0.006	<0.02	<0.002	<0.02	<0.02	<0.004	<0.006	0.006	<0.009	<0.03	<0.004	<0.005
MAY													
06...	<0.05	<0.006	--	--	--	--	--	--	--	--	<0.03	<0.004	--
13...	<0.05	<0.006	<0.02	<0.002	<0.02	<0.02	<0.004	<0.006	0.003	<0.009	<0.03	<0.004	<0.005
20...	<0.05	<0.006	--	--	--	--	--	--	--	--	<0.03	<0.004	--
27...	<0.05	<0.006	<0.02	<0.002	<0.02	<0.02	<0.004	<0.006	<0.002	<0.009	<0.03	<0.004	<0.005
JUN													
02...	<0.05	<0.006	--	--	--	--	--	--	--	--	<0.03	<0.004	--
10...	<0.05	<0.006	<0.02	<0.002	<0.02	<0.02	<0.004	<0.006	<0.002	<0.009	<0.03	<0.004	<0.005
17...	<0.05	<0.006	--	--	--	--	--	--	--	--	<0.03	<0.004	--
23...	<0.05	<0.006	<0.02	<0.002	<0.02	<0.02	<0.004	<0.006	<0.002	<0.009	<0.03	<0.004	<0.005
JUL													
01...	<0.05	<0.006	--	--	--	--	--	--	--	--	<0.03	<0.004	--
09...	<0.05	<0.006	<0.02	<0.002	<0.02	<0.02	<0.004	<0.006	<0.002	<0.009	<0.03	<0.004	<0.005
15...	<0.05	<0.006	--	--	--	--	--	--	--	--	<0.03	<0.004	--
22...	<0.05	--	--	--	--	--	--	--	--	--	--	--	--
28...	<0.05	<0.006	--	--	--	--	--	--	--	--	<0.03	<0.004	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	<0.05	<0.006	<0.02	<0.002	<0.02	<0.02	<0.004	<0.006	<0.002	<0.009	<0.03	<0.004	<0.005
12...	<0.05	<0.006	--	--	--	--	--	--	--	--	<0.03	<0.004	--
19...	<0.05	<0.006	<0.02	<0.002	<0.02	<0.02	<0.004	<0.006	<0.002	<0.009	<0.03	<0.004	<0.005
26...	<0.05	<0.006	--	--	--	--	--	--	--	--	<0.03	<0.004	--
SEP													
02...	--	<0.006	<0.02	<0.002	<0.02	<0.02	<0.004	<0.006	<0.002	<0.009	<0.03	<0.004	<0.005
09...	<0.05	<0.006	--	--	--	--	--	--	--	--	<0.03	<0.004	--
16...	--	<0.006	<0.02	<0.002	<0.02	<0.02	<0.004	<0.006	<0.002	<0.009	<0.03	<0.004	<0.005

06800000 MAPLE CREEK NEAR NICKERSON, NE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Fenamiphos sulfone water, fltrd, ug/L (61645)	Fenamiphos sulfoxide, water, fltrd, ug/L (61646)	Fenamiphos, water, fltrd, ug/L (61591)	Fenthion sulfoxide, water, fltrd, ug/L (61647)	Fenthion, water, fltrd, ug/L (38801)	Desulfinylfipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Flufenacet ESA, water, fltrd, ug/L (61952)	Flufenacet OA, water, fltrd, ug/L (62483)	Flumetralin, water, fltrd, ug/L (61592)	Fonofos oxon, water, fltrd, ug/L (61649)
OCT													
08...	<0.008	<0.03	<0.03	<0.008	<0.02	<0.009	<0.005	<0.005	<0.007	<0.05	<0.05	<0.004	<0.002
NOV													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	<0.008	<0.03	<0.03	<0.008	<0.02	<0.009	<0.005	<0.005	<0.007	<0.05	<0.05	<0.004	<0.002
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
10...	<0.008	<0.03	<0.03	<0.008	<0.02	<0.009	<0.005	<0.005	<0.007	<0.05	<0.05	<0.004	<0.002
JAN													
14...	<0.008	<0.03	<0.03	<0.008	<0.02	<0.009	<0.005	<0.005	<0.007	--	--	<0.004	<0.002
FEB													
11...	<0.008	--	<0.03	<0.008	<0.02	<0.009	<0.005	<0.005	<0.007	<0.05	<0.05	<0.004	<0.002
MAR													
11...	<0.008	<0.03	<0.03	<0.008	<0.02	<0.009	<0.005	<0.005	<0.007	<0.05	<0.05	<0.004	<0.002
APR													
07...	<0.008	<0.03	<0.03	--	--	<0.009	<0.005	<0.005	<0.007	<0.05	<0.05	--	<0.002
16...	<0.008	<0.03	<0.03	<0.008	<0.02	<0.009	<0.005	<0.005	<0.007	<0.05	<0.05	<0.004	<0.002
21...	<0.008	<0.03	<0.03	--	--	<0.009	<0.005	<0.005	<0.007	<0.05	<0.05	--	<0.002
30...	<0.008	<0.03	<0.03	<0.008	<0.02	<0.009	<0.005	<0.005	E.021	<0.05	<0.05	<0.004	<0.002
MAY													
06...	<0.008	<0.03	<0.03	--	--	<0.009	<0.005	<0.008	E.012	<0.05	<0.05	--	<0.002
13...	<0.008	<0.03	<0.03	<0.008	<0.02	<0.009	<0.005	0.007	E.009	<0.05	<0.05	<0.004	<0.002
20...	<0.008	<0.03	<0.03	--	--	<0.009	E.003	0.005	E.008	<0.05	<0.05	--	<0.002
27...	<0.031	<0.03	<0.03	<0.008	<0.02	<0.009	<0.005	0.005	E.007	<0.05	<0.05	<0.004	<0.002
JUN													
02...	<0.008	<0.03	<0.03	--	--	<0.009	E.004	E.005	E.006	<0.05	<0.05	--	<0.002
10...	<0.008	<0.03	<0.03	<0.008	<0.02	<0.009	<0.005	0.008	E.026	<0.05	<0.05	<0.004	<0.002
17...	<0.008	<0.03	<0.03	--	--	<0.009	E.004	E.006	E.007	<0.05	<0.05	--	<0.002
23...	<0.008	<0.03	<0.03	<0.008	<0.02	<0.009	<0.005	<0.005	<0.007	<0.05	<0.05	<0.004	<0.002
JUL													
01...	<0.008	<0.03	<0.03	--	--	<0.009	<0.005	<0.006	<0.007	<0.05	<0.05	--	<0.002
09...	<0.008	<0.03	<0.03	<0.008	<0.02	<0.009	<0.005	<0.005	<0.007	<0.05	<0.05	<0.004	<0.002
15...	<0.008	<0.03	<0.03	--	--	<0.009	E.004	<0.007	<0.007	<0.05	<0.05	--	<0.002
22...	--	--	--	--	--	--	--	--	--	<0.05	<0.05	--	--
28...	<0.008	<0.03	<0.03	--	--	<0.009	<0.005	<0.005	<0.007	<0.05	<0.05	--	<0.002
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	<0.008	<0.03	<0.03	<0.008	<0.02	<0.009	<0.005	<0.005	<0.007	<0.05	<0.05	<0.004	<0.002
12...	<0.008	<0.03	<0.03	--	--	<0.009	<0.005	<0.005	<0.007	<0.05	<0.05	--	<0.002
19...	<0.008	<0.03	<0.03	<0.008	<0.02	<0.009	<0.005	<0.005	<0.007	<0.05	<0.05	<0.004	<0.002
26...	<0.008	<0.03	<0.03	--	--	<0.009	<0.005	<0.005	<0.007	<0.05	<0.05	--	<0.002
SEP													
02...	<0.008	<0.03	<0.03	<0.008	<0.02	<0.009	<0.005	<0.005	<0.007	--	--	<0.004	<0.002
09...	<0.008	<0.03	<0.03	--	--	<0.009	<0.005	<0.005	<0.007	<0.05	<0.05	--	<0.002
16...	<0.008	<0.03	<0.03	<0.008	<0.02	<0.009	<0.005	0.006	E.004	--	--	<0.004	<0.002

06800000 MAPLE CREEK NEAR NICKERSON, NE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Fonofos water, fltrd, ug/L (04095)	Glufosinate, water, fltrd 0.7u GF ug/L (62721)	Glyphosate, water, fltrd 0.7u GF ug/L (62722)	Hexazinone, water, fltrd, ug/L (04025)	Iprodione, water, fltrd, ug/L (61593)	Isofenphos, water, fltrd, ug/L (61594)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malaoxon, water, fltrd, ug/L (61652)	Malathion, water, fltrd, ug/L (39532)	Metalaxyl, water, fltrd, ug/L (61596)	Methialthion water, fltrd, ug/L (61598)	c-Permethric acid methyl ester, wat flt ug/L (79842)
OCT													
08...	<0.003	<0.1	<0.1	<0.013	<1	<0.003	<0.004	<0.035	<0.008	<0.027	<0.005	<0.006	<0.04
NOV													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	<0.003	<0.1	<0.1	<0.013	<1	<0.003	<0.004	<0.035	<0.008	<0.027	<0.005	<0.006	<0.04
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
10...	<0.003	<0.1	<0.1	<0.013	<1	<0.003	<0.004	<0.035	<0.008	<0.027	<0.005	<0.006	<0.04
JAN													
14...	<0.003	<0.1	<0.1	<0.013	<1	<0.003	<0.004	<0.035	<0.008	<0.027	<0.005	<0.006	<0.04
FEB													
11...	<0.003	<0.1	<0.1	<0.013	<1	<0.003	<0.004	<0.035	<0.008	<0.027	<0.005	<0.006	<0.04
MAR													
11...	<0.003	<0.1	<0.1	<0.013	<1	<0.003	<0.004	<0.035	<0.008	<0.027	<0.005	<0.006	<0.04
APR													
07...	<0.003	--	--	--	<1	<0.003	--	--	<0.008	<0.027	<0.005	<0.006	--
16...	<0.003	<0.1	<0.1	<0.013	<1	<0.003	<0.004	<0.035	<0.008	<0.027	<0.005	<0.006	<0.04
21...	<0.003	--	--	--	<1	<0.003	--	--	<0.008	<0.027	<0.005	<0.006	--
30...	<0.003	<0.1	<0.1	<0.013	<1	<0.003	0.005	<0.035	<0.008	E.010	0.015	<0.006	<0.04
MAY													
06...	<0.003	--	--	--	<1	<0.003	--	--	<0.008	<0.027	<0.005	<0.006	--
13...	<0.003	<0.1	<0.1	<0.013	<1	<0.003	<0.004	<0.035	<0.008	<0.027	<0.005	<0.006	<0.04
20...	<0.003	--	--	<0.013	<1	<0.003	--	--	<0.008	<0.027	<0.008	<0.006	--
27...	<0.003	<0.1	<0.1	<0.013	<1	<0.003	<0.004	<0.035	<0.008	<0.027	<0.005	<0.006	<0.04
JUN													
02...	<0.003	--	--	<0.013	<1	<0.003	--	--	<0.008	<0.027	<0.005	<0.006	--
10...	<0.003	<0.1	<0.1	<0.013	<1	<0.003	<0.004	<0.035	<0.008	<0.027	<0.005	<0.006	<0.04
17...	<0.003	--	--	<0.013	<1	<0.003	--	--	<0.008	<0.027	<0.005	<0.006	--
23...	<0.003	<0.1	0.3	<0.013	<1	<0.003	<0.004	<0.035	<0.008	<0.027	<0.005	<0.006	<0.04
JUL													
01...	<0.003	--	--	<0.013	<1	<0.003	--	--	<0.008	<0.027	<0.005	<0.006	--
09...	<0.003	<0.1	0.3	<0.013	<1	<0.003	<0.004	<0.035	<0.008	<0.027	<0.005	<0.006	<0.04
15...	<0.003	--	--	<0.013	<1	<0.003	--	--	<0.008	<0.027	<0.005	<0.006	--
22...	--	<0.1	<0.1	--	--	--	--	--	--	--	--	--	--
28...	<0.003	--	--	<0.013	<1	<0.003	--	--	<0.008	<0.027	<0.005	<0.006	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	<0.003	<0.1	<0.1	<0.013	<1	<0.003	<0.004	<0.035	<0.008	<0.027	<0.005	<0.006	<0.04
12...	<0.003	--	--	<0.013	<1	<0.003	--	--	<0.008	<0.027	<0.005	<0.006	--
19...	<0.003	<0.1	<0.1	<0.013	<1	<0.003	<0.004	<0.035	<0.008	<0.027	<0.005	<0.006	<0.04
26...	<0.003	--	--	<0.013	<1	<0.003	--	--	<0.008	<0.027	<0.005	<0.006	--
SEP													
02...	<0.003	<0.1	<0.1	<0.013	<1	<0.003	<0.004	<0.035	<0.008	<0.027	<0.005	<0.006	<0.04
09...	<0.003	--	--	<0.013	<1	<0.003	--	--	<0.008	<0.027	<0.005	<0.006	--
16...	<0.003	<0.1	0.2	<0.013	<1	<0.003	<0.004	<0.035	<0.008	<0.027	<0.005	<0.006	<0.04

06800000 MAPLE CREEK NEAR NICKERSON, NE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Methyl para-oxon, water, fltrd, ug/L (61664)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	t-Per-methric acid methyl ester, wat flt ug/L (79843)	Metola-chlor ESA, water, fltrd 0.7u GF ug/L (61043)	Metola-chlor OA, water, fltrd 0.7u GF ug/L (61044)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Moli-nate, water, fltrd 0.7u GF ug/L (82671)	Myclo-butanil water, fltrd, ug/L (61599)	Naprop-amide, water, fltrd 0.7u GF ug/L (82684)	O-Et-O-Me-S-Pr -phos-phoro-thioate wat flt ug/L (61660)	Oxy-fluor-fen, water, fltrd, ug/L (61600)	p,p-' DDE, water, fltrd, ug/L (34653)
OCT													
08...	<0.03	<0.006	<0.03	0.15	0.05	0.056	<0.006	<0.002	<0.008	<0.007	<0.008	<0.007	<0.003
NOV													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	<0.03	<0.006	<0.03	0.09	<0.05	E.010	<0.006	<0.002	<0.008	<0.007	<0.008	<0.007	<0.003
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
10...	<0.03	<0.006	<0.03	0.13	<0.05	E.010	<0.006	<0.002	<0.008	<0.007	<0.008	<0.007	<0.003
JAN													
14...	<0.03	<0.006	<0.03	--	--	E.009	<0.006	<0.002	<0.008	<0.007	<0.008	<0.007	<0.003
FEB													
11...	<0.03	<0.006	<0.03	0.11	<0.05	E.007	<0.006	0.002	<0.008	<0.007	<0.008	<0.007	<0.003
MAR													
11...	<0.03	<0.006	<0.03	0.11	0.05	0.036	<0.006	<0.002	<0.008	<0.007	<0.008	<0.007	<0.003
APR													
07...	<0.03	<0.006	--	0.09	<0.05	E.009	<0.006	--	<0.008	--	--	--	--
16...	<0.03	<0.006	<0.03	0.13	0.06	0.035	<0.006	<0.002	<0.008	<0.007	<0.008	<0.007	0.003
21...	<0.03	<0.006	--	0.10	<0.05	0.027	<0.006	--	<0.008	--	--	--	--
30...	<0.03	<0.006	<0.03	0.15	0.14	7.26	0.023	<0.002	<0.008	<0.007	<0.008	<0.007	<0.003
MAY													
06...	<0.03	<0.006	--	0.14	0.13	4.36	0.023	--	<0.008	--	--	--	--
13...	<0.03	<0.006	<0.03	0.15	0.14	1.12	0.012	<0.002	<0.008	<0.007	<0.008	<0.007	<0.003
20...	<0.03	<0.006	--	<0.05	<0.05	3.72	0.150	--	<0.008	--	--	--	--
27...	<0.03	<0.006	<0.03	0.14	0.07	0.828	0.014	<0.002	<0.008	<0.007	<0.008	<0.007	<0.003
JUN													
02...	<0.03	<0.006	--	0.08	<0.05	0.422	0.008	--	<0.008	--	--	--	--
10...	<0.03	<0.006	<0.03	0.11	0.11	1.13	0.024	<0.002	<0.008	<0.007	<0.008	<0.007	<0.003
17...	<0.03	<0.006	--	0.11	0.06	0.337	0.009	--	<0.008	--	--	--	--
23...	<0.03	<0.006	<0.03	0.14	0.08	0.564	<0.006	<0.002	<0.008	<0.007	<0.008	<0.007	<0.003
JUL													
01...	<0.03	<0.006	--	0.16	0.07	0.193	<0.006	--	<0.008	--	--	--	--
09...	<0.03	<0.006	<0.03	0.27	0.26	0.465	<0.010	<0.002	<0.008	<0.007	<0.008	<0.007	<0.003
15...	<0.03	<0.006	--	0.16	0.10	0.188	<0.006	--	<0.008	--	--	--	--
22...	--	--	--	0.19	0.10	--	--	--	--	--	--	--	--
28...	<0.03	<0.006	--	0.21	0.08	0.092	<0.006	--	<0.008	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	<0.03	<0.006	<0.03	0.19	0.11	0.113	<0.006	<0.002	<0.008	<0.007	<0.008	<0.007	<0.003
12...	<0.03	<0.006	--	0.20	0.09	0.052	<0.006	--	<0.008	--	--	--	--
19...	<0.03	<0.006	<0.03	0.22	0.09	0.055	<0.006	<0.002	<0.008	<0.007	<0.008	<0.007	<0.003
26...	<0.03	<0.006	--	0.14	0.06	0.047	<0.006	--	<0.008	--	--	--	--
SEP													
02...	<0.03	<0.006	<0.03	--	--	0.014	<0.006	<0.002	<0.008	<0.007	<0.008	<0.007	<0.003
09...	<0.03	<0.006	--	0.07	<0.05	0.013	<0.006	--	<0.008	--	--	--	--
16...	<0.03	<0.006	<0.03	--	--	0.058	<0.006	<0.002	<0.008	<0.007	<0.008	<0.007	<0.003

06800000 MAPLE CREEK NEAR NICKERSON, NE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Para-oxon, water, fltrd, ug/L (61663)	Para-thion, water, fltrd, ug/L (39542)	Peb-ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Phoste-bupirim water, fltrd, ug/L (61602)	Pro-fenofos water, fltrd, ug/L (61603)	Prome-ton, water, fltrd, ug/L (04037)	Prome-tryn, water, fltrd, ug/L (04036)	Pron-amide, water, fltrd 0.7u GF ug/L (82676)
OCT													
08...	<0.008	<0.010	<0.004	<0.022	<0.10	<0.011	<0.06	<0.008	<0.005	<0.006	0.02	<0.005	<0.004
NOV													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	<0.008	<0.010	<0.004	<0.022	<0.10	<0.011	<0.06	<0.008	<0.005	<0.006	E.01	<0.005	<0.004
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
10...	<0.008	<0.010	<0.004	<0.022	<0.10	<0.011	<0.06	<0.008	<0.005	<0.006	E.01	<0.005	<0.004
JAN													
14...	<0.008	<0.010	<0.004	<0.022	<0.10	<0.011	<0.06	<0.008	<0.005	<0.006	E.01	<0.005	<0.004
FEB													
11...	<0.008	<0.010	<0.004	<0.022	<0.10	<0.011	<0.06	<0.008	<0.005	<0.006	M	<0.005	<0.004
MAR													
11...	<0.008	<0.010	<0.004	<0.022	<0.10	<0.011	<0.06	<0.008	<0.005	<0.006	<0.01	<0.005	<0.004
APR													
07...	--	--	--	<0.022	<0.10	<0.011	<0.06	<0.008	--	--	<0.01	<0.005	<0.004
16...	<0.008	<0.010	<0.004	E.010	<0.10	<0.011	<0.06	<0.008	<0.005	<0.006	E.01	<0.005	<0.004
21...	--	--	--	<0.022	<0.10	<0.011	<0.06	<0.008	--	--	E.01	<0.005	<0.004
30...	<0.008	<0.010	<0.004	0.036	<0.10	<0.011	<0.06	<0.008	0.017	<0.006	<0.01	<0.005	<0.004
MAY													
06...	--	--	--	E.020	<0.10	<0.011	<0.06	<0.008	--	--	E.01	<0.005	<0.004
13...	<0.008	<0.010	<0.004	E.013	<0.10	<0.011	<0.06	<0.008	0.020	<0.006	0.03	<0.005	<0.004
20...	--	--	--	0.025	<0.10	<0.011	<0.06	<0.008	--	--	<0.01	<0.005	<0.004
27...	<0.008	<0.010	<0.004	E.009	<0.10	<0.011	<0.06	<0.008	E.005	<0.006	E.01	<0.005	<0.004
JUN													
02...	--	--	--	<0.022	<0.10	<0.011	<0.06	<0.008	--	--	<0.01	<0.005	<0.004
10...	<0.008	<0.010	<0.004	E.009	<0.10	<0.011	<0.06	<0.008	0.012	<0.006	E.01	<0.005	<0.004
17...	--	--	--	<0.022	<0.10	<0.011	<0.06	<0.008	--	--	E.01	<0.005	<0.004
23...	<0.008	<0.010	<0.004	<0.022	<0.10	<0.011	<0.06	<0.008	<0.005	<0.006	E.01	<0.005	<0.004
JUL													
01...	--	--	--	<0.022	<0.10	<0.011	<0.06	<0.008	--	--	M	<0.005	<0.004
09...	<0.008	<0.010	<0.004	<0.022	<0.10	<0.011	<0.06	<0.008	<0.005	<0.006	0.02	<0.005	<0.004
15...	--	--	--	<0.022	<0.10	<0.011	<0.06	<0.008	--	--	0.02	<0.005	<0.004
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	<0.022	<0.10	<0.011	<0.06	<0.008	--	--	E.01	<0.005	<0.004
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	<0.008	<0.010	<0.004	<0.022	<0.10	<0.011	<0.06	<0.008	<0.005	<0.006	0.06	<0.005	<0.004
12...	--	--	--	<0.022	<0.10	<0.011	<0.06	<0.008	--	--	0.02	<0.005	<0.004
19...	<0.008	<0.010	<0.004	<0.022	<0.10	<0.011	<0.06	<0.008	<0.005	<0.006	E.02	<0.005	<0.004
26...	--	--	--	<0.022	<0.10	<0.011	<0.06	<0.008	--	--	E.01	<0.005	<0.004
SEP													
02...	<0.008	<0.010	<0.004	<0.022	<0.10	<0.011	<0.06	<0.008	<0.005	<0.006	<0.01	<0.005	<0.004
09...	--	--	--	<0.022	<0.10	<0.011	<0.06	<0.008	--	--	<0.01	<0.005	<0.004
16...	<0.008	<0.010	<0.004	<0.022	<0.10	<0.011	<0.06	<0.008	<0.005	<0.006	E.01	<0.005	<0.004

06800000 MAPLE CREEK NEAR NICKERSON, NE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Propetamphos, water, fltrd, ug/L (61604)	Simazine, water, fltrd, ug/L (04035)	Sulfotepp, water, fltrd, ug/L (61605)	Sulprofos, water, fltrd, ug/L (38716)	Tebupirimphos oxon, water, fltrd, ug/L (61669)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Tefluthrin metabolite R119365 wat flt ug/L (61671)	Tefluthrin metabolite R152913 wat flt ug/L (61672)	Tefluthrin, water, fltrd, ug/L (61606)	Temephos, water, fltrd, ug/L (61607)
OCT													
08...	<0.010	<0.011	<0.02	<0.004	<0.005	<0.003	<0.02	<0.006	<0.02	<0.02	<0.01	<0.008	<0.3
NOV													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	<0.010	<0.011	<0.02	<0.004	<0.005	<0.003	<0.02	<0.006	<0.02	<0.02	<0.01	<0.008	<0.3
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
10...	<0.010	<0.011	<0.02	<0.004	<0.005	<0.003	<0.02	<0.006	<0.02	<0.02	<0.01	<0.008	<0.3
JAN													
14...	<0.010	<0.011	<0.02	<0.004	<0.005	<0.003	<0.02	<0.006	<0.02	<0.02	<0.01	<0.008	<0.3
FEB													
11...	<0.010	<0.011	<0.02	<0.004	<0.005	<0.003	<0.02	<0.006	<0.02	<0.02	<0.01	<0.008	<0.3
MAR													
11...	<0.010	<0.011	<0.02	<0.004	<0.005	<0.003	<0.02	<0.006	<0.02	<0.02	<0.01	<0.008	<0.4
APR													
07...	--	--	--	--	<0.005	--	--	--	<0.02	--	--	--	--
16...	<0.010	<0.011	<0.02	<0.004	<0.005	<0.003	<0.02	<0.006	<0.02	--	--	<0.008	<0.3
21...	--	--	--	--	E.004	--	--	--	<0.02	--	--	--	--
30...	<0.010	<0.800	<0.02	<0.004	0.050	<0.003	<0.02	<0.006	<0.02	--	--	<0.008	<0.3
MAY													
06...	--	--	--	--	0.028	--	--	--	<0.02	--	--	--	--
13...	<0.010	<0.011	<0.02	<0.004	0.016	<0.003	<0.02	0.012	<0.02	--	--	<0.008	<0.3
20...	--	--	--	--	<0.020	--	--	--	<0.02	--	--	--	--
27...	<0.010	--	<0.02	<0.004	0.016	<0.003	<0.02	<0.006	<0.02	--	--	<0.008	<0.3
JUN													
02...	--	--	--	--	<0.010	--	--	--	<0.02	--	--	--	--
10...	<0.010	0.133	<0.02	<0.004	0.031	<0.003	<0.02	<0.006	<0.02	--	--	<0.008	<0.3
17...	--	--	--	--	0.010	--	--	--	<0.02	--	--	--	--
23...	<0.010	<0.011	<0.02	<0.004	0.012	<0.003	<0.02	<0.006	<0.02	--	--	<0.008	<0.3
JUL													
01...	--	--	--	--	<0.007	--	--	--	<0.02	--	--	--	--
09...	<0.010	<0.011	<0.02	<0.004	0.011	<0.003	<0.02	<0.006	<0.02	--	--	<0.008	<0.3
15...	--	--	--	--	0.010	--	--	--	<0.02	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	0.006	--	--	--	<0.02	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	<0.010	<0.011	<0.02	<0.004	<0.005	<0.003	<0.02	<0.006	<0.02	--	--	<0.008	<0.3
12...	--	--	--	--	E.005	--	--	--	<0.02	--	--	--	--
19...	<0.010	<0.011	<0.02	<0.004	<0.005	<0.003	<0.02	<0.006	<0.02	--	--	<0.008	<0.3
26...	--	--	--	--	<0.005	--	--	--	<0.02	--	--	--	--
SEP													
02...	<0.010	<0.011	<0.02	<0.004	<0.005	<0.003	<0.02	<0.006	<0.02	--	--	<0.008	<0.3
09...	--	--	--	--	<0.005	--	--	--	<0.02	--	--	--	--
16...	<0.010	<0.011	<0.02	<0.004	<0.005	<0.003	<0.02	<0.006	E.01	--	--	<0.008	<0.3

06800000 MAPLE CREEK NEAR NICKERSON, NE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbufos oxon sulfone water, fltrd, ug/L (61674)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Terbuthylazine, water, fltrd, ug/L (04022)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	trans-Propiconazole, water, fltrd, ug/L (79847)	Triallate, water, fltrd 0.7u GF ug/L (82678)	Tribuphos, water, fltrd, ug/L (61610)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)	z-Dimethomorph, water, fltrd, ug/L (79845)	Dichlorvos, water fltrd, ug/L (38775)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)
OCT													
08...	<0.034	<0.07	<0.02	<0.01	<0.005	<0.01	<0.002	<0.004	<0.009	<0.05	<0.01	97	14
NOV													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	<0.034	<0.07	<0.02	<0.01	<0.005	<0.01	<0.002	<0.004	E.005	<0.05	<0.01	--	25
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
10...	<0.034	<0.07	<0.02	<0.01	<0.005	<0.01	<0.002	<0.004	<0.009	<0.05	<0.01	47	91
JAN													
14...	<0.034	<0.07	<0.02	<0.01	<0.005	<0.01	<0.002	<0.004	<0.009	<0.05	<0.01	--	103
FEB													
11...	<0.034	<0.07	<0.02	<0.01	<0.005	<0.01	<0.002	<0.004	<0.009	<0.05	<0.01	80	26
MAR													
11...	<0.034	<0.07	<0.02	<0.01	<0.005	<0.01	<0.002	<0.004	0.053	<0.05	<0.01	--	26
APR													
07...	--	<0.07	<0.02	<0.01	--	--	--	--	E.009	--	<0.01	97	59
16...	<0.034	<0.07	<0.02	<0.01	<0.005	<0.01	<0.002	<0.004	0.014	<0.05	<0.01	--	12
21...	--	<0.07	<0.02	<0.01	--	--	--	--	E.006	--	<0.01	--	13
30...	<0.034	<0.07	<0.02	0.03	<0.005	<0.01	<0.002	<0.004	0.079	<0.05	<0.01	94	32,000
MAY													
06...	--	<0.07	<0.02	E.01	--	--	--	--	0.035	--	<0.01	--	15,500
13...	<0.034	<0.07	<0.02	<0.01	<0.005	<0.01	<0.002	<0.004	E.005	<0.05	<0.01	91	813
20...	--	<0.07	<0.02	<0.04	--	--	--	--	0.044	--	<0.01	--	12,300
27...	<0.034	<0.07	<0.02	E.01	<0.005	<0.01	<0.002	<0.004	E.007	<0.05	<0.01	--	288
JUN													
02...	--	<0.07	<0.02	M	--	--	--	--	E.006	--	<0.01	--	106
10...	<0.034	<0.07	<0.02	0.01	<0.005	<0.01	<0.002	<0.004	0.011	<0.05	<0.01	--	547
17...	--	<0.07	<0.02	M	--	--	--	--	<0.009	--	<0.01	--	149
23...	<0.034	<0.07	<0.02	E.01	<0.005	<0.01	<0.002	<0.004	<0.009	<0.05	<0.01	--	155
JUL													
01...	--	<0.07	<0.02	M	--	--	--	--	<0.009	--	<0.01	--	40
09...	<0.034	<0.07	<0.02	E.01	<0.005	<0.01	<0.002	<0.004	<0.009	<0.05	<0.01	97	279
15...	--	<0.07	<0.02	M	--	--	--	--	<0.009	--	<0.01	--	34
22...	--	--	--	--	--	--	--	--	--	--	--	--	112
28...	--	<0.07	<0.02	<0.01	--	--	--	--	<0.009	--	<0.01	--	16
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	<0.034	<0.07	<0.02	M	<0.005	<0.01	<0.002	<0.004	<0.009	<0.05	<0.01	100	10
12...	--	<0.07	<0.02	<0.01	--	--	--	--	<0.009	--	<0.01	--	E370
19...	<0.034	<0.07	<0.02	<0.01	<0.005	<0.01	<0.002	<0.004	<0.009	<0.05	<0.01	--	13
26...	--	<0.07	<0.02	<0.01	--	--	--	--	<0.009	--	<0.01	--	8
SEP													
02...	<0.034	<0.07	<0.02	<0.01	<0.005	<0.01	<0.002	<0.004	<0.009	<0.05	<0.01	94	6
09...	--	<0.07	<0.02	<0.01	--	--	--	--	<0.009	--	<0.01	--	--
16...	<0.034	<0.07	<0.02	<0.01	<0.005	<0.01	<0.002	<0.004	<0.009	<0.05	<0.01	--	--

06800000 MAPLE CREEK NEAR NICKERSON, NE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Suspended sediment load, tons/d (80155)
OCT	
08...	0.53
NOV	
12...	--
12...	--
13...	1.3
15...	--
15...	--
15...	--
15...	--
DEC	
10...	4.7
JAN	
14...	8.6
FEB	
11...	1.3
MAR	
11...	1.3
APR	
07...	5.7
16...	1.0
21...	1.2
30...	376,000
MAY	
06...	61,200
13...	123
20...	9,720
27...	40
JUN	
02...	12
10...	69
17...	14
23...	15
JUL	
01...	2.9
09...	20
15...	1.6
22...	6.7
28...	0.32
31...	--
31...	--
31...	--
AUG	
04...	0.10
12...	--
19...	0.07
26...	0.05
SEP	
02...	0.03
09...	--
16...	--

Remark codes used in this table:
< -- Less than
E -- Estimated value
M-- Presence verified, not quantified

06800500 ELKHORN RIVER AT WATERLOO, NE

LOCATION.--Lat 41° 17'37", long 96° 17'00", in SW 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 mi^2, approximately, of which about 5,870 mi^2 contributes directly to surface runoff.

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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	521	707	748	759	e760	e960	1,060	6,090	1,300	1,100	587	e290
2	535	720	730	877	e720	e1,000	1,020	4,020	1,300	1,010	560	307
3	541	711	e640	749	e660	e1,080	977	2,030	1,360	962	548	319
4	696	688	e560	781	e620	e1,000	982	2,030	1,420	920	525	299
5	821	681	e480	813	e580	e860	972	9,260	1,430	892	519	292
6	752	679	e480	807	e580	e880	955	6,040	1,450	1,300	518	289
7	681	663	e580	e800	e600	e940	996	4,100	1,880	5,670	524	284
8	618	666	e600	e800	e640	e1,240	1,020	2,750	1,600	2,530	523	279
9	619	678	e660	853	e740	e1,400	1,020	3,160	1,490	1,960	509	298
10	620	675	868	760	e760	889	1,050	3,400	2,200	1,720	488	328
11	595	660	777	549	e720	898	1,150	3,460	5,300	1,600	480	474
12	582	652	744	483	e660	951	1,240	3,170	2,840	1,290	472	839
13	561	657	728	e470	e680	1,120	1,210	3,140	2,220	1,120	473	1,430
14	545	650	716	e470	e660	1,250	1,140	3,450	1,640	1,030	511	1,390
15	541	643	743	e440	e660	1,810	1,070	3,510	1,450	941	466	975
16	546	642	787	e400	e700	2,800	986	3,270	1,340	878	439	712
17	557	659	824	e300	e740	1,490	944	2,840	1,270	825	421	599
18	e560	664	827	e250	e800	1,160	909	2,570	1,500	788	405	547
19	e560	670	773	e250	e880	1,110	906	2,780	1,560	754	440	525
20	e560	675	e700	e250	e920	1,130	945	4,030	1,270	724	595	528
21	559	672	e640	e290	e1,020	1,120	991	2,510	1,170	707	554	523
22	561	669	e560	e400	e3,500	1,100	1,070	2,250	1,240	692	442	565
23	559	666	e540	e430	e2,050	1,020	1,090	2,090	1,180	674	405	531
24	586	667	e500	e490	1,220	957	1,150	2,150	1,070	640	380	504
25	580	663	e460	e640	857	925	1,140	2,220	2,260	608	360	489
26	592	618	e460	e660	874	904	1,110	1,980	2,400	586	355	479
27	596	589	e500	e660	e940	888	1,060	1,760	1,520	567	361	470
28	e620	642	e620	e700	e840	906	1,010	1,600	1,390	565	349	472
29	e640	622	e720	e700	---	979	1,010	1,500	1,410	576	328	469
30	e660	694	e680	e760	---	1,110	6,510	1,430	1,240	598	e300	469
31	e680	---	e640	e780	---	1,060	---	1,360	---	607	e280	---
TOTAL	18,644	19,942	20,285	18,371	25,381	34,937	36,693	95,950	50,700	34,834	14,117	15,975
MEAN	601	665	654	593	906	1,127	1,223	3,095	1,690	1,124	455	532
MAX	821	720	868	877	3,500	2,800	6,510	9,260	5,300	5,670	595	1,430
MIN	521	589	460	250	580	860	906	1,360	1,070	565	280	279
AC-FT	36,980	39,550	40,240	36,440	50,340	69,300	72,780	190,300	100,600	69,090	28,000	31,690

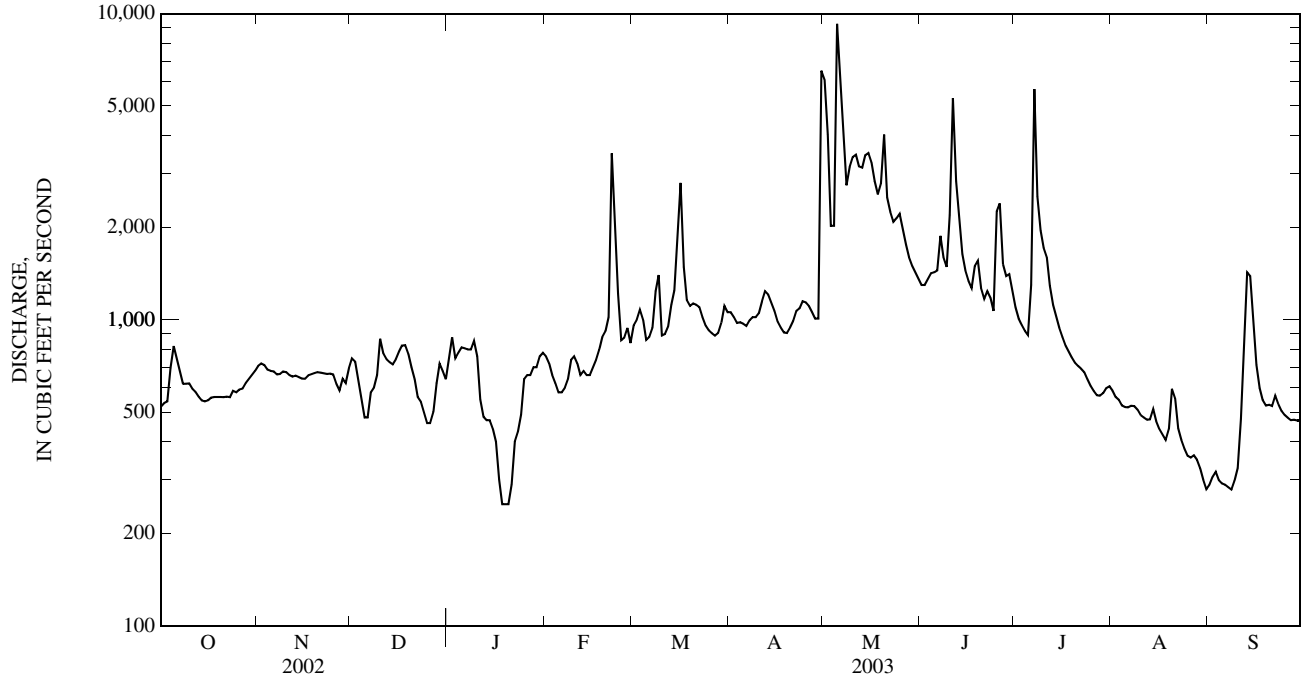
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2003, BY WATER YEAR (WY)

MEAN	730	762	665	626	1,195	2,257	2,064	2,081	2,816	1,443	951	732
MAX	2,780	2,792	1,803	1,650	6,439	8,082	10,450	7,565	11,950	11,470	4,755	2,705
(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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1929 - 2003	
ANNUAL TOTAL	396,172		385,829			
ANNUAL MEAN	1,085		1,057		1,359	
HIGHEST ANNUAL MEAN					3,870	1993
LOWEST ANNUAL MEAN					417	1939
HIGHEST DAILY MEAN	9,870	Jun 12	9,260	May 5	93,800	Jun 12, 1944
LOWEST DAILY MEAN	251	Aug 3	250	Jan 18	64	Sep 16, 1939
ANNUAL SEVEN-DAY MINIMUM	313	Jul 29	294	Sep 3	66	Sep 15, 1939
MAXIMUM PEAK FLOW			16,200	Apr 30	100,000	Jun 12, 1944
MAXIMUM PEAK STAGE			10.38	Apr 30	*16.60	Jun 12, 1944
ANNUAL RUNOFF (AC-FT)	785,800		765,300		984,400	
10 PERCENT EXCEEDS	1,820		2,030		2,720	
50 PERCENT EXCEEDS	824		740		740	
90 PERCENT EXCEEDS	497		468		304	

e Estimated.
* From floodmark, site and datum then in use.



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, 2002 to current year.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	23.3	19.2	21.2	4.1	1.9	3.2	---	---	---	---	---	---
2	21.1	14.3	16.9	3.3	1.7	2.6	---	---	---	---	---	---
3	15.2	13.4	14.3	4.9	3.2	3.9	---	---	---	---	---	---
4	15.2	13.8	14.7	5.2	2.8	4.2	---	---	---	---	---	---
5	15.3	12.3	13.9	5.4	4.6	4.9	---	---	---	---	---	---
6	15.1	12.8	14.2	5.9	3.7	4.9	---	---	---	---	---	---
7	13.8	10.4	12.3	7.6	4.3	6.1	---	---	---	---	---	---
8	15.9	11.8	13.9	8.4	6.4	7.5	---	---	---	---	---	---
9	16.8	13.6	15.3	9.8	7.1	8.5	---	---	---	---	---	---
10	18.3	15.1	16.7	9.4	6.5	8.1	---	---	---	---	---	---
11	18.6	15.5	17.2	6.5	4.4	5.5	---	---	---	---	---	---
12	18.0	13.7	16.2	6.0	3.4	4.9	---	---	---	---	---	---
13	14.1	10.9	12.8	6.1	4.0	5.2	---	---	---	---	---	---
14	13.5	10.3	12.1	---	---	---	---	---	---	---	---	---
15	12.4	10.0	11.4	---	---	---	---	---	---	---	---	---
16	11.1	9.0	9.9	---	---	---	---	---	---	---	---	---
17	11.6	8.5	10	---	---	---	---	---	---	---	---	---
18	13.3	9.6	11.4	---	---	---	---	---	---	---	---	---
19	11.9	9.4	10.7	---	---	---	---	---	---	---	---	---
20	11.2	8.4	10	---	---	---	---	---	---	---	---	---
21	10.8	9.2	9.8	---	---	---	---	---	---	---	---	---
22	9.4	6.6	7.8	---	---	---	---	---	---	---	---	---
23	6.6	3.3	5.0	---	---	---	---	---	---	---	---	---
24	3.7	2.8	3.3	---	---	---	---	---	---	---	---	---
25	5.7	3.6	4.5	---	---	---	---	---	---	---	---	---
26	8.5	5.6	6.9	---	---	---	---	---	---	---	---	---
27	7.8	6.4	7.0	---	---	---	---	---	---	---	---	---
28	6.9	6.2	6.6	---	---	---	---	---	---	---	---	---
29	7.2	6.8	7.0	---	---	---	---	---	---	---	---	---
30	7.0	5.4	6.6	---	---	---	---	---	---	---	---	---
31	5.4	3.7	4.5	---	---	---	---	---	---	---	---	---
MONTH	23.3	2.8	11.1	9.8	1.7	5.3	---	---	---	---	---	---

06800500 ELKHORN RIVER AT WATERLOO, NE—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	15.5	10.6	13.1	13.4	10.9	12.0
2	---	---	---	---	---	---	17.9	13.6	15.8	16.0	13.1	14.4
3	---	---	---	---	---	---	17.6	15.2	16.6	17.3	14.2	15.7
4	---	---	---	---	---	---	15.2	8.5	11.0	16.8	13.3	14.9
5	---	---	---	---	---	---	9.8	6.8	8.3	13.3	9.6	11.5
6	---	---	---	---	---	---	8.2	3.6	5.7	13.6	12.1	12.9
7	---	---	---	---	---	---	4.5	2.7	3.7	15.7	12.3	13.9
8	---	---	---	---	---	---	8.2	3.4	5.7	15.5	14.6	15.0
9	---	---	---	---	---	---	10.5	5.4	7.9	16.5	13.3	14.9
10	---	---	---	---	---	---	13.2	8.1	10.6	16.1	14.2	15.1
11	---	---	---	---	---	---	15.9	11.1	13.5	14.2	12.5	13.1
12	---	---	---	---	---	---	17.7	13.5	15.6	15.2	11.6	13.3
13	---	---	---	---	---	---	18.6	14.8	16.8	17.5	14.3	15.9
14	---	---	---	---	---	---	20.9	16.2	18.5	18.4	15.7	17.1
15	---	---	---	---	---	---	20.6	18.4	19.6	17.8	16.6	17.0
16	---	---	---	---	---	---	21.2	18.0	19.5	18.5	16.0	17.2
17	---	---	---	---	---	---	18.4	14.8	16.1	20.3	16.8	18.5
18	---	---	---	---	---	---	15.3	12.5	13.6	21.6	18.4	20.0
19	---	---	---	---	---	---	12.5	10.9	11.6	21.1	18.1	19.7
20	---	---	---	---	---	---	11.0	10.2	10.6	18.1	16.1	17.1
21	---	---	---	---	---	---	14.9	9.7	12.1	19.1	15.5	17.3
22	---	---	---	---	---	---	16.8	12.1	14.5	19.0	17.0	18.1
23	---	---	---	---	---	---	16.1	14.0	14.9	20.5	17.4	18.9
24	---	---	---	---	---	---	14.4	13.1	13.6	19.9	17.4	18.3
25	---	---	---	13.6	10.0	11.9	16.6	12.2	14.3	20.6	16.7	18.6
26	---	---	---	12.5	10.5	11.3	18.1	13.8	16.1	22.1	18.2	20.2
27	---	---	---	11.5	8.8	10.7	20.1	15.6	17.7	23.2	19.6	21.5
28	---	---	---	9.1	6.8	7.9	---	---	---	24.2	20.9	22.6
29	---	---	---	7.9	5.4	6.9	---	---	---	24.2	21.1	22.8
30	---	---	---	9.2	5.2	7.3	17.3	10.9	14.4	24.6	21.4	22.9
31	---	---	---	12.0	7.2	9.6	---	---	---	23.0	19.6	21.5
MONTH	---	---	---	13.6	5.2	9.4	21.2	2.7	13.3	24.6	9.6	17.2
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.8	20.2	21.6	28.5	24.8	26.7	27.8	24.4	26.0	25.4	17.8	21.4
2	21.6	17.4	19.3	29.4	25.6	27.6	29.4	24.6	27.1	26.8	20.0	23.4
3	17.6	16.2	16.9	31.5	26.7	29.1	29.8	24.5	27.3	25.8	21.5	23.6
4	19.6	15.7	17.7	30.7	27.3	28.7	28.6	24.9	26.8	25.9	18.9	22.6
5	20.8	17.9	19.4	29.7	25.8	27.8	30.2	24.7	27.5	26.3	20.1	23.2
6	22.3	18.6	20.5	29.2	24.3	26.8	28.4	25.9	27.1	27.0	20.7	23.8
7	21.3	17.6	19.2	28.6	22.1	24.3	29.8	24.1	27.0	26.0	20.4	23.2
8	19.0	16.4	17.8	28.5	25.5	26.8	30.5	25.5	28.1	25.4	19.3	22.4
9	22.0	17.1	19.5	27.8	25.8	27.0	30.6	25.4	28.1	22.4	19.9	21.0
10	22.9	19.9	21.7	28.1	25.5	26.9	31.3	25.7	28.5	22.4	19.4	20.8
11	20.6	16.8	18.6	28.3	25.4	27.0	30.0	25.6	27.9	21.5	18.6	20.1
12	20.4	19.8	20.2	28.6	25.0	27.0	29.8	24.9	27.3	20.8	16.9	18.9
13	23.4	19.1	21.1	28.7	25.4	27.3	28.4	24.0	26.2	19.9	18.0	19.1
14	25.9	21.9	23.9	29.9	25.5	27.7	29.0	23.9	26.5	19.8	17.4	18.7
15	27.6	23.5	25.6	30.8	27.0	29.1	30.6	25.3	28.0	20.6	16.9	18.9
16	27.8	24.7	26.4	29.6	26.8	28.1	32.0	26.1	29.0	22.6	18.1	20.4
17	27.4	24.6	26.2	31.2	26.2	28.6	31.9	26.8	29.4	24.1	20.2	22.2
18	26.7	24.6	25.6	31.4	28.3	29.8	31.2	26.4	28.5	22.7	16.6	19.7
19	26.4	23.6	25.1	30.7	26.9	28.9	30.0	24.5	27.1	18.9	14.1	16.6
20	25.2	22.5	24.0	32.0	27.2	29.6	29.2	24.8	27.0	18.6	15.1	17.0
21	23.9	21.3	22.8	30.0	26.8	28.1	29.5	26.5	28.0	19.0	16.1	17.3
22	24.0	21.9	22.8	27.4	24.1	25.9	29.2	24.6	26.9	18.9	16.2	17.6
23	26.2	21.4	23.8	27.9	22.7	25.3	29.4	23.9	26.7	20.1	14.7	17.5
24	28.4	25.1	26.7	26.8	23.1	25.2	30.9	24.4	27.7	19.6	17.2	18.6
25	27.4	21.8	25.3	28.7	23.0	25.9	32.0	26.0	29.0	18.2	14.1	16.4
26	22.6	19.8	21.3	31.1	24.9	28.1	30.8	26.2	28.6	18.2	14.9	16.4
27	24.9	20.6	22.8	30.4	25.2	27.4	31.1	25.8	28.5	16.2	13.8	15.0
28	26.9	22.7	24.8	28.6	23.7	26.2	28.8	25.5	27.2	15.2	11.7	13.5
29	26.9	24.5	25.8	29.7	24.5	27.2	29.1	24.1	26.3	13.3	10.8	11.7
30	27.4	24.0	25.9	30.6	26.0	28.3	24.1	20.5	21.9	13.3	9.9	11.4
31	---	---	---	28.8	24.5	26.6	21.6	19.7	20.5	---	---	---
MONTH	28.4	15.7	22.4	32.0	22.1	27.4	32.0	19.7	27.2	27.0	9.9	19.1
YEAR	32.0	1.7	18.6									

06800500 ELKHORN RIVER AT WATERLOO, NE—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	628	587	617	625	610	616	---	---	---	---	---	---
2	620	582	595	633	620	627	---	---	---	---	---	---
3	604	544	593	641	623	633	---	---	---	---	---	---
4	549	512	531	644	631	637	---	---	---	---	---	---
5	564	526	548	643	627	634	---	---	---	---	---	---
6	593	555	575	640	627	636	---	---	---	---	---	---
7	674	593	639	631	621	626	---	---	---	---	---	---
8	681	638	663	631	617	626	---	---	---	---	---	---
9	662	642	653	630	618	626	---	---	---	---	---	---
10	662	628	649	624	607	616	---	---	---	---	---	---
11	643	629	638	611	600	605	---	---	---	---	---	---
12	650	630	640	609	603	606	---	---	---	---	---	---
13	641	632	637	615	608	612	---	---	---	---	---	---
14	642	631	638	---	---	---	---	---	---	---	---	---
15	649	638	644	---	---	---	---	---	---	---	---	---
16	653	634	645	---	---	---	---	---	---	---	---	---
17	650	635	645	---	---	---	---	---	---	---	---	---
18	645	630	640	---	---	---	---	---	---	---	---	---
19	638	631	634	---	---	---	---	---	---	---	---	---
20	638	631	634	---	---	---	---	---	---	---	---	---
21	647	633	641	---	---	---	---	---	---	---	---	---
22	650	627	643	---	---	---	---	---	---	---	---	---
23	646	615	634	---	---	---	---	---	---	---	---	---
24	624	614	620	---	---	---	---	---	---	---	---	---
25	630	618	622	---	---	---	---	---	---	---	---	---
26	651	630	643	---	---	---	---	---	---	---	---	---
27	647	630	642	---	---	---	---	---	---	---	---	---
28	643	632	639	---	---	---	---	---	---	---	---	---
29	646	638	642	---	---	---	---	---	---	---	---	---
30	644	613	629	---	---	---	---	---	---	---	---	---
31	625	580	616	---	---	---	---	---	---	---	---	---
MONTH	681	512	627	644	600	623	---	---	---	---	---	---
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	651	599	622	428	258	326
2	---	---	---	---	---	---	695	651	683	528	428	489
3	---	---	---	---	---	---	737	685	700	579	503	530
4	---	---	---	---	---	---	732	615	651	593	516	561
5	---	---	---	---	---	---	617	597	605	636	311	419
6	---	---	---	---	---	---	---	562	---	500	388	471
7	---	---	---	---	---	---	562	546	553	511	462	482
8	---	---	---	---	---	---	548	537	543	522	439	492
9	---	---	---	---	---	---	543	535	540	531	491	512
10	---	---	---	---	---	---	567	538	549	576	531	561
11	---	---	---	---	---	---	587	553	574	558	512	531
12	---	---	---	---	---	---	589	580	584	589	506	546
13	---	---	---	---	---	---	669	584	642	586	567	575
14	---	---	---	---	---	---	655	615	630	567	486	537
15	---	---	---	---	---	---	627	596	616	550	488	533
16	---	---	---	---	---	---	598	528	570	570	539	558
17	---	---	---	---	---	---	541	472	515	583	567	574
18	---	---	---	---	---	---	542	462	510	598	577	585
19	---	---	---	---	---	---	572	542	559	600	576	594
20	---	---	---	---	---	---	588	572	580	583	377	440
21	---	---	---	---	---	---	---	---	---	584	431	533
22	---	---	---	---	---	---	---	---	---	604	583	594
23	---	---	---	---	---	---	---	---	---	619	589	609
24	---	---	---	---	615	---	526	487	515	621	569	610
25	---	---	---	622	615	618	547	520	540	612	570	600
26	---	---	---	617	607	610	546	534	541	633	606	625
27	---	---	---	610	591	599	548	499	531	651	633	641
28	---	---	---	594	583	588	---	---	---	651	639	646
29	---	---	---	584	574	578	533	---	---	645	578	623
30	---	---	---	642	576	607	541	258	458	579	539	560
31	---	---	---	635	602	611	---	---	---	541	511	524
MONTH	---	---	---	642	574	602	737	258	575	651	258	545

06800500 ELKHORN RIVER AT WATERLOO, NE—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	529	513	521	657	630	649	---	---	---	---	---	---
2	563	526	539	655	585	622	---	---	---	---	---	---
3	579	563	570	614	545	583	---	---	---	---	549	---
4	586	564	580	593	507	547	---	---	---	577	542	560
5	578	516	556	579	423	501	---	---	---	570	543	556
6	581	422	555	586	424	554	545	470	520	567	544	554
7	594	412	546	653	283	354	567	493	537	566	534	547
8	606	566	589	443	329	385	537	421	500	550	481	533
9	627	605	610	477	443	457	501	---	---	566	524	541
10	646	626	641	516	451	484	510	439	481	551	528	542
11	---	---	---	544	515	527	554	408	502	553	500	532
12	---	---	---	579	544	561	522	---	---	522	460	494
13	---	---	---	608	576	587	526	---	---	620	470	542
14	---	---	---	628	599	615	529	418	493	608	469	542
15	---	---	---	630	598	607	513	414	467	479	450	460
16	---	---	---	605	592	599	498	438	465	544	478	502
17	608	---	---	624	592	610	499	444	470	617	541	583
18	608	501	573	628	614	621	477	430	458	646	617	633
19	593	526	561	642	618	628	477	455	466	662	638	653
20	630	593	614	651	626	639	518	466	496	651	635	643
21	630	599	610	635	623	628	521	460	489	657	639	648
22	639	580	609	641	574	614	527	---	---	644	608	622
23	645	606	620	578	528	559	---	---	---	643	588	614
24	646	593	620	546	514	532	---	---	---	626	552	585
25	796	467	620	553	522	532	---	---	---	597	561	577
26	467	371	388	524	449	500	---	---	---	585	557	575
27	482	400	439	454	432	442	---	---	---	612	572	598
28	536	482	516	587	451	504	---	---	---	643	607	630
29	597	536	577	---	---	---	---	---	---	650	633	642
30	630	585	602	---	---	---	---	---	---	672	650	663
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	796	371	568	657	283	551	567	408	488	672	450	577
YEAR	796	258	573									

06800500 ELKHORN RIVER AT WATERLOO, NE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)
OCT													
09...	1030	2.80	601	36	738	10.2	102	8.3	669	13.5	14.0	241	289
NOV													
13...	0900	3.02	655	--	--	--	--	--	--	--	--	--	--
13...	1000	3.02	655	--	--	--	--	--	--	--	--	--	--
13...	1100	3.02	655	--	--	--	--	--	--	--	--	--	--
13...	1200	3.02	655	--	--	--	--	--	--	--	--	--	--
13...	1300	3.02	655	--	--	--	--	--	--	--	--	--	--
13...	1400	3.02	655	--	--	--	--	--	--	--	--	--	--
14...	1100	3.01	650	29	733	12.1	100	8.3	632	6.7	5.5	237	284
DEC													
11...	1100	3.21	775	30	732	14.1	101	7.7	689	3.0	0.0	258	311
JAN													
15...	0930	2.70	635	E8.2	746	E13.8	--	8.5	786	-5.0	0.0	311	371
FEB													
12...	1000	3.78	1,160	10	741	14.0	98	7.5	647	-2.9	-0.1	263	317
MAR													
12...	1100	3.48	936	64	729	12.3	88	7.8	561	2.6	0.0	209	253
APR													
17...	1100	3.55	947	55	734	9.5	97	8.1	512	7.5	14.7	182	214
MAY													
01...	1000	6.77	5,730	7,600	731	4.6	43	7.2	289	13.9	11.3	92	112
14...	1000	5.42	3,310	1,400	731	7.9	85	8.0	531	22.2	16.7	190	232
28...	1000	4.10	1,590	120	736	8.8	103	8.3	629	23.5	21.4	251	275
29...	1301	4.00	1,490	--	--	--	--	--	--	--	--	--	--
29...	1302	4.00	1,490	--	--	--	--	--	--	--	--	--	--
29...	1303	4.00	1,490	--	--	--	--	--	--	--	--	--	--
29...	1304	4.00	1,490	--	--	--	--	--	--	--	--	--	--
29...	1305	4.00	1,490	--	--	--	--	--	--	--	--	--	--
29...	1306	4.00	1,490	--	--	--	--	--	--	--	--	--	--
29...	1307	4.00	1,490	--	--	--	--	--	--	--	--	--	--
29...	1308	4.00	1,490	--	--	--	--	--	--	--	--	--	--
29...	1309	4.00	1,490	--	--	--	--	--	--	--	--	--	--
29...	1310	4.00	1,490	--	--	--	--	--	--	--	--	--	--
29...	1330	4.00	1,490	98	--	--	--	--	--	--	--	--	--
29...	1331	4.00	1,490	99	--	--	--	--	--	--	--	--	--
29...	1332	4.00	1,490	93	--	--	--	--	--	--	--	--	--
29...	1401	4.00	1,490	--	--	--	--	--	--	--	--	--	--
29...	1402	4.00	1,490	--	--	--	--	--	--	--	--	--	--
29...	1403	4.00	1,490	--	--	--	--	--	--	--	--	--	--
29...	1404	4.00	1,490	--	--	--	--	--	--	--	--	--	--
29...	1405	4.00	1,490	--	--	--	--	--	--	--	--	--	--
29...	1406	4.00	1,490	--	--	--	--	--	--	--	--	--	--
29...	1407	4.00	1,490	--	--	--	--	--	--	--	--	--	--
29...	1408	4.00	1,490	--	--	--	--	--	--	--	--	--	--
29...	1409	4.00	1,490	--	--	--	--	--	--	--	--	--	--
29...	1410	4.00	1,490	--	--	--	--	--	--	--	--	--	--
JUN													
11...	0930	6.80	5,790	12,000	730	4.2	46	7.7	299	19.8	17.2	96	118
24...	1100	3.63	1,070	200	725	9.7	127	8.2	612	30.5	26.5	234	264
JUL													
10...	0930	4.50	1,690	810	735	6.4	79	8.0	526	23.0	24.0	178	218
23...	1000	2.92	680	64	740	11.0	135	8.6	551	23.5	24.0	189	225
AUG													
06...	1030	2.53	516	51	731	7.0	90	8.2	508	24.0	26.0	157	187
18...	1000	--	--	--	--	11.7	--	8.4	491	--	29.6	--	--
20...	1000	2.64	551	E75	727	7.5	96	8.6	541	27.4	25.2	180	211
SEP													
03...	1200	2.07	319	23	737	14.2	175	8.7	560	27.1	24.0	193	200
17...	1000	2.78	601	180	728	E9.6	--	E8.3	E590	21.0	E22.5	181	216

06800500 ELKHORN RIVER AT WATERLOO, NE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Orthophosphate, water, fltrd, mg/L (00660)
OCT													
09...	2	24.2	63.6	1.8	0.23	0.18	12.5	2.81	2.88	0.230	0.070	1.7	1.75
NOV													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	2	16.4	62.4	0.95	0.33	0.26	13.1	2.96	2.99	0.105	0.032	0.69	1.18
DEC													
11...	2	19.8	61.9	1.3	0.81	0.63	13.5	3.04	3.15	0.361	0.110	0.67	1.47
JAN													
15...	4	19.1	73.6	0.86	0.65	0.50	15.8	3.58	3.83	0.845	0.257	0.36	1.47
FEB													
12...	2	15.8	60.0	0.64	0.34	0.27	13.5	3.05	3.19	0.453	0.138	0.38	1.03
MAR													
12...	1	12.0	49.8	1.7	0.67	0.52	12.9	2.91	3.06	0.506	0.154	1.2	1.30
APR													
17...	--	13.0	69.8	1.4	--	<0.04	0.518	0.12	0.13	0.046	0.014	--	0.359
MAY													
01...	0.0	--	--	27	1.97	1.53	12.7	2.88	3.02	0.473	0.144	26	1.10
14...	0.0	9.79	56.1	5.7	0.28	0.22	14.6	3.29	3.40	0.352	0.107	5.5	1.10
28...	15	--	--	2.1	--	<0.04	12.8	2.90	2.95	0.174	0.053	--	1.01
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
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29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
11...	--	4.65	22.1	27	0.83	0.64	14.8	3.34	3.51	0.555	0.169	26	0.417
24...	11	--	--	2.7	--	<0.04	10.5	2.38	2.42	0.135	0.041	--	0.687
JUL													
10...	0.0	9.91	59.5	3.5	0.08	0.06	16.1	3.64	3.74	0.315	0.096	3.4	1.13
23...	3	--	--	1.5	--	<0.04	5.34	1.21	1.24	0.092	0.028	--	0.472
AUG													
06...	2	16.7	76.1	1.4	--	E.03	2.20	0.50	0.51	0.056	0.017	--	0.435
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	0.0	--	--	1.6	--	<0.04	1.50	0.34	0.35	0.056	0.017	--	0.721
SEP													
03...	17	24.8	75.3	1.9	0.10	0.08	--	--	0.16	--	<0.008	1.8	--
17...	4	--	--	2.8	0.49	0.38	11.2	2.53	2.63	0.312	0.095	2.4	1.98

06800500 ELKHORN RIVER AT WATERLOO, NE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Partic-ulate nitro-gen, susp, water, mg/L (49570)	Phos-phorus, water, unfltrd mg/L (00665)	Total nitro-gen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inor-ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Biomass peri-phyton, ashfree drymass g/m2 (49954)	Biomass chloro-phyll ratio, peri-phyton, number (70950)	2,6-Di-ethyl-aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto-chlor, water, fltrd, ug/L (49260)
OCT													
09...	0.57	0.62	0.81	4.7	4.7	<0.1	4.7	5.7	--	--	<0.006	E.019	0.035
NOV													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	0.39	0.32	0.47	3.9	2.7	<0.1	2.6	2.8	--	--	<0.006	E.014	<0.006
DEC													
11...	0.48	0.23	0.59	4.4	2.1	<0.1	2.1	2.4	--	--	<0.006	E.014	<0.006
JAN													
15...	0.48	0.08	0.50	4.7	0.6	<0.1	0.6	2.6	--	--	<0.006	E.016	<0.006
FEB													
12...	0.34	0.18	0.38	3.8	1.2	<0.1	1.2	2.7	--	--	<0.006	E.012	E.005
MAR													
12...	0.42	0.44	0.64	4.8	3.6	<0.1	3.6	6.8	--	--	<0.006	E.017	0.011
APR													
17...	0.12	1.45	0.54	1.5	9.3	0.7	8.5	4.5	--	--	<0.006	E.016	0.020
MAY													
01...	0.36	--	9.81	30	--	--	--	--	--	--	<0.006	E.180	E31.0
14...	0.36	2.27	1.98	9.1	19.9	0.2	19.6	9.4	--	--	<0.006	E.252	4.74
28...	0.33	--	0.72	5.0	--	--	--	--	--	--	<0.006	E.066	0.544
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
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JUN													
11...	0.14	20.1	11.8	30	183	6.5	177	7.4	--	--	<0.006	E.582	13.7
24...	0.22	--	0.76	5.1	--	--	--	--	--	--	<0.006	E.185	0.319
JUL													
10...	0.37	2.05	1.44	7.2	20.3	E2.3	E18.0	5.8	--	--	<0.006	E.140	0.292
23...	0.15	--	0.48	2.7	--	--	--	--	--	--	<0.006	E.032	0.018
AUG													
06...	0.14	1.63	0.44	1.9	9.7	<0.1	9.7	3.8	--	--	<0.006	E.025	<0.006
18...	--	--	--	--	--	--	--	--	22.4	594	--	--	--
20...	0.23	--	0.68	2.0	--	--	--	--	--	--	<0.006	E.017	0.010
SEP													
03...	<0.02	1.49	0.60	2.0	8.2	<0.1	8.2	3.9	--	--	<0.006	E.014	<0.006
17...	0.65	--	1.17	5.4	--	--	--	--	--	--	<0.006	E.041	0.069

06800500 ELKHORN RIVER AT WATERLOO, NE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Amino-methyl-phos-phonic acid, wat flt ug/L (62649)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	Butyl-ate, water, fltrd, ug/L (04028)	Car-baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd 0.7u GF ug/L (82674)	Chlor-pyrifos water, fltrd, ug/L (38933)	cis-Per-methrin water fltrd 0.7u GF ug/L (82687)	Cyana-zine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)
OCT													
09...	<0.004	<0.005	1.3	0.371	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	0.031	<0.003
NOV													
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14...	<0.004	<0.005	0.4	0.037	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003
DEC													
11...	<0.004	<0.005	0.2	0.030	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	E.009	<0.003
JAN													
15...	<0.004	<0.005	0.3	0.057	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003
FEB													
12...	<0.004	<0.005	0.2	0.076	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	0.028	<0.003
MAR													
12...	<0.004	<0.005	0.4	0.116	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003
APR													
17...	0.009	<0.005	0.4	0.070	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003
MAY													
01...	1.11	<0.005	0.4	E23.0	<0.050	<0.010	<0.002	<0.041	<0.020	<0.020	<0.006	<0.050	<0.003
14...	0.104	<0.005	0.2	11.8	<0.050	<0.010	<0.002	<0.041	<0.020	0.036	<0.006	E.013	E.002
28...	0.016	<0.005	0.3	1.58	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003
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JUN													
11...	1.02	<0.005	0.5	16.1	<0.050	<0.010	<0.002	E.003	E.007	0.019	<0.006	<0.350	<0.003
24...	0.027	<0.005	0.7	3.66	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	0.090	<0.003
JUL													
10...	0.013	<0.005	0.8	2.07	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	E.013	<0.003
23...	<0.004	<0.005	0.6	0.258	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003
AUG													
06...	<0.004	<0.005	0.6	0.153	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003
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20...	<0.004	<0.005	1.4	0.145	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003
SEP													
03...	<0.004	<0.005	1.1	0.094	<0.050	<0.010	<0.002	E.006	<0.020	<0.005	<0.006	<0.018	<0.003
17...	0.005	<0.005	0.9	0.209	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003

06800500 ELKHORN RIVER AT WATERLOO, NE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Desulfinyl fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Fonofos water, fltrd, ug/L (04095)	Glufosinate, water, fltrd 0.7u GF ug/L (62721)
OCT													
09...	<0.004	0.007	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	<0.003	<0.1
NOV													
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14...	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	<0.003	<0.1
DEC													
11...	<0.004	<0.006	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	<0.003	<0.1
JAN													
15...	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	<0.003	<0.1
FEB													
12...	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	<0.003	<0.1
MAR													
12...	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	<0.003	<0.1
APR													
17...	<0.004	E.003	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	E.003	<0.1
MAY													
01...	<0.004	<0.005	<0.005	<0.02	0.003	<0.009	<0.005	<0.009	<0.005	<0.005	E.036	<0.003	<0.1
14...	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	E.005	<0.003	<0.1
28...	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	<0.003	<0.1
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JUN													
11...	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	E.005	<0.003	<0.1
24...	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	<0.003	<0.1
JUL													
10...	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	<0.003	<0.1
23...	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	0.004	<0.1
AUG													
06...	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	<0.003	<0.1
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	0.003	<0.1
SEP													
03...	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	0.003	<0.1
17...	<0.004	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	<0.003	<0.1

06800500 ELKHORN RIVER AT WATERLOO, NE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Glyphosate, water, fltrd 0.7u GF ug/L (62722)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd 0.7u GF ug/L (82671)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	p,p-' DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)
OCT													
09...	<0.1	0.009	<0.035	<0.027	<0.006	0.066	0.020	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022
NOV													
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14...	<0.1	<0.004	<0.035	<0.027	<0.006	0.021	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022
DEC													
11...	<0.1	<0.021	<0.035	<0.027	<0.006	E.006	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022
JAN													
15...	<0.1	<0.004	<0.035	<0.027	<0.006	E.009	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022
FEB													
12...	<0.1	<0.004	<0.035	<0.027	<0.006	0.035	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022
MAR													
12...	<0.1	<0.004	<0.035	<0.027	<0.006	0.043	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022
APR													
17...	<0.1	<0.004	<0.035	<0.027	<0.006	0.033	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022
MAY													
01...	<0.1	<0.004	<0.035	<0.027	<0.006	8.96	0.056	<0.002	<0.007	<0.003	<0.010	<0.004	0.029
14...	<0.1	<0.004	<0.035	<0.027	<0.006	3.31	<0.010	<0.002	<0.007	<0.003	<0.010	<0.004	E.016
28...	<0.1	<0.004	<0.035	<0.027	<0.006	0.302	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	E.009
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JUN													
11...	<0.1	<0.004	<0.035	<0.027	<0.006	4.49	0.131	<0.002	<0.007	<0.003	<0.010	<0.004	0.043
24...	0.3	<0.004	<0.035	<0.027	<0.006	0.845	0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022
JUL													
10...	0.3	<0.004	<0.035	<0.027	<0.006	0.653	0.007	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022
23...	<0.1	<0.004	<0.035	<0.027	<0.006	0.070	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022
AUG													
06...	<0.1	<0.004	<0.035	<0.027	<0.006	0.060	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	<0.1	<0.004	<0.035	<0.027	<0.006	0.040	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022
SEP													
03...	<0.1	<0.004	<0.035	<0.027	<0.006	0.034	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022
17...	0.1	<0.004	<0.035	<0.027	<0.006	0.256	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022

06800500 ELKHORN RIVER AT WATERLOO, NE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Phorate water fltrd 0.7u GF ug/L (82664)	Prometon, water, fltrd, ug/L (04037)	Pronamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	Triallate, water, fltrd 0.7u GF ug/L (82678)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
OCT													
09...	<0.011	E.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
NOV													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	<0.011	E.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
DEC													
11...	<0.011	<0.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
JAN													
15...	<0.011	E.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
FEB													
12...	<0.011	<0.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
MAR													
12...	<0.011	<0.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
APR													
17...	<0.011	M	<0.004	<0.010	<0.011	<0.02	E.004	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
MAY													
01...	<0.011	0.04	<0.004	<0.010	<0.500	<0.02	0.043	<0.02	<0.034	<0.02	<0.005	<0.002	0.025
14...	<0.011	0.02	<0.004	<0.010	<0.011	<0.02	0.035	<0.02	<0.034	<0.02	<0.005	<0.002	E.009
28...	<0.011	E.01	<0.004	<0.010	<0.011	<0.02	0.009	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
11...	<0.011	E.01	<0.004	<0.010	<0.011	<0.02	0.077	<0.02	<0.034	<0.02	<0.005	<0.002	0.019
24...	<0.011	0.16	<0.004	<0.010	<0.011	<0.02	0.018	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
JUL													
10...	<0.011	E.01	<0.004	<0.010	<0.011	<0.02	0.012	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
23...	<0.011	E.01	<0.004	<0.010	<0.011	<0.02	0.017	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
AUG													
06...	<0.011	<0.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	<0.011	E.01	<0.004	<0.010	<0.011	<0.02	0.005	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
SEP													
03...	<0.011	E.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
17...	<0.011	E.01	<0.004	<0.010	<0.011	<0.02	0.006	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009

06800500 ELKHORN RIVER AT WATERLOO, NE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment load, tons/d (80155)
OCT			
09...	82	79	128
NOV			
13...	--	--	--
13...	--	--	--
13...	--	--	--
13...	--	--	--
13...	--	--	--
13...	--	--	--
14...	--	68	120
DEC			
11...	99	49	103
JAN			
15...	--	31	54
FEB			
12...	42	38	119
MAR			
12...	--	170	429
APR			
17...	54	197	504
MAY			
01...	96	8,890	138,000
14...	61	2,340	20,900
28...	--	385	1,650
29...	--	200	805
29...	--	213	856
29...	--	302	1,210
29...	--	281	1,130
29...	--	323	1,300
29...	--	433	1,740
29...	--	699	2,810
29...	--	430	1,730
29...	--	321	1,290
29...	--	276	1,110
29...	--	--	--
29...	--	--	--
29...	--	--	--
29...	--	364	1,460
29...	--	307	1,240
29...	--	250	1,010
29...	--	204	819
29...	--	389	1,560
29...	--	424	1,710
29...	--	--	--
29...	--	322	1,290
29...	--	272	1,100
29...	--	228	916
JUN			
11...	--	10,100	158,000
24...	--	369	1,060
JUL			
10...	93	1,040	4,750
23...	--	132	242
AUG			
06...	91	85	118
18...	--	--	--
20...	--	254	378
SEP			
03...	83	23	20
17...	--	--	--

Remark codes used in this table:
< -- Less than
E -- Estimated value
M -- Presence verified, not quantified

06801000 PLATTE RIVER NEAR ASHLAND, NE

LOCATION.--Lat 41° 03'44", long 96° 19'28", in SE 1/4 SW 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 mi^2 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 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 1/2 mi upstream at datum 14.79 ft higher. June 17, 1948 to May 11, 1953 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.

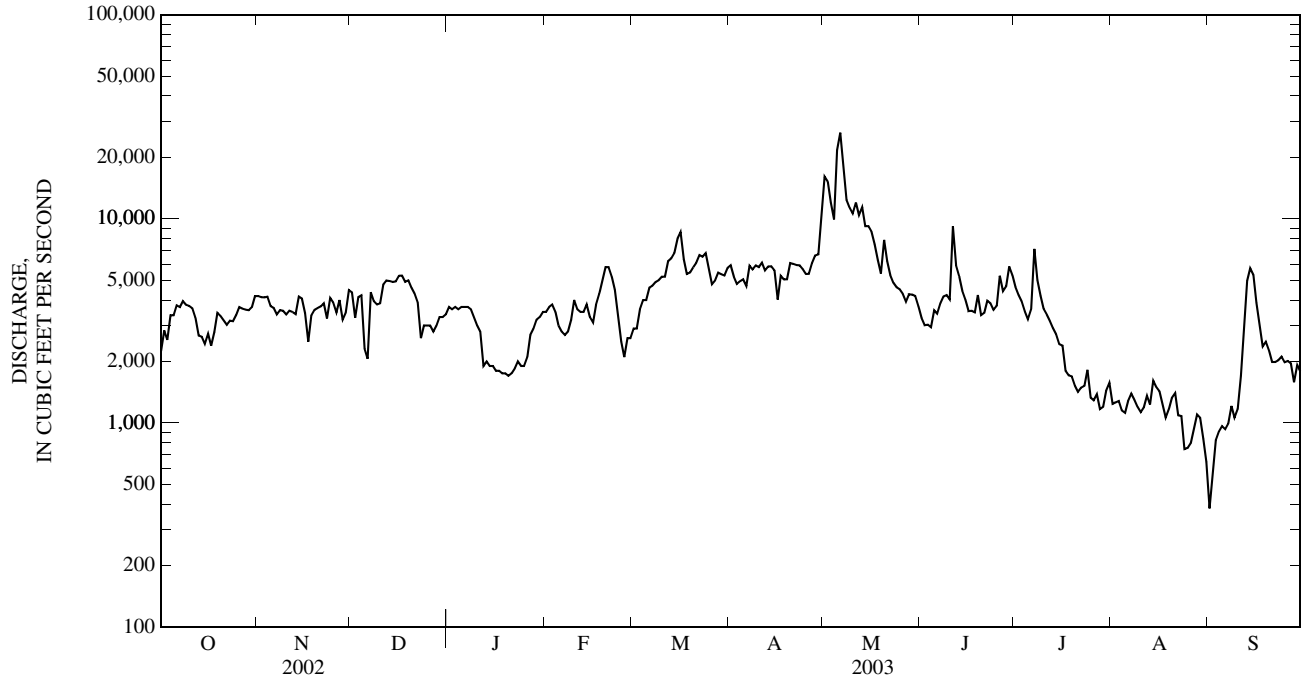
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,250	4,180	4,360	e3,700	e3,500	e2,900	5,920	16,100	3,270	4,640	1,240	381
2	2,840	4,130	3,270	e3,600	e3,700	e2,900	5,200	15,200	3,010	4,230	1,260	569
3	2,550	4,120	4,140	e3,700	e3,800	e3,600	4,800	12,000	3,030	3,940	1,280	821
4	3,370	4,150	4,220	e3,600	e3,500	e4,000	4,950	9,930	2,940	3,520	1,150	909
5	3,370	3,730	2,310	e3,700	e3,000	e4,000	5,060	21,700	3,560	3,220	1,120	965
6	3,770	3,660	2,060	e3,700	e2,800	e4,600	4,690	26,400	3,430	3,600	1,280	931
7	3,690	3,400	4,370	e3,700	e2,700	e4,700	5,890	18,300	3,860	7,120	1,390	992
8	3,950	3,570	3,950	e3,600	e2,800	e4,900	5,640	12,400	4,160	5,010	1,300	1,210
9	3,790	3,540	3,800	e3,300	e3,200	e5,000	5,900	11,300	4,230	4,190	1,200	1,060
10	3,740	3,400	3,850	e3,000	e4,000	e5,200	5,800	10,600	4,030	3,620	1,130	1,170
11	3,640	3,540	4,760	e2,800	e3,600	e5,200	6,100	12,000	9,190	3,390	1,190	1,700
12	3,270	3,490	4,980	e1,900	e3,500	e6,200	5,580	10,400	5,900	3,160	1,360	2,740
13	2,680	3,410	4,960	e2,000	e3,500	e6,400	5,840	11,400	5,240	2,910	1,230	4,970
14	2,640	4,160	4,900	e1,900	e3,800	e6,800	5,850	9,200	4,430	2,720	1,610	5,730
15	2,440	4,070	4,940	e1,900	e3,300	e8,000	5,580	9,200	4,020	2,430	1,500	5,320
16	2,730	3,450	5,260	e1,800	e3,100	e8,600	4,020	8,660	3,530	2,390	1,430	3,870
17	2,390	2,500	5,270	e1,800	e3,800	6,330	5,260	7,490	3,540	1,800	1,230	3,020
18	2,790	3,360	4,910	e1,750	e4,300	5,370	5,050	6,270	3,480	1,710	1,060	2,370
19	3,460	3,580	4,990	e1,750	e5,000	5,450	5,060	5,400	4,230	1,690	1,170	2,500
20	3,340	3,650	e4,600	e1,700	e5,800	5,790	6,070	7,880	3,370	1,520	1,330	2,260
21	3,180	3,720	e4,300	e1,750	e5,800	6,090	6,010	6,210	3,460	1,420	1,400	1,990
22	3,020	3,860	e3,900	e1,850	e5,200	6,640	5,940	5,290	3,970	1,490	1,090	1,990
23	3,170	3,250	e2,600	e2,000	e4,500	6,520	5,920	4,860	3,860	1,520	1,080	2,030
24	3,150	4,090	e3,000	e1,900	e3,400	6,780	5,670	4,620	3,580	1,820	744	2,110
25	3,380	3,890	e3,000	e1,900	e2,500	5,750	5,370	4,520	3,750	1,330	754	1,980
26	3,690	3,480	e3,000	e2,100	e2,100	4,770	5,380	4,290	5,260	1,290	797	2,010
27	3,630	4,000	e2,800	e2,700	e2,600	4,970	6,080	3,930	4,420	1,380	930	1,960
28	3,590	3,200	e3,000	e2,900	e2,600	5,440	6,610	4,270	4,680	1,170	1,100	1,580
29	3,570	3,460	e3,300	e3,200	---	5,350	6,690	4,250	5,840	1,200	1,060	1,920
30	3,700	4,470	e3,300	e3,300	---	5,270	9,910	4,180	5,300	1,440	835	1,790
31	4,180	---	e3,400	e3,500	---	5,750	---	3,720	---	1,570	644	---
TOTAL	100,960	110,510	121,500	82,000	101,400	169,270	171,840	291,970	126,570	82,440	35,894	62,848
MEAN	3,257	3,684	3,919	2,645	3,621	5,460	5,728	9,418	4,219	2,659	1,158	2,095
MAX	4,180	4,470	5,270	3,700	5,800	8,600	9,910	26,400	9,190	7,120	1,610	5,730
MIN	2,250	2,500	2,060	1,700	2,100	2,900	4,020	3,720	2,940	1,170	644	381
AC-FT	200,300	219,200	241,000	162,600	201,100	335,700	340,800	579,100	251,100	163,500	71,200	124,700
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2003, BY WATER YEAR (WY)												
MEAN	5,292	5,886	5,335	4,888	6,705	9,224	8,614	9,018	10,690	7,265	4,786	4,541
MAX	8,325	9,403	8,778	9,022	11,390	23,190	15,470	19,330	23,270	31,980	10,730	9,825
(WY)	(1998)	(1999)	(1998)	(1998)	(1997)	(1993)	(1998)	(1995)	(1995)	(1993)	(1996)	(1993)
MIN	2,433	3,620	2,879	2,645	3,621	5,233	4,618	2,969	2,928	1,083	1,158	1,533
(WY)	(1992)	(1989)	(1990)	(2003)	(2003)	(1991)	(1989)	(1989)	(1989)	(2002)	(2003)	(1991)

06801000 PLATTE RIVER NEAR ASHLAND, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1989 - 2003	
ANNUAL TOTAL	1,380,689		1,457,202			
ANNUAL MEAN	3,783		3,992		*6,849	
HIGHEST ANNUAL MEAN					11,820	1993
LOWEST ANNUAL MEAN					3,992	2003
HIGHEST DAILY MEAN	19,500	Jun 12	26,400	May 6	110,000	Mar 10, 1993
LOWEST DAILY MEAN	416	Aug 4	381	Sep 1	381	Sep 1, 2003
ANNUAL SEVEN-DAY MINIMUM	634	Jul 30	732	Aug 30	634	Jul 30, 2002
MAXIMUM PEAK FLOW			**33,200	May 6	***130,000	Mar 10, 1993
MAXIMUM PEAK STAGE			****18.65	Feb 22	****23.05	Feb 20, 1997
ANNUAL RUNOFF (AC-FT)	2,739,000		2,890,000		4,962,000	
10 PERCENT EXCEEDS	5,810		6,080		11,200	
50 PERCENT EXCEEDS	3,650		3,600		5,740	
90 PERCENT EXCEEDS	1,230		1,300		2,400	

e Estimated.
* Average discharge for water years 1942-52, 5,961 ft^3/s.
** Stage 18.11 ft.
*** Estimated; discharge includes overbank flow, stage 19.23 ft., backwater from ice.
**** Backwater from ice.



06801180 OLIVE BRANCH NEAR HALLAM, NE

LOCATION.--Lat 40° 35'44", long 096° 47'42", in NE 1/4 NW 1/4 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 mi^2.

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 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.53	2.2	1.5	1.3	1.4	1.5	2.0	e7.9	1.0	e2.4	0.95	0.28
2	3.0	2.1	1.5	1.0	1.5	1.7	1.9	2.4	1.4	e2.4	0.78	0.23
3	3.0	1.9	1.6	0.73	1.7	1.7	2.0	2.0	1.5	1.6	0.52	0.21
4	84	1.8	1.6	0.75	1.5	2.0	2.7	1.8	1.5	1.5	0.48	0.22
5	3.1	1.6	1.6	0.93	1.4	1.9	2.8	1.8	1.3	1.6	0.50	0.25
6	1.5	1.4	1.5	1.0	1.4	e12	3.4	1.9	1.2	1.5	0.48	0.29
7	1.3	1.4	1.5	1.0	1.3	e10	3.6	1.9	1.5	1.4	0.56	0.28
8	1.3	1.3	1.5	1.1	1.1	e5.6	3.3	e9.8	1.5	1.4	0.54	0.35
9	1.3	1.1	1.3	1.3	1.1	2.0	3.0	e73	1.2	1.4	0.56	1.3
10	1.3	1.2	1.2	1.4	1.1	2.0	2.7	e13	e117	1.6	0.41	1.7
11	1.2	1.4	1.3	1.4	1.0	1.9	2.4	3.2	e128	1.7	0.40	3.6
12	1.3	1.4	1.3	1.4	1.1	2.2	2.2	2.4	e370	1.5	0.38	1.2
13	1.2	1.4	1.4	1.4	1.0	2.3	2.1	1.8	e188	1.6	0.34	0.68
14	1.3	1.4	1.4	1.5	1.3	2.0	1.9	2.0	e90	1.7	0.40	0.60
15	1.2	1.5	1.4	1.4	1.6	2.0	1.9	e30	e41	1.8	0.38	0.48
16	1.2	1.5	1.3	e1.5	1.5	1.8	2.0	2.5	3.5	1.8	0.34	0.43
17	1.4	1.5	1.2	e1.9	1.4	1.6	2.2	2.6	2.9	1.8	0.30	0.44
18	1.3	1.4	1.3	1.5	1.3	1.5	2.4	2.4	2.5	1.7	0.32	0.40
19	1.3	1.5	1.4	1.5	1.4	1.7	2.4	e217	e51	1.5	1.7	0.44
20	1.1	1.4	1.4	1.5	1.5	2.2	2.4	e68	1.9	1.3	e1.4	0.45
21	1.2	1.4	1.5	1.5	1.6	2.2	2.1	e32	1.7	0.97	0.52	0.49
22	1.3	1.5	1.4	1.6	1.8	1.7	2.1	e22	e27	1.4	0.56	0.53
23	1.6	1.4	1.3	1.5	1.8	1.6	2.3	e12	e129	1.3	0.30	0.54
24	1.7	1.6	1.3	1.4	1.7	1.5	2.4	1.2	e91	0.82	0.26	0.59
25	e1.9	1.6	1.2	1.4	1.5	1.6	e5.1	1.1	e30	0.68	0.18	0.60
26	e2.7	1.6	1.1	1.4	1.5	1.7	2.0	1.1	1.8	0.60	0.21	0.60
27	e2.8	1.6	1.0	1.3	1.4	1.9	2.0	1.0	1.6	0.63	0.25	0.64
28	e3.1	1.5	1.0	1.3	1.4	2.3	1.8	0.84	1.5	1.3	0.30	0.60
29	e3.3	1.5	1.1	1.2	---	2.5	e7.0	0.84	2.4	1.0	0.31	0.64
30	e5.3	1.7	1.1	1.3	---	2.4	e46	0.79	e2.4	0.61	0.42	0.65
31	2.1	---	1.3	1.5	---	2.1	---	0.98	---	0.64	0.34	---
TOTAL	139.83	45.8	41.5	40.91	39.3	81.1	122.1	521.25	1,296.3	43.15	15.39	19.71
MEAN	4.51	1.53	1.34	1.32	1.40	2.62	4.07	16.8	43.2	1.39	0.50	0.66
MAX	84	2.2	1.6	1.9	1.8	12	46	217	370	2.4	1.7	3.6
MIN	0.53	1.1	1.0	0.73	1.0	1.5	1.8	0.79	1.0	0.60	0.18	0.21
AC-FT	277	91	82	81	78	161	242	1,030	2,570	86	31	39

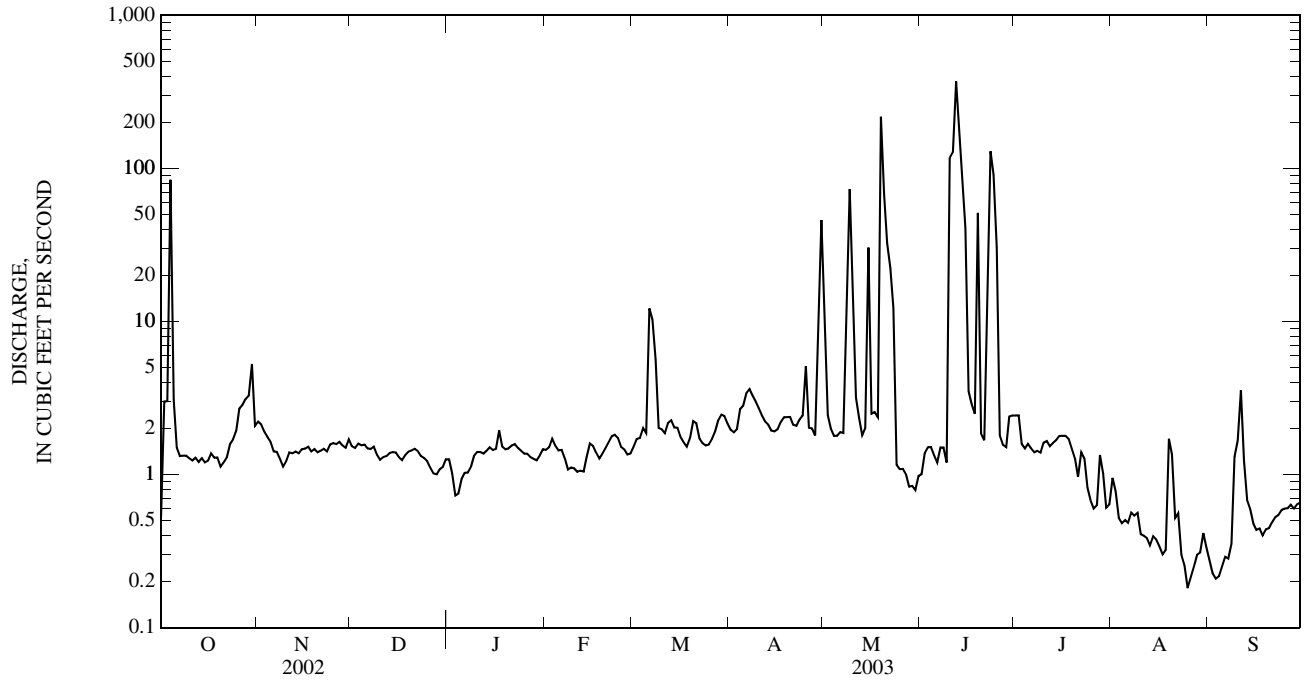
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2003, BY WATER YEAR (WY)

MEAN	4.89	8.94	2.92	2.21	4.79	8.95	12.2	23.1	17.2	4.53	2.08	2.30
MAX	17.2	35.6	6.37	4.21	18.1	28.6	33.1	80.7	43.2	7.46	7.73	8.21
(WY)	(1999)	(1999)	(1999)	(1998)	(1998)	(1998)	(1999)	(2001)	(2003)	(1998)	(1998)	(1998)
MIN	0.98	0.96	0.43	0.96	1.07	0.74	1.25	1.03	1.53	1.27	0.50	0.66
(WY)	(2000)	(2001)	(2001)	(2000)	(2000)	(2000)	(2000)	(2000)	(2002)	(2002)	(2003)	(2003)

06801180 OLIVE BRANCH NEAR HALLAM, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1997 - 2003	
ANNUAL TOTAL	1,096.82		2,406.34			
ANNUAL MEAN	3.00		6.59		9.21	
HIGHEST ANNUAL MEAN					13.4	1998
LOWEST ANNUAL MEAN					2.83	2002
HIGHEST DAILY MEAN	149	May 6	370	Jun 12	537	May 20, 2001
LOWEST DAILY MEAN	0.48	Aug 8	0.18	Aug 25	0.06	Jun 22, 2000
ANNUAL SEVEN-DAY MINIMUM	0.55	Aug 6	0.25	Sep 1	0.12	Dec 11, 2000
MAXIMUM PEAK FLOW			unknown	Jun 12	1,880	May 20, 2001
MAXIMUM PEAK STAGE			unknown	Jun 12	13.90	May 20, 2001
ANNUAL RUNOFF (AC-FT)	2,180		4,770		6,670	
10 PERCENT EXCEEDS	3.2		3.1		15	
50 PERCENT EXCEEDS	1.5		1.5		2.4	
90 PERCENT EXCEEDS	0.66		0.51		0.78	

e Estimated.



06801180 OLIVE BRANCH NEAR HALLAM, NE—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1997 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1997 to current year.
WATER TEMPERATURES: May 1997 to current year.

REMARKS.--Specific conductance was affected by beaver dams September 23 through the end of the water year.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.7	14.8	7.5	4.3	7.0	3.4	5.0	3.2	6.0	2.6	5.5	2.6
2	15.5	13.7	6.6	4.5	6.2	4.2	5.3	3.7	6.3	3.0	5.9	1.3
3	14.5	13.0	7.8	5.4	5.0	3.3	6.1	3.2	3.6	1.8	7.6	2.2
4	14.7	12.8	8.8	4.5	5.0	3.6	6.1	3.8	4.5	1.8	2.9	0.7
5	16.1	11.2	8.9	6.2	5.0	3.0	5.7	2.9	5.2	2.4	4.4	1.1
6	14.3	11.1	10.4	5.5	6.3	3.0	4.9	3.0	3.6	1.6	6.4	1.5
7	14.2	9.3	11.2	6.2	6.6	3.1	7.4	2.9	4.7	1.2	6.8	1.8
8	16.0	10.8	11.1	8.0	5.2	3.2	7.6	3.4	5.7	2.2	4.0	1.2
9	16.1	12.2	12.2	8.2	5.8	2.9	4.8	3.0	4.6	2.4	6.2	1.2
10	16.6	11.8	9.8	7.1	5.9	3.9	3.8	2.1	4.4	2.0	7.3	2.1
11	16.6	12.5	9.3	6.2	5.4	4.6	4.7	1.8	5.8	2.0	9.5	2.3
12	14.7	10.7	9.9	5.7	6.5	4.2	5.4	2.1	6.8	2.0	5.6	2.8
13	13.7	8.8	9.7	5.9	6.6	3.1	5.4	2.4	6.9	2.2	8.9	3.5
14	13.5	9.1	9.3	7.3	6.8	3.3	4.2	1.8	3.8	1.6	12.6	4.0
15	13.0	9.2	9.6	6.7	7.4	3.5	4.2	2.3	3.3	1.2	14.3	5.6
16	10.1	9.2	9.1	6.4	7.4	4.3	---	---	4.9	1.3	16.3	8.5
17	12.7	8.4	9.5	5.6	7.2	5.0	---	---	5.4	1.5	12.1	10.5
18	14.2	9.3	9.2	6.3	7.2	4.4	3.8	2.1	6.8	2.4	14.4	10.5
19	11.7	8.6	9.0	5.8	6.1	4.0	5.3	1.9	7.3	1.9	11.6	7.9
20	12.8	8.2	9.8	6.4	5.5	3.3	4.7	2.4	8.0	2.4	8.5	6.7
21	11.7	8.9	8.9	6.2	4.7	2.7	3.9	2.1	8.2	2.7	12.0	5.2
22	9.4	7.8	8.7	5.0	4.9	2.7	2.6	0.9	4.8	2.1	14.1	7.1
23	7.8	5.1	8.7	6.5	4.8	2.8	3.8	0.8	3.0	1.1	14.8	8.3
24	6.9	5.4	6.6	4.2	4.3	2.4	3.8	1.8	4.0	0.8	15.9	9.7
25	---	---	5.8	3.4	5.0	2.3	5.2	1.3	4.8	1.0	16.4	9.0
26	---	---	5.9	3.6	5.7	2.5	3.3	1.2	5.4	1.5	13.9	8.8
27	---	---	5.8	3.1	5.6	3.2	4.7	1.8	5.3	2.0	12.2	7.7
28	---	---	7.0	3.5	6.7	3.7	4.4	3.3	6.1	2.3	11.7	5.6
29	8.6	8.1	7.1	4.8	6.0	3.0	4.6	3.3	---	---	11.6	4.7
30	8.3	5.6	5.1	2.9	5.5	3.0	5.5	2.3	---	---	13.5	4.4
31	6.3	4.7	---	---	5.4	2.4	5.0	2.4	---	---	---	---
MONTH	19.7	4.7	12.2	2.9	7.4	2.3	7.6	0.8	8.2	0.8	16.4	0.7

06801180 OLIVE BRANCH NEAR HALLAM, NE—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	18.8	9.2	15.1	12.1	20.5	15.8	---	---	23.2	16.9	20.1	14.6
2	19.6	10.9	17.8	11.3	16.2	14.4	---	---	23.4	18.0	20.5	13.9
3	18.1	11.0	19.7	11.6	15.8	13.7	27.4	20.1	23.0	16.6	19.5	14.3
4	11.0	7.3	20.5	14.0	17.2	13.5	26.6	20.3	20.2	16.8	19.5	12.8
5	11.3	6.0	20.1	13.1	19.0	13.7	26.2	19.4	23.6	16.7	20.0	13.9
6	7.0	3.9	16.1	12.6	20.6	14.4	26.5	19.2	22.5	17.0	19.6	14.3
7	6.1	3.8	20.2	11.4	15.7	13.4	26.8	19.6	24.5	16.9	18.9	13.9
8	11.6	3.9	14.7	12.8	19.1	12.6	26.6	20.0	24.3	16.6	18.1	13.4
9	14.4	4.6	17.3	12.1	22.5	14.3	23.2	19.3	25.0	18.2	18.9	15.2
10	16.3	6.5	15.0	11.0	21.5	17.0	25.7	17.7	24.2	17.5	19.4	17.1
11	18.5	8.5	16.1	9.8	23.0	15.9	24.7	17.7	22.9	17.6	19.3	17.1
12	19.5	9.9	18.0	10.1	19.4	17.5	24.2	16.7	22.6	15.8	19.8	15.2
13	19.8	11.0	20.8	12.7	21.7	18.0	24.8	16.7	22.0	15.0	17.0	14.7
14	22.3	13.3	20.1	14.0	22.9	19.8	26.3	17.9	22.7	15.9	16.0	13.3
15	19.9	14.8	17.1	13.5	23.8	20.5	25.9	18.1	24.0	17.0	15.6	12.2
16	21.1	12.4	17.7	14.0	23.6	20.5	24.2	17.1	24.3	16.8	16.0	14.0
17	19.0	10.6	20.6	12.7	24.7	19.7	26.2	19.1	23.6	16.5	17.0	16.0
18	14.7	11.2	21.0	14.6	21.7	19.5	25.9	18.7	23.6	17.3	17.7	13.6
19	12.2	10.5	17.4	15.5	24.1	17.9	24.5	18.7	25.8	18.6	---	---
20	12.6	10.0	16.6	12.8	22.6	17.0	25.5	17.9	25.7	19.9	14.4	12.0
21	18.5	9.2	18.1	11.6	22.2	16.7	21.5	18.0	23.4	18.5	15.0	13.7
22	20.1	9.1	17.3	12.5	22.2	18.1	22.1	16.3	22.6	16.3	15.4	13.3
23	13.8	11.3	19.7	14.2	24.8	18.7	22.5	15.0	23.3	16.4	14.7	11.8
24	12.5	11.5	17.1	14.4	26.7	20.2	22.9	15.8	23.3	16.7	15.3	14.5
25	18.9	11.0	19.9	13.2	22.8	17.2	25.4	17.5	23.5	17.0	15.2	11.0
26	19.9	10.4	19.1	13.2	22.6	15.2	25.3	18.1	19.9	17.0	14.7	13.7
27	18.5	11.9	20.7	13.5	24.0	15.8	22.1	18.1	23.4	16.5	14.7	13.7
28	21.6	12.9	21.7	15.6	24.8	17.4	25.3	18.0	21.8	18.2	14.6	11.9
29	15.1	12.4	22.0	15.0	21.1	18.3	24.3	16.8	22.2	16.5	13.3	10.5
30	14.2	12.5	23.1	16.3	24.1	16.5	24.8	16.9	18.2	15.6	12.6	11.6
31	---	---	21.7	15.0	---	---	22.3	16.5	17.0	15.2	---	---
MONTH	22.3	3.8	23.1	9.8	26.7	12.6	27.4	15.0	25.8	15.0	20.5	10.5
YEAR	27.4	0.7										

06801180 OLIVE BRANCH NEAR HALLAM, NE—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	825	622	791	778	734	773	721	613	772	---	726	766
2	646	648	784	769	712	749	719	691	747	---	741	791
3	588	669	781	771	705	740	715	732	746	809	783	807
4	225	699	788	770	723	741	719	749	744	815	799	802
5	453	714	795	755	728	758	728	760	757	811	785	798
6	638	748	801	759	752	752	706	761	766	815	787	817
7	691	745	799	757	784	761	695	752	769	816	766	823
8	698	754	800	745	787	742	696	658	769	820	773	833
9	707	761	810	752	789	744	700	405	778	821	748	771
10	735	772	810	771	793	741	710	536	605	810	790	698
11	761	776	794	784	781	739	708	642	664	813	786	430
12	766	780	785	795	774	707	705	709	523	808	793	416
13	778	780	786	795	759	680	697	746	419	815	796	624
14	773	773	778	816	727	675	697	709	442	820	773	698
15	774	771	768	836	693	654	701	718	450	824	779	718
16	768	774	765	---	711	653	704	750	492	824	804	732
17	764	772	764	---	731	673	716	745	552	821	810	711
18	779	769	754	827	750	692	724	749	609	824	795	739
19	786	772	753	817	739	693	731	430	657	822	672	---
20	803	770	764	807	699	665	741	447	702	816	636	742
21	799	769	770	806	685	676	744	582	736	814	712	771
22	797	776	781	815	683	719	744	666	764	807	761	794
23	777	777	792	823	710	723	738	719	708	809	762	1,260
24	768	779	802	820	737	721	725	741	684	812	775	2,820
25	---	784	817	820	775	722	734	753	719	808	782	1,230
26	---	785	828	831	789	718	733	762	752	829	781	2,840
27	---	784	838	822	801	719	733	767	770	824	747	3,180
28	---	786	825	810	801	723	740	772	765	759	735	2,530
29	751	781	819	803	---	724	571	775	681	792	767	1,480
30	691	780	797	783	---	724	474	778	713	785	773	1,890
31	644	---	785	756	---	---	---	773	---	765	780	---
MEAN	---	756	791	---	745	---	706	690	675	---	765	---
MAX	---	786	838	---	801	---	744	778	778	---	810	---
MIN	---	622	753	---	683	---	474	405	419	---	636	---

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06803000 SALT CREEK AT ROCA, NE

LOCATION.--Lat 40° 39'29", long 96° 39'55", in NW 1/4 SW 1/4 sec.17, T.8 N., R.7 E., Lancaster County, Hydrologic Unit 10200203, on left bank 15 ft upstream from highway bridge at west edge of Roca, and at mile 54.2. Mar. 18, 2002, to Sept. 30, 2002, at location 0.25 mile west and 0.25 mile south at mile 53.5.

DRAINAGE AREA.--167 mi^2.

PERIOD OF RECORD.--May 1951 to current year.

REVISED RECORDS.--WDR NE-71: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,192.50 ft above sea level, Kansas City supplementary adjustment of 1943. Prior to May 16, 1956, nonrecording gage at present site and datum. Data collection platform at station.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. Flood flow affected by several detention dams.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	12	9.3	10	21	e16	15	20	25	28	5.9	5.3
2	31	9.5	9.4	9.9	21	e16	16	18	28	25	6.1	5.3
3	14	9.0	9.2	10	e19	e15	16	17	28	22	5.5	5.4
4	298	8.4	9.0	11	e14	e13	16	16	27	20	5.3	5.1
5	41	8.2	8.7	11	e11	e16	15	16	25	18	5.0	5.0
6	18	7.7	8.9	11	e11	e14	15	16	25	16	4.5	5.1
7	12	7.9	9.6	11	e13	e22	17	16	25	15	4.8	5.0
8	10	7.6	9.3	11	e9.0	e31	17	25	25	14	5.0	5.0
9	8.8	8.1	9.0	11	e12	35	16	107	24	13	5.4	6.2
10	7.9	8.2	9.8	11	e12	34	16	35	1,800	12	5.3	8.8
11	7.2	7.2	9.8	11	e12	28	16	30	231	12	5.1	32
12	6.5	7.3	10	e11	e12	17	17	30	970	11	5.0	16
13	6.6	7.4	9.8	e11	e14	17	17	31	695	10	4.9	8.5
14	6.5	7.5	9.7	e11	e15	17	17	55	238	9.8	5.1	5.7
15	6.1	7.4	9.6	e10	e17	18	17	38	156	9.4	5.1	5.5
16	6.1	7.7	9.6	e11	e19	18	17	34	93	8.8	5.4	5.2
17	6.6	7.9	9.8	e9.6	e14	19	17	32	60	8.7	4.8	5.3
18	6.3	8.3	9.8	e11	e15	21	17	31	48	7.5	4.9	5.1
19	6.1	7.8	9.8	e12	e19	20	17	315	42	7.3	7.7	5.3
20	6.2	7.5	10	e12	25	36	17	138	36	7.1	8.6	5.2
21	6.6	8.1	8.7	e12	26	28	17	60	32	6.8	6.8	5.5
22	7.0	8.1	8.8	e10	e21	21	17	50	29	6.5	5.6	5.4
23	7.4	8.4	9.5	e8.2	e14	19	17	45	975	6.7	5.2	5.1
24	8.1	8.5	9.5	e11	e16	18	17	41	161	6.2	5.2	5.1
25	8.2	8.3	8.8	e12	e13	16	17	39	100	5.9	5.1	5.0
26	8.6	8.6	9.0	e13	e14	16	17	36	71	5.1	4.9	4.8
27	8.5	8.6	9.4	e13	e14	15	17	33	56	5.2	4.8	4.7
28	9.0	9.0	9.7	e13	e15	15	16	31	42	5.6	5.0	4.6
29	9.2	9.2	10	e13	---	14	23	30	36	5.9	5.3	4.8
30	15	9.0	11	e12	---	14	34	28	32	5.5	5.1	4.6
31	17	---	10	e17	---	14	---	27	---	5.0	5.5	---
TOTAL	618.6	248.4	294.5	350.7	438.0	613	520	1,440	6,135	339.0	167.9	199.6
MEAN	20.0	8.28	9.50	11.3	15.6	19.8	17.3	46.5	204	10.9	5.42	6.65
MAX	298	12	11	17	26	36	34	315	1,800	28	8.6	32
MIN	6.1	7.2	8.7	8.2	9.0	13	15	16	24	5.0	4.5	4.6
AC-FT	1,230	493	584	696	869	1,220	1,030	2,860	12,170	672	333	396

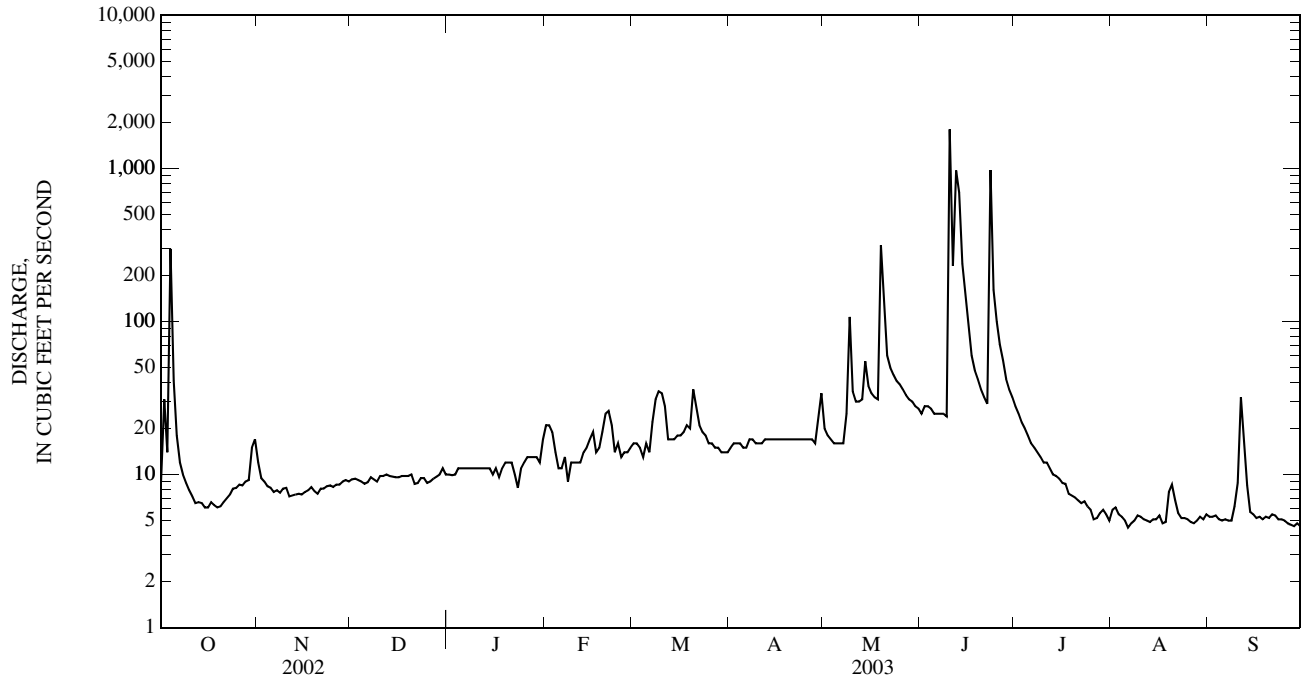
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2003, BY WATER YEAR (WY)

MEAN	39.3	20.7	16.3	18.6	36.9	84.2	67.1	99.0	93.0	77.7	30.3	22.6
MAX	617	167	108	140	180	641	356	587	666	789	496	220
(WY)	(1974)	(1999)	(1987)	(1973)	(1958)	(1979)	(1987)	(1995)	(1984)	(1993)	(1954)	(1989)
MIN	1.36	3.11	3.19	3.25	5.37	5.59	5.23	5.23	2.98	2.19	1.18	1.66
(WY)	(1956)	(1956)	(1965)	(1954)	(1956)	(1956)	(1956)	(1955)	(1981)	(1955)	(1955)	(1991)

06803000 SALT CREEK AT ROCA, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1952 - 2003	
ANNUAL TOTAL	9,104.5		11,364.7			
ANNUAL MEAN	24.9		31.1		50.6	
HIGHEST ANNUAL MEAN					200	1987
LOWEST ANNUAL MEAN					6.15	1981
HIGHEST DAILY MEAN	1,530	May 28	1,800	Jun 10	6,070	Jul 14, 1952
LOWEST DAILY MEAN	1.7	Aug 16	4.5	Aug 6	0.20	Jul 23, 1955
ANNUAL SEVEN-DAY MINIMUM	1.9	Aug 15	4.8	Sep 24	0.61	Sep 6, 1955
MAXIMUM PEAK FLOW			3,150	Jun 10	16,700	Jul 10, 1958
MAXIMUM PEAK STAGE			18.29	Jun 10	22.70	Jul 10, 1958
ANNUAL RUNOFF (AC-FT)	18,060		22,540		36,630	
10 PERCENT EXCEEDS	25		34		77	
50 PERCENT EXCEEDS	13		11		11	
90 PERCENT EXCEEDS	5.6		5.2		4.1	

e Estimated.



06803080 SALT CREEK AT PIONEERS BOULEVARD AT LINCOLN, NE

LOCATION.--Lat 40° 46'13", long 96° 43'05", in SW 1/4 SW 1/4, sec.2, T.9 N., R.6 E., Lancaster County, Hydrologic Unit 10200203, on left bank downstream from bridge.

DRAINAGE AREA.--220 mi^2.

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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

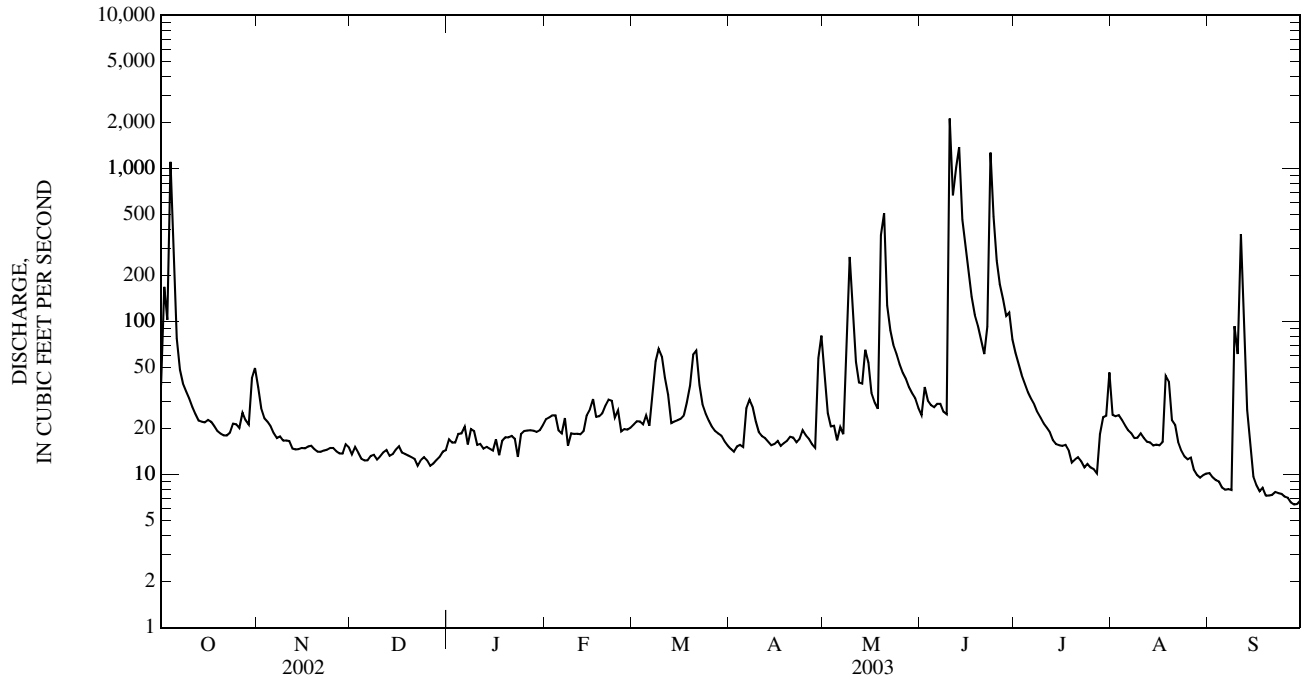
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	37	14	17	23	21	15	45	24	62	25	10
2	168	27	15	16	24	22	14	25	37	53	24	9.6
3	103	23	14	16	24	22	15	21	30	45	24	9.2
4	1,100	22	13	18	24	21	16	21	28	39	23	9.0
5	237	21	12	19	19	24	15	17	28	35	21	8.2
6	78	19	12	20	19	21	27	21	29	31	20	8.0
7	48	17	13	16	23	34	31	18	29	29	19	8.0
8	39	18	13	20	15	55	28	83	26	26	17	7.9
9	35	17	13	19	19	66	22	264	25	24	17	93
10	32	17	13	16	18	59	19	116	2,120	22	19	61
11	28	17	14	16	18	43	18	54	668	20	17	373
12	25	15	14	15	18	33	17	40	1,010	19	16	85
13	23	15	13	15	19	22	16	39	1,380	17	16	26
14	22	15	14	15	24	22	16	65	463	16	15	16
15	22	15	15	14	27	23	16	54	315	16	16	9.7
16	23	15	15	17	31	23	17	34	211	15	16	8.5
17	22	15	14	13	24	24	15	30	145	16	16	7.8
18	21	15	14	17	24	30	16	27	110	14	44	8.2
19	19	15	13	18	25	38	17	366	94	12	40	7.3
20	19	14	13	18	28	61	18	510	76	13	23	7.3
21	18	14	13	18	31	64	17	127	61	13	21	7.4
22	18	14	11	17	30	38	16	88	92	12	16	7.7
23	19	15	12	13	24	29	17	70	1,270	11	14	7.6
24	21	15	13	18	26	25	19	61	485	12	13	7.5
25	21	15	12	19	19	23	18	53	249	11	13	7.2
26	20	14	11	19	20	21	17	46	176	11	13	7.1
27	25	14	12	19	20	19	16	42	141	10	11	6.6
28	23	14	12	19	20	19	15	37	109	18	9.9	6.4
29	21	16	13	19	---	18	58	34	114	24	9.5	6.4
30	43	15	14	19	---	17	81	32	76	24	9.9	6.8
31	50	---	14	21	---	16	---	27	---	46	10	---
TOTAL	2,381	515	408	536	636	953	642	2,467	9,621	716	568.3	843.4
MEAN	76.8	17.2	13.2	17.3	22.7	30.7	21.4	79.6	321	23.1	18.3	28.1
MAX	1,100	37	15	21	31	66	81	510	2,120	62	44	373
MIN	18	14	11	13	15	16	14	17	24	10	9.5	6.4
AC-FT	4,720	1,020	809	1,060	1,260	1,890	1,270	4,890	19,080	1,420	1,130	1,670

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2003, BY WATER YEAR (WY)

MEAN	33.3	58.2	32.1	26.4	49.6	68.3	96.7	290	172	71.3	35.3	27.0
MAX	83.8	172	97.1	49.5	194	202	272	689	321	220	90.6	55.8
(WY)	(1999)	(1999)	(1998)	(1995)	(1998)	(1998)	(1998)	(1995)	(2003)	(1996)	(1996)	(1996)
MIN	11.0	13.6	9.15	14.5	16.5	16.2	21.4	17.1	38.6	23.1	13.6	9.12
(WY)	(1996)	(2001)	(2001)	(2001)	(1996)	(1996)	(2003)	(2000)	(2002)	(2003)	(2001)	(2000)

06803080 SALT CREEK AT PIONEERS BOULEVARD AT LINCOLN, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1994 - 2003	
ANNUAL TOTAL	17,461.1		20,286.7			
ANNUAL MEAN	47.8		55.6		80.1	
HIGHEST ANNUAL MEAN					124	1998
LOWEST ANNUAL MEAN					23.5	2000
HIGHEST DAILY MEAN	1,560	May 28	2,120	Jun 10	3,380	May 9, 1996
LOWEST DAILY MEAN	6.4	Aug 18	6.4	Sep 28	3.6	Sep 13, 2001
ANNUAL SEVEN-DAY MINIMUM	7.7	Aug 14	6.9	Sep 24	4.8	Aug 31, 2001
MAXIMUM PEAK FLOW			2,650	Jun 10	6,360	Jul 20, 1996
MAXIMUM PEAK STAGE			15.00	Jun 10	22.92	Jul 20, 1996
ANNUAL RUNOFF (AC-FT)	34,630		40,240		58,020	
10 PERCENT EXCEEDS	67		72		150	
50 PERCENT EXCEEDS	19		19		26	
90 PERCENT EXCEEDS	11		12		11	



06803093 HAINES BRANCH AT SW 56th ST. AT LINCOLN, NE

LOCATION.--Lat 40° 45'59", long 96° 47'48", in SE 1/ 4 NE 1/ 4, sec.12, T.9 N., R.5 E., Lancaster County, Hydrologic Unit 10200203, on right upstream bank.

DRAINAGE AREA.--60 mi^2.

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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

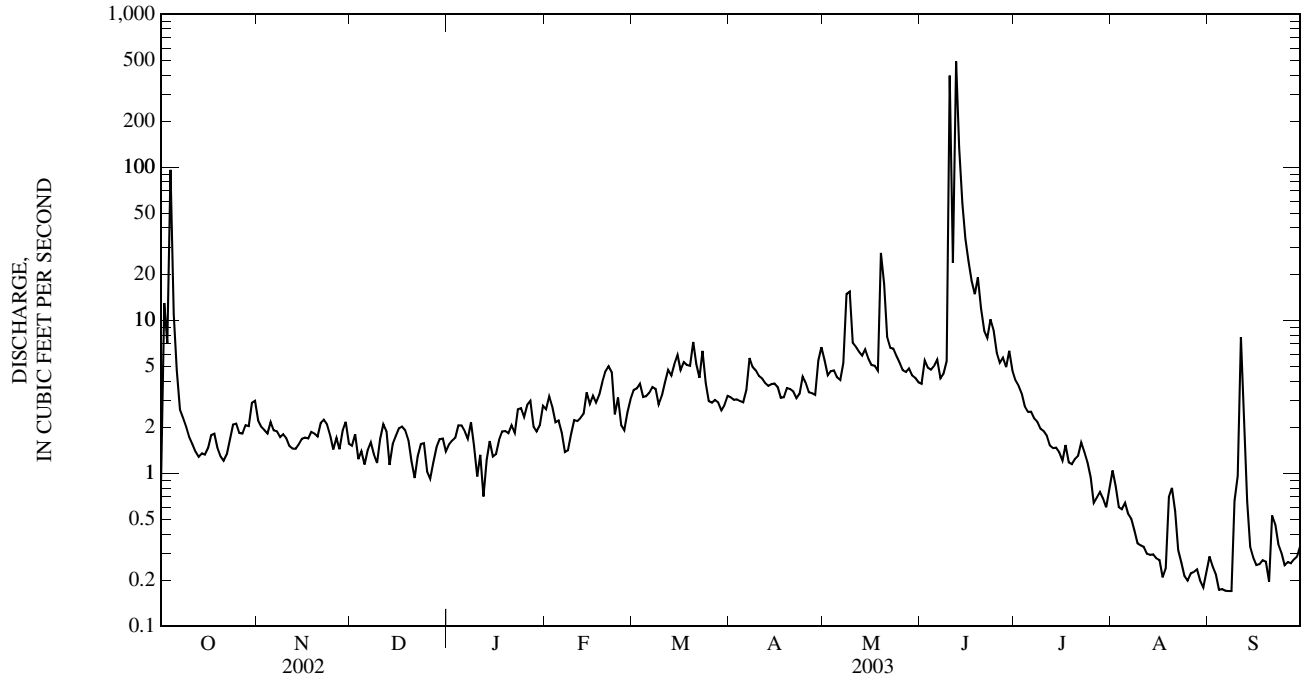
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.89	2.2	1.5	1.5	2.6	3.5	3.1	5.5	3.8	4.0	1.0	0.29
2	13	2.0	1.8	1.6	3.2	3.6	3.0	4.4	5.5	3.7	0.83	0.25
3	7.0	1.9	1.2	1.7	2.7	3.8	3.0	4.6	4.9	3.3	0.60	0.22
4	96	1.8	1.4	2.1	2.2	3.2	3.0	4.7	4.7	2.7	0.58	0.17
5	11	2.2	1.1	2.1	2.2	3.2	2.9	4.2	5.0	2.5	0.64	0.17
6	4.7	1.9	1.4	1.9	1.8	3.4	3.5	4.1	5.5	2.5	0.54	0.17
7	2.6	1.9	1.6	1.7	1.4	3.7	5.7	5.2	4.2	2.3	0.50	0.17
8	2.3	1.7	1.3	2.1	1.4	3.6	5.0	15	4.5	2.2	0.42	0.17
9	2.0	1.8	1.2	1.5	1.8	2.8	4.7	15	5.4	2.0	0.35	0.66
10	1.7	1.7	1.7	0.95	2.2	3.2	4.3	7.1	396	1.9	0.34	0.96
11	1.5	1.5	2.1	1.3	2.2	3.9	4.2	6.7	24	1.8	0.33	7.7
12	1.4	1.5	1.9	0.71	2.3	4.7	3.9	6.2	491	1.5	0.30	2.6
13	1.3	1.4	1.1	1.2	2.4	4.4	3.7	5.9	134	1.5	0.29	0.66
14	1.3	1.6	1.6	1.6	3.4	5.2	3.8	6.4	58	1.5	0.30	0.33
15	1.3	1.7	1.7	1.3	2.8	5.9	3.9	5.6	34	1.4	0.28	0.28
16	1.5	1.7	2.0	1.3	3.2	4.7	3.7	5.1	24	1.2	0.27	0.25
17	1.8	1.7	2.0	1.7	2.9	5.3	3.1	5.0	18	1.5	0.21	0.25
18	1.8	1.9	1.9	1.9	3.3	5.1	3.1	4.7	15	1.2	0.24	0.27
19	1.5	1.8	1.6	1.9	3.9	5.0	3.6	27	19	1.1	0.70	0.26
20	1.3	1.7	1.2	1.8	4.7	7.2	3.5	17	12	1.2	0.80	0.20
21	1.2	2.1	0.93	2.1	5.0	5.2	3.4	7.8	8.5	1.3	0.56	0.53
22	1.3	2.2	1.3	1.8	4.6	4.2	3.1	6.6	7.7	1.6	0.31	0.46
23	1.7	2.1	1.6	2.6	2.4	6.3	3.3	6.5	10	1.4	0.26	0.34
24	2.1	1.8	1.6	2.7	3.1	3.9	4.3	5.8	8.6	1.2	0.21	0.30
25	2.1	1.4	1.0	2.3	2.1	3.0	3.9	5.3	6.1	0.94	0.20	0.25
26	1.8	1.7	0.92	2.8	1.9	2.9	3.4	4.7	5.3	0.64	0.22	0.26
27	1.8	1.4	1.2	3.0	2.5	3.0	3.3	4.6	5.7	0.70	0.23	0.26
28	2.1	1.9	1.5	2.0	3.0	2.9	3.3	4.8	4.9	0.75	0.24	0.27
29	2.0	2.2	1.7	1.9	---	2.6	5.5	4.4	6.3	0.68	0.20	0.29
30	2.9	1.6	1.7	2.1	---	2.8	6.7	4.2	4.7	0.60	0.18	0.34
31	3.0	---	1.4	2.8	---	3.2	---	3.9	---	0.78	0.23	---
TOTAL	177.89	54.0	46.15	57.96	77.2	125.4	114.9	218.0	1,336.3	51.59	12.36	19.33
MEAN	5.74	1.80	1.49	1.87	2.76	4.05	3.83	7.03	44.5	1.66	0.40	0.64
MAX	96	2.2	2.1	3.0	5.0	7.2	6.7	27	491	4.0	1.0	7.7
MIN	0.89	1.4	0.92	0.71	1.4	2.6	2.9	3.9	3.8	0.60	0.18	0.17
AC-FT	353	107	92	115	153	249	228	432	2,650	102	25	38

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2003, BY WATER YEAR (WY)

MEAN	4.05	7.91	4.68	4.71	8.24	10.2	14.0	44.3	32.1	10.8	4.65	3.34
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	1.87	2.37	3.23	3.83	2.30	2.86	0.94	0.40	0.37
(WY)	(2001)	(2001)	(2001)	(2003)	(2001)	(1996)	(2003)	(2000)	(2002)	(2002)	(2003)	(2000)

06803093 HAINES BRANCH AT SW 56th ST. AT LINCOLN, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1994 - 2003	
ANNUAL TOTAL	1,414.70		2,291.08			
ANNUAL MEAN	3.88		6.28		12.4	
HIGHEST ANNUAL MEAN					22.2	1998
LOWEST ANNUAL MEAN					3.99	2002
HIGHEST DAILY MEAN	194	May 28	491	Jun 12	786	May 8, 1995
LOWEST DAILY MEAN	0.24	Aug 3	0.17	Sep 4	0.04	Sep 19, 2000
ANNUAL SEVEN-DAY MINIMUM	0.28	Sep 5	0.19	Sep 2	0.09	Sep 7, 2000
MAXIMUM PEAK FLOW			1,480	Jun 10	1,970	Jun 14, 2001
MAXIMUM PEAK STAGE			10.95	Jun 10	12.89	Jun 14, 2001
ANNUAL RUNOFF (AC-FT)	2,810		4,540		9,000	
10 PERCENT EXCEEDS	5.3		6.0		23	
50 PERCENT EXCEEDS	2.2		2.1		4.4	
90 PERCENT EXCEEDS	0.46		0.31		1.3	



06803170 MIDDLE CREEK AT SW 40th ST. AT LINCOLN, NE

LOCATION.--Lat 40° 48'20", long 96° 46'39", in NW 1/4 SW 1/4, sec.29, T.10 N., R.6 E., Lancaster County, Hydrologic Unit 10200203, on right downstream side of bridge.

DRAINAGE AREA.--94 mi^2.

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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	0.99	1.1	1.2	3.0	e3.7	3.3	6.3	7.3	6.2	1.7	1.4
2	7.4	0.92	1.1	1.4	e2.8	e3.4	3.3	5.7	8.3	5.3	1.5	1.3
3	5.2	1.2	0.63	1.4	e1.9	e4.1	3.4	5.4	8.5	4.5	1.5	1.1
4	162	1.1	0.59	1.8	e0.93	e3.5	3.5	137	8.1	3.8	1.5	1.1
5	8.6	1.6	0.53	1.6	e1.0	e2.9	3.6	37	7.8	3.3	1.5	1.0
6	3.8	1.4	0.78	1.3	e0.87	e3.6	4.1	16	8.0	3.1	1.5	1.2
7	2.5	1.6	1.3	1.5	e0.88	e4.2	5.3	16	8.1	2.7	1.5	1.1
8	2.8	2.2	5.2	1.9	e1.1	e4.3	4.9	51	8.3	2.4	1.4	1.0
9	2.9	2.3	2.6	1.5	1.3	3.4	5.4	72	7.9	2.3	1.4	1.7
10	2.9	2.0	0.61	0.76	1.1	4.0	4.7	29	565	2.2	1.4	2.1
11	2.8	1.0	1.2	0.71	1.4	6.4	4.5	26	78	2.0	1.3	8.9
12	2.5	1.3	1.1	0.83	3.7	7.3	4.3	21	820	2.1	1.4	3.0
13	1.9	1.5	0.86	e0.64	5.8	7.6	4.4	19	165	2.5	1.2	1.1
14	1.9	2.0	0.89	e0.66	e6.7	7.6	4.4	18	80	2.4	1.2	0.84
15	1.7	1.9	1.1	e0.64	e5.9	7.8	4.4	e16	52	2.1	1.2	0.79
16	1.6	1.7	1.5	e0.66	5.2	7.3	4.5	14	38	2.0	1.1	0.78
17	1.8	1.5	1.9	e0.75	4.3	8.2	4.7	13	30	2.0	0.99	0.85
18	2.0	1.8	1.7	e0.76	5.4	8.6	4.6	11	25	1.9	1.1	0.85
19	1.6	1.4	1.3	e0.97	7.9	9.6	4.6	42	25	1.9	1.5	0.84
20	1.6	1.9	1.0	e1.2	8.1	14	4.7	41	22	1.9	1.6	0.87
21	1.6	1.6	0.56	e1.2	7.9	12	4.7	29	19	2.4	1.3	0.97
22	1.2	1.1	0.51	e0.94	5.3	9.7	4.6	24	16	2.3	1.1	0.91
23	0.76	1.3	0.53	e1.2	3.4	8.7	4.7	21	16	2.1	1.2	0.96
24	0.74	0.81	0.56	e1.3	3.7	8.8	5.3	18	14	2.1	1.2	0.99
25	1.1	0.46	0.69	e1.1	e3.9	6.6	5.2	15	13	1.8	1.1	0.89
26	1.6	0.46	e0.77	e1.1	e3.2	3.2	4.9	13	11	1.7	1.2	0.97
27	2.1	0.44	e1.0	e1.2	e3.7	3.1	4.8	11	8.3	1.7	1.2	1.0
28	2.6	0.52	e1.4	e1.3	e4.0	3.6	4.8	10	7.7	1.8	1.4	1.00
29	2.5	1.3	1.5	1.6	---	3.5	7.8	9.3	8.4	1.7	1.2	0.96
30	3.2	0.65	1.5	2.2	---	3.1	8.1	8.4	7.8	1.6	1.1	1.1
31	1.7	---	1.1	3.0	---	3.0	---	8.1	---	1.8	1.3	---
TOTAL	240.30	39.95	37.11	38.32	104.38	186.8	141.5	763.2	2,093.5	77.6	40.79	41.57
MEAN	7.75	1.33	1.20	1.24	3.73	6.03	4.72	24.6	69.8	2.50	1.32	1.39
MAX	162	2.3	5.2	3.0	8.1	14	8.1	137	820	6.2	1.7	8.9
MIN	0.74	0.44	0.51	0.64	0.87	2.9	3.3	5.4	7.3	1.6	0.99	0.78
AC-FT	477	79	74	76	207	371	281	1,510	4,150	154	81	82

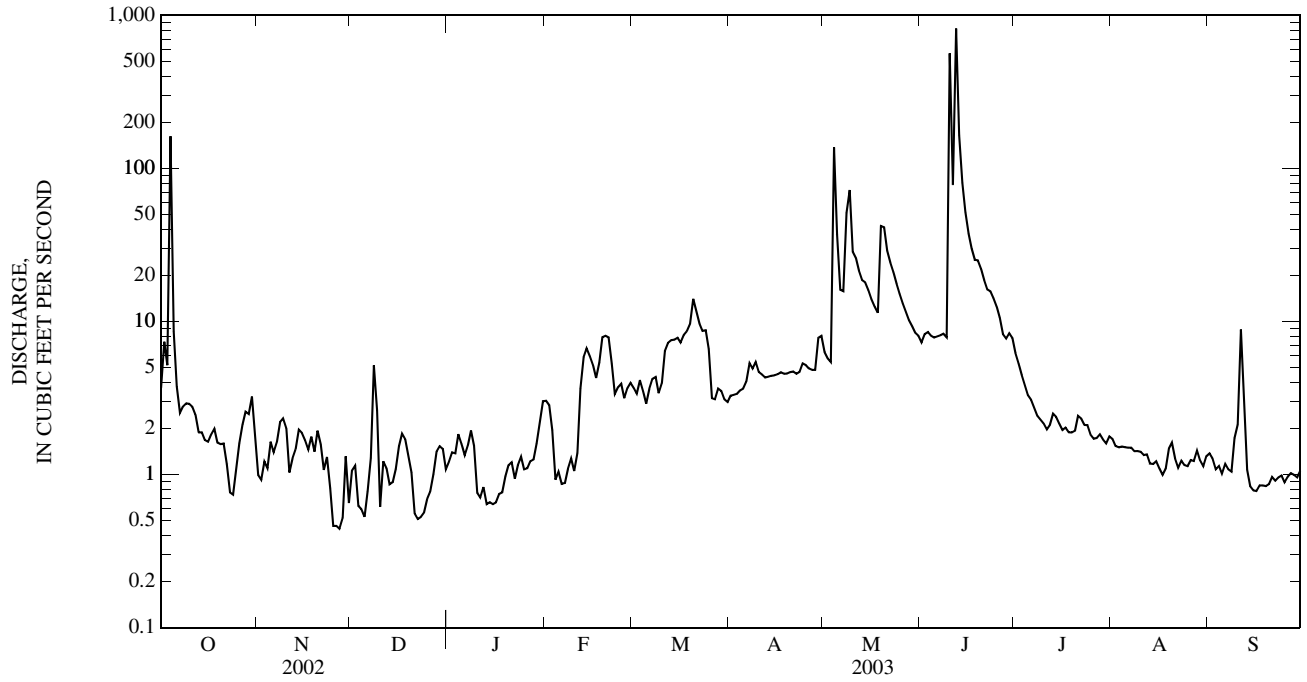
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2003, BY WATER YEAR (WY)

MEAN	6.96	7.32	6.23	6.02	8.19	10.8	13.6	56.3	53.5	15.2	7.97	6.76
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	1.33	1.20	1.24	3.25	3.19	1.98	4.50	2.82	1.61	1.32	1.39
(WY)	(2001)	(2003)	(2003)	(2003)	(2002)	(2002)	(1996)	(2000)	(2002)	(2002)	(2003)	(2003)

06803170 MIDDLE CREEK AT SW 40th ST. AT LINCOLN, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1994 - 2003	
ANNUAL TOTAL	1,758.46		3,805.02			
ANNUAL MEAN	4.82		10.4		16.6	
HIGHEST ANNUAL MEAN					32.6	1998
LOWEST ANNUAL MEAN					4.92	2002
HIGHEST DAILY MEAN	477	Aug 22	820	Jun 12	1,840	Jun 14, 1998
LOWEST DAILY MEAN	0.44	Nov 27	0.44	Nov 27	0.44	Nov 27, 2002
ANNUAL SEVEN-DAY MINIMUM	0.66	Dec 20	0.66	Dec 20	0.66	Dec 20, 2002
MAXIMUM PEAK FLOW			2,070	Jun 12	4,030	Jun 14, 1998
MAXIMUM PEAK STAGE			11.85	Jun 12	16.25	Jun 14, 1998
ANNUAL RUNOFF (AC-FT)	3,490		7,550		12,020	
10 PERCENT EXCEEDS	4.3		14		28	
50 PERCENT EXCEEDS	2.7		2.1		5.5	
90 PERCENT EXCEEDS	1.1		0.87		2.1	

e Estimated.



06803486 OAK CREEK AT AIR PARK ROAD AT LINCOLN, NE

LOCATION.--Lat 40° 51'20", long 96° 46'46", in NE 1/4 NE 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 mi^2.

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 ft^3/s, July 24, 1993, gage height 22.66 ft; minimum daily discharge, 2.6 ft^3/s July 24, 1990, during period of gage operation by Nebraska Department of Natural Resources.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	10	14	15	19	15	12	21	8.7	8.3	11	5.2
2	22	11	14	16	19	16	12	17	12	7.9	8.1	4.5
3	16	11	13	15	19	16	12	15	11	7.5	6.3	4.3
4	232	9.2	13	14	20	16	14	193	11	6.3	6.1	4.7
5	56	9.9	12	15	16	e17	13	111	9.5	6.3	8.8	4.5
6	16	10	13	16	15	e19	16	32	14	6.5	10	4.3
7	7.7	11	13	14	20	17	18	23	14	6.5	11	4.4
8	6.8	9.9	13	15	16	16	18	91	13	7.0	9.5	3.9
9	6.3	10	13	16	14	15	17	148	15	6.6	8.2	6.6
10	7.9	11	11	13	15	15	17	34	151	6.2	7.2	10
11	6.8	9.9	11	18	18	14	16	25	52	6.6	7.3	30
12	6.0	9.6	11	16	20	16	15	22	181	6.2	7.6	19
13	5.8	10	11	15	18	16	14	20	41	5.6	6.2	15
14	6.2	13	10	16	21	16	13	22	17	5.6	6.1	9.7
15	6.5	15	10	15	20	16	13	17	13	5.3	7.0	6.9
16	7.5	15	11	e15	e21	18	13	15	11	5.5	7.9	5.3
17	7.3	15	11	e18	24	18	12	15	11	6.5	5.7	5.5
18	7.4	15	10	e19	18	17	13	14	38	5.6	5.3	5.1
19	7.1	15	11	e18	19	19	13	33	149	4.7	7.7	4.9
20	6.6	15	9.4	e15	20	22	12	20	19	4.8	7.7	5.6
21	6.6	14	9.2	e16	21	20	12	16	11	6.4	9.6	5.8
22	7.0	15	11	e18	e20	17	12	14	11	7.8	7.0	6.1
23	7.7	14	11	e15	e16	15	12	14	86	7.9	6.8	6.2
24	9.3	14	10	e17	e17	15	13	13	11	9.5	6.5	5.9
25	9.9	14	11	e18	e17	15	14	12	9.3	7.1	6.1	5.0
26	9.0	15	11	e18	e17	13	14	12	9.2	7.3	5.5	4.7
27	10	14	13	e16	e17	12	13	10	9.3	6.4	6.0	3.5
28	11	14	15	e17	e16	12	12	9.6	9.7	6.9	5.5	3.7
29	11	16	16	e21	---	12	20	9.0	8.7	7.1	6.0	3.5
30	15	13	15	e23	---	12	24	9.1	8.4	6.1	5.5	3.6
31	12	---	16	23	---	11	---	7.6	---	11	5.9	---
TOTAL	553.4	378.5	372.6	516	513	488	429	1,014.3	964.8	209.0	225.1	207.4
MEAN	17.9	12.6	12.0	16.6	18.3	15.7	14.3	32.7	32.2	6.74	7.26	6.91
MAX	232	16	16	23	24	22	24	193	181	11	11	30
MIN	5.8	9.2	9.2	13	14	11	12	7.6	8.4	4.7	5.3	3.5
AC-FT	1,100	751	739	1,020	1,020	968	851	2,010	1,910	415	446	411

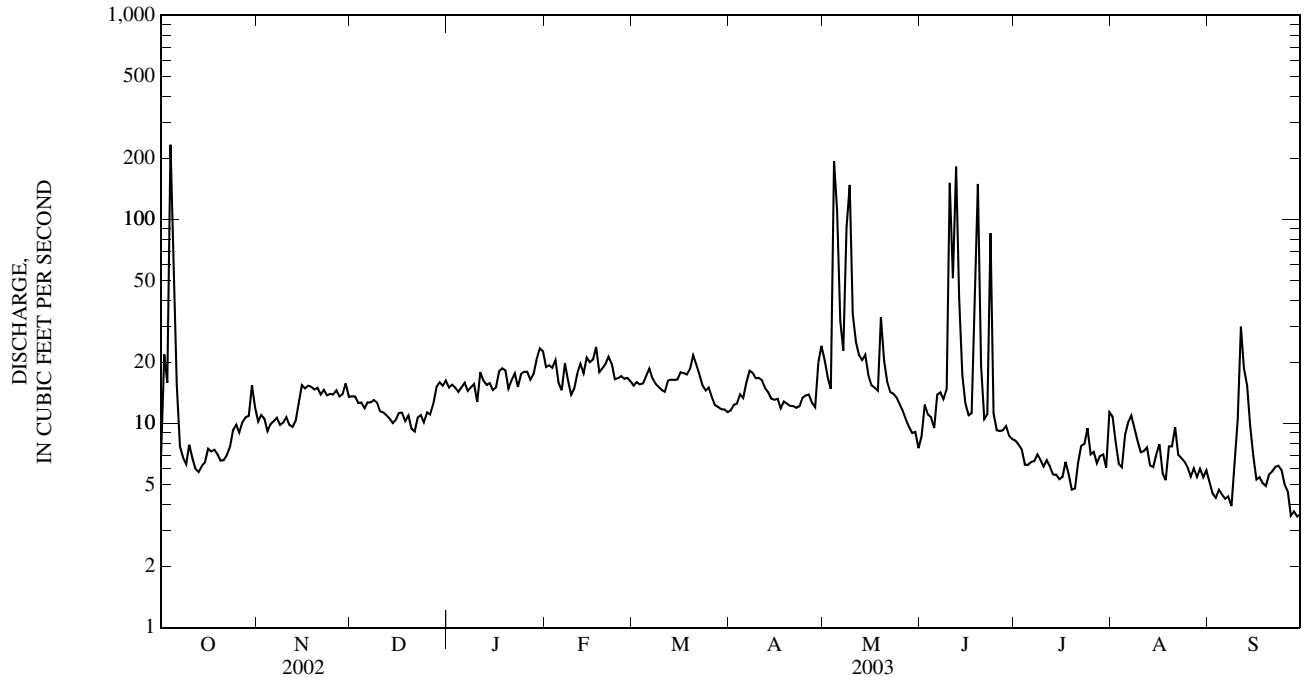
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2003, BY WATER YEAR (WY)

MEAN	30.3	41.2	24.5	24.6	28.8	25.0	21.0	42.0	51.6	16.4	22.1	8.99
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	12.6	11.6	15.7	15.5	15.7	14.3	23.0	15.9	6.74	7.26	6.91
(WY)	(2001)	(2003)	(2001)	(2002)	(2002)	(2003)	(2003)	(2000)	(2002)	(2003)	(2003)	(2003)

06803486 OAK CREEK AT AIR PARK ROAD AT LINCOLN, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2000 - 2003	
ANNUAL TOTAL	6,801.4		5,871.1			
ANNUAL MEAN	18.6		16.1		28.0	
HIGHEST ANNUAL MEAN					37.4	2001
LOWEST ANNUAL MEAN					16.1	2003
HIGHEST DAILY MEAN	1,000	Aug 22	232	Oct 4	1,000	Aug 22, 2002
LOWEST DAILY MEAN	5.0	Aug 3	3.5	Sep 27	3.3	Oct 1, 2000
ANNUAL SEVEN-DAY MINIMUM	5.7	Aug 1	4.3	Sep 24	4.3	Sep 24, 2003
MAXIMUM PEAK FLOW			669	May 4	1,870	Jun 14, 2001
MAXIMUM PEAK STAGE			5.20	May 4	9.21	Jun 14, 2001
ANNUAL RUNOFF (AC-FT)	13,490		11,650		20,280	
10 PERCENT EXCEEDS	21		20		63	
50 PERCENT EXCEEDS	14		13		17	
90 PERCENT EXCEEDS	6.8		6.0		7.2	

e Estimated.



06803500 SALT CREEK AT LINCOLN, NE

LOCATION.--Lat 40° 50'49", long 96° 40'54", in NW 1/4 SW 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 mi^2.

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. Flood flow affected by several detention dams.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

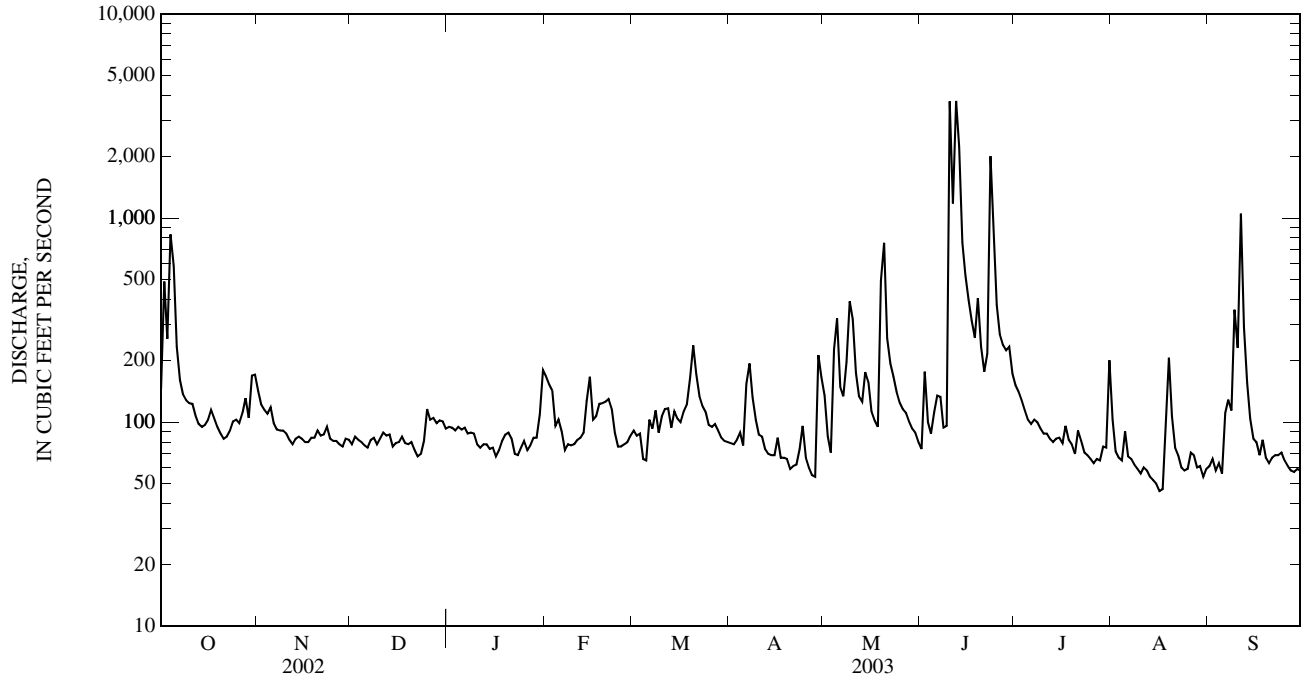
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	146	142	78	95	168	91	79	135	74	152	103	61
2	489	122	85	94	153	86	78	85	177	141	72	66
3	256	115	82	91	143	88	82	71	100	128	67	58
4	832	110	80	95	96	66	89	228	88	114	65	63
5	583	118	77	92	103	65	77	323	112	103	90	56
6	235	99	75	94	90	103	154	149	135	98	68	111
7	161	92	82	88	73	93	194	134	133	103	66	129
8	137	91	84	89	78	114	132	197	94	100	62	114
9	128	91	78	88	77	89	103	391	96	93	59	356
10	124	88	83	78	78	107	87	319	3,730	88	56	231
11	123	82	89	75	82	116	85	174	1,180	88	60	1,050
12	108	78	86	78	84	117	74	134	3,750	83	58	293
13	98	83	87	78	89	94	70	126	2,240	80	54	156
14	95	85	76	74	127	113	69	176	761	83	52	104
15	97	83	79	75	167	104	69	157	525	84	50	83
16	103	80	80	68	103	100	84	113	397	79	46	80
17	115	80	85	73	107	113	67	102	316	96	47	69
18	104	84	79	81	123	122	67	95	260	82	89	82
19	95	84	78	87	124	164	66	494	406	78	207	67
20	88	91	80	89	126	238	59	756	234	70	107	63
21	83	86	73	83	130	172	61	258	177	91	75	67
22	85	87	68	70	116	134	62	194	217	81	69	69
23	91	95	70	69	89	120	74	168	2,010	71	60	69
24	101	83	81	75	76	112	96	141	756	69	58	71
25	103	81	116	81	76	97	67	125	375	66	59	65
26	99	81	103	73	78	95	60	116	270	63	71	61
27	111	78	105	77	80	98	55	111	239	66	69	58
28	131	76	99	84	86	91	54	101	225	65	60	57
29	105	83	102	84	---	84	213	93	234	76	61	59
30	169	82	101	109	---	81	166	89	173	75	54	58
31	171	---	93	180	---	80	---	80	---	201	59	---
TOTAL	5,366	2,730	2,634	2,667	2,922	3,347	2,693	5,835	19,484	2,867	2,173	3,926
MEAN	173	91.0	85.0	86.0	104	108	89.8	188	649	92.5	70.1	131
MAX	832	142	116	180	168	238	213	756	3,750	201	207	1,050
MIN	83	76	68	68	73	65	54	71	74	63	46	56
AC-FT	10,640	5,410	5,220	5,290	5,800	6,640	5,340	11,570	38,650	5,690	4,310	7,790

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2003, BY WATER YEAR (WY)

MEAN	171	117	96.8	105	169	324	275	404	499	330	183	172
MAX	1,621	442	349	350	577	1,972	1,383	1,693	3,061	3,205	704	1,075
(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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1950 - 2003	
ANNUAL TOTAL	45,450		56,644			
ANNUAL MEAN	125		155		237	
HIGHEST ANNUAL MEAN					721	1987
LOWEST ANNUAL MEAN					81.4	1970
HIGHEST DAILY MEAN	1,790	May 28	3,750	Jun 12	22,100	Jun 2, 1951
LOWEST DAILY MEAN	29	Jul 6	46	Aug 16	21	Jul 10, 1977
ANNUAL SEVEN-DAY MINIMUM	42	Jun 30	52	Aug 11	26	May 19, 1956
MAXIMUM PEAK FLOW			6,000	Jun 10	28,400	Jul 24, 1993
MAXIMUM PEAK STAGE			11.25	Jun 10	26.52	Jul 24, 1993
ANNUAL RUNOFF (AC-FT)	90,150		112,400		171,900	
10 PERCENT EXCEEDS	169		215		391	
50 PERCENT EXCEEDS	86		89		98	
90 PERCENT EXCEEDS	60		65		52	



06803510 LITTLE SALT CREEK NEAR LINCOLN, NE

LOCATION.--Lat 40° 53'36", long 096° 40'52", in NW 1/4 SW 1/4 sec.30, T.11 N., R.7 E., Lancaster County, Hydrologic Unit 10200203, on left bank 10 ft downstream from county road bridge, 0.4 mi north of intersection of Interstate Highway 80 and North 27th Street north of Lincoln, and at mile 1.6.

DRAINAGE AREA.--43.6 mi^2.

PERIOD OF RECORD.--January 1969 to current year.

REVISED RECORDS.--WDR NE-77-1: 1969-73 (M).

GAGE.--Water-stage recorder. Datum of gage is 1,114.73 ft above sea level. Prior to Oct. 10, 1980, water-stage recorder at present site and datum 3.00 ft higher. Data collection platform at station.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	3.9	3.0	4.0	5.4	e2.8	4.7	11	2.3	1.7	3.3	6.9
2	19	3.3	4.0	4.1	e4.8	e2.8	4.9	8.3	4.4	1.4	2.9	5.9
3	12	3.3	2.9	4.6	e4.3	e2.9	4.8	7.0	4.9	1.4	2.5	4.3
4	134	3.2	2.7	5.1	e3.5	e2.7	6.1	68	3.8	1.2	2.1	2.7
5	16	3.6	2.5	5.4	e3.3	e3.0	6.4	34	4.0	1.2	2.9	1.5
6	7.5	2.8	2.6	4.7	e3.2	e3.5	7.0	17	8.4	1.4	3.5	1.2
7	4.5	2.5	3.2	4.5	e3.1	4.2	13	20	6.6	1.3	3.1	0.99
8	4.1	2.7	3.3	5.3	e2.9	3.8	15	72	10	1.0	3.0	0.95
9	3.6	2.8	2.9	5.1	e3.2	4.0	16	72	6.4	1.1	2.7	3.3
10	3.2	2.6	3.3	3.6	3.3	3.0	11	21	52	1.6	2.8	4.1
11	3.4	1.9	4.0	3.6	3.3	4.3	8.0	17	10	1.0	2.6	31
12	2.7	2.0	4.0	3.0	3.6	5.8	6.8	11	77	0.81	2.8	8.0
13	2.6	2.0	3.4	e3.1	3.7	4.7	5.9	9.4	36	0.81	2.7	1.6
14	2.7	3.1	3.7	e3.1	e4.9	5.5	5.7	26	12	0.78	2.7	0.78
15	2.8	3.2	4.0	e3.0	e6.0	7.5	5.3	9.9	7.2	0.88	2.6	0.71
16	3.5	2.8	4.1	e3.0	e5.0	8.2	5.0	7.6	5.9	0.82	2.4	0.76
17	3.7	2.8	5.0	e3.2	4.2	7.6	4.6	7.6	5.8	1.8	2.1	0.73
18	3.0	3.0	5.5	e3.2	e4.8	7.7	5.1	5.4	22	1.5	2.2	0.85
19	2.6	2.8	4.1	e3.3	e5.5	8.0	6.0	19	41	1.2	3.3	0.95
20	2.5	3.0	3.6	e3.2	e7.4	16	5.6	14	8.1	1.2	4.0	1.2
21	2.2	3.2	3.7	e2.9	e5.4	11	5.2	7.2	7.0	1.1	4.5	2.1
22	2.6	3.0	3.2	e2.9	e4.4	7.9	4.8	5.3	5.8	1.2	4.1	3.0
23	3.1	3.4	2.8	e3.2	e3.7	7.0	5.6	5.9	118	1.4	5.1	3.6
24	3.7	3.0	3.0	e3.0	e2.5	5.5	7.7	5.5	13	1.3	5.1	3.9
25	4.0	2.5	3.0	e2.6	e2.4	5.0	7.0	5.1	6.0	1.5	5.3	3.3
26	3.7	2.5	2.8	e3.0	e2.6	5.2	5.9	4.1	5.2	1.6	6.3	3.4
27	3.5	2.7	3.6	e2.8	e2.6	5.5	6.1	3.8	3.1	1.8	6.9	3.2
28	4.5	2.8	4.0	e2.8	e2.6	5.2	5.8	2.9	3.7	2.0	7.3	3.3
29	3.9	3.6	4.5	3.2	---	4.4	15	2.7	3.1	1.9	6.8	3.1
30	6.5	3.2	4.6	3.7	---	4.2	18	2.5	2.2	2.3	5.7	2.4
31	5.7	---	4.1	5.7	---	4.4	---	2.2	---	2.6	7.1	---
TOTAL	280.9	87.2	111.1	113.9	111.6	173.3	228.0	504.4	494.9	42.80	120.4	109.72
MEAN	9.06	2.91	3.58	3.67	3.99	5.59	7.60	16.3	16.5	1.38	3.88	3.66
MAX	134	3.9	5.5	5.7	7.4	16	18	72	118	2.6	7.3	31
MIN	2.2	1.9	2.5	2.6	2.4	2.7	4.6	2.2	2.2	0.78	2.1	0.71
AC-FT	557	173	220	226	221	344	452	1,000	982	85	239	218

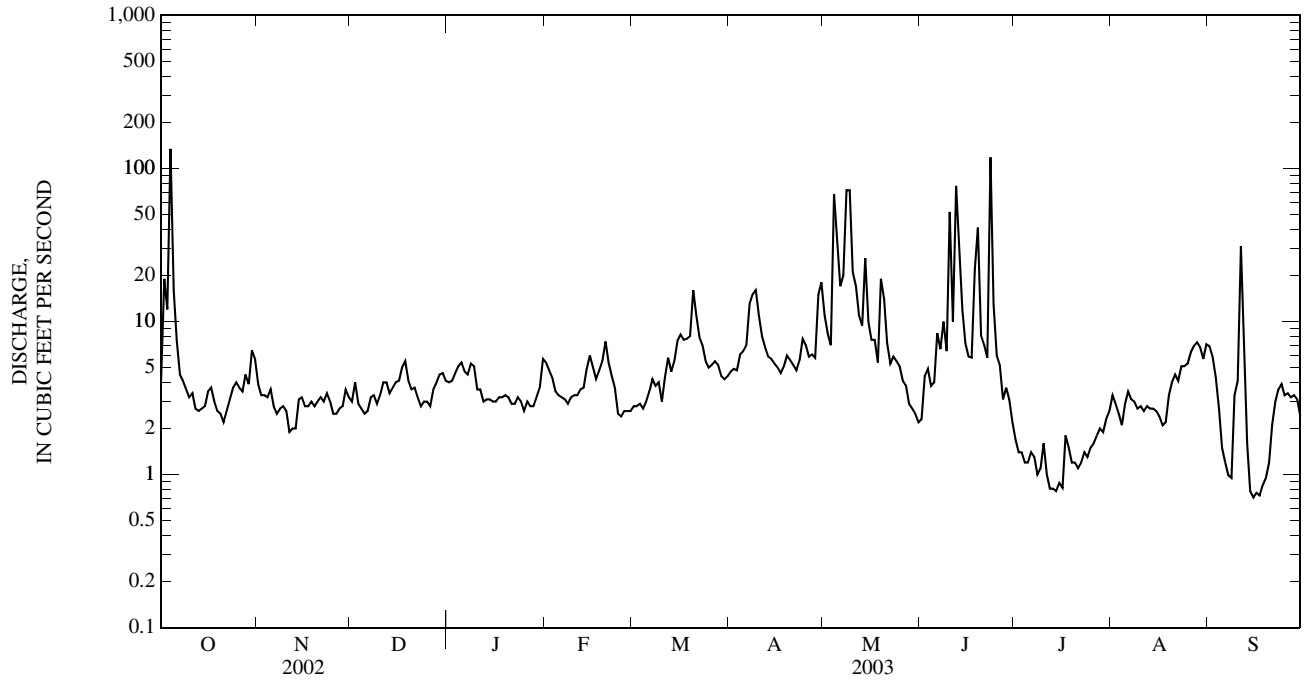
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2003, BY WATER YEAR (WY)

MEAN	9.84	7.41	6.35	6.98	11.5	24.0	16.3	22.7	23.7	24.8	11.8	9.58
MAX	87.5	20.5	16.8	25.3	42.3	134	68.6	85.3	180	379	110	87.2
(WY)	(1987)	(1973)	(1987)	(1973)	(1971)	(1979)	(1987)	(1996)	(1984)	(1993)	(1987)	(1989)
MIN	2.13	2.32	1.69	2.28	3.10	3.57	3.86	3.54	2.31	1.09	1.74	0.96
(WY)	(1977)	(1977)	(1977)	(1977)	(1972)	(1972)	(1970)	(1989)	(2002)	(2002)	(1976)	(1971)

06803510 LITTLE SALT CREEK NEAR LINCOLN, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1969 - 2003	
ANNUAL TOTAL	2,767.39		2,378.22			
ANNUAL MEAN	7.58		6.52		14.7	
HIGHEST ANNUAL MEAN					51.7	1993
LOWEST ANNUAL MEAN					3.59	1970
HIGHEST DAILY MEAN	547	Aug 22	134	Oct 4	5,020	Jul 24, 1993
LOWEST DAILY MEAN	0.30	Jul 4	0.71	Sep 15	0.20	Sep 29, 1969
ANNUAL SEVEN-DAY MINIMUM	0.33	Jun 29	0.85	Sep 14	0.28	Sep 28, 1969
MAXIMUM PEAK FLOW			358	Oct 4	8,480	Jul 24, 1993
MAXIMUM PEAK STAGE			5.98	Oct 4	20.58	Jul 24, 1993
ANNUAL RUNOFF (AC-FT)	5,490		4,720		10,630	
10 PERCENT EXCEEDS	9.5		9.9		18	
50 PERCENT EXCEEDS	3.9		3.6		5.6	
90 PERCENT EXCEEDS	0.88		1.7		2.3	

e Estimated.



06803513 SALT CREEK AT 70th STREET AT LINCOLN, NE

LOCATION.--Lat 40° 53'10", long 96° 37'26", in SW 1/4 SW 1/4 sec. 27, T.11 N., R.7 W., Lancaster County, Hydrologic Unit 10200203, on left bank downstream from bridge.

DRAINAGE AREA.--753 mi^2.

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.--Records good.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

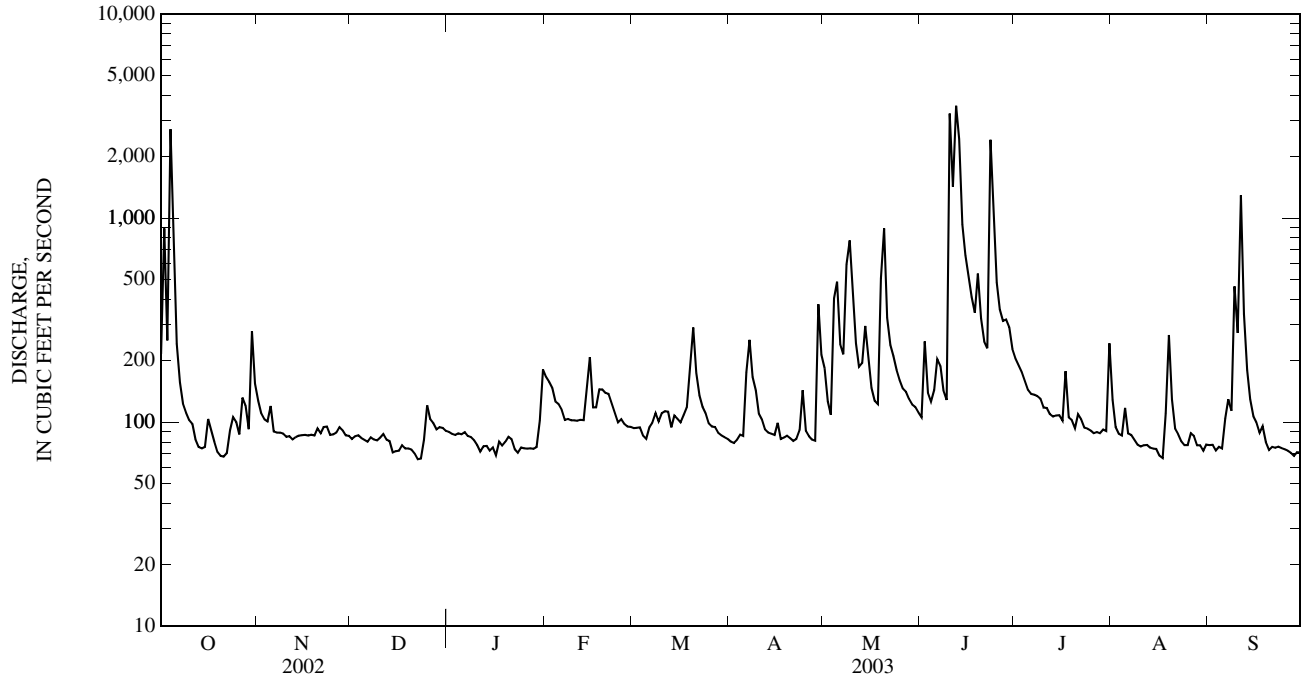
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	216	127	83	90	167	94	80	184	106	205	129	77
2	889	110	85	88	158	94	79	127	249	190	95	78
3	251	103	86	87	147	94	82	109	139	177	88	73
4	2,720	101	84	88	126	86	87	404	126	159	86	76
5	643	120	82	87	123	83	86	488	144	144	117	74
6	242	90	80	89	115	95	176	241	204	138	88	104
7	157	89	84	86	103	100	253	215	189	136	87	130
8	123	89	82	85	104	111	167	593	143	134	82	114
9	111	88	81	82	102	101	144	777	129	130	78	463
10	102	85	84	77	102	111	110	411	3,260	118	76	274
11	98	85	88	72	102	113	103	244	1,420	117	77	1,290
12	82	82	82	76	103	113	92	187	3,560	110	77	339
13	76	84	81	77	102	94	89	195	2,440	106	75	180
14	74	86	71	73	146	108	88	297	931	108	74	129
15	76	86	72	75	208	104	87	203	659	108	74	107
16	104	87	73	69	118	100	99	148	516	102	69	100
17	92	86	77	80	118	109	83	127	411	178	67	89
18	80	87	74	77	145	118	84	123	344	106	111	95
19	72	86	74	80	145	183	86	507	535	103	267	80
20	68	93	74	85	139	291	84	891	322	94	129	73
21	68	88	70	83	138	174	81	325	248	110	93	76
22	71	95	66	74	123	135	83	239	230	103	87	75
23	91	95	66	71	111	119	92	211	2,420	94	81	76
24	106	87	82	75	100	110	144	181	978	93	77	75
25	100	87	121	74	103	99	91	161	484	91	77	74
26	87	89	104	74	98	95	85	146	357	88	88	73
27	132	95	99	74	95	95	82	141	314	89	86	71
28	121	91	92	74	95	89	81	130	318	88	77	68
29	92	86	95	76	---	86	378	122	293	92	77	71
30	279	86	94	102	---	85	214	119	228	91	72	71
31	154	---	91	181	---	83	---	111	---	243	78	---
TOTAL	7,577	2,763	2,577	2,581	3,436	3,472	3,490	8,357	21,697	3,845	2,839	4,675
MEAN	244	92.1	83.1	83.3	123	112	116	270	723	124	91.6	156
MAX	2,720	127	121	181	208	291	378	891	3,560	243	267	1,290
MIN	68	82	66	69	95	83	79	109	106	88	67	68
AC-FT	15,030	5,480	5,110	5,120	6,820	6,890	6,920	16,580	43,040	7,630	5,630	9,270

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2003, BY WATER YEAR (WY)

MEAN	158	203	131	129	174	207	281	742	601	283	190	153
MAX	307	471	220	162	327	455	621	1,644	1,199	628	367	279
(WY)	(1999)	(1999)	(1998)	(1998)	(1998)	(1998)	(1998)	(1995)	(1998)	(1999)	(1996)	(1996)
MIN	96.4	92.1	71.1	83.3	97.7	104	116	122	136	95.9	91.6	82.1
(WY)	(1996)	(2003)	(2001)	(2003)	(2001)	(2002)	(2003)	(2000)	(2002)	(2002)	(2003)	(2000)

06803513 SALT CREEK AT 70th STREET AT LINCOLN, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1994 - 2003	
ANNUAL TOTAL	61,086		67,309			
ANNUAL MEAN	167		184		271	
HIGHEST ANNUAL MEAN					400	1998
LOWEST ANNUAL MEAN					137	2000
HIGHEST DAILY MEAN	3,950	Aug 22	3,560	Jun 12	10,200	Jun 14, 1998
LOWEST DAILY MEAN	46	Aug 3	66	Dec 22	46	Aug 3, 2002
ANNUAL SEVEN-DAY MINIMUM	51	Aug 6	72	Dec 17	51	Aug 6, 2002
MAXIMUM PEAK FLOW			5,360	Jun 12	15,800	Jun 14, 1998
MAXIMUM PEAK STAGE			13.72	Jun 12	23.65	Jun 14, 1998
ANNUAL RUNOFF (AC-FT)	121,200		133,500		196,400	
10 PERCENT EXCEEDS	242		276		469	
50 PERCENT EXCEEDS	98		95		145	
90 PERCENT EXCEEDS	70		74		85	



06803520 STEVENS CREEK NEAR LINCOLN, NE

LOCATION.--Lat 40° 51'25", long 096° 35'42", in NW 1/4 NE 1/4 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 mi^2.

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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	2.3	2.0	2.6	e2.8	e3.4	3.8	5.2	3.0	4.4	1.3	0.82
2	22	2.1	2.1	2.6	e2.8	e3.6	3.9	4.5	4.4	4.2	1.2	0.77
3	5.0	2.0	2.0	2.7	e2.8	e3.7	3.7	4.2	4.2	3.9	1.1	0.69
4	228	1.9	1.9	2.7	e2.6	e3.6	3.6	4.1	3.9	3.4	1.0	0.60
5	9.4	1.9	2.1	2.7	e2.6	e3.5	3.4	3.7	4.0	3.0	1.2	0.63
6	4.6	1.7	2.2	2.7	e2.6	e3.7	4.1	4.6	4.3	2.8	1.1	0.60
7	2.4	1.7	2.2	2.7	e2.7	e3.8	6.0	4.1	4.4	2.7	1.0	0.63
8	2.1	1.8	2.1	e2.7	e2.8	e3.8	5.8	9.5	4.2	2.5	1.1	0.63
9	1.8	1.9	2.1	e2.5	e2.8	e3.7	5.5	17	4.1	2.4	1.1	2.4
10	1.6	1.7	2.2	e2.6	e2.9	3.9	5.1	8.0	46	2.2	1.2	3.5
11	1.5	1.6	2.3	e2.5	e2.9	4.1	5.7	6.1	14	2.1	1.1	14
12	1.4	1.6	2.5	e2.5	e2.9	4.4	5.2	5.4	279	3.3	1.0	5.9
13	1.3	1.6	2.4	e2.5	e2.9	4.2	4.5	5.1	84	3.3	0.93	1.9
14	1.2	1.6	2.5	e2.5	e3.0	4.5	4.3	6.8	18	2.0	0.95	1.2
15	1.2	1.6	2.4	e2.5	e3.0	5.2	4.7	5.2	12	1.8	1.0	0.98
16	1.3	1.7	2.5	e2.5	e3.0	5.2	4.5	4.5	8.8	1.6	0.96	0.92
17	1.3	1.8	2.5	e2.4	e3.0	5.0	3.9	4.0	7.6	3.1	1.0	0.85
18	1.3	1.8	2.5	e2.4	e3.0	4.7	3.6	3.7	7.7	2.0	0.96	0.80
19	1.3	1.8	2.5	e2.4	e3.0	5.1	3.6	44	7.5	1.6	1.8	0.87
20	1.2	1.8	2.5	e2.4	e3.0	8.3	3.8	22	5.6	1.5	1.6	0.82
21	1.3	1.7	2.6	e2.4	e3.0	7.1	3.6	8.0	4.8	1.5	1.1	0.81
22	1.2	1.7	2.4	e2.3	e2.9	5.5	3.3	7.3	5.0	1.4	0.91	0.87
23	1.4	1.8	2.3	e2.2	e2.9	5.0	3.5	6.4	516	1.4	0.89	0.80
24	1.5	1.7	e2.3	e2.2	e2.8	4.7	4.1	5.7	23	1.4	0.84	0.76
25	1.6	1.8	2.3	e2.3	e2.7	4.3	4.1	4.9	11	1.3	0.80	0.83
26	1.5	1.8	2.4	e2.4	e2.9	4.2	3.8	4.6	7.9	1.2	0.75	0.69
27	1.6	1.9	2.5	e2.5	e3.1	4.1	3.8	4.3	6.3	1.1	0.82	0.68
28	1.7	2.3	2.6	e2.6	e3.2	4.0	3.5	3.9	6.0	1.3	0.77	0.66
29	2.1	2.2	2.7	e2.6	---	3.9	6.2	4.8	5.1	1.2	0.77	0.66
30	3.0	2.0	2.7	e2.7	---	3.7	6.9	3.2	4.8	1.1	0.83	0.66
31	2.6	---	2.6	e2.7	---	3.8	---	3.0	---	1.4	0.64	---
TOTAL	315.2	54.8	72.9	78.0	80.6	137.7	131.5	227.8	1,116.6	68.1	31.72	46.93
MEAN	10.2	1.83	2.35	2.52	2.88	4.44	4.38	7.35	37.2	2.20	1.02	1.56
MAX	228	2.3	2.7	2.7	3.2	8.3	6.9	44	516	4.4	1.8	14
MIN	1.2	1.6	1.9	2.2	2.6	3.4	3.3	3.0	3.0	1.1	0.64	0.60
AC-FT	625	109	145	155	160	273	261	452	2,210	135	63	93

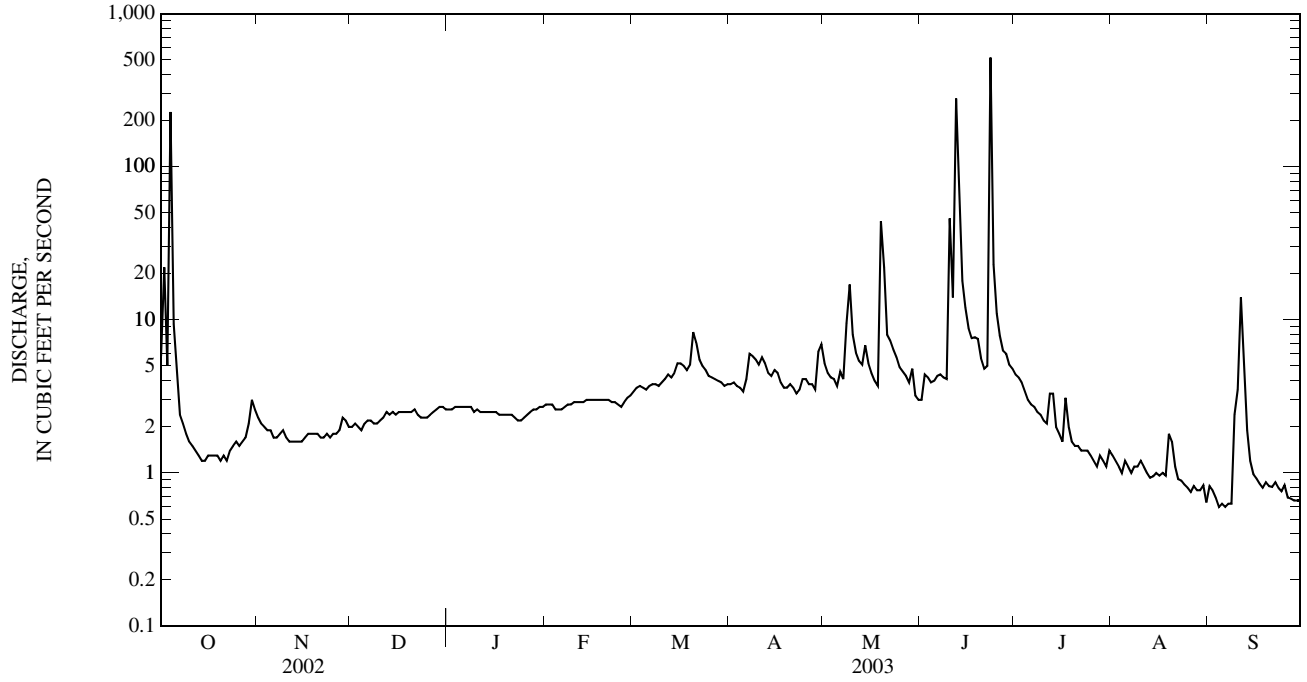
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2003, BY WATER YEAR (WY)

MEAN	13.0	6.68	6.14	6.88	12.7	29.4	24.6	38.1	31.5	30.1	11.3	15.3
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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1969 - 2003	
ANNUAL TOTAL	2,177.87		2,361.85			
ANNUAL MEAN	5.97		6.47		18.9	
HIGHEST ANNUAL MEAN					69.3	1993
LOWEST ANNUAL MEAN					1.84	1976
HIGHEST DAILY MEAN	230	May 11	516	Jun 23	4,810	Sep 8, 1989
LOWEST DAILY MEAN	0.32	Jul 24	0.60	Sep 4	0.00	Jul 31, 1977
ANNUAL SEVEN-DAY MINIMUM	0.49	Jul 18	0.65	Sep 2	0.00	Jul 29, 1977
MAXIMUM PEAK FLOW			1,220	Jun 23	*12,900	Sep 8, 1989
MAXIMUM PEAK STAGE			10.62	Jun 23	19.57	Jun 13, 1984
ANNUAL RUNOFF (AC-FT)	4,320		4,680		13,660	
10 PERCENT EXCEEDS	5.8		5.8		24	
50 PERCENT EXCEEDS	2.3		2.6		3.9	
90 PERCENT EXCEEDS	0.81		0.96		0.88	

e Estimated.
* Stage 19.42 ft.



06803530 ROCK CREEK NEAR CERESCO, NE

LOCATION.--Lat 41° 00'56", long 96° 32'39", in NE 1/4 NE 1/4 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 mi^2.

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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.9	8.3	8.4	8.4	e10	11	11	17	18	7.8	5.7	5.1
2	11	8.3	8.1	8.2	e10	11	11	15	19	7.7	5.4	5.0
3	9.9	8.3	7.9	8.5	e10	11	11	15	19	7.6	5.3	4.7
4	117	8.8	7.8	8.7	e9.8	9.4	12	249	18	7.4	5.2	4.5
5	17	8.6	7.7	8.7	e9.6	e10	12	99	20	7.1	5.1	4.5
6	9.2	8.5	8.0	8.3	e9.4	e10	12	35	75	7.6	5.2	4.4
7	7.5	8.4	7.8	8.5	8.9	e10	14	33	45	7.3	4.8	4.5
8	7.4	7.9	7.5	8.6	e9.4	e10	14	83	60	7.0	4.6	4.4
9	7.4	8.1	7.9	8.6	e9.4	10	18	168	24	7.7	4.7	5.1
10	7.3	8.2	7.9	8.7	10	10	15	46	72	7.6	4.9	6.5
11	7.0	8.4	8.2	8.5	10	11	14	37	31	6.6	5.2	12
12	7.1	8.1	8.3	8.6	10	12	13	28	32	6.1	4.8	11
13	6.8	8.0	8.0	8.7	10	11	12	25	60	5.8	4.9	5.3
14	6.9	8.0	7.9	8.6	11	12	12	24	25	5.8	4.4	4.5
15	6.9	7.8	7.9	e8.6	e12	13	12	23	19	5.9	4.2	4.8
16	7.1	8.0	8.0	e8.6	11	13	12	22	17	5.8	4.3	4.6
17	7.8	8.2	8.3	e8.6	11	13	11	21	17	5.7	4.6	4.7
18	8.2	8.1	8.5	e8.6	11	12	11	20	42	5.7	5.0	4.7
19	8.8	8.0	8.2	e8.6	12	13	12	30	66	5.6	5.5	4.9
20	7.8	8.0	7.9	e8.6	e15	17	12	30	17	5.4	5.8	4.7
21	7.7	7.9	7.5	e8.4	e18	15	11	22	12	5.4	5.4	5.0
22	7.3	8.2	7.9	e8.2	14	13	11	21	11	5.2	5.0	5.1
23	7.5	8.3	7.9	e8.2	11	12	11	21	14	5.3	5.0	4.9
24	7.9	8.3	8.1	e8.0	e11	12	12	20	10	5.4	5.1	4.8
25	8.0	8.1	7.8	e8.2	e11	12	12	20	8.9	5.0	4.8	4.7
26	8.1	8.3	8.1	e8.2	11	12	11	19	8.5	5.1	4.7	4.7
27	8.0	8.2	8.6	e8.4	11	12	11	19	8.1	5.1	4.7	4.8
28	8.5	8.4	8.7	e8.6	11	11	11	18	8.5	5.3	4.7	4.7
29	8.4	8.5	8.6	e8.8	---	11	19	18	8.3	5.2	4.6	4.7
30	8.7	8.6	8.5	e8.8	---	10	23	18	7.8	4.8	4.4	4.8
31	9.0	---	8.5	e9.6	---	11	---	17	---	5.3	4.8	---
TOTAL	366.1	246.8	250.4	264.6	307.5	360.4	383	1,233	793.1	190.3	152.8	158.1
MEAN	11.8	8.23	8.08	8.54	11.0	11.6	12.8	39.8	26.4	6.14	4.93	5.27
MAX	117	8.8	8.7	9.6	18	17	23	249	75	7.8	5.8	12
MIN	6.8	7.8	7.5	8.0	8.9	9.4	11	15	7.8	4.8	4.2	4.4
AC-FT	726	490	497	525	610	715	760	2,450	1,570	377	303	314

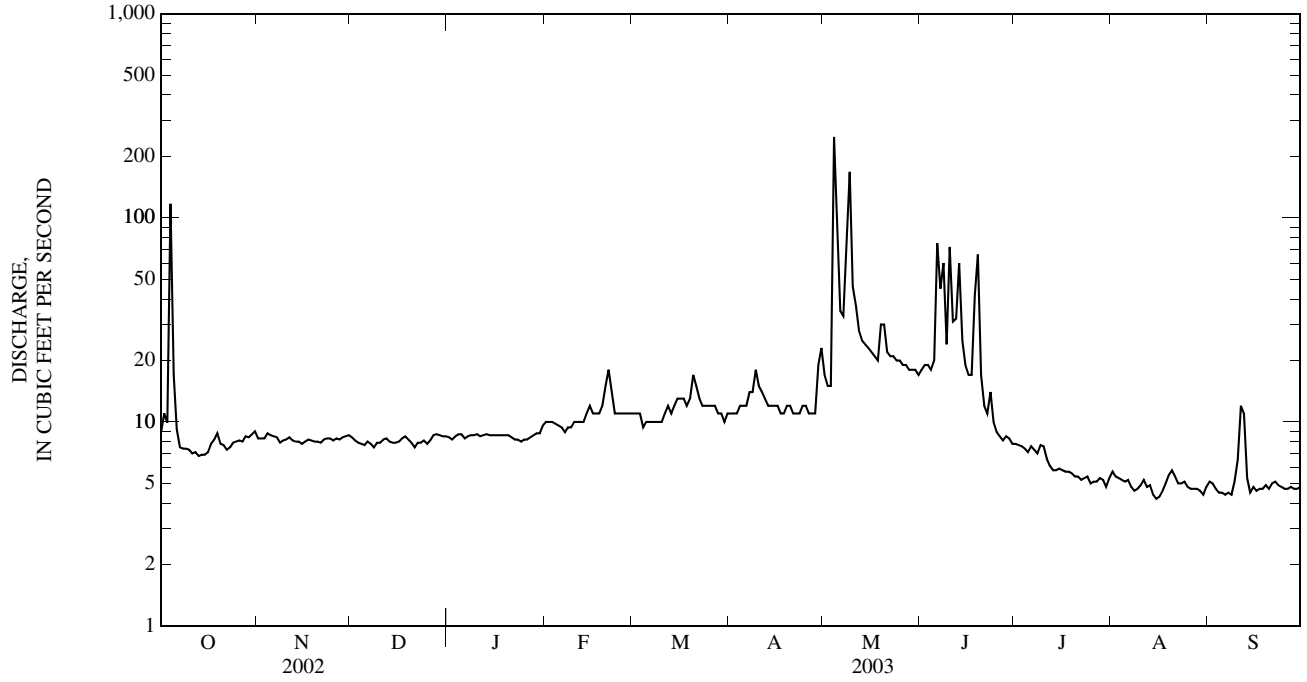
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2003, BY WATER YEAR (WY)

MEAN	21.8	16.2	14.2	15.0	31.8	53.9	40.5	63.2	67.9	51.7	43.7	22.4
MAX	191	45.5	44.8	63.3	116	260	236	237	272	648	527	128
(WY)	(1987)	(1978)	(1985)	(1973)	(1983)	(1979)	(1984)	(1996)	(1998)	(1993)	(1987)	(1989)
MIN	3.85	5.23	5.26	3.93	7.92	8.41	7.40	10.2	5.34	3.07	2.08	3.86
(WY)	(1977)	(1977)	(1977)	(1977)	(1979)	(1972)	(1971)	(1976)	(1976)	(1976)	(1976)	(1971)

06803530 ROCK CREEK NEAR CERESCO, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1971 - 2003	
ANNUAL TOTAL	4,201.1		4,706.1			
ANNUAL MEAN	11.5		12.9		36.9	
HIGHEST ANNUAL MEAN					123	1987
LOWEST ANNUAL MEAN					8.68	1976
HIGHEST DAILY MEAN	193	Aug 23	249	May 4	11,400	Aug 25, 1987
LOWEST DAILY MEAN	3.3	Aug 9	4.2	Aug 15	0.25	Jul 13, 1976
ANNUAL SEVEN-DAY MINIMUM	3.6	Aug 6	4.6	Sep 2	1.1	Jul 11, 1976
MAXIMUM PEAK FLOW			804	May 4	*23,300	Aug 25, 1987
MAXIMUM PEAK STAGE			9.11	May 4	20.50	May 22, 1998
ANNUAL RUNOFF (AC-FT)	8,330		9,330		26,720	
10 PERCENT EXCEEDS	16		19		44	
50 PERCENT EXCEEDS	9.5		8.5		13	
90 PERCENT EXCEEDS	4.9		4.9		5.9	

e Estimated.
* Includes road overflow; stage 19.60 ft, from floodmark.



06803555 SALT CREEK AT GREENWOOD, NE

LOCATION.--Lat 40° 57'56", long 96° 27'01", at center of sec.31, T.12 N., R.9 E., Cass County, Hydrologic Unit 10200203, on right bank just downstream from county road bridge, 0.5 mi west of Greenwood, and at mile 13.0.

DRAINAGE AREA.--1,051 mi^2.

PERIOD OF RECORD.--November 1951 to current year. Records furnished by Corps of Engineers prior to Oct. 1, 1972.

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

GAGE.--Water-stage recorder. Datum of gage is 1,066.14 ft above sea level. Datum lowered 2.00 ft Feb. 6, 2002. Prior to Nov. 5, 1964, nonrecording gage at same site. Data collection platform at station.

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

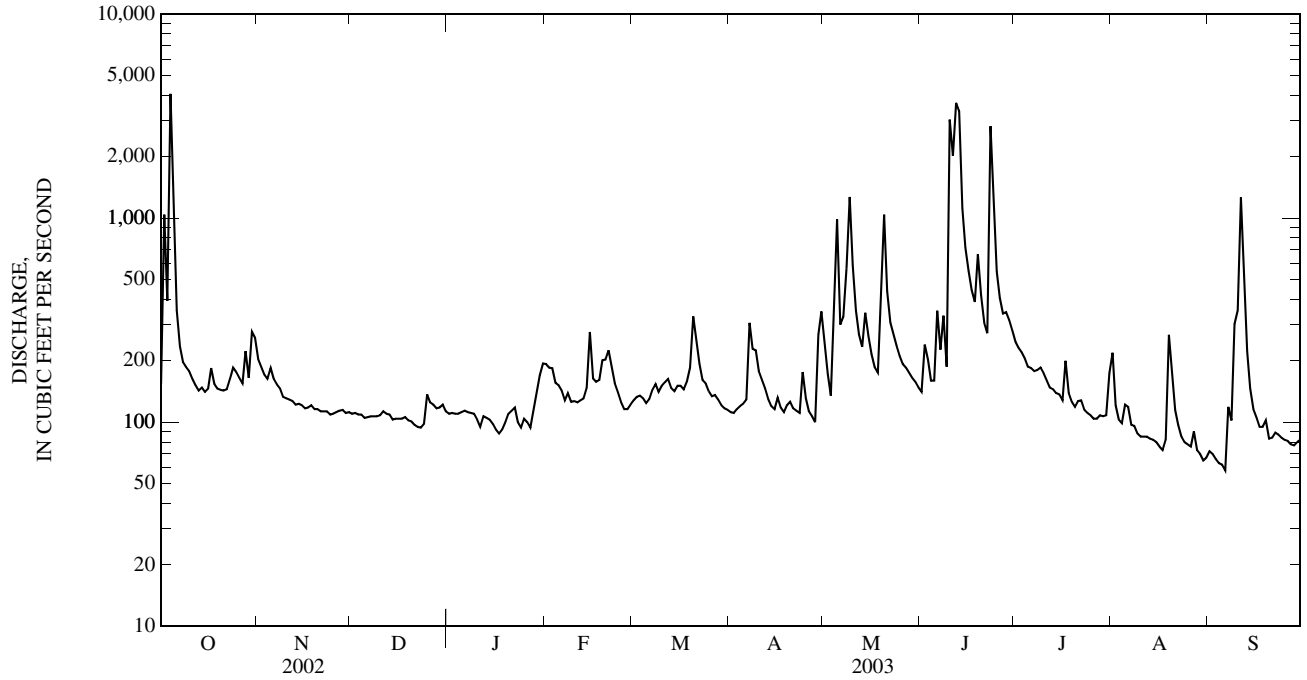
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	154	204	110	110	193	e128	112	241	141	248	219	72
2	1,040	187	111	111	185	133	111	172	240	231	121	70
3	393	171	109	110	184	135	116	135	203	220	103	66
4	4,060	163	109	110	156	131	120	415	160	205	99	63
5	960	184	105	112	152	e124	123	985	160	187	122	62
6	353	163	106	114	143	e130	129	301	352	184	119	58
7	235	153	107	112	128	e144	307	328	227	178	97	119
8	197	146	107	111	139	154	229	569	333	180	96	102
9	186	133	107	110	126	141	225	1,270	187	185	88	303
10	178	131	108	103	127	151	178	586	3,040	174	85	353
11	163	129	113	95	125	157	161	351	2,020	160	85	1,260
12	152	127	110	107	128	163	147	269	3,670	148	85	487
13	143	122	109	105	131	147	130	234	3,350	145	83	223
14	148	123	103	103	147	142	120	344	1,120	139	82	146
15	141	121	104	e98	277	151	116	264	715	137	80	116
16	146	117	104	e92	164	151	132	216	551	128	76	106
17	184	118	104	e88	158	145	118	186	445	200	73	95
18	154	121	106	e92	161	158	112	175	389	139	82	95
19	146	116	102	e100	201	185	121	392	665	126	268	102
20	144	116	101	e110	203	330	126	1,040	419	119	173	83
21	143	113	97	e114	225	253	117	439	307	127	115	84
22	145	113	95	e118	187	193	114	308	273	128	97	89
23	163	113	94	e100	155	161	111	272	2,820	115	85	87
24	185	109	98	e94	e140	155	176	237	1,360	111	80	84
25	176	110	137	e104	e125	142	131	212	547	108	78	82
26	165	112	125	e100	e116	134	113	193	407	104	76	81
27	155	114	122	e94	e116	136	107	185	341	104	90	78
28	223	115	117	e116	e122	129	100	175	346	108	73	77
29	165	111	118	e140	---	121	268	165	317	107	70	80
30	278	112	122	e170	---	117	349	158	281	108	65	82
31	260	---	113	194	---	115	---	148	---	174	67	---
TOTAL	11,335	3,967	3,373	3,437	4,414	4,756	4,519	10,965	25,386	4,727	3,132	4,805
MEAN	366	132	109	111	158	153	151	354	846	152	101	160
MAX	4,060	204	137	194	277	330	349	1,270	3,670	248	268	1,260
MIN	141	109	94	88	116	115	100	135	141	104	65	58
AC-FT	22,480	7,870	6,690	6,820	8,760	9,430	8,960	21,750	50,350	9,380	6,210	9,530
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2003, BY WATER YEAR (WY)												
MEAN	253	177	147	158	261	497	404	594	711	510	314	254
MAX	2,681	638	465	520	952	3,481	2,023	2,383	4,101	5,461	1,748	1,534
(WY)	(1974)	(1999)	(1987)	(1974)	(1983)	(1979)	(1984)	(1996)	(1984)	(1993)	(1987)	(1989)
MIN	36.4	35.1	37.3	26.2	40.6	51.3	58.1	54.7	65.6	55.6	42.8	52.9
(WY)	(1956)	(1956)	(1956)	(1957)	(1957)	(1957)	(1956)	(1955)	(1958)	(1955)	(1955)	(1953)

06803555 SALT CREEK AT GREENWOOD, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1952 - 2003	
ANNUAL TOTAL	81,941		84,816			
ANNUAL MEAN	224		232		355	
HIGHEST ANNUAL MEAN					1,054	1987
LOWEST ANNUAL MEAN					107	1953
HIGHEST DAILY MEAN	5,940	Aug 22	4,060	Oct 4	37,100	Jun 13, 1984
LOWEST DAILY MEAN	57	Aug 12	58	Sep 6	14	Jan 10, 1957
ANNUAL SEVEN-DAY MINIMUM	61	Aug 6	65	Aug 31	17	Jan 10, 1957
MAXIMUM PEAK FLOW			6,780	Jun 12	*46,800	Jun 13, 1984
MAXIMUM PEAK STAGE			11.53	Jun 12	**26.57	Jul 24, 1993
ANNUAL RUNOFF (AC-FT)	162,500		168,200		257,500	
10 PERCENT EXCEEDS	280		342		569	
50 PERCENT EXCEEDS	126		132		146	
90 PERCENT EXCEEDS	95		90		72	

e Estimated.
* Stage 26.50 ft, datum then in use.
** Datum then in use.



06804000 WAHOO CREEK AT ITHACA, NE

LOCATION.--Lat 41° 08'40", long 96° 32'10", in NW 1/4 NW 1/4 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 mi^2, of which 268 mi^2 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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	24	e20	e16	e22	e18	24	34	32	23	18	15
2	11	22	e19	e17	e20	e17	24	26	35	23	19	15
3	13	23	e17	e18	e19	e16	24	21	37	23	17	15
4	108	23	e17	e18	e18	e15	25	225	36	23	16	15
5	91	23	e16	e18	e17	e19	25	781	35	21	17	15
6	23	23	e17	e19	e16	e22	26	97	51	23	19	15
7	19	23	e17	e18	e16	e28	29	67	48	25	19	14
8	19	23	e19	e19	e15	e29	28	101	61	23	17	15
9	19	23	e19	e18	e15	e26	29	312	58	23	17	15
10	20	22	e19	e17	e16	e28	28	78	121	23	17	15
11	19	22	e19	e16	e16	e28	27	61	90	21	18	16
12	19	21	e19	e17	e16	e30	25	54	51	20	16	15
13	19	21	e18	e19	e15	e30	24	50	74	20	16	15
14	20	22	e17	e18	e15	e30	23	49	46	21	17	15
15	20	22	e18	e17	e14	e32	23	45	37	21	18	15
16	20	21	e19	e16	e16	e34	23	42	33	19	19	15
17	21	21	e18	e16	e18	e33	22	40	42	19	18	16
18	21	21	e18	e18	e19	e31	22	38	122	20	19	15
19	20	21	e17	e20	e19	e31	22	47	66	20	21	15
20	20	20	e16	e19	e19	e33	22	64	37	20	22	15
21	20	20	e15	e18	e16	32	21	48	29	20	20	15
22	19	20	e15	e16	e15	30	20	39	28	18	17	15
23	19	20	e17	e16	e14	28	20	39	28	17	16	15
24	21	20	e18	e15	e13	27	22	40	27	16	15	15
25	22	e19	e19	e14	e14	27	21	39	27	16	15	15
26	22	e19	e21	e14	e14	26	20	38	25	16	15	15
27	22	e19	e18	e13	e15	27	19	36	24	16	15	15
28	23	e19	e16	e16	e18	26	25	35	24	17	15	15
29	24	e20	e15	e19	---	25	29	34	25	16	15	15
30	25	e20	e16	e22	---	24	37	34	24	16	14	15
31	25	---	e16	e23	---	24	---	32	---	18	15	---
TOTAL	772.4	637	545	540	460	826	729	2,646	1,373	617	532	451
MEAN	24.9	21.2	17.6	17.4	16.4	26.6	24.3	85.4	45.8	19.9	17.2	15.0
MAX	108	24	21	23	22	34	37	781	122	25	22	16
MIN	8.4	19	15	13	13	15	19	21	24	16	14	14
AC-FT	1,530	1,260	1,080	1,070	912	1,640	1,450	5,250	2,720	1,220	1,060	895

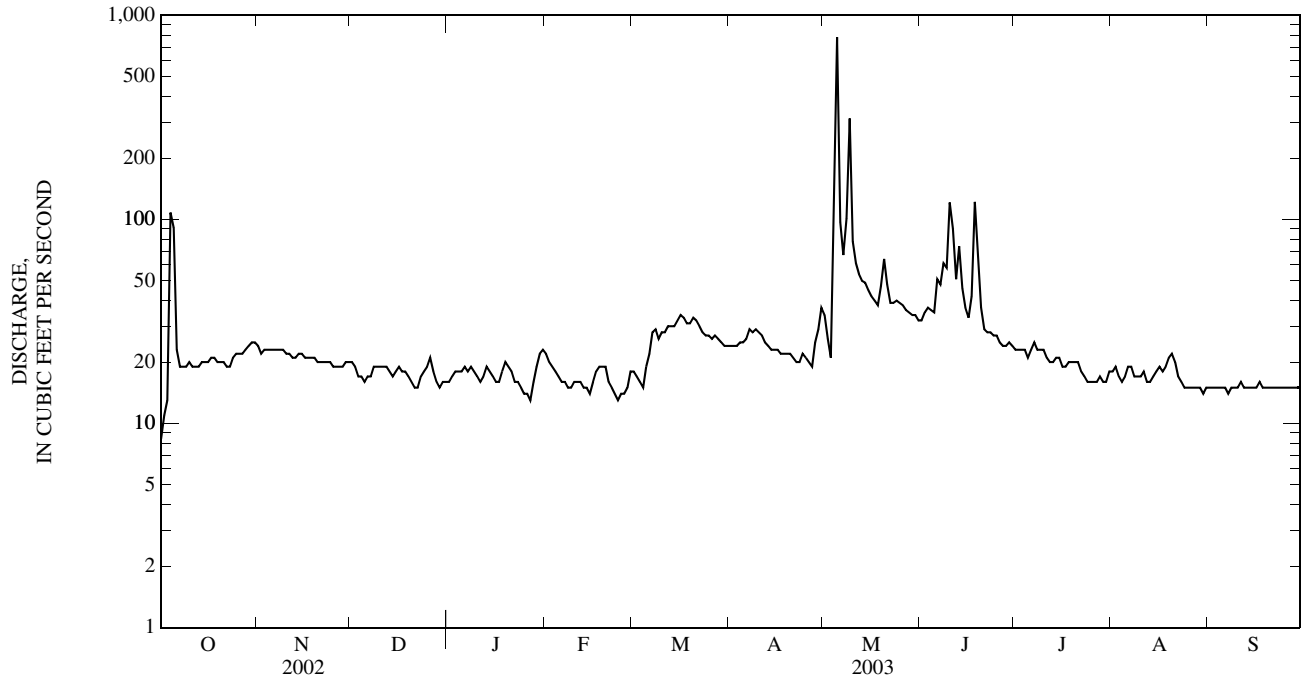
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2003, BY WATER YEAR (WY)

MEAN	49.8	40.0	35.2	38.9	71.7	118	87.3	120	219	86.4	93.0	67.9
MAX	343	110	96.3	125	276	518	430	401	1,051	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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1950 - 2003	
ANNUAL TOTAL	13,396.4		10,128.4			
ANNUAL MEAN	36.7		27.7		85.5	
HIGHEST ANNUAL MEAN					207	1987
LOWEST ANNUAL MEAN					15.3	1956
HIGHEST DAILY MEAN	852	May 11	781	May 5	22,100	Jun 24, 1963
LOWEST DAILY MEAN	8.4	Oct 1	8.4	Oct 1	3.3	Jun 11, 1955
ANNUAL SEVEN-DAY MINIMUM	12	Sep 26	14	Feb 21	4.4	Oct 12, 1955
MAXIMUM PEAK FLOW			1,710	May 5	77,400	Jun 24, 1963
MAXIMUM PEAK STAGE			14.16	May 5	22.93	Jun 24, 1963
ANNUAL RUNOFF (AC-FT)	26,570		20,090		61,930	
10 PERCENT EXCEEDS	44		38		110	
50 PERCENT EXCEEDS	30		20		35	
90 PERCENT EXCEEDS	18		15		18	

e Estimated.



06804000 WAHOO CREEK AT ITHACA, NE—Continued

WATER-QUALITY RECORDS

Pesticide Reconnaissance Study

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	Acetochlor ESA, water, fltrd 0.7u GF ug/L (61029)	Acetochlor OA, water, fltrd 0.7u GF ug/L (61030)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor ESA, water, fltrd 0.7u GF ug/L (50009)
OCT													
04...	0930	4.75	77	725	9.9	7.0	472	0.09	0.08	0.20	0.22	<0.05	0.09

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Alachlor OA, water, fltrd 0.7u GF ug/L (61031)	Alachlor, water, fltrd, ug/L (46342)	Ametryn water, fltrd, ug/L (38401)	Aminomethylphosphonic acid, wat flt ug/L (62649)	Atrazine, water, fltrd, ug/L (39632)	Cyanazine amide, water, fltrd, ug/L (61709)	Cyanazine, water, fltrd, ug/L (04041)	Dimethenamid ESA, water, fltrd, ug/L (61951)	Dimethenamid OA, water, fltrd, ug/L (62482)	Dimethenamid water, fltrd, ug/L (61588)	Flufenacet ESA, water, fltrd, ug/L (61952)	Flufenacet OA, water, fltrd, ug/L (62483)	Flufenacet, water, fltrd, ug/L (62481)
OCT													
04...	<0.05	<0.05	<0.05	0.7	0.42	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Glufosinate, water, fltrd 0.7u GF ug/L (62721)	Glyphosate, water, fltrd 0.7u GF ug/L (62722)	Metolachlor ESA, water, fltrd 0.7u GF ug/L (61043)	Metolachlor OA, water, fltrd 0.7u GF ug/L (61044)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propachlor, water, fltrd, ug/L (04024)	Propazine, water, fltrd, ug/L (38535)	Simazine, water, fltrd, ug/L (04035)	Terbutryn, water, fltrd, ug/L (38888)
OCT													
04...	<0.1	<0.1	0.07	0.07	0.12	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

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06804700 WAHOO CREEK AT ASHLAND, NE

LOCATION.--Lat 41° 03'13", long 96° 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 mi^2.

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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	43	41	41	e45	e37	45	65	55	50	24	21
2	36	42	e38	41	e44	e37	44	65	57	46	24	22
3	39	41	e38	41	e43	e40	44	53	58	43	25	23
4	178	42	39	43	e43	e41	46	232	59	40	25	23
5	191	42	38	42	e40	e41	47	1,000	57	40	22	20
6	82	42	38	43	e32	e40	49	211	70	44	22	21
7	50	42	e39	e40	e33	e41	54	142	82	47	23	20
8	43	41	39	e40	e35	e42	54	154	92	48	24	21
9	43	40	39	e42	e37	e64	54	462	95	42	23	23
10	43	40	41	e40	e37	e48	55	179	154	41	24	29
11	42	40	40	e37	e37	e44	53	111	171	36	24	40
12	41	40	40	e35	e37	e45	50	94	126	35	22	76
13	40	39	36	e34	e35	48	49	90	124	35	21	48
14	40	39	36	e32	e32	49	47	85	88	36	21	33
15	41	39	37	e32	e30	51	46	83	69	37	21	27
16	41	39	36	e32	e36	54	52	78	62	34	20	26
17	43	39	36	e33	e36	54	46	74	64	31	21	26
18	43	40	e35	e33	e37	51	46	71	126	32	22	26
19	41	39	e34	e34	e37	50	47	75	126	34	23	26
20	41	39	e32	e33	e36	53	47	89	88	31	27	26
21	40	39	e30	e32	e34	55	47	97	68	32	26	28
22	41	39	e29	e32	e33	51	46	76	62	31	24	29
23	41	38	e30	e31	e31	50	45	69	68	26	23	27
24	43	39	e32	e31	e31	47	48	68	59	25	22	27
25	44	39	e35	e30	e34	46	49	67	54	25	23	28
26	43	e36	e37	e34	e35	46	47	66	51	23	22	28
27	43	e36	e38	e38	e38	47	45	63	51	23	22	27
28	44	e37	e38	e41	e38	46	46	60	53	24	23	27
29	45	42	e38	e44	---	45	63	59	51	24	20	28
30	45	40	e38	e45	---	45	73	59	52	21	19	29
31	45	---	e39	e45	---	45	---	56	---	23	20	---
TOTAL	1,624	1,193	1,136	1,151	1,016	1,453	1,484	4,153	2,392	1,059	702	855
MEAN	52.4	39.8	36.6	37.1	36.3	46.9	49.5	134	79.7	34.2	22.6	28.5
MAX	191	43	41	45	45	64	73	1,000	171	50	27	76
MIN	32	36	29	30	30	37	44	53	51	21	19	20
AC-FT	3,220	2,370	2,250	2,280	2,020	2,880	2,940	8,240	4,740	2,100	1,390	1,700

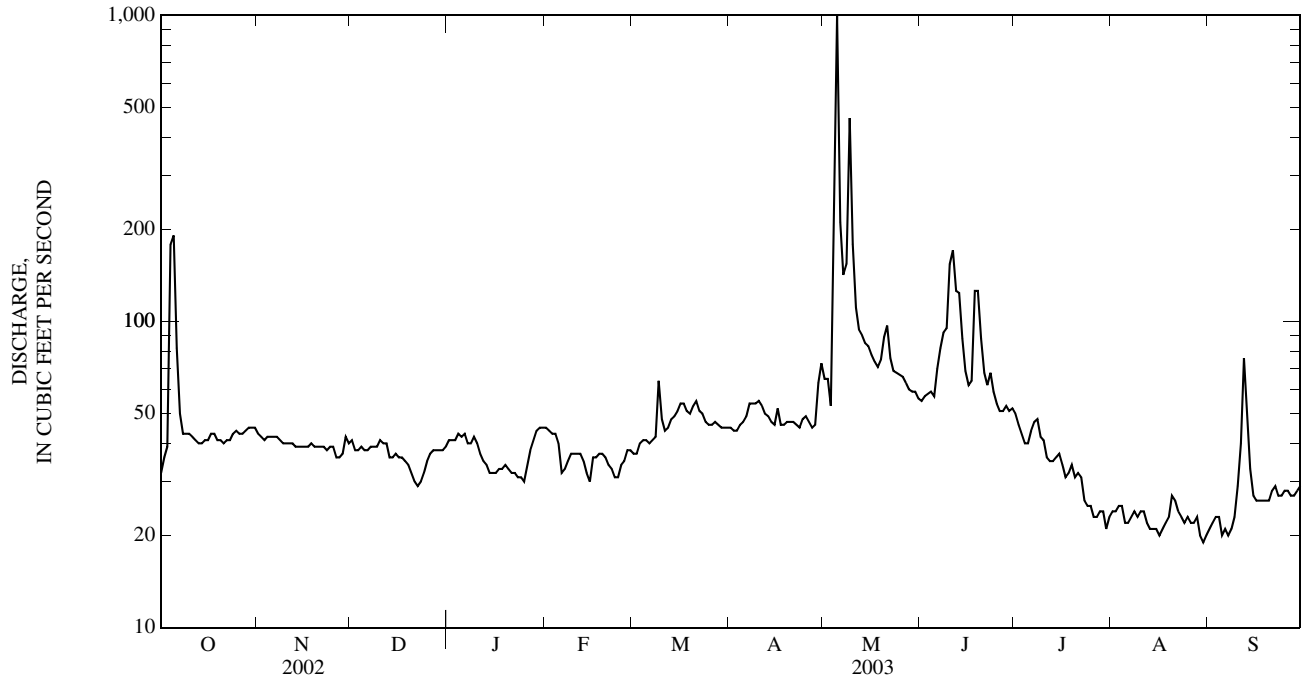
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2003, BY WATER YEAR (WY)

MEAN	56.1	65.9	58.4	60.5	89.9	141	114	194	330	199	98.1	59.0
MAX	98.2	125	85.9	91.5	199	580	247	552	1,031	1,032	341	150
(WY)	(1994)	(1999)	(1999)	(1995)	(1997)	(1993)	(1999)	(1995)	(1991)	(1993)	(1998)	(1993)
MIN	36.0	39.8	36.6	37.1	36.3	46.9	49.5	67.5	55.9	34.2	22.6	28.0
(WY)	(1992)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(1997)	(1992)	(2003)	(2003)	(1990)

06804700 WAHOO CREEK AT ASHLAND, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1990 - 2003	
ANNUAL TOTAL	21,818		18,218			
ANNUAL MEAN	59.8		49.9		122	
HIGHEST ANNUAL MEAN					223	1993
LOWEST ANNUAL MEAN					49.9	2003
HIGHEST DAILY MEAN	1,160	May 12	1,000	May 5	7,000	Jun 15, 1991
LOWEST DAILY MEAN	23	Aug 10	19	Aug 30	19	Aug 30, 2003
ANNUAL SEVEN-DAY MINIMUM	26	Aug 6	21	Aug 26	21	Aug 26, 2003
MAXIMUM PEAK FLOW			1,650	May 5	7,000	Jun 15, 1991
MAXIMUM PEAK STAGE			12.36	May 5	20.50	Jun 15, 1991
ANNUAL RUNOFF (AC-FT)	43,280		36,140		88,600	
10 PERCENT EXCEEDS	79		69		174	
50 PERCENT EXCEEDS	48		40		68	
90 PERCENT EXCEEDS	31		24		38	

e Estimated.



06804900 JOHNSON CREEK NEAR MEMPHIS, NE

LOCATION.--Lat 41° 08'48", long 96° 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 mi^2.

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.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.1	0.67	0.65	0.79	0.78	1.1	1.6	1.1	2.1	1.4	1.6
2	2.0	1.1	0.67	0.64	0.81	0.77	1.0	1.4	1.3	2.1	1.4	1.7
3	1.5	1.1	0.63	0.65	0.82	0.81	1.0	1.5	1.2	1.9	1.4	1.7
4	7.4	1.1	0.62	0.67	0.78	0.78	1.2	4.6	1.1	1.7	1.5	1.7
5	1.6	1.1	0.63	0.68	0.78	0.80	1.1	2.7	1.2	1.7	1.6	1.7
6	1.3	1.0	0.66	0.64	e0.76	0.85	1.2	2.5	1.2	2.1	1.6	1.7
7	1.3	1.0	0.66	0.68	e0.76	0.83	1.4	2.7	1.4	1.9	1.6	1.7
8	1.3	0.95	0.66	0.66	0.77	0.83	1.6	7.3	1.4	1.8	1.6	1.7
9	1.4	0.90	0.66	0.67	0.78	0.81	1.7	3.7	1.3	2.0	1.5	1.8
10	1.4	0.85	0.67	e0.66	0.75	0.85	1.5	2.1	1.4	1.8	1.6	1.7
11	1.4	0.76	0.70	e0.66	0.78	0.94	1.4	2.0	1.2	1.7	1.5	1.9
12	1.4	0.76	0.69	e0.66	0.78	0.95	1.3	1.8	1.4	1.6	1.4	1.8
13	1.4	0.75	0.68	0.66	0.78	0.96	1.3	1.7	1.3	1.5	1.4	1.8
14	1.3	0.73	0.68	0.65	0.93	1.1	1.2	1.6	1.1	1.5	1.5	1.8
15	1.3	0.72	0.69	0.61	1.0	1.3	1.3	1.6	1.1	1.5	1.4	1.8
16	1.4	0.73	0.69	0.66	e1.1	1.3	1.2	1.5	1.1	1.6	1.4	1.8
17	1.4	0.72	0.70	e0.60	e0.82	1.2	1.1	1.4	1.1	1.6	1.4	1.8
18	1.4	0.71	0.72	0.68	0.81	1.1	1.1	1.4	1.3	1.5	1.5	1.8
19	1.3	0.72	0.69	0.59	0.80	1.2	1.2	2.0	1.5	1.5	1.7	1.8
20	1.3	0.71	0.67	0.70	1.3	1.4	1.2	1.6	1.4	1.6	1.6	1.8
21	1.3	0.69	0.64	0.67	1.4	1.3	1.1	1.5	1.5	1.6	1.5	1.8
22	1.2	0.67	0.60	e0.66	1.0	1.2	1.1	1.4	1.7	1.5	1.5	1.9
23	1.3	0.66	0.57	e0.66	0.86	1.2	1.1	1.4	1.8	1.5	1.5	1.9
24	1.3	0.64	0.60	0.75	e0.84	1.2	1.2	1.4	1.8	1.4	1.5	1.9
25	1.3	0.65	0.62	0.69	e0.84	1.2	1.1	1.3	1.9	1.4	1.5	1.9
26	1.2	0.67	e0.60	0.71	e0.82	1.2	1.1	1.3	1.9	1.4	1.5	1.9
27	1.3	e0.70	0.61	0.75	0.79	1.2	1.1	1.3	1.9	1.5	1.5	1.9
28	1.2	0.70	0.60	0.73	0.76	1.2	1.2	1.3	2.0	1.6	1.6	1.9
29	1.2	0.71	0.63	0.72	---	1.1	1.9	1.2	2.0	1.4	1.6	1.9
30	1.2	0.66	0.66	0.75	---	1.1	1.8	1.2	2.0	1.3	1.5	1.9
31	1.2	---	0.65	0.79	---	1.1	---	1.1	---	1.4	1.6	---
TOTAL	47.7	24.26	20.22	20.95	24.21	32.56	37.8	61.1	43.6	50.7	46.8	54.0
MEAN	1.54	0.81	0.65	0.68	0.86	1.05	1.26	1.97	1.45	1.64	1.51	1.80
MAX	7.4	1.1	0.72	0.79	1.4	1.4	1.9	7.3	2.0	2.1	1.7	1.9
MIN	1.2	0.64	0.57	0.59	0.75	0.77	1.0	1.1	1.1	1.3	1.4	1.6
AC-FT	95	48	40	42	48	65	75	121	86	101	93	107

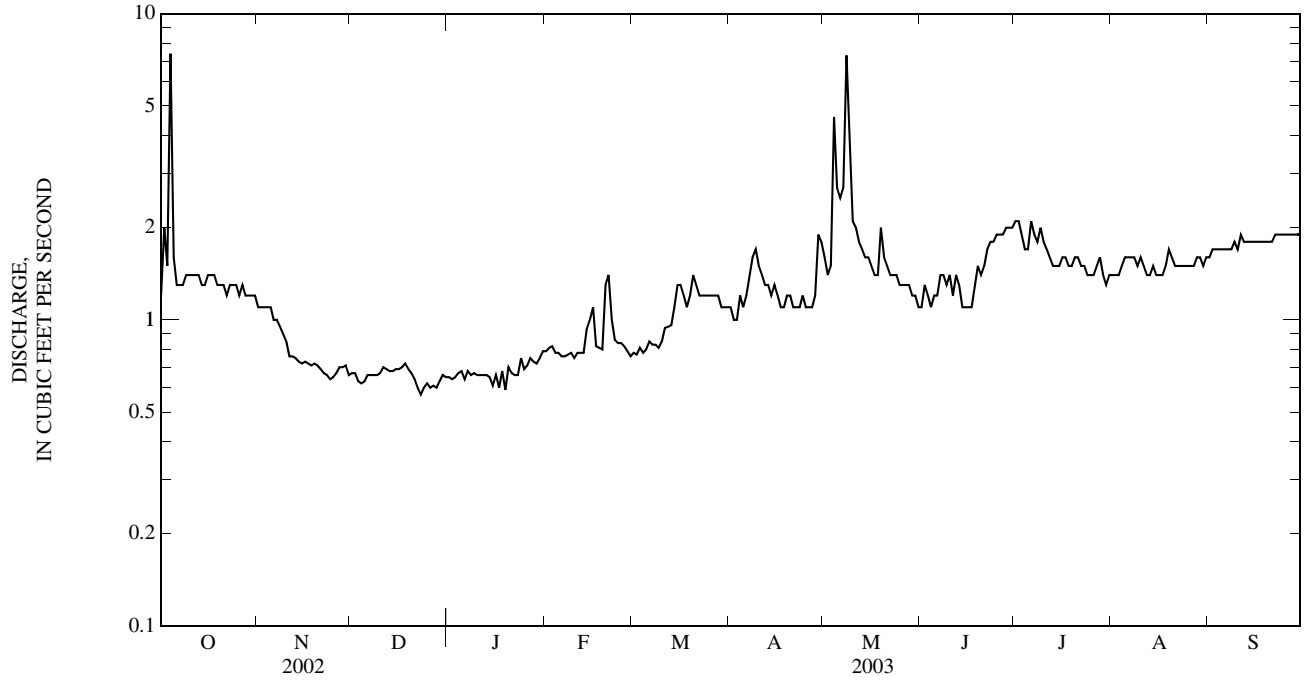
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2003, BY WATER YEAR (WY)

MEAN	1.63	1.73	1.73	1.65	2.19	3.96	2.67	3.20	9.16	4.64	2.53	2.08
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	0.81	0.65	0.68	0.86	1.05	1.21	1.42	1.45	1.21	0.73	0.72
(WY)	(1993)	(2003)	(2003)	(2003)	(2003)	(2003)	(2000)	(1997)	(2003)	(1991)	(2002)	(1992)

06804900 JOHNSON CREEK NEAR MEMPHIS, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1991 - 2003	
ANNUAL TOTAL	568.42		463.90			
ANNUAL MEAN	1.56		1.27		3.05	
HIGHEST ANNUAL MEAN					6.79	1993
LOWEST ANNUAL MEAN					1.27	2003
HIGHEST DAILY MEAN	7.4	Oct 4	7.4	Oct 4	240	Jul 23, 1993
LOWEST DAILY MEAN	0.37	Aug 15	0.57	Dec 23	0.36	Jul 22, 1995
ANNUAL SEVEN-DAY MINIMUM	0.46	Aug 25	0.60	Dec 22	0.46	Aug 25, 2002
MAXIMUM PEAK FLOW			19	Oct 4	*269	Jun 14, 1991
MAXIMUM PEAK STAGE			5.72	Oct 4	10.49	Jun 1, 1994
ANNUAL RUNOFF (AC-FT)	1,130		920		2,210	
10 PERCENT EXCEEDS	2.7		1.8		3.6	
50 PERCENT EXCEEDS	1.3		1.2		1.8	
90 PERCENT EXCEEDS	0.59		0.66		1.0	

e Estimated.
* Stage 10.25 ft.



06805500 PLATTE RIVER AT LOUISVILLE, NE
(National Stream-Quality Accounting Network, NASQAN, station)

(National Water-Quality Assessment, NAWQA, station)

LOCATION.--Lat 41° 00'55", long 96° 09'28", in NW 1/4 NW 1/4 sec.14, T.12 N., R.11 E., Sarpy County, Hydrologic Unit 10200202, on the left bank at the upstream side of bridge on Nebraska Highway 50, 1 mi north of Louisville, and at mile 16.5.

DRAINAGE AREA.--85,370 mi^2, approximately, of which about 71,000 mi^2 contributes directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1953 to current year. October 1961 to September 1973 published as Platte River at South Bend.

REVISED RECORDS.--WDR NE-97-1: Drainage area; 1995.

GAGE.--Water-stage recorder. Datum of gage is 1,007.10 ft above sea level. Dec. 5, 1961 to Sept. 30, 1973 at site 7 mi upstream at datum 31.43 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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,650	4,460	4,720	e3,900	e3,600	e3,500	6,150	15,400	4,570	5,320	2,180	744
2	3,620	4,190	3,550	e3,900	e3,900	e3,500	5,720	12,000	4,680	4,680	1,400	685
3	3,630	4,240	4,070	e3,900	e4,000	e3,800	5,380	11,000	4,420	4,580	1,630	1,130
4	6,220	4,470	4,640	e3,900	e3,600	e4,200	5,390	8,840	4,190	3,930	1,320	1,070
5	5,410	3,990	3,120	e3,900	e3,300	e4,300	5,390	18,700	5,340	3,680	1,340	1,380
6	3,830	4,190	2,070	e3,900	e3,100	e4,900	5,500	26,100	5,580	4,170	1,350	1,240
7	3,390	3,630	3,420	e3,900	e3,100	e5,200	5,910	18,300	5,680	6,350	1,510	1,270
8	3,520	4,050	4,000	e3,800	e3,200	e5,200	6,100	13,300	6,180	6,070	1,570	1,540
9	3,670	4,050	3,890	e3,500	e3,500	e5,400	6,150	13,900	6,060	4,800	1,330	1,610
10	3,410	3,990	3,880	e3,200	e4,400	e5,600	5,830	11,600	6,890	4,180	1,170	2,230
11	3,520	3,770	4,430	e2,900	e4,000	e5,800	6,200	11,200	11,800	4,060	1,300	2,540
12	3,400	3,850	4,890	e2,150	e3,900	e6,600	5,760	9,570	8,950	3,910	1,260	4,090
13	2,970	3,720	4,780	e2,150	e3,900	e6,800	5,950	10,100	10,600	3,440	1,530	4,960
14	2,930	4,270	4,780	e2,150	e4,200	e7,400	5,900	9,070	7,210	3,300	1,700	6,100
15	2,880	4,450	4,860	e2,100	e3,600	e8,400	5,770	8,930	6,390	2,960	1,760	6,010
16	3,030	4,220	5,090	e1,950	e3,400	e9,000	4,800	8,840	5,220	2,890	1,730	4,330
17	3,250	2,930	5,110	e1,900	e4,200	7,230	5,420	8,190	5,300	2,600	1,350	3,100
18	2,840	3,420	4,940	e1,900	e4,800	6,250	5,540	7,380	4,930	2,110	1,360	2,730
19	3,960	3,930	4,980	e1,800	e5,400	6,270	5,470	6,800	6,380	2,110	1,270	2,610
20	3,740	4,000	e4,800	e1,800	e6,200	6,370	6,090	9,270	5,210	2,010	2,020	2,470
21	3,540	3,970	e4,600	e1,900	e6,400	6,600	6,260	8,200	5,020	e1,750	1,900	2,500
22	3,490	4,260	e4,100	e1,950	e5,600	6,610	6,180	6,890	4,900	1,810	1,420	2,140
23	3,610	3,770	e3,100	e2,050	e4,900	6,860	6,340	6,410	6,520	1,710	1,460	2,400
24	3,630	4,470	e3,200	e2,000	e3,900	6,460	6,190	6,830	6,240	2,350	985	2,540
25	3,780	4,010	e3,200	e2,150	e2,900	6,330	5,960	6,590	4,800	1,810	1,030	2,320
26	4,110	3,590	e3,400	e2,250	e2,700	5,490	5,810	6,250	6,270	1,570	967	2,430
27	4,250	4,140	e3,500	e2,800	e3,000	5,550	6,030	5,470	5,390	1,810	1,170	2,440
28	4,070	3,790	e3,400	e3,100	e3,000	5,820	6,910	5,370	5,200	1,430	1,240	2,000
29	4,070	3,670	e3,600	e3,300	---	5,890	6,890	5,720	6,350	1,440	1,380	2,070
30	4,250	4,460	e3,700	e3,400	---	5,820	7,730	5,410	6,070	1,560	1,270	2,150
31	4,620	---	e3,700	e3,600	---	5,950	---	5,280	---	1,850	1,040	---
TOTAL	115,290	119,950	125,520	87,100	111,700	183,100	178,720	306,910	182,340	96,240	43,942	74,829
MEAN	3,719	3,998	4,049	2,810	3,989	5,906	5,957	9,900	6,078	3,105	1,417	2,494
MAX	6,220	4,470	5,110	3,900	6,400	9,000	7,730	26,100	11,800	6,350	2,180	6,100
MIN	2,650	2,930	2,070	1,800	2,700	3,500	4,800	5,280	4,190	1,430	967	685
AC-FT	228,700	237,900	249,000	172,800	221,600	363,200	354,500	608,800	361,700	190,900	87,160	148,400

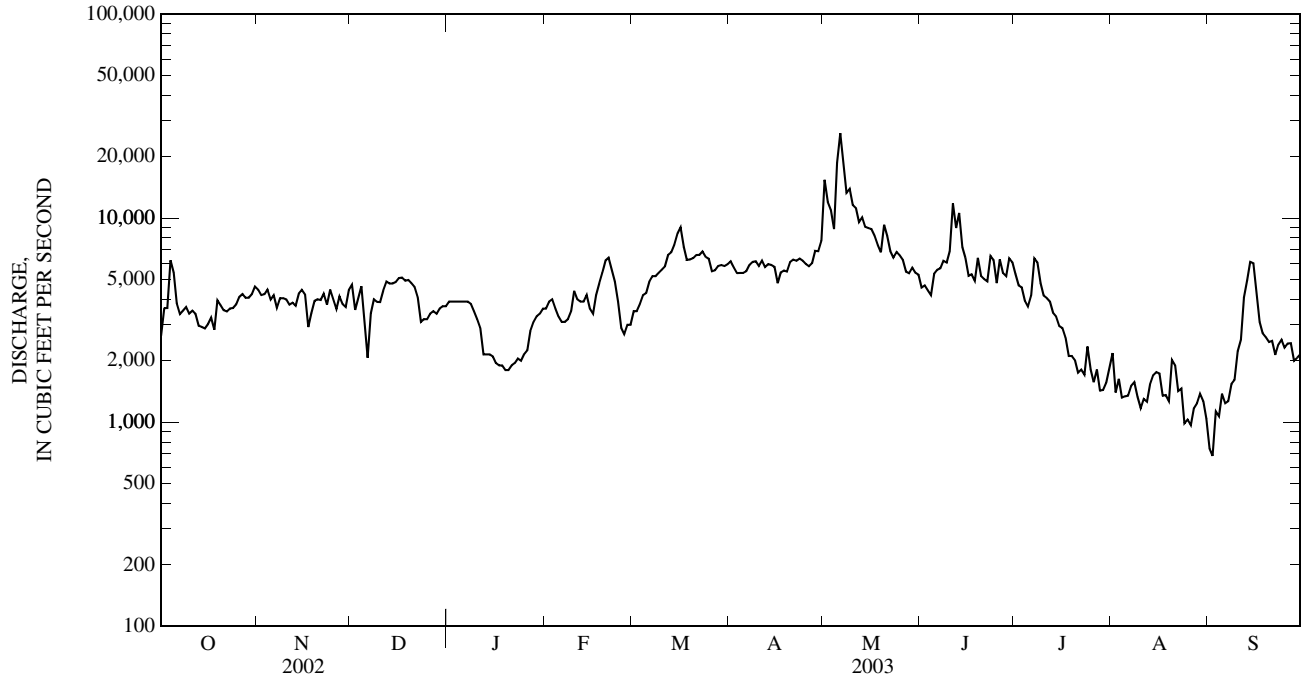
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2003, BY WATER YEAR (WY)

MEAN	5,153	5,515	4,919	4,791	7,474	11,070	9,924	9,880	11,170	6,220	4,104	4,269
MAX	15,630	10,580	10,910	10,810	17,270	27,010	34,250	35,350	39,430	43,440	13,890	12,870
(WY)	(1987)	(1987)	(1985)	(1998)	(1984)	(1993)	(1984)	(1984)	(1984)	(1993)	(1993)	(1993)
MIN	1,604	2,234	1,456	1,822	3,237	4,898	3,701	2,548	2,493	978	519	975
(WY)	(1957)	(1956)	(1956)	(1957)	(1955)	(1957)	(1967)	(1955)	(1981)	(1974)	(1955)	(1955)

06805500 PLATTE RIVER AT LOUISVILLE, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1953 - 2003	
ANNUAL TOTAL	1,555,891		1,625,641			
ANNUAL MEAN	4,263		4,454		7,052	
HIGHEST ANNUAL MEAN					16,210	1984
LOWEST ANNUAL MEAN					2,885	1956
HIGHEST DAILY MEAN	15,300	Mar 15	26,100	May 6	138,000	Jul 25, 1993
LOWEST DAILY MEAN	658	Jul 30	685	Sep 2	131	Sep 3, 1976
ANNUAL SEVEN-DAY MINIMUM	752	Jul 30	1,040	Aug 31	159	Aug 29, 1976
MAXIMUM PEAK FLOW			34,200	May 6	*160,000	Jul 25, 1993
MAXIMUM PEAK STAGE			7.20	May 6	**12.45	Mar 30, 1960
ANNUAL RUNOFF (AC-FT)	3,086,000		3,224,000		5,109,000	
10 PERCENT EXCEEDS	6,930		6,800		12,900	
50 PERCENT EXCEEDS	4,000		4,000		5,310	
90 PERCENT EXCEEDS	1,460		1,590		2,040	

e Estimated.
* Stage 11.90 ft.
** Discharge 124,000 ft^3/s.



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 2002 TO SEPTEMBER 2003

Date	Time	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)
OCT													
10...	1000	3.12	3,000	48	739	10.7	110	8.4	676	--	15.0	148	176
NOV													
15...	1100	3.46	4,170	40	742	12.1	100	9.3	598	5.5	6.0	164	197
DEC													
12...	1000	3.62	4,810	60	737	13.8	99	8.3	654	0.0	0.5	166	201
JAN													
16...	1100	2.75	2,580	13	748	E11.0	--	7.9	766	-7.0	0.0	196	236
FEB													
13...	0930	4.15	7,240	17	743	12.9	90	8.6	649	-3.5	-0.2	176	212
MAR													
13...	1200	4.09	7,140	65	744	13.2	97	8.0	520	6.0	1.5	152	183
APR													
18...	1000	3.73	5,540	E61	733	10.2	99	8.4	592	--	12.2	158	172
MAY													
02...	0930	5.00	11,200	3,600	739	7.5	73	8.0	469	13.3	13.1	125	151
15...	1000	4.57	9,210	640	735	8.5	91	7.8	518	14.0	17.1	163	199
30...	0900	3.62	5,080	110	729	8.5	101	8.4	695	22.4	21.5	173	178
JUN													
12...	1030	4.29	8,100	2,800	732	7.0	81	8.0	409	19.7	19.9	124	151
26...	1200	3.98	7,190	730	740	8.1	95	8.4	596	24.0	21.5	190	213
JUL													
11...	1000	3.33	3,740	440	737	6.9	88	8.4	506	24.0	25.6	175	198
24...	1000	3.03	2,850	100	738	10.0	119	8.8	460	21.5	22.5	170	200
AUG													
07...	1030	2.78	1,940	78	736	9.1	114	8.9	435	27.0	25.0	168	189
21...	1000	2.79	2,230	76	732	9.0	118	8.2	706	28.7	26.8	161	176
SEP													
04...	1200	2.12	1,000	27	743	10.4	126	8.6	1,400	27.7	23.1	200	201
19...	1000	2.83	2,580	160	742	10.9	109	8.8	753	11.5	14.0	158	192

06805500 PLATTE RIVER AT LOUISVILLE, NE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Orthophosphate, water, fltrd, mg/L (00660)
OCT													
10...	2	79.8	57.1	1.4	0.12	0.09	3.25	0.73	0.79	0.168	0.051	1.4	0.432
NOV													
15...	2	57.0	43.9	0.76	0.16	0.12	6.36	1.44	1.45	0.056	0.017	0.64	0.782
DEC													
12...	--	61.4	54.9	1.0	0.38	0.29	6.67	1.51	1.53	0.076	0.023	0.73	0.767
JAN													
16...	1	82.8	60.2	0.37	0.16	0.12	8.12	1.83	1.86	0.089	0.027	0.24	0.825
FEB													
13...	1	54.1	61.0	0.47	0.17	0.13	7.22	1.63	1.67	0.118	0.036	0.34	0.699
MAR													
13...	1	35.4	53.5	1.0	0.24	0.18	7.11	1.61	1.64	0.105	0.032	0.84	0.797
APR													
18...	10	53.0	57.3	1.4	--	<0.04	--	--	<0.06	--	E.007	--	0.239
MAY													
02...	0.0	--	--	13	0.68	0.53	7.37	1.67	1.74	0.237	0.072	12	1.06
15...	0.0	19.9	55.1	2.8	--	E.03	8.44	1.91	1.95	0.128	0.039	--	0.920
30...	16	--	--	2.1	--	<0.04	0.775	0.18	0.20	0.072	0.022	--	0.184
JUN													
12...	--	21.3	37.7	9.3	0.09	0.07	8.27	1.87	1.97	0.348	0.106	9.2	0.601
26...	9	--	--	3.8	--	<0.04	5.74	1.30	1.33	0.115	0.035	--	0.629
JUL													
11...	8	66.0	59.1	2.5	--	<0.04	8.11	1.83	1.85	0.059	0.018	--	0.883
24...	3	--	--	1.6	--	<0.04	--	--	<0.06	--	<0.008	--	0.380
AUG													
07...	8	85.7	50.4	1.7	--	<0.04	--	--	<0.06	--	E.007	--	0.497
21...	10	--	--	1.9	--	<0.04	--	--	<0.06	0.039	0.012	--	0.711
SEP													
04...	21	276	84.3	1.4	--	<0.04	0.491	0.11	0.15	0.118	0.036	--	0.935
19...	0.0	--	--	3.1	--	<0.04	1.70	0.39	0.43	0.141	0.043	--	0.767

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)
OCT													
10...	0.14	0.78	0.37	2.2	4.5	<0.1	4.5	3.1	<0.006	E.028	0.010	<0.004	<0.005
NOV													
15...	0.26	0.46	0.36	2.2	3.0	<0.1	3.0	2.0	<0.006	E.016	<0.006	<0.004	<0.005
DEC													
12...	0.25	0.58	0.37	2.6	4.4	<0.1	4.4	2.4	<0.006	E.019	<0.006	<0.004	<0.005
JAN													
16...	0.27	0.11	0.32	2.2	0.7	<0.1	0.7	2.9	<0.006	E.024	<0.006	<0.004	<0.005
FEB													
13...	0.23	0.15	0.28	2.1	1.1	<0.1	1.1	2.3	<0.006	E.022	<0.006	<0.004	<0.005
MAR													
13...	0.26	0.38	0.44	2.7	2.8	<0.1	2.8	2.8	<0.006	E.026	<0.010	<0.004	<0.005
APR													
18...	0.08	1.08	0.37	--	7.1	<0.1	7.1	3.5	<0.006	E.025	0.022	0.007	<0.005
MAY													
02...	0.35	--	4.54	14	--	--	--	--	<0.006	E.145	14.2	0.798	<0.005
15...	0.30	2.24	0.99	4.8	18.1	0.1	17.9	6.4	<0.006	E.135	0.853	0.105	<0.005
30...	0.06	--	0.49	2.3	--	--	--	--	<0.006	E.115	0.161	0.018	<0.005
JUN													
12...	0.20	4.22	3.77	11	35.8	0.4	35.5	5.6	<0.006	E.433	5.92	0.505	<0.005
26...	0.20	--	1.27	5.2	--	--	--	--	<0.006	E.057	0.121	0.030	<0.005
JUL													
11...	0.29	1.72	0.89	4.3	14.6	E.3	E14.3	4.8	<0.006	E.127	0.171	0.010	<0.005
24...	0.12	--	0.52	--	--	--	--	--	<0.006	E.055	0.022	<0.004	<0.005
AUG													
07...	0.16	1.58	0.47	--	10.4	<0.1	10.3	3.6	<0.006	E.025	0.011	<0.004	<0.005
21...	0.23	--	0.57	--	--	--	--	--	<0.006	E.018	0.008	<0.004	<0.005
SEP													
04...	0.30	1.06	0.55	1.5	6.1	<0.1	6.1	3.6	<0.006	E.023	0.007	<0.004	<0.005
19...	0.25	--	0.73	3.6	--	--	--	--	<0.006	E.032	0.020	<0.007	<0.005

06805500 PLATTE RIVER AT LOUISVILLE, NE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Atrazine, water, fltrd, ug/L (39632)	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)
OCT													
10...	0.150	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	E.009	<0.003	<0.004	E.004	<0.005
NOV													
15...	0.042	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.004	<0.005	<0.005
DEC													
12...	0.046	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.004	<0.006	<0.005
JAN													
16...	0.060	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.004	<0.005	<0.005
FEB													
13...	0.054	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.004	<0.005	<0.005
MAR													
13...	0.050	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.004	<0.005	<0.005
APR													
18...	0.071	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.004	<0.005	<0.005
MAY													
02...	14.1	<0.050	<0.010	<0.002	<0.041	<0.020	<0.010	<0.006	<0.030	<0.003	<0.004	<0.005	<0.005
15...	3.80	<0.050	<0.010	<0.002	<0.041	<0.025	0.007	<0.006	E.018	E.003	<0.004	<0.005	<0.005
30...	1.96	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	E.005	<0.003	<0.004	E.003	<0.005
JUN													
12...	11.8	<0.050	<0.010	<0.002	<0.041	<0.020	<0.010	<0.006	<0.100	<0.003	<0.004	E.004	<0.005
26...	2.00	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.004	E.004	<0.005
JUL													
11...	2.02	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.004	0.005	<0.005
24...	0.563	<0.050	<0.010	<0.002	<0.041	<0.020	E.003	<0.006	<0.018	<0.003	<0.004	<0.005	<0.005
AUG													
07...	0.262	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.004	<0.005	<0.005
21...	0.183	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.004	0.007	<0.005
SEP													
04...	0.223	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.004	0.007	<0.005
19...	0.169	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.004	E.004	<0.005

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)
OCT													
10...	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006
NOV													
15...	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006
DEC													
12...	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006
JAN													
16...	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006
FEB													
13...	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006
MAR													
13...	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006
APR													
18...	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006
MAY													
02...	<0.02	0.004	<0.009	<0.005	<0.009	<0.005	<0.005	E.016	<0.003	<0.004	<0.035	<0.027	<0.006
15...	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006
30...	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006
JUN													
12...	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	E.008	<0.003	<0.004	<0.035	<0.027	<0.006
26...	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006
JUL													
11...	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006
24...	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006
AUG													
07...	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006
21...	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006
SEP													
04...	<0.02	<0.002	<0.009	<0.005	<0.009	<0.005	<0.005	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006
19...	<0.02	<0.002	<0.009	<0.005	E.004	<0.005	<0.005	<0.007	<0.003	<0.004	<0.035	<0.027	<0.006

06805500 PLATTE RIVER AT LOUISVILLE, NE—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd 0.7u GF ug/L (82671)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	p,p-' DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prometon, water, fltrd, ug/L (04037)	Pronamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)
OCT													
10...	0.024	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	E.01	<0.004	<0.010	<0.011
NOV													
15...	E.011	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	E.01	<0.004	<0.010	<0.011
DEC													
12...	E.003	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	<0.01	<0.004	<0.010	<0.011
JAN													
16...	E.007	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	M	<0.004	<0.010	<0.011
FEB													
13...	0.014	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	<0.01	<0.004	<0.010	<0.011
MAR													
13...	0.015	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	<0.01	<0.004	<0.010	<0.011
APR													
18...	0.026	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	E.01	<0.004	<0.010	<0.011
MAY													
02...	4.54	0.029	<0.002	<0.007	<0.003	<0.010	<0.004	E.017	<0.011	0.02	<0.004	<0.010	<0.300
15...	1.46	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	0.02	<0.004	<0.010	<0.011
30...	0.399	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	E.01	<0.004	<0.010	<0.011
JUN													
12...	2.78	0.105	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	E.01	<0.004	<0.010	<0.011
26...	0.434	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	0.02	<0.004	<0.010	<0.011
JUL													
11...	0.407	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	E.01	<0.004	<0.010	<0.011
24...	0.092	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	E.01	<0.004	<0.010	<0.011
AUG													
07...	0.038	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	<0.01	<0.004	<0.010	<0.011
21...	0.034	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	0.02	<0.004	<0.010	<0.011
SEP													
04...	0.022	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	E.01	<0.004	<0.010	<0.011
19...	0.113	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	E.01	<0.004	<0.010	<0.011

06805500 PLATTE RIVER AT LOUISVILLE, NE—Continued

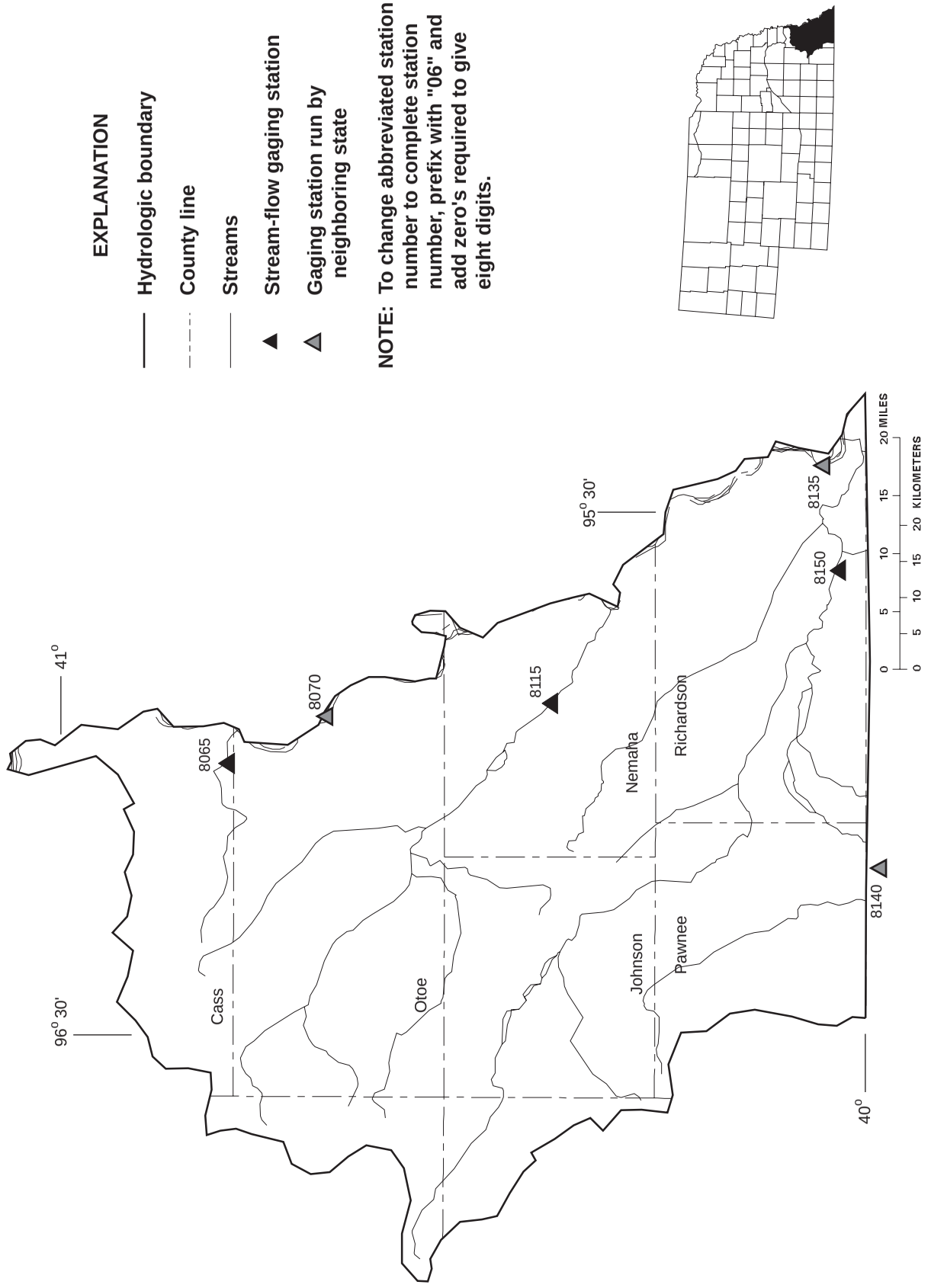
WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Propargite, water, fltrd 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	Triallate, water, fltrd 0.7u GF ug/L (82678)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
OCT											
10...	<0.02	E.004	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	72	112	907
NOV											
15...	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	--	106	1,200
DEC											
12...	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	84	103	1,340
JAN											
16...	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	--	408	2,840
FEB											
13...	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	11	330	6,450
MAR											
13...	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	--	321	6,180
APR											
18...	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	73	137	2,050
MAY											
02...	<0.02	0.028	<0.02	<0.034	<0.02	<0.005	<0.002	0.014	90	3,740	113,000
15...	<0.02	0.016	<0.02	<0.034	<0.02	<0.005	<0.002	E.003	--	863	21,500
30...	<0.02	0.009	E.01	<0.034	<0.02	<0.005	<0.002	<0.009	--	347	4,760
JUN											
12...	<0.02	0.045	<0.02	<0.034	<0.02	<0.005	<0.002	E.008	--	3,020	66,000
26...	<0.02	0.010	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	--	--	--
JUL											
11...	<0.02	0.013	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	82	501	5,060
24...	<0.02	0.009	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	--	419	3,220
AUG											
07...	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	70	178	932
21...	<0.02	0.007	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	--	274	1,650
SEP											
04...	<0.29	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	94	70	189
19...	<0.05	E.004	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	--	--	--

Remark codes used in this table:
< -- Less than
E -- Estimated value
M -- Presence verified, not quantified

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SURFACE-WATER DISCHARGE RECORDS
MISSOURI RIVER BASIN
MISSOURI RIVER AND AND TRIBUTARIES



*Station number	Station name	Page
	WEEPING WATER CREEK BASIN	
8065	Weeping Water Creek at Union	276
	MISSOURI RIVER MAIN STEM	
8070	Missouri River at Nebraska City	278
	LITTLE NEMAHA RIVER BASIN	
8115	Little Nemaha River at Auburn	280
	MISSOURI RIVER MAIN STEM	
8135	Missouri River at Rulo	282
	BIG NEMAHA RIVER BASIN	
8140	Turkey Creek near Seneca, KS	284
8150	Big Nemaha River at Falls City	286

*NOTE: To change abbreviated station number to complete station number, prefix with “06” and add zeros required to give eight digits.

06806500 WEEPING WATER CREEK AT UNION, NE

LOCATION.--Lat 40° 47'35", long 95° 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 mi^2.

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 fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	30	26	26	28	25	25	34	29	18	9.6	2.8
2	75	26	25	25	27	26	24	32	31	18	9.5	3.5
3	115	26	24	28	27	26	24	31	34	17	9.2	2.3
4	139	25	25	26	28	27	25	33	32	16	8.9	1.8
5	126	26	24	27	24	e26	25	34	31	15	8.7	1.9
6	44	25	26	26	23	25	25	34	32	16	7.7	2.9
7	30	24	24	30	25	24	30	33	31	16	7.2	2.9
8	26	24	24	28	22	23	31	49	33	15	6.3	2.7
9	24	25	27	27	22	28	28	414	31	15	6.1	2.9
10	23	24	24	27	22	25	27	105	29	16	6.6	4.0
11	22	23	24	33	21	25	26	72	29	15	7.2	3.7
12	21	23	25	28	22	28	26	61	30	14	7.1	5.2
13	20	23	24	24	22	28	26	54	66	13	6.6	4.3
14	20	24	25	25	24	28	25	76	49	13	6.6	4.8
15	20	24	26	24	27	30	25	54	35	13	6.6	5.4
16	20	24	26	25	33	30	26	44	30	12	6.6	4.7
17	21	24	26	28	30	31	26	41	28	12	6.3	4.2
18	22	24	27	25	26	32	26	40	63	11	5.7	3.5
19	22	23	26	e26	28	33	27	100	183	10	4.6	3.7
20	21	23	25	e25	e26	41	27	110	24	10	5.1	3.4
21	20	23	24	25	e24	39	27	60	21	10	5.2	3.8
22	20	23	27	25	e22	33	26	50	22	9.4	5.2	4.2
23	20	24	25	26	e20	30	26	46	31	9.0	4.7	4.5
24	23	24	22	25	e22	28	27	44	33	8.9	4.6	3.9
25	27	23	24	27	e22	27	29	42	24	8.7	4.4	3.4
26	27	23	24	27	e24	26	28	41	21	8.6	3.3	3.3
27	26	24	23	27	24	26	29	38	20	8.4	2.9	3.5
28	26	25	24	27	24	26	28	e37	20	10	2.8	3.6
29	26	25	25	26	---	25	29	e34	19	9.3	3.4	3.3
30	30	25	26	26	---	24	36	32	18	9.1	2.8	3.3
31	34	---	28	27	---	24	---	30	---	8.9	2.7	---
TOTAL	1,101	729	775	821	689	869	809	1,905	1,079	385.3	184.2	107.4
MEAN	35.5	24.3	25.0	26.5	24.6	28.0	27.0	61.5	36.0	12.4	5.94	3.58
MAX	139	30	28	33	33	41	36	414	183	18	9.6	5.4
MIN	11	23	22	24	20	23	24	30	18	8.4	2.7	1.8
AC-FT	2,180	1,450	1,540	1,630	1,370	1,720	1,600	3,780	2,140	764	365	213

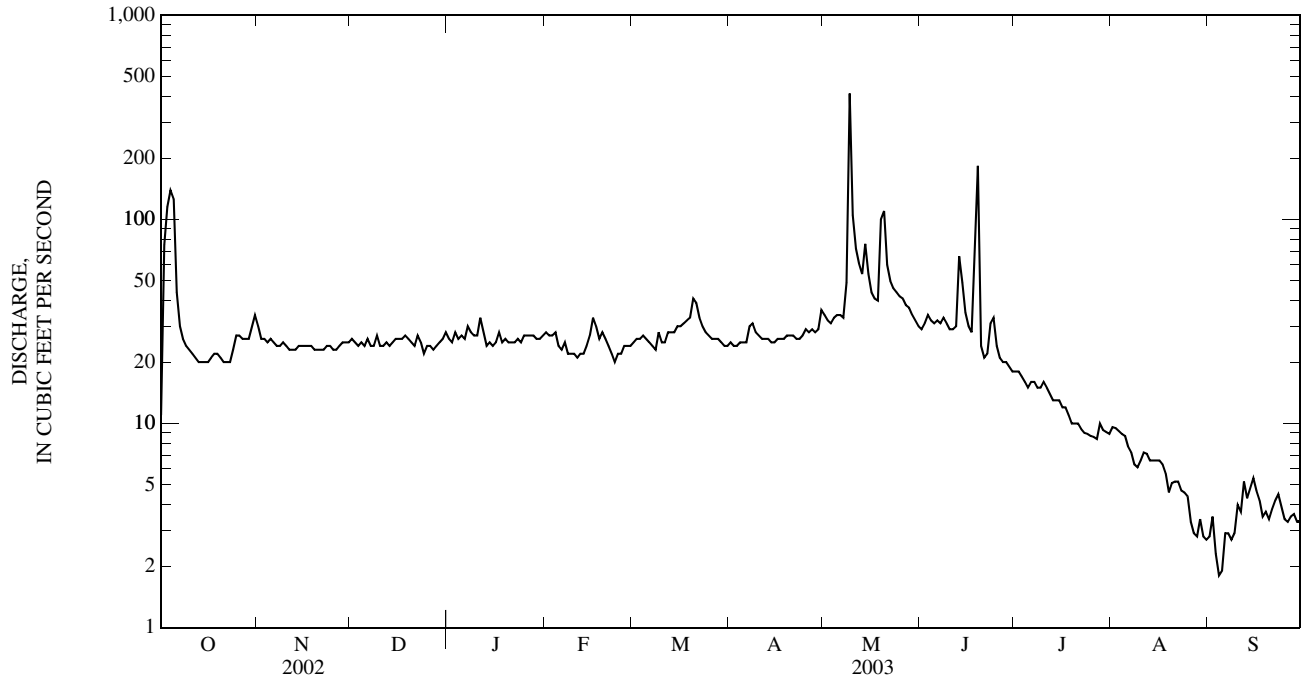
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2003, BY WATER YEAR (WY)

MEAN	60.3	45.7	39.8	41.2	81.3	126	112	178	202	181	90.7	67.3
MAX	579	148	136	177	301	1,049	437	678	1,603	2,688	507	470
(WY)	(1987)	(1974)	(1987)	(1974)	(1971)	(1979)	(1999)	(1987)	(1984)	(1993)	(1987)	(1989)
MIN	0.55	1.26	2.09	2.01	4.16	7.57	4.60	3.15	2.39	1.49	0.70	2.21
(WY)	(1957)	(1957)	(1957)	(1957)	(1957)	(1956)	(1956)	(1956)	(1956)	(1954)	(1955)	(1976)

06806500 WEEPING WATER CREEK AT UNION, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1951 - 2003	
ANNUAL TOTAL	17,148.1		9,453.9			
ANNUAL MEAN	47.0		25.9		102	
HIGHEST ANNUAL MEAN					433	1993
LOWEST ANNUAL MEAN					19.9	1956
HIGHEST DAILY MEAN	2,880	Aug 23	414	May 9	34,000	Jul 23, 1993
LOWEST DAILY MEAN	4.0	Aug 7	1.8	Sep 4	0.10	Sep 10, 1955
ANNUAL SEVEN-DAY MINIMUM	4.2	Aug 6	2.5	Sep 3	0.13	Sep 9, 1955
MAXIMUM PEAK FLOW			912	May 9	65,100	Jul 23, 1993
MAXIMUM PEAK STAGE			10.27	May 9	30.97	Jul 23, 1993
ANNUAL RUNOFF (AC-FT)	34,010		18,750		74,040	
10 PERCENT EXCEEDS	45		34		168	
50 PERCENT EXCEEDS	26		25		39	
90 PERCENT EXCEEDS	8.2		4.7		9.3	

e Estimated.



06807000 MISSOURI RIVER AT NEBRASKA CITY, NE

LOCATION.--Lat 40° 40'55", long 95° 50'48", in NW$^{1}/_{4}$ NE$^{1}/_{4}$ 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 mi^2, approximately. The 3,959 mi^2 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 414,000 ft^3/s Apr. 19, 1952; maximum gage height, 27.66 ft Apr. 18, 1952; minimum discharge, 1,600 ft^3/s Dec. 31, 1946 (discharge measurement); minimum gage height observed, -0.28 ft Dec. 24, 1960, result of freezeup.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34,600	35,600	23,600	19,700	18,800	16,800	32,100	42,900	35,600	45,600	30,100	26,600
2	36,800	35,200	22,300	19,600	18,600	20,300	32,600	42,100	35,500	44,500	30,500	26,300
3	36,600	34,800	20,600	19,500	19,600	21,900	32,400	41,400	35,200	43,300	29,900	26,300
4	37,800	34,200	20,800	19,900	20,000	22,400	32,300	39,700	34,800	42,100	29,800	27,300
5	40,000	34,000	20,900	20,500	20,200	22,100	32,600	51,700	34,700	40,800	29,500	29,300
6	38,000	33,500	18,800	20,700	20,200	21,300	32,600	62,900	35,400	41,800	29,600	30,900
7	36,500	33,400	17,500	20,700	19,700	19,600	33,100	52,500	35,000	48,500	29,800	31,500
8	35,900	33,400	19,100	20,100	21,700	17,400	33,300	47,500	36,000	50,000	30,300	31,700
9	36,300	33,300	20,000	20,100	22,700	19,100	32,800	47,000	36,200	44,800	29,800	32,200
10	36,400	33,000	19,800	21,000	21,200	21,500	32,500	45,900	36,800	43,700	29,800	32,800
11	35,800	32,900	19,600	20,900	20,900	19,800	32,500	45,100	42,700	49,800	30,200	34,000
12	36,500	32,700	20,200	18,800	19,400	17,900	33,100	44,500	47,100	54,600	30,000	37,000
13	36,100	32,500	20,700	e16,200	18,200	21,800	33,000	43,800	43,800	48,900	29,500	39,300
14	35,800	32,300	20,500	e16,000	18,900	25,500	33,300	44,100	40,900	44,100	28,800	39,000
15	36,000	32,700	20,400	18,000	20,500	28,100	33,300	44,000	38,500	41,900	27,200	37,600
16	35,700	32,800	20,400	17,600	22,200	30,500	33,400	43,400	37,100	39,600	25,300	36,000
17	35,900	32,400	20,700	15,700	23,100	27,700	32,400	42,900	36,200	38,000	24,400	34,700
18	35,900	31,600	20,800	e15,500	21,400	23,900	33,600	41,900	35,900	36,100	24,400	33,900
19	36,100	32,100	20,600	e15,600	21,700	25,200	34,000	41,400	36,300	34,900	26,100	33,300
20	36,500	32,400	20,600	e16,400	22,200	28,900	34,000	41,200	36,200	34,200	27,400	33,000
21	36,100	32,500	21,200	17,300	23,400	31,500	34,400	42,500	34,500	33,200	28,000	33,000
22	36,200	32,700	21,300	18,700	29,100	31,500	34,400	40,500	34,400	32,800	27,700	32,800
23	36,100	32,900	19,500	19,300	35,700	30,700	34,700	39,300	36,400	32,400	27,200	31,500
24	36,100	32,700	18,200	18,300	28,500	29,800	34,800	39,100	38,500	31,900	26,900	31,500
25	36,300	33,400	18,100	18,400	22,500	30,000	33,800	39,000	38,000	31,800	26,500	31,200
26	36,300	32,800	18,100	18,000	18,700	30,000	33,300	38,400	44,300	30,900	26,700	30,800
27	36,200	31,000	17,300	18,300	16,300	29,700	33,200	38,200	48,900	30,600	26,700	30,400
28	36,300	29,100	17,100	19,300	15,800	30,100	33,000	37,500	49,900	31,000	26,800	30,500
29	36,500	26,400	18,500	19,700	---	31,300	33,200	37,500	48,400	30,800	26,800	30,200
30	37,200	24,500	19,300	19,700	---	32,200	34,500	37,100	46,600	30,200	26,700	30,000
31	36,700	---	19,700	20,200	---	31,900	---	36,400	---	30,100	26,800	---
TOTAL	1,129,200	972,800	616,200	579,700	601,200	790,400	998,200	1,331,400	1,169,800	1,212,900	869,200	964,600
MEAN	36,430	32,430	19,880	18,700	21,470	25,500	33,270	42,950	38,990	39,130	28,040	32,150
MAX	40,000	35,600	23,600	21,000	35,700	32,200	34,800	62,900	49,900	54,600	30,500	39,300
MIN	34,600	24,500	17,100	15,500	15,800	16,800	32,100	36,400	34,400	30,100	24,400	26,300
AC-FT	2,240,000	1,930,000	1,222,000	1,150,000	1,192,000	1,568,000	1,980,000	2,641,000	2,320,000	2,406,000	1,724,000	1,913,000
CFSM	0.09	0.08	0.05	0.05	0.05	0.06	0.08	0.10	0.10	0.10	0.07	0.08
IN.	0.10	0.09	0.06	0.05	0.05	0.07	0.09	0.12	0.11	0.11	0.08	0.09

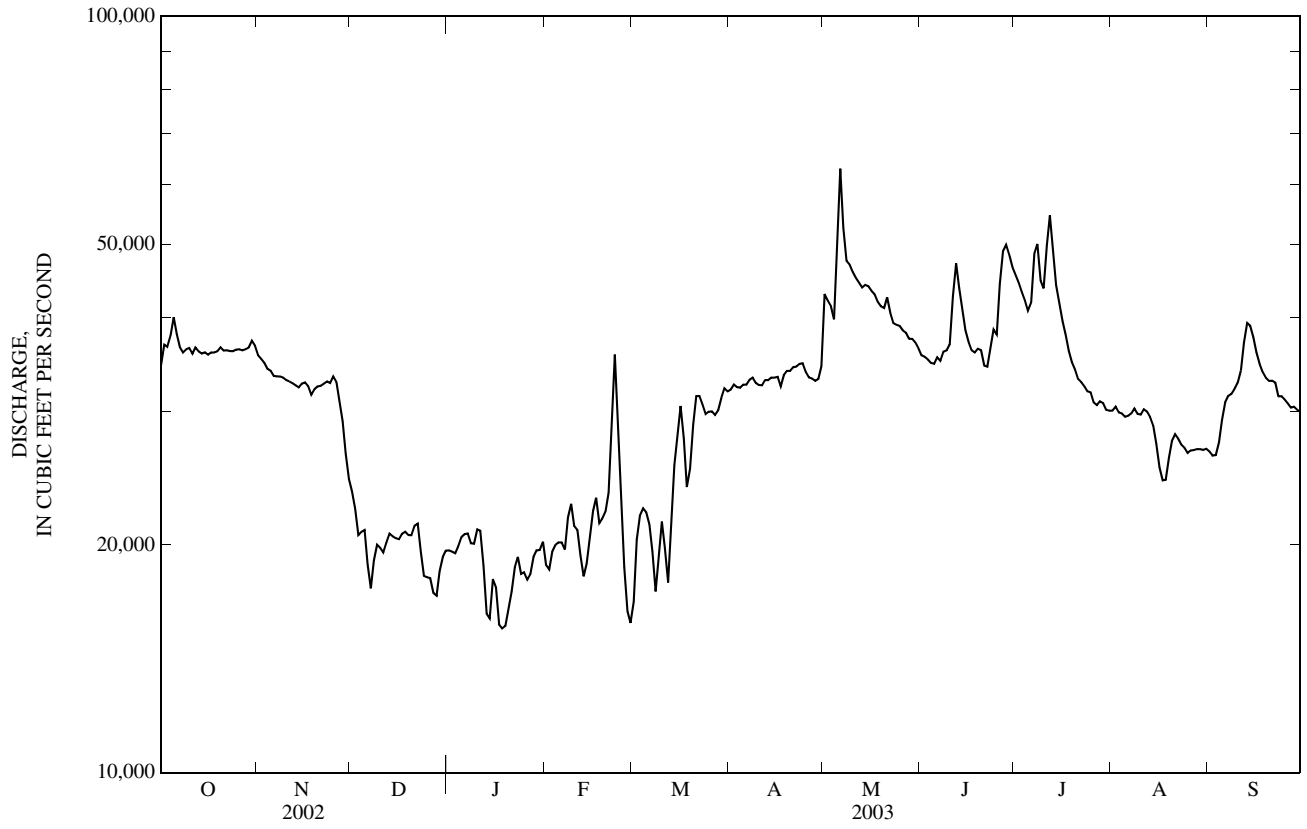
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2003, BY WATER YEAR (WY)

MEAN	42,700	38,900	25,510	21,480	26,470	37,660	47,540	47,610	51,910	46,100	42,360	42,320
MAX	76,760	79,410	52,410	39,970	48,630	66,730	98,960	90,280	117,500	116,700	71,540	73,410
(WY)	(1998)	(1998)	(1987)	(1987)	(1983)	(1983)	(1997)	(1997)	(1984)	(1993)	(1996)	(1997)
MIN	22,420	14,380	10,510	10,160	12,780	15,310	21,850	32,470	33,530	28,830	28,040	32,150
(WY)	(1962)	(1962)	(1956)	(1957)	(1957)	(1957)	(1957)	(1955)	(1958)	(2002)	(2003)	(2003)

06807000 MISSOURI RIVER AT NEBRASKA CITY, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1953 - 2003a	
ANNUAL TOTAL	10,950,600		11,235,600			
ANNUAL MEAN	30,000		30,780		39,240	
HIGHEST ANNUAL MEAN					66,450	1997
LOWEST ANNUAL MEAN					25,370	1957
HIGHEST DAILY MEAN	51,200	Aug 23	62,900	May 6	188,000	Jul 25, 1993
LOWEST DAILY MEAN	17,100	Dec 28	15,500	Jan 18b	4,320	Jan 11, 1957
ANNUAL SEVEN-DAY MINIMUM	18,100	Dec 24	16,400	Jan 13	5,590	Nov 29, 1955
MAXIMUM PEAK FLOW			65,900	May 6	196,000	Jul 23, 1993
MAXIMUM PEAK STAGE			14.09	May 6	27.19	Jul 23, 1993
INSTANTANEOUS LOW FLOW			14,600	Jan 18		
ANNUAL RUNOFF (AC-FT)	21,720,000		22,290,000		28,430,000	
ANNUAL RUNOFF (CFSM)	0.073		0.075		0.096	
ANNUAL RUNOFF (INCHES)	0.99		1.02		1.30	
10 PERCENT EXCEEDS	36,200		42,000		61,400	
50 PERCENT EXCEEDS	32,400		32,200		37,000	
90 PERCENT EXCEEDS	20,600		19,300		18,000	

a Post regulation.
b Ice affected.
e Estimated.



06811500 LITTLE NEMAHA RIVER AT AUBURN, NE

LOCATION.--Lat 40° 23'33", long 95° 48'46", in NE 1/4 NW 1/4 sec.23, T.5 N., R.14 E., Nemaha County, Hydrologic Unit 10240006, on left bank at upstream 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 mi^2.

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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	75	61	67	e38	e50	53	91	60	207	31	24
2	49	60	60	65	e36	e60	52	69	75	173	28	23
3	85	58	56	70	e35	e80	49	59	79	150	23	20
4	229	54	51	70	e35	71	49	61	72	133	22	19
5	278	60	54	60	e36	e73	52	55	65	120	20	18
6	159	55	e61	50	e34	73	56	49	64	106	18	16
7	93	54	e63	50	e34	e89	76	50	64	96	17	16
8	69	54	62	52	e35	72	83	220	67	87	17	15
9	54	53	63	51	e34	101	72	2,200	63	78	17	19
10	46	53	60	46	e36	177	64	580	3,190	70	16	23
11	43	50	73	42	e41	86	60	275	988	62	17	27
12	41	50	64	e36	e46	50	56	186	5,370	56	21	28
13	37	52	61	e34	e49	51	54	147	5,220	48	16	29
14	39	55	59	e35	e44	48	53	132	1,480	40	15	27
15	38	54	61	e36	e40	49	51	129	777	37	13	22
16	39	56	64	e37	e37	50	57	112	474	32	12	21
17	46	53	65	e36	e48	45	58	97	357	38	13	20
18	44	55	60	e39	e54	44	60	87	374	33	11	22
19	40	53	54	e40	e63	52	68	969	1,020	30	156	26
20	39	56	49	e36	e56	81	66	1,200	386	32	177	26
21	40	55	45	e35	e54	98	59	359	268	30	37	26
22	38	56	e45	e34	e57	70	52	198	232	27	23	27
23	44	57	e45	e34	e46	55	51	150	4,370	25	19	25
24	55	55	e44	e35	e43	45	65	126	1,990	24	16	24
25	78	51	e45	e35	e43	38	66	112	1,050	23	14	22
26	67	56	e49	e35	e42	34	59	98	660	22	15	23
27	59	53	e56	e34	e44	46	52	89	430	19	16	23
28	63	61	e64	e35	e50	57	48	80	305	23	20	23
29	61	62	69	e36	---	57	53	73	262	24	21	24
30	81	59	67	e37	---	57	79	68	329	23	18	26
31	92	---	66	e36	---	56	---	62	---	24	21	---
TOTAL	2,185	1,675	1,796	1,338	1,210	2,015	1,773	8,183	30,141	1,892	880	684
MEAN	70.5	55.8	57.9	43.2	43.2	65.0	59.1	264	1,005	61.0	28.4	22.8
MAX	278	75	73	70	63	177	83	2,200	5,370	207	177	29
MIN	37	50	44	34	34	34	48	49	60	19	11	15
AC-FT	4,330	3,320	3,560	2,650	2,400	4,000	3,520	16,230	59,780	3,750	1,750	1,360

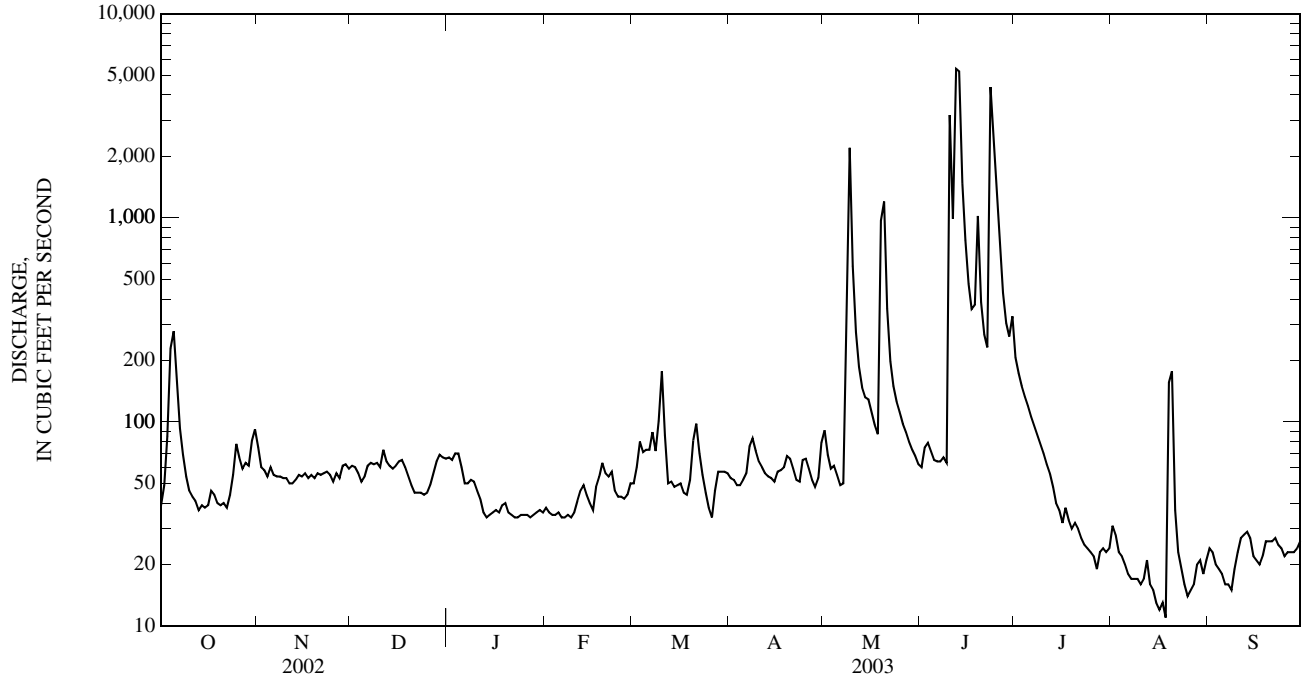
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2003, BY WATER YEAR (WY)

MEAN	214	133	112	115	221	442	361	597	560	573	218	230
MAX	2,003	493	509	562	747	2,870	1,589	2,949	3,524	9,419	1,256	1,546
(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	22.8
(WY)	(1992)	(1956)	(1957)	(1957)	(1956)	(1957)	(1956)	(1956)	(1977)	(1977)	(1955)	(2003)

06811500 LITTLE NEMAHA RIVER AT AUBURN, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1950 - 2003	
ANNUAL TOTAL	34,241		53,772			
ANNUAL MEAN	93.8		147		315	
HIGHEST ANNUAL MEAN					1,389	1993
LOWEST ANNUAL MEAN					64.4	1981
HIGHEST DAILY MEAN	1,600	May 12	5,370	Jun 12	70,400	Jul 24, 1993
LOWEST DAILY MEAN	15	Aug 1	11	Aug 18	0.87	Jul 6, 1977
ANNUAL SEVEN-DAY MINIMUM	16	Jul 31	14	Aug 12	1.1	Jul 3, 1977
MAXIMUM PEAK FLOW			17,600	Jun 12	164,000	May 9, 1950
MAXIMUM PEAK STAGE			21.17	Jun 12	*27.65	May 9, 1950
ANNUAL RUNOFF (AC-FT)	67,920		106,700		228,500	
10 PERCENT EXCEEDS	123		165		468	
50 PERCENT EXCEEDS	63		53		98	
90 PERCENT EXCEEDS	27		22		34	

e Estimated.
* From floodmark.



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 mi^2, approximately. The 3,959 mi^2 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 358,000 ft^3/s Apr. 22, 1952, gage height, 25.60 ft; minimum daily discharge, 4,420 ft^3/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 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34,900	37,000	24,700	20,500	20,600	16,900	32,500	38,700	38,600	46,200	31,700	27,800
2	36,200	36,500	24,000	20,600	19,600	18,200	32,500	48,800	38,100	45,100	31,800	27,400
3	37,900	36,100	22,700	20,500	19,400	20,900	32,600	44,600	38,300	44,000	31,600	27,200
4	38,300	35,700	21,500	20,400	20,200	22,100	32,300	43,100	37,700	43,100	31,300	27,400
5	40,900	35,000	21,500	20,700	20,600	22,100	32,400	45,000	37,500	42,100	31,100	28,600
6	41,200	34,500	21,400	21,300	20,700	22,100	32,900	60,200	37,600	41,300	30,900	30,300
7	39,000	34,400	19,900	21,300	20,700	21,500	33,400	60,700	37,500	44,500	30,900	31,500
8	37,800	34,300	18,900	21,200	20,600	19,600	33,900	51,700	37,400	51,700	31,200	31,900
9	37,400	34,400	19,900	20,700	22,200	17,900	34,200	58,300	38,200	48,300	31,100	32,100
10	37,700	34,100	20,600	20,700	22,700	19,700	33,600	53,200	42,800	44,400	30,500	32,400
11	37,300	33,900	20,500	21,100	21,700	21,400	33,400	49,100	42,300	46,300	30,400	32,800
12	37,000	33,900	20,300	20,800	21,400	20,000	33,700	48,100	52,200	54,500	30,600	34,500
13	37,100	33,900	20,800	19,000	20,000	18,900	34,000	47,100	62,800	53,000	30,400	37,600
14	36,500	33,500	21,000	16,900	19,200	22,500	34,500	47,200	47,700	46,200	30,100	38,500
15	36,200	33,400	20,900	16,700	19,900	26,500	35,000	47,400	42,100	43,400	29,200	37,700
16	36,400	33,500	20,700	18,300	21,100	29,700	35,100	47,400	40,000	41,700	27,900	36,400
17	36,400	33,500	20,700	18,000	22,900	31,700	34,600	46,800	38,500	39,800	26,500	35,000
18	36,400	32,800	21,000	16,600	23,400	27,700	34,200	45,800	37,800	38,500	25,900	34,200
19	36,100	32,500	21,200	16,000	22,300	24,800	35,000	45,000	38,300	36,800	26,600	34,000
20	36,600	33,000	21,000	16,000	22,600	26,400	35,000	47,100	38,300	35,900	29,700	33,300
21	36,800	33,000	21,100	16,400	23,100	29,900	34,800	45,900	37,300	35,100	29,200	33,200
22	36,500	33,000	21,500	17,700	24,900	32,200	35,000	44,900	36,100	34,400	29,200	33,500
23	36,900	33,300	21,300	19,000	32,800	32,000	e35,200	43,100	38,900	34,000	28,800	32,600
24	36,800	33,400	20,000	19,400	35,200	31,300	35,300	42,000	43,300	33,300	28,300	31,800
25	36,700	33,700	19,000	18,900	28,000	30,600	35,100	41,900	41,400	33,000	27,900	31,500
26	36,900	33,900	19,000	18,800	22,800	31,100	34,700	41,200	41,800	32,800	27,600	31,300
27	36,800	33,100	19,000	18,700	18,900	30,700	34,700	40,500	47,900	32,000	27,700	31,000
28	36,600	31,100	18,500	18,900	17,200	30,300	34,800	40,000	50,400	32,000	27,700	30,800
29	36,600	29,100	18,500	19,800	---	31,000	35,300	39,400	50,900	32,300	27,700	31,000
30	37,300	26,500	19,600	20,200	---	32,400	36,000	39,400	48,400	32,000	27,700	30,800
31	37,900	---	20,300	20,400	---	32,900	---	38,900	---	31,700	27,800	---
TOTAL	1,153,100	1,006,000	641,000	595,500	624,700	795,000	1,025,700	1,432,500	1,260,100	1,249,400	909,000	968,100
MEAN	37,200	33,530	20,680	19,210	22,310	25,650	34,190	46,210	42,000	40,300	29,320	32,270
MAX	41,200	37,000	24,700	21,300	35,200	32,900	36,000	60,700	62,800	54,500	31,800	38,500
MIN	34,900	26,500	18,500	16,000	17,200	16,900	32,300	38,700	36,100	31,700	25,900	27,200
AC-FT	2,287,000	1,995,000	1,271,000	1,181,000	1,239,000	1,577,000	2,034,000	2,841,000	2,499,000	2,478,000	1,803,000	1,920,000
CFSM	0.09	0.08	0.05	0.05	0.05	0.06	0.08	0.11	0.10	0.10	0.07	0.08
IN.	0.10	0.09	0.06	0.05	0.06	0.07	0.09	0.13	0.11	0.11	0.08	0.09

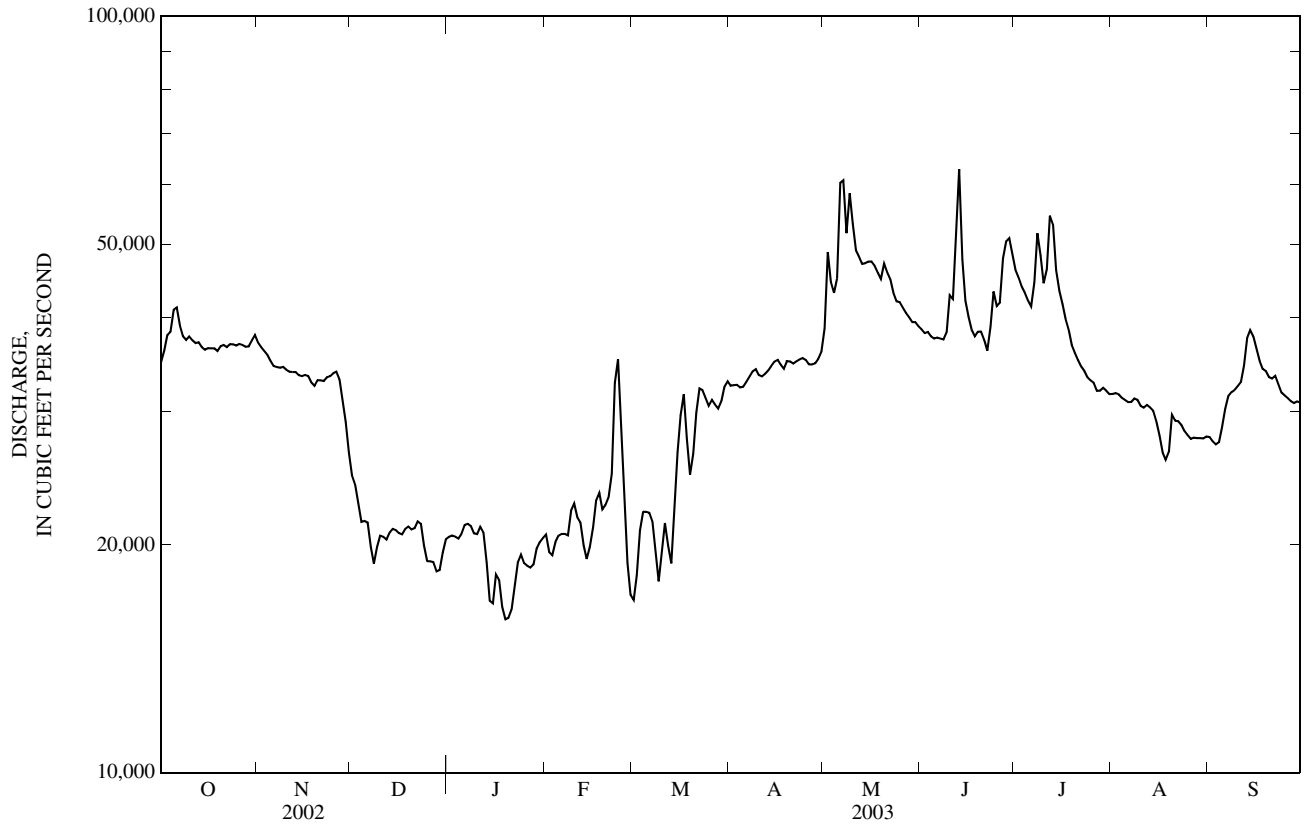
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2003, BY WATER YEAR (WY)

MEAN	44,640	40,950	27,220	22,800	28,470	40,890	51,040	51,790	56,420	50,520	44,590	44,810
MAX	80,050	83,880	57,380	42,280	53,140	79,590	106,100	97,280	130,600	164,800	78,730	76,410
(WY)	(1998)	(1998)	(1998)	(1973)	(1997)	(1979)	(1997)	(1997)	(1984)	(1993)	(1996)	(1997)
MIN	25,580	17,000	9,953	10,800	13,220	15,380	21,820	33,790	33,710	29,650	29,320	32,270
(WY)	(1962)	(1962)	(1956)	(1957)	(1957)	(1957)	(1957)	(1956)	(1956)	(2002)	(2003)	(2003)

06813500 MISSOURI RIVER AT RULO, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1953 - 2003a	
ANNUAL TOTAL	11,295,000		11,660,100			
ANNUAL MEAN	30,950		31,950		42,040	
HIGHEST ANNUAL MEAN					71,880	1997
LOWEST ANNUAL MEAN					26,340	1957
HIGHEST DAILY MEAN	51,500	Aug 24	62,800	Jun 13	289,000	Jul 24, 1993
LOWEST DAILY MEAN	18,500	Dec 28	16,000	Jan 19b	4,420	Jan 13, 1957
ANNUAL SEVEN-DAY MINIMUM	19,100	Dec 24	16,900	Jan 15	5,560	Nov 30, 1955
MAXIMUM PEAK FLOW			77,700	Jun 13	307,000	Jul 24, 1993
MAXIMUM PEAK STAGE			16.57	Jun 13	25.37	Jul 24, 1993
INSTANTANEOUS LOW FLOW			15,800	Jan 20		
ANNUAL RUNOFF (AC-FT)	22,400,000		23,130,000		30,460,000	
ANNUAL RUNOFF (CFSM)	0.075		0.077		0.10	
ANNUAL RUNOFF (INCHES)	1.01		1.05		1.38	
10 PERCENT EXCEEDS	37,100		44,400		66,500	
50 PERCENT EXCEEDS	33,100		32,800		38,500	
90 PERCENT EXCEEDS	21,400		19,900		19,000	

a Post regulation.
b Also Jan. 20.
e Estimated.



06814000 TURKEY CREEK NEAR SENECA, KS

LOCATION.--Lat 39° 56'52", long 96° 06'30", in SW 1/4 NW 1/4 SW 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 mi^2.

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 fair except those for estimated daily discharges, which are poor. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 9	0400	*3,680	*14.93	Jun 13	0359	3,110	13.76

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.57	24	5.5	6.4	e7.1	10	4.8	13	7.6	11	1.1	6.0
2	1.7	8.7	5.0	5.7	e6.3	9.7	4.5	11	11	9.1	1.6	5.2
3	5.8	6.1	4.2	6.4	e5.8	8.4	4.4	9.3	14	7.8	1.3	3.3
4	11	5.0	4.9	6.6	e5.4	9.7	5.1	8.6	12	6.9	1.2	2.1
5	7.2	5.0	5.8	6.6	e5.2	12	5.3	8.1	10	6.0	1.1	1.1
6	2.8	5.1	5.4	5.5	e5.0	11	7.5	8.4	34	5.4	0.96	0.58
7	1.0	4.9	4.8	5.6	e4.9	9.2	12	9.1	15	4.8	0.71	0.57
8	0.80	4.5	5.6	5.6	e5.3	9.2	13	368	11	4.4	0.57	0.98
9	0.69	4.2	6.1	5.2	e6.3	9.3	9.8	1,840	9.6	4.2	0.45	0.54
10	0.69	4.0	5.7	5.5	e7.2	8.7	6.5	288	444	4.5	0.28	4.4
11	0.63	3.8	5.3	6.3	e7.3	8.4	5.4	140	192	4.8	0.54	6.5
12	0.66	3.9	5.3	6.1	e7.0	8.9	4.6	71	227	4.1	0.46	4.9
13	0.54	3.4	5.9	6.1	e6.6	8.4	4.2	47	1,480	3.6	1.3	3.6
14	0.59	3.9	5.9	5.9	e6.6	8.3	3.9	38	224	3.4	0.82	2.0
15	0.56	4.2	5.5	5.8	e7.9	7.3	3.8	48	105	3.2	0.22	1.2
16	0.67	4.4	5.2	e5.0	e9.6	6.6	4.9	25	65	2.9	0.16	0.67
17	0.71	4.6	5.3	e5.1	e12	7.8	6.0	21	41	2.3	e0.12	0.40
18	1.0	4.3	5.1	e5.1	e13	12	5.7	18	29	2.1	e0.10	0.67
19	0.87	4.1	4.9	e5.0	e14	29	8.2	17	25	1.8	e0.11	e0.67
20	0.80	4.0	4.8	e5.0	e13	88	15	187	19	1.8	e11	0.67
21	0.75	4.0	5.6	e5.1	13	69	8.2	63	14	2.7	15	0.65
22	0.74	3.9	5.5	e5.0	9.9	27	5.5	30	13	3.7	5.9	0.77
23	0.92	4.3	5.5	e5.5	8.7	14	5.0	21	135	3.0	2.6	0.64
24	2.0	4.2	5.8	e6.2	e3.9	10	42	17	123	2.2	0.97	0.38
25	4.6	4.3	6.1	e7.0	e4.8	8.0	51	16	47	1.8	0.28	0.22
26	5.7	4.4	6.1	e7.1	8.9	7.1	26	14	26	1.4	0.19	0.16
27	4.5	4.6	6.1	e6.6	8.0	6.6	15	12	17	1.2	0.35	e0.14
28	3.5	5.2	6.3	e6.6	8.8	6.4	11	11	13	1.1	1.6	e0.11
29	3.0	5.0	6.0	e7.0	---	6.1	16	9.9	12	1.0	10	e0.10
30	20	6.9	5.7	e7.6	---	5.7	26	9.0	12	0.89	5.3	e0.11
31	79	---	6.8	e7.4	---	5.2	---	8.3	---	0.99	5.6	---
MEAN	5.29	5.30	5.54	5.99	7.91	14.4	11.3	109	113	3.68	2.32	1.64
MAX	79	24	6.8	7.6	14	88	51	1,840	1,480	11	15	6.5
MIN	0.54	3.4	4.2	5.0	3.9	5.2	3.8	8.1	7.6	0.89	0.10	0.10
AC-FT	325	315	341	368	439	887	675	6,720	6,720	226	143	98

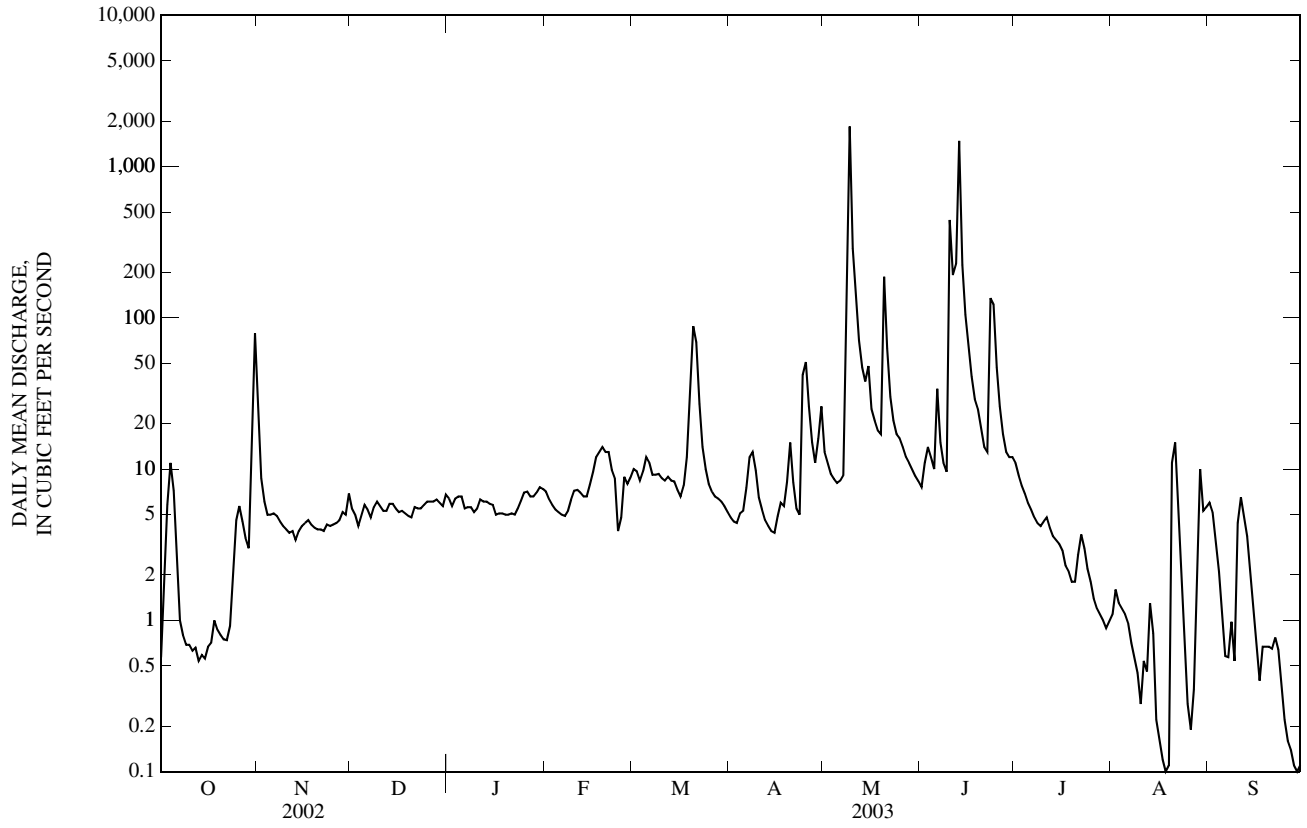
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2003, BY WATER YEAR (WY)

MEAN	81.6	48.2	33.0	39.8	92.1	203	174	226	238	202	79.0	131
MAX	1,050	419	206	310	372	1,297	1,079	1,354	2,067	3,193	914	1,057
(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)

06814000 TURKEY CREEK NEAR SENECA, KS—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1949 - 2003	
ANNUAL MEAN	31.6		23.8		127	
HIGHEST ANNUAL MEAN					547	1993
LOWEST ANNUAL MEAN					3.24	1956
HIGHEST DAILY MEAN	1,390	May 12	1,840	May 9	16,700	Oct 11, 1973
LOWEST DAILY MEAN	0.52	Sep 24	0.10	Aug 18	0.00	Jul 28, 1956
ANNUAL SEVEN-DAY MINIMUM	0.59	Sep 23	0.17	Sep 24	0.00	Aug 21, 1956
MAXIMUM PEAK FLOW			3,680	May 9	21,400	Oct 11, 1973
MAXIMUM PEAK STAGE			14.93	May 9	24.77	Oct 11, 1973
INSTANTANEOUS LOW FLOW			0.10	Aug 16	0.00	Jul 28, 1956
ANNUAL RUNOFF (AC-FT)	22,840		17,250		92,340	
10 PERCENT EXCEEDS	49		24		200	
50 PERCENT EXCEEDS	11		5.6		21	
90 PERCENT EXCEEDS	0.82		0.67		2.0	

e Estimated



06815000 BIG NEMAHA RIVER AT FALLS CITY, NE

LOCATION.--Lat 40° 02'08", long 95° 35'45", in NE 1/4 SE 1/4 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 mi^2.

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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	196	64	e72	e64	e60	49	176	49	277	60	53
2	60	177	65	e83	e70	e62	48	149	79	214	51	49
3	82	112	66	e90	e72	e64	49	121	83	177	39	46
4	150	84	64	e98	e67	e63	55	104	83	149	35	42
5	308	75	62	e83	e72	e59	59	100	72	128	33	31
6	169	71	53	e66	e74	e61	78	96	156	110	31	26
7	120	66	68	59	e77	e63	129	99	124	96	29	24
8	66	60	72	61	e75	e59	132	169	99	86	28	21
9	44	57	96	62	e77	e58	133	5,220	69	83	31	22
10	33	56	97	55	e78	e62	117	2,340	3,430	84	32	36
11	28	54	76	e57	e94	e64	102	964	1,650	78	38	40
12	25	52	72	e59	e103	68	88	535	4,250	91	55	35
13	21	51	70	e56	95	74	81	360	5,890	70	41	66
14	20	53	68	e55	e70	73	74	275	2,250	59	32	65
15	18	57	65	e53	e67	73	63	256	1,080	57	30	41
16	20	55	64	e53	e69	72	76	248	643	53	31	33
17	31	52	64	e52	e70	73	84	182	447	48	28	29
18	33	52	65	e57	e75	74	91	147	352	42	26	41
19	29	52	63	e55	102	97	121	138	305	41	25	49
20	27	53	61	e53	80	208	191	1,040	269	42	158	37
21	26	53	56	e53	74	260	243	662	242	47	133	26
22	27	53	e56	e52	63	312	189	360	216	51	64	28
23	35	54	e56	e51	58	202	117	223	2,640	45	34	25
24	60	55	e56	e52	e57	128	165	e180	2,990	41	23	24
25	100	56	e55	e52	e56	94	238	e150	1,500	37	25	22
26	173	57	e58	e51	e56	77	236	e130	994	35	25	23
27	110	60	e60	e52	e56	69	165	e112	675	36	31	23
28	100	62	e65	e54	e58	63	121	102	457	35	37	25
29	105	63	e72	e55	---	61	328	85	331	30	33	25
30	123	66	e75	e56	---	58	295	70	352	107	38	31
31	401	---	e62	e60	---	54	---	57	---	68	49	---
TOTAL	2,570	2,064	2,046	1,867	2,029	2,865	3,917	14,850	31,777	2,517	1,325	1,038
MEAN	82.9	68.8	66.0	60.2	72.5	92.4	131	479	1,059	81.2	42.7	34.6
MAX	401	196	97	98	103	312	328	5,220	5,890	277	158	66
MIN	18	51	53	51	56	54	48	57	49	30	23	21
AC-FT	5,100	4,090	4,060	3,700	4,020	5,680	7,770	29,450	63,030	4,990	2,630	2,060

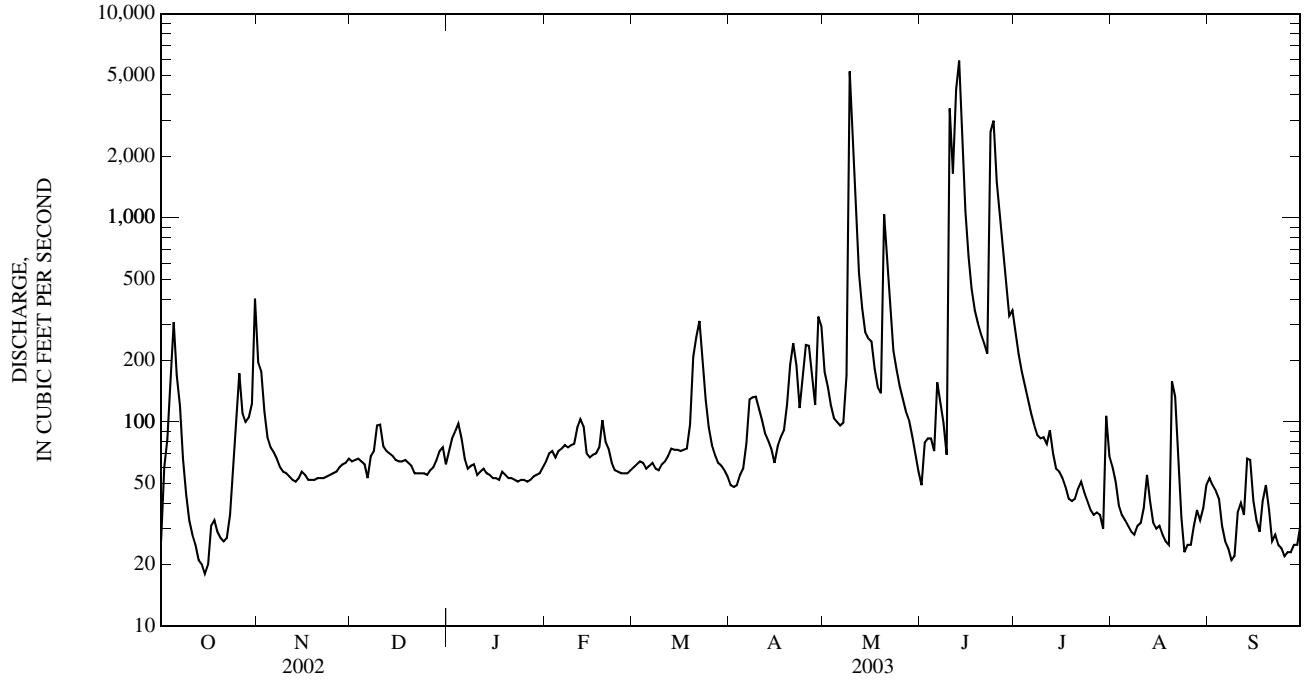
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2003, BY WATER YEAR (WY)

MEAN	408	268	184	223	441	871	792	1,067	1,149	984	459	623
MAX	5,229	1,851	1,036	1,446	2,998	5,819	4,462	6,166	7,816	15,690	3,898	3,408
(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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1944 - 2003	
ANNUAL TOTAL	55,932.1		68,865			
ANNUAL MEAN	153		189		620	
HIGHEST ANNUAL MEAN					2,559	1993
LOWEST ANNUAL MEAN					86.7	1956
HIGHEST DAILY MEAN	2,640	May 12	5,890	Jun 13	57,600	Oct 11, 1973
LOWEST DAILY MEAN	7.1	Aug 9	18	Oct 15	3.0	Jul 9, 1977
ANNUAL SEVEN-DAY MINIMUM	11	Aug 5	23	Oct 11	4.0	Jul 4, 1977
MAXIMUM PEAK FLOW			16,700	Jun 12	71,600	Oct 11, 1973
MAXIMUM PEAK STAGE			19.12	Jun 12	*31.40	Oct 11, 1973
ANNUAL RUNOFF (AC-FT)	110,900		136,600		449,000	
10 PERCENT EXCEEDS	226		251		1,030	
50 PERCENT EXCEEDS	100		64		158	
90 PERCENT EXCEEDS	28		31		45	

e Estimated.
* Datum then in use.



06815000 BIG NEMAHA AT FALLS CITY, NE—Continued

WATER-QUALITY RECORDS

Pesticide Reconnaissance Study

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	Acetochlor ESA, water, fltrd 0.7u GF ug/L (61029)	Acetochlor OA, water, fltrd 0.7u GF ug/L (61030)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor ESA, water, fltrd 0.7u GF ug/L (50009)
OCT													
04...	1520	4.51	169	8.9	7.9	669	18.0	0.06	<0.05	0.11	0.14	<0.05	0.09

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Alachlor OA, water, fltrd 0.7u GF ug/L (61031)	Alachlor, water, fltrd, ug/L (46342)	Ametryn water, fltrd, ug/L (38401)	Aminomethylphosphonic acid, wat flt ug/L (62649)	Atrazine, water, fltrd, ug/L (39632)	Cyanazine amide, water, fltrd, ug/L (61709)	Cyanazine, water, fltrd, ug/L (04041)	Dimethenamid ESA, water, fltrd, ug/L (61951)	Dimethenamid OA, water, fltrd, ug/L (62482)	Dimethenamid water, fltrd, ug/L (61588)	Flufenacet ESA, water, fltrd, ug/L (61952)	Flufenacet OA, water, fltrd, ug/L (62483)	Flufenacet, water, fltrd, ug/L (62481)
OCT													
04...	0.05	<0.05	<0.05	0.3	0.13	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Glufosinate, water, fltrd 0.7u GF ug/L (62721)	Glyphosate, water, fltrd 0.7u GF ug/L (62722)	Metolachlor ESA, water, fltrd 0.7u GF ug/L (61043)	Metolachlor OA, water, fltrd 0.7u GF ug/L (61044)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propachlor, water, fltrd, ug/L (04024)	Propazine, water, fltrd, ug/L (38535)	Simazine, water, fltrd, ug/L (04035)	Terbutryn, water, fltrd, ug/L (38888)
OCT													
04...	<0.1	<0.1	0.09	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

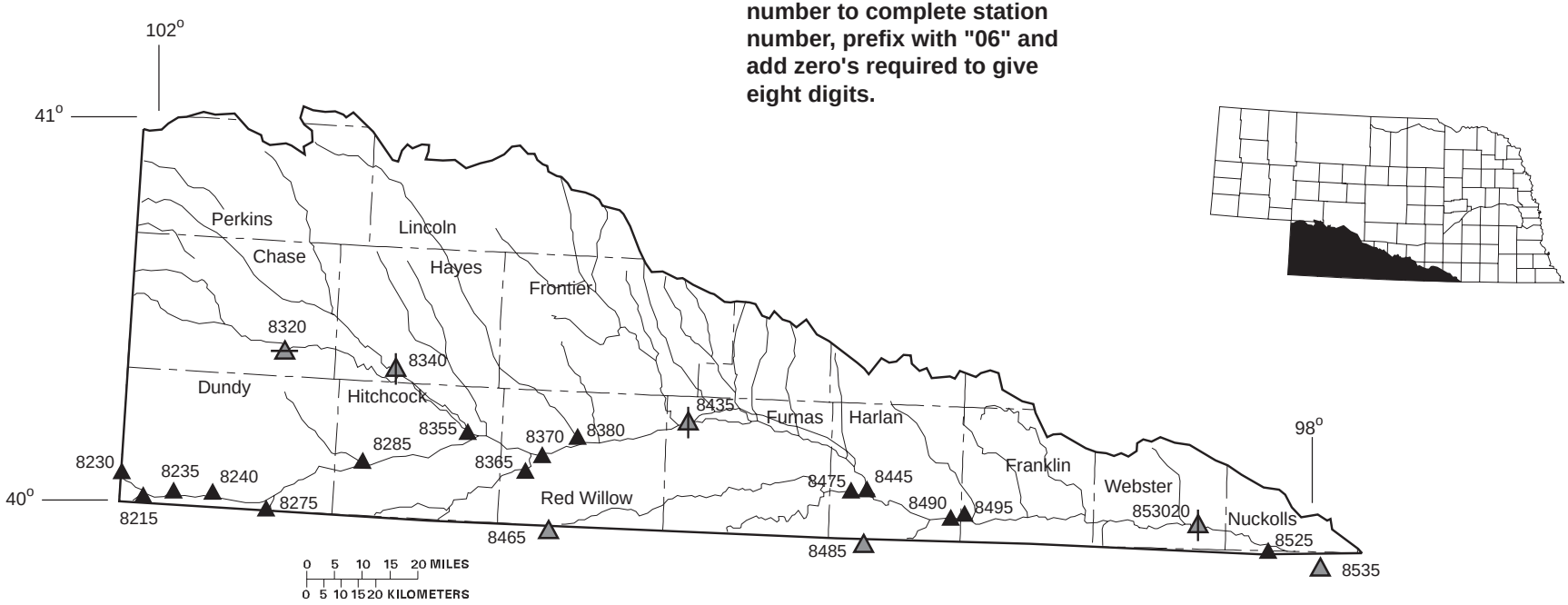
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EXPLANATION

- 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.



*Station number	Station name	Page
8215	Arikaree River at Haigler	292
8230	N.F. Republican River at Colorado-Nebraska State Line	294
8235	Buffalo Creek near Haigler	296
8240	Rock Creek at Parks	298
8275	South Fork Republican River near Benkelman	300
8285	Republican River at Stratton	302
8320	Enders Reservoir near Enders	304
8340	Frenchman Creek at Palisade	306
8355	Frenchman Creek at Culbertson	308
8365	Driftwood Creek near McCook	310
8370	Republican River at McCook	312
8380	Red Willow Creek near Red Willow	314
8435	Republican River at Cambridge	316
8445	Republican River near Orleans	318
8465	Beaver Creek at Cedar Bluffs, KS	320
8475	Sappa Creek near Stamford	322
8485	Prairie Dog Creek near Woodruff, KS	324
8490	Harlan County Lake near Republican City	326
8495	Republican River below Harlan County Dam	336
8525	Courtland Canal at Nebraska-Kansas State Line	338
853020	Republican River at Guide Rock	340
8535	Republican River near Hardy	342

*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

LOCATION.--Lat 40° 01'45", long 101° 58'10", in NE 1/4 NE 1/4 sec.29, T.1 N., R.41 W., Dundy County, Hydrologic Unit 10250001, on right bank at downstream side of bridge on U.S. Highway 34, 1.3 mi upstream from Burlington Northern Inc. bridge, 1.9 mi upstream from confluence with North Fork Republican River, 2 mi northwest of Haigler, and 3.2 mi downstream from Kansas-Nebraska state line.

DRAINAGE AREA.--1,700 mi^2, of which about 1,020 mi^2 contributes directly to surface runoff.

PERIOD OF RECORD.--October 1931 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1919: 1951, 1954, 1956, 1960. WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 3,250.98 ft above sea level. See WSP 1919 for history of changes prior to Sept. 29, 1964. Sept. 29, 1964 to Apr. 25, 1982 on left bank 57 ft downstream from bridge at present datum. Data collection platform at station.

REMARKS.--Record fair except for daily discharges greater than 10 ft^3/s, which are poor. Natural flow affected by ground-water withdrawals and diversions for irrigation of about 1,500 acres in Colorado and by return flow from Haigler Canal.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	7.1	0.00	0.00	0.00	0.00	0.09	4.6	4.6	2.9	0.00	0.00
2	0.00	4.4	0.00	0.00	0.00	0.00	0.09	6.9	4.3	2.3	0.00	0.00
3	0.00	0.32	0.00	0.00	0.00	0.01	0.02	7.7	3.6	1.7	0.00	0.00
4	0.00	0.02	0.00	0.00	0.00	0.00	0.00	5.9	3.8	1.1	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.7	4.7	0.74	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.34	6.0	6.1	0.48	0.00	0.00
7	0.15	0.00	0.00	0.00	0.00	0.00	0.31	4.5	6.1	1.1	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.75	4.6	5.2	1.3	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	1.1	4.8	5.0	0.70	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.53	7.5	3.0	1.2	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.27	13	3.8	0.96	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.06	12	4.5	0.41	0.00	0.00
13	1.6	0.00	0.00	0.00	0.00	0.00	0.06	6.5	6.8	0.04	0.00	0.00
14	0.56	0.00	0.00	0.00	0.00	0.00	0.02	4.4	4.4	0.42	0.00	0.00
15	2.2	0.00	0.00	0.00	0.00	0.00	6.5	3.5	2.7	0.00	0.00	0.00
16	6.1	0.00	0.00	0.00	0.00	0.00	15	7.4	4.6	0.00	0.00	0.00
17	6.3	0.00	0.00	0.00	0.00	0.00	15	11	5.2	0.08	0.00	0.00
18	0.19	0.00	0.00	0.00	0.00	0.39	14	6.5	4.6	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	3.0	11	3.3	4.9	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.65	11	9.3	4.7	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.28	9.6	7.5	4.1	0.00	0.00	1.0
22	0.00	0.00	0.00	0.00	0.00	0.19	7.9	6.4	3.0	0.00	0.00	1.5
23	0.00	0.00	0.00	0.00	0.00	0.15	7.9	7.6	3.0	0.00	0.00	0.98
24	0.00	0.00	0.00	0.00	0.00	0.11	9.4	6.9	3.0	0.00	0.00	1.5
25	0.00	0.00	0.00	0.00	0.00	0.09	8.1	7.3	3.4	0.00	0.00	2.0
26	0.00	0.00	0.00	0.00	0.00	0.11	3.7	7.0	2.9	0.00	0.00	1.9
27	0.01	0.00	0.00	0.00	0.00	0.13	3.6	6.7	3.6	0.00	0.00	0.49
28	0.11	0.00	0.00	0.00	0.00	0.09	4.1	6.0	4.1	0.00	0.00	0.33
29	1.1	0.00	0.00	0.00	---	0.03	6.6	4.6	4.7	0.00	0.00	2.7
30	3.3	0.00	0.00	0.00	---	0.04	8.1	4.6	5.6	0.00	0.00	2.9
31	5.1	---	0.00	0.00	---	0.08	---	5.7	---	0.00	0.00	---
TOTAL	26.72	11.84	0.00	0.00	0.00	5.35	145.14	206.4	130.0	15.43	0.00	15.30
MEAN	0.86	0.39	0.000	0.000	0.000	0.17	4.84	6.66	4.33	0.50	0.000	0.51
MAX	6.3	7.1	0.00	0.00	0.00	3.0	15	13	6.8	2.9	0.00	2.9
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.3	2.7	0.00	0.00	0.00
AC-FT	53	23	0.00	0.00	0.00	11	288	409	258	31	0.00	30

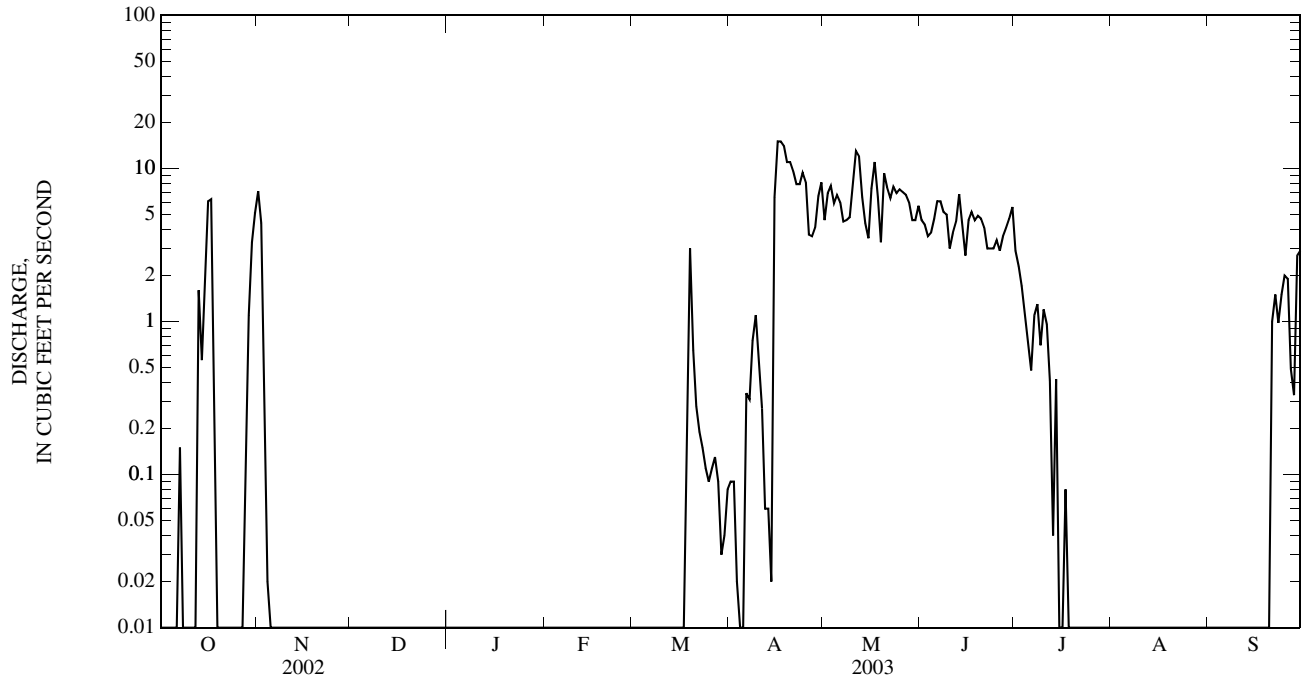
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2003, BY WATER YEAR (WY)

MEAN	9.53	7.84	6.20	7.35	15.0	26.8	22.2	39.0	38.3	18.9	17.8	14.5
MAX	39.8	31.8	28.3	24.0	67.0	400	78.0	709	599	193	111	140
(WY)	(1943)	(1947)	(1939)	(1934)	(1937)	(1960)	(1944)	(1935)	(1935)	(1962)	(1938)	(1938)
MIN	0.75	0.000	0.000	0.000	0.000	0.17	1.00	0.99	0.066	0.000	0.000	0.000
(WY)	(2002)	(2002)	(2002)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)	(2002)	(1952)	(2002)

06821500 ARIKAREE RIVER AT HAIGLER, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1932 - 2003	
ANNUAL TOTAL	116.52		556.18			
ANNUAL MEAN	0.32		1.52		18.6	
HIGHEST ANNUAL MEAN					127	1935
LOWEST ANNUAL MEAN					0.28	2002
HIGHEST DAILY MEAN	8.0	May 25	15	Apr 16	17,000	May 31, 1935
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Jul 21, 1932
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 19	0.00	Jul 30, 1934
MAXIMUM PEAK FLOW			22	Apr 16	50,000	May 31, 1935
MAXIMUM PEAK STAGE			5.73	Apr 16	*11.20	May 31, 1935
ANNUAL RUNOFF (AC-FT)	231		1,100		13,460	
10 PERCENT EXCEEDS	0.37		6.1		30	
50 PERCENT EXCEEDS	0.00		0.00		8.0	
90 PERCENT EXCEEDS	0.00		0.00		0.50	

* Site and datum then in use.



06823000 NORTH FORK REPUBLICAN RIVER AT COLORADO-NEBRASKA STATE LINE

LOCATION.--Lat 40° 04'10", long 102° 03'05", in SE 1/4 NW 1/4 sec.10, T.1 N., R.42 W., Dundy County, Nebraska, Hydrologic Unit 10250002, on right bank 100 ft east of Colorado-Nebraska State line, 9.5 mi upstream from confluence with Arikaree River, and at mile 448.

DRAINAGE AREA.--2,370 mi^2, of which about 174 mi^2 contributes directly to surface runoff.

PERIOD OF RECORD.--October 1930 to current year. Prior to October 1932, published as North Fork of Arikaree River at Colorado-Nebraska State line. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1240: 1947(M). WSP 1390: 1934. WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Steel piling control since January 1965. Datum of gage is 3,336.09 ft above sea level. Prior to Oct. 17, 1934, nonrecording gage at present site and datum. Data Collection platform at station.

REMARKS.--Records fair. Natural flow affected by diversion in Haigler Canal for irrigation of about 2,700 acres in Colorado and Nebraska.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	19	42	43	43	43	45	24	12	9.1	5.8	7.4
2	13	21	42	43	43	43	46	11	12	8.6	6.3	4.4
3	15	24	42	43	43	43	45	11	11	9.6	5.1	4.9
4	15	23	41	44	43	43	45	10	11	8.6	5.3	4.8
5	14	19	42	45	43	44	46	9.2	10	9.0	4.5	4.0
6	14	16	41	44	44	43	50	9.0	8.8	8.5	4.1	4.2
7	14	13	42	44	e45	43	53	9.0	9.2	7.6	4.5	5.4
8	12	13	42	44	e46	43	53	8.8	8.0	7.0	4.4	8.8
9	12	20	41	42	47	43	54	8.8	7.5	6.9	4.0	8.8
10	12	27	42	41	48	43	53	10	7.0	5.9	3.8	9.5
11	12	31	42	41	48	43	52	11	7.0	5.0	3.7	7.3
12	9.8	34	41	40	48	43	51	9.1	6.9	4.5	3.4	7.4
13	9.6	36	41	39	48	42	50	9.5	9.4	4.8	3.0	7.4
14	8.2	39	42	38	48	42	43	9.2	16	4.8	3.2	8.4
15	8.0	43	42	38	48	42	17	9.1	16	4.4	2.7	7.0
16	8.0	45	42	e39	48	42	15	9.1	10	5.5	2.1	6.7
17	8.0	45	40	e40	48	41	14	9.8	11	4.5	2.7	9.7
18	10	44	41	e42	46	42	15	20	11	3.6	5.0	7.1
19	13	43	40	43	46	58	13	20	11	3.7	4.9	6.2
20	12	43	40	43	46	59	12	11	10	3.9	7.3	5.5
21	12	43	40	42	47	50	12	10	9.0	3.6	7.5	6.7
22	12	43	40	e42	47	47	11	9.4	8.2	5.2	6.3	11
23	13	44	41	e42	47	46	12	9.1	8.6	4.8	3.2	12
24	14	44	e41	e43	38	45	14	11	8.4	4.1	3.2	12
25	14	43	e42	e43	e40	45	12	13	7.6	3.3	5.5	8.3
26	14	41	e43	43	e42	45	12	13	7.5	3.6	5.8	8.5
27	14	42	e44	42	44	45	11	13	7.0	3.4	5.7	7.3
28	17	42	44	43	44	45	11	11	13	4.4	5.7	6.2
29	17	43	43	43	---	45	19	11	13	3.4	6.5	8.9
30	22	44	43	43	---	45	60	11	11	5.8	7.1	8.3
31	23	---	43	42	---	45	---	11	---	6.9	7.5	---
TOTAL	401.6	1,027	1,292	1,304	1,268	1,388	946	351.1	298.1	174.0	149.8	224.1
MEAN	13.0	34.2	41.7	42.1	45.3	44.8	31.5	11.3	9.94	5.61	4.83	7.47
MAX	23	45	44	45	48	59	60	24	16	9.6	7.5	12
MIN	8.0	13	40	38	38	41	11	8.8	6.9	3.3	2.1	4.0
AC-FT	797	2,040	2,560	2,590	2,520	2,750	1,880	696	591	345	297	445

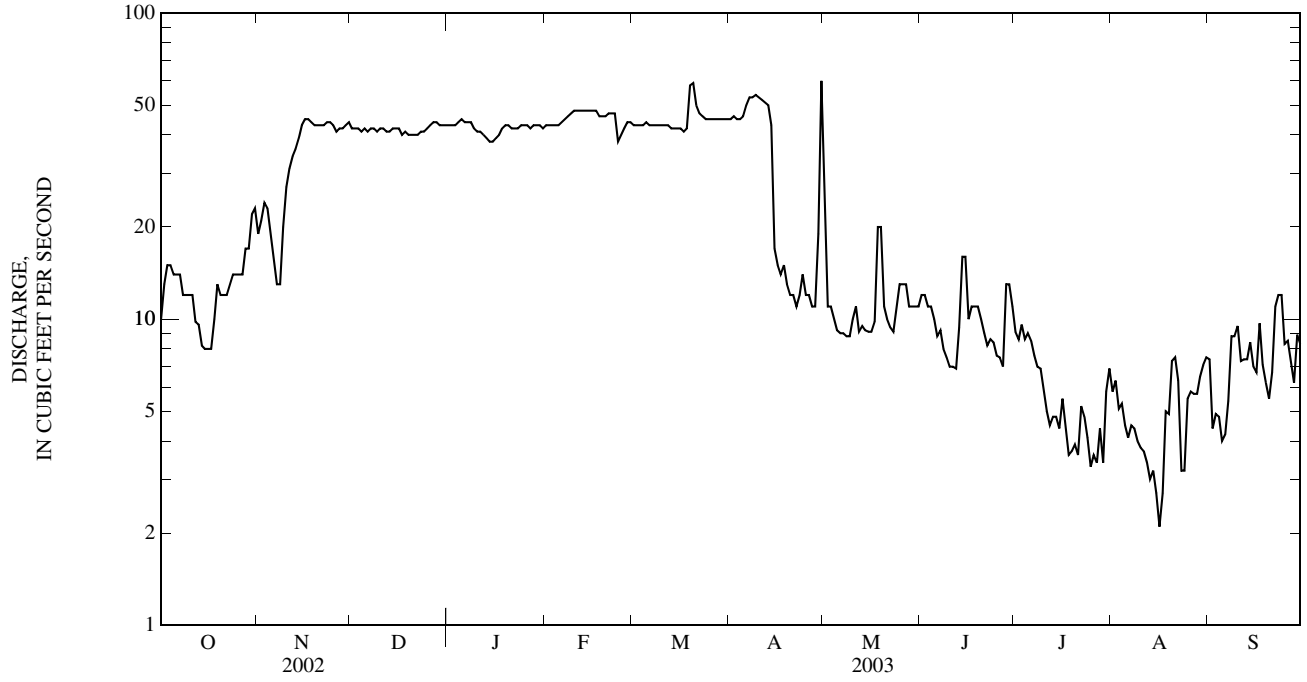
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2003, BY WATER YEAR (WY)

MEAN	36.0	55.5	59.3	59.1	60.9	63.5	55.8	39.6	33.2	17.9	18.0	25.0
MAX	67.1	83.5	74.7	73.4	76.8	85.8	85.7	104	113	93.8	72.4	128
(WY)	(1963)	(1957)	(1954)	(1953)	(1960)	(1960)	(1980)	(1951)	(1962)	(1962)	(1950)	(1951)
MIN	11.1	27.0	34.4	39.4	35.2	41.7	21.3	7.24	5.80	3.76	4.12	5.78
(WY)	(1979)	(1989)	(2002)	(1979)	(2002)	(2002)	(1999)	(2000)	(2002)	(2002)	(1940)	(1978)

06823000 NORTH FORK REPUBLICAN RIVER AT COLORADO-NEBRASKA STATE LINE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1935 - 2003	
ANNUAL TOTAL	8,017.4		8,823.7			
ANNUAL MEAN	22.0		24.2		43.4	
HIGHEST ANNUAL MEAN					65.3	1951
LOWEST ANNUAL MEAN					22.5	2002
HIGHEST DAILY MEAN	58	Mar 3	60	Apr 30	761	May 15, 1951
LOWEST DAILY MEAN	1.9	Jul 21	2.1	Aug 16	1.5	Sep 12, 1999
ANNUAL SEVEN-DAY MINIMUM	2.7	Jul 16	3.0	Aug 11	2.3	Aug 5, 1940
MAXIMUM PEAK FLOW			*85	Apr 30	2,110	Apr 28, 1947
MAXIMUM PEAK STAGE			**1.47	Jan 17	5.92	Apr 28, 1947
ANNUAL RUNOFF (AC-FT)	15,900		17,500		31,470	
10 PERCENT EXCEEDS	44		45		72	
50 PERCENT EXCEEDS	13		14		47	
90 PERCENT EXCEEDS	4.3		4.9		8.4	

e Estimated.
* Stage 1.23 ft.
** Backwater from ice.



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 mi^2, of which about 8.6 mi^2 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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.06	3.6	4.4	e3.8	e4.7	5.2	e3.6	6.6	3.0	0.00	0.00	1.2
2	1.0	5.2	4.6	e3.9	e4.7	5.0	e3.4	4.9	3.1	0.00	0.00	0.98
3	1.5	6.5	4.1	e4.2	e4.6	4.9	e3.2	4.8	2.8	0.00	0.00	0.26
4	1.3	6.0	4.1	e4.2	e4.5	5.0	e3.2	4.5	3.1	0.00	0.00	0.25
5	1.9	5.7	e4.0	e4.2	e4.2	e4.8	e6.8	4.1	2.9	0.00	0.00	2.2
6	0.81	5.6	e4.0	e4.3	e4.0	e4.8	e11	4.0	3.4	0.00	0.00	2.2
7	0.84	5.5	4.1	4.6	e3.8	4.7	e10	4.0	3.6	0.00	0.00	2.1
8	1.6	5.6	4.1	4.4	e3.6	4.5	e9.6	4.1	3.9	0.00	0.00	2.2
9	4.0	5.5	4.4	3.8	e3.7	4.5	e9.0	4.1	3.7	0.00	0.00	2.5
10	2.4	5.0	4.9	e3.7	e3.8	5.4	e8.2	4.7	2.9	0.00	0.00	2.6
11	1.2	5.1	5.1	e3.6	e3.9	4.9	e7.0	5.5	4.4	0.00	0.00	2.2
12	0.82	5.0	4.4	e3.6	e3.9	5.4	e6.4	5.3	4.8	0.00	0.00	2.1
13	1.3	5.0	4.4	e3.5	e3.9	4.9	e5.2	4.9	3.8	0.00	0.00	1.9
14	3.2	5.3	4.6	e3.4	e4.0	4.8	e4.4	3.1	3.6	0.00	0.00	1.8
15	1.8	5.1	4.1	e3.4	e4.0	4.6	e8.0	2.4	3.3	0.00	0.00	1.9
16	3.2	4.9	4.1	e3.4	e4.0	4.9	e10	3.4	3.3	0.00	0.00	2.1
17	3.9	4.8	3.8	e3.5	e4.0	5.0	e9.4	4.9	3.3	0.00	0.00	2.1
18	2.4	4.6	3.6	e3.4	e4.0	8.4	e7.0	4.4	2.2	0.00	0.00	1.7
19	1.1	4.4	3.6	e3.3	e4.0	17	e5.0	4.2	2.6	0.00	0.00	1.8
20	1.3	4.5	e3.6	e3.2	e3.9	6.7	e3.5	4.1	3.0	0.00	0.00	2.0
21	0.86	4.8	e3.5	e3.1	e3.9	e6.2	e3.1	3.8	2.7	0.00	0.00	2.4
22	0.44	4.7	e3.5	e2.9	e3.9	e6.0	e2.7	3.9	3.5	0.00	0.00	1.4
23	0.59	4.5	e3.5	e2.9	e3.9	e5.6	e2.5	4.2	3.3	0.00	0.00	0.59
24	0.97	4.6	e3.6	e3.0	e4.0	e5.4	3.2	4.1	1.9	0.00	0.00	0.04
25	1.4	4.3	e3.7	e3.1	e4.1	e5.2	2.5	3.9	1.4	0.00	0.00	0.14
26	1.2	e4.1	e3.6	e3.4	e4.3	e5.0	2.5	2.1	1.2	0.00	0.00	0.16
27	1.4	e4.0	e3.6	e4.1	e4.7	e5.0	2.4	2.6	1.2	0.00	0.00	0.41
28	1.7	e4.0	e3.7	e4.3	e5.0	e4.6	3.2	3.9	0.85	0.00	0.00	0.45
29	2.3	e4.0	e3.7	e4.5	---	e4.4	5.7	3.7	0.28	0.00	0.00	0.53
30	3.1	4.6	e3.7	e4.6	---	e4.0	7.9	2.8	0.02	0.00	1.1	0.64
31	4.4	---	e3.7	e4.7	---	e3.6	---	2.4	---	0.00	1.5	---
TOTAL	53.99	146.5	123.8	116.0	115.0	170.4	169.6	125.4	83.05	0.00	2.60	42.85
MEAN	1.74	4.88	3.99	3.74	4.11	5.50	5.65	4.05	2.77	0.000	0.084	1.43
MAX	4.4	6.5	5.1	4.7	5.0	17	11	6.6	4.8	0.00	1.5	2.6
MIN	0.06	3.6	3.5	2.9	3.6	3.6	2.4	2.1	0.02	0.00	0.00	0.04
AC-FT	107	291	246	230	228	338	336	249	165	0.00	5.2	85

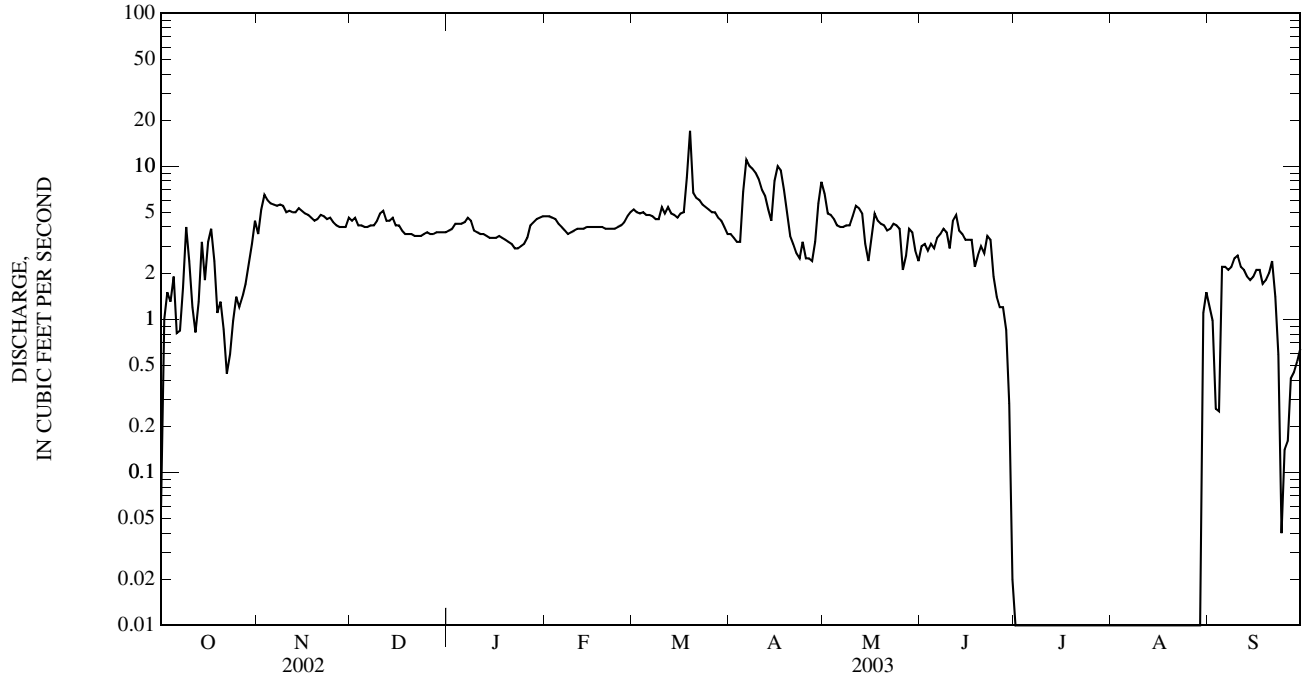
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2003, BY WATER YEAR (WY)

MEAN	6.58	7.78	7.90	8.13	8.69	8.97	8.85	7.57	5.45	2.55	2.39	4.09
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	1.74	1.95	3.15	2.68	0.89	2.72	3.72	2.11	0.000	0.000	0.000	0.23
(WY)	(2003)	(2000)	(1999)	(1998)	(1998)	(1998)	(2000)	(1965)	(1994)	(1997)	(2000)	(1998)

06823500 BUFFALO CREEK NEAR HAIGLER, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1941 - 2003	
ANNUAL TOTAL	1,033.11		1,149.19			
ANNUAL MEAN	2.83		3.15		6.57	
HIGHEST ANNUAL MEAN					10.9	1951
LOWEST ANNUAL MEAN					2.51	1998
HIGHEST DAILY MEAN	8.2	Jun 26	17	Mar 19	90	Aug 11, 1950
LOWEST DAILY MEAN	0.00	Jul 2	0.00	Jul 1	0.00	Aug 3, 1955
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 7	0.00	Jul 1	0.00	Aug 14, 1973
MAXIMUM PEAK FLOW			33	Mar 19	*140	Jun 27, 1948
MAXIMUM PEAK STAGE			2.09	Mar 19	**5.93	Jan 3, 1976
ANNUAL RUNOFF (AC-FT)	2,050		2,280		4,760	
10 PERCENT EXCEEDS	5.1		5.2		11	
50 PERCENT EXCEEDS	3.3		3.6		7.1	
90 PERCENT EXCEEDS	0.00		0.00		0.20	

e Estimated.
* Stage 4.37 ft.
** Backwater from ice.



06824000 ROCK CREEK AT PARKS, NE

LOCATION.--Lat 40° 02'30", long 101° 43'40", in SW 1/4 NE 1/4 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 mi^2, of which about 20 mi^2 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 and daily discharges for September, 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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	13	9.6	7.3	5.6	6.0	9.0	14	8.5	7.4	5.2	5.8
2	8.2	14	9.2	7.9	5.0	7.0	8.0	8.9	8.7	7.5	5.8	5.6
3	12	14	8.4	8.0	6.3	7.5	7.7	7.9	8.6	6.8	5.6	5.6
4	6.1	12	8.9	8.3	6.2	7.1	8.2	6.4	9.1	6.0	5.3	5.4
5	4.9	11	10	8.1	5.9	7.2	8.4	5.4	10	5.7	5.1	5.3
6	4.6	11	8.5	7.9	5.8	7.0	10	5.4	9.7	5.8	5.1	5.2
7	4.7	11	8.8	7.9	5.8	5.0	9.7	5.5	10	6.1	4.2	5.0
8	5.6	11	9.2	8.0	e5.8	6.5	10	6.5	9.4	6.1	3.4	4.9
9	5.8	10	9.3	7.6	5.7	6.7	12	7.4	9.1	5.5	3.5	4.9
10	5.0	9.8	9.3	7.2	5.7	6.7	9.5	11	9.3	5.3	3.6	4.8
11	5.1	10	9.5	7.3	5.9	6.7	8.2	13	11	5.5	3.8	4.7
12	5.7	10	9.4	7.4	6.2	6.6	7.6	9.4	11	5.5	3.8	4.6
13	6.0	10	9.6	7.4	6.8	6.2	7.5	8.1	12	5.5	3.8	4.5
14	7.0	11	9.7	7.5	6.7	6.1	6.1	7.4	10	5.5	3.5	4.4
15	7.1	10	9.7	7.5	6.1	6.3	4.6	7.0	8.8	5.4	3.5	4.3
16	7.9	10	9.6	e8.5	6.1	6.3	7.2	9.0	8.2	5.5	3.7	4.3
17	8.7	9.9	9.6	e9.0	6.5	6.4	7.2	8.0	8.3	5.2	3.6	4.2
18	8.5	9.8	9.9	e9.2	7.1	12	6.9	9.0	11	5.0	4.0	4.2
19	8.4	9.7	9.9	9.4	7.6	18	7.2	9.4	9.0	5.4	6.5	4.1
20	9.1	9.7	e9.8	9.2	5.7	14	7.2	8.5	12	5.4	6.0	4.1
21	11	9.6	e10	9.3	e5.8	11	6.7	8.3	8.6	5.2	5.0	4.1
22	9.1	9.7	e10	e9.5	6.0	10	6.7	7.3	7.7	5.2	5.1	4.1
23	11	10	e10	e10	6.7	9.6	8.5	7.6	8.5	5.0	5.0	4.1
24	13	10	e10	e10	6.7	9.3	8.5	7.7	9.1	4.6	4.6	4.1
25	11	9.9	e9.8	10	6.2	9.1	8.6	8.1	8.9	4.4	4.8	4.1
26	9.4	9.5	e9.6	9.6	6.6	9.9	8.1	8.4	7.0	4.4	5.3	4.1
27	9.9	10	e9.4	10	5.9	9.3	7.5	8.5	6.9	4.8	5.5	4.1
28	11	9.6	9.1	10	5.8	9.7	7.5	8.1	7.0	5.1	11	4.1
29	13	9.7	7.7	10	---	9.0	14	7.7	9.6	5.7	9.0	4.1
30	16	11	7.0	9.8	---	9.3	26	7.4	9.1	6.3	6.3	4.1
31	13	---	6.5	6.6	---	9.5	---	8.3	---	5.5	6.1	---
TOTAL	264.3	315.9	287.0	265.4	172.2	261.0	264.3	254.6	276.1	172.3	156.7	136.9
MEAN	8.53	10.5	9.26	8.56	6.15	8.42	8.81	8.21	9.20	5.56	5.05	4.56
MAX	16	14	10	10	7.6	18	26	14	12	7.5	11	5.8
MIN	4.6	9.5	6.5	6.6	5.0	5.0	4.6	5.4	6.9	4.4	3.4	4.1
AC-FT	524	627	569	526	342	518	524	505	548	342	311	272

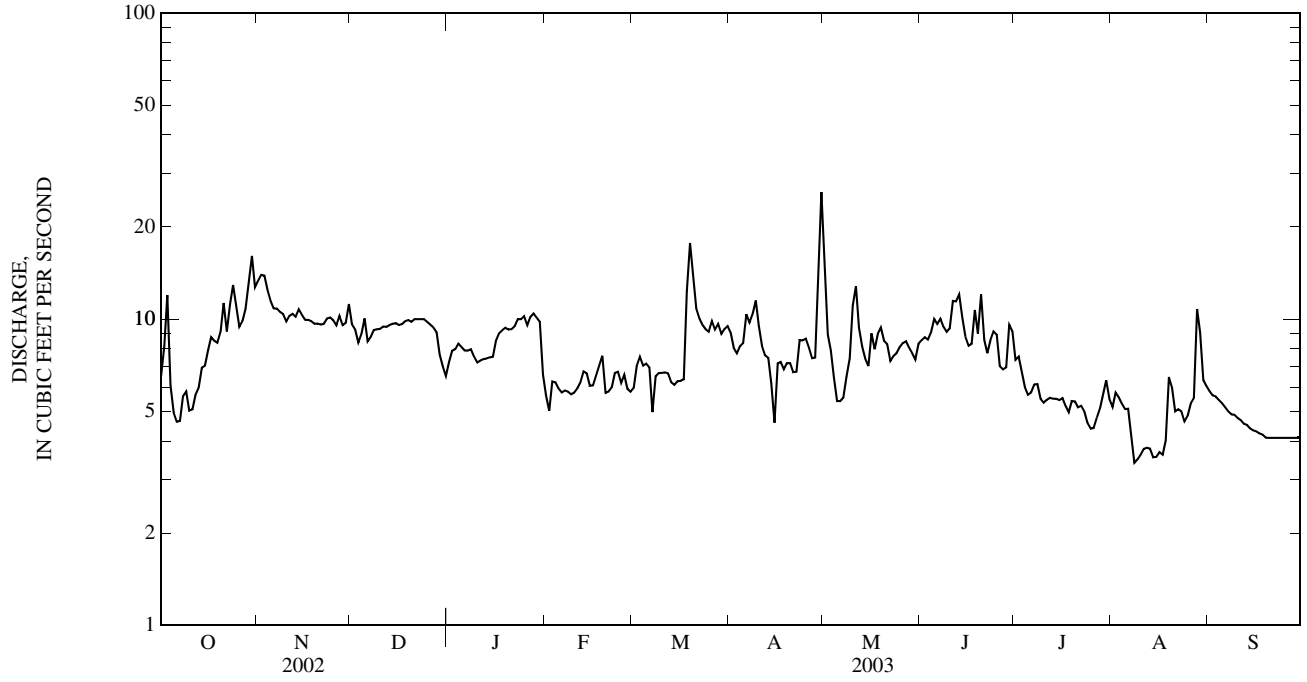
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2003, BY WATER YEAR (WY)

MEAN	12.2	13.1	13.0	13.1	13.4	13.5	13.4	13.3	12.8	11.5	11.1	11.4
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	6.15	7.49	7.97	5.90	5.96	5.18	5.05	4.56
(WY)	(2002)	(2000)	(1999)	(1999)	(2003)	(1999)	(2001)	(2000)	(2001)	(2001)	(2003)	(2003)

06824000 ROCK CREEK AT PARKS, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1941 - 2003	
ANNUAL TOTAL	3,183.3		2,826.7			
ANNUAL MEAN	8.72		7.74		12.6	
HIGHEST ANNUAL MEAN					15.8	1949
LOWEST ANNUAL MEAN					7.57	2000
HIGHEST DAILY MEAN	21	Feb 19	26	Apr 30	111	Jul 6, 1965
LOWEST DAILY MEAN	3.4	Sep 8	3.4	Aug 8	2.6	Nov 19, 1975
ANNUAL SEVEN-DAY MINIMUM	4.7	Sep 7	3.6	Aug 8	3.1	Feb 17, 1943
MAXIMUM PEAK FLOW			*35	Apr 30	493	Jul 5, 1965
MAXIMUM PEAK STAGE			**2.61	Feb 21	6.00	Jul 5, 1965
ANNUAL RUNOFF (AC-FT)	6,310		5,610		9,160	
10 PERCENT EXCEEDS	11		10		16	
50 PERCENT EXCEEDS	8.4		7.6		13	
90 PERCENT EXCEEDS	6.1		4.6		8.7	

e Estimated.
* Stage 2.20 ft.
** Backwater from ice.



06827500 SOUTH FORK REPUBLICAN RIVER NEAR BENKELMAN, NE

LOCATION (REVISED).--Lat 40° 00'34", long 101° 32'32", in NE 1/4 SW 1/4 sec.31, T.1 N., R.37 W., Dundy County, Hydrologic Unit 10250003, on right bank at downstream side of bridge on State Highway 61, 1 mi downstream from Kansas-Nebraska State line, 2.5 mi southwest of Benkelman, and 3.4 mi upstream from mouth.

DRAINAGE AREA.--2,740 mi^2, approximately, of which about 2,190 mi^2 contributes directly to surface runoff.

PERIOD OF RECORD.--October 1894 to September 1895, October 1902 to November 1906, October 1930 to September 1932, August 1937 to current year. Published as South Fork of Republican River at Benkelman prior to 1906 and as Republican River at Benkelman 1931-32. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1310: 1904-6, 1931. WSP 1390: 1940, 1945, 1947. WSP 1919: 1951-52, 1954-56. WSP 2119: Drainage area. WDR NE-97: 1995 (M).

GAGE.--Water-stage recorder. Datum of gage is 2,989.91 ft above sea level. Prior to Dec. 10, 1947, nonrecording gages at several sites within 3.5 mi of present site at various datums. Dec.10, 1947 to Sept. 28, 1966 water-stage recorder 170 ft upstream at datum 3.00 ft higher and Sept. 29, 1966 to Mar. 7, 1968 at site 300 ft upstream at datum 3.00 ft higher. Mar. 8, 1968 to May 29, 1991 at site 300 ft upstream at datum 1.0 ft higher. May 30, 1991 to Sept. 30, 1998 at present site at datum 1.0 ft higher. Data collection platform at station.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow affected by irrigation development above station, and since July 6, 1950, by storage in Bonny Reservoir.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
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	10	6.1	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	10	8.8	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	9.5	9.6	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	7.9	9.2	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	7.0	7.2	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	11	4.9	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	12	4.4	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	14	4.6	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	16	5.1	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	15	4.8	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	e13	4.5	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	e11	5.9	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	e9.0	5.3	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	e7.0	4.6	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	e5.5	4.8	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	4.9	4.7	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	4.5	4.4	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	4.3	4.5	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.07	4.7	4.5	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	3.9	5.2	4.8	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	5.5	5.3	5.0	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	7.0	4.9	5.3	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	8.0	4.6	4.5	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	8.2	4.4	2.9	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	7.5	4.5	1.6	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	8.1	4.4	0.87	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	9.3	4.5	0.43	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	7.9	4.7	0.18	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	7.5	5.8	0.09	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	8.1	7.7	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	9.3	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	90.37	232.3	133.57	0.00	0.00	0.00	0.00
MEAN	0.000	0.000	0.000	0.000	0.000	2.92	7.74	4.31	0.000	0.000	0.000	0.000
MAX	0.00	0.00	0.00	0.00	0.00	9.3	16	9.6	0.00	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	4.3	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	179	461	265	0.00	0.00	0.00	0.00

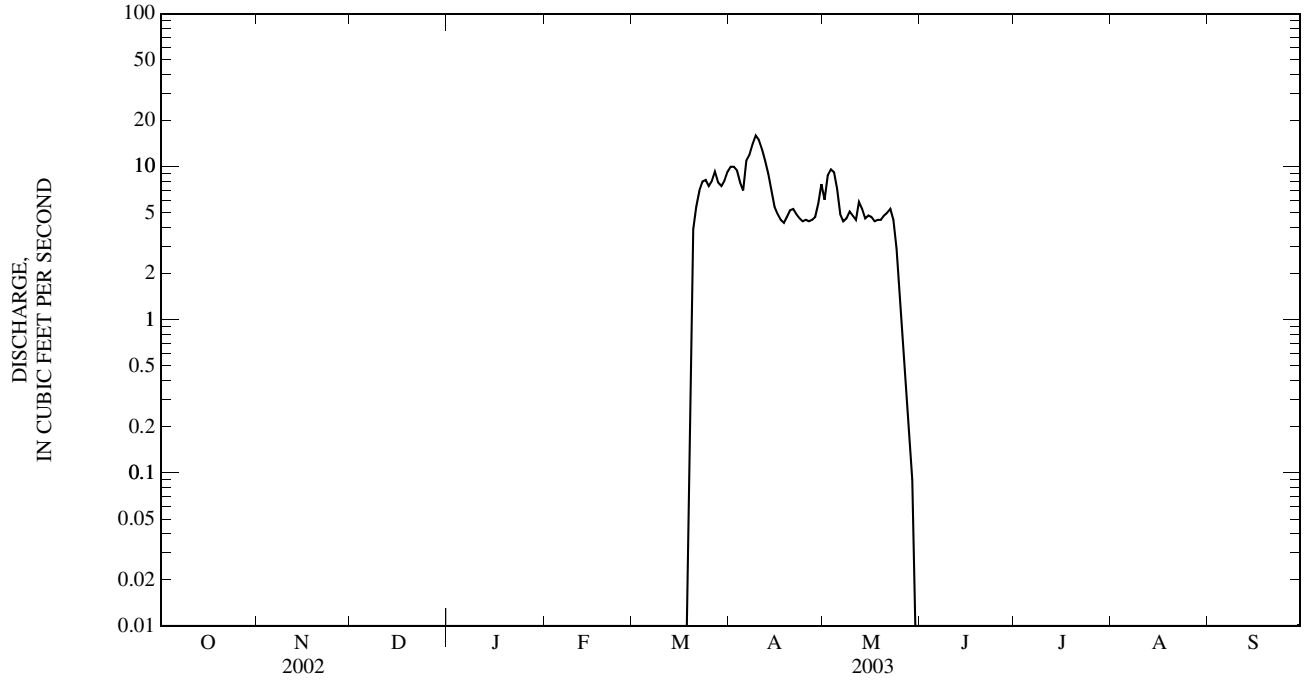
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2003, BY WATER YEAR (WY)

MEAN	15.7	20.6	19.8	22.3	37.9	49.8	54.8	68.5	69.3	54.8	32.8	23.1
MAX	160	113	77.0	77.5	121	227	158	396	455	616	383	335
(WY)	(1966)	(1970)	(1943)	(1943)	(1949)	(1942)	(1958)	(1957)	(1948)	(1946)	(1958)	(1951)
MIN	0.000	0.000	0.000	0.000	0.000	2.92	7.74	1.89	0.000	0.000	0.000	0.000
(WY)	(1940)	(1953)	(1953)	(1977)	(2003)	(2003)	(2003)	(2002)	(2002)	(1943)	(1940)	(1939)

06827500 SOUTH FORK REPUBLICAN RIVER NEAR BENKELMAN, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1938 - 2003	
ANNUAL TOTAL	795.71		456.24			
ANNUAL MEAN	2.18		1.25		39.1	
HIGHEST ANNUAL MEAN					121	1951
LOWEST ANNUAL MEAN					1.25	2003
HIGHEST DAILY MEAN	16	Mar 27	16	Apr 9	6,220	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	Apr 9	19,600	Aug 16, 1958
MAXIMUM PEAK STAGE			2.18	Apr 9	*8.70	Aug 16, 1958
ANNUAL RUNOFF (AC-FT)	1,580		905		28,330	
10 PERCENT EXCEEDS	9.5		5.3		84	
50 PERCENT EXCEEDS	0.00		0.00		18	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated.
* May have been higher during flood of June 24, 1945, site and datum then in use.



06828500 REPUBLICAN RIVER AT STRATTON, NE

LOCATION.--Lat 40° 08'28", long 101° 13'42", in SW 1/4 NW 1/4 sec.13, T.2 N., R.35 W., Hitchcock County, Hydrologic Unit 10250004, on right bank at downstream side of county bridge, 0.5 mi south of Stratton, 0.2 mi downstream from Muddy Creek, 10 mi upstream from Trenton Dam, 19 mi downstream from South Fork Republican River, and at mile 387.

DRAINAGE AREA.--8,200 mi^2, approximately, of which about 3,690 mi^2 contributes directly to surface runoff.

PERIOD OF RECORD.--July 1950 to current year.

REVISED RECORDS.--WDR NE-73: 1968-71(M), 1972. WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 2,775.49 ft above sea level. Prior to Aug. 1, 1967, at site 0.3 mi downstream at present datum. Data collection platform at station.

REMARKS.--Records fair except for estimated daily discharges and daily discharges less than 7.0 ft^3/s, which are poor. Natural flow affected by irrigation development above station and by storage in Bonny Reservoir (station 06826000).

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	e37	e23	e51	42	77	17	0.00	0.00	0.00
2	0.00	0.00	0.00	e37	e21	e56	43	84	20	0.00	0.00	0.00
3	0.00	0.00	0.00	e38	e17	57	43	89	16	0.00	0.00	0.00
4	0.00	0.00	0.00	e41	e15	57	41	68	17	0.00	0.00	0.00
5	0.00	0.00	0.00	e42	e15	e52	40	56	22	0.00	0.00	0.00
6	0.00	0.00	0.74	e43	e16	e54	48	48	21	0.00	0.00	0.00
7	0.00	0.00	18	e44	e20	72	57	43	21	0.00	0.00	0.00
8	0.00	0.00	21	e44	e23	65	58	43	19	0.00	0.00	0.00
9	0.00	0.00	22	e42	e25	86	61	37	16	0.00	0.00	0.00
10	0.00	0.00	24	e41	e27	114	62	36	13	0.00	0.00	0.00
11	0.00	0.00	27	e41	e29	109	61	38	11	0.00	0.00	0.00
12	0.00	0.00	34	e43	e30	87	56	38	11	0.00	0.00	0.00
13	0.00	0.00	34	e45	e30	45	52	37	11	0.00	0.00	0.00
14	0.00	0.00	39	e45	29	49	50	35	11	0.00	0.00	0.00
15	0.00	0.00	45	e44	e22	49	49	36	12	0.00	0.00	0.00
16	0.00	0.00	38	e42	e18	48	60	43	10	0.00	0.00	0.00
17	0.00	0.00	28	e41	16	50	53	38	10	0.00	0.00	0.00
18	0.00	0.00	25	e40	15	56	47	32	9.2	0.00	0.00	0.00
19	0.00	0.00	21	e40	14	76	41	29	9.9	0.00	0.00	0.00
20	0.00	0.00	e20	e38	14	81	39	28	9.9	0.00	0.00	0.00
21	0.00	0.00	e19	e33	13	74	34	26	7.7	0.00	0.00	0.00
22	0.00	0.00	e18	e32	13	72	33	26	5.8	0.00	0.00	0.00
23	0.00	0.00	e17	e32	e18	66	44	27	3.6	0.00	0.00	0.00
24	0.00	0.00	17	e33	e23	60	48	29	0.75	0.00	0.00	0.00
25	0.00	0.00	22	e34	e26	56	44	25	0.22	0.00	0.00	0.00
26	0.00	0.00	e27	e31	e30	49	40	23	0.10	0.00	0.00	0.00
27	0.00	0.00	e30	e29	e39	48	36	21	0.02	0.00	0.00	0.00
28	0.00	0.00	e36	e27	e43	44	33	19	0.60	0.00	0.00	0.00
29	0.00	0.00	e40	e26	---	41	202	18	0.46	0.00	0.00	0.00
30	0.00	0.00	e40	e26	---	41	144	15	0.05	0.00	0.00	0.00
31	0.00	---	e38	e23	---	41	---	16	---	0.00	0.00	---
TOTAL	0.00	0.00	700.74	1,154	624	1,906	1,661	1,180	306.30	0.00	0.00	0.00
MEAN	0.000	0.000	22.6	37.2	22.3	61.5	55.4	38.1	10.2	0.000	0.000	0.000
MAX	0.00	0.00	45	45	43	114	202	89	22	0.00	0.00	0.00
MIN	0.00	0.00	0.00	23	13	41	33	15	0.02	0.00	0.00	0.00
AC-FT	0.00	0.00	1,390	2,290	1,240	3,780	3,290	2,340	608	0.00	0.00	0.00

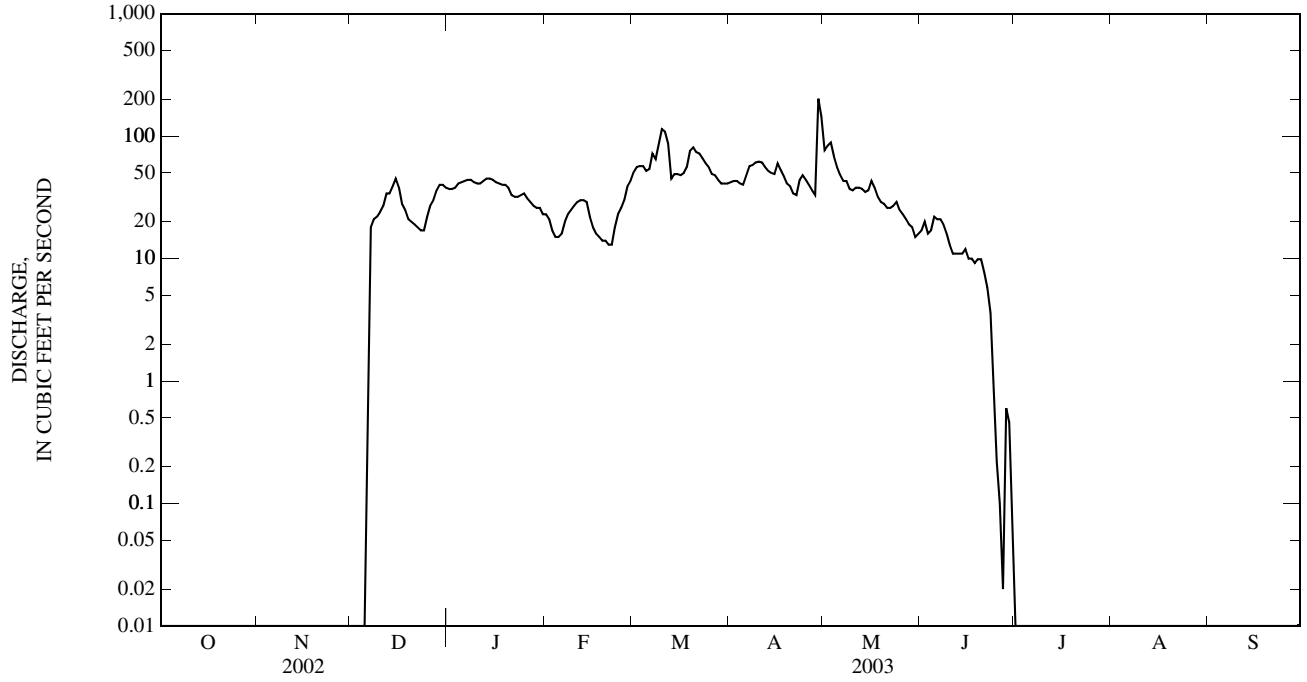
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2003, BY WATER YEAR (WY)

MEAN	45.8	85.3	86.2	97.1	138	173	163	166	135	82.6	62.1	49.4
MAX	285	218	157	159	225	788	388	766	572	759	479	1,005
(WY)	(1966)	(1970)	(1966)	(1974)	(1963)	(1960)	(1980)	(1957)	(1951)	(1962)	(1950)	(1951)
MIN	0.000	0.000	10.0	22.8	22.3	61.5	55.1	11.5	0.000	0.000	0.000	0.000
(WY)	(1977)	(2003)	(2002)	(1979)	(2003)	(2003)	(2002)	(2002)	(2000)	(1954)	(1952)	(1952)

06828500 REPUBLICAN RIVER AT STRATTON, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1950 - 2003	
ANNUAL TOTAL	8,198.50		7,532.04			
ANNUAL MEAN	22.5		20.6		106	
HIGHEST ANNUAL MEAN					304	1951
LOWEST ANNUAL MEAN					20.6	2003
HIGHEST DAILY MEAN	732	Aug 27	202	Apr 29	8,180	Aug 1, 1962
LOWEST DAILY MEAN	0.00	Jun 9	0.00	Oct 1	0.00	Jun 18, 1952
ANNUAL SEVEN-DAY MINIMUM	0.00	Jun 9	0.00	Oct 1	0.00	Jun 18, 1952
MAXIMUM PEAK FLOW			303	Apr 29	*26,800	Jul 31, 1962
MAXIMUM PEAK STAGE			7.62	Apr 29	9.34	Jul 31, 1962
ANNUAL RUNOFF (AC-FT)	16,260		14,940		76,680	
10 PERCENT EXCEEDS	62		50		211	
50 PERCENT EXCEEDS	2.6		14		79	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated.
* Stage 9.34 ft., site then in use.



06832000 ENDERS RESERVOIR NEAR ENDERS, NE

LOCATION.--Lat 40° 25'05", long 101° 30'55", in NE $^{1}/_{4}$ 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 mi^2, approximately, of which about 790 mi^2 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, ACRE FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10,330	10,730	11,070	11,480	11,920	12,380	13,000	13,550	13,680	13,590	11,790	11,220
2	10,370	10,740	11,090	11,470	11,930	12,400	13,000	13,550	13,670	13,560	11,740	11,210
3	10,410	10,760	11,120	11,500	11,950	12,410	13,030	13,550	13,670	13,550	11,670	11,200
4	10,400	10,760	11,150	11,510	11,980	12,430	13,040	13,580	13,670	13,510	11,650	11,180
5	10,410	10,770	11,160	11,510	12,000	12,450	13,060	13,580	13,670	13,510	11,630	11,170
6	10,410	10,770	11,180	11,540	12,010	12,460	13,130	13,590	13,670	13,490	11,600	11,150
7	10,410	10,810	11,190	11,570	12,030	12,490	13,160	13,590	13,670	13,460	11,570	11,130
8	10,420	10,840	11,230	11,590	12,040	12,480	13,160	13,620	13,670	13,450	11,580	11,100
9	10,440	10,840	11,230	11,580	12,080	12,460	13,180	13,610	13,670	13,420	11,560	11,170
10	10,450	10,850	11,230	11,600	12,090	12,530	13,180	13,660	13,670	13,400	11,540	11,190
11	10,460	10,850	11,270	11,630	12,110	12,530	13,190	13,660	13,630	13,330	11,520	11,150
12	10,450	10,860	11,280	11,630	12,100	12,560	13,180	13,670	13,640	13,230	11,500	11,140
13	10,440	10,870	11,270	11,650	12,120	12,570	13,200	13,670	13,630	13,150	11,470	11,120
14	10,440	10,880	11,290	11,650	12,130	12,560	13,200	13,670	13,620	13,070	11,440	11,110
15	10,460	10,890	11,300	11,680	12,180	12,590	13,210	13,690	13,600	12,970	11,420	11,100
16	10,460	10,920	11,300	11,700	12,190	12,600	13,270	13,710	13,670	12,890	11,400	11,070
17	10,470	10,930	11,310	11,700	12,210	12,630	13,260	13,710	13,710	12,800	11,370	11,100
18	10,470	10,950	11,330	11,710	12,210	12,750	13,300	13,720	13,700	12,720	11,350	11,050
19	10,470	10,950	11,350	11,730	12,210	12,810	13,300	13,690	13,690	12,650	11,390	11,030
20	10,480	10,970	11,320	11,760	12,250	12,830	13,300	13,690	13,670	12,560	11,380	11,020
21	10,440	10,990	11,350	11,760	12,260	12,840	13,300	13,690	13,650	12,500	11,350	11,020
22	10,460	11,000	11,360	11,790	12,270	12,870	13,300	13,690	13,650	12,430	11,350	11,010
23	10,500	11,000	11,350	11,800	12,310	12,870	13,340	13,730	13,650	12,350	11,300	11,010
24	10,530	11,000	11,380	11,800	12,330	12,900	13,390	13,720	13,640	12,280	11,290	10,980
25	10,530	11,010	11,380	11,800	12,350	12,920	13,400	13,710	13,610	12,210	11,260	10,970
26	10,550	11,020	11,380	11,830	12,360	12,930	13,420	13,700	13,590	12,160	11,250	10,960
27	10,560	11,040	11,390	11,850	12,360	12,970	13,430	13,710	13,580	12,080	11,230	10,940
28	10,570	11,050	11,400	11,850	12,380	12,970	13,440	13,710	13,610	12,030	11,280	10,940
29	10,590	11,050	11,430	11,880	---	12,980	13,570	13,710	13,600	11,970	11,260	10,910
30	10,680	11,060	11,430	11,880	---	13,000	13,540	13,690	13,590	11,920	11,250	10,920
31	10,710	---	11,450	11,890	---	12,990	---	13,670	---	11,850	11,240	---
MEAN	10,480	10,910	11,290	11,690	12,160	12,680	13,250	13,660	13,650	12,840	11,440	11,080
MAX	10,710	11,060	11,450	11,890	12,380	13,000	13,570	13,730	13,710	13,590	11,790	11,220
MIN	10,330	10,730	11,070	11,470	11,920	12,380	13,000	13,550	13,580	11,850	11,230	10,910
(*)	3,085.06	3,085.55	3,086.09	3,086.69	3,087.34	3,088.13	3,088.82	3,088.99	3,088.88	3,086.64	3085.80	3085.35
(**)	+390	+350	+390	+400	+490	+610	+550	+130	-80	-1,740	-610	-320

CAL YR 2002 MAX 15,240 MIN 10,210 (**) -580
CAL YR 2003 MAX 13,730 MIN 10,330 (**) +600
(*) Elevation, in feet, at end of month.
(**) Change in contents, in acre-feet.

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06834000 FRENCHMAN CREEK AT PALISADE, NE

LOCATION.--Lat 40° 21'07", long 101° 07'24", in SW 1/4 SE 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 mi^2, approximately, of which about 1,110 mi^2 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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	17	25	e25	22	e20	22	30	20	19	18	0.46
2	5.1	16	23	e24	22	e21	22	28	20	17	17	0.98
3	7.0	15	22	e26	23	21	20	26	19	17	16	0.72
4	7.6	16	22	e28	24	22	21	25	19	15	14	0.37
5	7.5	16	22	e30	26	e18	22	24	19	13	14	0.15
6	7.7	15	24	e31	24	e20	23	24	19	12	9.7	0.02
7	7.7	16	26	e31	e23	22	25	23	21	13	5.7	0.01
8	7.8	15	23	25	e25	20	24	24	21	13	11	0.08
9	7.8	15	24	24	e27	20	24	25	20	12	4.6	2.8
10	7.8	15	27	23	e28	21	24	27	18	10	4.1	5.3
11	8.2	15	29	e30	24	20	23	26	17	8.7	4.7	5.3
12	7.9	15	22	e27	21	20	23	25	17	7.9	3.6	4.5
13	7.6	16	23	e25	21	20	22	24	16	13	3.1	4.3
14	7.8	18	27	31	21	20	22	22	15	21	2.4	4.9
15	8.7	18	22	31	21	19	22	22	15	22	2.0	5.3
16	10	17	21	e27	22	19	26	24	15	22	1.6	5.7
17	11	17	20	e27	21	19	28	24	24	23	0.36	5.4
18	11	17	22	e28	20	25	25	23	80	23	0.13	5.0
19	11	17	24	e29	20	30	25	23	39	24	0.12	5.1
20	11	17	e20	e30	20	27	24	22	26	24	0.25	5.7
21	11	17	e19	e32	20	23	23	22	23	24	0.06	6.0
22	12	17	e18	32	20	23	23	22	21	25	0.04	6.3
23	13	17	e16	26	e27	22	29	22	19	25	0.02	6.3
24	13	17	e15	e35	e23	22	29	22	18	24	0.01	5.8
25	14	e17	e16	e34	e18	22	28	22	41	21	0.01	5.6
26	14	e18	e17	e34	e18	22	26	21	48	18	0.01	5.8
27	15	e17	e18	e33	e19	22	25	21	23	18	0.03	5.9
28	15	e19	e20	e32	e20	22	24	20	20	19	0.79	6.6
29	14	e21	e26	27	---	22	35	20	20	20	0.03	6.3
30	15	e23	e24	21	---	22	36	19	24	19	0.02	6.6
31	16	---	e23	21	---	22	---	19	---	19	0.03	---
TOTAL	317.5	506	680	879	620	668	745	721	717	561.6	133.41	123.29
MEAN	10.2	16.9	21.9	28.4	22.1	21.5	24.8	23.3	23.9	18.1	4.30	4.11
MAX	16	23	29	35	28	30	36	30	80	25	18	6.6
MIN	5.1	15	15	21	18	18	20	19	15	7.9	0.01	0.01
AC-FT	630	1,000	1,350	1,740	1,230	1,320	1,480	1,430	1,420	1,110	265	245

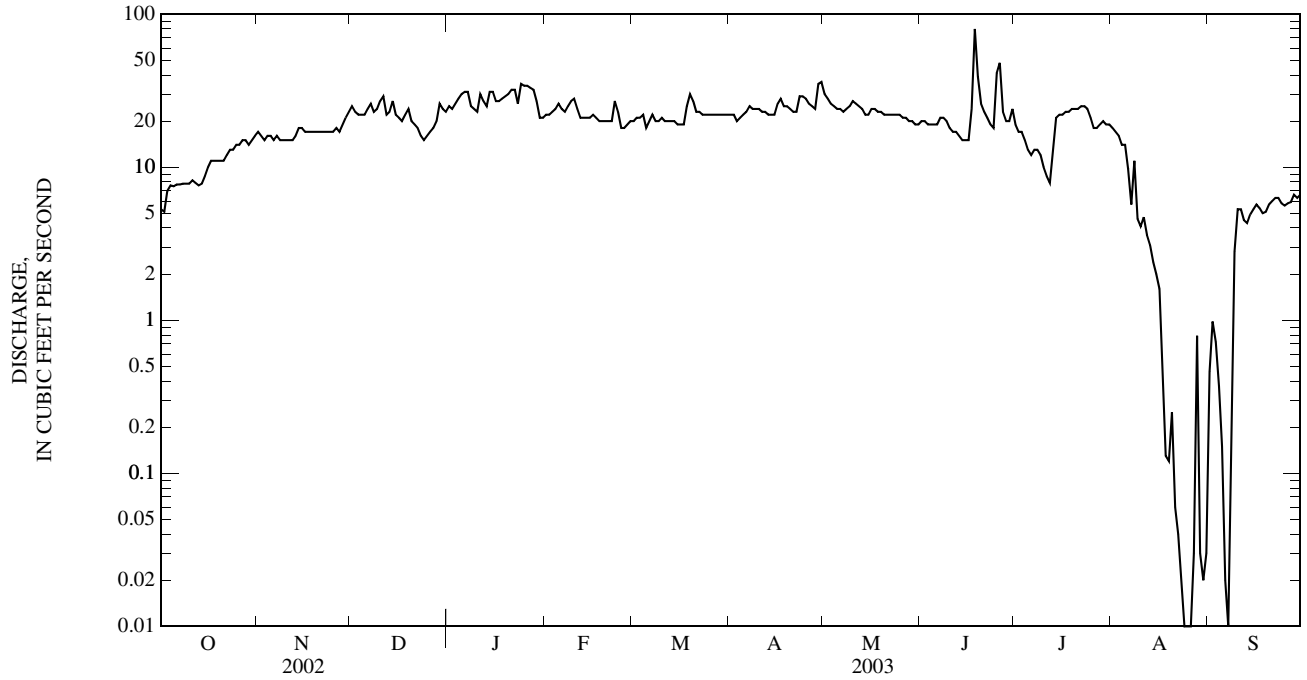
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2003, BY WATER YEAR (WY)

MEAN	38.3	34.6	34.8	36.8	41.6	46.2	45.7	50.9	68.3	177	162	64.8
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	10.2	16.9	21.6	19.3	22.1	21.5	21.6	16.4	8.61	18.1	3.41	2.25
(WY)	(2003)	(2003)	(1990)	(1979)	(2003)	(2003)	(1972)	(2002)	(2002)	(2003)	(2002)	(2002)

06834000 FRENCHMAN CREEK AT PALISADE, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1950 - 2003a	
ANNUAL TOTAL	7,339.62		6,671.80			
ANNUAL MEAN	20.1		18.3		67.2	
HIGHEST ANNUAL MEAN					115	1960
LOWEST ANNUAL MEAN					18.3	2003
HIGHEST DAILY MEAN	100	Jul 22	80	Jun 18	2,090	Jun 17, 1956
LOWEST DAILY MEAN	0.04	Sep 9	0.01	Aug 24	0.01	Aug 24, 2003
ANNUAL SEVEN-DAY MINIMUM	0.17	Aug 21	0.03	Aug 21	0.03	Aug 21, 2003
MAXIMUM PEAK FLOW			124	Jun 25	5,560	Jun 17, 1956
MAXIMUM PEAK STAGE			4.47	Jun 25	*8.79	Jun 17, 1956
ANNUAL RUNOFF (AC-FT)	14,560		13,230		48,710	
10 PERCENT EXCEEDS	31		27		157	
50 PERCENT EXCEEDS	18		20		36	
90 PERCENT EXCEEDS	2.8		5.1		22	

e Estimated.
a Since beginning of storage in Enders Reservoir.
* Site and datum then in use.



06835500 FRENCHMAN CREEK AT CULBERTSON, NE

LOCATION.--Lat 40° 14'05", long 100° 52'40", in SW 1/4 SE 1/4 sec. 12, T.3 N., R.32 W., Hitchcock County, Hydrologic Unit 10250005, on right bank 8 ft upstream from bridge on U.S. Highways 6 and 34, 2 mi west of Culbertson, and 4.0 mi upstream from mouth.

DRAINAGE AREA.--2,990 mi^2, of which about 1,590 mi^2 contributes directly to surface runoff.

PERIOD OF RECORD.--June 1913 to September 1915 (gage heights and discharge measurements only), October 1930 to current year. Published as Frenchman River at Culbertson October 1965 to September 1972. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1390: 1931, 1933, 1934(M), 1938(M). WDR NE-84-1: 1979, 1982(M). WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,583.44 ft above sea level. See WSP 1919 for history of changes prior to Nov. 2, 1950. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow affected by irrigation development above station and, since Oct. 23, 1950, by storage in Enders Reservoir (station 06832000). Prinicipal diversion is by Culbertson Canal, 20,800 acres.

EXTREME FOR TOTAL PERIOD OF RECORD.--Maximum discharge, 15,000 ft^3/s (estimated), May 31, 1935, gage height 14.80 ft, from floodmark.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.01	12	31	44	49	18	47	23	8.9	0.16	0.05
2	0.00	1.9	12	33	45	53	17	43	24	8.1	0.17	0.04
3	0.01	2.4	13	33	45	47	17	46	23	9.0	0.15	0.04
4	0.00	2.9	13	32	44	37	15	45	21	6.2	0.26	0.00
5	0.00	3.0	13	e34	45	35	15	42	20	5.0	0.26	0.00
6	0.00	2.9	e13	36	e43	37	14	40	20	3.3	0.19	0.00
7	0.00	3.3	e13	e37	40	37	14	38	20	2.9	0.12	0.00
8	0.00	3.8	e13	e37	36	34	15	38	19	3.2	1.3	0.00
9	0.00	3.8	e14	e37	e41	33	16	37	19	2.4	0.31	0.00
10	0.00	3.5	e14	e36	e44	35	17	37	19	2.1	0.25	0.00
11	0.00	3.7	14	36	e44	37	17	38	18	1.7	0.17	0.00
12	0.00	3.7	e15	34	44	37	17	38	17	1.4	0.19	0.00
13	0.00	4.3	e16	34	44	30	17	37	17	0.99	0.25	0.00
14	0.00	4.8	16	e34	45	27	16	36	16	0.90	0.24	0.00
15	0.00	5.2	e17	e34	44	24	16	35	14	0.83	0.23	0.00
16	0.00	5.5	18	e34	44	22	17	35	14	0.59	0.14	0.00
17	0.00	6.0	18	34	45	31	15	35	13	0.36	0.06	0.00
18	0.00	6.0	18	e35	44	32	17	34	14	0.32	0.03	0.00
19	0.00	6.0	19	e36	44	38	17	34	32	0.30	0.00	0.00
20	0.00	6.1	18	e38	44	37	17	32	33	0.23	0.00	0.00
21	0.00	6.0	15	e41	44	39	16	32	20	0.18	0.00	0.00
22	0.00	6.1	e16	e43	44	37	17	32	19	0.10	0.00	0.00
23	0.00	6.2	e18	e45	42	31	22	32	16	0.09	0.00	0.00
24	0.00	6.2	19	e46	31	25	28	32	13	0.10	0.00	0.00
25	0.00	e6.2	e19	e45	31	24	28	31	11	0.08	0.00	0.00
26	0.00	e6.2	e20	e43	37	23	29	30	9.9	0.08	0.00	0.00
27	0.02	e6.4	e20	e43	42	22	29	28	35	0.14	0.00	0.00
28	0.00	6.8	21	44	47	19	28	28	16	0.16	0.11	0.00
29	0.01	12	e23	45	---	18	32	27	10	0.10	0.05	0.00
30	0.00	13	e25	46	---	18	54	25	9.2	0.07	0.05	0.00
31	0.00	---	e28	47	---	18	---	23	---	0.10	0.05	---
TOTAL	0.04	153.91	523	1,183	1,187	986	607	1,087	555.1	59.92	4.74	0.13
MEAN	0.001	5.13	16.9	38.2	42.4	31.8	20.2	35.1	18.5	1.93	0.15	0.004
MAX	0.02	13	28	47	47	53	54	47	35	9.0	1.3	0.05
MIN	0.00	0.01	12	31	31	18	14	23	9.2	0.07	0.00	0.00
AC-FT	0.08	305	1,040	2,350	2,350	1,960	1,200	2,160	1,100	119	9.4	0.3

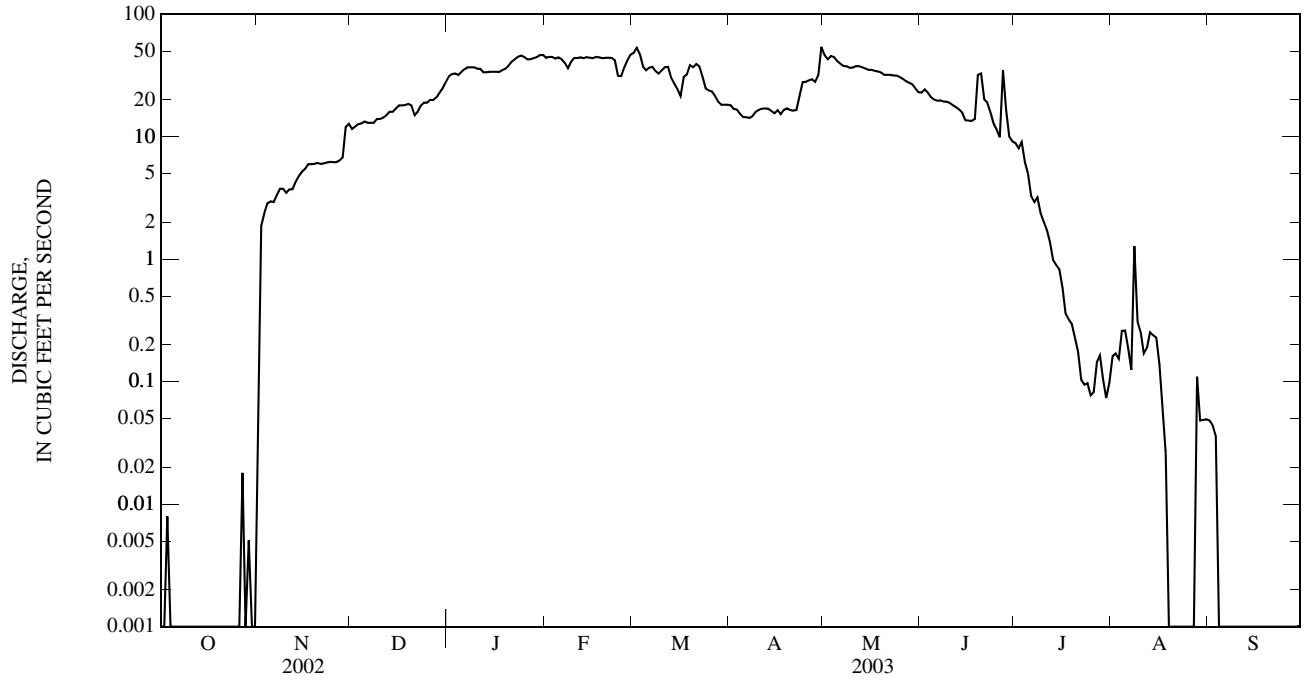
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2003, BY WATER YEAR (WY)

MEAN	68.1	79.2	78.3	79.4	96.4	108	76.2	63.2	73.9	46.3	36.1	53.8
MAX	172	146	162	182	210	543	290	222	351	269	258	245
(WY)	(1963)	(1963)	(1959)	(1953)	(1952)	(1960)	(1960)	(1952)	(1967)	(1962)	(1962)	(1951)
MIN	0.001	5.13	16.9	38.2	42.4	31.8	20.2	12.4	4.57	0.32	0.15	0.000
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2000)	(2002)	(2003)	(2002)

06835500 FRENCHMAN CREEK AT CULBERTSON, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1951 - 2003a	
ANNUAL TOTAL	6,184.47		6,346.84			
ANNUAL MEAN	16.9		17.4		71.4	
HIGHEST ANNUAL MEAN					165	1960
LOWEST ANNUAL MEAN					17.4	2003
HIGHEST DAILY MEAN	59	Mar 11	54	Apr 30	3,060	Jun 18, 1956
LOWEST DAILY MEAN	0.00	Jul 23	0.00	Oct 1	0.00	Aug 7, 1980
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 23	0.00	Oct 4	0.00	Aug 18, 2000
MAXIMUM PEAK FLOW			*69	Apr 30	5,260	Jun 17, 1951
MAXIMUM PEAK STAGE			**3.57	Jan 25	10.43	Jun 17, 1951
ANNUAL RUNOFF (AC-FT)	12,270		12,590		51,750	
10 PERCENT EXCEEDS	52		43		128	
50 PERCENT EXCEEDS	10		16		61	
90 PERCENT EXCEEDS	0.00		0.00		14	

e Estimated.
a Since start of storage in Enders Reservoir.
* Stage 2.84 ft.
** Backwater from ice.



06836500 DRIFTWOOD CREEK NEAR MCCOOK, NE

LOCATION.--Lat 40° 08'45", long 100° 40'22", in SW 1/4 SE 1/4 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 mi^2, of which about 351 mi^2 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 fair. Natural flow affected by waste from Meeker-Driftwood Canal and by irrigation development above station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.85	2.1	1.4	1.6	1.7	2.1	3.5	3.1	1.5	1.2	0.30	0.25
2	0.85	2.0	1.4	1.6	1.8	2.1	3.3	2.7	2.0	1.1	0.48	0.25
3	0.91	2.0	1.4	1.6	1.8	2.1	3.5	2.7	1.8	1.2	0.39	0.25
4	0.97	2.0	1.4	1.7	1.9	2.0	3.6	2.7	2.3	1.0	0.53	0.24
5	0.94	2.1	1.4	1.7	1.9	2.1	3.6	2.6	2.6	1.1	0.27	0.22
6	0.89	2.0	1.5	1.7	1.7	2.2	3.9	2.5	2.0	1.2	0.20	0.18
7	0.97	2.0	1.5	1.7	1.6	2.1	3.9	2.5	1.7	1.5	0.13	0.18
8	0.95	1.9	1.5	1.8	1.8	2.2	3.8	2.5	1.6	1.7	0.33	0.18
9	1.00	1.9	1.5	1.9	1.8	2.0	3.8	2.5	1.4	1.6	0.28	0.25
10	1.1	1.8	1.4	1.8	1.8	1.9	3.6	2.6	1.5	1.5	0.37	0.25
11	1.1	1.7	1.5	1.8	1.8	2.2	3.7	2.7	2.3	1.2	0.31	0.94
12	1.2	1.6	1.4	1.8	1.7	2.2	3.3	e2.6	2.6	1.1	0.16	0.88
13	1.2	1.5	1.4	1.8	1.8	2.3	3.1	e2.5	2.2	0.89	0.21	0.28
14	1.2	1.6	1.6	1.8	1.8	2.3	2.9	e2.6	2.0	0.72	0.23	0.25
15	1.2	1.6	1.5	1.6	1.8	2.3	3.0	e2.5	1.5	0.41	0.29	0.24
16	1.2	1.6	1.5	1.5	1.7	2.3	16	e2.8	1.2	0.51	0.26	0.24
17	1.5	1.6	1.5	1.6	1.7	2.4	7.7	2.6	1.3	0.39	0.15	0.25
18	1.6	1.5	1.5	1.7	1.7	3.1	3.2	2.4	1.5	0.32	0.21	0.24
19	1.7	1.5	1.6	1.7	1.7	3.4	2.7	2.7	1.6	0.35	0.23	0.25
20	1.9	1.5	1.5	1.7	1.8	3.0	2.6	2.4	1.6	0.43	0.26	0.24
21	2.0	1.6	1.5	1.6	2.0	2.8	2.6	2.2	1.6	0.43	0.24	0.27
22	1.9	1.5	1.4	1.4	2.0	2.9	2.6	2.0	1.4	0.30	0.22	0.29
23	2.1	1.5	1.4	1.5	1.9	3.1	2.9	2.0	1.1	0.28	0.27	0.28
24	2.1	1.5	1.5	1.6	1.9	3.4	3.0	1.9	1.1	0.26	0.26	0.25
25	2.2	1.5	1.4	1.5	1.7	3.4	2.7	1.8	0.99	0.25	0.23	0.25
26	2.1	1.5	1.5	1.4	2.0	3.5	2.7	1.7	1.2	0.21	0.19	0.27
27	2.3	1.5	1.6	1.4	2.0	3.7	2.6	1.6	1.2	0.22	0.20	0.34
28	2.3	1.5	1.6	1.4	2.1	3.8	2.6	1.6	1.5	0.24	0.29	0.41
29	2.2	1.5	1.7	1.4	---	3.7	3.1	1.5	1.4	0.28	0.26	0.35
30	2.1	1.4	1.7	1.3	---	3.7	3.6	1.4	1.1	0.44	0.25	0.35
31	2.1	---	1.6	1.5	---	3.7	---	1.5	---	0.25	0.27	---
TOTAL	46.63	50.5	46.3	50.1	50.9	84.0	113.1	71.4	48.79	22.58	8.27	9.12
MEAN	1.50	1.68	1.49	1.62	1.82	2.71	3.77	2.30	1.63	0.73	0.27	0.30
MAX	2.3	2.1	1.7	1.9	2.1	3.8	16	3.1	2.6	1.7	0.53	0.94
MIN	0.85	1.4	1.4	1.3	1.6	1.9	2.6	1.4	0.99	0.21	0.13	0.18
AC-FT	92	100	92	99	101	167	224	142	97	45	16	18

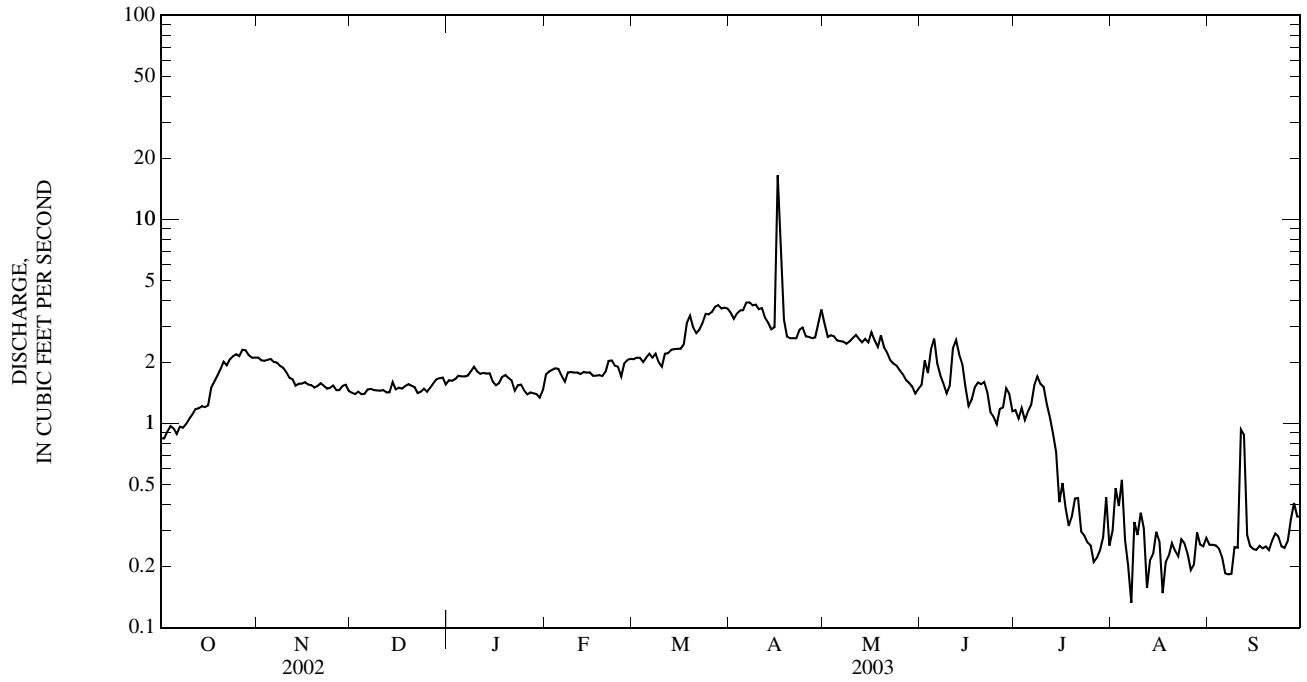
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2003, BY WATER YEAR (WY)

MEAN	6.89	3.65	3.55	3.51	5.59	7.62	4.24	9.35	17.0	19.2	16.0	12.8
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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1946 - 2003	
ANNUAL TOTAL	1,011.86		601.69			
ANNUAL MEAN	2.77		1.65		9.15	
HIGHEST ANNUAL MEAN					35.0	1951
LOWEST ANNUAL MEAN					1.12	1953
HIGHEST DAILY MEAN	207	Aug 28	16	Apr 16	3,950	Aug 7, 1950
LOWEST DAILY MEAN	0.39	Aug 26	0.13	Aug 7	0.00	Apr 25, 1946
ANNUAL SEVEN-DAY MINIMUM	0.49	Aug 17	0.21	Sep 2	0.00	Jun 12, 1946
MAXIMUM PEAK FLOW			38	Apr 16	4,740	Aug 7, 1950
MAXIMUM PEAK STAGE			6.17	Apr 16	25.43	Aug 7, 1950
ANNUAL RUNOFF (AC-FT)	2,010		1,190		6,630	
10 PERCENT EXCEEDS	3.2		2.8		11	
50 PERCENT EXCEEDS	2.1		1.6		4.6	
90 PERCENT EXCEEDS	0.85		0.25		0.30	

e Estimated.



06837000 REPUBLICAN RIVER AT MCCOOK, NE

LOCATION.--Lat 40° 11'15", long 100° 37'05", in SW 1/4 NE 1/4 sec.32, T.3 N., R.29 W., Red Willow County, Hydrologic Unit 10250004, on left bank at downstream side of bridge on U.S. Highway 83 at south edge of McCook, 2.5 mi downstream from Driftwood Creek, 10.5 mi upstream from Red Willow Creek, and at mile 348.

DRAINAGE AREA.--12,240 mi^2, of which about 6,220 mi^2 contributes directly to surface runoff.

PERIOD OF RECORD.--October 1930 to June 1932, October 1954 to current year. Monthly discharge only for some periods, published in WSP 1310.

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

GAGE.--Water-stage recorder. Datum of gage is 2,456.37 ft above sea level. October 1930 to June 1932, nonrecording gage on former highway bridge 300 ft upstream at different datum, and October 1954 to Mar. 13, 1959 on highway bridge 25 ft upstream at present datum. Mar. 13, 1959 to Mar. 29, 1988 at present site and datum. Mar. 29, 1988 to Oct. 31, 1989 200 ft downstream at present datum. Data collection platform at station.

REMARKS.--Records fair, except for estimated daily discharges and records for July through September, which are poor. Natural flow affected by irrigation development above station and by storage in Bonny Reservoir, Enders Reservoir (station 06832000), and Swanson Lake (station 06829000).

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.12	0.18	0.19	0.37	39	48	22	48	29	14	0.03	0.02
2	0.26	0.16	0.20	0.39	41	47	21	54	70	13	0.01	0.06
3	0.77	0.14	0.19	0.42	45	48	20	45	37	10	0.01	0.06
4	0.43	0.10	0.25	0.45	39	41	20	41	33	7.0	0.14	0.08
5	0.23	0.09	0.27	1.4	39	47	19	38	32	3.4	0.01	0.06
6	0.24	0.09	0.31	4.8	36	54	22	37	29	2.5	0.12	0.01
7	0.23	0.14	0.31	7.9	28	35	25	36	26	2.6	0.37	0.02
8	0.26	0.14	0.26	12	28	33	26	37	26	12	3.7	0.12
9	0.42	0.13	0.28	9.9	32	32	27	37	25	3.8	0.02	1.3
10	0.50	0.08	0.25	3.2	38	31	27	37	24	1.1	0.11	0.83
11	0.53	0.09	0.26	5.6	43	32	27	37	29	0.50	0.93	0.52
12	0.43	0.09	0.29	3.7	45	32	26	36	150	0.20	0.78	0.36
13	0.39	0.09	0.27	4.1	43	31	25	37	51	0.17	1.0	0.05
14	0.30	0.22	0.33	8.0	42	28	26	37	33	0.05	1.8	0.04
15	0.25	0.25	0.23	12	39	27	27	35	29	0.15	2.6	0.14
16	0.32	0.29	0.18	9.5	37	25	63	41	25	0.14	2.1	0.10
17	0.34	0.26	0.21	5.5	38	25	60	37	25	0.04	4.5	0.10
18	0.41	0.21	0.26	2.4	36	40	34	33	25	0.04	9.4	0.07
19	0.42	0.23	0.26	4.1	35	48	28	62	23	0.03	5.4	0.06
20	0.41	0.22	0.30	8.9	35	39	26	34	27	0.17	0.04	0.01
21	0.47	0.27	0.34	e8.6	36	36	26	31	30	0.29	0.03	0.04
22	0.56	0.31	0.32	e8.3	36	36	26	30	25	0.32	0.02	0.25
23	0.59	0.34	0.32	e8.1	30	35	34	35	24	0.20	0.00	0.21
24	0.55	0.28	0.32	7.9	25	30	39	31	21	0.15	0.00	0.20
25	0.56	0.25	0.39	7.7	27	26	35	28	21	0.26	0.01	0.07
26	0.41	0.25	0.33	13	33	26	31	26	20	0.22	0.03	0.05
27	0.71	0.25	0.27	17	38	26	29	26	18	0.32	0.05	0.05
28	0.44	0.23	0.34	20	42	23	30	26	25	0.60	4.0	0.05
29	0.53	0.22	0.35	26	---	22	36	26	20	0.44	0.53	0.17
30	0.51	0.19	0.27	30	---	22	37	23	17	0.19	0.04	0.09
31	0.27	---	0.36	33	---	22	---	25	---	0.06	0.02	---
TOTAL	12.86	5.79	8.71	284.23	1,025	1,047	894	1,106	969	73.94	37.80	5.19
MEAN	0.41	0.19	0.28	9.17	36.6	33.8	29.8	35.7	32.3	2.39	1.22	0.17
MAX	0.77	0.34	0.39	33	45	54	63	62	150	14	9.4	1.3
MIN	0.12	0.08	0.18	0.37	25	22	19	23	17	0.03	0.00	0.01
AC-FT	26	11	17	564	2,030	2,080	1,770	2,190	1,920	147	75	10

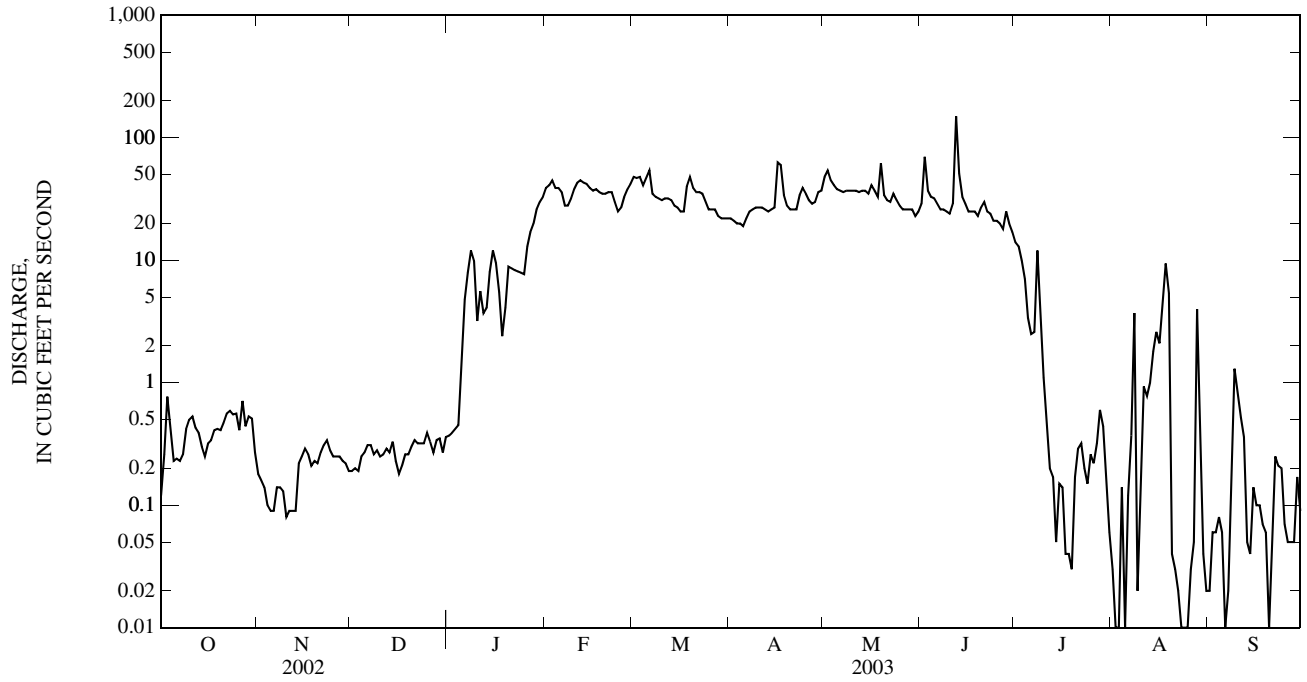
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2003, BY WATER YEAR (WY)

MEAN	93.2	106	103	107	143	171	153	165	178	201	163	92.6
MAX	466	341	321	269	398	901	577	1,022	1,070	1,142	970	286
(WY)	(1966)	(1966)	(1959)	(1959)	(1958)	(1960)	(1958)	(1957)	(1962)	(1962)	(1962)	(1962)
MIN	0.41	0.19	0.28	9.17	36.6	33.8	29.8	22.3	6.41	1.77	1.22	0.17
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)	(2003)	(2003)

06837000 REPUBLICAN RIVER AT MCCOOK, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1955 - 2003	
ANNUAL TOTAL	7,183.56		5,469.52			
ANNUAL MEAN	19.7		15.0		140	
HIGHEST ANNUAL MEAN					383	1962
LOWEST ANNUAL MEAN					15.0	2003
HIGHEST DAILY MEAN	140	Aug 28	150	Jun 12	5,020	Mar 21, 1960
LOWEST DAILY MEAN	0.00	Jul 9	0.00	Aug 23	0.00	Sep 24, 2000
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 28	0.02	Aug 20	0.00	Aug 29, 2001
MAXIMUM PEAK FLOW			261	Jun 12	5,890	Mar 21, 1960
MAXIMUM PEAK STAGE			4.75	Jun 12	9.14	Mar 21, 1960
ANNUAL RUNOFF (AC-FT)	14,250		10,850		101,200	
10 PERCENT EXCEEDS	59		37		248	
50 PERCENT EXCEEDS	2.9		3.8		103	
90 PERCENT EXCEEDS	0.02		0.08		46	

e Estimated.



06838000 RED WILLOW CREEK NEAR RED WILLOW, NE

LOCATION.--Lat 40° 14'10", long 100° 30'00", in NE 1/4 NE 1/4 sec.17, T.3 N., R.28 W., Red Willow County, Hydrologic Unit 10250007, on left bank near downstream side of bridge on U.S. Highways 6 and 34, 0.8 mi north of Red Willow and 2.1 mi upstream from mouth.

DRAINAGE AREA.--820 mi^2, of which about 405 mi^2 contributes directly to surface runoff.

PERIOD OF RECORD.--September 1939 to current year.

REVISED RECORDS.--WSP 1510: 1945(M). WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,398.64 ft above sea level. Prior to May 26, 1945, nonrecording gage at bridge 1.2 mi upstream at datum 11.16 ft higher; May 26, 1945 to Aug. 2, 1974 water-stage recorder at left downstream side of bridge, present datum; Aug. 3, 1974 to June 27, 1980 on right bank at downstream side of bridge, present datum; and June 28, 1980 to May 19, 1992 at left downstream side of bridge, present datum. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow affected by irrigation development above station, since Sept. 5, 1961, by storage in Hugh Butler Lake (station 06837390), and since June 1963 by Red Willow Canal which diverts 4.5 mi above station for irrigation of about 4,150 acres.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	7.0	5.9	e3.9	e5.4	6.7	6.5	7.6	7.0	6.4	0.86	2.6
2	4.3	7.0	6.5	e4.3	e5.4	7.0	6.6	8.9	19	6.3	1.3	2.5
3	4.5	6.8	6.4	e4.8	e5.2	7.3	6.6	8.1	7.1	6.0	2.1	2.4
4	5.3	6.7	6.5	e5.4	5.2	6.2	6.7	7.9	8.1	6.2	1.8	2.2
5	4.6	6.7	6.6	5.9	e4.8	4.6	6.8	7.3	6.4	5.9	1.7	1.2
6	4.8	6.5	5.8	5.9	4.6	9.2	7.1	7.3	6.0	5.4	1.3	1.1
7	5.0	6.6	e5.2	6.2	3.2	7.3	7.0	7.4	6.2	5.2	1.2	1.1
8	5.1	6.7	e5.0	6.3	e4.9	6.9	6.7	7.6	5.9	5.5	1.1	1.4
9	4.9	6.7	4.8	5.3	e5.6	5.2	6.8	7.7	5.9	4.4	0.78	2.3
10	5.0	6.4	4.7	2.9	e6.4	7.4	6.9	7.5	6.4	3.4	1.1	2.4
11	5.0	6.4	4.8	e2.9	e7.4	6.7	7.1	7.6	7.5	3.2	1.5	2.7
12	4.6	6.5	e4.6	e2.9	7.9	6.9	7.4	7.5	32	3.1	1.7	2.7
13	4.8	6.5	4.3	e2.8	8.2	7.0	7.4	7.4	23	3.1	1.6	2.7
14	5.0	6.6	6.0	e2.8	8.7	7.2	7.9	7.7	8.7	3.0	1.0	2.9
15	5.3	6.7	6.2	e2.8	7.4	7.3	8.1	8.0	7.5	2.7	1.0	3.2
16	5.5	6.5	6.2	2.8	6.1	7.3	18	8.2	7.2	2.6	0.60	3.3
17	5.6	6.6	6.1	e2.8	6.7	7.4	9.0	8.2	7.0	2.6	0.32	3.3
18	5.6	6.5	6.1	e3.0	6.5	8.3	8.1	8.1	7.0	2.6	0.30	3.3
19	5.8	6.5	e5.6	e3.4	6.5	9.9	7.8	29	6.9	2.2	0.53	3.0
20	5.9	6.5	e5.0	e3.7	6.7	7.1	7.7	7.8	7.1	2.6	0.51	3.3
21	6.1	6.5	3.6	e4.1	6.7	7.0	7.5	7.3	7.1	1.9	0.58	3.3
22	6.3	6.7	1.9	4.6	6.7	7.0	7.5	7.2	6.9	1.6	0.11	3.4
23	6.7	6.7	e2.0	e4.7	3.7	6.9	8.2	7.4	6.9	1.4	0.13	3.4
24	6.9	6.7	e2.1	e5.0	2.2	6.8	10	7.3	6.7	1.1	0.43	3.4
25	6.7	6.7	2.3	e5.2	e2.5	6.7	8.0	7.0	7.0	1.4	1.1	3.3
26	6.9	6.4	2.7	e5.4	e3.3	6.7	7.6	7.1	6.9	1.4	1.3	3.4
27	7.1	4.4	3.8	e5.6	e4.2	6.5	7.5	7.2	6.7	1.3	1.5	3.3
28	7.2	e4.6	e4.1	e5.6	5.1	6.4	7.5	7.1	6.6	1.5	16	3.3
29	6.9	e5.0	e4.6	e5.6	---	5.9	9.7	6.8	7.0	0.93	3.3	3.5
30	7.0	e5.4	e4.0	e5.6	---	6.2	8.4	6.5	6.6	1.1	2.3	3.5
31	7.1	---	3.7	e5.4	---	6.5	---	6.3	---	0.89	2.5	---
TOTAL	175.9	191.5	147.1	137.6	157.2	215.5	238.1	254.0	260.3	96.92	51.55	83.4
MEAN	5.67	6.38	4.75	4.44	5.61	6.95	7.94	8.19	8.68	3.13	1.66	2.78
MAX	7.2	7.0	6.6	6.3	8.7	9.9	18	29	32	6.4	16	3.5
MIN	4.3	4.4	1.9	2.8	2.2	4.6	6.5	6.3	5.9	0.89	0.11	1.1
AC-FT	349	380	292	273	312	427	472	504	516	192	102	165

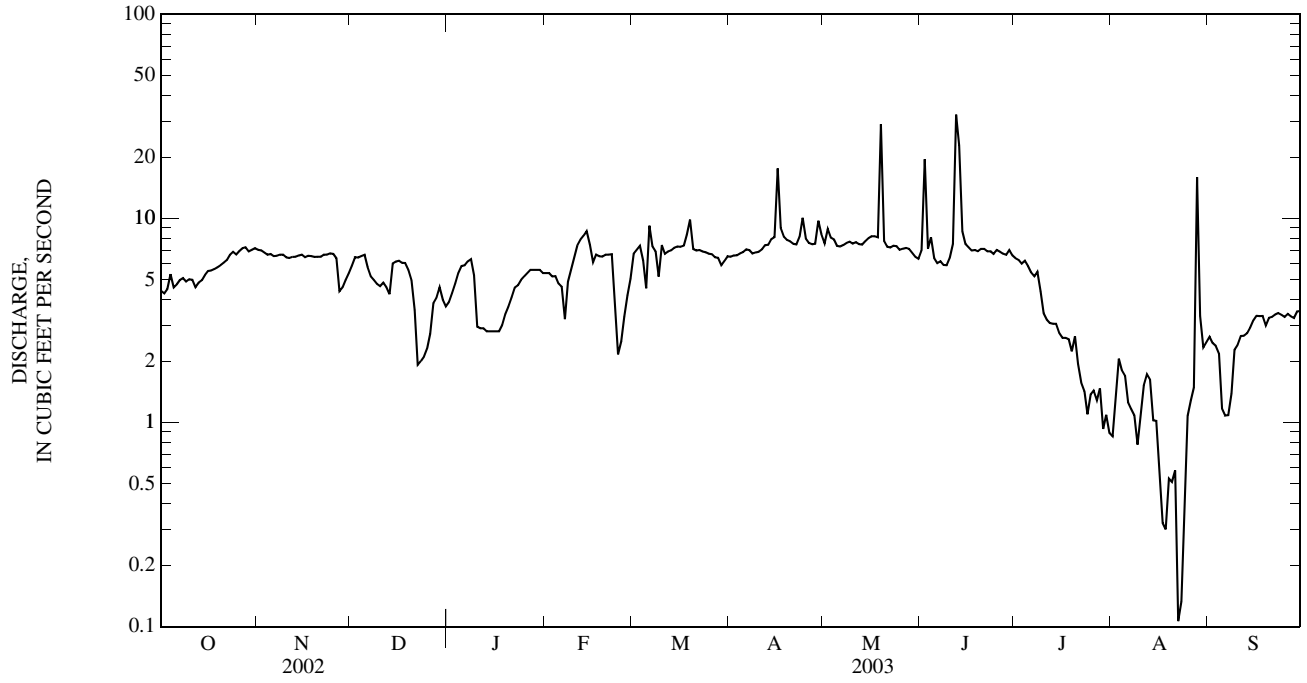
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2003, BY WATER YEAR (WY)

MEAN	8.45	8.51	8.64	9.28	10.7	11.3	11.3	11.8	20.9	22.2	21.4	10.3
MAX	18.8	13.6	12.1	21.1	32.9	35.5	41.5	36.6	124	67.2	92.4	29.0
(WY)	(1970)	(1997)	(1966)	(1962)	(1968)	(1994)	(1970)	(1973)	(1967)	(2002)	(1978)	(1978)
MIN	3.84	4.98	4.75	4.00	5.61	6.11	4.98	2.87	4.56	3.13	1.66	2.78
(WY)	(1978)	(1978)	(2003)	(2002)	(2003)	(2002)	(1978)	(1978)	(1992)	(2003)	(2003)	(2003)

06838000 RED WILLOW CREEK NEAR RED WILLOW, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1962 - 2003a	
ANNUAL TOTAL	4,258.31		2,009.07			
ANNUAL MEAN	11.7		5.50		12.9	
HIGHEST ANNUAL MEAN					25.5	1967
LOWEST ANNUAL MEAN					5.50	2003
HIGHEST DAILY MEAN	143	Jul 22	32	Jun 12	668	Jul 18, 1962
LOWEST DAILY MEAN	0.00	Jul 26	0.11	Aug 22	0.00	Sep 2, 1995
ANNUAL SEVEN-DAY MINIMUM	1.2	Aug 31	0.35	Aug 17	0.29	Dec 31, 1998
MAXIMUM PEAK FLOW			*71	Jun 12	30,000	Jun 22, 1947
MAXIMUM PEAK STAGE			**9.38	Jan 25	18.36	Jun 22, 1947
ANNUAL RUNOFF (AC-FT)	8,450		3,980		9,360	
10 PERCENT EXCEEDS	8.5		7.6		20	
50 PERCENT EXCEEDS	6.1		6.0		9.1	
90 PERCENT EXCEEDS	2.3		1.6		5.4	

e Estimated.
a Since beginning of storage in Hugh Butler Lake.
* Stage 6.34 ft.
** Backwater from ice.



06843500 REPUBLICAN RIVER AT CAMBRIDGE, NE

LOCATION.--Lat 40° 17'05", long 100° 08'35", in NW 1/4 SE 1/4 sec. 28, T.4 N., R.25 W., Furnas County, Hydrologic Unit 10250004, on left bank 400 ft south of U.S. Highways 6 and 34, 0.5 mi downstream from Medicine Creek, 1 mi east of Cambridge, 1.3 mi upstream from Cambridge diversion dam, and at mile 315.

DRAINAGE AREA.--14,460 mi^2, of which about 7,780 mi^2 contributes directly to surface runoff.

PERIOD OF RECORD.--September 1945 to current year.

REVISED RECORDS.--WDR NE-84-1: 1983(M). WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,239.07 ft above sea level. Prior to July 13, 1948, nonrecording gage at site 150 ft upstream at same datum and July 13, 1948 to Sept. 25, 1950 at present site and datum.

REMARKS.--Records good. Natural flow affected by irrigation development above station and since 1949 by regulation from upstream reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 160,000 ft^3/s June 22, 1947, gage height 16.7 ft, from floodmarks.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1826, 17.6 ft May 31 to June 1, 1935, information from local resident, discharge, about 280,000 ft^3/s.

COOPERATION.--Records provided by Nebraska Department of Natural Resources and reviewed by the U.S. Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.10	0.20	0.08	0.78	1.0	50	35	58	45	109	171	0.87
2	0.09	0.16	0.06	0.71	1.1	62	35	57	55	120	151	0.53
3	0.07	0.11	0.08	0.68	0.89	66	34	69	96	190	140	0.26
4	0.07	0.09	0.09	0.70	0.71	72	34	67	79	193	184	0.11
5	0.07	0.06	0.10	0.68	0.82	93	35	63	63	180	187	0.09
6	0.06	0.18	0.11	0.63	0.73	60	38	59	57	178	185	0.09
7	0.06	0.26	0.12	0.65	0.57	67	39	55	55	197	181	0.09
8	0.05	0.23	0.12	0.78	0.52	54	40	55	51	206	162	0.05
9	0.03	0.19	0.13	0.80	0.66	51	41	60	47	197	143	0.04
10	0.02	0.31	0.14	0.62	0.80	48	39	61	43	181	141	0.05
11	0.01	0.46	0.14	0.57	5.8	45	39	62	40	174	164	0.30
12	0.01	0.41	0.14	0.52	15	46	39	59	47	177	183	0.21
13	0.00	0.35	0.17	0.59	22	46	38	55	94	178	172	0.16
14	0.00	0.41	0.17	0.65	22	46	37	52	97	199	157	0.10
15	0.00	0.31	0.19	0.69	26	46	37	52	61	203	135	0.07
16	0.00	0.23	0.22	0.59	34	44	43	55	50	203	120	0.06
17	0.00	0.18	0.27	0.50	36	44	57	57	45	205	118	0.05
18	0.00	0.14	0.28	0.48	33	49	64	57	43	202	170	0.05
19	0.00	0.16	0.25	0.68	33	60	56	87	45	191	186	0.04
20	0.00	0.15	0.44	0.79	33	64	48	99	45	189	216	0.05
21	0.00	0.12	0.48	0.91	34	54	45	75	42	194	228	0.05
22	0.00	0.11	0.45	0.89	36	49	43	63	40	192	171	0.05
23	0.00	0.13	0.39	0.77	40	45	46	58	42	176	14	0.06
24	0.00	0.13	0.47	0.87	24	46	54	58	68	169	7.4	0.06
25	0.00	0.11	0.48	0.58	24	45	58	57	70	152	5.3	0.05
26	0.00	0.12	0.46	0.52	29	44	57	52	43	142	4.0	0.05
27	0.96	0.11	0.46	0.56	35	42	55	50	38	143	3.2	0.04
28	0.57	0.10	0.60	0.67	46	40	54	48	34	190	4.5	0.03
29	0.37	0.09	0.73	0.75	---	38	53	48	39	196	2.4	0.03
30	0.34	0.09	0.88	0.85	---	37	55	47	126	199	1.8	0.02
31	0.28	---	0.82	0.95	---	36	---	46	---	204	1.2	---
TOTAL	3.16	5.70	9.52	21.41	535.60	1,589	1,348	1,841	1,700	5,629	3,708.8	3.71
MEAN	0.10	0.19	0.31	0.69	19.1	51.3	44.9	59.4	56.7	182	120	0.12
MAX	0.96	0.46	0.88	0.95	46	93	64	99	126	206	228	0.87
MIN	0.00	0.06	0.06	0.48	0.52	36	34	46	34	109	1.2	0.02
AC-FT	6.3	11	19	42	1,060	3,150	2,670	3,650	3,370	11,170	7,360	7.4

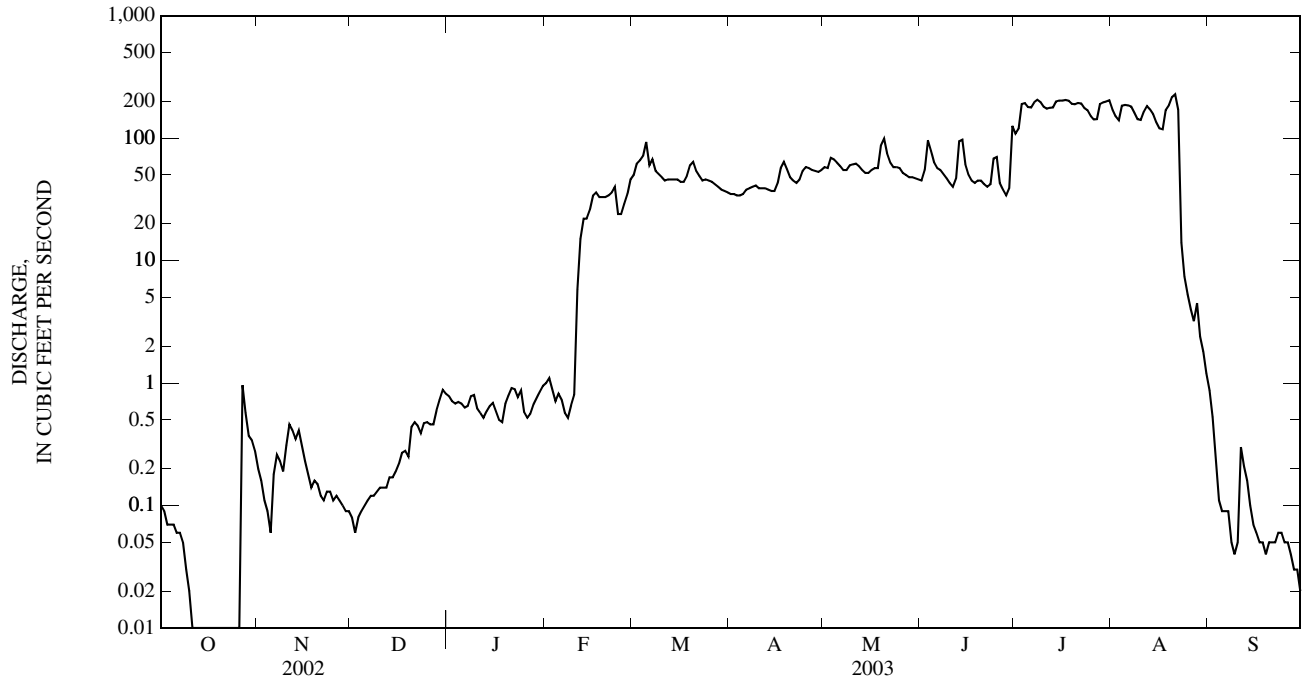
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2003, BY WATER YEAR (WY)

MEAN	115	148	144	151	231	284	250	292	332	357	288	148
MAX	515	425	389	384	579	1,684	756	1,624	1,743	1,613	1,202	1,935
(WY)	(1966)	(1966)	(1966)	(1959)	(1966)	(1960)	(1958)	(1957)	(1962)	(1962)	(1962)	(1951)
MIN	0.10	0.19	0.31	0.69	19.1	51.3	44.9	37.4	56.7	160	98.9	0.12
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2003)	(1952)	(1952)	(2003)

06843500 REPUBLICAN RIVER AT CAMBRIDGE, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1950 - 2003a	
ANNUAL TOTAL	22,942.01		16,394.90			
ANNUAL MEAN	62.9		44.9		228	
HIGHEST ANNUAL MEAN					686	1951
LOWEST ANNUAL MEAN					44.9	2003
HIGHEST DAILY MEAN	349	Jul 23	228	Aug 21	8,610	Mar 22, 1960
LOWEST DAILY MEAN	0.00	Oct 13	0.00	Oct 13	0.00	Oct 13, 2002
ANNUAL SEVEN-DAY MINIMUM	0.00	Oct 13	0.00	Oct 13	0.00	Oct 13, 2002
MAXIMUM PEAK FLOW			232	Aug 21	*11,000	Sep 4, 1951
MAXIMUM PEAK STAGE			3.79	Aug 21	9.35	Mar 22, 1960
ANNUAL RUNOFF (AC-FT)	45,510		32,520		165,500	
10 PERCENT EXCEEDS	190		170		402	
50 PERCENT EXCEEDS	49		33		161	
90 PERCENT EXCEEDS	0.10		0.06		66	

a Since beginning of storage in Harry Strunk Lake (Medicine Creek).
* Stage 7.02 ft.



06844500 REPUBLICAN RIVER NEAR ORLEANS, NE

LOCATION.--Lat 40° 07'53", long 99° 30'08", in NE 1/4 NE 1/4 sec.19, T.2 N., R.19 W., Harlan County, Hydrologic Unit 10250009, on right bank 18 ft downstream from bridge on State Highway 89, 200 ft downstream from Burlington Northern Inc. bridge, 2 mi west of Orleans, 2.8 mi upstream from Sappa Creek, 23 mi upstream from Harlan County Dam, and at mile 262.

DRAINAGE AREA.--15,580 mi^2, approximately, of which about 8,880 mi^2 contributes directly to surface runoff.

PERIOD OF RECORD.--October 1947 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 1,972.57 ft above sea level. Prior to June 2, 1948, nonrecording gage at present site and datum. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow affected by irrigation development above station and regulation by upstream reservoirs.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
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	49	e24	48	92	67	53	0.00	0.00
2	0.00	0.00	0.00	0.00	56	e28	49	86	81	53	0.00	0.00
3	0.00	0.00	0.00	3.6	54	e31	48	88	87	45	0.00	0.00
4	0.00	0.00	0.00	7.4	38	e34	47	88	95	40	0.00	0.00
5	0.00	0.00	0.00	18	37	e41	45	95	103	35	0.00	0.00
6	0.00	0.00	0.00	18	26	e47	49	100	115	30	0.00	0.00
7	0.00	0.00	0.00	18	22	e51	53	94	99	27	0.00	0.00
8	0.00	0.00	0.00	15	e22	e54	53	91	91	22	0.00	0.00
9	0.00	0.00	0.00	16	25	57	54	90	85	21	0.00	0.00
10	0.00	0.00	0.00	14	26	57	55	91	77	17	0.00	0.00
11	0.00	0.00	0.00	9.2	32	51	55	90	72	14	0.00	0.00
12	0.00	0.00	0.00	7.4	41	49	53	89	78	12	0.00	0.00
13	0.00	0.00	0.00	5.9	44	46	51	87	73	11	0.00	0.00
14	0.00	0.00	0.00	5.7	49	47	50	82	76	11	0.00	0.00
15	0.00	0.00	0.00	e5.8	44	47	51	81	78	9.2	0.00	0.00
16	0.00	0.00	0.00	e6.0	36	47	57	81	117	7.5	0.00	0.00
17	0.00	0.00	0.00	e7.0	40	50	62	78	98	4.6	0.00	0.00
18	0.00	0.00	0.00	e8.2	44	57	65	77	83	2.1	0.00	0.00
19	0.00	0.00	0.00	9.7	36	58	69	100	94	1.5	0.00	0.00
20	0.00	0.00	0.00	9.9	37	55	77	198	75	1.3	0.00	0.00
21	0.00	0.00	0.00	11	39	58	73	355	69	0.30	0.00	0.00
22	0.00	0.00	0.00	e10	37	63	68	224	65	0.00	0.00	0.00
23	0.00	0.00	0.00	e9.6	25	60	73	150	59	0.00	0.00	0.00
24	0.00	0.00	0.00	e8.6	e21	56	90	190	54	0.00	0.00	0.00
25	0.00	0.00	0.01	e8.4	e19	52	93	200	73	0.00	0.00	0.00
26	0.00	0.00	0.12	e8.2	e19	52	89	156	114	0.00	0.00	0.00
27	0.00	0.00	0.10	8.2	e19	52	88	101	151	0.00	0.00	0.00
28	0.00	0.00	0.02	11	e19	49	83	89	107	0.00	0.00	0.00
29	0.00	0.00	0.00	22	---	45	106	80	86	0.00	0.00	0.00
30	0.00	0.00	0.00	34	---	45	100	74	63	0.00	0.00	0.00
31	0.00	---	0.06	42	---	46	---	68	---	0.00	0.00	---
TOTAL	0.00	0.00	0.31	357.80	956	1,509	1,954	3,565	2,585	417.50	0.00	0.00
MEAN	0.000	0.000	0.010	11.5	34.1	48.7	65.1	115	86.2	13.5	0.000	0.000
MAX	0.00	0.00	0.12	42	56	63	106	355	151	53	0.00	0.00
MIN	0.00	0.00	0.00	0.00	19	24	45	68	54	0.00	0.00	0.00
AC-FT	0.00	0.00	0.6	710	1,900	2,990	3,880	7,070	5,130	828	0.00	0.00

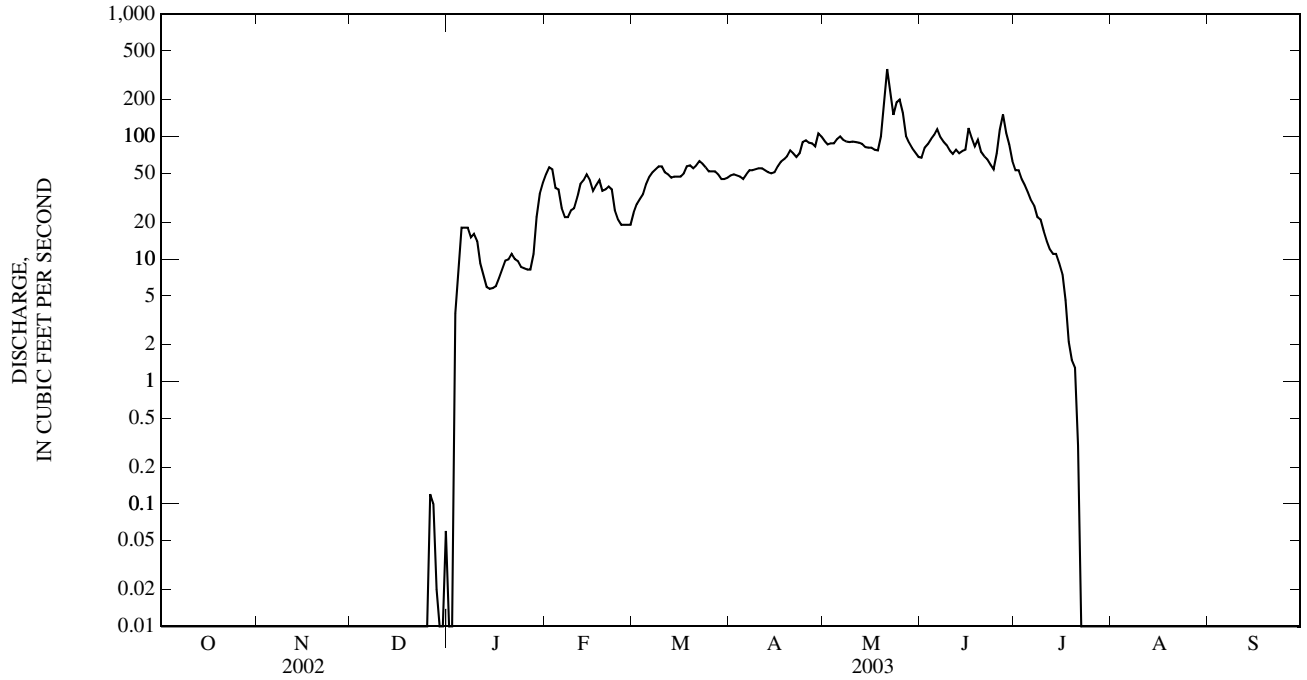
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2003, BY WATER YEAR (WY)

MEAN	124	164	163	164	281	364	317	375	448	248	172	141
MAX	840	519	438	392	772	1,720	915	1,528	2,732	1,602	1,396	2,026
(WY)	(1966)	(1966)	(1966)	(1953)	(1949)	(1960)	(1949)	(1951)	(1948)	(1962)	(1962)	(1951)
MIN	0.000	0.000	0.010	11.5	34.1	48.7	65.1	54.8	37.9	1.19	0.000	0.000
(WY)	(1992)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(1956)	(2002)	(2002)	(2002)	(2002)

06844500 REPUBLICAN RIVER NEAR ORLEANS, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1948 - 2003	
ANNUAL TOTAL	14,544.03		11,344.61			
ANNUAL MEAN	39.8		31.1		246	
HIGHEST ANNUAL MEAN					746	1951
LOWEST ANNUAL MEAN					31.1	2003
HIGHEST DAILY MEAN	177	Mar 13	355	May 21	18,400	Jun 22, 1948
LOWEST DAILY MEAN	0.00	Jul 24	0.00	Oct 1	0.00	Sep 15, 1952
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 24	0.00	Oct 1	0.00	Sep 15, 1952
MAXIMUM PEAK FLOW			469	May 21	*40,600	Jun 22, 1948
MAXIMUM PEAK STAGE			3.56	May 21	**12.95	Mar 8, 1993
ANNUAL RUNOFF (AC-FT)	28,850		22,500		178,500	
10 PERCENT EXCEEDS	114		88		464	
50 PERCENT EXCEEDS	5.1		8.4		155	
90 PERCENT EXCEEDS	0.00		0.00		38	

e Estimated.
* Stage 11.25 ft.
** Backwater from ice.



06846500 BEAVER CREEK AT CEDAR BLUFFS, KS

LOCATION.--Lat 39° 59'06", long 100° 33'35", in NW 1/4 NE 1/4 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 mi^2, of which 294 mi^2 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.

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 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 29	0800	*52	*4.85	No peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	e0.00	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	e0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	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	0.09	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.4	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	9.9	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	2.6	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.03	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	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	5.9	0.00	0.00	0.00	0.00	0.00
30	e0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	e0.00	---	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	0.63	0.000	0.13	0.000	0.000	0.000
MAX	0.00	0.00	0.00	0.00	0.00	0.00	9.9	0.00	3.4	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	37	0.00	8.0	0.00	0.00	0.00

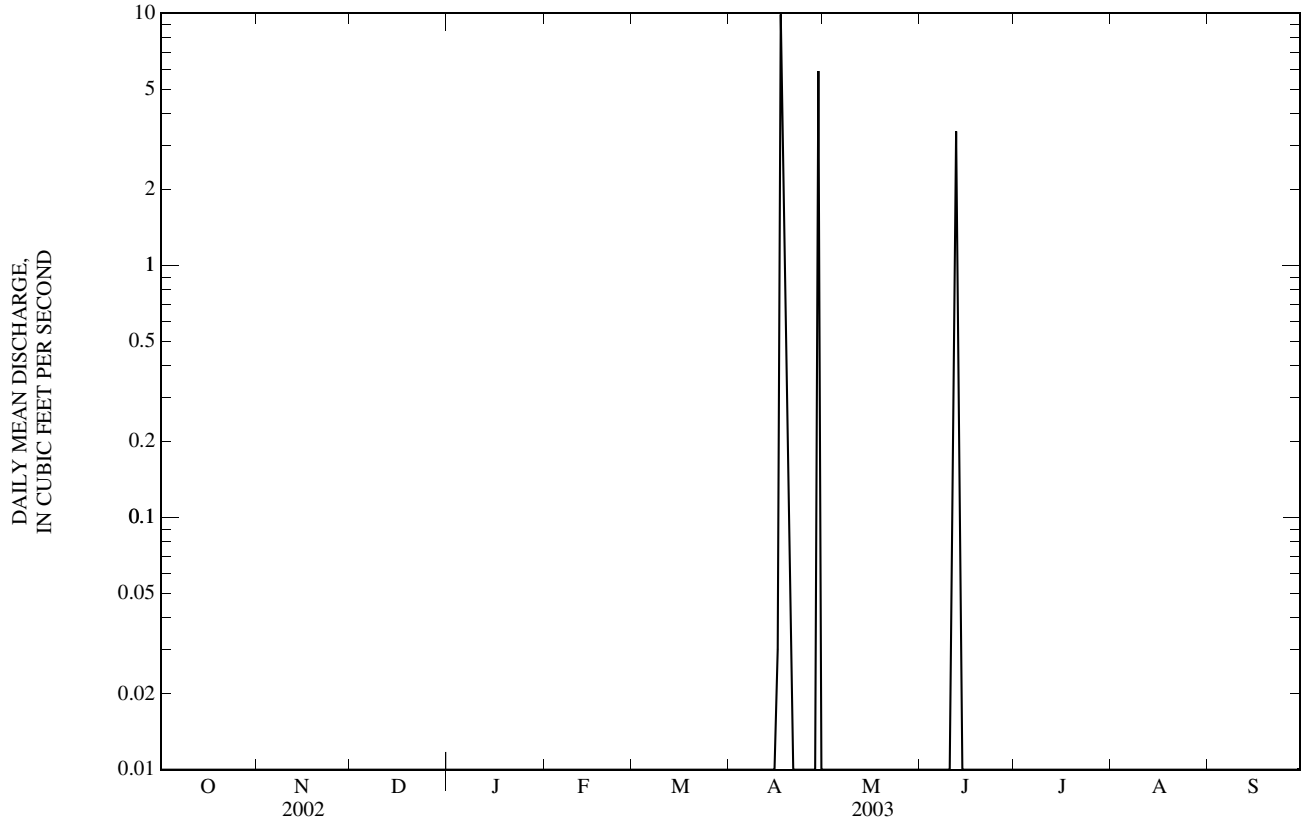
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2003, BY WATER YEAR (WY)

MEAN	8.37	2.76	2.37	2.06	3.63	11.1	6.82	22.2	36.6	28.1	14.7	15.2
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)

06846500 BEAVER CREEK AT CEDAR BLUFFS, KS—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1946 - 2003	
ANNUAL MEAN	0.002		0.063		12.9	
HIGHEST ANNUAL MEAN					106	1951
LOWEST ANNUAL MEAN					0.000	1991
HIGHEST DAILY MEAN	0.43	Jul 26	9.9	Apr 17	4,560	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			52	Apr 29	127	Sep 17, 2001
MAXIMUM PEAK STAGE			4.85	Apr 29	18.71	Jun 11, 1960
INSTANTANEOUS LOW FLOW			0.00	Oct 1	0.00	most years
ANNUAL RUNOFF (AC-FT)	1.5		45		9,330	
10 PERCENT EXCEEDS	0.00		0.00		21	
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

LOCATION.--Lat 40° 07'53", long 99° 33'15", in NW 1/4 NW 1/4 sec. 23, T.2 N., R.20 W., Harlan County, Hydrologic Unit 10250011, on left bank 40 ft south of Burlington Northern Inc. track, 500 ft downstream from bridge on county highway, 2 mi east of Stamford, and 6.5 mi upstream from mouth.

DRAINAGE AREA.--3,840 mi^2, of which about 3,370 mi^2 contributes directly to surface runoff.

PERIOD OF RECORD.--October 1945 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1919: 1960. WDR NE-71-1: Calendar year totals. WRD NE-82-1: 1979(M). WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,981.31 ft above sea level. Data collection platform at station.

REMARKS.--Records fair except for daily discharges over 3.0 ft^3/s, which are poor. Natural flow affected by irrigation development above station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
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	0.34	0.91	2.7	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	11	2.6	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.8	0.85	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	2.1	0.93	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.97	0.43	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.0	0.06	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.8	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.6	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.2	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.4	1.5	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.4	1.2	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.0	1.1	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.3	0.75	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.1	0.51	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.5	0.32	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.3	0.17	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	0.06	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.25	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.86	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	1.2	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.0	1.2	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	5.5	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	2.9	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	1.7	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	1.5	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	1.2	0.00	2.8	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	1.0	0.00	1.8	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	2.20	26.31	54.41	7.57	0.00	0.00
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.073	0.85	1.81	0.24	0.000	0.000
MAX	0.00	0.00	0.00	0.00	0.00	0.00	1.2	7.0	11	2.7	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	4.4	52	108	15	0.00	0.00

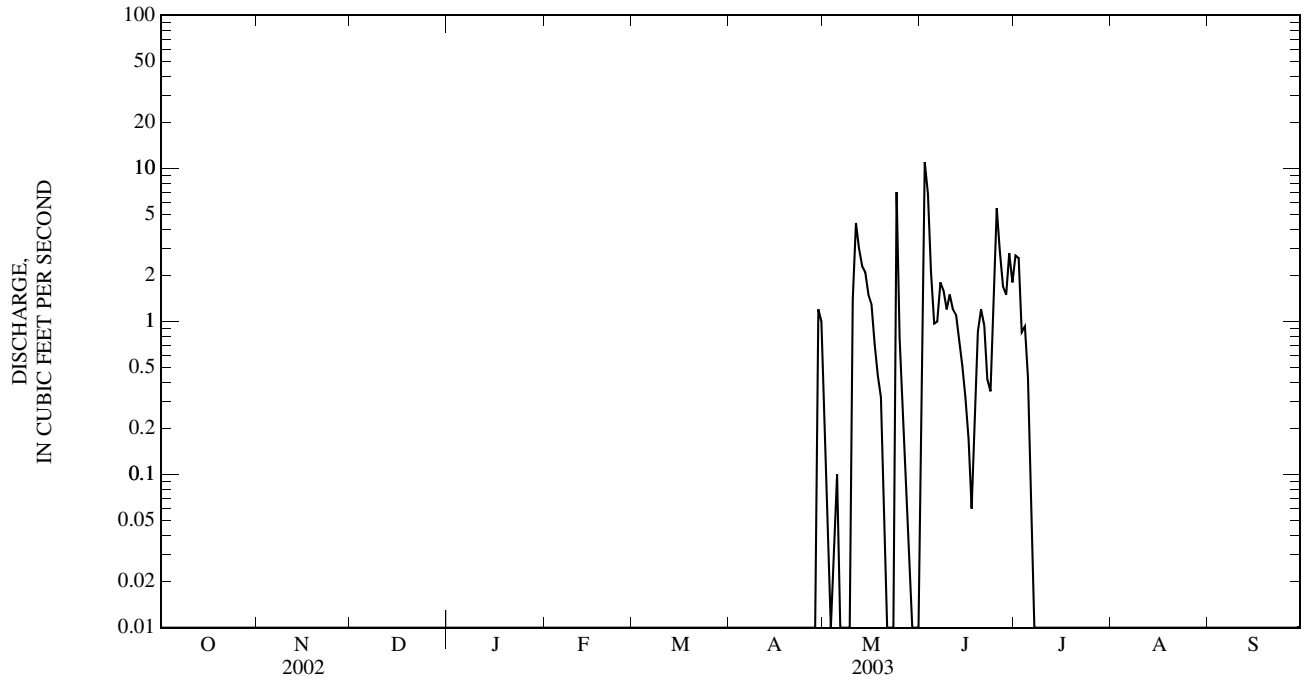
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2003, BY WATER YEAR (WY)

MEAN	37.9	12.5	10.4	9.03	18.6	33.8	24.1	54.6	141	85.3	54.9	38.8
MAX	965	145	96.2	71.5	182	486	164	522	878	891	544	708
(WY)	(1947)	(1947)	(1966)	(1966)	(1966)	(1960)	(1960)	(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)	(1954)	(1955)	(1955)	(1955)	(1956)	(1956)	(1956)	(1956)	(1981)	(1977)	(1955)	(1959)

06847500 SAPPA CREEK NEAR STAMFORD, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1946 - 2003	
ANNUAL TOTAL	1,458.46		90.49			
ANNUAL MEAN	4.00		0.25		43.5	
HIGHEST ANNUAL MEAN					229	1951
LOWEST ANNUAL MEAN					0.25	2003
HIGHEST DAILY MEAN	33	May 11	11	Jun 2	16,600	Jun 24, 1966
LOWEST DAILY MEAN	0.00	Jul 1	0.00	Oct 1	0.00	Sep 12, 1953
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 13	0.00	Oct 1	0.00	Sep 12, 1953
MAXIMUM PEAK FLOW			33	Jun 2	43,400	Jun 24, 1966
MAXIMUM PEAK STAGE			4.45	Jun 2	*22.13	Jun 24, 1966
ANNUAL RUNOFF (AC-FT)	2,890		179		31,520	
10 PERCENT EXCEEDS	10		0.80		77	
50 PERCENT EXCEEDS	0.02		0.00		6.0	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

* From floodmark.



06848500 PRAIRIE DOG CREEK NEAR WOODRUFF, KS

LOCATION.--Lat 39° 59'09", long 99° 28'39", in NW 1/4 NW 1/4 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 mi^2.

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.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.42	e2.4	e3.1	e3.5	1.6	2.9	1.2	1.0	3.3	0.00
2	0.01	0.00	0.52	e2.3	e2.8	e3.5	1.5	2.5	2.5	0.60	1.2	0.00
3	0.02	0.00	0.64	e2.5	e2.5	e3.5	1.4	2.3	2.5	1.2	0.16	0.00
4	0.00	0.00	0.68	e2.5	e2.2	e3.1	3.3	2.3	1.7	0.99	0.00	0.00
5	0.00	0.00	0.60	e2.1	e2.2	e2.6	4.3	2.2	1.3	0.51	0.00	0.00
6	0.00	0.00	0.74	e1.9	e3.3	e2.7	3.9	2.2	1.5	0.37	0.00	0.00
7	0.00	0.00	0.90	e1.9	e3.4	e3.1	3.6	1.9	2.1	0.25	0.00	0.00
8	0.00	0.00	0.93	e2.0	e4.5	e3.6	3.2	1.8	2.1	0.21	0.00	0.00
9	0.00	0.00	e1.0	e2.0	e4.7	e3.6	3.0	2.0	2.1	4.5	0.00	0.00
10	0.00	0.00	e1.1	e1.8	e4.6	e3.1	2.5	2.1	2.0	20	0.00	0.00
11	0.00	0.00	e1.2	e1.6	e4.3	e3.6	2.3	2.0	1.9	9.6	0.00	0.04
12	0.00	0.00	e1.2	e2.5	e3.7	e4.3	2.0	2.0	2.4	5.6	1.4	0.00
13	0.00	0.00	e1.3	e2.5	e3.8	e4.0	1.8	2.0	2.2	3.1	1.5	0.00
14	0.00	0.00	e1.3	e2.3	e4.3	e3.8	1.7	1.7	1.4	4.9	2.3	0.00
15	0.00	0.00	e1.4	e2.0	e3.7	3.8	1.9	1.8	0.98	1.2	2.0	0.00
16	0.00	0.00	1.5	e1.6	e3.0	3.5	2.4	1.9	0.81	1.1	0.92	0.00
17	0.00	0.00	1.7	e1.4	e2.8	3.4	2.4	1.7	0.76	0.78	0.09	0.00
18	0.00	0.00	e1.9	e1.8	e2.8	4.3	2.4	1.4	0.95	0.62	0.00	0.00
19	0.00	0.00	e2.0	e2.6	e3.2	4.1	2.3	1.6	1.4	0.20	0.00	0.00
20	0.00	0.00	e1.7	e2.5	e3.4	3.9	2.8	1.5	1.4	0.16	0.00	0.00
21	0.00	0.00	e1.7	e1.8	e3.6	3.5	2.9	1.3	1.0	0.22	0.00	0.00
22	0.16	0.00	e1.6	e1.4	e3.2	3.9	2.6	1.2	1.0	0.31	0.00	0.00
23	0.00	0.00	e1.4	e1.3	e2.2	6.4	2.7	1.2	0.90	0.17	0.00	0.00
24	0.00	0.00	e1.7	e1.5	e1.7	7.8	3.2	9.0	0.80	0.13	0.00	0.00
25	0.00	0.00	e1.6	e2.2	e1.8	5.6	3.2	4.5	1.4	0.12	0.00	0.00
26	0.00	0.42	e1.5	e2.6	e2.9	4.2	3.4	2.0	1.2	0.06	0.00	0.00
27	0.00	e0.60	e1.8	e2.9	e3.2	3.5	3.8	1.4	1.1	0.17	0.00	0.00
28	0.00	0.47	e2.8	e3.0	e3.4	3.0	4.0	1.3	0.87	0.18	0.00	0.00
29	0.02	0.30	e2.8	e3.0	---	2.6	3.9	1.3	1.4	2.7	0.00	0.00
30	0.00	0.25	e2.9	e3.0	---	2.3	3.5	1.1	1.5	3.9	0.00	0.00
31	0.00	---	e2.8	e2.9	---	1.9	---	1.0	---	3.4	0.00	---
MEAN	0.007	0.068	1.46	2.19	3.23	3.73	2.78	2.10	1.48	2.20	0.42	0.001
MAX	0.16	0.60	2.9	3.0	4.7	7.8	4.3	9.0	2.5	20	3.3	0.04
MIN	0.00	0.00	0.42	1.3	1.7	1.9	1.4	1.0	0.76	0.06	0.00	0.00
AC-FT	0.4	4.0	90	134	179	229	166	129	88	135	26	0.08

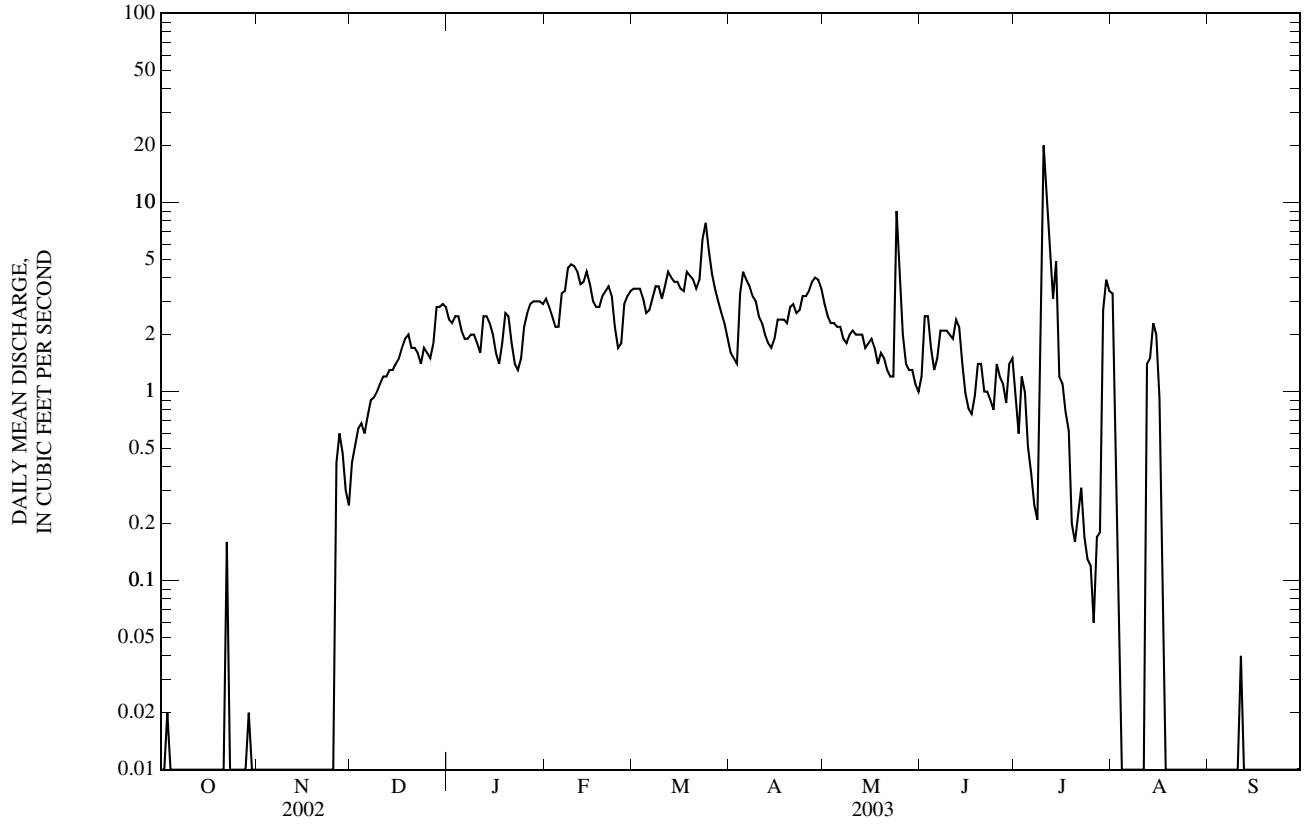
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2003, BY WATER YEAR (WY)

MEAN	18.7	6.46	5.40	5.45	15.8	17.5	10.1	41.8	84.2	60.3	33.6	22.3
MAX	429	56.5	26.0	22.5	230	240	36.6	422	1,041	1,070	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)

06848500 PRAIRIE DOG CREEK NEAR WOODRUFF, KS—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1929 - 2003	
ANNUAL MEAN	3.88		1.63		26.1	
HIGHEST ANNUAL MEAN					208	1951
LOWEST ANNUAL MEAN					0.051	1991
HIGHEST DAILY MEAN	14	Mar 5	20	Jul 10	9,700	Jun 23, 1947
LOWEST DAILY MEAN	0.00	Jul 17	0.00	Oct 1	0.00	Oct 29, 1945
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 29	0.00	Oct 4	0.00	Oct 5, 1948
MAXIMUM PEAK FLOW			25	Jul 10	15,000	Jun 23, 1947
MAXIMUM PEAK STAGE			3.58	Jul 10	21.04	Jun 23, 1947
INSTANTANEOUS LOW FLOW			0.00	Oct 1	0.00	most years
ANNUAL RUNOFF (AC-FT)	2,810		1,180		18,910	
10 PERCENT EXCEEDS	9.8		3.6		27	
50 PERCENT EXCEEDS	2.8		1.4		4.0	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated



06849000 HARLAN COUNTY LAKE NEAR REPUBLICAN CITY, NE

LOCATION.--Lat 40° 04'10", long 99° 12'30", in NE$^{1}/_{4}$ NW$^{1}/_{4}$ sec.11, T.1 N., R.17 W., Harlan County, Hydrologic Unit 10250009, at left end of spillway on upstream side of Harlan County Dam on Republican River, 2 mi southeast of Republican City and 8 mi southeast of Alma.

DRAINAGE AREA.--20,750 mi^2, approximately, of which about 13,530 mi^2 contributes directly to surface runoff.

PERIOD OF RECORD.--November 1952 to current year. Prior to October 1965 published as Harlan County Reservoir near Republican City.

GAGE.--Water-stage recorder: Datum of gage is sea level. Data collection platform at station.

REMARKS.--Reservoir is formed by earthfill dam with gravity-type concrete spillway section; storage began Nov. 14, 1952. Capacity, 313,700 acre-ft between elevations 1,885.0 ft, sill of outlet gates, and 1,946.0 ft, top of storage pool. Top of flood-control pool at elevation 1,973.5 ft, capacity, 814,100 acre-ft. Top of superstorage flood-control pool at elevation 1,975.5 ft, capacity, 861,900 acre-ft. Figures given herein represent total contents. Water used for irrigation in Bostwick irrigation project.

COOPERATION.--Capacity table furnished by Corps of Engineers (revised Jan. 1, 1990 and Jan. 1, 2001). Elevations furnished by Corps of Engineers from October 1994 to September 2003.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 497,700 acre-ft Apr. 6, 1960, elevation, 1,955.67 ft; minimum since operation of reservoir began, 110,300 acre-ft Oct. 22 to Nov. 6, 1953, elevation, 1,922.00 ft.

EXTREMES (AT 0600) FOR 1995-2003

Water Year	Maximum contents (acre-feet)	Elevation (feet)	Elevation date (feet)	Minimum contents (acre-feet)	Elevation (feet)	Date
1995	388,900	1,951.18	Jun 7	249,700	1,940.49	Sep 18
1996	379,700	1,950.57	Aug 10	250,700	1,940.69	Oct 22
1997	371,600	1950.02	Apr 4	250,800	1,940.70	Sep 21
1998	340,200	1,947.84	Apr 9	253,100	1,940.91	Oct 11
1999	344,200	1,948.12	Jun 21	254,500	1,941.03	Oct 01
2000	335,800	1,947.53	May 18	204,800	1,936.39	Sep 30
2001	314,500	1,945.76	Jun 13	200,100	1,936.15	Oct 21
2002	277,500	1,942.88	Jun 16	161,200	1,932.19	Sep 28
2003	178,700	1,934.06	Jun 17	117,700	1,926.94	Sep 29

Capacity table (elevation, in feet, and contents, in acre-feet)
Jan. 1, 1990 to Dec. 31, 2000

1,928	128,300	1,940	243,100
1,930	144,300	1,945	302,000
1,935	190,800		

Capacity table (elevation, in feet and contents, in acre-feet)
Jan 1, 2001 to current

1,928	125,700	1,940	242,500
1,930	141,900	1,945	304,400
1,935	188,300		

RESERVOIR STORAGE (ACRE-FEET), WATER YEARS OCTOBER 1994 TO SEPTEMBER 2003

DAILY OBSERVATION AT 0600 VALUES

06849000 HARLAN COUNTY LAKE NEAR REPUBLICAN CITY, NE—Continued

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 0600 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	267,000	268,400	275,800	286,000	296,100	305,500	321,600	337,900	384,200	351,700	306,300	263,100
2	267,000	268,700	275,900	286,000	296,800	306,100	322,000	338,500	385,400	350,300	304,600	261,400
3	267,000	268,600	276,400	286,400	297,300	306,400	322,700	340,200	386,000	348,200	302,900	260,400
4	267,100	268,800	276,400	286,200	297,300	306,500	322,900	341,700	387,200	348,900	301,400	259,300
5	267,000	268,800	277,000	286,300	297,800	307,200	323,300	342,300	387,700	348,200	299,300	258,100
6	267,100	269,100	277,000	286,500	298,200	307,300	323,600	343,000	388,200	347,500	298,000	257,900
7	267,300	269,100	277,800	286,600	298,700	308,500	324,400	343,800	388,900	346,500	296,200	256,400
8	267,100	269,400	278,300	287,000	298,700	308,400	324,800	346,900	385,900	345,800	294,900	255,300
9	267,000	269,600	278,300	287,300	299,000	308,400	325,400	348,600	387,400	344,800	295,900	254,300
10	266,600	269,500	278,400	287,500	299,600	308,700	325,800	350,000	386,800	343,400	294,800	253,400
11	266,500	269,600	278,200	287,800	300,000	307,700	326,600	350,400	385,900	342,000	293,200	252,600
12	266,500	269,600	278,600	288,000	300,000	308,500	327,100	350,000	384,800	340,200	291,300	252,100
13	266,400	270,300	278,600	288,200	300,200	309,100	326,800	351,000	383,500	338,200	289,700	251,200
14	266,400	270,400	278,800	288,600	300,200	309,700	327,100	351,000	382,600	336,200	287,400	250,400
15	266,400	270,300	279,200	288,700	301,000	309,900	327,900	350,900	381,700	334,600	287,100	249,700
16	267,800	270,300	279,800	289,100	300,900	310,200	329,400	350,700	380,200	333,000	286,200	249,600
17	267,200	270,600	279,800	289,600	301,100	310,800	328,600	350,900	379,000	331,100	285,400	249,000
18	267,600	270,600	280,000	289,900	302,800	311,900	331,500	352,000	377,600	329,400	284,400	248,600
19	267,600	270,400	280,200	290,300	302,100	312,300	330,400	351,900	376,000	327,900	283,500	249,200
20	267,800	271,000	280,800	290,700	302,800	313,100	331,400	352,300	374,700	326,700	282,400	249,900
21	268,000	272,600	281,000	291,100	302,900	313,500	332,100	352,300	369,800	325,500	281,200	250,700
22	268,200	272,600	281,400	291,500	303,600	313,800	332,600	352,400	368,200	323,900	280,000	250,700
23	268,200	273,000	281,900	291,800	303,800	314,600	333,200	353,900	366,400	322,100	278,500	250,400
24	268,200	272,600	282,300	292,300	303,900	314,400	333,600	354,900	364,800	320,500	276,900	250,400
25	268,200	273,400	283,100	292,400	304,700	315,100	334,000	355,600	363,100	318,800	275,000	250,400
26	268,100	273,800	283,100	292,800	305,000	317,100	334,300	356,400	361,200	317,200	273,100	250,400
27	268,100	276,300	283,600	293,600	305,200	319,700	334,800	361,700	359,000	315,600	271,500	250,400
28	268,200	275,300	283,800	294,300	305,500	319,700	335,100	370,000	357,300	313,900	269,800	250,300
29	268,300	275,400	284,200	294,600	---	320,000	336,000	375,000	355,700	312,000	268,100	251,000
30	268,300	275,600	284,600	295,100	---	320,400	336,100	379,700	353,700	309,800	266,400	251,400
31	268,400	---	284,300	295,700	---	321,000	---	382,100	---	308,100	264,500	---
MEAN	267,400	271,100	280,000	289,700	300,900	311,800	328,800	352,800	376,400	332,300	286,100	252,900
MAX	268,400	276,300	284,600	295,700	305,500	321,000	336,100	382,100	388,900	351,700	306,300	263,100
MIN	266,400	268,400	275,800	286,000	296,100	305,500	321,600	337,900	353,700	308,100	264,500	248,600
(*)	1942.24	1942.85	1943.66	1944.50	1945.27	1946.45	1947.55	1950.73	1948.80	1945.47	1941.90	1940.76
(**)	+3200	+7200	+8700	+11400	+9800	+15500	+15100	+46000	-28400	-45600	-43600	-13100

CAL YR	1994	MAX	343100	MIN	265200	(**)	-32700	
CAL YR	1995	MAX	388900	MIN	248600	(**)	-13800	

(*) Elevation, in feet, at end of month.
(**) Change in contents, in acre-feet.

06849000 HARLAN COUNTY LAKE NEAR REPUBLICAN CITY, NE—Continued

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY OBSERVATION AT 0600 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	251,300	251,700	257,900	263,800	271,300	280,600	291,700	300,600	323,100	358,600	354,300	353,400
2	251,300	252,100	258,100	264,200	271,900	280,000	292,200	301,100	324,400	358,000	352,900	352,000
3	251,200	252,100	257,900	264,300	271,900	281,300	293,200	301,200	325,200	356,700	356,200	350,900
4	251,100	252,100	258,400	264,800	272,000	281,700	292,900	301,400	326,000	355,300	362,700	348,900
5	252,200	252,100	258,700	264,900	272,400	282,300	293,100	301,900	326,200	353,900	364,800	347,300
6	251,200	252,300	258,700	265,100	272,400	282,500	293,200	301,900	327,800	352,600	365,200	345,400
7	251,100	252,500	258,900	265,200	272,500	282,500	293,400	302,300	328,100	351,600	367,600	344,300
8	250,900	252,600	259,600	265,500	272,600	282,900	294,100	302,900	328,500	352,900	373,900	342,400
9	251,000	252,800	259,200	265,600	272,700	282,900	294,400	303,300	329,300	352,700	379,000	340,700
10	251,000	253,000	259,200	265,700	273,000	283,100	294,600	303,800	329,900	353,100	379,700	339,200
11	251,000	253,400	259,200	266,000	273,300	283,300	294,900	304,100	330,100	353,100	379,100	338,200
12	251,000	253,400	259,200	266,300	273,300	283,800	295,600	304,600	331,800	352,700	378,700	336,900
13	251,800	253,700	259,300	266,700	273,800	284,600	295,400	305,100	332,100	352,000	377,200	335,400
14	251,000	254,000	259,600	266,800	274,100	284,900	295,900	305,500	332,500	353,300	375,700	335,000
15	251,100	254,100	259,700	267,100	274,700	285,200	297,100	306,000	332,500	352,700	374,400	334,600
16	251,100	254,100	259,900	267,600	274,900	285,800	297,200	306,000	334,800	352,000	373,700	334,400
17	251,100	254,800	260,000	268,200	275,400	286,200	297,600	306,700	335,700	351,000	372,300	334,400
18	251,100	254,800	260,700	269,300	275,800	286,600	298,300	306,900	338,600	350,400	371,200	334,600
19	251,000	255,200	260,800	269,100	276,400	287,000	298,300	307,200	340,500	349,200	369,700	334,400
20	251,100	255,300	260,900	269,100	276,900	287,100	298,600	307,200	340,700	349,300	368,000	334,100
21	250,800	255,500	261,000	269,500	277,500	287,300	298,700	307,300	341,000	350,300	366,500	334,000
22	250,700	255,600	261,500	269,700	278,100	287,600	299,000	307,300	341,400	350,200	365,300	333,200
23	251,000	255,800	261,900	269,900	278,900	287,600	299,100	308,000	347,600	349,700	363,900	331,800
24	251,100	256,100	262,100	269,900	278,900	289,000	299,300	308,900	353,000	349,600	362,400	329,900
25	251,000	256,800	262,300	270,300	279,700	289,600	299,700	309,800	356,700	349,000	361,500	327,400
26	251,000	256,900	262,400	270,600	279,700	289,500	299,600	312,200	358,200	348,300	360,900	326,800
27	251,600	257,400	262,500	270,800	280,200	289,400	299,600	314,700	358,900	347,600	359,000	325,200
28	251,300	257,100	262,800	271,000	280,600	289,700	299,700	316,400	359,200	347,600	357,600	323,500
29	251,100	257,100	262,900	271,200	280,600	290,100	300,600	318,500	359,600	352,700	356,000	321,900
30	251,000	257,400	263,200	271,300	---	291,000	300,500	320,000	359,300	355,300	355,100	320,000
31	251,200	---	263,600	271,300	---	291,500	---	321,400	---	355,400	354,400	---
MEAN	251,100	254,400	260,400	267,800	275,400	285,700	296,600	307,200	338,400	352,200	366,400	336,300
MAX	252,200	257,400	263,600	271,300	280,600	291,500	300,600	321,400	359,600	358,600	379,700	353,400
MIN	250,700	251,700	257,900	263,800	271,300	280,000	291,700	300,600	323,100	347,600	352,900	320,000
(*)	1940.74	1941.29	1941.82	1942.49	1943.27	1944.16	1944.88	1946.48	1949.19	1948.92	1948.85	1946.37
(**)	-200	+6200	+6200	+7700	+9300	+10900	+9000	+20900	+37900	-3900	-1000	-34400

CAL YR	1995	MAX	38890	MIN	248600	(**)	-20700	
WTR YR	1996	MAX	379700	MIN	250700	(**)	+68600	

(*) Elevation, in feet, at end of month.
(**) Change in contents, in acre-feet.

06849000 HARLAN COUNTY LAKE NEAR REPUBLICAN CITY, NE—Continued

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY OBSERVATION AT 0600 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	318,700	294,400	301,000	306,900	325,500	348,600	369,200	343,000	343,000	336,800	284,700	255,600
2	317,500	294,800	301,900	307,600	326,200	349,400	370,400	343,600	342,900	335,700	283,200	255,000
3	315,500	295,400	302,900	308,200	326,800	350,300	371,200	343,400	342,900	333,900	281,800	254,300
4	314,400	296,700	303,300	308,900	327,800	351,000	371,300	343,300	342,900	331,900	280,200	253,900
5	313,100	296,200	304,500	309,700	328,500	351,900	370,100	343,400	342,700	330,400	278,200	253,600
6	311,500	296,400	305,000	310,500	329,200	352,300	368,800	343,100	342,600	328,800	277,100	253,500
7	310,100	296,400	305,900	311,200	330,000	353,400	367,400	343,000	343,100	327,000	275,700	253,100
8	309,100	297,100	306,400	311,800	331,000	354,000	365,500	343,100	342,900	325,100	274,000	253,000
9	307,400	298,100	307,100	312,600	331,800	354,700	364,000	342,900	343,100	323,700	272,300	252,900
10	306,500	298,500	308,000	313,200	332,700	355,400	363,100	342,400	342,400	322,400	271,000	252,700
11	304,300	298,700	308,500	313,800	333,400	356,300	362,600	342,600	342,400	321,200	269,700	252,500
12	302,100	299,300	309,400	314,300	334,100	356,600	361,100	342,200	343,000	319,700	269,300	252,000
13	300,500	299,700	310,100	314,700	335,000	357,700	359,600	351,700	344,300	318,300	268,100	252,200
14	299,100	300,000	311,000	315,100	335,800	358,300	358,200	341,600	343,400	316,700	267,400	251,900
15	298,000	301,300	311,800	315,700	336,600	358,900	356,700	341,300	343,600	315,000	266,800	252,200
16	296,600	303,300	312,300	316,100	337,500	359,500	355,600	340,900	343,600	313,100	266,400	252,100
17	295,100	305,900	313,200	316,500	338,300	360,200	354,300	341,000	343,300	311,200	265,900	251,900
18	293,400	306,500	313,500	317,100	339,300	361,100	353,300	341,200	342,600	309,500	265,200	251,800
19	293,300	307,600	311,200	317,600	340,000	361,700	352,000	340,700	342,400	308,100	264,600	251,900
20	292,600	308,100	309,000	318,100	340,900	362,400	350,900	340,500	341,600	306,000	264,300	251,700
21	291,800	306,800	308,600	318,700	341,900	363,100	349,300	340,200	340,900	304,200	263,900	251,300
22	290,700	305,100	308,500	319,400	342,700	363,600	348,200	339,900	340,000	302,300	263,500	250,900
23	289,900	303,800	308,400	320,000	343,600	364,200	346,800	340,200	338,200	300,500	262,800	252,600
24	289,100	302,000	308,100	320,600	344,400	364,800	345,400	341,000	337,200	298,500	262,300	253,600
25	288,700	300,400	307,800	321,300	345,600	365,600	344,300	340,700	337,800	296,600	261,800	253,900
26	290,500	298,600	307,700	322,000	346,300	365,900	344,000	341,700	337,500	294,700	261,000	253,900
27	291,000	297,400	307,400	322,700	347,200	366,500	343,600	342,300	336,900	292,800	259,900	253,900
28	291,800	298,200	307,200	323,100	347,900	368,300	342,900	342,700	337,900	291,300	258,900	254,000
29	292,100	299,000	306,800	323,500	---	368,600	342,700	342,700	338,500	289,500	258,100	254,000
30	292,600	300,500	306,400	324,100	---	368,800	343,600	343,000	338,100	287,900	257,100	254,000
31	293,300	---	306,300	324,800	---	368,900	---	343,000	---	286,300	256,300	---
MEAN	300,000	300,200	307,700	316,100	336,400	359,400	356,500	342,300	341,400	312,200	268,100	253,000
MAX	318,700	308,100	313,500	324,800	347,900	368,900	371,300	351,700	344,300	336,800	284,700	255,600
MIN	288,700	294,400	301,000	306,900	325,500	348,600	342,700	339,900	336,900	286,300	256,300	250,900
(*)	1944.31	1944.88	1945.33	1946.73	1948.39	1949.84	1948.08	1948.04	1947.69	1943.74	1941.19	1940.99
(**)	-26700	+7200	+5800	+18500	+23100	+21000	-25300	-600	-4900	-51800	-30000	-2300

CAL YR	1996	MAX	379700	MIN	263800	(**)	+42700	
WTR YR	1997	MAX	371300	MIN	250900	(**)	-66000	

(*) Elevation, in feet, at end of month.
(**) Change in contents, in acre-feet.

06849000 HARLAN COUNTY LAKE NEAR REPUBLICAN CITY, NE—Continued

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY OBSERVATION AT 0600 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	254,000	261,900	272,500	286,000	298,700	313,800	333,700	336,600	336,200	312,800	284,100	260,000
2	254,000	262,800	273,000	286,400	314,900	314,000	333,700	336,600	336,100	311,100	284,700	260,000
3	253,900	262,400	273,900	287,000	299,800	314,200	334,800	336,600	335,800	308,700	284,600	259,700
4	253,700	262,300	274,400	287,400	300,400	314,300	335,200	336,400	335,400	306,400	284,300	259,500
5	253,700	262,900	274,700	287,600	300,900	315,000	335,600	336,500	335,500	305,100	283,700	259,300
6	253,900	263,100	274,900	288,200	301,400	315,200	336,400	336,500	335,400	303,300	283,200	259,000
7	253,800	263,300	275,000	288,600	301,800	315,700	338,800	336,900	335,300	301,600	282,600	258,700
8	253,600	263,700	275,200	288,900	302,100	316,500	339,600	336,500	335,300	300,600	281,500	258,200
9	253,800	264,200	275,600	289,400	302,700	317,300	340,300	336,500	336,400	300,500	280,700	257,800
10	253,500	264,400	276,300	289,600	303,900	317,100	340,100	336,500	336,100	300,500	280,000	257,600
11	253,400	264,500	276,700	289,900	318,600	317,500	339,400	336,800	336,400	300,400	278,600	257,300
12	254,700	264,800	277,100	290,100	318,800	317,700	339,400	336,800	336,500	300,000	277,600	257,200
13	254,800	265,200	277,300	290,200	305,600	318,100	338,800	336,500	336,200	299,200	276,500	257,100
14	254,900	265,800	277,600	290,500	306,100	318,500	337,600	336,800	336,400	298,500	275,400	257,100
15	254,900	265,800	277,900	290,700	306,800	319,100	337,200	336,200	336,000	297,600	274,300	256,900
16	255,000	265,800	278,500	290,800	320,700	319,600	337,200	336,400	335,000	296,300	273,000	256,800
17	255,000	265,800	278,800	291,300	322,100	320,800	336,400	336,100	334,100	294,900	272,000	256,600
18	255,000	266,300	279,400	291,800	322,800	321,600	336,400	335,800	333,300	292,900	271,000	256,500
19	255,200	266,600	279,800	292,300	309,000	322,000	336,600	336,000	332,100	291,700	269,700	256,300
20	255,300	266,800	280,300	292,800	309,500	322,800	337,000	336,100	330,800	290,100	268,600	255,800
21	255,400	267,100	280,800	293,400	310,100	323,200	336,700	336,500	329,000	288,200	267,100	255,400
22	255,400	267,500	281,400	293,800	310,600	323,600	336,700	336,800	328,300	287,400	266,200	255,200
23	255,500	268,000	281,900	294,400	311,200	324,100	336,800	336,400	326,400	285,800	265,100	255,200
24	255,600	268,400	282,300	294,800	311,500	324,700	336,600	336,400	325,400	284,800	263,800	255,200
25	257,000	268,700	282,900	295,200	312,000	325,500	337,100	336,400	323,900	283,600	262,500	255,000
26	258,200	269,300	283,300	295,700	312,700	326,300	337,100	336,200	322,000	283,600	261,500	255,000
27	259,600	269,500	283,800	296,100	313,200	326,800	336,800	335,700	320,100	282,900	261,100	254,800
28	260,000	269,800	284,300	296,600	313,500	328,500	336,600	335,500	318,700	282,900	260,900	254,700
29	260,300	270,600	284,800	296,900	---	330,300	337,000	336,200	316,500	283,100	260,600	254,800
30	260,900	271,500	285,700	297,400	---	331,900	337,100	336,200	315,000	284,000	260,300	254,900
31	261,200	---	285,700	298,300	---	333,200	---	336,200	---	284,200	259,900	---
MEAN	255,700	266,000	278,900	291,700	309,300	320,900	337,100	336,400	331,000	294,900	272,700	256,900
MAX	261,200	271,500	285,700	298,300	322,800	333,200	340,300	336,900	336,500	312,800	284,700	260,000
MIN	253,400	261,900	272,500	286,000	298,700	313,800	333,700	335,500	315,000	282,900	259,900	254,700
(*)	1941.62	1942.50	1943.69	1944.71	1945.88	1947.30	1947.59	1947.56	1945.99	1943.57	1941.50	1941.07
(**)	+7200	+10300	+14200	+12600	+15200	+19700	+3900	-900	-21200	-30800	-24300	-5000

CAL YR	1997	MAX	371300	MIN	250900	(**)	-20600	
WTR YR	1998	MAX	340300	MIN	253400	(**)	-900	

(*) Elevation, in feet, at end of month.
(**) Change in contents, in acre-feet.

06849000 HARLAN COUNTY LAKE NEAR REPUBLICAN CITY, NE—Continued

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY OBSERVATION AT 0600 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	254,500	256,300	264,600	270,400	279,100	289,400	299,500	311,500	333,600	340,700	299,500	281,200
2	255,200	257,400	264,800	270,200	280,000	289,000	299,600	311,800	334,500	340,500	299,100	280,200
3	255,300	257,700	265,000	270,300	280,400	289,100	300,600	312,900	335,600	340,400	299,100	279,500
4	255,300	257,800	265,300	271,300	280,900	289,200	300,600	313,300	336,300	339,000	298,700	279,400
5	255,200	258,000	265,600	270,900	281,300	289,700	301,100	314,800	336,700	337,400	297,900	278,800
6	255,000	258,000	265,800	271,200	281,800	290,100	301,800	315,100	336,400	336,000	297,800	278,200
7	254,900	258,100	265,900	271,000	282,400	290,000	302,300	315,500	337,200	334,500	296,900	277,700
8	254,800	258,800	266,300	271,200	283,100	290,100	302,800	315,000	338,300	333,000	295,900	278,000
9	254,800	258,900	266,400	271,300	282,700	291,700	303,300	315,100	338,300	331,000	295,800	277,600
10	254,800	260,700	266,600	272,000	283,100	291,200	303,600	315,800	338,600	329,500	294,900	277,200
11	254,900	259,400	266,700	271,700	282,800	291,900	303,400	316,200	339,600	327,800	293,700	277,600
12	255,000	259,700	267,100	272,200	282,900	292,000	303,400	316,700	338,600	325,900	294,000	278,200
13	255,000	260,100	267,300	272,500	283,200	292,400	303,700	316,700	340,800	324,100	294,700	278,400
14	255,000	260,600	267,500	272,800	283,800	292,900	305,000	316,500	342,400	322,200	293,300	278,000
15	255,200	260,600	267,800	273,200	284,400	293,300	305,200	319,600	342,700	320,400	293,300	278,000
16	254,800	260,900	268,100	273,300	284,600	293,700	305,700	321,000	343,000	320,700	293,600	277,800
17	255,700	261,000	268,200	273,600	284,800	294,500	306,000	320,200	343,900	320,200	292,300	278,200
18	255,500	261,400	268,600	274,000	286,300	294,600	306,000	320,400	343,700	319,100	291,800	278,200
19	255,300	261,200	268,600	274,300	285,400	294,500	306,600	320,700	344,000	318,200	291,300	278,200
20	255,400	261,700	268,700	274,700	285,800	295,400	306,800	321,800	344,000	317,100	290,100	278,400
21	255,700	261,900	268,700	275,000	285,900	295,800	306,800	325,300	344,200	315,900	290,300	278,800
22	255,500	262,100	268,700	275,400	286,200	295,900	307,300	325,900	343,700	314,500	288,300	278,800
23	255,400	262,200	268,800	275,600	286,900	296,400	307,800	327,700	343,200	313,200	287,100	278,800
24	255,700	262,400	268,900	275,900	287,200	296,700	308,200	328,100	342,600	311,500	287,000	278,800
25	256,100	263,000	268,900	276,300	287,300	296,900	308,400	328,900	342,000	310,100	285,800	278,700
26	255,800	263,100	269,000	276,500	287,800	297,000	309,500	329,500	341,200	308,800	285,000	278,400
27	256,300	263,300	269,100	277,000	288,100	297,400	310,100	330,300	340,700	307,200	284,300	278,200
28	256,400	263,700	269,300	277,200	288,300	298,600	310,500	331,200	340,800	305,700	282,600	278,300
29	256,900	264,100	269,500	277,600	---	299,200	310,600	331,200	339,800	304,100	282,200	278,300
30	256,400	264,400	269,600	278,100	---	298,400	311,500	331,500	339,800	302,300	282,800	278,400
31	256,300	---	269,900	278,500	---	299,100	---	331,200	---	300,600	281,800	---
MEAN	255,400	260,600	267,600	273,700	284,200	293,700	305,300	321,000	340,200	321,700	291,600	278,500
MAX	256,900	264,400	269,900	278,500	288,300	299,200	311,500	331,500	344,200	340,700	299,500	281,200
MIN	254,500	256,300	264,600	270,200	279,100	289,000	299,500	311,500	333,600	300,600	281,800	277,200
(*)	1941.19	1941.89	1942.37	1943.08	1943.90	1944.75	1945.72	1947.18	1947.81	1944.87	1943.35	1943.07
(**)	+1400	+8100	+5500	+8600	+9800	+10800	+12400	+19700	+8600	-39200	-18800	-3400

CAL YR	1998	MAX	340300	MIN	254500	(**)	-15800	
WTR YR	1999	MAX	344200	MIN	254500	(**)	+23500	

(*) Elevation, in feet, at end of month.
(**) Change in contents, in acre-feet.

06849000 HARLAN COUNTY LAKE NEAR REPUBLICAN CITY, NE—Continued

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 0600 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	278,200	278,900	284,300	292,300	302,500	320,000	331,400	332,200	332,600	296,300	260,400	210,500
2	278,200	279,000	284,500	293,100	303,100	320,300	330,800	332,500	331,800	295,200	258,700	210,500
3	278,200	279,300	285,200	293,500	303,600	321,900	330,400	332,700	330,800	294,200	256,900	210,200
4	278,200	279,500	285,300	293,800	304,100	322,300	329,500	333,000	330,800	292,700	254,600	209,800
5	278,000	279,700	285,700	293,500	304,500	322,900	328,900	333,100	330,000	292,400	252,900	209,600
6	277,600	280,000	285,400	293,800	305,000	323,600	328,600	333,400	328,900	291,900	250,200	209,300
7	277,600	280,100	286,000	294,000	305,400	323,800	328,500	333,700	327,800	291,200	249,000	208,900
8	278,100	280,100	286,000	294,200	305,900	325,300	327,000	334,200	326,700	289,700	247,000	208,900
9	278,200	280,100	286,800	294,600	306,400	325,900	326,400	334,600	325,500	287,900	245,100	208,700
10	278,200	280,200	286,400	295,000	307,000	326,400	325,200	334,400	324,300	286,400	243,300	208,400
11	278,200	280,400	286,800	295,000	307,500	327,000	325,900	334,900	322,700	284,500	241,400	208,400
12	278,300	280,800	287,500	295,400	307,800	327,500	326,000	335,100	321,500	282,800	239,300	208,100
13	278,400	281,200	287,500	295,400	308,200	328,100	326,400	335,100	319,600	280,900	237,300	207,900
14	278,400	281,400	287,300	295,800	308,700	328,900	326,900	334,400	318,200	279,000	235,500	207,600
15	278,400	281,500	287,700	296,500	309,200	329,900	327,100	334,200	315,900	277,000	233,800	207,300
16	278,400	281,400	287,800	296,500	309,700	329,900	327,800	334,500	314,100	275,100	232,000	207,000
17	278,400	281,800	288,200	296,900	310,100	330,300	327,900	334,600	311,900	273,000	230,200	206,800
18	278,400	281,800	288,200	297,300	310,700	330,800	328,200	336,000	310,600	275,700	227,900	206,400
19	278,400	281,800	288,500	298,100	311,100	331,800	328,800	335,600	308,400	276,600	226,200	206,100
20	278,400	282,000	288,900	298,300	311,600	331,500	329,000	335,700	307,900	275,100	224,500	206,900
21	278,400	282,400	289,100	298,400	312,000	332,500	328,900	335,900	306,800	275,100	222,900	206,300
22	278,500	282,600	289,200	299,000	312,500	333,000	328,900	336,000	305,400	274,400	221,600	206,300
23	278,400	282,600	289,200	298,800	312,900	333,300	329,300	335,700	304,800	273,200	220,300	205,900
24	278,400	283,300	289,600	299,600	315,000	334,800	329,600	335,300	304,500	272,500	219,100	205,700
25	278,500	283,500	290,000	300,400	315,500	334,500	330,800	334,500	303,100	271,900	218,200	205,700
26	278,500	283,700	290,400	300,400	317,600	334,400	330,300	334,400	302,300	270,700	216,600	205,300
27	278,500	283,800	290,800	300,800	317,100	333,700	331,000	334,600	301,100	269,300	215,000	205,300
28	278,500	284,000	291,200	301,100	317,300	333,000	330,500	334,200	299,900	267,700	214,300	205,300
29	278,500	284,100	291,200	301,500	318,000	332,600	330,700	334,100	298,300	265,900	212,900	205,000
30	278,500	284,100	291,500	301,900	---	332,300	331,200	333,600	297,600	264,000	212,300	204,800
31	278,500	---	292,300	302,200	---	331,600	---	333,000	---	262,200	211,300	---
MEAN	278,300	281,500	288,000	297,000	309,700	328,800	328,700	334,400	315,500	279,500	233,200	207,400
MAX	278,500	284,100	292,300	302,200	318,000	334,800	331,400	336,000	332,600	296,300	260,400	210,500
MIN	277,600	278,900	284,300	292,300	302,500	320,000	325,200	332,200	297,600	262,200	211,300	204,800
(*)	1943.08	1943.55	1944.22	1944.99	1946.21	1947.21	1947.18	1947.31	1944.63	1941.70	1937.02	1936.39
(**)	+100	+5600	+8200	+9900	+15800	+13600	-400	+1800	-35400	-35400	-50900	-3500

CAL YR	1999	MAX	344200	MIN	270200	(**)	+22400	
WTR YR	2000	MAX	336000	MIN	204800	(**)	-77200	

(*) Elevation, in feet, at end of month.
(**) Change in contents, in acre-feet.

06849000 HARLAN COUNTY LAKE NEAR REPUBLICAN CITY, NE—Continued

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY OBSERVATION AT 0600 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	204,800	206,300	211,000	213,400	223,000	234,200	265,000	284,300	306,500	302,600	274,800	238,200
2	204,700	206,400	210,700	213,400	223,200	234,800	265,600	286,300	309,500	300,700	273,700	237,000
3	204,500	206,300	210,900	213,700	223,600	235,300	265,900	287,000	310,300	299,400	272,100	236,300
4	204,600	206,700	211,200	213,800	224,000	235,900	266,600	287,800	310,400	297,800	270,300	235,600
5	204,300	206,800	211,100	213,900	224,200	236,700	267,800	293,200	311,200	296,500	268,100	234,600
6	204,000	207,900	211,500	214,100	224,600	237,500	268,200	295,200	312,100	295,600	265,900	233,800
7	203,800	207,800	211,800	214,400	223,600	239,200	270,100	296,100	312,500	294,800	263,900	233,700
8	203,600	207,700	212,000	214,600	224,100	241,400	270,300	297,000	312,700	293,500	261,900	233,300
9	203,500	207,800	212,100	214,700	225,400	243,700	271,200	298,000	313,200	292,100	260,400	233,800
10	203,200	207,700	212,500	214,900	225,600	246,300	271,600	298,500	313,300	291,200	258,200	233,200
11	202,900	207,800	212,600	215,100	225,800	248,100	273,300	299,700	313,800	288,400	256,500	233,000
12	202,800	208,900	212,600	215,400	225,900	249,800	274,700	300,100	314,000	287,700	254,800	232,800
13	202,900	208,800	212,600	215,800	226,100	250,800	274,900	300,700	314,400	285,900	253,200	232,600
14	202,800	208,700	212,700	216,200	226,500	251,900	275,500	301,200	314,500	284,400	251,900	232,300
15	203,000	208,400	212,700	216,500	226,800	253,100	276,400	301,500	314,400	282,900	251,000	233,900
16	202,700	208,600	212,900	216,800	227,100	254,200	276,500	302,100	314,100	281,500	249,400	235,200
17	202,800	208,700	213,100	217,000	227,400	254,900	277,000	302,400	314,100	280,000	248,700	235,400
18	202,800	208,800	213,200	217,300	227,700	255,600	277,300	303,000	314,200	278,400	248,000	236,500
19	202,600	208,700	213,400	217,500	228,100	256,600	277,600	303,300	313,300	276,800	247,000	237,200
20	202,400	208,800	213,600	217,500	228,300	257,200	278,400	303,700	313,300	277,600	246,300	237,500
21	202,600	208,900	213,600	218,000	228,500	258,000	279,000	304,300	313,600	276,600	244,400	237,800
22	202,400	209,000	213,600	218,100	228,900	258,600	280,000	304,200	313,100	275,800	243,500	237,300
23	203,500	209,200	213,900	218,300	229,100	259,200	281,400	304,400	312,800	274,900	241,900	237,300
24	203,700	209,300	214,000	218,500	229,800	260,300	281,500	304,200	312,100	274,300	242,900	237,000
25	204,200	209,500	214,200	218,700	231,100	260,900	282,400	304,300	311,500	274,700	243,400	237,000
26	204,300	209,700	214,300	219,400	231,800	261,500	283,500	304,400	310,000	273,800	243,400	237,000
27	204,200	209,800	214,600	219,400	233,000	262,000	284,400	304,600	308,400	275,500	243,000	236,900
28	204,600	210,000	214,800	219,700	233,800	262,700	284,800	305,100	307,000	276,500	242,400	236,800
29	205,300	210,300	214,700	220,200	---	263,200	285,000	305,400	305,600	276,800	241,500	236,700
30	205,400	209,900	214,800	221,100	---	263,900	285,400	307,900	304,200	276,500	239,900	236,500
31	205,400	---	215,000	221,200	---	264,800	---	308,300	---	275,800	239,300	---
MEAN	203,700	208,400	213,000	216,700	227,000	251,400	275,700	299,900	311,700	284,500	253,000	235,500
MAX	205,400	210,300	215,000	221,200	233,800	264,800	285,400	308,300	314,500	302,600	274,800	238,200
MIN	202,400	206,300	210,700	213,400	223,000	234,200	265,000	284,300	304,200	273,800	239,300	232,300
(*)	1936.45	1936.89	1937.38	1938.12	1939.24	1941.85	1943.51	1945.29	1944.98	1942.74	1939.72	1939.48
(**)	-600	+4500	+5100	+6200	+12600	+31000	+20600	+22900	-4100	-28400	-36500	-2800

CAL YR	2000	MAX	336000	MIN	202400	(**)	-82100	
WTR YR	2001	MAX	314500	MIN	202400	(**)	+30500	

(*) Elevation, in feet, at end of month.
(**) Change in contents, in acre-feet.

06849000 HARLAN COUNTY LAKE NEAR REPUBLICAN CITY, NE—Continued

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY OBSERVATION AT 0600 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	236,700	236,000	238,700	242,900	248,500	255,000	264,000	270,000	276,200	256,400	194,000	166,200
2	236,500	236,000	238,700	242,900	248,600	255,000	264,400	270,100	276,200	254,100	191,800	166,100
3	236,400	236,100	238,800	243,000	248,700	255,500	264,500	270,100	276,300	252,300	189,700	165,800
4	235,900	236,100	239,200	243,200	248,800	255,900	264,500	270,300	275,900	250,500	187,800	165,600
5	236,000	236,100	239,800	243,200	249,100	256,000	264,700	270,200	276,500	248,500	186,000	165,200
6	236,000	236,200	239,500	243,400	249,300	256,400	264,800	270,500	276,400	246,700	184,000	165,100
7	235,900	236,300	239,800	243,500	249,500	256,700	265,300	270,600	276,200	244,900	181,900	165,000
8	235,600	236,300	239,600	243,700	249,800	256,900	265,600	270,800	275,800	243,000	180,000	164,600
9	235,600	236,400	240,000	243,800	250,100	257,300	265,900	270,900	275,900	241,100	179,000	164,500
10	236,000	236,500	240,200	244,100	250,600	257,700	266,100	270,600	275,500	239,200	177,400	164,400
11	235,900	236,500	240,100	244,300	250,500	258,000	266,600	272,300	275,500	237,100	175,600	164,200
12	235,600	236,400	240,500	244,500	250,800	258,300	266,400	272,400	275,000	234,900	174,000	164,000
13	236,300	236,500	240,800	244,800	251,100	258,800	267,100	272,700	275,000	232,900	173,000	163,900
14	236,100	236,800	241,000	245,000	251,300	259,300	267,500	272,700	275,000	230,800	171,800	163,900
15	236,500	237,000	241,100	245,600	251,800	259,500	267,600	272,800	274,700	228,700	171,000	163,900
16	236,300	237,000	241,400	245,900	252,000	259,700	267,600	273,200	277,500	226,600	169,800	163,600
17	236,100	237,000	241,500	246,000	252,300	259,900	267,800	273,400	277,500	224,500	169,500	163,200
18	236,100	237,300	241,600	246,100	253,000	260,100	268,000	273,300	277,000	222,400	168,700	163,800
19	236,100	237,600	241,800	245,900	253,300	260,800	267,800	273,500	276,400	220,200	168,100	163,400
20	236,200	237,500	241,900	246,200	253,600	261,100	267,800	273,400	275,400	218,100	167,400	163,100
21	236,000	237,500	241,900	246,300	253,900	261,400	268,500	273,400	274,800	216,000	167,200	162,800
22	236,000	237,800	242,200	246,600	254,100	261,500	268,500	273,200	273,700	214,500	167,300	162,800
23	236,100	237,500	242,600	246,700	254,400	261,600	268,700	273,500	272,200	212,300	167,100	162,500
24	236,400	237,700	242,500	246,700	254,800	261,500	268,800	273,400	270,600	210,000	167,300	161,900
25	236,300	238,700	242,400	246,800	254,900	262,100	268,800	274,400	268,700	208,100	167,300	161,900
26	235,900	239,000	242,500	246,900	255,500	262,300	267,500	274,200	266,600	206,100	167,100	161,700
27	235,700	239,200	242,600	247,200	255,000	262,700	269,500	275,700	264,900	203,900	166,900	161,500
28	235,600	238,600	242,600	247,400	255,300	263,000	269,600	275,900	263,100	202,000	166,800	161,200
29	235,600	238,500	242,800	247,700	---	263,300	269,600	276,000	260,900	199,900	166,800	161,200
30	235,700	238,600	242,800	247,500	---	263,600	269,600	276,000	258,600	198,000	166,500	161,300
31	235,900	---	242,900	248,100	---	263,700	---	276,200	---	195,900	166,400	---
MEAN	236,000	237,200	241,100	245,400	251,800	259,500	267,100	272,800	273,100	226,400	174,100	163,600
MAX	236,700	239,200	242,900	248,100	255,500	263,700	269,600	276,200	277,500	256,400	194,000	166,200
MIN	235,600	236,000	238,700	242,900	248,500	255,000	264,000	270,000	258,600	195,900	166,400	161,200
(*)	1939.42	1939.66	1940.03	1940.47	1941.07	1941.76	1942.24	1942.77	1941.34	1935.75	1932.75	1932.20
(**)	-600	+2700	+4300	+5200	+7200	+8400	+5900	+6600	-17600	-62700	-29500	-5100

CAL YR	2001	MAX	314500	MIN	213400	(**)	+27900	
WTR YR	2002	MAX	277500	MIN	161200	(**)	-75200	

(*) Elevation, in feet, at end of month.
(**) Change in contents, in acre-feet.

06849000 HARLAN COUNTY LAKE NEAR REPUBLICAN CITY, NE—Continued

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY OBSERVATION AT 0600 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161,200	162,700	161,500	160,500	160,100	161,400	164,300	170,800	175,500	178,600	140,700	121,200
2	162,100	162,600	161,500	160,500	160,100	161,500	164,300	170,800	176,600	178,100	139,700	121,000
3	161,900	162,600	161,300	160,500	160,500	161,600	164,500	170,900	176,400	177,600	138,600	120,900
4	162,600	162,600	161,200	160,500	160,500	161,400	164,400	170,400	177,400	176,500	137,100	120,800
5	162,300	162,600	161,200	160,500	160,500	161,600	164,600	170,300	177,500	176,000	136,100	120,600
6	162,500	162,500	161,200	160,400	160,500	161,600	165,000	170,700	177,700	175,100	134,800	120,400
7	162,000	162,400	161,300	160,500	160,500	161,600	165,200	170,400	177,600	174,300	133,700	120,300
8	161,900	162,700	161,100	160,500	160,400	161,800	165,200	170,400	177,900	173,600	132,400	120,000
9	161,800	162,400	161,000	160,400	160,400	161,800	165,100	171,100	177,700	172,000	131,100	120,400
10	161,800	162,500	161,100	160,400	160,500	161,700	165,000	171,300	177,900	171,100	130,300	120,100
11	161,700	162,300	161,000	160,300	160,500	161,900	165,200	171,300	177,800	169,600	129,000	120,600
12	161,700	162,300	161,100	160,200	160,500	162,000	165,300	171,100	178,800	168,700	128,000	120,400
13	161,600	162,100	161,200	160,200	160,500	162,200	165,300	171,400	178,700	167,200	126,700	120,200
14	161,200	162,400	161,100	160,300	160,800	162,200	165,400	171,800	178,600	165,500	125,600	120,100
15	161,300	162,300	161,000	159,900	161,000	162,500	165,500	171,500	178,800	164,400	124,900	120,000
16	160,900	162,300	160,900	160,300	160,900	162,500	165,900	171,700	178,800	162,700	124,400	119,800
17	161,100	162,300	160,800	160,100	161,100	162,600	165,800	172,000	178,900	161,600	123,900	119,600
18	160,900	162,000	161,000	160,100	161,100	163,000	165,600	172,000	178,700	160,000	123,200	119,500
19	160,700	162,300	161,200	160,100	161,100	163,300	165,700	172,700	178,400	158,500	122,900	119,300
20	160,600	162,200	161,200	160,100	161,200	163,700	166,300	172,500	178,100	157,200	123,000	118,900
21	160,500	162,100	160,500	159,900	161,300	163,800	166,000	172,600	178,100	155,900	123,000	118,900
22	160,400	162,000	160,700	160,000	161,400	163,900	165,800	172,900	177,800	154,900	122,800	119,100
23	161,800	162,000	160,500	160,000	161,200	163,900	165,700	173,200	177,100	153,300	122,700	118,800
24	162,000	161,700	160,600	160,100	161,500	164,000	166,800	175,100	177,500	151,800	122,500	118,700
25	162,000	161,800	160,800	160,000	161,400	164,200	167,400	174,900	178,400	150,400	122,400	118,600
26	161,900	161,900	160,600	159,900	161,400	164,200	167,600	175,100	177,900	148,800	122,200	118,500
27	161,800	161,600	160,600	159,900	161,400	164,400	167,600	175,200	177,900	147,600	122,000	118,300
28	162,200	161,600	160,500	159,900	161,400	164,400	167,800	175,300	177,900	146,100	122,000	118,000
29	162,200	161,700	160,600	159,900	---	164,300	168,800	175,500	178,600	145,000	121,900	117,800
30	162,700	161,700	160,600	159,900	---	164,200	169,800	175,600	178,600	143,700	121,300	117,700
31	162,500	---	160,500	160,100	---	164,200	---	175,600	---	142,200	121,300	---
MEAN	161,700	162,200	160,900	160,200	160,800	162,800	165,900	172,500	177,900	162,200	127,400	119,600
MAX	162,700	162,700	161,500	160,500	161,500	164,400	169,800	175,600	178,900	178,600	140,700	121,200
MIN	160,400	161,600	160,500	159,900	160,100	161,400	164,300	170,300	175,500	142,200	121,300	117,700
(*)	1932.33	1932.24	1932.11	1932.07	1932.21	1932.51	1933.11	1933.72	1934.03	1930.04	1927.42	1926.92
(**)	+1200	-800	-1200	-400	+1300	+2800	+5600	+5800	+3000	-36400	-57300	-3600

CAL YR	2002	MAX	277500	MIN	160400	(**)	-82400	
WTR YR	2003	MAX	178900	MIN	117700	(**)	-80000	

(*) Elevation, in feet, at end of month.
(**) Change in contents, in acre-feet.

06849500 REPUBLICAN RIVER BELOW HARLAN COUNTY DAM, NE

LOCATION.--Lat 40° 04'45", long 99° 10'05", in SW $^{1}/_{4}$ sec.6, T.1 N., R.16 W., Franklin County, Hydrologic Unit 10250016, on left bank 1.4 mi west of Naponee, 1.4 mi upstream from Turkey Creek, 2.8 mi downstream from Harlan County Dam, and at mile 234.

DRAINAGE AREA.--20,820 mi^2 , of which about 13,590 mi^2 contributes directly to surface runoff.

PERIOD OF RECORD.--December 1952 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 1,863.38 ft above sea level (Corps of Engineers bench mark). Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow completely regulated by Harlan County Lake (station 06849000) and partially regulated by six upstream reservoirs.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	2.1	2.5	1.9	2.6	3.3	2.0	1.8	1.4	123	303	2.8
2	9.6	1.9	2.9	1.8	2.9	2.8	2.1	1.1	2.2	194	285	2.7
3	5.5	1.9	2.9	1.9	2.8	2.6	1.9	0.96	2.3	294	277	2.5
4	5.9	2.0	2.9	2.3	2.5	2.5	1.9	1.0	2.2	320	287	2.2
5	4.7	2.2	2.8	2.3	2.7	2.3	2.0	0.91	1.8	310	286	1.9
6	4.5	2.2	2.4	2.4	2.7	2.6	2.4	0.89	1.5	345	281	1.3
7	4.2	2.4	2.4	2.4	2.2	2.9	2.4	1.1	1.9	353	287	1.5
8	4.0	2.4	2.4	2.5	2.5	3.1	2.4	1.3	2.0	349	270	1.8
9	4.0	2.6	2.2	2.4	2.8	2.2	2.3	1.1	1.9	341	263	2.3
10	4.0	2.6	2.2	2.4	2.9	2.4	1.9	1.1	1.7	354	274	2.4
11	4.0	2.6	2.2	2.2	2.9	3.0	1.9	1.1	2.0	357	264	2.5
12	4.0	2.3	2.1	2.4	2.9	2.9	2.0	1.0	2.5	314	243	2.4
13	4.0	2.4	2.1	2.4	2.9	2.9	2.1	0.89	2.3	377	223	2.4
14	3.7	2.8	2.2	2.5	3.4	2.9	2.2	0.96	2.1	384	177	2.3
15	3.4	2.6	2.4	2.2	3.3	2.5	2.4	1.1	2.0	390	142	2.0
16	3.6	2.4	2.3	1.6	3.0	2.4	2.4	1.3	26	373	138	2.0
17	3.4	2.8	2.3	2.1	3.1	2.5	2.4	1.0	104	368	134	2.0
18	3.3	2.8	2.4	2.4	3.4	2.9	2.4	0.74	139	367	130	2.0
19	3.3	2.9	2.0	2.3	3.4	2.8	2.3	1.9	117	369	63	2.0
20	3.3	2.8	1.9	2.2	3.3	2.5	2.1	2.1	101	370	3.4	1.9
21	3.1	2.7	1.9	1.9	3.2	2.5	2.0	1.1	118	362	3.4	1.9
22	7.8	2.9	e1.9	1.5	3.2	2.2	1.9	1.1	144	348	3.4	1.9
23	4.5	2.8	e1.7	1.8	2.7	2.0	2.3	0.90	115	340	3.4	1.8
24	2.2	2.7	e1.6	1.8	2.9	2.0	2.7	1.9	4.7	333	3.4	1.7
25	1.9	2.9	e1.5	2.1	2.9	2.0	2.4	2.8	2.4	323	3.4	1.6
26	1.7	2.5	e1.4	1.9	2.9	2.1	2.0	1.4	2.4	338	3.4	1.4
27	2.6	2.4	e1.2	1.9	3.0	2.2	2.0	1.1	26	361	3.2	1.3
28	2.2	2.4	1.3	2.4	3.1	1.9	2.0	0.88	56	362	3.3	1.3
29	2.2	2.6	1.5	2.4	---	1.9	40	0.98	61	344	2.8	1.3
30	2.6	2.4	1.5	2.4	---	2.0	13	1.2	79	335	2.4	1.6
31	1.9	---	1.6	2.6	---	2.0	---	1.1	---	313	2.7	---
TOTAL	121.1	75.0	64.6	67.3	82.1	76.8	113.8	37.81	1,125.3	10,411	4,365.2	58.7
MEAN	3.91	2.50	2.08	2.17	2.93	2.48	3.79	1.22	37.5	336	141	1.96
MAX	9.6	2.9	2.9	2.6	3.4	3.3	40	2.8	144	390	303	2.8
MIN	1.7	1.9	1.2	1.5	2.2	1.9	1.9	0.74	1.4	123	2.4	1.3
AC-FT	240	149	128	133	163	152	226	75	2,230	20,650	8,660	116

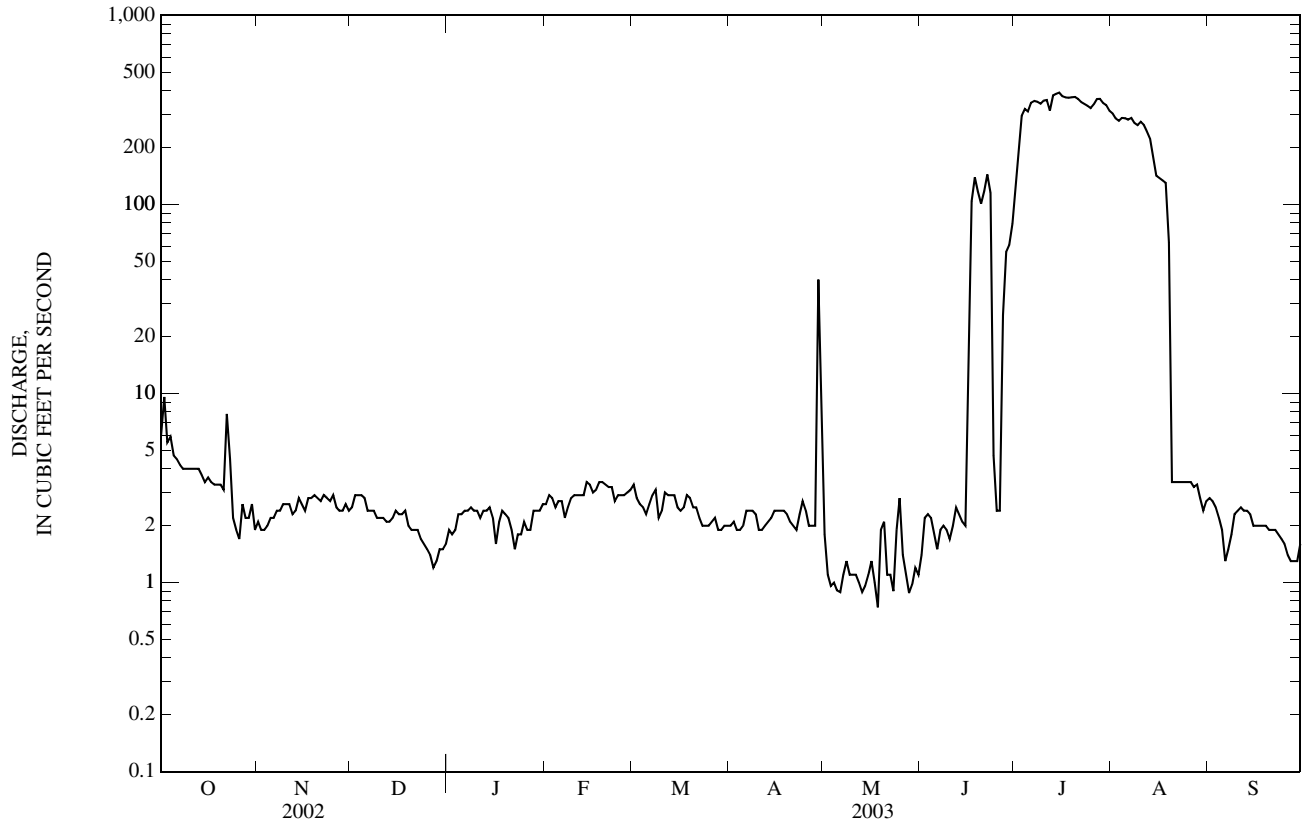
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2003, BY WATER YEAR (WY)

MEAN	117	71.0	57.6	51.8	110	122	192	195	368	709	420	125
MAX	2,044	985	571	535	680	941	2,400	2,069	1,763	2,761	1,726	1,260
(WY)	(1966)	(1994)	(1994)	(1966)	(1966)	(1963)	(1960)	(1960)	(1962)	(1962)	(1962)	(1996)
MIN	3.79	2.50	2.08	2.17	2.15	2.48	2.63	1.22	14.4	70.3	91.0	1.96
(WY)	(1990)	(1992)	(2003)	(2003)	(1977)	(2003)	(1992)	(2003)	(1993)	(1993)	(1981)	(2003)

06849500 REPUBLICAN RIVER BELOW HARLAN COUNTY DAM, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1953 - 2003	
ANNUAL TOTAL	37,774.7		16,598.71			
ANNUAL MEAN	103		45.5		214	
HIGHEST ANNUAL MEAN					690	1966
LOWEST ANNUAL MEAN					37.4	1992
HIGHEST DAILY MEAN	744	Jun 30	390	Jul 15	4,210	Nov 2, 1965
LOWEST DAILY MEAN	1.2	Dec 27	0.74	May 18	0.29	Jun 3, 1996
ANNUAL SEVEN-DAY MINIMUM	1.4	Dec 24	1.00	May 12	0.38	Jun 1, 1996
MAXIMUM PEAK FLOW			496	Jul 12	4,320	Jun 25, 1957
MAXIMUM PEAK STAGE			2.41	Jul 12	8.65	Jun 25, 1957
ANNUAL RUNOFF (AC-FT)	74,930		32,920		155,200	
10 PERCENT EXCEEDS	618		275		640	
50 PERCENT EXCEEDS	4.6		2.4		14	
90 PERCENT EXCEEDS	2.4		1.5		4.0	

e Estimated.



06852500 COURTLAND CANAL AT NEBRASKA-KANSAS STATE LINE

LOCATION.--Lat 40° 00'15", long 98° 07'55", in SW 1/4 SE 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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	117	76	e72	e110	0.00	0.00	281	61	89	200	31
2	31	99	76	e72	e114	0.00	0.00	202	65	92	190	31
3	53	93	76	e64	e108	0.00	0.00	143	50	110	188	31
4	86	86	75	e68	e92	0.00	e0.00	126	61	137	187	30
5	80	85	e76	e72	e88	0.00	e0.00	119	65	163	189	30
6	e62	82	e76	e72	e84	0.00	e0.00	115	62	177	186	30
7	61	81	e76	e70	e80	0.00	e5.0	112	62	187	174	30
8	e58	81	e76	e70	79	0.00	73	149	61	203	176	30
9	58	81	e76	e70	77	0.00	92	216	66	207	178	29
10	51	79	e76	e68	76	0.00	89	136	81	207	173	31
11	48	76	e76	54	72	0.00	82	129	74	204	174	73
12	48	76	e76	50	e68	0.00	77	e96	71	197	174	172
13	47	76	76	52	e66	0.00	76	39	83	196	166	124
14	47	80	75	65	e58	0.00	75	25	81	193	170	59
15	e47	81	75	e66	49	0.00	74	58	79	210	208	44
16	46	77	76	e64	e25	0.00	79	58	64	208	208	38
17	45	77	76	e64	e15	0.00	77	58	51	205	172	35
18	45	77	76	e62	e5.2	0.00	76	58	46	201	158	33
19	e44	76	77	e62	0.00	0.00	78	52	60	206	193	e31
20	44	76	77	63	0.00	0.00	78	38	96	219	149	e31
21	43	76	73	e64	0.00	0.00	77	37	e120	221	132	31
22	44	76	67	e64	0.00	0.00	76	40	120	225	70	32
23	74	75	61	e60	e0.00	0.00	77	60	96	230	51	32
24	103	e74	56	e58	e0.00	0.00	121	72	60	240	42	31
25	95	74	55	e56	e0.00	0.00	129	65	59	225	46	31
26	80	76	55	e56	e0.00	0.00	111	63	57	213	48	30
27	77	76	57	e56	0.00	0.00	99	57	58	212	59	30
28	79	77	61	e56	0.00	0.00	93	61	58	227	59	30
29	80	78	e62	e54	---	0.00	100	60	58	247	55	30
30	102	76	e66	e56	---	0.00	158	61	78	231	34	30
31	128	---	e68	85	---	0.00	---	60	---	205	31	---
TOTAL	1,933	2,414	2,200	1,965	1,266.20	0.00	2,072.00	2,846	2,103	6,087	4,240	1,250
MEAN	62.4	80.5	71.0	63.4	45.2	0.000	69.1	91.8	70.1	196	137	41.7
MAX	128	117	77	85	114	0.00	158	281	120	247	208	172
MIN	27	74	55	50	0.00	0.00	0.00	25	46	89	31	29
AC-FT	3,830	4,790	4,360	3,900	2,510	0.00	4,110	5,650	4,170	12,070	8,410	2,480

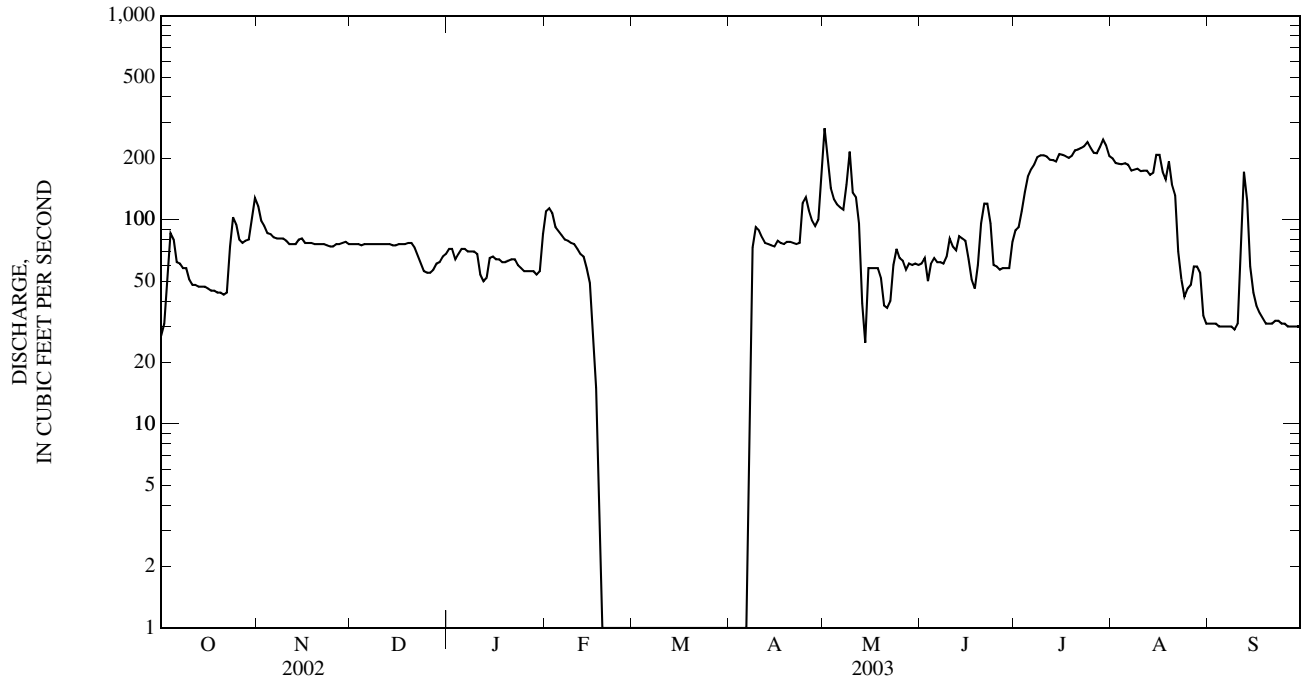
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2003, BY WATER YEAR (WY)

MEAN	30.7	12.1	5.45	5.87	4.79	9.53	15.2	53.0	115	347	277	65.6
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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1955 - 2003	
ANNUAL TOTAL	36,046.8		28,376.20			
ANNUAL MEAN	98.8		77.7		79.2	
HIGHEST ANNUAL MEAN					138	1976
LOWEST ANNUAL MEAN					19.5	1955
HIGHEST DAILY MEAN	475	Jul 30	281	May 1	731	Oct 22, 1957
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Feb 19	*0.00	Oct 1, 1954
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Feb 19	0.00	Oct 1, 1954
MAXIMUM PEAK FLOW			311	May 1	781	Sep 2, 1973
MAXIMUM PEAK STAGE			2.89	May 1	5.05	Sep 2, 1973
ANNUAL RUNOFF (AC-FT)	71,500		56,280		57,400	
10 PERCENT EXCEEDS	318		186		289	
50 PERCENT EXCEEDS	75		70		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated.
* No flow for many days each year.



06853020 REPUBLICAN RIVER AT GUIDE ROCK, NE

LOCATION.--Lat 40° 03'49", long 98° 19'53", in NE 1/4 SE 1/4 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 mi^2, approximately, of which about 14,610 mi^2 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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.43	4.2	2.0	e2.2	3.2	e84	84	9.4	26	17	14	1.2
2	0.76	2.7	2.0	e2.1	3.2	e100	67	7.8	46	13	14	1.0
3	1.3	2.5	1.9	e2.4	3.1	114	84	6.8	41	9.9	17	0.95
4	12	2.4	1.9	2.5	3.0	90	78	6.6	40	12	14	0.86
5	2.3	2.3	1.9	2.6	e2.8	61	77	6.3	310	11	13	0.83
6	1.5	2.2	2.1	2.6	e2.0	79	94	8.0	83	5.1	9.0	0.73
7	0.90	2.2	2.1	2.7	e2.0	100	66	7.5	42	2.8	9.7	0.73
8	0.74	2.1	2.2	2.6	e2.4	98	11	55	33	10	8.7	0.73
9	0.73	2.1	2.3	e2.4	e2.5	83	8.3	45	22	24	9.2	0.96
10	0.70	2.0	2.3	e2.0	e2.8	90	6.8	27	12	13	7.6	1.0
11	0.76	1.9	2.3	e2.7	3.2	106	6.0	14	10	9.6	14	57
12	0.72	2.1	2.2	4.1	3.1	90	5.5	16	22	6.5	18	4.5
13	0.77	2.1	2.2	3.3	3.1	86	5.0	51	43	5.6	6.8	1.9
14	0.82	2.3	2.2	e2.9	40	86	4.7	47	10	15	5.6	1.4
15	0.81	2.0	2.2	e2.6	95	87	4.3	39	8.4	18	13	1.3
16	0.84	2.1	2.2	e2.1	80	85	6.3	46	7.3	26	6.8	1.3
17	0.85	2.0	2.2	e2.0	91	85	4.6	64	6.8	19	4.9	1.2
18	0.86	1.9	2.2	e2.3	98	107	4.8	61	6.7	10	4.8	1.1
19	0.81	1.9	2.1	e2.9	90	114	4.3	85	6.3	8.7	14	1.0
20	0.87	1.9	e1.9	e2.7	87	108	4.2	93	22	19	4.8	0.86
21	0.91	1.9	e1.8	e2.1	87	98	3.9	105	17	27	3.6	0.90
22	1.3	1.9	e1.8	e1.8	e80	95	3.8	62	9.3	26	3.1	0.96
23	2.1	1.9	e1.7	e1.8	e64	93	7.0	47	213	27	2.7	0.88
24	1.8	1.9	e1.6	e1.8	e64	90	8.2	575	944	13	2.3	0.81
25	1.7	1.9	e1.6	e2.1	e70	86	6.2	573	316	11	2.1	0.79
26	1.6	1.9	e1.7	e2.4	e80	85	5.3	160	112	9.3	2.2	0.78
27	1.8	1.9	e1.9	e2.7	e84	84	5.2	90	61	9.6	2.3	0.71
28	1.8	2.0	e2.1	e3.1	e84	80	4.8	59	37	19	2.2	0.69
29	2.1	2.1	e2.1	e2.9	---	78	7.3	43	28	19	1.6	0.67
30	3.9	2.0	e2.2	3.2	---	80	17	36	30	15	1.4	0.91
31	6.0	---	e2.2	3.6	---	83	---	29	---	18	1.3	---
TOTAL	54.48	64.3	63.1	79.2	1,230.4	2,805	694.5	2,474.4	2,564.8	449.1	233.7	88.65
MEAN	1.76	2.14	2.04	2.55	43.9	90.5	23.1	79.8	85.5	14.5	7.54	2.96
MAX	12	4.2	2.3	4.1	98	114	94	575	944	27	18	57
MIN	0.43	1.9	1.6	1.8	2.0	61	3.8	6.3	6.3	2.8	1.3	0.67
AC-FT	108	128	125	157	2,440	5,560	1,380	4,910	5,090	891	464	176

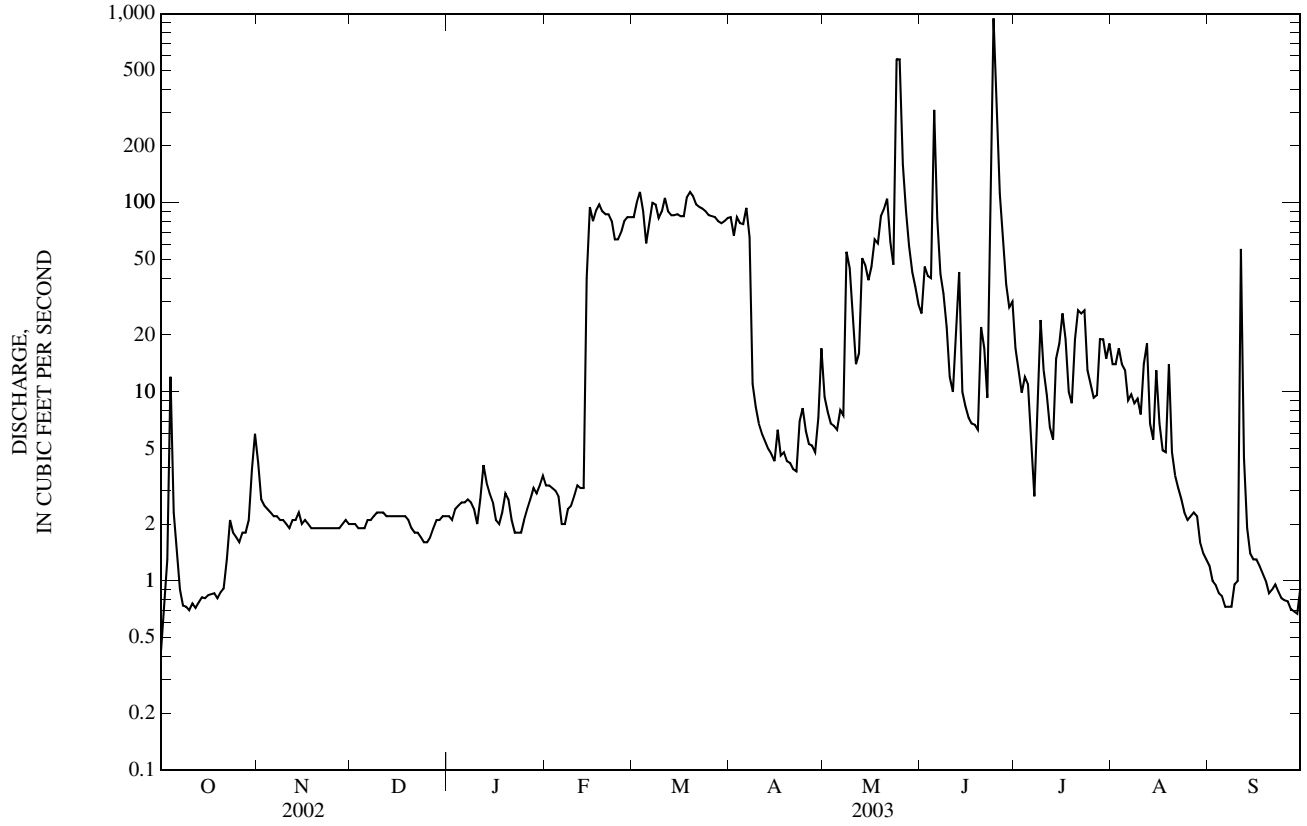
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2003, BY WATER YEAR (WY)

MEAN	197	178	155	148	242	308	352	400	457	495	232	267
MAX	2,073	1,245	819	588	948	1,077	2,484	2,511	3,619	4,298	1,712	3,602
(WY)	(1966)	(1994)	(1994)	(1952)	(1952)	(1952)	(1960)	(1960)	(1951)	(1951)	(1962)	(1951)
MIN	1.19	2.14	2.04	2.55	3.86	22.5	6.86	7.04	11.5	14.5	7.54	0.64
(WY)	(1992)	(2003)	(2003)	(2003)	(1992)	(1992)	(1992)	(1989)	(1992)	(2003)	(2003)	(2002)

06853020 REPUBLICAN RIVER AT GUIDE ROCK, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1950 - 2003	
ANNUAL TOTAL	12,396.83		10,801.63			
ANNUAL MEAN	34.0		29.6		285	
HIGHEST ANNUAL MEAN					1,495	1951
LOWEST ANNUAL MEAN					29.6	2003
HIGHEST DAILY MEAN	221	May 29	944	Jun 24	20,900	Jun 16, 1957
LOWEST DAILY MEAN	0.38	Sep 25	0.43	Oct 1	0.10	May 26, 1964
ANNUAL SEVEN-DAY MINIMUM	0.39	Sep 23	0.75	Oct 8	0.39	Sep 23, 2002
MAXIMUM PEAK FLOW					29,200	Jun 16, 1957
MAXIMUM PEAK STAGE					20.73	Jun 16, 1957
ANNUAL RUNOFF (AC-FT)	24,590		21,430		206,600	
10 PERCENT EXCEEDS	119		86		663	
50 PERCENT EXCEEDS	8.6		4.8		115	
90 PERCENT EXCEEDS	0.83		1.0		14	

e Estimated.
* Site and datum then in use.



06853500 REPUBLICAN RIVER NEAR HARDY, NE

LOCATION.--Lat 39° 59'33", long 97° 55'53", in NE 1/4 NE 1/4 SE 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 mi^2, of which about 7,500 mi^2 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.

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 ft^3/s, based on records for upstream stations.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	34	20	23	e30	e81	89	60	83	96	26	23
2	61	32	20	23	e31	e85	89	49	90	76	30	21
3	46	29	20	23	32	e90	89	43	92	62	32	19
4	163	26	21	22	e31	e91	89	41	87	57	46	19
5	114	23	22	23	30	e93	89	40	89	56	47	18
6	59	21	21	22	30	e96	94	40	260	65	35	15
7	34	21	20	23	e31	96	99	40	197	62	28	13
8	30	21	20	23	e31	e95	95	147	122	55	24	13
9	27	21	20	23	e32	e93	62	365	99	47	25	19
10	26	21	20	e23	e32	92	52	159	87	51	28	34
11	25	21	20	e23	32	97	48	108	76	56	25	950
12	25	21	20	e23	31	95	45	84	69	45	22	819
13	24	21	20	e24	31	97	44	72	98	42	25	267
14	25	23	20	e23	33	93	42	78	103	40	25	106
15	24	23	20	e22	37	92	41	83	75	40	25	69
16	24	23	20	e21	79	91	42	79	61	39	19	55
17	25	23	20	e21	87	93	42	76	57	37	12	46
18	25	23	20	e22	94	100	41	86	59	36	21	41
19	24	22	20	e22	103	109	40	100	58	32	132	37
20	24	23	19	e22	104	116	38	114	57	31	67	34
21	24	22	19	e21	104	110	38	130	56	34	46	33
22	25	22	e18	e21	101	103	38	124	66	49	35	30
23	30	23	e18	e21	97	99	42	120	2,120	50	30	29
24	32	23	e18	e21	85	96	52	260	839	41	27	27
25	30	23	e18	e22	77	94	49	1,050	838	32	25	25
26	28	24	e18	e23	e76	92	44	596	422	21	20	25
27	29	24	e19	e25	e77	91	41	281	262	20	18	22
28	29	24	e21	e26	e78	91	40	189	180	23	17	21
29	30	24	e22	e28	---	88	41	145	136	27	21	21
30	41	20	e23	e29	---	87	49	115	112	27	17	24
31	39	---	24	e30	---	88	---	95	---	25	22	---
MEAN	37.3	23.4	20.0	23.2	58.4	94.6	56.8	160	232	44.3	31.4	95.8
MAX	163	34	24	30	104	116	99	1,050	2,120	96	132	950
MIN	15	20	18	21	30	81	38	40	56	20	12	13
AC-FT	2,290	1,390	1,230	1,420	3,250	5,820	3,380	9,860	13,790	2,730	1,930	5,700

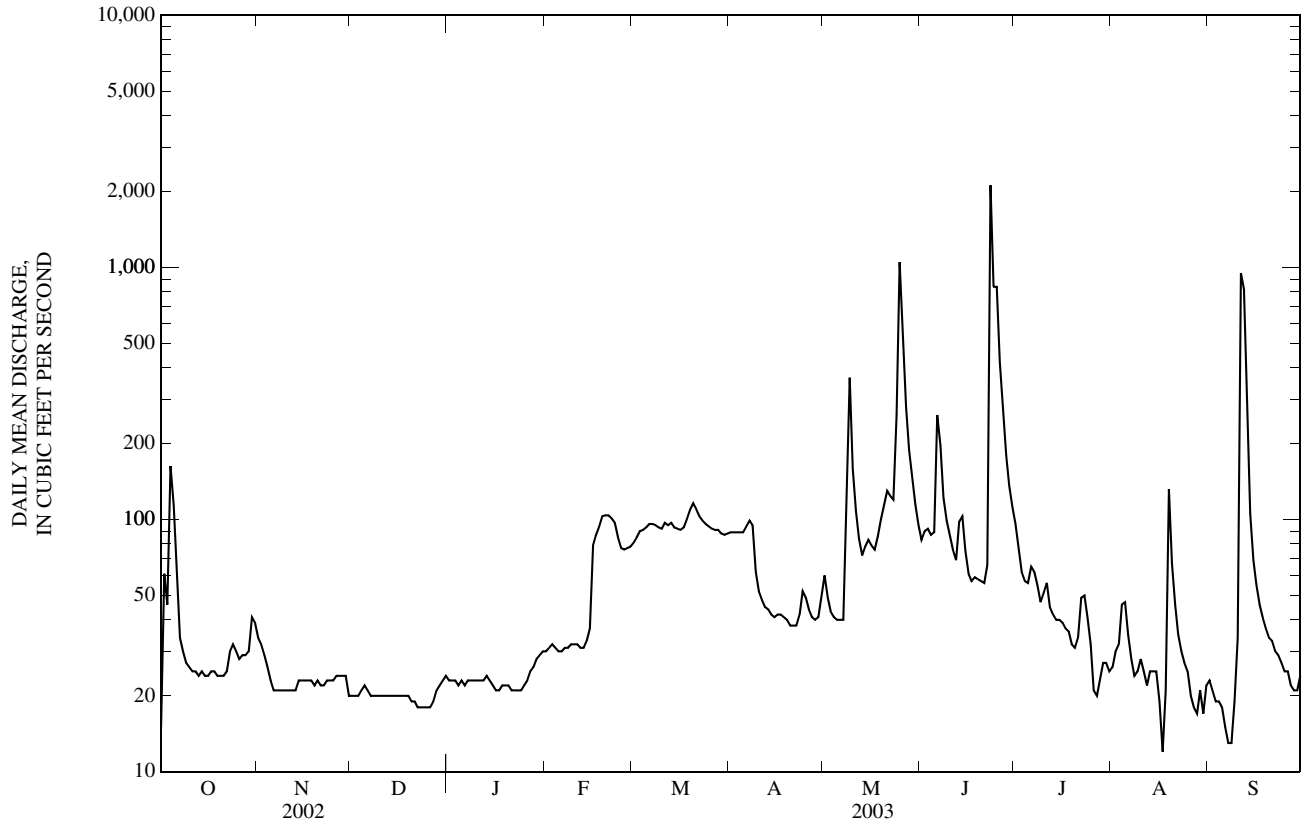
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2003, BY WATER YEAR (WY)

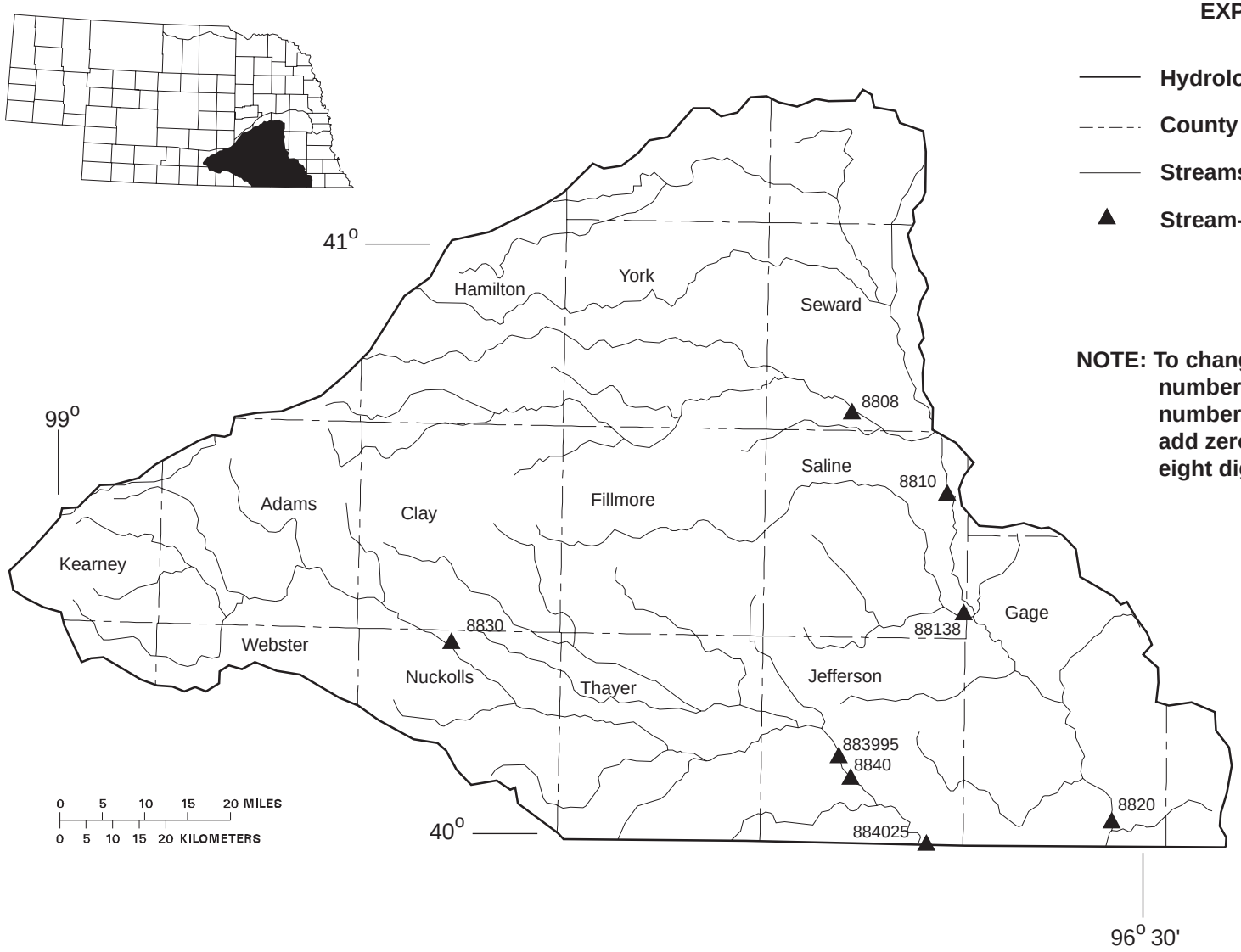
MEAN	268	223	194	185	290	407	429	475	480	500	304	306
MAX	1,970	1,308	928	636	968	1,584	2,415	2,523	2,031	3,210	1,800	1,455
(WY)	(1966)	(1994)	(1994)	(1966)	(1966)	(1993)	(1960)	(1960)	(1960)	(1993)	(1962)	(1973)
MIN	17.2	22.3	20.0	23.2	27.0	66.5	39.1	29.6	46.5	44.3	30.5	15.3
(WY)	(1992)	(1992)	(2003)	(2003)	(1992)	(1991)	(1991)	(1992)	(1992)	(2003)	(2002)	(1991)

06853500 REPUBLICAN RIVER NEAR HARDY, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1958 - 2003	
ANNUAL MEAN	69.9		72.9		339	
HIGHEST ANNUAL MEAN					800	1960
LOWEST ANNUAL MEAN					72.5	1991
HIGHEST DAILY MEAN	238	May 30	2,120	Jun 23	15,000	Oct 1, 1983
LOWEST DAILY MEAN	13	Aug 8	12	Aug 17	4.8	Aug 3, 1991
ANNUAL SEVEN-DAY MINIMUM	15	Sep 5	17	Sep 3	9.0	Jun 26, 1992
MAXIMUM PEAK FLOW			3,380	Jun 23	225,000	Jun 2, 1935
MAXIMUM PEAK STAGE			8.31	Jun 23	19.40	Jun 2, 1935
INSTANTANEOUS LOW FLOW			10	Aug 17	0.00	Aug 9, 1934
ANNUAL RUNOFF (AC-FT)	50,610		52,780		245,400	
10 PERCENT EXCEEDS	160		105		755	
50 PERCENT EXCEEDS	44		34		164	
90 PERCENT EXCEEDS	18		20		54	

e Estimated




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.
41°
99°
40°
96° 30'
Hamilton
York
Seward
Saline
Adams
Clay
Fillmore
Kearney
Webster
Nuckolls
Thayer
Jefferson
Gage
8808
8810
8830
88138
883995
8840
8820
884025
0 5 10 15 20 MILES
0 5 10 15 20 KILOMETERS

*Station number	Station name	Page
	BIG BLUE RIVER BASIN	
8808	West Fork Big Blue River near Dorchester	346
8810	Big Blue River near Crete	350
881380	Turkey Creek near DeWitt	352
8820	Big Blue River at Barneston	354
	LITTLE BLUE RIVER BASIN	
8830	Little Blue River near Deweese	358
883995/ 8840	Little Blue River at Fairbury/Little Blue River near Fairbury	360
884025	Little Blue River at Hollenberg, KS	364

*NOTE: To change abbreviated station number to complete station number, prefix with “06” and add zeros required to give eight digits.

06880800 WEST FORK BIG BLUE RIVER NEAR DORCHESTER, NE

LOCATION.--Lat 40° 43'52", long 97° 10'38", in SW 1/4 SW 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 mi^2.

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 good 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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	68	56	57	e56	e68	67	87	77	88	83	56
2	63	68	56	57	e58	70	66	79	81	82	80	55
3	70	67	56	58	e60	70	66	77	82	79	79	54
4	196	66	54	57	e64	71	68	87	82	79	80	52
5	99	66	54	58	67	64	69	93	83	79	82	51
6	93	66	57	57	69	e72	72	95	87	76	74	47
7	82	63	54	57	e68	77	77	83	80	76	67	44
8	74	61	55	56	e66	75	75	96	82	74	74	41
9	72	59	56	58	e62	71	76	133	82	71	79	51
10	76	58	56	53	e64	73	73	124	100	68	80	84
11	72	57	56	e49	68	68	71	114	88	67	81	1,170
12	68	57	59	e46	68	73	69	99	741	70	74	1,030
13	64	57	57	e46	66	72	69	91	930	78	67	669
14	64	57	57	e47	69	72	68	85	821	82	66	433
15	63	56	57	e47	73	70	68	82	518	77	72	433
16	64	57	57	e46	63	69	68	85	255	67	72	307
17	64	57	57	e47	70	73	66	81	160	66	66	206
18	64	57	56	e47	75	74	67	77	178	69	62	144
19	63	56	55	e47	73	73	68	125	215	70	73	111
20	62	56	54	e46	74	75	69	178	120	70	78	97
21	61	55	53	e46	73	74	69	154	143	77	92	78
22	61	55	53	e45	72	73	68	150	168	81	76	71
23	62	55	e51	e45	68	71	70	131	127	81	69	67
24	64	55	e49	e46	e64	69	76	109	124	83	66	59
25	65	54	e50	e46	e62	68	76	102	114	92	65	55
26	64	55	e52	e48	e62	68	76	91	112	96	61	53
27	65	55	e53	e50	e64	69	72	86	105	93	57	49
28	66	55	e55	e50	e64	69	70	82	110	87	53	47
29	66	56	e56	e51	---	68	77	85	111	77	56	45
30	71	57	e58	e52	---	68	82	88	99	69	57	45
31	68	---	58	e54	---	68	---	79	---	76	57	---
TOTAL	2,246	1,761	1,707	1,569	1,862	2,195	2,128	3,128	6,075	2,400	2,198	5,704
MEAN	72.5	58.7	55.1	50.6	66.5	70.8	70.9	101	202	77.4	70.9	190
MAX	196	68	59	58	75	77	82	178	930	96	92	1,170
MIN	60	54	49	45	56	64	66	77	77	66	53	41
AC-FT	4,450	3,490	3,390	3,110	3,690	4,350	4,220	6,200	12,050	4,760	4,360	11,310

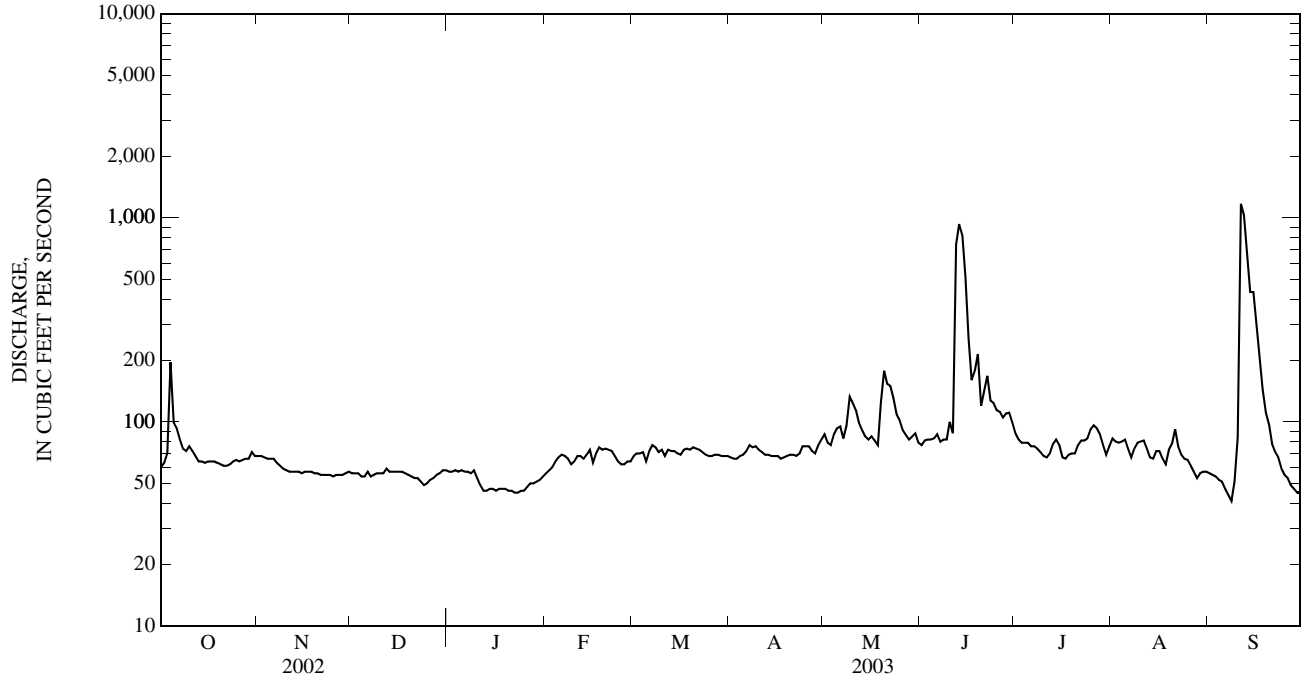
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2003, BY WATER YEAR (WY)

MEAN	116	81.9	69.7	74.1	140	298	170	262	354	322	186	152
MAX	812	224	202	377	671	1,762	887	1,147	1,749	1,395	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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1958 - 2003	
ANNUAL TOTAL	34,905		32,973			
ANNUAL MEAN	95.6		90.3		185	
HIGHEST ANNUAL MEAN					441	1984
LOWEST ANNUAL MEAN					54.4	1976
HIGHEST DAILY MEAN	843	May 12	1,170	Sep 11	11,100	Mar 11, 1993
LOWEST DAILY MEAN	49	Dec 24	41	Sep 8	12	Dec 31, 1976
ANNUAL SEVEN-DAY MINIMUM	52	Dec 21	46	Jan 19	17	Jul 11, 1976
MAXIMUM PEAK FLOW			1,460	Sep 11	*12,400	Mar 11, 1993
MAXIMUM PEAK STAGE			10.07	Sep 11	22.62	Jul 1, 1986
ANNUAL RUNOFF (AC-FT)	69,230		65,400		134,400	
10 PERCENT EXCEEDS	121		107		305	
50 PERCENT EXCEEDS	76		68		83	
90 PERCENT EXCEEDS	56		53		48	

e Estimated.
* Stage 21.71 ft.



06880800 WEST FORK BIG BLUE RIVER NEAR DORCHESTER, NE—Continued

WATER-QUALITY RECORDS

Pesticide Reconnaissance Study

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	Acetochlor ESA, water, fltrd 0.7u GF ug/L (61029)	Acetochlor OA, water, fltrd 0.7u GF ug/L (61030)
OCT													
04...	0920	4.35	213	718	8.0	82	7.2	350	13.5	0.17	0.10	0.13	0.17

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Acetochlor, water, fltrd, ug/L (49260)	Alachlor ESA, water, fltrd 0.7u GF ug/L (50009)	Alachlor OA, water, fltrd 0.7u GF ug/L (61031)	Alachlor, water, fltrd, ug/L (46342)	Ametryn water, fltrd, ug/L (38401)	Aminomethylphosphonic acid, wat flt ug/L (62649)	Atrazine, water, fltrd, ug/L (39632)	Cyanazine amide, water, fltrd, ug/L (61709)	Cyanazine, water, fltrd, ug/L (04041)	Dimethenamid ESA, water, fltrd, ug/L (61951)	Dimethenamid OA, water, fltrd, ug/L (62482)	Dimethenamid water, fltrd, ug/L (61588)	Flufenacet ESA, water, fltrd, ug/L (61952)
OCT													
04...	<0.05	0.15	0.08	<0.05	<0.05	1.3	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Flufenacet OA, water, fltrd, ug/L (62483)	Flufenacet, water, fltrd, ug/L (62481)	Glufosinate, water, fltrd 0.7u GF ug/L (62721)	Glyphosate, water, fltrd 0.7u GF ug/L (62722)	Metolachlor ESA, water, fltrd 0.7u GF ug/L (61043)	Metolachlor OA, water, fltrd 0.7u GF ug/L (61044)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propachlor, water, fltrd, ug/L (04024)	Propazine, water, fltrd, ug/L (38535)
OCT													
04...	<0.05	<0.05	<0.1	0.2	0.35	0.44	0.13	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Simazine, water, fltrd, ug/L (04035)	Terbutryn, water, fltrd, ug/L (38888)
OCT		
04...	<0.05	<0.05

Remark codes used in this table:
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06881000 BIG BLUE RIVER NEAR CRETE, NE

LOCATION.--Lat 40° 35'47", long 96° 57'33", in SW 1/4 SE 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 mi^2.

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 estimated daily discharges which are poor. Natural flow of stream affected by ground-water and surface-water withdrawals for irrigation and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	132	102	108	99	122	128	152	134	254	79	62
2	145	126	112	103	e96	118	129	155	140	212	86	65
3	126	124	103	101	e92	132	129	149	136	178	88	61
4	881	121	104	106	e90	126	129	179	135	150	88	58
5	906	120	94	102	e86	85	129	406	134	134	86	58
6	376	116	86	102	e82	116	137	322	138	127	83	60
7	235	115	112	94	e80	129	145	293	165	121	74	59
8	182	113	110	103	71	147	143	266	144	113	68	59
9	159	111	92	100	81	111	140	352	140	108	71	67
10	147	109	113	90	89	133	140	351	757	97	75	87
11	143	107	112	65	90	131	139	280	1,670	82	77	942
12	139	104	105	e64	88	124	136	232	2,220	77	81	2,740
13	131	103	103	e63	92	129	134	198	2,450	70	74	2,590
14	125	103	103	e61	98	131	132	194	1,430	77	60	1,410
15	123	104	105	e59	101	132	131	184	997	80	58	789
16	124	104	109	e56	107	128	131	167	623	76	61	697
17	126	104	105	e54	98	138	127	160	395	71	61	567
18	125	103	104	e56	96	148	124	155	302	65	67	416
19	124	103	104	e56	117	161	122	254	802	66	89	301
20	121	104	102	e57	124	168	121	615	678	67	116	225
21	118	104	94	e55	130	161	121	381	285	74	113	188
22	117	103	81	e54	120	158	120	283	264	79	118	155
23	120	102	72	e53	114	151	122	242	281	99	102	134
24	122	103	84	e55	71	147	128	224	221	97	88	121
25	121	102	98	e59	101	144	128	195	209	86	83	108
26	120	102	103	e60	113	141	127	180	221	88	78	99
27	122	102	96	e66	109	139	124	162	387	90	64	97
28	125	100	101	e76	117	137	121	152	361	107	56	92
29	123	107	106	e82	---	133	143	144	406	97	52	86
30	134	104	107	88	---	131	143	143	320	78	54	83
31	135	---	97	95	---	130	---	144	---	72	57	---
TOTAL	5,903	3,255	3,119	2,343	2,752	4,181	3,923	7,314	16,545	3,192	2,407	12,476
MEAN	190	108	101	75.6	98.3	135	131	236	552	103	77.6	416
MAX	906	132	113	108	130	168	145	615	2,450	254	118	2,740
MIN	108	100	72	53	71	85	120	143	134	65	52	58
AC-FT	11,710	6,460	6,190	4,650	5,460	8,290	7,780	14,510	32,820	6,330	4,770	24,750

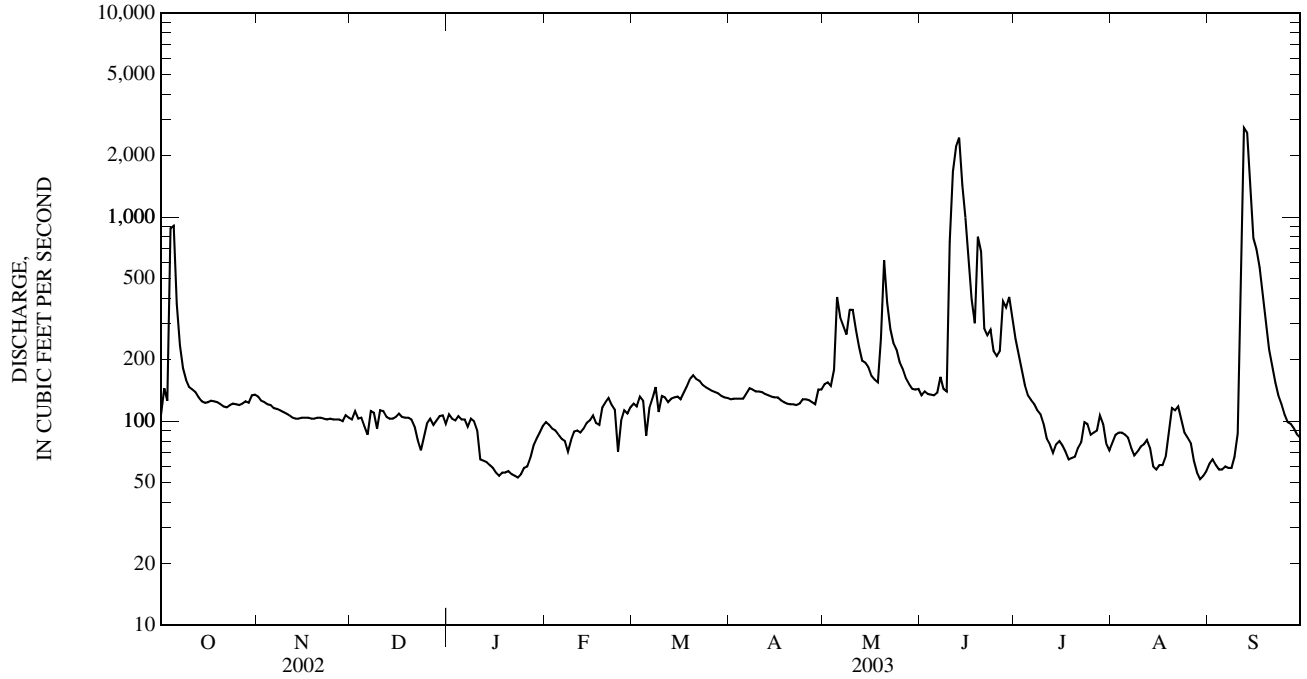
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2003, BY WATER YEAR (WY)

MEAN	234	157	133	142	301	677	395	556	912	655	334	313
MAX	1,864	439	390	865	1,576	3,968	2,257	2,339	5,808	4,739	1,048	2,065
(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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1954 - 2003	
ANNUAL TOTAL	68,540		67,410			
ANNUAL MEAN	188		185		401	
HIGHEST ANNUAL MEAN					1,030	1984
LOWEST ANNUAL MEAN					96.6	1976
HIGHEST DAILY MEAN	1,980	May 13	2,740	Sep 12	21,400	Jun 19, 1957
LOWEST DAILY MEAN	55	Aug 2	52	Aug 29	6.0	Aug 1, 1980
ANNUAL SEVEN-DAY MINIMUM	65	Aug 1	55	Jan 17	11	Jul 12, 1976
MAXIMUM PEAK FLOW			3,260	Jun 12	*27,600	Jul 10, 1950
MAXIMUM PEAK STAGE			17.57	Jun 12	**29.86	Jul 3, 1986
ANNUAL RUNOFF (AC-FT)	135,900		133,700		290,500	
10 PERCENT EXCEEDS	308		282		721	
50 PERCENT EXCEEDS	126		116		159	
90 PERCENT EXCEEDS	78		67		79	

e Estimated.
* Stage 28.74 ft.
** From floodmark.



06881380 TURKEY CREEK NEAR DEWITT, NE

LOCATION.--Lat 40° 22'03", long 96° 53'36", in NW 1/4 SW 1/4 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 mi^2 approximately.

PERIOD OF RECORD.--April 2002 to current year. 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 good except for estimated daily discharges and records for June 10-20, which are poor.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	132	20	e20	e27	e20	27	159	48	28	17	5.1
2	180	75	21	e21	e25	e20	26	88	53	24	15	4.5
3	408	53	20	e20	e23	e23	27	73	48	21	18	3.6
4	935	41	20	e20	e21	e25	27	70	50	22	15	3.0
5	1,140	e34	20	e20	e20	e27	27	69	49	22	16	2.6
6	726	e28	22	e20	e19	e41	31	195	45	21	14	2.1
7	422	e22	21	e20	e19	34	36	101	44	18	10	1.6
8	213	e19	20	e19	e19	28	34	127	46	16	11	3.4
9	110	e19	17	e19	e22	26	35	435	43	17	10	8.1
10	74	e20	20	e19	e23	32	36	361	41	17	9.5	29
11	57	e20	20	e18	e21	33	33	188	186	14	6.8	428
12	46	e20	e20	e18	e20	28	31	124	217	12	9.3	1,190
13	38	20	e20	e19	e19	32	31	89	260	11	12	1,200
14	33	20	e20	e19	e18	33	30	68	192	7.0	8.7	1,200
15	29	20	e20	e18	e17	31	29	58	138	6.2	9.5	1,110
16	28	19	e20	e19	e18	32	30	51	100	9.3	8.1	505
17	27	19	e21	e18	e19	34	28	45	59	15	5.2	294
18	25	19	22	e18	e22	50	28	42	57	18	4.1	197
19	23	19	22	e18	e25	73	29	229	43	19	59	138
20	22	18	22	e19	e26	56	28	701	127	19	52	104
21	21	19	21	e18	e26	57	27	709	39	17	22	85
22	21	18	e21	e17	e22	52	26	669	30	19	12	69
23	23	18	e20	e17	e20	45	28	517	42	19	8.0	56
24	23	18	e21	e18	e18	40	32	262	42	18	6.1	48
25	23	18	e21	e18	e17	35	31	150	35	16	4.9	41
26	22	19	e22	e20	e17	32	33	108	30	14	5.0	38
27	23	19	e22	e22	e17	31	33	86	27	13	5.0	33
28	26	20	e22	e24	e19	30	32	73	23	21	7.1	28
29	27	20	e21	e25	---	28	35	63	30	22	6.5	25
30	99	20	e21	e26	---	28	185	56	30	18	6.5	25
31	244	---	e20	e27	---	28	---	51	---	16	6.2	---
TOTAL	5,099	826	640	614	579	1,084	1,065	6,017	2,174	529.5	399.5	6,877.0
MEAN	164	27.5	20.6	19.8	20.7	35.0	35.5	194	72.5	17.1	12.9	229
MAX	1,140	132	22	27	27	73	185	709	260	28	59	1,200
MIN	11	18	17	17	17	20	26	42	23	6.2	4.1	1.6
AC-FT	10,110	1,640	1,270	1,220	1,150	2,150	2,110	11,930	4,310	1,050	792	13,640

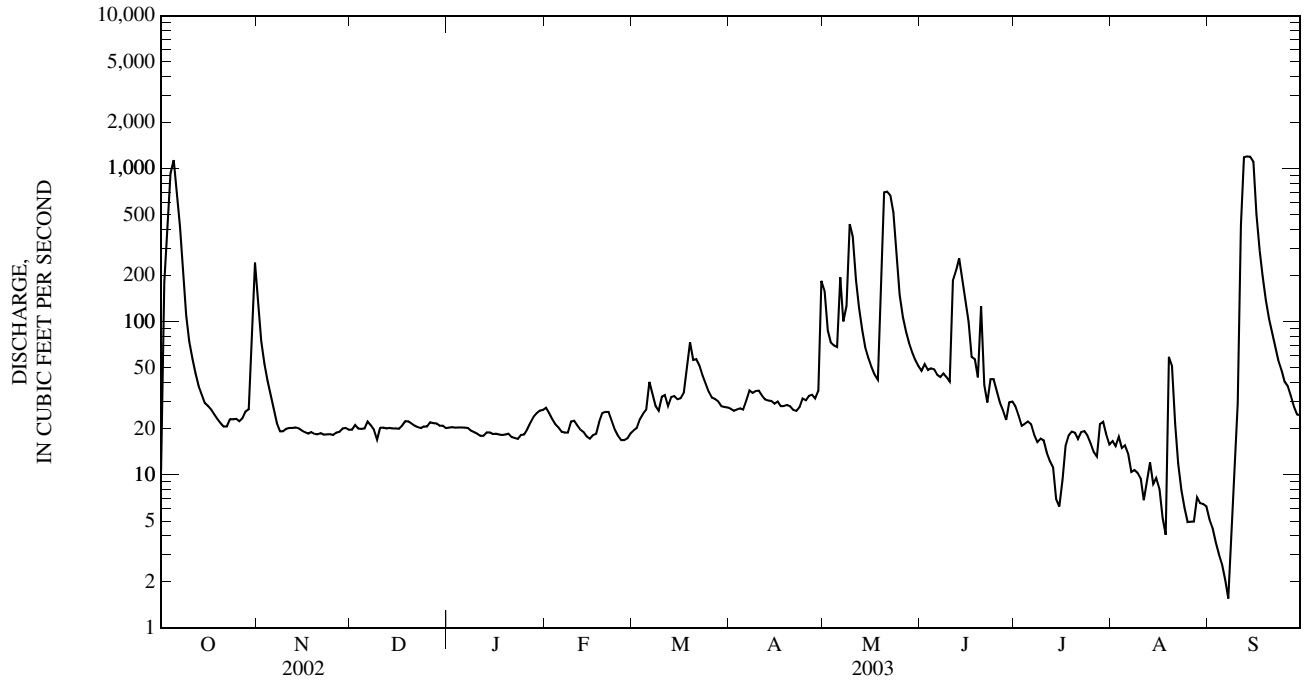
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2003, BY WATER YEAR (WY)

MEAN	164	27.5	20.6	19.8	20.7	35.0	35.5	176	67.4	17.4	18.9	127
MAX	164	27.5	20.6	19.8	20.7	35.0	35.5	194	72.5	17.7	24.9	229
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2003)
MIN	164	27.5	20.6	19.8	20.7	35.0	35.5	158	62.3	17.1	12.9	24.8
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2003)	(2003)	(2002)

06881380 TURKEY CREEK NEAR DEWITT, NE—Continued

SUMMARY STATISTICS	FOR 2003 WATER YEAR		WATER YEARS 2002 - 2003	
ANNUAL TOTAL	04.0			
ANNUAL MEAN	71.0		71.0	
HIGHEST ANNUAL MEAN			71.0	2003
LOWEST ANNUAL MEAN			71.0	2003
HIGHEST DAILY MEAN	00 Sep 13		1,200	Sep 13, 2003
LOWEST DAILY MEAN	1.6	Sep 7	1.6	Sep 7, 2003
ANNUAL SEVEN-DAY MINIMUM	3.0	Sep 2	3.0	Sep 2, 2003
ANNUAL RUNOFF (AC-FT)	80		51,410	
10 PERCENT EXCEEDS	29		129	
50 PERCENT EXCEEDS	23		23	
90 PERCENT EXCEEDS	12		12	

e Estimated.



06882000 BIG BLUE RIVER AT BARNESTON, NE

LOCATION.--Lat 40° 02'40", long 96° 35'12", in NE 1/4 NW 1/4 sec.24, T.1 N., R.7 E., Gage County, Hydrologic Unit 10270205, on right bank at right downstream end of bridge on State Highway 8, 0.6 mi southwest of Barneston, 1.3 mi upstream from Plum Creek, and 4.3 mi upstream from Nebraska-Kansas State line.

DRAINAGE AREA.--4,447 mi^2, of which about 4,370 mi^2 contributes directly to surface runoff.

PERIOD OF RECORD.--May 1932 to current year.

REVISED RECORDS.--WSP 896: 1932, 1935. WSP 1919: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,162.2 ft above sea level. Prior to June 9, 1941, water-stage recorder at site 0.3 mi downstream at datum 1.56 ft higher. June 9 to Nov. 17, 1941, nonrecording gage and Nov. 18, 1941 to Sept. 30, 1979, water-stage recorder at site 0.7 mi upstream at datum 2.0 ft higher. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor. Low flow regulated by dam at unused powerplant 0.7 mi upstream. No large tributaries between station and Nebraska-Kansas State line. Some pump diversions for irrigation above station. Natural flow of stream affected by groundwater withdrawals for irrigation and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	127	572	170	197	e190	230	211	402	258	585	113	114
2	150	410	171	191	e210	235	211	409	297	475	111	108
3	251	306	167	190	e200	238	212	327	291	376	116	108
4	646	254	173	189	e195	209	206	314	277	307	121	107
5	2,540	227	168	186	e195	239	198	299	267	263	128	105
6	2,560	215	152	187	e190	223	209	339	305	219	121	100
7	1,330	204	175	185	e180	233	259	590	277	190	98	96
8	756	197	170	184	e190	248	262	839	271	155	91	92
9	488	194	160	180	e195	250	259	4,120	286	128	82	144
10	341	188	187	177	e200	216	251	2,290	458	120	76	245
11	271	174	185	157	e200	216	247	1,280	428	112	79	317
12	231	170	185	e155	e210	231	239	874	5,230	100	84	1,760
13	196	168	202	e150	e220	233	233	647	7,510	84	72	3,970
14	182	174	186	e145	e220	222	233	520	4,380	87	79	4,070
15	170	175	181	e140	e210	230	232	433	2,520	91	99	3,590
16	164	171	186	e135	e200	230	239	392	1,630	66	93	2,410
17	170	170	190	e130	e190	310	226	362	1,130	62	82	1,200
18	164	173	196	e135	e195	644	226	330	798	66	77	959
19	157	168	190	e138	e200	383	238	424	608	72	169	749
20	151	168	183	e140	200	583	229	1,540	499	68	434	579
21	153	168	177	e145	217	625	218	1,720	988	80	356	469
22	151	167	159	e140	231	429	208	1,410	609	95	274	382
23	169	172	141	e138	235	344	213	1,100	1,590	101	204	313
24	181	168	e140	e140	166	305	256	822	1,940	107	174	271
25	188	162	e135	e145	146	272	249	597	1,100	109	157	224
26	179	165	e145	e140	207	255	235	489	703	125	125	205
27	185	166	150	e145	206	248	240	421	500	117	107	185
28	192	171	195	e150	218	231	236	370	430	114	108	165
29	190	173	202	e155	---	217	238	325	540	118	128	154
30	242	170	204	e160	---	210	263	298	571	134	112	161
31	510	---	183	e165	---	211	---	267	---	130	111	---
TOTAL	13,385	6,160	5,408	4,914	5,616	8,950	6,976	24,550	36,691	4,856	4,181	23,352
MEAN	432	205	174	159	201	289	233	792	1,223	157	135	778
MAX	2,560	572	204	197	235	644	263	4,120	7,510	585	434	4,070
MIN	127	162	135	130	146	209	198	267	258	62	72	92
AC-FT	26,550	12,220	10,730	9,750	11,140	17,750	13,840	48,690	72,780	9,630	8,290	46,320

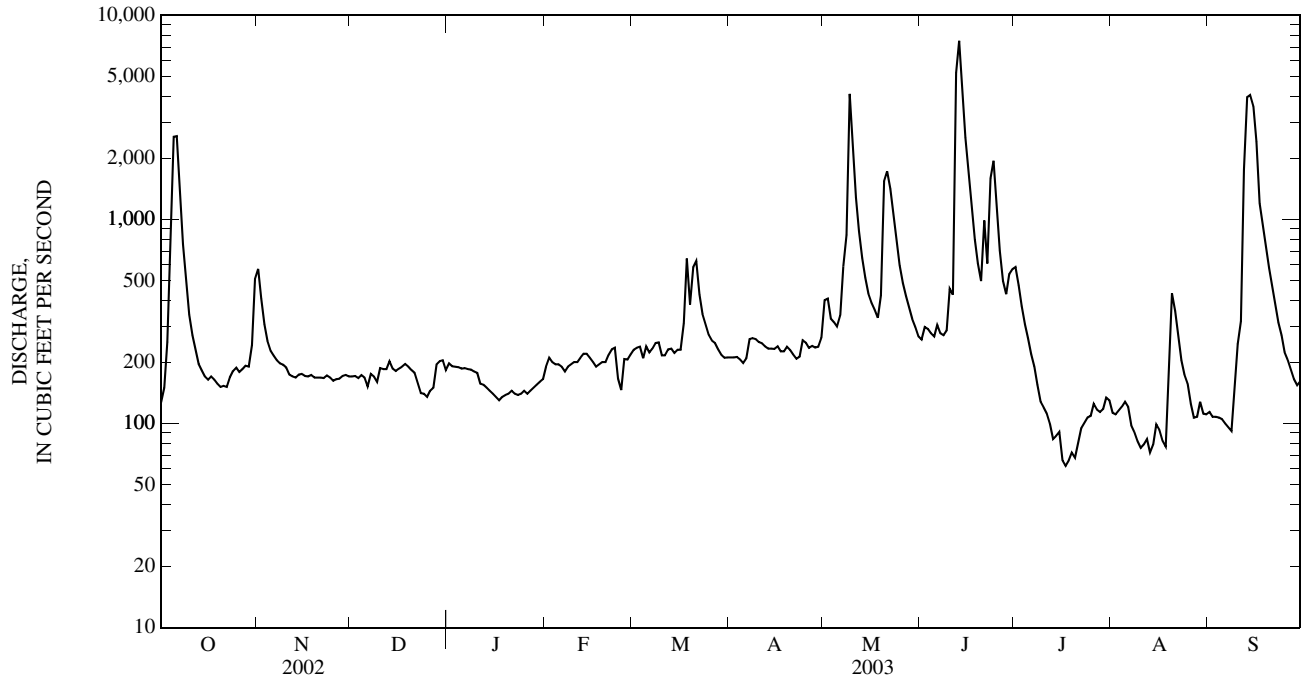
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 2003, BY WATER YEAR (WY)

MEAN	543	310	240	288	640	1,353	855	1,286	2,054	1,329	694	709
MAX	7,451	1,526	851	1,596	2,876	10,560	5,280	5,207	10,460	12,270	5,227	3,420
(WY)	(1974)	(1999)	(1998)	(1973)	(1984)	(1979)	(1984)	(1995)	(1951)	(1993)	(1954)	(1989)
MIN	61.5	77.5	87.4	67.6	116	137	132	96.0	69.3	30.7	21.1	50.6
(WY)	(1941)	(1937)	(1977)	(1937)	(1940)	(1968)	(1934)	(1934)	(1934)	(1934)	(1934)	(1939)

06882000 BIG BLUE RIVER AT BARNESTON, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1933 - 2003	
ANNUAL TOTAL	147,044		145,039			
ANNUAL MEAN	403		397		859	
HIGHEST ANNUAL MEAN					2,781	1993
LOWEST ANNUAL MEAN					115	1934
HIGHEST DAILY MEAN	7,020	May 28	7,510	Jun 13	50,000	Jun 9, 1941
LOWEST DAILY MEAN	49	Aug 5	62	Jul 17	1.0	Nov 30, 1945
ANNUAL SEVEN-DAY MINIMUM	60	Aug 3	72	Jul 15	15	Aug 3, 1934
MAXIMUM PEAK FLOW			12,100	Jun 12	57,700	Jun 9, 1941
MAXIMUM PEAK STAGE			16.07	Jun 12	34.30	Jun 9, 1941
ANNUAL RUNOFF (AC-FT)	291,700		287,700		622,000	
10 PERCENT EXCEEDS	665		645		1,770	
50 PERCENT EXCEEDS	231		200		279	
90 PERCENT EXCEEDS	115		111		105	

e Estimated.



06882000 BIG BLUE RIVER AT BARNESTON, NE—Continued

WATER-QUALITY RECORDS

Pesticide Reconnaissance Study

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	Acetochlor ESA, water, fltrd 0.7u GF ug/L (61029)	Acetochlor OA, water, fltrd 0.7u GF ug/L (61030)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor ESA, water, fltrd 0.7u GF ug/L (50009)
OCT													
04...	1300	4.91	668	9.6	8.4	773	16.5	0.09	0.07	0.08	0.08	<0.05	0.16

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Alachlor OA, water, fltrd 0.7u GF ug/L (61031)	Alachlor, water, fltrd, ug/L (46342)	Ametryn water, fltrd, ug/L (38401)	Aminomethylphosphonic acid, wat flt ug/L (62649)	Atrazine, water, fltrd, ug/L (39632)	Cyanazine amide, water, fltrd, ug/L (61709)	Cyanazine, water, fltrd, ug/L (04041)	Dimethenamid ESA, water, fltrd, ug/L (61951)	Dimethenamid OA, water, fltrd, ug/L (62482)	Dimethenamid water, fltrd, ug/L (61588)	Flufenacet ESA, water, fltrd, ug/L (61952)	Flufenacet OA, water, fltrd, ug/L (62483)	Flufenacet, water, fltrd, ug/L (62481)
OCT													
04...	0.05	<0.05	<0.05	1.3	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Glufosinate, water, fltrd 0.7u GF ug/L (62721)	Glyphosate, water, fltrd 0.7u GF ug/L (62722)	Metolachlor ESA, water, fltrd 0.7u GF ug/L (61043)	Metolachlor OA, water, fltrd 0.7u GF ug/L (61044)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propachlor, water, fltrd, ug/L (04024)	Propazine, water, fltrd, ug/L (38535)	Simazine, water, fltrd, ug/L (04035)	Terbutryn, water, fltrd, ug/L (38888)
OCT													
04...	<0.1	0.5	0.16	0.10	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

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06883000 LITTLE BLUE RIVER NEAR DEWEESE, NE

LOCATION.--Lat 40° 19'58", long 98° 04'00", in SW $^{1}/_{4}$ NW $^{1}/_{4}$ 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 mi^2.

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. 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, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	57	55	52	55	e59	61	85	106	78	32	15
2	50	52	56	52	55	e58	62	78	114	68	29	11
3	53	52	53	52	e54	e59	63	72	104	60	31	9.3
4	130	50	54	54	e52	e59	62	76	102	56	33	8.1
5	95	51	54	54	e51	e60	60	71	105	54	35	7.0
6	55	50	55	53	e52	e58	67	69	115	51	36	6.1
7	44	50	54	53	e52	e56	68	67	130	48	45	5.7
8	47	52	53	56	e52	e55	65	106	123	46	32	5.3
9	44	54	53	55	e53	56	63	160	100	43	28	7.1
10	44	53	54	54	55	55	63	90	94	47	36	7.8
11	44	51	55	e55	56	58	64	77	93	43	72	22
12	42	50	55	e56	56	59	64	67	133	42	49	105
13	38	51	55	e50	58	58	63	66	116	44	33	110
14	40	53	55	e51	e59	59	64	64	102	42	18	104
15	40	53	56	e50	e59	60	64	63	100	42	13	60
16	43	52	56	e51	e60	61	67	66	90	35	18	42
17	43	53	57	e51	59	64	63	62	85	39	20	33
18	43	54	57	e52	61	65	64	61	83	37	18	29
19	42	52	54	e51	62	65	64	153	81	36	25	25
20	42	53	52	e51	62	64	61	141	81	35	33	23
21	42	54	53	e50	63	62	59	93	87	53	36	22
22	44	54	53	e50	e60	61	60	87	93	51	30	23
23	52	56	53	e50	e57	61	65	76	147	34	26	23
24	49	54	52	e50	e54	61	75	742	114	29	20	23
25	47	54	53	e51	e55	60	69	777	154	34	15	23
26	46	56	53	e50	e56	61	65	580	129	38	13	24
27	48	55	53	e51	e55	62	63	352	162	38	13	24
28	49	56	53	e50	e57	59	61	208	116	35	15	25
29	49	57	54	e49	---	57	93	144	98	34	17	26
30	65	55	54	e48	---	58	123	123	86	29	15	30
31	75	---	52	56	---	60	---	111	---	29	14	---
TOTAL	1,580	1,594	1,676	1,608	1,580	1,850	2,005	4,987	3,243	1,350	850	878.4
MEAN	51.0	53.1	54.1	51.9	56.4	59.7	66.8	161	108	43.5	27.4	29.3
MAX	130	57	57	56	63	65	123	777	162	78	72	110
MIN	35	50	52	48	51	55	59	61	81	29	13	5.3
AC-FT	3,130	3,160	3,320	3,190	3,130	3,670	3,980	9,890	6,430	2,680	1,690	1,740

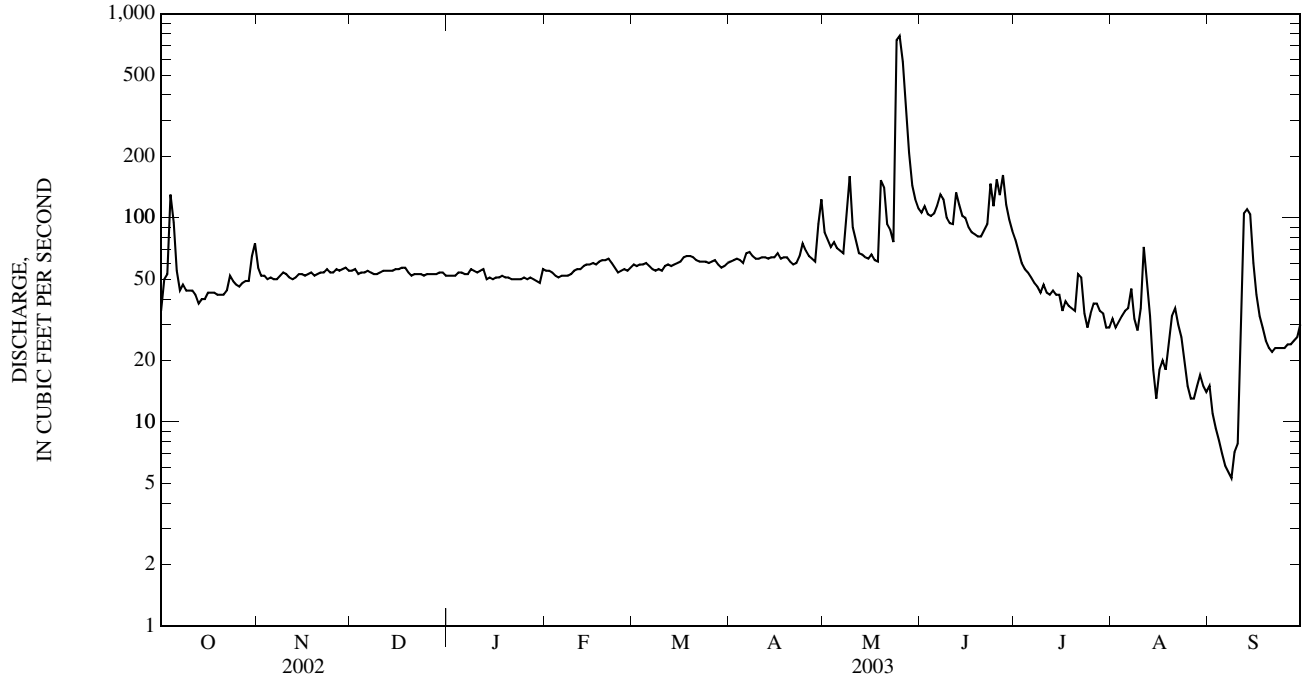
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2003, BY WATER YEAR (WY)

MEAN	80.8	69.4	64.8	68.3	93.3	193	127	247	258	262	145	126
MAX	347	193	115	207	245	1,140	762	1,348	1,145	2,655	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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1954 - 2003	
ANNUAL TOTAL	23,004.2		23,201.4			
ANNUAL MEAN	63.0		63.6		145	
HIGHEST ANNUAL MEAN					464	1993
LOWEST ANNUAL MEAN					63.6	2003
HIGHEST DAILY MEAN	560	May 12	777	May 25	14,300	Sep 1, 1969
LOWEST DAILY MEAN	2.0	Aug 21	5.3	Sep 8	0.00	Jan 1, 1997
ANNUAL SEVEN-DAY MINIMUM	2.8	Aug 12	6.7	Sep 4	2.8	Aug 12, 2002
MAXIMUM PEAK FLOW			1,580	May 24	25,100	Aug 31, 1969
MAXIMUM PEAK STAGE			6.99	May 24	*18.57	Aug 31, 1969
ANNUAL RUNOFF (AC-FT)	45,630		46,020		104,900	
10 PERCENT EXCEEDS	93		99		188	
50 PERCENT EXCEEDS	56		54		70	
90 PERCENT EXCEEDS	13		26		43	

e Estimated.
* Datum then in use.



06883995 LITTLE BLUE RIVER AT FAIRBURY, NE / 06884000 LITTLE BLUE RIVER NEAR FAIRBURY

LOCATION.--Lat 40° 08'47", long 97° 11'58", in NE$^{1}/_{4}$ NE$^{1}/_{4}$ sec.26, T.2 N., R.2 E., Jefferson County, Hydrologic Unit 10270207, on left downstream shoulder of roadway on Highway US 136, 0.5 mile west of Fairbury.

DRAINAGE AREA.--2,350 mi^{2}.

PERIOD OF RECORD.--May 1908 to September 1915, October 1928 to September 1956 (published as "near Endicott"), October 1956 to current year. Monthly discharge only for some periods, published in WSP 1310. Published as Little Blue River near Fairbury, (06884000) October 1952 to September 2002.

REVISED RECORDS.--WSP 1086: 1941(M). WSP 1390: 1908(M), 1912, 1915, 1935, 1939, 1945(M). WSP 1510: 1947 (calendar year figures only). WSP 1919: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,378 ft above sea level from topographic map. May 23, 1908 to Sept. 30, 1915, nonrecording gage at Highway 15 site at different datum. Apr. 26, 1929 to Sept. 24, 1957 nonrecording gage or water-stage recorder at site 3.5 mi downstream at various datums. Sept. 25, 1957 to Aug. 20, 1991 water-stage recorder at Highway 15 at datum 5.0 ft higher, through July 31, 2003, when gage was moved. Data collection platform at station.

REMARKS.--Records good except for December through March, which are poor. Natural flow of stream affected by irrigation development above station.

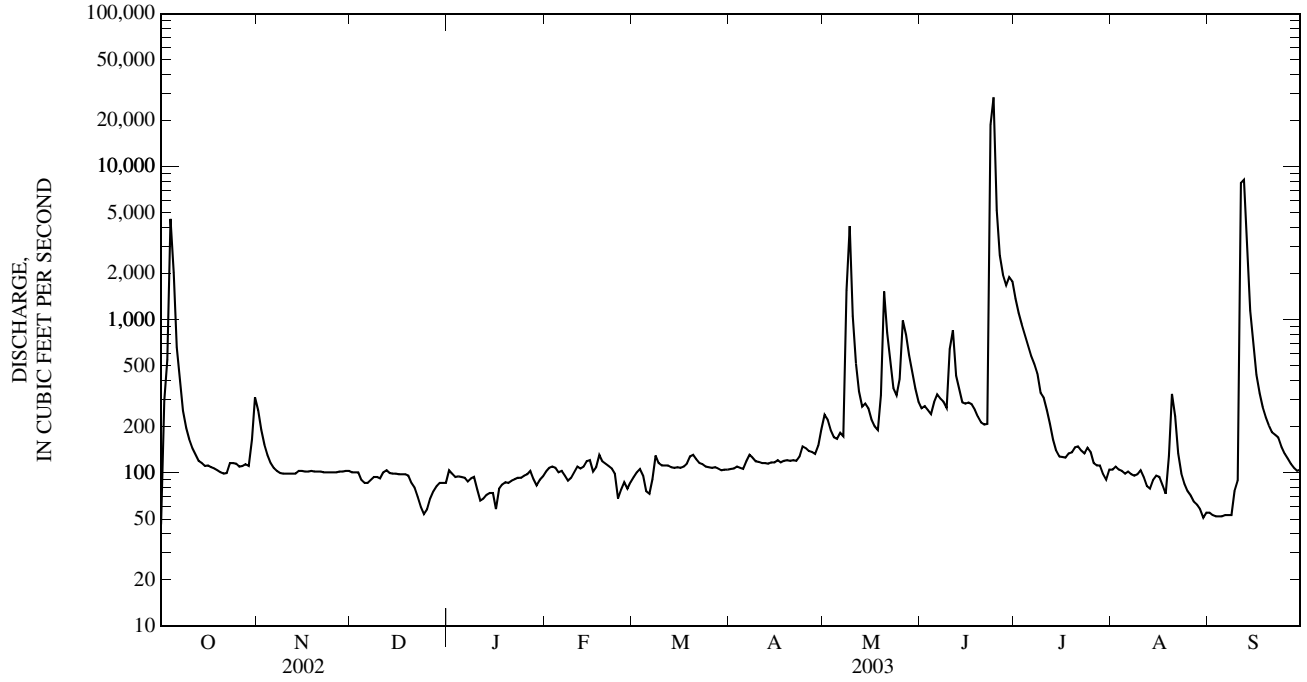
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	256	101	104	102	e94	106	240	265	1,380	105	55
2	296	192	101	99	e108	e101	107	222	273	1,110	110	53
3	549	153	101	94	e110	e106	110	190	257	938	105	52
4	4,570	131	e90	95	e108	e96	108	171	242	800	103	52
5	2,040	116	e86	94	e101	e76	106	167	291	683	99	52
6	663	108	e86	93	e103	e73	119	183	326	583	102	53
7	393	103	e90	88	e96	e91	131	174	306	516	98	53
8	254	100	e94	92	e89	e130	126	1,560	292	447	96	53
9	197	99	e94	94	e93	e116	119	4,100	266	334	98	76
10	166	99	e92	78	e101	e112	118	1,060	643	311	104	89
11	145	99	101	66	e110	112	116	519	855	258	94	7,850
12	132	99	104	e68	107	112	116	341	432	210	82	8,230
13	120	99	100	e72	110	109	115	271	353	165	79	2,680
14	116	103	99	e74	e119	108	117	284	289	140	90	1,150
15	111	103	99	e74	e121	109	117	264	283	128	96	679
16	112	102	98	58	e102	108	121	224	288	127	94	437
17	109	102	98	e79	e109	110	117	202	281	126	83	332
18	107	103	98	e84	131	115	120	191	259	134	73	270
19	104	102	96	e87	119	128	121	322	233	136	129	231
20	101	102	e86	e86	115	131	120	1,530	214	147	328	203
21	99	102	e80	e89	111	123	121	825	207	149	234	184
22	100	101	e70	e91	107	116	120	534	209	140	134	177
23	116	101	e60	e93	e99	114	128	359	18,800	134	99	170
24	116	101	e54	e93	e68	110	149	322	28,400	146	85	148
25	115	101	e58	e96	e78	109	145	410	5,190	137	76	134
26	110	101	e68	e98	e87	108	139	990	2,640	116	71	124
27	111	102	e76	e103	e79	109	137	799	1,970	112	65	115
28	114	102	e82	91	e87	107	133	587	1,680	112	62	108
29	111	103	e86	83	---	104	151	454	1,900	98	58	103
30	165	103	e86	90	---	105	193	357	1,780	90	51	105
31	312	---	e86	95	---	105	---	292	---	105	55	---
TOTAL	11,800	3,388	2,720	2,701	2,870	3,347	3,746	18,144	69,424	10,012	3,158	24,018
MEAN	381	113	87.7	87.1	102	108	125	585	2,314	323	102	801
MAX	4,570	256	104	104	131	131	193	4,100	28,400	1,380	328	8,230
MIN	46	99	54	58	68	73	106	167	207	90	51	52
AC-FT	23,410	6,720	5,400	5,360	5,690	6,640	7,430	35,990	137,700	19,860	6,260	47,640

06883995 LITTLE BLUE RIVER AT FAIRBURY, NE / 06884000 LITTLE BLUE RIVER NEAR FAIRBURY—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1910 - 2003	
ANNUAL TOTAL	66,842		155,328			
ANNUAL MEAN	183		426		384	
HIGHEST ANNUAL MEAN					1,239	1993
LOWEST ANNUAL MEAN					107	1940
HIGHEST DAILY MEAN	4,570	Oct 4	28,400	Jun 24	36,400	Jul 26, 1992
LOWEST DAILY MEAN	30	Sep 11	46	Oct 1	14	Nov 22, 1929
ANNUAL SEVEN-DAY MINIMUM	33	Sep 7	53	Sep 2	24	Sep 14, 1991
MAXIMUM PEAK FLOW			71,200	Jun 24	71,200	Jun 24, 2003
MAXIMUM PEAK STAGE			23.17	Jun 24	*24.33	Jul 25, 1992
ANNUAL RUNOFF (AC-FT)	132,600		308,100		277,900	
10 PERCENT EXCEEDS	259		479		580	
50 PERCENT EXCEEDS	120		110		159	
90 PERCENT EXCEEDS	53		79		91	

e Estimated.
* Site and datum then in use.



06884000 LITTLE BLUE RIVER NEAR FAIRBURY—Continued

WATER-QUALITY RECORDS

Pesticide Reconnaissance Study

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	Acetochlor ESA, water, fltrd 0.7u GF ug/L (61029)	Acetochlor OA, water, fltrd 0.7u GF ug/L (61030)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor ESA, water, fltrd 0.7u GF ug/L (50009)
OCT													
02...	2000	8.13	730	8.2	6.5	148	13.5	0.14	0.16	0.30	0.48	0.06	0.09

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Alachlor OA, water, fltrd 0.7u GF ug/L (61031)	Alachlor, water, fltrd, ug/L (46342)	Ametryn water, fltrd, ug/L (38401)	Aminomethylphosphonic acid, wat flt ug/L (62649)	Atrazine, water, fltrd, ug/L (39632)	Cyanazine amide, water, fltrd, ug/L (61709)	Cyanazine, water, fltrd, ug/L (04041)	Dimethenamid ESA, water, fltrd, ug/L (61951)	Dimethenamid OA, water, fltrd, ug/L (62482)	Dimethenamid water, fltrd, ug/L (61588)	Flufenacet ESA, water, fltrd, ug/L (61952)	Flufenacet OA, water, fltrd, ug/L (62483)	Flufenacet, water, fltrd, ug/L (62481)
OCT													
02...	0.06	<0.05	<0.05	0.7	0.17	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Glufosinate, water, fltrd 0.7u GF ug/L (62721)	Glyphosate, water, fltrd 0.7u GF ug/L (62722)	Metolachlor ESA, water, fltrd 0.7u GF ug/L (61043)	Metolachlor OA, water, fltrd 0.7u GF ug/L (61044)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propachlor, water, fltrd, ug/L (04024)	Propazine, water, fltrd, ug/L (38535)	Simazine, water, fltrd, ug/L (04035)	Terbutryn, water, fltrd, ug/L (38888)
OCT													
02...	<0.1	0.3	0.28	0.41	0.21	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

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06884025 LITTLE BLUE RIVER AT HOLLENBERG, KS

LOCATION.--Lat 39° 58'48", long 97° 00'16", NE 1/4 SW 1/4 sec.8, T.1 S., R.4 E., Washington County, Hydrologic Unit 10270207, on right bank 2 ft downstream from bridge on county road, 0.6 mi west of Hollenberg, 1.75 mi downstream from Nebraska-Kansas State line, and at mile 43.1.

DRAINAGE AREA.--2,752 mi^2.

PERIOD OF RECORD.--March 1973 to February 1974 (discharge measurements only), March 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,216.10 ft above sea level. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor. Discharge measurements made prior to 1974 water year are published in table of miscellaneous sites in WDR NE-73.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	366	113	136	e136	e118	113	232	283	1,420	122	84
2	73	288	114	129	e142	e130	115	222	270	658	131	80
3	478	231	110	125	e145	e137	120	195	237	476	132	75
4	3,070	189	110	120	e123	e122	118	157	222	390	127	69
5	3,380	167	109	119	e123	88	115	138	221	336	125	63
6	1,040	149	103	120	e120	e87	129	145	413	288	119	61
7	564	142	115	126	e108	166	165	146	354	264	120	59
8	347	133	116	122	e125	176	156	740	328	263	117	56
9	240	126	115	126	e129	171	142	6,930	276	238	114	78
10	182	120	121	120	e131	150	134	2,480	448	217	130	113
11	155	115	117	e107	e138	151	130	842	1,360	222	145	3,270
12	142	112	120	e109	e153	151	126	481	848	214	132	10,700
13	127	111	122	e108	e142	145	123	330	521	209	122	5,680
14	118	120	120	e110	e154	144	122	278	394	203	125	2,070
15	116	121	119	e108	e162	146	120	335	317	189	131	1,040
16	116	118	121	e100	e144	149	124	268	281	173	132	615
17	114	115	123	e118	e144	159	115	229	276	168	128	433
18	109	114	123	e124	159	159	116	206	257	165	119	338
19	103	114	121	e134	168	172	104	266	229	160	173	285
20	100	114	118	e132	157	205	103	1,530	205	159	439	250
21	97	112	114	e122	155	185	101	1,110	194	166	600	222
22	97	109	105	e116	148	170	100	756	197	159	371	197
23	115	109	84	e107	148	159	102	472	5,950	148	210	201
24	132	108	e80	e114	95	140	144	365	29,100	148	154	176
25	131	110	e70	e118	e107	130	150	352	11,200	151	125	154
26	124	111	e90	e113	e120	123	130	886	2,900	140	109	140
27	121	112	e110	e105	e116	122	120	959	1,330	132	102	132
28	127	114	138	e114	e119	119	117	727	967	131	91	122
29	124	113	146	e105	---	113	120	541	1,210	133	82	115
30	152	112	149	e115	---	111	130	417	1,850	123	78	117
31	284	---	137	e123	---	113	---	328	---	117	84	---
TOTAL	12,126	4,175	3,553	3,645	3,811	4,411	3,704	23,063	62,638	7,960	4,889	26,995
MEAN	391	139	115	118	136	142	123	744	2,088	257	158	900
MAX	3,380	366	149	136	168	205	165	6,930	29,100	1,420	600	10,700
MIN	48	108	70	100	95	87	100	138	194	117	78	56
AC-FT	24,050	8,280	7,050	7,230	7,560	8,750	7,350	45,750	124,200	15,790	9,700	53,540

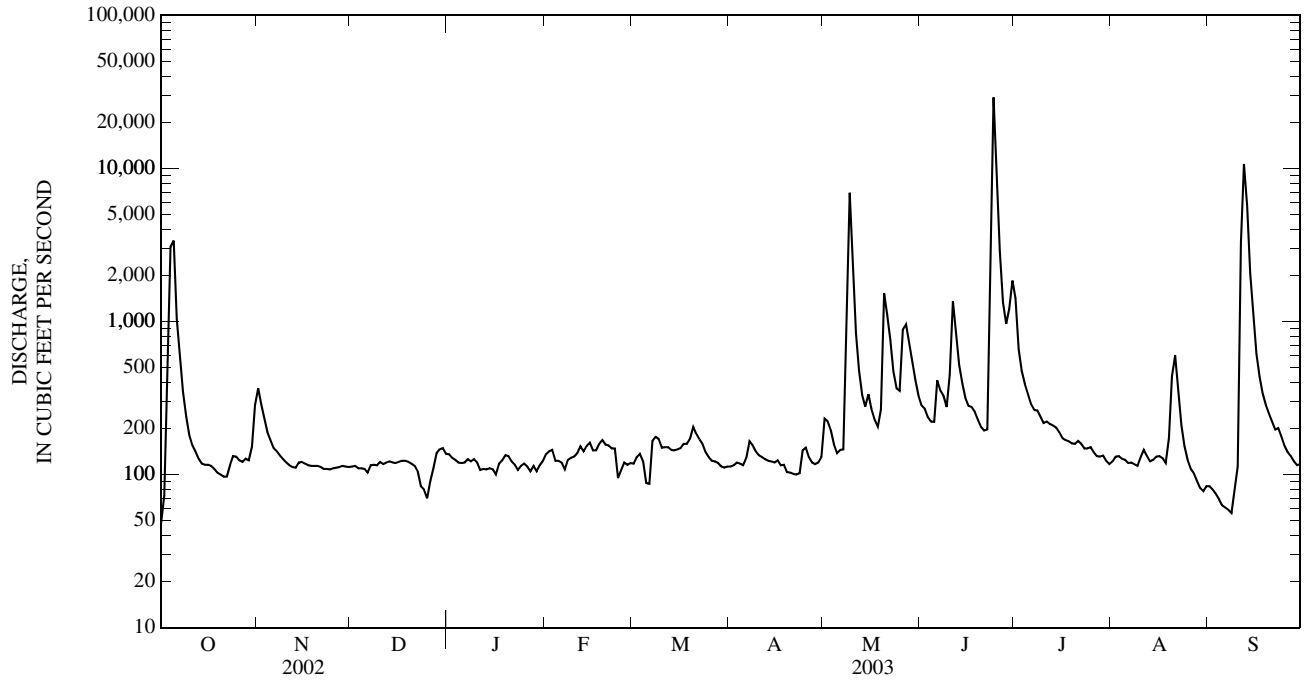
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2003, BY WATER YEAR (WY)

MEAN	311	244	181	176	324	786	532	804	984	1,019	508	383
MAX	2,163	1,113	424	576	1,059	3,816	2,379	2,302	4,373	9,014	2,572	1,320
(WY)	(1987)	(1997)	(1993)	(1984)	(1993)	(1993)	(1987)	(1995)	(1984)	(1993)	(1985)	(1977)
MIN	45.3	81.1	96.7	98.5	115	118	123	108	151	83.8	72.5	32.0
(WY)	(1992)	(1992)	(2001)	(1977)	(1992)	(1981)	(2003)	(1992)	(1981)	(2002)	(1991)	(1991)

06884025 LITTLE BLUE RIVER AT HOLLENBERG, KS—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1975 - 2003	
ANNUAL TOTAL	85,070		160,970			
ANNUAL MEAN	233		441		522	
HIGHEST ANNUAL MEAN					1,891	1993
LOWEST ANNUAL MEAN					195	1991
HIGHEST DAILY MEAN	5,790	May 28	29,100	Jun 24	39,300	Jul 26, 1992
LOWEST DAILY MEAN	40	Aug 8	48	Oct 1	26	Oct 1, 1991
ANNUAL SEVEN-DAY MINIMUM	45	Sep 24	66	Sep 3	27	Sep 27, 1991
MAXIMUM PEAK FLOW			43,900	Jun 24	47,800	Jul 26, 1992
MAXIMUM PEAK STAGE			20.67	Jun 24	21.21	Jul 26, 1992
ANNUAL RUNOFF (AC-FT)	168,700		319,300		378,400	
10 PERCENT EXCEEDS	322		479		857	
50 PERCENT EXCEEDS	153		132		203	
90 PERCENT EXCEEDS	58		105		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 2003

[mi^2, square mile; ft, foot; ft^3/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 NW¼ NE¼ 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 1997-2003	05-09-03	11.11	5,610
Kansas River Basin							
06838200	Coon Creek at Indianola, NE	Lat 40° 14' 03", long 100° 25' 37", in NW¼ NE¼ 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	1961-2003	05-14-03	4.96	[e]120
06838550	Dry Creek at Bartley, NE	Lat 40° 15' 02", long 100° 19' 02", in SW¼ SE¼ 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	1961-2003	05-14-03	10.83	[e] 20
06850000	Turkey Creek at Naponee, NE	Lat 40° 04' 34", long 099° 08' 17", in SW¼ SW¼ 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 1991-2003	06-29-03	2.71	[c] 152
06881450	Indian Creek at Beatrice, NE	Lat 40° 17' 08", long 096° 44' 47", in SE¼ NE¼ sec. 28, T.4 N., R.6 E., Gage County, at bridge on U.S. Higway 77 at north edge of Beatrice	74.7	1960-89, 1991-2003	06-12-03	11.70	1,630

[*] 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] Data provided by Nebraska Department of Natural Resources.
[e] 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 2003

[mi^2, square miles; ft^3/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, 2002	04-10-03 05-27-03 08-04-03	18.1 7.05 2.27
Minnechaduza Creek (06461010)	Niobrara River	Lat 42° 53' 41" long 100° 30 '53", in NW 1/4 NW 1/4 sec. 29, T. 34 N., R. 27 W., Cherry County, at county bridge, 0.8 mi north of State Highway 12, and 1.6 mi northwest of Valentine.			06-03-03	35.8
Kansas River Basin						
Republican River (06850500)	Kansas River	Lat 40° 03' 58" long 99° 02' 14", in NW 1/4 SE 1/4 sec. 8, T. 1 N., R. 15 W., Franklin County, 2 mi south of Bloomington.	20,800	1929-52 1955 1957	05-27-03 06-19-03 08-26-03	26.3 149 13.0
Republican River (06851090)	Kansas River	Lat 40°05'26", long 98°46'03", in SE 1/4 SE 1/4 sec. 34, T. 2 N., R. 13 W., Franklin County, at bridge on county road 0.5 mi west of Riverton.	21,300	1963-67 1970-78	05-27-03	52.5
Republican River (06853200)	Kansas River	Lat 40° 01' 01", long 98° 05' 15", in SE 1/4 SE 1/4 sec. 27, T. 1 N., R. 7 W., Nuckolls County, on State Highway 8 bridge 0.5 mi west of Superior.	22,300	1961-65* 1967* 1971-75** 1977**	05-28-03 06-24-03	118 858

* Measured at site 2.0 mi upstream.

** Measured at site 1.0 mi upstream.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

MISCELLANEOUS SURFACE-WATER QUALITY DATA

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

MISCELLANEOUS STATION ANALYSES

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
06803525 SALT CR BL STEVENS CR NR WAVERLY NEBR (LAT 40 54 18N LONG 096 35 09W)													
OCT 2002													
09...	1030	E101	736	--	5.7	59	7.5	4,790	12.5	15.0	260	69.0	21.7
NOV													
14...	1300	E82	731	--	6.5	53	7.6	7,120	9.0	4.0	340	86.8	30.1
DEC													
06...	1330	E76	734	17	8.1	64	7.5	6,910	5.0	3.0	360	91.9	30.6
JAN 2003													
08...	1000	E108	727	7.3	7.9	61	7.8	7,440	8.0	2.0	330	81.2	30.7
FEB													
04...	0930	E108	737	17	12.1	88	7.5	6,800	-3.0	0.0	320	77.2	31.0
MAR													
03...	1030	E95	727	5.5	10.1	81	8.1	6,190	1.5	3.0	340	89.7	28.8
APR													
04...	1100	E92	727	15	8.7	83	7.5	6,700	3.5	10.0	340	83.8	31.0
MAY													
01...	1230	E188	731	7.8	12.3	121	7.8	3,730	15.0	12.0	290	80.0	21.9
JUN													
03...	1030	E139	732	6.9	5.7	66	7.8	4,850	17.0	19.5	280	73.5	23.0
JUL													
01...	1100	E203	734	4.6	6.9	84	8.0	4,130	26.0	22.0	270	72.4	21.0
AUG													
20...	1000	E160	732	5.7	6.0	76	7.8	4,550	26.0	24.0	230	60.5	19.2
SEP													
10...	1130	E264	731	7.4	4.4	52	7.6	2,850	17.0	21.0	170	45.5	14.4

MISCELLANEOUS STATION ANALYSES

Date	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)
06803525 SALT CR BL STEVENS CR NR WAVERLY NEBR (LAT 40 54 18N LONG 096 35 09W)													
OCT 2002													
09...	15.8	22	834	87	E197	1,250	0.64	22.0	213	--	--	9.6	10.4
NOV													
14...	16.1	30	1,280	89	E270	1,840	0.73	22.4	294	--	--	11	12.4
DEC													
06...	17.1	31	1,350	89	263	1,850	0.79	24.6	307	3,850	5.24	12	14.2
JAN 2003													
08...	16.1	34	1,420	90	269	2,000	0.87	20.7	305	4,070	5.54	9.2	9.30
FEB													
04...	14.4	33	1,340	90	282	1,790	0.85	20.3	259	3,720	5.06	8.8	9.19
MAR													
03...	5.01	27	1,170	88	319	1,640	0.66	22.1	267	3,440	4.67	9.7	10.2
APR													
04...	18.2	30	1,280	89	261	1,740	0.71	20.1	270	3,620	4.92	13	14.0
MAY													
01...	5.82	18	690	83	256	911	<0.68	17.8	176	2,070	2.81	6.3	4.95
JUN													
03...	11.8	20	766	85	221	1,180	0.6	19.3	202	2,430	3.30	4.4	3.60
JUL													
01...	12.3	20	733	85	234	1,090	0.6	22.9	193	2,300	3.13	2.1	1.19
AUG													
20...	13.7	24	824	88	194	1,220	0.7	20.3	202	2,490	3.39	2.8	1.69
SEP													
10...	10.3	15	460	84	148	723	0.5	15.0	130	1,500	2.03	3.1	1.88

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

MISCELLANEOUS STATION ANALYSES

Date	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitro-gen, water, unfltrd mg/L (00605)	Ortho-phos-phate, water, fltrd, mg/L (00660)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, unfltrd mg/L (00665)	Total nitro-gen, water, unfltrd mg/L (00600)	Organic carbon, water, unfltrd mg/L (00680)	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)
06803525 SALT CR BL STEVENS CR NR WAVERLY NEBR (LAT 40 54 18N LONG 096 35 09W)													
OCT 2002													
09...	8.08	5.96	1.35	2.01	2.17	0.659	1.5	4.85	1.58	1.95	12	12.0	4,100
NOV													
14...	9.61	2.66	0.60	0.83	0.766	0.233	1.4	8.67	2.83	3.27	12	--	19,000
DEC													
06...	11.0	6.24	1.41	1.79	1.24	0.377	0.53	3.86	1.26	1.63	13	8.2	19,700
JAN 2003													
08...	7.22	13.5	3.05	3.58	1.74	0.530	1.9	3.86	1.26	1.67	13	12.0	1,030
FEB													
04...	7.14	7.63	1.72	1.91	0.611	0.186	1.7	1.02	0.33	0.89	11	14.8	S2800
MAR													
03...	7.90	5.79	1.31	1.47	0.536	0.163	1.8	1.43	0.47	1.15	11	12.5	1,470
APR													
04...	10.9	1.23	0.28	0.33	0.181	0.055	2.5	6.67	2.17	2.83	14	19.8	1,800
MAY													
01...	3.84	4.96	1.12	1.46	1.12	0.341	2.4	1.71	0.56	0.94	7.7	13.4	1,200
JUN													
03...	2.79	7.32	1.65	2.31	2.16	0.657	1.6	1.92	0.63	0.94	6.7	9.5	320
JUL													
01...	0.93	11.7	2.63	3.18	1.79	0.545	1.2	1.10	0.36	0.58	5.3	9.8	430
AUG													
20...	1.32	9.96	2.25	2.69	1.47	0.446	1.5	1.71	0.56	0.93	5.5	12.2	2,200
SEP													
10...	1.46	3.59	0.81	1.12	1.02	0.310	1.6	1.48	0.48	0.84	4.2	9.2	3,800

MISCELLANEOUS STATION ANALYSES

Date	Fecal strep-tococci KF MF, col/ 100 mL (31673)	Arsenic water unfltrd ug/L (01002)	Barium, water, unfltrd recover-able, ug/L (01007)	Cadmium water, unfltrd ug/L (01027)	Chrom-ium, water, unfltrd recover-able, ug/L (01034)	Copper, water, unfltrd recover-able, ug/L (01042)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, unfltrd recover-able, ug/L (01051)	Mangan-ese, water, unfltrd recover-able, ug/L (01055)	Mercury water, unfltrd recover-able, ug/L (71900)	Selen-ium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recover-able, ug/L (01077)	Zinc, water, unfltrd recover-able, ug/L (01092)
06803525 SALT CR BL STEVENS CR NR WAVERLY NEBR (LAT 40 54 18N LONG 096 35 09W)													
OCT 2002													
09...	2,200	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
14...	28,000	4	86.8	<0.4	E.5	8.5	760	12	453	0.04	<3	E.1	<25
DEC													
06...	4,800	--	--	--	--	--	--	--	--	--	--	--	--
JAN 2003													
08...	6,100	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	5,200	5	105	0.9	1.3	14.4	830	24	186	E.01	<5	0.4	E14
MAR													
03...	800	--	--	--	--	--	--	--	--	--	--	--	--
APR													
04...	6,400	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
01...	208	7	134	<0.2	E2.9	6.3	--	5	662	E.01	<3	<0.3	52
JUN													
03...	460	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
01...	224	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
20...	2,480	8	188	E.1	1.9	7.0	--	5	428	E.02	E2	<0.3	36
SEP													
10...	10,800	--	--	--	--	--	--	--	--	--	--	--	--

Remark codes used in this table:
< -- Less than
E -- Estimated value
S -- Most probable value

JOHNSON LAKE WATER-QUALITY MONITORING

COUNTIES.--Dawson and Gosper

MULTIPLE STATION ANALYSES

Station number	Station name	Latitude	Longitude	Date	Time	Altitude of land surface feet (72000)
	DAWSON COUNTY					
404233099522608	LAKEVIEW ACRES JOHNSON LAKE	40 42 33 N	099 52 26 W	07-07-03	1430	2,671
	LAKEVIEW ACRES JOHNSON LAKE	40 42 33 N	099 52 26 W	08-18-03	1230	2,671
404253099515506	KIRBY POINT JOHNSON LAKE	40 41 59 N	099 50 46 W	07-07-03	1600	2,617
	KIRBY POINT JOHNSON LAKE	40 41 59 N	099 50 46 W	08-18-03	1400	2,617
404253099515507	NORTH END JOHNSON LAKE	40 42 54 N	099 51 56 W	07-07-03	1530	2,617
	NORTH END JOHNSON LAKE	40 42 54 N	099 51 56 W	08-18-03	1500	2,617
404318099562601	PLUM CREEK INLET JOHNSON LAKE	40 43 19 N	099 56 26 W	07-07-03	1500	2,617
	PLUM CREEK INLET JOHNSON LAKE	40 43 19 N	099 56 26 W	08-18-03	1600	2,617
	GOSPER COUNTY					
404030099502211	SW DAM	40 40 31 N	099 50 22 W	07-07-03	1300	2,617
	SW DAM	40 40 31 N	099 50 22 W	08-18-03	1830	2,617
404104099514810	MALLARD BAY JOHNSON LAKE	40 41 04 N	099 51 48 W	07-07-03	1330	2,617
	MALLARD BAY JOHNSON LAKE	40 41 04 N	099 51 48 W	08-18-03	1700	2,617
404147099521909	INLET CANAL AT JOHNSON LAKE	40 41 47 N	099 52 19 W	07-07-03	1400	2,617
	INLET CANAL AT JOHNSON LAKE	40 41 47 N	099 52 19 W	08-18-03	1130	2,617
404159099495304	SWIMMING BEACH JOHNSON LAKE	40 41 59 N	099 49 53 W	07-07-03	1230	2,716
	SWIMMING BEACH JOHNSON LAKE	40 41 59 N	099 49 53 W	08-18-03	1900	2,716

MULTIPLE STATION ANALYSES

Station number	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)
					DAWSON COUNTY							
404233099522608	693	7.0	98	8.5	668	E29.5	27.0	1.0	<0.04	<0.06	<0.008	<0.02
	--	5.9	--	7.8	737	E32.0	25.8	1.6	<0.04	<0.06	<0.008	<0.18
404253099515506	--	7.4	--	8.4	680	29.0	25.5	0.71	<0.04	<0.06	<0.008	<0.02
	--	10.0	--	8.6	739	E36.0	26.5	0.90	<0.04	<0.06	<0.008	<0.02
404253099515507	693	9.5	132	8.8	664	30.0	27.0	0.79	<0.04	<0.06	<0.008	<0.02
	--	6.8	--	8.7	702	37.0	26.7	0.95	<0.04	<0.06	<0.008	<0.02
404318099562601	693	6.6	92	8.4	788	E30.0	27.0	0.96	<0.04	0.07	E.004	<0.02
	--	7.9	--	8.6	736	37.0	24.9	0.99	<0.04	<0.06	<0.008	<0.02
					GOSPER COUNTY							
404030099502211	693	10.3	140	8.6	673	E30.0	25.5	0.84	<0.04	<0.06	<0.008	<0.02
	--	8.0	--	8.6	727	33.0	25.6	0.76	<0.04	<0.06	<0.008	<0.02
404104099514810	693	5.9	85	8.5	673	31.0	29.0	0.74	<0.04	<0.06	<0.008	<0.02
	--	5.2	--	8.7	741	36.0	26.3	1.3	<0.04	<0.06	<0.008	<0.02
404147099521909	693	6.9	96	8.3	756	31.0	27.0	0.97	<0.04	E.04	<0.008	<0.02
	--	8.4	--	8.4	738	E30.0	25.3	0.96	<0.04	<0.06	<0.008	<0.02
404159099495304	693	8.4	113	8.5	678	--	25.3	0.70	E.03	<0.06	E.004	<0.02
	--	10.0	--	8.7	726	--	26.0	0.75	<0.04	<0.06	<0.008	<0.02

JOHNSON LAKE WATER-QUALITY MONITORING

MULTIPLE STATION ANALYSES

Station number	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	1,4-Dichlorobenzene water, fltrd, ug/L (34572)	1-Methylnaphthalene, water, fltrd, ug/L (62054)	2,6-Dimethylnaphthalene, water, fltrd, ug/L (62055)	2-Methylnaphthalene, water, fltrd, ug/L (62056)	3-beta-Coprostanol, water, fltrd, ug/L (62057)	3-Methyl-1H-indole, water, fltrd, ug/L (62058)	3-tert-Butyl-4-hydroxyanisole wat flt ug/L (62059)	4-Cumylphenol, water, fltrd, ug/L (62060)	4-Octylphenol, water, fltrd, ug/L (62061)	4-Nonylphenol, water, fltrd, ug/L (62085)
DAWSON COUNTY												
404233099522608	0.102	--	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<5
	0.120	--	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<5
404253099515506	0.051	--	--	--	--	--	--	--	--	--	--	--
	0.066	--	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	E1
404253099515507	0.072	--	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<5
	0.067	--	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<5
404318099562601	0.109	1.0	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<5
	0.106	--	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<5
GOSPER COUNTY												
404030099502211	0.062	--	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<5
	0.048	--	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<5
404104099514810	0.061	--	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<5
	0.124	--	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<5
404147099521909	0.116	--	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<5
	0.085	--	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<5
404159099495304	0.049	--	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<5
	0.051	--	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<5

MULTIPLE STATION ANALYSES

Station number	4-tert-Octylphenol, water, fltrd, ug/L (62062)	5-Methyl-1H-benzotriazole, wat flt ug/L (62063)	9,10-Anthraquinone water, fltrd, ug/L (62066)	Acetophenone water, fltrd, ug/L (62064)	AHTN, water, fltrd, ug/L (62065)	Anthracene, water, fltrd, ug/L (34221)	Benzo[a]pyrene, water, fltrd, ug/L (34248)	Benzophenone water, fltrd, ug/L (62067)	beta-Sitosterol, water, fltrd, ug/L (62068)	beta-Stigmastanol, water, fltrd, ug/L (62086)	Bisphenol A, water, fltrd, ug/L (62069)	Bromacil, water, fltrd, ug/L (04029)
DAWSON COUNTY												
404233099522608	<1	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<1	<0.5
	<1	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<1	<0.5
404253099515506	--	--	--	--	--	--	--	--	--	--	--	--
	<1	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<1	<0.5
404253099515507	<1	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<1	<0.5
	<1	<2	<0.5	<0.5	<0.5	<0.5	<0.5	E.1	<2	<2	<1	<0.5
404318099562601	<1	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<1	<0.5
	<1	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	M	M	<1	<0.5
GOSPER COUNTY												
404030099502211	<1	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<1	<0.5
	<1	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<1	<0.5
404104099514810	<1	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<1	<0.5
	<1	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<1	<0.5
404147099521909	<1	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<1	<0.5
	<1	<2	<0.5	<0.5	<0.5	<0.5	<0.5	E.1	<2	<2	<1	<0.5
404159099495304	<1	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<1	<0.5
	<1	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<1	<0.5

JOHNSON LAKE WATER-QUALITY MONITORING

MULTIPLE STATION ANALYSES

Station number	Caffeine, water, fltrd, ug/L (50305)	Camphor water, fltrd, ug/L (62070)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbazole, water, fltrd, ug/L (62071)	Chlorpyrifos water, fltrd, ug/L (38933)	Cholesterol, water, fltrd, ug/L (62072)	Cotinine, water, fltrd, ug/L (62005)	DEET, water, fltrd, ug/L (62082)	Diazinon, water, fltrd, ug/L (39572)	Diethoxynonylphenol, water, fltrd, ug/L (62083)	Diethoxyoctylphenol, water, fltrd ug/L (61705)	D-Limonene, water, fltrd, ug/L (62073)
DAWSON COUNTY												
404233099522608	<0.5	<0.5	<1	<0.5	<0.5	<2	<1	M	<0.5	<5	<1	<0.5
	<0.5	<0.5	<1	<0.5	<0.5	<2	<1	E.1	<0.5	<5	<1	<0.5
404253099515506	--	--	--	--	--	--	--	--	--	--	--	--
	<0.5	<0.5	<1	<0.5	<0.5	<2	<1	E.1	<0.5	<5	<1	<0.5
404253099515507	<0.5	<0.5	<1	<0.5	<0.5	<2	<1	M	<0.5	<5	<1	<0.5
	<0.5	<0.5	<1	<0.5	<0.5	<2	<1	E.1	<0.5	<5	<1	<0.5
404318099562601	<0.5	<0.5	<1	<0.5	<0.5	<2	<1	M	<0.5	<5	<1	<0.5
	<0.5	<0.5	<1	<0.5	<0.5	E1	<1	E.1	<0.5	<5	<1	<0.5
GOSPER COUNTY												
404030099502211	<0.5	<0.5	<1	<0.5	<0.5	<2	<1	M	<0.5	<5	<1	<0.5
	<0.5	<0.5	<1	<0.5	<0.5	<2	<1	E.1	<0.5	<5	<1	<0.5
404104099514810	M	<0.5	<1	<0.5	<0.5	<2	<1	E.1	<0.5	<5	<1	<0.5
	<0.5	<0.5	<1	<0.5	<0.5	<2	<1	E.2	<0.5	<5	<1	<0.5
404147099521909	<0.5	<0.5	<1	<0.5	<0.5	<2	<1	M	<0.5	<5	<1	<0.5
	<0.5	<0.5	<1	<0.5	<0.5	<2	<1	E.1	<0.5	<5	<1	<0.5
404159099495304	<0.5	<0.5	<1	<0.5	<0.5	<2	<1	M	<0.5	<5	<1	<0.5
	<0.5	<0.5	<1	<0.5	<0.5	<2	<1	E.1	<0.5	<5	<1	<0.5

MULTIPLE STATION ANALYSES

Station number	Ethoxyoctylphenol, water, fltrd ug/L (61706)	Fluoranthene water, fltrd, ug/L (34377)	HHCB, water, fltrd, ug/L (62075)	Indole, water, fltrd, ug/L (62076)	Isoborneol, water, fltrd, ug/L (62077)	Isophorone water, fltrd, ug/L (34409)	Isopropylbenzene water, fltrd, ug/L (62078)	Isoquinoline, water, fltrd, ug/L (62079)	Menthol water, fltrd, ug/L (62080)	Metalaxyl, water, fltrd, ug/L (50359)	Methyl salicylate, water, fltrd, ug/L (62081)	Metolachlor, water, fltrd, ug/L (39415)
DAWSON COUNTY												
404233099522608	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	E.1
	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	E.1
404253099515506	--	--	--	--	--	--	--	--	--	--	--	--
	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
404253099515507	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	E.1
	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
404318099562601	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	M
	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GOSPER COUNTY												
404030099502211	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	E.1
	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
404104099514810	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	E.1
	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
404147099521909	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	M
	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
404159099495304	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	E.1
	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

JOHNSON LAKE WATER-QUALITY MONITORING

MULTIPLE STATION ANALYSES

Station number	Naphthalene, water, fltrd, ug/L (34443)	p-Cresol, water, fltrd, ug/L (62084)	Pentachlorophenol, water, fltrd, ug/L (34459)	Phenanthrene, water, fltrd, ug/L (34462)	Phenol, water, fltrd, ug/L (34466)	Prometon, water, fltrd, ug/L (04037)	Pyrene, water, fltrd, ug/L (34470)	Tetrachloroethene, water, fltrd, ug/L (34476)	Tribromomethane water, fltrd, ug/L (34288)	Tributyl phosphate, water, fltrd, ug/L (62089)	Triclosan, water, fltrd, ug/L (62090)	Triethyl citrate water, fltrd, ug/L (62091)
DAWSON COUNTY												
404233099522608	<0.5	<1	<2	<0.5	E.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
	<0.5	<1	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
404253099515506	--	--	--	--	--	--	--	--	--	--	--	--
	<0.5	<1	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
404253099515507	<0.5	<1	<2	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
	<0.5	<1	<2	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
404318099562601	<0.5	<1	<2	<0.5	E.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
	<0.5	<1	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
GOSPER COUNTY												
404030099502211	<0.5	<1	<2	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
	<0.5	<1	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
404104099514810	<0.5	<1	<2	<0.5	E.3	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
	<0.5	<1	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
404147099521909	<0.5	<1	<2	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
	<0.5	<1	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
404159099495304	<0.5	<1	<2	<0.5	E.3	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
	<0.5	<1	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5

MULTIPLE STATION ANALYSES

Station number	Triphenyl phosphate, water, fltrd, ug/L (62092)	Tris(2-butoxyethyl) phosphate, wat flt ug/L (62093)	Tris(2-chloroethyl) phosphate, wat flt ug/L (62087)	Tris(dichloro-i-Pr) phosphate, wat flt ug/L (62088)	Dichlorvos, water fltrd, ug/L (38775)
DAWSON COUNTY					
404233099522608	<0.5	<0.5	<0.5	<0.5	<1.00
	<0.5	<0.5	<0.5	<0.5	<1.00
404253099515506	--	--	--	--	--
	<0.5	<0.5	<0.5	<0.5	<1.00
404253099515507	<0.5	<0.5	<0.5	<0.5	<1.00
	<0.5	<0.5	<0.5	<0.5	<1.00
404318099562601	<0.5	<0.5	<0.5	<0.5	<1.00
	<0.5	<0.5	<0.5	<0.5	<1.00
GOSPER COUNTY					
404030099502211	<0.5	<0.5	<0.5	<0.5	<1.00
	<0.5	<0.5	<0.5	<0.5	<1.00
404104099514810	<0.5	<0.5	<0.5	<0.5	<1.00
	<0.5	<0.5	<0.5	<0.5	<1.00
404147099521909	<0.5	<0.5	<0.5	<0.5	<1.00
	<0.5	<0.5	<0.5	<0.5	<1.00
404159099495304	<0.5	<0.5	<0.5	<0.5	<1.00
	<0.5	<0.5	<0.5	<0.5	<1.00

Remark codes used in this table:
< -- Less than
E -- Estimated value
M -- Presence verified, not quantified

ADAMS COUNTY

403403098244001. Local number 7N 10W 23AB.

LOCATION.--Lat 40° 34'03", long 098° 24'40", NW 1/4 NE 1/4 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.

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 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	112.55	JAN 14	111.70	APR 08	111.33	JUN 10	110.90	SEP 09	115.47		
NOV 06	112.16	FEB 17	111.40	22	111.33	JUL 02	111.52				
DEC 04	111.97	MAR 11	111.28	MAY 13	110.97	AUG 12	114.76				

WATER YEAR 2003 HIGHEST 110.90 JUN 10, 2003 LOWEST 115.47 SEP 09, 2003

BLAINE COUNTY

414958100061501. Local number 22N 24W 33CA.

LOCATION.--Lat 41° 49'58", long 100° 06'15", NE 1/4 SW 1/4 sec. 33, T. 22 N., R. 24 W., Hydrologic Unit 10210001, approxmately 500 ft west of junction of State Highways 91 and 2 north of Dunning.

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 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL
JUN 02	4.31

BUFFALO COUNTY

404618098504401. Local number 9N 14W 1DC.

LOCATION.--Lat 40° 46'18", long 098° 50'44", SW 1/4 SE 1/4 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.

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 water level, 11.17 ft below land-surface datum, July 13, 1999; lowest, 29.22 ft below land-surface datum, Aug. 10, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 25.69 ft, Sept. 18, 19, 20; minimum water-level depth below land surface, 21.79 ft, July 6.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.45	22.37	22.27	22.30	22.28	22.20	22.27	22.20	21.98	21.91	23.99	25.14
2	22.47	22.34	22.27	22.35	22.24	22.22	22.26	22.20	21.97	21.90	23.88	25.13
3	22.47	22.30	22.29	22.35	22.29	22.21	22.24	22.19	21.97	21.89	23.82	25.11
4	22.45	22.30	22.29	22.34	22.31	22.20	22.29	22.16	21.97	21.89	23.87	25.14
5	22.46	22.30	22.29	22.40	22.31	22.22	22.30	22.14	21.97	21.89	23.90	25.32
6	22.46	22.31	22.27	22.42	22.33	22.20	22.29	22.17	21.96	21.83	23.94	25.40
7	22.46	22.31	22.24	22.41	22.33	22.23	22.31	22.17	21.96	21.91	23.96	25.45
8	22.42	22.27	22.29	22.38	22.28	22.25	22.35	22.16	21.96	22.09	24.04	25.49
9	22.43	22.23	22.28	22.36	22.28	22.29	22.34	22.13	21.95	22.40	24.26	25.54
10	22.42	22.27	22.24	22.38	22.25	22.28	22.30	22.12	21.96	22.61	24.36	25.58
11	22.41	22.32	22.22	22.38	22.27	22.25	22.28	22.14	21.96	22.74	24.34	25.61
12	22.45	22.35	22.23	22.38	22.28	22.23	22.27	22.15	21.95	22.78	24.19	25.62
13	22.45	22.34	22.23	22.37	22.27	22.27	22.27	22.13	21.95	22.78	24.07	25.65
14	22.43	22.29	22.21	22.39	22.25	22.27	22.26	22.08	21.95	22.84	24.14	25.67
15	22.39	22.32	22.21	22.39	22.30	22.23	22.23	22.08	21.96	22.86	24.22	25.68
16	22.38	22.31	22.19	22.40	22.30	22.23	22.27	22.07	21.96	22.86	24.25	25.68
17	22.36	22.29	22.19	22.40	22.27	22.23	22.30	22.07	21.96	22.85	24.24	25.67
18	22.35	22.28	22.22	22.37	22.24	22.23	22.28	22.07	21.94	22.90	24.24	25.69
19	22.38	22.29	22.24	22.33	22.25	22.24	22.27	22.09	21.93	23.09	24.32	25.69
20	22.38	22.29	22.23	22.33	22.24	22.28	22.28	22.10	21.93	23.25	24.40	25.69
21	22.36	22.29	22.22	22.35	22.23	22.29	22.30	22.08	21.93	23.35	24.53	25.68
22	22.39	22.29	22.26	22.39	22.19	22.30	22.29	22.04	21.92	23.36	24.75	25.67
23	22.39	22.28	22.27	22.39	22.23	22.30	22.27	22.03	21.91	23.36	24.90	25.67
24	22.38	22.29	22.27	22.36	22.27	22.27	22.22	22.01	21.91	23.36	25.02	25.65
25	22.33	22.29	22.26	22.34	22.27	22.31	22.23	22.01	21.94	23.39	25.01	25.65
26	22.34	22.30	22.28	22.36	22.22	22.31	22.23	21.98	21.95	23.47	24.98	25.64
27	22.33	22.30	22.28	22.32	22.19	22.28	22.22	21.99	21.94	23.56	25.01	25.64
28	22.32	22.27	22.28	22.32	22.20	22.32	22.22	21.99	21.91	23.62	25.05	25.64
29	22.31	22.24	22.28	22.33	---	22.34	22.22	21.99	21.92	23.79	25.08	25.64
30	22.35	22.27	22.28	22.30	---	22.34	22.18	21.96	21.92	23.97	25.13	25.64
31	22.36	---	22.29	22.29	---	22.32	---	21.99	---	23.99	25.14	---
MEAN	22.40	22.30	22.25	22.36	22.26	22.26	22.27	22.09	21.95	22.85	24.42	25.55
MAX	22.47	22.37	22.29	22.42	22.33	22.34	22.35	22.20	21.98	23.99	25.14	25.69
MIN	22.31	22.23	22.19	22.29	22.19	22.20	22.18	21.96	21.91	21.83	23.82	25.11

BUFFALO COUNTY—Continued

404345098560001. Local number 9N 14W 19DD.

LOCATION.--Lat 40° 43'45", long 098° 56'10", SE 1/4 SE 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.

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 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL
APR 09	30.29

CHASE COUNTY

403220101384001. Local number 7N 38W 28CC.

LOCATION.--Lat 40° 32'20", long 101° 38'40", SW 1/4 SW 1/4 sec.28, T.7 N., R.38 W., Hydrologic Unit 10250005, about 0.5 mi north of Imperial.

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, 114.66 ft below land-surface datum, April 22, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL
APR 22	114.66

CHASE COUNTY—Continued

403235101395501. Local number 7N 38W 29CBB.

LOCATION.--Lat 40° 32'35", long 101° 39'55", NW 1/4 NW 1/4 SW 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.

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.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 55.87 ft below land-surface datum, July 4, 1964; lowest, 104.64 ft below land-surface datum, Sept. 7, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 107.95 ft, Aug. 28, 29; minimum water-level depth below land surface, 101.33 ft, Apr. 15, 16, 18.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103.62	103.26	102.92	102.60	102.17	101.87	101.48	101.58	102.19	103.62	105.84	106.48
2	103.63	103.22	102.82	102.60	102.08	101.87	101.48	101.58	101.97	103.65	106.11	107.20
3	103.63	103.16	102.83	102.59	102.17	101.76	101.50	101.58	101.96	103.71	106.14	107.84
4	103.51	103.16	102.83	102.59	102.17	101.76	101.52	101.42	102.45	104.05	106.11	107.92
5	103.51	103.07	102.83	102.60	102.17	101.76	101.52	101.49	102.48	104.08	106.49	107.88
6	103.54	103.08	102.83	102.60	102.18	101.76	101.53	101.53	102.44	104.15	106.58	107.70
7	103.54	103.08	102.81	102.60	102.18	101.77	101.60	101.53	101.77	103.95	106.60	107.70
8	103.50	103.01	102.82	102.54	102.01	101.81	101.60	101.51	101.75	104.07	106.63	106.78
9	103.52	103.01	102.82	---	102.01	101.81	101.59	101.47	101.65	104.41	106.74	106.55
10	103.52	103.04	102.81	---	102.01	101.81	---	101.51	102.10	104.48	106.81	106.42
11	103.52	103.12	102.79	---	102.01	101.76	---	101.52	102.15	104.48	106.61	106.50
12	103.58	103.12	102.79	---	102.01	101.74	---	101.52	102.20	104.37	106.65	106.44
13	103.58	103.12	102.79	---	102.01	101.74	---	101.50	102.06	104.36	106.89	106.37
14	103.44	103.02	102.79	---	102.02	101.74	---	101.48	102.18	104.98	106.95	106.37
15	103.39	103.04	102.79	102.57	102.08	101.68	---	101.48	102.28	104.99	106.99	106.22
16	103.39	103.04	102.75	102.59	102.08	101.68	---	101.48	102.24	105.05	106.99	106.11
17	103.40	103.01	102.68	102.59	101.91	101.64	---	101.49	102.21	105.26	106.91	106.26
18	103.40	103.01	102.73	102.32	101.91	101.64	---	101.48	102.12	105.31	107.43	106.36
19	103.42	103.01	102.73	102.32	101.91	101.66	---	102.11	101.99	105.38	107.43	106.27
20	103.42	103.02	102.73	102.40	101.91	101.66	---	102.11	101.95	105.41	107.24	106.03
21	103.44	103.02	102.73	102.41	101.89	101.66	---	101.69	101.77	105.46	107.40	106.12
22	103.48	103.02	102.72	102.52	101.89	101.66	---	101.80	101.77	104.52	107.32	106.08
23	103.48	102.92	102.72	102.52	101.94	101.66	101.60	101.80	101.77	104.11	107.83	106.01
24	103.43	102.94	102.72	102.25	101.96	101.63	101.66	101.77	102.16	105.30	107.86	106.10
25	103.30	102.94	102.69	102.33	101.96	101.63	101.66	101.64	102.15	105.66	107.81	106.10
26	103.28	102.93	102.69	102.33	101.86	101.62	101.66	101.60	102.55	105.84	107.90	105.93
27	103.28	102.93	102.69	102.18	101.85	101.62	101.66	101.61	103.06	105.90	107.92	105.94
28	103.28	102.92	102.69	102.27	101.85	101.63	101.66	102.28	103.60	105.80	107.95	105.95
29	103.25	102.92	102.61	102.27	---	101.63	101.65	102.32	103.72	105.77	107.95	105.92
30	103.25	102.92	102.64	102.25	---	101.63	101.59	102.16	103.72	105.92	107.22	105.91
31	103.25	---	102.64	102.18	---	101.55	---	102.20	---	105.92	106.74	---
MEAN	103.44	103.04	102.76	---	102.01	101.70	---	101.69	102.28	104.84	107.03	106.52
MAX	103.63	103.26	102.92	---	102.18	101.87	---	102.32	103.72	105.92	107.95	107.92
MIN	103.25	102.92	102.61	---	101.85	101.55	---	101.42	101.65	103.62	105.84	105.91

CHERRY COUNTY

423205100321501. Local number 30N 28W 36AAA.

LOCATION.--Lat 42° 32'05", long 100° 32'15", NE 1/4 NE 1/4 NE 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.

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 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL
MAY 15	1.50

COLFAX COUNTY

412810097054501. Local number 17N 3E 4CC.

LOCATION.--Lat 41° 28'10", long 097° 05'45", SW 1/4 SW 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.

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 water level measured, 3.70 ft below land-surface datum, May. 9, 1995; lowest, 10.68 ft below land-surface datum, Oct. 29, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	10.00	APR 02	9.12

DAWSON COUNTY

404949099445701. Local number 10N 21W 18DDD.

LOCATION.--Lat 40° 49'49", long 099° 44'57", SE 1/4 SE 1/4 SE 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.

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.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.20 ft below land-surface datum, July 24-25, 1993; lowest, 21.50 ft below land-surface datum, July 16, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 14.77 ft, Aug. 31, Sept. 1; minimum water-level depth below land surface, 11.46 ft, June 27, 28.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.87	12.37	12.64	12.96	13.18	13.36	13.50	13.31	12.40	11.54	13.10	14.77
2	11.90	12.34	12.67	12.98	13.22	13.37	13.50	13.27	12.31	11.67	13.08	13.38
3	11.89	12.34	12.70	12.98	13.25	13.36	13.51	13.23	12.27	11.78	13.11	13.07
4	11.88	12.34	12.71	12.99	13.25	13.38	13.54	13.17	12.19	11.84	13.29	12.95
5	11.90	12.37	12.71	13.00	13.25	13.39	13.56	13.12	12.15	12.10	13.94	12.81
6	11.94	12.38	12.69	13.03	13.27	13.38	13.56	13.10	12.08	12.32	14.14	12.82
7	11.93	12.36	12.71	13.03	13.26	13.40	13.59	13.07	12.02	12.45	14.32	12.82
8	11.99	12.35	12.74	13.02	13.26	13.42	13.59	13.02	11.96	12.50	14.33	12.25
9	11.99	12.36	12.73	13.03	13.25	13.42	13.57	12.97	11.92	12.58	13.30	12.19
10	12.00	12.43	12.71	13.04	13.28	13.41	13.55	12.94	11.88	13.30	12.85	12.24
11	12.02	12.47	12.72	13.04	13.28	13.39	13.56	12.90	11.86	13.82	12.89	12.26
12	12.07	12.49	12.74	13.05	13.28	13.41	13.57	12.87	11.80	13.96	12.74	12.26
13	12.09	12.45	12.74	13.07	13.27	13.43	13.57	12.81	11.79	13.98	12.76	12.27
14	12.05	12.47	12.75	13.10	13.30	13.40	13.58	12.80	11.75	13.82	12.80	12.26
15	12.13	12.51	12.74	13.11	13.33	13.39	13.58	12.80	11.72	13.69	12.87	12.26
16	12.13	12.51	12.75	13.13	13.32	13.40	13.58	12.76	11.68	13.75	12.68	12.28
17	12.14	12.49	12.77	13.13	13.29	13.40	13.59	12.76	11.65	14.30	12.68	12.33
18	12.15	12.50	12.80	13.12	13.31	13.42	13.54	12.73	11.62	14.30	12.85	12.38
19	12.19	12.51	12.82	13.11	13.32	13.44	13.57	12.74	11.60	14.18	13.28	12.36
20	12.19	12.51	12.82	13.14	13.31	13.45	13.57	12.75	11.56	14.05	13.00	12.38
21	12.22	12.52	12.82	13.15	13.31	13.45	13.58	12.69	11.53	13.99	13.08	12.43
22	12.27	12.51	12.86	13.18	13.33	13.45	13.58	12.69	11.57	13.68	12.98	12.50
23	12.27	12.54	12.88	13.18	13.35	13.44	13.55	12.67	11.58	13.71	13.25	12.51
24	12.26	12.55	12.88	13.16	13.36	13.44	13.50	12.66	11.58	13.83	13.32	12.59
25	12.26	12.59	12.89	13.18	13.34	13.47	13.50	12.59	11.56	13.92	13.43	12.59
26	12.26	12.65	12.89	13.20	13.34	13.45	13.46	12.57	11.53	13.94	13.62	12.63
27	12.26	12.63	12.90	13.18	13.35	13.50	13.44	12.57	11.49	14.03	13.88	12.68
28	12.26	12.64	12.91	13.21	13.36	13.51	13.41	12.53	11.54	13.43	14.50	12.72
29	12.30	12.62	12.91	13.22	---	13.51	13.39	12.53	11.55	13.44	14.66	12.76
30	12.34	12.66	12.96	13.20	---	13.50	13.33	12.49	11.56	13.41	14.68	12.78
31	12.36	---	12.96	13.21	---	13.49	---	12.47	---	13.23	14.77	---
MEAN	12.11	12.48	12.79	13.10	13.29	13.43	13.53	12.83	11.79	13.31	13.43	12.62
MAX	12.36	12.66	12.96	13.22	13.36	13.51	13.59	13.31	12.40	14.30	14.77	14.77
MIN	11.87	12.34	12.64	12.96	13.18	13.36	13.33	12.47	11.49	11.54	12.68	12.19

DUNDY COUNTY

400155101521302. Local number 1N 40W 29BB2.

LOCATION.--Lat 40° 01'55", long 101° 52'13", NW 1/4 NW 1/4 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.

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 water level, 15.41 ft below land-surface datum, June 21, 1984; lowest, 31.67 ft below land-surface datum, Aug. 12 and 13, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 30.24 ft, Aug. 6; minimum water-level depth below land surface, 19.93 ft, May 3, 4.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.82	22.92	21.91	21.36	20.76	20.53	20.30	20.06	20.45	23.77	29.76	28.70
2	26.60	22.84	21.94	21.31	20.80	20.52	20.29	20.03	20.40	25.90	29.27	29.44
3	---	22.82	21.93	21.25	20.80	20.44	20.32	20.00	20.31	26.38	29.31	30.02
4	---	22.76	21.89	21.24	20.77	20.46	20.29	20.09	20.26	27.16	29.71	29.03
5	---	22.73	21.85	21.26	20.75	20.43	20.27	20.18	20.23	27.54	30.17	25.78
6	---	22.71	21.82	21.25	20.79	20.45	20.25	20.27	20.19	23.37	30.24	25.06
7	---	22.64	21.81	21.16	20.74	20.45	20.29	20.33	20.17	22.62	26.56	24.75
8	23.56	22.57	21.83	21.10	20.70	20.46	20.28	20.39	20.14	22.37	25.41	27.99
9	23.57	22.56	21.74	21.15	20.68	20.43	20.20	20.41	20.11	26.85	24.88	29.53
10	23.57	22.56	21.72	21.11	20.69	20.36	20.18	20.48	20.14	27.39	24.59	29.62
11	27.44	22.54	21.69	21.09	20.69	20.34	20.16	20.45	20.21	27.95	24.44	26.35
12	25.09	22.53	21.70	21.06	20.69	20.38	20.15	20.30	20.22	24.20	28.54	25.25
13	23.84	22.43	21.66	21.10	20.65	22.78	20.12	20.20	20.19	23.11	29.41	24.79
14	23.51	22.42	21.65	21.09	20.68	23.49	22.69	20.18	20.16	26.83	29.91	24.47
15	23.42	22.42	21.64	21.07	20.70	24.16	23.66	20.14	20.12	27.76	29.92	28.28
16	23.28	22.38	21.61	21.07	20.66	24.59	23.64	20.11	20.09	28.52	26.17	29.31
17	23.24	22.30	21.55	21.00	20.61	22.86	21.02	20.08	20.08	28.58	29.04	29.45
18	27.12	22.34	21.59	20.97	20.61	21.46	20.64	20.07	20.13	28.65	29.71	26.06
19	26.53	22.28	21.59	20.94	20.61	21.17	20.54	20.10	20.23	24.43	27.80	25.15
20	26.53	22.25	21.52	20.97	20.57	20.98	20.46	20.09	20.29	23.65	25.41	24.80
21	27.65	22.21	21.52	20.97	20.55	20.86	20.38	19.99	20.41	26.80	24.74	24.47
22	26.53	22.19	21.51	21.00	20.56	20.76	20.29	20.10	20.58	28.41	24.41	24.30
23	23.82	22.19	21.51	20.94	20.61	20.66	20.20	20.21	20.66	28.93	24.19	24.09
24	23.50	22.17	21.45	20.90	20.61	20.61	20.19	20.26	20.73	29.09	24.03	24.22
25	23.31	22.13	21.45	20.92	20.52	20.57	20.17	20.33	23.57	27.12	27.57	24.23
26	23.25	22.12	21.43	20.90	20.50	20.49	20.11	20.38	21.85	28.36	28.87	24.31
27	23.15	22.04	21.41	20.82	20.50	20.48	20.13	20.44	20.96	28.94	29.24	24.34
28	23.07	22.03	21.37	20.88	20.49	20.46	20.09	20.46	20.99	29.38	29.77	24.34
29	23.03	22.00	21.34	20.87	---	20.45	20.06	20.35	21.07	29.38	29.99	24.37
30	23.02	22.00	21.42	20.87	---	20.40	20.05	20.49	22.18	28.87	28.52	24.33
31	22.95	---	21.34	20.86	---	20.35	---	20.49	---	29.58	25.69	---
MEAN	---	22.40	21.63	21.05	20.65	21.06	20.58	20.24	20.57	26.84	27.65	26.23
MAX	---	22.92	21.94	21.36	20.80	24.59	23.66	20.49	23.57	29.58	30.24	30.02
MIN	---	22.00	21.34	20.82	20.49	20.34	20.05	19.99	20.08	22.37	24.03	24.09

FILLMORE COUNTY

402504097432201. Local number 5N 4W 12BDC.

LOCATION.--Lat 40° 25'04", long 097° 43'22", SW 1/4 SE 1/4 NW 1/4 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.

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 corrent 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 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	96.60	DEC 03	96.11	FEB 19	95.06	APR 10	94.24	JUN 05	93.76	AUG 06	96.64
NOV 04	96.20	JAN 13	95.38	MAR 06	94.59	MAY 07	94.10	JUL 09	94.42	SEP 03	98.24

WATER YEAR 2003 HIGHEST 93.76 JUN 05, 2003 LOWEST 98.24 SEP 03, 2003

403800097300701. Local number 8N 2W 26AD.

LOCATION.--Lat 40° 38'00", long 097° 30'07", SE 1/4 NE 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.

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 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	13.32	DEC 03	13.30	FEB 17	13.67	APR 14	13.57	JUN 05	11.70	AUG 06	11.84
NOV 06	13.34	JAN 13	13.50	MAR 06	13.59	MAY 12	12.99	JUL 08	10.68	SEP 03	13.71

WATER YEAR 2003 HIGHEST 10.68 JUL 08, 2003 LOWEST 13.71 SEP 03, 2003

GOSPER COUNTY

403626099451401. Local number 7N 21W 6BC.

LOCATION.--Lat 40° 36'26", long 099° 45'14", SW 1/4 NW 1/4 sec. 6, T.7 N., R.21 W., Hydrologic Unit 10200101, 1 mi west and 2 mi north of Smithfield.

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 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL
MAY 05	32.01

HALL COUNTY

405315098304302. Local number 11N 11W 25CC2.

LOCATION.--Lat 40° 53'15", long 098° 30'43", SW 1/4 SW 1/4 sec.25, T.11 N., R.11 W., Hydrologic Unit 10200103, 1.0 mi north and 2.0 mi west of Alda.

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 water level, 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.--Maximum water-level depth below land surface, 23.30 ft, Sept. 7, 2003; minimum water-level depth below land surface, 20.55 ft, July 2, 3, 4.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.10	21.22	21.17	21.12	21.05	21.00	20.97	20.99	20.73	20.57	22.00	23.18
2	21.11	21.20	21.17	21.12	21.03	21.00	20.96	20.99	20.73	20.56	22.05	23.21
3	21.12	21.18	21.18	21.12	21.06	21.00	20.96	20.98	20.71	20.55	22.10	23.23
4	21.13	21.18	21.18	21.10	21.07	20.99	20.97	20.97	20.71	20.61	22.14	23.25
5	21.13	21.18	21.18	21.12	21.07	20.99	20.99	20.95	20.70	20.66	22.17	23.27
6	21.13	21.19	21.16	21.14	21.07	20.99	20.99	20.95	20.70	20.72	22.21	23.28
7	21.13	21.18	21.16	21.13	21.07	21.00	21.00	20.94	20.69	20.76	22.25	---
8	21.13	21.15	21.17	21.10	21.05	21.01	21.01	20.93	20.69	20.80	22.30	---
9	21.14	21.13	21.17	21.09	21.05	21.01	21.00	20.91	20.68	20.85	22.36	---
10	21.15	21.16	21.14	21.09	21.04	21.01	20.99	20.90	20.68	20.90	22.39	---
11	21.15	21.19	21.13	21.09	21.04	20.99	20.99	20.89	20.67	20.95	22.43	---
12	21.15	21.20	21.14	21.09	21.05	20.98	20.99	20.89	20.67	21.00	22.47	---
13	21.16	21.20	21.14	21.09	21.04	21.00	20.98	20.88	20.66	21.07	22.50	---
14	21.15	21.18	21.13	21.10	21.03	21.00	20.98	20.86	20.66	21.13	22.53	---
15	21.16	21.20	21.13	21.10	21.06	20.98	20.97	20.87	20.66	21.17	22.57	---
16	21.16	21.20	21.12	21.10	21.06	20.98	20.98	20.86	20.66	21.22	22.60	---
17	21.16	21.18	21.12	21.10	21.04	20.98	21.00	20.86	20.65	21.28	22.64	---
18	21.15	21.18	21.13	21.08	21.02	20.97	20.98	20.86	20.65	21.34	22.68	---
19	21.17	21.18	21.14	21.08	21.03	20.97	20.98	20.87	20.63	21.39	22.72	---
20	21.17	21.18	21.14	21.07	21.03	20.98	20.99	20.87	20.63	21.42	22.75	---
21	21.17	21.18	21.13	21.08	21.01	20.99	21.00	20.86	20.62	21.46	22.78	---
22	21.18	21.18	21.15	21.10	21.00	20.99	21.00	20.83	20.61	21.49	22.83	---
23	21.18	21.18	21.15	21.10	21.02	20.98	20.99	20.81	20.61	21.54	22.87	---
24	21.18	21.18	21.15	21.09	21.04	20.97	20.98	20.80	20.60	21.59	22.91	---
25	21.17	21.18	21.14	21.07	21.04	20.98	20.98	20.79	20.60	21.66	22.95	---
26	21.18	21.19	21.14	21.08	21.02	20.98	20.98	20.78	20.60	21.73	22.99	---
27	21.18	21.19	21.13	21.07	21.00	20.97	20.98	20.78	20.59	21.79	23.02	---
28	21.17	21.17	21.12	21.06	21.00	20.99	20.98	20.76	20.58	21.82	23.05	---
29	21.18	21.16	21.12	21.07	---	21.00	20.99	20.75	20.58	21.87	23.08	---
30	21.19	21.18	21.12	21.07	---	21.00	20.99	20.74	20.58	21.91	23.12	---
31	21.21	---	21.12	21.05	---	20.99	---	20.73	---	21.95	23.16	---
MEAN	21.16	21.18	21.14	21.09	21.04	20.99	20.98	20.87	20.65	21.22	22.60	---
MAX	21.21	21.22	21.18	21.14	21.07	21.01	21.01	20.99	20.73	21.95	23.16	---
MIN	21.10	21.13	21.12	21.05	21.00	20.97	20.96	20.73	20.58	20.55	22.00	---

HAMILTON COUNTY

404836097584101 Local number 10N 6W 27ACAA.

LOCATION.--Lat 40° 48'36", long 097° 58'41", NE 1/4 NE 1/4 SW 1/4 NE 1/4 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.

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 water level measured, 82.31 ft below land-surface datum, June 5, 2000; lowest, 107.40 ft below land-surface datum, Aug. 24, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	92.75	OCT 15	92.34	OCT 31	91.88	JAN 08	90.33	APR 09	89.22	JUL 02	88.50
05	92.68	20	92.10	NOV 06	91.73	FEB 18	89.78	MAY 05	89.04	AUG 12	96.11
10	92.43	25	91.97	DEC 02	91.19	MAR 11	89.45	JUN 10	88.78	SEP 15	96.94

WATER YEAR 2003 HIGHEST 88.50 JUL 02, 2003 LOWEST 96.94 SEP 15, 2003

405514097573901. Local number 11N 6W 13CB.

LOCATION.--Lat 40° 55'14", long 097° 57'39", NW 1/4 SW 1/4 sec.13, T.11 N., R.6 W., Hydrologic Unit 10270201, 2 mi east and 3.5 mi north of Aurora.

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 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL
APR 15	99.61

HOLT COUNTY

421605098203001. Local number 27N 9W 34DA.

LOCATION.--Lat 42° 16'05", long 098° 20'30", NE 1/4 SE 1/4 sec.34, T.27 N., R.9 W., Hydrologic Unit 10220001, 0.5 mi north of Ewing.

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 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL
MAY 06	7.79

HOLT COUNTY—Continued

423148098300601. Local number 30N 10W 32DAA.

LOCATION.--Lat 42° 31'48", long 098° 30'06", NE 1/4 NE 1/4 SE 1/4 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.

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 water level, 35.41 ft below land-surface datum, Oct. 21, 1966; lowest, 53.72 ft below land-surface datum, Sept. 15, 20, 25, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 49.16 ft, Sept. 29, 30; minimum water-level depth below land surface, 46.49 ft, Oct. 4.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46.53	46.72	46.78	46.80	46.71	46.70	46.60	46.57	46.58	46.77	47.49	48.48
2	46.54	46.71	46.81	46.81	46.72	46.71	46.60	46.58	46.58	46.76	47.52	48.51
3	46.53	46.72	46.81	46.80	46.74	46.68	46.61	46.57	46.59	46.80	47.55	48.55
4	46.55	46.72	46.81	46.79	46.75	46.68	46.62	46.54	46.59	46.81	47.58	48.57
5	46.56	46.72	46.81	46.83	46.75	46.68	46.64	46.56	46.59	46.83	47.61	48.62
6	46.58	46.73	46.79	46.83	46.77	46.68	46.62	46.58	46.59	46.82	47.65	48.65
7	46.58	46.72	46.81	46.80	46.76	46.69	46.64	46.58	46.60	46.85	47.69	48.69
8	46.58	46.69	46.83	46.76	46.72	46.71	46.65	46.57	46.61	46.85	47.72	48.73
9	46.58	46.71	46.81	46.79	46.72	46.71	46.64	46.57	46.61	46.86	47.75	48.76
10	46.58	46.74	46.77	46.80	46.72	46.70	46.60	46.57	46.63	46.87	47.77	48.81
11	46.60	46.76	46.77	46.80	46.73	46.66	46.60	46.58	46.63	46.89	47.80	48.83
12	46.62	46.76	46.79	46.79	46.74	46.68	46.60	46.58	46.64	46.90	47.84	48.88
13	46.62	46.75	46.79	46.80	46.73	46.68	46.59	46.56	46.65	46.91	47.86	48.90
14	46.62	46.75	46.78	46.81	46.73	46.66	46.57	46.56	46.66	46.92	47.89	48.93
15	46.63	46.77	46.76	46.80	46.76	46.64	46.56	46.56	46.66	46.95	47.92	48.95
16	46.63	46.77	46.77	46.81	46.76	46.64	46.60	46.56	46.66	46.97	47.94	48.97
17	46.63	46.74	46.75	46.80	46.70	46.64	46.60	46.56	46.66	47.00	47.97	49.02
18	46.65	46.77	46.77	46.76	46.72	46.65	46.59	46.55	46.65	47.02	48.00	49.02
19	46.65	46.77	46.78	46.75	46.72	46.65	46.60	46.58	46.67	47.04	48.03	49.04
20	46.65	46.77	46.78	46.78	46.70	46.65	46.61	46.59	46.66	47.08	48.06	49.06
21	46.66	46.78	46.79	46.79	46.70	46.65	46.61	46.58	46.66	47.12	48.10	49.07
22	46.68	46.77	46.82	46.81	46.70	46.65	46.61	46.56	46.69	47.13	48.13	49.08
23	46.69	46.78	46.82	46.81	46.72	46.64	46.58	46.57	46.70	47.16	48.17	49.09
24	46.68	46.79	46.81	46.76	46.74	46.64	46.57	46.57	46.73	47.19	48.21	49.11
25	46.68	46.79	46.80	46.79	46.72	46.64	46.58	46.58	46.75	47.23	48.23	49.11
26	46.69	46.81	46.80	46.79	46.69	46.64	46.57	46.59	46.75	---	48.27	49.12
27	46.69	46.79	46.80	46.73	46.69	46.63	46.58	46.59	46.76	---	48.29	49.14
28	46.69	46.78	46.78	46.76	46.69	46.65	46.59	46.59	46.77	---	48.34	49.14
29	46.70	46.79	46.76	46.77	---	46.67	46.57	46.58	46.78	47.39	48.38	49.16
30	46.71	46.80	46.80	46.73	---	46.66	46.57	46.59	46.78	47.41	48.39	49.16
31	46.72	---	46.80	46.74	---	46.62	---	46.59	---	47.45	48.44	---
MEAN	46.63	46.76	46.79	46.79	46.73	46.66	46.60	46.57	46.66	---	47.95	48.91
MAX	46.72	46.81	46.83	46.83	46.77	46.71	46.65	46.59	46.78	---	48.44	49.16
MIN	46.53	46.69	46.75	46.73	46.69	46.62	46.56	46.54	46.58	---	47.49	48.48

HOLT COUNTY—Continued

423730098560001. Local number 31N 14W 27DDD.

LOCATION.--Lat 42° 37'30", long 098° 56'00", SE 1/4 SE 1/4 SE 1/4 sec.27, T.31 N., R.14 W., Hydrologic Unit 10150007, 6 mi north from Atkinson on Route 11, then 2 mi east.

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 water level, 28.72 ft below land-surface datum, July 3, 1995; lowest, 43.30 ft below land-surface datum, Sept. 10, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 40.32 ft, Sept. 12, 13, 14, 15, 16; minimum water-level depth below land surface, 35.69 ft, on several days.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37.07	36.70	36.44	36.23	36.05	35.92	35.81	35.74	35.82	35.96	38.14	39.96
2	37.06	36.69	36.43	36.23	36.04	35.92	35.81	35.74	35.85	36.04	38.20	40.02
3	37.04	36.68	36.43	36.22	36.04	35.91	35.80	35.74	35.88	36.13	38.27	40.08
4	37.02	36.67	36.43	36.21	36.04	35.90	35.81	35.73	35.89	36.17	38.34	40.09
5	37.01	36.65	36.42	36.20	36.04	35.90	35.81	35.72	35.90	36.18	38.42	40.11
6	36.99	36.64	36.41	36.21	36.04	35.89	35.81	35.73	35.90	36.20	38.49	40.12
7	36.98	36.63	36.40	36.20	36.04	35.90	35.80	35.73	35.89	36.22	38.57	40.16
8	36.97	36.62	36.39	36.19	36.02	35.90	35.81	35.73	35.89	36.29	38.64	40.21
9	36.95	36.61	36.39	36.18	36.02	35.91	35.81	35.71	35.88	36.36	38.72	40.27
10	36.94	36.60	36.38	36.18	36.00	35.91	35.79	35.71	35.86	36.43	38.73	40.30
11	36.92	36.59	36.36	36.18	36.00	35.89	35.78	35.72	35.86	36.51	38.74	40.31
12	36.91	36.59	36.36	36.17	36.00	35.88	35.78	35.72	35.85	36.59	38.75	40.32
13	36.90	36.59	36.35	36.16	36.00	35.89	35.77	35.72	35.85	36.68	38.79	40.32
14	36.89	36.57	36.34	36.16	35.99	35.88	35.77	35.71	35.88	36.77	38.85	40.32
15	36.88	36.57	36.34	36.16	36.00	35.87	35.77	35.70	35.93	36.85	38.92	40.32
16	36.87	36.56	36.33	36.15	36.00	35.86	35.77	35.70	36.01	36.95	38.98	40.32
17	36.85	36.55	36.32	36.15	35.98	35.86	35.77	35.70	36.06	37.04	39.04	40.31
18	36.83	36.54	36.30	36.14	35.97	35.85	35.77	35.70	36.08	37.13	39.09	40.30
19	36.82	36.54	36.30	36.13	35.97	35.85	35.76	35.71	36.09	37.21	39.14	40.30
20	36.81	36.53	36.30	36.12	35.96	35.85	35.76	35.72	36.09	37.31	39.19	40.30
21	36.80	36.52	36.29	36.12	35.96	35.85	35.76	35.71	36.08	37.39	39.25	40.29
22	36.79	36.52	36.29	36.12	35.95	35.85	35.76	35.70	36.06	37.49	39.32	40.28
23	36.79	36.50	36.29	36.12	35.95	35.84	35.75	35.69	36.05	37.57	39.39	40.26
24	36.78	36.50	36.28	36.11	35.95	35.84	35.74	35.69	36.03	37.65	39.46	40.24
25	36.77	36.50	36.28	36.10	35.95	35.84	35.74	35.69	36.01	37.73	39.53	40.22
26	36.75	36.49	36.27	36.10	35.94	35.84	35.74	35.69	36.01	37.81	39.60	40.20
27	36.74	36.49	36.26	36.09	35.93	35.83	35.73	35.69	35.99	37.87	39.66	40.18
28	36.73	36.48	36.25	36.08	35.92	35.83	35.73	35.69	35.97	37.88	39.72	40.16
29	36.72	36.47	36.24	36.08	---	35.84	35.73	35.70	35.96	37.92	39.76	40.13
30	36.71	36.45	36.24	36.07	---	35.84	35.73	35.74	35.94	38.00	39.82	40.12
31	36.71	---	36.24	36.06	---	35.83	---	35.79	---	38.06	39.90	---
MEAN	36.87	36.57	36.33	36.15	35.99	35.87	35.77	35.71	35.95	36.98	39.01	40.22
MAX	37.07	36.70	36.44	36.23	36.05	35.92	35.81	35.79	36.09	38.06	39.90	40.32
MIN	36.71	36.45	36.24	36.06	35.92	35.83	35.73	35.69	35.82	35.96	38.14	39.96

HOOKER COUNTY

420204101200502. Local number 24N 35W 23DC2.

LOCATION.--Lat 42° 02'04", long 101° 20'05", SW 1/4 SE 1/4 sec.23, T.24 N., R.35 W., Hydrologic Unit 10210001, Approximately 5.2 mi west of Heclaon the south side of State Highway 2.

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 water level, 3.64 ft below land-surface datum, April 29-30, 2001; lowest, 8.26 ft below land-surface datum, Nov. 2, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 8.26 ft, Nov. 2; minimum water-level depth below land surface, 4.01 ft, May 12, 19.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.86	8.25	6.27	---	---	---	5.19	5.08	4.97	5.25	---	7.55
2	7.87	8.26	6.26	---	---	---	5.22	5.00	4.99	5.28	---	7.59
3	7.88	8.21	6.26	---	---	---	5.27	4.95	5.01	5.29	---	7.60
4	7.90	7.80	6.24	---	---	---	5.31	4.79	5.03	5.28	---	7.64
5	7.92	7.57	6.23	---	---	---	5.32	4.54	5.04	5.28	6.76	7.66
6	7.94	7.45	6.21	---	---	---	5.33	4.49	5.07	5.32	6.80	7.69
7	7.95	7.33	6.18	---	---	---	5.37	4.45	5.06	5.38	6.84	7.71
8	7.97	7.21	6.15	---	---	5.35	5.37	4.40	5.03	5.37	6.88	7.73
9	7.98	7.10	6.12	---	---	5.31	5.25	4.34	5.06	5.42	6.90	7.76
10	7.99	7.01	6.09	---	---	5.29	5.17	4.30	5.09	5.44	6.86	7.78
11	8.01	6.94	6.07	---	---	5.29	5.17	4.11	5.09	5.46	6.92	7.80
12	8.03	6.88	6.06	---	---	5.33	5.14	4.07	5.11	5.46	6.96	7.82
13	8.04	6.81	---	---	---	5.35	5.13	4.17	5.09	5.47	6.99	7.85
14	8.06	6.75	---	---	---	5.33	5.15	4.21	5.01	5.53	7.02	7.87
15	8.07	6.70	---	---	---	5.34	5.16	4.26	5.02	5.59	7.05	7.89
16	8.08	6.66	---	---	---	5.34	5.22	4.32	5.04	5.67	7.07	7.91
17	8.09	6.62	---	---	---	5.32	5.22	4.40	5.06	5.76	7.11	7.95
18	8.11	6.59	---	---	---	5.30	5.20	4.47	5.08	5.84	7.15	7.96
19	8.12	6.56	---	---	---	5.26	5.18	4.18	5.10	5.87	7.18	7.99
20	8.14	6.55	---	---	---	5.19	5.22	4.30	5.09	5.94	7.22	8.02
21	8.15	6.52	---	---	---	5.17	5.22	4.44	5.10	6.07	7.25	8.03
22	8.17	6.49	---	---	---	5.17	5.21	4.54	5.11	6.13	7.28	8.05
23	8.18	6.45	---	---	---	5.17	5.21	4.60	5.10	6.14	7.31	8.06
24	8.17	6.43	---	---	---	5.18	5.24	4.66	5.12	6.11	7.35	8.08
25	8.17	6.40	---	---	---	5.19	5.25	4.71	5.14	6.29	7.38	8.09
26	8.18	6.37	---	---	---	5.18	5.27	4.76	5.15	6.40	7.41	8.11
27	8.19	6.33	---	---	---	5.18	5.30	4.81	5.18	6.44	7.43	8.13
28	8.20	6.31	---	---	---	5.21	5.31	4.85	5.21	6.47	7.45	8.15
29	8.21	6.30	---	---	---	5.24	5.31	4.87	5.23	---	7.49	8.17
30	8.23	6.29	---	---	---	5.24	5.23	4.93	5.24	---	7.51	8.19
31	8.24	---	---	---	---	5.20	---	4.94	---	---	7.53	---
MEAN	8.07	6.90	---	---	---	---	5.24	4.55	5.09	---	---	7.89
MAX	8.24	8.26	---	---	---	---	5.37	5.08	5.24	---	---	8.19
MIN	7.86	6.29	---	---	---	---	5.13	4.07	4.97	---	---	7.55

KEARNEY COUNTY

402625098594501. Local number 6N 15W 34DC.

LOCATION.--Lat 40° 26'16", long 098° 59'40", SW 1/4 SE 1/4 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.

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 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL
APR 24	66.78

KIMBALL COUNTY

411416103361101. Local number 15N 55W 26CCC.

LOCATION.--Lat 41° 14'10", long 103° 36'19", SW 1/4 SW 1/4 SW 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.

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, 39.82 ft below land-surface datum, Jan. 2, 1936; lowest, 55.43 ft below land-surface datum, April 4, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 04	55.43	APR 29	40.6

LANCASTER COUNTY

403929096401001. Local number 8N 7E 18DDB.

LOCATION.--Lat 40° 39'29", long 096° 40'10", NW 1/4 SE 1/4 SE 1/4 sec.18, T.8 N., R.7 E., Hydrologic Unit 10200203, 0.6 mi west of Roca.

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 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 14	12.38	SEP 29	13.39

LANCASTER COUNTY—Continued

403833096385501. Local number 8N 7E 20DDA.

LOCATION.--Lat 40° 38'33", long 096° 38'55", NE 1/4 SE 1/4 SE 1/4 sec.20, T.8 N., R.7 E., Hydrologic Unit 10200203, 0.5 mi east and 1.1 mi south of Roca.

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, 13.39 ft below land-surface datum, Sept. 29, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 14	8.05	SEP 29	13.39

404706096413001. Local number 10N 6E 36CDD.

LOCATION.--Lat 40° 47'06", long 096° 41'30", SE 1/4 SE 1/4 SW 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.

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.

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 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	46.96	APR 15	46.60	SEP 29	47.26

MC PHERSON COUNTY

413130100531201. Local number 18N 31W 16DD.

LOCATION.--Lat 41° 31'30", long 100° 53'18", SE 1/4 SE 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.

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, 103.93 ft below land-surface datum, May 28, 2003; lowest, 112.25 ft below land-surface datum, November 14, 1986.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL
MAY 28	103.93

NUCKOLLS COUNTY

400240098111301. Local number 1N 8W 23AB.

LOCATION.--Lat 40° 02'40", long 098° 11'13", NW 1/4 NE 1/4 sec.23, T.1 N., R.8 W., Hydrologic Unit 10250016, 0.5 mi south and 0.5 mi west of Bostwick.

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 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL
MAY 02	4.07

PHELPS COUNTY

403123099261501. Local number 6N 19W 2AA.

LOCATION.--Lat 40° 31'28", long 099° 26'13", NE 1/4 NE 1/4 sec.2, T.6 N., R.19 W., Hydrologic Unit 10200101, 10 mi east of Bertrand.

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 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 11	39.8	APR 24	40.88

PLATTE COUNTY

412955097192001. Local number 18N 1E 28CD.

LOCATION.--Lat 41° 29'55", long 097° 19'20", SE 1/4 SW 1/4 sec.28, T.18 N., R.1 E., Hydrologic Unit 10200201, 3 mi south and 8.5 mi east of Platte Center.

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 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL
APR 28	66.74

SALINE COUNTY

403855097072501. Local number 8N 3E 19ADA.

LOCATION.--Lat 40° 38'55", long 097° 07'25", NE 1/4 SE 1/4 NE 1/4 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.

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 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	101.62	JAN 13	100.51	APR 14	99.48	JUN 05	99.39	SEP 02	104.80		
NOV 06	101.42	FEB 17	99.85	22	99.48	JUL 08	100.43				
DEC 03	101.30	MAR 06	99.63	MAY 12	99.86	AUG 04	103.41				

WATER YEAR 2003 HIGHEST 99.39 JUN 05, 2003 LOWEST 104.80 SEP 02, 2003

SARPY COUNTY

410308096190701. Local number 13N 10E 32DBBA.

LOCATION.--Lat 41° 03'08", long 096° 19'07", NE 1/4 NW 1/4 NW 1/4 SE 1/4 sec.32, T.13N., R.10E., 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.

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 water level, +2.13 ft above land-surface datum, July 25, 1993; lowest, 7.70 ft below land-surface datum, Nov. 4-5, 1993.

EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 5.55 ft, Sept. 2; minimum water-level depth below land surface, 1.63 ft, May 6.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.66	4.22	4.21	4.42	3.73	4.69	3.86	3.75	4.17	4.02	5.11	5.50
2	4.48	4.33	4.49	4.37	3.66	4.48	4.04	3.01	4.21	4.20	5.15	5.55
3	4.62	4.30	4.36	4.27	3.38	4.29	4.18	3.18	4.28	4.21	5.13	5.41
4	4.43	4.27	4.26	4.18	3.33	4.09	4.18	3.33	4.35	4.41	5.15	5.45
5	4.41	4.37	4.70	4.09	3.19	4.10	4.15	3.19	4.18	4.51	5.16	5.35
6	4.35	4.28	4.86	4.11	3.12	4.31	4.20	2.11	4.20	4.39	5.18	5.39
7	4.38	4.39	4.85	4.24	3.02	4.22	4.26	2.58	4.21	4.35	5.11	---
8	4.33	4.24	4.26	4.23	3.13	4.06	4.00	2.95	3.98	3.98	5.11	5.31
9	4.31	4.25	4.31	4.11	3.33	3.57	4.02	3.04	3.99	4.18	5.17	5.32
10	4.40	4.28	4.34	4.06	3.37	3.47	4.06	3.16	4.02	4.31	5.19	5.33
11	4.36	4.47	4.34	4.39	3.51	3.86	3.94	3.07	4.07	4.37	5.20	5.32
12	4.39	4.44	4.16	4.81	3.69	3.93	4.00	3.22	3.63	4.40	5.21	5.00
13	4.51	4.45	4.25	4.82	3.62	3.80	3.97	3.11	3.76	4.49	5.22	4.71
14	4.52	4.36	4.27	4.33	3.41	3.62	3.91	3.28	3.95	4.55	5.22	4.21
15	4.56	4.24	4.23	4.36	3.41	3.43	3.96	3.30	3.97	4.64	5.10	4.08
16	4.53	4.38	4.22	4.72	3.31	3.58	4.34	3.25	4.24	4.69	5.12	4.39
17	4.66	4.59	4.19	4.90	3.28	3.83	4.33	3.40	4.19	4.83	5.21	4.63
18	4.68	4.58	4.14	4.90	3.14	3.94	4.03	3.55	4.31	4.90	5.26	4.79
19	4.36	4.36	4.15	4.80	3.00	3.98	4.04	3.65	3.98	4.93	5.28	4.80
20	4.45	4.39	4.11	4.76	2.95	4.02	4.00	3.68	4.20	4.98	5.19	4.84
21	4.50	4.45	4.11	4.64	2.81	3.95	3.83	3.52	4.21	5.02	5.14	4.87
22	4.50	4.29	4.22	4.51	3.15	3.95	3.83	3.71	4.23	5.03	5.19	4.91
23	4.44	4.37	4.53	4.44	3.53	3.93	3.82	3.81	4.11	5.02	5.21	4.88
24	4.47	4.32	4.53	4.15	4.11	4.00	3.86	3.89	4.20	4.98	5.31	4.82
25	4.47	4.39	4.57	4.16	4.67	3.91	3.94	3.93	4.32	5.04	5.32	4.88
26	4.35	4.42	4.69	4.09	4.76	4.10	3.97	3.96	4.03	5.06	5.37	4.88
27	4.35	4.28	4.80	3.81	4.81	4.15	3.93	4.04	4.01	5.06	5.33	4.89
28	4.37	4.41	4.81	3.74	4.86	4.13	3.76	4.03	4.15	5.11	5.30	4.95
29	4.38	4.43	4.65	3.86	---	4.03	3.79	3.89	3.90	5.13	5.25	4.93
30	4.37	4.39	4.56	3.94	---	4.00	3.75	3.98	3.90	5.13	5.35	4.89
31	4.35	---	4.46	3.92	---	3.99	---	4.03	---	5.00	5.39	---
MEAN	4.45	4.36	4.41	4.33	3.55	3.98	4.00	3.44	4.10	4.67	5.21	---
MAX	4.68	4.59	4.86	4.90	4.86	4.69	4.34	4.04	4.35	5.13	5.39	---
MIN	4.31	4.22	4.11	3.74	2.81	3.43	3.75	2.11	3.63	3.98	5.10	---

SAUNDERS COUNTY

410558096210601. Local number 13N 9E 13ADBA.

LOCATION.--Lat 41° 05'58", long 096° 21'06", NE 1/4 NW 1/4 SE 1/4 NE 1/4 sec.13, T.13 N., R.9E., Hydrologic Unit 10200202, approximately 3.75 mi north and 0.85 mi east of Ashland.

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 water level measured, 6.77 ft below land-surface datum, Mar 13, 1993; lowest, 14.95 ft below land-surface datum, June 2, 2003.

EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 14.95 ft, June 2; minimum water-level depth below land surface, 11.63 ft, Mar. 18.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.33	12.79	12.69	12.82	12.46	11.86	12.18	12.80	14.94	12.95	13.21	13.45
2	13.31	12.77	12.74	12.82	12.44	11.85	12.19	12.79	14.95	12.89	13.33	13.48
3	13.25	12.78	12.74	12.81	12.44	11.81	12.19	12.80	14.90	12.84	13.42	13.45
4	13.20	12.78	12.75	12.78	12.42	11.81	12.20	12.80	14.77	12.97	13.49	13.36
5	13.14	12.75	12.75	12.77	12.40	11.79	12.19	12.76	14.60	13.06	13.53	13.30
6	13.10	12.74	12.76	12.76	12.39	11.77	12.19	12.73	14.36	13.09	13.50	13.26
7	13.10	12.72	12.78	12.75	12.37	11.77	12.18	12.68	14.10	13.13	13.40	13.36
8	13.09	12.68	12.79	12.75	12.35	11.76	12.24	12.64	13.91	13.08	13.32	13.39
9	13.09	12.66	12.78	12.77	12.35	11.76	12.28	12.51	13.83	13.01	13.26	13.35
10	13.09	12.66	12.78	12.78	12.33	11.74	12.34	12.43	13.67	12.93	13.37	13.23
11	13.08	12.65	12.80	12.78	12.31	11.72	12.40	12.40	13.46	12.92	13.41	13.19
12	13.08	12.65	12.81	12.78	12.31	11.72	12.45	12.40	13.24	13.05	13.39	13.15
13	13.07	12.63	12.80	12.78	12.30	11.71	12.50	12.33	13.04	13.16	13.36	13.20
14	13.05	12.61	12.81	12.77	12.26	11.70	12.55	12.26	12.90	13.18	13.31	13.29
15	13.05	12.60	12.81	12.75	12.20	11.68	12.58	12.10	12.92	13.14	13.28	13.35
16	13.04	12.59	12.82	12.71	12.14	11.66	12.62	11.97	12.93	13.07	13.22	13.34
17	13.01	12.56	12.82	12.68	12.11	11.65	12.64	11.90	12.86	13.07	13.25	13.25
18	12.99	12.58	12.83	12.65	12.09	11.67	12.67	11.99	12.78	13.09	13.33	13.16
19	12.99	12.59	12.84	12.64	12.08	11.72	12.70	12.01	12.71	13.20	13.35	13.26
20	12.97	12.60	12.85	12.62	12.05	11.77	12.73	11.94	12.68	13.27	13.27	13.34
21	12.96	12.59	12.86	12.61	12.02	11.84	12.77	12.86	12.78	13.30	13.19	13.38
22	12.95	12.59	12.86	12.61	12.00	11.88	12.79	13.42	12.86	13.27	13.15	13.41
23	12.95	12.59	12.84	12.58	11.98	11.90	12.81	13.67	12.88	13.22	13.12	13.43
24	12.92	12.60	12.82	12.56	11.95	11.95	12.82	13.90	12.80	13.17	13.23	13.39
25	12.89	12.61	12.82	12.54	11.93	12.02	12.84	14.10	12.71	13.14	13.27	13.27
26	12.88	12.63	12.83	12.54	11.90	12.06	12.86	14.28	12.66	13.26	13.27	13.16
27	12.87	12.63	12.83	12.52	11.89	12.11	12.88	14.43	12.67	13.34	13.25	13.12
28	12.84	12.65	12.81	12.51	11.88	12.15	12.90	14.57	12.82	13.36	13.21	13.25
29	12.82	12.67	12.80	12.50	---	12.16	12.90	14.67	12.94	13.34	13.20	13.28
30	12.82	12.69	12.81	12.49	---	12.16	12.83	14.77	12.97	13.27	13.31	13.25
31	12.79	---	12.81	12.47	---	12.16	---	14.86	---	13.22	13.39	---
MEAN	13.02	12.65	12.80	12.67	12.19	11.85	12.55	13.02	13.39	13.13	13.31	13.30
MAX	13.33	12.79	12.86	12.82	12.46	12.16	12.90	14.86	14.95	13.36	13.53	13.48
MIN	12.79	12.56	12.69	12.47	11.88	11.65	12.18	11.90	12.66	12.84	13.12	13.12

SAUNDERS COUNTY—Continued

410427096202501. Local number 13N 10E 19CDDD.

LOCATION.--Lat 41° 04'27", long 096° 20'25", SE 1/4 SE 1/4 SE 1/4 SW 1/4 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.

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 water level measured, +0.18 ft above land-surface datum, July 10, 1993; lowest, 17.38 ft below land-surface datum, Oct. 27, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 20.74 ft, on several days; minimum water-level depth below land surface, 6.97 ft, Feb. 23.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.50	8.85	8.63	8.83	8.11	8.11	7.70	9.23	9.46	9.01	11.30	11.79
2	10.46	8.83	8.79	8.87	8.03	8.12	7.81	9.11	9.50	9.08	11.33	11.79
3	10.44	8.77	8.76	8.84	7.92	7.99	7.90	9.19	9.44	9.10	11.41	11.66
4	10.35	8.74	8.65	8.84	7.86	7.91	7.92	9.35	9.39	9.17	11.52	11.55
5	10.19	8.72	8.86	8.76	7.79	7.80	7.93	9.33	9.37	9.28	11.55	11.47
6	10.05	8.69	9.01	8.78	7.69	7.82	7.92	8.83	9.35	9.36	11.62	11.56
7	9.92	8.71	9.01	8.77	7.64	7.92	7.85	8.48	9.32	9.35	11.70	11.73
8	9.79	8.65	8.75	8.73	7.58	7.94	7.74	8.64	9.18	9.19	11.69	11.81
9	9.92	8.65	8.73	8.73	7.61	7.91	7.72	8.70	9.10	9.27	11.50	11.85
10	10.00	8.73	8.68	8.77	7.66	7.87	7.72	8.73	9.03	9.34	11.46	11.85
11	10.09	8.85	8.66	8.91	7.67	7.81	7.76	8.65	8.99	9.34	11.53	11.73
12	10.13	8.86	8.60	9.13	7.76	7.77	7.84	8.59	8.73	9.40	11.52	11.63
13	10.01	8.87	8.60	9.19	7.72	7.64	7.85	8.62	8.86	9.57	11.39	11.42
14	9.88	8.84	8.58	9.03	7.57	7.55	7.94	8.70	9.06	9.74	11.37	11.11
15	9.78	8.78	8.55	9.00	7.53	7.44	8.08	8.77	9.26	9.80	11.25	10.84
16	9.70	8.80	8.54	8.99	7.43	7.40	8.26	8.94	9.44	9.79	11.23	10.69
17	9.67	8.92	8.51	8.75	7.37	7.57	8.26	9.07	9.47	9.81	11.38	10.70
18	9.69	8.93	8.49	8.67	7.30	7.69	8.38	9.18	9.43	9.91	11.54	10.86
19	9.62	8.81	8.52	8.63	7.23	7.72	8.57	9.28	9.31	9.94	11.56	10.86
20	9.67	8.77	8.47	8.60	7.13	7.69	8.71	9.31	9.21	10.03	11.49	10.75
21	9.70	8.78	8.46	8.58	7.06	7.65	8.90	9.31	9.18	10.15	11.35	10.67
22	9.73	8.71	8.53	8.54	7.12	7.66	9.08	9.29	9.21	10.19	11.25	10.62
23	9.66	8.75	8.68	8.51	7.25	7.61	9.23	9.21	9.25	10.29	11.24	10.56
24	9.53	8.72	8.69	8.42	7.59	7.67	9.30	9.19	9.26	10.45	11.48	10.49
25	---	8.73	8.58	8.40	7.86	7.67	9.30	9.20	9.24	10.65	11.63	10.43
26	---	8.79	8.65	8.40	7.99	7.73	9.23	9.21	9.14	10.85	11.67	10.59
27	---	8.73	8.72	8.29	8.08	7.78	9.15	9.25	9.09	11.07	11.61	10.73
28	---	8.72	8.72	8.21	8.14	7.79	9.04	9.27	9.06	11.29	11.50	10.80
29	---	8.74	8.69	8.22	---	7.81	9.05	9.09	9.04	11.34	11.40	10.86
30	8.93	8.73	8.79	8.21	---	7.80	9.23	9.23	9.02	11.35	11.51	10.97
31	8.95	---	8.80	8.18	---	7.76	---	9.32	---	11.28	11.69	---
MEAN	---	8.77	8.67	8.67	7.63	7.76	8.38	9.04	9.21	9.95	11.47	11.15
MAX	---	8.93	9.01	9.19	8.14	8.12	9.30	9.35	9.50	11.35	11.70	11.85
MIN	---	8.65	8.46	8.18	7.06	7.40	7.70	8.48	8.73	9.01	11.23	10.43

SAUNDERS COUNTY—Continued

410340096202201. Local number 13N 10E 30CDDA.

LOCATION.--Lat 41° 03'40", long 096° 20'22", NE 1/4 SE 1/4 SE 1/4 SW 1/4 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.

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,

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, +4.13 ft above land-surface datum, July 24, 1993; lowest, 26.00 ft below land-surface datum, Oct. 11, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 25.38 ft, July 24, 25; minimum water-level depth below land surface, 3.31 ft, Feb. 26.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.87	13.20	10.49	8.30	5.16	3.41	4.07	9.50	8.71	8.99	17.85	20.34
2	14.94	13.16	10.38	8.35	5.00	3.53	4.33	9.16	8.80	9.51	17.54	20.10
3	14.83	13.47	10.37	8.29	4.88	3.46	4.56	8.87	8.72	10.05	17.54	20.27
4	14.48	13.83	10.29	8.04	4.82	3.51	4.59	8.61	8.92	10.57	17.69	20.49
5	14.21	14.00	9.96	7.89	4.78	3.55	4.61	9.01	9.31	10.71	17.83	20.68
6	13.86	13.96	9.84	7.75	4.61	3.51	4.56	9.26	9.32	10.76	17.94	20.74
7	13.77	13.80	9.88	7.61	4.56	3.59	4.42	9.24	9.25	11.22	18.03	20.63
8	14.08	13.70	9.91	7.45	4.42	3.61	4.40	9.10	9.42	11.33	18.30	20.70
9	14.28	13.66	9.88	7.30	4.37	3.63	4.33	8.89	9.77	11.66	18.63	20.69
10	14.48	13.30	9.79	7.21	4.27	3.58	4.35	8.70	10.14	12.06	18.89	20.59
11	14.67	12.97	9.72	7.06	4.21	3.49	4.46	8.36	10.49	12.58	19.13	20.35
12	14.68	12.72	9.61	6.92	4.20	3.51	4.53	8.02	10.83	13.03	19.22	20.09
13	14.25	12.66	9.47	6.79	4.11	3.58	4.56	7.89	10.83	13.33	19.31	19.82
14	13.68	12.67	9.34	6.64	4.02	3.49	4.60	7.66	10.83	13.70	19.66	19.55
15	13.22	12.64	9.21	6.54	3.96	3.49	4.74	7.53	10.80	14.32	19.85	19.34
16	13.18	12.54	9.07	6.42	3.90	3.56	5.20	7.47	10.54	14.87	20.12	19.32
17	13.15	12.39	8.94	6.34	3.79	3.62	5.62	7.40	10.64	15.36	20.36	19.57
18	13.02	12.22	8.79	6.21	3.73	3.71	6.15	7.37	11.06	15.56	20.45	19.71
19	12.91	12.08	8.69	6.11	3.70	3.72	6.60	7.45	11.34	15.71	20.45	19.84
20	12.76	11.93	8.60	5.98	3.61	3.67	7.10	7.34	11.30	15.70	20.19	19.84
21	12.60	11.80	8.51	5.87	3.51	3.57	7.61	7.36	10.78	15.64	20.09	20.02
22	12.49	11.66	8.45	5.77	3.47	3.50	8.02	7.38	10.09	15.63	19.57	20.44
23	12.67	11.48	8.41	5.69	3.45	3.44	8.42	6.83	9.92	15.76	19.54	20.79
24	12.83	11.33	8.34	5.57	3.45	3.41	8.87	6.69	9.66	15.98	19.54	21.04
25	13.03	11.24	8.26	5.50	3.40	3.43	9.16	6.72	9.74	16.36	19.77	21.17
26	13.16	11.08	8.22	5.52	3.34	3.47	9.43	6.95	9.75	16.67	20.08	21.07
27	13.14	10.95	8.15	5.70	3.38	3.60	9.66	7.10	9.50	16.85	20.21	20.63
28	13.25	10.77	8.14	5.79	3.42	3.79	9.92	7.31	9.47	16.84	20.24	20.16
29	13.25	10.64	8.14	5.66	---	3.94	9.97	7.60	9.23	17.01	20.22	19.75
30	13.18	10.54	8.27	5.41	---	3.99	9.81	7.97	8.94	17.44	20.33	19.38
31	13.19	---	8.33	5.25	---	4.00	---	8.41	---	17.85	20.39	---
MEAN	13.62	12.41	9.14	6.61	4.05	3.59	6.29	7.97	9.94	13.97	19.32	20.24
MAX	14.94	14.00	10.49	8.35	5.16	4.00	9.97	9.50	11.34	17.85	20.45	21.17
MIN	12.49	10.54	8.14	5.25	3.34	3.41	4.07	6.69	8.71	8.99	17.54	19.32

SAUNDERS COUNTY—Continued

410303096192901. Local number 13N 10E 32CABC.

LOCATION.--Lat 41° 03'03", long 096° 19'29", SW 1/4 NW 1/4 NE 1/4 SW 1/4 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.

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 water level measured, 0.18 ft below land-surface datum, July 25, 1993; lowest, 11.81 ft below land-surface datum, Oct 23, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 9.70 ft, Sept. 8; minimum water-level depth below land surface, 5.79 ft, May 6.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.03	7.53	7.69	8.35	7.54	7.57	7.29	7.31	8.39	7.39	8.86	9.31
2	7.90	7.61	7.39	7.99	7.54	7.59	7.92	6.75	8.48	7.52	8.92	9.23
3	7.92	7.58	7.29	7.56	7.47	7.52	8.19	7.28	8.47	7.43	8.95	9.01
4	7.76	7.59	7.92	7.47	7.45	7.51	8.22	7.41	8.39	7.49	9.00	9.01
5	7.71	7.66	8.19	7.40	7.38	7.28	7.66	7.05	8.35	7.78	9.01	9.39
6	8.16	7.62	7.81	7.76	7.32	7.34	7.69	6.14	8.19	7.99	9.05	9.57
7	8.34	7.70	7.62	8.12	7.27	7.49	7.97	6.58	7.76	8.05	9.04	9.67
8	7.83	7.62	7.26	8.15	7.27	7.61	8.21	6.36	7.53	7.87	9.02	9.70
9	7.65	7.63	7.31	8.08	7.32	7.45	7.82	6.48	7.94	7.97	9.11	9.56
10	7.70	7.64	7.35	8.00	7.35	7.45	7.59	6.56	7.99	8.04	9.19	9.26
11	7.66	7.77	7.35	8.15	7.43	7.57	7.59	6.58	8.03	8.11	9.23	8.93
12	7.75	7.75	7.24	8.39	7.54	7.56	7.88	6.69	7.59	8.13	9.13	8.77
13	7.87	7.74	7.26	8.41	7.52	7.46	7.90	6.68	7.14	7.88	9.19	8.91
14	7.89	7.66	7.27	8.13	7.38	7.38	7.59	6.80	7.24	7.99	9.21	8.69
15	7.96	7.55	7.25	8.04	7.38	7.30	7.32	6.83	7.33	8.18	9.19	8.59
16	7.98	7.57	7.26	8.00	7.24	7.25	7.54	6.86	7.59	8.34	9.22	8.04
17	8.03	7.70	7.24	8.11	7.20	7.44	7.54	7.26	7.44	8.53	9.37	8.40
18	8.04	7.69	7.23	8.11	7.16	7.55	7.38	7.62	7.53	8.64	9.47	8.59
19	7.77	7.54	7.25	8.06	7.06	7.58	7.36	7.73	7.35	8.74	9.50	8.60
20	7.82	7.67	7.22	8.04	7.02	7.62	7.28	7.49	7.44	8.84	9.38	8.66
21	7.88	8.13	7.19	7.95	6.92	7.57	7.11	7.71	7.43	8.89	9.32	8.70
22	7.90	8.11	7.26	7.86	6.68	7.57	7.05	7.82	7.44	8.89	9.30	8.77
23	7.86	8.15	7.42	7.18	6.58	7.52	6.99	7.90	7.77	8.55	9.41	8.79
24	7.90	8.11	7.43	6.83	6.88	7.62	6.97	7.94	7.91	8.59	9.58	8.78
25	7.86	8.13	7.27	6.81	7.26	7.58	7.03	7.96	7.51	8.27	9.62	8.82
26	7.76	8.18	7.90	6.81	7.38	7.08	7.10	7.97	7.42	8.47	9.65	8.84
27	7.71	8.10	8.22	6.70	7.48	7.02	7.22	8.09	7.54	8.47	9.50	8.87
28	7.73	8.16	8.25	7.26	7.54	7.02	7.28	8.12	7.67	8.51	9.44	8.97
29	7.71	8.17	8.21	7.46	---	6.99	7.32	8.01	7.45	8.40	9.39	9.00
30	7.68	8.15	8.26	7.54	---	7.00	7.31	8.15	7.37	8.36	9.22	9.01
31	7.65	---	8.31	7.55	---	7.00	---	8.28	---	8.28	9.19	---
MEAN	7.85	7.81	7.55	7.75	7.27	7.40	7.51	7.30	7.72	8.21	9.25	8.95
MAX	8.34	8.18	8.31	8.41	7.54	7.62	8.22	8.28	8.48	8.89	9.65	9.70
MIN	7.65	7.53	7.19	6.70	6.58	6.99	6.97	6.14	7.14	7.39	8.86	8.04

SAUNDERS COUNTY—Continued

411005096281502. Local number 14N 8E 24ACD2.

LOCATION.--Lat 41° 10'05", long 096° 28'15", SE 1/4 SW 1/4 NE 1/4 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.

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 water level, 39.22 ft below land-surface datum, Mar. 31, 1988; lowest, 46.98 ft below land-surface datum, Sept. 25, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	43.14	DEC 05	43.15	FEB 20	43.20	APR 15	43.25	JUN 11	43.36	AUG 11	43.83
NOV 05	43.07	JAN 14	43.19	MAR 17	43.19	MAY 14	43.31	JUL 10	43.45	SEP 21	44.53

WATER YEAR 2003 HIGHEST 43.07 NOV 05, 2002 LOWEST 44.53 SEP 21, 2003

SCOTTS BLUFF COUNTY

415325103392801. Local number 22N 55W 11DDC.

LOCATION.--Lat 41° 53'25", long 103° 39'28", SW 1/4 SE 1/4 SE 1/4 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.

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 water level, 21.27 ft below land-surface datum, Sept. 9, 1986; lowest, 28.08 ft below land-surface datum, May 31, 1994.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05	26.33	NOV 25	25.96	FEB 20	26.17	APR 10	26.40	MAY 31	26.86	JUL 20	27.14
10	26.27	30	25.95	25	26.19	15	26.43	JUN 05	26.91	25	27.27
15	26.25	DEC 05	25.95	28	26.20	20	26.47	10	26.96	31	27.27
20	26.20	10	25.95	MAR 05	26.22	25	26.50	15	26.98	AUG 05	27.26
25	26.17	15	25.94	10	26.26	30	26.54	20	27.05	10	27.26
31	26.13	20	25.95	15	26.28	MAY 05	26.58	25	27.09	SEP 20	27.33
NOV 05	26.07	25	25.97	20	26.28	10	26.60	30	27.16	25	27.31
10	26.02	31	26.01	25	26.30	15	26.65	JUL 05	27.20	30	27.33
15	26.00	FEB 10	26.14	31	26.35	20	26.70	10	27.19		
20	25.99	15	26.15	APR 05	26.37	25	26.78	15	27.22		

WATER YEAR 2003 HIGHEST 25.94 DEC 15, 2002 LOWEST 27.33 SEP 20, 2003 SEP 30, 2003

SEWARD COUNTY

405406097115001. Local number 11N 2E 21DD.

LOCATION.--Lat 40° 54'06", long 097° 11'50", SE 1/4 SE 1/4 sec.21, T.11 N., R.2 E., Hydrologic Unit 10270201, 4.5 mi west of Seward.

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 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05	81.47	DEC 05	80.46	FEB 05	79.77	APR 09	79.66	JUN 05	79.87	AUG 05	85.18
09	81.42	10	80.44	10	79.78	10	79.70	09	79.76	10	85.77
10	81.42	15	80.23	15	79.76	15	79.56	10	79.80	11	85.80
15	81.34	20	80.04	20	79.80	20	79.46	15	79.77	15	86.21
20	81.15	25	80.19	25	79.84	22	79.66	20	79.73	20	86.22
25	81.12	31	80.08	28	79.77	25	79.45	25	79.56	25	86.15
31	80.92	JAN 05	80.12	MAR 03	79.65	30	79.45	30	79.59	31	86.40
NOV 05	80.80	10	80.10	05	79.66	MAY 05	79.36	JUL 05	79.91	SEP 05	86.47
10	80.50	13	80.07	10	79.76	10	79.35	09	80.36	10	86.15
15	80.56	15	80.12	15	79.66	12	79.36	10	80.76	15	85.81
20	80.56	20	79.97	20	79.50	15	79.44	15	82.22	16	85.70
25	80.55	25	80.03	25	79.59	20	79.56	20	83.32	20	85.45
30	80.48	31	79.85	31	79.70	25	79.52	25	84.10	25	85.13
DEC 02	80.40	FEB 04	79.72	APR 05	79.58	31	79.64	31	84.59	30	84.95

WATER YEAR 2003 HIGHEST 79.35 MAY 10, 2003 LOWEST 86.47 SEP 05, 2003

WEBSTER COUNTY

400423098314001. Local number 1N 11W 11AB.

LOCATION.--Lat 40° 04'23", long 098° 31'40", NW 1/4 NE 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.

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 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL
MAY 02	7.66

YORK COUNTY

405305097351503. Local number 11N 2W 31BA3.

LOCATION.--Lat 40° 53'05", long 097° 35'15", NE 1/4 NW 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.

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, 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 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	85.49	DEC 02	84.26	FEB 19	84.28	APR 09	84.30	JUN 10	84.59	AUG 06	101.29
NOV 07	83.83	JAN 08	84.14	MAR 12	83.81	MAY 12	84.04	JUL 01	88.19	SEP 16	89.93

WATER YEAR 2003 HIGHEST 83.81 MAR 12, 2003 LOWEST 101.29 AUG 06, 2003

NIOBRARA NATIONAL SCENIC RIVER WATER-QUALITY MONITORING—Continued

MISCELLANEOUS SURFACE-WATER QUALITY DATA

NIOBRARA NATIONAL SCENIC RIVER WATER-QUALITY MONITORING

COUNTIES.--Cherry and Keya Paha

MULTIPLE STATION ANALYSES

Station number	Station name	Latitude	Longitude	Date	Time	Barometric pressure, mm Hg (00025)
	CHERRY COUNTY					
06460800	NIOBRARA RIVER AT BORMAN BRIDGE NR VALENTINE, NE	42 51 08 N	100 31 16 W	06-03-03	0930	699
	NIOBRARA RIVER AT BORMAN BRIDGE NR VALENTINE, NE	42 51 08 N	100 31 16 W	06-25-03	1900	710
	NIOBRARA RIVER AT BORMAN BRIDGE NR VALENTINE, NE	42 51 08 N	100 31 16 W	07-08-03	1200	698
	NIOBRARA RIVER AT BORMAN BRIDGE NR VALENTINE, NE	42 51 08 N	100 31 16 W	08-20-03	1000	700
	NIOBRARA RIVER AT BORMAN BRIDGE NR VALENTINE, NE	42 51 08 N	100 31 16 W	09-09-03	1000	710
06461010	Minnechaduza Cr above Spring Cr	42 53 41 N	100 30 54 W	06-03-03	1300	--
	Minnechaduza Cr above Spring Cr	42 53 41 N	100 30 54 W	06-26-03	0800	703
	Minnechaduza Cr above Spring Cr	42 53 41 N	100 30 54 W	07-08-03	1400	698
	Minnechaduza Cr above Spring Cr	42 53 41 N	100 30 54 W	08-20-03	1230	710
	Minnechaduza Cr above Spring Cr	42 53 41 N	100 30 54 W	09-09-03	1330	710
06461500	NIOBRARA RIVER NEAR SPARKS, NEBR.	42 54 10 N	100 21 40 W	06-03-03	1500	700
	NIOBRARA RIVER NEAR SPARKS, NEBR.	42 54 10 N	100 21 40 W	06-26-03	1000	703
	NIOBRARA RIVER NEAR SPARKS, NEBR.	42 54 10 N	100 21 40 W	07-08-03	1500	698
	NIOBRARA RIVER NEAR SPARKS, NEBR.	42 54 10 N	100 21 40 W	08-20-03	1500	712
	NIOBRARA RIVER NEAR SPARKS, NEBR.	42 54 10 N	100 21 40 W	09-09-03	1500	710
06461600	NIOBRARA RIVER AT BREWER BRIDGE NR SPARKS, NE	42 52 34 N	100 15 59 W	06-04-03	0830	--
	KEYA PAHA COUNTY					
06462000	NIOBRARA RIVER NR NORDEN NEBR	42 47 13 N	100 02 06 W	06-04-03	1030	--
	NIOBRARA RIVER NR NORDEN NEBR	42 47 13 N	100 02 06 W	06-26-03	1200	706
	NIOBRARA RIVER NR NORDEN NEBR	42 47 13 N	100 02 06 W	07-08-03	1700	698
	NIOBRARA RIVER NR NORDEN NEBR	42 47 13 N	100 02 06 W	08-20-03	0900	710
	NIOBRARA RIVER NR NORDEN NEBR	42 47 13 N	100 02 06 W	09-10-03	0830	711

MULTIPLE STATION ANALYSES

Station number	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Sodium adsorption ratio (00931)	Sodium, percent (00932)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)
						CHERRY COUNTY						
06460800	8.3	93	8.3	210	17.0	16.8	84	0.4	17	0.52	--	<0.04
	8.3	94	8.2	200	18.5	17.5	80	0.4	15	0.70	--	<0.04
	7.8	102	8.1	215	27.0	24.5	94	0.4	16	0.56	--	<0.04
	7.8	106	8.0	199	19.8	26.0	87	0.4	15	0.22	--	<0.04
	8.8	100	7.9	198	20.0	18.0	86	0.4	15	0.15	--	<0.04
06461010	8.7	--	8.3	335	--	19.0	140	0.4	15	0.67	--	E.03
	8.3	91	8.1	304	19.0	16.2	130	0.4	14	0.74	0.08	0.07
	8.4	110	8.1	291	29.0	24.5	93	0.4	16	0.66	--	E.04
	9.7	127	8.4	281	29.5	25.2	130	0.4	14	0.52	--	<0.04
	9.7	122	8.4	294	20.0	23.2	120	0.4	15	0.40	--	<0.04
06461500	--	--	8.3	204	21.0	21.0	87	0.4	17	0.54	--	<0.04
	10.3	110	8.3	211	23.0	14.6	87	0.4	15	0.58	--	<0.04
	8.9	121	8.4	216	30.0	26.0	96	0.4	16	0.60	0.06	0.04
	10.2	137	8.3	201	30.0	26.8	89	0.4	15	0.26	--	<0.04
	10.9	139	8.7	229	22.0	24.0	87	0.4	15	0.18	--	<0.04
06461600	--	--	8.2	218	14.0	16.0	87	0.4	17	0.48	--	<0.04
						KEYA PAHA COUNTY						
06462000	--	--	8.0	198	19.0	18.5	90	0.4	16	0.52	--	<0.04
	8.7	99	8.2	215	25.0	17.6	93	0.4	15	0.63	--	<0.04
	8.1	111	8.3	221	30.0	27.0	95	0.4	15	0.66	--	<0.04
	8.1	100	8.1	205	24.0	22.2	92	0.4	14	0.28	--	<0.04
	8.6	101	8.1	206	20.2	20.2	89	0.4	15	0.21	--	<0.04

NIOBRARA NATIONAL SCENIC RIVER WATER-QUALITY MONITORING—Continued

MULTIPLE STATION ANALYSES

Station number	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, fltrd, mg/L (00607)	Organic nitrogen, water, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L (00660)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)
CHERRY COUNTY												
06460800	--	--	0.26	--	<0.008	--	--	0.178	0.06	0.166	0.43	0.78
	--	--	0.46	--	<0.008	--	--	0.285	0.09	0.23	0.67	1.2
	--	--	0.33	--	E.005	--	--	0.233	0.08	0.174	0.54	0.89
	--	--	0.24	--	<0.008	--	--	0.147	0.05	0.125	0.38	0.47
	--	--	0.26	--	E.004	--	--	0.129	0.04	0.081	0.40	0.41
06461010	3.05	0.69	0.70	0.039	0.012	--	--	0.408	0.13	0.184	1.2	1.4
	2.05	0.46	0.48	0.046	0.014	0.52	0.67	0.205	0.07	0.121	1.1	1.2
	3.32	0.75	0.77	0.049	0.015	--	--	0.362	0.12	0.168	1.2	1.4
	--	--	0.11	--	E.006	--	--	--	E.14	0.21	0.38	0.62
	0.478	0.11	0.12	0.026	0.008	--	--	0.334	0.11	0.172	0.36	0.51
06461500	--	--	0.21	--	E.004	--	--	0.166	0.05	0.176	0.37	0.75
	--	--	0.43	--	<0.008	--	--	0.270	0.09	0.19	0.67	1.0
	--	--	0.27	--	E.004	0.17	0.56	0.190	0.06	0.141	0.48	0.87
	--	--	0.18	--	<0.008	--	--	0.126	0.04	0.094	--	0.44
	--	--	0.19	--	E.004	--	--	0.123	0.04	0.076	0.30	0.37
06461600	--	--	0.27	--	<0.008	--	--	0.169	0.06	0.159	0.43	0.75
KEYA PAHA COUNTY												
06462000	--	--	0.23	--	<0.008	--	--	0.156	0.05	0.20	0.42	0.75
	--	--	0.50	--	<0.008	--	--	0.264	0.09	0.24	0.76	1.1
	--	--	0.21	--	<0.008	--	--	0.163	0.05	0.150	0.42	0.87
	--	--	0.18	--	<0.008	--	--	0.113	0.04	0.163	--	0.46
	--	--	0.23	--	E.004	--	--	0.107	0.04	0.171	0.36	0.44

MULTIPLE STATION ANALYSES

Station number	1,4-Dichlorobenzene water, fltrd, ug/L (34572)	1-Methylnaphthalene, water, fltrd, ug/L (62054)	2,6-Dimethylnaphthalene, water, fltrd, ug/L (62055)	2-Methylnaphthalene, water, fltrd, ug/L (62056)	3-beta-Coprostanol, water, fltrd, ug/L (62057)	3-Methyl-1H-indole, water, fltrd, ug/L (62058)	3-tert-Butyl-4-hydroxyanisole wat flt ug/L (62059)	4-Cumylphenol, water, fltrd, ug/L (62060)	4-Octylphenol, water, fltrd, ug/L (62061)	4-Nonylphenol, water, fltrd, ug/L (62085)	4-tert-Octylphenol, water, fltrd, ug/L (62062)	5-Methyl-1H-benzotriazole, wat flt ug/L (62063)
CHERRY COUNTY												
06460800	<0.5	<0.5	<0.5	<0.5	<2	M	<5	<1	<1	<5	<1	<2
	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	E1	<1	<2
	E.1	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	M	<1	<2
	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<5	<1	<2
	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<5	<1	<2
06461010	<0.5	<0.5	<0.5	<0.5	<2	M	<5	<1	<1	<6	<1	<2
	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<5	<1	<2
	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<5	<1	<2
	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<5	<1	<2
	<0.5	<0.5	<0.5	<0.5	<2	M	<5	<1	<1	<5	<1	<2
06461500	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<5	<1	<2
	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	E2	<1	<2
	E.1	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<5	<1	<2
	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<5	<1	<2
	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<5	<1	<2
06461600	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<5	<1	<2
KEYA PAHA COUNTY												
06462000	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<3	<1	<2
	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<5	<1	<2
	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<5	<1	<2
	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<5	<1	<2
	<0.5	<0.5	<0.5	<0.5	<2	<1	<5	<1	<1	<5	<1	<2

NIOBRARA NATIONAL SCENIC RIVER WATER-QUALITY MONITORING—Continued

MULTIPLE STATION ANALYSES

Station number	9,10-Anthraquinone water, fltrd, ug/L (62066)	Acetophenone water, fltrd, ug/L (62064)	AHTN, water, fltrd, ug/L (62065)	Anthracene, water, fltrd, ug/L (34221)	Benzo[a]pyrene, water, fltrd, ug/L (34248)	Benzophenone water, fltrd, ug/L (62067)	beta-Sitosterol, water, fltrd, ug/L (62068)	beta-Stigmastanol, water, fltrd, ug/L (62086)	Bisphenol A, water, fltrd, ug/L (62069)	Bromacil, water, fltrd, ug/L (04029)	Caffeine, water, fltrd, ug/L (50305)	Camphor water, fltrd, ug/L (62070)
CHERRY COUNTY												
06460800	<0.5	E.1	M	<0.5	<0.5	M	<2	<2	M	<0.5	M	<0.5
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<1	<0.5	<0.5	<0.5
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<1	<0.5	<0.5	<0.5
	<0.5	E.1	<0.5	<0.5	<0.5	E.1	<2	<2	<1	<0.5	<0.5	<0.5
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<1	<0.5	<0.5	M
06461010	<0.5	E.1	M	<0.5	<0.5	E.1	<2	<2	M	<0.5	M	M
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<1	<0.5	<0.5	<0.5
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<1	<0.5	M	<0.5
	<0.5	E.1	E.1	<0.5	<0.5	E.1	<2	<2	<1	<0.5	<0.5	<0.5
	<0.5	<0.5	M	<0.5	<0.5	M	<2	<2	<1	<0.5	M	M
06461500	<0.5	E.1	<0.5	<0.5	<0.5	M	<2	<2	M	<0.5	<0.5	M
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<1	<0.5	<0.5	<0.5
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<1	<0.5	<0.5	<0.5
	<0.5	<0.5	<0.5	<0.5	<0.5	E.1	<2	<2	<1	<0.5	<0.5	<0.5
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<1	<0.5	<0.5	<0.5
06461600	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<1	<0.5	<0.5	<0.5
KEYA PAHA COUNTY												
06462000	<0.5	<0.5	<0.5	<0.5	<0.5	M	<2	<2	M	<0.5	<0.5	M
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<1	<0.5	<0.5	<0.5
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<1	<0.5	<0.5	<0.5
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<1	<0.5	<0.5	<0.5
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	<1	<0.5	<0.5	<0.5

MULTIPLE STATION ANALYSES

Station number	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbazole, water, fltrd, ug/L (62071)	Chlorpyrifos water, fltrd, ug/L (38933)	Cholesterol, water, fltrd, ug/L (62072)	Cotinine, water, fltrd, ug/L (62005)	DEET, water, fltrd, ug/L (62082)	Diazinon, water, fltrd, ug/L (39572)	Diethoxynonylphenol, water, fltrd, ug/L (62083)	Diethoxyoctylphenol, water, fltrd ug/L (61705)	D-Limonene, water, fltrd, ug/L (62073)	Ethoxyoctylphenol, water, fltrd ug/L (61706)	Fluoranthene water, fltrd, ug/L (34377)
CHERRY COUNTY												
06460800	<1	<0.5	<0.5	<2	<1	M	<0.5	<5	<1	<0.5	<1	<0.5
	<1	<0.5	<0.5	<2	<1	<0.5	<0.5	<5	<1	<0.5	<1	<0.5
	<1	<0.5	<0.5	<2	<1	<0.5	<0.5	<5	<1	<0.5	<1	<0.5
	<1	<0.5	<0.5	<2	<1	E.1	<0.5	<5	<1	<0.5	<1	<0.5
	<1	<0.5	<0.5	<2	<1	M	<0.5	E8	<1	<0.5	<1	<0.5
06461010	<1	<0.5	<0.5	<2	<1	M	<0.5	<5	<1	<0.5	<1	<0.5
	<1	<0.5	<0.5	<2	<1	E.1	<0.5	<5	<1	<0.5	<1	<0.5
	<1	<0.5	<0.5	<2	<1	<0.5	<0.5	<5	<1	<0.5	<1	<0.5
	<1	<0.5	<0.5	<2	<1	E.1	<0.5	<5	<1	<0.5	<1	<0.5
	<1	M	<0.5	M	<1	M	<0.5	E6	<1	<0.5	<1	<0.5
06461500	<1	<0.5	<0.5	<2	<1	M	<0.5	<5	<1	<0.5	<1	<0.5
	<1	<0.5	<0.5	<2	<1	<0.5	<0.5	<5	<1	<0.5	<1	<0.5
	<1	<0.5	<0.5	<2	<1	<0.5	<0.5	<5	<1	<0.5	<1	<0.5
	<1	<0.5	<0.5	<2	<1	E.1	<0.5	<5	<1	<0.5	<1	<0.5
	<1	<0.5	<0.5	<2	<1	<0.5	<0.5	E2	<1	<0.5	<1	<0.5
06461600	<1	<0.5	<0.5	<2	<1	<0.5	<0.5	<5	<1	<0.5	<1	<0.5
KEYA PAHA COUNTY												
06462000	<0.041	<0.5	<0.005	<2	<1	<0.5	<0.005	<5	<1	<0.5	<1	<0.5
	<0.041	<0.5	<0.005	<2	<1	<0.5	<0.005	<5	<1	<0.5	<1	<0.5
	<0.041	<0.5	<0.005	<2	<1	<0.5	<0.005	<5	<1	<0.5	<1	<0.5
	<0.041	<0.5	<0.005	<2	<1	E.1	<0.005	<5	<1	<0.5	<1	<0.5
	<0.041	<0.5	<0.005	<2	<1	<0.5	<0.005	E2	<1	<0.5	<1	<0.5

NIOBRARA NATIONAL SCENIC RIVER WATER-QUALITY MONITORING—Continued

MULTIPLE STATION ANALYSES

Station number	HHCB, water, fltrd, ug/L (62075)	Indole, water, fltrd, ug/L (62076)	Isoborneol, water, fltrd, ug/L (62077)	Isophorone water, fltrd, ug/L (34409)	Isopropylbenzene water, fltrd, ug/L (62078)	Isoquinoline, water, fltrd, ug/L (62079)	Menthol water, fltrd, ug/L (62080)	Metalaxyl, water, fltrd, ug/L (50359)	Methyl salicylate, water, fltrd, ug/L (62081)	Metolachlor, water, fltrd, ug/L (39415)	Naphthalene, water, fltrd, ug/L (34443)	p-Cresol, water, fltrd, ug/L (62084)
CHERRY COUNTY												
06460800	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	E.2	<0.5	E.1	<0.5	M	<1
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	M	<0.5	<0.5	<1
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1
06461010	M	<0.5	<0.5	<0.5	<0.5	<0.5	E.1	<0.5	E.1	E.1	<0.5	<1
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	E.1	E.1	<0.5	<1
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	M	<0.5	<1
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	E.1	<0.5	E.1	E.1	<0.5	<1
	M	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	M	M	<0.5	<1
06461500	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	E.1	<0.5	E.1	<0.5	<0.5	<1
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	M	<0.5	<0.5	<1
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1
06461600	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	M	<0.5	<0.5	<1
KEYA PAHA COUNTY												
06462000	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	M	E.004	<0.5	<1
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	E.008	<0.5	<1
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	E.005	<0.5	<1
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	M	<0.013	<0.5	<1
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.013	<0.5	<1

MULTIPLE STATION ANALYSES

Station number	Pentachlorophenol, water, fltrd, ug/L (34459)	Phenanthrene, water, fltrd, ug/L (34462)	Phenol, water, fltrd, ug/L (34466)	Prometon, water, fltrd, ug/L (04037)	Pyrene, water, fltrd, ug/L (34470)	Tetrachloroethene, water, fltrd, ug/L (34476)	Tribromomethane water, fltrd, ug/L (34288)	Tributyl phosphate, water, fltrd, ug/L (62089)	Triclosan, water, fltrd, ug/L (62090)	Triethyl citrate water, fltrd, ug/L (62091)	Triphenyl phosphate, water, fltrd, ug/L (62092)	Tris(2-butoxyethyl) phosphate, wat flt ug/L (62093)
CHERRY COUNTY												
06460800	<2	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5
	<2	<0.5	E.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5
	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5
	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5
	<2	<0.5	E.3	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5
06461010	<2	<0.5	E.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	M	<0.5
	<2	<0.5	E.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5
	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5
	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	1.6
	<2	<0.5	E.3	<0.5	<0.5	<0.5	<0.5	<0.5	M	<0.5	<0.5	<0.5
06461500	<2	<0.5	E.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5
	<2	<0.5	E.4	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5
	<2	<0.5	E.1	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5
	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5
	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5
06461600	<2	<0.5	E.2	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5
KEYA PAHA COUNTY												
06462000	<2	<0.5	E.3	<0.01	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5
	<2	<0.5	E.3	<0.01	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5
	<2	<0.5	<0.5	<0.01	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5
	<2	<0.5	E.4	<0.01	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5
	<2	<0.5	E.5	<0.01	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5

NIOBRARA NATIONAL SCENIC RIVER WATER-QUALITY MONITORING—Continued

MULTIPLE STATION ANALYSES

Station number	Tris(2-chloro-ethyl) phos-phate, wat flt ug/L (62087)	Tris(di chloro-i-Pr) phos-phate, wat flt ug/L (62088)	Di-chlor-vos, water fltrd, ug/L (38775)
CHERRY COUNTY			
06460800	<0.5	<0.5	<1.00
	<0.5	<0.5	<1.00
	<0.5	<0.5	<1.00
	E.1	<0.5	<1.00
	<0.5	<0.5	<1.00
06461010	E.1	<0.5	<1.00
	E.5	<0.5	<1.00
	<0.5	<0.5	<1.00
	<0.5	E.1	<1.00
	<0.5	M	<1.00
06461500	<0.5	<0.5	<1.00
	E.1	<0.5	<1.00
	<0.5	<0.5	<1.00
	<0.5	<0.5	<1.00
	<0.5	<0.5	<1.00
06461600	<0.5	<0.5	<1.00
KEYA PAHA COUNTY			
06462000	<0.5	<0.5	<0.01
	<0.5	<0.5	<0.01
	<0.5	<0.5	<0.01
	<0.5	<0.5	<0.01
	<0.5	<0.5	<0.01

Remark codes used in this table:
< -- Less than
E -- Estimated value
M -- Presence verified, not quantified

PAPIO-MISSOURI STUDY
WATER-QUALITY MONITORING

(Station Name: indicates location by township, range, and section. Geologic unit: 110QRNR, Quaternary system deposits, undifferentiated; 112SDGV, Pleistocene sand and gravel deposits.)

COUNTIES.--Burt, Douglas, and Sarpy

MULTIPLE STATION ANALYSES

Station number	Station name	Date	Time	Geologic unit	Depth of well, feet below LSD (72008)	Depth to water level, feet below LSD (72019)	Barometric pressure, mm Hg (00025)
		BURT COUNTY					
415835096190901	23N 10E 8DCBB1	02-06-03	1245	--	111	--	738
		DOUGLAS COUNTY					
411249096192901	14N 10E 5BDBB1	08-13-03	1140	112SDGV	79	--	739
411258096205801	14N 9E 1AADD2	08-07-03	1335	112SDGV	65	--	734
411324096181801	15N 10E33CDBA1	08-14-03	1230	112SDGV	59	--	740
411348096180401	15N 10E33ACBB1	08-14-03	1125	112SDGV	46	--	740
411413096194401	15N 10E29CCBA1	08-12-03	1830	112SDGV	46	--	736
411443096194201	15N 10E29BBCC1	08-12-03	1445	112SDGV	61	--	736
411507096154801	15N 10E23CADD1	08-11-03	1445	112SDGV	50	--	738
411620096164001	15N 10E15ACAD1	08-08-03	1230	112SDGV	87	--	733
411717096193501	15N 10E 8BDDD1	08-14-03	1345	112SDGV	61	--	740
411723096211601	15N 9E12ABAC1	09-26-03	1250	112SDGV	58	--	724
411741096173301	15N 10E 4DDAA1	08-12-03	1245	112SDGV	70	--	736
411755096162801	16N 10E34DDDC1	08-12-03	1605	112SDGV	55	--	736
411810096200901	15N 10E 6ACAA1	08-14-03	1500	112SDGV	97	--	740
411937096213701	16N 9E25CAAC1	08-08-03	1030	112SDGV	82	--	733
411945096200701	16N 10E30ADCB1	08-12-03	1730	112SDGV	90	--	736
412018096084501	16N 11E23DCBA1	02-03-03	1150	110QRNR	56	--	723
412126096232201	16N 9E15DAAA1	08-15-03	1740	112SDGV	60	--	741
412134096223901	16N 9E14BDAD1	08-15-03	1745	112SDGV	38	--	741
412230096214501	16N 9E12B 1	08-12-03	1035	112SDGV	39	--	736
412312096261601	16N 9E 5BDCA1	08-05-03	1550	112SDGV	91	--	724
412333096264801	16N 9E 6AABA1	08-05-03	1435	112SDGV	91	--	724
		SARPY COUNTY					
410228096083501	12N 11E 2ADB 1	08-11-03	1040	112SDGV	73	--	738
410327096061801	13N 12E31ABDA1	08-15-03	1230	112SDGV	68	--	741
410332095594701	13N 13E31BAAC1	08-06-03	1225	112SDGV	62	--	732
410334095595701	13N 13E31BABB1	08-06-03	1325	112SDGV	52	--	732
410337095593701	13N 13E30DCCC1	08-06-03	1415	112SDGV	46	--	732
410407096032701	13N 12E27BCDA1	08-05-03	1135	112SDGV	74	--	724
410411096175701	13N 10E28ACBA1	08-11-03	1220	112SDGV	43	--	738
410528096152301	13N 10E14DD 1	08-05-03	0940	112SDGV	259	169.50	724
410535096174501	13N 10E16DACC1	08-07-03	1615	112SDGV	84	--	734
410651096134801	13N 11E 7BCAA1	08-15-03	1350	112SDGV	198	--	741
410656096173901	13N 10E 9AAAC1	08-15-03	1545	112SDGV	65	--	741
410719096180601	13N 10E 4CDAA1	08-15-03	1450	112SDGV	51	--	741

PAPIO-MISSOURI STUDY
WATER-QUALITY MONITORING—Continued

MULTIPLE STATION ANALYSES

Station number	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)
BURT COUNTY												
415835096190901	3.9	36	6.9	670	-5.0	11.0	--	--	--	--	12.7	--
DOUGLAS COUNTY												
411249096192901	3.9	43	7.1	661	28.7	17.7	--	--	--	--	8.82	--
411258096205801	0.2	2	7.4	545	28.4	12.3	--	--	--	--	0.12	--
411324096181801	7.0	68	7.2	509	33.0	12.8	--	--	--	--	1.32	--
411348096180401	5.3	53	7.1	505	31.0	14.2	--	--	--	--	1.98	--
411413096194401	0.1	1	7.1	757	33.1	12.4	--	<0.04	107	24.1	24.1	0.089
411443096194201	0.7	7	7.1	543	29.5	12.4	--	--	--	--	4.06	--
411507096154801	1.8	18	7.0	667	32.2	13.3	--	--	--	--	<0.06	--
411620096164001	0.2	2	7.0	650	27.5	11.9	--	--	--	--	<0.06	--
411717096193501	0.4	4	6.8	484	33.0	12.0	--	--	--	--	2.33	--
411723096211601	5.7	57	7.1	505	23.4	12.9	--	--	--	--	E.05	--
411741096173301	9.5	96	7.2	711	27.5	14.0	--	--	--	--	<0.06	--
411755096162801	6.4	63	6.8	585	29.5	12.9	--	--	--	--	0.09	--
411810096200901	0.3	3	6.9	511	33.0	12.6	--	--	--	--	0.99	--
411937096213701	0.3	3	7.0	538	27.5	12.4	--	--	--	--	3.38	--
411945096200701	5.4	55	7.2	543	29.5	14.3	--	--	--	--	5.42	--
412018096084501	2.4	23	6.9	873	-0.1	11.0	--	--	--	--	12.5	--
412126096232201	2.1	21	6.8	513	32.0	12.5	--	--	--	--	7.32	--
412134096223901	--	--	--	--	32.0	--	--	--	--	--	<0.06	--
412230096214501	5.9	61	7.2	478	27.5	15.5	--	--	--	--	E.04	--
412312096261601	0.2	2	6.9	539	32.0	12.9	0.08	0.06	--	--	0.17	--
412333096264801	0.3	3	7.1	511	32.0	12.3	--	<0.04	--	--	0.97	--
SARPY COUNTY												
410228096083501	7.6	84	7.3	542	23.6	18.7	--	--	--	--	9.23	--
410327096061801	3.9	37	7.0	567	31.8	11.9	--	--	--	--	2.64	--
410332095594701	0.2	2	7.6	855	24.6	26.1	--	<0.04	--	--	<0.06	--
410334095595701	0.2	3	7.5	716	24.6	24.5	--	<0.04	--	--	E.04	--
410337095593701	0.9	8	7.3	533	24.6	11.6	--	<0.04	7.14	1.61	1.62	0.033
410407096032701	0.1	2	7.4	679	29.4	21.3	0.07	0.06	--	--	E.06	--
410411096175701	2.4	23	7.1	710	23.6	12.2	--	--	--	--	<0.06	--
410528096152301	4.9	50	6.9	568	25.5	13.7	--	<0.04	--	--	0.34	--
410535096174501	0.3	2	7.2	684	28.4	11.8	--	--	--	--	<0.06	--
410651096134801	13.2	127	6.8	570	31.8	12.3	--	--	--	--	12.7	--
410656096173901	7.5	75	7.5	883	32.0	13.8	--	--	--	--	<0.06	--
410719096180601	9.3	91	7.5	946	31.8	13.3	--	--	--	--	<0.06	--

PAPIO-MISSOURI STUDY
WATER-QUALITY MONITORING—Continued

MULTIPLE STATION ANALYSES

Station number	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L (00660)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	Ametryn water, fltrd, ug/L (38401)	Atra-zine, water, fltrd, ug/L (39632)	Broma-cil, water, fltrd, ug/L (04029)	Buta-chlor, water, fltrd, ug/L (04026)	Butyl-ate, water, fltrd, ug/L (04028)
BURT COUNTY												
415835096190901	--	--	--	--	--	--	--	--	--	--	--	--
DOUGLAS COUNTY												
411249096192901	--	--	--	--	--	--	--	--	--	--	--	--
411258096205801	--	--	--	--	--	--	--	--	--	--	--	--
411324096181801	--	--	--	--	--	--	--	--	--	--	--	--
411348096180401	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1.00	<0.05	<0.05
411413096194401	0.027	0.589	0.19	--	--	--	--	--	--	--	--	--
411443096194201	--	--	--	--	--	--	--	--	--	--	--	--
411507096154801	--	--	--	--	--	--	--	--	--	--	--	--
411620096164001	--	--	--	--	--	--	--	--	--	--	--	--
411717096193501	--	--	--	--	--	--	--	--	--	--	--	--
411723096211601	--	--	--	--	--	--	--	--	--	--	--	--
411741096173301	--	--	--	--	--	--	--	--	--	--	--	--
411755096162801	--	--	--	--	--	--	--	--	--	--	--	--
411810096200901	--	--	--	0.10	<0.05	<0.05	<0.05	<0.05	0.22	<1.00	<0.05	<0.05
411937096213701	--	--	--	--	--	--	--	--	--	--	--	--
411945096200701	--	--	--	--	--	--	--	--	--	--	--	--
412018096084501	--	--	--	--	--	--	--	--	--	--	--	--
412126096232201	--	--	--	0.13	<0.05	<0.05	<0.05	<0.05	0.12	<1.00	<0.05	<0.05
412134096223901	--	--	--	--	--	--	--	--	--	--	--	--
412230096214501	--	--	--	--	--	--	--	--	--	--	--	--
412312096261601	E.004	0.291	0.10	--	--	--	--	--	--	--	--	--
412333096264801	E.007	0.454	0.15	0.05	<0.05	<0.05	<0.05	<0.05	0.19	<1.00	<0.05	<0.05
SARPY COUNTY												
410228096083501	--	--	--	--	--	--	--	--	--	--	--	--
410327096061801	--	--	--	--	--	--	--	--	--	--	--	--
410332095594701	<0.008	0.730	0.24	--	--	--	--	--	--	--	--	--
410334095595701	E.004	0.656	0.21	--	--	--	--	--	--	--	--	--
410337095593701	0.010	0.598	0.20	0.15	<0.09	<0.14	<0.05	<0.05	1.18	<1.00	<0.05	<0.05
410407096032701	E.007	0.929	0.30	0.15	<0.05	<0.13	<0.05	<0.05	0.96	<1.00	<0.05	<0.05
410411096175701	--	--	--	--	--	--	--	--	--	--	--	--
410528096152301	<0.008	0.132	0.04	--	--	--	--	--	--	--	--	--
410535096174501	--	--	--	--	--	--	--	--	--	--	--	--
410651096134801	--	--	--	--	--	--	--	--	--	--	--	--
410656096173901	--	--	--	--	--	--	--	--	--	--	--	--
410719096180601	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<1.00	<0.05	<0.05

PAPIO-MISSOURI STUDY
WATER-QUALITY MONITORING—Continued

MULTIPLE STATION ANALYSES

Station number	Carboxin, water, fltrd, ug/L (04027)	Cyanazine, water, fltrd, ug/L (04041)	Cycloate, water, fltrd, ug/L (04031)	Diphenamid, water, fltrd, ug/L (04033)	Hexazinone, water, fltrd, ug/L (04025)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propachlor, water, fltrd, ug/L (04024)	Propazine, water, fltrd, ug/L (38535)	Simazine, water, fltrd, ug/L (04035)
BURT COUNTY												
415835096190901	--	--	--	--	--	--	--	--	--	--	--	--
DOUGLAS COUNTY												
411249096192901	--	--	--	--	--	--	--	--	--	--	--	--
411258096205801	--	--	--	--	--	--	--	--	--	--	--	--
411324096181801	--	--	--	--	--	--	--	--	--	--	--	--
411348096180401	<0.05	<0.02	<0.05	<0.05	<0.05	E.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
411413096194401	--	--	--	--	--	--	--	--	--	--	--	--
411443096194201	--	--	--	--	--	--	--	--	--	--	--	--
411507096154801	--	--	--	--	--	--	--	--	--	--	--	--
411620096164001	--	--	--	--	--	--	--	--	--	--	--	--
411717096193501	--	--	--	--	--	--	--	--	--	--	--	--
411723096211601	--	--	--	--	--	--	--	--	--	--	--	--
411741096173301	--	--	--	--	--	--	--	--	--	--	--	--
411755096162801	--	--	--	--	--	--	--	--	--	--	--	--
411810096200901	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
411937096213701	--	--	--	--	--	--	--	--	--	--	--	--
411945096200701	--	--	--	--	--	--	--	--	--	--	--	--
412018096084501	--	--	--	--	--	--	--	--	--	--	--	--
412126096232201	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
412134096223901	--	--	--	--	--	--	--	--	--	--	--	--
412230096214501	--	--	--	--	--	--	--	--	--	--	--	--
412312096261601	--	--	--	--	--	--	--	--	--	--	--	--
412333096264801	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SARPY COUNTY												
410228096083501	--	--	--	--	--	--	--	--	--	--	--	--
410327096061801	--	--	--	--	--	--	--	--	--	--	--	--
410332095594701	--	--	--	--	--	--	--	--	--	--	--	--
410334095595701	--	--	--	--	--	--	--	--	--	--	--	--
410337095593701	<0.05	<0.02	<0.05	<0.05	<0.05	0.40	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
410407096032701	<0.05	<0.02	<0.05	<0.05	<0.05	0.18	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
410411096175701	--	--	--	--	--	--	--	--	--	--	--	--
410528096152301	--	--	--	--	--	--	--	--	--	--	--	--
410535096174501	--	--	--	--	--	--	--	--	--	--	--	--
410651096134801	--	--	--	--	--	--	--	--	--	--	--	--
410656096173901	--	--	--	--	--	--	--	--	--	--	--	--
410719096180601	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PAPIO-MISSOURI STUDY
WATER-QUALITY MONITORING—Continued

MULTIPLE STATION ANALYSES

Station number	Simatryn, water, fltrd, ug/L (04030)	Terbacil, water, fltrd, ug/L (04032)	Trifluralin, water, fltrd, ug/L (04023)	Vernolate, water, fltrd, ug/L (04034)
BURT COUNTY				
415835096190901	--	--	--	--
DOUGLAS COUNTY				
411249096192901	--	--	--	--
411258096205801	--	--	--	--
411324096181801	--	--	--	--
411348096180401	<0.05	<0.05	<0.05	<0.05
411413096194401	--	--	--	--
411443096194201	--	--	--	--
411507096154801	--	--	--	--
411620096164001	--	--	--	--
411717096193501	--	--	--	--
411723096211601	--	--	--	--
411741096173301	--	--	--	--
411755096162801	--	--	--	--
411810096200901	<0.05	<0.05	<0.05	<0.05
411937096213701	--	--	--	--
411945096200701	--	--	--	--
412018096084501	--	--	--	--
412126096232201	<0.05	<0.05	<0.05	<0.05
412134096223901	--	--	--	--
412230096214501	--	--	--	--
412312096261601	--	--	--	--
412333096264801	<0.05	<0.05	<0.05	<0.05
SARPY COUNTY				
410228096083501	--	--	--	--
410327096061801	--	--	--	--
410332095594701	--	--	--	--
410334095595701	--	--	--	--
410337095593701	<0.05	<0.05	<0.05	<0.05
410407096032701	<0.05	<0.05	<0.05	<0.05
410411096175701	--	--	--	--
410528096152301	--	--	--	--
410535096174501	--	--	--	--
410651096134801	--	--	--	--
410656096173901	--	--	--	--
410719096180601	<0.05	<0.05	<0.05	<0.05

Remark codes used in this table:
< -- Less than
E -- Estimated value

PAPIO-MISSOURI STUDY
WATER QUALITY FROM WELL NESTS—Continued

CHEMICAL ANALYSES OF GROUND WATER

PAPIO-MISSOURI STUDY
WATER QUALITY FROM WELL NESTS

(Station Name: 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

MULTIPLE STATION ANALYSES

Station number	Station name	Latitude	Longitude	Geologic unit	Date	Time
		BURT COUNTY				
414700096134901	21N 11E19BBBC1	41 47 00 N	096 13 49 W	211DKOT	10-17-02	1915
	21N 11E19BBBC1	41 47 00 N	096 13 49 W	211DKOT	12-17-02	1950
	21N 11E19BBBC1	41 47 00 N	096 13 49 W	211DKOT	02-27-03	1855
	21N 11E19BBBC1	41 47 00 N	096 13 49 W	211DKOT	04-02-03	1905
	21N 11E19BBBC1	41 47 00 N	096 13 49 W	211DKOT	06-18-03	0755
	21N 11E19BBBC1	41 47 00 N	096 13 49 W	211DKOT	09-10-03	1020
414700096134902	21N 11E19BBBC2	41 47 00 N	096 13 49 W	211DKOT	10-17-02	1955
	21N 11E19BBBC2	41 47 00 N	096 13 49 W	211DKOT	12-17-02	2030
	21N 11E19BBBC2	41 47 00 N	096 13 49 W	211DKOT	02-27-03	1945
	21N 11E19BBBC2	41 47 00 N	096 13 49 W	211DKOT	04-02-03	1940
	21N 11E19BBBC2	41 47 00 N	096 13 49 W	211DKOT	06-18-03	0830
	21N 11E19BBBC2	41 47 00 N	096 13 49 W	211DKOT	09-10-03	1100
414700096134903	21N 11E19BBBC3	41 47 00 N	096 13 49 W	211DKOT	10-17-02	2015
	21N 11E19BBBC3	41 47 00 N	096 13 49 W	211DKOT	12-17-02	1850
	21N 11E19BBBC3	41 47 00 N	096 13 49 W	211DKOT	02-27-03	2010
	21N 11E19BBBC3	41 47 00 N	096 13 49 W	211DKOT	04-02-03	2010
	21N 11E19BBBC3	41 47 00 N	096 13 49 W	211DKOT	06-18-03	0855
	21N 11E19BBBC3	41 47 00 N	096 13 49 W	211DKOT	09-10-03	1135
		DAKOTA COUNTY				
422035096281901	27N 8E 1ACCC1	42 20 35 N	096 28 19 W	112SDGV	10-17-02	1545
	27N 8E 1ACCC1	42 20 35 N	096 28 19 W	112SDGV	12-17-02	1525
	27N 8E 1ACCC1	42 20 35 N	096 28 19 W	112SDGV	02-27-03	1535
	27N 8E 1ACCC1	42 20 35 N	096 28 19 W	112SDGV	04-02-03	1525
	27N 8E 1ACCC1	42 20 35 N	096 28 19 W	112SDGV	06-17-03	1410
	27N 8E 1ACCC1	42 20 35 N	096 28 19 W	112SDGV	09-09-03	1235
422035096281902	27N 8E 1ACCC2	42 20 35 N	096 28 19 W	112SDGV	10-17-02	1615
	27N 8E 1ACCC2	42 20 35 N	096 28 19 W	112SDGV	12-17-02	1555
	27N 8E 1ACCC2	42 20 35 N	096 28 19 W	112SDGV	02-27-03	1610
	27N 8E 1ACCC2	42 20 35 N	096 28 19 W	112SDGV	04-02-03	1555
	27N 8E 1ACCC2	42 20 35 N	096 28 19 W	112SDGV	06-17-03	1455
	27N 8E 1ACCC2	42 20 35 N	096 28 19 W	112SDGV	09-09-03	1310
422035096281903	27N 8E 1ACCC3	42 20 35 N	096 28 19 W	112SDGV	10-17-02	1630
	27N 8E 1ACCC3	42 20 35 N	096 28 19 W	112SDGV	12-17-02	1620
	27N 8E 1ACCC3	42 20 35 N	096 28 19 W	112SDGV	02-27-03	1630
	27N 8E 1ACCC3	42 20 35 N	096 28 19 W	112SDGV	04-02-03	1615
	27N 8E 1ACCC3	42 20 35 N	096 28 19 W	112SDGV	06-17-03	1535
	27N 8E 1ACCC3	42 20 35 N	096 28 19 W	112SDGV	09-09-03	1330
		DOUGLAS COUNTY				
411231096193201	14N 10E 5CBDD1	41 12 31 N	096 19 32 W	112SDGV	10-16-02	1700
	14N 10E 5CBDD1	41 12 31 N	096 19 32 W	112SDGV	12-19-02	1730
	14N 10E 5CBDD1	41 12 31 N	096 19 32 W	112SDGV	02-26-03	1555
	14N 10E 5CBDD1	41 12 31 N	096 19 32 W	112SDGV	04-01-03	1635
	14N 10E 5CBDD1	41 12 31 N	096 19 32 W	112SDGV	06-25-03	1445
	14N 10E 5CBDD1	41 12 31 N	096 19 32 W	112SDGV	09-11-03	1630
411231096193202	14N 10E 5CBDD2	41 12 31 N	096 19 32 W	112SDGV	10-16-02	1720
	14N 10E 5CBDD2	41 12 31 N	096 19 32 W	112SDGV	12-19-02	1805
	14N 10E 5CBDD2	41 12 31 N	096 19 32 W	112SDGV	02-26-03	1620
	14N 10E 5CBDD2	41 12 31 N	096 19 32 W	112SDGV	04-01-03	1655
	14N 10E 5CBDD2	41 12 31 N	096 19 32 W	112SDGV	06-25-03	1510
	14N 10E 5CBDD2	41 12 31 N	096 19 32 W	112SDGV	09-11-03	1655
411231096193203	14N 10E 5CBDB3	41 12 31 N	096 19 32 W	112SDGV	10-16-02	1740
	14N 10E 5CBDB3	41 12 31 N	096 19 32 W	112SDGV	12-19-02	1840
	14N 10E 5CBDB3	41 12 31 N	096 19 32 W	112SDGV	02-26-03	1640
	14N 10E 5CBDB3	41 12 31 N	096 19 32 W	112SDGV	04-01-03	1715
	14N 10E 5CBDB3	41 12 31 N	096 19 32 W	112SDGV	06-25-03	1530
	14N 10E 5CBDB3	41 12 31 N	096 19 32 W	112SDGV	09-11-03	1725
412151096180801	16N 10E16BAAA1	41 21 51 N	096 18 08 W	112SDGV	10-18-02	1450
	16N 10E16BAAA1	41 21 51 N	096 18 08 W	112SDGV	12-18-02	1500

PAPIO-MISSOURI STUDY
WATER QUALITY FROM WELL NESTS—Continued

MULTIPLE STATION ANALYSES

Station number	Depth of well, feet below LSD (72008)	Barometric pressure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
BURT COUNTY												
414700096134901	171	727	--	1.0	10	7.0	1,140	13.0	12.0	--	--	--
	171	717	--	0.4	4	6.9	1,230	4.0	12.0	--	--	--
	171	729	--	1.8	18	7.0	1,020	2.0	12.0	440	127	29.9
	171	718	--	2.1	20	7.0	1,060	26.5	11.0	--	--	--
	171	731	--	0.7	6	7.1	1,150	22.0	12.0	--	--	--
	171	728	--	E.3	--	7.0	1,020	18.0	12.1	--	--	--
414700096134902	139	727	--	0.4	4	7.0	1,170	13.0	12.0	--	--	--
	139	717	--	0.3	3	6.9	1,210	4.0	12.0	--	--	--
	139	729	--	0.2	2	7.0	1,180	2.0	12.0	510	145	34.8
	139	718	--	3.2	31	7.0	1,000	26.5	11.5	--	--	--
	139	731	--	0.1	1	7.1	1,090	22.0	12.0	--	--	--
	139	728	--	E.1	--	6.9	1,000	18.0	12.1	--	--	--
414700096134903	80	727	--	8.8	87	7.2	884	13.0	12.5	--	--	--
	80	717	--	8.6	86	7.2	921	4.0	12.5	--	--	--
	80	729	--	7.5	73	7.2	909	2.0	12.0	440	120	34.1
	80	718	--	8.9	89	7.1	923	26.5	12.5	--	--	--
	80	731	--	10.4	103	7.2	911	22.0	12.5	--	--	--
	80	728	--	E9.0	--	7.1	870	18.0	12.5	--	--	--
DAKOTA COUNTY												
422035096281901	129	727	--	0.1	1	7.0	1,180	13.0	11.5	--	--	--
	129	717	--	0.2	2	6.8	1,220	4.0	11.5	--	--	--
	129	729	--	0.4	4	7.0	1,200	3.0	11.5	--	--	--
	129	718	--	0.3	3	7.0	1,230	26.5	11.5	--	--	--
	129	733	67	0.2	2	7.0	1,250	33.0	11.5	540	155	37.2
	129	730	--	0.2	2	6.9	1,210	22.0	11.6	--	--	--
422035096281902	93	727	--	0.2	2	7.1	894	13.0	11.5	--	--	--
	93	717	--	1.6	16	7.0	923	4.0	11.5	--	--	--
	93	729	--	1.5	15	7.1	909	3.0	11.5	--	--	--
	93	718	--	0.6	6	7.0	927	26.5	11.5	--	--	--
	93	733	111	1.5	14	6.9	931	33.0	11.5	450	124	33.2
	93	730	--	0.8	8	6.9	896	22.0	11.6	--	--	--
422035096281903	53	727	--	1.5	15	7.1	1,070	13.0	11.5	--	--	--
	53	717	--	1.8	18	7.0	1,090	4.0	11.5	--	--	--
	53	729	--	1.7	16	7.0	1,050	3.0	11.5	--	--	--
	53	718	--	1.6	15	7.0	1,070	26.5	11.5	--	--	--
	53	733	127	1.8	17	6.9	1,100	33.0	11.5	580	172	37.7
	53	730	--	1.7	16	6.9	1,040	22.0	11.7	--	--	--
DOUGLAS COUNTY												
411231096193201	98	735	--	0.1	1	--	555	4.5	12.0	--	--	--
	98	727	--	0.2	2	7.2	560	7.0	12.0	230	71.2	11.9
	98	735	--	0.2	2	7.4	570	-3.0	12.0	--	--	--
	98	724	--	0.3	3	7.4	571	26.5	12.0	--	--	--
	98	736	--	0.2	2	7.3	565	29.0	12.0	--	--	--
	98	731	--	E.2	--	7.3	554	18.0	12.1	--	--	--
411231096193202	58	735	--	0.1	1	--	584	4.5	12.0	--	--	--
	58	727	--	0.1	0.0	7.1	586	7.0	12.0	240	74.3	12.3
	58	735	--	M	0.0	7.3	588	-3.0	12.0	--	--	--
	58	724	--	0.2	2	7.3	589	26.5	12.0	--	--	--
	58	736	--	0.2	2	7.3	575	29.0	12.0	--	--	--
	58	731	--	E.1	--	7.2	553	18.0	12.2	--	--	--
411231096193203	22	735	--	0.6	6	--	435	4.5	14.0	--	--	--
	22	727	--	0.5	5	6.6	410	7.0	13.5	160	52.0	7.98
	22	735	--	1.1	10	6.8	419	-3.0	12.0	--	--	--
	22	724	--	0.5	4	6.7	452	26.5	11.5	--	--	--
	22	736	--	0.5	4	7.0	431	29.0	11.5	--	--	--
	22	731	--	E.8	--	6.9	391	18.0	13.4	--	--	--
412151096180801	33	727	--	1.2	12	7.4	538	21.0	12.5	--	--	--
	33	719	--	0.8	7	6.9	570	5.0	12.0	--	--	--

PAPIO-MISSOURI STUDY
WATER QUALITY FROM WELL NESTS—Continued

MULTIPLE STATION ANALYSES

Station number	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)
BURT COUNTY												
414700096134901	--	--	--	--	--	--	--	--	--	--	1.39	--
	--	--	--	--	--	--	--	--	--	--	0.77	--
	1	53.2	E286	24.0	17.8	183	--	--	--	--	8.91	--
	--	--	--	--	--	--	0.07	0.05	--	--	7.95	--
	--	--	--	--	--	--	--	--	--	--	1.61	--
	--	--	--	--	--	--	0.36	0.28	--	--	1.05	--
414700096134902	--	--	--	--	--	--	--	--	--	--	0.15	--
	--	--	--	--	--	--	--	--	--	--	0.30	--
	1	69.8	--	32.5	19.3	296	--	--	--	--	0.42	--
	--	--	--	--	--	--	--	<0.04	37.5	8.47	8.54	0.220
	--	--	--	--	--	--	--	--	--	--	0.19	--
	--	--	--	--	--	--	0.24	0.19	--	--	<0.06	--
414700096134903	--	--	--	--	--	--	--	--	--	--	22.1	--
	--	--	--	--	--	--	--	--	--	--	20.1	--
	0.5	21.9	E343	19.1	19.8	31.7	--	--	--	--	22.1	--
	--	--	--	--	--	--	--	<0.04	--	--	22.9	--
	--	--	--	--	--	--	--	--	--	--	21.3	--
	--	--	--	--	--	--	--	<0.04	--	--	18.9	--
DAKOTA COUNTY												
422035096281901	--	--	--	--	--	--	--	--	--	--	<0.06	--
	--	--	--	--	--	--	--	--	--	--	0.07	--
	--	--	--	--	--	--	--	--	--	--	<0.06	--
	--	--	--	--	--	--	0.60	0.47	--	--	<0.06	--
	1	60.7	325	39.5	29.3	296	--	--	--	--	<0.06	--
	--	--	--	--	--	--	0.61	0.47	--	--	<0.06	--
422035096281902	--	--	--	--	--	--	--	--	--	--	<0.06	--
	--	--	--	--	--	--	--	--	--	--	<0.06	--
	--	--	--	--	--	--	--	--	--	--	<0.06	--
	--	--	--	--	--	--	0.40	0.31	--	--	<0.06	--
	0.6	29.9	415	7.23	30.7	94.9	--	--	--	--	<0.06	--
	--	--	--	--	--	--	0.35	0.27	--	--	<0.06	--
422035096281903	--	--	--	--	--	--	--	--	--	--	<0.06	--
	--	--	--	--	--	--	--	--	--	--	<0.06	--
	--	--	--	--	--	--	--	--	--	--	<0.06	--
	--	--	--	--	--	--	0.15	0.12	--	--	<0.06	--
	0.4	20.2	543	5.61	29.4	74.5	--	--	--	--	<0.06	--
	--	--	--	--	--	--	0.13	0.10	--	--	<0.06	--
DOUGLAS COUNTY												
411231096193201	--	--	--	--	--	--	--	--	--	--	2.33	--
	0.8	28.3	E192	11.7	32.0	80.6	--	--	--	--	2.04	--
	--	--	--	--	--	--	--	--	--	--	1.82	--
	--	--	--	--	--	--	--	<0.04	--	--	1.85	--
	--	--	--	--	--	--	--	--	--	--	1.87	--
	--	--	--	--	--	--	--	<0.04	--	--	1.65	--
411231096193202	--	--	--	--	--	--	--	--	--	--	2.38	--
	0.8	27.8	E195	13.4	30.8	82.8	--	--	--	--	1.01	--
	--	--	--	--	--	--	--	--	--	--	1.42	--
	--	--	--	--	--	--	--	<0.04	6.61	1.49	1.51	0.053
	--	--	--	--	--	--	--	--	--	--	0.99	--
	--	--	--	--	--	--	--	<0.04	--	--	0.31	--
411231096193203	--	--	--	--	--	--	--	--	--	--	1.61	--
	0.4	11.0	E121	13.8	27.4	52.7	--	--	--	--	2.68	--
	--	--	--	--	--	--	--	--	--	--	2.48	--
	--	--	--	--	--	--	--	<0.04	7.49	1.69	1.75	0.197
	--	--	--	--	--	--	--	--	--	--	1.64	--
	--	--	--	--	--	--	--	<0.04	11.5	2.61	2.68	0.233
412151096180801	--	--	--	--	--	--	--	--	--	--	<0.06	--
	--	--	--	--	--	--	--	--	--	--	<0.06	--

PAPIO-MISSOURI STUDY
WATER QUALITY FROM WELL NESTS—Continued

MULTIPLE STATION ANALYSES

Station number	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L (00660)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Iron, water, fltrd, ug/L (01046)	Mangan-ese, water, fltrd, ug/L (01056)
BURT COUNTY					
414700096134901	--	--	--	--	--
	--	--	--	--	--
	--	--	--	11	630
	<0.008	--	E.01	--	--
	--	--	--	--	--
	<0.008	--	E.01	--	--
414700096134902	--	--	--	--	--
	--	--	--	--	--
	--	--	--	32	273
	0.067	0.077	0.03	--	--
	--	--	--	--	--
	<0.008	0.083	0.03	--	--
414700096134903	--	--	--	--	--
	--	--	--	--	--
	--	--	--	<10	<2.0
	<0.008	0.267	0.09	--	--
	--	--	--	--	--
	<0.008	0.276	0.09	--	--
DAKOTA COUNTY					
422035096281901	--	--	--	--	--
	--	--	--	--	--
	--	--	--	--	--
	<0.008	0.077	0.03	--	--
	--	--	--	5,910	389
	<0.008	--	<0.02	--	--
422035096281902	--	--	--	--	--
	--	--	--	--	--
	--	--	--	--	--
	<0.008	--	E.01	--	--
	--	--	--	5,280	489
	<0.008	--	<0.02	--	--
422035096281903	--	--	--	--	--
	--	--	--	--	--
	--	--	--	--	--
	<0.008	0.123	0.04	--	--
	--	--	--	7,390	995
	<0.008	--	<0.02	--	--
DOUGLAS COUNTY					
411231096193201	--	--	--	--	--
	--	--	--	11	38.1
	--	--	--	--	--
	E.005	0.291	0.10	--	--
	--	--	--	--	--
	E.007	--	E.12	--	--
411231096193202	--	--	--	--	--
	--	--	--	77	224
	--	--	--	--	--
	0.016	0.227	0.07	--	--
	--	--	--	--	--
	E.007	--	E.10	--	--
411231096193203	--	--	--	--	--
	--	--	--	11	286
	--	--	--	--	--
	0.060	0.113	0.04	--	--
	--	--	--	--	--
	0.071	--	<0.18	--	--
412151096180801	--	--	--	--	--
	--	--	--	--	--

PAPIO-MISSOURI STUDY
WATER QUALITY FROM WELL NESTS—Continued

MULTIPLE STATION ANALYSES

Station number	Station name	Latitude	Longitude	Geologic unit	Date	Time
		DOUGLAS COUNTY				
412151096180801	16N 10E16BAAA1	41 21 51 N	096 18 08 W	112SDGV	02-28-03	1640
	16N 10E16BAAA1	41 21 51 N	096 18 08 W	112SDGV	04-03-03	1555
	16N 10E16BAAA1	41 21 51 N	096 18 08 W	112SDGV	06-25-03	1245
	16N 10E16BAAA1	41 21 51 N	096 18 08 W	112SDGV	09-11-03	1410
412151096180802	16N 10E16BAAA2	41 21 51 N	096 18 08 W	112SDGV	10-18-02	1505
	16N 10E16BAAA2	41 21 51 N	096 18 08 W	112SDGV	12-18-02	1520
	16N 10E16BAAA2	41 21 51 N	096 18 08 W	112SDGV	02-28-03	1655
	16N 10E16BAAA2	41 21 51 N	096 18 08 W	112SDGV	04-03-03	1625
	16N 10E16BAAA2	41 21 51 N	096 18 08 W	112SDGV	06-25-03	1310
	16N 10E16BAAA2	41 21 51 N	096 18 08 W	112SDGV	09-11-03	1440
		SARPY COUNTY				
410243096082001	12N 11E 1BBBB1	41 02 43 N	096 08 20 W	112SDGV	10-16-02	1405
	12N 11E 1BBBB1	41 02 43 N	096 08 20 W	112SDGV	12-19-02	1400
	12N 11E 1BBBB1	41 02 43 N	096 08 20 W	112SDGV	02-26-03	1315
	12N 11E 1BBBB1	41 02 43 N	096 08 20 W	112SDGV	04-01-03	1355
	12N 11E 1BBBB1	41 02 43 N	096 08 20 W	112SDGV	06-25-03	1720
	12N 11E 1BBBB1	41 02 43 N	096 08 20 W	112SDGV	09-12-03	1525
410243096082002	12N 11E 1BBBB2	41 02 43 N	096 08 20 W	112SDGV	10-16-02	1435
	12N 11E 1BBBB2	41 02 43 N	096 08 20 W	112SDGV	12-19-02	1500
	12N 11E 1BBBB2	41 02 43 N	096 08 20 W	112SDGV	02-26-03	1345
	12N 11E 1BBBB2	41 02 43 N	096 08 20 W	112SDGV	04-01-03	1420
	12N 11E 1BBBB2	41 02 43 N	096 08 20 W	112SDGV	06-25-03	1740
	12N 11E 1BBBB2	41 02 43 N	096 08 20 W	112SDGV	09-12-03	1550
410243096082003	12N 11E 1BBBB3	41 02 43 N	096 08 20 W	112SDGV	10-16-02	1500
	12N 11E 1BBBB3	41 02 43 N	096 08 20 W	112SDGV	12-19-02	1535
	12N 11E 1BBBB3	41 02 43 N	096 08 20 W	112SDGV	02-26-03	1410
	12N 11E 1BBBB3	41 02 43 N	096 08 20 W	112SDGV	04-01-03	1440
	12N 11E 1BBBB3	41 02 43 N	096 08 20 W	112SDGV	06-25-03	1805
	12N 11E 1BBBB3	41 02 43 N	096 08 20 W	112SDGV	09-12-03	1630
410334096182801	13N 10E33BBAB1	41 03 34 N	096 18 28 W	112SDGV	10-16-02	1105
	13N 10E33BBAB1	41 03 34 N	096 18 28 W	112SDGV	12-19-02	1035
	13N 10E33BBAB1	41 03 34 N	096 18 28 W	112SDGV	02-26-03	1025
	13N 10E33BBAB1	41 03 34 N	096 18 28 W	112SDGV	04-01-03	1055
	13N 10E33BBAB1	41 03 34 N	096 18 28 W	112SDGV	06-20-03	1205
	13N 10E33BBAB1	41 03 34 N	096 18 28 W	112SDGV	09-12-03	1155
410334096182802	13N 10E33BBAB2	41 03 34 N	096 18 28 W	112SDGV	10-16-02	1130
	13N 10E33BBAB2	41 03 34 N	096 18 28 W	112SDGV	12-19-02	1120
	13N 10E33BBAB2	41 03 34 N	096 18 28 W	112SDGV	02-26-03	1100
	13N 10E33BBAB2	41 03 34 N	096 18 28 W	112SDGV	04-01-03	1125
	13N 10E33BBAB2	41 03 34 N	096 18 28 W	112SDGV	06-20-03	1300
	13N 10E33BBAB2	41 03 34 N	096 18 28 W	112SDGV	09-12-03	1230
410334096182803	13N 10E33BBAB3	41 03 34 N	096 18 28 W	112SDGV	10-16-02	1150
	13N 10E33BBAB3	41 03 34 N	096 18 28 W	112SDGV	12-19-02	1155
	13N 10E33BBAB3	41 03 34 N	096 18 28 W	112SDGV	02-26-03	1120
	13N 10E33BBAB3	41 03 34 N	096 18 28 W	112SDGV	04-01-03	1145
	13N 10E33BBAB3	41 03 34 N	096 18 28 W	112SDGV	06-20-03	1345
	13N 10E33BBAB3	41 03 34 N	096 18 28 W	112SDGV	09-12-03	1305
		THURSTON COUNTY				
420840096290901	25N 8E14ADBA1	42 08 40 N	096 29 09 W	211DKOT	10-17-02	1155
	25N 8E14ADBA1	42 08 40 N	096 29 09 W	211DKOT	12-17-02	1120
	25N 8E14ADBA1	42 08 40 N	096 29 09 W	211DKOT	02-27-03	1125
	25N 8E14ADBA1	42 08 40 N	096 29 09 W	211DKOT	04-02-03	1210
	25N 8E14ADBA1	42 08 40 N	096 29 09 W	211DKOT	06-17-03	1810
	25N 8E14ADBA1	42 08 40 N	096 29 09 W	211DKOT	09-09-03	1550
420840096290902	25N 8E14ADBA2	42 08 40 N	096 29 09 W	211DKOT	10-17-02	1240
	25N 8E14ADBA2	42 08 40 N	096 29 09 W	211DKOT	12-17-02	1235
	25N 8E14ADBA2	42 08 40 N	096 29 09 W	211DKOT	02-27-03	1205
	25N 8E14ADBA2	42 08 40 N	096 29 09 W	211DKOT	04-02-03	1255

PAPIO-MISSOURI STUDY
WATER QUALITY FROM WELL NESTS—Continued

MULTIPLE STATION ANALYSES

Station number	Depth of well, feet below LSD (72008)	Barometric pressure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
					DOUGLAS COUNTY							
412151096180801	33	737	--	0.4	4	7.3	571	5.0	12.0	--	--	--
	33	716	57	0.4	4	6.9	575	23.0	12.0	280	83.6	16.2
	33	736	--	0.7	7	7.0	575	29.0	11.5	--	--	--
	33	731	--	E.4	--	7.2	561	18.0	11.7	--	--	--
412151096180802	25	727	--	0.2	2	7.2	564	21.0	11.9	--	--	--
	25	719	--	1.4	14	7.2	545	5.0	12.5	--	--	--
	25	737	--	1.2	11	7.5	553	5.0	12.0	--	--	--
	25	716	28	1.2	12	7.2	558	23.0	12.0	260	79.4	15.4
	25	736	--	1.5	14	7.0	562	29.0	11.5	--	--	--
	25	731	--	E1.3	--	7.2	553	18.0	11.7	--	--	--
					SARPY COUNTY							
410243096082001	83	735	--	6.2	60	--	500	4.5	12.5	--	--	--
	83	727	--	7.2	71	7.1	507	7.0	12.5	230	64.1	16.6
	83	735	--	7.1	69	7.2	513	-3.0	12.5	--	--	--
	83	724	--	6.7	66	7.2	514	26.5	12.5	--	--	--
	83	736	--	8.5	83	7.2	511	29.0	12.5	--	--	--
	83	730	--	E6.7	--	7.0	503	28.0	12.6	--	--	--
410243096082002	70	735	--	5.5	54	--	489	4.5	12.5	--	--	--
	70	727	--	5.7	56	7.0	509	7.0	12.5	230	64.0	17.0
	70	735	--	6.3	62	7.1	519	-3.0	12.5	--	--	--
	70	724	--	6.2	61	7.1	522	26.5	12.5	--	--	--
	70	736	--	8.1	78	7.1	523	29.0	12.5	--	--	--
	70	730	--	E6.0	--	6.9	516	28.0	12.6	--	--	--
410243096082003	55	735	--	3.8	37	--	495	4.5	12.5	--	--	--
	55	727	--	3.7	36	7.0	503	7.0	12.5	230	64.7	16.8
	55	735	--	4.2	41	7.2	511	-3.0	12.5	--	--	--
	55	724	--	3.5	35	7.2	512	26.5	12.5	--	--	--
	55	736	--	4.5	43	7.1	509	29.0	12.5	--	--	--
	55	730	--	E3.9	--	7.0	500	28.0	12.6	--	--	--
410334096182801	55	735	--	0.2	2	--	476	4.5	12.5	--	--	--
	55	727	--	0.4	4	7.5	478	7.0	12.5	190	53.1	12.9
	55	735	--	0.3	3	7.6	481	-3.0	12.5	--	--	--
	55	724	--	0.2	2	7.4	483	26.5	12.5	--	--	--
	55	735	--	0.4	4	7.3	472	30.5	12.5	--	--	--
	55	730	--	E.2	--	7.2	476	28.0	12.7	--	--	--
410334096182802	37.5	735	--	0.1	1	--	476	4.5	12.5	--	--	--
	37.5	727	--	0.7	6	7.4	470	7.0	12.5	180	50.5	12.4
	37.5	735	--	1.0	10	7.5	470	-3.0	12.5	--	--	--
	37.5	724	--	0.5	5	7.3	472	26.5	12.5	--	--	--
	37.5	735	--	0.6	6	7.2	461	30.5	12.5	--	--	--
	37.5	730	--	E.3	--	7.2	458	28.0	12.6	--	--	--
410334096182803	21	735	--	0.4	4	--	675	4.5	14.0	--	--	--
	21	727	--	0.3	4	6.9	741	7.0	14.0	260	77.6	17.1
	21	735	--	0.7	7	6.9	791	-3.0	12.5	--	--	--
	21	724	--	1.1	11	6.8	783	26.5	11.5	--	--	--
	21	735	--	0.5	5	7.0	645	30.5	11.5	--	--	--
	21	730	--	E.5	--	6.9	732	28.0	13.0	--	--	--
					THURSTON COUNTY							
420840096290901	162	727	--	0.1	1	7.1	940	10.5	11.0	--	--	--
	162	717	--	0.8	8	7.0	964	4.0	11.0	--	--	--
	162	729	--	0.1	1	7.0	938	-0.5	11.0	400	124	22.9
	162	718	--	0.3	3	7.1	959	26.5	11.0	--	--	--
	162	733	--	0.2	2	6.8	955	32.0	11.0	--	--	--
	162	730	--	0.2	2	6.9	915	22.0	11.1	--	--	--
420840096290902	133	727	--	0.2	2	7.1	840	10.5	11.0	--	--	--
	133	717	--	0.9	9	6.9	868	4.0	11.0	--	--	--
	133	729	--	0.2	2	7.0	845	-0.5	11.0	390	119	22.1
	133	718	--	0.4	4	7.1	869	26.5	11.0	--	--	--

PAPIO-MISSOURI STUDY
WATER QUALITY FROM WELL NESTS—Continued

MULTIPLE STATION ANALYSES

Station number	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L (00660)	Orthophosphate, water, fltrd, mg/L as P (00671)
DOUGLAS COUNTY												
412151096180801	--	--	--	--	--	--	--	--	E.03	--	--	--
	0.4	16.6	240	3.51	27.0	66.6	0.36	0.28	<0.06	<0.008	0.254	0.08
	--	--	--	--	--	--	--	--	<0.06	--	--	--
	--	--	--	--	--	--	0.27	0.21	<0.06	<0.008	0.724	0.24
412151096180802	--	--	--	--	--	--	--	--	<0.06	--	--	--
	--	--	--	--	--	--	--	--	<0.06	--	--	--
	--	--	--	--	--	--	--	--	<0.06	--	--	--
	0.4	16.7	242	3.10	23.6	58.1	0.28	0.22	<0.06	<0.008	0.386	0.13
	--	--	--	--	--	--	--	--	<0.06	--	--	--
	--	--	--	--	--	--	0.28	0.22	<0.06	<0.008	0.779	0.25
SARPY COUNTY												
410243096082001	--	--	--	--	--	--	--	--	6.27	--	--	--
	0.5	18.5	E232	3.90	29.2	18.1	--	--	5.87	--	--	--
	--	--	--	--	--	--	--	--	6.10	--	--	--
	--	--	--	--	--	--	--	<0.04	6.27	<0.008	0.408	0.13
	--	--	--	--	--	--	--	--	6.57	--	--	--
	--	--	--	--	--	--	--	<0.04	6.40	<0.008	0.429	0.14
410243096082002	--	--	--	--	--	--	--	--	5.72	--	--	--
	0.5	17.8	E230	3.88	30.9	21.1	--	--	4.35	--	--	--
	--	--	--	--	--	--	--	--	5.84	--	--	--
	--	--	--	--	--	--	--	<0.04	5.28	<0.008	0.457	0.15
	--	--	--	--	--	--	--	--	4.57	--	--	--
	--	--	--	--	--	--	--	<0.04	6.31	<0.008	0.481	0.16
410243096082003	--	--	--	--	--	--	--	--	3.09	--	--	--
	0.5	17.7	E234	4.79	35.2	25.6	--	--	3.05	--	--	--
	--	--	--	--	--	--	--	--	3.32	--	--	--
	--	--	--	--	--	--	0.07	0.05	3.46	<0.008	1.55	0.50
	--	--	--	--	--	--	--	--	2.94	--	--	--
	--	--	--	--	--	--	0.14	0.11	2.81	<0.008	1.97	0.64
410334096182801	--	--	--	--	--	--	--	--	<0.06	--	--	--
	0.8	26.0	E205	13.6	30.5	23.8	--	--	<0.06	--	--	--
	--	--	--	--	--	--	--	--	E.04	--	--	--
	--	--	--	--	--	--	0.52	0.41	0.10	<0.008	0.383	0.12
	--	--	--	--	--	--	--	--	<0.06	--	--	--
	--	--	--	--	--	--	0.64	0.50	<0.06	<0.008	0.159	0.05
410334096182802	--	--	--	--	--	--	--	--	E.04	--	--	--
	0.9	27.4	E190	14.0	27.5	34.2	--	--	<0.06	--	--	--
	--	--	--	--	--	--	--	--	0.09	--	--	--
	--	--	--	--	--	--	0.29	0.23	0.07	<0.008	0.181	0.06
	--	--	--	--	--	--	--	--	<0.06	--	--	--
	--	--	--	--	--	--	0.24	0.19	<0.06	<0.008	--	<0.02
410334096182803	--	--	--	--	--	--	--	--	<0.06	--	--	--
	2	59.3	E356	7.45	31.6	36.4	--	--	<0.06	--	--	--
	--	--	--	--	--	--	--	--	<0.06	--	--	--
	--	--	--	--	--	--	0.31	0.24	<0.06	<0.008	0.212	0.07
	--	--	--	--	--	--	--	--	<0.06	--	--	--
	--	--	--	--	--	--	0.32	0.25	<0.06	<0.008	0.113	0.04
THURSTON COUNTY												
420840096290901	--	--	--	--	--	--	--	--	<0.06	--	--	--
	--	--	--	--	--	--	--	--	<0.06	--	--	--
	0.9	43.2	E304	27.7	12.6	167	--	--	<0.06	--	--	--
	--	--	--	--	--	--	0.44	0.34	<0.06	<0.008	--	E.02
	--	--	--	--	--	--	--	--	<0.06	--	--	--
	--	--	--	--	--	--	0.51	0.40	<0.06	<0.008	--	<0.02
420840096290902	--	--	--	--	--	--	--	--	<0.06	--	--	--
	--	--	--	--	--	--	--	--	<0.06	--	--	--
	0.7	32.4	E319	22.1	13.9	122	--	--	<0.06	--	--	--
	--	--	--	--	--	--	0.36	0.28	<0.06	<0.008	--	E.01

PAPIO-MISSOURI STUDY
WATER QUALITY FROM WELL NESTS—Continued

MULTIPLE STATION ANALYSES

Station number	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)
DOUGLAS COUNTY		
412151096180801	--	--
	1,400	1,580
	--	--
	--	--
412151096180802	--	--
	--	--
	--	--
	1,670	1,150
	--	--
	--	--
SARPY COUNTY		
410243096082001	--	--
	<10	<2.0
	--	--
	--	--
	--	--
	--	--
410243096082002	--	--
	16	3.1
	--	--
	--	--
	--	--
	--	--
410243096082003	--	--
	234	237
	--	--
	--	--
	--	--
	--	--
410334096182801	--	--
	918	550
	--	--
	--	--
	--	--
	--	--
410334096182802	--	--
	1,380	657
	--	--
	--	--
	--	--
	--	--
410334096182803	--	--
	3,310	1,050
	--	--
	--	--
	--	--
	--	--
THURSTON COUNTY		
420840096290901	--	--
	--	--
	857	158
	--	--
	--	--
	--	--
420840096290902	--	--
	--	--
	768	182
	--	--

PAPIO-MISSOURI STUDY
WATER QUALITY FROM WELL NESTS—Continued

MULTIPLE STATION ANALYSES

Station number	Station name	Latitude	Longitude	Geologic unit	Date	Time
		THURSTON COUNTY				
420840096290902	25N 8E14ADBA2	42 08 40 N	096 29 09 W	211DKOT	06-17-03	1855
	25N 8E14ADBA2	42 08 40 N	096 29 09 W	211DKOT	09-09-03	1635
420840096290903	25N 8E14ADBA3	42 08 40 N	096 29 09 W	211DKOT	10-17-02	1320
	25N 8E14ADBA3	42 08 40 N	096 29 09 W	211DKOT	12-17-02	1315
	25N 8E14ADBA3	42 08 40 N	096 29 09 W	211DKOT	02-27-03	1250
	25N 8E14ADBA3	42 08 40 N	096 29 09 W	211DKOT	04-02-03	1330
	25N 8E14ADBA3	42 08 40 N	096 29 09 W	211DKOT	06-17-03	1935
	25N 8E14ADBA3	42 08 40 N	096 29 09 W	211DKOT	09-09-03	1830
		WASHINGTON COUNTY				
412527096081201	17N 11E24CCBC1	41 25 27 N	096 08 12 W	112SDGV	10-18-02	1255
	17N 11E24CCBC1	41 25 27 N	096 08 12 W	112SDGV	12-18-02	1215
	17N 11E24CCBC1	41 25 27 N	096 08 12 W	112SDGV	02-28-03	1355
	17N 11E24CCBC1	41 25 27 N	096 08 12 W	112SDGV	04-03-03	0850
	17N 11E24CCBC1	41 25 27 N	096 08 12 W	112SDGV	06-18-03	1200
	17N 11E24CCBC1	41 25 27 N	096 08 12 W	112SDGV	09-10-03	1550
412527096081202	17N 11E24CCBC2	41 25 27 N	096 08 12 W	112SDGV	10-18-02	1330
	17N 11E24CCBC2	41 25 27 N	096 08 12 W	112SDGV	12-18-02	1255
	17N 11E24CCBC2	41 25 27 N	096 08 12 W	112SDGV	02-28-03	1430
	17N 11E24CCBC2	41 25 27 N	096 08 12 W	112SDGV	04-03-03	0925
	17N 11E24CCBC2	41 25 27 N	096 08 12 W	112SDGV	06-18-03	1310
	17N 11E24CCBC2	41 25 27 N	096 08 12 W	112SDGV	09-10-03	1620
412527096081203	17N 11E24CCBC3	41 25 27 N	096 08 12 W	112SDGV	12-18-02	1310
	17N 11E24CCBC3	41 25 27 N	096 08 12 W	112SDGV	02-28-03	1445
	17N 11E24CCBC3	41 25 27 N	096 08 12 W	112SDGV	04-03-03	1005
	17N 11E24CCBC3	41 25 27 N	096 08 12 W	112SDGV	06-18-03	1330
412637095565901	17N 13E16BDAA1	41 26 37 N	095 56 59 W	112SDGV	10-18-02	0915
	17N 13E16BDAA1	41 26 37 N	095 56 59 W	112SDGV	12-18-02	0905
	17N 13E16BDAA1	41 26 37 N	095 56 59 W	112SDGV	02-28-03	1055
	17N 13E16BDAA1	41 26 37 N	095 56 59 W	112SDGV	04-03-03	1325
	17N 13E16BDAA1	41 26 37 N	095 56 59 W	112SDGV	06-18-03	1600
	17N 13E16BDAA1	41 26 37 N	095 56 59 W	112SDGV	09-11-03	1100
412637095565902	17N 13E16DBAA2	41 26 37 N	095 56 59 W	112SDGV	10-18-02	0940
	17N 13E16DBAA2	41 26 37 N	095 56 59 W	112SDGV	12-18-02	0930
	17N 13E16DBAA2	41 26 37 N	095 56 59 W	112SDGV	02-28-03	1120
	17N 13E16DBAA2	41 26 37 N	095 56 59 W	112SDGV	04-03-03	1400
	17N 13E16DBAA2	41 26 37 N	095 56 59 W	112SDGV	06-18-03	1620
	17N 13E16DBAA2	41 26 37 N	095 56 59 W	112SDGV	09-11-03	1125
412637095565903	17N 13E16DBAA3	41 26 37 N	095 56 59 W	112SDGV	10-18-02	1010
	17N 13E16DBAA3	41 26 37 N	095 56 59 W	112SDGV	12-18-02	0950
	17N 13E16DBAA3	41 26 37 N	095 56 59 W	112SDGV	02-28-03	1145
	17N 13E16DBAA3	41 26 37 N	095 56 59 W	112SDGV	04-03-03	1415
	17N 13E16DBAA3	41 26 37 N	095 56 59 W	112SDGV	06-18-03	1730
	17N 13E16DBAA3	41 26 37 N	095 56 59 W	112SDGV	09-11-03	1210

PAPIO-MISSOURI STUDY
WATER QUALITY FROM WELL NESTS—Continued

MULTIPLE STATION ANALYSES

Station number	Depth of well, feet below LSD (72008)	Barometric pressure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
					THURSTON COUNTY							
420840096290902	133	733	--	0.2	2	6.9	867	32.0	11.0	--	--	--
	133	730	--	0.3	3	6.9	831	22.0	10.9	--	--	--
420840096290903	104.5	727	--	0.3	3	7.0	772	10.5	11.0	--	--	--
	104.5	717	--	0.7	6	7.0	794	4.0	11.0	--	--	--
	104.5	729	--	0.8	8	7.0	774	-0.1	11.0	370	112	21.2
	104.5	718	--	0.3	3	7.1	791	26.5	11.0	--	--	--
	104.5	733	--	0.2	2	7.0	790	32.0	11.0	--	--	--
	104.5	730	--	0.4	4	6.9	763	22.0	10.9	--	--	--
					WASHINGTON COUNTY							
412527096081201	225	727	--	3.8	38	7.3	726	21.0	14.0	--	--	--
	225	719	--	3.9	39	7.2	734	5.0	13.0	--	--	--
	225	737	--	3.7	37	7.5	737	5.0	13.0	--	--	--
	225	716	36	4.4	45	7.3	747	23.0	13.5	360	99.7	26.2
	225	731	--	4.0	40	7.5	749	34.0	13.5	--	--	--
	225	728	--	E3.8	--	7.2	729	20.0	13.7	--	--	--
412527096081202	193.5	727	--	2.7	27	7.5	571	21.0	13.5	--	--	--
	193.5	719	--	2.9	29	7.4	576	5.0	13.0	--	--	--
	193.5	737	--	2.6	25	7.7	582	5.0	13.0	--	--	--
	193.5	716	16	3.2	32	7.6	594	23.0	13.0	240	65.5	18.2
	193.5	731	--	2.8	29	7.5	593	34.0	14.0	--	--	--
	193.5	728	--	E2.9	--	7.3	568	20.0	13.7	--	--	--
412527096081203	168	719	--	4.0	40	7.4	578	5.0	12.5	--	--	--
	168	737	--	2.8	28	7.7	572	5.0	12.5	--	--	--
	168	716	20	4.2	42	7.5	571	23.0	13.0	240	64.4	19.2
	168	731	--	4.0	40	7.8	579	34.0	13.5	--	--	--
412637095565901	100	727	--	0.1	1	7.0	1,200	10.0	12.5	--	--	--
	100	719	--	0.2	2	7.0	1,200	5.0	12.5	--	--	--
	100	737	--	0.3	3	7.3	1,190	3.0	12.5	--	--	--
	100	716	123	0.2	2	7.0	1,230	23.0	12.5	610	159	52.1
	100	731	--	0.3	3	7.2	1,260	34.0	12.5	--	--	--
	100	731	--	E.2	--	7.1	1,220	18.0	12.4	--	--	--
412637095565902	60	727	--	0.1	1	7.1	1,090	10.0	12.5	530	140	43.4
	60	719	--	0.1	1	7.1	1,080	5.0	12.5	--	--	--
	60	737	--	0.3	3	7.4	1,080	3.0	12.5	--	--	--
	60	716	--	0.3	3	7.1	1,120	23.0	12.5	--	--	--
	60	731	--	0.1	1	7.3	1,100	34.0	12.5	--	--	--
	60	731	--	E.2	--	7.1	1,060	18.0	12.5	--	--	--
412637095565903	25	727	--	1.0	10	6.8	1,000	10.0	13.5	540	135	48.6
	25	719	--	1.0	11	6.8	933	5.0	13.5	--	--	--
	25	737	--	1.2	11	7.2	969	3.0	12.5	--	--	--
	25	716	--	1.0	10	7.0	936	23.0	12.0	--	--	--
	25	731	--	1.1	11	6.8	1,020	24.0	11.5	--	--	--
	25	731	--	E1.0	--	7.0	1,020	18.0	12.7	--	--	--

PAPIO-MISSOURI STUDY
WATER QUALITY FROM WELL NESTS—Continued

MULTIPLE STATION ANALYSES

Station number	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
THURSTON COUNTY												
420840096290902	--	--	--	--	--	--	--	--	--	--	--	<0.06
	--	--	--	--	--	--	--	--	--	0.45	0.35	<0.06
420840096290903	--	--	--	--	--	--	--	--	--	--	--	<0.06
	--	--	--	--	--	--	--	--	--	--	--	<0.06
	--	0.7	28.7	--	E352	15.7	--	14.2	86.0	--	--	<0.06
	--	--	--	--	--	--	--	--	--	0.37	0.29	<0.06
	--	--	--	--	--	--	--	--	--	--	--	<0.06
	--	--	--	--	--	--	--	--	--	0.46	0.36	<0.06
WASHINGTON COUNTY												
412527096081201	--	--	--	--	--	--	--	--	--	--	--	0.09
	--	--	--	--	--	--	--	--	--	--	--	<0.06
	--	--	--	--	--	--	--	--	--	--	--	<0.06
	--	0.7	30.9	--	394	1.48	--	22.5	33.3	0.52	0.40	<0.06
	--	--	--	--	--	--	--	--	--	--	--	0.09
	--	--	--	--	--	--	--	--	--	0.58	0.45	<0.06
412527096081202	--	--	--	--	--	--	--	--	--	--	--	<0.06
	--	--	--	--	--	--	--	--	--	--	--	<0.06
	--	--	--	--	--	--	--	--	--	--	--	<0.06
	--	1	41.8	--	307	1.42	--	22.5	23.9	0.62	0.48	<0.06
	--	--	--	--	--	--	--	--	--	--	--	<0.06
	--	--	--	--	--	--	--	--	--	0.56	0.43	<0.06
412527096081203	--	--	--	--	--	--	--	--	--	--	--	0.07
	--	--	--	--	--	--	--	--	--	--	--	<0.06
	--	1	36.8	--	289	1.48	--	22.4	30.0	0.50	0.39	<0.06
	--	--	--	--	--	--	--	--	--	--	--	<0.06
412637095565901	--	--	--	--	--	--	--	--	--	--	--	<0.06
	--	--	--	--	--	--	--	--	--	--	--	<0.06
	--	--	--	--	--	--	--	--	--	--	--	<0.06
	--	0.8	45.9	--	664	7.77	--	30.8	43.0	1.07	0.83	<0.06
	--	--	--	--	--	--	--	--	--	--	--	<0.06
	--	--	--	--	--	--	--	--	--	1.64	1.27	<0.06
412637095565902	6.32	0.9	48.1	16	E469	2.86	0.32	32.7	27.3	--	--	<0.06
	--	--	--	--	--	--	--	--	--	--	--	<0.06
	--	--	--	--	--	--	--	--	--	--	--	0.08
	--	--	--	--	--	--	--	--	--	1.52	1.18	<0.06
	--	--	--	--	--	--	--	--	--	--	--	<0.06
	--	--	--	--	--	--	--	--	--	1.52	1.18	<0.06
412637095565903	4.77	0.5	27.9	10	E329	3.21	0.22	21.7	58.2	--	--	<0.06
	--	--	--	--	--	--	--	--	--	--	--	<0.06
	--	--	--	--	--	--	--	--	--	--	--	<0.06
	--	--	--	--	--	--	--	--	--	0.14	0.11	<0.06
	--	--	--	--	--	--	--	--	--	--	--	<0.06
	--	--	--	--	--	--	--	--	--	0.24	0.19	<0.06

PAPIO-MISSOURI STUDY
WATER QUALITY FROM WELL NESTS—Continued

MULTIPLE STATION ANALYSES

Station number	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L (00660)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Iron, water, fltrd, ug/L (01046)	Mangan-ese, water, fltrd, ug/L (01056)
THURSTON COUNTY					
420840096290902	--	--	--	--	--
	<0.008	--	<0.02	--	--
420840096290903	--	--	--	--	--
	--	--	--	--	--
	--	--	--	1,010	231
	<0.008	--	E.01	--	--
	--	--	--	--	--
	<0.008	--	<0.02	--	--
WASHINGTON COUNTY					
412527096081201	--	--	--	--	--
	--	--	--	--	--
	--	--	--	--	--
	<0.008	--	E.01	301	236
	--	--	--	--	--
	<0.008	--	<0.02	--	--
412527096081202	--	--	--	--	--
	--	--	--	--	--
	--	--	--	--	--
	<0.008	0.178	0.06	210	200
	--	--	--	--	--
	<0.008	0.163	0.05	--	--
412527096081203	--	--	--	--	--
	--	--	--	--	--
	<0.008	0.199	0.07	18	132
	--	--	--	--	--
412637095565901	--	--	--	--	--
	--	--	--	--	--
	--	--	--	--	--
	<0.008	--	E.01	4,100	323
	--	--	--	--	--
	<0.008	--	<0.18	--	--
412637095565902	--	--	--	7,860	253
	--	--	--	--	--
	--	--	--	--	--
	<0.008	0.132	0.04	--	--
	--	--	--	--	--
	<0.008	0.601	0.20	--	--
412637095565903	--	--	--	1,330	1,860
	--	--	--	--	--
	--	--	--	--	--
	<0.008	--	<0.02	--	--
	--	--	--	--	--
	<0.008	--	E.01	--	--

Remark codes used in this table:
< -- Less than
E -- Estimated value
M -- Presence verified, not quantified

UPPER ELKHORN NATURAL RESOURCES DISTRICT
WATER-QUALITY MONITORING

(Station Name: indicates location by township, range, and section.)

COUNTIES.--Antelope and Holt

MULTIPLE STATION ANALYSES

Station number	Station name	Latitude	Longitude	Date	Time	Depth of well, feet below LSD (72008)
		ANTELOPE COUNTY				
421547097592601	27N 6W34DD1	42 15 47 N	097 59 26 W	07-02-03	0900	69
421547097592602	27N 6W34DD2	42 15 47 N	097 59 26 W	07-02-03	1000	190
421902097592401	27N 6W14BB1	42 19 02 N	097 59 24 W	07-01-03	1530	135
421902097592402	27N 6W14BB2	42 19 02 N	097 59 24 W	07-01-03	1700	200
421902097592403	27N 6W14BB3	42 19 02 N	097 59 24 W	07-01-03	1600	315
422010097522701	27N 5W 3DD1	42 20 10 N	097 52 27 W	06-30-03	1700	92
422010097522702	27N 5W 3DD2	42 20 10 N	097 52 27 W	06-30-03	1600	170
422010097522703	27N 5W 3DD3	42 20 10 N	097 52 27 W	06-30-03	1500	300
422033098062301	27N 7W 2BC1	42 20 33 N	098 06 23 W	07-01-03	1130	90
422033098062302	27N 7W 2BC2	42 20 33 N	098 06 23 W	07-01-03	1300	180
422033098062303	27N 7W 2BC3	42 20 33 N	098 06 23 W	07-01-03	1230	287
		HOLT COUNTY				
422758098263201	29N 10W24CC1	42 27 58 N	098 26 32 W	07-01-03	0800	70
422758098263202	29N 10W24CC2	42 27 58 N	098 26 32 W	07-01-03	1000	120
422758098263203	29N 10W24CC3	42 27 58 N	098 26 32 W	07-01-03	0930	211

MULTIPLE STATION ANALYSES

Station number	Altitude of land surface feet (72000)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)
					ANTELOPE COUNTY							
421547097592601	1,854	27	11.4	7.1	543	12.5	240	70.5	15.2	0.4	12.6	191
421547097592602	1,854	30	9.8	7.1	394	13.0	190	59.7	9.35	0.2	7.84	205
421902097592401	1,894	13	6.3	7.3	345	13.5	150	48.7	7.64	0.2	6.59	137
421902097592402	1,894	22	13.8	7.2	361	14.0	170	56.6	7.62	0.2	6.55	189
421902097592403	1,894	32	7.0	7.1	411	14.5	190	60.4	8.28	0.4	11.8	213
422010097522701	1,820	45	5.7	6.8	523	12.5	200	60.7	12.4	0.5	17.7	138
422010097522702	1,820	34	4.8	7.0	367	13.5	170	53.8	7.91	0.4	11.3	193
422010097522703	1,820	48	1.1	7.0	561	14.5	220	69.9	11.2	1	32.7	265
422033098062301	1,847	39	12.1	6.9	565	13.0	240	74.3	13.1	0.3	11.0	152
422033098062302	1,847	49	7.8	7.0	444	14.0	220	69.9	10.1	0.3	9.56	224
422033098062303	1,847	46	6.6	7.0	478	14.5	230	75.3	10.6	0.3	9.92	238
					HOLT COUNTY							
422758098263201	1,935	130	6.4	5.7	424	12.5	150	45.5	9.01	0.5	12.8	35
422758098263202	1,935	3.7	5.8	7.7	207	13.0	86	27.5	4.28	0.3	5.36	97
422758098263203	1,935	3.1	5.8	7.7	182	14.0	73	23.1	3.64	0.3	5.88	86

UPPER ELKHORN NATURAL RESOURCES DISTRICT
WATER-QUALITY MONITORING—Continued

MULTIPLE STATION ANALYSES

Station number	Chloride, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)
ANTELOPE COUNTY						
421547097592601	5.03	47.1	16.6	17.2	<8	E.2
421547097592602	1.09	62.0	3.8	0.48	<8	<0.4
421902097592401	2.58	46.2	7.0	8.16	<8	E.2
421902097592402	1.13	56.0	2.1	0.44	<8	E.2
421902097592403	1.09	64.9	6.1	0.55	<8	17.6
422010097522701	6.83	47.2	16.7	26.4	<8	E.3
422010097522702	1.38	56.3	3.0	0.44	<8	E.3
422010097522703	2.02	64.1	35.7	1.55	<8	1.3
422033098062301	8.28	47.7	17.5	27.1	<8	E.4
422033098062302	1.53	60.1	11.2	0.90	<8	E.2
422033098062303	1.54	61.8	16.4	1.09	<8	E.3
HOLT COUNTY						
422758098263201	10.1	28.5	25.1	32.3	<8	1.1
422758098263202	0.61	66.3	6.5	0.40	<8	<0.4
422758098263203	0.60	66.5	4.7	0.31	<8	E.2

Remark codes used in this table:
< -- Less than
E -- Estimated value

ASHLAND GROUND-WATER QUALITY STUDY—Continued

CHEMICAL ANALYSES OF GROUND WATER

ASHLAND GROUND-WATER QUALITY STUDY

(Station Name: indicates location by township, range, and section. Geologic unit: 110QRNR, Quaternary system deposits, undifferentiated; 110SDGV, Quaternary sand and gravel deposits, undifferentiated; 112SDGV, Pleistocene sand and gravel deposits.)

COUNTIES.-- Sarpy and Saunders

MULTIPLE STATION ANALYSES

Station number	Station name	Latitude	Longitude	Date	Time	Geologic unit
		SARPY COUNTY				
410159096181001	12N 10E 4CDAA1	41 01 59 N	096 18 10 W	08-28-03	1030	112SDGV
410233096181801	12N 10E 4BADB1	41 02 33 N	096 18 18 W	08-28-03	0900	--
410312096183901	13N 10E32ADDD1	41 03 12 N	096 18 39 W	08-27-03	1400	110SDGV
410324096191801	13N 10E32BADC1	41 03 24 N	096 19 18 W	08-28-03	1200	112SDGV
		SAUNDERS COUNTY				
410303096192901	13N 10E32CABC1	41 03 03 N	096 19 29 W	08-28-03	1330	112SDGV
410427096202501	13N 10E19CDDD1	41 04 27 N	096 20 25 W	08-27-03	1230	110SDGV
410612096220601	13N 9E14AAAA1	41 06 11 N	096 22 06 W	08-27-03	0900	110QRNR
410703096205301	13N 10E 7BBBB1	41 07 03 N	096 20 53 W	08-27-03	1130	110QRNR

MULTIPLE STATION ANALYSES

Station number	Depth of well, feet below LSD (72008)	Altitude of land surface feet (72000)	Pump or flow period prior to sampling, minutes (72004)	Barometric pressure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)
						SARPY COUNTY						
410159096181001	--	1,052.	45	732	4.4	0.1	0.0	8.0	597	11.0	230	63.3
410233096181801	--	1,052	45	732	3.4	0.1	1	8.1	554	12.0	210	59.5
410312096183901	46.00	1,056.	45	734	2.3	0.1	0.0	8.1	468	10.5	160	39.3
410324096191801	--	1,060.	55	732	4.8	0.1	0.0	7.9	561	11.5	210	61.5
						SAUNDERS COUNTY						
410303096192901	86.	1,056.	45	732	2.2	0.1	0.0	8.2	418	17.0	150	39.3
410427096202501	56.	1,065.	40	734	2.8	0.1	0.0	8.0	465	14.0	170	45.0
410612096220601	98.00	1,075.	55	734	--	0.1	1	7.6	700	12.0	--	--
410703096205301	96.00	1,075.	45	734	--	0.1	0.0	7.8	517	20.0	--	--

MULTIPLE STATION ANALYSES

Station number	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/acre-ft (70303)
						SARPY COUNTY						
410159096181001	16.8	8.21	0.9	32.3	23	208	15.1	0.4	32.2	79.2	373	0.51
410233096181801	15.0	7.88	0.8	26.9	21	203	13.2	0.4	27.7	62.9	337	0.46
410312096183901	14.0	7.82	0.9	26.7	26	159	14.8	0.3	12.5	50.9	263	0.36
410324096191801	13.7	7.74	0.9	31.5	24	198	13.9	0.4	30.2	68.0	346	0.47
						SAUNDERS COUNTY						
410303096192901	11.9	8.54	0.9	24.0	25	161	9.75	0.4	39.2	37.5	268	0.36
410427096202501	13.3	8.48	0.8	23.6	22	155	11.6	0.3	26.7	58.8	281	0.38
410612096220601	--	--	--	--	--	--	--	--	--	--	--	--
410703096205301	--	--	--	--	--	--	--	--	--	--	--	--

ASHLAND GROUND-WATER QUALITY STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryll-ium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chrom-ium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)	Mangan-ese, water, fltrd, ug/L (01056)
SARPY COUNTY												
410159096181001	9	145	<0.4	72	<2	<5	<3	<7	10	E.06	19	239
410233096181801	8	185	<0.4	71	<2	<5	<3	E3	128	<0.08	17	925
410312096183901	2	168	<0.4	51	<2	<5	<3	<7	416	<0.08	13	806
410324096191801	5	165	<0.4	62	<2	<5	<3	<7	E4	E.07	16	18.3
SAUNDERS COUNTY												
410303096192901	8	65.9	<0.4	64	<2	<5	<3	<7	34	E.08	19	29.3
410427096202501	4	80.2	<0.4	46	<2	<5	<3	<7	13	0.09	14	85.9
410612096220601	--	--	--	--	--	--	--	--	--	--	--	--
410703096205301	--	--	--	--	--	--	--	--	--	--	--	--

MULTIPLE STATION ANALYSES

Station number	Mercury water, fltrd, ug/L (71890)	Molyb-denum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selen-ium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Stront-ium, water, fltrd, ug/L (01080)	Vanad-ium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)
SARPY COUNTY												
410159096181001	<0.02	<4	<7	E2	<5	424	E5	3	0.05	<0.05	<0.05	<0.05
410233096181801	<0.02	<4	<7	3	<5	379	E5	4	0.10	<0.05	<0.05	<0.05
410312096183901	<0.02	E3	<7	<3	<5	306	<6	4	<0.05	<0.05	<0.05	<0.05
410324096191801	<0.02	<4	<7	E1	<5	385	E4	5	0.07	<0.05	<0.05	<0.05
SAUNDERS COUNTY												
410303096192901	<0.02	<4	<7	<3	<5	334	9	E2	0.16	0.07	<0.05	<0.05
410427096202501	<0.02	E2	<7	<3	<5	377	E5	E2	0.13	<0.05	<0.05	<0.05
410612096220601	--	--	--	--	--	--	--	--	--	--	--	--
410703096205301	--	--	--	--	--	--	--	--	--	--	--	--

MULTIPLE STATION ANALYSES

Station number	Ametryn water, fltrd, ug/L (38401)	Atra-zine, water, fltrd, ug/L (39632)	Broma-cil, water, fltrd, ug/L (04029)	Buta-chlor, water, fltrd, ug/L (04026)	Butyl-ate, water, fltrd, ug/L (04028)	Car-boxin, water, fltrd, ug/L (04027)	Cyana-zine, water, fltrd, ug/L (04041)	Cyclo-ate, water, fltrd, ug/L (04031)	Diphen-amid, water, fltrd, ug/L (04033)	Hexa-zinone, water, fltrd, ug/L (04025)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)
SARPY COUNTY												
410159096181001	<0.05	0.20	<1.00	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05
410233096181801	<0.05	0.80	<1.00	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	0.08	<0.05
410312096183901	<0.05	0.20	<1.00	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05
410324096191801	<0.05	0.36	E.14	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05
SAUNDERS COUNTY												
410303096192901	<0.05	0.77	<1.00	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	0.16	<0.05
410427096202501	<0.05	1.11	<1.00	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	0.36	<0.05
410612096220601	--	--	--	--	--	--	--	--	--	--	--	--
410703096205301	--	--	--	--	--	--	--	--	--	--	--	--

ASHLAND GROUND-WATER QUALITY STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propachlor, water, fltrd, ug/L (04024)	Propazine, water, fltrd, ug/L (38535)	Simazine, water, fltrd, ug/L (04035)	Simatryn, water, fltrd, ug/L (04030)	Terbacil, water, fltrd, ug/L (04032)	Trifluralin, water, fltrd, ug/L (04023)	Vernolate, water, fltrd, ug/L (04034)	Xylenes water unfltrd ug/L (81551)	1,1,1,2-Tetrachloroethane, water, unfltrd ug/L (77562)	1,1,1-Trichloroethane, water, unfltrd ug/L (34506)
SARPY COUNTY												
410159096181001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--
410233096181801	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--
410312096183901	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--
410324096191801	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--
SAUNDERS COUNTY												
410303096192901	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--
410427096202501	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--
410612096220601	--	--	--	--	--	--	--	--	--	<0.2	<0.2	<0.2
410703096205301	--	--	--	--	--	--	--	--	--	<0.2	<0.2	<0.2

MULTIPLE STATION ANALYSES

Station number	1,1,2,2-Tetrachloroethane, water, unfltrd ug/L (34516)	CFC-113 water unfltrd ug/L (77652)	1,1,2-Trichloroethane, water, unfltrd ug/L (34511)	1,1-Dichloroethane, water unfltrd ug/L (34496)	1,1-Dichloroethene, water, unfltrd ug/L (34501)	1,1-Dichloropropene water unfltrd ug/L (77168)	1,2,3-Trichlorobenzene water unfltrd ug/L (77613)	1,2,3-Trichloropropane water unfltrd ug/L (77443)	1,2,4-Trichlorobenzene water unfltrd ug/L (34551)	1,2,4-Trimethylbenzene water unfltrd ug/L (77222)	Dibromochloropropane water unfltrd ug/L (82625)	1,2-Dibromoethane, water, unfltrd ug/L (77651)
SARPY COUNTY												
410159096181001	--	--	--	--	--	--	--	--	--	--	--	--
410233096181801	--	--	--	--	--	--	--	--	--	--	--	--
410312096183901	--	--	--	--	--	--	--	--	--	--	--	--
410324096191801	--	--	--	--	--	--	--	--	--	--	--	--
SAUNDERS COUNTY												
410303096192901	--	--	--	--	--	--	--	--	--	--	--	--
410427096202501	--	--	--	--	--	--	--	--	--	--	--	--
410612096220601	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.2
410703096205301	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<0.2

MULTIPLE STATION ANALYSES

Station number	1,2-Dichlorobenzene water unfltrd ug/L (34536)	1,2-Dichloroethane, water, unfltrd ug/L (32103)	1,2-Dichloropropane water unfltrd ug/L (34541)	1,3,5-Trimethylbenzene water unfltrd ug/L (77226)	1,3-Dichlorobenzene water unfltrd ug/L (34566)	1,3-Dichloropropane water unfltrd ug/L (77173)	1,4-Dichlorobenzene water unfltrd ug/L (34571)	2,2-Dichloropropane water unfltrd ug/L (77170)	2-Chlorotoluene water unfltrd ug/L (77275)	4-Chlorotoluene water unfltrd ug/L (77277)	4-Isopropyltoluene water unfltrd ug/L (77356)	Acrylonitrile water unfltrd ug/L (34215)
SARPY COUNTY												
410159096181001	--	--	--	--	--	--	--	--	--	--	--	--
410233096181801	--	--	--	--	--	--	--	--	--	--	--	--
410312096183901	--	--	--	--	--	--	--	--	--	--	--	--
410324096191801	--	--	--	--	--	--	--	--	--	--	--	--
SAUNDERS COUNTY												
410303096192901	--	--	--	--	--	--	--	--	--	--	--	--
410427096202501	--	--	--	--	--	--	--	--	--	--	--	--
410612096220601	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.5
410703096205301	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2.5

ASHLAND GROUND-WATER QUALITY STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	Benzene water unfltrd ug/L (34030)	Bromobenzene water unfltrd ug/L (81555)	Bromochloromethane water unfltrd ug/L (77297)	Bromodichloromethane water unfltrd ug/L (32101)	Bromomethane water unfltrd ug/L (34413)	Chlorobenzene water unfltrd ug/L (34301)	Chloroethane, water, unfltrd ug/L (34311)	Chloromethane water unfltrd ug/L (34418)	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)	cis-1,3-Dichloropropene water unfltrd ug/L (34704)	Dibromochloromethane water unfltrd ug/L (32105)	Dibromomethane water unfltrd ug/L (30217)
SARPY COUNTY												
410159096181001	--	--	--	--	--	--	--	--	--	--	--	--
410233096181801	--	--	--	--	--	--	--	--	--	--	--	--
410312096183901	--	--	--	--	--	--	--	--	--	--	--	--
410324096191801	--	--	--	--	--	--	--	--	--	--	--	--
SAUNDERS COUNTY												
410303096192901	--	--	--	--	--	--	--	--	--	--	--	--
410427096202501	--	--	--	--	--	--	--	--	--	--	--	--
410612096220601	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
410703096205301	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

MULTIPLE STATION ANALYSES

Station number	Dichlorodifluoromethane wat unf ug/L (34668)	Dichloromethane water unfltrd ug/L (34423)	Ethylbenzene water unfltrd ug/L (34371)	Hexachlorobutadiene, water, unfltrd ug/L (39702)	Isopropylbenzene water unfltrd ug/L (77223)	Naphthalene, water, unfltrd ug/L (34696)	n-Butyl benzene water unfltrd ug/L (77342)	n-propylbenzene water unfltrd ug/L (77224)	sec-Butylbenzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert-Butylbenzene water unfltrd ug/L (77353)
SARPY COUNTY												
410159096181001	--	--	--	--	--	--	--	--	--	--	--	--
410233096181801	--	--	--	--	--	--	--	--	--	--	--	--
410312096183901	--	--	--	--	--	--	--	--	--	--	--	--
410324096191801	--	--	--	--	--	--	--	--	--	--	--	--
SAUNDERS COUNTY												
410303096192901	--	--	--	--	--	--	--	--	--	--	--	--
410427096202501	--	--	--	--	--	--	--	--	--	--	--	--
410612096220601	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
410703096205301	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

MULTIPLE STATION ANALYSES

Station number	Tetrachloroethene, water, unfltrd ug/L (34475)	Tetrachloromethane water unfltrd ug/L (32102)	Toluene water unfltrd ug/L (34010)	trans-1,2-Dichloroethene, water, unfltrd ug/L (34546)	trans-1,3-Dichloropropene water unfltrd ug/L (34699)	Tribromomethane water unfltrd ug/L (32104)	Trichloroethene, water, unfltrd ug/L (39180)	Trichlorofluoromethane water unfltrd ug/L (34488)	Trichloromethane water unfltrd ug/L (32106)	Vinyl chloride, water, unfltrd ug/L (39175)
SARPY COUNTY										
410159096181001	--	--	--	--	--	--	--	--	--	--
410233096181801	--	--	--	--	--	--	--	--	--	--
410312096183901	--	--	--	--	--	--	--	--	--	--
410324096191801	--	--	--	--	--	--	--	--	--	--
SAUNDERS COUNTY										
410303096192901	--	--	--	--	--	--	--	--	--	--
410427096202501	--	--	--	--	--	--	--	--	--	--
410612096220601	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
410703096205301	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

Remark codes used in this table:
< -- Less than
E -- Estimated value

GROUND-WATER PROTECTION AREA

MIDDLE REPUBLICAN NATURAL RESOURCES DISTRICT

(Station Name: indicates location by township, range, and section. Geologic unit: 112SDGV, Pleistocene sand and gravel deposits; 121OGLL, Tertiary Ogallala Formation.)

COUNTIES.--Hitchcock and Red Willow

MULTIPLE STATION ANALYSES

Station number	Station name	Latitude	Longitude	Geologic unit	Date	Time
HITCHCOCK COUNTY						
400818101124001	2N 35W13AAAD1	40 08 18 N	101 12 40 W	112SDGV	09-10-03	1430
400818101124002	2N 35W13AAAD2	40 08 18 N	101 12 40 W	112SDGV	09-10-03	1500
401655100583201	4N 32W30DCBB1	40 16 55 N	100 58 32 W	112SDGV	09-10-03	1600
401655100583202	4N 32W30DCBB2	40 16 55 N	100 58 32 W	112SDGV	09-10-03	1630
RED WILLOW COUNTY						
400357100135201	1N 26W11CBBB1	40 03 57 N	100 13 52 W	112SDGV	09-11-03	1030
401016100391801	2N 30W 1ACDD1	40 10 16 N	100 39 18 W	112SDGV	09-10-03	1800
401016100391802	2N 30W 1ACDD2	40 10 16 N	100 39 18 W	112SDGV	09-10-03	1830
401016100391803	2N 30W 1ACDD3	40 10 16 N	100 39 18 W	112SDGV	09-10-03	1900
401412100364201	3N 29W 8DDBA1	40 14 12 N	100 36 42 W	121OGLL	09-10-03	1130
401412100364202	3N 29W 8DDBA2	40 14 12 N	100 36 42 W	121OGLL	09-10-03	1200
401412100364203	3N 29W 8DDBA3	40 14 12 N	100 36 42 W	112SDGV	09-10-03	1230
401454100215401	3N 27W 9AAAA1	40 14 54 N	100 21 54 W	112SDGV	09-11-03	0900

MULTIPLE STATION ANALYSES

Station number	Depth of well, feet below LSD (72008)	Altitude of land surface feet (72000)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Nitrite + nitrate water fltrd, mg/L as N (00631)
HITCHCOCK COUNTY										
400818101124001	46.00	2,788	695	0.8	8	7.3	1,400	26.0	14.5	16.7
400818101124002	30.00	2,788	695	0.9	10	7.2	1,580	25.0	14.0	13.2
401655100583201	61.00	2,867	695	2.6	28	7.2	1,220	26.5	14.5	14.7
401655100583202	45.00	2,867	695	2.6	29	7.2	1,300	26.5	15.0	15.7
RED WILLOW COUNTY										
400357100135201	64.00	2,366	689	0.1	1	7.2	706	20.0	13.5	<0.06
401016100391801	72.00	2,493	695	0.3	3	7.2	1,320	25.0	15.0	26.0
401016100391802	55.00	2,493	695	0.2	2	7.1	1,200	26.0	15.0	17.5
401016100391803	36.00	2,493	695	3.0	33	7.1	1,180	26.0	16.0	11.4
401412100364201	174.00	2,605	695	7.3	83	7.4	522	21.0	16.5	4.77
401412100364202	159.00	2,605	695	8.2	92	7.4	763	21.0	16.5	17.4
401412100364203	135.00	2,605	695	8.2	92	7.4	1,030	23.0	16.5	27.3
401454100215401	40.00	2,368	689	6.3	67	7.3	563	18.0	13.5	0.76

Remark codes used in this table:
< -- Less than

ECOLOGICAL TRENDS SAMPLING

COUNTIES.--Douglas, Sarpy, and Thomas

MISCELLANEOUS STATION ANALYSES

Date	Time	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Sample location, distanc upstream, feet (72105)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)	Biomass chlorophyll ratio, periphyton, number (70950)	Pheophytin a, periphyton, mg/m2 (62359)	Pheophytin a, phytoplankton, ug/L (62360)	Chlorophyll a periphyton, chromofluoro, mg/m2 (70957)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Suspended sediment load, tons/d (80155)
06800500 ELKHORN RIVER AT WATERLOO, NE (LAT 41 17 37N LONG 096 17 00W)													
NOV 2002													
13...	0900	3.02	655	23,820	--	--	--	--	--	--	--	--	--
13...	1000	3.02	655	24,800	--	--	--	--	--	--	--	--	--
13...	1100	3.02	655	38,970	--	--	--	--	--	--	--	--	--
13...	1200	3.02	655	39,620	--	--	--	--	--	--	--	--	--
13...	1300	3.02	655	32,610	--	--	--	--	--	--	--	--	--
13...	1400	3.02	655	33,590	--	--	--	--	--	--	--	--	--
MAY 2003													
29...	1301	4.00	1,490	--	--	--	--	--	--	--	--	--	805
29...	1302	4.00	1,490	--	--	--	--	--	--	--	--	--	856
29...	1303	4.00	1,490	--	--	--	--	--	--	--	--	--	1,210
29...	1304	4.00	1,490	--	--	--	--	--	--	--	--	--	1,130
29...	1305	4.00	1,490	--	--	--	--	--	--	--	--	--	1,300
29...	1306	4.00	1,490	--	--	--	--	--	--	--	--	--	1,740
29...	1307	4.00	1,490	--	--	--	--	--	--	--	--	--	2,810
29...	1308	4.00	1,490	--	--	--	--	--	--	--	--	--	1,730
29...	1309	4.00	1,490	--	--	--	--	--	--	--	--	--	1,290
29...	1310	4.00	1,490	--	--	--	--	--	--	--	--	--	1,110
29...	1330	4.00	1,490	--	--	--	--	--	--	40.1	--	162	--
29...	1331	4.00	1,490	--	--	--	--	--	--	43.1	--	143	--
29...	1332	4.00	1,490	--	--	--	--	--	--	42.8	--	153	--
29...	1401	4.00	1,490	--	--	--	--	--	--	--	--	--	1,460
29...	1402	4.00	1,490	--	--	--	--	--	--	--	--	--	1,240
29...	1403	4.00	1,490	--	--	--	--	--	--	--	--	--	1,010
29...	1404	4.00	1,490	--	--	--	--	--	--	--	--	--	819
29...	1405	4.00	1,490	--	--	--	--	--	--	--	--	--	1,560
29...	1406	4.00	1,490	--	--	--	--	--	--	--	--	--	1,710
29...	1407	4.00	1,490	--	--	--	--	--	--	--	--	--	--
29...	1408	4.00	1,490	--	--	--	--	--	--	--	--	--	1,290
29...	1409	4.00	1,490	--	--	--	--	--	--	--	--	--	1,100
29...	1410	4.00	1,490	--	--	--	--	--	--	--	--	--	916
AUG													
18...	1000	--	--	--	22.4	420	447.4	594	19	--	37.7	--	--
06805500 PLATTE R AT LOUISVILLE NE (LAT 41 00 55N LONG 096 09 28W)													
NOV 2002													
12...	1000	3.35	3,300	20,390	--	--	--	--	--	--	--	--	--
12...	1100	3.35	3,300	20,720	--	--	--	--	--	--	--	--	--
AUG 2003													
19...	1100	--	--	--	35.6	450	483.1	1,320	14	--	27.1	--	--
06775900 DISMAL RIVER NEAR THEDFORD, NE (LAT 41 46 45N LONG 100 31 30W)													
NOV 2002													
14...	0900	0.49	213	961.0	--	--	--	--	--	--	--	--	--

CENTRAL NEBRASKA BASINS STUDY UNIT
ECOLOGICAL TRENDS SAMPLING—Continued

MISCELLANEOUS STATION ANALYSES

Date	Bed sediment, dry svd sve dia percent <.063mm (80164)	Bed sediment, dry svd sve dia percent <.125mm (80165)	Bed sediment, dry svd sve dia percent <.25mm (80166)	Bed sediment, dry svd sve dia percent <.5 mm (80167)	Bed sediment, dry svd sve dia percent <1 mm (80168)	Bed sediment, dry svd sve dia percent <2 mm (80169)	Bed sediment, dry svd sve dia percent <4 mm (80170)	Bed sediment, dry svd sve dia percent <8 mm (80171)	Bed sediment, dry svd sve dia percent <16 mm (80172)	Bed sediment, dry svd sve dia percent <32 mm (80173)	Number of sampling points, count (00063)
06800500 ELKHORN RIVER AT WATERLOO, NE (LAT 41 17 37N LONG 096 17 00W)											
NOV 2002											
13...	2	7	50	87	96	99	100	100	100	100	3
13...	0.1	0.4	13	69	92	98	100	100	100	100	3
13...	0.1	0.8	30	79	91	95	98	99	100	100	3
13...	0.0	1	37	75	90	96	99	100	100	100	3
13...	0.1	3	28	60	77	87	94	99	100	100	3
13...	0.2	4	76	95	98	99	100	100	100	100	3
MAY 2003											
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
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29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
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29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
AUG											
18...	--	--	--	--	--	--	--	--	--	--	--
06805500 PLATTE R AT LOUISVILLE NE (LAT 41 00 55N LONG 096 09 28W)											
NOV 2002											
12...	0.0	0.8	12	51	77	91	97	100	100	100	5
12...	0.2	2	20	65	85	94	98	100	100	100	5
AUG 2003											
19...	--	--	--	--	--	--	--	--	--	--	--
06775900 DISMAL RIVER NEAR THEDFORD, NE (LAT 41 46 45N LONG 100 31 30W)											
NOV 2002											
14...	0.2	3	34	88	100	100	100	100	100	100	3

CENTRAL NEBRASKA BASINS STUDY UNIT
ECOLOGICAL TRENDS SAMPLING—Continued

MISCELLANEOUS STATION ANALYSES

Date	Time	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Sample location, distanc down stream, feet (72104)	Sample location, distanc up-stream, feet (72105)	Dissolved oxygen, percent of saturation (00301)	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)	Biomass chlorophyll ratio, periphyton, number (70950)	Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chromofluoro, mg/m2 (70957)	Bed sediment, dry svd sve dia percent <.063mm (80164)
06775900 DISMAL RIVER NEAR THEDFORD, NE (LAT 41 46 45N LONG 100 31 30W)													
NOV 2002													
14...	1000	0.49	213	--	676.0	--	--	--	--	--	--	--	2
14...	1100	0.49	213	853.0	--	--	--	--	--	--	--	--	0.0
14...	1200	0.49	213	626.0	--	--	--	--	--	--	--	--	5
14...	1300	0.49	213	2,891	--	--	--	--	--	--	--	--	0.1
14...	1400	0.49	213	2,694	--	--	--	--	--	--	--	--	0.1
AUG 2003													
14...	1430	--	--	--	--	--	58.0	970	1,032	370	67	157	--
06800000 MAPLE CREEK NEAR NICKERSON, NE (LAT 41 33 39N LONG 096 32 27W)													
NOV 2002													
12...	1400	4.18	19	--	5,072	--	--	--	--	--	--	--	0.5
12...	1500	4.18	19	--	5,368	--	--	--	--	--	--	--	0.6
15...	1200	4.18	19	--	3,110	--	--	--	--	--	--	--	0.2
15...	1300	4.18	19	--	3,396	--	--	--	--	--	--	--	0.1
15...	1400	4.18	19	--	843.0	--	--	--	--	--	--	--	0.2
15...	1500	4.18	19	--	1,139	--	--	--	--	--	--	--	0.3
JUL 2003													
31...	1310	--	--	--	--	113	2.8	49	51.60	671	2.2	4.2	--

MISCELLANEOUS STATION ANALYSES

Date	Bed sediment, dry svd sve dia percent <.125mm (80165)	Bed sediment, dry svd sve dia percent <.25mm (80166)	Bed sediment, dry svd sve dia percent <.5 mm (80167)	Bed sediment, dry svd sve dia percent <1 mm (80168)	Bed sediment, dry svd sve dia percent <2 mm (80169)	Bed sediment, dry svd sve dia percent <4 mm (80170)	Bed sediment, dry svd sve dia percent <8 mm (80171)	Bed sediment, dry svd sve dia percent <16 mm (80172)	Bed sediment, dry svd sve dia percent <32 mm (80173)	Number of sampling points, count (00063)
06775900 DISMAL RIVER NEAR THEDFORD, NE (LAT 41 46 45N LONG 100 31 30W)										
NOV 2002										
14...	3	24	81	99	100	100	100	100	100	3
14...	0.6	19	85	99	100	100	100	100	100	3
14...	12	36	85	97	99	100	100	100	100	3
14...	2	34	90	100	100	100	100	100	100	3
14...	3	38	82	99	100	100	100	100	100	3
AUG 2003										
14...	--	--	--	--	--	--	--	--	--	--
06800000 MAPLE CREEK NEAR NICKERSON, NE (LAT 41 33 39N LONG 096 32 27W)										
NOV 2002										
12...	1	14	63	86	95	99	100	100	100	3
12...	1	9	30	46	61	81	91	100	100	3
15...	0.4	14	61	78	88	94	96	100	100	3
15...	0.4	18	59	76	85	94	98	100	100	3
15...	0.9	21	59	73	81	86	90	92	100	3
15...	0.9	25	65	78	86	94	98	100	100	3
JUL 2003										
31...	--	--	--	--	--	--	--	--	--	--

NATIONAL WATER-QUALITY ASSESSMENT PROGRAM

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL LAND-USE STUDY

(Station Name: indicates location by township, range, and section. Geologic unit: 111ALVM, Holocene Alluvium; 112PLSC, Pleistocene Series, undifferentiated; 112LOSS, Pleistocene Loess; 112SDGV, Pleistocene sand and gravel deposits; 112TILL, Pleistocene Till.)

COUNTIES.--Burt, Cedar, Colfax, Cuming, Dixon, Dodge, Douglas, Knox, Pierce, Stanton, and Wayne

MULTIPLE STATION ANALYSES

Station number	Station name	Geologic unit	Date	Time	Depth of well, feet below LSD (72008)	Altitude of land surface feet (72000)	Sampling depth, feet (00003)
		BURT COUNTY					
414931096321101	21N 8E 4BBDD1	112LOSS	06-05-03	0900	25	1,395	12.0
415220096214801	22N 9E24BBAB1	112LOSS	04-28-03	1530	17	1,328	13.0
		CEDAR COUNTY					
422802097031601	29N 3E23CCCC1	111ALVM	05-19-03	1530	20	1,465	12.0
422947097142701	29N 2E18BAAA1	112PLSC	05-20-03	0930	23.5	1,620	12.0
		COLFAX COUNTY					
414343096595801	20N 4E 5CCDC1	111ALVM	06-04-03	0900	25	1,450	23.0
		CUMING COUNTY					
415558096434501	23N 6E28DDAD1	112LOSS	04-29-03	1130	45	1,391	45.0
415918096350501	23N 7E 2CDDD1	112TILL	04-30-03	1130	32	1,350	30.0
420024096485901	24N 5E35CDAA1	111ALVM	05-28-03	1600	22	1,380	20.0
420248096300901	24N 7E18DDDD1	112TILL	05-29-03	0830	30	1,405	29.0
		DIXON COUNTY					
422011096595401	27N 4E 7AAAA1	112SDGV	05-05-03	1630	65	1,500	59.0
		DODGE COUNTY					
413340096402701	18N 7E 6BCCC1	111ALVM	05-15-03	1500	24.5	1,290	23.0
413853096483801	19N 5E 2ADDC1	112LOSS	06-04-03	1230	32	1,450	31.0
414141096371701	20N 7E21AACD1	112LOSS	06-04-03	1700	57	1,395	56.0
414401096531301	20N 5E 6DADA1	112LOSS	06-02-03	1400	29.5	1,450	23.0
		DOUGLAS COUNTY					
411733096185501	15N 10E 5DDCB1	111ALVM	06-09-03	1200	15	1,126	10.0
		KNOX COUNTY					
422756097334901	29N 2W28BBCB1	112PLSC	05-20-03	1400	45	1,735	35.0
		PIERCE COUNTY					
421357097243201	26N 1W15AADC1	112TILL	05-27-03	1600	25	1,725	23.0
422156097314301	28N 2W34ABAA1	112TILL	05-21-03	1000	39	1,760	37.0
422441097404601	28N 3W 8DDAD1	112TILL	05-20-03	1700	60	1,715	55.0
		STANTON COUNTY					
414527097094101	21N 2E35ABAA1	112TILL	06-03-03	1630	65	1,580	52.0
414948097212601	22N 1E31DCC 1	112SDGV	05-13-03	1530	35	1,670	34.0
415458097142201	22N 2E 6ABAA1	111ALVM	06-03-03	0900	29	1,470	22.0
420425097101301	24N 2E11BBDA1	112LOSS	05-07-03	1700	30	1,600	27.0

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL LAND-USE STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	Turbidity, water, unfltrd field, NTU (61028)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Noncarb hardness, wat flt field, mg/L as CaCO3 (00904)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
BURT COUNTY												
414931096321101	0.2	725	5.3	52	7.2	695	14.0	11.5	330	78	83.4	30.4
415220096214801	14	762	8.2	75	7.3	711	18.0	11.6	360	60	104	24.7
CEDAR COUNTY												
422802097031601	0.3	725	0.8	7	6.9	1,040	20.0	10.5	510	80	154	31.3
422947097142701	0.7	730	0.6	6	7.0	814	12.0	9.5	410	26	108	34.7
COLFAX COUNTY												
414343096595801	4.6	720	0.5	5	6.5	1,610	15.0	12.0	940	--	261	68.6
CUMING COUNTY												
415558096434501	67	762	5.4	51	6.5	552	10.0	12.5	230	74	63.5	17.6
415918096350501	8.8	717	5.7	57	7.3	577	12.0	12.4	290	--	73.7	24.4
420024096485901	1.6	725	0.3	3	6.9	1,130	20.0	12.6	500	150	135	39.4
420248096300901	--	723	--	--	7.3	1,040	20.0	--	300	--	90.0	18.2
DIXON COUNTY												
422011096595401	0.1	709	9.0	93	7.2	702	15.0	13.5	360	--	104	23.1
DODGE COUNTY												
413340096402701	0.1	723	3.5	34	7.0	1,220	18.0	12.5	570	100	161	40.5
413853096483801	140	720	0.4	4	6.7	1,890	--	13.5	920	300	274	57.3
414141096371701	85	720	7.0	72	7.0	985	--	13.7	270	--	82.2	14.8
414401096531301	0.3	717	2.6	26	6.9	1,130	15.0	12.0	450	57	135	26.3
DOUGLAS COUNTY												
411733096185501	230	725	0.8	8	7.0	773	26.0	13.5	360	67	98.2	26.6
KNOX COUNTY												
422756097334901	0.1	725	9.6	94	7.1	1,540	11.0	12.0	760	460	223	50.1
PIERCE COUNTY												
421357097243201	59	717	2.9	28	6.9	1,140	19.0	11.5	550	210	158	36.4
422156097314301	1.2	720	7.1	72	7.2	997	11.0	13.0	350	--	101	24.0
422441097404601	1.2	725	14.2	140	7.3	858	11.0	12.5	290	--	89.3	16.0
STANTON COUNTY												
414527097094101	5.4	716	6.4	66	7.1	687	13.5	13.5	310	--	97.2	17.1
414948097212601	6.4	714	8.2	--	7.2	1,100	22.0	--	330	--	96.5	20.9
415458097142201	1.8	720	7.9	79	6.5	100	13.0	12.5	38	6	11.2	2.49
420425097101301	3.5	713	5.1	51	7.1	704	20.0	12.5	340	--	90.9	27.5

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL LAND-USE STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Bromide water, fltrd, mg/L (71870)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)
BURT COUNTY												
414931096321101	7.46	0.3	11.6	7	256	311	0.0	0.05	3.56	0.6	33.6	19.6
415220096214801	1.41	0.2	8.96	5	304	370	0.0	0.05	4.00	0.36	21.6	19.8
CEDAR COUNTY												
422802097031601	9.05	0.5	26.2	10	435	530	0.0	0.07	33.6	0.4	20.7	95.2
422947097142701	1.64	0.5	23.3	11	386	471	0.0	0.05	3.48	0.5	19.4	42.9
COLFAX COUNTY												
414343096595801	9.12	0.1	10.2	2	1,020	1,240	0.0	0.50	7.08	0.2	42.1	7.5
CUMING COUNTY												
415558096434501	7.07	0.5	18.1	14	158	192	0.0	0.06	3.50	<0.17	24.9	53.6
415918096350501	4.05	0.7	26.7	17	305	371	0.0	0.02	1.73	0.63	31.1	19.2
420024096485901	3.62	0.7	35.4	13	352	428	0.0	0.09	4.01	0.3	33.8	154
420248096300901	4.03	2	87.4	38	451	549	0.0	0.04	5.48	0.4	20.7	63.2
DIXON COUNTY												
422011096595401	3.77	0.5	22.7	12	366	445	0.0	0.05	2.98	0.26	32.2	<0.2
DODGE COUNTY												
413340096402701	5.79	0.8	41.2	13	467	569	0.0	0.37	42.9	0.34	29.2	114
413853096483801	29.0	0.6	41.7	9	628	764	0.0	0.88	72.7	0.4	36.5	80.5
414141096371701	4.37	3	126	50	438	534	0.0	0.22	6.88	0.4	22.7	56.2
414401096531301	15.8	0.9	43.6	17	389	474	0.0	0.19	22.9	0.6	31.4	79.7
DOUGLAS COUNTY												
411733096185501	19.0	0.4	18.4	10	288	351	0.0	0.10	19.6	0.6	26.1	93.9
KNOX COUNTY												
422756097334901	6.63	1	71.8	17	303	369	0.0	0.13	18.3	0.3	36.3	524
PIERCE COUNTY												
421357097243201	11.2	0.4	23.4	8	340	414	0.0	0.19	26.9	0.3	36.4	120
422156097314301	16.4	2	83.7	33	356	433	0.0	0.06	22.8	0.6	40.1	94.2
422441097404601	22.2	2	80.8	36	394	479	0.0	0.08	11.0	0.7	33.1	75.2
STANTON COUNTY												
414527097094101	6.73	0.6	25.9	15	346	421	0.0	0.04	2.92	0.4	32.2	19.2
414948097212601	19.0	3	109	40	488	592	1.0	0.04	58.0	0.84	41.1	32.3
415458097142201	2.12	0.3	4.50	19	33	40	0.0	0.02	1.04	<0.2	32.5	6.9
420425097101301	13.8	0.4	17.6	10	368	448	0.0	0.03	3.40	1.15	35.5	25.2

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL LAND-USE STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	Residue water, fltrd, sum of consti-tuents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitro-gen, water, fltrd, mg/L (00607)
BURT COUNTY												
414931096321101	445	0.45	331	0.11	--	<0.04	--	--	22.8	--	<0.008	--
415220096214801	443	0.58	426	E.06	--	<0.04	--	--	16.9	--	<0.008	--
CEDAR COUNTY												
422802097031601	636	0.89	657	E.07	--	E.02	--	--	0.88	--	<0.008	--
422947097142701	508	0.70	513	0.13	--	<0.04	--	--	9.60	--	<0.008	--
COLFAX COUNTY												
414343096595801	1,040	1.41	1,040	1.3	1.16	0.90	--	--	<0.06	--	<0.008	0.36
CUMING COUNTY												
415558096434501	360	0.48	354	0.28	--	<0.04	--	--	17.2	--	<0.008	--
415918096350501	369	0.51	374	<0.10	--	<0.04	--	--	0.91	--	<0.008	--
420024096485901	748	1.09	802	0.51	--	<0.04	--	--	29.5	--	E.005	--
420248096300901	571	0.81	592	E.09	--	<0.04	--	--	2.27	--	<0.008	--
DIXON COUNTY												
422011096595401	--	--	446	E.08	--	<0.04	--	--	6.35	--	<0.008	--
DODGE COUNTY												
413340096402701	768	1.09	799	0.30	--	<0.04	--	--	11.4	--	<0.008	--
413853096483801	1,280	1.78	1,310	0.36	--	E.03	308	69.5	69.5	0.056	0.017	--
414141096371701	627	0.84	620	0.12	--	<0.04	--	--	11.3	--	<0.008	--
414401096531301	710	1.01	740	0.18	--	<0.04	--	--	27.0	--	<0.008	--
DOUGLAS COUNTY												
411733096185501	479	0.65	479	0.24	0.10	0.08	--	--	0.28	--	E.004	0.16
KNOX COUNTY												
422756097334901	1,150	1.72	1,270	0.31	--	<0.04	--	--	8.90	--	<0.008	--
PIERCE COUNTY												
421357097243201	746	0.99	727	0.17	--	<0.04	--	--	28.9	--	<0.008	--
422156097314301	669	0.90	663	0.15	--	<0.04	--	--	16.2	--	<0.008	--
422441097404601	575	0.78	576	E.07	--	<0.04	--	--	1.96	--	<0.008	--
STANTON COUNTY												
414527097094101	422	0.57	423	E.06	--	<0.04	--	--	2.75	--	<0.008	--
414948097212601	677	0.94	689	0.14	--	<0.04	--	--	1.07	--	<0.008	--
415458097142201	89	0.13	95	E.06	--	<0.04	--	--	1.71	--	<0.008	--
420425097101301	442	0.59	434	E.07	--	<0.04	--	--	1.14	--	<0.008	--

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL LAND-USE STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	Ortho-phos-phate, water, fltrd, mg/L (00660)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Total nitro-gen, water, fltrd, mg/L (00602)	Organic carbon, water, fltrd, mg/L (00681)	Alum-inum, water, fltrd, ug/L (01106)	Anti-mony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryll-ium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chrom-ium, water, fltrd, ug/L (01030)
BURT COUNTY												
414931096321101	--	--	23	0.8	E2	E.19	0.5	270	<0.06	39	E.03	5.1
415220096214801	--	E.01	--	0.7	M	<0.30	0.5	514	<0.06	39	<0.04	3.5
CEDAR COUNTY												
422802097031601	0.340	0.11	--	1.0	<2	<0.30	1.6	103	<0.06	97	0.05	<0.8
422947097142701	--	E.01	9.7	1.0	<2	E.24	0.8	185	<0.06	56	E.02	<0.8
COLFAX COUNTY												
414343096595801	--	--	--	4.8	E1	<0.30	45.8	664	<0.06	71	0.08	<0.8
CUMING COUNTY												
415558096434501	0.389	0.13	17	2.0	<2	<0.30	1.1	206	<0.06	41	0.10	1.4
415918096350501	0.110	0.04	--	0.4	M	<0.30	0.8	26	<0.06	108	<0.04	2.3
420024096485901	0.362	0.12	30	3.6	<2	E.23	5.3	92	<0.06	79	0.16	<0.8
420248096300901	0.089	0.03	--	3.0	M	E.20	1.3	108	<0.06	243	E.02	1.4
DIXON COUNTY												
422011096595401	0.178	0.06	--	0.6	E1	<0.30	2.2	89	<0.06	99	<0.04	2.0
DODGE COUNTY												
413340096402701	0.736	0.24	12	2.3	<2	E.28	3.6	137	<0.06	62	0.04	E.7
413853096483801	0.717	0.23	70	2.6	E1	0.30	8.3	519	<0.06	138	0.27	0.8
414141096371701	--	--	11	1.0	28	<0.30	1.7	91	<0.06	60	<0.04	2.5
414401096531301	0.626	0.20	27	3.0	<2	E.22	3.3	272	<0.06	122	0.07	3.3
DOUGLAS COUNTY												
411733096185501	0.141	0.05	0.52	2.1	E1	0.30	10.1	120	<0.06	73	0.04	<0.8
KNOX COUNTY												
422756097334901	0.184	0.06	9.2	2.9	<2	<0.30	5.1	32	<0.06	75	<0.04	2.9
PIERCE COUNTY												
421357097243201	0.123	0.04	29	1.2	<2	E.17	2.7	52	<0.06	63	E.02	1.7
422156097314301	0.135	0.04	16	1.0	<2	<0.30	3.3	90	<0.06	237	<0.04	5.3
422441097404601	0.307	0.10	--	1.3	<2	<0.30	7.6	211	<0.06	302	<0.04	4.5
STANTON COUNTY												
414527097094101	0.132	0.04	--	0.6	2	<0.30	1.3	74	<0.06	99	<0.04	4.2
414948097212601	0.233	0.08	1.2	2.1	<2	E.29	1.6	311	<0.06	273	E.03	1.5
415458097142201	1.11	0.36	--	0.6	<2	E.24	2.4	30	<0.06	17	E.04	E.7
420425097101301	--	E.01	--	0.8	E1	E.18	0.7	159	<0.06	124	E.02	9.1

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL LAND-USE STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Strontium, water, fltrd, ug/L (01080)	Thallium, water, fltrd, ug/L (01057)
BURT COUNTY												
414931096321101	0.241	0.7	<8	<0.08	26.7	E.1	4.0	1.12	4.0	<0.2	395	<0.04
415220096214801	0.231	1.0	<10	0.09	15.8	0.4	1.4	4.09	5.2	<0.2	404	E.02
CEDAR COUNTY												
422802097031601	0.366	1.7	<10	E.05	28.9	32.0	0.6	4.01	6.6	<0.2	430	<0.04
422947097142701	0.221	0.9	<10	<0.08	19.0	3.9	0.9	4.19	11.2	<0.2	566	<0.04
COLFAX COUNTY												
414343096595801	9.11	1.1	5,810	<0.08	15.4	18,300	15.3	16.2	0.7	<0.2	949	E.02
CUMING COUNTY												
415558096434501	0.234	3.2	<10	<0.08	27.7	2.1	2.5	6.26	4.5	<0.2	187	<0.04
415918096350501	0.174	0.5	<10	0.10	37.9	3.9	3.5	3.70	2.0	<0.2	469	<0.04
420024096485901	0.455	2.2	<8	<0.08	33.9	122	3.3	8.65	84.2	<0.2	605	<0.04
420248096300901	0.238	2.4	<8	<0.08	16.3	2.8	4.5	4.45	6.9	<0.2	496	<0.04
DIXON COUNTY												
422011096595401	0.291	0.7	<10	<0.08	22.9	1.0	2.2	2.09	13.8	<0.2	470	<0.04
DODGE COUNTY												
413340096402701	0.552	2.2	<10	E.05	34.0	0.3	2.5	4.79	8.1	<0.2	762	<0.04
413853096483801	0.975	2.5	9	<0.08	118	9.3	3.5	10.8	1.1	<0.2	1,480	<0.04
414141096371701	0.249	1.2	17	<0.08	12.6	1.5	1.1	2.01	44.5	<0.2	412	<0.04
414401096531301	0.388	1.6	<8	<0.08	71.2	0.4	6.0	3.03	30.7	<0.2	801	<0.04
DOUGLAS COUNTY												
411733096185501	0.525	1.4	45	E.06	34.1	1,150	8.9	2.90	<0.5	<0.2	555	<0.04
KNOX COUNTY												
422756097334901	0.446	2.2	<10	<0.08	37.7	0.6	1.8	7.12	63.6	<0.2	594	<0.04
PIERCE COUNTY												
421357097243201	0.343	1.5	<8	E.05	43.2	1.6	1.3	6.73	30.2	<0.2	746	<0.04
422156097314301	0.192	0.9	<10	E.06	83.0	0.4	5.3	3.33	55.9	<0.2	381	<0.04
422441097404601	0.177	0.9	<10	<0.08	105	0.9	4.3	2.92	129	<0.2	532	<0.04
STANTON COUNTY												
414527097094101	0.304	11.5	E6	<0.08	29.3	2.4	0.9	3.21	22.5	<0.2	605	<0.04
414948097212601	0.261	1.7	<10	0.18	89.1	0.8	4.6	4.14	8.6	<0.2	707	E.03
415458097142201	0.045	0.5	<8	<0.08	3.9	E.1	E.3	0.76	1.0	<0.2	50.0	<0.04
420425097101301	0.296	2.1	<10	E.05	66.7	E.1	2.6	2.46	10.9	<0.2	582	<0.04

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL LAND-USE STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)	2,6-Diethyl-aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy carbofuran, wat flt 0.7u GF ug/L (49308)	3-Ketocarbofuran, water, fltrd, ug/L (50295)	Acetochlor, water, fltrd, ug/L (49260)
BURT COUNTY												
414931096321101	1.2	M	<0.009	<0.02	<0.02	<0.006	<0.006	<0.04	<0.008	<0.006	<2	<0.006
415220096214801	4.8	1	<0.009	<0.02	<0.02	<0.006	E.020	<0.04	<0.008	<0.006	<2	<0.006
CEDAR COUNTY												
422802097031601	1.0	1	<0.009	<0.02	<0.02	<0.006	<0.006	M	<0.008	<0.006	<2	<0.006
422947097142701	0.8	M	<0.009	<0.02	<0.02	<0.006	<0.006	E.02	<0.008	<0.006	<2	<0.006
COLFAX COUNTY												
414343096595801	5.6	3	<0.009	<0.02	<0.02	<0.006	<0.006	<0.04	<0.008	<0.006	<2	<0.006
CUMING COUNTY												
415558096434501	3.7	2	<0.009	<0.02	<0.02	<0.006	<0.006	<0.04	<0.008	<0.006	<2	<0.006
415918096350501	3.7	14	<0.009	<0.02	<0.02	<0.006	E.003	<0.04	<0.008	<0.006	<2	<0.006
420024096485901	6.7	1	<0.009	<0.02	<0.02	<0.006	<0.006	<0.04	<0.008	<0.006	<2	<0.006
420248096300901	5.2	5	<0.009	<0.02	<0.02	<0.006	<0.006	<0.04	<0.008	<0.006	<2	<0.006
DIXON COUNTY												
422011096595401	4.4	M	<0.009	<0.02	<0.02	<0.006	<0.006	<0.04	<0.008	<0.006	<2	<0.006
DODGE COUNTY												
413340096402701	3.3	1	<0.009	<0.02	<0.02	<0.006	E.004	<0.04	<0.008	<0.006	<2	<0.006
413853096483801	9.2	2	<0.009	<0.02	<0.02	<0.006	<0.006	<0.04	<0.008	<0.006	<2	<0.006
414141096371701	3.4	2	<0.009	<0.02	<0.02	<0.006	<0.006	<0.04	<0.008	<0.006	<2	<0.006
414401096531301	3.9	2	<0.009	<0.02	<0.02	<0.006	E.004	<0.04	<0.008	<0.006	<2	<0.006
DOUGLAS COUNTY												
411733096185501	3.9	1	<0.009	<0.02	<0.02	<0.006	<0.006	<0.04	<0.008	<0.006	<2	<0.006
KNOX COUNTY												
422756097334901	5.4	2	<0.009	<0.02	<0.02	<0.006	<0.006	<0.04	<0.008	<0.006	<2	<0.006
PIERCE COUNTY												
421357097243201	6.3	2	<0.009	<0.02	<0.02	<0.006	<0.006	<0.04	<0.008	<0.006	<2	<0.006
422156097314301	3.9	M	<0.009	<0.02	<0.02	<0.006	<0.006	<0.04	<0.008	<0.006	<2	<0.006
422441097404601	0.9	M	<0.009	<0.02	<0.02	<0.006	<0.006	<0.04	<0.008	<0.006	<2	<0.006
STANTON COUNTY												
414527097094101	2.1	4	<0.009	<0.02	<0.02	<0.006	<0.006	<0.04	<0.008	<0.006	<2	<0.006
414948097212601	3.5	2	<0.009	<0.02	<0.02	<0.006	E.008	M	<0.008	<0.006	<2	<0.006
415458097142201	2.7	M	<0.009	<0.02	<0.02	<0.006	<0.006	<0.04	<0.008	<0.006	<2	<0.006
420425097101301	0.5	1	<0.009	<0.02	<0.02	<0.006	<0.006	<0.04	<0.008	<0.006	<2	<0.006

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL LAND-USE STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	Acifluorfen, water, fltrd 0.7u GF ug/L (49315)	Alachlor, water, fltrd, ug/L (46342)	Aldicarb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldicarb sulfoxide, wat flt 0.7u GF ug/L (49314)	Aldicarb, water, fltrd 0.7u GF ug/L (49312)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Bendiocarb, water, fltrd, ug/L (50299)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Benomyl water, fltrd, ug/L (50300)	Bensulfuron, water, fltrd, ug/L (61693)
BURT COUNTY												
414931096321101	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005	<0.007	<0.050	<0.03	<0.010	<0.004	<0.02
415220096214801	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005	0.018	<0.050	<0.03	<0.010	<0.004	<0.02
CEDAR COUNTY												
422802097031601	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005	<0.007	<0.050	<0.03	<0.010	<0.004	<0.02
422947097142701	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005	<0.007	<0.050	<0.03	<0.010	<0.004	<0.02
COLFAX COUNTY												
414343096595801	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005	<0.007	<0.050	<0.03	<0.010	<0.004	<0.02
CUMING COUNTY												
415558096434501	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005	<0.007	<0.050	<0.03	<0.010	<0.004	<0.02
415918096350501	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005	E.004	<0.050	<0.03	<0.010	<0.004	<0.02
420024096485901	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005	<0.007	<0.050	<0.03	<0.010	<0.004	<0.02
420248096300901	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005	<0.007	<0.050	<0.03	<0.010	<0.004	<0.02
DIXON COUNTY												
422011096595401	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005	<0.007	<0.050	<0.03	<0.010	<0.004	<0.02
DODGE COUNTY												
413340096402701	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005	<0.007	<0.050	<0.03	<0.010	<0.004	<0.02
413853096483801	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005	<0.007	<0.050	<0.03	<0.010	<0.004	<0.02
414141096371701	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005	<0.007	<0.050	<0.03	<0.010	<0.004	<0.02
414401096531301	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005	0.009	<0.050	<0.03	<0.010	<0.004	<0.02
DOUGLAS COUNTY												
411733096185501	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005	<0.007	<0.050	<0.03	<0.010	<0.004	<0.02
KNOX COUNTY												
422756097334901	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005	<0.007	<0.050	<0.03	<0.010	<0.004	<0.02
PIERCE COUNTY												
421357097243201	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005	<0.007	<0.050	<0.03	<0.010	<0.004	<0.02
422156097314301	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005	<0.007	<0.050	<0.03	<0.010	<0.004	<0.02
422441097404601	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005	<0.007	<0.050	<0.03	<0.010	<0.004	<0.02
STANTON COUNTY												
414527097094101	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005	<0.007	<0.050	<0.03	<0.010	<0.004	<0.02
414948097212601	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005	E.003	<0.050	<0.03	<0.010	<0.004	<0.02
415458097142201	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005	<0.007	<0.050	<0.03	<0.010	<0.004	<0.02
420425097101301	<0.007	<0.004	<0.02	<0.008	<0.04	<0.005	<0.007	<0.050	<0.03	<0.010	<0.004	<0.02

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL LAND-USE STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	Bentazon, water, fltrd 0.7u GF ug/L (38711)	Bromacil, water, fltrd, ug/L (04029)	Bromoxynil, water, fltrd 0.7u GF ug/L (49311)	Butylate, water, fltrd, ug/L (04028)	Caffeine, water, fltrd, ug/L (50305)	Carbaryl, water, fltrd 0.7u GF ug/L (49310)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (49309)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chloramben methyl ester, water, fltrd, ug/L (61188)	Chlorimuron, water, fltrd, ug/L (50306)	Chloro-di-amino-s-triazine, wat flt ug/L (04039)
BURT COUNTY												
414931096321101	<0.01	<0.03	<0.02	<0.002	<0.010	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01
415220096214801	<0.01	<0.03	<0.02	<0.002	<0.010	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	E.01
CEDAR COUNTY												
422802097031601	<0.01	<0.03	<0.02	<0.002	<0.010	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	E.05
422947097142701	<0.01	<0.03	<0.02	<0.002	<0.010	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	E.76
COLFAX COUNTY												
414343096595801	<0.01	<0.03	<0.02	<0.002	<0.010	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01
CUMING COUNTY												
415558096434501	<0.01	<0.03	<0.02	<0.002	0.014	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01
415918096350501	<0.01	<0.03	<0.02	<0.002	<0.010	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01
420024096485901	<0.01	<0.03	<0.02	<0.002	<0.010	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01
420248096300901	<0.01	<0.03	<0.02	<0.002	E.007	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01
DIXON COUNTY												
422011096595401	<0.01	<0.03	<0.02	<0.002	E.004	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01
DODGE COUNTY												
413340096402701	<0.01	<0.03	<0.02	<0.002	<0.010	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	E.01
413853096483801	E.01	<0.03	<0.02	<0.002	<0.010	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	E.01
414141096371701	<0.01	<0.03	<0.02	<0.002	<0.010	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01
414401096531301	<0.01	<0.03	<0.02	<0.002	<0.010	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	E.02
DOUGLAS COUNTY												
411733096185501	<0.01	<0.03	<0.02	<0.002	<0.010	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01
KNOX COUNTY												
422756097334901	<0.01	<0.03	<0.02	<0.002	<0.010	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01
PIERCE COUNTY												
421357097243201	<0.01	<0.03	<0.02	<0.002	<0.010	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01
422156097314301	<0.01	<0.03	<0.02	<0.002	<0.010	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01
422441097404601	<0.01	<0.03	<0.02	<0.002	<0.010	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01
STANTON COUNTY												
414527097094101	<0.01	<0.03	<0.02	<0.002	<0.010	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	E.03
414948097212601	<0.01	<0.03	<0.02	<0.002	<0.010	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	E.14
415458097142201	<0.01	<0.03	<0.02	<0.002	<0.010	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01
420425097101301	<0.01	<0.03	<0.02	<0.002	<0.010	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	E.01

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL LAND-USE STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	Chlorothalonil, water, fltrd 0.7u GF ug/L (49306)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Clopyralid, water, fltrd 0.7u GF ug/L (49305)	Cyanazine, water, fltrd, ug/L (04041)	Cycloate, water, fltrd, ug/L (04031)	Dacthal monoacid, water, fltrd 0.7u GF ug/L (49304)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dicamba water fltrd 0.7u GF ug/L (38442)	Dichlorprop, water, fltrd 0.7u GF ug/L (49302)
BURT COUNTY												
414931096321101	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01
415220096214801	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01
CEDAR COUNTY												
422802097031601	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01
422947097142701	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01
COLFAX COUNTY												
414343096595801	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01
CUMING COUNTY												
415558096434501	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01
415918096350501	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01
420024096485901	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01
420248096300901	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01
DIXON COUNTY												
422011096595401	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01
DODGE COUNTY												
413340096402701	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01
413853096483801	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01
414141096371701	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01
414401096531301	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01
DOUGLAS COUNTY												
411733096185501	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01
KNOX COUNTY												
422756097334901	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01
PIERCE COUNTY												
421357097243201	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01
422156097314301	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01
422441097404601	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01
STANTON COUNTY												
414527097094101	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01
414948097212601	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01
415458097142201	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01
420425097101301	<0.04	<0.005	<0.006	<0.01	<0.018	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL LAND-USE STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	Dieldrin, water, fltrd, ug/L (39381)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphenamid, water, fltrd, ug/L (04033)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	Diuron, water, fltrd 0.7u GF ug/L (49300)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Fenuron water, fltrd 0.7u GF ug/L (49297)	Desulfinylfipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)
BURT COUNTY												
414931096321101	<0.005	<0.01	<0.03	<0.02	<0.01	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005
415220096214801	<0.005	<0.01	<0.03	<0.02	<0.01	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005
CEDAR COUNTY												
422802097031601	<0.005	<0.01	<0.03	<0.02	<0.01	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005
422947097142701	<0.005	<0.01	<0.03	<0.02	<0.01	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005
COLFAX COUNTY												
414343096595801	<0.005	<0.01	<0.03	<0.02	<0.01	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005
CUMING COUNTY												
415558096434501	<0.005	<0.01	<0.03	<0.02	<0.01	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005
415918096350501	<0.005	<0.01	<0.03	<0.02	<0.01	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005
420024096485901	<0.005	<0.01	<0.03	<0.02	<0.01	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005
420248096300901	<0.005	<0.01	<0.03	<0.02	E.01	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005
DIXON COUNTY												
422011096595401	<0.005	<0.01	<0.03	<0.02	<0.01	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005
DODGE COUNTY												
413340096402701	<0.005	<0.01	<0.03	<0.02	<0.01	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005
413853096483801	<0.005	<0.01	<0.03	<0.02	<0.01	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005
414141096371701	<0.005	<0.01	<0.03	<0.02	<0.01	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005
414401096531301	<0.005	<0.01	<0.03	<0.02	<0.01	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005
DOUGLAS COUNTY												
411733096185501	<0.005	<0.01	<0.03	<0.02	<0.01	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005
KNOX COUNTY												
422756097334901	<0.005	<0.01	<0.03	<0.02	<0.01	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005
PIERCE COUNTY												
421357097243201	<0.005	<0.01	<0.03	<0.02	<0.01	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005
422156097314301	<0.005	<0.01	<0.03	<0.02	<0.01	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005
422441097404601	<0.005	<0.01	<0.03	<0.02	<0.01	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005
STANTON COUNTY												
414527097094101	<0.005	<0.01	<0.03	<0.02	<0.01	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005
414948097212601	<0.005	<0.01	<0.03	<0.02	M	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005
415458097142201	<0.005	<0.01	<0.03	<0.02	<0.01	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005
420425097101301	<0.005	<0.01	<0.03	<0.02	<0.01	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL LAND-USE STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	Fipronil, water, fltrd, ug/L (62166)	Flumetsulam, water, fltrd, ug/L (61694)	Fluometuron water fltrd 0.7u GF ug/L (38811)	Fonofos water, fltrd, ug/L (04095)	Imazaquin, water, fltrd, ug/L (50356)	Imazethapyr, water, fltrd, ug/L (50407)	Imidacloprid water, fltrd, ug/L (61695)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (38478)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	MCPA, water, fltrd 0.7u GF ug/L (38482)
BURT COUNTY												
414931096321101	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02
415220096214801	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02
CEDAR COUNTY												
422802097031601	<0.007	E.01	<0.03	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02
422947097142701	<0.007	<0.01	<0.03	<0.003	<0.02	E.01	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02
COLFAX COUNTY												
414343096595801	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02
CUMING COUNTY												
415558096434501	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02
415918096350501	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02
420024096485901	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02
420248096300901	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	<0.035	E.006	<0.02
DIXON COUNTY												
422011096595401	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02
DODGE COUNTY												
413340096402701	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02
413853096483801	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02
414141096371701	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02
414401096531301	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02
DOUGLAS COUNTY												
411733096185501	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02
KNOX COUNTY												
422756097334901	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02
PIERCE COUNTY												
421357097243201	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02
422156097314301	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02
422441097404601	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02
STANTON COUNTY												
414527097094101	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02
414948097212601	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02
415458097142201	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02
420425097101301	<0.007	<0.01	<0.03	<0.003	<0.02	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL LAND-USE STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	MCPB, water, fltrd 0.7u GF ug/L (38487)	Metalaxyl, water, fltrd, ug/L (50359)	Methiocarb, water, fltrd 0.7u GF ug/L (38501)	Methomyl, water, fltrd 0.7u GF ug/L (49296)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Metsulfuron, water, fltrd, ug/L (61697)	Molinate, water, fltrd 0.7u GF ug/L (82671)	N-(4-Chlorophenyl) -N-' methylurea, ug/L (61692)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	Neburon water, fltrd 0.7u GF ug/L (49294)
BURT COUNTY												
414931096321101	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01
415220096214801	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01
CEDAR COUNTY												
422802097031601	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01
422947097142701	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01
COLFAX COUNTY												
414343096595801	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01
CUMING COUNTY												
415558096434501	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01
415918096350501	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01
420024096485901	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01
420248096300901	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01
DIXON COUNTY												
422011096595401	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01
DODGE COUNTY												
413340096402701	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01
413853096483801	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01
414141096371701	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01
414401096531301	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01
DOUGLAS COUNTY												
411733096185501	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01
KNOX COUNTY												
422756097334901	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01
PIERCE COUNTY												
421357097243201	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01
422156097314301	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01
422441097404601	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01
STANTON COUNTY												
414527097094101	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01
414948097212601	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01
415458097142201	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01
420425097101301	<0.01	<0.02	<0.008	<0.004	<0.006	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL LAND-USE STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	Nicosulfuron, water, fltrd, ug/L (50364)	Norflurazon, water, fltrd 0.7u GF ug/L (49293)	Oryzalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	p,p-' DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Picloram, water, fltrd 0.7u GF ug/L (49291)	Prometon, water, fltrd, ug/L (04037)	Pronamide, water, fltrd 0.7u GF ug/L (82676)
BURT COUNTY												
414931096321101	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004
415220096214801	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004
CEDAR COUNTY												
422802097031601	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004
422947097142701	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004
COLFAX COUNTY												
414343096595801	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004
CUMING COUNTY												
415558096434501	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004
415918096350501	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004
420024096485901	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004
420248096300901	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022	<0.011	<0.02	M	<0.004
DIXON COUNTY												
422011096595401	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004
DODGE COUNTY												
413340096402701	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004
413853096483801	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004
414141096371701	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004
414401096531301	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004
DOUGLAS COUNTY												
411733096185501	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004
KNOX COUNTY												
422756097334901	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004
PIERCE COUNTY												
421357097243201	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004
422156097314301	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004
422441097404601	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004
STANTON COUNTY												
414527097094101	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004
414948097212601	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004
415458097142201	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004
420425097101301	<0.01	<0.02	<0.02	<0.01	<0.003	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL LAND-USE STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Propham water fltrd 0.7u GF ug/L (49236)	Propiconazole, water, fltrd, ug/L (50471)	Propoxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Simazine, water, fltrd, ug/L (04035)	Sulfometruron, water, fltrd, ug/L (50337)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbacil, water, fltrd, ug/L (04032)
BURT COUNTY												
414931096321101	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010
415220096214801	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010
CEDAR COUNTY												
422802097031601	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010
422947097142701	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010
COLFAX COUNTY												
414343096595801	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010
CUMING COUNTY												
415558096434501	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010
415918096350501	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010
420024096485901	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010
420248096300901	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010
DIXON COUNTY												
422011096595401	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010
DODGE COUNTY												
413340096402701	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010
413853096483801	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010
414141096371701	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010
414401096531301	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010
DOUGLAS COUNTY												
411733096185501	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010
KNOX COUNTY												
422756097334901	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010
PIERCE COUNTY												
421357097243201	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010
422156097314301	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010
422441097404601	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010
STANTON COUNTY												
414527097094101	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010
414948097212601	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010
415458097142201	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010
420425097101301	<0.010	<0.011	<0.02	<0.010	<0.02	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL LAND-USE STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	Triallate, water, fltrd 0.7u GF ug/L (82678)	Triclopyr, water, fltrd 0.7u GF ug/L (49235)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)	Uranium natural water, fltrd, ug/L (22703)
BURT COUNTY						
414931096321101	<0.02	<0.005	<0.002	<0.02	<0.009	2.85
415220096214801	<0.02	<0.005	<0.002	<0.02	<0.009	4.20
CEDAR COUNTY						
422802097031601	<0.02	<0.005	<0.002	<0.02	<0.009	6.82
422947097142701	<0.02	<0.005	<0.002	<0.02	<0.009	12.8
COLFAX COUNTY						
414343096595801	<0.02	<0.005	<0.002	<0.02	<0.009	8.38
CUMING COUNTY						
415558096434501	<0.02	<0.005	<0.002	<0.02	<0.009	0.76
415918096350501	<0.02	<0.005	<0.002	<0.02	<0.009	9.29
420024096485901	<0.02	<0.005	<0.002	<0.02	<0.009	11.4
420248096300901	<0.02	<0.005	<0.002	<0.02	<0.009	23.9
DIXON COUNTY						
422011096595401	<0.02	<0.005	<0.002	<0.02	<0.009	13.2
DODGE COUNTY						
413340096402701	<0.02	<0.005	<0.002	<0.02	<0.009	25.7
413853096483801	<0.02	<0.005	<0.002	<0.02	<0.009	31.8
414141096371701	<0.02	<0.005	<0.002	<0.02	<0.009	2.93
414401096531301	<0.02	<0.005	<0.002	<0.02	<0.009	44.8
DOUGLAS COUNTY						
411733096185501	<0.02	<0.005	<0.002	<0.02	<0.009	13.1
KNOX COUNTY						
422756097334901	<0.02	<0.005	<0.002	<0.02	<0.009	19.3
PIERCE COUNTY						
421357097243201	<0.02	<0.005	<0.002	<0.02	<0.009	32.4
422156097314301	<0.02	<0.005	<0.002	<0.02	<0.009	95.2
422441097404601	<0.02	<0.005	<0.002	<0.02	<0.009	162
STANTON COUNTY						
414527097094101	<0.02	<0.005	<0.002	<0.02	<0.009	13.2
414948097212601	<0.02	<0.005	<0.002	<0.02	<0.009	53.3
415458097142201	<0.02	<0.005	<0.002	<0.02	<0.009	0.02
420425097101301	<0.02	<0.005	<0.002	<0.02	<0.009	39.0

MULTIPLE STATION ANALYSES

Station number	Station name	Geologic unit	Date	Time	Depth of well, feet below LSD (72008)	Altitude of land surface feet (72000)	Sampling depth, feet (00003)
WAYNE COUNTY							
420526096543901	25N 4E36CDDD1	112SDGV	05-01-03	0930	35	1,470	33.0
420922096514401	25N 5E 8ADDD1	112LOSS	05-05-03	1130	39	1,442	36.0
421149097121301	26N 2E28CADD1	112LOSS	05-07-03	1400	37	1,675	35.0
421303097011601	26N 3E24AACD1	111ALVM	05-07-03	0900	34.80	1,449	30.0
421445097123801	26N 2E 9BCBA1	112LOSS	05-28-03	0900	52	1,721	51.0
421829097112401	27N 2E15CCDC1	112LOSS	05-08-03	0930	35	1,645	30.0
422031097043501	27N 3E 4DAAD1	112PLSC	05-06-03	1000	73	1,540	70.0

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL LAND-USE STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	Turbidity, water, unfltrd field, NTU (61028)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Noncarb hardness, wat flt field, mg/L as CaCO3 (00904)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
WAYNE COUNTY												
420526096543901	240	719	1.0	10	6.9	2,930	10.0	12.0	1,400	990	406	90.5
420922096514401	0.3	709	4.8	48	7.2	856	11.0	12.0	360	--	105	23.9
421149097121301	0.7	715	5.8	62	7.2	1,030	23.0	15.5	400	10	117	27.0
421303097011601	0.3	719	3.1	31	7.3	801	15.0	12.0	340	61	95.3	25.8
421445097123801	--	720	--	--	7.3	1,710	18.0	13.5	880	450	290	37.7
421829097112401	36	712	4.6	46	7.0	1,020	14.0	12.0	560	79	175	29.9
422031097043501	1.9	713	9.5	95	7.2	766	16.0	12.0	340	34	102	21.4

MULTIPLE STATION ANALYSES

Station number	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Bromide water, fltrd, mg/L (71870)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)
WAYNE COUNTY												
420526096543901	10.9	3	281	30	400	488	0.0	0.12	14.8	0.38	20.7	1,390
420922096514401	13.9	1	44.7	21	392	477	0.0	0.04	5.26	0.61	34.8	38.0
421149097121301	7.14	2	78.2	29	395	481	0.0	0.08	7.34	0.34	28.0	167
421303097011601	5.06	0.9	39.4	20	283	343	1.0	0.08	7.41	0.34	30.3	70.2
421445097123801	19.8	2	124	23	431	524	0.0	0.11	8.35	0.5	19.9	620
421829097112401	26.9	0.5	26.7	9	484	589	0.0	0.05	1.24	0.69	34.3	118
422031097043501	4.25	0.8	34.5	18	309	376	0.0	0.07	5.99	0.24	31.1	37.3

MULTIPLE STATION ANALYSES

Station number	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/acre-ft (70303)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L (00660)	Orthophosphate, water, fltrd, mg/L as P (00671)	Total nitrogen, water, fltrd, mg/L (00602)	Organic carbon, water, fltrd, mg/L (00681)	Aluminum, water, fltrd, ug/L (01106)
WAYNE COUNTY												
420526096543901	2,470	3.60	2,640	0.18	E.03	4.91	<0.008	0.193	0.06	5.1	2.7	<3
420922096514401	548	0.75	554	0.14	<0.04	10.5	<0.008	--	E.01	11	1.0	E2
421149097121301	701	0.95	698	0.13	<0.04	6.71	<0.008	0.147	0.05	6.8	1.0	E2
421303097011601	518	0.73	537	0.20	<0.04	16.6	<0.008	0.356	0.12	17	1.4	M
421445097123801	1,420	2.02	1,480	0.21	<0.04	8.96	<0.008	0.377	0.12	9.2	2.1	E1
421829097112401	747	1.04	768	E.08	<0.04	9.46	<0.008	--	<0.02	--	0.8	E1
422031097043501	490	0.69	506	E.09	<0.04	15.1	<0.008	0.681	0.22	--	0.7	<2

MULTIPLE STATION ANALYSES

Station number	Antimony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)
WAYNE COUNTY												
420526096543901	<0.60	9.6	14	<0.12	198	<0.07	<0.8	0.730	5.1	<30	E.14	82.9
420922096514401	E.15	0.9	316	<0.06	167	E.03	6.5	0.293	1.4	<10	0.09	72.5
421149097121301	E.27	3.1	38	<0.06	224	E.02	2.5	0.343	4.3	<10	0.10	46.5
421303097011601	E.15	1.3	199	<0.06	104	0.06	3.0	0.314	1.7	<10	<0.08	29.7
421445097123801	E.29	8.1	55	<0.06	379	0.06	5.8	0.644	4.4	<10	E.06	63.6
421829097112401	E.19	0.9	258	<0.06	148	E.02	5.6	0.567	2.1	<10	E.05	126
422031097043501	E.18	3.2	224	<0.06	130	<0.04	4.0	0.286	0.9	<10	<0.08	25.1

CENTRAL NEBRASKA BASINS STUDY UNIT
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MULTIPLE STATION ANALYSES

Station number	Manganese, water, fltrd, ug/L (01056)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Strontium, water, fltrd, ug/L (01080)	Thallium, water, fltrd, ug/L (01057)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)
WAYNE COUNTY												
420526096543901	10.5	2.2	14.3	223	<0.4	2,160	E.05	9.6	4	<0.009	<0.02	<0.02
420922096514401	0.3	2.4	2.01	13.5	<0.2	493	<0.04	0.9	2	<0.009	<0.02	<0.02
421149097121301	2.8	4.1	3.30	85.7	<0.2	605	E.02	4.5	6	<0.009	<0.02	<0.02
421303097011601	28.3	10.3	2.59	12.7	<0.2	373	E.03	4.4	M	<0.009	<0.02	<0.02
421445097123801	3.8	7.4	12.7	81.8	<0.2	1,340	E.03	8.1	6	<0.009	<0.02	<0.02
421829097112401	5.8	1.9	4.93	12.0	<0.2	1,090	<0.04	1.5	2	<0.009	<0.02	<0.02
422031097043501	0.9	1.3	2.58	9.3	<0.2	319	<0.04	8.9	M	<0.009	<0.02	<0.02

MULTIPLE STATION ANALYSES

Station number	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy carbofuran, wat flt 0.7u GF ug/L (49308)	3-Ketocarbofuran, water, fltrd, ug/L (50295)	Acetochlor, water, fltrd, ug/L (49260)	Acifluorfen, water, fltrd 0.7u GF ug/L (49315)	Alachlor, water, fltrd, ug/L (46342)	Aldicarb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldicarb sulfoxide, wat flt 0.7u GF ug/L (49314)	Aldicarb, water, fltrd 0.7u GF ug/L (49312)
WAYNE COUNTY												
420526096543901	<0.006	<0.006	<0.04	<0.008	<0.006	<2	<0.006	<0.007	<0.004	<0.02	<0.008	<0.04
420922096514401	<0.006	<0.006	<0.04	<0.008	<0.006	<2	<0.006	<0.007	<0.004	<0.02	<0.008	<0.04
421149097121301	<0.006	<0.006	<0.04	<0.008	<0.006	<2	<0.006	<0.007	<0.004	<0.02	<0.008	<0.04
421303097011601	<0.006	<0.006	<0.04	<0.008	<0.006	<2	<0.006	<0.007	<0.004	<0.02	<0.008	<0.04
421445097123801	<0.006	E.003	<0.04	<0.008	<0.006	<2	E.006	<0.007	<0.004	<0.02	<0.008	<0.04
421829097112401	<0.006	<0.006	<0.04	<0.008	<0.006	<2	<0.006	<0.007	<0.004	<0.02	<0.008	<0.04
422031097043501	<0.006	<0.006	E.01	<0.008	<0.006	<2	<0.006	<0.007	<0.004	<0.02	<0.008	<0.04

MULTIPLE STATION ANALYSES

Station number	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Bendiocarb, water, fltrd, ug/L (50299)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Benomyl water, fltrd, ug/L (50300)	Bensulfuron, water, fltrd, ug/L (61693)	Bentazon, water, fltrd 0.7u GF ug/L (38711)	Bromacil, water, fltrd, ug/L (04029)	Bromoxynil, water, fltrd 0.7u GF ug/L (49311)	Butylate, water, fltrd, ug/L (04028)	Caffeine, water, fltrd, ug/L (50305)
WAYNE COUNTY												
420526096543901	<0.005	E.004	<0.050	<0.03	<0.010	<0.004	<0.02	<0.01	<0.03	<0.02	<0.002	<0.010
420922096514401	<0.005	<0.007	<0.050	<0.03	<0.010	<0.004	<0.02	<0.01	<0.03	<0.02	<0.002	<0.010
421149097121301	<0.005	<0.007	<0.050	<0.03	<0.010	<0.004	<0.02	<0.01	<0.03	<0.02	<0.002	<0.010
421303097011601	<0.005	<0.007	<0.050	<0.03	<0.010	<0.004	<0.02	<0.01	<0.03	<0.02	<0.002	<0.010
421445097123801	<0.005	E.007	<0.050	<0.03	<0.010	<0.004	<0.02	<0.01	<0.03	<0.02	<0.002	<0.010
421829097112401	<0.005	<0.007	<0.050	<0.03	<0.010	<0.004	<0.02	<0.01	<0.03	<0.02	<0.002	<0.010
422031097043501	<0.005	<0.007	<0.050	<0.03	<0.010	<0.004	<0.02	<0.01	<0.03	<0.02	<0.002	<0.010

MULTIPLE STATION ANALYSES

Station number	Carbaryl, water, fltrd 0.7u GF ug/L (49310)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (49309)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chloramben methyl ester, water, fltrd, ug/L (61188)	Chlorimuron, water, fltrd, ug/L (50306)	Chlorodiamino-s-triazine, wat flt ug/L (04039)	Chlorothalonil, water, fltrd 0.7u GF ug/L (49306)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Clopyralid, water, fltrd 0.7u GF ug/L (49305)	Cyanazine, water, fltrd, ug/L (04041)
WAYNE COUNTY												
420526096543901	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01	<0.04	<0.005	<0.006	<0.01	<0.018
420922096514401	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	M	<0.04	<0.005	<0.006	<0.01	<0.018
421149097121301	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01	<0.04	<0.005	<0.006	<0.01	<0.018
421303097011601	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	E.01	<0.04	<0.005	<0.006	<0.01	<0.018
421445097123801	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	<0.01	<0.04	<0.005	<0.006	<0.01	<0.018
421829097112401	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	E.71	<0.04	<0.005	<0.006	<0.01	<0.018
422031097043501	<0.03	<0.041	<0.006	<0.020	<0.02	<0.010	E.06	<0.04	<0.005	<0.006	<0.01	<0.018

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MULTIPLE STATION ANALYSES

Station number	Cyclo-ate, water, fltrd, ug/L (04031)	Dacthal mono-acid, water, fltrd 0.7u GF ug/L (49304)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Diazi-non, water, fltrd, ug/L (39572)	Dicamba water fltrd 0.7u GF ug/L (38442)	Di-chlor-prop, water, fltrd 0.7u GF ug/L (49302)	Diel-drin, water, fltrd, ug/L (39381)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphen-amid, water, fltrd, ug/L (04033)	Disul-foton, water, fltrd 0.7u GF ug/L (82677)	Diuron, water, fltrd 0.7u GF ug/L (49300)
WAYNE COUNTY												
420526096543901	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01	<0.005	<0.01	<0.03	<0.02	<0.01
420922096514401	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01	<0.005	<0.01	<0.03	<0.02	<0.01
421149097121301	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01	<0.005	<0.01	<0.03	<0.02	<0.01
421303097011601	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01	<0.005	<0.01	<0.03	<0.02	<0.01
421445097123801	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01	<0.005	<0.01	<0.03	<0.02	0.05
421829097112401	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01	<0.005	<0.01	<0.03	<0.02	<0.01
422031097043501	<0.01	<0.01	<0.003	<0.004	<0.005	<0.01	<0.01	<0.005	<0.01	<0.03	<0.02	<0.01

MULTIPLE STATION ANALYSES

Station number	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663)	Etho-prop, water, fltrd 0.7u GF ug/L (82672)	Fenuron water, fltrd 0.7u GF ug/L (49297)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)	Fipro-nil, water, fltrd, ug/L (62166)	Flumet-sulam, water, fltrd, ug/L (61694)	Fluo-meturon water fltrd 0.7u GF ug/L (38811)	Fonofos water, fltrd, ug/L (04095)	Imaza-quin, water, fltrd, ug/L (50356)
WAYNE COUNTY												
420526096543901	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005	<0.007	<0.01	<0.03	<0.003	<0.02
420922096514401	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005	<0.007	<0.01	<0.03	<0.003	<0.02
421149097121301	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005	<0.007	<0.01	<0.03	<0.003	<0.02
421303097011601	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005	<0.007	<0.01	<0.03	<0.003	<0.02
421445097123801	<0.002	<0.009	<0.005	<0.03	E.006	<0.005	E.003	<0.007	<0.01	<0.03	<0.003	<0.02
421829097112401	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005	<0.007	<0.01	<0.03	<0.003	<0.02
422031097043501	<0.002	<0.009	<0.005	<0.03	<0.009	<0.005	<0.005	<0.007	<0.01	<0.03	<0.003	<0.02

MULTIPLE STATION ANALYSES

Station number	Imaze-thapyr, water, fltrd, ug/L (50407)	Imida-cloprid water, fltrd, ug/L (61695)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (38478)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala-thion, water, fltrd, ug/L (39532)	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Meta-laxyl, water, fltrd, ug/L (50359)	Methio-carb, water, fltrd 0.7u GF ug/L (38501)	Meth-omyl, water, fltrd 0.7u GF ug/L (49296)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)
WAYNE COUNTY												
420526096543901	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02	<0.01	<0.02	<0.008	<0.004	<0.006
420922096514401	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02	<0.01	<0.02	<0.008	<0.004	<0.006
421149097121301	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02	<0.01	<0.02	<0.008	<0.004	<0.006
421303097011601	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02	<0.01	<0.02	<0.008	<0.004	<0.006
421445097123801	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02	<0.01	<0.02	<0.008	<0.004	<0.006
421829097112401	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02	<0.01	<0.02	<0.008	<0.004	<0.006
422031097043501	<0.02	<0.007	<0.004	<0.01	<0.035	<0.027	<0.02	<0.01	<0.02	<0.008	<0.004	<0.006

MULTIPLE STATION ANALYSES

Station number	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Metsul-furon, water, fltrd, ug/L (61697)	Moli-nate, water, fltrd 0.7u GF ug/L (82671)	N-(4-Chloro-phenyl) -N-' methyl-urea, ug/L (61692)	Naprop-amide, water, fltrd 0.7u GF ug/L (82684)	Neburon water, fltrd 0.7u GF ug/L (49294)	Nico-sul-furon, water, fltrd, ug/L (50364)	Norflur azon, water, fltrd 0.7u GF ug/L (49293)	Ory-zalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	p,p-' DDE, water, fltrd, ug/L (34653)
WAYNE COUNTY												
420526096543901	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	<0.02	<0.02	<0.01	<0.003
420922096514401	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	<0.02	<0.02	<0.01	<0.003
421149097121301	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	<0.02	<0.02	<0.01	<0.003
421303097011601	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	<0.02	<0.02	<0.01	<0.003
421445097123801	E.002	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	<0.02	<0.02	<0.01	<0.003
421829097112401	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	<0.02	<0.02	<0.01	<0.003
422031097043501	<0.013	<0.006	<0.03	<0.002	<0.02	<0.007	<0.01	<0.01	<0.02	<0.02	<0.01	<0.003

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MULTIPLE STATION ANALYSES

Station number	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Picloram, water, fltrd 0.7u GF ug/L (49291)	Prometon, water, fltrd, ug/L (04037)	Pronamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Propham water fltrd 0.7u GF ug/L (49236)	Propiconazole, water, fltrd, ug/L (50471)
WAYNE COUNTY												
420526096543901	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02
420922096514401	<0.010	<0.004	<0.022	<0.011	0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02
421149097121301	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02
421303097011601	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02
421445097123801	<0.010	<0.004	<0.022	<0.011	<0.02	E.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02
421829097112401	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02
422031097043501	<0.010	<0.004	<0.022	<0.011	<0.02	<0.01	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02

MULTIPLE STATION ANALYSES

Station number	Propoxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Simazine, water, fltrd, ug/L (04035)	Sulfometruron, water, fltrd, ug/L (50337)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbacil, water, fltrd, ug/L (04032)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	Triallate, water, fltrd 0.7u GF ug/L (82678)	Triclopyr, water, fltrd 0.7u GF ug/L (49235)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
WAYNE COUNTY												
420526096543901	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010	<0.02	<0.005	<0.002	<0.02	<0.009
420922096514401	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010	<0.02	<0.005	<0.002	<0.02	<0.009
421149097121301	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010	<0.02	<0.005	<0.002	<0.02	<0.009
421303097011601	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010	<0.02	<0.005	<0.002	<0.02	<0.009
421445097123801	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010	<0.02	<0.005	<0.002	<0.02	<0.009
421829097112401	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010	<0.02	<0.005	<0.002	<0.02	<0.009
422031097043501	<0.008	<0.02	<0.005	<0.009	<0.02	<0.034	<0.010	<0.02	<0.005	<0.002	<0.02	<0.009

MULTIPLE STATION ANALYSES

Station number	Uranium natural water, fltrd, ug/L (22703)
WAYNE COUNTY	
420526096543901	56.8
420922096514401	70.3
421149097121301	23.8
421303097011601	10.9
421445097123801	83.8
421829097112401	77.6
422031097043501	13.4

Remark codes used in this table:
< -- Less than
E -- Estimated value
M -- Presence verified, not quantified

NATIONAL WATER-QUALITY ASSESSMENT PROGRAM

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL CHEMICAL TRANSPORT STUDY

(Station Name: indicates location. Geologic unit: 111ALVM, Holocene Alluvium; 112LOSS, Pleistocene Loess; 112TILL, Pleistocene Till.)

COUNTIES.--Colfax, Dodge, and Stanton

MULTIPLE STATION ANALYSES

Station number	Station name	Latitude	Longitude	Geologic unit	Date	Time
	COLFAX COUNTY					
06799750	TRIBUTARY TO SOUTH FORK DRY CREEK, NR SCHUYLER	41 32 21 N	097 08 14 W	--	05-08-03	1005
	TRIBUTARY TO SOUTH FORK DRY CREEK, NR SCHUYLER	41 32 21 N	097 08 14 W	--	05-08-03	1130
	TRIBUTARY TO SOUTH FORK DRY CREEK, NR SCHUYLER	41 32 21 N	097 08 14 W	--	05-08-03	1350
	TRIBUTARY TO SOUTH FORK DRY CREEK, NR SCHUYLER	41 32 21 N	097 08 14 W	--	06-18-03	1200
	TRIBUTARY TO SOUTH FORK DRY CREEK, NR SCHUYLER	41 32 21 N	097 08 14 W	--	08-18-03	1805
	TRIBUTARY TO SOUTH FORK DRY CREEK, NR SCHUYLER	41 32 21 N	097 08 14 W	--	08-18-03	1840
	TRIBUTARY TO SOUTH FORK DRY CREEK, NR SCHUYLER	41 32 21 N	097 08 14 W	--	08-18-03	1925
	TRIBUTARY TO SOUTH FORK DRY CREEK, NR SCHUYLER	41 32 21 N	097 08 14 W	--	08-18-03	2025
413236097090501	18W 2E12CCAA-Ground-water well	41 32 36 N	097 09 05 W	--	08-26-03	0900
413247097084801	18W 2E12CADA1-Spring	41 32 46 N	097 08 48 W	--	08-26-03	1000
413302097090595	RAIN SAMPLER ACTRS1-1 NEAR SCHUYLER, NE	41 33 02 N	097 09 05 W	--	04-22-03	1000
	RAIN SAMPLER ACTRS1-1 NEAR SCHUYLER, NE	41 33 02 N	097 09 05 W	--	04-29-03	1000
	RAIN SAMPLER ACTRS1-1 NEAR SCHUYLER, NE	41 33 02 N	097 09 05 W	--	05-06-03	1000
	RAIN SAMPLER ACTRS1-1 NEAR SCHUYLER, NE	41 33 02 N	097 09 05 W	--	05-27-03	1000
	RAIN SAMPLER ACTRS1-1 NEAR SCHUYLER, NE	41 33 02 N	097 09 05 W	--	06-03-03	1000
	RAIN SAMPLER ACTRS1-1 NEAR SCHUYLER, NE	41 33 02 N	097 09 05 W	--	06-24-03	1000
	RAIN SAMPLER ACTRS1-1 NEAR SCHUYLER, NE	41 33 02 N	097 09 05 W	--	07-15-03	1000
	RAIN SAMPLER ACTRS1-1 NEAR SCHUYLER, NE	41 33 02 N	097 09 05 W	--	07-29-03	1000
	RAIN SAMPLER ACTRS1-1 NEAR SCHUYLER, NE	41 33 02 N	097 09 05 W	--	08-12-03	1000
	RAIN SAMPLER ACTRS1-1 NEAR SCHUYLER, NE	41 33 02 N	097 09 05 W	--	09-02-03	1000
	RAIN SAMPLER ACTRS1-1 NEAR SCHUYLER, NE	41 33 02 N	097 09 05 W	--	09-09-03	1000
414343096595801	20N 4E 5CCDC1	41 43 43 N	096 59 58 W	111ALVM	11-05-02	1600
	20N 4E 5CCDC1	41 43 43 N	096 59 58 W	111ALVM	03-06-03	1000
	20N 4E 5CCDC1	41 43 43 N	096 59 58 W	111ALVM	08-27-03	0930
	DODGE COUNTY					
413340096402701	18N 7E 6BCCC1	41 33 39 N	096 40 27 W	111ALVM	11-04-02	1500
	18N 7E 6BCCC1	41 33 39 N	096 40 27 W	111ALVM	03-04-03	1500
	18N 7E 6BCCC1	41 33 39 N	096 40 27 W	111ALVM	08-25-03	1700
413853096483801	19N 5E 2ADDC1	41 38 53 N	096 48 37 W	112LOSS	11-06-02	1300
	19N 5E 2ADDC1	41 38 53 N	096 48 37 W	112LOSS	03-12-03	1330
	19N 5E 2ADDC1	41 38 53 N	096 48 37 W	112LOSS	08-27-03	1300
414401096531301	20N 5E 6DADA1	41 44 01 N	096 53 13 W	112LOSS	11-06-02	1100
	20N 5E 6DADA1	41 44 01 N	096 53 13 W	112LOSS	03-07-03	1200
	20N 5E 6DADA1	41 44 01 N	096 53 13 W	112LOSS	08-26-03	1030
	STANTON COUNTY					
414527097094101	21N 2E35ABAA1	41 45 27 N	097 09 41 W	112TILL	11-05-02	1300
	21N 2E35ABAA1	41 45 27 N	097 09 41 W	112TILL	03-06-03	1500
	21N 2E35ABAA1	41 45 27 N	097 09 41 W	112TILL	08-26-03	1730

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL CHEMICAL TRANSPORT STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	Depth of well, feet below LSD (72008)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Sampling depth, feet (00003)	Turbidity, water, unfltrd field, NTU (61028)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
					COLFAX COUNTY							
06799750	--	--	--	--	--	713	7.5	74	8.4	826	14.0	11.5
	--	--	--	--	--	713	12.2	126	7.1	312	14.0	13.5
	--	--	--	--	--	713	7.3	76	7.5	520	14.0	14.0
	--	--	--	--	--	--	--	--	E7.5	E193	--	--
	--	0.25	0.05	--	--	--	--	--	7.9	619	--	--
	--	0.31	0.09	--	--	--	--	--	7.6	456	--	--
	--	0.54	0.34	--	--	--	--	--	7.6	426	--	--
	--	0.30	0.08	--	--	--	--	--	7.3	257	--	--
413236097090501	--	--	--	--	--	722	--	--	6.9	731	25.0	17.0
413247097084801	--	--	--	--	--	722	6.6	80	7.6	1,050	25.0	21.6
413302097090595	--	--	--	--	--	--	--	--	--	--	--	--
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414343096595801	25	--	--	19.0	4.0	--	0.5	--	6.8	1,590	2.0	13.5
	25	--	--	19.0	34	717	1.7	17	6.5	1,590	5.0	12.0
	25	--	--	23.0	5.9	721	--	--	6.6	1,660	27.0	14.3
					DODGE COUNTY							
413340096402701	24.5	--	--	21.0	5.4	729	4.0	40	7.3	1,100	8.0	13.0
	24.5	--	--	22.0	1.0	727	3.9	39	7.3	1,310	-5.0	13.0
	24.5	--	--	22.5	2.4	724	3.3	34	6.8	1,170	35.0	15.0
413853096483801	32	--	--	27.0	9.6	715	0.9	10	6.8	1,820	10.0	13.2
	32	--	--	31.0	17	737	3.4	35	6.9	1,860	2.0	15.5
	32	--	--	31.0	--	721	5.2	54	6.8	1,930	32.0	14.6
414401096531301	29.5	--	--	21.0	10	714	2.5	25	7.0	1,120	7.0	12.5
	29.5	--	--	22.0	1.2	725	3.6	39	6.8	1,110	6.0	15.5
	29.5	--	--	27.5	12	721	3.5	37	7.0	1,160	28.0	14.4
					STANTON COUNTY							
414527097094101	65	--	--	60.0	3.9	--	7.8	--	7.2	661	3.0	13.0
	65	--	--	55.0	6.5	717	6.6	68	6.9	680	5.0	14.0
	65	--	--	63.0	20	721	7.0	73	7.0	712	33.0	14.8

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL CHEMICAL TRANSPORT STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Noncarb hardness, wat flt field, mg/L as CaCO3 (00904)	Noncarb hardness, wat flt lab, mg/L as CaCO3 (00905)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)
COLFAX COUNTY												
06799750	390	43	--	112	27.2	6.88	0.7	29.6	14	--	348	418
	120	22	--	34.1	9.21	5.62	0.4	9.66	14	--	101	123
	210	50	--	58.1	14.8	7.51	0.5	15.4	13	--	156	188
	71	--	10	18.9	5.72	5.63	0.3	6.52	15	61	--	--
	250	--	--	61.2	24.2	11.3	0.8	27.4	18	262	--	--
	170	--	--	43.2	15.5	19.8	0.6	17.1	16	180	--	--
	160	--	--	41.7	13.1	18.8	0.5	14.2	15	171	--	--
	84	--	--	22.4	6.90	9.56	0.4	9.00	17	94	--	--
413236097090501	370	--	--	105	24.9	6.97	0.4	19.4	10	--	--	--
413247097084801	470	--	--	136	31.2	5.83	0.8	39.0	15	--	--	--
413302097090595	--	--	--	--	--	--	--	--	--	--	--	--
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414343096595801	890	--	--	250	63.7	8.25	0.1	9.74	2	--	970	1,180
	880	--	--	250	63.0	8.15	0.1	8.81	2	--	966	1,180
	910	--	--	252	67.6	8.09	0.1	8.73	2	--	972	1,180
DODGE COUNTY												
413340096402701	530	120	--	150	37.0	4.94	0.8	40.9	14	--	403	491
	660	210	--	187	47.4	5.88	0.7	43.6	12	--	453	551
	550	97	--	154	39.5	5.17	0.7	38.2	13	--	452	551
413853096483801	870	280	--	256	55.5	23.6	0.5	36.8	8	--	590	720
	880	300	--	262	55.0	24.9	0.6	40.3	9	--	582	710
	920	320	--	273	56.7	26.4	0.6	40.7	9	--	600	731
414401096531301	470	92	--	140	29.4	17.3	1	54.9	20	--	378	461
	490	93	--	145	30.0	16.4	0.9	45.9	16	--	393	479
	480	94	--	141	30.5	17.1	0.9	46.4	17	--	384	468
STANTON COUNTY												
414527097094101	320	--	--	97.8	17.2	6.07	0.6	25.6	15	--	352	429
	310	--	--	97.0	17.2	6.24	0.7	26.5	15	--	346	421
	330	--	--	103	18.4	6.77	0.6	25.9	14	--	338	412

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL CHEMICAL TRANSPORT STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Bromide water, fltrd, mg/L (71870)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)
COLFAX COUNTY												
06799750	3	--	11.2	0.39	18.9	51.0	520	0.73	--	539	--	2.2
	0.2	--	3.92	0.45	7.81	16.8	177	0.25	--	182	--	12
	1	--	7.59	0.49	11.1	34.2	293	0.41	--	302	--	6.4
	--	--	2.45	0.5	7.23	10.6	114	0.16	--	120	--	23
	--	--	9.18	0.4	18.6	46.6	375	0.55	0.05	404	--	1.2
	--	--	7.62	0.3	14.8	34.6	271	0.43	0.08	319	--	3.1
	--	--	5.81	0.4	16.0	32.4	254	0.39	0.26	286	--	2.6
	--	--	3.47	0.5	9.30	17.6	142	0.23	0.04	167	--	7.5
413236097090501	--	--	2.77	0.3	38.2	46.1	--	--	--	440	--	0.26
413247097084801	--	--	27.6	0.4	25.6	66.7	--	--	--	663	--	1.1
413302097090595	--	--	--	--	--	--	--	--	--	--	--	--
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414343096595801	0.0	0.60	4.78	0.21	41.1	9.1	997	1.37	--	1,010	1.3	--
	0.0	0.55	5.76	0.21	38.0	7.3	986	1.31	--	962	1.2	--
	0.0	0.50	6.62	0.2	38.1	7.1	996	1.37	--	1,000	1.1	--
DODGE COUNTY												
413340096402701	0.0	0.29	35.0	0.37	29.7	104	685	0.98	--	721	0.20	--
	0.0	0.45	54.2	0.37	30.1	128	872	1.22	--	896	0.31	--
	0.0	0.33	37.9	0.4	30.8	112	724	1.02	--	754	0.27	--
413853096483801	0.0	0.78	64.9	0.43	34.9	83.6	1,200	1.62	--	1,190	0.35	--
	0.0	0.78	71.5	0.39	34.2	84.4	1,210	1.43	--	1,050	0.34	--
	0.0	0.82	76.4	0.3	34.9	75.7	1,260	1.84	--	1,350	0.44	--
414401096531301	0.0	0.18	20.5	0.53	32.1	86.6	736	1.02	--	747	0.15	--
	0.0	0.19	21.9	0.51	30.9	81.0	742	1.03	--	759	0.16	--
	0.0	0.19	24.0	0.5	30.9	79.1	732	1.03	--	759	0.18	--
STANTON COUNTY												
414527097094101	0.0	0.04	2.45	0.35	31.5	18.9	422	0.55	--	407	<0.10	--
	0.0	0.04	2.71	0.35	30.7	20.0	421	0.52	--	384	E.09	--
	0.0	0.04	2.58	0.4	32.1	19.0	424	0.57	--	417	E.08	--

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL CHEMICAL TRANSPORT STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, fltrd, mg/L (00607)	Organic nitrogen, water, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L (00660)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)
COLFAX COUNTY												
06799750	0.89	0.69	52.9	11.9	12.0	0.309	0.094	--	1.5	0.466	0.15	1.12
	1.56	1.21	27.3	6.16	6.23	0.240	0.073	--	10	0.184	0.06	19.1
	1.67	1.30	46.8	10.6	10.9	1.01	0.308	--	5.1	0.392	0.13	3.95
	1.04	0.81	17.8	4.03	4.11	0.276	0.084	--	22	0.101	0.03	19.6
	--	<0.04	18.1	4.09	4.18	0.302	0.092	--	--	0.509	0.17	3.98
	--	<0.04	9.12	2.06	2.13	0.223	0.068	--	--	1.13	0.37	6.11
	0.13	0.10	7.74	1.75	1.82	0.237	0.072	--	2.5	1.21	0.40	3.14
	--	E.02	6.02	1.36	1.40	0.145	0.044	--	--	0.555	0.18	13.4
413236097090501	0.25	0.20	--	--	<0.06	--	<0.008	--	0.06	0.101	0.03	<0.02
413247097084801	0.05	0.04	28.1	6.35	6.37	0.085	0.026	--	1.0	0.374	0.12	0.17
413302097090595	--	--	--	--	--	--	--	--	--	--	--	--
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414343096595801	1.33	1.03	--	--	<0.06	--	<0.008	0.23	--	1.89	0.62	--
	1.19	0.93	--	--	<0.06	--	<0.008	0.28	--	0.438	0.14	--
	0.99	0.77	--	--	<0.06	--	<0.008	0.38	--	3.11	1.01	--
DODGE COUNTY												
413340096402701	--	<0.04	--	--	9.23	--	E.004	--	--	0.773	0.25	--
	--	<0.04	--	--	23.2	--	<0.008	--	--	0.721	0.23	--
	0.05	0.04	33.8	7.62	7.63	0.026	0.008	0.23	--	0.724	0.24	--
413853096483801	--	E.03	291	65.6	65.7	0.069	0.021	--	--	0.598	0.20	--
	--	E.04	283	63.9	64.0	0.049	0.015	--	--	0.583	0.19	--
	0.06	0.04	319	72.1	72.1	0.033	0.010	0.40	--	0.770	0.25	--
414401096531301	--	<0.04	--	--	28.9	--	E.006	--	--	0.537	0.17	--
	--	<0.04	--	--	30.1	--	<0.008	--	--	0.604	0.20	--
	0.05	0.04	131	29.6	29.6	0.026	0.008	0.14	--	0.555	0.18	--
STANTON COUNTY												
414527097094101	--	<0.04	--	--	2.43	--	<0.008	--	--	0.135	0.04	--
	--	<0.04	--	--	2.79	--	<0.008	--	--	0.150	0.05	--
	--	<0.04	--	--	3.06	--	<0.008	--	--	0.138	0.04	--

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL CHEMICAL TRANSPORT STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	1-Naphthol, water, fltrd 0.7u GF ug/L (49295)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	2-[(2-Et-6-Me-Ph)--amino]propan-1-ol, ug/L (61615)	2-Chloro-2,6'-'diethyl acetanilide wat flt ug/L (61618)
COLFAX COUNTY												
06799750	--	--	14	8.2	<0.1	8.1	<10	26.8	<0.09	<0.006	<0.1	<0.005
	--	--	18	156	1.6	155	<10	11.2	<0.09	<0.006	<0.1	<0.005
	--	--	17	27.2	0.9	26.3	<10	16.7	<0.09	<0.006	<0.1	<0.005
	6.94	--	27	150	1.8	148	E6	34.7	<0.09	<0.006	<0.1	<0.005
	0.34	--	5.4	32.0	0.4	31.6	16	7.1	<0.09	<0.006	<0.1	<0.005
	0.71	--	5.2	34.9	0.2	34.7	15	4.3	<0.09	<0.006	<0.1	<0.005
	0.66	--	4.4	20.4	0.2	20.2	20	2.8	<0.09	<0.006	<0.1	<0.005
	2.58	--	8.9	95.0	1.4	93.6	17	2.7	<0.09	<0.006	<0.1	<0.005
413236097090501	0.124	--	--	0.2	<0.1	0.2	258	281	<0.09	<0.006	<0.1	<0.005
413247097084801	0.199	--	7.4	1.6	<0.1	1.5	9	360	<0.09	<0.006	<0.1	<0.005
413302097090595	--	--	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	<0.09	<0.006	<0.1	<0.005
	--	--	--	--	--	--	--	--	<0.09	<0.006	<0.1	<0.005
	--	--	--	--	--	--	--	--	<0.09	<0.006	<0.1	<0.005
	--	--	--	--	--	--	--	--	<0.09	<0.006	<0.1	<0.005
	--	--	--	--	--	--	--	--	<0.09	<0.006	<0.1	<0.005
	--	--	--	--	--	--	--	--	E.01	<0.006	<0.1	<0.005
	--	--	--	--	--	--	--	--	<0.09	<0.006	<0.1	<0.005
	--	--	--	--	--	--	--	--	<0.09	<0.006	<0.1	<0.005
	--	--	--	--	--	--	--	--	<0.09	<0.006	<0.1	<0.005
414343096595801	--	--	--	--	--	--	5,970	19,500	<0.09	<0.006	<0.1	<0.005
	--	--	--	--	--	--	4,120	18,700	<0.09	<0.006	<0.1	<0.005
	--	--	--	--	--	--	3,710	16,800	<0.09	<0.006	<0.1	<0.005
DODGE COUNTY												
413340096402701	--	9.4	--	--	--	--	<10	E1.1	<0.09	<0.006	<0.1	<0.005
	--	23	--	--	--	--	<10	<2.0	<0.09	<0.006	<0.1	<0.005
	--	7.9	--	--	--	--	<8	1.1	<0.09	<0.006	<0.1	<0.005
413853096483801	--	66	--	--	--	--	<10	11.4	<0.09	<0.006	<0.1	<0.005
	--	64	--	--	--	--	54	12.7	<0.09	<0.006	<0.1	<0.005
	--	73	--	--	--	--	9	8.1	<0.09	<0.006	<0.1	<0.005
414401096531301	--	29	--	--	--	--	<10	E2.1	<0.09	<0.006	<0.1	<0.005
	--	30	--	--	--	--	E8	2.0	<0.09	<0.006	<0.1	<0.005
	--	30	--	--	--	--	<8	1.1	<0.09	<0.006	<0.1	<0.005
STANTON COUNTY												
414527097094101	--	--	--	--	--	--	22	12.4	<0.09	<0.006	<0.1	<0.005
	--	--	--	--	--	--	E5	6.6	<0.09	<0.006	<0.1	<0.005
	--	--	--	--	--	--	<8	3.0	<0.09	<0.006	<0.1	<0.005

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL CHEMICAL TRANSPORT STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	CIAT, water, fltrd, ug/L (04040)	2-Ethyl -6- methyl- aniline water, fltrd, ug/L (61620)	3,4-Di- chloro- aniline water fltrd, ug/L (61625)	4-Chloro 2-methyl phenol, water, fltrd, ug/L (61633)	Aceto- chlor ESA, water, fltrd 0.7u GF ug/L (61029)	Aceto- chlor OA, water, fltrd 0.7u GF ug/L (61030)	Aceto- chlor, water, fltrd, ug/L (49260)	Ala- chlor ESA, water, fltrd 0.7u GF ug/L (50009)	Ala- chlor OA, water, fltrd 0.7u GF ug/L (61031)	Ala- chlor, water, fltrd, ug/L (46342)	Atra- zine, water, fltrd, ug/L (39632)	Azin- phos- methyl oxon, water, fltrd, ug/L (61635)
COLFAX COUNTY												
06799750	E.120	<0.004	<0.004	<0.006	0.34	0.58	4.62	0.09	<0.05	0.017	4.81	<0.02
	E.956	<0.007	<0.004	<0.006	2.87	6.41	19.6	<0.05	<0.05	0.020	21.3	<0.02
	E.748	<0.007	<0.004	<0.006	3.42	8.36	19.4	<0.05	0.12	0.032	19.4	<0.02
	E.747	<0.004	<0.004	<0.006	0.71	1.23	1.40	0.05	<0.05	0.020	5.16	<0.02
	E.025	<0.004	<0.004	<0.006	0.36	0.55	<0.025	0.05	<0.05	<0.004	0.045	<0.02
	E.036	<0.004	<0.004	<0.006	0.59	0.90	<0.050	<0.05	<0.05	<0.004	0.058	<0.02
	E.049	<0.004	<0.004	<0.006	0.58	1.01	<0.075	<0.05	<0.05	<0.004	0.070	<0.02
	E.050	<0.004	<0.004	<0.006	0.60	0.97	<0.065	<0.05	<0.05	<0.004	0.136	<0.02
413236097090501	<0.006	<0.004	<0.004	<0.006	<0.05	<0.05	<0.006	<0.05	<0.05	<0.004	<0.007	<0.02
413247097084801	E.006	<0.004	<0.004	<0.006	<0.05	<0.05	<0.006	0.16	<0.05	<0.004	0.007	<0.02
413302097090595	--	--	--	--	--	--	--	--	--	--	--	--
	E.068	<0.004	<0.004	<0.006	<0.05	<0.05	0.741	<0.05	<0.05	0.093	0.562	<0.02
	E.042	<0.004	<0.004	<0.006	<0.05	<0.05	0.319	<0.05	<0.05	E.021	0.239	<0.02
	E.065	<0.004	<0.004	<0.006	<0.05	<0.05	0.543	<0.05	<0.05	0.074	0.249	<0.03
	E.033	<0.004	<0.004	<0.006	<0.05	<0.05	0.252	<0.05	<0.05	0.031	0.243	<0.02
	E.046	<0.004	<0.004	<0.006	--	--	0.046	--	--	<0.009	0.309	<0.02
	E.015	<0.004	<0.004	<0.006	--	--	0.020	--	--	0.011	0.041	<0.02
	E.022	<0.004	<0.004	<0.006	<0.05	<0.05	0.013	<0.05	<0.05	0.013	0.028	<0.03
	E.009	<0.004	<0.004	<0.006	--	--	0.009	--	--	0.006	0.027	<0.02
	<0.006	<0.004	<0.004	<0.006	--	--	<0.006	--	--	0.005	<0.007	<0.02
	E.003	<0.004	<0.004	<0.006	--	--	<0.006	--	--	<0.004	0.007	<0.02
414343096595801	E.003	<0.004	<0.004	<0.006	<0.05	<0.05	<0.006	<0.05	<0.05	<0.004	E.005	<0.02
	<0.006	<0.004	<0.004	<0.006	<0.05	<0.05	<0.006	<0.05	<0.05	<0.004	<0.007	<0.02
	<0.006	<0.004	<0.004	<0.006	<0.05	<0.05	<0.006	0.05	<0.05	<0.004	<0.007	<0.02
DODGE COUNTY												
413340096402701	E.004	<0.004	<0.004	<0.006	<0.05	<0.05	<0.006	0.09	<0.05	<0.004	<0.007	<0.02
	E.004	<0.004	<0.004	<0.006	<0.05	<0.05	<0.006	0.14	<0.05	<0.004	<0.007	<0.02
	E.004	<0.004	<0.004	<0.006	<0.05	<0.05	<0.006	0.12	<0.05	<0.004	<0.007	<0.02
413853096483801	<0.006	<0.004	<0.004	<0.006	<0.05	<0.05	<0.006	4.63	<0.05	<0.004	<0.007	<0.02
	<0.006	<0.004	<0.004	<0.006	<0.05	<0.05	<0.006	4.79	<0.05	<0.004	<0.007	<0.02
	<0.006	<0.004	<0.004	<0.006	<0.05	<0.05	<0.006	2.16	<0.05	<0.004	<0.007	<0.02
414401096531301	E.006	<0.004	<0.004	<0.006	0.05	<0.05	<0.006	0.30	<0.05	<0.004	0.019	<0.02
	E.005	<0.004	<0.004	<0.006	<0.05	<0.05	<0.006	0.17	<0.05	<0.004	0.017	<0.02
	E.006	<0.004	<0.004	<0.006	<0.05	<0.05	<0.006	0.24	<0.05	<0.004	0.011	<0.02
STANTON COUNTY												
414527097094101	<0.006	<0.004	<0.004	<0.006	<0.05	<0.05	<0.006	<0.05	<0.05	<0.004	<0.007	<0.02
	<0.006	<0.004	<0.004	<0.006	<0.05	<0.05	<0.006	<0.05	<0.05	<0.004	<0.007	<0.02
	<0.006	<0.004	<0.004	<0.006	<0.05	<0.05	<0.006	0.06	<0.05	<0.004	<0.007	<0.02

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL CHEMICAL TRANSPORT STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Chlorpyrifos oxon, water, fltrd, ug/L (61636)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cyfluthrin, water, fltrd, ug/L (61585)	Cypermethrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon oxon, water, fltrd, ug/L (61638)	Diazinon, water, fltrd, ug/L (39572)
COLFAX COUNTY												
06799750	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	<0.003	<0.004	<0.01	<0.005
	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	<0.003	<0.004	<0.01	<0.005
	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	<0.003	<0.004	<0.01	<0.005
	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	<0.003	<0.004	<0.01	<0.005
	<0.050	<0.010	<0.041	<0.06	<0.005	<0.015	<0.008	<0.009	<0.003	<0.004	<0.01	<0.005
	<0.050	<0.010	<0.041	<0.06	<0.005	<0.015	<0.008	<0.009	<0.003	<0.004	<0.01	<0.005
	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	<0.003	<0.004	<0.01	<0.015
	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	<0.003	<0.004	<0.01	<0.005
413236097090501	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	<0.003	<0.004	<0.01	<0.005
413247097084801	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	<0.003	<0.004	<0.01	<0.005
413302097090595	--	--	--	--	--	--	--	--	--	--	--	--
	<0.050	<0.010	E.004	<0.06	E.004	<0.006	<0.008	<0.009	E.001	<0.004	<0.01	<0.005
	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	<0.003	<0.004	<0.01	<0.005
	<0.050	<0.010	E.011	<0.06	0.009	<0.006	<0.008	<0.009	0.003	<0.004	<0.01	0.005
	<0.050	<0.010	<0.041	<0.06	0.024	<0.006	<0.008	<0.009	<0.003	<0.004	<0.01	<0.005
	<0.050	<0.010	<0.041	<0.03	0.021	<0.006	<0.008	<0.009	<0.003	<0.004	<0.01	<0.005
	<0.050	<0.010	<0.041	<0.06	0.017	<0.006	<0.008	<0.009	<0.003	<0.004	<0.01	<0.005
	<0.050	<0.010	<0.041	<0.06	0.009	<0.006	<0.008	<0.009	E.003	<0.004	<0.01	<0.005
	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	<0.003	<0.004	<0.01	<0.005
	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	E.003	<0.004	<0.01	<0.005
	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	E.003	<0.004	<0.01	<0.005
414343096595801	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	<0.003	<0.004	--	<0.005
	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	<0.003	<0.004	<0.04	<0.005
	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	<0.003	<0.004	<0.01	<0.005
DODGE COUNTY												
413340096402701	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	<0.003	<0.004	--	<0.005
	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	<0.003	<0.004	<0.04	<0.005
	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	<0.003	<0.004	<0.01	<0.005
413853096483801	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	<0.003	<0.004	--	<0.005
	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	<0.003	<0.004	<0.04	<0.005
	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	<0.003	<0.004	<0.01	<0.005
414401096531301	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	<0.003	<0.004	--	<0.005
	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	<0.003	<0.004	<0.04	<0.005
	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	<0.003	<0.004	<0.01	<0.005
STANTON COUNTY												
414527097094101	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	<0.003	<0.004	--	<0.005
	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	<0.003	<0.004	<0.04	<0.005
	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	<0.003	<0.004	<0.01	<0.005

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL CHEMICAL TRANSPORT STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Dimethenamid ESA, water, fltrd, ug/L (61951)	Dimethenamid OA, water, fltrd, ug/L (62482)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Fenamiphos sulfone water, fltrd, ug/L (61645)	Fenamiphos sulfoxide, water, fltrd, ug/L (61646)	Fenamiphos, water, fltrd, ug/L (61591)	Desulfinyl fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)
COLFAX COUNTY												
06799750	<0.08	<0.005	<0.05	<0.05	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	E.003
	<0.08	<0.005	<0.05	<0.05	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
	<0.08	<0.005	<0.05	<0.05	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	E.003
	<0.08	<0.005	<0.05	<0.05	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
	<0.08	<0.005	<0.05	<0.05	E.045	<0.03	<0.005	<0.008	<0.03	<0.03	<0.009	<0.005
	<0.08	<0.005	<0.05	<0.05	<0.006	<0.03	<0.045	<0.008	<0.03	<0.03	<0.009	<0.005
	<0.08	<0.005	<0.05	<0.05	<0.015	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
	<0.08	<0.005	<0.05	<0.05	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
413236097090501	<0.08	<0.005	<0.05	<0.05	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
413247097084801	<0.08	<0.005	<0.05	<0.05	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
413302097090595	--	--	--	--	--	--	--	--	--	--	--	--
	<0.08	<0.005	<0.05	<0.05	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
	<0.08	<0.005	<0.05	<0.05	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
	<0.08	<0.005	<0.05	<0.05	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
	<0.08	<0.005	<0.05	<0.05	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
	<0.08	<0.005	--	--	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
	<0.08	<0.005	--	--	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
	<0.08	<0.005	<0.05	<0.05	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
	<0.08	<0.005	--	--	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
	<0.08	<0.005	--	--	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
	<0.08	<0.005	--	--	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
414343096595801	<0.08	<0.005	<0.05	<0.05	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
	<0.08	<0.005	<0.05	<0.05	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
	<0.08	<0.005	<0.05	<0.05	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
DODGE COUNTY												
413340096402701	<0.08	<0.005	<0.05	<0.05	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
	<0.08	<0.005	<0.05	<0.05	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
	<0.08	<0.005	<0.05	<0.05	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
413853096483801	<0.08	<0.005	<0.05	<0.05	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
	<0.08	<0.005	<0.05	<0.05	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
	<0.08	<0.005	<0.05	<0.05	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
414401096531301	<0.08	<0.005	<0.05	<0.05	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
	<0.08	<0.005	<0.05	<0.05	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
	<0.08	<0.005	<0.05	<0.05	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
STANTON COUNTY												
414527097094101	<0.08	<0.005	<0.05	<0.05	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
	<0.08	<0.005	<0.05	<0.05	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005
	<0.08	<0.005	<0.05	<0.05	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL CHEMICAL TRANSPORT STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Flufenacet ESA, water, fltrd, ug/L (61952)	Flufenacet OA, water, fltrd, ug/L (62483)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	Hexazinone, water, fltrd, ug/L (04025)	Iprodione, water, fltrd, ug/L (61593)	Isofenphos, water, fltrd, ug/L (61594)	Malaoxon, water, fltrd, ug/L (61652)	Malathion, water, fltrd, ug/L (39532)	Metalaxyl, water, fltrd, ug/L (61596)
COLFAX COUNTY												
06799750	E.007	<0.007	<0.05	<0.05	<0.002	<0.003	--	<1	<0.003	<0.008	<0.027	<0.005
	E.008	<0.007	<0.05	<0.05	<0.002	<0.003	--	<1	<0.003	<0.008	<0.027	<0.005
	E.009	<0.007	<0.05	<0.05	<0.002	<0.003	--	<1	<0.003	<0.008	<0.027	<0.010
	<0.009	<0.007	<0.05	<0.05	<0.002	<0.003	<0.013	<1	<0.003	<0.008	<0.027	<0.005
	<0.005	<0.007	<0.05	<0.05	<0.002	<0.003	<0.013	<1	<0.003	<0.008	<0.027	<0.005
	<0.007	<0.007	<0.05	<0.05	<0.002	<0.003	<0.013	<1	<0.003	<0.008	<0.027	<0.005
	<0.005	<0.007	<0.05	<0.05	<0.002	<0.003	<0.013	<1	<0.003	<0.008	<0.027	<0.005
	<0.005	<0.007	<0.05	<0.05	<0.002	<0.003	<0.013	<1	<0.003	<0.008	<0.027	<0.005
413236097090501	<0.005	<0.007	<0.05	<0.05	<0.002	<0.003	<0.013	<1	<0.003	<0.008	<0.027	<0.005
413247097084801	<0.005	<0.007	<0.05	<0.05	<0.002	<0.003	<0.013	<1	<0.003	<0.008	<0.027	<0.005
413302097090595	--	--	--	--	--	--	--	--	--	--	--	--
	<0.005	<0.007	<0.05	<0.05	<0.002	<0.003	--	<1	<0.003	<0.008	<0.027	<0.005
	<0.005	<0.007	<0.05	<0.05	<0.002	<0.003	--	<1	<0.003	<0.008	<0.027	<0.005
	<0.007	<0.007	<0.05	<0.05	<0.002	<0.003	<0.013	<1	<0.003	<0.008	<0.027	<0.005
	<0.005	<0.007	<0.05	<0.05	<0.002	<0.003	<0.013	<1	<0.003	<0.008	<0.027	<0.005
	<0.005	<0.007	--	--	<0.002	<0.003	<0.013	<1	<0.003	<0.025	<0.027	<0.005
	<0.005	<0.007	--	--	<0.002	<0.003	<0.013	<1	<0.003	<0.008	<0.027	<0.005
	<0.005	<0.007	<0.05	<0.05	<0.002	<0.003	<0.013	<1	<0.003	0.011	E.006	<0.005
	<0.005	<0.008	--	--	<0.002	<0.003	<0.013	<1	<0.003	<0.010	<0.027	<0.005
	<0.005	<0.007	--	--	<0.002	<0.003	<0.013	<1	<0.003	<0.008	<0.027	<0.005
	<0.005	<0.007	--	--	<0.002	<0.003	<0.013	<1	<0.003	<0.008	<0.027	<0.005
414343096595801	<0.005	<0.007	<0.05	<0.05	<0.002	<0.003	--	<1	<0.003	<0.008	<0.027	<0.005
	<0.005	<0.007	<0.05	<0.05	<0.002	<0.003	--	<1	<0.003	<0.008	<0.027	<0.005
	<0.005	<0.007	<0.05	<0.05	<0.002	<0.003	<0.013	<1	<0.003	<0.008	<0.027	<0.005
DODGE COUNTY												
413340096402701	<0.005	<0.007	<0.05	<0.05	<0.002	<0.003	--	<1	<0.003	<0.008	<0.027	<0.005
	<0.005	<0.007	<0.05	<0.05	<0.002	<0.003	--	<1	<0.003	<0.008	<0.027	<0.005
	<0.005	<0.007	<0.05	<0.05	<0.002	<0.003	<0.013	<1	<0.003	<0.008	<0.027	<0.005
413853096483801	<0.005	<0.007	<0.05	<0.05	<0.002	<0.003	--	<1	<0.003	<0.008	<0.027	<0.005
	<0.005	<0.007	<0.05	<0.05	<0.002	<0.003	--	<1	<0.003	<0.008	<0.027	<0.005
	<0.005	<0.007	<0.05	<0.05	<0.002	<0.003	<0.013	<1	<0.003	<0.008	<0.027	<0.005
414401096531301	<0.005	<0.007	<0.05	<0.05	<0.002	<0.003	--	<1	<0.003	<0.008	<0.027	<0.005
	<0.005	<0.007	<0.05	<0.05	<0.002	<0.003	--	<1	<0.003	<0.008	<0.027	<0.005
	<0.005	<0.007	<0.05	<0.05	<0.002	<0.003	<0.013	<1	<0.003	<0.008	<0.027	<0.005
STANTON COUNTY												
414527097094101	<0.005	<0.007	<0.05	<0.05	<0.002	<0.003	--	<1	<0.003	<0.008	<0.027	<0.005
	<0.005	<0.007	<0.05	<0.05	<0.002	<0.003	--	<1	<0.003	<0.008	<0.027	<0.005
	<0.005	<0.007	<0.05	<0.05	<0.002	<0.003	<0.013	<1	<0.003	<0.008	<0.027	<0.005

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL CHEMICAL TRANSPORT STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	Methi-althion water, fltrd, ug/L (61598)	Methyl para-oxon, water, fltrd, ug/L (61664)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Metola-chlor ESA, water, fltrd 0.7u GF ug/L (61043)	Metola-chlor OA, water, fltrd 0.7u GF ug/L (61044)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Myclo-butanil water, fltrd, ug/L (61599)	Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)
COLFAX COUNTY												
06799750	<0.006	<0.03	<0.006	0.10	<0.05	0.037	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
	<0.006	<0.03	<0.006	<0.05	<0.05	0.058	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
	<0.006	<0.03	<0.006	0.11	0.09	0.071	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
	<0.006	<0.03	<0.006	<0.05	<0.05	0.056	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
	<0.006	<0.03	<0.006	0.15	0.07	E.010	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
	<0.006	<0.03	<0.007	0.12	0.08	0.016	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
	<0.006	<0.03	<0.006	0.10	0.07	E.012	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
	<0.006	<0.03	<0.006	0.07	0.06	E.012	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
413236097090501	<0.006	<0.03	<0.006	<0.05	<0.05	<0.013	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
413247097084801	<0.006	<0.03	<0.006	<0.05	<0.05	<0.013	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
413302097090595	--	--	--	--	--	--	--	--	--	--	--	--
	<0.006	<0.03	<0.006	<0.05	<0.05	0.186	<0.006	<0.008	0.037	<0.10	<0.011	<0.06
	<0.006	<0.03	<0.006	<0.05	<0.05	0.073	<0.006	<0.008	E.015	<0.10	<0.011	<0.06
	<0.006	<0.03	<0.006	<0.05	<0.05	0.057	<0.006	<0.008	0.046	<0.10	<0.011	<0.06
	<0.006	<0.03	<0.006	<0.05	<0.05	0.056	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
	<0.006	<0.03	<0.006	--	--	0.028	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
	<0.006	E.04	0.056	--	--	E.010	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
	<0.006	E.01	0.038	<0.05	<0.05	E.006	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
	<0.006	<0.03	<0.006	--	--	E.006	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
	<0.006	<0.03	<0.006	--	--	<0.013	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
	<0.006	<0.03	<0.006	--	--	E.004	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
414343096595801	<0.006	<0.03	<0.006	<0.05	<0.05	E.004	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
	<0.006	<0.03	<0.006	<0.05	<0.05	<0.013	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
	<0.006	<0.03	<0.006	<0.05	<0.05	<0.013	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
DODGE COUNTY												
413340096402701	<0.006	<0.03	<0.006	<0.05	<0.05	<0.013	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
	<0.006	<0.03	<0.006	<0.05	<0.05	<0.013	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
	<0.006	<0.03	<0.006	<0.05	<0.05	<0.013	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
413853096483801	<0.006	<0.03	<0.006	<0.05	<0.05	<0.013	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
	<0.006	<0.03	<0.006	<0.05	<0.05	<0.013	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
	<0.006	<0.03	<0.006	<0.05	<0.05	<0.013	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
414401096531301	<0.006	<0.03	<0.006	<0.05	<0.05	<0.013	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
	<0.006	<0.03	<0.006	<0.05	<0.05	<0.013	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
	<0.006	<0.03	<0.006	<0.05	<0.05	<0.013	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
STANTON COUNTY												
414527097094101	<0.006	<0.03	<0.006	<0.05	<0.05	<0.013	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
	<0.006	<0.03	<0.006	<0.05	<0.05	E.002	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06
	<0.006	<0.03	<0.006	<0.05	<0.05	<0.013	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06

CENTRAL NEBRASKA BASINS STUDY UNIT
AGRICULTURAL CHEMICAL TRANSPORT STUDY—Continued

MULTIPLE STATION ANALYSES

Station number	Phosmet water, fltrd, ug/L (61601)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Pronamide, water, fltrd 0.7u GF ug/L (82676)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbufos oxon sulfone water, fltrd, ug/L (61674)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Terbuthylazine, water, fltrd, ug/L (04022)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)	Dichlorvos, water fltrd, ug/L (38775)
					COLFAX COUNTY						
06799750	<0.008	<0.01	E.003	<0.004	<0.021	<0.02	<0.07	<0.02	E.01	0.022	<0.01
	<0.008	<0.01	<0.005	<0.004	<0.021	<0.02	<0.07	<0.02	<0.02	0.059	<0.01
	<0.008	<0.01	<0.005	<0.004	<0.021	<0.02	<0.07	<0.02	<0.02	0.029	<0.01
	<0.008	<0.01	<0.005	<0.004	0.031	<0.02	<0.07	<0.02	E.01	0.041	<0.01
	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	E.003	<0.01
	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	<0.009	<0.01
	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	E.003	<0.01
	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	E.005	<0.01
413236097090501	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	<0.009	<0.01
413247097084801	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	E.005	<0.01
413302097090595	--	--	--	--	--	--	--	--	--	--	--
	<0.008	<0.01	<0.005	<0.004	E.004	<0.02	<0.07	<0.02	<0.01	0.022	<0.01
	<0.008	<0.01	E.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	<0.009	<0.01
	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	0.148	<0.01
	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	0.060	<0.01
	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	0.019	<0.01
	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	0.013	<0.01
	<0.008	<0.01	<0.005	<0.004	E.004	<0.02	<0.07	<0.02	<0.01	0.015	<0.01
	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	E.006	<0.01
	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	E.006	<0.01
	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	E.004	<0.01
414343096595801	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	<0.009	<0.01
	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	<0.009	<0.01
	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	<0.009	<0.01
					DODGE COUNTY						
413340096402701	<0.008	M	<0.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	<0.009	<0.01
	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	<0.009	<0.01
	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	<0.009	<0.01
413853096483801	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	<0.009	<0.01
	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	<0.009	<0.01
	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	<0.009	<0.01
414401096531301	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	<0.009	<0.01
	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	<0.009	<0.01
	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	<0.009	<0.01
					STANTON COUNTY						
414527097094101	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	<0.009	<0.01
	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	<0.009	<0.01
	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	<0.02	<0.01	<0.009	<0.01

Remark codes used in this table:
< -- Less than
E -- Estimated value
M -- Presence verified, not quantified

Conversion Factors

Multiply	By	To obtain
	Length	
inch (in.)	2.54×10^{1}	millimeter (mm)
	2.54×10^{-2}	meter
foot (ft)	3.048×10^{-1}	meter (m)
mile (mi)	1.609×10^{0}	kilometer (km)
	Area	
acre	4.047×10^{3}	square meter (m^2)
	4.047×10^{-1}	square hectometer (hm^2)
	4.047×10^{-3}	square kilometer (km^2)
square mile (mi^2)	2.590×10^{0}	square kilometer (km^2)
	Volume	
gallon (gal)	3.785×10^{0}	liter (L)
	3.785×10^{-3}	cubic meter (m^3)
	3.785×10^{0}	cubic decimeter (dm^3)
million gallons (Mgal)	3.785×10^{3}	cubic meter (m^3)
	3.785×10^{-3}	cubic hectometer (hm^3)
cubic foot (ft^3)	2.832×10^{-2}	cubic meter (m^3)
	2.832×10^{1}	cubic decimeter (dm^3)
cubic-foot-per-second-per-day [(ft^3/s/d]	2.447×10^{3}	cubic meter (m^3)
	2.447×10^{-3}	cubic hectometer (hm^3)
acre-foot (acre-ft)	1.223×10^{3}	cubic meter (m^3)
	1.223×10^{-3}	cubic hectometer (hm^3)
	1.223×10^{-6}	cubic kilometer (km^3)
	Flow rate	
cubic foot per second (ft^3/s)	2.832×10^{1}	liter (L/s)
	2.832×10^{-2}	cubic meter per second (m^3/s)
	2.832×10^{1}	cubic decimeter per second (dm^3/s)
gallon per minute (gal/min)	6.309×10^{-2}	liter per second (L/s)
	6.309×10^{-5}	cubic meter per second (m^3/s)
	6.309×10^{-2}	cubic decimeter per second (dm^3/s)
million gallons per day (Mgal/d)	4.381×10^{-2}	cubic meter per second
	4.381×10^{1}	cubic decimeter per second (dm^3/s)
	Mass	
ton, short (2,000 lb)	9.072×10^{-1}	megagram (Mg) or metric ton

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows:

$$°F = (1.8 \times °C) + 32$$

USGS

Hitch and others—**Water Resources Data, Nebraska, Water Year 2003**—NE-03-1



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