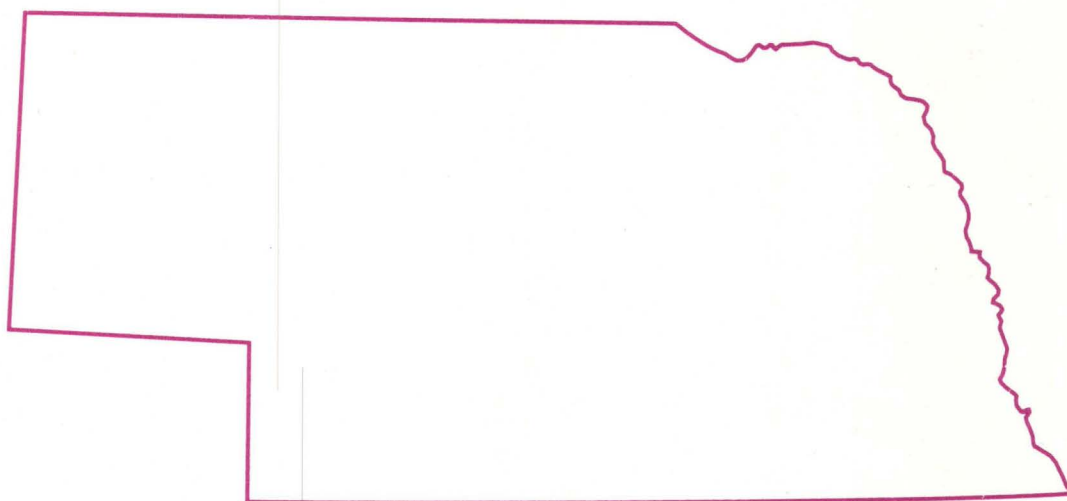
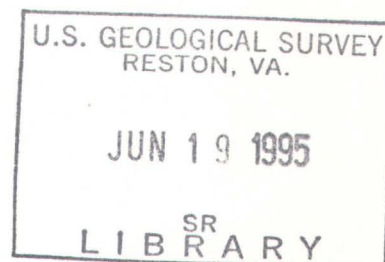


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Water Resources Data Nebraska Water Year 1994



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NE-94-1
Prepared in cooperation with the Nebraska Department of Water
Resources, the Conservation and Survey Division of the
University of Nebraska, the Nebraska Natural Resources
Commission, the Nebraska Department of Environmental
Quality, and other Federal, State, and local agencies

CALENDAR FOR WATER YEAR 1994

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1994

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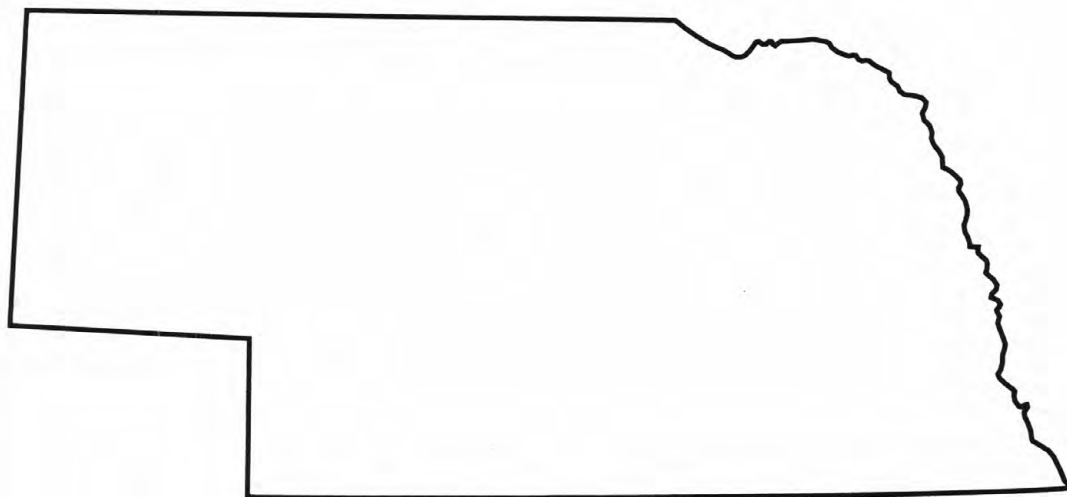
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10	11	12	13	14	15	16	15	16	17	18	19	20	21	12	13	14	15	16	17	18
17	18	19	20	21	22	23	22	23	24	25	26	27	28	19	20	21	22	23	24	25
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10	11	12	13	14	15	16	14	15	16	17	18	19	20	11	12	13	14	15	16	17
17	18	19	20	21	22	23	21	22	23	24	25	26	27	18	19	20	21	22	23	24
24	25	26	27	28	29	30	28	29	30	31				25	26	27	28	29	30	
31																				



Water Resources Data Nebraska Water Year 1994

by J.A. Boohar, C.G. Hoy, and F. J. Jelinek



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NE-94-1
Prepared in cooperation with the Nebraska Department of Water
Resources, the Conservation and Survey Division of the
University of Nebraska, the Nebraska Natural Resources
Commission, the Nebraska Department of Environmental
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UNITED STATES DEPARTMENT OF THE INTERIOR

BRUCE BABBITT, Secretary

GEOLOGICAL SURVEY

Gordon P. Eaton, Director

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

District Chief
U.S. Geological Survey
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100 Centennial Mall, North
Lincoln, Nebraska 68508

PREFACE

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

This report is the culmination of a concerted effort by personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, 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 Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

G.B. Engel, P.A. Bartz, J.C. Beard, N.R. Harmon, M.C. Rowan, and G.V. Steele of the District office, including

student assistants: J.A. Broyles, J.G. Carpenter, S.A. Choquette, and R.D. Zarek.
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D. E. Hitch, R.B. Swanson, D.L. Curtis, and K.A. Miller, and J.D. Miller (Twin Platte NRD) of the North Platte field office,

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

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13. ABSTRACT (Maximum 200 words) Water resources data for the 1994 water year for Nebraska consists of records of stage, discharge, and water quality of stream; stage and contents in lakes and reservoirs; and water levels and water quality in wells. This report contains discharge records for 121 streamflow-gaging stations, 5 partial-record or miscellaneous stream-flow stations, and 2 crest-stage, partial-record streamflow stations; stage and contents records for 11 lakes and reservoirs; water-quality records for 22 streamflow-gaging stations, 46 ungaged streamsites, and 255 wells; and water-levels for 60 observation wells. These data represent that part of the National Water-Data System operated by the U. S. Geological Survey and cooperating Federal, State, and local agencies in Nebraska.				
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SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER,
FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

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[Letter after station name designates type of data: (d) discharge, (e) elevation and/or contents, (c) chemical, (b) biological, (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-digit number.

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MISSOURI RIVER:		
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Mud Creek near Sweetwater (d) -----	7835	124
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GARDEN COUNTY

Well 414124102230101	Local number 20N 44W 22CB -----	302
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SEWARD COUNTY

Well 405406097115001 Local number 11N 2E 21DD ----- 321

SHERIDAN COUNTY

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THOMAS COUNTY

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VALLEY COUNTY

Well 412955099123201 Local number 18N 16W 30CC ----- 322

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

Well 400423098314001	Local number 1N 11W 11AB -----	323
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YORK COUNTY

Well 404618097482201	Local number 9N 4W 5CCC-----	323
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Well 405305097351503	Local number 11N 2W 31BA3-----	324
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DISCONTINUED SURFACE-WATER GAGING STATIONS

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 preceeding the number has been left off as well as the 00 following 4-digit number.

Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only)

<i>Station name</i>	<i>Station number</i>	<i>Drainage area (mi²)</i>	<i>Period of record (water years)</i>
White River Basin			
White River near Crawford (d)	4435	1163	* 1897
White River at Crawford (d)	4440	313	** 1931-43, 1948-91
White River below Crawford (d)	4445	350	* 1931
White River below Cottonwood C 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 Lynch (d)	453550		1961-64
Niobrara River Basin			
Niobrara River at Agate (d)	4541	840	** 1957-91
Niobrara River below Box Butte Reservoir (d)	4555	1460	** 1947-91
Niobrara River near Dunlap (d)	4559	1580	1931-42, 1962-71
Niobrara River near Hay Springs (d)	4565	1790	1950-64
Niobrara River near Colclessner (d)	4570	2220	1948
Niobrara River near Gordon (d)	4575	4290	** 1929-32, 1946-91
Antelope Creek near Gordon (d)	4580	160	* 1948
Bear Creek near Eli (d)	4585	360	1948-53
Niobrara River near Cody (d)	4590	5570	1948-57
Snake River at Doughboy (d)	459175	405	** 1982-93
Snake River above Merritt Res. (d)	4592	440	1963-81
Gordon Creek near Simeon (d)	4600		* 1948
Niobrara River near Valentine (d)	4605	6160	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	8390	1953-83, 1986
Niobrara River at Meadville (d)	4630		1951-52
Long Pine Creek near Long Pine (d)	463080	246	1980-91
Niobrara River at Mariaville (d)	4637	9810	1986-91
Eagle Creek near Redbird (d)	465310	206	1979-91
North. Banch Verdigre Creek near Verdigre (d)	465680	137	1980-92
Niobrara River at Niobrara (d)	4660		1954-58

DISCONTINUED SURFACE-WATER GAGING STATIONS--continued

<i>Station name</i>	<i>Station number</i>	<i>Drainage area (mi²)</i>	<i>Period of record (water years)</i>
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 at WY-NE State Line (d)	6771		1969-70
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
Tub Springs near Scottsbluff (d)	6800		** 1949-79
North Platte River at Scottsbluff (d)	6805	24500	1887-1900, 1912, 1917-18
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	24700	** 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	25300	** 1917-91
Pumpkin Creek near Bridgeport (d)	6850	1020	** 1932-91
North Platte River at Broadwater (d)	6855		1917-23
North Platte River at Oshkosh (d)	6865	31300	1916-17, 1928-60
Blue Creek near Lewellen (d)	6870	1190	** 1931-91

DISCONTINUED SURFACE-WATER GAGING STATIONS--continued

<i>Station name</i>	<i>Station number</i>	<i>Drainage area (mi²)</i>	<i>Period of record (water years)</i>
Platte River Basin--continued			
North Platte River at Lewellen (d)	6875	28600	** 1941-91
North Platte River at Belmar (d)	6880	29100	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 Sutherland (d)	6910	29800	** 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	6925		** 1931, 1955-79
Lodgepole Creek at Bushnell (upper station)	7620	1090	1931-32
Lodgepole Creek at Bushnell (d)	7625	1350	** 1932-91
Lodgepole Creek at Sidney (d)	7630	2190	1931-32
Lodgepole Creek at Ralton (d)	7635	3307	1931, 1951-79
South Platte River at Big Springs (d)	7645	23200	* 1903
South Platte River at Paxton (d)	7650	24000	1923-24, 1931-33, 1937-70
Platte River at Brady (d)	7660	56200	** 1939-91
Platte River near Cozad (d)	7665	56500	** 1938-91
Platte River near Lexington (d)	7670	57300	1902-06, 1916-24
Plum Creek near Smithfield (d)	7675	229	1946-53, 1969-75
Buffalo Creek near Darr (d)	7685	63.0	1947-69
Buffalo Creek near Overton (d)	7690	175	1949-58
Elm Creek near Overton (d)	7695	31.0	1947-58
Platte River near Odessa (d)	7700	58100	** 1938-91
North Dry Creek near Kearney (d)	770190		1969-71
Platte River near Grand Island (South Channel) (d)	770478		1984-87
Wood River near Riverdale (d)	7710	379	1946-73
Dry Creek near Cairo (d)	7730	25	1949-53
Prairie Creek near Silver Creek (d)	7735	406	1949-53
Middle Loup River near Mullen (d)	7745	1120	1947-48
Middle Loup River near Seneca (d)	7750	1140	1948-53
Dismal River near Gem (d)	7760	1360	1947-53
Middle Loup River near Milburn (d)	7770	3690	1952-56, 1958 1960-64
Middle Loup River at Walworth (d)	7775	4650	1941-60
Middle Loup River at Sargent (d)	7780	4480	1937-38, 1953-70
Middle Loup River near Comstock (d)	7785	4960	* 1937
Middle Loup River at Arcadia (d)	7790	5040	** 1937-93
Middle Loup River at Loup City (d)	7795	4860	1936-38, 1949-56
Middle Loup River at Rockville (d)	7800	5310	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)	7815		1937-38
South Loup River near Cumro (d)	7820	1340	1946-53
South Loup River at Ravenna (d)	7825	1660	1941-58, 1968-75

DISCONTINUED SURFACE-WATER GAGING STATIONS--continued

<i>Station name</i>	<i>Station number</i>	<i>Drainage area (mi²)</i>	<i>Period of record (water years)</i>
Platte River Basin--continued			
Mud Creek near Broken Bow (d)	7830	440	1949-53
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	1890	1945-51
North Loup River at Burwell (d)	7865	2510	1953-60
North Loup River near Burwell (d)	7880		1937-38, 1952-60
Mira Creek near North Loup (d)	788988	65.8	** 1980-93
North Loup River at Scotia (d)	7890	3960	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
Spalding Power Canal at Spalding (d)	7917		1960-64
Cedar River at Primrose (d)	791750	870	1960-64
Cedar River at Belgrade (d)	7918	1060	1960-65
Fullerton Power Canal at Fullerton (d)	7921		1960-64
Loup River power canal near Genoa (d)	7925		** 1937-93
Beaver Creek at Loretto (d)	7935	311	** 1945-53, 1980-91
Loup River at Columbus (d)	7945	15200	1895-1915, 1931, 1934-78
Shell Creek at Newman Grove (d)	7950	122	1949-67
Platte River near Fremont (d)	7965		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)	7983210		** 1962-64, 1978-91
Elkhorn River at Neligh (d)	7985	2200	** 1931-93
Elkhorn River at Meadow Grove (d)	7988	2500	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	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
Silver Creek at Ithaca (d)	8045	80.0	1950-58
Salt Creek near Ashland (d)	8050	1640	1948-67

DISCONTINUED SURFACE-WATER GAGING STATIONS--continued

<i>Station name</i>	<i>Station number</i>	<i>Drainage area (mi²)</i>	<i>Period of record (water years)</i>
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			
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 Max (d)	8280	7740	1928-45
Muddy Creek at Stratton (d)	828490	157	1978
Republican River at Trenton (d)	8295	8340	** 1947-93
Republican River at Culbertson (d)	8300	8450	1931-50
Frenchman Creek near Champion (d)	8305	700	1932-40
Frenchman Creek below Champion (d)	8310	721	1935-56
Frenchman Creek near Enders (d)	8325	1140	** 1947-93
Frenchman Creek near Hamlet (d)	8335	1270	1929-56
Stinking Water Creek near Wauneta (d)	8345	1330	1941-50
Little Blue River near Alexandria (d)	883570	607	1980-92
Blackwood Creek near Culbertson (d)	8360	320	1946-86
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-
Dry Creek near Curtis (d)	8405	20	1951-58
Mitchell Creek above Harry Strunk Lake (d)	8415	52.0	1950-74
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	1480	1937-72
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	21020	1929-57
Center Creek at Franklin (d)	8510	177	** 1948-56, 1978-93
Elm Creek at Amboy (d)	8520	39.2	** 1948-54, 1978-93
Republican River near Guide Rock (d)	8530	22040	1951-84
Beaver Creek near Rosemont (d)	8531	.75	1968-70
Big Blue River at Surprise (d)	8799	345	** 1964-93
Little Blue River below Pawnee Creek, near Pauline (d)	8829	929	1963-68

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WATER RESOURCES DATA - NEBRASKA, 1994
DISCONTINUED SURFACE-WATER GAGING STATIONS--continued

<i>Station name</i>	<i>Station number</i>	<i>Drainage area (mi²)</i>	<i>Period of record (water years)</i>
	Kansas River Basin		
Little Blue River at Angus (d)	8835		1950-53
Little Blue River near Alexandria (d)	883570	1568	1960-72, 1975-92
Big Sandy Creek at Alexandria (d)	883940	607	** 1980-93

* Partial year only.

** Operated by Nebraska Department of Water Resources after last indicated date..

DISCONTINUED SURFACE-WATER CREST STAGE STATIONS

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 preceeding the number has been left off as well as the 00 following a 4-digit number. The asterik (*) denotes a current continuous-record streamflow station.

<i>Station name</i>	<i>Station number</i>	<i>Drainage area (mi²)</i>	<i>Period of record (water years)</i>
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
Soldier's 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	2.59	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

<i>Station name</i>	<i>Station number</i>	<i>Drainage area (mi²)</i>	<i>Period of record (water years)</i>
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
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

DISCONTINUED SURFACE-WATER CREST STAGE STATIONS--continued

<i>Station name</i>	<i>Station number</i>	<i>Drainage area (mi²)</i>	<i>Period of record (water years)</i>
Platte River Basin--continued			
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
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

DISCONTINUED SURFACE-WATER CREST STAGE STATIONS--continued

<i>Station name</i>	<i>Station number</i>	<i>Drainage area (mi²)</i>	<i>Period of record (water years)</i>
Platte River Basin--continued			
Silver Creek near Cedar Bluffs	8041	10.9	1950-78
Silver Creek near Colon	8042	29.9	1950-78
Silver Creek tributary near Colon	8043	14.3	1951-78
Silver Creek tributary at Colon	8044	22.4	1951-78
Silver Creek at Ithaca	8045	72.0	1959-78
Buffalo Creek near Gretna	805510	4.29	1968-78
Weeping Water Creek Basin			
Weeping Water Creek at Elmwood	8064	20.8	1951-67
Stove Creek near Elmwood	806420	5.23	1951-67
Stove Creek at Elmwood	806440	10.0	1950-78
Weeping Water Creek at Weeping Water	806460	75.5	1947, 1950-78
Weeping Water Creek tributary near Weeping Water	806470	.87	1950-78
Honey Creek Basin			
Honey Creek near Peru	810060	3.40	1968-78
Little Nemaha River Basin			
Hooper Creek tributary near Palmyra	8101	7.81	1950-78
Hooper Creek near Palmyra	8102	57.5	1951-67
Wolf Creek near Syracuse	8103	25.5	1951-67
Little Nemaha River tributary near Syracuse	8104	.76	1950-78
Big Nemaha River Basin			
Muddy Creek at Verdon	8155	186	1973
Temple Creek near Falls City	815510	3.02	1968-78
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

DISCONTINUED SURFACE-WATER CREST STAGE STATIONS--continued

<i>Station name</i>	<i>Station number</i>	<i>Drainage area (mi²)</i>	<i>Period of record (water years)</i>
Kansas River Basin--continued			
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	20800	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	223	1961-68
* Elm Creek at Amboy	8520	39.2	1954-78
Beaver Creek near Rosemont	8531	.752	1971-78
Republican River at Superior	8534	22300	1971-75, 1977
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 Ohioa	883955	11.6	1968-78
Dry Branch tributary near Fairbury	884005	4.51	1968-78

* Current continuous record surface-water gaging station.

WATER RESOURCES DATA - NEBRASKA, 1994
DISCONTINUED SURFACE-WATER QUALITY STATIONS

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 preceeding the number has been left off as well as the 00 following a 4-digit number.

Type of record:	c	chemical
	m	microbiological
	s	sediment
	t	temperature

<i>Station name</i>	<i>Station number</i>	<i>Period of record (water years)</i>	<i>Type of record</i>
White River Basin			
White River at Crawford	4440	* 1957	c
White River near Whitney	4450	1969-72	c m t
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 Colclessner	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 at Valentine	4605	* 1948	c

DISCONTINUED SURFACE-WATER QUALITY STATIONS--continued

<i>Station name</i>	<i>Station number</i>	<i>Period of record (water years)</i>	<i>Type of record</i>
Niobrara River Basin--continued			
** Minnechaduz Creek at Valentine	4610	* 1948-49	c
** Niobrara River near Sparks	4615	1982-93	c t
Niobrara River near Norden	4620	* 1953, *1961, 1964-67	c s t
Plum Creek at Johnstown	462450	1969-75, 1978-84	c m t
Plum Creek near Johnstown	462470	1969-75, 1978-84	c m t
** Plum Creek near Meadville	4625	1948-49	c *s
		1977-84	c t
Niobrara River at Meadville	4630	1950-52	c s t
Long Pine Creek at Long Pine	463050	1978-84	c t
Bone Creek at Ainsworth	463090	* 1969-75, 1978-84	c t
Sand Draw near Johnstown	463290	1978-84	c t
Sand Draw near Meadville	463310	1978-84	c t
Bone Creek near Long Pine	463350	* 1969-75, 1978-84	c t
Niobrara River near Mariaville	463720	1985-89	c m s
Keya Paha River at Wewela, SD	4645	1947-49	c
** Niobrara River near Spencer	4650	* 1946-48	c
		1976	c t
Eagle Creek near Midway	465050	* 1957-66,	c
		1976-90	c t
East Branch Eagle Creek near Midway	4651	* 1957-66	c
		1976-90	c t
		1974-83	c
Honey Creek near Midway	465202	* 1957-66	c
Eagle Creek near Redbird	465310	1986-90	c
Redbird Creek near Meek	465398	* 1957-66	c
		1976-90	c t
Blackbird Creek near Meek	465420	* 1957-66	c
		1976-90	c t
South Branch Verdigre Creek near Royal	465650	* 1967	c
Verdigre River near Verdigre	4657	1948-49	c
		1948-50	s
Bazille 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 at Omaha	6100	1969-72	c m t
Missouri River at Bellevue	6106	1969-70, 1971-73	c m t
Missouri River near Mormon Bridge at Omaha	6098	1974-75	c m t

DISCONTINUED SURFACE-WATER QUALITY STATIONS--continued

<i>Station name</i>	<i>Station number</i>	<i>Period of record (water years)</i>	<i>Type of record</i>	
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 S of Henry	6750	* 1938	c	
South Horse Creek lateral at WY-NE State Line near Lyman	6771	* 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 1970-73	c	t
Lane Drain near Lyman	677550	* 1964	c	
Sheep Creek near Morrill	6780	* 1964	c	
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

DISCONTINUED SURFACE-WATER QUALITY STATIONS--continued

<i>Station name</i>	<i>Station number</i>	<i>Period of record (water years)</i>	<i>Type of record</i>
Platte River Basin--continued			
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	884450	* 1964	c
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 Oshkosh	6865	1951	c
Kingsley Reservoir (McConaughy Lake)	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

DISCONTINUED SURFACE-WATER QUALITY STATIONS--continued

<i>Station name</i>	<i>Station number</i>	<i>Period of record (water years)</i>	<i>Type of record</i>
Platte River Basin--continued			
** 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
** South Platte River at North Platte	7655	1950-51, 1957-59, * 1964-65	c
Supply Canal (Tri-County diversion) near Maxwell	7657	1951-72	c t
Platte River at Brady	7660	1950-72 1951-72	c 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	* 1948 * 1948-51	c s
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
Buffalo Creek near Darr	7685	* 1948	c
Buffalo Creek near Overton	7690	* 1947	c
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
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
North Dry Creek near Kearney	770190	1969-71	c m t
North Dry Creek 2.0 miles SW of Platte River bridge S of Kearney	770195	* 1968	c
Whiskey Slough 3.2 miles SW of Platte River bridge S 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
Crooked Creek Drain 0.8 mile NW of Newark	770250	* 1968	c
Lost Creek 7.7 miles NE of Axtell	770340	* 1968	c
** Platte River near Grand Island	7705	1972-80 1972-89	t c m

DISCONTINUED SURFACE-WATER QUALITY STATIONS--continued

<i>Station name</i>	<i>Station number</i>	<i>Period of record (water years)</i>	<i>Type of record</i>
Platte River Basin--continued			
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	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
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	* 1965-66	c
Middle Loup River near Seneca	7750	* 1949-51	s
** Middle Loup River at Dunning	7755	* 1947-66	c
		1950-52, 1954, *1977	s
		1950-56, 1966-89	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

DISCONTINUED SURFACE-WATER QUALITY STATIONS--continued

<i>Station name</i>	<i>Station number</i>	<i>Period of record (water years)</i>	<i>Type of record</i>
Platte River Basin--continued			
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
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
** 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
Loup River Power Canal at Diversion near Genoa	792499	1973-86	c m s 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
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

DISCONTINUED SURFACE-WATER QUALITY STATIONS--continued

<i>Station name</i>	<i>Station number</i>	<i>Period of record (water years)</i>	<i>Type of record</i>
Platte River Basin--continued			
Elkhorn River near Inman	7974	* 1966, *1968-69 1965-70	c s
** Elkhorn River at Ewing	7975	* 1948-49, 1960-66, 1968-69, 1976 1948-52, 1961	c s
** South Fork Elkhorn River at Ewing	7980	* 1948, 1960-66 1961, 1963-67	c s
Cache Creek near Ewing	798150	* 1967-68	c
Clearwater Creek at Clearwater	798302	* 1964, *1967-69 1962-64	c s
Antelope Creek near Neligh	798450	* 1967-68	c
** Elkhorn River at Neligh	7985	* 1947, *1967-68, 1974-81 1948-51 1962-64	c t s s
Cedar Creek at Oakdale	798550	* 1967-69	s
Elkhorn River at Meadow Grove	7988	* 1943, *1964, *1967-69 1963-65	c 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 1960-69, 1974-89	s t 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
Yankton Slough near Pierce	799040	* 1968	c
Willow Creek near Pierce	799050	* 1968-69	c
** North Fork Elkhorn River near Pierce	7991	* 1944, 1959-64, * 1968-69 * 1961, 1963-64	c s
North Fork Elkhorn River at Hadar	799110	* 1968-69	c
North Fork Elkhorn River at Norfolk	799130	* 1965, 1968-69 1965-68	c s
Union Creek near Stanton	799290	* 1964, *1968-69 1962-65	c s
Elkhorn River at Stanton	7993	* 1943, *1968-69	c
Humbug Creek near Pilger	799310	* 1968-69	c
Rock Creek near Beemer	799325	* 1968-69	c
Plum Creek near Beemer	799345	* 1968-69	c
** Elkhorn River at West Point	799350	1968-69, 1981-89	c m
Cuming Creek near Scribner	799365	* 1968-69	c
** Pebble Creek at Scribner	799385	* 1968-69	c
Elkhorn River near Hooper	7994	* 1968-69	c
Middle Logan Creek at Laurel	799410	* 1968-69	c

DISCONTINUED SURFACE-WATER QUALITY STATIONS--continued

<i>Station name</i>	<i>Station number</i>	<i>Period of record (water years)</i>	<i>Type of record</i>
Platte River Basin--continued			
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
		* 1976	c t
Middle Fork Maple Creek near Schuyler	7999	* 1968	c
** Maple Creek near Nickerson	8000	* 1968	c
Bell Creek at Arlington	800250	* 1968-69	c
** Platte River near Ashland	8010	* 1946, 1950-53, *1969	c
East inlet to Olive Creek Lakene near Kramer	801148	* 1967	c
Olive Creek near Kramer	801150	* 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
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
South tributary to Yankee Hill Reservoir near Denton	803069	* 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	813114	* 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

DISCONTINUED SURFACE-WATER QUALITY STATIONS--continued

<i>Station name</i>	<i>Station number</i>	<i>Period of record (water years)</i>	<i>Type of record</i>
Platte River Basin--continued			
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
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
latte 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

DISCONTINUED SURFACE-WATER QUALITY STATIONS--continued

<i>Station name</i>	<i>Station number</i>	<i>Period of record (water years)</i>	<i>Type of record</i>
Platte River Basin--continued			
Platte River near Plattsmouth	805550	1969-72	cmt
Fourmile Creek near Plattsmouth	805565	1974-81	c m s t
Platte River at La Platte	805570	1974	c m t
Weeping Water Creek Basin			
Weeping Water Creek at Weeping Water	806460	1973-81	c m s t
S Br 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

DISCONTINUED SURFACE-WATER QUALITY STATIONS--continued

<i>Station name</i>	<i>Station number</i>	<i>Period of record (water years)</i>	<i>Type of record</i>	
Kansas River Basin--continued				
****Enders Reservoir	8320	1952-57	c	
** Frenchman Creek near Enders	8325	1947-49	c	
Frenchman Creek 2.6 miles E of Enders Dam near Wauneta	8327	1946-47, 1962, 1964		s
Frenchman Creek 5.6 miles E of Enders Dam near Wauneta	8329	1962		s
Frenchman Creek at Wauneta	8331	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
Dry Creek near Curtis	8405	* 1953-56	c	
		1951-58		s
** Medicine Creek above Harry Strunk Lk	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	
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 Lk	8415	* 1951-56	c	
		1951-57		s

DISCONTINUED SURFACE-WATER QUALITY STATIONS--continued

<i>Station name</i>	<i>Station number</i>	<i>Period of record (water years)</i>	<i>Type of record</i>
Kansas River Basin--continued			
****Harry Strunk Lake	8420	1952-56	c
** Medicine Creek below Harry Strunk Lk	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
** Republican River near Hardy	8535	* 1946, 1950-57	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
West Fork Big Blue River below Hastings	805555	* 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

DISCONTINUED SURFACE-WATER QUALITY STATIONS--continued

<i>Station name</i>	<i>Station number</i>	<i>Period of record (water years)</i>	<i>Type of record</i>
Kansas River Basin--continued			
Turkey Creek near Milligan	881110	1968-69	c
Turkey Creek above Brush Creek near Wilber	881150	* 1964	c
** Turkey Creek near Wilber	8812	1965-72, 1966-70, 1973-89	s c m
Turkey Creek 2 miles SW of Wilber	881210	* 1964	c
Turkey Creek above Swan Creek near DeWitt	881220	* 1964	c
North Fork Swan Creek near Swanton	881353	* 1964	c
Swan Creek at Swanton	881356	* 1964	c
Swan Creek near DeWitt	881357	* 1968-69	c
Turkey Creek near DeWitt	881358	* 1964	c
Big Blue River near DeWitt	881420	* 1968-69	c
Cub Creek near Beatrice	881430	* 1968-69	c
Indian Creek at Beatrice	881450	* 1968-69	c
** Big Blue River at Beatrice	8815	* 1960-69, *1963 1978-83	c 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
*** 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, 1979-81, 1953, 1955-61	c m t 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

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WATER RESOURCES DATA - NEBRASKA, 1994
DISCONTINUED SURFACE-WATER QUALITY STATIONS--continued

<i>Station name</i>	<i>Station number</i>	<i>Period of record (water years)</i>	<i>Type of record</i>
Kansas River Basin--continued			
Little Blue River at Fairbury	883995	* 1968-69	c
** Little Blue River near Fairbury	8840	1951-53, 1955-57 1952-63, *1960-61,	s
		* 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.
- *** Surface-water gaging station run by Nebraska USGS.
- **** Current reservoir stations

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with State 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 Geological Survey, the data are published annually in this report series entitled "Water Resources Data - Nebraska."

This report includes records on both surface and ground water in the State. Specifically, it contains: (1) Discharge records for 121 streamflow-gaging stations, for 5 partial-record or miscellaneous streamflow stations, and for 2 crest-stage, partial-record streamflow stations; (2) stage and contents for 11 lakes and reservoirs; (3) water-quality records for 20 streamflow-gaging stations, for 46 ungaged streamsites, and for 255 wells; and (4) water-level records for 60 observation wells. Records included for stream stages and for ground-water levels are only a small fraction of those obtained during the water year. The data in this report represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Nebraska.

This series of annual reports for Nebraska began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only 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, Books and Open-File Reports, Federal Center, Bldg. 41, Box 25425, Denver, CO 80225.

Additional information, including current prices, for ordering specific reports may be obtained from the Office Chief at the address given on the back of the title page or by telephone (402) 437-5082. A limited number of CD-ROM disc will be available for sale by the Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, CO 80225.

COOPERATION

The U.S. Geological Survey and agencies of the State of Nebraska have had cooperative agreements for the collection of water-resource records since 1930. Organizations that assisted in collecting the data in this report through cooperative agreement with the Survey are: Nebraska Department of Water Resources, J. Michael Jess, Director; Conservation and Survey Division, University of Nebraska-Lincoln, Perry B. Wigley, Director; Nebraska Natural Resources Commission, Dayle Williamson, Director; Big Blue River Compact Administration; City of Lincoln; City of Omaha; and many of the Natural Resources Districts.

Nebraska Department of Water Resources (NDWR) personnel in Bridgeport, Cambridge, Lincoln, Norfolk, and Ord contributed significantly in the collection and computation of records under a USGS-NDWR cooperative agreement.

Assistance with funds or services was given by the U.S. Army Corps of Engineers in collecting records for 23 streamflow-gaging stations and 2 crest-stage gages, and by the U.S. Bureau of Reclamation in collecting records for 1 streamflow-gaging stations, 2 lake stations, and in providing elevations or capacity tables for 8 reservoir stations.

The following organizations aided in collecting records: Central Nebraska Public Power and Irrigation District, Nebraska Public Power District, and Loup River Public Power District.

SUMMARY OF HYDROLOGIC CONDITIONS

Streamflow, chemical quality of streamflow, and ground-water levels are directly related to precipitation. The relation of these hydrologic characteristics to precipitation during water year 1994 at selected locations is discussed in this summary section.

Precipitation

Precipitation data from published reports of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service, for the eight National Weather Service divisions in Nebraska (fig. 1) are listed in table 1. Precipitation and departures from normal are shown for each quarter of the year to emphasize temporal as well as spatial variations of precipitation during water year 1994.

The precipitation totals for each division in Nebraska during water year 1994 compared with the totals during water years 1992, 1993, and normal precipitation are shown in figure 2. Precipitation during water year 1994 was, generally, less-than-normal.

Five divisions (Northeast, Central, East Central, South Central and Southeast) showed less-than-normal precipitation during the first quarter of water year 1994; the other three divisions (Panhandle, North Central, and Southwest) located in the western half of the State (fig. 1) showed greater-than-normal precipitation. All divisions showed less-than-normal precipitation during the second and third quarters. However, during the fourth quarter, only three divisions (Panhandle, South Central, and Southeast) showed less-than-normal precipitation; the other five divisions showed greater-than-normal precipitation. The Northeast division showed a 50 percent increase in precipitation over normal during the fourth quarter (table 1), with the greatest increase occurring in July when precipitation doubled the normal amount for July.

Table 1. -- Precipitation and departures from normal, water year 1994

[All values are in inches. Period of record for normal, 1961-90. Source: U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service published reports]

National Weather Service division	Precipitation											
	First quarter (October-December)			Second quarter (January-March)			Third quarter (April-June)			Fourth quarter (July-September)		
	Normal	Water year 1994	Departure	Normal	Water year 1994	Departure	Normal	Water year 1994	Departure	Normal	Water year 1994	Departure
Panhandle	1.80	3.51	1.71	1.77	1.22	-0.55	7.80	4.09	-3.71	5.39	4.13	-1.26
North Central	2.59	3.31	.72	2.34	1.40	-.94	9.03	8.39	-.64	7.68	9.07	1.39
Northeast	3.60	3.01	-.59	3.10	1.56	-1.54	10.48	8.60	-1.88	8.66	12.96	4.30
Central	3.05	2.48	-.57	2.77	1.52	-1.25	10.12	8.12	-2.00	8.48	8.93	.45
East Central	4.40	3.02	-1.38	3.46	1.45	-2.01	11.20	9.35	-1.85	10.11	10.66	.55
Southwest	2.17	3.35	1.18	2.11	1.49	-.62	8.58	5.53	-3.05	6.72	7.65	.93
South Central	2.93	2.85	-.08	2.70	1.66	-1.04	9.86	8.34	-1.52	8.85	8.18	-.67
Southeast	5.22	3.60	-1.62	3.68	1.44	-2.24	11.02	9.07	-1.95	11.02	10.04	-.98

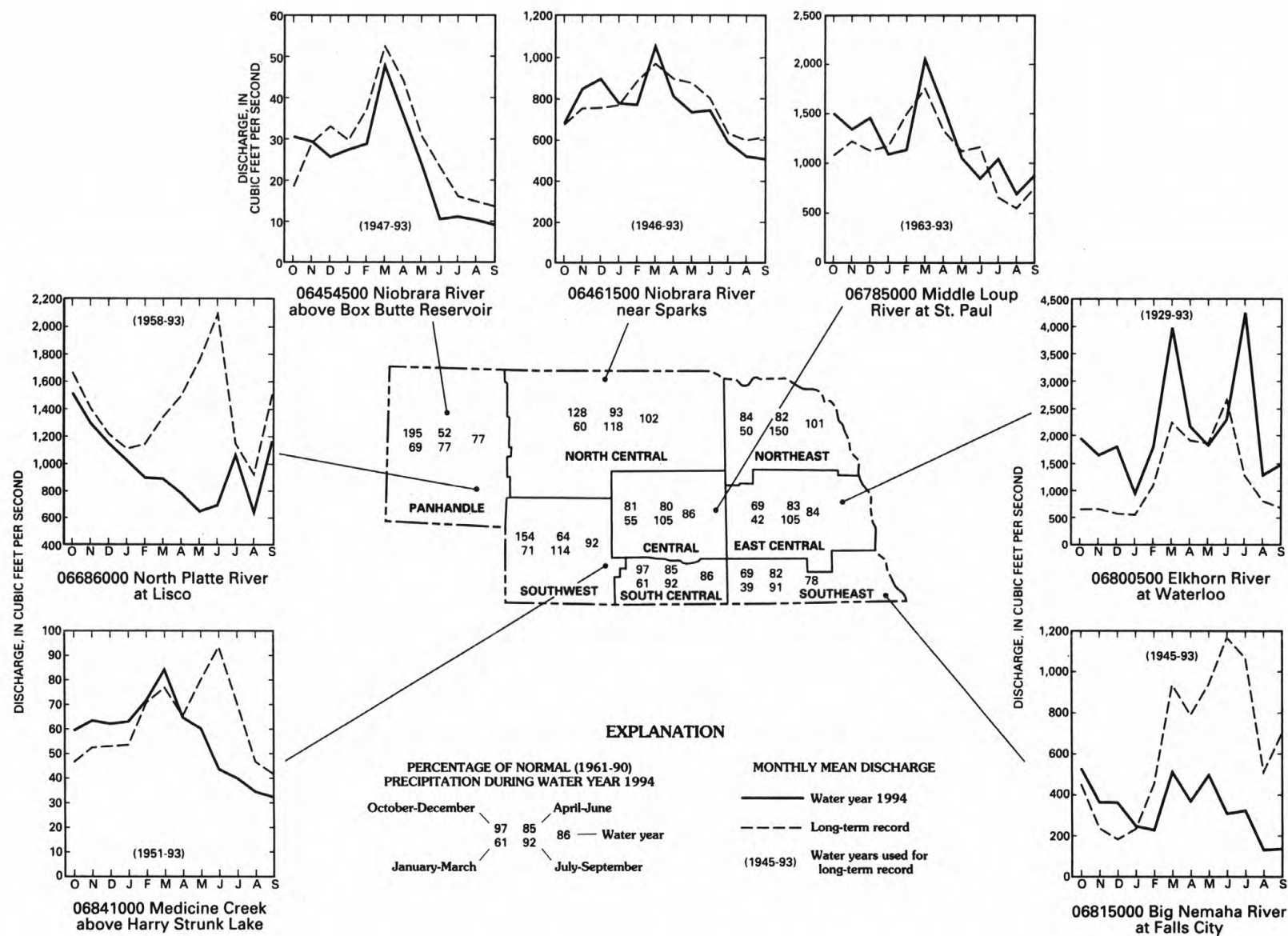


Figure 1.--Streamflow and precipitation data for water year 1994 and the long-term record.

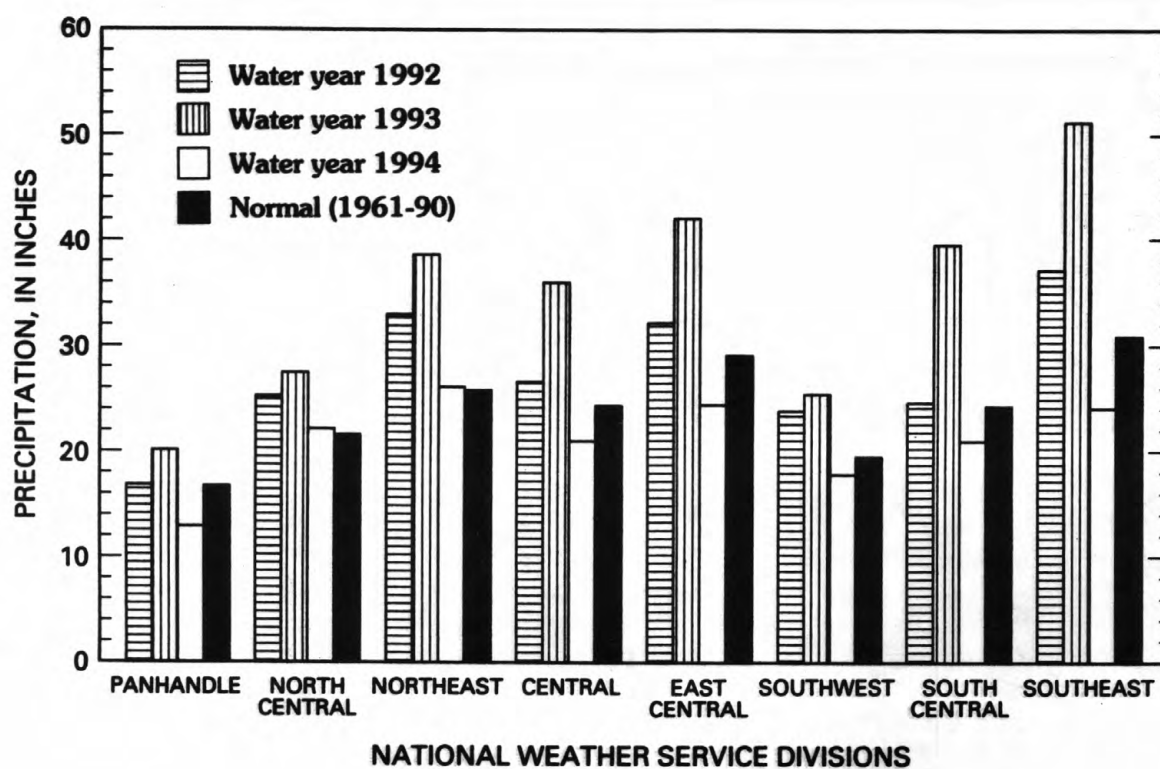


Figure 2.--Precipitation for water years 1992, 1993, 1994, and normal for the eight National Weather Service divisions in Nebraska.

Streamflow

Monthly mean discharges during water year 1994 and long-term monthly mean discharges at representative streamflow-gaging stations are shown in figure 1. The period of record used for the long-term mean at some stations is from the completion of the last known storage structure or from the latest change in streamflow regulation upstream from the gage. The individual graphs demonstrate the varied streamflow conditions in the State during the water year 1994.

Streamflow at station 06841000, Medicine Creek above Harry Strunk Lake, was slightly higher than the long-term mean at the beginning of the water year, but was near the long-term mean by February. Flow increased during March with the spring runoff but decreased below the long-term mean the remainder of the water year. The Southwest division, where this station is located, received less-than-normal precipitation during the second and third quarters (table 1). Greater-than-normal precipitation in the fourth quarter helped slow the decreasing trend of flow.

Station 06686000, North Platte River at Lisco, in the Panhandle division shows smaller monthly means for the entire water year compared with the long-term means. This station receives a good part of its flow from reservoir releases. The decrease in snowmelt runoff from the North Platte River Basin in the Rocky Mountains in addition to the less-than-normal precipitation during most of the year accounted for streamflow less than the long-term mean for water year 1994.

Flow during October at station 06454500, Niobrara River above Box Butte Reservoir, was greater than the long-term mean due to increased precipitation in the latter part of water year 1993. After October, flow decreased to December and then, generally, followed below the long-term record of flow for remainder of the water year. The increase in flow in March was due to snowmelt runoff.

Flow for station 06461500, Niobrara River near Sparks, increased during the first quarter, due to greater-than-normal precipitation and then decreased until February. The small increase in flow in March and April resulted from snow melt. Flow for the remainder of the water year was less than the mean flow for the long-term record.

Station 06785000, Middle Loup River at St. Paul, is located near the eastern edge of the Sandhills region of the State where the most of the flow is derived from ground-water discharge, so, generally, flow is more uniform and extremes in runoff are not as great as for other regions of the state.

Station 06800500, Elkhorn River at Waterloo, located in the East Central division of the state, showed streamflow greater than the long-term mean for most of the water year. Although the East Central division received less-than-normal precipitation for the first three quarters of the water year, much of the drainage area of the Elkhorn River lies in the Northeast division, so that the increase in flow in March was mainly due to runoff from these two divisions. The increase of flow in July was due to increased precipitation in the Northeast division.

Station 06815000, Big Nemaha River at Falls City, shows monthly means greater than the long-term means during the first quarter as a carryover from higher flows due to heavy thunderstorms over the Midwest during water year 1993. The Southeast division, where this station is located, received precipitation that was 78 percent of normal during water year 1994, which resulted in decreased flows for the remainder of the water year. (The Southeast division received precipitation that was 165 percent of normal during water year 1993.)

Flow duration hydrographs for water years 1993-94 are shown for station 06815000, Big Nemaha River at Falls City, in figure 3. The flow duration hydrograph for a station compares the median flow for the current water year with the median, maximum, minimum, 75th percentile, and 25th percentile for the period-of-record. Water year 1993 was an exceptionally wet year. Heavy thunderstorms during July 1993 were responsible for severe flooding in the Midwest. Mean flow for July at this station was almost 20 times the period-of-record mean flow for July.

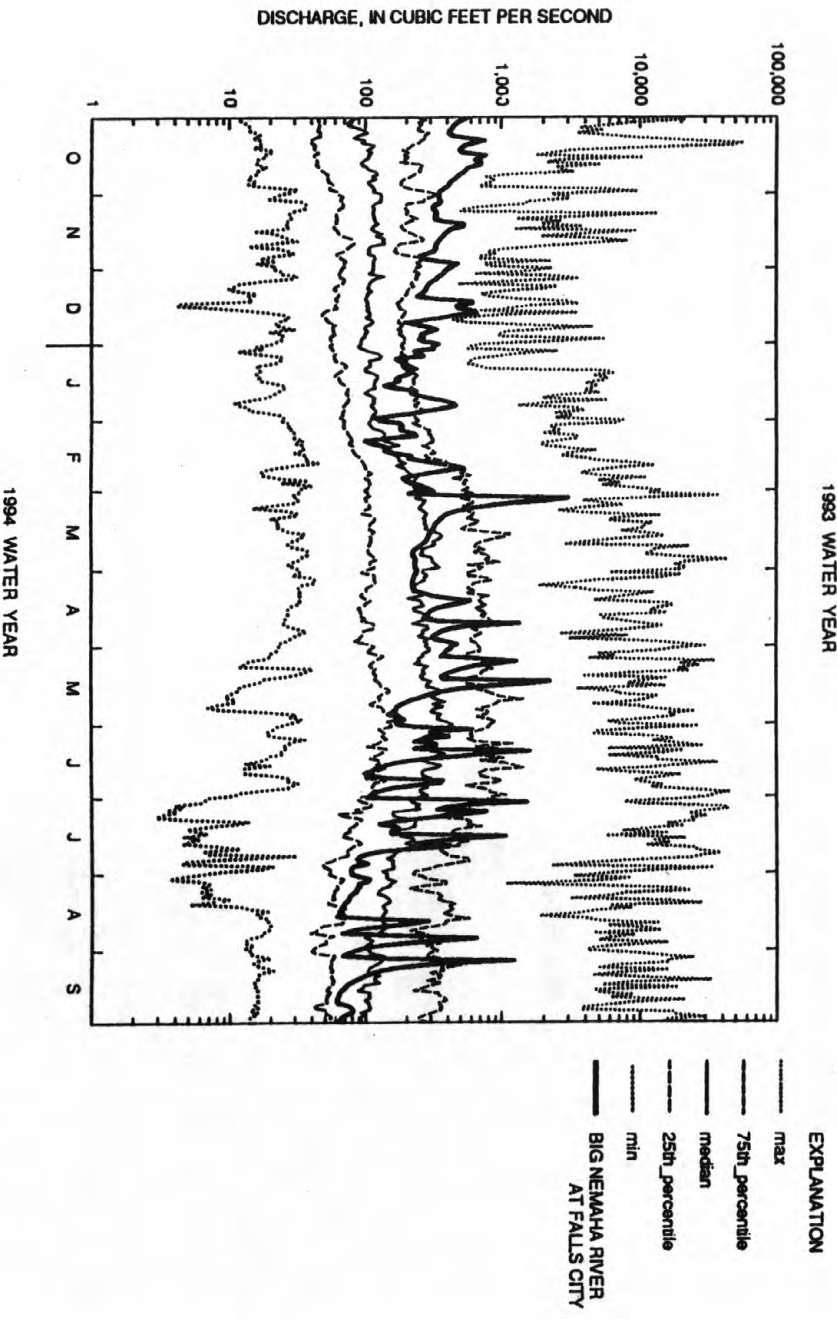
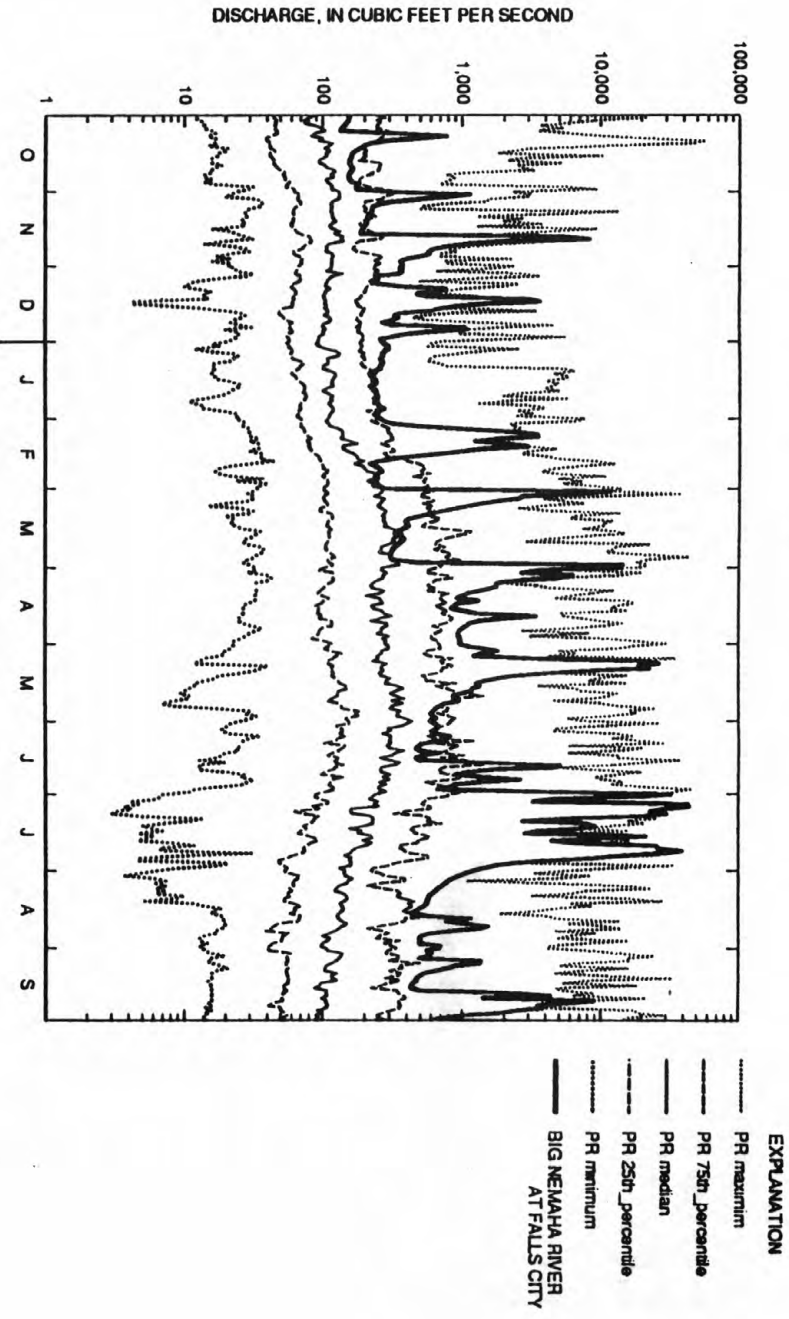


Figure 3.--Flow duration hydrographs for station 06815000, Big Nemaha River at Falls City.

Water Quality

The National Water-Quality Assessment (NAWQA) Program is a long-term multidisciplinary program that seeks to describe the status and trends of water quality in the Nation. The program focuses on the integration of physical, chemical, and biological information about the Nation's water resources, and the human factors affecting those water resources. It also assesses the quality of surface and ground water affecting 60 to 70 percent of the Nation's water use. This is accomplished by investigative activities in 60 study units geographically distributed throughout the Nation and representing large watersheds and aquifer systems.

Investigations are underway in two thirds of the NAWQA study units. Two units include parts of Nebraska: Central Nebraska Basins Study Unit, which lies entirely in Nebraska; and South Platte Study Unit, which lies partially in Nebraska. Study of these units began in 1991. The program currently operates 10 Basic Fixed Site (BFS) monitoring stations in the State, where water-quality information is collected on a regular basis.

These fixed sites are:

06765500 South Platte River at North Platte
06765698 Tri-County Canal 1.25 mi. below Diversion
06770500 Platte River near Grand Island
06773050 Prairie Creek near Ovina
06775900 Dismal River near Thedford
06791150 Loup River at Palmer
06795500 Shell Creek near Columbus
06800000 Maple Creek near Nickerson
06800500 Elkhorn River at Waterloo
06805500 Platte River at Louisville.

This report includes nutrient, major ions, and dissolved organic carbon concentrations, and field parameter data collected at these sites. It also includes information on two ground-water flow path arrays and data from two synoptic surveys of wetlands in central Nebraska. Additional data, including trace elements, pesticides, bed and fish tissue contaminants, industrial compounds, temperature, and biological, habitat, and geomorphological characteristics, will be published separately.

Selected water-quality constituents from four of the basic fixed sites are listed in table 2. The constituents listed are from samples collected during periods of high and low discharges and show the effect of streamflow on concentration.

Generally, the concentration of dissolved solids (and major ions) in streams is related inversely to streamflow. High streamflows resulting from snowmelt and rainfall runoff have smaller dissolved-solids concentrations per unit volume; whereas, low 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 nitrogen is recognized as a major factor in growth of aquatic plants. The presence of excessive phosphorus concentrations, commonly resulting from application of agricultural fertilizers, can result in biological enrichment such as algae and other aquatic plant growth.

Dissolved oxygen in streams sustains most aquatic organisms and is an important constituent that allows for the purification of wastes.

Suspended-sediment concentration is directly related to turbidity and generally increases with stream discharge as a result of eroded sediment transported by runoff.

Table 2.--Selected water-quality constituents in NAWQA samples
collected during periods of high and low discharges, water year 1994

[mi², square miles; ft³/s, cubic feet per second; μ s/cm, microsiemens per centimeter at 25 degrees Celsius;
mg/L, milligrams per liter; --, not determined]

Station name	Drainage area (mi ²)	Discharge (ft ³ /s) (month)	Specific conductance (μ s/cm)	Solids, residue (mg/L)	Nitrogen, NO ₂ + NO ₃ (mg/L)	Dissolved oxygen (mg/L)	Sediment suspended (mg/L)
		High Low					
Platte River near Grand Island	57,650	2,500 (July) - 261 (Aug.)	864 - 880	588 - 586	0.28 - ---	8.2 - 8.6	152 - 70
Dismal River near Thedford	966	236 (Nov.) - 212 (May)	195 - 180	154 - 153	.51 - .44	10.7 - 8.2	560 - 519
Elkhorn River at Waterloo	6,900	10,800 (July) - 860 (Jan.)	275 - 764	168 - 501	1.8 - 5.0	4.5 - 11.5	--- - 40
Platte River at Louisville	85,800	25,000 (Jun.) - 2,870 (Aug.)	364 - 610	222 - 383	1.7 - ---	4.4 - 9.6	9,470 - 117

Ground-Water Levels

Water-level changes during water year 1994 were determined from a statewide network of observation wells measured by 38 Federal, State, and local agencies. The network consists of more than 3,900 wells measured annually, semiannually, or monthly and 119 wells equipped with continuous recorders. Because of the importance of ground water as a source for irrigation and municipal supplies, most observation wells in Nebraska are located in those areas where large quantities of ground water are pumped. Water-level fluctuations in representative observation wells located in various parts of the State are shown in figure 4.

During water year 1994, precipitation generally equalled or exceeded the 30-year normal for Nebraska during two of the three most critical months of the 1994 irrigation season (June and July). However, the below-normal precipitation during the third most critical month, August, resulted in the greatest water-level declines, occurring near the end of the 1994 growing season (April through September). Many observation wells throughout Nebraska showed rising ground water levels from October 1993 through June or July 1994. These rising ground-water levels indicate that during this period, precipitation provided significant amounts of recharge to aquifers. Water levels in the 60 observation wells published in this report had an average water-level decrease of 0.24 foot from the end of water year 1993 to the end of water year 1994.

The hydrograph for the observation well in Seward County (fig. 4) is representative of water-level fluctuations that occurred in the east-central part of the State during water years 1993 and 1994. The water level in this well was 0.98 foot higher at the end of water year 1994 than at the end of water year 1993. This rise seems to typify most water-level measurements in the east-central region of the State and probably can be attributed to decreased ground-water irrigation occurring at the end of water year 1993.

Throughout much of the Central and South Central divisions of Nebraska, precipitation during three of the first four months of the growing season was normal to slightly-above normal, and water levels measured in observation wells in these areas generally were higher at the end of water year 1994 than they were at the end of water year 1993. The hydrograph for the Buffalo County well (fig. 4) is generally representative of water levels in central and south-central Nebraska. As shown, these water levels recovered significantly during water year 1994. At the end of water year 1994, the water level in the Buffalo County well was 0.94 foot higher than at the end of water year 1993. This probably can be attributed directly to decreased ground-water irrigation during the growing season of water year 1993, and to the greater-than-normal amount of precipitation that fell from January through July 1994.

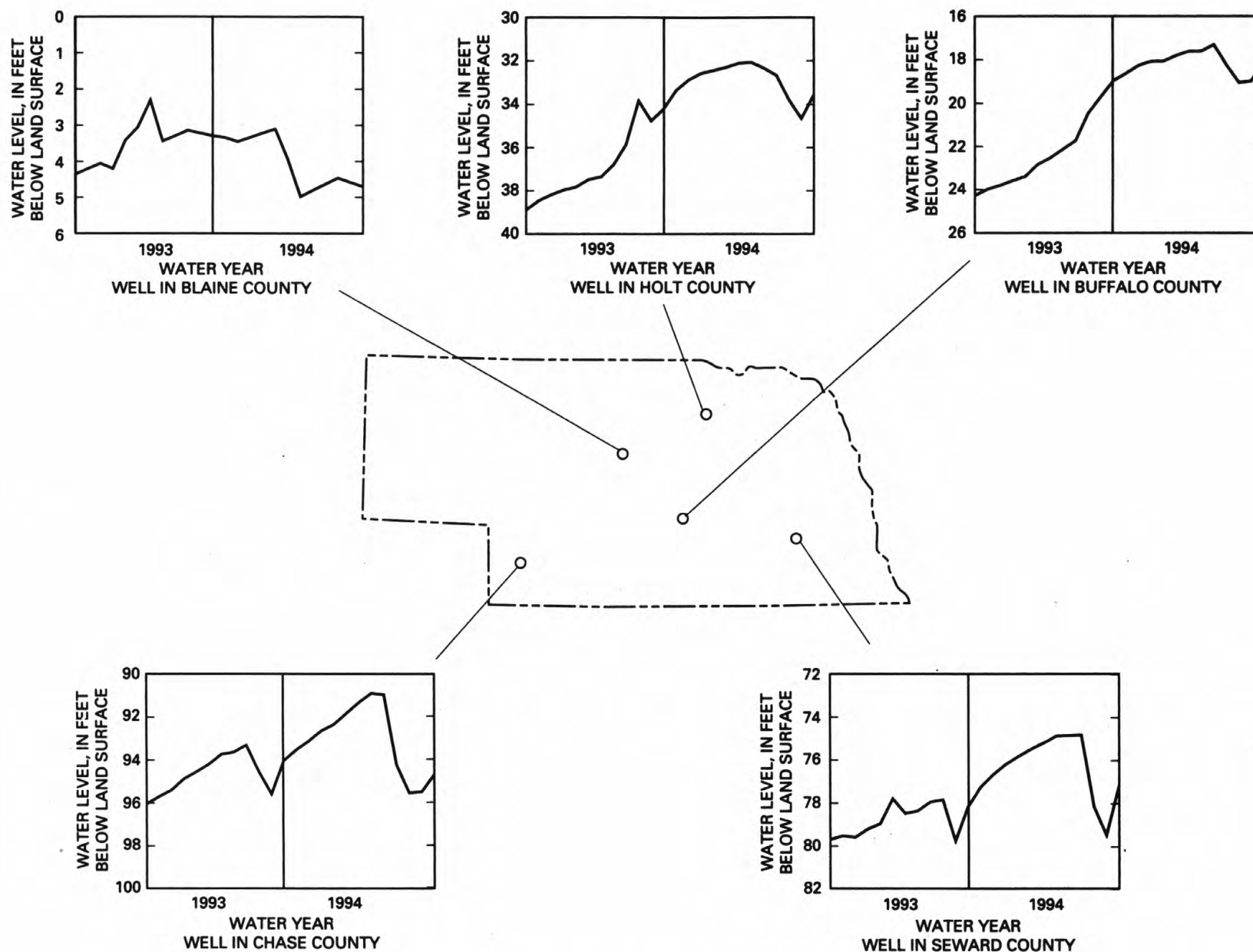


Figure 4.--Water levels in representative observation wells, water years 1993 and 1994.

In the Southwest division of the State, precipitation during the water year was slightly below normal. Water levels in the southwestern part of Nebraska, similar to water levels in the Central and South Central divisions of Nebraska, continued the recoveries in water year 1994 that began during water year 1993. Water-level fluctuations shown for an observation well in Chase County (fig. 4) are representative of those that occurred in irrigated areas in the southwestern part of the State during water years 1993 and 1994. The hydrograph shows that the water level at the end of water year 1994 was 0.66 foot lower than at the end of water year 1993. Furthermore, water levels declined approximately twice as much at the end of the 1994 irrigation season than during the same period in water year 1993.

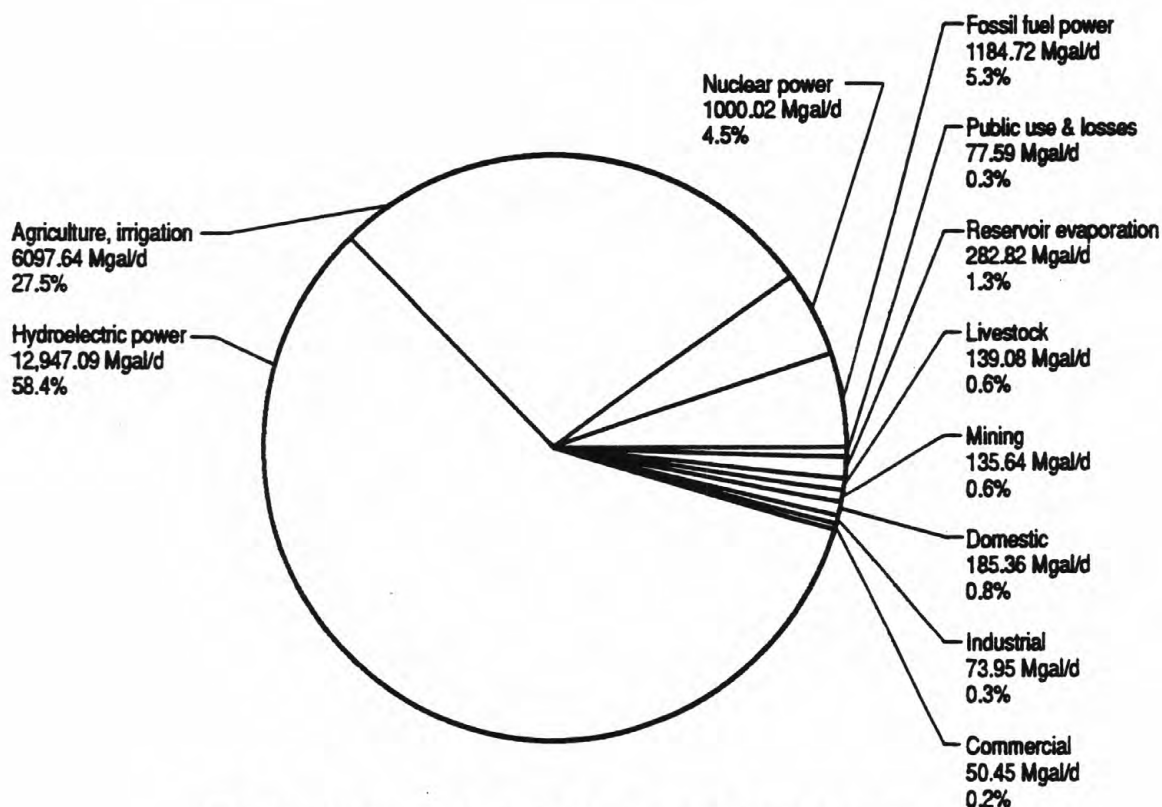
Precipitation in the North Central and Northeast divisions of Nebraska varied greatly throughout the non-growing season of water year 1994 (October 1993 to March 1994). Water levels measured in wells published for these divisions at the end of water year 1994 ranged from 1.31 feet higher to 1.32 feet lower than they were at the end of water year 1993. The hydrograph for an observation well in Holt County (fig. 4) is representative of water-level fluctuations that occurred in this part of Nebraska during water years 1993 and 1994. This hydrograph shows that water levels recovered during water year 1994 and that ground-water withdrawals for irrigation began earlier in 1994 than in 1993. The water level in this well at the end of water year 1994 was 0.66 foot higher than at the end of water year 1993.

In areas of Nebraska where ground water is used only for domestic and stock supplies, most water-level fluctuations are caused by variations in natural recharge to and discharge from the aquifers. Commonly, water levels rise during the fall and winter months when recharge from precipitation exceeds discharge by seepage to streams and by evapotranspiration. Water levels decline during the spring and summer months when discharge by seepage to streams and by evapotranspiration is greater than recharge from precipitation. The hydrograph for the observation well in Blaine County (fig. 4) shows these annual fluctuations, and overall water level declines during water year 1994. This decline can be attributed to smaller amounts of precipitation occurring during the growing season of water year 1994 than during the growing season of water year 1993. The water level in the Blaine County well at the end of water year 1994 was 0.31 foot lower than at the end of water year 1993.

WATER USE

General water-use facts for the State of Nebraska for the year 1990 are listed below. Water-use information is collected and published every 5 years.

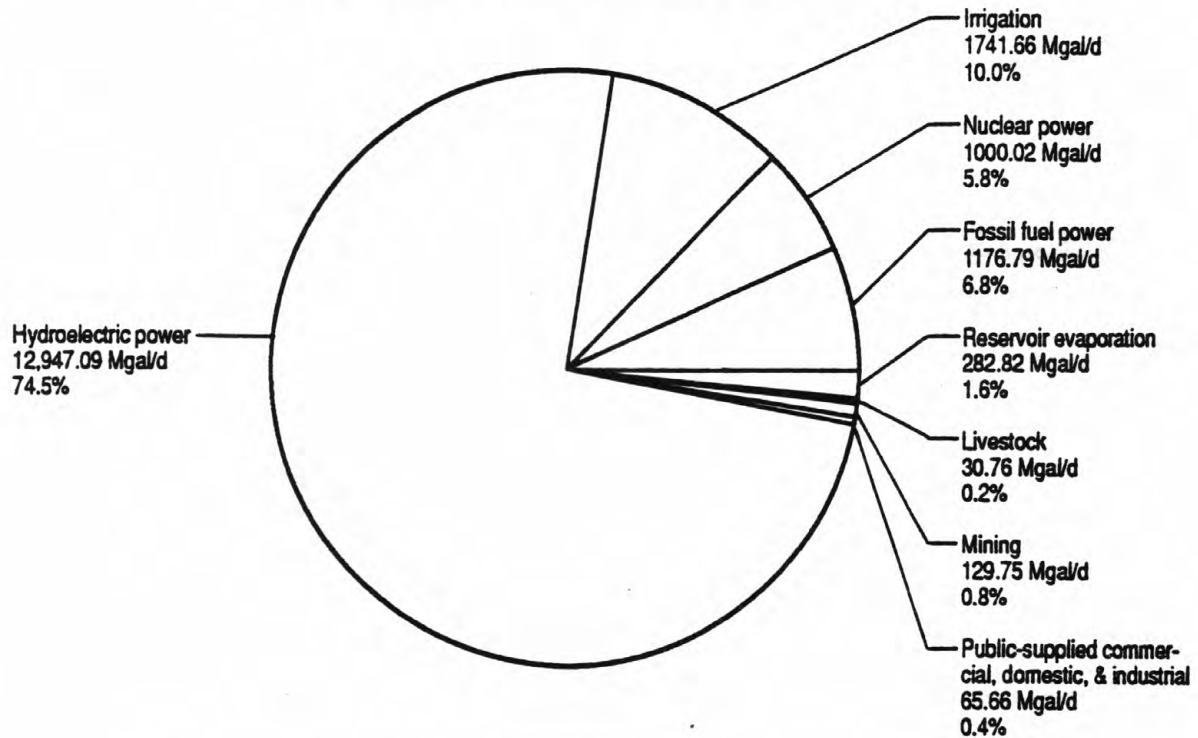
- Total water use in Nebraska was 22,174.36 million gallons per day (Mgal/d).
 - Surface water use was 17,376.92 Mgal/d, or 78.4 percent of total water use.
 - Ground-water use was 4,797.44 Mgal/d, or 21.6 percent of total water use, of which 4,355.98 Mgal/d or 90.8 percent was used for irrigation.
 - The largest use of water in Nebraska was for power generation, with 15,131.83 Mgal/d or 68.2 percent of all water use, of which greater than 99.9 percent was from surface water.
 - Excluding power production, total water use was 7,042.53 Mgal/d, of which 4,789.51 Mgal/d or 68.0 percent was from ground water.
 - Total population was 1.6 million, no net change in population since 1985.
 - Total per capita use of all water was 13,859 GPD (gallons per day).
 - Domestic water use was 185.36 Mgal/d, an average of 115.85 GPD per capita.
 - Commercial water use was 50.45 Mgal/d, with 99.6 percent from public supply.
 - Industrial water use was 73.95 Mgal/d, with 44.7 percent from public supply.
 - Mining water use was 135.64 Mgal/d, with 95.7 percent supplied from surface water and used primarily for quarrying and gravel washing.
 - Irrigation water use was 6,097.64 Mgal/d, or 27.5 percent of all water use. This is 68.2 percent of all offstream water use.
 - Livestock water use was 139.08 Mgal/d, or 1.6 percent all offstream use.
 - Total power generation was 21,306 GWh (giga watt hours).
- (Z.D. Hill, U.S. Geological Survey, written commun., 1991).



Total water use: 22,174.36 million gallons per day

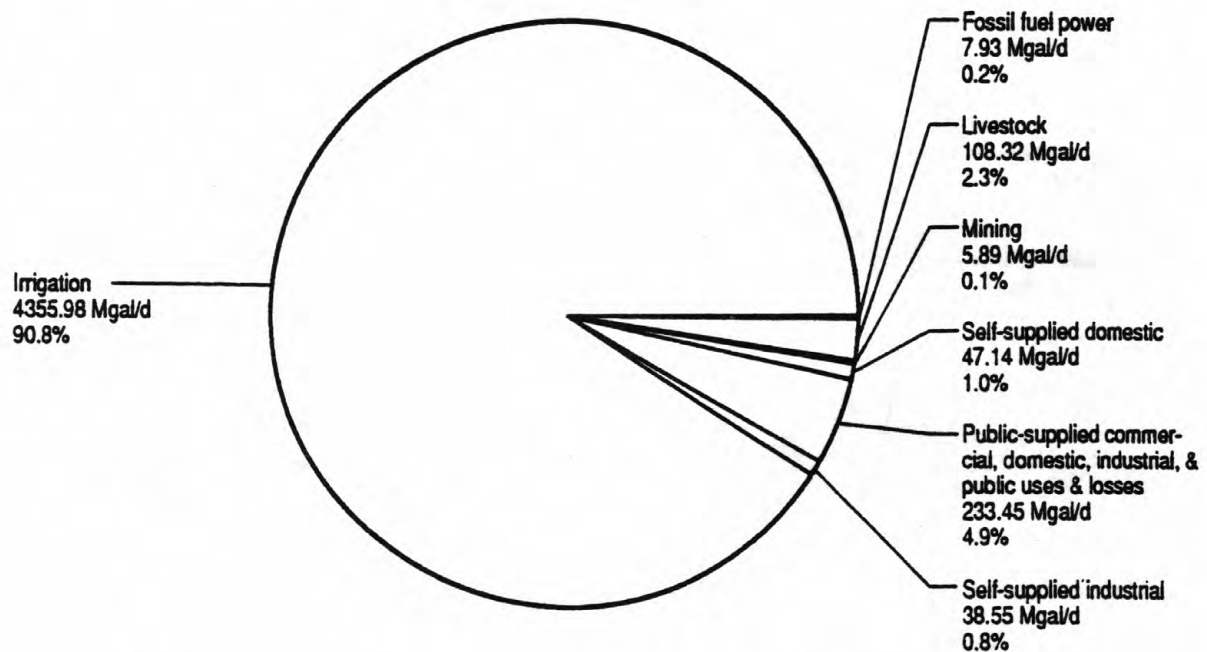
Figure 5a.--Estimated total water use in Nebraska, 1990.

WATER RESOURCES DATA - NEBRASKA, 1994



Total surface-water use: 17,376.92 million gallons per day

Figure 5b.--Estimated total surface-water use in Nebraska, 1990.



Total ground-water use: 4,797.44 million gallons per day

Figure 5c.--Estimated total ground-water use in Nebraska, 1990.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Bench-Mark Network is a network of 53 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

National Stream-Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 284 sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, diverse, and geographically distributed part of the Nation's ground- and surface-water resources, and to identify, describe, and explain the major natural and human factors that affect these observed conditions and trends.

Assessment activities have begun in about two-thirds of the study units and ultimately will be conducted in 60 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents will be measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision-making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

Radiochemical Program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 1994 water year that began October 1, 1993, and ended September 30, 1994. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, water-quality data for surface and ground water, and ground-water-level data. The locations of the stations and wells where the data were collected are shown in figures 6, 7, and 8. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each data station, whether streamsite or well, in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream order" system is used for surface-water stations and the "latitude-longitude" system is used for wells.

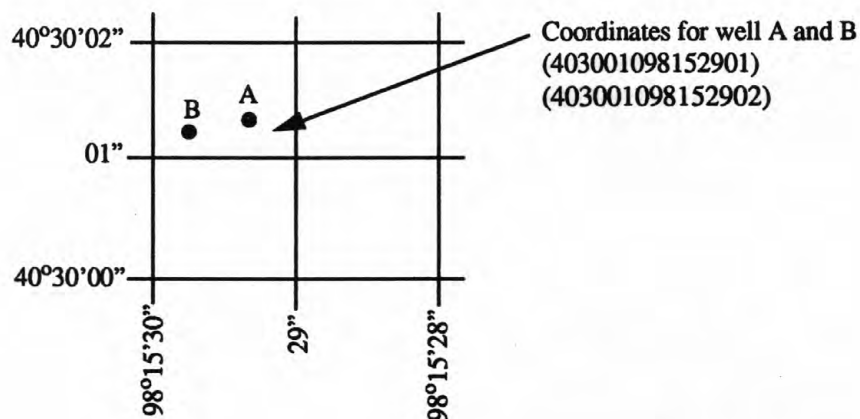
Downstream Order System

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

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

Latitude-Longitude System

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



System for numbering wells (latitude and longitude)

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean daily discharges may be computed for any time, or any period of time, during the period of record. Complete records of lake or reservoir content, similarly, are those for which stage or content may be computed or estimated with reasonable accuracy for any time, or period of time. They may be obtained using a continuous stage-recording device, but need not be. Because daily mean discharges and end-of-day contents commonly are published for such stations, they are referred to as "daily stations."

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

Data Collection and Computation

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

Continuous records of stage are obtained with analog recorders that trace continuous graphs of stage or with digital recorders that punch stage values on paper tapes at selected time intervals. Measurements of discharge are made with current meters using methods adopted by the Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A1 through A19 and Book 8, Chapters A2 and B2. The methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for Standards (ISO).

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

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

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

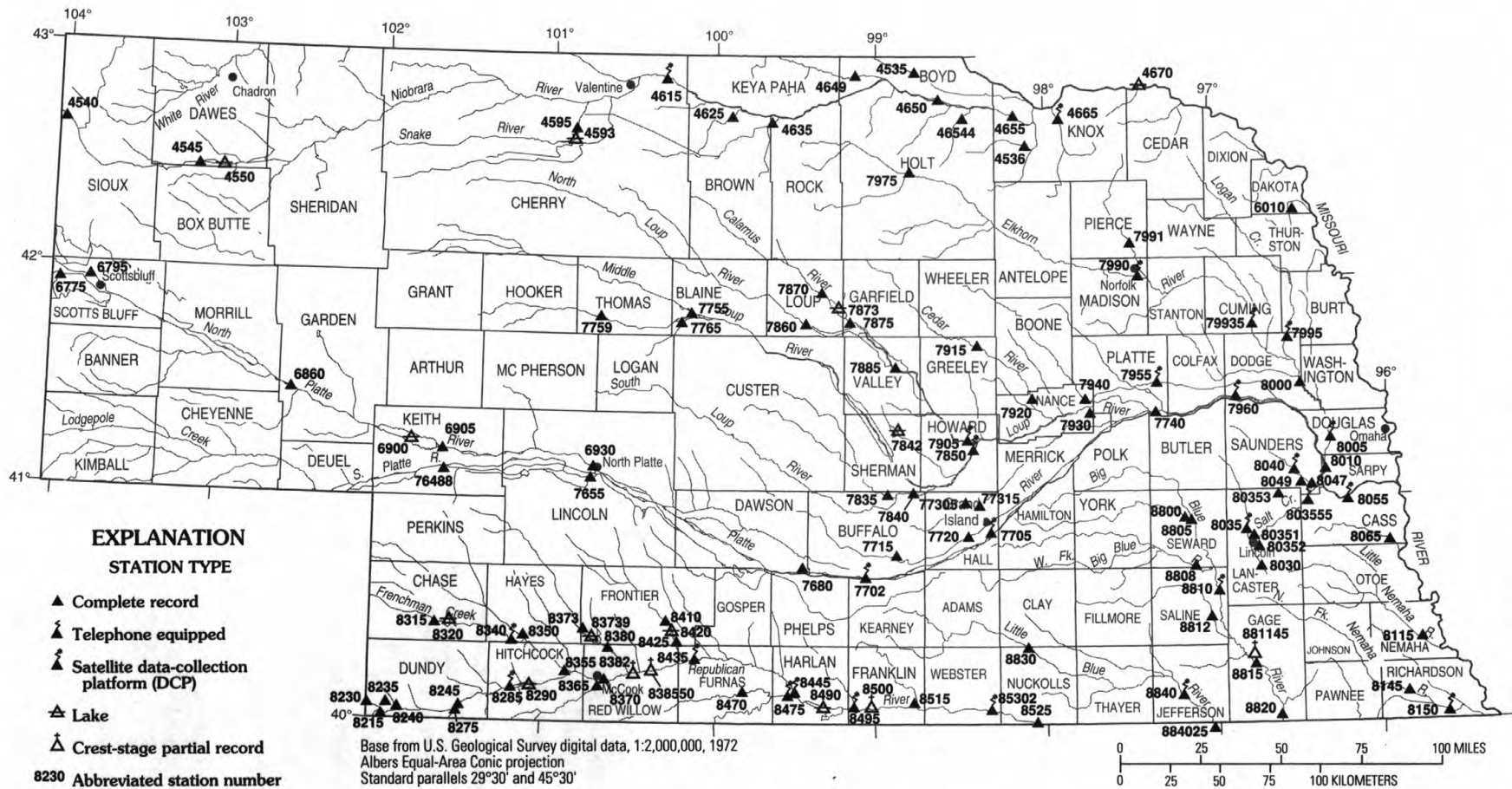


Figure 6.--Location of active surface-water gaging stations.

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

Data Presentation

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

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

Station manuscript

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

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

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

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

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

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

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

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

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

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

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

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

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

Data table of daily mean values

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

Statistics of monthly mean data

A tabular summary of the mean (line headed "MEAN"), maximum (line headed "MAX"), and minimum (line headed "MIN") of monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those figures. The designated period will be expressed as "FOR WATER YEARS - , BY WATER YEAR (WY)," and will list the first and last water years of the range of years selected from the PERIOD OF RECORD

paragraph in the station manuscript. It will consist of all the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript.

Summary Statistics

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Identifying Estimated Daily Discharge

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

Accuracy of the Records

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

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

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft³/s; to the nearest tenth between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures for more than 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

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

Other Records Available

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

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

Records of discharge, not published by the Geological Survey, are collected in Nebraska at several sites by the U.S. Army Corps of Engineers. The National Water Data Exchange (NAWDEX), U.S. Geological Survey, Reston, VA 22092, maintains an index of these sites as well as sites where other agencies have collected water data.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies.

Classification of Records

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

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

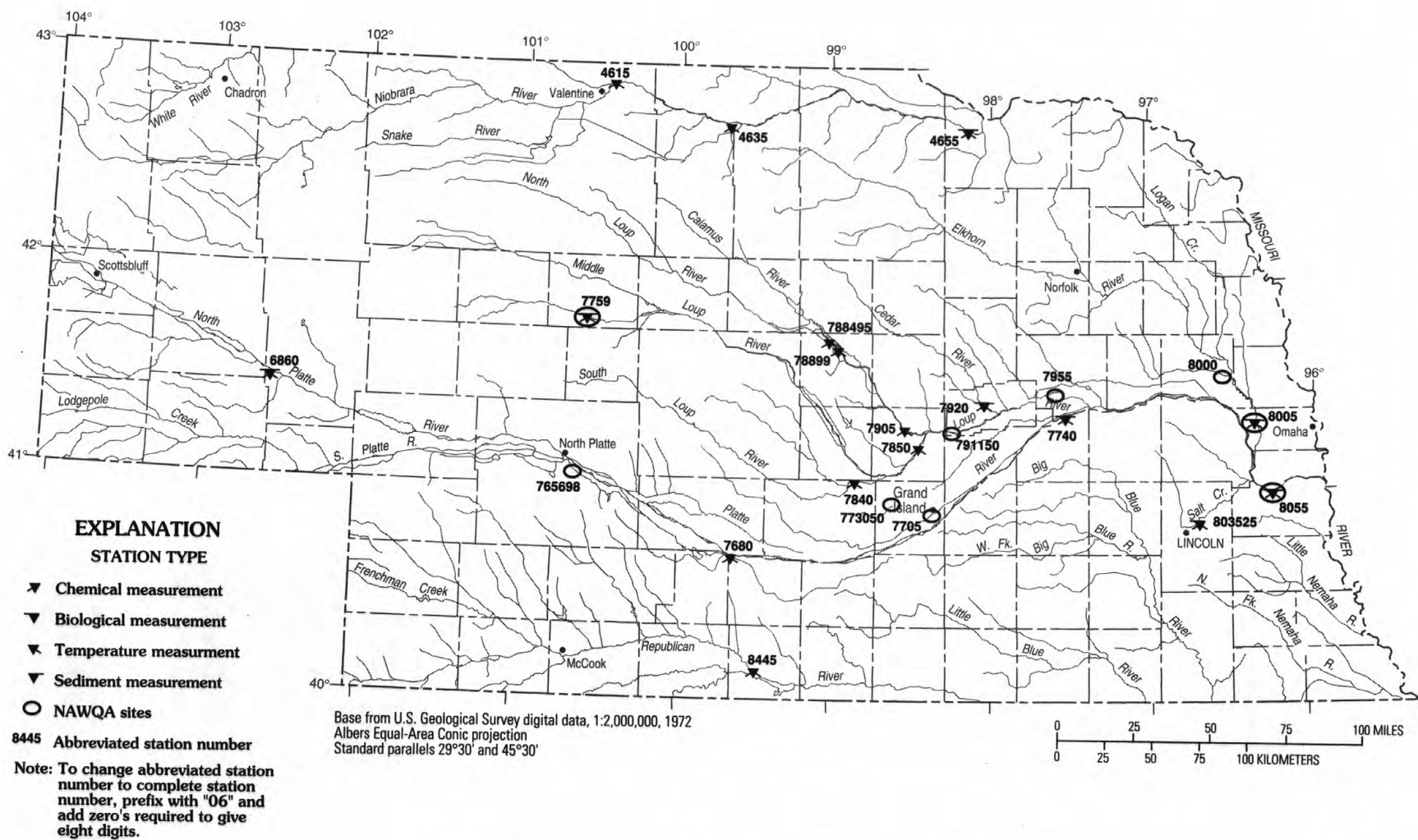


Figure 7.--Location of active surface-water quality stations.

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 needs to be assuring that the data obtained represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for onsite measurements and for collecting, treating, and shipping samples are detailed on the TWRI Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. These references are listed in the PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS section of this report. These methods are consistent with ASTM standards and generally follow ISO standards.

Investigations," Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. All of these references are listed under "PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS" which appears at the end of the introductory text. Detailed information on collecting, treating, and shipping samples may be obtained from the Nebraska District office.

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

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

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

Historical and current (1994) dissolved trace-element concentrations are reported herein for water that was collected, processed, and analyzed by using either ultraclean or other than ultraclean techniques. If ultraclean techniques were used, then those concentrations are reported in nanograms per liter. If other than ultraclean techniques were used, then those concentrations are reported in micrograms per liter and could reflect contamination introduced during some phase of the procedure.

Water temperature

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

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

Sediment

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

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

Laboratory Measurements

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

Data Presentation

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

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

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

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

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

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

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

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

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

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to insure the most recent updates.

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

Records of Ground-Water Levels

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

Although, in this report, records of water levels are presented for only selected wells, records are obtained through cooperative efforts of many Federal, State, and local agencies for several thousand observation wells throughout Nebraska and are placed in computer storage. Each spring, the Nebraska District and the Conservation and Survey Division of the University of Nebraska publish a report for the previous calendar year entitled "Groundwater Levels in Nebraska, 19__." This report contains hydrographs of recorder wells, detailed maps showing changes in water levels from the previous year, and other useful items. Information about the availability of the data in the water-level file may be obtained from the District Chief, Nebraska District. (see address on back of front page.)

Data Collection and Computation

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

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

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

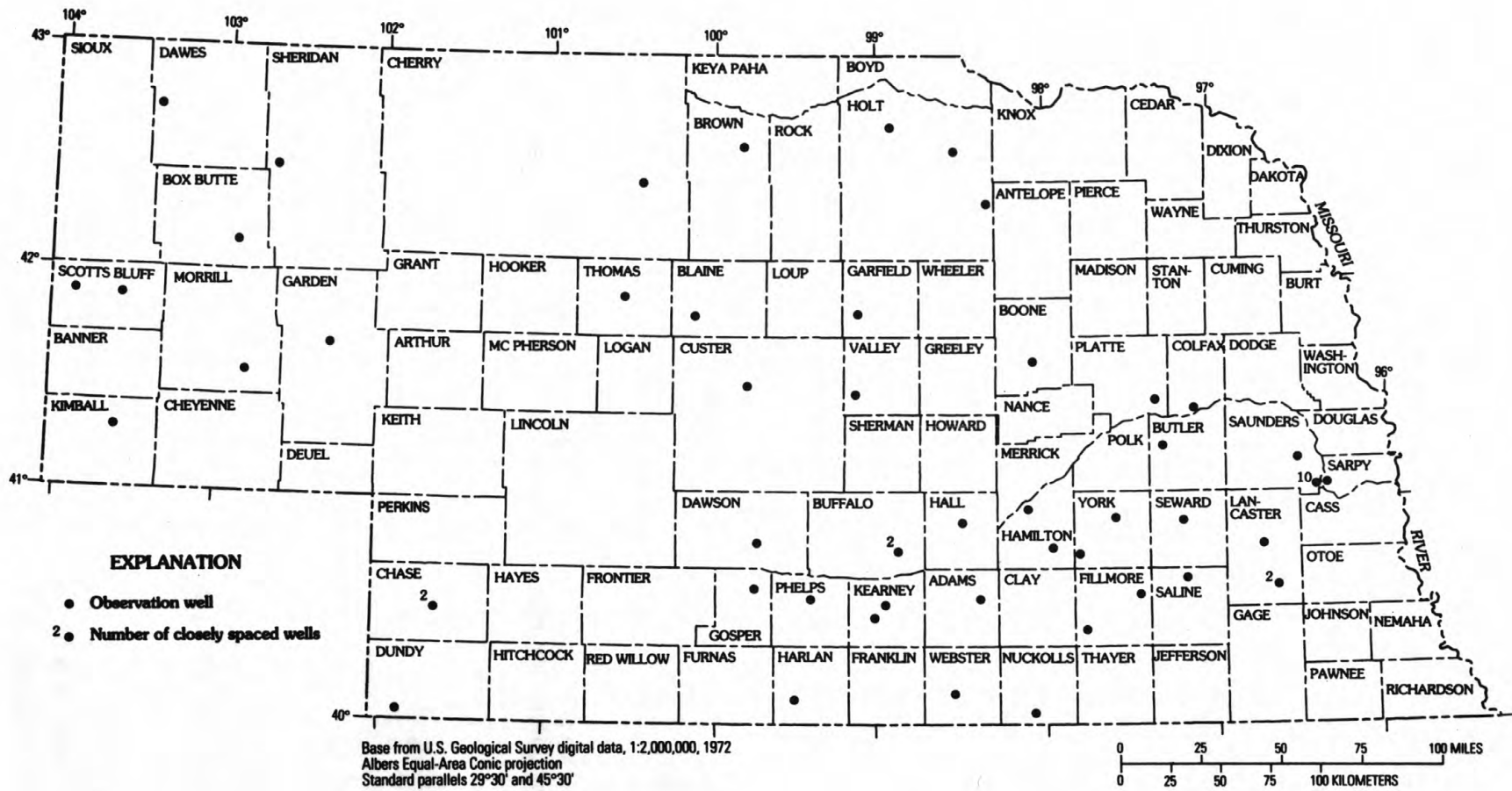


Figure 8.—Location of selected observation wells.

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

Data Presentation

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

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

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

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

DATUM.--This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base and so on), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above (or below) sea level; it is reported with a precision depending on the method of determination.

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

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

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

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

Records of Ground-Water Quality

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

Data Collection and Computation

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

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

Data Presentation

The records of ground-water quality are published in a section titled QUALITY OF GROUND WATER immediately following the ground-water-level records. Data for quality of ground water are listed alphabetically by County and are identified by well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. No descriptive statements are given for ground-water-quality records; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water. The REMARK codes listed for surface-water-quality records are also applicable to ground-water-quality records.

ACCESS TO WATSTORE DATA

The National Water Data Storage and Retrieval System (WATSTORE) was established in 1972 to provide an effective and efficient means for the processing and maintenance of water data collected through the activities of the U.S. Geological Survey. A variety of useful products ranging from data tables to complex statistical analyses such as Log Pearson Type III statistics can be produced using WATSTORE. The system resides on the central computer facilities of the U.S. Geological Survey at its National Center in Reston, Virginia and consists of related files and data bases.

Station Header File - Contains descriptive information on more than 440,000 sites throughout the United States and its territories where the U.S. Geological Survey collects or has collected data.

Daily Values File - Contains more than 220 million daily values of stream flow, stages, reservoir contents, water temperatures, specific conductances, sediment concentrations, sediment discharges, and ground-water levels.

Peak Flow File - Contains approximately 500,000 maximum (peak) streamflow and gage-height values at surface-water sites.

Water Quality File - Contains approximately 2 million analyses of water samples that describe the chemical, physical, biological, and radiochemical characteristics of both surface and ground water.

Ground-Water Site Inventory Data Base - Contains inventory data for more than 900,000 wells, springs, and other sources of ground water. The data includes site location, geohydrologic characteristics, well-construction history, and one-time field measurements such as water temperature.

In 1976, the U.S. Geological Survey opened WATSTORE to the public for direct access. The signing of a Memorandum of Agreement with the Survey is required to obtain direct access to WATSTORE. The system can be accessed either synchronously or asynchronously. The requester will be expected to pay all computer costs he/she incurs. Direct access may be obtained by contacting:

U.S. Geological Survey
National Water Data Exchange
421 USGS National Center
Reston, Virginia 22092

In addition to providing direct access to WATSTORE, the National Water Data Exchange (NAWDEX) services include data-search assistance, data dissemination, and data referrals. Data can be provided in various machine-readable formats on magnetic tape or 5-1/4 inch floppy disc. and, as noted in the introduction, on CD-ROM discs. The request for water-data should be forwarded to the local Geological Survey district office.

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

Beginning with the 1990 water year, all water-data reports will also be available on Compact Disc - Read Only Memory (CD-ROM). All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, will be reproduced on a single CD-ROM disc. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division's District offices. (See address on the back of the title page.) A limited number of CD-ROM discs will be available for sale by the Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, CO 80225. If the district office does not have the facility to fulfill the request, it will be referred to the National Water Data Exchange (NAWDEX) office in Reston, Virginia.

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. See also table for converting English units to International System (SI) Units on the inside of the back cover.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, while 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.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which 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 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warmblooded animals. They are often 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.

Fecal streptococcal bacteria are bacteria found also in the intestine of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which 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.

Bed material is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

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 micro-organisms, such as bacteria.

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

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

Dry mass refers to the mass of residue present after drying in an oven at 105° C for zooplankton and periphyton, 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.

Organic mass or volatile mass of the living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

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 natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common green pigments in plants.

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.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic foot per second (ft³/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Cubic-foot-per-second day 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, approximately 1.9835 acre-feet, about 646,000 gallons, or 2,445 cubic meters.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment) that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Annual 7-day minimum is 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.)

Dissolved refers to that material in a representative water sample which passes through a 0.45 μ m membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved-solids concentration of water 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 of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

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

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate (CaCO_3).

Hydrologic Bench-Mark Network is a network of 57 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an eight-digit number.

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

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

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

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

Micrograms per liter ($\mu\text{G/L}$, $\mu\text{g/L}$) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

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

National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 384 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

National Water-Quality Assessment (NAWQA) Program of the Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, diverse, and geographically distributed part of the Nation's ground- and surface-water resources, and to identify, describe, and explain the major natural and human factors that affect these observed conditions and trends.

Organism is any living entity.

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.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Parameter Code is a 5-digit number used in the U.S. Geological Survey computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are the same as those used in the U.S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of a particle determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) 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 used in this report agrees with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

<u>Classification</u>	<u>Size (mm)</u>	<u>Method of analysis</u>
Clay.....	0.00024 - 0.004	Sedimentation
Silt.....	.004 - .062	Sedimentation
Sand.....	.062 - 2.0	Sedimentation or sieve
Gravel.....	2.0 - 64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. 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.

Percent composition 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, mass, or volume.

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

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

Picocurie (PC, pCi) is one trillionth (1×10^{12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 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.

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

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

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

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

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and are often 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.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Recoverable from 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.

Return period is the average time interval between occurrences of a hydrological event of a given or greater magnitude, usually expressed in years. May also be called recurrence interval.

Runoff in inches (IN., in.) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sea level: In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)--a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it 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 influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Bed load is the sediment that is transported in a stream by rolling, sliding, or skipping along the bed and very close to it. In this report, bed load is considered to consist of particles in transit within 0.25 ft of the streambed.

Bed load discharge (tons per day) is the quantity of bed load measured by dry weight that moves past a section as bed load in a given time.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

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 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Suspended-sediment discharge (tons/day) is the rate at which dry mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft³/s) x 0.0027.

Suspended-sediment load is a general term that refers to material in suspension. It is not synonymous with either discharge or concentration.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry mass or volume, that passes a section during a given time.

Total-sediment load or total load is a term which refers to the total sediment (bed load plus suspended-sediment load) that is in transport. It is not synonymous with total-sediment discharge.

7-day 10-year low flow (7 Q₁₀) is the discharge at the 10-year recurrence interval taken from a frequency curve of annual values of the lowest mean discharge for 7 consecutive days (the 7-day low flow).

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. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25° C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 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.

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

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.

Natural substrate refers to any naturally occurring emerged or submersed solid surface, such as a rock or tree, upon which an organism lives.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. 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.

Surface area of a lake is that area outlined on the latest U.S.G.S. topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered. All areas shown are those for the stage when the planimetered map was made.

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

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

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 μm 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 analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 μm membrane filter. 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 determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

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

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

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table headings 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 that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 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) is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour period.

Total is the total amount of a given constituent in a representative water-suspended sediment 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 all of the constituent in the sample.)

Total discharge is the total quantity of any individual constituent, as measured by dry mass or volume, that passes through a stream cross-section per unit of time. This term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment 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, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Water year in Geological Survey 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, 1993, is called the "1993 water year."

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

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

WSP is used as an abbreviation for "Water-Supply Paper" in reference to previously published reports.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

The U.S. Geological Survey publishes a series of manuals 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.

The reports listed below are for sale by the U.S. Geological Survey, Branch of Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

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- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
- 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, Chapter D1. 1974. 116 pages.
- 2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F. P. Haeni: USGS--TWRI Book 2, Chapter D2. 1988. 86 pages.
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- 2-E2. *Borehole geophysics applied to ground-water investigations*, by W. S. Keys: USGS--TWRI Book 2, Chapter E2. 1990. 150 pages.
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- 3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.
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- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.
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- 3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.
- 3-A7. *Stage measurement at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.
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- 3-A9. *Measurement of time of travel in streams by dye tracing*, by F. A. Kilpatrick and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1989. 27 pages.
- 3-A10. *Discharge ratings at gaging stations*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.

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- 3-A12. *Fluorometric procedures for dye tracing*, Revised, by J. F. Wilson, Jr., E. D. Cobb, and F. A. Kilpatrick: USGS--TWRI Book 3, Chapter A12. 1986. 34 pages.
- 3-A13. *Computation of continuous records of streamflow*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.
- 3-A14. *Use of flumes in measuring discharge*, by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.
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- 3-A19. *Levels at streamflow gaging stations*, by E.J. Kennedy: USGS--TWRI Book 3, Chapter A19. 1990. 31 pages.
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- 3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.
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- 3-B4. *Regression modeling of ground-water flow*, by R. L. Cooley and R. L. Naff: USGS--TWRI Book 3, Chapter B4. 1990. 232 pages.
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- 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, Chapter B6. 1987. 28 pages.
- 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, Chapter B7. 1992. 190 pages.
- 3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
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- 4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.
- 4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.
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- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by L. J. Britton and P. E. Greenson, editors: USGS--TWRI Book 5, Chapter A4. 1989. 363 pages.
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- 5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.
- 6-A1. *A modular three-dimensional finite-difference ground-water flow model*, by M. G. McDonald and A. W. Harbaugh: USGS--TWRI Book 6, Chapter A1. 1988. 586 pages.
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- 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, Chapter C1. 1976. 116 pages.
- 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, Chapter C2. 1978. 90 pages.
- 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, Chapter C3. 1981. 110 pages.

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- 8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J. D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.
- 8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

WATER RESOURCES DATA - NEBRASKA, 1994
SURFACE-WATER-DISCHARGE AND SURFACE-WATER-QUALITY RECORDS

Remark Codes

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

<u>PRINTED OUTPUT</u>	<u>REMARK</u>
E	Estimated value
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
K	Results based on colony count outside the acceptance range (non-ideal colony count)
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted)
D	Biological organism count equal to or greater than 15 percent (dominant)
&	Biological organism estimated as 1 dominant

NOTE: Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter ($\mu\text{g/L}$) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's and 100's of nanograms per liter (ng/L). Present data above the $\mu\text{g/L}$ level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes. However these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey will begin using new trace-element protocols in water year 1994. Full implementation of the protocols will take place during water year 1995.

06453500 PONCA CREEK AT ANOKA, NE

LOCATION.--Lat 42°56'34", long 98°50'25", in NE1/4 sec. 9, T.34 N., R.13 W., Boyd County, Hydrologic Unit 10150001, at left downstream end of bridge on State Highway 11, 0.5 mi southwest of Anoka, 0.5 mi upstream from Dry Creek, and at mile 52.1.

DRAINAGE AREA (REVISED).--504 mi².

PERIOD OF RECORD.--March 1949 to current year.

REVISED RECORDS.--WSP 2117: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 1,630 above sea level, from topographic map. Prior to Sept. 13, 1950, nonrecording gage and Sept. 13, 1950, to Oct. 8, 1984, water-stage recorder for stages above 0.4 ft and nonrecording gage read daily at same site and datum.

REMARKS.--Records good except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 19943
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	21	e16	e12	e6.0	e10	42	138	13	18	18	7.1
2	14	21	e16	e11	e6.0	e13	40	114	13	29	16	8.0
3	14	21	e16	e10	e6.0	e50	38	92	13	64	17	8.9
4	16	23	e16	e10	e6.0	e700	39	84	12	66	17	27
5	14	23	e16	e10	e6.0	e220	41	74	14	622	14	27
6	14	18	e16	e9.0	e6.4	e170	40	67	13	131	18	24
7	14	22	e15	e7.0	e5.6	e155	42	65	124	398	16	21
8	19	25	e15	e6.8	e5.0	e140	43	62	118	178	13	16
9	27	22	e18	e7.0	e3.6	e135	39	56	120	87	13	12
10	30	22	e19	e7.2	e4.2	e125	38	49	102	59	15	10
11	29	26	e16	e6.8	e5.4	e120	37	41	72	44	19	9.0
12	25	34	e18	e6.8	e5.8	e110	37	33	74	35	20	8.3
13	23	68	e20	e6.8	e5.8	e100	35	29	98	61	18	7.6
14	22	81	e19	e5.6	e6.8	e110	31	1010	85	91	15	7.3
15	20	57	e18	e4.8	e7.2	e100	31	286	63	61	14	6.9
16	19	47	e18	e4.8	e7.6	e94	34	115	52	94	12	6.1
17	21	41	e18	e4.6	e8.0	e90	35	85	46	69	11	5.7
18	20	41	e17	e3.6	e8.8	e80	34	68	96	58	9.7	5.5
19	19	36	e16	e3.4	e10	e86	32	58	150	43	8.9	5.4
20	21	32	e16	e3.2	e9.0	e92	28	46	131	33	8.6	5.3
21	20	31	e16	e3.2	e8.8	e80	27	37	70	26	8.0	5.2
22	21	27	e16	e4.0	e8.8	64	27	32	96	33	7.0	5.6
23	20	e19	e15	e6.0	e8.2	57	26	30	716	42	6.3	5.7
24	20	e15	e13	e7.8	e7.8	52	26	28	196	40	6.2	5.9
25	22	e12	e13	e7.0	e8.0	49	25	24	85	35	8.0	5.8
26	19	e12	e14	e6.6	e8.0	47	62	21	50	30	7.8	5.4
27	19	e13	e13	e6.4	e8.0	46	121	19	38	26	7.9	5.5
28	19	e15	e11	e6.4	e8.6	44	100	18	27	23	6.6	5.4
29	19	e15	e11	e6.2	---	44	95	16	22	21	6.6	5.7
30	19	e15	e11	e5.6	---	41	126	14	19	20	6.7	5.8
31	19	---	e12	e5.6	---	43	---	13	---	18	6.2	---
TOTAL	614	855	484	205.2	195.4	3267	1371	2824	2728	2555	370.5	284.1
MEAN	19.8	28.5	15.6	6.62	6.98	105	45.7	91.1	90.9	82.4	12.0	9.47
MAX	30	81	20	12	10	700	126	1010	716	622	20	27
MIN	14	12	11	3.2	3.6	10	25	13	12	18	6.2	5.2
AC-FT	1220	1700	960	407	388	6480	2720	5600	5410	5070	735	564

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1994, BY WATER YEAR (WY)

	7.31	8.41	5.92	5.08	26.8	145	116	80.3	74.7	40.8	20.1	10.7
MEAN	7.31	8.41	5.92	5.08	26.8	145	116	80.3	74.7	40.8	20.1	10.7
MAX	39.6	39.0	32.1	37.6	192	762	753	530	958	654	234	80.8
(WY)	1952	1952	1952	1973	1952	1960	1950	1962	1962	1962	1962	1986
MIN	.000	.000	.000	.000	.000	2.24	1.05	.93	.72	.000	.000	.000
(WY)	1957	1977	1959	1950	1956	1981	1981	1981	1976	1956	1955	1956

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1950 - 1994

ANNUAL TOTAL	24100.4	15753.2	
ANNUAL MEAN	66.0	43.2	
MEDIAN OF ANNUAL MEANS			45.1
HIGHEST ANNUAL MEAN			33
LOWEST ANNUAL MEAN			258
HIGHEST DAILY MEAN	1160	1010	7990
LOWEST DAILY MEAN	2.4	3.2	*.00
ANNUAL SEVEN-DAY MINIMUM	2.7	3.8	.00
INSTANTANEOUS PEAK FLOW		1870	9810
INSTANTANEOUS PEAK STAGE		**7.70	**16.86
ANNUAL RUNOFF (AC-FT)	47800	31250	32690
10 PERCENT EXCEEDS	143	94	86
50 PERCENT EXCEEDS	31	19	6.3
90 PERCENT EXCEEDS	7.7	6.0	.00

e Estimated.

* No flow at times in most years.

** From floodmark.

PONCA CREEK BASIN

06453600 PONCA CREEK AT VERDEL, NE

LOCATION.--Lat 42°48'40", long 98°10'35", in NE1/4 NE1/4 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 mi².

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

REVISED RECORDS.--WSP 2117: Drainage area.

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.

REMARKS.--Records good except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	65	e78	e50	e26	e80	99	289	46	58	32	22
2	88	65	e78	e48	e26	e120	94	290	50	62	33	24
3	88	64	e78	e44	e25	e200	93	230	47	65	43	24
4	89	65	e78	e44	e25	e600	95	193	47	87	46	43
5	85	62	e82	e44	e25	e900	99	169	58	464	35	48
6	83	59	e80	e41	e26	e320	98	154	61	473	35	39
7	76	61	e80	e36	e24	e270	104	150	112	448	33	35
8	90	60	e82	e35	e22	e240	106	143	274	573	33	33
9	111	60	e88	e36	e19	e210	99	135	221	269	32	28
10	103	59	e92	e37	e20	e190	90	126	200	167	32	23
11	92	61	e90	e36	e22	e180	89	115	157	122	33	20
12	89	67	e92	e36	e25	e170	99	105	153	94	35	19
13	82	100	92	e37	e25	e160	101	90	319	96	37	19
14	77	117	83	e33	e32	e180	93	312	182	105	34	17
15	72	116	77	e29	e35	e170	90	522	134	120	30	16
16	68	100	80	e30	e37	e160	84	189	106	137	28	15
17	66	90	81	e27	e42	e160	82	105	89	216	26	14
18	64	87	80	e24	e46	e150	80	72	348	137	24	14
19	73	85	69	e24	e56	e170	78	68	522	105	23	14
20	73	80	59	e24	e50	e200	80	68	400	79	20	14
21	71	77	e58	e25	e49	e175	78	68	257	65	19	12
22	68	74	e58	e28	e49	154	74	68	163	58	18	14
23	65	69	e54	e28	e47	140	74	68	675	52	17	14
24	65	e64	e52	e29	e45	129	75	68	514	58	16	15
25	60	e60	e54	e27	e48	114	75	67	269	57	21	15
26	64	e60	e56	e26	e48	114	99	59	179	51	24	14
27	61	e62	e54	e25	e50	110	199	55	126	47	23	13
28	63	e68	e48	e25	e56	110	248	52	97	42	19	13
29	62	e72	e49	e25	---	105	237	51	79	38	19	13
30	60	e72	e49	e24	---	97	243	48	68	36	19	13
31	61	---	e50	e25	---	99	---	45	---	33	18	---
TOTAL	2361	2201	2201	1002	1000	6177	3255	4174	5953	4414	857	617
MEAN	76.2	73.4	71.0	32.3	35.7	199	108	135	198	142	27.6	20.6
MAX	111	117	92	50	56	900	248	522	675	573	46	48
MIN	60	59	48	24	19	80	74	45	46	33	16	12
AC-FT	4680	4370	4370	1990	1980	12250	6460	8280	11810	8760	1700	1220

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1994, BY WATER YEAR (WY)

MEAN	17.2	20.0	13.3	11.9	45.4	235	174	136	136	87.9	34.3	21.8
MAX	83.4	73.4	71.0	57.9	229	1333	818	562	1237	742	327	213
(WY)	1974	1994	1994	1973	1973	1960	1984	1962	1962	1993	1962	1986
MIN	.000	.000	.000	.000	.000	6.53	4.77	4.02	5.64	.006	.000	.000
(WY)	1959	1977	1971	1959	1969	1965	1981	1981	1976	1966	1968	1958

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1958 - 1994

ANNUAL TOTAL	67367.6	34212	77.8
ANNUAL MEAN	185	93.7	59
MEDIAN OF ANNUAL MEANS			343
HIGHEST ANNUAL MEAN			3.75
LOWEST ANNUAL MEAN			1962
HIGHEST DAILY MEAN	4450	900	14800
LOWEST DAILY MEAN	4.0	12	Mar 28 1960
ANNUAL SEVEN-DAY MINIMUM	4.1	14	Oct 1 1957
INSTANTANEOUS PEAK FLOW (STAGE)		1160 (**7.55)	15700 (**15.10)
INSTANTANEOUS PEAK STAGE		****16.58	Mar 27 1960
ANNUAL RUNOFF (AC-FT)	133600	67860	56330
10 PERCENT EXCEEDS	317	189	165
50 PERCENT EXCEEDS	95	65	16
90 PERCENT EXCEEDS	23	23	.03

e Estimated.

* No flow for many days in 1957-60, 1965-72, 1974-77, 1979-81, 1989, 1991.

** From floodmark.

*** Site and datum then in use.

****From floodmark; ice jam.

NIOBRARA RIVER BASIN

45

06454000 NIOBRARA RIVER AT WYOMING-NEBRASKA STATE LINE

LOCATION.--Lat 42°39'33", long 104°03'54", in SE1/4SW1/4 sec.15, T.31 N., R.60 W., Niobrara County, Wyoming, Hydrologic Unit 10150002, on left bank 0.2 mi downstream from Van Tassel Creek, 0.3 mi upstream from Wyoming-Nebraska State line, 3 mi east of Van Tassel, WY, and at mile 358.1.

DRAINAGE AREA (REVISED).--455 mi².

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,687.70 ft above sea level.

REMARKS.--Records good except for estimated record which is fair. Diversions for irrigation of about 4,700 acres above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	2.4	2.3	2.6	e2.5	2.8	5.6	4.7	3.0	2.2	1.8	1.5
2	2.1	2.5	2.3	2.7	e2.7	3.1	5.6	4.9	3.0	2.3	1.8	1.5
3	2.1	2.6	2.5	2.7	2.7	3.2	5.5	4.8	2.9	2.4	1.7	1.7
4	2.2	2.7	2.5	2.6	2.4	5.2	5.5	4.7	3.0	2.4	1.7	1.7
5	2.2	2.7	e2.4	2.6	2.4	5.7	5.3	4.4	2.7	2.2	1.7	1.7
6	2.3	2.5	e2.5	2.6	2.4	5.8	5.1	4.3	2.6	2.4	1.7	1.7
7	2.5	2.5	2.1	2.5	2.4	4.9	5.0	4.1	2.5	3.5	1.7	1.6
8	2.7	2.4	2.0	2.4	2.4	4.3	5.1	3.9	2.4	3.1	1.7	1.5
9	2.5	2.4	2.1	2.4	2.3	4.1	4.8	3.8	2.3	2.6	1.6	1.5
10	2.9	2.4	2.0	2.4	2.2	5.2	4.8	3.7	2.3	2.3	1.6	1.5
11	3.6	2.4	2.0	2.4	2.3	10	4.8	3.5	2.2	1.9	1.6	1.4
12	2.8	2.6	2.0	2.5	2.3	9.1	4.7	3.3	2.2	2.1	1.6	1.4
13	2.5	2.7	2.0	2.6	2.3	9.1	4.5	3.2	2.2	2.9	1.5	1.4
14	3.5	2.6	2.0	2.6	2.4	9.5	4.7	3.8	2.2	2.9	1.5	1.4
15	4.1	2.6	2.0	2.7	2.6	9.3	4.5	3.4	2.2	3.6	1.5	1.4
16	4.5	2.5	2.0	2.7	2.8	9.2	4.3	3.3	2.2	2.7	1.5	1.5
17	4.2	2.5	e2.0	e2.6	3.5	9.6	4.2	3.0	2.2	2.4	1.5	1.5
18	4.2	2.7	e2.0	2.6	3.6	9.7	4.1	3.0	2.2	2.2	1.5	1.4
19	3.9	2.6	2.0	2.6	3.2	9.9	4.0	3.0	2.2	1.9	1.5	1.5
20	3.4	2.7	2.4	2.7	3.2	9.7	3.9	3.4	2.2	1.7	1.5	1.5
21	3.3	2.7	2.2	2.7	3.0	9.1	3.8	3.5	2.2	1.7	1.5	1.5
22	3.5	2.7	2.1	2.7	2.9	7.8	3.8	3.2	3.9	1.8	1.5	1.6
23	3.3	e2.7	e1.8	2.6	3.0	7.3	3.9	3.2	2.3	1.8	1.5	1.5
24	3.2	e2.7	e2.3	2.6	e2.9	6.4	3.8	3.3	2.2	1.8	1.5	1.5
25	3.2	e2.5	2.3	2.6	e2.9	6.3	3.9	3.4	2.2	1.8	1.5	1.4
26	3.1	e2.0	2.3	2.6	2.7	6.3	e3.8	3.3	2.3	1.8	1.5	1.4
27	3.0	e2.8	2.4	2.7	2.6	5.7	e4.2	3.4	2.3	1.9	1.5	1.4
28	3.0	2.5	2.5	2.7	2.6	5.7	4.5	3.2	2.2	1.8	1.6	1.4
29	2.9	2.4	2.6	e2.7	---	5.5	4.4	3.1	2.2	1.8	1.8	1.4
30	2.9	2.4	2.5	e2.7	---	5.6	4.5	3.1	2.2	1.8	2.1	1.5
31	2.5	---	2.6	e2.7	---	5.6	---	3.1	---	1.8	1.9	---
TOTAL	94.2	76.4	68.7	80.8	75.2	210.7	136.6	112.0	72.7	69.5	50.1	44.9
MEAN	3.04	2.55	2.22	2.61	2.69	6.80	4.55	3.61	2.42	2.24	1.62	1.50
MAX	4.5	2.8	2.6	2.7	3.6	10	5.6	4.9	3.9	3.6	2.1	1.7
MIN	2.1	2.0	1.8	2.4	2.2	2.8	3.8	3.0	2.2	1.7	1.5	1.4
AC-FT	187	152	136	160	149	418	271	222	144	138	99	89

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 1994, BY WATER YEAR (WY)

MEAN	2.69	2.91	2.92	3.10	4.33	5.60	5.43	4.54	3.99	3.37	2.55	2.21
MAX	4.24	4.95	4.66	12.6	18.1	19.3	16.3	10.2	12.6	22.2	15.6	3.68
(WY)	1987	1958	1958	1974	1963	1960	1974	1957	1962	1969	1977	1965
MIN	1.71	1.98	1.56	1.58	2.17	2.23	2.74	2.46	1.55	1.22	.94	1.01
(WY)	1982	1984	1984	1986	1985	1982	1981	1992	1977	1977	1975	1975

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1956 - 1994

ANNUAL TOTAL	1365.1	1091.8	
ANNUAL MEAN	3.74	2.99	3.63
HIGHEST ANNUAL MEAN			5.77
LOWEST ANNUAL MEAN			2.14
HIGHEST DAILY MEAN	14	Mar 24	352
LOWEST DAILY MEAN	1.8	Dec 23	.54
ANNUAL SEVEN-DAY MINIMUM	2.0	Sep 21	.58
INSTANTANEOUS PEAK FLOW (STAGE)			12 (1.98)
INSTANTANEOUS PEAK STAGE			*3.66
ANNUAL RUNOFF (AC-FT)	2710	2170	2630
10 PERCENT EXCEEDS	7.8	4.8	5.5
50 PERCENT EXCEEDS	2.5	2.6	2.9
90 PERCENT EXCEEDS	2.0	1.5	1.8

e Estimated

* Backwater from snow in channel.

NIOBRARA RIVER BASIN

06454500 NIOBRARA RIVER ABOVE BOX BUTTE RESERVOIR, NE

LOCATION.--Lat 42°27'35", long 103°10'15", in NE1/4 sec.27, T.29 N., R.50 W., Dawes County, Hydrologic Unit 10150002, on right bank 1 mi upstream from high-water line of Box Butte Reservoir 6 mi east of Marsland and at mile 345.

DRAINAGE AREA.--1,400 mi², approximately.

PERIOD OF RECORD.--October 1946 to current year.

REVISED RECORDS.--WSP 1917: 1951, 1952(P), 1957(M).

GAGE.--Water-stage recorder. Concrete control since Oct. 12, 1953. Datum of gage is 4,012.47 ft above sea level.

REMARKS.--Records good except for periods of estimated record, which are poor. Diversions for irrigation of about 12,800 acres above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	31	26	24	e30	34	40	38	13	11	9.9	7.9
2	25	32	28	24	e29	34	39	38	14	10	12	8.5
3	25	31	28	27	e30	42	39	37	14	9.5	14	8.0
4	24	32	29	28	e30	46	39	35	19	9.1	13	9.3
5	24	31	31	28	e29	53	39	35	16	9.3	12	9.0
6	25	e30	e30	e27	e29	58	39	35	14	9.5	12	8.9
7	25	29	29	e28	e28	59	39	35	7.8	11	13	8.8
8	30	28	27	e29	e30	51	39	33	8.6	11	12	8.5
9	28	28	26	29	e30	52	38	30	8.0	9.8	13	8.3
10	31	28	27	26	28	55	38	30	9.3	9.9	13	8.4
11	35	30	28	25	28	59	38	27	10	11	13	8.9
12	35	35	29	26	e28	55	38	22	9.7	10	13	9.7
13	34	29	29	26	e28	53	38	18	9.0	11	13	9.7
14	34	32	28	27	27	54	37	23	8.4	13	13	9.7
15	33	e32	27	27	28	54	37	22	8.2	12	12	10
16	33	e32	25	28	27	54	36	21	9.1	12	12	9.8
17	32	e32	25	30	29	52	36	20	9.2	14	12	9.9
18	33	e32	e24	e29	31	50	36	20	9.4	14	10	9.9
19	34	e31	e24	e28	30	48	35	20	9.9	14	9.2	11
20	35	e31	e24	27	31	47	34	18	12	13	8.9	11
21	35	e31	e26	e26	30	46	34	20	12	14	9.6	11
22	34	e31	e24	26	34	46	32	18	14	13	9.1	11
23	34	32	e22	27	33	45	31	20	12	14	9.0	10
24	34	e30	e26	29	32	44	31	20	12	14	8.7	9.8
25	33	e28	26	29	e28	44	31	21	9.3	13	8.8	9.7
26	32	e26	25	31	e26	43	34	18	8.7	12	8.5	9.7
27	32	e24	23	30	25	43	33	18	7.9	11	8.1	9.4
28	32	e26	23	e30	31	42	33	15	11	11	7.7	10
29	32	23	22	32	---	43	35	14	12	11	6.9	9.8
30	30	25	22	e30	---	42	35	15	11	10	6.9	8.8
31	29	---	23	e30	---	42	---	14	---	9.6	7.1	---
TOTAL	958	892	806	863	819	1490	1083	750	328.5	356.7	330.4	284.4
MEAN	30.9	29.7	26.0	27.8	29.2	48.1	36.1	24.2	10.9	11.5	10.7	9.48
MAX	35	35	31	32	34	59	40	38	19	14	14	11
MIN	24	23	22	24	25	34	31	14	7.8	9.1	6.9	7.9
AC-FT	1900	1770	1600	1710	1620	2960	2150	1490	652	708	655	564

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1994, BY WATER YEAR (WY)

	1947	1949	1951	1948	1963	1948	1957	1991	1956	1956	1951	1951
MEAN	18.9	29.1	33.0	29.8	37.0	52.6	44.6	30.9	23.6	16.8	15.4	14.2
MAX	41.9	45.2	49.5	43.4	56.6	106	67.3	83.6	69.5	62.8	29.7	53.1
(WY)	1947	1949	1951	1948	1963	1948	1957	1991	1956	1951	1951	1951
MIN	3.86	13.2	17.0	10.0	21.2	31.7	19.7	12.3	3.11	3.50	5.39	2.83
(WY)	1957	1990	1990	1949	1993	1991	1967	1992	1956	1956	1964	1956

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1947 - 1994

ANNUAL TOTAL	11052	8961.0	
ANNUAL MEAN	30.3	24.6	28.8
HIGHEST ANNUAL MEAN			42.8
LOWEST ANNUAL MEAN			18.6
HIGHEST DAILY MEAN	72	59	1080
LOWEST DAILY MEAN	15	6.9	1.6
ANNUAL SEVEN-DAY MINIMUM	19	7.6	2.3
INSTANTANEOUS PEAK FLOW (STAGE)		65(3.78)	4950
INSTANTANEOUS PEAK STAGE		*4.60	10.30
ANNUAL RUNOFF (AC-FT)	21920	17770	20850
10 PERCENT EXCEEDS	49	39	50
50 PERCENT EXCEEDS	26	27	26
90 PERCENT EXCEEDS	20	9.3	9.0

e Estimated.

* Backwater from ice.

NIOBRARA RIVER BASIN

47

06455000 BOX BUTTE RESERVOIR NEAR HEMINGFORD, NE

LOCATION.--Lat 42°27'30", long 103°04'03", in sec. 28, T. 29 N., R. 49 W., Dawes County, Hydrologic Unit 10150002, in control tower on dam near left bank on Niobrara River, 9 mi north of Hemingford.

DRAINAGE AREA.--1,460 mi², approximately.

PERIOD OF RECORD.--October 1945 to current year.

GAGE.--Electric tape gage read three or more times a month. Datum of gage is sea level.

REMARKS.--Reservoir is formed by earthfill dam; outlet gate first closed Oct. 3, 1945. Usable capacity, 30,420 acre-ft between elevations 3,969.00 ft, sill of outlet gate, and 4,007.00 ft, crest of spillway. Dead storage, 640 acre-ft. Figures given herein represent total contents. Water is used for irrigation of Mirage Flats project of Bureau of Reclamation.

COOPERATION.--Records of elevations and capacity table furnished by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 32,210 acre-ft Mar. 26, 1948, elevation, 4,007.70 ft; minimum observed since operation of reservoir began, 640 acre-ft Aug. 26, 1985, elevation, 3,969.00 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 20,960 acre-ft May 27, elevation, 3,999.96 ft; minimum observed, 5,380 acre-ft Aug. 31, elevation, 3,983.15 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Elevation *(feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sep. 30	3,987.19	8,000	-
Oct. 31	3,990.10	10,360	+2,360
Nov. 30	3,992.08	12,180	+1,820
Dec. 31	3,993.62	13,690	+1,510
CAL YR 1993.....	-	-	+2,920
Jan. 31	3,995.09	15,210	+1,520
Feb. 28	3,996.18	16,400	+1,190
Mar. 31	3,998.29	18,860	+2,460
Apr. 30	3,999.43	20,280	+1,420
May 31	3,999.90	20,880	+600
June 30	3,997.79	18,260	-2,620
July 31	3,990.48	10,700	-7,560
Aug. 31	3,983.15	5,380	-5,320
Sept. 30	3,984.46	6,160	+780
WTR YR 1994.....	-	-	-1,840

* Elevations read on or near last day of month.

NIOBRARA RIVER BASIN

06459300 MERRITT RESERVOIR NEAR BURGE, NE

LOCATION.--Lat 42°38'06", long 100°2'18", in SW1/4 NW1/4 sec. 29, T. 31 N., R. 30 W., Cherry County, Hydrologic Unit 10150005, in control house of outlet works of Merritt Dam, 8.1 mi southwest of Burge and 23 mi southwest of Valentine.

DRAINAGE AREA.--640 mi², approximately, of which about 44 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--February 1964 to current year.

REVISED RECORDS.--WDR NE-67: Drainage area.

GAGE.--Direct reading, single vertical column, mercury-well type manometer read once daily. Datum of gage is sea level.

REMARKS.--Reservoir is formed by earthfill dam; storage began Feb. 19, 1964. Usable capacity, 72,872 acre-ft between elevations 2,875.0 ft, sill of canal outlet works, and 2,946.0 ft, crest of spillway. Dead and inactive storage, 1,614 acre-ft below elevation 2,875.0 ft. Figures given herein represent total contents. Water is used for irrigation of Ainsworth Unit of Bureau of Reclamation.

COOPERATION.--Records of elevations and capacity table furnished by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 78,040 acre-ft May 21, 1982, elevation 2,947.2 ft; minimum since appreciable storage was attained, 20,060 acre-ft Oct. 1, 1968, elevation, 2,916.1 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed 75,660 acre-ft June 8, elevation, 2,946.4 ft; minimum observed 42,400 acre-ft Aug. 30, elevation, 2,932.4 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Elevation *(feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	2,940.0	58,420	-
Oct. 31.....	2,943.9	68,560	+10,140
Nov. 30.....	2,944.0	68,830	+270
Dec. 31.....	2,944.0	68,830	0
CAL YR 1993	-	-	+270
Jan. 31.....	2,944.0	68,830	0
Feb. 28.....	2,944.0	68,830	0
Mar. 31.....	2,944.2	69,390	+560
Apr. 30.....	2,945.9	74,200	+4,810
May 31.....	2,946.2	75,080	+880
June 30.....	2,945.6	73,340	-1,740
July 31.....	2,939.4	56,970	-16,370
Aug. 31.....	2,932.5	42,380	-14,590
Sept. 30.....	2,937.8	53,230	+10,850
WTR YR 1994.....	-	-	-5,190

* Elevations read on or near last day of month.

NIOBRARA RIVER BASIN

49

06459500 SNAKE RIVER NEAR BURGE, NE

LOCATION.--Lat 42°39'15", long 100°51'28", in NE 1/4 sec.20, T.31 N., R.30 W., Cherry County, Hydrologic Unit 10150005, on right bank 150 ft downstream from Nebraska National Forest boundary, 2.1 mi downstream from Merritt Dam, 6.5 mi southwest of Burge, 22 mi southwest of Valentine, and at mile 12.2.

DRAINAGE AREA (REVISED).--646 mi², approximately, of which about 30 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--June 1947 to current year.

REVISED RECORDS.--WSP 1279: 1950(M), 1951(P). WDR NE-67,72: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,805.36 ft above sea level, (levels by Bureau of Reclamation).

REMARKS.--Records good. Natural flow affected since February 1964 by storage in Merritt Reservoir (station 06459300) 2.1 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	238	208	206	257	272	271	160	282	132	46	56	59
2	237	208	205	257	272	269	161	279	150	46	56	59
3	237	211	233	257	272	269	160	276	150	46	58	59
4	237	212	252	257	272	269	161	247	124	52	57	59
5	237	164	252	258	272	266	161	211	146	57	58	59
6	237	208	252	263	272	266	159	211	144	59	59	59
7	237	208	252	264	272	267	159	214	169	60	59	60
8	125	208	276	264	242	267	164	218	246	59	59	60
9	24	208	300	264	222	267	164	212	271	59	59	60
10	24	208	279	264	222	266	164	218	255	59	62	60
11	24	208	256	264	222	267	164	213	240	58	61	60
12	24	209	256	263	222	264	164	216	228	59	60	60
13	24	208	258	263	222	261	203	217	217	59	60	60
14	24	208	258	264	220	262	269	220	205	58	60	60
15	24	208	256	266	220	261	269	220	189	57	60	60
16	24	226	256	258	251	260	269	181	150	59	59	60
17	24	284	257	219	268	262	269	104	119	58	59	60
18	24	301	257	219	269	260	271	106	124	57	57	60
19	24	301	257	188	270	256	238	106	128	57	57	60
20	24	300	257	163	269	259	219	81	125	56	57	60
21	24	299	259	162	270	257	219	55	124	55	57	60
22	24	300	237	161	272	260	123	64	124	56	57	50
23	24	253	212	161	272	261	16	81	124	57	55	15
24	24	210	211	191	272	260	16	87	126	57	55	15
25	24	210	208	215	272	260	19	83	121	56	55	15
26	24	210	210	246	272	261	18	87	116	56	55	15
27	57	209	212	268	272	261	23	94	80	56	55	15
28	198	208	212	244	272	233	118	93	50	56	56	15
29	208	207	212	219	---	215	265	94	45	57	57	15
30	212	206	238	220	---	215	283	95	44	57	57	15
31	208	---	260	222	---	183	---	89	---	57	59	---
TOTAL	3100	6808	7546	7281	7197	7955	5048	4954	4466	1741	1791	1424
MEAN	100	227	243	235	257	257	168	160	149	56.2	57.8	47.5
MAX	238	301	300	268	272	271	283	282	271	60	62	60
MIN	24	164	205	161	220	183	16	55	44	46	55	15
AC-FT	6150	13500	14970	14440	14280	15780	10010	9830	8860	3450	3550	2820

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1994, BY WATER YEAR (WY)

MEAN	87.7	179	224	230	247	220	189	183	151	65.5	53.6	68.1
MAX	309	270	277	299	315	320	311	319	294	243	246	311
(WY)	1966	1970	1984	1984	1984	1987	1964	1983	1967	1968	1968	1968
MIN	12.1	18.8	11.5	29.2	207	31.4	58.4	59.8	11.4	12.9	12.4	7.41
(WY)	1975	1977	1969	1969	1965	1976	1971	1989	1964	1970	1970	1964

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1963 - 1994

ANNUAL TOTAL	68088	59311	
ANNUAL MEAN	187	162	158
HIGHEST ANNUAL MEAN			261
LOWEST ANNUAL MEAN			103
HIGHEST DAILY MEAN	331	Mar 21	732
LOWEST DAILY MEAN	24	Oct 9	5.8
ANNUAL SEVEN-DAY MINIMUM	24	Oct 9	5.9
INSTANTANEOUS PEAK FLOW			303
INSTANTANEOUS PEAK STAGE			2.10
ANNUAL RUNOFF (AC-FT)	135100	117600	114200
10 PERCENT EXCEEDS	262	269	275
50 PERCENT EXCEEDS	209	206	195
90 PERCENT EXCEEDS	54	48	15

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 Minnechadua Creek, 6.5 mi southwest of Sparks, and at mile 342.

DRAINAGE AREA (REVISED).--7150 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1209: 1947(M), 1948-50(P). WDR NE-67: Drainage area.

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

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	751	813	e933	858	e780	e1190	828	949	575	585	532	552
2	750	817	e940	874	e780	e1400	795	944	683	583	527	547
3	753	818	e940	e860	e780	1210	801	961	714	566	530	553
4	759	822	e960	868	e780	1160	795	944	665	566	532	547
5	764	837	e940	881	e800	1170	808	868	639	562	524	540
6	773	778	e880	e800	e780	1230	803	839	696	566	532	535
7	771	779	e900	e760	e720	1200	793	822	896	716	542	547
8	833	797	e940	786	e640	1130	804	827	911	681	563	540
9	759	813	941	e800	e600	1070	803	830	1030	649	549	510
10	647	797	988	e800	e580	1060	785	826	997	632	523	481
11	600	795	922	e800	e680	1060	786	807	977	605	527	484
12	592	876	915	e840	e720	1070	793	791	932	604	526	490
13	609	1010	949	844	e720	1060	781	775	870	682	536	517
14	612	924	927	e780	e780	1070	802	833	810	639	524	517
15	632	899	902	e760	e860	1090	847	805	758	641	551	517
16	602	865	912	e780	e840	1080	827	808	728	609	532	508
17	660	893	941	e700	e880	1050	840	698	678	611	551	508
18	649	966	917	e620	e900	1050	956	599	695	592	523	508
19	631	983	930	e640	959	1030	953	611	726	581	539	500
20	618	989	882	e665	934	1020	912	594	706	575	502	508
21	615	976	902	e740	779	1010	940	543	703	563	506	509
22	604	996	e860	e780	719	988	922	608	721	554	494	525
23	606	1090	e840	797	e700	961	773	717	728	553	474	502
24	609	599	e820	792	e680	967	683	657	727	553	477	465
25	612	e560	811	e760	e720	943	696	619	711	551	494	470
26	599	e640	818	e760	e700	921	767	603	689	558	498	470
27	596	e720	847	e740	e800	920	673	601	649	559	484	471
28	704	e820	e820	e760	e1000	920	675	595	597	547	475	473
29	811	e880	e820	786	---	880	814	596	572	538	484	468
30	813	e920	e860	e760	---	870	943	573	562	539	586	470
31	792	---	e860	e760	---	861	---	555	---	526	515	---
TOTAL	21126	25472	27817	24151	21611	32641	24398	22798	22345	18286	16152	15232
MEAN	681	849	897	779	772	1053	813	735	745	590	521	508
MAX	833	1090	988	881	1000	1400	956	961	1030	716	586	553
MIN	592	560	811	620	580	861	673	543	562	526	474	465
AC-FT	41900	50520	55180	47900	42870	64740	48390	45220	44320	36270	32040	30210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1994, BY WATER YEAR (WY)

MEAN	673	755	758	769	879	971	896	871	800	631	595	613
MAX	879	877	950	1208	1403	1464	1214	1279	1470	1122	858	993
(WY)	1966	1963	1986	1984	1984	1949	1958	1983	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

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1946 - 1994

ANNUAL TOTAL	296034	272029	
ANNUAL MEAN	811	745	
HIGHEST ANNUAL MEAN			767
LOWEST ANNUAL MEAN			911
HIGHEST DAILY MEAN	1460	Mar 10	1962
LOWEST DAILY MEAN	467	Aug 4	1976
ANNUAL SEVEN-DAY MINIMUM	497	Aug 1	5000
INSTANTANEOUS PEAK FLOW (STAGE)			Feb 5 1984
INSTANTANEOUS PEAK STAGE			100
ANNUAL RUNOFF (AC-FT)	587200		Jan 10 1957
10 PERCENT EXCEEDS	1060		327
50 PERCENT EXCEEDS	796		Dec 8 1949
90 PERCENT EXCEEDS	571		*4800
			Mar 2
			10200(6.73)
			Mar 5 1949
			10.06
			Feb 7 1973
			555600
			1020
			760
			500

e Estimated.

* Backwater from ice; estimate.

** Ice jam.

NIOBRARA RIVER BASIN

51

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. (FT ³ /S) (00061)	SPECIFIC CON- DUCT- ANCE (μS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (° C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	HARDNESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS- SOLVED (MG/L AS Na) (00930)	SODIUM AD- SORP- TION RATIO (00931)
OCT 06...	0910	768	216	8.6	13.0	8	87	28	4.1	8.4	0.4
DEC 01...	1350	933	230	8.5	1.0	9	90	29	4.2	10	0.5
JAN 20...	1410	665	253	8.4	0.5	8	98	32	4.5	10	0.4
MAR 22...	1625	935	241	8.6	12.0	14	94	30	4.6	10	0.4
APR 13...	1440	737	236	8.8	13.5	13	96	31	4.6	11	0.5
JUN 15...	0850	747	237	8.5	20.5	18	96	31	4.5	9.0	0.4
JUL 13...	0900	691	223	8.6	19.0	14	89	29	4.1	8.5	0.4
SEP 20...	0950	506	226	8.5	16.0	8	91	30	3.9	8.6	0.4
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY LAB (MG/L AS CaCO ₃) (90410)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
OCT 06...	6.4	106	5.6	1.1	0.40	48	167	0.23	346	--	<0.010
DEC 01...	6.2	107	6.3	1.5	0.30	47	171	0.23	432	--	<0.010
JAN 20...	6.4	116	6.3	1.3	0.30	62	196	0.27	353	0.760	0.050
MAR 22...	7.3	116	6.2	1.8	0.40	47	178	0.24	450	--	<0.010
APR 13...	7.2	120	6.1	1.5	0.40	46	181	0.25	360	--	<0.010
JUN 15...	6.9	116	5.7	1.2	0.40	49	178	0.24	359	--	<0.010
JUL 13...	5.6	108	4.8	1.3	0.40	48	167	0.23	312	--	<0.010
SEP 20...	6.4	112	5.0	1.4	0.30	54	178	0.24	243	--	<0.010

NIOBRARA RIVER BASIN

06461500 NIOBRARA RIVER NEAR SPARKS, NE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	BORON, DIS- SOLVED (µG/L AS B) (01020)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)
OCT 06...	0.200	0.010	--	<0.20	--	0.090	0.040	0.050	40	17	2
DEC 01...	0.550	0.010	--	<0.20	--	0.110	0.020	0.050	20	14	3
JAN 20...	0.810	0.030	--	<0.20	--	0.140	0.060	0.100	30	14	3
MAR 22...	0.300	0.020	0.18	0.20	0.50	0.110	0.070	0.060	30	13	4
APR 13...	0.250	0.030	--	<0.20	--	0.090	0.040	0.040	20	13	4
JUN 15...	0.093	0.020	--	<0.20	--	0.160	0.070	0.070	30	12	2
JUL 13...	0.150	0.020	0.18	0.20	0.35	0.180	0.040	0.050	20	17	4
SEP 20...	0.220	0.020	--	<0.20	--	0.060	0.050	0.050	20	8	2

06462500 PLUM CREEK AT MEADVILLE, NE

LOCATION --Lat 42°45'13", long 99°55'49", in SW1/4 SE1/4 sec.11, T.32 N., R.22 W., Brown County, Hydrologic Unit 10150004, on right bank at county bridge, 0.6 mi upstream from mouth, approximately 1 mi southwest of Meadville, and 17 mi north of Ainsworth.

DRAINAGE AREA. (REVISED)--536 mi², of which about 340 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--December 1947 to September 1975, October 1976 to current year. Prior to October 1962, published as "near Meadville."

REVISED RECORDS.--WSP 1729: 1953. WSP 1917: 1953.

GAGE --Water-stage recorder. Elevation of gage is 2,026 ft above sea level, from topographic map. Prior to Nov. 25, 1962, at site 6.9 mi upstream at different datum. Nov. 25, 1962, to Nov. 14, 1966, at datum 9.0 ft higher; Nov. 15, 1966 to Oct. 2, 1979, at datum 8.0 ft higher. Oct. 3, 1979 to June 3, 1982, at datum 7.0 ft higher; June 4, 1982 to Oct. 20, 1992, at datum 6.0 ft higher; Oct. 21, 1992 to Aug. 25, 1993, at datum 5.0 ft higher: all at site 0.4 mi upstream from county road bridge.

REMARKS.--Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	123	129	139	e130	122	138	177	104	106	104	144
2	118	123	126	139	e120	128	137	184	105	115	101	145
3	117	123	127	141	e116	153	136	186	105	112	100	162
4	117	124	131	140	e120	156	134	196	105	108	100	219
5	116	123	132	142	e124	192	135	197	111	108	101	181
6	116	121	132	e120	e120	221	134	188	108	113	100	153
7	116	119	125	e110	e116	236	132	180	146	140	106	142
8	133	122	125	e120	e110	220	131	175	194	185	107	137
9	147	122	127	e130	e102	217	128	168	182	148	116	131
10	140	120	132	e126	e110	223	126	159	159	129	128	125
11	141	121	133	e132	e114	224	125	153	145	119	135	123
12	139	132	134	141	e120	212	132	146	143	120	134	118
13	138	145	136	139	e126	209	135	142	142	138	129	119
14	137	146	137	139	136	204	133	150	140	130	123	117
15	138	146	134	e128	129	194	132	147	135	140	116	120
16	138	142	132	e130	134	184	124	141	135	137	112	112
17	139	143	136	e124	133	179	123	136	138	123	110	108
18	139	146	136	e122	135	173	121	133	168	117	107	107
19	138	146	130	e133	144	168	117	128	157	115	110	106
20	137	144	124	e130	155	164	115	122	138	112	112	106
21	136	144	128	e134	151	160	113	119	132	110	114	106
22	134	144	128	e138	154	155	113	120	142	108	109	109
23	132	143	123	e140	e130	153	113	131	132	107	104	108
24	132	e130	e120	e146	e126	149	113	147	117	106	104	108
25	131	e115	129	149	e130	145	114	131	112	105	108	107
26	129	e120	133	143	e120	143	135	119	107	106	110	106
27	127	e120	133	142	e124	143	145	112	104	103	110	106
28	128	e124	133	e138	127	143	149	113	102	104	110	106
29	126	e128	131	e130	---	140	153	112	102	106	110	105
30	124	133	132	e126	---	140	160	108	101	109	182	105
31	123	---	133	e124	---	138	---	106	---	107	151	---
TOTAL	4044	3932	4041	4135	3556	5388	3896	4526	3911	3686	3563	3741
MEAN	130	131	130	133	127	174	130	146	130	119	115	125
MAX	147	146	137	149	155	236	160	197	194	185	182	219
MIN	116	115	120	110	102	122	113	106	101	103	100	105
AC-FT	8020	7800	8020	8200	7050	10690	7730	8980	7760	7310	7070	7420

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1994, BY WATER YEAR (WY)

MEAN	101	103	101	99.9	113	143	153	152	132	118	102	101
MAX	150	167	144	141	248	426	399	426	276	390	164	174
(WY)	1987	1985	1987	1985	1984	1987	1984	1988	1951	1962	1984	1986
MIN	78.8	79.9	78.5	73.4	80.0	82.6	91.4	83.7	85.9	73.2	73.3	76.7
(WY)	1950	1949	1949	1950	1950	1948	1948	1948	1969	1980	1979	1948

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1948 - 1994

ANNUAL TOTAL	55239	48419	
ANNUAL MEAN	151	133	119
HIGHEST ANNUAL MEAN			196
LOWEST ANNUAL MEAN			91.6
HIGHEST DAILY MEAN	393	236	1540
LOWEST DAILY MEAN	96	100	15
ANNUAL SEVEN-DAY MINIMUM	99	102	53
INSTANTANEOUS PEAK FLOW (STAGE)		302	*2070 (6.98)
INSTANTANEOUS PEAK STAGE		**5.03	***8.54
ANNUAL RUNOFF (AC-FT)	109600	96040	86140
10 PERCENT EXCEEDS	224	159	161
50 PERCENT EXCEEDS	133	130	103
90 PERCENT EXCEEDS	108	107	83

e Estimated.

* Datum 8.0 ft higher.

** Backwater from ice.

*** Datum 9.0 ft higher; maximum observed; backwater from ice.

LOCATION.--Lat 42°41'21", long 99°40'43", in SE1/4 NE1/4 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 (REVISED).--458 mi².

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

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.

REMARKS.--Records good, except for periods of estimated record, which are fair. Flow includes return water from Ainsworth Irrigation District since 1965.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	166	161	176	167	165	173	173	263	161	161	192	276
2	163	158	180	168	158	197	171	269	166	170	189	233
3	166	157	186	164	163	326	170	237	168	181	187	232
4	165	153	194	163	163	408	171	218	174	186	185	465
5	169	147	203	166	163	406	169	194	181	274	178	303
6	171	147	195	154	162	299	169	184	169	207	184	276
7	166	153	187	e150	e155	234	169	177	288	347	198	232
8	184	153	178	163	e150	199	170	176	262	286	197	198
9	236	153	178	161	e145	193	165	169	256	260	206	185
10	209	156	177	163	e150	192	163	166	222	246	236	176
11	206	156	177	160	162	191	162	165	204	213	197	172
12	200	165	179	162	161	191	179	160	190	192	185	172
13	197	185	181	163	160	193	182	164	184	220	189	167
14	189	193	178	157	164	197	174	184	177	200	185	165
15	192	188	174	153	168	194	171	167	160	186	181	161
16	181	184	175	153	176	193	168	167	153	186	188	162
17	179	185	175	e150	182	193	165	170	157	179	172	162
18	177	186	169	e160	205	191	162	178	306	177	181	159
19	178	180	165	169	304	193	158	187	224	185	175	157
20	176	174	167	167	249	187	158	172	197	173	171	157
21	173	170	166	169	204	183	157	177	173	172	180	155
22	175	165	160	171	187	184	157	177	201	177	186	151
23	175	156	161	173	170	180	158	182	246	174	185	144
24	170	e155	160	171	172	176	160	180	215	170	190	143
25	168	e150	165	170	160	174	160	172	186	178	197	144
26	159	164	165	169	166	175	180	174	176	193	187	142
27	156	169	162	163	172	171	169	175	172	187	183	141
28	161	170	158	165	171	171	174	176	171	191	177	140
29	151	172	156	165	---	172	180	171	161	185	183	143
30	152	174	158	164	---	171	198	166	165	186	330	143
31	156	---	159	161	---	172	---	160	---	192	207	---
TOTAL	5465	4979	5364	5054	4907	6479	5062	5677	5865	6234	5981	5656
MEAN	176	166	173	163	175	209	169	183	195	201	193	189
MAX	236	193	203	173	304	408	198	269	306	347	330	465
MIN	151	147	156	150	145	171	157	160	153	161	171	140
AC-FT	10840	9880	10640	10020	9730	12850	10040	11260	11630	12370	11860	11220

MEAN	134	136	135	132	139	164	160	169	165	158	154	150
MAX	176	175	173	172	203	257	309	297	396	368	236	263
(WY)	1994	1989	1994	1984	1984	1987	1984	1988	1951	1962	1951	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

ANNUAL TOTAL	73407		66724			
ANNUAL MEAN	201		183		150	
HIGHEST ANNUAL MEAN					202	1984
LOWEST ANNUAL MEAN					111	1949
HIGHEST DAILY MEAN	805	Jul 13	465	Sep 4	3050	Jul 1 1962
LOWEST DAILY MEAN	147	Nov 5	140	Sep 28	44	Jan 10 1963
ANNUAL SEVEN-DAY MINIMUM	152	Nov 4	142	Sep 24	76	Jan 10 1963
INSTANTANEOUS PEAK FLOW			665	Sep 4	9650	Jul 1 1962
INSTANTANEOUS PEAK STAGE			4.13	Sep 4	*15.68	Jul 1 1962
ANNUAL RUNOFF (AC-FT)	145600		132300		108900	
10 PERCENT EXCEEDS	263		211		187	
50 PERCENT EXCEEDS	182		173		140	
90 PERCENT EXCEEDS	158		157		110	

* Backwater from fallen bridge.

NIOBRARA RIVER BASIN

55

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 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE INST. (FT ³ /S) (00061)	SPECIFIC CONDUCTANCE (μS/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (°C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	HARDNESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	SODIUM ADSORPTION RATIO (00931)
OCT 20...	1040	178	211	8.2	10.0	--	78	25	3.8	8.3	0.4
DEC 02...	1110	178	209	8.3	5.5	9	81	26	3.9	8.0	0.4
JAN 19...	1240	172	215	8.3	2.5	4	80	26	3.7	8.0	0.4
MAR 23...	1015	179	211	8.3	7.0	13	80	26	3.7	8.3	0.4
APR 14...	1030	173	206	8.4	9.0	14	77	25	3.6	8.8	0.4
JUN 15...	1420	164	193	8.4	18.5	14	77	25	3.6	7.5	0.4
JUL 11...	1440	216	198	8.3	24.0	38	77	25	3.5	8.2	0.4
SEP 19...	1445	163	198	8.4	19.0	8	77	25	3.5	7.5	0.4

DATE	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKALINITY LAB (MG/L AS CaCO ₃) (90410)	SULFATE DIS-SOLVED (MG/L AS SO ₄) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
OCT 20...	6.3	89	4.8	4.2	0.30	55	171	0.23	82.2	2.09	0.010
DEC 02...	6.2	89	4.9	3.1	0.30	54	170	0.23	81.7	--	<0.010
JAN 19...	5.6	85	4.6	2.4	0.20	60	174	0.24	80.6	2.55	0.050
MAR 23...	5.7	89	4.5	2.8	0.30	51	165	0.22	79.6	--	<0.010
APR 14...	5.5	89	4.4	2.7	0.30	50	163	0.22	76.1	1.99	0.010
JUN 15...	5.7	87	4.6	2.2	0.30	54	162	0.22	71.9	--	<0.010
JUL 11...	5.4	87	4.1	2.2	0.30	51	158	0.22	92.3	--	<0.010
SEP 19...	6.1	87	4.5	2.7	0.30	56	166	0.23	73.2	--	<0.010

NIOBRARA RIVER BASIN

06463500 LONG PINE CREEK NEAR RIVERVIEW, NE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	BORON, DIS- SOLVED (µG/L AS B) (01020)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)
OCT 20...	2.10	0.030	0.17	0.20	2.3	0.200	0.140	0.170	20	33	2
DEC 02...	2.20	0.020	--	<0.20	--	0.160	0.160	0.170	20	21	2
JAN 19...	2.60	0.070	--	<0.20	--	0.160	0.150	0.160	30	9	3
MAR 23...	1.90	0.020	--	<0.20	--	0.200	0.160	0.150	20	18	3
APR 14...	2.00	0.020	0.18	0.20	2.2	0.130	0.120	0.120	20	25	3
JUN 15...	1.50	0.020	--	<0.20	--	0.270	0.160	0.160	20	24	3
JUL 11...	1.30	0.020	0.28	0.30	1.6	0.260	0.200	0.200	20	50	6
SEP 19...	1.80	0.020	--	<0.20	--	0.160	0.140	0.150	30	24	3

06464500 KEYA PAHA RIVER AT WEWELA, SD

LOCATION.--Lat 43°01'44", long 99°46'49", in NW1/4SW1/4SE1/4 sec.24, T.9S N., R.7E 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 mi², 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. Datum of gage is 2,049.78 ft above sea level. 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. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	48	e46	e44	e28	e300	104	173	48	51	30	49
2	43	49	e50	e40	e29	e350	102	169	49	57	31	51
3	44	52	e52	e40	e30	e500	99	164	49	58	29	50
4	42	54	e52	e36	e30	e1200	98	178	49	55	29	52
5	46	53	e53	e35	e30	e1800	98	175	52	52	29	49
6	47	45	e52	e33	e29	1140	98	160	52	49	36	47
7	50	48	e51	e33	e25	637	98	144	65	55	41	44
8	54	54	e52	e34	e20	414	96	131	97	61	40	42
9	57	57	e60	e35	e21	320	92	118	143	62	42	41
10	53	56	e58	e35	e25	279	90	107	114	58	41	37
11	52	56	e60	e35	e28	251	88	99	95	53	42	34
12	50	59	e65	e33	e27	233	88	90	84	49	46	32
13	49	70	e63	e30	e27	216	86	85	86	62	45	32
14	47	77	e60	e27	e29	210	84	100	79	76	44	32
15	47	76	e58	e25	e33	201	87	108	71	63	42	33
16	46	75	e56	e24	e40	189	84	95	68	58	39	32
17	46	71	e56	e23	e150	178	82	83	66	55	37	32
18	45	70	e56	e24	e400	168	81	77	70	50	35	31
19	44	69	e55	e25	e600	159	78	71	99	49	34	31
20	44	66	e53	e27	e1000	152	77	64	115	45	33	31
21	43	65	e50	e30	e1500	141	75	63	96	42	31	32
22	43	63	e49	e32	e1100	134	74	62	85	40	31	34
23	44	e40	e47	e32	e800	127	73	67	157	37	30	34
24	43	e30	e48	e34	e650	119	71	70	163	35	30	35
25	43	e35	e52	e32	e600	112	75	69	148	32	37	35
26	42	e42	e48	e32	e500	110	98	62	108	32	38	35
27	42	e43	e45	e31	e400	109	117	60	83	32	36	35
28	43	e44	e46	e30	e350	106	125	57	67	30	33	34
29	43	e46	e48	e30	---	108	130	55	61	29	33	33
30	42	e46	e48	e29	---	106	156	53	56	28	38	33
31	43	---	e47	e28	---	105	---	50	---	27	44	---
TOTAL	1421	1659	1636	978	8501	10174	2804	3059	2575	1482	1126	1122
MEAN	45.8	55.3	52.8	31.5	304	328	93.5	98.7	85.8	47.8	36.3	37.4
MAX	57	77	65	44	1500	1800	156	178	163	76	46	52
MIN	42	30	45	23	20	105	71	50	48	27	29	31
AC-FT	2820	3290	3250	1940	16860	20180	5560	6070	5110	2940	2230	2230

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1994, BY WATER YEAR (WY)

MEAN	34.9	39.6	31.5	26.3	57.8	179	151	122	92.6	60.2	33.2	27.8
MAX	82.2	77.6	64.5	85.5	304	598	605	358	512	607	143	69.5
(WY)	1983	1983	1983	1983	1994	1960	1952	1962	1962	1962	1962	1986
MIN	8.49	12.0	8.74	1.61	5.07	33.5	31.3	27.4	12.2	3.55	.80	3.71
(WY)	1977	1977	1956	1949	1979	1975	1976	1981	1976	1940	1976	1976

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1939 - 1994	
ANNUAL TOTAL	31018		36537			
ANNUAL MEAN	85.0		100		a71.4	
HIGHEST ANNUAL MEAN					175	
LOWEST ANNUAL MEAN					19.5	
HIGHEST DAILY MEAN	1400		1800		4930	
LOWEST DAILY MEAN	12		20		.00	
ANNUAL SEVEN-DAY MINIMUM	13		25		.00	
INSTANTANEOUS PEAK FLOW (STAGE)			c2000		5430 (13.08)	
INSTANTANEOUS PEAK STAGE			c9.67		13.50	
ANNUAL RUNOFF (AC-FT)	61520		72470		51710	
10 PERCENT EXCEEDS	164		159		140	
50 PERCENT EXCEEDS	53		52		38	
90 PERCENT EXCEEDS	32		30		14	

e Estimated

a Median of annual mean discharges, 58 ft³/s.

b Also Jan. 11 to Feb. 15, 1949, and Aug. 19 to Sept. 14, 1976.

c Backwater from ice.

NIOBRARA RIVER BASIN

06464900 KEYA PAHA RIVER NEAR NAPER, NE

LOCATION.--Lat 42°55'00", long 99°05'50", in SE1/4 SE1/4 sec.17, T.34 N., R.15 W., Boyd County, Hydrologic Unit 10150006, on left upstream bank near highway bridge abutment, 3.3 mi south of Naper, and 8.8 mi upstream from mouth.

DRAINAGE AREA (REVISED).--1,690 mi².

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

REVISED RECORDS.--WSP 1709: 1959(M).

GAGE.--Water-stage recorder. Elevation of gage is 1,680 ft above sea level, from topographic map. Prior to May 2, 1958, nonrecording gage at same site and datum.

REMARKS.--Records good, except for period of estimated record, which is poor. Minor diversions for irrigation above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	78	e118	e118	e70	e200	189	400	65	98	53	81
2	75	80	e116	e108	e70	e250	183	388	67	121	52	101
3	75	83	e116	e96	e68	e400	175	359	68	111	54	109
4	75	88	e114	e100	e68	e900	173	326	67	120	56	353
5	76	95	e120	e90	e70	e3000	182	312	75	307	48	399
6	79	96	e116	e82	e72	2590	180	302	71	136	51	330
7	77	93	e114	e70	e58	1160	175	285	139	217	54	204
8	88	89	e120	e72	e49	649	180	261	213	172	55	152
9	118	102	e135	e76	e42	444	178	224	235	131	64	127
10	124	100	e150	e78	e47	330	177	205	254	112	412	112
11	122	101	e135	e76	e56	277	169	198	209	99	610	97
12	120	117	e155	e76	e64	254	165	185	174	87	324	80
13	122	160	e165	e74	e62	240	158	226	154	90	183	69
14	116	158	e155	e60	e69	260	160	1440	137	86	137	66
15	112	164	e145	e56	e72	232	168	432	120	105	113	64
16	110	153	e145	e56	e74	204	167	282	105	149	102	60
17	105	150	e145	e50	e80	206	165	220	99	120	91	58
18	97	150	e145	e45	e120	189	161	171	107	98	80	57
19	98	154	e140	e47	e150	246	147	144	167	85	72	56
20	100	138	e141	e49	e300	273	143	115	190	78	63	53
21	97	133	e135	e50	e700	250	135	104	215	71	60	50
22	99	124	e130	e60	e600	237	134	101	248	66	58	54
23	98	109	e125	e76	e500	234	134	108	265	64	52	57
24	98	e96	e114	e86	e400	205	132	119	229	67	50	59
25	94	e88	e118	e78	e350	186	130	111	248	66	69	61
26	87	e90	e125	e74	e310	166	219	111	217	61	79	60
27	88	e94	e120	e72	e270	156	276	102	182	55	77	60
28	88	e100	e106	e72	e230	160	297	87	141	53	68	59
29	82	e108	e112	e70	---	164	295	82	117	52	61	60
30	81	e108	e114	e66	---	154	366	74	105	50	56	60
31	79	---	e116	e68	---	175	---	67	---	48	59	---
TOTAL	2956	3399	4005	2251	5021	14391	5513	7541	4683	3175	3363	3208
MEAN	95.4	113	129	72.6	179	464	184	243	156	102	108	107
MAX	124	164	165	118	700	3000	366	1440	265	307	610	399
MIN	75	78	106	45	42	154	130	67	65	48	48	50
AC-FT	5860	6740	7940	4460	9960	28540	10940	14960	9290	6300	6670	6360

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1994, BY WATER YEAR (WY)

	MEAN	68.4	77.5	65.0	57.3	116	325	285	233	192	130	62.5	50.5
MAX	151	155	137	128	278	1087	919	662	945	1538	420	131	
(WY)	1983	1963	1963	1987	1984	1960	1984	1962	1962	1962	1962	1986	
MIN	14.7	17.3	20.4	7.00	22.4	80.3	71.9	58.5	20.8	1.97	1.18	8.05	
(WY)	1977	1977	1977	1977	1979	1981	1976	1981	1976	1976	1976	1975	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR WATER

YEARS 1958 - 1994

ANNUAL TOTAL	70299	59506	
ANNUAL MEAN	193	163	
MEDIAN OF ANNUAL MEANS			139
HIGHEST ANNUAL MEAN			119
LOWEST ANNUAL MEAN			389
HIGHEST DAILY MEAN	1800	3000	6500
LOWEST DAILY MEAN	38	42	.00
ANNUAL SEVEN-DAY MINIMUM	41	50	.00
INSTANTANEOUS PEAK FLOW		5980	9280
INSTANTANEOUS PEAK STAGE		*12.78	*13.34
ANNUAL RUNOFF (AC-FT)	139400	118000	100400
10 PERCENT EXCEEDS	433	276	290
50 PERCENT EXCEEDS	117	112	74
90 PERCENT EXCEEDS	59	59	24

e Estimated.

* Ice jam.

NIOBRARA RIVER BASIN

59

06465000 NIOBRARA RIVER NEAR SPENCER, NE

LOCATION.--Lat 42°48'33", long 98°39'22", in SE1/4 NW1/4 sec.30, T.33 N., R.11 W., Boyd County, Hydrologic Unit 10150007, at Spencer powerplant dam 5 mi southeast of Spencer.

DRAINAGE AREA (REVISED).--11,070 mi².

PERIOD OF RECORD.--May to December 1908 (gage heights only); August 1913 to September 1914; October to December 1914, April to September 1915 (gage heights only); August 1927 to September 1936, June 1940 to current year. Published as "near Lynch" 1913-15. Monthly discharge only for some periods, published in WSP 1309.

REVISED RECORDS.--WDR NE-67: Drainage area.

GAGE.--Water-stage recorder and hourly log and powerplant operation. Datum of gage is 1,473.67 ft above sea level. Elevation of taintor gate sill, 1,491.12 ft above sea level. Prior to December 1908, nonrecording gage on former highway bridge 275 ft downstream and Aug. 1, 1913, to Sept. 30, 1915, nonrecording gage at highway bridge 10 mi downstream at different datums. Aug. 1, 1927, to Sept. 30, 1936, and June 14, 1940, to Sept. 30, 1944, discharge computed as flow through powerhouse and over dam. Oct. 1, 1944, to Nov. 10, 1954, water-stage recorder at site 275 ft downstream at datum 4.98 ft higher, and Nov. 11, 1954, to Sept. 30, 1957, at site 0.3 mi downstream at datum 9.78 ft lower. Oct. 1, 1957 to Oct. 21, 1958, discharge computed as flow through powerhouse and over dam. Oct. 28, 1958, to Aug. 13, 1963, water-stage recorder at site 225 ft downstream at present datum. Aug. 14, 1963, gage moved to present site with discharge computed as flow through powerhouse and over dam.

REMARKS.--Records good. Natural flow of stream affected by irrigation and power developments. Daily discharge determined from flow through turbines and taintor gates, computed from relation between head, and gage openings.

COOPERATION.--Powerplant log furnished by Nebraska Public Power District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1710	1570	2680	1880	1430	1610	1830	2640	1270	1090	1040	1620
2	1450	1550	2560	1880	1430	1850	1840	2630	1380	1480	993	1580
3	1380	1540	2530	1820	1430	2420	1750	2410	1280	1430	993	1450
4	1630	1560	2560	1710	1430	3530	1790	2240	1270	1250	1060	2560
5	1650	1560	2660	1780	1430	4840	1940	2260	1340	1850	1060	2120
6	1720	1570	2520	1600	1430	6300	1970	2280	1300	1520	1130	1780
7	1630	1580	2060	1180	1540	4540	2050	2140	1950	1880	1120	1560
8	1910	1650	2000	676	1470	3480	1840	1930	2230	2040	1120	1400
9	2540	1560	2050	515	1360	3270	1580	1900	2370	1700	1290	1320
10	2130	1540	2250	814	1140	3190	1640	1790	2040	1420	2820	1220
11	1570	1570	2090	1110	1120	3290	1670	1740	1970	1320	2030	1120
12	1490	1760	2310	1510	1220	3530	1850	1640	1870	1240	1600	1080
13	1450	2220	2460	1770	1410	3230	1820	1640	1460	1350	1380	1060
14	1450	2140	1890	1820	1890	4000	1450	3480	1550	1390	1370	1080
15	1490	2050	1880	1620	2330	3430	1750	2320	1510	1480	1180	1150
16	1440	2100	2050	1200	2170	2890	1780	1900	1520	1530	1100	1200
17	1440	1850	2020	1050	1940	2360	1650	1720	1480	1420	1120	1100
18	1430	1870	2020	943	2550	1830	1650	1560	1850	1190	991	1060
19	1480	1930	1670	857	3260	1570	1720	1430	2970	1140	1040	1070
20	1470	2040	1640	784	3040	1970	1650	1360	1760	1160	1030	1050
21	1490	2140	1740	767	2790	2070	1580	1320	1550	1100	1040	1110
22	1400	1480	838	1030	2650	1960	1550	1300	1560	1030	985	1350
23	1380	1530	1110	1350	2230	1930	1500	1430	1950	1020	943	1420
24	1390	272	998	1500	1890	1910	1410	1550	1630	1130	920	1420
25	1380	181	1240	1660	1640	1900	1350	1520	1400	1150	1190	1770
26	1410	191	1550	1800	1420	1990	2140	1390	797	1040	1210	1270
27	1370	281	1590	1690	1400	1980	2240	1320	1270	1040	1110	1180
28	1350	445	1260	1650	1510	2060	1990	1210	1150	1000	1060	443
29	1380	755	1170	1540	---	1560	2140	1170	1020	958	1040	1080
30	1530	1240	1270	1450	---	1510	2280	1190	948	948	1050	1010
31	1570	---	1630	1430	---	1860	---	1160	---	982	1810	---
TOTAL	48110	43725	58296	42386	50550	83860	53400	55570	47645	40278	37825	39633
MEAN	1552	1457	1881	1367	1805	2705	1780	1793	1588	1299	1220	1321
MAX	2540	2220	2680	1880	3260	6300	2280	3480	2970	2040	2820	2560
MIN	1350	181	838	515	1120	1510	1350	1160	797	948	920	443
AC-FT	95430	86730	115600	84070	100300	166300	105900	110200	94500	79890	75030	78610

NIOBRARA RIVER BASIN

06465000 NIOBRARA RIVER NEAR SPENCER, NE--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 1994, BY WATER YEAR (WY)

MEAN	1248	1308	1144	1201	1582	2252	1893	1791	1590	1135	1023	1095
MAX	1865	1771	1881	1749	2687	3941	3720	4052	3972	4156	2167	2143
(WY)	1947	1987	1994	1990	1984	1950	1984	1942	1962	1962	1951	1951
MIN	936	899	601	645	839	1276	1179	1014	830	549	612	746
(WY)	1941	1977	1928	1929	1950	1976	1934	1934	1933	1936	1970	1970

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1927 - 1994

ANNUAL TOTAL	655324		601278		
ANNUAL MEAN	1795		1647		1439
HIGHEST ANNUAL MEAN					2066
LOWEST ANNUAL MEAN					1096
HIGHEST DAILY MEAN	4750	Mar 10	6300	Mar 6	19000
LOWEST DAILY MEAN	181	Nov 25	181	Nov 25	5.0
ANNUAL SEVEN-DAY MINIMUM	481	Nov 24	481	Nov 24	168
INSTANTANEOUS PEAK FLOW					27400
INSTANTANEOUS PEAK STAGE					12.16
ANNUAL RUNOFF (AC-FT)	1300000		1193000		1043000
10 PERCENT EXCEEDS	2590		2340		2200
50 PERCENT EXCEEDS	1670		1540		1280
90 PERCENT EXCEEDS	1100		1040		765

NIOBRARA RIVER BASIN

61

06465440 REDBIRD CREEK AT REDBIRD, NE

LOCATION.--Lat 42°45'36", long 98°26'26", in NW1/4/ SW1/4 sec.12, T.32 N., R.10 W., Holt County, Hydrologic Unit 10150007, at right upstream end of county road bridge at Redbird, 1.1 mi upstream from mouth and 4.8 mi south-southeast of Lynch.

DRAINAGE AREA.--157 mi².

PERIOD OF RECORD.--October 1980 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,411.75 ft above sea level. Oct. 1980 to Sept. 30, 1982 at bridge 0.2 mi downstream at datum 1.00 ft higher. Oct. 1, 1982 to Sept. 20, 1990 at bridge 0.2 mi downstream at present datum.

REMARKS.--Records good except for period of estimated record, which is poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	40	e56	e30	e33	e64	46	88	30	35	26	48
2	35	40	e56	e28	e33	e66	46	76	33	41	27	50
3	36	41	e56	e29	e32	e150	45	67	32	43	28	46
4	35	41	57	e30	e32	e450	46	69	31	41	25	104
5	35	39	55	e30	e33	276	46	65	36	50	24	81
6	38	38	52	e28	e35	e150	47	54	34	47	29	56
7	41	40	50	e25	e31	e94	49	52	45	70	27	44
8	55	41	51	e26	e27	e76	48	53	42	70	26	36
9	106	42	51	e27	e22	e68	46	49	41	53	27	32
10	76	42	52	e28	e23	e64	45	47	37	47	38	28
11	64	44	50	e28	e27	e60	44	46	35	42	40	26
12	56	52	52	e28	e32	e58	58	44	36	40	37	25
13	51	92	52	e29	e31	e56	85	43	35	52	35	25
14	49	81	48	e27	e39	e60	68	45	32	46	31	26
15	48	66	48	e25	e43	e60	62	43	30	42	28	24
16	48	61	49	e26	e45	e56	57	42	32	46	25	22
17	48	59	51	e25	e49	e51	54	41	33	44	22	22
18	46	57	52	e23	e56	e50	52	41	67	38	22	22
19	45	53	49	e25	e68	e54	48	39	110	35	19	21
20	45	50	49	e26	e64	e48	49	37	73	32	19	21
21	43	51	49	e27	e62	e52	48	42	48	30	20	22
22	42	57	e35	e32	e62	e60	48	43	80	28	19	23
23	43	47	e31	e37	e60	63	48	38	320	28	17	24
24	43	37	e29	e40	e56	57	48	31	145	31	16	26
25	43	e33	e30	e38	e58	53	48	29	81	33	26	27
26	42	e34	e32	e37	e58	53	62	28	57	30	30	25
27	41	e38	e32	e37	e60	50	67	28	49	28	30	24
28	41	e42	e27	e37	e62	49	67	28	45	26	25	25
29	38	e48	e29	e35	---	47	74	27	40	25	25	25
30	38	e48	e30	e31	---	45	88	28	38	25	59	25
31	37	---	e32	e32	---	47	---	27	---	25	42	---
TOTAL	1443	1454	1392	926	1233	2587	1639	1390	1747	1223	864	1005
MEAN	46.5	48.5	44.9	29.9	44.0	83.5	54.6	44.8	58.2	39.5	27.9	33.5
MAX	106	92	57	40	68	450	88	88	320	70	59	104
MIN	35	33	27	23	22	45	44	27	30	25	16	21
AC-FT	2860	2880	2760	1840	2450	5130	3250	2760	3470	2430	1710	1990

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 1994, BY WATER YEAR (WY)

	34.1	36.2	32.1	32.2	45.4	58.9	58.5	58.2	40.8	34.8	30.2	32.3
MEAN	34.1	36.2	32.1	32.2	45.4	58.9	58.5	58.2	40.8	34.8	30.2	32.3
MAX	58.9	48.5	44.9	43.8	72.9	108	144	103	62.3	129	62.6	87.0
(WY)	1985	1994	1994	1987	1984	1987	1984	1985	1983	1993	1990	1986
MIN	17.3	20.7	22.7	17.8	26.6	21.9	19.0	21.7	19.4	14.3	11.6	13.8
(WY)	1981	1981	1991	1982	1981	1981	1981	1981	1981	1991	1991	1981

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1981 - 1994

ANNUAL TOTAL	21420	16903	
ANNUAL MEAN	58.7	46.3	41.1
HIGHEST ANNUAL MEAN			58.6
LOWEST ANNUAL MEAN			21.1
HIGHEST DAILY MEAN	460	Mar 9	897
LOWEST DAILY MEAN	14	Jan 10	3.8
ANNUAL SEVEN-DAY MINIMUM	16	Jan 7	6.3
INSTANTANEOUS PEAK FLOW			558 (5.16)
INSTANTANEOUS PEAK STAGE			*7.18
ANNUAL RUNOFF (AC-FT)	42490	33530	29780
10 PERCENT EXCEEDS	94	64	66
50 PERCENT EXCEEDS	48	42	34
90 PERCENT EXCEEDS	27	25	18

e Estimated.

* From floodmark; ice jam.

NIOBRARA RIVER BASIN

06465500 NIOBRARA RIVER NEAR VERDEL, NE
(National Stream-Quality Accounting Network, NASQAN, station)

LOCATION.--Lat 42°44'23", long 98°13'26", in NW1/4NW1/4 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 (REVISED).--11,580 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR NE-67: 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.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1970	1690	2380	1950	1540	1780	1980	2850	1290	1090	1120	1850
2	1640	1680	2910	1960	1540	1950	2000	2880	1530	1580	1100	1740
3	1530	1690	2700	1980	1530	2660	1900	2760	1400	1510	1070	1650
4	1660	1680	2720	1820	1530	4570	1900	2470	1370	1610	1130	2300
5	1760	1680	2810	1870	1540	5300	2080	2510	1410	1630	1120	2780
6	1820	1670	2760	1770	1540	6620	1940	2400	1470	1900	1210	2040
7	1840	1730	2390	1440	1580	5330	2470	2390	1660	1860	1240	1790
8	1780	1760	2150	893	1620	3980	1960	2150	2550	2320	1170	1560
9	2800	1730	2120	619	1470	3500	1790	2100	2520	1970	1370	1430
10	2600	1660	2430	799	1270	3430	1780	1970	1980	1680	2460	1370
11	1890	1730	2290	1090	1200	3390	1820	1930	2350	1480	2420	1200
12	1700	1780	2350	1440	1280	3650	1940	1780	1880	1350	1850	1160
13	1620	2450	2670	1830	1460	3510	2040	1800	1670	1500	1510	1150
14	1610	2430	2240	1900	1820	3690	1810	2920	1700	1550	1510	1150
15	1630	2260	1980	1790	2310	4160	1860	2990	1580	1520	1310	1190
16	1600	2340	2160	1450	2530	3190	2000	2140	1620	1730	1210	1280
17	1590	2130	2170	1130	2030	2790	1860	1910	1640	1640	1180	1190
18	1580	1960	2220	1060	2440	2090	1830	1750	1930	1330	1090	1140
19	1620	2080	1900	994	3340	1700	1850	1560	3100	1250	1080	1140
20	1620	2250	1890	869	3380	2050	1810	1500	2320	1270	1100	1120
21	1620	2190	1830	847	3060	2250	1800	1510	1750	1230	1090	1150
22	1590	1840	1210	1030	2920	2180	1690	1420	1750	1150	1070	1380
23	1540	1890	1180	1350	2550	2120	1670	1400	2880	1100	1030	1510
24	1520	699	1110	1590	2180	2110	1620	1690	2240	1150	966	1400
25	1520	283	1250	1710	1930	2030	1420	1640	1690	1320	1140	1830
26	1540	312	1540	1930	1650	2190	1950	1540	975	1140	1400	1400
27	1510	345	1690	1840	1590	2140	2680	1440	1470	1140	1210	1380
28	1500	518	1490	1770	1670	2310	2150	1320	1340	1110	1150	683
29	1460	806	1280	1690	---	1720	2400	1260	1180	1060	1130	1060
30	1610	1150	1290	1580	---	1610	2440	1270	1080	1030	1190	2070
31	1680	---	1580	1530	---	2010	---	1260	---	1020	1740	---
TOTAL	52950	48413	62690	45521	54500	92010	58440	60510	53325	44220	40366	44093
MEAN	1708	1614	2022	1468	1946	2968	1948	1952	1777	1426	1302	1470
MAX	2800	2450	2910	1980	3380	6620	2680	2990	3100	2320	2460	2780
MIN	1460	283	1110	619	1200	1610	1420	1260	975	1020	966	683
AC-FT	105000	96030	124300	90290	108100	182500	115900	120000	105800	87710	80070	87460

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1994, BY WATER YEAR (WY)

MEAN	1361	1457	1313	1370	1787	2572	2170	1995	1719	1339	1083	1212
MAX	1913	2142	2022	1858	2910	4425	4129	3345	4442	5370	2049	2094
(WY)	1974	1974	1994	1990	1984	1960	1984	1988	1962	1962	1962	1986
MIN	1009	943	787	706	941	1444	1282	1228	1044	551	644	704
(WY)	1977	1977	1969	1940	1939	1981	1939	1969	1976	1974	1971	1939

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1938 - 1994

ANNUAL TOTAL	725759	657038	
ANNUAL MEAN	1988	1800	
HIGHEST ANNUAL MEAN			1620
LOWEST ANNUAL MEAN			2461
HIGHEST DAILY MEAN	5790	Mar 10	25100
LOWEST DAILY MEAN	229	Jan 1	104
ANNUAL SEVEN-DAY MINIMUM	588	Nov 24	210
INSTANTANEOUS PEAK FLOW (STAGE)			39000 (10.10)
INSTANTANEOUS PEAK STAGE			*10.62
ANNUAL RUNOFF (AC-FT)	1440000	1303000	1174000
10 PERCENT EXCEEDS	2800	2570	2480
50 PERCENT EXCEEDS	1880	1680	1450
90 PERCENT EXCEEDS	1210	1120	855

* Backwater from ice.

NIOBRARA RIVER BASIN

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06465500 NIOBRARA RIVER NEAR VERDEL, NE--Continued
(National Stream-Quality Accounting Network, NASQAN, station)

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1958-65, 1967 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1975 to September 1980.

WATER TEMPERATURES: June 1958 to September 1965, October 1966 to September 1984.

SUSPENDED-SEDIMENT DISCHARGE: October 1971 to September 1981.

INSTRUMENTATION.--Temperature recorder June 14, 1958 to September 30, 1984.

REMARKS.--Prior to July 1, 1971, sediment records were obtained by U.S. Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 470 microsiemens Dec. 22, 1976; minimum daily, 110 microsiemens Nov. 22, 1976.

WATER TEMPERATURES: Maximum, 38.0 °C July 22, 1964, July 20, 1974; minimum, 0.0 °C on many days during winter periods.

SEDIMENT CONCENTRATIONS: Maximum daily, 12,000 mg/L June 8, 1975; minimum daily, 50 mg/L Dec. 31, Jan. 1, 3, 5, 6, 1978.

SEDIMENT LOADS: Maximum daily, 423,000 tons Mar. 19, 1979; minimum daily, 60 tons Dec. 7, 1972.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. FT ³ /S (00061)	.SPECIFIC CON- DUCT- ANCE (μ S/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (°C) (00010)	BARO- METRIC PRES- SURE (MM OF (HG) (00025)	TURBID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	COLIFORM,	STREP-	
									FECAL, 0.7 μM-MF (COLS./ 100 ML) (31625)	TOCOC CI, FECAL, KF AGAR, (COLS. PER 100 ML, (31673)	
NOV	09...	0925	1820	278	8.3	5.5	727	48	12.1	41	200
MAR	31...	0950	2360	302	8.0	7.5	725	70	11.4	11	50
MAY	24...	0905	1280	292	8.9	27.5	722	55	8.9	150	230
AUG	24...	0910	935	260	8.8	27.0	723	6.7	7.7	74	79

DATE	HARD- NESS TOTAL (MG/L AS CaCO ₃ (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CaCO ₃ (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS- SOLVED (MG/L AS Na) (00930)	SODIUM ADSORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CaCO ₃ (39086)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO ₃ (00452)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO ₃ (00453)
NOV 09...	120	10	38	5.7	9.9	0.4	5.1	108	0	132
MAR 31...	130	8	41	5.8	11	0.4	7.1	119	0	145
MAY 24...	120	7	39	5.9	11	0.4	7.8	115	12	116
AUG 24...	100	0	33	4.7	9.2	0.4	7.0	108	10	112

DATE	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLOR- RIDE DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, RESIDUE AT 180 °C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)
NOV 09...	19	2.0	0.30	43	188	195	0.26	924	1.40	--
MAR 31...	23	2.4	0.30	42	217	209	0.30	1380	1.07	1.07
MAY 24...	25	2.1	0.40	43	213	204	0.29	736	--	--
AUG 24...	14	1.8	0.30	48	177	183	0.24	447	--	--

NIOBRARA RIVER BASIN

06465500 NIOBRARA RIVER NEAR VERDEL, NE--Continued
(National Stream-Quality Accounting Network, NASQAN, station)

WATER QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO- GEN NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
NOV 09...	<0.010	1.40	0.030	0.57	0.60	2.0	0.240	0.090	0.070
MAR 31...	0.030	1.10	0.030	0.87	0.90	2.0	0.410	0.080	0.080
MAY 24...	<0.010	<0.050	0.040	0.86	0.90	0.90	0.190	<0.010	<0.010
AUG 24...	<0.010	<0.050	0.020	0.28	0.30	0.30	0.030	<0.010	<0.010

DATE	TIME	ALUM- INUM, DIS- SOLVED (μG/L AS AL) (01106)	BARIUM, DIS- SOLVED (μG/L AS BA) (01005)	COBALT, DIS- SOLVED (μG/L AS CO) (01035)	IRON, DIS- SOLVED (μG/L AS FE) (01046)	LITHIUM DIS- SOLVED (μG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (μG/L AS MN) (01056)
NOV 09...	0925	10	94	<3	10	11	14
MAR 31...	0950	20	100	<3	8	15	5
MAY 24...	0905	20	91	<3	14	14	3
AUG 24...	0910	30	79	<3	13	12	1

DATE	TIME	MOLYB- DENUM, DIS- SOLVED (μG/L AS MO) (01060)	NICKEL, DIS- SOLVED (μG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (μG/L AS SE) (01145)	SILVER, DIS- SOLVED (μG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (μG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (μG/L AS V) (01085)
NOV 09...		<10	<1	<1	<1.0	200	<6
MAR 31...		<10	<1	<1	<1.0	210	9
MAY 24...		<10	1	1	<1.0	210	13
AUG 24...		<10	<1	<1	<1.0	190	11

DATE	TIME	DIS- CHARGE, INST. FT ³ /S (00061)	TEMPER- ATURE WATER (°C) (00010)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 09...	0925	1820	5.5	1460	7170	15
MAR 31...	0950	2360	7.5	1710	10900	22
MAY 24...	0905	1280	27.5	1130	3910	21
AUG 24...	0910	935	27.0	479	1210	20

06466500 BAZILE CREEK NEAR NIOBRARA, NE

LOCATION.--Lat 42°45'26", long 97°56'50", in SW1/4 sec.7, T.32 N., R.5 W., Knox County, Hydrologic Unit 10170101, on left bank 60 ft shoreward and 20 ft downstream from centerline of bridge on State Highway 12, 2.3 mi upstream from mouth and 4.5 mi east of Niobrara.

DRAINAGE AREA.--440 mi², approximately.

PERIOD OF RECORD.--May 1952 to current year. 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 1,210.81 ft above sea level. Prior to Dec. 16, 1952, nonrecording gage only, and Dec. 16, 1952, to June 16, 1957, water-stage recorder at downstream end of right pier, above 4.2 ft, at present site at datum 4 ft higher. June 17, 1957, to Sept. 14, 1958, water-stage recorder above 8.2 ft at present datum. Sept. 15, 1958, to Oct. 17, 1978, water-stage recorder at downstream end of left pier, above 4.3 ft, at present site and datum.

REMARKS.--Records fair except for period of estimated record, which is poor. Minor diversions for irrigation above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	91	e112	e72	e49	e96	123	200	74	92	76	60
2	90	89	e110	e68	e49	e150	123	191	76	91	74	67
3	90	90	e110	e62	e49	e500	122	170	73	104	104	70
4	84	92	e110	e64	e49	e1130	119	160	69	96	118	139
5	83	92	e118	e64	e50	857	121	162	73	101	96	190
6	86	87	e118	e56	e52	328	122	155	71	101	114	157
7	88	91	e120	e50	e49	176	126	153	88	176	176	98
8	98	94	e120	e50	e47	126	126	151	89	177	109	75
9	117	95	e124	e52	e43	114	124	142	80	143	94	68
10	114	95	e126	e54	e45	106	122	134	72	108	91	64
11	108	93	e110	e54	e48	98	122	128	68	90	86	60
12	103	95	e102	e56	e52	96	148	122	98	162	86	70
13	101	118	95	e56	e52	94	170	116	129	2070	83	75
14	99	121	97	e54	e58	98	218	123	92	684	78	68
15	101	111	100	e50	e60	99	266	135	73	326	73	67
16	99	102	96	e52	e60	90	248	126	66	1640	71	60
17	99	102	96	e50	e66	82	204	113	64	388	66	56
18	102	103	96	e46	e72	81	189	107	438	259	62	54
19	102	102	93	e48	e84	88	172	102	361	221	60	53
20	102	100	90	e49	e82	79	167	97	228	185	56	52
21	101	100	87	e50	e82	83	163	96	173	158	55	53
22	97	99	e84	e56	e82	102	154	91	179	140	53	63
23	95	96	e80	e58	e80	111	150	86	1870	127	50	65
24	94	e86	e76	e60	e78	88	154	82	814	117	49	65
25	95	e80	e78	e56	e80	78	143	77	315	110	51	65
26	93	e82	e80	e54	e80	76	168	74	208	104	56	63
27	95	e88	e78	e52	e80	92	162	74	161	97	57	62
28	95	e94	e68	e52	e84	109	168	71	133	92	52	59
29	92	e102	e70	e50	---	106	178	102	113	86	51	57
30	88	e102	e70	e47	---	102	187	91	101	82	51	57
31	85	---	e72	e48	---	114	---	75	---	80	54	---
TOTAL	2989	2892	2986	1690	1762	5549	4759	3706	6449	8407	2352	2212
MEAN	96.4	96.4	96.3	54.5	62.9	179	159	120	215	271	75.9	73.7
MAX	117	121	126	72	84	1130	266	200	1870	2070	176	190
MIN	83	80	68	46	43	76	119	71	64	80	49	52
AC-FT	5930	5740	5920	3350	3490	11010	9440	7350	12790	16680	4670	4390

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1994, BY WATER YEAR (WY)

	MEAN	48.3	52.0	44.9	44.3	77.4	156	130	121	159	74.8	53.6	43.9
MAX	108	96.4	96.3	87.1	213	621	587	469	933	388	326	118	
(WY)	1985	1994	1994	1986	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	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1952 - 1994

ANNUAL TOTAL	60625	45753	
ANNUAL MEAN	166	125	83.9
MEDIAN OF ANNUAL MEANS			69.7
HIGHEST ANNUAL MEAN			194
LOWEST ANNUAL MEAN			34.9
HIGHEST DAILY MEAN	2560	Mar 9	12300
LOWEST DAILY MEAN	33	Jan 10	.00
ANNUAL SEVEN-DAY MINIMUM	37	Jan 8	.77
INSTANTANEOUS PEAK FLOW (STAGE)			3470 (17.65)
INSTANTANEOUS PEAK STAGE			*19.85
ANNUAL RUNOFF (AC-FT)	120200	90750	60790
10 PERCENT EXCEEDS	292	171	137
50 PERCENT EXCEEDS	110	93	50
90 PERCENT EXCEEDS	64	53	22

e Estimated.

* From floodmark; backwater from ice.

** Backwater from ice.

MISSOURI-LEWIS AND CLARK RIVER BASIN

06467000 LEWIS AND CLARK LAKE NEAR YANKTON, SD

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

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

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

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

REMARKS.--Reservoir is formed by earthfill dam; storage began in July 1955. Maximum capacity, 504,000 acre-ft below elevation 1,210.0 ft (top of spillway gates). Normal maximum, 442,600 acre-ft below elevation 1,208.0 ft. Inactive storage, 157,000 acre-ft below elevation 1,195.0 ft. Dead storage, 23,000 acre-ft below elevation 1,180.0 ft (crest of spillway). From capacity table put into use Nov. 1, 1986; maximum capacity, 491,700 acre-ft. Normal maximum, 432,000 acre-ft. Inactive storage, 149,400 acre-ft. Dead storage, 17,700 acre-ft. Figures given herein represent elevations at powerhouse and total contents adjusted for wind effect. The spillway consists of 14 taintor gates, each 40 ft wide by 30 ft high; spillway capacity, 280,000 ft³/s at pool elevation 1,210.0 ft. Crest of spillway is at elevation 1,180.0 ft. Normal releases are through 3 power units, installation completed in January 1957; maximum release through power units is 35,000 ft³/s at pool elevation, 1,210.0 ft. Water is used for flood control, navigation, power, and incidental uses.

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; minimum since initial filling, 61,950 acre-ft, Apr. 23, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 445,000 acre-ft, Feb. 20; minimum contents, 356,000 acre-ft, May 2.

MONTHEND ELEVATION AND CONTENTS AT 2400 HOURS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	1,206.60	394,000	-
Oct. 31.....	1,206.70	396,000	+2,000
Nov. 30.....	1,206.65	394,000	-2,000
Dec. 31.....	1,206.27	384,000	-10,000
CAL YR 1993.....	-	-	-7,000
Jan. 31.....	1,207.16	408,000	+24,000
Feb. 28.....	1,205.44	362,000	-46,000
Mar. 31.....	1,206.00	377,000	+15,000
Apr. 30.....	1,205.83	373,000	-4,000
May 31.....	1,205.60	368,000	-5,000
June 30.....	1,206.83	400,000	+32,000
July 31.....	1,205.88	374,000	-26,000
Aug. 31.....	1,206.90	402,000	+28,000
Sept. 30.....	1,206.70	396,000	-6,000
WTR YR 1994.....	-	-	+2,000

NOTE.--Lake frozen over Dec. 23 to Mar. 23.

MISSOURI-LEWIS AND CLARK RIVER BASIN

67

06467500 MISSOURI RIVER AT YANKTON, SD

LOCATION.--Lat 42°51'58", long 97°23'37", in SW1/4SW1/4 sec.18, T.93 N., R.55 W., Yankton County, Hydrologic Unit 10170101, near left bank in downstream end of left pier of Meridian Highway Bridge on U.S. Highway 81, 5.2 mi downstream from Gavins Point Dam, 6.0 mi upstream from James River, and at mile 805.8.

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

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1309. Gage-height records collected at same site March 1873 to November 1886, March 1905 to May 1908 (fragmentary), August 1921 to September 1950 (except winter months prior to 1932), are contained in reports of the National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 1,139.68 ft above sea level. Prior to Sept. 20, 1932, nonrecording gage, and Sept. 20, 1932, to Mar. 9, 1967, water-stage recorder at present site and at datum 20.0 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow on Missouri River main-stem completely regulated by a series of 6 dams with the most downstream being Gavins Point Dam (5.2 mi upstream from gage). Many diversions for irrigation and water supply above station. The last main-stem reservoir to reach maximum pool elevation was Oahe Reservoir on Aug. 22, 1975. Maximum discharge prior to Sept. 30, 1975, 480,000 ft³/s, Apr. 13, 1952, maximum gage height, 35.5 ft, Apr. 13, 14, 1952 (present datum); minimum daily discharge, 2,700 ft³/s, Nov. 15, 16, 1940. U.S. Army Corps of Engineers gage-height telemeter and 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.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 50.5 ft, Apr. 5, 1881, ice jam, present datum.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20200	22100	15400	16500	e18000	17400	18600	24800	31100	29100	28000	31700
2	20300	22200	15500	16600	e18000	17800	19500	29000	31100	29000	28100	31700
3	20600	22200	15400	17300	e18000	17900	19600	30700	31100	29200	28000	32100
4	20700	22100	15500	17700	e18000	18100	20300	30800	31100	29000	28000	31600
5	20700	22100	15200	e18000	e18000	18100	23100	29700	31000	29100	27900	31100
6	21000	22100	15200	e18000	e18000	18100	25400	27900	31000	29100	28000	31200
7	21100	22100	12500	e18000	e18000	17900	25700	28100	31200	27500	28000	31500
8	21100	22200	15500	e18000	e18000	17900	26000	28000	31100	27200	28000	31700
9	21100	22300	15400	e18000	e18000	18100	25400	30600	31000	29000	28000	31700
10	20900	22600	15400	e18000	e18000	18200	25300	30700	30900	29100	28000	31600
11	20800	23200	15500	e18000	e18000	18100	25500	30900	30900	29000	28100	31900
12	21100	23600	15500	e18000	e18000	18000	25500	31000	31100	29000	27800	32000
13	21100	22400	15400	e18000	e18000	18000	25200	31100	29500	29200	27100	31900
14	21100	22400	15600	e18000	e18100	18000	25200	31100	26300	29000	26700	31800
15	21100	21600	16400	e18000	e18200	18000	24800	31000	27200	29100	26600	31600
16	22500	20800	16500	e18000	e18200	18000	22200	31200	30100	28700	26700	31700
17	24300	20800	16500	e18000	e18200	18000	22100	31300	26200	28500	27000	32000
18	20900	21200	16300	e18000	e18200	18000	21500	31200	26900	28300	27900	31900
19	20600	21100	16300	e18000	e18200	18000	20900	31200	31000	27900	28500	32200
20	21100	21200	16700	e18000	e18200	18700	21000	31300	31000	27200	28600	32400
21	21700	21300	17400	e18000	e18200	18900	21500	31100	31000	27000	28700	32100
22	21900	19700	e17500	e18000	e18200	19000	22000	31100	29100	27100	29000	32100
23	21900	15800	e17500	e18000	e18200	19000	22000	31100	26400	27100	29500	32200
24	22300	15200	e17000	e18000	e18200	18800	22600	31200	27500	27200	30100	32200
25	22200	15000	e17000	e18000	e18200	18900	22600	31100	27000	27200	30400	31600
26	22000	15400	e17000	e18000	e18200	18800	22200	31000	24200	27000	30500	31400
27	21700	15400	e17000	e18000	e18000	18900	22400	31000	26400	27100	30500	31300
28	21700	15400	e17000	e18000	17600	18700	22500	31000	27700	27100	30600	31300
29	21700	15500	e17000	e18000	---	18300	22600	31100	26200	27400	31200	31400
30	21900	15500	e17000	e18000	---	18300	22500	31100	27500	27900	31500	31700
31	21900	---	16800	e18000	---	18400	---	31000	---	28100	31400	---
TOTAL	663200	604500	499900	554100	506100	566300	685700	943400	873800	873400	888400	952600
MEAN	21390	20150	16130	17870	18070	18270	22860	30430	29130	28170	28660	31750
MAX	24300	23600	17500	18000	18200	19000	26000	31300	31200	29200	31500	32400
MIN	20200	15000	12500	16500	17600	17400	18600	24800	24200	27000	26600	31100
AC-FT	1315000	1199000	991600	1099000	1004000	1123000	1360000	1871000	1733000	1732000	1762000	1889000

e Estimated.

MISSOURI-LEWIS AND CLARK RIVER BASIN

06467500 MISSOURI RIVER AT YANKTON, SD--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEAR, 1976 - 1994, BY WATER YEAR (WY)

MEAN	35400	30810	20220	17430	17230	18680	25060	28560	29290	31590	33060	33860
MAX	62570	62180	36790	26490	24320	31630	36470	38490	40900	46970	52120	51940
(WY)	1976	1976	1987	1987	1976	1976	1976	1979	1979	1978	1978	1978
MIN	17960	7723	12390	11510	10300	10930	11500	17520	17100	9006	11040	19200
(WY)	1993	1993	1991	1990	1991	1991	1993	1993	1984	1993	1993	1993

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

*WATER YEARS 1976 - 1994

ANNUAL TOTAL	5554670		8611400		26800	
ANNUAL MEAN	15220		23590		38220	1976
HIGHEST ANNUAL MEAN					13640	1993
LOWEST ANNUAL MEAN					63400	Nov 5 1975
HIGHEST DAILY MEAN	24300	Oct 17	32400	Sep 20	5070	Mar 6 1992
LOWEST DAILY MEAN	5810	Jul 7	12500	Dec 7	5740	Mar 1 1992
ANNUAL SEVEN-DAY MINIMUM	6370	Mar 30	15000	Dec 1	63700 (23.07)	Nov 5 1975
INSTANTANEOUS PEAK FLOW (STAGE)			32800 (15.49)	Sep 4	23.17	Oct 6 1975
INSTANTANEOUS PEAK STAGE			**17.03	Jan 18		
ANNUAL RUNOFF (AC-FT)	11020000		7080000		19420000	
10 PERCENT EXCEEDS	21800		31200		38700	
50 PERCENT EXCEEDS	15400		22200		27800	
90 PERCENT EXCEEDS	8470		17000		13000	

e* Period of record since main-stem reservoirs reached maximum pool elevation (1976-94). See REMARKS.

** Backwater from ice.

MISSOURI RIVER MAIN STEM

69

06486000 MISSOURI RIVER AT SIOUX CITY, IA

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

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

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

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

GAGE.--Water-stage encoder. Datum of gage is 1,056.98 ft above sea level. 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.--Estimated daily discharges: Jan. 10-13, 16-31, and Feb. 12-14, 21-23, 25, 26. Records good except those for estimated daily discharges, which are poor. Flow regulated by upstream main-stem reservoirs. U.S. Army Corps of Engineers rain-gage and satellite data collection platform at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 441,000 ft³/s Apr. 14, 1952, gage height, 24.28 ft, datum then in use; minimum, 2,500 ft³/s Dec. 29, 1941; minimum gage height, 7.83 ft Jan. 9, 1989.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25600	26700	18600	23500	20200	23400	31800	32500	36500	37000	31900	32000
2	25500	27000	18600	21100	20400	23900	31600	34500	36400	38700	31800	32100
3	25400	27100	18400	19800	20200	25000	31400	39200	35700	37900	31800	32200
4	25300	27100	18400	19700	20300	29200	31000	44000	35200	37100	31700	33200
5	25300	27200	18500	21000	20300	35000	30700	43200	35500	35800	31200	32800
6	25300	26700	18700	20200	20100	37700	31700	41900	34800	35400	31000	31600
7	25500	26500	19300	14200	19800	37400	34500	39000	36300	35500	31000	31500
8	25800	26500	18600	13200	19100	39300	34300	38700	37600	34500	31100	31500
9	26700	26300	19800	17500	18300	40800	34200	38000	38200	32100	30800	31300
10	26300	26100	20300	e19600	19000	39300	34200	39500	39200	34100	30800	31400
11	26100	25900	19400	e20400	20000	37000	34000	40600	39000	34100	30500	31400
12	26000	26400	20200	e20900	e20400	35900	34800	40400	37500	34700	30800	31700
13	25700	27300	20300	e21100	e20200	36100	35200	40100	37600	35400	31500	32500
14	25500	27000	19800	20400	e19500	33400	34100	40000	37900	35700	31500	31900
15	25400	27000	20500	17800	19000	31500	35300	40000	37600	35400	31600	31600
16	25300	27400	21100	e18000	19300	31100	35300	39200	41600	35900	31300	31300
17	25400	26400	21300	e18400	19500	31100	33500	39200	49200	35800	30700	31000
18	27200	26100	21500	e18900	22100	31200	33600	38800	42900	34800	30600	31300
19	26000	26300	21200	e19400	33900	30900	33200	38100	35700	34400	31100	31000
20	24700	26200	21100	e20100	35200	31000	31800	37500	37200	33500	31600	31200
21	24900	25900	20300	e20800	e30700	31900	30900	37000	36800	32200	31600	31800
22	25400	25700	20300	e21400	e30200	32200	30600	36700	36500	31600	31200	32800
23	25600	24600	18300	e21900	e28600	31800	30400	35900	39000	31400	31100	32900
24	25500	21400	18900	e22000	25700	31800	30300	36200	38100	31200	31200	32200
25	25700	18000	19000	e21500	e24300	31100	30000	35600	38800	31300	31600	32000
26	26100	18000	19100	e20500	e21800	31300	30300	35700	44400	31400	32400	31300
27	26200	17000	18600	e20000	23500	31500	30100	35700	41500	31100	31800	31000
28	26100	17600	18600	e19800	24500	32100	31000	36000	39600	30900	31600	31000
29	26100	17600	18400	e19700	---	32300	32500	37100	40000	30800	31400	30900
30	26200	17700	19300	e19800	---	31700	32100	36900	36900	31000	31800	31200
31	26500	---	21700	e19700	---	31800	---	36900	---	31600	31900	---
TOTAL	798300	736700	608100	612300	636100	1009700	974400	1184100	1153200	1052300	971900	951600
MEAN	25750	24560	19620	19750	22720	32570	32480	38200	38440	33950	31350	31720
MAX	27200	27400	21700	23500	35200	40800	35300	44000	49200	38700	32400	33200
MIN	24700	17000	18300	13200	18300	23400	30000	32500	34800	30800	30500	30900
AC-FT	1583000	1461000	1206000	1214000	1262000	2003000	1933000	2349000	2287000	2087000	1928000	1887000

e Estimated

MISSOURI RIVER MAIN STEM

06486000 MISSOURI RIVER AT SIOUX CITY, IA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1994, BY WATER YEAR (WY)

MEAN	35040	30340	18460	15870	16790	22060	32490	32420	33930	35450	35850	35690
MAX	63260	62930	36770	27720	27730	36270	50970	46250	54190	53720	63090	63290
(WY)	1976	1976	1987	1987	1983	1983	1969	1986	1971	1975	1975	1975
MIN	14350	6951	8271	7316	6293	10130	23480	23820	23270	26890	24270	25790
(WY)	1962	1962	1962	1964	1963	1958	1961	1962	1960	1958	1993	1962

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1958 - 1994 ^a	
ANNUAL TOTAL	9630000		10688700			
ANNUAL MEAN	26380		29280		28740	
HIGHEST ANNUAL MEAN					40750	1972
LOWEST ANNUAL MEAN					20030	1962
HIGHEST DAILY MEAN	71300	Jul 15	49200	Jun 17	103000	Jun 25 1984
LOWEST DAILY MEAN	9600	Jan 1	13200	Jan 8	3000	Dec 11 1961
ANNUAL SEVEN-DAY MINIMUM	13000	Jan 1	17800	Nov 25	5430	Feb 22 1963
INSTANTANEOUS PEAK FLOW			50600	Jun 7	101000	Apr 3 1960
INSTANTANEOUS PEAK STAGE			22.24	Jun 7	30.65	Feb 19 1971
ANNUAL RUNOFF (AC-FT)	19100000		21200000		20820000	
10 PERCENT EXCEEDS	39300		37800		43400	
50 PERCENT EXCEEDS	25800		31100		29900	
90 PERCENT EXCEEDS	14400		19500		11900	

^a Post-regulation period

OMAHA CREEK BASIN

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06601000 OMAHA CREEK AT HOMER, NE

LOCATION.--Lat 42°19'29", long 96°29'43", in SW1/4 SE1/4 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 (REVISED).--174 mi².

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

REVISED RECORDS.--WDR NE-72: Drainage area. WDR NE-75-1: 1971-73.

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.

REMARKS.--Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994 MEAN VALUES

1	96	82	e64	e48	e42	e110	67	56	41	48	84	55
2	90	85	e64	e45	e44	125	66	55	50	70	62	56
3	90	83	e66	e42	e49	1010	64	55	44	64	226	51
4	88	83	e66	e40	e47	894	64	54	42	165	119	325
5	83	76	e68	e41	e45	236	64	53	146	206	66	102
6	82	74	e68	e42	e35	147	63	53	74	1450	60	65
7	81	76	e68	e44	e29	113	61	52	54	176	58	58
8	91	80	68	e45	e28	97	63	53	57	127	57	56
9	133	80	73	e46	e33	100	62	52	51	111	58	54
10	93	80	74	e46	e45	115	61	51	47	102	63	51
11	92	81	65	e45	e50	111	61	50	45	95	58	51
12	90	87	70	e45	e56	115	88	50	122	142	71	48
13	87	107	78	e44	e60	107	87	50	234	217	79	46
14	87	81	67	e36	e68	110	76	63	70	129	61	46
15	117	79	72	e38	e80	108	72	57	54	102	55	45
16	100	80	73	e34	e150	99	70	51	51	114	53	43
17	92	79	74	e40	e250	91	67	48	53	98	52	42
18	90	78	76	e46	e1000	89	65	46	197	90	51	44
19	89	79	73	e48	e300	90	64	44	81	86	48	43
20	88	74	e54	e54	122	85	64	43	73	81	46	43
21	87	76	e48	e60	112	86	64	42	84	111	46	45
22	88	75	e44	e62	e90	82	64	43	55	79	46	126
23	88	74	e40	e62	e76	81	61	44	129	75	44	226
24	87	60	e44	e56	e70	77	60	43	64	71	43	95
25	85	e52	e42	e50	e78	72	56	42	93	70	75	86
26	82	e52	e41	e48	e74	71	55	42	545	65	141	73
27	81	e56	e39	e45	e74	71	52	42	75	64	61	70
28	85	e60	e42	e40	e94	71	56	41	58	63	63	66
29	79	e62	e45	e42	---	67	73	55	52	63	53	64
30	77	e64	e48	e38	---	67	59	46	49	60	74	63
31	80	---	e50	e40	---	69	---	40	---	61	58	---
TOTAL	2778	2255	1864	1412	3201	4766	1949	1516	2790	4455	2131	2238
MEAN	89.6	75.2	60.1	45.5	114	154	65.0	48.9	93.0	144	68.7	74.6
MAX	133	107	78	62	1000	1010	88	63	545	1450	226	325
MIN	77	52	39	34	28	67	52	40	41	48	43	42
AC-FT	5510	4470	3700	2800	6350	9450	3870	3010	5530	8840	4230	4440

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1994, BY WATER YEAR (WY)

MEAN	19.5	17.8	15.4	15.4	46.8	72.3	52.6	54.2	84.1	50.2	29.0	23.9
MAX	89.6	75.2	60.1	82.0	472	315	426	248	356	271	181	131
(WY)	1994	1994	1994	1973	1971	1993	1985	1984	1967	1993	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	.75
(WY)	1957	1956	1977	1957	1956	1956	1956	1981	1981	1976	1968	1948

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1946 - 1994

ANNUAL TOTAL	48484	31355	
ANNUAL MEAN	133	85.9	40.0
MEDIAN OF ANNUAL MEANS			31.9
HIGHEST ANNUAL MEAN			130
LOWEST ANNUAL MEAN			6.20
HIGHEST DAILY MEAN	2940	1450	6840
LOWEST DAILY MEAN	18	28	.10
ANNUAL SEVEN-DAY MINIMUM	24	37	.16
INSTANTANEOUS PEAK FLOW (STAGE)		4380(9.77)	18100
INSTANTANEOUS PEAK STAGE		*11.19	**28.47
ANNUAL RUNOFF (AC-FT)	96170	62190	28970
10 PERCENT EXCEEDS	179	112	70
50 PERCENT EXCEEDS	95	65	16
90 PERCENT EXCEEDS	31	43	4.0

e Estimated.
* Backwater from ice.
** From floodmark.

MISSOURI MAIN STEM

06601200 MISSOURI RIVER AT DECATUR, NE

LOCATION.--Lat 42°00'26", long 96°14'29", in NE1/4 SW1/4 sec.36, T.24 N., R.10 E., Burt County, Hydrologic Unit 10230001, on right bank 0.1 mi upstream from Iowa Highway 175 bridge at Decatur, and at mile 691.0.

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

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

GAGE.--Water-stage encoder. Datum of gage is 1,010.00 ft above sea level, supplementary adjustment of 1954.

REMARKS.--Estimated daily discharges: Feb. 19-28 and Mar. 4-10. Records good. Flow regulated by upstream main-stem reservoirs. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water quality data. U.S. Army Corps of Engineers rain-gage and satellite data collection platform at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25800	26900	19600	23300	20700	24000	32600	33800	37400	37200	33500	32800
2	25900	27100	20400	23000	21200	23900	32500	34500	37100	38700	33400	32800
3	25700	27500	20300	21100	21100	24900	32400	37400	36800	39100	33600	32800
4	25500	27600	20200	20400	21100	29600	32500	42300	36400	38700	33800	34100
5	25400	27400	20200	21100	21300	33300	31900	43600	37600	38100	32900	34300
6	25400	27200	20400	21400	21300	37700	32200	42400	37400	38800	32300	32800
7	25500	26900	20100	19500	21200	39200	35000	40200	37500	36600	32100	32500
8	25800	26600	20400	14100	21000	38700	36200	39000	39600	36400	31900	32600
9	26600	26500	19400	16100	20100	e42000	35900	39500	39900	33500	31500	32700
10	27000	26600	21100	18700	20100	e41800	35800	40200	40800	34000	31500	32700
11	26600	26800	20600	20900	20600	38500	35900	42200	41100	34600	31500	32600
12	26400	27200	19900	21400	21300	36500	36300	41600	40100	35100	31800	32600
13	26300	28100	20700	21900	20800	37700	37600	41300	40100	35900	32900	33400
14	26400	28400	20500	22200	20800	37000	36700	41000	39500	36100	33200	33400
15	26600	27700	20200	19500	21100	34300	36500	41100	39200	36100	33000	32700
16	26500	27900	21000	18500	21200	34400	37300	40600	40600	36200	33100	32200
17	26400	27400	21300	19300	21200	33900	36100	40400	47300	37300	32500	31700
18	28100	26500	21600	19700	22200	33600	34400	40400	48300	36200	32000	31700
19	29100	26400	21700	20300	e32900	32900	34700	39700	38400	36000	32100	31500
20	26200	26500	21500	21400	e39400	32300	33200	38700	37300	35100	32600	31300
21	25900	26000	21100	21800	e35500	32400	32200	38000	38600	34100	32900	31500
22	26300	25700	20900	22200	e30900	32900	31700	37500	38700	32900	32400	32500
23	26600	25300	19600	22700	e30200	32300	31700	36900	40800	32600	32000	33800
24	26700	23700	19300	23100	e28100	32400	31900	36900	43400	32300	32100	32800
25	26700	20600	19800	22700	e26500	32500	31800	37000	41400	32100	32400	32600
26	27000	18700	19900	21900	e25500	32300	32200	37200	46600	31900	33300	32400
27	27000	18300	19700	21500	e24000	32500	32300	37300	45500	31900	33300	32000
28	26900	18900	19600	21000	e26900	33000	32500	37000	42200	31900	32700	32000
29	26600	19100	19600	20800	---	33400	34200	37700	41700	31900	32300	31800
30	26600	19300	19600	21000	---	33200	34300	37700	38900	32100	32500	31800
31	26800	---	20600	20800	---	32700	---	37500	---	32700	32800	---
TOTAL	820300	758800	630800	643300	678200	1045800	1020500	1210600	1210200	1086100	1009900	976400
MEAN	26460	25290	20350	20750	24220	33740	34020	39050	40340	35040	32580	32550
MAX	29100	28400	21700	23300	39400	42000	37600	43600	48300	39100	33800	34300
MIN	25400	18300	19300	14100	20100	23900	31700	33800	36400	31900	31500	31300
AC-FT	1627000	1505000	1251000	1276000	1345000	2074000	2024000	2401000	2400000	2154000	2003000	1937000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1994, BY WATER YEAR (WY)

	MEAN	18060	15580	15700	16520	20110	29110	31290	32530	33930	29450	30600
MAX	33830	32870	20390	20750	24220	33740	34020	39050	40340	51480	32580	35840
(WY)	1989	1988	1988	1994	1994	1994	1994	1994	1994	1993	1994	1988
MIN	24250	10470	12070	12360	12210	11580	24410	26130	28240	27680	25700	26750
(WY)	1993	1991	1991	1990	1991	1991	1991	1991	1991	1991	1993	1993

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1988 - 1994

ANNUAL TOTAL	10112500	11090900	
ANNUAL MEAN	27710	30390	
HIGHEST ANNUAL MEAN			25190
LOWEST ANNUAL MEAN			30390
HIGHEST DAILY MEAN	75600	48300	1991
LOWEST DAILY MEAN	10100	14100	1993
ANNUAL SEVEN-DAY MINIMUM	13800	18800	1990
INSTANTANEOUS PEAK FLOW		50700	1993
INSTANTANEOUS PEAK STAGE		27.70	1993
ANNUAL RUNOFF (AC-FT)	20060000	22000000	18250000
10 PERCENT EXCEEDS	42200	39200	34100
50 PERCENT EXCEEDS	26600	32200	26800
90 PERCENT EXCEEDS	14900	20500	12500

eEstimated

MISSOURI MAIN STEM

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06610000 MISSOURI RIVER AT OMAHA, NE

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

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

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 encoder. Datum of gage is 948.24 ft above sea level. 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.--Estimated daily discharges: Feb. 7-13, 27, 28. Records good except those for estimated daily discharges, which are poor. Flow regulated by upstream main-stem reservoirs. U.S. Army Corps of Engineers rain-gage and satellite data collection platform at station.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31900	31200	24400	24200	22800	30200	34500	38000	41500	53300	35400	36100
2	31700	31100	25100	27100	22600	30100	35300	36900	41800	52100	36300	35800
3	31800	30800	26300	27100	23100	29800	36000	37300	40800	50600	36500	35800
4	31700	31000	26300	24900	23200	36500	36800	41200	40300	50000	37700	37200
5	31800	30800	26100	23900	23100	45300	36900	46300	40400	49100	38700	39500
6	31800	30700	26000	24500	23200	50300	36700	47500	42800	50300	36800	39400
7	32100	30500	26100	25000	e23400	54800	37000	46400	41200	51100	36200	37000
8	32700	30100	25700	22800	e23200	53900	39200	44400	41000	48500	36600	36500
9	33400	29800	25200	17900	e23000	50900	39800	43500	43200	46900	38000	36300
10	35900	29700	24400	19000	e22000	51800	39000	44000	44300	43200	36600	35900
11	35900	30100	25400	21800	e22300	51700	38300	45400	45700	43300	36500	35400
12	35000	30900	24400	24200	e23000	47400	38800	47400	45100	43000	36500	34900
13	33800	31900	23400	24800	e24000	44000	39400	47300	46900	44000	36600	34900
14	32900	33000	23900	25100	24100	42500	39800	45800	45800	45400	39000	35500
15	32900	33500	24100	25300	23500	40500	39000	45300	46500	45300	39400	35500
16	33000	33200	24000	22400	24200	39100	38900	45200	46800	45100	38000	34900
17	32300	33200	25200	20500	24800	39800	39800	44200	47800	45100	37700	34800
18	31700	32500	26100	21000	23600	39200	38400	43900	55100	46100	37100	34600
19	32700	31400	26700	21000	35400	38600	37700	44100	58200	44300	36600	34900
20	33300	31400	27100	21300	43500	37300	38200	43600	48600	43500	36700	34900
21	30600	31500	27000	23400	40600	36600	37200	43000	48200	42500	37200	35100
22	30000	31100	26100	24300	36300	36500	36200	42600	52000	41400	37100	36500
23	30400	30800	24700	24100	34800	36800	35500	42500	53700	39700	36500	38400
24	30700	30400	23000	24600	33300	35700	35200	42200	55700	39300	35800	41300
25	30500	28700	22300	25200	31400	35200	35500	42000	60000	38900	35700	40700
26	30600	25200	23200	25000	29900	34600	35600	42100	58500	38200	36500	38500
27	31100	22700	23500	24200	e28500	33800	36000	42100	62100	37600	37300	37300
28	31400	22400	23300	23600	e28900	33300	36200	42000	60800	36800	36800	36700
29	31400	23300	23000	23200	---	33600	36500	42200	56400	36300	36200	36500
30	30900	24000	23000	22800	---	34200	38100	42300	55900	35600	35900	36100
31	31000	---	23100	23100	---	34300	---	41700	---	35200	36000	---
TOTAL	996900	896900	768100	727300	761700	1238300	1121500	1342400	1467100	1361700	1143900	1096900
MEAN	32160	29900	24780	23460	27200	39950	37380	43300	48900	43930	36900	36560
MAX	35900	33500	27100	27100	43500	54800	39800	47500	62100	53300	39400	41300
MIN	30000	22400	22300	17900	22000	29800	34500	36900	40300	35200	35400	34600
TOTAL	996900	896900	768100	727300	761700	1238300	1121500	1342400	1467100	1361700	1143900	1096900
MEAN	32160	29900	24780	23460	27200	39950	37380	43300	48900	43930	36900	36560
MAX	35900	33500	27100	27100	43500	54800	39800	47500	62100	53300	39400	41300
MIN	30000	22400	22300	17900	22000	29800	34500	36900	40300	35200	35400	34600
MED	31800	30800	24700	24100	23800	37300	37100	43500	46800	44000	36600	36100

e Estimated

MISSOURI MAIN STEM

06610000 MISSOURI RIVER AT OMAHA, NE--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1994, BY WATER YEAR (WY)

MEAN	37350	33140	20400	17380	19330	27300	38310	37110	39840	39630	38150	38120
MAX	64410	66130	42800	33250	36590	53980	66320	60430	75730	78560	64830	65020
(WY)	1976	1976	1987	1987	1983	1983	1969	1986	1984	1993	1975	1975
MIN	16920	8324	8296	8425	8162	12090	24630	26450	26890	27150	27280	28290
(WY)	1962	1962	1962	1964	1963	1958	1959	1961	1961	1958	1958	1958

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1958 - 1994a

ANNUAL TOTAL	13835700		12922700			
ANNUAL MEAN	37910		35400			32210
HIGHEST ANNUAL MEAN						46090
LOWEST ANNUAL MEAN						20790
HIGHEST DAILY MEAN	113000	Jul 10	62100	Jun 27	116000	Apr 4 1960
LOWEST DAILY MEAN	13200	Jan 3	17900	Jan 9	2440	Dec 14 1961
ANNUAL SEVEN-DAY MINIMUM	16400	Jan 1	22000	Jan 16	4650	Dec 10 1961
INSTANTANEOUS PEAK FLOW			63800	Jun 27	120000	Apr 1 1960
INSTANTANEOUS PEAK STAGE			22.79	Jun 27	30.26	Jul 10 1993
ANNUAL RUNOFF (AC-FT)	27440000		25630000		23340000	
10 PERCENT EXCEEDS	62100		46400		50100	
50 PERCENT EXCEEDS	33000		35900		32400	
90 PERCENT EXCEEDS	17900		23500		14100	

a Post-regulation period

DRAINAGE AREA.--22,218 mi², of which 1,929 mi² is probably 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 Mar. 9, 1994. Datum of gage is 4,025 ft above sea level, from topographic map. Prior to Nov. 6, 1929, non-recording gage and Nov. 6, 1929, to Sept. 30, 1959, water-stage recorder at site 0.2 mi upstream at different datum. Oct. 7, 1959 to Feb. 22, 1972 water-stage recorder at site 0.2 mi upstream at different datum. Feb. 22, 1972 to Mar. 9, 1994, water-stage recorder at site 0.3 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Dec. 18, 24, Jan. 8, and Jan. 27 to Feb. 10. Records fair 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. U.S. Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	635	303	242	198	178	188	164	166	364	1290	1140	1100
2	544	297	242	199	188	187	164	168	384	1360	1180	1050
3	509	295	246	201	185	186	161	168	384	1370	1200	921
4	490	297	246	200	179	186	162	163	453	1400	1170	839
5	486	295	243	204	187	183	162	168	391	1390	1160	690
6	512	291	239	203	187	187	159	177	362	1290	1150	703
7	469	294	236	199	183	189	160	179	343	1450	1120	706
8	471	289	234	200	179	183	159	166	330	1530	1100	694
9	459	281	236	204	170	176	159	176	325	1420	1100	640
10	452	276	242	204	173	177	162	180	342	1340	1140	655
11	437	275	252	201	177	176	165	222	394	1200	1190	656
12	422	293	247	199	174	173	165	245	412	1170	1240	716
13	412	302	242	193	170	173	164	524	435	1190	1250	716
14	402	294	231	190	166	173	164	833	450	1290	1240	677
15	394	292	223	192	170	173	160	723	439	1750	1230	633
16	385	287	225	191	179	173	155	635	564	1650	1160	655
17	378	284	221	183	182	174	155	605	817	1690	1120	650
18	379	288	210	180	186	170	151	623	937	1530	1110	648
19	378	288	208	173	188	169	144	585	985	1420	1130	638
20	375	285	207	176	190	169	144	560	1220	1370	1130	640
21	363	282	205	176	190	169	142	568	1180	1270	1160	667
22	354	280	198	176	190	166	143	556	1140	1150	1160	705
23	347	275	199	178	190	167	150	575	1040	1120	1120	685
24	340	260	199	179	190	164	145	634	910	1100	1070	587
25	336	261	199	176	187	164	151	666	940	1130	1070	507
26	328	262	204	176	190	166	167	593	1100	1180	1070	460
27	322	257	204	175	188	167	166	497	1290	1150	1090	422
28	316	227	204	173	186	165	173	465	1350	1080	1110	406
29	309	225	202	172	---	165	169	432	1390	1030	1130	381
30	301	234	201	178	---	164	168	413	1340	1070	1100	376
31	300	---	201	170	---	164	---	367	---	1090	1080	---
TOTAL	12605	8369	6888	5819	5102	5386	4753	13032	22011	40470	35420	19823
MEAN	407	279	222	188	182	174	158	420	734	1305	1143	661
MAX	635	303	252	204	190	189	173	833	1390	1750	1250	1100
MIN	300	225	198	170	166	164	142	163	325	1030	1070	376
AC-FT	25000	16600	13660	11540	10120	10680	9430	25850	43660	80270	70260	39320

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1994, BY WATER YEAR (WY)

MEAN	516	434	385	340	347	502	607	1171	1599	1530	1275	873
MAX	1666	1454	895	751	1063	4202	4407	7226	10360	7170	5751	4766
(WY)	1987	1987	1930	1930	1984	1974	1974	1971	1929	1983	1983	1983
MIN	150	174	191	166	148	141	141	43.9	49.1	611	154	230
(WY)	1957	1935	1991	1993	1993	1991	1991	1990	1992	1934	1934	1934

SUMMARY STATISTICS		FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1929 - 1994	
ANNUAL TOTAL	176152			179678		--	
ANNUAL MEAN	483			492		780	
HIGHEST ANNUAL MEAN	--			--		2863	1984
LOWEST ANNUAL MEAN	--			--		388	1992
HIGHEST DAILY MEAN	3080	Aug 20		1750	Jul 15	17600	Jun 2 1929
LOWEST DAILY MEAN	132	Feb 17		142	Apr 21	3.9	May 13 1992
ANNUAL SEVEN-DAY MINIMUM	137	Feb 24		146	Apr 18	4.4	Jun 20 1992
INSTANTANEOUS PEAK FLOW	--			2090	Jul 15	17900a	Jun 2 1929
INSTANTANEOUS PEAK STAGE	--			3.73	Jul 15	7.04b	Jun 2 1929
ANNUAL RUNOFF (AC-FT)	349400			356400		565200	
10 PERCENT EXCEEDS	1160			1160		1440	
50 PERCENT EXCEEDS	287			291		490	
90 PERCENT EXCEEDS	158			166		210	

a maximum observed.

b site and datum then in use.

PLATTE RIVER BASIN

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 1993 TO SEPTEMBER 1994

	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (μ S/CM)	TEMPER- ATURE WATER (° C)	TEMPER- ATURE AIR (° C)
NOV						
	03...	0850	295	967	5.5	9.0
DEC						
	09...	1610	241	996	5.0	10.0
JAN						
	21...	1545	176	1010	6.0	8.0
MAR						
	03...	0730	187	1020	6.5	2.0
APR						
	08...	1530	160	1020	14.0	10.0
MAY						
	04...	1030	163	980	15.0	16.5
	17...	1715	601	860	20.5	26.0
JUN						
	01...	0730	380	880	22.0	15.0
	28...	0845	1310	777	19.5	--
JUL						
	26...	0915	1190	695	25.5	--

PLATTE RIVER BASIN

77

06677500 HORSE CREEK NEAR LYMAN, NE

LOCATION.--Lat 41°56'21", long 103°59'13", in SE1/4 NE1/4 sec.25, T.23 N., R.58 W., Scotts Bluff County, Hydrologic Unit 10180012, on right bank 10 ft upstream from county highway bridge, 1.8 mi upstream from mouth, 2.2 mi downstream from Owl Creek, and 3.2 mi northeast of Lyman.

DRAINAGE AREA (REVISED).--1,707 mi², approximately, of which about 40 mi² is noncontributing.

PERIOD OF RECORD.--February 1931 to current year.

REVISED RECORDS.--WSP 926: 1940(M). WDR NE-67: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,992.84 ft above sea level (levels by private engineering firm). See WSP 2118 for history of changes prior to Apr. 17, 1967.

REMARKS.--Records good, except for periods of estimated record which are poor.. Natural flow of stream affected by ground-water withdrawals and diversions for irrigation and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	50	e39	e36	e56	133	51	26	249	203	146	213
2	74	47	e39	e37	e56	161	50	25	274	180	163	234
3	70	48	e39	e39	e56	142	50	25	263	133	157	242
4	68	47	e38	e40	e54	132	50	25	277	137	157	234
5	67	45	e38	e41	e54	124	47	24	300	139	152	243
6	67	43	e37	42	e54	131	43	25	247	135	148	250
7	67	44	e37	e34	e48	125	40	26	233	156	139	256
8	70	42	e37	e36	e40	119	39	25	224	164	134	239
9	69	41	e36	e37	e36	112	38	24	200	145	128	218
10	69	43	e35	e37	e36	103	37	21	186	142	115	211
11	67	43	e35	e36	e40	99	38	17	192	146	106	199
12	63	e42	e34	e35	e45	97	36	115	188	153	105	204
13	63	e44	e33	e36	e54	95	33	210	176	167	112	207
14	64	e50	e33	40	78	95	32	174	127	181	114	204
15	62	e45	e33	39	86	95	30	321	116	472	113	195
16	62	e44	e32	43	96	105	29	233	133	383	120	208
17	61	e42	e32	37	102	98	28	126	116	438	118	211
18	73	e40	e31	e40	114	88	28	105	112	374	112	190
19	70	e41	e31	e40	105	84	28	78	287	310	114	201
20	70	e41	e30	43	111	80	28	73	473	278	125	273
21	62	e40	e30	e45	109	79	27	159	341	286	136	292
22	59	e39	e31	e46	102	76	28	155	582	240	143	226
23	57	e38	e31	e46	106	73	32	151	392	214	146	179
24	57	e37	e32	e47	e96	63	28	309	342	204	150	163
25	55	e38	e32	e49	e82	58	28	213	306	196	150	152
26	53	e39	e33	e50	e78	57	29	203	273	187	142	145
27	52	e40	e33	e52	e74	54	31	211	253	165	139	121
28	53	e41	e34	e54	117	54	30	214	234	158	143	91
29	49	e42	e34	e54	---	54	29	221	200	163	167	80
30	48	e41	e35	e56	---	51	28	238	185	161	189	77
31	50	---	e36	e56	---	51	---	247	---	149	213	---
TOTAL	1947	1277	1060	1323	2085	2888	1045	4019	7481	6559	4296	5958
MEAN	62.8	42.6	34.2	42.7	74.5	93.2	34.8	130	249	212	139	199
MAX	76	50	39	56	117	161	51	321	582	472	213	292
MIN	48	37	30	34	36	51	27	17	112	133	105	77
AC-FT	3860	2530	2100	2620	4140	5730	2070	7970	14840	13010	8520	11820

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1994, BY WATER YEAR (WY)

MEAN	69.4	40.6	30.5	25.2	31.3	36.8	38.8	102	161	102	96.2	164
MAX	146	117	138	100	141	173	229	464	456	212	273	349
(WY)	1985	1985	1985	1974	1984	1984	1984	1983	1983	1994	1945	1986
MIN	12.7	10.6	11.9	4.23	7.83	7.45	9.40	8.39	10.4	12.5	5.92	12.9
(WY)	1935	1935	1935	1949	1936	1935	1941	1934	1940	1940	1940	1934

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1931 - 1994

ANNUAL TOTAL	34657	39938	
ANNUAL MEAN	95.0	109	74.9
HIGHEST ANNUAL MEAN			174
LOWEST ANNUAL MEAN			18.1
HIGHEST DAILY MEAN	690	582	1160
LOWEST DAILY MEAN	12	17	.40
ANNUAL SEVEN-DAY MINIMUM	15	23	.69
INSTANTANEOUS PEAK FLOW		913	5110
INSTANTANEOUS PEAK STAGE		7.16	10.82
ANNUAL RUNOFF (AC-FT)	68740	79220	54280
10 PERCENT EXCEEDS	214	234	182
50 PERCENT EXCEEDS	50	73	41
90 PERCENT EXCEEDS	23	32	16

PLATTE RIVER BASIN

06679500 NORTH PLATTE RIVER AT MITCHELL, NE

LOCATION.--Lat 41°55'38", long 103°48'48", in NE1/4 NE1/4 sec.33, T.23 N., R.56 W., Scotts Bluff County, Hydrologic Unit 10180009, on right bank of main channel 10 ft downstream from bridge on State Highway 29, 0.5 mi south of Mitchell, and at mile 186.

DRAINAGE AREA.--24,300 mi², approximately, of which about 22,300 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--June 1901 to September 1910, May to December 1911, February 1912 to July 1913 (gage heights only), May 1916 to October 1918 (irrigation seasons only), May 1920 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WDR NE-67, WDR NE-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,928.3 ft above sea level. See WSP 1918 for history of changes prior to May 27, 1960. May 27, 1960, to Aug. 24, 1971, at datum 2.00 ft higher; Aug. 25, 1971, to May 18, 1992, at datum 1.00 ft higher.

REMARKS.--Records good except for period of sandpoint plugging in June, which is fair. 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	979	625	580	478	427	498	383	355	396	380	339	421
2	930	613	571	476	431	535	372	346	379	352	356	488
3	868	614	558	479	440	523	378	339	359	345	376	474
4	840	595	556	478	444	515	375	333	393	358	358	430
5	825	574	550	473	449	507	373	309	418	381	328	423
6	860	566	537	471	461	518	372	300	381	348	325	412
7	841	568	541	466	435	518	375	308	329	364	303	407
8	858	566	543	440	410	498	360	298	312	548	287	397
9	843	552	545	445	403	488	345	255	296	537	274	373
10	834	537	559	455	452	481	337	181	281	485	255	361
11	821	540	566	454	465	475	337	155	267	435	262	349
12	802	558	570	453	447	462	349	153	270	372	290	352
13	787	595	557	450	452	461	349	303	301	353	307	367
14	777	583	537	452	464	464	337	435	251	421	327	378
15	756	578	525	454	470	457	334	552	212	906	332	350
16	746	556	518	453	484	454	333	512	229	1280	314	351
17	735	552	524	456	491	452	336	361	212	1320	296	371
18	758	555	509	428	507	445	330	290	233	1150	273	367
19	770	561	495	429	501	442	328	254	446	956	269	381
20	760	563	498	435	500	423	334	229	553	860	273	417
21	740	564	497	433	497	423	332	238	807	784	286	494
22	721	583	498	441	483	426	326	253	879	636	308	621
23	709	579	493	447	489	420	337	256	714	520	296	742
24	694	577	492	453	488	411	330	510	597	456	279	979
25	685	582	488	449	451	411	320	431	533	436	279	944
26	664	588	500	446	440	395	329	413	494	441	273	921
27	659	585	502	468	460	387	331	384	475	432	274	839
28	655	592	494	472	483	385	340	381	484	405	280	774
29	627	595	487	477	---	387	342	401	475	361	322	785
30	615	585	479	467	---	383	352	419	443	342	378	767
31	627	---	478	443	---	388	---	411	---	337	381	---
TOTAL	23786	17281	16247	14121	12924	14032	10376	10365	12419	17301	9500	15735
MEAN	767	576	524	456	462	453	346	334	414	558	306	524
MAX	979	625	580	479	507	535	383	552	879	1320	381	979
MIN	615	537	478	428	403	383	320	153	212	337	255	349
AC-FT	47180	34280	32230	28010	25630	27830	20580	20560	24630	34320	18840	31210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1994, BY WATER YEAR (WY)

	MEAN	849	671	568	505	495	758	970	1198	1486	807	581	744
MAX	2235	1833	1251	1040	1236	4091	5244	7388	7693	6868	5294	4987	
(WY)	1987	1987	1985	1985	1984	1974	1984	1971	1984	1983	1983	1983	
MIN	478	478	377	366	347	308	278	166	128	130	137	171	
(WY)	1961	1961	1991	1991	1991	1991	1967	1992	1992	1963	1963	1960	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1958 - 1994
(SINCE GLENDO PROJECT)

ANNUAL TOTAL	181718	174087	803
ANNUAL MEAN	498	477	539
MEDIAN OF ANNUAL MEANS			3008
HIGHEST ANNUAL MEAN			330
LOWEST ANNUAL MEAN			1984
HIGHEST DAILY MEAN	2060	Aug 21	1320
LOWEST DAILY MEAN	128	May 16	153
ANNUAL SEVEN-DAY MINIMUM	201	May 11	236
INSTANTANEOUS PEAK FLOW (STAGE)			1470
INSTANTANEOUS PEAK STAGE			3.91
ANNUAL RUNOFF (AC-FT)	360400	345300	581700
10 PERCENT EXCEEDS	780	741	1330
50 PERCENT EXCEEDS	422	452	495
90 PERCENT EXCEEDS	302	299	238

PLATTE RIVER BASIN

79

06686000 NORTH PLATTE RIVER AT LISCO, NE
(National Stream-Quality Accounting Network, NASQAN, station)

LOCATION.--Lat 41°29'24", long 102°37'24", in SW1/4 NE1/4 sec.33, T.18 N., R.46 W., Garden County, Hydrologic Unit 10180009, on left bank 40 ft downstream of highway bridge, 0.5 mi south of Lisco, and at mile 113.

DRAINAGE AREA.--26,700 mi², approximately, of which about 24,700 mi² contributes directly to surface runoff..

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May to September 1916, June to October 1917, September 1931 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WDR NE-67, WDR NE-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,474.5 ft above sea level. Prior to Sept. 8, 1931, nonrecording gage at different datum, Sept. 8, 1931 to May 3, 1932, nonrecording gage at datum 1.0 ft higher, May 4, 1932, to May 28, 1974, water-stage recorder at datum 1.0 ft higher, and May 29, 1974 to Oct. 31, 1988, water-stage recorder at present datum; all at downstream side of right bridge pier 40 ft upstream and 600 ft south of present site.

REMARKS.-- Records good except for periods of estimated record, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water and return flow from irrigated areas.

CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1690	1280	e1400	1050	e900	e900	675	768	705	422	659	772
2	1710	1280	e1400	1030	e900	977	661	828	678	396	653	931
3	1640	1270	e1400	1020	e900	1000	652	781	672	361	746	1100
4	1580	1240	e1350	1030	e900	1020	702	821	670	331	743	1160
5	1580	1240	e1350	1040	e900	1000	730	735	667	344	771	1140
6	1560	1240	e1300	e1020	e920	1040	755	720	680	337	767	1140
7	1580	1230	e1300	e1000	e940	1020	764	664	677	474	734	1080
8	1700	1240	e1300	e980	e940	990	779	615	759	637	725	1030
9	1710	1210	e1300	e1000	e960	990	813	558	882	761	743	994
10	1700	1180	e1250	e1000	e980	986	859	520	944	842	661	960
11	1700	1200	e1250	1010	e980	968	852	466	762	777	606	939
12	1670	1400	e1250	996	e1000	938	803	423	693	689	584	907
13	1650	1620	e1200	1030	e1020	949	805	383	658	571	595	861
14	1650	1530	e1160	1060	e1120	958	789	408	614	555	615	908
15	1550	1450	e1100	1080	e1200	957	771	504	563	817	667	954
16	1460	1380	e1000	1100	e1180	957	775	660	496	2170	696	983
17	1470	1330	e980	1080	e1000	926	784	870	442	2490	697	1020
18	1470	1340	e960	e1000	e900	890	798	796	411	2470	679	1050
19	1490	1350	e960	e900	e800	879	783	783	408	2420	661	1090
20	1500	1340	e960	e800	e740	846	766	645	397	2230	622	1100
21	1490	1290	980	e960	e720	836	777	560	526	2010	611	1100
22	1440	1290	e980	e1080	e720	808	819	542	975	1810	609	1190
23	1400	1260	e980	e1200	e740	803	807	519	1330	1540	656	1370
24	1380	e1200	e980	e1060	e760	779	843	502	1240	1300	674	1680
25	1360	e1200	e980	e1000	e800	781	842	674	1020	1080	684	1900
26	1330	e1200	e1000	1050	e740	767	863	828	824	983	643	1740
27	1320	e1200	1090	1080	e700	739	835	749	638	948	556	1590
28	1330	e1250	1130	1100	e800	742	823	726	518	909	501	1470
29	1330	e1300	1150	1080	---	724	762	680	466	844	547	1410
30	1310	e1350	1080	974	---	714	756	658	443	762	588	1390
31	1310	---	1080	e960	---	693	---	664	---	673	660	---
TOTAL	47060	38890	35600	31770	25160	27577	23443	20050	20758	32953	20353	34959
MEAN	1518	1296	1148	1025	899	890	781	647	692	1063	657	1165
MAX	1710	1620	1400	1200	1200	1040	863	870	1330	2490	771	1900
MIN	1310	1180	960	800	700	693	652	383	397	331	501	772
AC-FT	93340	77140	70610	63020	49900	54700	46500	39770	41170	65360	40370	69340

PLATTE RIVER BASIN

06686000 NORTH PLATTE RIVER AT LISCO, NE--Continued
(National Stream-Quality Accounting Network, NASQAN, station)

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1994, BY WATER YEAR (WY)

MEAN	1647	1396	1199	1102	1128	1324	1460	1700	2022	1131	961	1500
MAX	2890	2571	1855	1594	1861	4658	5477	7757	8203	6250	5346	5463
(WY)	1987	1987	1987	1974	1984	1974	1984	1971	1971	1983	1983	1983
MIN	1043	957	813	790	810	778	644	244	263	101	188	404
(WY)	1993	1990	1993	1962	1990	1991	1991	1992	1960	1960	1960	1960

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1958 - 1994 (SINCE GLENDON PROJECT)	
ANNUAL TOTAL	387825		358573			
ANNUAL MEAN	1063		982		1381	
MEDIAN OF ANNUAL MEANS					1142	
HIGHEST ANNUAL MEAN					3403	
LOWEST ANNUAL MEAN					769	
HIGHEST DAILY MEAN	2740	Aug 23	2490	Jul 17	11700	Jun 3 1971
LOWEST DAILY MEAN	289	Jul 13	331	Jul 4	43	Jul 13 1960
ANNUAL SEVEN-DAY MINIMUM	352	Jul 10	376	Jun 30	61	Jul 10 1960
INSTANTANEOUS PEAK FLOW (STAGE)			2850	(2.59)Jul 16	*20100	Jun 27 1917
INSTANTANEOUS PEAK STAGE			**4.55	Feb 1		
ANNUAL RUNOFF (AC-FT)	769300	711200	1000000			
10 PERCENT EXCEEDS	1580	1450	2100			
50 PERCENT EXCEEDS	1010	949	1150			
90 PERCENT EXCEEDS	534	602	538			

e Estimated.

* From rating curve extended above 15,000 cfs.

** Backwater from ice.

PLATTE RIVER BASIN

81

06686000 NORTH PLATTE RIVER AT LISCO, NE--Continued
(National Stream-Quality Accounting Network, NASQAN, station)

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970 to July 1994 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1970 to September 1981.

WATER TEMPERATURES: October 1970 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,280 microsiemens Feb. 11, 1981; minimum daily, 275 microsiemens Mar. 1, 1978.

WATER TEMPERATURES: Maximum, 31.0°C July 19, 1972; minimum, 0.0°C on many days during winter periods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. FT ³ /S (00061)	SPECIFIC CON- DUCT- ANCE (μS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (°C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TURBID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	COLIFORM, FECAL, 0.7 μM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
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NOV	17...	1300	1300	1010	8.7	3.5	674	23	11.9	11	2700
FEB	10...	1230	980	1010	7.7	0.0	670	2.8	11.8	K10	K64
MAR	10...	1200	967	1000	8.7	5.5	670	32	11.2	10	1300
MAY	05...	0830	762	981	8.2	12.5	668	21	9.7	140	140
JUL	28...	1130	930	936	8.5	22.0	695	89	7.9	210	390

DATE	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CaCO ₃ (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS- SOLVED (MG/L AS Na) (00930)	SODIUM ADSORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CaCO ₃ (39086)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO ₃ (00452)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO ₃ (00453)
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NOV	17...	310	35	89	21	98	2	9.9	274	24	286
FEB	10...	330	49	93	23	110	3	12	278	0	339
MAR	10...	290	57	84	20	99	3	10	237	8	272
MAY	05...	280	38	77	20	99	3	11	238	0	290
JUL	28...	280	54	78	21	88	2	9.6	228	7	264

DATE	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, RESIDUE AT 180 °C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)
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NOV	17...	230	24	0.50	39	690	693	0.94	2420	3.47	3.47
FEB	10...	230	25	0.50	48	744	727	1.01	1970	4.17	4.17
MAR	10...	210	23	0.50	38	651	643	0.89	1700	3.59	3.59
MAY	05...	220	24	0.50	36	642	644	0.87	1320	2.90	--
JUL	28...	220	21	0.50	32	651	608	0.89	1630	--	--

PLATTE RIVER BASIN

06686000 NORTH PLATTE RIVER AT LISCO, NE--Continued
(National Stream-Quality Accounting Network, NASQAN, station)

WATER QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO- GEN, NITRITE SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
NOV 17...	0.030	3.50	0.030	0.47	0.50	4.0	0.090	<0.010	0.020
FEB 10...	0.030	4.20	0.070	0.23	0.30	4.5	0.050	0.040	0.040
MAR 10...	0.010	3.60	0.030	0.67	0.70	4.3	0.090	0.030	0.030
MAY 05...	<0.010	2.90	0.010	0.59	0.60	3.5	0.080	0.020	0.010
JUL 28...	0.010	<0.050	0.080	1.0	1.1	1.1	0.340	0.040	0.010

DATE	TIME	INUM, DIS- SOLVED (μG/L AS AL) (01106)	ALUM- BARIUM, DIS- SOLVED (μG/L AS BA) (01005)	COBALT, DIS- SOLVED (μG/L AS CO) (01035)	IRON, DIS- SOLVED (μG/L AS FE) (01046)	LITHIUM DIS- SOLVED (μG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (μG/L AS MN) (01056)
NOV 17...	1300	<10	90	<3	4	34	1
MAR 10...	1200	<10	91	<3	7	37	2
MAY 05...	0830	<10	89	<3	3	37	<1
JUL 28...	1130	<10	97	<3	5	43	2

DATE	MOLYB- DENUM, DIS- SOLVED (μG/L AS MO) (01060)	NICKEL, DIS- SOLVED (μG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (μG/L AS SE) (01145)	SILVER, DIS- SOLVED (μG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (μG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (μG/L AS V) (01085)
NOV 17...	<10	<1	4	<1.0	920	6
MAR 10...	<10	<1	3	<1.0	890	11
MAY 05...	10	<1	4	<1.0	840	13
JUL 28...	<10	<1	3	<1.0	800	10

DATE	TIME	DIS- CHARGE, INST. FT ³ /S (00061)	TEMPER- ATURE WATER (°C) (00010)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDIMENT, DISCHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 17...	1300		1300	3.5	314	1100
FEB 10...	1230		980	0.0	186	47
MAR 10...	1200		967	5.5	260	679
MAY 05...	0830		762	12.5	198	407
JUL 28...	1130		930	22.0	455	1140

PLATTE RIVER BASIN

83

06690000 LAKE MCCONAUGHY NEAR KEYSTONE, NE

LOCATION.--Lat 41°12'45", long 101°40'03", in NW1/4SW1/4 sec.3, T.14 N., R.38 W., Keith County, Hydrologic Unit 10180014, near right bank at outlet tower of Kingsley Dam on North Platte River, 4.5 mi west of Keystone, and at mile 55.8.

DRAINAGE AREA.--29,300 mi², approximately, of which about 25,800 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--February 1941 to current year.

GAGE.--Electric tape gage read once daily. Datum of gage is sea level.

REMARKS.--Reservoir is formed by earthfill dam; storage began Feb. 9, 1941. Capacity, 1,948,000 acre-ft between elevations 3,130.0 ft, sill of outlet gates, and 3,270.0 ft, top of morning-glory spillway gates. Elevation of crest of morning-glory spillway is 3,254.0 ft. Dead storage negligible. Figures given herein represent total contents. Water is used for power development and irrigation in South-Central Nebraska by the Central Nebraska Public Power and Irrigation District.

COOPERATION.--Records of elevations and capacity table furnished by the Central Nebraska Public Power and Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 1,920,000 acre-ft July 12-16, 1971, elevation, 3,269.1 ft; minimum observed since operation of reservoir began, 32,860 acre-ft Sept. 29, 1941, elevation, 3,153.4 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 1,560,000 acre-ft May 18, elevation, 3,257.8 ft; minimum observed, 1,216,000 acre-ft Sept. 1, elevation, 3,245.6 ft.

MONTHEND ELEVATION AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	3,250.3	1,331,000	-
Oct. 31.....	3,252.3	1,383,000	+52,000
Nov. 30.....	3,253.0	1,401,000	+18,000
Dec. 31.....	3,253.7	1,419,000	+18,000
CAL YR 1993	-	-	+337,000
Jan. 31.....	3,254.8	1,449,000	+30,000
Feb. 29.....	3,255.8	1,476,000	+27,000
Mar. 31.....	3,257.3	1,518,000	+42,000
Apr. 30.....	3,258.4	1,548,000	+30,000
May 31.....	3,257.6	1,526,000	-22,000
June 30.....	3,254.6	1,444,000	-82,000
July 31.....	3,250.8	1,344,000	-100,000
Aug. 31.....	3,245.7	1,218,000	-126,000
Sept. 30.....	3,246.3	1,233,000	+15,000
WTR YR 1994.....	-	-	-98,000

PLATTE RIVER BASIN

06690500 NORTH PLATTE RIVER NEAR KEYSTONE, NE

LOCATION.--Lat 41°12'30", long 101°37'50", in SW1/4 sec.1, T.14 N., R.38 W., Keith County, Hydrologic Unit 10180014, on right bank 0.2 mi downstream from diversion dam of Sutherland Reservoir supply canal, 2.5 mi southwest of Keystone, and at mile 54.0.

DRAINAGE AREA (REVISED).--29,400 mi², of which about 25,890 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--June to August 1917, July to September 1939, May to September 1940, January to April 1941, March 1942 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1390: 1942, 1946-47. WSP 1630: 1958. WDR NE-67, WDR NE-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,105.59 ft above sea level (Nebraska Public Power District bench mark). See WSP 1918 for history of changes prior to May 1, 1964.

REMARKS.--Records good. 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. Flow completely regulated by Lake McConaughy (station 06690000) since Feb. 9, 1941. Supply canal for Nebraska Public Power District diverts 0.2 mi upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	37	.00	.00	.00	.00	7.4	.00	230	2410	1700	143
2	33	33	.00	.00	.00	.00	37	6.9	218	2410	1470	181
3	31	19	.00	.00	.00	.00	35	52	217	2280	1500	216
4	31	32	.00	.00	.00	.00	26	78	220	2190	1400	214
5	31	32	.00	.00	.00	.00	.00	78	220	2040	1100	212
6	31	32	.00	.00	.00	.00	.00	85	277	1980	874	213
7	31	32	.00	.00	.00	.00	.00	92	313	1680	810	213
8	28	30	.00	.00	.00	.00	.00	91	241	1530	580	214
9	23	30	.00	.00	.00	.00	.00	91	158	1510	608	219
10	23	30	.00	.00	.00	.00	.00	91	139	1510	617	216
11	29	30	.00	.00	.00	.00	.00	92	145	1620	614	169
12	30	31	.00	.00	.00	.00	.00	92	156	1610	609	171
13	30	32	.00	.00	.00	.00	.00	91	137	1040	600	168
14	30	32	.00	.00	.00	.00	.00	95	176	966	605	133
15	29	17	.00	.00	.00	.00	.00	98	231	546	859	96
16	29	.00	.00	.00	.00	.00	.00	110	292	328	1350	94
17	29	.00	.00	.00	.00	.00	.00	122	527	338	1440	77
18	28	.00	.00	.00	.00	.00	.00	133	588	344	1430	77
19	28	.00	.00	.00	.00	.00	.00	146	595	325	1420	75
20	27	.00	.00	.00	.00	.00	.00	151	588	307	1430	71
21	27	.00	.00	.00	.00	.00	.00	150	372	346	1610	69
22	35	.00	.00	.00	.00	.00	.00	148	218	717	2210	68
23	35	.00	.00	.00	.00	.00	.00	290	219	1050	2020	66
24	35	.00	.00	.00	.00	.00	.00	449	294	1040	1920	66
25	35	.00	.00	.00	.00	.00	15	488	406	859	1920	66
26	35	.00	.00	.00	.00	.00	46	381	536	743	1860	51
27	34	.00	.00	.00	.00	.00	45	256	746	763	1660	27
28	34	.00	.00	.00	.00	.00	25	223	1370	982	1310	24
29	33	.00	.00	.00	---	.00	.00	230	2000	1330	913	24
30	33	.00	.00	.00	---	.00	.00	253	2550	1870	568	25
31	33	---	.00	.00	---	.00	---	251	---	2050	239	---
TOTAL	952	449.00	0.00	0.00	0.00	0.00	236.40	4913.90	14379	38714	37246	3658
MEAN	30.7	15.0	.000	.000	.000	.000	7.88	159	479	1249	1201	122
MAX	35	37	.00	.00	.00	.00	46	488	2550	2410	2210	219
MIN	23	.00	.00	.00	.00	.00	.00	.00	137	307	239	24
AC-FT	1890	891	.00	.00	.00	.00	469	9750	28520	76790	73880	726

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1994, BY WATER YEAR (WY)

MEAN	289	141	95.3	69.6	114	195	286	554	875	1546	1300	563
MAX	2490	1185	1369	1185	1745	3253	5000	4749	6806	4843	6383	6289
(WY)	1987	1985	1985	1984	1984	1984	1984	1973	1971	1983	1983	1983
MIN	.000	.000	.000	.000	.000	.000	.000	1.88	35.8	187	291	75.9
(WY)	1992	1975	1975	1975	1975	1979	1982	1958	1962	1962	1993	1989

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1943 - 1994

ANNUAL TOTAL	38426.10	100548.30	
ANNUAL MEAN	105	275	506
MEDIAN OF ANNUAL MEANS			360
HIGHEST ANNUAL MEAN			2162
LOWEST ANNUAL MEAN			108
HIGHEST DAILY MEAN	1280	2550	8490
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
INSTANTANEOUS PEAK FLOW		5230	20300
INSTANTANEOUS PEAK STAGE		6.20	
ANNUAL RUNOFF (AC-FT)	76220	199400	366300
10 PERCENT EXCEEDS	381	1070	1700
50 PERCENT EXCEEDS	19	30	56
90 PERCENT EXCEEDS	.00	.00	.00

06693000 NORTH PLATTE RIVER AT NORTH PLATTE, NE

LOCATION.--Lat 41°09'13", long 100°45'16", in sec.28, T.14 N., R.30 W., Lincoln County, Hydrologic Unit 10180014, on right bank 150 ft downstream from bridge on U.S. Highway 83, 0.5 mi north of city of North Platte, and 4.5 mi upstream from confluence with South Platte River.

DRAINAGE AREA.--30,900 mi², approximately, of which about 26,300 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--February 1895 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WDR NE-67, WDR NE-76-1: Drainage area. WSP 2118: 1915(M).

GAGE.--Water-stage recorder. Datum of gage is 2,792.14 ft above sea level (Nebraska Department of Roads bench mark). See WSP 2118 for history of changes prior to June 3, 1968.

REMARKS.--Records good except for period of estimated record, which is 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	268	427	e420	327	e310	e400	334	338	269	1620	1650	553
2	299	429	e420	327	e310	e400	329	317	268	1800	1570	430
3	324	424	e420	332	e310	401	331	316	279	1860	1260	383
4	324	422	e410	328	e300	401	339	321	255	1980	1200	417
5	328	407	e380	319	e290	399	347	325	239	1920	1200	395
6	327	410	363	e320	e290	397	351	319	215	1800	1070	349
7	312	397	365	e280	e300	389	338	324	239	1880	895	340
8	416	396	347	e300	e310	377	339	295	360	1960	814	333
9	544	416	331	e300	e320	375	330	275	426	1520	649	326
10	484	415	334	e320	e320	363	333	272	432	1390	565	328
11	458	413	331	e340	e320	350	334	280	379	1350	515	368
12	441	441	321	e340	e330	356	372	273	325	1530	511	365
13	426	509	318	e360	e330	350	390	244	297	1590	501	348
14	427	472	305	e360	e330	355	353	243	278	1180	484	339
15	426	447	318	e350	e340	351	320	227	265	1100	468	330
16	429	429	335	e320	e330	343	296	224	270	972	438	313
17	424	426	347	e310	e330	350	284	225	317	813	665	289
18	418	437	362	e300	e330	353	272	213	400	810	881	274
19	407	411	353	e350	e320	342	276	207	493	661	968	266
20	411	401	371	e480	e320	332	272	212	504	576	978	268
21	405	421	365	e400	e310	328	279	224	706	580	1010	281
22	400	414	367	e380	e300	324	280	231	678	491	1110	307
23	397	401	371	e370	e300	319	282	235	482	522	1480	313
24	386	e390	363	e360	e300	308	265	239	397	910	1770	302
25	376	e390	349	e350	e290	315	262	331	360	1060	1700	302
26	377	e400	327	e340	e300	321	280	397	383	932	1690	305
27	385	e400	329	e330	e320	322	291	430	418	749	1690	306
28	367	e410	362	e320	e380	318	301	341	421	562	1610	294
29	382	e420	355	e310	---	324	333	283	613	620	1420	277
30	396	e420	356	e300	---	334	343	259	1080	791	1030	284
31	413	---	352	e300	---	335	---	262	---	1240	777	---
TOTAL	12177	12595	11047	10423	8840	10932	9456	8682	12048	36769	32569	9985
MEAN	393	420	356	336	316	353	315	280	402	1186	1051	333
MAX	544	509	420	480	380	401	390	430	1080	1980	1770	553
MIN	268	390	305	280	290	308	262	207	215	491	438	266
AC-FT	24150	24980	21910	20670	17530	21680	18760	17220	23900	72930	64600	19810

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1994, BY WATER YEAR (WY)

	MEAN	624	532	470	412	494	612	652	791	961	1389	1264	745
MAX	3114	1583	1800	1611	2328	3469	5434	4754	6992	5091	6248	6586	
(WY)	1987	1974	1984	1984	1984	1984	1984	1984	1971	1983	1983	1983	
MIN	296	329	296	276	285	343	277	256	252	423	460	248	
(WY)	1951	1989	1944	1983	1981	1981	1981	1956	1961	1947	1993	1960	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1943 - 1994

ANNUAL TOTAL	143292	175523	
ANNUAL MEAN	393	481	748
MEDIAN OF ANNUAL MEANS			590
HIGHEST ANNUAL MEAN			2467
LOWEST ANNUAL MEAN			382
HIGHEST DAILY MEAN	963	Aug 23	1980
LOWEST DAILY MEAN	242	May 18	207
ANNUAL SEVEN-DAY MINIMUM	261	Feb 13	219
INSTANTANEOUS PEAK FLOW (STAGE)			2110
INSTANTANEOUS PEAK STAGE			4.91
ANNUAL RUNOFF (AC-FT)	284200	348100	541700
10 PERCENT EXCEEDS	469	970	1640
50 PERCENT EXCEEDS	380	353	412
90 PERCENT EXCEEDS	306	279	296

e Estimated

* Minimum daily, period of record, 20 ft³/s, Sept. 20, 1904/

PLATTE RIVER BASIN

06764000 SOUTH PLATTE RIVER AT JULESBURG, CO

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

DRAINAGE AREA.--23,193 mi².

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

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

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

REMARKS.--Estimated daily discharges: Nov. 24-26, Dec. 20-21, and Jan. 27 to Feb. 7. 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 of 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	861	385	1620	712	700	361	396	171	91	26	23	14
2	839	315	1320	631	720	407	400	185	116	19	23	15
3	809	224	882	615	740	506	400	194	171	18	24	15
4	730	190	594	615	785	606	388	183	160	17	30	16
5	621	172	464	653	805	708	385	169	126	19	25	15
6	596	171	403	644	825	809	379	130	130	24	28	14
7	596	203	371	651	850	784	369	110	112	45	35	13
8	571	217	344	621	870	786	321	103	90	43	33	13
9	541	197	305	704	900	803	236	94	73	37	25	12
10	535	175	274	770	920	839	244	85	63	24	23	13
11	489	166	243	825	889	838	251	84	56	24	18	14
12	461	192	312	832	872	826	343	71	48	32	18	14
13	446	178	400	834	906	838	424	67	40	30	16	15
14	431	179	389	850	918	820	359	68	32	45	17	16
15	427	176	383	855	913	641	267	62	25	18	19	16
16	437	174	364	815	911	465	203	60	22	14	18	16
17	431	176	372	778	938	401	162	53	20	13	16	17
18	452	183	433	843	900	319	146	48	19	16	14	16
19	493	183	482	937	848	288	110	44	17	21	14	18
20	501	193	481	1090	817	256	94	41	17	31	17	21
21	515	199	501	1150	742	243	92	46	42	29	16	23
22	539	196	526	1110	695	360	85	45	36	26	17	21
23	589	203	526	935	589	425	88	50	32	24	20	21
24	548	240	501	855	557	432	110	52	24	24	20	29
25	488	280	501	751	499	412	110	49	24	24	18	33
26	447	340	503	735	444	401	130	59	24	25	18	35
27	437	388	712	731	422	406	122	71	29	25	16	26
28	428	533	975	701	391	413	118	75	26	26	16	26
29	414	628	1100	701	---	408	132	70	31	25	16	36
30	403	1030	1030	690	---	404	144	60	31	21	14	74
31	394	---	845	685	---	406	---	58	---	22	14	---
TOTAL	16469	8086	18156	24319	21366	16611	7008	2657	1727	787	621	627
MEAN	531	270	586	784	763	536	234	85.7	57.6	25.4	20.0	20.9
MAX	861	1030	1620	1150	938	839	424	194	171	45	35	74
MIN	394	166	243	615	391	243	85	41	17	13	14	12
AC-FT	32670	16040	36010	48240	42380	32950	13900	5270	3430	1560	1230	1240

PLATTE RIVER BASIN

87

06764000 SOUTH PLATTE RIVER AT JULESBURG, CO--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1902 - 1994, BY WATER YEAR (WY)

MEAN	291	349	405	515	604	557	560	1067	1361	263	152	221
MAX	2427	2358	1371	1566	1864	2200	2808	9922	12200	5059	1346	1964
(WY)	1985	1985	1985	1970	1930	1939	1983	1980	1983	1983	1983	1984
MIN	5.85	23.0	18.8	89.9	78.9	56.9	17.3	24.1	8.33	2.15	2.52	5.60
(WY)	1904	1911	1912	1965	1935	1904	1904	1911	1910	1903	1902	1903

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1902 - 1994	
ANNUAL TOTAL	181245		118434			
ANNUAL MEAN	497		324		532	
HIGHEST ANNUAL MEAN					2882	1983
LOWEST ANNUAL MEAN					76.3	1956
HIGHEST DAILY MEAN	1620	Dec 1	1620	Dec 1	30800	Jun 16 1921
LOWEST DAILY MEAN	^a 31	Jul 3	12	Sep 9	^b .00	Aug 18 1902
ANNUAL SEVEN-DAY MINIMUM	37	Jul 1	13	Sep 6	.00	Jul 25 1903
INSTANTANEOUS PEAK FLOW			Not determined		37600	Jun 20 1965
INSTANTANEOUS PEAK STAGE			Not determined		^c 10.44	Jun 20 1965
ANNUAL RUNOFF (AC-FT)	359500		234900		385300	
10 PERCENT EXCEEDS	1100		833		1120	
50 PERCENT EXCEEDS	405		197		221	
90 PERCENT EXCEEDS	47		17		28	

a Also occurred July 4 and Aug. 20.

b Also occurred Aug. 19-20, 1902, and July 25 to Aug. 7, 1903.

c From floodmarks in gage well.

PLATTE RIVER BASIN

06764880 SOUTH PLATTE RIVER AT ROSCOE, NE

LOCATION.--Lat 41°07'33" long 101°34'35", in NW1/4SW1/4 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.

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

GAGE.--Water-stage recorder. Elevation of gage is 3,150 ft, from topographic map.

REMARKS.--Record 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	864	400	e260	e600	e640	e720	425	156	59	20	12	.05
2	795	386	e280	e660	e580	e740	402	164	65	18	15	.28
3	766	377	e310	e660	e590	e760	401	177	80	16	14	.62
4	736	313	e370	e640	e610	666	386	179	96	10	9.2	.59
5	684	256	e470	e650	e630	535	372	152	92	4.1	5.8	.06
6	639	230	523	e550	e640	539	380	143	88	3.5	9.9	.45
7	619	213	464	e510	e630	582	365	125	94	15	7.9	.75
8	693	217	357	e500	e710	618	345	110	100	15	14	.62
9	589	219	349	e500	e780	672	311	102	102	18	18	.08
10	561	212	318	e520	e820	780	255	92	85	13	14	.02
11	529	210	292	e540	e700	841	236	86	72	6.2	13	.00
12	485	227	276	e560	e540	847	231	76	64	4.6	6.9	.00
13	464	228	281	e600	e570	832	265	72	60	12	5.2	.00
14	438	217	320	e640	e600	811	344	70	54	25	3.9	.00
15	395	210	332	e620	e640	775	349	67	46	35	7.4	.00
16	399	210	352	e590	e660	656	286	67	36	66	9.5	.00
17	408	203	354	e600	e710	541	263	60	27	33	7.1	.00
18	427	193	347	e620	e760	477	251	57	25	26	7.8	.00
19	444	191	e330	e740	e810	416	229	58	37	21	5.7	.00
20	455	191	e320	e740	e820	351	209	55	33	30	2.6	.00
21	463	193	e310	e680	e760	313	170	53	31	23	1.8	.00
22	486	193	e320	e720	e640	282	149	56	28	14	1.4	.00
23	502	192	e330	e740	e640	309	148	59	19	13	1.4	.00
24	540	e150	e350	e740	e610	375	141	56	17	31	1.8	.00
25	515	e160	e350	e700	e630	384	135	59	31	19	1.8	.00
26	467	e190	e390	e610	e640	358	145	57	28	14	1.2	.00
27	451	e220	e400	e680	e640	366	164	57	24	12	.78	.00
28	444	e240	e360	e750	e670	384	156	61	16	11	.35	.00
29	418	e260	e320	e700	---	407	155	66	8.9	10	.20	.00
30	404	e260	e330	e680	---	437	166	66	7.0	9.9	.10	.00
31	408	---	e380	e680	---	448	---	62	---	9.9	.07	---
TOTAL	16488	6961	10745	19720	18670	17222	7834	2720	1524.9	558.2	199.80	3.52
MEAN	532	232	347	636	667	556	261	87.7	50.8	18.0	6.45	.12
MAX	864	400	523	750	820	847	425	179	102	66	18	.75
MIN	395	150	260	500	540	282	135	53	7.0	3.5	.07	.00
AC-FT	32700	13810	21310	39110	37030	34160	15540	5400	3020	1110	396	7.0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1994, BY WATER YEAR(WY)

MAX	2392	2183	1323	1693	2280	1519	2767	7044	12150	5433	1479	1935
(WY)	1985	1985	1985	1984	1984	1987	1984	1983	1983	1983	1983	1984
MIN	121	81.9	98.5	407	667	391	199	76.7	50.8	13.1	6.45	.12
(WY)	1989	1990	1990	1991	1994	1991	1989	1992	1994	1990	1994	1994

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1983 - 1994

ANNUAL TOTAL	176788	102646.42	896
ANNUAL MEAN	484	281	2941
HIGHEST ANNUAL MEAN			281
LOWEST ANNUAL MEAN			13900
HIGHEST DAILY MEAN	1600	864	13900
LOWEST DAILY MEAN	25	.00	.00
ANNUAL SEVEN-DAY MINIMUM	29	.00	.00
INSTANTANEOUS PEAK FLOW (STAGE)		924 (5.27)	14700 (9.31)
INSTANTANEOUS PEAK STAGE		*7.00	**10.23
ANNUAL RUNOFF (AC-FT)	350700	203600	649500
10 PERCENT EXCEEDS	1070	675	1940
50 PERCENT EXCEEDS	350	220	441
90 PERCENT EXCEEDS	40	1.3	30

e Estimated.

* Backwater from ice; stage may have been higher.

** Backwater from ice.

PLATTE RIVER BASIN

89

06765500 SOUTH PLATTE RIVER AT NORTH PLATTE, NE
(National Water-Quality Assessment, NAWQA, station)

LOCATION.--Lat 41°07'05", long 100°46'22", in NE1/4 NE1/4 sec.8, T.13 N., R.30 W., Lincoln County, Hydrologic Unit 10190018, on left bank 0.5 mi downstream from bridge on U.S. Highway 83, 0.7 mi northwest of intersection of U.S. Highway 83 and Interstate 80 south of North Platte, and 5.5 mi upstream from confluence with North Platte River.

DRAINAGE AREA.--24,300 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June to November 1897, June to August 1914, May to September 1915, and May 1917 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1390: 1932-33, 1935.

GAGE.--Water-stage recorder. Datum of gage is 2,787.73 ft above sea level. See WSP 1918 for history of changes prior to Dec. 11, 1956. Dec. 11, 1956, to Mar. 29, 1973, at site 50 ft upstream from bridge on U.S. Highway 83, at same datum; Mar. 30, 1973, to Aug. 12, 1981, at current site and datum; and Aug. 13, 1981, to Mar. 16, 1993, at site 50 ft downstream from bridge on U.S. Highway 83, at same datum.

REMARKS.--Records good except for periods of estimated record, which are fair. 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. South Platte canal diverts around station; diversion began Nov. 13, 1946.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	283	264	292	266	358	365	226	224	182	157	190	163
2	288	245	308	345	325	377	232	214	182	144	185	160
3	289	246	328	353	293	386	228	212	178	145	175	159
4	316	251	379	334	294	380	209	227	157	156	172	167
5	315	230	321	361	313	379	204	224	151	132	171	171
6	276	243	263	346	312	314	201	216	170	121	174	169
7	241	262	248	279	331	293	200	216	260	195	173	164
8	350	259	276	275	320	296	208	243	280	213	171	153
9	390	255	294	267	322	323	208	261	264	194	156	144
10	319	251	287	276	e300	313	208	246	278	193	176	141
11	305	254	289	287	e600	332	211	234	264	183	178	132
12	292	294	275	295	e400	322	240	219	249	224	180	116
13	299	302	251	311	275	248	253	207	230	183	166	112
14	263	312	241	343	303	244	247	207	208	175	157	105
15	263	314	265	346	327	281	224	203	197	196	136	107
16	295	301	292	315	328	263	216	204	186	185	116	107
17	291	293	298	306	351	247	216	198	186	210	129	107
18	283	273	266	314	361	243	216	199	189	226	135	107
19	283	270	246	362	426	238	213	200	186	206	132	107
20	282	261	242	428	483	217	217	188	174	177	131	106
21	277	268	238	354	500	203	220	182	236	170	140	107
22	265	280	223	345	478	203	220	174	248	177	138	110
23	252	287	224	355	335	210	215	174	243	186	125	110
24	276	259	228	382	352	223	190	185	206	195	124	110
25	296	194	227	380	334	234	184	218	189	185	133	112
26	284	234	255	371	314	235	196	198	189	158	127	113
27	258	267	275	299	359	240	192	202	177	153	111	110
28	274	256	305	324	343	238	231	195	155	143	137	107
29	272	250	253	414	---	216	245	188	162	151	138	107
30	244	281	228	379	---	231	228	182	154	156	146	107
31	264	---	224	342	---	230	---	182	---	168	155	---
TOTAL	8885	7956	8341	10354	10037	8524	6498	6422	6130	5457	4677	3790
MEAN	287	265	269	334	358	275	217	207	204	176	151	126
MAX	390	314	379	428	600	386	253	261	280	226	190	171
MIN	241	194	223	266	275	203	184	174	151	121	111	105
AC-FT	17620	15780	16540	20540	19910	16910	12890	12740	12160	10820	9280	7520

e Estimated.

PLATTE RIVER BASIN

06765500 SOUTH PLATTE RIVER AT NORTH PLATTE, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1994, BY WATER YEAR (WY)

MEAN	273	216	209	294	417	331	376	979	1233	389	200	263
MAX	2118	2048	980	1432	2090	1235	1949	8057	11150	4862	1042	1839
(WY)	1985	1985	1985	1984	1984	1984	1984	1980	1983	1983	1983	1984
MIN	114	118	114	90.5	121	134	131	122	135	85.3	94.4	89.9
(WY)	1979	1979	1969	1949	1977	1957	1982	1947	1953	1963	1955	1955

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1947 - 1994

ANNUAL TOTAL	119781		87071			
ANNUAL MEAN	328		239			431
MEDIAN OF ANNUAL MEANS						264
HIGHEST ANNUAL MEAN						2316
LOWEST ANNUAL MEAN						131
HIGHEST DAILY MEAN	1460	Mar 9	600	Feb 11	19700	1983
LOWEST DAILY MEAN	150	Jan 1	105	Sep 14	35	1955
ANNUAL SEVEN-DAY MINIMUM	199	Jul 12	107	Sep 14	58	Jun 22 1965
INSTANTANEOUS PEAK FLOW			760	Feb 11	*37100	Jan 4 1949
INSTANTANEOUS PEAK STAGE			**8.57	Feb 10	14.02	Jan 3 1949
ANNUAL RUNOFF (AC-FT)	237600		172700		312200	Jun 3 1935
10 PERCENT EXCEEDS	479		342		805	
50 PERCENT EXCEEDS	283		234		170	
90 PERCENT EXCEEDS	224		139		122	

* Observed.

** Backwater from ice.

PLATTE RIVER BASIN

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06765500 SOUTH PLATTE RIVER AT NORTH PLATTE, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. (ft ³ /S (00061)	SPECIFIC CON- DUCT- ANCE (μS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (° C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CaCO ₃ (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg) (00925)	
OCT	06...	1400	254	1420	8.4	19.0	685	9.2	500	270	130	42
NOV	05...	1330	210	1510	8.1	4.5	692	12.2	510	300	140	40
DEC	03...	1130	370	1590	8.5	3.5	690	13.0	560	320	150	45
JAN	12...	1430	306	1560	8.5	3.5	690	12.4	530	310	140	43
FEB	11...	1500	653	1790	8.4	3.5	678	13.9	610	370	160	50
	16...	1430	348	1530	8.4	5.0	688	12.1	530	320	140	45
MAR	01...	1000	383	1550	9.1	0.5	691	12.9	530	320	140	43
APR	06...	1000	157	1340	8.5	3.0	685	11.6	440	220	120	33
MAY	03...	1030	193	1280	8.4	10.0	687	10.0	430	240	120	32
JUN	01...	1000	175	1130	8.5	16.5	685	10.0	--	--	--	--
JUL	12...	1130	201	1020	8.3	21.5	685	7.4	330	130	92	24
AUG	11...	1030	171	956	8.4	20.0	695	8.0	320	140	88	24
	30...	1130	157	935	8.4	21.0	685	8.8	310	120	86	24

DATE	SODIUM, DIS- SOLVED (MG/L AS Na) (00930)	SODIUM AD- SORP- TION RATIO (00931)	ALKA- POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CAR- LINITY WAT DIS TOT IT FIELD MG/L AS CaCO ₃ (39086)	BICAR- BONATE WATER DIS IT FIELD MG/L AS CO ₃ (00452)	BONATE WATER DIS IT FIELD MG/L AS HCO ₃ (00453)	CHLO- SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS Cl) (00940)	SILICA, RIDE, DIS- SOLVED (MG/L AS F) (00950)	DIS- SOLVED (MG/L AS SiO ₂) (00955)
OCT										
	120	2	16	224	0	273	470	63	0.70	27
NOV										
	120	2	14	212	16	227	480	64	0.60	31
DEC										
	130	2	15	238	0	290	520	66	0.60	28
JAN										
	130	2	13	230	0	261	490	63	0.70	29
FEB										
	150	3	14	236	0	288	580	76	0.80	26
	140	3	14	217	0	265	510	68	0.80	27
MAR										
	130	2	13	208	0	254	510	67	0.70	26
APR										
	100	2	13	216	13	237	400	55	0.60	28
MAY										
	100	2	14	193	8	218	390	52	0.60	30
JUN										
	--	--	--	213	22	216	--	--	--	--
JUL										
	85	2	14	202	12	222	270	36	0.50	30
AUG										
	87	2	13	181	7	206	250	30	0.50	32
	91	2	13	198	2	237	250	33	0.50	31

PLATTE RIVER BASIN

06765500 SOUTH PLATTE RIVER AT NORTH PLATTE, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	SOLIDS, RESIDUE AT 180° C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)
OCT 06...	1060	1010	1.44	727	--	<0.010	1.40	0.050	0.55	0.15
NOV 05...	1040	1030	1.41	590	--	<0.010	2.00	0.030	0.27	--
DEC 03...	1150	1110	1.56	1150	2.79	0.010	2.80	0.250	0.35	1.8
JAN 12...	1110	1050	1.51	917	2.99	0.010	3.00	0.050	0.45	0.25
FEB 11...	1190	1220	1.62	2100	3.68	0.020	3.70	0.050	0.85	0.25
FEB 16...	1160	1090	1.58	1090	3.18	0.020	3.20	0.040	0.56	0.36
MAR 01...	1140	1070	1.55	1180	--	<0.010	3.00	0.040	0.46	0.36
APR 06...	964	889	1.31	409	2.07	0.030	2.10	0.050	0.45	--
MAY 03...	890	860	1.21	464	--	<0.010	1.40	0.020	0.28	--
JUN 01...	--	--	--	--	0.480	0.020	0.500	0.020	0.78	--
JUL 12...	694	676	0.94	377	0.790	0.010	0.800	0.020	0.48	0.28
AUG 11...	661	637	0.90	305	--	<0.010	0.970	0.020	0.28	0.28
AUG 30...	679	651	0.92	288	0.840	0.010	0.850	0.030	0.37	0.17

DATE	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (µS/CM AS FE) (01046)	MANGA- NESE, DIS- SOLVED (µS/CM AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED (MG/KG AS C) (00683)
OCT 06...	0.60	0.20	2.0	1.6	0.070	0.050	<3	3	4.8	1.4
NOV 05...	0.30	<0.20	2.3	--	0.080	0.080	3	2	3.2	0.4
DEC 03...	0.60	2.1	3.4	4.9	1.00	0.970	<3	4	4.9	1.3
JAN 12...	0.50	0.30	3.5	3.3	0.100	0.120	<3	2	3.2	1.4
FEB 11...	0.90	0.30	4.6	4.0	0.150	0.160	6	5	4.2	3.0
FEB 16...	0.60	0.40	3.8	3.6	0.120	0.120	4	4	4.0	1.2
MAR 01...	0.50	0.40	3.5	3.4	0.110	0.100	6	3	3.6	1.0
APR 06...	0.50	<0.20	2.6	--	0.050	0.040	10	5	2.7	0.6
MAY 03...	0.30	<0.20	1.7	--	0.040	0.040	<3	3	3.1	0.8
JUN 01...	0.80	<0.20	1.3	--	<0.010	0.010	--	--	22	1.2
JUL 12...	0.50	0.30	1.3	1.1	0.060	0.040	4	5	4.0	0.9
AUG 11...	0.30	0.30	1.3	1.3	0.040	0.020	<3	2	2.8	0.8
AUG 30...	0.40	0.20	1.2	1.0	0.020	0.020	4	4	4.2	0.8

PLATTE RIVER BASIN

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06765500 SOUTH PLATTE RIVER AT NORTH PLATTE, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DISCHARGE INST. FT ³ /S (00061)	SEDIMENT SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
OCT				
06...	1400	254	37	25
NOV				
05...	1300	210	30	17
DEC				
03...	1135	370	134	134
JAN				
12...	1435	306	60	50
FEB				
16...	1435	348	180	169
MAR				
01...	1005	383	230	238
APR				
06...	1005	157	119	50
MAY				
03...	1035	193	143	75
JUN				
01...	1005	175	79	37

PLATTE RIVER BASIN

06765698 TRI-COUNTY CANAL (1.25 MI BELOW DIVERSION) NEAR NORTH PLATTE, NE
(National Water-Quality Assessment, NAWQA, station)

WATER QUALITY RECORDS

LOCATION.--Lat 41° 05' 40", long 100° 40' 33", in NW1/4 SW1/2 sec. 17, T. 13N., R. 29W., Lincoln County, Hydrologic Unit 10200101, at bridge 900 ft south of Interstate Highway 80, 1.25 mi south of diversion dam, and 6 mi southeast of North Platte.

PERIOD OF RECORD.--Water years 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE INST. FT ³ /S (00061)	SPE- CIFIC CON- DUCT- ANCE ((μS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (° C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CaCO ₃ (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)
NOV	18...	1000	1540	1040	8.7	3.0	685	11.9	330	84
MAR	14...	1130	1410	1120	8.6	7.0	683	11.2	330	85
MAY	04...	1100	800	860	8.4	12.0	691	10.5	270	76
JUL	26...	1100	2130	797	8.6	23.5	696	7.5	200	50

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINTY WAT DIS TOT IT FIELD MG/L AS CaCO ₃ (39086)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO ₃ (00452)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO ₃ (00453)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
NOV	18...	29	96	2	12	178	7	203	310	0.50
MAR	14...	28	93	2	11	168	0	205	300	0.50
MAY	04...	20	68	2	11	151	2	179	220	0.60
JUL	26...	18	78	2	11	169	0	206	190	0.50

DATE	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, RESIDUE AT 180 ° C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)
NOV	18...	25	728	705	0.99	3030	0.970	0.030	1.00	0.37
MAR	14...	24	724	688	0.98	2760	1.38	0.020	1.40	0.66
MAY	04...	31	595	551	0.81	1290	0.830	0.010	0.840	0.44
JUL	26...	19	519	492	0.71	2980	0.470	0.010	0.480	0.58

PLATTE RIVER BASIN

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06765698 TRI-COUNTY CANAL (1.25 MI BELOW DIVERSION) NEAR NORTH PLATTE, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE		NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (µ G/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (µ G/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
NOV	18...	0.17	0.40	0.20	1.4	1.2	0.020	0.030	<3	9	3.6
MAR	14...	0.26	0.70	0.30	2.1	1.7	<0.010	0.010	7	7	5.9
MAY	04...	0.44	0.50	0.50	1.3	1.3	0.050	0.030	5	18	2.5
JUL	26...	0.28	0.60	0.30	1.1	0.78	0.010	<0.010	<3	1	4.4

DATE	TIME	DIS- CHARGE INST. FT ³ /S (00061)	TEMPER- ATURE WATER (° C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV	18...	1000	1540	3.0	11	46
MAR	14...	1130	1410	7.0	25	95
MAY	04...	1100	800	12.0	27	58
JUL	26...	1100	2130	23.5	62	357

PLATTE RIVER BASIN

06768000 PLATTE RIVER NEAR OVERTON, NE

LOCATION.--Lat 40°40'57", long 99°32'27", in NE1/4NW1/4 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 (REVISED).--56,300 mi², of which about 51,620 mi² contributes directly to surface runoff.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR NE-67, WDR NE-76-1: 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.

REMARKS.--Records good except for period of estimated record, which is 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1810	1830	1570	1980	e1400	2040	1410	779	484	251	444	466
2	1500	1770	1790	2020	e1440	2160	1280	762	289	263	398	534
3	1530	1660	2000	2020	e1560	2320	1200	766	276	331	423	925
4	1430	1570	2040	1750	e1540	2650	1130	821	279	342	495	907
5	1550	1480	2080	1820	e1540	2880	1050	805	258	413	405	756
6	1400	1640	1930	e1800	e1600	2760	1230	782	232	448	407	695
7	1370	1390	1820	e1800	e1500	2450	1040	852	343	703	481	547
8	1370	1400	1880	e1840	e1400	1930	856	778	443	1350	532	494
9	1580	1570	1930	1840	e1460	2170	753	765	862	1550	503	795
10	1630	1590	1970	1700	e1500	2210	769	738	1120	1510	429	925
11	1630	1800	1990	e1540	1550	1930	810	739	712	1010	468	923
12	1710	1800	1980	e1500	1660	1810	928	755	963	493	432	867
13	1800	1820	1970	e1440	1670	1840	1140	775	560	944	402	881
14	1910	1880	1910	e1600	1820	1800	1630	766	430	2050	356	1010
15	1800	1840	1880	e1700	2010	1810	1770	767	406	2290	405	846
16	1870	1970	1830	e1560	2050	1960	1550	767	467	2110	347	805
17	1980	1910	1830	e1600	2070	1900	1560	774	432	1910	318	709
18	2000	1900	1830	e1400	2170	1950	1390	775	399	2000	456	682
19	1900	1920	1850	e1000	2220	1780	1010	859	449	1790	403	677
20	1780	1980	1800	952	2270	1760	949	858	417	1300	447	673
21	1610	1920	1640	974	e2200	1630	888	872	440	684	447	727
22	1710	1770	1580	1190	e2100	1620	920	871	468	322	413	645
23	2080	1660	1600	1690	e2100	1640	962	882	1130	292	418	688
24	2120	e1500	e1620	1690	e2000	1390	914	894	1040	276	459	673
25	2140	e1400	e1720	2020	e2100	1490	842	873	344	362	393	688
26	2000	e1300	e1700	1890	e2100	1300	767	803	348	557	478	912
27	2020	e1200	e1600	1590	e2200	1150	810	776	300	720	410	1010
28	1470	e1340	e1600	1480	2270	1140	804	772	241	345	499	1010
29	1650	1380	e1660	1290	---	1300	820	757	235	405	434	1000
30	1870	1290	1660	e1300	---	1280	779	769	240	379	421	1060
31	1630	---	1850	e1540	---	1400	---	733	---	423	439	---
TOTAL	53850	49480	56110	49516	51500	57450	31961	24685	14607	27823	13362	23530
MEAN	1737	1649	1810	1597	1839	1853	1065	796	487	898	431	784
MAX	2140	1980	2080	2020	2270	2880	1770	894	1130	2290	532	1060
MIN	1370	1200	1570	952	1400	1140	753	733	232	251	318	466
AC-FT	106800	98140	111300	98210	102200	114000	63390	48960	28970	55190	26500	46670

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Estimated

PLATTE RIVER BASIN

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06768000 PLATTE RIVER NEAR OVERTON, NE--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1994, BY WATER YEAR (WY)

MEAN	1337	1415	1538	1619	1932	2135	1924	2240	2294	984	626	1111
MAX	6330	5765	5012	4281	6730	7206	10050	12590	18970	11380	6635	8040
(WY)	1974	1985	1985	1984	1984	1984	1984	1984	1983	1983	1983	1983
MIN	75.1	169	156	336	474	665	519	171	232	159	83.7	54.9
(WY)	1942	1942	1942	1942	1942	1957	1967	1956	1959	1956	1956	1956

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1942 - 1994

ANNUAL TOTAL	514802			453874			1593	
ANNUAL MEAN	1410			1243			5835	1983
HIGHEST ANNUAL MEAN							*558	1956
LOWEST ANNUAL MEAN							22300	Jun 22 1983
HIGHEST DAILY MEAN	4770	Mar 10		2880	Mar 5		2.0	Aug 31 1942
LOWEST DAILY MEAN	351	Jul 3		232	Jun 6		5.4	Aug 25 1942
ANNUAL SEVEN-DAY MINIMUM	409	May 28		266	Jun 27		37600 (**6.25)	Jun 5 1935
INSTANTANEOUS PEAK FLOW (STAGE)				2900	Mar 4-5		7.44	Jun 22 1983
INSTANTANEOUS PEAK STAGE				3.63	Mar 4-5			
ANNUAL RUNOFF (AC-FT)	1021000			900300			1154000	
10 PERCENT EXCEEDS	2150			2000			2910	
50 PERCENT EXCEEDS	1470			1340			1160	
90 PERCENT EXCEEDS	468			412			267	

* No flow at times in 1919, 1925, 1927-28, 1930-41.

** South channel, datum then in use.

PLATTE RIVER BASIN

06768000 PLATTE RIVER NEAR OVERTON, NE--Continued

WATER QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1958 to current year.

WATER TEMPERATURES: January 1958 to current year.

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.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,180 microsiemens Feb. 7 (south channel); minimum daily, 718 microsiemens June 8 (south channel).

WATER TEMPERATURES: Maximum daily, 32.0 °C June 27, 30 and July 1 (north channel); minimum daily, 1.0 °C on many days during winter period.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DISCHARGE, INST. (FT ³ /S) (00061)	SPECIFIC CON- DUCT- ANCE (μS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (°C) (00010)	BARO- METRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY LAB (MG/L AS CaCO ₃) (90410)	
OCT	13...	1300	1860	926	7.9	14.0	700	11.1	79	15	200
DEC	06...	1500	1980	1040	8.6	1.5	700	13.2	88	12	126
JAN	14...	1530	1600	829	8.6	0.0	714	14.5	87	12	169
MAR	08...	1700	2250	917	8.5	6.5	704	11.6	69	13	441
APR	22...	1400	1050	956	8.6	14.0	703	10.0	81	13	199
JUN	13...	1330	460	953	8.2	26.0	693	9.5	86	15	200
JUL	13...	0900	821	878	8.2	21.5	695	6.9	80	13	181
SEP	13...	0900	548	837	8.5	20.0	695	7.8	85	13	204
DATE		SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
OCT	13...	230	28	0.60	26	0.990	0.010	1.00	0.030	0.040	0.040
DEC	06...	290	36	0.50	29	1.39	0.010	1.40	0.020	0.040	0.050
JAN	14...	260	33	0.60	29	1.59	0.010	1.60	0.040	0.070	0.060
MAR	08...	210	26	0.50	37	2.08	0.020	2.10	0.030	0.080	0.080
APR	22...	250	36	0.50	27	2.18	0.020	2.20	0.010	0.150	0.140
JUN	13...	260	36	0.50	25	0.970	0.030	1.00	0.050	0.100	0.090
JUL	13...	220	31	0.50	19	0.970	0.030	1.00	0.050	0.160	0.140
SEP	13...	210	28	0.50	27	1.19	0.010	1.20	<0.010	0.070	0.060

PLATTE RIVER BASIN

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06768000 PLATTE RIVER NEAR OVERTON, NE--Continued

WATER QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	BORON, DISSOLVED (µ G/L AS B) (01020)	IRON, DISSOLVED (µ G/L AS FE) (01046)	MANGANESE DISSOLVED (µ G/L AS MN) (01056)
OCT 13...	1300	140	4	3
DEC 06...	1500	150	3	4
JAN 14...	1530	130	<3	2
MAR 08...	1700	120	20	20
APR 22...	1400	140	7	5
JUN 13...	1330	160	<3	6
JUL 13...	0900	140	7	6
SEP 13...	0900	140	4	7

PLATTE RIVER BASIN

06767998 PLATTE RIVER NEAR OVERTON, NE (NORTH CHANNEL)

SPECIFIC CONDUCTANCE, $\mu\text{S}/\text{CM}$ @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	954	897	796	885	903	849	880	904	866	905	976	859
2	952	901	766	851	894	835	867	896	866	868	998	921
3	930	909	758	730	868	830	892	900	860	876	950	851
4	914	910	812	860	875	837	858	894	862	914	846	909
5	918	932	805	877	884	820	860	885	843	899	946	815
6	932	929	862	769	852	823	921	891	860	889	972	970
7	942	928	725	837	848	834	911	894	762	856	867	984
8	937	897	890	924	951	806	902	891	750	878	868	948
9	930	896	891	919	991	856	816	911	807	883	905	970
10	915	912	738	916	1010	867	890	912	802	902	907	909
11	898	904	836	891	931	874	894	909	754	915	938	876
12	899	865	1070	838	942	842	799	944	855	874	979	907
13	896	840	873	851	936	862	805	950	813	753	977	901
14	886	849	877	827	931	866	902	935	791	823	857	849
15	903	859	823	818	822	825	900	937	798	825	895	886
16	892	865	721	923	811	860	913	947	799	864	920	876
17	898	891	787	976	772	877	901	937	785	866	1030	815
18	898	874	857	1020	771	862	876	932	828	865	999	906
19	904	882	970	1000	750	872	912	934	858	917	1010	913
20	901	876	756	978	758	883	946	940	864	936	898	824
21	896	888	926	894	791	866	916	945	797	935	946	908
22	905	878	925	915	881	841	902	943	760	932	991	872
23	904	886	833	851	873	863	880	948	805	954	1030	798
24	884	984	940	777	930	875	931	960	804	947	1020	945
25	900	1090	892	830	901	863	914	915	847	933	1020	947
26	897	1070	899	821	900	861	873	959	831	949	947	949
27	900	978	861	882	929	881	916	999	815	950	966	954
28	913	966	780	904	873	877	886	1000	853	980	893	965
29	914	896	889	942	---	881	873	975	896	976	917	916
30	914	886	947	878	---	878	860	921	801	993	906	986
31	906	---	893	897	---	874	---	973	---	971	883	---
MEAN	911	911	852	880	878	856	887	932	821	904	944	904

06767999 PLATTE RIVER NEAR OVERTON, NE (SOUTH CHANNEL)

SPECIFIC CONDUCTANCE, $\mu\text{S}/\text{CM}$ @ 25 DEGREES CELSIUS WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	915	1040	1070	979	1100	1120	1040	1000	877	888	850	845
2	906	1040	1080	948	1100	1130	1040	1000	885	913	851	840
3	928	1050	1030	1030	1120	1110	1040	1000	895	859	859	915
4	937	1060	1050	1040	1120	1080	1040	969	893	860	956	840
5	942	1080	1070	1040	1130	1070	1050	994	887	882	913	850
6	963	1070	1030	1030	1140	1080	1050	1010	888	877	834	855
7	950	1070	1030	1040	1180	1070	987	1020	851	975	869	848
8	946	1070	1090	1020	1150	1100	1050	1000	718	941	875	847
9	947	1060	1080	1030	1160	1110	1040	1000	835	943	880	837
10	943	1080	1080	1020	1140	1110	1040	1010	848	944	883	844
11	954	1090	---	1030	1120	1110	1030	997	913	948	877	843
12	959	1070	1070	1030	1140	1100	860	995	931	919	826	841
13	964	1080	1040	1030	1140	1100	999	984	923	887	815	838
14	952	1070	1060	1040	1150	1090	1010	987	928	915	802	842
15	958	1080	1010	1040	1140	1060	1020	985	925	921	823	915
16	957	1080	1030	1040	1120	1050	1010	982	926	943	815	854
17	962	1080	1040	1010	1130	1050	993	985	925	853	829	836
18	956	1090	1030	1050	1140	1030	1000	978	922	845	867	819
19	975	1090	1040	1040	1120	1020	1020	979	924	878	864	818
20	965	1090	1040	1040	1130	1030	1020	981	923	886	863	902
21	962	1080	1030	1050	1130	1040	1020	981	900	882	855	821
22	980	1060	1030	1060	1120	1040	1010	980	896	881	854	820
23	974	1070	963	1050	1130	1050	1020	976	890	870	850	822
24	981	1090	1030	1070	1130	1040	1010	979	792	868	861	820
25	989	1090	1040	1080	1120	1040	1000	970	855	882	924	817
26	994	1090	971	1070	1110	1060	1010	986	852	867	812	816
27	1020	1080	1030	1090	1110	1050	996	998	849	866	895	831
28	1030	1090	1030	1100	1120	1050	992	998	860	886	860	822
29	1020	1070	1040	1080	---	1060	991	1000	866	876	874	849
30	1040	1070	1030	1070	---	1060	974	1010	817	868	864	821
31	1040	---	1030	1050	---	1050	---	1020	---	863	843	---
MEAN	968	1070	---	1040	1130	1070	1010	992	880	893	859	842

PLATTE RIVER BASIN

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06767998 PLATTE RIVER NEAR OVERTON, NE (NORTH CHANNEL)

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.0	8.0	1.0	4.0	1.0	3.0	16.0	13.0	28.0	32.0	---	25.0
2	15.0	9.0	2.0	4.0	1.0	5.0	9.0	11.0	23.0	27.0	---	---
3	20.0	9.0	3.0	1.0	1.0	11.0	15.0	13.0	28.0	29.0	---	---
4	14.0	9.0	4.0	1.0	1.0	12.0	14.0	21.0	27.0	31.0	---	---
5	22.0	5.0	5.0	1.0	2.0	13.0	7.0	23.0	30.0	30.0	---	---
6	20.0	5.0	3.0	1.0	1.0	13.0	13.0	14.0	30.0	29.0	---	---
7	21.0	7.0	3.0	1.0	1.0	6.0	13.0	20.0	29.0	26.0	---	---
8	20.0	8.0	3.0	2.0	1.0	7.0	8.0	21.0	30.0	26.0	---	---
9	12.0	9.0	5.0	1.0	1.0	8.0	8.0	14.0	25.0	28.0	---	---
10	9.0	5.0	6.0	1.0	1.0	5.0	10.0	16.0	27.0	27.0	25.0	---
11	14.0	9.0	4.0	1.0	1.0	5.0	7.0	20.0	29.0	22.0	23.0	---
12	10.0	11.0	3.0	1.0	1.0	11.0	5.0	23.0	29.0	30.0	30.0	---
13	12.0	10.0	3.0	3.0	2.0	12.0	15.0	25.0	30.0	26.0	30.0	---
14	13.0	4.0	2.0	2.0	1.0	12.0	16.0	17.0	31.0	26.0	30.0	19.0
15	18.0	6.0	3.0	1.0	1.0	8.0	14.0	26.0	28.0	27.0	30.0	19.0
16	15.0	8.0	3.0	1.0	1.0	14.0	17.0	24.0	28.0	23.0	21.0	20.0
17	12.0	8.0	3.0	1.0	1.0	6.0	21.0	26.0	30.0	24.0	29.0	20.0
18	12.0	8.0	3.0	1.0	3.0	10.0	22.0	27.0	29.0	30.0	---	21.0
19	14.0	4.0	3.0	1.0	1.0	10.0	20.0	27.0	31.0	29.0	---	22.0
20	12.0	4.0	3.0	1.0	1.0	7.0	20.0	25.0	31.0	25.0	---	21.0
21	11.0	8.0	2.0	2.0	1.0	6.0	19.0	20.0	26.0	20.0	---	18.0
22	13.0	8.0	2.0	1.0	1.0	8.0	15.0	20.0	31.0	20.0	---	15.0
23	15.0	2.0	1.0	2.0	1.0	10.0	21.0	28.0	31.0	30.0	30.0	14.0
24	17.0	1.0	1.0	2.0	1.0	11.0	24.0	28.0	30.0	25.0	31.0	18.0
25	15.0	1.0	3.0	1.0	1.0	6.0	20.0	25.0	30.0	31.0	30.0	19.0
26	11.0	1.0	5.0	1.0	1.0	11.0	16.0	24.0	30.0	25.0	25.0	21.0
27	8.0	2.0	1.0	1.0	1.0	7.0	9.0	15.0	32.0	28.0	25.0	21.0
28	9.0	2.0	1.0	1.0	2.0	10.0	11.0	16.0	30.0	20.0	26.0	23.0
29	6.0	1.0	1.0	1.0	---	5.0	10.0	31.0	28.0	27.0	26.0	14.0
30	5.0	1.0	1.0	1.0	---	4.0	11.0	31.0	32.0	30.0	25.0	21.0
31	7.0	---	1.0	1.0	---	15.0	---	27.0	---	30.0	22.0	---
MEAN	13.6	5.8	2.7	1.4	1.2	8.7	14.2	21.6	29.1	26.9	---	---

06767999 PLATTE RIVER NEAR OVERTON, NE (SOUTH CHANNEL)

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	8.0	3.0	3.0	1.0	6.0	13.0	15.0	26.0	28.0	---	25.0
2	15.0	9.0	5.0	2.0	1.0	7.0	6.0	12.0	24.0	23.0	---	---
3	19.0	9.0	4.0	1.0	1.0	6.0	13.0	14.0	27.0	29.0	---	---
4	15.0	8.0	3.0	1.0	1.0	7.0	12.0	20.0	26.0	28.0	---	---
5	19.0	6.0	3.0	1.0	3.0	8.0	8.0	22.0	29.0	31.0	---	---
6	19.0	6.0	3.0	1.0	1.0	8.0	12.0	14.0	29.0	30.0	---	---
7	20.0	8.0	3.0	1.0	1.0	2.0	9.0	18.0	30.0	26.0	---	---
8	14.0	7.0	2.0	3.0	1.0	5.0	7.0	21.0	25.0	27.0	---	---
9	14.0	9.0	5.0	2.0	1.0	7.0	7.0	12.0	25.0	29.0	---	---
10	13.0	6.0	4.0	4.0	1.0	3.0	11.0	13.0	25.0	28.0	24.0	---
11	15.0	8.0	4.0	1.0	1.0	4.0	7.0	20.0	28.0	22.0	22.0	---
12	12.0	8.0	3.0	3.0	3.0	8.0	3.0	21.0	27.0	30.0	29.0	---
13	13.0	8.0	3.0	3.0	3.0	9.0	15.0	22.0	28.0	27.0	29.0	---
14	14.0	4.0	2.0	2.0	3.0	9.0	15.0	15.0	30.0	28.0	29.0	19.0
15	16.0	6.0	3.0	1.0	4.0	4.0	13.0	24.0	27.0	28.0	31.0	19.0
16	14.0	6.0	2.0	1.0	4.0	10.0	16.0	23.0	27.0	24.0	17.0	19.0
17	13.0	6.0	2.0	1.0	2.0	10.0	18.0	25.0	29.0	25.0	29.0	19.0
18	13.0	6.0	3.0	1.0	3.0	6.0	17.0	25.0	29.0	29.0	---	20.0
19	15.0	4.0	3.0	1.0	1.0	6.0	19.0	24.0	30.0	28.0	---	21.0
20	12.0	4.0	3.0	1.0	1.0	9.0	18.0	23.0	28.0	26.0	---	20.0
21	12.0	7.0	2.0	5.0	1.0	6.0	19.0	20.0	25.0	21.0	---	18.0
22	14.0	7.0	2.0	1.0	1.0	6.0	15.0	20.0	30.0	21.0	---	15.0
23	16.0	2.0	1.0	4.0	1.0	7.0	19.0	26.0	28.0	29.0	27.0	15.0
24	15.0	1.0	1.0	3.0	1.0	11.0	21.0	26.0	29.0	23.0	30.0	18.0
25	14.0	1.0	1.0	1.0	1.0	7.0	18.0	25.0	29.0	30.0	29.0	20.0
26	12.0	1.0	3.0	1.0	1.0	10.0	18.0	23.0	29.0	24.0	23.0	22.0
27	11.0	2.0	1.0	1.0	1.0	8.0	11.0	15.0	30.0	27.0	23.0	18.0
28	7.0	2.0	1.0	1.0	2.0	11.0	14.0	17.0	30.0	17.0	26.0	20.0
29	8.0	1.0	2.0	1.0	---	5.0	12.0	28.0	27.0	28.0	26.0	14.0
30	8.0	1.0	1.0	1.0	---	8.0	13.0	28.0	30.0	30.0	23.0	19.0
31	9.0	---	1.0	1.0	---	11.0	---	26.0	---	28.0	22.0	---
MEAN	13.8	5.4	2.5	1.7	1.6	7.2	13.3	20.5	27.9	26.6	---	---

PLATTE RIVER BASIN

06770200 PLATTE RIVER NEAR KEARNEY, NE

LOCATION.--Lat 40°39'32", long 99°05'08", in SE1/4 SE1/4 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 (REVISED).--57,260 mi², of which about 52,540 mi² contributes directly to surface runoff.

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

GAGE.--Water stage recorder. Datum of gage is 2134.11 ft above sea level.

REMARKS.--Records good except for periods of estimated record, 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2120	1860	e1500	2000	e1500	e2000	1330	946	762	381	512	396
2	1840	1980	e2000	2070	e1400	e2200	1260	976	545	e520	472	414
3	1820	1950	e2200	1980	e1500	e2300	1110	986	356	e800	468	503
4	1750	1920	1900	2030	e1500	2330	1170	1040	333	e1030	521	1020
5	1800	1630	2070	2130	e1600	3050	996	1010	343	e1090	481	881
6	1750	1760	2010	2120	e1600	3210	1030	922	311	e800	453	768
7	1510	1660	1790	2010	e1650	2890	1100	913	563	e780	490	703
8	1460	1610	1870	e2000	e1500	2150	941	868	1090	1020	627	572
9	1430	1840	2040	e2000	e1400	2220	855	821	1200	1420	626	593
10	1610	1690	2150	e1900	e1300	2240	877	780	1180	1560	570	807
11	1710	1740	2210	1930	e1300	2130	904	770	1120	1520	459	867
12	1710	1900	2230	2100	e1200	1810	984	729	817	912	490	807
13	1720	1940	2330	2070	e1300	1740	1030	826	1050	942	450	722
14	1880	1930	2260	e2000	e1400	1770	1290	778	749	1410	421	768
15	2040	1990	2150	e1900	e1500	1790	1650	854	527	1940	387	901
16	1910	2180	2120	e1800	e1600	1840	1500	835	477	2310	402	937
17	2010	2190	2180	e1600	e1700	1950	1490	811	492	2160	332	933
18	2110	2040	2150	e1500	e1700	2030	1590	764	468	2250	322	863
19	2080	2130	2120	e1500	e1600	1900	1250	777	456	2050	421	819
20	1850	2240	2030	e1500	e1600	1900	1020	861	440	1810	437	753
21	1450	2290	1770	e1600	e1500	1900	1030	867	701	1180	453	749
22	1410	2340	1700	e1650	e1500	1930	939	829	537	749	434	789
23	1850	2020	1920	e1700	e1350	1810	1030	865	649	569	383	831
24	2090	1870	2080	e1800	e1200	1600	1040	813	1120	563	396	864
25	2160	e1300	2080	e1900	e1100	1560	1010	896	772	596	385	824
26	2110	e1100	2100	e1900	e1300	1420	924	807	482	648	339	791
27	1920	e1000	2060	e1900	e1600	1260	919	791	457	877	381	979
28	2070	e1000	1470	e1800	e1800	1190	1020	757	405	763	324	1020
29	1240	e1000	1590	e1800	---	1160	986	930	336	564	403	1030
30	1590	e1100	1700	e1700	---	1250	1090	828	351	572	376	1020
31	1740	---	1930	e1600	---	1290	---	854	---	546	364	---
TOTAL	55740	53200	61710	57490	41200	59820	33365	26504	19089	34332	13579	23924
MEAN	1798	1773	1991	1855	1471	1930	1112	855	636	1107	438	797
MAX	2160	2340	2330	2130	1800	3210	1650	1040	1200	2310	627	1030
MIN	1240	1000	1470	1500	1100	1160	855	729	311	381	322	396
AC-FT	110600	105500	122400	114000	81720	118700	66180	52570	37860	68100	26930	47450

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1994, BY WATER YEAR (WY)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	1632	1644	1877	2138	2611	2889	2627	2864	3318	1867	1220	1930
MAX	3859	4717	4404	4487	6612	7148	9535	11770	17660	10910	6393	7903
(WY)	1987	1985	1985	1984	1984	1984	1984	1984	1983	1983	1983	1983
MIN	464	792	734	864	1355	1132	724	289	315	123	288	230
(WY)	1992	1990	1990	1991	1993	1991	1989	1989	1992	1990	1991	1990

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1983 - 1994

ANNUAL TOTAL	585667	479953	
ANNUAL MEAN	1605	1315	
MEDIAN OF ANNUAL MEANS			2213
HIGHEST ANNUAL MEAN			1470
LOWEST ANNUAL MEAN			5418
HIGHEST DAILY MEAN	6810	Mar 9	3210
LOWEST DAILY MEAN	343	Jun 16	311
ANNUAL SEVEN-DAY MINIMUM	428	Jun 13	367
INSTANTANEOUS PEAK FLOW (STAGE)			3450 (4.38)
INSTANTANEOUS PEAK STAGE			*8.62
ANNUAL RUNOFF (AC-FT)	1162000	952000	1603000
10 PERCENT EXCEEDS	2290	2100	4630
50 PERCENT EXCEEDS	1450	1300	1520
90 PERCENT EXCEEDS	718	470	360

e Estimated.

* Backwater from ice.

PLATTE RIVER BASIN

103

06770500 PLATTE RIVER NEAR GRAND ISLAND, NE (National Water-Quality Assessment, NAWQA, station)

LOCATION.--Lat 40°52'28", long 98°16'54", in SW1/4 SW1/4 sec.31, T.11 N., R.8 W., Merrick County, Hydrologic Unit 10200101, on left bank 20 ft downstream from bridge on U.S. Highway 34, 2 mi upstream from Burlington Northern Inc. bridge, 5 mi southeast of Grand Island, and at mile 70.0.

DRAINAGE AREA (REVISED).--57,650 mi², of which about 52,940 mi² contributes directly to surface runoff.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 956: 1935. WSP 1390: 1942. WDR NE-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,831.90 ft above sea level (Nebraska Department of Highways bench mark). Prior to Oct. 23, 1933, nonrecording gage at bridge 68 ft downstream and Oct. 23, 1933, to Aug. 19, 1980, water-stage recorder at site 98 ft downstream, all at same datum.

REMARKS.--Records good except for periods of estimated record, 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 1993 TO SEPTEMBER 1994 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1550	1790	e3100	e1000	e1700	e3000	1450	1050	697	479	691	229
2	1690	1780	2910	e1300	e1500	e3500	1490	1000	703	497	667	245
3	1780	1860	2390	e1600	e1600	e4300	1470	976	657	522	787	297
4	1670	1850	2140	e1700	e1800	e5000	1390	985	546	874	967	553
5	1640	1810	2080	e1700	e1900	e5600	1350	970	460	823	792	730
6	1610	1670	1990	e1600	e2000	5390	1350	929	409	742	749	834
7	1660	1680	1920	1500	e1950	4240	1270	892	521	911	661	739
8	1620	1730	1700	1390	e1200	3710	1300	880	882	954	870	696
9	1520	1620	1680	e1100	e840	2960	1200	911	1310	1050	805	601
10	1500	1760	1840	e1200	e1000	2740	1120	816	1350	1400	719	519
11	1720	1770	1860	e1300	e1150	2760	1150	781	1370	1620	697	629
12	1790	1920	1960	e1400	e1300	2700	1680	758	1430	1640	602	743
13	1840	2060	1950	e1300	e1400	2460	1650	738	1080	1560	528	738
14	1990	2050	2000	e1200	e1400	2390	1500	784	1050	1370	560	689
15	2450	2030	2070	e1100	e1700	2300	1510	868	873	1510	519	590
16	2390	2010	1940	e1050	e1800	2290	1870	807	702	2180	458	717
17	2140	2040	1870	e1000	e1900	2410	1970	826	595	2510	426	658
18	2120	2180	1830	e1000	e2000	2250	1730	822	591	2530	385	638
19	2190	2100	1800	e1200	e2300	2200	1660	780	596	2480	382	618
20	2160	2120	1780	e1300	e2600	2120	1490	768	577	2370	355	556
21	2030	2140	1690	e1400	e2300	2000	1250	808	564	2190	348	557
22	1810	2190	1560	e1400	e1800	2000	1180	820	771	1790	381	557
23	1710	2180	1420	e1500	e1500	1990	1100	817	784	1410	366	646
24	1840	2030	1350	e1600	e1400	1890	1050	753	710	1090	325	627
25	2040	e1200	1600	e1750	e1250	1850	1110	717	984	1090	313	700
26	2060	e800	2000	e1800	e1500	1820	1020	738	997	1020	328	661
27	1980	e700	1870	e1900	e1700	1740	914	776	588	1030	269	607
28	1850	e1200	1480	e1900	e2000	1670	936	729	497	977	256	667
29	1860	e2000	1090	e1850	---	1500	1070	773	470	1080	252	812
30	1470	e3200	e900	e1850	---	1380	1070	769	465	860	263	874
31	1600	---	e950	e1750	---	1420	---	724	---	782	242	---
TOTAL	57280	55470	56720	44640	46490	83580	40300	25765	23229	41341	15963	18727
MEAN	1848	1849	1830	1440	1660	2696	1343	831	774	1334	515	624
MAX	2450	3200	3100	1900	2600	5600	1970	1050	1430	2530	967	874
MIN	1470	700	900	1000	840	1380	914	717	409	479	242	229
AC-FT	113600	110000	112500	88540	92210	165800	79940	51100	46070	82000	31660	37140

e Estimated.

PLATTE RIVER BASIN

06770500 PLATTE RIVER NEAR GRAND ISLAND, NE --Continued
(National Water-Quality Assessment, NAWQA, station)

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1994, BY WATER YEAR (WY)

MEAN	1197	1295	1350	1444	2012	2429	2044	2260	2310	1063	473	870
MAX	6970	5250	4607	4955	7065	7051	9906	12190	16990	10810	5865	6575
(WY)	1974	1985	1985	1984	1984	1984	1984	1984	1983	1983	1983	1983
MIN	.000	.000	.000	37.0	418	769	544	148	20.0	.000	.000	.000
(WY)	1942	1942	1942	1942	1942	1957	1967	1955	1956	1953	1953	1953

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1942 - 1994

ANNUAL TOTAL	672768			509505			1558	
ANNUAL MEAN	1843			1396			5380	1983
HIGHEST ANNUAL MEAN							414	1956
LOWEST ANNUAL MEAN							23500	Jun 30 1983
HIGHEST DAILY MEAN	11500	Mar 10		5600	Mar 5			
LOWEST DAILY MEAN	418	Jun 17		229	Sep 1		*.00	Oct 1 1941
ANNUAL SEVEN-DAY MINIMUM	518	Jun 15		251	Aug 27		.00	Oct 1 1941
INSTANTANEOUS PEAK FLOW (STAGE)				6690 (3.69)	Mar 6		30000	Jun 6 1935
INSTANTANEOUS PEAK STAGE				4.02	Mar 4		6.16	Mar 27 1960
ANNUAL RUNOFF (AC-FT)	1334000			1011000			1129000	
10 PERCENT EXCEEDS	2820			2180			3100	
50 PERCENT EXCEEDS	1530			1370			1100	
90 PERCENT EXCEEDS	857			559			114	

* No flow at times in many years.

** Backwater from ice.

PLATTE RIVER BASIN

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06770500 PLATTE RIVER NEAR GRAND ISLAND, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972-89, 1993 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1972 to September 1980.

WATER TEMPERATURES: July 1972 to September 1980.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,250 microsiemens Feb. 3, 1980; minimum daily, 575 microsiemens May 24, 1977.

WATER TEMPERATURES: Maximum, 34.5° C July 23, 1972; minimum, 0.0° C on many days during winter periods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (μS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (° C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CaCO ₃ (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)	
OCT											
20...	1630	2170	--	8.5	13.5	715	10.4	300	120	78	
NOV											
09...	1000	1580	750	8.5	4.5	718	13.4	--	--	--	
DEC											
15...	1130	2110	--	8.9	0.5	713	14.2	350	150	91	
JAN											
12...	1000	1400	1050	8.2	1.0	715	13.1	330	130	89	
FEB											
15...	1000	1700	1080	8.2	0.5	720	12.9	340	160	90	
MAR											
15...	1200	2420	1030	8.8	11.0	714	10.8	350	130	92	
APR											
20...	1130	1560	1020	8.6	13.0	718	9.6	320	110	83	
MAY											
18...	1130	832	993	8.8	24.0	714	11.5	270	100	65	
JUN											
08...	1130	888	725	8.9	23.5	708	10.7	200	99	48	
09...	1230	1340	693	8.8	23.5	714	11.2	200	82	52	
JUL											
18...	1100	2500	864	8.8	27.0	711	8.2	250	66	64	
AUG											
01...	1045	681	858	8.6	23.0	710	9.0	230	80	51	
29...	1430	261	880	8.8	29.5	710	8.6	240	78	55	
SEP											
26...	1100	650	901	8.3	16.5	710	10.0	250	66	61	
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY WAT DIS TOT IT FIELD (MG/L AS CaCO ₃) (39086)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO ₃) (00452)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO ₃) (00453)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
OCT											
20...		26	87	2	15	185	7	211	250	33	0.50
NOV											
09...		--	--	--	--	203	11	226	--	--	--
DEC											
15...		29	92	2	10	192	5	225	280	35	0.50
JAN											
12...		27	94	2	13	204	0	249	280	38	0.60
FEB											
15...		28	91	2	13	184	0	225	290	39	0.60
MAR											
15...		28	88	2	13	220	1	266	270	36	0.50
APR											
20...		27	88	2	14	211	14	228	280	37	0.60
MAY											
18...		27	92	2	14	173	22	167	280	41	0.60
JUN											
08...		20	68	2	11	103	4	118	200	30	0.40
09...		18	60	2	5.0	123	8	133	180	25	0.40
JUL											
18...		22	83	2	14	185	13	199	220	29	0.60
AUG											
01...		25	91	3	16	150	12	159	230	32	0.50
29...		25	100	3	15	161	16	165	240	36	0.50
SEP											
26...		23	89	2	14	181	0	221	230	31	0.60

PLATTE RIVER BASIN

06770500 PLATTE RIVER NEAR GRAND ISLAND, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	SILICA, DIS- SOLVED (MG/L AS SIO ₂) (00955)	SOLIDS, RESIDUE AT 180 ° C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)
OCT 20...	23	629	629	0.86	3690	--	<0.010	1.20	0.020	0.28
NOV 09...	--	--	--	--	--	1.47	0.030	1.50	0.030	0.47
DEC 15...	27	708	689	0.96	4030	--	<0.010	2.00	0.040	0.56
JAN 12...	27	724	700	0.98	2740	1.98	0.020	2.00	0.050	0.35
FEB 15...	25	746	697	1.01	3420	2.07	0.030	2.10	0.060	0.34
MAR 15...	26	724	697	0.98	4730	2.49	0.010	2.50	0.060	0.64
APR 20...	19	710	680	0.97	2990	1.08	0.020	1.10	0.020	0.78
MAY 18...	9.5	621	634	0.84	1400	--	<0.010	0.210	0.020	1.5
JUN 08...	12	458	451	0.62	1100	--	<0.010	<0.050	0.020	2.5
JUN 09...	12	469	427	0.64	1700	0.240	0.020	0.260	0.030	2.3
JUL 18...	19	588	564	0.80	3970	--	<0.010	0.280	0.020	1.5
AUG 01...	22	564	558	0.77	1040	--	<0.010	<0.050	0.020	0.98
AUG 29...	24	586	593	0.80	413	--	<0.010	<0.050	0.020	0.98
SEP 26...	20	579	579	0.79	1020	--	<0.010	0.400	0.020	0.88

DATE	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (µ G/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (µ G/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
OCT 20...	0.28	0.30	0.30	1.5	1.5	0.050	0.060	<3	2	1.9
NOV 09...	0.27	0.50	0.30	2.0	1.8	0.060	0.050	--	--	3.7
DEC 15...	0.26	0.60	0.30	2.6	2.3	0.060	0.070	<3	6	2.1
JAN 12...	0.25	0.40	0.30	2.4	2.3	0.090	0.090	<3	5	6.0
FEB 15...	0.24	0.40	0.30	2.5	2.4	0.090	0.080	5	7	6.4
MAR 15...	--	0.70	<0.20	3.2	--	0.100	0.090	10	4	8.2
APR 20...	0.28	0.80	0.30	1.9	1.4	0.050	0.030	5	2	4.3
MAY 18...	0.28	1.5	0.30	1.7	0.51	<0.010	<0.010	5	4	3.6
JUN 08...	0.18	2.5	0.20	2.5	--	<0.010	<0.010	9	2	3.3
JUN 09...	0.37	2.3	0.40	2.6	0.66	0.050	0.020	6	1	4.7
JUL 18...	0.28	1.5	0.30	1.8	0.58	0.070	0.070	6	3	5.3
AUG 01...	0.28	1.0	0.30	1.0	--	<0.010	<0.010	4	3	3.8
AUG 29...	0.28	1.0	0.30	1.0	--	0.020	<0.010	4	11	3.7
SEP 26...	0.28	0.90	0.30	1.3	0.70	0.010	<0.010	<3	3	8.9

PLATTE RIVER BASIN

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06770500 PLATTE RIVER NEAR GRAND ISLAND, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. FT ³ /S (00061)	TEMPER- ATURE WATER (° C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT						
20...	1630	2170	13.5	57	334	89
NOV						
09...	1000	1580	4.5	79	337	66
DEC						
15...	1130	2110	0.5	77	439	58
JAN						
12...	1000	1400	1.0	52	197	16
FEB						
15...	1000	1700	0.5	73	335	12
MAR						
15...	1200	2420	11.0	57	372	76
APR						
20...	1130	1560	13.0	67	282	52
MAY						
18...	1130	832	24.0	134	301	80
JUN						
08...	1130	888	23.5	778	1870	31
09...	1230	1340	23.5	303	1100	91
JUL						
18...	1100	2500	27.0	152	1030	84
AUG						
01...	1045	681	23.0	38	70	91
29...	1430	261	29.5	70	49	47

PLATTE RIVER BASIN

06771500 WOOD RIVER NEAR GIBBON, NE

LOCATION.-- Lat. 40° 46' 17", long. 98° 47' 51" in NW1/4 sec. 9, T.9 N., R.13 W., Buffalo County, Hydrologic Unit 10200102, on the right bank 10 ft downstream from bridge on county road. From Gibbon 2.5 mi east on U.S. Highway 30 and 0.6 mi north on the county road.

DRAINAGE AREA (REVISED).--526 mi².

PERIOD OF RECORD.--April 1, 1949 to September 30, 1976. June, 1991 to current year (irrigation season only).

GAGE.--Water-stage recorder. Datum of gage is 2,024.88 ft above sea level.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,050 ft³/s June 15, 1967, gage height, 16.79 ft; no flow for many days in 1952-1962, 1964-1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period, May to September, 761 ft³/s June 29, gage height, 14.63 ft; minimum daily during period May to September, 0.57 ft³/s Sept. 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	7.0	4.5	17	14	4.2
2	---	---	---	---	---	---	---	7.2	4.3	19	15	4.7
3	---	---	---	---	---	---	---	7.5	4.4	21	36	3.7
4	---	---	---	---	---	---	---	9.1	4.2	20	35	4.8
5	---	---	---	---	---	---	---	11	3.2	19	89	2.5
6	---	---	---	---	---	---	---	10	2.9	37	93	2.7
7	---	---	---	---	---	---	---	9.5	10	28	54	7.2
8	---	---	---	---	---	---	---	9.2	413	46	28	4.7
9	---	---	---	---	---	---	---	9.2	540	59	18	2.9
10	---	---	---	---	---	---	---	9.2	467	25	14	2.0
11	---	---	---	---	---	---	---	9.5	167	15	26	1.3
12	---	---	---	---	---	---	---	9.1	255	12	20	1.1
13	---	---	---	---	---	---	---	9.0	513	19	14	1.1
14	---	---	---	---	---	---	---	8.8	372	24	16	1.0
15	---	---	---	---	---	---	---	8.2	64	62	12	.91
16	---	---	---	---	---	---	---	8.3	35	45	9.6	.93
17	---	---	---	---	---	---	---	8.5	24	28	8.9	.79
18	---	---	---	---	---	---	---	8.4	22	17	8.6	.61
19	---	---	---	---	---	---	---	8.2	19	11	8.9	.57
20	---	---	---	---	---	---	---	8.0	16	9.9	9.0	.68
21	---	---	---	---	---	---	---	8.0	16	11	8.4	.85
22	---	---	---	---	---	---	---	7.6	15	11	8.9	3.5
23	---	---	---	---	---	---	---	7.3	18	11	9.3	3.7
24	---	---	---	---	---	---	---	5.4	15	16	9.3	3.6
25	---	---	---	---	---	---	---	5.3	13	12	6.2	3.4
26	---	---	---	---	---	---	---	5.2	13	120	6.2	3.4
27	---	---	---	---	---	---	---	4.5	15	124	5.8	4.0
28	---	---	---	---	---	---	---	4.2	14	48	5.5	3.9
29	---	---	---	---	---	---	---	5.4	13	30	6.2	4.0
30	---	---	---	---	---	---	---	7.7	16	24	5.4	4.0
31	---	---	---	---	---	---	---	5.6	---	19	4.0	---
TOTAL	---	---	---	---	---	---	---	241.1	3088.5	959.9	604.2	82.74
MEAN	---	---	---	---	---	---	---	7.78	103	31.0	19.5	2.76
MAX	---	---	---	---	---	---	---	11	540	124	93	7.2
MIN	---	---	---	---	---	---	---	4.2	2.9	9.9	4.0	.57
AC-FT	---	---	---	---	---	---	---	478	6130	1900	1200	164

PLATTE RIVER BASIN

109

06772000 WOOD RIVER NEAR ALDA, NE

LOCATION.--Lat 40°51'10", long 98°28'20", in NE1/4 SE1/4 sec.7, T.10 N., R.10 W., Hall County, Hydrologic Unit 10200102, on right bank 1.2 mi south of Alda, 2.2 mi upstream from old north channel of the Platte River, and at mile 26.6.

DRAINAGE AREA (REVISED).--599 mi².

PERIOD OF RECORD.--October 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,897.66 ft above sea level (Bureau of Reclamation bench mark).

REMARKS--Records fair except for period of estimated record, which is poor.. Numerous small pump diversions for irrigation above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	5.3	e4.1	e4.5	e2.3	e4.0	7.3	4.5	4.5	19	19	2.2
2	5.6	5.2	e4.3	e4.5	e2.0	e4.2	7.2	4.3	3.4	21	16	1.5
3	6.2	5.4	e4.7	e2.7	e1.9	e4.5	7.0	4.2	2.8	19	18	1.1
4	5.5	5.4	e5.2	e3.0	e2.0	e4.5	6.9	4.4	2.5	26	81	3.2
5	4.5	e5.4	e5.2	e3.4	e2.2	e5.0	6.3	4.7	2.3	24	56	3.1
6	3.8	e5.4	e5.2	e3.0	e2.4	e3.0	6.8	5.8	2.4	20	84	1.8
7	4.8	e5.6	e5.2	e1.8	e2.0	162	6.6	6.2	6.2	41	96	1.2
8	4.6	e5.6	e5.2	e2.2	e1.6	228	6.5	6.2	23	31	79	.63
9	4.0	5.7	e5.2	e2.5	e1.2	236	6.3	5.6	238	46	34	2.0
10	3.9	5.7	e5.0	e2.8	e1.4	193	6.3	5.4	457	64	19	1.5
11	3.7	5.3	e5.0	e2.4	e1.7	88	8.0	5.2	546	31	15	.97
12	3.5	6.4	e5.0	e2.5	e2.7	53	11	5.1	345	20	20	.69
13	3.7	5.9	e5.0	e2.9	e2.6	39	14	5.0	228	20	19	.39
14	6.0	6.5	e5.0	e2.7	e2.9	21	9.7	5.1	439	19	16	.10
15	7.9	5.7	e5.0	e2.5	e3.0	19	8.5	4.9	383	21	13	.00
16	11	5.7	e5.0	e2.5	e3.2	15	7.5	4.7	93	64	18	.00
17	5.9	5.8	e5.0	e2.1	e3.2	13	7.1	4.2	51	48	12	.00
18	5.0	5.6	e5.0	e2.1	e3.2	12	7.0	4.4	34	31	8.9	.00
19	4.0	5.7	e5.0	e2.3	e3.2	13	6.4	5.8	29	19	8.3	.00
20	3.5	6.1	e5.0	e2.5	e3.0	11	7.0	4.6	25	15	6.5	.00
21	3.2	5.4	e5.0	e2.7	e2.6	10	6.7	4.6	22	12	6.0	.00
22	3.1	5.0	e5.0	e3.1	e3.0	9.7	6.0	4.7	20	13	6.8	.00
23	2.9	4.6	e5.0	e3.3	e2.4	9.4	6.5	5.1	19	14	6.6	.00
24	3.1	e3.5	e4.5	e3.3	e2.0	8.9	6.4	4.3	19	14	9.3	.00
25	3.0	e2.0	e4.0	e3.3	e1.9	8.4	6.4	4.2	18	17	9.0	.00
26	2.6	e2.2	e3.6	e3.1	e1.7	8.6	5.2	3.2	16	18	6.8	.00
27	2.4	e2.7	e3.0	e2.9	e2.4	8.5	4.3	2.6	15	94	4.4	.00
28	3.3	e3.1	e2.5	e2.9	e2.8	8.3	5.1	2.6	16	130	3.6	.06
29	3.8	e3.4	e2.6	e2.4	---	7.8	4.7	2.6	16	56	2.2	.51
30	e4.6	e3.6	e3.0	e2.0	---	8.2	5.1	2.8	16	30	2.3	.63
31	e5.2	---	e3.5	e1.4	---	7.6	---	3.4	---	23	2.5	---
TOTAL	140.3	148.9	141.0	85.3	66.5	1250.6	209.8	140.4	3092.1	1020	698.2	21.58
MEAN	4.53	4.96	4.55	2.75	2.37	40.3	6.99	4.53	103	32.9	22.5	.72
MAX	11	6.5	5.2	4.5	3.2	236	14	6.2	546	130	96	3.2
MIN	2.4	2.0	2.5	1.4	1.2	4.0	4.3	2.6	2.3	12	2.2	.00
AC-FT	278	295	280	169	132	2480	416	278	6130	2020	1380	43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1994, BY WATER YEAR (WY)

MEAN	2.73	.37	.33	.94	4.39	19.8	3.95	12.4	41.6	31.1	12.8	6.24
MAX	48.9	4.96	4.55	27.2	51.2	163	34.9	83.4	467	279	63.3	76.3
(WY) 1966	1994	1994	1973	1966	1993	1984	1965	1967	1993	1962	1985	1985
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.45	.000
(WY) 1954	1954	1954	1954	1955	1954	1954	1956	1964	1954	1963	1954	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1954 - 1994

ANNUAL TOTAL	18724.49	7014.68	
ANNUAL MEAN	51.3	19.2	11.4
MEDIAN OF ANNUAL MEANS			8.2
HIGHEST ANNUAL MEAN			50.1
LOWEST ANNUAL MEAN			1993
HIGHEST DAILY MEAN	1100	Mar 11	546 Jun 11
LOWEST DAILY MEAN	.00	Jan 1	.00 Sep 15
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00 Sep 15
INSTANTANEOUS PEAK FLOW			576 Jun 11
INSTANTANEOUS PEAK STAGE			10.32 Jun 11
ANNUAL RUNOFF (AC-FT)	37140	13910	8280
10 PERCENT EXCEEDS	113	29	15
50 PERCENT EXCEEDS	5.3	5.0	.00
90 PERCENT EXCEEDS	.00	2.0	.00

Estimated

PLATTE RIVER BASIN

06773050 PRAIRIE CREEK NEAR OVINA, NE
(National Water-Quality Assessment, NAWQA, station)

LOCATION.--Lat 40°59'03", long 98°24'59", in NW1/4 SE1/4 NW1/4, sec .26, T.12 N., R.10 W., Hall County, Hydrologic Unit 10200103, on downstream side of right pier of Hall County bridge number 18V7 on Engelman Road, 1.75 mi north of the Highway 2, Airport Road, and Engelman Road intersection.

DRAINAGE AREA.--132 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June, 1991 to current year (partial years only, 1991-93).

GAGE.--Water-stage recorder. Datum of gage is 1,873 ft above sea level, from topographic map.

REMARKS.--Records good, except for estimated period which are poor. Natural flow affected by beaver activity, small pump diversions and runoff from irrigation above gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1290 ft³/s Mar. 9, 1993, gage height, 10.55 ft, maximum observed, discharge measurement; maximum gage height, 10.77 ft, June 2, 1991; no flow for many days in Sept., 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 163 ft³/s Mar. 5, gage height 6.38 ft; minimum daily 0.02 ft³/s Sept. 16-19, 29, 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	7.0	4.6	4.8	e3.8	e4.0	4.4	6.0	3.6	7.7	9.3	1.3
2	5.5	6.6	4.5	4.9	e4.0	3.4	5.9	6.0	3.6	6.6	8.7	1.3
3	5.8	6.7	4.4	5.6	e4.1	4.9	4.6	6.1	3.9	5.4	9.2	.94
4	5.7	6.7	4.6	4.7	e4.2	10	5.1	5.8	3.9	14	8.7	.84
5	5.5	6.4	4.7	4.8	e4.0	101	4.6	5.6	3.7	15	21	.65
6	5.6	6.8	4.5	e3.0	e3.8	73	4.7	5.7	3.7	6.8	22	.44
7	5.6	6.7	4.7	e3.2	e3.6	21	4.9	5.8	3.9	6.2	11	.31
8	5.9	5.1	4.5	e3.7	e3.4	14	4.6	6.4	7.3	20	6.9	.25
9	6.2	4.5	4.5	e4.4	e3.0	9.3	4.7	4.8	23	32	16	.17
10	6.0	4.3	4.2	e5.0	e1.2	8.0	4.3	4.7	23	14	79	.10
11	6.0	4.7	4.2	4.5	e3.5	6.3	5.4	4.7	12	7.4	22	.07
12	5.8	5.5	4.6	4.4	e4.0	6.3	15	4.7	e9.0	5.5	6.7	.05
13	5.7	5.8	4.7	4.7	4.2	5.9	12	4.8	e7.6	6.9	2.9	.03
14	7.0	4.9	4.8	4.8	4.4	6.0	8.5	4.8	e6.6	8.9	2.1	.03
15	7.8	4.7	4.4	4.9	4.5	5.9	7.1	4.8	e6.0	5.6	1.9	.03
16	6.4	4.8	4.5	4.8	4.8	6.1	6.5	4.9	e5.2	46	1.9	.02
17	6.2	4.7	4.7	e4.0	5.0	5.9	5.9	4.7	e5.2	35	5.9	.02
18	6.3	4.8	4.6	e3.5	6.8	5.7	5.6	4.7	e5.0	11	6.6	.02
19	6.3	4.6	4.7	e4.0	6.7	5.5	5.6	4.8	e4.7	7.2	8.8	.02
20	6.2	4.5	4.7	e4.5	5.8	5.4	5.6	4.7	e4.4	5.3	4.5	.05
21	6.3	4.6	4.6	e5.0	5.4	5.3	5.6	4.6	e4.4	4.8	2.4	.08
22	6.3	4.8	4.6	e5.6	e2.0	5.2	5.6	4.5	e4.3	4.9	1.9	.12
23	6.3	4.6	4.5	e5.4	e1.5	5.5	5.8	4.5	4.3	4.9	1.8	.13
24	6.4	e2.5	4.5	e5.2	e2.5	5.4	5.7	4.3	3.9	5.1	1.7	.08
25	6.2	e1.5	4.5	e4.5	e4.0	8.0	6.4	4.2	4.5	7.6	1.7	.06
26	5.9	e2.0	4.8	e4.3	e4.5	5.5	5.8	4.0	5.2	7.3	1.7	.06
27	6.4	e3.0	5.6	e4.0	e5.2	4.3	5.3	4.1	4.2	10	1.7	.04
28	6.7	e5.0	5.3	e3.8	e6.0	4.8	5.5	4.1	5.0	8.6	1.7	.03
29	6.6	4.5	4.6	e3.5	---	4.9	6.4	4.1	5.1	7.5	1.9	.02
30	6.5	4.5	4.5	e3.3	---	4.6	6.0	3.9	6.0	6.5	1.5	.02
31	6.7	---	4.7	e3.5	---	6.5	---	3.6	---	8.5	1.1	---
TOTAL	191.5	146.8	143.3	136.3	115.9	367.6	183.1	150.4	192.2	342.2	274.2	7.28
MEAN	6.18	4.89	4.62	4.40	4.14	11.9	6.10	4.85	6.41	11.0	8.85	.24
MAX	7.8	7.0	5.6	5.6	6.8	101	15	6.4	23	46	79	1.3
MIN	5.5	1.5	4.2	3.0	1.2	3.4	4.3	3.6	3.6	4.8	1.1	.02
AC-FT	380	291	284	270	230	729	363	298	381	679	544	14

WTR YR 1994 TOTAL 2250.78 MEAN 6.17 MAX 101 MIN .02 AC-FT 4460

e Estimated

PLATTE RIVER BASIN

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06773050 PRAIRIE CREEK NEAR OVINA, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water year 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE INST. FT ³ /S (00061)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (° C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CaCO ₃ (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)
OCT										
14...	1400	6.5	804	7.2	11.5	706	8.4	320	56	100
NOV										
09...	0800	4.6	856	8.1	3.0	715	9.7	380	79	120
DEC										
08...	0830	5.3	916	8.1	1.0	710	10.4	390	74	120
JAN										
05...	0900	4.9	783	7.9	2.0	700	11.2	390	90	120
FEB										
08...	1000	3.4	985	6.6	0.0	710	10.4	420	120	130
MAR										
16...	1400	6.1	655	8.0	11.0	707	9.8	270	18	81
APR										
19...	1130	5.9	827	8.7	15.0	717	9.4	330	63	98
MAY										
05...	1250	5.4	786	8.3	18.0	710	12.1	360	83	110
31...	1300	3.8	829	8.2	21.0	715	11.1	--	--	--
JUN										
09...	1700	50	963	8.0	22.5	713	5.0	400	120	120
10...	0700	25	1090	7.5	19.0	715	0.1	430	100	130
JUL										
14...	0930	9.8	415	7.6	20.5	710	6.0	150	5	47
AUG										
01...	1500	9.5	974	8.6	26.5	712	9.1	420	150	130
27...	0900	1.8	519	8.2	24.0	710	5.7	190	10	58
SEP										
14...	1000	0.06	617	8.1	23.0	700	7.2	280	7	85

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CaCO ₃ (39086)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO ₃ (00452)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO ₃ (00453)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
OCT										
14...	18	28	0.7	17	268	0	327	120	14	0.40
NOV										
09...	20	33	0.7	16	303	0	370	140	16	0.30
DEC										
08...	22	33	0.7	14	316	0	386	160	15	0.20
JAN										
05...	22	33	0.7	14	300	0	366	140	16	0.30
FEB										
08...	23	35	0.7	14	300	0	366	150	16	0.30
MAR										
16...	17	24	0.6	22	254	0	310	67	12	0.30
APR										
19...	20	33	0.8	19	294	0	322	120	17	0.30
MAY										
05...	20	32	0.7	18	274	0	334	110	14	0.40
31...	--	--	--	--	328	0	400	--	--	--
JUN										
09...	24	44	1	17	275	0	336	180	20	<0.10
10...	25	43	0.9	44	326	0	398	200	40	<0.10
JUL										
14...	8.8	15	0.5	17	148	0	181	43	6.7	0.30
AUG										
01...	24	48	1	24	279	8	323	220	17	0.30
27...	12	22	0.7	23	184	0	225	52	10	0.30
SEP										
14...	16	18	0.5	23	271	0	331	58	11	0.40

PLATTE RIVER BASIN

06773050 PRAIRIE CREEK NEAR OVINA, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, RESIDUE AT 180 ° C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)
OCT										
14...	29	509	492	0.69	8.93	--	<0.010	0.600	0.060	0.64
NOV										
09...	32	570	565	0.78	7.13	0.800	0.010	0.810	0.030	0.47
DEC										
08...	30	632	591	0.86	9.04	1.09	0.010	1.10	0.030	0.27
JAN										
05...	30	590	561	0.80	7.81	0.980	0.020	1.00	0.040	0.36
FEB										
08...	37	627	593	0.85	5.76	1.38	0.020	1.40	0.040	0.26
MAR										
16...	31	439	416	0.60	7.17	1.25	0.050	1.30	0.460	1.2
APR										
19...	21	554	490	0.75	8.83	0.070	0.010	0.080	0.020	2.3
MAY										
05...	28	544	501	0.74	7.93	--	<0.010	0.290	0.040	0.76
31...	--	--	--	--	--	0.350	0.040	0.390	0.150	0.95
JUN										
09...	29	670	604	0.91	90.4	0.120	0.030	0.150	0.380	1.1
10...	28	816	715	1.11	54.6	--	<0.010	<0.050	2.20	7.8
JUL										
14...	29	271	264	0.37	7.17	0.500	0.260	0.760	0.830	2.0
AUG										
01...	33	703	673	0.96	18.0	1.52	0.080	1.60	0.030	1.3
27...	34	346	324	0.47	1.68	--	<0.010	<0.050	0.040	3.4
SEP										
14...	37	439	415	0.60	0.07	--	0.010	<0.050	0.160	6.7

DATE	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (µ G/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (µ G/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
OCT										
14...	0.24	0.70	0.30	1.3	0.90	0.580	0.580	9	350	5.6
NOV										
09...	0.27	0.50	0.30	1.3	1.1	0.470	0.440	6	320	4.3
DEC										
08...	0.27	0.30	0.30	1.4	1.4	0.420	0.430	16	310	4.5
JAN										
05...	0.26	0.40	0.30	1.4	1.3	0.440	0.410	22	350	4.2
FEB										
08...	0.26	0.30	0.30	1.7	1.7	0.940	0.440	22	450	4.0
MAR										
16...	1.0	1.7	1.5	3.0	2.8	0.940	0.840	22	400	10
APR										
19...	0.78	2.3	0.80	2.4	0.88	0.820	0.810	82	510	11
MAY										
05...	0.56	0.80	0.60	1.1	0.89	0.950	0.910	49	440	7.3
31...	0.55	1.1	0.70	1.5	1.1	1.30	0.240	--	--	6.6
JUN										
09...	0.62	1.5	1.0	1.7	1.2	1.00	0.950	<3	660	8.8
10...	5.2	10	7.4	10	--	2.60	1.90	64	950	4.4
JUL										
14...	0.87	2.8	1.7	3.6	2.5	1.80	1.00	23	240	11
AUG										
01...	0.67	1.3	0.70	2.9	2.3	0.790	0.760	6	91	7.2
27...	2.5	3.4	2.5	3.4	--	1.10	0.510	11	140	9.3
SEP										
14...	5.8	6.9	6.0	6.9	--	1.10	1.10	3	700	15

PLATTE RIVER BASIN

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06773050 PRAIRIE CREEK NEAR OVINA, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. FT ³ /S (00061)	TEMPER- ATURE WATER (°C) (00010)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT						
14...	1400	6.5	11.5	127	2.2	99
NOV						
09...	0800	4.6	3.0	15	0.19	91
DEC						
08...	0830	5.3	1.0	22	0.31	97
JAN						
05...	0900	4.9	2.0	19	0.25	88
MAR						
16...	1400	6.1	11.0	40	0.65	100
APR						
19...	1130	5.9	15.0	81	1.3	98
MAY						
05...	1250	5.4	18.0	41	0.60	96
JUN						
09...	1700	50	22.5	358	48	98
10...	0700	25	19.0	190	13	97
JUL						
14...	0930	9.8	20.5	389	10	98
AUG						
01...	1500	9.5	26.5	116	3.0	98
27...	0900	1.8	24.0	272	1.3	99
SEP						
14...	1000	0.06	23.0	135	0.02	100

PLATTE RIVER BASIN

06773150 SILVER CREEK AT OVINA, NE

LOCATION.--Lat. 40° 57' 34", Long 98° 27' 18", in NW1/4 NW1/4 NW1/4, sec.4, T.11 N., R.10 W., Hydrologic Unit 10200103, on right bank 150 ft downstream from Hall County Bridge Number 22T9 on private property, 2 mi west of intersection of Airport and Engleman Road, then 1/8 mi south of Airport Road, Hall County.

DRAINAGE AREA.--67.6 mi².

PERIOD OF RECORD.--May, 1991 to current year (irrigation season only).

GAGE.--Water-stage recorder. Datum of gage is 1,881 ft above sea level, from topographic map.

REMARKS.--Record poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 620 ft³/s June 2, 1991, gage height, 6.57 ft; no flow for many days 1991-92.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period May to September, 20 ft³/s June 10, gage height, 2.85 ft; no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	2.5	.07	.00	.03	.00
2	---	---	---	---	---	---	---	2.7	.07	.07	.01	.00
3	---	---	---	---	---	---	---	3.0	.07	.08	.04	.00
4	---	---	---	---	---	---	---	2.3	.07	.10	.06	.00
5	---	---	---	---	---	---	---	2.1	.07	.08	.01	.00
6	---	---	---	---	---	---	---	1.7	.07	.09	.00	.00
7	---	---	---	---	---	---	---	1.6	.25	1.1	.00	.00
8	---	---	---	---	---	---	---	1.5	6.2	.26	.00	.00
9	---	---	---	---	---	---	---	1.4	13	.08	.00	.00
10	---	---	---	---	---	---	---	1.4	19	.23	1.0	.00
11	---	---	---	---	---	---	---	1.3	11	.22	2.1	.00
12	---	---	---	---	---	---	---	1.1	4.9	.07	.14	.00
13	---	---	---	---	---	---	---	1.1	8.6	.07	.03	.00
14	---	---	---	---	---	---	---	1.1	8.2	.07	.00	.00
15	---	---	---	---	---	---	---	1.0	3.1	.08	.00	.00
16	---	---	---	---	---	---	---	1.1	1.1	4.4	.00	.00
17	---	---	---	---	---	---	---	.90	.60	5.9	.00	.00
18	---	---	---	---	---	---	---	.87	.25	5.5	.00	.00
19	---	---	---	---	---	---	---	.62	.11	1.7	.00	.00
20	---	---	---	---	---	---	---	.59	.09	.18	.00	.00
21	---	---	---	---	---	---	---	.45	.09	.07	.00	.00
22	---	---	---	---	---	---	---	.46	.09	.07	.00	.00
23	---	---	---	---	---	---	---	.26	.13	.05	.00	.00
24	---	---	---	---	---	---	---	.07	.10	.01	.00	.00
25	---	---	---	---	---	---	---	.06	.09	.00	.00	.00
26	---	---	---	---	---	---	---	.05	.07	.00	.00	.00
27	---	---	---	---	---	---	---	.04	.07	.00	.00	.00
28	---	---	---	---	---	---	---	.06	.06	.00	.00	.00
29	---	---	---	---	---	---	---	.08	.00	.00	.00	.00
30	---	---	---	---	---	---	---	.08	.00	.00	.00	.00
31	---	---	---	---	---	---	---	.07	---	.01	.00	---
TOTAL	---	---	---	---	---	---	---	31.56	77.52	20.49	3.42	0.00
MEAN	---	---	---	---	---	---	---	1.02	2.58	.66	.11	
.000												
MAX	---	---	---	---	---	---	---	3.0	19	5.9	2.1	.00
MIN	---	---	---	---	---	---	---	.04	.00	.00	.00	.00
AC-FT	---	---	---	---	---	---	---	63	154	41	6.8	.00

PLATTE RIVER BASIN

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06774000 PLATTE RIVER NEAR DUNCAN, NE
(National Stream-Quality Accounting Network, NASQAN, station)

LOCATION.--Lat 41°22'04", long 97°29'40", in SE1/4 SW1/4 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.

DRAINAGE AREA (REVISED).--59,300 mi², of which about 54,630 mi² contributes directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1895 to December 1909 (irrigation seasons only 1895-1900), 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, 1903-5, 1929-32, 1935(M), 1936. WDR NE-76-1: Drainage area.

GAGE.--Water-stage recorder. 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.

REMARKS.--Records good except for periods of estimated record, 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2360	1840	e2500	e2800	e1750	e4100	1760	1900	1010	595	811	177
2	2090	2080	e3000	e2900	e1800	e5000	1850	1890	826	676	724	192
3	2230	2110	e3200	e3000	e1850	e6000	1860	1860	803	777	673	203
4	2500	2200	e3400	e2700	e1900	e7400	1850	1770	811	801	772	457
5	2310	2220	e3500	e2700	e2100	e8800	1660	1680	799	836	861	415
6	2360	2240	e3400	e2800	e2000	e10000	1510	1710	642	1040	962	611
7	2240	2190	e3400	e2300	e1900	e7200	1550	1820	517	966	1020	867
8	2310	2100	e3300	e2000	e1800	e6000	1450	1650	667	828	903	912
9	2310	2220	e3000	e2200	e1650	e5000	1480	1480	1070	971	891	783
10	2060	2170	e3500	e2300	e1600	e4100	1570	1370	1530	986	902	754
11	1990	2160	e2200	e2100	e1650	e3350	1550	1340	1940	1060	833	625
12	2060	2410	e2300	e1800	e1700	3420	2180	1230	2110	1300	853	534
13	2140	2500	e2300	e1700	e1750	3350	2790	1190	2330	1730	826	610
14	2290	2680	e2400	e1400	e1850	3060	2880	1140	2100	1700	703	731
15	2690	2730	e2500	e1300	e2000	2850	2590	1220	1630	1410	614	785
16	3120	2730	e2600	e1350	e2100	2840	2360	1230	1590	1650	586	698
17	3340	2750	e2500	e1400	e2300	2740	2480	1070	1510	2070	532	622
18	3100	2800	e2400	e1350	e2600	2600	2660	1000	1250	2510	487	735
19	3020	2930	e2400	e1300	e3200	2760	2390	1010	927	2730	471	773
20	3100	3010	e2300	e1300	e4400	2570	2260	954	860	2480	509	764
21	3050	2950	e2200	e1350	e4600	2580	2220	838	849	2420	481	678
22	2870	2880	e2100	e1400	e4400	2390	1900	833	803	2080	400	798
23	2680	2820	e2100	e1500	e4100	2310	1720	1080	1190	1860	331	1050
24	2490	e1100	e2100	e1800	e3700	2200	1710	981	1400	1510	302	988
25	2550	e800	e2200	e2100	e3200	2130	1600	938	1210	1160	266	896
26	2840	e680	e2400	e1900	e2900	2070	1600	946	1140	986	238	812
27	2880	e600	e2600	e1800	e3100	1920	1600	930	1460	932	216	780
28	2850	e700	e2500	e1750	e3500	1990	1670	902	1190	876	219	741
29	2620	e900	e2400	e1700	---	1900	1750	845	818	841	232	717
30	2400	e1300	e2400	e1700	---	1720	1830	820	672	895	209	817
31	2070	---	e2500	e1700	---	1690	---	791	---	877	184	---
TOTAL	78920	62800	81600	59400	71400	116040	58280	38418	35654	41553	18011	20525
MEAN	2546	2093	2632	1916	2250	3743	1943	1239	1188	1340	581	684
MAX	3340	3010	3500	3000	4600	10000	2880	1900	2330	2730	1020	1050
MIN	1990	600	2100	1300	1600	1690	1450	791	517	595	184	177
AC-FT	156500	124600	161900	117800	141600	230200	115600	76200	70720	82420	35720	40710

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1994, BY WATER YEAR (WY)

	1260	1410	1402	1494	2250	2981	2473	2596	2704	1326	514	867
MEAN	1260	1410	1402	1494	2250	2981	2473	2596	2704	1326	514	867
MAX	6673	5617	5107	5603	8795	9531	13410	15450	18320	12590	6135	6785
(WY)	1974	1985	1985	1984	1984	1984	1984	1984	1983	1983	1983	1983
MIN	.000	.000	15.7	44.5	269	820	574	150	11.3	.000	.000	.000
(WY)	1957	1957	1942	1942	1942	1957	1967	1955	1956	1956	1956	1956

PLATTE RIVER BASIN

06774000 PLATTE RIVER NEAR DUNCAN, NE--Continued
(National Stream-Quality Accounting Network, NASQAN, station)

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1942 - 1994	
ANNUAL TOTAL	1016237		682601		1768	
ANNUAL MEAN	2784		1870		1390	
MEDIAN OF ANNUAL MEANS					1984	
HIGHEST ANNUAL MEAN				6652	494	1956
LOWEST ANNUAL MEAN					23800	Jul 1 1983
HIGHEST DAILY MEAN	16000	Mar 11	10000	Mar 6	.00	Jan 4 1942
LOWEST DAILY MEAN	600	Nov 27	177	Sep 1	.00	Oct 1 1943
ANNUAL SEVEN-DAY MINIMUM	706	Jan 2	202	Aug 28	44100	(*6.50) Jun 23 1905
INSTANTANEOUS PEAK FLOW (STAGE)			10000	Mar 6	**7.86	Mar 11 1993
INSTANTANEOUS PEAK STAGE			**6.39	Mar 6		
ANNUAL RUNOFF (AC-FT)	2016000		1354000		1281000	
10 PERCENT EXCEEDS	4540		3010		3720	
50 PERCENT EXCEEDS	2300		1770		1190	
90 PERCENT EXCEEDS	1000		679		78	

e Estimated.

* Site and datum then in use.

** Backwater from ice.

PLATTE RIVER BASIN

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06774000 PLATTE RIVER NEAR DUNCAN, NE--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965 to August 1994 (discontinued)..

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1977 to September 1981.

WATER TEMPERATURES: November 1977 to September 1980.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,100 microsiemens Feb. 12, 1981; minimum daily, 290 microsiemens Mar. 21, 1978.

WATER TEMPERATURES: Maximum, 33.0 °C July 10, 11, 1980; minimum, 0.0 °C on many days during winter periods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. FT ³ /S (00061)	PH WATER			TEMPER-ATURE WATER (°C) (00010)	BARO-METRIC PRESSURE (MM OF HG) (00025)	TUR-BIDITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 μM-MF (COLS./100 ML) (31625)	STREP-TOCOCCEI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
			SPECIFIC CON-DUCT-ANCE (μS/CM) (00095)	FIELD (STAND-ARD UNITS) (00400)							
NOV 09...	1300	2210	1050	8.4	6.0	730	12	10.8	220	110	
JAN 11...	1230	2100	1140	7.2	0.5	735	2.3	10.0	K170	44	
MAR 15...	1030	2790	906	8.3	7.5	728	15	6.1	270	120	
MAY 26...	1200	955	--	8.6	19.0	727	2.4	10.1	340	170	
JUL 20...	1005	2450	788	8.3	24.0	721	0.50	8.2	K79	220	
DATE		HARD-NESS NONCARB	HARD-NESS	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM ADSORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CaCO ₃) (39086)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO ₃) (00452)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO ₃) (00453)	
		TOTAL DISSOLV FLD. AS CaCO ₃ (MG/L) (00900)	DIS-SOLVED (MG/L AS Ca) (00915)								
NOV 09...	320	--	85	27	88	2	13	--	--	--	
JAN 11...	340	--	93	27	88	2	14	--	--	--	
MAR 15...	330	120	89	25	80	2	14	203	0	248	
MAY 26...	240	110	55	25	83	2	13	128	8	139	
JUL 20...	200	94	45	22	79	2	14	110	8	117	
DATE		SULFATE DIS-SOLVED (MG/L AS SO ₄) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, RESIDUE AT 180 °C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
NOV 09...	270	36	0.50	23	685	676	0.93	4090	1.77	0.030	
JAN 11...	260	38	0.60	30	722	708	0.98	4090	2.98	0.020	
MAR 15...	250	34	0.60	24	688	652	0.94	5180	2.69	0.010	
MAY 26...	250	39	0.50	8.2	571	553	0.78	1470	0.440	0.010	
JUL 20...	220	30	0.50	14	515	491	0.70	3410	--	<0.010	

PLATTE RIVER BASIN

06774000 PLATTE RIVER NEAR DUNCAN, NE--Continued

WATER QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
NOV 09...	1.80	0.050	0.65	--	0.70	2.5	--	0.130	0.070	0.070
JAN 11...	3.00	0.090	0.41	--	0.50	3.5	--	0.150	0.110	0.120
MAR 15...	2.70	0.030	0.57	0.37	0.60	3.3	3.1	0.210	0.170	0.130
MAY 26...	0.450	0.040	1.3	--	1.3	1.7	--	0.210	0.020	0.010
JUL 20...	0.110	0.030	1.5	--	1.5	1.6	--	0.190	<0.010	<0.010

DATE	TIME	ALUMINUM, DIS- SOLVED (µG/L AS AL) (01106)	BARIUM, DIS- SOLVED (µG/L AS BA) (01005)	COBALT, DIS- SOLVED (µG/L AS CO) (01035)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	LITHIUM DIS- SOLVED (µG/L AS LI) (01130)	MANGANESE, DIS- SOLVED (µG/L AS MN) (01056)
NOV 09...	1300	10	78	<3	10	29	4
MAR 15...	1030	<10	83	<3	5	26	3
MAY 26...	1200	10	76	<3	4	30	3
JUL 20...	1005	<10	72	4	10	29	2

DATE	MOLYB- DENUM, DIS- SOLVED (µG/L AS MO) (01060)	NICKEL, DIS- SOLVED (µG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (µG/L AS SE) (01145)	SILVER, DIS- SOLVED (µG/L A AG) (01075)	STRON- TIUM, DIS- SOLVED (µG/L A SR) (01080)	VANA- DIUM, DIS- SOLVED (µG/L AS V) (01085)
NOV 09...	<10	2	2	<1.0	780	<6
MAR 15...	10	1	2	<1.0	750	8
MAY 26...	<10	2	1	<1.0	610	<6
JUL 20...	<10	2	2	<1.0	550	12

DATE	TIME	DIS- CHARGE INST. FT ³ /S (00061)	TEMPER- ATURE WATER (°C) (00010)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
JAN 11...	1230	2100	0.5	64	363	41
MAY 26...	1200	955	19.0	93	240	88
JUL 20...	1005	2450	24.0	280	1850	89

PLATTE RIVER BASIN

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06775500 MIDDLE LOUP RIVER AT DUNNING, NE

LOCATION.--Lat 41°49'50", long 100°06'20", in NW1/4 SE1/4 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 (REVISED).--1,830 mi², of which about 79 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--September 1945 to current year.

REVISED RECORDS.--WDR NE-72: 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.

REMARKS.--Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
11	401	464	499	478	e428	411	518	491	469	415	455	469
2	400	452	528	505	e420	425	515	485	493	447	455	469
3	409	463	541	479	e420	436	511	479	486	414	466	499
4	412	484	524	466	e390	445	541	491	482	421	478	531
5	425	445	541	458	e410	484	507	479	484	441	461	510
6	438	433	499	e430	e390	498	509	468	475	428	467	467
7	446	447	519	e390	e360	465	529	457	478	476	478	446
8	494	450	513	e400	e330	445	550	457	513	501	488	441
9	446	455	534	e410	e300	458	547	457	515	476	502	431
10	444	453	515	e420	e310	462	544	446	496	467	474	431
11	453	446	528	e410	e320	470	545	441	490	458	466	432
12	463	502	549	e410	e330	475	540	441	483	481	462	439
13	482	469	569	e418	e340	477	552	446	482	506	471	439
14	504	478	499	e430	e340	496	566	452	477	482	466	450
15	515	452	522	e430	349	472	525	441	470	476	467	456
16	508	476	550	e440	390	485	524	425	472	511	462	433
17	533	486	550	457	404	512	546	430	480	495	461	420
18	534	491	507	441	434	503	544	436	483	472	459	429
19	518	482	515	463	446	505	532	430	478	466	467	429
20	520	454	470	454	427	521	526	420	476	444	462	430
21	514	441	495	486	415	495	521	425	474	442	461	433
22	516	465	449	474	387	510	519	410	485	433	457	415
23	518	457	483	471	340	514	519	441	525	427	456	404
24	509	e370	473	516	e320	495	519	452	435	442	470	418
25	502	e345	491	527	e290	485	535	485	418	439	490	421
26	484	e340	478	505	e290	484	516	474	398	471	476	417
27	489	e370	478	480	e300	464	441	470	398	436	473	425
28	500	e410	476	e468	344	462	479	465	378	433	471	430
29	468	e440	475	e460	---	471	452	461	372	436	468	430
30	439	466	505	e440	---	461	463	456	383	440	471	442
31	450	---	492	e428	---	494	---	452	---	449	475	---
TOTAL	14734	13386	15767	14044	10224	14780	15635	14063	13948	14125	14535	13286
MEAN	475	446	509	453	365	477	521	454	465	456	469	443
MAX	534	502	569	527	446	521	566	491	525	511	502	531
MIN	400	340	449	390	290	411	441	410	372	414	455	404
AC-FT	29220	26550	31270	27860	20280	29320	31010	27890	27670	28020	28830	26350

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1994, BY WATER YEAR (WY)

	MEAN	401	411	409	403	424	451	447	433	411	388	389	393
	MAX	475	517	509	490	499	544	545	560	507	473	469	477
	(WY)	1987	1992	1994	1967	1988	1993	1958	1983	1983	1962	1994	1987
	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

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1946 - 1994

ANNUAL TOTAL	169290	168527	
ANNUAL MEAN	464	462	413
HIGHEST ANNUAL MEAN			482
LOWEST ANNUAL MEAN			365
HIGHEST DAILY MEAN	601 Jul 20	569 Dec 13	778 Apr 20 1971
LOWEST DAILY MEAN	240 Jan 13	290 Feb 25	100 Dec 5 1950
ANNUAL SEVEN-DAY MINIMUM	256 Jan 10	324 Feb 8	231 Jan 1 1949
INSTANTANEOUS PEAK FLOW (STAGE)		643 (3.91) Sep 3	2160 (*3.55) Mar 8 1989
INSTANTANEOUS PEAK STAGE		**6.54 Feb 9	**7.02 Mar 31 1949
ANNUAL RUNOFF (AC-FT)	335800	334300	299400
10 PERCENT EXCEEDS	544	519	486
50 PERCENT EXCEEDS	457	466	408
90 PERCENT EXCEEDS	405	410	350

e Estimated

* Result of bridge collapsing and releasing ice jam 0.2 mi upstream.

** Backwater from ice.

PLATTE RIVER BASIN

06775900 DISMAL RIVER NEAR THEDFORD, NE
(National Water-Quality Assessment, NAWQA, station)
(Hydrologic bench-mark station and Radiochemical program)

LOCATION.--Lat 41°46'45", long 100°31'30", in SE1/4 NW1/4 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 (REVISED).--966 mi², approximately, of which about 30 mi² contributes directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,800.13 ft above sea level.

REMARKS.--Records fair except for period of estimated record, which is poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	183	217	232	222	203	215	214	210	213	230	218	207
2	184	217	221	222	205	224	210	216	235	217	219	208
3	184	221	224	208	200	225	203	217	218	202	251	220
4	187	217	227	201	203	225	205	215	213	209	231	226
5	188	218	223	213	209	235	205	217	215	243	214	214
6	193	212	221	214	205	232	206	214	211	221	216	210
7	195	212	220	195	190	224	210	214	210	294	218	209
8	204	220	218	201	186	213	208	215	221	261	221	209
9	222	219	218	202	198	223	211	210	222	221	229	206
10	198	229	223	209	194	218	206	208	220	226	219	206
11	208	223	223	204	213	216	206	212	222	226	217	212
12	209	244	227	215	203	220	221	212	211	224	219	210
13	212	250	225	216	203	218	225	214	210	233	218	214
14	214	230	215	209	207	218	219	214	208	219	213	214
15	213	233	218	200	216	222	214	213	209	219	223	214
16	214	237	226	199	209	225	213	212	203	235	215	206
17	215	236	224	204	217	221	216	212	201	230	212	206
18	220	235	217	200	223	213	216	212	203	219	211	203
19	220	231	219	202	231	222	213	211	203	215	209	204
20	216	234	219	211	216	219	211	211	203	214	210	205
21	209	231	216	206	209	210	218	212	212	210	207	207
22	211	230	220	210	207	218	217	213	229	207	208	206
23	214	230	216	214	196	219	213	218	221	210	210	204
24	216	208	218	216	202	211	217	221	208	220	207	204
25	210	198	221	209	206	205	219	218	203	234	221	209
26	212	209	221	196	199	206	223	215	201	229	213	209
27	211	226	215	198	205	202	208	214	198	216	212	208
28	215	222	209	204	210	208	215	212	194	217	212	206
29	208	228	213	207	---	208	211	206	197	217	210	205
30	206	223	219	204	---	198	218	210	211	217	211	209
31	203	---	212	201	---	212	---	209	---	219	210	---
TOTAL	6394	6740	6820	6412	5765	6725	6391	6607	6325	6954	6704	6270
MEAN	206	225	220	207	206	217	213	213	211	224	216	209
MAX	222	250	232	222	231	235	225	221	235	294	251	226
MIN	183	198	209	195	186	198	203	206	194	202	207	203
AC-FT	12680	13370	13530	12720	11430	13340	12680	13100	12550	13790	13300	12440

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1994, BY WATER YEAR (WY)

	195	200	198	198	200	205	206	203	196	194	192	193
MEAN	195	200	198	198	200	205	206	203	196	194	192	193
MAX	221	225	221	230	226	236	231	240	220	224	216	227
(WY)	1987	1994	1985	1985	1986	1986	1991	1987	1986	1994	1994	1985
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

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1967 - 1994

ANNUAL TOTAL	75263	78107	
ANNUAL MEAN	206	214	198
HIGHEST ANNUAL MEAN			214
LOWEST ANNUAL MEAN			188
HIGHEST DAILY MEAN	270	294	463
LOWEST DAILY MEAN	178	183	125
ANNUAL SEVEN-DAY MINIMUM	183	188	153
INSTANTANEOUS PEAK FLOW (STAGE)		381	1160
INSTANTANEOUS PEAK STAGE		1.85	3.83
ANNUAL RUNOFF (AC-FT)	149300	154900	143600
10 PERCENT EXCEEDS	223	226	218
50 PERCENT EXCEEDS	207	213	196
90 PERCENT EXCEEDS	186	203	181

* Backwater from ice.

PLATTE RIVER BASIN

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06775900 DISMAL RIVER NEAR THEDFORD, NE--Continued
(National Water-Quality Assessment, NAWQA, station)
(Hydrologic and bench-mark station and Radiochemical program)

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. FT ³ /S (00061)	SPECIFIC CON-DUCT-ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (°C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 µM-MF (COLS./100 ML) (31625)	STREP-TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CaCO ₃) (00900)
NOV 16...	1300	236	195	8.4	6.5	687	17	10.7	34	51	75
MAR 11...	1300	223	188	8.2	9.0	685	21	10.3	15	11	73
MAY 26...	1130	212	180	8.3	16.5	688	18	8.2	260	74	66
JUL 29...	1130	223	182	8.4	18.0	688	18	8.3	93	140	69
DATE		HARD-NESS NONCARB DISSOLV FLD. AS CaCO ₃ (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	SODIUM ADSORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CaCO ₃) (39086)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO ₃) (00452)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO ₃) (00453)	SULFATE, DIS-SOLVED (MG/L AS SO ₄) (00945)
NOV 16...		0	24	3.7	8.1	0.4	5.3	83	0	101	6.1
MAR 11...		0	23	3.7	7.4	0.4	5.2	76	0	93	5.9
MAY 26...		0	21	3.3	6.3	0.3	4.7	78	0	95	6.3
JUL 29...		0	22	3.4	6.8	0.4	5.0	83	1	99	6.2
DATE		CHLO-RIDE, DIS-SOLVED (MG/L AS Cl) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, RESIDUE AT 180° C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	GEN, NO ₂ +NO ₃ DIS-SOLVED (MG/L AS N) (00631)
NOV 16...		1.3	0.30	53	154	154	0.21	98.1	0.480	0.030	0.510
MAR 11...		1.2	0.30	53	152	148	0.21	91.5	--	<0.010	0.540
MAY 26...		0.80	0.30	53	153	145	0.21	87.6	--	<0.010	0.440
JUL 29...		0.80	0.90	55	159	152	0.22	95.7	--	<0.010	0.230
DATE		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, DIS-SOLVED (µG/L AS AL) (01106)	BARIUM, DIS-SOLVED (µG/L AS BA) (01005)	COBALT, DIS-SOLVED (µG/L AS CO) (01035)
NOV 16...		<0.010	0.40	0.40	<0.20	0.91	0.120	0.130	80	52	<3
MAR 11...		0.030	0.27	0.30	<0.20	0.84	0.130	0.120	20	50	<3
MAY 26...		0.010	0.19	0.20	<0.20	0.64	0.120	0.130	30	46	<3
JUL 29...		<0.010	0.30	0.30	<0.20	0.53	0.120	0.150	40	51	<3

PLATTE RIVER BASIN

06775900 DISMAL RIVER NEAR THEDFORD, NE--Continued
 (National Water-Quality Assessment, NAWQA, station)
 (Hydrologic and bench-mark station and Radiochemical program)

WATER QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	IRON, DIS- SOLVED (μ G/L AS FE) (01046)	LITHIUM DIS- SOLVED (μ G/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (μ G/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (μ G/L AS MO) (01060)	NICKEL, DIS- SOLVED (μ G/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (μ G/L AS SE) (01145)	SILVER, DIS- SOLVED (μ G/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (μ G/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (μ G/L AS V) (01085)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
NOV 16...	29	10	3	<10	<1	<1	<1.0	120	8	2.4
MAR 11...	36	12	3	<10	<1	<1	<1.0	120	11	2.3
MAY 26...	26	12	3	<10	<1	<1	<1.0	110	10	1.3
JUL 29...	23	13	3	<10	<1	<1	<1.0	110	9	1.5

DATE	TIME	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L) (09511)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	URANIUM NATURAL 2 SIGMA WATER, DISS, (UG/L) (75990)	RA-226 2 SIGMA WATER, DISS, (PCI/L) (76001)	
NOV 16...	1300		0.05	0.23	<1.0	0.020
MAY 26...	1130		0.05	0.33	<1.0	0.020

DATE	TIME	DISCHARGE, INST. FT ³ /S (00061)	TEMPER- ATURE WATER (°C) (00010)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDIMENT, DISCHARGE, SUS- PENDE (T/DAY) (80155)	SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 16...	1300	236	6.5	560	357	22
MAR 11...	1300	223	9.0	804	484	20
MAY 26...	1130	212	16.5	519	297	18
JUL 29...	1130	223	18.0	444	267	22

PLATTE RIVER BASIN

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06776500 DISMAL RIVER AT DUNNING, NE

LOCATION.--Lat 41°49'23", long 100°06'05", in sec.4, T.21 N., R.24 W., Blaine County, Hydrologic Unit 10210002, on right bank 100 ft downstream from bridge on State Highway 2 at southeast corner of Dunning and 1.9 mi upstream from mouth.

DRAINAGE AREA.--2,040 mi², approximately, of which about 45 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--March to June 1932, September 1945 to current year.

REVISED RECORDS.--WSP 2118: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,606.3 ft above sea level. Mar. 1 to June 30, 1932, nonrecording gage at site 0.2 mi upstream at datum 0.5 ft lower. Sept. 13, 1945 to Apr. 19, 1956, nonrecording gage on bridge 100 ft upstream at present datum.

REMARKS.--Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	374	e365	e380	e370	e351	e310	e362	404	334	336	346	327
2	367	e365	e369	e370	e353	e340	e358	400	346	340	345	331
3	376	e369	e372	e356	e348	e373	e351	410	354	307	346	363
4	397	e365	e375	e349	e351	e401	e353	409	345	311	373	442
5	401	e366	e371	e361	e340	e383	e353	418	341	333	340	365
6	404	e360	e369	e362	e330	e380	e354	400	340	351	342	334
7	396	e360	e368	e343	e310	e372	e358	390	338	350	342	339
8	428	e368	e366	e349	e290	e361	e356	396	354	400	335	345
9	407	e367	e366	e350	e280	e371	e359	395	349	328	346	347
10	398	e377	e371	e357	e280	e366	e354	385	345	329	338	345
11	380	e371	e371	e352	e290	e364	e354	377	344	332	329	344
12	382	e392	e375	e363	e300	e368	e369	381	345	389	337	345
13	381	e398	e373	e364	e310	e366	e411	381	331	370	347	347
14	381	e378	e363	e357	e310	e366	423	373	329	351	330	354
15	382	e374	e366	e348	e320	e370	405	364	319	349	331	347
16	386	363	e374	e347	e340	e373	421	368	314	377	345	333
17	378	374	e372	e352	e365	e369	430	361	317	365	321	328
18	383	376	e365	e348	e371	e361	430	354	318	350	319	335
19	374	367	e367	e348	e379	e370	421	356	317	343	324	335
20	380	363	e367	e359	e364	e367	428	349	317	332	332	344
21	356	371	e364	e354	e357	e358	430	352	325	326	345	351
22	e359	375	e353	e358	e330	e366	435	349	333	323	341	335
23	e362	354	e364	e362	e310	e367	426	359	339	327	337	331
24	e364	e356	e366	e364	e290	e359	439	352	321	334	343	341
25	e358	e346	e369	e357	e270	e353	449	350	307	339	351	342
26	e360	e357	e369	e344	e270	e354	432	342	299	386	356	349
27	e359	e374	e363	e346	e280	e350	389	348	299	342	349	350
28	e363	e370	e357	e352	e290	e356	400	350	289	345	342	347
29	e356	e376	e361	e355	---	e356	384	348	293	342	340	349
30	e354	e371	e367	e352	---	e346	396	340	300	339	340	358
31	e351	---	e360	e349	---	e360	---	325	---	342	335	---
TOTAL	11697	11068	11393	10998	8979	11256	11830	11486	9802	10688	10547	10403
MEAN	377	369	368	355	321	363	394	371	327	345	340	347
MAX	428	398	380	370	379	401	449	418	354	400	373	442
MIN	351	346	353	343	270	310	351	325	289	307	319	327
AC-FT	23200	21950	22600	21810	17810	22330	23460	22780	19440	21200	20920	20630

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1994, BY WATER YEAR (WY)

MEAN	324	328	326	321	336	344	345	338	328	318	318	319
MAX	377	369	380	371	391	421	427	408	419	404	381	366
(WY)	1994	1994	1986	1988	1988	1977	1977	1983	1983	1993	1993	1987
MIN	296	300	279	260	270	305	305	294	275	269	279	285
(WY)	1952	1979	1973	1993	1962	1951	1946	1946	1946	1946	1971	1956

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1946 - 1994

ANNUAL TOTAL	129499	130147	
ANNUAL MEAN	355	357	329
HIGHEST ANNUAL MEAN			368
LOWEST ANNUAL MEAN			305
HIGHEST DAILY MEAN	571	Jul 20	672
LOWEST DAILY MEAN	235	Jan 7	100
ANNUAL SEVEN-DAY MINIMUM	240	Jan 5	191
INSTANTANEOUS PEAK FLOW (STAGE)			1290
INSTANTANEOUS PEAK STAGE		569(1.24)Sep 4	Jun 13 1983
ANNUAL RUNOFF (AC-FT)	256900	*1.75 Mar 12	**5.21 Jan 19 1947
10 PERCENT EXCEEDS	398		369
50 PERCENT EXCEEDS	361		327
90 PERCENT EXCEEDS	296		290

e Estimated.

* Backwater from ice.

**Maximum observed, backwater from ice.

PLATTE RIVER BASIN

06783500 MUD CREEK NEAR SWEETWATER, NE

LOCATION.--Lat 41°02'15", long 98°59'35", in NE1/4 SE1/4 sec.3, T.12 N., R.15 W., Buffalo County, Hydrologic Unit 10210005, on right bank 12 ft downstream from bridge on State Highway 2, 0.9 mi southeast of Sweetwater, and 11.6 mi upstream from mouth.

DRAINAGE AREA.--707 mi², of which 655 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--July 1946 to current year.

REVISED RECORDS.--WDR NE-72: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,013.69 ft above sea level.

REMARKS.--Records good except for periods of estimated discharge, which are poor. Minor irrigation developments above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
11	40	36	e31	e30	e29	e39	37	45	29	25	29	17
2	40	36	e30	e30	e29	e45	37	47	29	30	28	17
3	40	36	e29	e28	e28	e60	36	46	29	31	46	18
4	39	36	e30	e29	e29	e250	36	43	30	36	85	19
5	39	35	e29	e28	e28	578	36	41	30	35	32	22
6	38	35	e31	e27	e29	380	36	40	29	29	27	53
7	37	34	e33	e26	e29	176	37	40	29	79	27	66
8	38	36	36	e31	e28	89	35	40	30	70	48	31
9	40	35	36	e29	e28	70	37	39	37	33	38	25
10	41	36	36	e34	e25	61	36	38	43	32	32	20
11	41	35	36	e38	e27	57	36	38	37	28	29	18
12	41	37	36	e37	e28	55	46	38	36	28	27	18
13	39	39	37	e35	e30	52	53	37	30	46	28	17
14	38	39	36	e33	e32	50	52	41	37	50	27	17
15	38	44	36	e30	e33	49	59	39	32	73	28	17
16	37	46	e35	e28	e34	46	54	36	28	119	26	16
17	36	39	e34	e27	e36	45	49	36	28	134	25	16
18	36	38	e33	e26	e39	44	45	36	29	83	25	16
19	36	39	e32	e27	e42	43	45	35	35	91	23	16
20	36	38	e32	e28	e44	42	44	34	60	57	23	16
21	36	38	e33	e29	e42	41	42	34	48	44	22	17
22	36	38	e29	e31	e37	40	40	35	60	36	18	18
23	36	37	e28	e33	e33	40	39	36	46	33	19	18
24	36	e34	e30	e33	e28	39	38	35	34	31	23	18
25	37	e29	e31	e31	e30	38	38	35	31	55	21	19
26	35	e28	e30	e29	e31	38	38	36	28	34	19	19
27	35	e30	e29	e28	e33	38	38	34	26	34	18	18
28	35	e31	e28	e29	e34	37	44	33	25	39	17	18
29	36	e31	e28	e30	---	37	49	84	24	33	17	18
30	36	e31	e30	e29	---	37	45	45	24	33	19	17
31	35	---	e29	e28	---	37	---	32	---	31	20	---
TOTAL	1163	1076	993	931	895	2653	1257	1228	1013	1512	866	635
MEAN	37.5	35.9	32.0	30.0	32.0	85.6	41.9	39.6	33.8	48.8	27.9	21.2
MAX	41	46	37	38	44	578	59	84	60	134	85	66
MIN	35	28	28	26	25	37	35	32	24	25	17	16
AC-FT	2310	2130	1970	1850	1780	5260	2490	2440	2010	3000	1720	1260

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1994, BY WATER YEAR (WY)

	MEAN	22.2	21.0	21.3	23.1	38.9	66.7	36.1	44.5	95.8	48.2	25.6	20.9
MAX	154	35.9	32.7	56.0	131	432	88.1	130	1002	325	146	58.5	
(WY)	1947	1994	1966	1973	1966	1978	1984	1960	1947	1993	1962	1965	
MIN	7.36	9.75	11.1	10.2	13.8	18.3	18.3	16.5	14.9	2.19	.49	3.11	
(WY)	1956	1956	1956	1956	1957	1981	1981	1956	1981	1980	1955	1956	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1946 - 1994

ANNUAL TOTAL	39413	14222		
ANNUAL MEAN	108	39.0	38.7	
HIGHEST ANNUAL MEAN				128
LOWEST ANNUAL MEAN				17.4
HIGHEST DAILY MEAN	1970	Mar 9	578	Mar 5
LOWEST DAILY MEAN	20	Jan 1	16	Sep 16
ANNUAL SEVEN-DAY MINIMUM	21	Jan 1	16	Sep 14
INSTANTANEOUS PEAK FLOW			657	Mar 5
INSTANTANEOUS PEAK STAGE			12.59	Mar 5
ANNUAL RUNOFF (AC-FT)	78180	28210		28000
10 PERCENT EXCEEDS	136	48		49
50 PERCENT EXCEEDS	39	35		23
90 PERCENT EXCEEDS	29	23		11

PLATTE RIVER BASIN

125

06784000 SOUTH LOUP RIVER AT ST. MICHAEL, NE

LOCATION.--Lat 41°01'53", long 98°44'25", in NW1/4 NW1/4 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 (REVISED).--2,320 mi², of which about 1,5910 mi² contributes directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1943 to current year.

REVISED RECORDS.--WDR NE-74: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,921.26 ft above sea level. Prior to June 22, 1947, water-stage recorder, and June 25 to Sept. 30, 1947, nonrecording gage, at present site at datum 2.00 ft higher. Oct. 1, 1947 to July 3, 1958, nonrecording gage at present site and datum. July 4, 1958 to Sept. 7, 1960, water-stage recorder at site 600 ft upstream at present datum. Sept. 8, 1960 to June 24, 1968, water-stage recorder at site 100 ft upstream at present datum. June 25 to Nov. 21, 1968, nonrecording gage at present site and datum. Nov. 22, 1968 to May 19, 1981, water-stage recorder at site 40 ft upstream at present datum. May 20 to July 16, 1981, water-stage recorder at site 70 ft upstream at present datum.

REMARKS.--Records good except for periods of estimated record, which are poor. Minor irrigation developments above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
11	150	205	e245	348	e160	e220	229	294	178	136	193	121
2	151	207	e250	366	e165	e300	223	278	175	169	193	120
3	157	211	e260	330	e165	e600	231	283	181	186	236	128
4	158	216	e240	e290	e160	e1000	231	287	183	290	372	146
5	155	226	e245	e270	e160	1340	238	282	186	366	297	138
6	155	232	e240	e230	e170	921	241	279	180	216	135	145
7	171	231	e235	e200	e160	613	242	275	268	205	114	220
8	184	226	e245	e190	e145	402	252	256	585	397	272	189
9	197	228	e248	e200	e140	319	254	249	473	249	434	153
10	213	225	e270	e205	e150	296	262	232	310	201	205	137
11	219	219	279	e200	e151	258	278	212	254	180	144	126
12	220	241	317	e195	e175	255	406	195	231	172	137	115
13	221	263	316	e210	e170	259	505	184	209	348	137	108
14	225	292	316	e190	e185	262	495	194	192	748	137	106
15	224	294	314	e175	e180	314	473	204	193	568	140	103
16	217	301	300	e175	e200	352	422	176	181	590	140	99
17	212	294	294	e170	e190	341	373	162	176	626	123	95
18	203	298	300	e165	e220	334	352	152	168	454	103	99
19	199	296	296	e170	e205	325	332	144	170	391	96	103
20	196	304	290	e175	e190	323	319	137	174	354	100	103
21	188	287	278	e175	e190	326	296	132	232	260	100	105
22	189	284	266	e190	e185	312	280	137	270	216	87	116
23	192	279	180	e210	e180	311	268	151	370	188	88	129
24	195	e240	205	e225	e175	308	264	153	275	180	87	142
25	195	e220	304	e215	e175	306	258	158	222	506	90	145
26	207	e225	329	e200	e175	304	241	148	198	325	99	135
27	202	e235	312	e190	e185	285	293	141	169	278	111	130
28	201	e240	258	e190	e200	263	310	133	150	216	98	133
29	201	e250	278	e185	---	253	334	231	134	197	104	132
30	199	e245	302	e170	---	253	323	300	136	201	101	138
31	205	---	328	e155	---	234	---	199	---	193	118	---
TOTAL	6001	7514	8540	6559	4906	12189	9225	6358	6823	9606	4791	3859
MEAN	194	250	275	212	175	393	307	205	227	310	155	129
MAX	225	304	329	366	220	1340	505	300	585	748	434	220
MIN	150	205	180	155	140	220	223	132	134	136	87	95
AC-FT	11900	14900	16940	13010	9730	24180	18300	12610	13530	19050	9500	7650

e Estimated

PLATTE RIVER BASIN

06784000 SOUTH LOUP RIVER AT ST. MICHAEL, NE--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1994, BY WATER YEAR (WY)

MEAN	172	189	177	180	259	362	276	301	428	227	148	150
MAX	619	272	275	281	543	1747	549	562	2741	1121	482	370
(WY)	1947	1947	1994	1973	1966	1978	1984	1951	1947	1993	1962	1949
MIN	87.5	129	116	96.5	138	201	171	176	126	26.5	21.3	51.0
(WY)	1957	1957	1956	1972	1989	1981	1992	1975	1981	1980	1955	1956

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1944 - 1994

ANNUAL TOTAL	169141			86371								
ANNUAL MEAN	463			237	239							
HIGHEST ANNUAL MEAN									483		1947	
LOWEST ANNUAL MEAN									161		1955	
HIGHEST DAILY MEAN	7850	Mar 9		1340	Mar 5				28000		Jun 23 1947	
LOWEST DAILY MEAN	130	Jan 1		87	Aug 22				.00		Aug 5 1980	
ANNUAL SEVEN-DAY MINIMUM	147	Jan 1		93	Aug 19				.65		Aug 4 1980	
INSTANTANEOUS PEAK FLOW STAGE)				1230 (4.64)	Jul 25				e50000		Jun 22 1947	
INSTANTANEOUS PEAK STAGE				**10.21	Mar				*27500	(11.00)	Jun 24 1968	
ANNUAL RUNOFF (AC-FT)	335500			171300					4	e12.00	Jun 22 1947	
10 PERCENT EXCEEDS	684			331					338			
50 PERCENT EXCEEDS	273			212					190			
90 PERCENT EXCEEDS	163			133					102			

e Estimated.

* Maximum discharge, computed.

** Backwater from ice.

06784000 SOUTH LOUP RIVER AT ST. MICHAEL, NE--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1946-53, 1974 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: June 1946 to June 1953.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily, 19,300 mg/L June 19, 1946; minimum daily, 13 mg/L Dec. 30, 31, 1951.

SEDIMENT LOADS: Maximum daily, 672,000 tons June 22, 1947; minimum daily, 6.1 tons Dec. 30, 31, 1951.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. FT ³ /S (00061)	SPECIFIC CONDUCT- ANCE (μS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (°C) (00010)	OXYGEN- DISSOLVED (MG/L) (00300)			
OCT									
13...	1140	226	483	8.5	13.0	9.9			
NOV									
08...	1505	231	493	8.4	6.0	11.8			
DEC									
09...	1040	248	488	8.4	1.0	13.4			
JAN									
10...	1200	205	605	8.3	0.5	13.3			
FEB									
11...	1000	151	523	7.5	1.5	9.0			
MAR									
15...	1600	330	471	8.4	12.5	10.9			
APR									
04...	1020	229	478	8.6	9.5	10.9			
MAY									
03...	1030	286	474	8.5	10.0	10.5			
JUN									
27...	1140	176	382	9.0	26.5	11.3			
JUL									
27...	1020	296	296	8.3	22.0	8.4			

DATE	TIME	COLOR (PLAT- INUM- COBALT UNITS) (00080)	HARDNESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS- SOLVED (MG/L AS Na) (00930)	SODIUM ADSORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY LAB (MG/L AS CaCO ₃) (90410)
MAR									
15...	1600	24	220	68	11	12	0.4	12	221
JUL									
27...	1020	52	130	42	6.5	7.4	0.3	8.9	131

DATE	TIME	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS DISSOLVED (TONS PER AC-FT) (70303)	SOLIDS, DISSOLVED (TONS PER DAY) (70302)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)
MAR									
15...		22	5.4	0.30	47	316	0.43	281	0.990
JUL									
27...		13	3.3	0.20	35	201	0.27	161	1.18

DATE	TIME	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	BORON, DIS- SOLVED (μG/L AS B) (01020)	IRON, DIS- SOLVED (μG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (μG/L AS MN) (01056)
MAR									
15..		0.010	1.00	0.100	0.280	0.240	40	8	14
JUL									
27..		0.020	1.20	0.050	0.280	0.300	50	51	2

PLATTE RIVER BASIN

06784200 SHERMAN RESERVOIR NEAR LOUP CITY, NE

LOCATION.--Lat 41°18'10", long 98°52'45", in SW1/4 NW1/4 sec. 1, T. 15 N., R. 14 W., Sherman County, Hydrologic Unit 10210003, in control house of outlet works of Sherman Dam, 5 mi northeast of Loup City.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Mercury-column pressure gage read once daily. Datum of gage is sea level.

REMARKS.--Reservoir is formed by earthfill dam; closure date of dam, August 1960. First diversions from Middle Loup River, Nov. 8, 1962. Usable capacity, 65,237 acre-ft between elevations 2,118.5 ft, sill of canal outlet works, and 2,162.3 ft, crest of spillway. Dead and inactive storage, 3,839 acre-ft below elevation 2,118.5 ft. Figures given herein represent total contents. Water is used for irrigation of Farwell Unit of Bureau of Reclamation.

COOPERATION.--Records of elevations and capacity table furnished by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 70,810 acre-ft June 25, 1989, elevation, 2,162.9 ft; minimum observed since appreciable storage was attained, 9,450 acre-ft Aug. 2, 1980, elevation, 2,127.7 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 69,360 acre-ft June 2, elevation, 2,162.4 ft; minimum observed, 47,140 acre-ft Sept. 2, elevation, 2,153.7 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Elevation *(feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	2,156.9	54,670	-
Oct. 31.....	2,156.3	53,210	-1,460
Nov. 30.....	2,155.8	52,000	-1,210
Dec. 31.....	2,155.4	51,060	-940
CAL YR 1993	-	-	+240
Jan. 31.....	2,155.0	50,110	-950
Feb. 28.....	2,154.8	48,650	-460
Mar. 31.....	2,154.4	48,730	-920
Apr. 30.....	2,154.7	49,420	+690
May 31.....	2,162.2	68,790	+19,370
June 30.....	2,159.7	61,870	-6,920
July 31.....	2,161.1	65,680	+3,810
Aug. 31.....	2,154.0	47,810	-17,870
Sept. 30.....	2,157.6	56,420	+8,610
WTR YR 1994.....	-	-	+1,750

* Elevations read on or near last day of month.

PLATTE RIVER BASIN

129

06785000 MIDDLE LOUP RIVER AT ST. PAUL, NE

LOCATION.--Lat 41°12'13", long 98°26'46", in SE1/4 NW1/4NE1/4 sec.10, T.14 N., R.10 W., Howard County, Hydrologic Unit 10210003, on left bank at St. Paul, 20 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. (REVISED)--8,075 mi², of which about 3,130 mi² contributes directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1894 to September 1915, August 1928 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1036: 1943. WSP 1390: 1896, 1903, 1928(M), 1944. WDR NE-72: 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 430 ft upstream at same datum. Mar. 17 to May 31, 1978, nonrecording gage on railroad bridge 30 ft upstream at same datum.

REMARKS.--Records fair except for periods of estimated record, which are poor. Diversions above station for irrigation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1580	1250	e1400	e1250	e920	e1400	1080	1140	654	339	608	437
2	1720	1140	e1400	e1300	e980	e1700	1090	1030	640	429	638	410
3	1560	1260	e1450	e1200	e1000	e2000	1210	1120	887	618	696	480
4	1530	1230	e1500	e1250	e940	e2480	1240	1030	1030	1170	886	575
5	1360	1190	e1450	e1300	e980	e8000	1320	1150	1030	1140	933	1660
6	1560	1270	e1450	e1100	e1000	e6000	1530	1200	1080	890	778	1570
7	1620	1230	e1450	e800	e960	4600	1250	1070	1080	1160	666	956
8	1670	1150	1510	e660	e920	2990	1180	937	1400	1480	866	824
9	2200	1020	1510	558	e880	2350	1320	1020	1470	1530	1300	724
10	1810	1100	1650	e900	e869	2120	1240	1140	1500	1200	1040	630
11	1470	1100	1490	e1060	e960	1820	1500	1200	1350	1020	908	666
12	1400	1130	1540	e980	e1040	1660	2350	1190	1190	823	893	603
13	1440	1390	1440	e1100	e1150	1480	2790	1190	1120	973	849	612
14	1370	1760	1400	e1040	e1200	1530	2510	1160	1060	1520	796	647
15	1350	1870	1440	e1000	e1350	1590	2270	1170	877	1500	915	615
16	1470	1670	1590	e940	e1300	1570	2190	1140	758	1770	868	548
17	1510	1670	1650	e860	e1450	1500	1660	1060	665	1840	679	575
18	1550	1590	1720	792	e1350	1500	1810	1010	504	1740	545	583
19	1380	1450	1670	662	e1600	1520	1790	961	404	1300	649	573
20	1600	1450	1550	929	e1400	1370	1540	990	754	1070	616	582
21	1260	1390	1530	1120	e1250	1410	1110	1010	776	882	578	1050
22	1360	1290	1450	1340	e1200	1360	1530	1020	725	729	476	1160
23	1430	1450	e1350	e1500	e1200	1290	1320	1040	753	640	463	1250
24	1340	e1250	e1350	e1600	e1120	1410	1560	1080	728	580	455	1160
25	1470	e1100	e1400	e1450	e1100	1360	1420	1040	606	774	418	1050
26	1430	e1160	e1450	e1250	e1100	1280	1630	940	533	1170	415	1200
27	1200	e1220	e1350	e1150	e1080	1180	1590	846	432	786	392	1190
28	1320	e1300	e1250	e1100	e1150	1220	1180	854	373	725	382	1230
29	1360	e1350	1170	e1200	---	1240	1230	830	329	836	401	1250
30	1490	e1400	1080	e1100	---	1060	1140	908	309	713	451	1280
31	1450	---	e1140	e960	---	1100	---	752	---	642	409	---
TOTAL	46260	39830	44780	33451	31449	63090	46580	32228	25017	31989	20969	26090
MEAN	1492	1328	1445	1079	1123	2035	1553	1040	834	1032	676	870
MAX	2200	1870	1720	1600	1600	8000	2790	1200	1500	1840	1300	1660
MIN	1200	1020	1080	558	869	1060	1080	752	309	339	382	410
AC-FT	91760	79000	88820	66350	62380	125100	92390	63920	49620	63450	41590	51750

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1994, BY WATER YEAR (WY)

	1079	1219	1125	1157	1474	1752	1326	1109	1144	655	538	747
MEAN	1079	1219	1125	1157	1474	1752	1326	1109	1144	655	538	747
MAX	2444	1692	1836	1844	2478	4022	2291	2094	3253	3642	1171	1790
(WY)	1993	1988	1971	1990	1984	1978	1984	1992	1993	1993	1992	1985
MIN	404	771	686	770	969	1181	767	519	395	124	174	240
(WY)	1964	1965	1969	1972	1979	1970	1981	1975	1972	1980	1980	1980

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1963 - 1994

ANNUAL TOTAL	652110	441733	1108
ANNUAL MEAN	1787	1210	1832
HIGHEST ANNUAL MEAN			1993
LOWEST ANNUAL MEAN			831
HIGHEST DAILY MEAN	16400	8000	21800
LOWEST DAILY MEAN	625	309	23
ANNUAL SEVEN-DAY MINIMUM	803	392	31
INSTANTANEOUS PEAK FLOW (STAGE)		6250 (3.70)	72000
INSTANTANEOUS PEAK STAGE		*6.30	12.69
ANNUAL RUNOFF (AC-FT)	1293000	876200	802300
10 PERCENT EXCEEDS	2480	1620	1780
50 PERCENT EXCEEDS	1430	1180	1050
90 PERCENT EXCEEDS	940	614	341

e Estimated.

* Backwater from ice.

PLATTE RIVER BASIN

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

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST/ FT ³ /S (00061)	SPECIFIC CONDUCT- ANCE (μ S/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (°C) (00010)	OXYGEN- DISSOLVED (MG/L) (00300)			
OCT									
18...	1155	1680	303	8.1	12.0	9.8			
NOV									
19...	1520	1470	318	8.4	4.5	12.3			
DEC									
15...	0935	1480	335	8.1	0.5	13.3			
JAN									
11...	1245	1060	386	7.9	0.5	13.6			
FEB									
10...	1500	869	345	7.4	0.5	12.3			
MAR									
16...	1430	1480	312	8.4	11.0	10.7			
APR									
07...	1340	1210	300	8.2	8.0	11.0			
MAY									
04...	1620	1150	340	8.1	17.5	9.2			
JUN									
01...	1445	691	333	8.8	20.0	9.3			
JUL									
28...	1325	756	316	8.7	27.5	8.0			
SEP									
07...	1415	838	282	8.5	26.0	8.1			
DATE	TIME	COLOR (PLAT- INUM- COBALT UNITS) (00080)	HARDNESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS- SOLVED (MG/L AS Na) (00930)	SODIUM ADSORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY LAB (MG/L AS CaCO ₃) (90410)
MAR									
16...	1430	23	130	42	6.5	10	0.4	9.0	148
JUL									
28...	1325	28	130	42	6.8	9.4	0.4	9.1	147
DATE		SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS DISSOLVED (TONS PER AC-FT) (70303)	SOLIDS, DISSOLVED (TONS PER DAY) (70302)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)
MAR									
16...		13	2.9	0.30	53	230	0.31	918	--
JUL									
28...		13	3.2	0.30	48	223	0.30	454	0.410
DATE		NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	BORON, DIS- SOLVED (μ G/L AS B) (01020)	IRON, DIS- SOLVED (μ G/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (μ G/L AS MN) (01056)
MAR									
16...		<0.010	0.800	0.040	0.200	0.190	30	14	4
JUL									
28...		0.010	0.420	0.040	0.190	0.200	40	25	2

06786000 NORTH LOUP RIVER AT TAYLOR, NE

LOCATION.--Lat 41°46'37", long 99°22'45", in NE1/4 SE1/4 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 (REVISED).--2,350 mi², of which about 186 mi² 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-72: Drainage area. WDR NE-75: 1974.

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 periods of estimated record, 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	513	575	e700	678	e560	e720	609	667	385	149	261	322
2	521	603	e720	647	e580	e780	635	675	423	241	255	342
3	529	596	e740	640	e580	e900	633	621	515	279	260	431
4	537	605	e780	629	e560	e1200	629	632	507	323	318	674
5	568	519	802	673	e560	864	628	634	475	469	305	594
6	600	491	727	597	e580	835	629	608	433	436	288	512
7	617	538	700	e580	e560	827	594	587	438	513	283	458
8	712	536	673	e540	e540	759	641	568	552	574	304	445
9	803	543	708	e580	e490	702	655	567	582	555	333	435
10	738	563	664	e600	e460	745	662	560	491	432	327	428
11	637	579	705	e640	e480	756	657	534	461	369	328	386
12	616	652	686	e600	e500	744	828	509	425	482	315	367
13	638	780	695	e660	e540	701	770	511	405	644	302	379
14	653	699	648	e640	e540	738	705	529	367	462	297	437
15	670	629	589	e600	e600	755	679	549	309	396	257	488
16	685	656	640	e560	e600	724	651	430	286	425	247	461
17	719	630	663	e580	e660	722	648	375	306	425	231	423
18	693	657	665	e520	e640	707	654	457	408	393	224	418
19	706	601	653	e520	e740	712	644	468	521	376	345	415
20	675	591	617	e560	e720	691	631	452	393	346	302	426
21	659	589	644	e580	e680	646	629	466	350	341	297	429
22	661	596	622	e640	e680	657	632	459	335	311	263	432
23	643	600	624	e700	e680	648	639	499	337	287	242	407
24	621	e520	606	e740	e660	610	630	503	365	263	240	431
25	624	e500	594	e700	e660	595	658	532	326	263	303	448
26	587	e490	651	e684	e660	599	675	484	288	483	323	439
27	574	e500	645	e660	e660	592	645	446	253	379	296	440
28	597	e540	612	e640	e700	588	611	417	205	277	286	425
29	553	e600	609	e660	---	579	639	405	152	240	295	441
30	556	e640	661	e640	---	597	634	402	137	230	294	456
31	548	---	692	e600	---	598	---	385	---	258	311	---
TOTAL	19453	17618	20735	19288	16870	22291	19574	15931	11430	11621	8932	13189
MEAN	628	587	669	622	602	719	652	514	381	375	288	440
MAX	803	780	802	740	740	1200	828	675	582	644	345	674
MIN	513	490	589	520	460	579	594	375	137	149	224	322
AC-FT	38590	34950	41130	38260	33460	44210	38830	31600	22670	23050	17720	26160

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 1994, BY WATER YEAR (WY)

	MEAN	476	507	476	485	556	623	593	530	471	316	299	385
MAX	706	730	669	738	863	896	836	848	861	716	527	665	
(WY)	1984	1987	1994	1941	1984	1993	1993	1983	1951	1962	1992	1951	
MIN	295	373	365	331	402	472	404	300	284	119	143	200	
(WY)	1941	1976	1979	1937	1939	1948	1940	1940	1940	1974	1969	1940	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1937 - 1994

ANNUAL TOTAL	238715	196932	
ANNUAL MEAN	654	540	477
HIGHEST ANNUAL MEAN			644
LOWEST ANNUAL MEAN			354
HIGHEST DAILY MEAN	1380	Mar 3	1200
LOWEST DAILY MEAN	354	Aug 15	137
ANNUAL SEVEN-DAY MINIMUM	385	Aug 12	202
INSTANTANEOUS PEAK FLOW (STAGE)			911
INSTANTANEOUS PEAK STAGE			*7.60
ANNUAL RUNOFF (AC-FT)	473500	390600	345400
10 PERCENT EXCEEDS	900	703	676
50 PERCENT EXCEEDS	617	580	470
90 PERCENT EXCEEDS	469	303	264

e Estimated.

* Backwater from ice.

** From floodmark; ice jam.

PLATTE RIVER BASIN

06787000 CALAMUS RIVER NEAR HARROP, NE

LOCATION.--Lat 41°56'48", long 99°23'10" in NW1/4 SE1/4 sec.22, T.23 N., R.18 W., Loup County, Hydrologic Unit 10210008, on right bank 44 ft upstream from bridge on U.S. Highway 183, 12.2 mi north of Taylor, and at mile 20.4.

DRAINAGE AREA (REVISED).--693 mi², most of which does not contribute directly to surface runoff.

PERIOD OF RECORD.--March to July 1932. August 1931 to February 1932, July 1932 to June 1939, 1955-64 and 1977, gage heights or discharge measurements only. June 1978 to current year.

GAUGE.--Water-stage recorder. Elevation of gage is 2,260 ft above sea level, from topographic map. Prior to June 5, 1978, staff gage or reference point at same site at datum 1.0 ft higher.

REMARKS.--Records good except for periods estimated records, which are poor. Diversions for irrigation above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	248	236	373	271	216	321	253	331	180	187	243	203
2	246	241	330	276	218	296	251	340	204	203	239	207
3	247	239	302	274	220	303	247	337	224	194	232	220
4	243	239	295	267	227	324	246	333	209	199	233	275
5	246	228	295	271	226	369	243	308	203	223	230	263
6	247	222	280	e260	229	400	238	286	194	217	224	259
7	245	232	275	e240	192	391	244	283	197	268	220	249
8	317	234	274	e230	e180	345	249	277	252	267	221	227
9	377	235	277	e240	e155	332	247	265	293	251	236	215
10	329	235	280	246	e185	318	240	258	253	244	243	207
11	331	234	280	238	231	312	247	252	234	217	251	203
12	317	250	280	237	248	305	302	243	215	268	250	203
13	302	281	279	248	247	309	305	234	205	255	238	204
14	296	291	269	230	270	312	303	231	196	231	228	200
15	292	296	268	184	288	311	304	224	187	225	223	198
16	284	310	276	168	260	305	284	226	187	234	219	195
17	279	292	280	e165	255	303	276	219	188	243	211	193
18	276	293	272	e160	272	303	269	215	224	244	203	195
19	274	280	268	179	320	300	263	209	264	240	213	194
20	272	271	262	205	309	290	262	201	236	237	236	192
21	267	268	259	229	312	287	255	195	206	234	240	193
22	262	265	248	239	295	284	251	193	201	227	231	202
23	261	250	253	272	e280	274	253	212	207	220	213	195
24	259	e240	253	281	e270	265	248	208	224	227	206	196
25	256	e235	269	272	e260	257	256	207	205	233	237	199
26	247	e250	269	238	e260	250	293	199	192	260	230	199
27	239	e260	271	150	e270	251	286	194	181	248	216	199
28	243	273	262	186	301	247	297	192	174	242	220	199
29	236	295	258	258	---	247	307	192	172	232	214	200
30	226	339	260	239	---	246	313	186	171	231	208	200
31	230	---	264	202	---	248	---	183	---	235	203	---
TOTAL	8394	7814	8581	7155	6996	9305	8032	7433	6278	7236	7011	6284
MEAN	271	260	277	231	250	300	268	240	209	233	226	209
MAX	377	339	373	281	320	400	313	340	293	268	251	275
MIN	226	222	248	150	155	246	238	183	171	187	203	192
AC-FT	16650	15500	17020	14190	13880	18460	15930	14740	12450	14350	13910	12460

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1994, BY WATER YEAR (WY)

	MEAN	242	242	236	234	256	293	280	268	248	232	225	225
	MAX	286	284	277	272	308	405	397	313	353	372	262	265
(WY)	1985	1985	1994	1984	1984	1987	1987	1984	1984	1983	1993	1993	1986
MIN	219	217	199	188	219	230	212	216	200	186	186	194	193
(WY)	1981	1986	1981	1982	1981	1981	1981	1992	1981	1980	1991	1991	1980

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1979 - 1994

ANNUAL TOTAL	103795	90519	
ANNUAL MEAN	284	248	248
HIGHEST ANNUAL MEAN			278
LOWEST ANNUAL MEAN			214
HIGHEST DAILY MEAN	654 Jul 9	400 Mar 6	792 Jun 30 1983
LOWEST DAILY MEAN	170 Feb 18	150 Jan 27	90 Jan 7 1980
ANNUAL SEVEN-DAY MINIMUM	217 Feb 17	183 Jun 26	169 Jan 10 1982
INSTANTANEOUS PEAK FLOW (STAGE)		419 (2.57) Oct 8	1170 (*4.80) May 4 1964
INSTANTANEOUS PEAK STAGE		**4.73 Feb 24	**5.34 Mar 29 1987
ANNUAL RUNOFF (AC-FT)	205900	179500	179800
10 PERCENT EXCEEDS	351	303	304
50 PERCENT EXCEEDS	271	246	240
90 PERCENT EXCEEDS	240	195	202

e Estimated.

* From floodmark.

** Backwater from ice.

PLATTE RIVER BASIN

133

06787300 CALAMUS RESERVOIR NEAR BURWELL, NE

LOCATION.--Lat 41°49'38", long 99°13'11", in SW1/4SW1/4 sec.31, T.22 N., R.16W., Garfield County, Hydrologic Unit 10210008, near right bank in control house of outlet works of Calamus Dam on Calamus River, 4 mi upstream from mouth, 5.5 mi northwest of Burwell.

DRAINAGE AREA.--1,050 mi², approximately, of which about 110 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--November 1985 to current year.

GAGE.--Fluid gage with continuous recorder. Datum of gage is sea level.

REMARKS.--Reservoir is formed by earthfill dam; storage began Oct. 1, 1985. Usable capacity, 102,750 acre-ft between elevations 2213.3 ft, bottom of conservation pool, and 2244.0 ft, top of inlet structure; inactive capacity, 23,830 acre-ft between elevations 2185.0 ft, sill of outlet gate, and 2213.3 ft. Dead storage 817 acre-ft below elevation 2185.0 ft. Figures given herein represent total contents. Water is used for irrigation of North Loup project of Bureau of Reclamation.

COOPERATION.--Records of elevations and capacity table furnished by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 131,100 acre-ft June 25, 1988, elevation, 2244.71 ft; minimum observed since appreciable storage was attained, 62,080 acre-ft Oct. 1, 1991, elevation 2228.20 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 128,320 acre-ft June 9, elevation, 2244.18 ft; minimum observed, 90,080 acre-ft Sept. 30, elevation, 2235.87 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	Elevation *(feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	2,237.98	98,950	-
Oct. 31.....	2,239.93	107,650	+8,700
Nov. 30.....	2,240.03	108,100	+450
Dec. 31.....	2,240.12	108,520	+420
CAL YR 1993.	-	-	0
Jan. 31.....	2,240.00	107,970	-550
Feb. 28.....	2,239.94	107,690	-280
Mar. 31.....	2,241.06	112,910	+5,220
Apr. 30.....	2,243.57	125,210	+12,300
May 31.....	2,244.01	127,450	+2,240
June 30.....	2,243.38	124,250	-3,200
July 31.....	2,241.17	113,430	-10,820
Aug. 31.....	2,237.43	96,580	-16,850
Sept. 30.....	2,235.87	90,080	-6,500
WTR YR 1994.....	-	-	-8,870

* Elevations read on or near last day of month.

PLATTE RIVER BASIN

06787500 CALAMUS RIVER NEAR BURWELL, NE

LOCATION.--Lat 41°48'35", long 99°10'56", in NW1/4 NW1/4 sec.9, T.21 N., R.16 W., Garfield County, Hydrologic Unit 10210008, on left bank 20 ft downstream from highway bridge, 1.1 mi downstream from Calamus Dam, 1.7 mi upstream from mouth, and 3 mi northwest of Burwell.

DRAINAGE AREA (REVISED).--994 mi², of which about 100 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1940 to current year.

REVISED RECORDS.--WSP 1918: 1958. WDR NE-72: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,153.48 ft above sea level (levels by Bureau of Reclamation). Prior to Apr. 20, 1945, nonrecording gage at site 20 ft upstream; Apr. 21, 1945 to Jan. 28, 1964, water-stage recorder at site 400 ft downstream; Jan. 29, 1964 to Oct. 4, 1977, water-stage recorder at site 230 ft downstream; Oct. 5, 1977 to July 30, 1985, water-stage recorder at site 190 ft downstream; at present datum and July 31, 1985 to Feb. 28, 1991, water-stage recorder at present site, all at 3.00 ft higher.

REMARKS.--Records fair except for periods of estimated record, which are poor. Diversions for irrigation above station, and since Oct. 1, 1985, flow regulated by the Calamus Dam.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	297	248	316	325	290	394	e169	223	32	256	306	332
2	262	266	349	331	290	452	e169	243	29	269	316	337
3	203	292	367	343	280	437	e157	267	30	278	307	349
4	157	298	367	353	294	329	e152	324	37	282	304	356
5	150	294	349	353	306	181	e152	346	35	280	303	364
6	152	295	344	343	305	181	e152	338	42	275	306	385
7	151	310	347	326	304	278	e152	341	62	273	305	410
8	163	317	349	296	e250	455	e152	333	211	292	308	378
9	152	316	347	272	224	468	e152	331	365	305	314	345
10	152	319	345	259	231	471	e152	288	289	309	310	320
11	152	319	345	275	265	424	e152	239	173	282	308	316
12	152	326	348	284	304	397	e152	217	151	317	317	315
13	152	362	341	299	318	400	e152	157	123	322	312	323
14	152	394	335	304	337	394	e152	104	62	317	323	324
15	152	391	340	279	374	394	e152	59	41	317	334	319
16	152	412	342	258	388	399	e152	49	40	340	334	316
17	153	422	338	259	365	400	e131	47	39	343	336	321
18	154	424	335	262	363	404	e122	47	44	341	330	311
19	154	424	331	265	387	407	122	46	64	341	323	303
20	154	425	331	271	420	310	119	46	68	339	323	306
21	154	417	329	261	433	265	113	46	71	322	325	306
22	181	351	319	288	440	269	111	46	67	315	343	309
23	266	335	308	320	441	240	110	49	72	317	335	307
24	329	e300	306	355	386	215	105	48	66	314	327	318
25	338	e280	307	349	313	214	96	49	68	318	331	321
26	333	e270	309	347	303	216	93	47	65	321	331	320
27	302	271	305	349	279	214	71	40	84	316	339	319
28	279	258	324	320	290	186	58	30	155	311	331	321
29	274	270	333	297	---	e169	130	20	185	310	333	322
30	252	301	325	283	---	e169	165	29	238	312	335	322
31	246	---	314	280	---	e169	---	36	---	303	329	---
TOTAL	6320	9907	10345	9406	9180	9901	4017	4485	3008	9537	9978	9895
MEAN	204	330	334	303	328	319	134	145	100	308	322	330
MAX	338	425	367	355	441	471	169	346	365	343	343	410
MIN	150	248	305	258	224	169	58	20	29	256	303	303
AC-FT	12540	19650	20520	18660	18210	19640	7970	8900	5970	18920	19790	19630

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1994, BY WATER YEAR (WY)

	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	176	178	259	287	296	233	207	209	228
MAX	404	330	334	314	328	338	489	343	339
(WY)	1989	1994	1994	1987	1994	1988	1987	1988	1991
MIN	47.3	38.6	81.0	159	151	115	78.7	57.4	100
(WY)	1992	1992	1992	1986	1986	1992	1988	1989	1994

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1986 - 1994
(SINCE CALAMUS DAM)

ANNUAL TOTAL	102548	95979	258
ANNUAL MEAN	281	263	277
HIGHEST ANNUAL MEAN			1988
LOWEST ANNUAL MEAN			1992
HIGHEST DAILY MEAN	617	471	787
LOWEST DAILY MEAN	49	20	*13
ANNUAL SEVEN-DAY MINIMUM	53	29	22
INSTANTANEOUS PEAK FLOW (STAGE)		484 (3.82)	1790 (7.35)
INSTANTANEOUS PEAK STAGE		3.91	**8.90
ANNUAL RUNOFF (AC-FT)	203400	190400	187000
10 PERCENT EXCEEDS	416	366	378
50 PERCENT EXCEEDS	316	304	288
90 PERCENT EXCEEDS	72	70	66

e Estimated.

* Due to temporary closure of dam.

** Backwater from ice.

PLATTE RIVER BASIN

135

06788500 NORTH LOUP RIVER AT ORD, NE

LOCATION.--Lat 41°36'27", long 98°55'17", in SW1/4 NW1/4 sec. 22, T.19 N., R.14 W., Valley County, Hydrologic Unit 10210007, on right bank 150 ft downstream from bridge on State Highway 70 at Ord and at mile 44.3.

DRAINAGE AREA (REVISED).--3,760 mi², approximately, of which about 702 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--November 1936 to September 1938 (published as "near Ord"), June 1952 to current year.

REVISED RECORDS.--WSP 1730: 1957(M). WDR NE-74: Drainage area. WDR NE-75: 1974.

GAGE.--Water-stage recorder. Datum of gage is 2,012.14 ft above sea level. Nov. 25, 1936, to Sept. 30, 1938, nonrecording gage at site 2 mi downstream at different datum.

REMARKS.--Records good except for period of estimated record, which is poor. Diversions above stations for irrigation. Flow includes return water from North Loup irrigation project.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	895	866	e800	1300	e690	e1300	861	1090	518	410	612	722
2	894	997	e900	1140	e660	e1800	884	1180	533	588	612	744
3	877	1090	e1100	1070	e620	e3000	924	1140	596	605	649	819
4	783	1140	e1000	1190	e640	2610	870	1120	680	653	903	2490
5	784	1040	e1100	1200	e580	1640	887	1110	671	1410	639	1260
6	813	1020	1250	e800	e540	1360	868	1100	647	1420	628	1090
7	817	977	1110	e450	e480	1310	801	1130	701	1280	649	1040
8	970	1020	997	e480	e500	1590	828	1010	800	1210	654	998
9	1120	1120	1130	e540	e466	1490	836	1030	1330	1130	673	939
10	1110	1260	1240	e600	e520	1400	841	1020	1240	997	695	867
11	987	1410	1190	e680	e600	1390	846	974	938	863	674	803
12	892	1610	1140	e780	e760	1340	978	906	819	732	677	762
13	867	1780	1120	e745	e700	1360	1050	910	803	936	735	752
14	883	1760	1040	e700	e780	1330	1050	863	703	1090	741	786
15	905	1490	1040	e740	e860	1300	1030	773	530	932	697	852
16	914	1400	980	e700	e1100	1290	979	722	522	1120	653	881
17	918	1420	1060	e680	e1000	1200	865	686	539	1100	632	910
18	812	1460	1060	e660	e1200	1230	805	740	1070	1000	618	823
19	809	1470	981	e690	e1100	1230	836	815	1000	1010	760	790
20	848	1510	1020	e670	e1040	1160	824	809	773	999	741	792
21	858	1460	1070	e760	e1000	1030	799	750	562	949	696	828
22	852	1370	1110	e900	e960	994	783	731	560	848	710	865
23	925	1280	1060	e1100	e900	949	797	741	528	772	708	846
24	1030	e400	1070	e1000	e960	928	794	740	516	738	685	846
25	1090	e250	1180	e900	e1000	910	771	721	527	707	677	879
26	1140	e280	1190	e940	e960	899	957	709	464	924	704	910
27	1140	e350	1090	e890	e1100	868	924	680	423	934	710	958
28	1040	e500	1010	e853	e1400	898	899	621	418	753	665	982
29	976	e600	1100	e800	---	841	963	585	382	631	721	973
30	871	e700	1210	e700	---	846	1070	531	352	597	731	951
31	855	---	1320	e600	---	829	---	519	---	592	716	---
TOTAL	28675	33030	33668	25258	23116	40322	26620	26456	20145	27930	21365	28158
MEAN	925	1101	1086	815	826	1301	887	853	671	901	689	939
MAX	1140	1780	1320	1300	1400	3000	1070	1180	1330	1420	903	2490
MIN	783	250	800	450	466	829	771	519	352	410	612	722
AC-FT	56880	65510	66780	50100	45850	79980	52800	52480	39960	55400	42380	55850

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1994, BY WATER YEAR (WY)

	MEAN	879	892	844	858	1015	1152	1057	978	896	660	662	801
MAX	1170	1165	1161	1123	1388	1701	1665	1391	1835	1416	1173	1317	
(WY)	1985	1985	1985	1989	1984	1978	1984	1988	1962	1993	1992	1988	
MIN	633	565	673	635	806	890	763	543	640	303	341	564	
(WY)	1992	1992	1968	1954	1981	1972	1989	1989	1976	1974	1955	1955	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1952 - 1994

ANNUAL TOTAL	375976	334743	
ANNUAL MEAN	1030	917	891
HIGHEST ANNUAL MEAN			1098
LOWEST ANNUAL MEAN			769
HIGHEST DAILY MEAN	2770	3000	6240
LOWEST DAILY MEAN	250	250	100
ANNUAL SEVEN-DAY MINIMUM	440	425	254
INSTANTANEOUS PEAK FLOW (STAGE)		4960 (4.47)	10100 (5.52)
INSTANTANEOUS PEAK STAGE		*6.04	*6.74
ANNUAL RUNOFF (AC-FT)	745700	664000	645400
10 PERCENT EXCEEDS	1400	1280	1210
50 PERCENT EXCEEDS	981	881	873
90 PERCENT EXCEEDS	701	597	545

e Estimated.

* Backwater from ice.

PLATTE RIVER BASIN

06790500 NORTH LOUP RIVER NEAR ST. PAUL, NE

LOCATION.--Lat 41°15'48", long 98°26'56", in NW1/4 NW1/4 NE1/4 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 (REVISED).--4,302 mi², of which about 1,240 mi² contributes directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1894 to September 1915, August 1928 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 976: 1942. WSP 1390: 1896. WDR NE-74: Drainage area. WDR NE-75: 1974.

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.

REMARKS.--Records fair except for period of estimated record, which is 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	985	1010	1190	1050	e920	e1180	847	942	563	521	818	957
2	939	1030	1290	1110	e940	e1400	886	998	614	682	832	993
3	910	1070	1210	1130	e940	e1900	872	1140	684	909	860	1020
4	865	1140	1300	1120	e900	e2800	919	1170	707	981	980	2890
5	786	1200	1280	1180	e900	4750	931	1150	754	1040	1120	2240
6	777	1130	1260	1300	e940	2860	933	1180	758	1920	921	1470
7	787	1190	1070	e1120	e880	1880	876	1210	700	1890	897	1220
8	931	1180	1020	e980	e820	1650	873	1230	764	1820	907	1120
9	1160	1210	1060	e1000	e760	1590	890	1110	901	1410	889	1090
10	1130	1250	1100	e1020	e711	1620	964	1020	1300	1260	902	999
11	1080	1220	1010	e1040	e780	1620	1030	1030	1290	1150	887	979
12	999	1250	1000	e1000	e880	1570	1360	954	1140	1170	833	954
13	932	1350	1000	e1060	e940	1510	1360	876	993	1680	822	930
14	924	1460	1070	e1040	e900	1420	1300	910	911	1660	929	1050
15	920	1420	1030	e960	e1020	1330	1180	992	805	1340	878	984
16	940	1380	1040	e940	e1000	1240	1080	746	682	1280	784	917
17	935	1360	1170	e960	e1080	1220	1040	686	641	1480	752	940
18	999	1350	1250	e920	e1040	1250	938	624	710	1330	728	906
19	982	1390	1220	e900	e1260	1240	840	563	1880	1140	953	825
20	965	1350	1040	e940	e1180	1240	849	605	1360	1080	1020	784
21	933	1340	940	e960	e1080	1090	899	588	1120	1020	931	805
22	967	1340	819	e1020	e1040	1020	909	678	938	881	871	857
23	975	1300	614	e1080	e1020	1010	900	713	1140	815	860	879
24	1060	807	662	e1140	e1000	982	897	689	949	1500	904	859
25	1090	e640	821	e1100	e980	866	889	661	787	1180	817	876
26	1130	e700	838	e1060	e980	851	915	693	721	1900	785	895
27	1120	e760	940	e1020	e980	862	1100	678	616	1490	857	868
28	1120	827	890	e1000	e1040	847	1180	652	550	1100	892	873
29	1100	1180	847	e1040	---	834	1080	628	539	920	866	888
30	1090	1260	844	e1000	---	801	1010	596	550	875	919	899
31	1000	---	959	e960	---	842	---	560	---	826	970	---
TOTAL	30531	35094	31784	32150	26911	45275	29747	26272	26067	38250	27384	31967
MEAN	985	1170	1025	1037	961	1460	992	847	869	1234	883	1066
MAX	1160	1460	1300	1300	1260	4750	1360	1230	1880	1920	1120	2890
MIN	777	640	614	900	711	801	840	560	539	521	728	784
AC-FT	60560	69610	63040	63770	53380	89800	59000	52110	51700	75870	54320	63410

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 1994, BY WATER YEAR (WY)

	MEAN	884	918	856	870	1098	1271	1102	1046	1031	697	654	800
MAX	1182	1198	1306	1308	1613	2589	1843	1498	2516	2471	1812	1384	
(WY)	1989	1980	1980	1990	1984	1936	1987	1983	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	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1928 - 1994

ANNUAL TOTAL	463157	381432	
ANNUAL MEAN	1269	1045	
HIGHEST ANNUAL MEAN			934
LOWEST ANNUAL MEAN			1223
HIGHEST DAILY MEAN	6400	Mar 7	1993
LOWEST DAILY MEAN	614	Dec 23	1940
ANNUAL SEVEN-DAY MINIMUM	720	Aug 12	21300
INSTANTANEOUS PEAK FLOW (STAGE)			85
INSTANTANEOUS PEAK STAGE			98
ANNUAL RUNOFF (AC-FT)	918700	756600	90000
10 PERCENT EXCEEDS	1850	1350	**14.90
50 PERCENT EXCEEDS	1050	981	Jun 22 1947
90 PERCENT EXCEEDS	781	739	Aug 8 1941
			Aug 6 1941
			Jun 6 1896
			Jun 6 1896

e Estimated.

* Backwater from ice.

**From floodmark, datum then in use.

PLATTE RIVER BASIN

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

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1946-53, 1974 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1974 to September 1978.

WATER TEMPERATURES: July 1974 to September 1978.

SUSPENDED SEDIMENT DISCHARGE: April 1946 to June 1953.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 426 microsiemens Jan. 18, 1976; minimum daily, 138 microsiemens Oct. 21, 1977.

WATER TEMPERATURES: Maximum, 34.0° C July 17, 1978; minimum, 0.0° C on many days during winter periods.

SEDIMENT CONCENTRATIONS: Maximum daily, 17,400 mg/L Apr. 27, 1951; minimum daily, not determined.

SEDIMENT LOADS: Maximum daily, 463,000 tons June 22, 1947; minimum daily, 20 tons Aug. 3, 1946, Feb. 22, 1953.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. FT ³ /S (00061)	SPECIFIC CONDUCT- ANCE (μ S/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (°C) (00010)	OXYGEN- DISSOLVED (MG/L) (00300)
OCT						
19...	1400	983	265	8.1	10.5	10.2
NOV						
19...	1115	1420	258	8.3	4.0	12.5
DEC						
15...	1050	1040	256	8.0	0.5	13.1
JAN						
11...	1035	1040	224	7.9	0.5	13.1
FEB						
10...	1215	711	289	7.5	0.5	11.7
MAR						
16...	0900	1210	262	8.3	7.0	11.8
APR						
07...	1105	879	267	8.2	6.5	11.8
MAY						
04...	1120	1170	249	8.2	15.5	9.9
JUN						
02...	0920	592	265	8.6	17.0	9.6
JUL						
28...	1615	1040	252	9.0	27.5	9.2
SEP						
07...	1040	1220	228	8.4	21.5	8.6

PLATTE RIVER BASIN

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

WATER QUALITY RECORDS

DATE	TIME	COLOR (PLAT- INUM- COBALT UNITS) (00080)	HARDNESS TOTAL (MG/L AS CaCO ₃) (00900)	MAGNE- CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)	SILUM, DIS- SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS- SOLVED (MG/L AS Na) (00930)	POTAS- SODIUM ADSORP- TION RATIO (00931)	ALKA- SIUM, DIS- SOLVED (MG/L AS K) (00935)	LINEITY LAB (MG/L AS CaCO ₃) (90410)
MAR 16...	0900	18	99	31	5.2	7.9	0.3	8.2	113
JUL 28...	1615	23	110	33	5.8	8.2	0.3	8.9	121

DATE	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS DISSOLVED (TONS PER AC-FT) (70303)	SOLIDS, DISSOLVED (TONS PER DAY) (70302)
MAR 16...	7.8	2.2	0.30	44	179	0.24	586
JUL 28...	8.1	2.4	0.30	33	173	0.23	485

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	BORON, DIS- SOLVED (µG/L AS B) (01020)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)
MAR 16...	<0.010	0.910	0.230	0.210	0.170	30	42	3
JUL 28...	<0.010	<0.050	0.050	0.090	0.090	30	22	4

PLATTE RIVER BASIN

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06791150 LOUP RIVER NEAR PALMER, NE
(National Water-Quality Assessment, NAWQA, station)

WATER QUALITY RECORDS

LOCATION.--Lat 41° 16' 34", long 98°15' 05", in NE 1/4 NE1/4 sec. 17, T. 15N., R. 8W., Nance County, Hydrologic Unit 10210019, at bridge 3.7 mi north of Palmer and 8 mi downstream from confluence of Middle and North Loup Rivers.

DRAINAGE AREA.--12,500 mi².

PERIOD OF RECORD.--Water years 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. FT ³ /S (00061)	SPE- CIFIC CON- DUCT- ANCE (μS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (° C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CaCO ₃ (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)	
OCT	20...	1000	3490	286	8.3	11.0	718	10.3	130	0	40
NOV	22...	1300	3020	281	8.0	5.0	711	14.4	120	0	38
DEC	07...	1100	2700	223	7.8	1.0	715	12.7	110	0	36
JAN	05...	1030	2710	--	8.1	0.0	706	14.3	120	0	37
FEB	16...	1000	3200	262	8.0	0.0	718	13.3	110	0	35
MAR	07...	1500	6710	252	7.9	2.0	722	9.5	93	0	29
	18...	0900	3400	290	8.3	8.0	709	10.8	120	0	38
APR	20...	1400	2360	298	8.4	17.0	715	10.1	120	0	39
MAY	24...	1130	1620	306	8.8	24.0	714	10.0	120	0	39
JUN	15...	1030	1450	270	9.1	25.0	708	9.0	120	3	37
JUL	19...	1030	2370	260	8.3	27.5	706	8.4	110	0	35
AUG	03...	1130	1620	280	8.8	24.0	711	8.1	110	0	36
SEP	19...	1330	1700	259	8.7	18.5	718	9.9	110	0	34
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CaCO ₃ (39086)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO ₃ (00452)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO ₃ (00453)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
OCT	20...	6.3	9.7	0.4	7.7	174	0	212	12	2.6	0.30
NOV	22...	6.2	11	0.4	7.3	131	0	160	11	2.8	0.30
DEC	07...	5.8	9.1	0.4	6.6	123	11	128	10	3.2	0.20
JAN	05...	5.9	9.1	0.4	6.4	118	0	144	11	2.4	0.30
FEB	16...	5.7	8.8	0.4	7.3	165	0	201	9.9	2.1	0.30
MAR	07...	5.0	7.1	0.3	11	104	0	127	9.4	2.8	0.30
	18...	6.1	9.4	0.4	8.4	128	6	144	11	2.8	0.30
APR	20...	6.5	11	0.4	8.5	126	0	154	12	3.2	0.30
MAY	24...	6.5	9.6	0.4	8.3	162	25	146	12	2.7	0.40
JUN	15...	5.7	9.4	0.4	8.2	112	0	137	10	2.3	0.30
JUL	19...	5.9	9.5	0.4	10	114	0	139	10	2.7	0.40
AUG	03...	5.9	9.0	0.4	8.4	120	7	132	9.7	2.5	0.30
SEP	19...	5.5	8.5	0.4	7.1	122	12	124	8.0	2.0	0.30

PLATTE RIVER BASIN

06791150 LOUP RIVER NEAR PALMER, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	SILICA, DIS- SOLVED (MG/L AS SIO ₂) (00955)	SOLIDS, RESIDUE AT 180 ° C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)
OCT 20...	51	225	238	0.31	2120	0.770	0.030	0.800	0.040	--
NOV 22...	45	203	205	0.28	1660	--	<0.010	0.850	0.040	0.26
DEC 07...	46	199	195	0.27	1450	--	<0.010	0.750	0.050	0.25
JAN 05...	50	209	198	0.28	1530	--	<0.010	1.00	0.080	0.22
FEB 16...	50	209	224	0.28	1810	1.17	0.030	1.20	0.050	0.15
MAR 07...	36	177	169	0.24	3210	1.17	0.030	1.20	0.160	0.84
MAR 18...	47	219	204	0.30	2010	--	<0.010	0.800	0.010	0.79
APR 20...	49	226	208	0.31	1440	0.400	0.010	0.410	0.020	0.48
MAY 24...	44	225	220	0.31	984	--	<0.010	<0.050	0.020	0.28
JUN 15...	50	192	190	0.26	752	--	<0.010	<0.050	<0.010	0.40
JUL 19...	37	186	180	0.25	1190	0.060	0.010	0.070	0.020	0.68
AUG 03...	37	199	181	0.27	870	--	<0.010	<0.050	0.020	0.88
SEP 19...	41	179	180	0.24	822	--	<0.010	0.130	0.010	1.1

DATE	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS- (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
OCT 20...	0.16	<0.20	0.20	--	1.0	0.430	0.240	13	3	5.8
NOV 22...	0.26	0.30	0.30	1.2	1.2	0.140	0.140	25	6	4.4
DEC 07...	0.25	0.30	0.30	1.0	1.0	0.150	0.120	20	7	14
JAN 05...	0.42	0.30	0.50	1.3	1.5	0.190	0.150	22	4	11
FEB 16...	0.15	0.20	0.20	1.4	1.4	0.150	0.140	46	5	9.7
MAR 07...	0.74	1.0	0.90	2.2	2.1	0.300	0.260	71	9	--
MAR 18...	0.19	0.80	0.20	1.6	1.0	0.170	0.170	21	3	5.5
APR 20...	--	0.50	<0.20	0.91	--	0.110	0.140	19	3	8.5
MAY 24...	0.18	0.30	0.20	0.30	--	0.050	0.060	11	4	3.0
JUN 15...	--	0.40	0.20	0.40	--	0.060	0.040	20	2	5.0
JUL 19...	0.18	0.70	0.20	0.77	0.27	0.180	0.180	30	2	7.8
AUG 03...	0.18	0.90	0.20	0.90	--	0.060	0.040	18	1	2.8
SEP 19...	--	1.1	<0.20	1.2	--	0.070	0.060	11	3	2.2

PLATTE RIVER BASIN

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06791150 LOUP RIVER NEAR PALMER, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. FT ³ /S (00061)	TEMPER- ATURE WATER (°C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT						
20...	1000	3490	11.0	1390	13100	30
NOV						
22...	1300	3020	5.0	707	5760	25
JAN						
05...	1030	2710	0.0	1370	10000	6
FEB						
16...	1000	3200	0.0	148	1280	16
MAR						
07...	1500	6710	2.0	9410	170000	20
18...	0900	3400	8.0	--	--	31
APR						
20...	1400	2360	17.0	751	4790	16
MAY						
24...	1130	1620	24.0	217	949	44
JUN						
15...	1030	1450	25.0	387	1520	29
JUL						
19...	1030	2370	27.5	466	2980	53
SEP						
19...	1330	1700	18.5	353	1620	25

PLATTE RIVER BASIN

06791500 CEDAR RIVER NEAR SPALDING, NE

LOCATION.--Lat 41°42'41", long 98°26'48", in NE1/4 NE1/4 NE1/4 sec.15, T.20 N., R.10 W., Greeley County, Hydrologic Unit 10210010, on left bank 15 ft downstream from bridge on county road, 0.4 mi upstream from small tributary, 4.7 mi northwest of Spalding, and at mile 60.3.

DRAINAGE AREA (REVISED).--752 mi², approximately, of which about 49 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1944 to September 1953, October 1957 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WDR NE-73: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,896.24 ft above sea level. Prior to Jan. 4, 1961, at two sites 6.5 mi upstream at different datum.

REMARKS.--Records good except for periods of estimated record, which are poor. Minor diversions for irrigation above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	162	174	e205	170	e190	269	179	236	142	147	195	134
2	162	173	207	169	e190	226	178	263	144	173	186	135
3	161	174	192	e165	e190	243	176	293	149	177	185	140
4	160	1731	89	167	e190	269	172	321	149	185	195	174
5	159	171	193	171	e195	278	170	287	151	232	197	197
6	157	167	195	e160	e190	344	166	263	150	702	265	263
7	156	167	193	e165	e185	402	166	254	152	497	208	215
8	192	170	190	e170	e175	390	162	216	179	329	195	187
9	215	170	193	e175	e175	356	163	217	193	255	188	171
10	229	170	196	e180	e180	302	161	208	189	244	186	160
11	232	169	193	e175	e180	277	166	195	175	230	186	135
12	233	184	192	e185	e180	228	232	186	164	237	183	138
13	228	203	196	e185	e180	250	264	164	156	398	177	142
14	222	212	196	e175	e185	252	305	192	150	345	171	145
15	217	224	196	e170	e185	245	335	188	141	433	163	144
16	208	233	196	e175	e190	241	409	178	140	467	153	141
17	204	234	196	e170	e185	236	446	165	141	434	129	139
18	200	232	200	e170	195	229	415	160	214	355	133	138
19	196	230	196	e175	205	223	323	155	332	283	134	140
20	195	221	193	e180	210	221	247	151	246	247	130	140
21	189	215	188	e190	226	214	187	152	166	182	131	144
22	189	210	e180	e205	221	206	200	152	196	187	132	147
23	187	206	e175	e215	150	203	197	160	345	185	128	149
24	187	e175	e190	e210	176	197	189	159	247	187	128	156
25	185	e180	178	e200	e185	193	186	152	169	195	133	160
26	181	e180	182	e195	e200	190	185	145	166	300	136	159
27	179	e185	170	e190	e215	188	179	142	160	276	138	156
28	176	e195	e165	e195	e240	185	197	140	152	251	137	157
29	175	e195	158	e190	---	184	212	141	143	227	138	155
30	173	e205	e170	e185	---	184	224	140	138	210	136	155
31	172	---	175	e185	---	182	---	139	---	197	135	---
TOTAL	5881	5797	5838	5612	5368	7607	6791	5914	5339	8767	5031	4716
MEAN	190	193	188	181	192	245	226	191	178	283	162	157
MAX	233	234	207	215	240	402	446	321	345	702	265	263
MIN	156	167	158	160	150	182	161	139	138	147	128	134
AC-FT	11660	11500	11580	11130	10650	15090	13470	11730	10590	17390	9980	9350

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1994, BY WATER YEAR (WY)

MEAN	149	151	147	150	168	202	203	193	187	154	146	145
MAX	261	220	208	208	308	601	475	352	530	362	290	296
(WY)	1987	1987	1987	1984	1952	1987	1987	1951	1962	1993	1992	1986
MIN	105	111	84.1	84.4	108	119	104	117	110	94.2	99.6	100
(WY)	1959	1959	1946	1950	1949	1946	1946	1946	1959	1980	1971	1945

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1945 - 1994

ANNUAL TOTAL	85183	72661	
ANNUAL MEAN	233	199	166
HIGHEST ANNUAL MEAN			260
LOWEST ANNUAL MEAN			112
HIGHEST DAILY MEAN	877	702	2240
LOWEST DAILY MEAN	121	128	30
ANNUAL SEVEN-DAY MINIMUM	154	131	55
INSTANTANEOUS PEAK FLOW		1150	4000
INSTANTANEOUS PEAK STAGE		5.22	7.50
ANNUAL RUNOFF (AC-FT)1	69000	144100	120400
10 PERCENT EXCEEDS	383	263	227
50 PERCENT EXCEEDS	197	185	149
90 PERCENT EXCEEDS	165	143	110

PLATTE RIVER BASIN

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06792000 CEDAR RIVER NEAR FULLERTON, NE

LOCATION.--Lat 41°23'36", long 98°00'15", in NE1/4 NE1/4 sec.4, T.16 N., R.6 W., Nance County, Hydrologic Unit 10210010, on left upstream bank near county bridge, 3 mi northwest of Fullerton and 7.4 mi upstream from mouth.

DRAINAGE AREA.--1,220 mi², of which about 480 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--September 1931 to June 1932, October 1940 to current year.

REVISED RECORDS.--WSP 1086: Drainage area. WSP 1390: 1932, 1941, 1943. WSP 1710: 1951(P), 1952(M), 1953, 1955(M).

GAGE.--Water-stage recorder. Datum of gage is 1,638.39 ft above sea level. Prior to Nov. 5, 1942, nonrecording gage; Nov. 5, 1942, to June 23, 1947, water-stage recorder; June 24, 1947, to Apr. 6, 1948, nonrecording gage; Apr. 7, 1948, to Apr. 15, 1971, water-stage recorder, all on downstream side of bridge pier at datum 2.00 ft higher; Apr. 16, 1971, to Aug. 26, 1980, on downstream side of bridge pier and Aug. 27, 1980, to Mar. 5, 1987, on left bank upstream from bridge both at present datum. Mar. 5, 1987 to Apr. 19, 1988, on left bank 400 ft downstream from county bridge.

REMARKS.--Records good except for periods of estimated record, which are poor. Natural flow affected by power developments, ground-water and surface-water withdrawals for irrigation, and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	253	282	e680	e330	e145	e350	234	305	236	243	775	196
2	245	285	e780	e320	e155	e470	219	315	221	381	646	191
3	245	276	e700	e290	e160	e800	219	356	232	418	569	187
4	241	287	583	e300	e165	e1400	200	415	236	475	775	627
5	246	274	501	e290	e165	1740	205	462	268	454	595	538
6	241	255	413	e220	e165	1030	187	468	247	2300	3220	262
7	235	259	383	e205	e160	647	182	408	257	1300	1400	538
8	329	265	376	e220	e160	590	179	389	272	853	632	447
9	595	265	365	e260	e160	538	175	344	304	503	420	329
10	432	265	336	e300	e160	506	173	315	371	299	345	298
11	414	263	319	e250	e155	529	171	321	358	282	318	248
12	408	278	326	e270	e145	510	306	298	325	663	303	224
13	412	313	338	e280	e140	419	314	276	294	1590	287	184
14	401	e330	342	e260	e160	454	348	309	303	811	282	206
15	396	e310	357	e230	e170	452	380	243	281	660	262	206
16	377	e330	373	e220	e175	426	416	298	258	981	243	191
17	360	e340	379	e210	e185	412	571	266	262	928	228	186
18	360	356	e370	e190	e200	380	648	238	284	738	187	187
19	350	353	e360	e180	e225	370	579	227	339	600	156	185
20	331	345	e330	e195	e250	374	451	214	637	465	164	190
21	324	329	e320	e225	e240	333	346	215	622	393	156	193
22	307	e310	e300	e300	e225	332	220	232	474	305	156	225
23	308	e290	e310	e320	e215	315	226	233	590	259	147	239
24	305	e250	e290	e300	e215	294	233	228	766	289	182	227
25	307	e220	e310	e215	e220	283	237	234	639	294	200	241
26	302	e200	e310	e205	e240	285	260	231	396	612	257	240
27	289	e210	e280	e195	e260	262	222	228	353	743	277	231
28	288	e300	e270	e190	e290	244	222	220	327	478	272	218
29	287	e360	e280	e165	---	253	262	279	299	430	238	210
30	287	e500	e290	e150	---	254	286	217	266	423	262	204
31	284	---	e320	e140	---	246	---	202	---	418	187	---
TOTAL	10159	8900	11891	7425	5305	15498	8671	8986	10717	19588	14141	7848
MEAN	328	297	384	240	189	500	289	290	357	632	456	262
MAX	595	500	780	330	290	1740	648	468	766	2300	3220	627
MIN	235	200	270	140	140	244	171	202	221	243	147	184
AC-FT	20150	17650	23590	14730	10520	30740	17200	17820	21260	38850	28050	15570

e Estimated.

*

PLATTE RIVER BASIN

06792000 CEDAR RIVER NEAR FULLERTON, NE--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1994, BY WATER YEAR (WY)

MEAN	207	216	203	202	271	343	298	310	355	249	218	203
MAX	387	325	384	334	666	1003	668	546	1436	1380	1693	421
(WY)	1987	1987	1994	1984	1948	1993	1987	1993	1947	1950	1966	1985
MIN	144	159	130	129	149	174	172	175	143	48.0	69.3	123
(WY)	1943	1976	1942	1957	1942	1943	1981	1955	1981	1974	1971	1955

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1941 - 1994

ANNUAL TOTAL	179752		129129			
ANNUAL MEAN	492		354		256	
HIGHEST ANNUAL MEAN					474	1993
LOWEST ANNUAL MEAN					172	1942
HIGHEST DAILY MEAN	6330	Mar 8	3220	Aug 6	37100	Aug 13 1966
LOWEST DAILY MEAN	170	Jan 5	140	Jan 31	30	Jul 18 1974
ANNUAL SEVEN-DAY MINIMUM	174	Jan 5	154	Jan 29	33	Jul 14 1974
INSTANTANEOUS PEAK FLOW			5970	Aug 6	64700	Aug 13 1966
INSTANTANEOUS PEAK STAGE			7.78	Aug 6	*16.90	Aug 13 1966
ANNUAL RUNOFF (AC-FT)	356500		256100		185400	
10 PERCENT EXCEEDS	818		590		370	
50 PERCENT EXCEEDS	343		289		210	
90 PERCENT EXCEEDS	218		187		135	

* From high point on surge.

06792000 CEDAR RIVER NEAR FULLERTON, NE--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1958-59, 1974 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1974 to September 1983.

WATER TEMPERATURES: July 1974 to September 1983.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 550 microsiemens Jan. 1, 1978; minimum daily, 119 microsiemens Nov. 23, 1980.

WATER TEMPERATURES: Maximum, 36.0 °C July 7, 1975; minimum, 0.0 °C on many days during winter periods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE TIME		DIS-CHARGE INST. FT ³ /S (00061)	SPECIFIC CON- DUCT- ANCE (μS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (°C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)
OCT	21...1130	324	--	7.0	10.5	24	140	45	7.8	10	0.4
DEC	28...1230	489	362	7.7	0.0	13	140	45	7.6	10	0.4
FEB	11...1400	1040	370	7.4	0.5	8	160	50	8.1	9.8	0.3
APR	20...0945	471	280	7.9	14.0	68	110	33	5.6	12	0.5
JUN	14...1200	303	292	7.5	26.0	35	130	40	6.8	8.8	0.3
AUG	25...1130	200	316	8.5	24.5	12	140	46	7.3	9.1	0.3

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY LAB (MG/L AS CaCO ₃) (90410)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	
OCT	21...	6.8	155	11	2.9	0.30	43	223	0.30	195	--	<0.010
DEC	28...	7.1	164	12	2.8	0.20	47	235	0.32	310	--	<0.010
FEB	11...	7.8	171	12	2.3	0.20	51	249	0.34	698	0.950	0.020
APR	20...	8.3	131	9.4	3.9	0.30	29	182	0.25	231	--	<0.010
JUN	14...	7.4	157	10	1.9	0.30	40	210	0.29	172	--	<0.010
AUG	25...	10	157	11	1.9	0.30	42	222	0.30	120	--	<0.010

DATE	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	BORON, DIS- SOLVED (μG/L AS B) (01020)	IRON, DIS- SOLVED (μG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (μG/L AS MN) (01056)	
OCT	21...	0.680	0.030	0.27	0.30	0.98	0.310	0.150	0.180	30	41	22
DEC	28...	0.880	0.070	0.13	0.20	1.1	0.240	0.170	0.170	30	15	17
FEB	11...	0.970	0.050	0.15	0.20	1.2	0.250	0.190	0.180	30	15	25
APR	20...	0.210	0.040	0.66	0.70	0.91	0.290	0.130	0.130	20	49	10
JUN	14...	<0.050	0.010	0.29	0.30	--	0.400	0.190	0.190	30	20	4
AUG	25...	<0.050	0.020	--	<0.20	--	0.350	0.150	0.150	30	<3	2

PLATTE RIVER BASIN

06793000 LOUP RIVER NEAR GENOA, NE

LOCATION.--Lat 41°25'05", long 97°43'25", in SW1/4NE1/4 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 (REVISED).--14,320 mi², of which about 5,620 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--August 1928 to June 1932, October 1943 to current year (October 1953 to April 1955, monthly discharge only).

REVISED RECORDS.--WDR NE-74: Drainage area.

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.

REMARKS.--Records fair except for period of estimated record, which is 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	483	221	1780	2500	e1300	e1900	654	81	90	120	624	774
2	438	76	1790	2610	e1400	e2500	510	54	82	120	1130	3720
3	416	41	2190	2800	e1500	e5000	768	46	82	118	822	3590
4	340	43	2730	2230	e1450	e11000	614	40	90	180	942	2250
5	260	51	2440	2280	e1450	e16000	715	37	94	188	1000	1710
6	175	870	2220	2440	e1400	11500	706	36	85	2030	1890	1760
7	412	469	1880	1880	e1400	6100	528	80	80	3070	2680	1420
8	222	46	1970	e400	e1400	4180	355	83	80	2990	1620	1380
9	809	29	2190	e450	e1350	4170	363	80	100	2550	1380	1390
10	1240	21	1500	e580	e1350	3100	617	81	149	1200	1700	1390
11	1020	67	1900	e800	e1400	2620	e700	81	180	304	1230	1140
12	521	108	820	e1000	e1500	2730	e740	79	86	197	1070	1100
13	306	318	1100	e1400	e1600	2860	e620	74	72	1370	672	992
14	281	615	3250	e2000	e1800	2750	e680	77	72	2180	653	811
15	341	756	2410	e2800	e2000	2630	e740	75	76	1430	551	799
16	252	421	470	e2700	e2200	3210	e780	71	67	605	596	799
17	293	382	296	e1900	e2400	2850	e700	63	76	1090	534	724
18	318	342	388	e1400	e2700	2020	e640	67	86	1400	438	745
19	469	357	1540	e1100	e3000	1660	e680	69	82	788	387	788
20	323	373	2460	e920	e3300	1500	e700	73	453	145	551	682
21	634	285	2660	e950	e3200	1890	614	98	453	98	596	633
22	358	189	2790	e960	e3000	1340	614	93	e168	102	614	799
23	234	308	2800	e1000	e2800	1090	280	104	e110	367	542	1040
24	201	1500	2850	e1040	e2600	1040	261	92	105	517	517	1140
25	161	717	2720	e1200	e2400	1170	641	105	100	777	413	1030
26	304	191	3000	e1400	e2300	1070	645	94	86	1170	459	979
27	532	234	3500	e1900	e2100	966	482	82	94	1890	360	942
28	367	356	3500	e1800	e2000	1080	149	80	105	1520	446	917
29	311	927	3090	e1700	---	952	132	94	112	992	643	954
30	413	1300	2240	e600	---	805	130	94	105	788	791	1020
31	469	---	2250	e1500	---	691	---	80	---	624	778	---
TOTAL	12903	11613	66724	48240	56300	102374	16758	2363	3620	30920	26629	37418
MEAN	416	387	2152	1556	2011	3302	559	76.2	121	997	859	1247
MAX	1240	1500	3500	2800	3300	16000	780	105	453	3070	2680	3720
MIN	161	21	296	400	1300	691	130	36	67	98	360	633
AC-FT	25590	23030	132300	95680	111700	203100	33240	4690	7180	61330	52820	74220

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1994, BY WATER YEARS (WY)

MEAN	127	410	991	875	1242	1654	609	579	882	388	267	196
MAX	934	1650	2521	2632	3866	5650	3745	4777	7365	6214	4253	1327
(WY)	1947	1992	1987	1990	1988	1978	1984	1984	1947	1993	1966	1986
MIN	3.76	41.1	177	67.5	72.4	95.0	18.5	8.18	7.54	.17	1.15	.000
(WY)	1977	1953	1956	1982	1955	1981	1981	1963	1981	1963	1970	1956

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1944 - 1994

ANNUAL TOTAL	728627	415862	
ANNUAL MEAN	1996	1139	683
HIGHEST ANNUAL MEAN			1993
LOWEST ANNUAL MEAN			182
HIGHEST DAILY MEAN	30000 Mar 8	16000 Mar 5	70800 Aug 13 1966
LOWEST DAILY MEAN	21 Nov 10	21 Nov 10	.00 Aug 20 1956
ANNUAL SEVEN-DAY MINIMUM	50 May 21	53 May 1	.00 Aug 20 1956
INSTANTANEOUS PEAK FLOW (STAGE)		17300 (*10.17) Mar 5	129000 Aug 13 1966
INSTANTANEOUS PEAK STAGE		*10.33 Jan 27	13.93 Aug 13 1966
ANNUAL RUNOFF (AC-FT)	1445000	824900	494500
10 PERCENT EXCEEDS	3560	2690	2000
50 PERCENT EXCEEDS	992	724	106
90 PERCENT EXCEEDS	157	82	12

e Estimated.

* Backwater from ice.

PLATTE RIVER BASIN

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06794000 BEAVER CREEK AT GENOA, NE

LOCATION.--Lat 41°26'32", long 97°44'11", in NE1/4 SE1/4 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 (REVISED).--677 mi², of which about 429 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1940 to current year.

REVISED RECORDS.--WSP 1310: 1942(M). WDR NE-73: 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.

REMARKS.--Records fair except for periods of estimated record, which are poor. Natural flow affected slightly by ground-water and surface-water withdrawals for irrigation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	112	e160	e114	e56	e100	155	172	94	116	476	85
2	110	115	e175	e110	e58	e114	155	186	142	125	449	83
3	110	120	e170	e104	e58	e140	154	201	131	140	278	83
4	109	121	e155	e114	e60	e1000	152	198	115	174	447	176
5	107	118	e155	e114	e58	1110	144	186	114	146	242	136
6	105	114	e150	e88	e58	677	137	172	137	949	212	123
7	107	113	e150	e72	e52	424	144	158	138	339	220	115
8	123	117	e150	e96	e54	341	141	149	136	285	193	109
9	163	118	143	e106	e58	302	136	148	153	342	178	103
10	188	117	138	e100	e62	268	128	145	145	321	172	99
11	199	119	137	e100	e66	245	130	138	155	253	169	94
12	173	124	140	e98	e68	234	153	135	135	201	161	94
13	156	130	141	e98	e70	227	203	130	116	497	155	94
14	152	146	140	e88	e72	224	292	163	106	556	146	91
15	140	168	137	e60	e74	218	287	131	96	392	140	83
16	133	166	136	e56	e100	216	342	178	88	477	134	78
17	131	158	135	e54	e140	211	341	166	87	504	130	74
18	129	160	135	e52	e200	206	310	134	89	348	126	70
19	130	164	134	e50	e300	205	250	124	100	320	121	74
20	127	160	134	e58	e170	204	209	117	139	272	115	76
21	123	154	e125	e68	e100	200	185	110	270	266	109	78
22	124	147	e120	e88	e70	196	167	108	253	232	108	81
23	122	e140	e110	e98	e68	193	157	107	458	188	106	97
24	121	e110	e110	e92	e68	183	152	108	470	252	101	97
25	121	e96	e125	e78	e66	174	149	103	240	313	96	95
26	122	e82	e120	e72	e70	170	155	99	215	221	99	95
27	117	e70	e114	e64	e80	164	143	95	185	189	106	87
28	116	e90	e104	e58	e88	160	144	93	152	167	104	84
29	118	e110	e114	e54	---	158	145	140	133	153	98	84
30	113	e130	e135	e47	---	155	158	100	121	144	93	84
31	113	---	e125	e50	---	157	---	88	---	137	91	---
TOTAL	4018	3789	4217	2501	2444	8576	5518	4282	4913	9019	5375	2822
MEAN	130	126	136	80.7	87.3	277	184	138	164	291	173	94.1
MAX	199	168	175	114	300	1110	342	201	470	949	476	176
MIN	105	70	104	47	52	100	128	88	87	116	91	70
AC-FT	7970	7520	8360	4960	4850	17010	10940	8490	9740	17890	10660	5600

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1994, BY WATER YEAR (WY)

	80.2	85.1	83.4	82.0	132	202	162	173	232	143	98.1	81.8
MEAN	80.2	85.1	83.4	82.0	132	202	162	173	232	143	98.1	81.8
MAX	184	173	150	197	537	688	519	432	808	1248	601	216
(WY)	1987	1983	1973	1973	1971	1993	1984	1984	1967	1950	1966	1993
MIN	43.4	47.6	42.2	48.0	57.4	78.0	74.2	67.3	64.0	12.9	8.72	29.8
(WY)	1981	1941	1977	1957	1979	1981	1981	1981	1980	1980	1976	1976

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1941 - 1994

ANNUAL TOTAL	99342	57474	
ANNUAL MEAN	272	157	129
HIGHEST ANNUAL MEAN			268
LOWEST ANNUAL MEAN			70.9
HIGHEST DAILY MEAN	4820	1110	10000
LOWEST DAILY MEAN	56	47	.41
ANNUAL SEVEN-DAY MINIMUM	63	54	.90
INSTANTANEOUS PEAK FLOW		2920	21200
INSTANTANEOUS PEAK STAGE		13.30	*18.70
ANNUAL RUNOFF (AC-FT)	197000	114000	93710
10 PERCENT EXCEEDS	402	253	204
50 PERCENT EXCEEDS	159	131	88
90 PERCENT EXCEEDS	81	74	48

e Estimated.

* Site and datum then in use.

PLATTE RIVER BASIN

06795500 SHELL CREEK NEAR COLUMBUS, NE
(National Water-Quality Assessment, NAWQA, station)

LOCATION.--Lat 41°31'33", long 97°16'55", in NE1/4 NW1/4 sec.23, T.18 N., R.1 E., Platte County, Hydrologic Unit 10200201, on right bank 80 ft upstream from county road bridge, 1 mi upstream from Loseke Creek, 7 mi northeast of Columbus, and at mile 32.2.

DRAINAGE AREA (REVISED).--294 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1947 to September 1975, October 1977 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,435 ft above sea level.

REMARKS.--Records good except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	32	e42	50	e19	e82	37	48	31	30	33	18
2	36	34	e44	47	e20	e80	38	44	59	169	45	19
3	36	36	e44	42	e21	146	36	42	50	323	34	19
4	35	38	e41	42	e20	990	35	41	40	159	51	58
5	34	36	e44	e40	e21	1370	35	40	39	128	46	90
6	33	33	e45	e36	e20	601	34	37	39	973	50	29
7	35	31	44	e32	e19	290	35	36	39	803	31	23
8	42	33	36	e28	e18	113	36	36	39	207	27	21
9	144	35	41	e27	e16	74	36	36	60	116	27	22
10	83	36	42	e29	e32	58	36	35	33	56	27	20
11	81	36	39	e31	e45	52	35	34	26	41	26	20
12	60	41	37	e33	e78	49	57	32	25	36	25	20
13	47	50	40	e30	e130	49	94	31	24	201	26	20
14	43	51	45	e32	e125	44	62	33	22	454	25	19
15	42	43	38	e34	e120	45	50	35	21	152	25	19
16	43	40	39	e26	e115	45	43	32	19	81	25	19
17	43	40	42	e25	e170	42	39	30	18	406	25	19
18	40	40	47	e27	e400	43	38	29	21	126	26	19
19	39	39	47	e29	e720	43	36	28	243	56	26	19
20	37	37	43	e27	e380	42	34	27	91	41	25	18
21	37	35	e42	e33	e175	44	34	26	198	109	24	19
22	38	35	e40	e36	e78	42	33	26	365	124	22	26
23	37	e35	e42	e39	e110	42	33	25	409	40	21	57
24	36	e34	53	e42	e94	41	33	25	451	45	20	56
25	36	e31	43	e40	e90	39	32	25	100	247	22	37
26	36	e27	41	e36	e80	38	34	23	48	60	25	30
27	36	e29	41	e36	e70	38	37	22	36	43	22	26
28	35	e32	37	e38	e98	38	38	21	31	35	18	24
29	34	e36	33	e28	---	37	48	25	29	31	17	23
30	33	e40	48	e17	---	37	55	54	28	29	18	23
31	33	---	49	e18	---	37	---	21	---	27	18	---
TOTAL	1381	1095	1309	1030	3284	4691	1223	999	2634	5348	852	832
MEAN	44.5	36.5	42.2	33.2	117	151	40.8	32.2	87.8	173	27.5	27.7
MAX	144	51	53	50	720	1370	94	54	451	973	51	90
MIN	33	27	33	17	16	37	32	21	18	27	17	18
AC-FT	2740	2170	2600	2040	6510	9300	2430	1980	5220	10610	1690	1650

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1994, BY WATER YEAR (WY)

	MEAN	16.7	14.9	14.1	17.2	50.3	101	40.0	66.8	119	65.3	35.9	23.2
MAX	74.6	59.9	42.2	84.7	322	469	210	552	702	515	202	195	
(WY)	1983	1983	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	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1948 - 1994

ANNUAL TOTAL	50368	24678	
ANNUAL MEAN	138	67.6	47.0
MEDIAN OF ANNUAL MEANS			41.1
HIGHEST ANNUAL MEAN			136
LOWEST ANNUAL MEAN			13.6
HIGHEST DAILY MEAN	3410	Mar 9	4900
LOWEST DAILY MEAN	15	Jan 1	16
ANNUAL SEVEN-DAY MINIMUM	16	Jan 1	18
INSTANTANEOUS PEAK FLOW			1790
INSTANTANEOUS PEAK STAGE			15.58
ANNUAL RUNOFF (AC-FT)	99900	48950	34040
10 PERCENT EXCEEDS	240	111	63
50 PERCENT EXCEEDS	45	37	15
90 PERCENT EXCEEDS	30	21	5.7

PLATTE RIVER BASIN

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06795500 SHELL CREEK NEAR COLUMBUS, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. FT ³ /S (00061)	SPE- CIFIC CON- DUCT- ANCE (μ S/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (°C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CaCO ₃ (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)
OCT										
19...	1000	39	713	8.1	10.0	733	10.0	350	0	100
NOV										
22...	1330	35	711	8.6	2.5	720	13.9	330	0	94
DEC										
20...	1000	43	698	8.4	0.5	727	--	350	0	98
JAN										
11...	1000	31	873	8.1	0.0	735	14.2	380	0	110
FEB										
24...	1000	86	559	7.6	0.5	720	11.7	230	0	67
MAR										
15...	1400	45	693	8.0	8.5	728	7.5	310	9	91
APR										
12...	1030	50	667	7.9	6.5	715	12.7	280	48	78
MAY										
25...	1200	25	630	8.0	19.5	719	11.6	290	79	77
JUN										
14...	1130	22	--	8.6	23.5	714	7.7	310	0	90
22...	1230	340	276	7.6	23.5	719	3.4	100	0	31
JUL										
06...	1130	1010	234	7.6	22.0	--	--	86	2	26
AUG										
02...	1300	49	627	8.2	24.5	725	9.4	310	52	87
SEP										
19...	1130	19	657	8.1	17.5	728	8.2	320	0	91

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CaCO ₃ (39086)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO ₃ (00452)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO ₃ (00453)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
OCT										
19...	24	20	0.5	9.7	353	0	431	44	7.9	0.40
NOV										
22...	23	20	0.5	7.6	394	0	481	44	8.7	0.30
DEC										
20...	25	25	0.6	7.9	352	12	405	40	9.7	0.30
JAN										
11...	26	23	0.5	7.3	385	0	470	46	8.7	0.40
FEB										
24...	16	13	0.4	13	233	0	284	25	6.6	0.30
MAR										
15...	21	20	0.5	11	305	0	372	38	8.1	0.30
APR										
12...	21	24	0.6	13	233	0	284	43	8.5	0.30
MAY										
25...	24	23	0.6	9.3	212	0	259	39	8.7	0.40
JUN										
14...	21	19	0.5	10	356	26	381	37	7.8	0.40
22...	6.0	4.5	0.2	11	112	0	137	8.0	3.0	0.50
JUL										
06...	5.2	4.0	0.2	11	84	0	103	7.5	2.6	0.40
AUG										
02...	22	21	0.5	10	256	0	312	32	7.4	0.40
SEP										
19...	22	21	0.5	8.5	341	0	416	35	7.6	0.30

PLATTE RIVER BASIN

06795500 SHELL CREEK NEAR COLUMBUS, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	SILICA, DIS- SOLVED (MG/L AS SIO ₂) (00955)	SOLIDS, RESIDUE AT 180 ° C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)
OCT 19...	31	478	472	0.65	50.3	4.95	0.050	5.00	0.040	0.36
NOV 22...	24	483	479	0.66	45.6	4.56	0.040	4.60	0.030	0.27
DEC 20...	27	482	465	0.66	56.0	4.37	0.030	4.40	0.160	0.54
JAN 11...	36	555	517	0.75	46.5	6.05	0.050	6.10	0.150	0.25
FEB 24...	21	343	322	0.47	79.6	4.27	0.130	4.40	0.610	0.79
MAR 15...	26	397	418	0.54	48.2	4.16	0.040	4.20	0.370	0.93
APR 12...	21	416	363	0.57	56.2	2.72	0.080	2.80	0.360	1.9
MAY 25...	21	390	334	0.53	26.3	0.710	0.070	0.780	0.050	1.4
JUN 14...	31	449	446	0.61	26.7	3.40	0.100	3.50	0.050	1.2
JUN 22...	11	166	160	0.23	152	3.52	0.280	3.80	0.480	0.82
JUL 06...	11	149	132	0.20	406	2.66	0.140	2.80	0.250	8.2
AUG 02...	27	407	372	0.55	53.8	2.57	0.030	2.60	0.030	1.5
SEP 19...	32	416	431	0.57	21.3	1.88	0.020	1.90	0.020	0.68

DATE	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (µ G/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (µ G/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
OCT 19...	0.36	0.40	0.40	5.4	5.4	0.210	0.200	6	190	2.5
NOV 22...	0.27	0.30	0.30	4.9	4.9	0.150	0.140	5	350	3.2
DEC 20...	0.64	0.70	0.80	5.1	5.2	0.140	0.160	10	400	4.2
JAN 11...	0.25	0.40	0.40	6.5	6.5	0.170	0.200	<3	520	2.7
FEB 24...	0.59	1.4	1.2	5.8	5.6	0.130	0.120	18	170	9.0
MAR 15...	0.33	1.3	0.70	5.5	4.9	0.180	0.170	6	140	4.8
APR 12...	0.94	2.3	1.3	5.1	4.1	0.270	0.240	26	480	10
MAY 25...	0.25	1.4	0.30	2.2	1.1	0.070	0.060	27	77	5.2
JUN 14...	0.35	1.2	0.40	4.7	3.9	0.280	0.270	<3	69	3.9
JUN 22...	0.82	1.3	1.3	5.1	5.1	0.090	0.090	140	3	20
JUL 06...	0.55	8.5	0.80	11	3.6	0.150	0.130	180	4	6.4
AUG 02...	0.27	1.5	0.30	4.1	2.9	0.130	0.120	<3	34	4.0
SEP 19...	0.18	0.70	0.20	2.6	2.1	0.200	0.190	4	70	3.8

PLATTE RIVER BASIN

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06795500 SHELL CREEK NEAR COLUMBUS, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. FT ³ /S (00061)	TEMPER- ATURE WATER (°C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70331)
OCT						
19...	1000	39	10.0	188	20	58
NOV						
22...	1330	35	2.5	163	15	32
DEC						
20...	1000	43	0.5	194	23	43
JAN						
11...	1000	31	0.0	214	18	53
FEB						
24...	1000	86	0.5	170	39	100
MAR						
15...	1400	31	8.5	267	22	98
APR						
12...	1030	50	6.5	343	46	95
MAY						
25...	1200	25	19.5	37	2.5	98
JUN						
14...	1130	22	23.5	220	13	99
22...	1230	340	23.5	9280	8520	99
AUG						
02...	1300	49	24.5	322	43	98
SEP						
19...	1130	19	17.5	107	5.5	88

PLATTE RIVER BASIN

06796000 PLATTE RIVER AT NORTH BEND, NE

LOCATION.--Lat 41°27'10", long 96°45'50", in SE1/4 sec.7, T.17 N., R.6 E., Dodge County, Hydrologic Unit 10200201, 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 (REVISED).--70,400 mi², of which about 57,800 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--April 1949 to current year.

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

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.

REMARKS.--Records good except for periods of estimated record, 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5730	5190	e3000	e3600	e3200	e6000	4680	4530	3060	1660	4360	2050
2	5390	4220	e4500	e4400	e3200	e10000	3630	4250	2430	1340	3700	1180
3	5110	5400	e5600	e4500	e3300	e13000	4390	4370	1980	3000	3660	1770
4	4660	5020	e7000	e4400	e3400	e20000	6380	4550	2770	2790	3560	2220
5	4760	6160	e8400	e3800	e3600	e38000	4890	4210	2810	2850	3010	2650
6	4420	4560	e8800	e3900	e3300	e30000	3870	4300	2410	7940	3580	4850
7	4530	5240	e8600	e3400	e3000	e22000	4320	4530	2230	12700	4640	4020
8	4100	4760	e8200	e2800	e2800	17300	4530	4400	1870	8530	6450	3730
9	5070	4470	e8000	e2900	e2700	14100	4240	4160	2990	5390	3720	3200
10	5570	4820	7550	e3200	e2800	12600	4400	3920	3460	4870	3130	2970
11	6320	4190	6640	e2800	e2800	11000	4040	3220	3530	3240	3380	2730
12	5520	4660	7200	e3100	e2900	9300	5320	2950	4100	3490	3430	2430
13	5120	5590	6320	e2800	e2900	8690	7170	2930	3650	4340	3010	2410
14	4980	5170	5410	e2400	e3100	9210	9430	2710	3250	6290	2970	2370
15	5560	6620	5600	e1800	e3400	5860	7710	3210	2700	7960	2790	2430
16	5260	6470	5850	e1900	e3800	6920	6680	2820	2660	5230	2760	2200
17	6250	6160	5750	e2000	e4300	6800	5840	2540	2260	5970	2610	2330
18	6200	5690	5460	e1900	e5200	6190	5610	2700	2170	6300	2410	2270
19	6200	5400	5170	e1800	e6000	6180	5050	1940	2340	6620	2050	2460
20	6360	5240	4240	e1900	e6500	6940	5280	2220	2300	6120	2030	2360
21	5990	4960	e3900	e2000	e6400	8070	3670	2470	3570	5540	2180	2320
22	6300	4860	e3700	e2200	e6000	6150	4750	1520	4640	5200	2450	2610
23	5920	4780	e3600	e2600	e5600	5730	4150	1950	5380	4060	2190	3290
24	5830	e1800	e3400	e3200	e5200	5250	4260	3130	4490	4180	2090	3510
25	5400	e1000	e3300	e3700	e4700	5340	4100	2310	4380	3410	1950	3560
26	5620	e740	e3300	e3400	e4500	3710	3920	2690	3040	4210	2170	3420
27	5910	e640	e3400	e3200	e4800	5470	4570	2760	2530	3550	1870	3460
28	8000	e760	e3300	e3000	e5000	6730	4220	2850	2610	3790	1810	2910
29	3540	e1100	e3100	e2800	---	4160	5090	2700	1740	4390	1540	3010
30	5970	e2000	e3000	e2900	---	6090	4830	2660	1890	3500	2100	3010
31	5640	---	e3200	e3000	---	4930	---	2380	---	2790	1260	---
TOTAL	171230	127670	164490	91300	114400	321720	151020	97880	89240	151250	88860	83730
MEAN	5524	4256	5306	2945	4086	10380	5034	3157	2975	4879	2866	2791
MAX	8000	6620	8800	4500	6500	38000	9430	4550	5380	12700	6450	4850
MIN	3540	640	3000	1800	2700	3710	3630	1520	1740	1340	1260	1180
AC-FT	339600	253200	326300	181100	226900	638100	299500	194100	177000	300000	176300	166100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 1994, BY WATER YEAR (WY)

	MEAN	3668	3983	3464	3353	5289	7690	6024	5885	6349	3625	2357	2972
MAX	10130	9462	8581	7361	11850	16870	19400	21770	25340	17070	8021	9022	
(WY)	1974	1985	1985	1984	1984	1993	1984	1984	1983	1993	1983	1986	
MIN	1624	1938	1413	1206	2689	3685	2881	1952	1932	381	442	936	
(WY)	1980	1956	1956	1957	1979	1957	1967	1955	1981	1974	1955	1955	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1949 - 1994

ANNUAL TOTAL	2714840	1652790	
ANNUAL MEAN	7438	4528	4535
HIGHEST ANNUAL MEAN			10070
LOWEST ANNUAL MEAN			2168
HIGHEST DAILY MEAN	82300	Mar 5	82300
LOWEST DAILY MEAN	640	Nov 27	36
ANNUAL SEVEN-DAY MINIMUM	1150	Nov 24	146
INSTANTANEOUS PEAK FLOW (STAGE)			112000 (10.04)
INSTANTANEOUS PEAK STAGE			*15.55
ANNUAL RUNOFF (AC-FT)	5385000	3278000	3285000
10 PERCENT EXCEEDS	13000	6630	8400
50 PERCENT EXCEEDS	5560	3920	3620
90 PERCENT EXCEEDS	2640	2170	1370

e Estimated.

* Ice jam.

PLATTE RIVER BASIN

153

06796500 PLATTE RIVER AT LESHARA

LOCATION.--Lat 41°19'09", long 96°24'14", in NW1/4 sec.34., T. 16 N., R. 9 E., Douglas County, Hydrologic Unit 10200202, on left bank 250 ft downstream from bridge on Nebraska Highway 64, 1.0 mi southeast of Leshara, NE.

PERIOD OF RECORD.--June to September 1994.

GAGE.--Water-stage recorder.

REMARKS.-- Records good except for periods of estimated record, which are poor.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period June to September, 13,800 ft³/s, July 8, gage height, 5.5ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	2610	3920	2040
2	---	---	---	---	---	---	---	---	---	2420	3620	2300
3	---	---	---	---	---	---	---	---	---	2220	3690	2090
4	---	---	---	---	---	---	---	---	---	3330	3640	2840
5	---	---	---	---	---	---	---	---	---	3360	2950	4020
6	---	---	---	---	---	---	---	---	---	5060	3600	4330
7	---	---	---	---	---	---	---	---	---	10700	3510	4930
8	---	---	---	---	---	---	---	---	---	11400	6950	5180
9	---	---	---	---	---	---	---	---	---	7610	4280	4770
10	---	---	---	---	---	---	---	---	---	7100	3830	3510
11	---	---	---	---	---	---	---	---	---	5870	3590	2860
12	---	---	---	---	---	---	---	---	---	5350	3770	2350
13	---	---	---	---	---	---	---	---	---	5710	3300	2330
14	---	---	---	---	---	---	---	---	---	6280	2940	2100
15	---	---	---	---	---	---	---	---	---	9020	3150	2290
16	---	---	---	---	---	---	---	---	---	7130	2970	2380
17	---	---	---	---	---	---	---	---	---	6960	2600	2200
18	---	---	---	---	---	---	---	---	---	7680	2560	2290
19	---	---	---	---	---	---	---	---	---	8280	2450	2450
20	---	---	---	---	---	---	---	---	---	7910	2260	2420
21	---	---	---	---	---	---	---	---	---	7540	2490	2660
22	---	---	---	---	---	---	---	---	---	7060	2120	2930
23	---	---	---	---	---	---	---	---	---	6310	2190	3450
24	---	---	---	---	---	---	---	---	---	5300	2020	3810
25	---	---	---	---	---	---	---	---	---	4530	1930	3810
26	---	---	---	---	---	---	---	---	---	4950	2110	3610
27	---	---	---	---	---	---	---	---	---	4550	2050	3300
28	---	---	---	---	---	---	---	---	---	4740	2060	3000
29	---	---	---	---	---	---	---	---	3490	5130	2060	3280
30	---	---	---	---	---	---	---	---	2560	3940	2020	3250
31	---	---	---	---	---	---	---	---	---	2990	2360	---
TOTAL	---	---	---	---	---	---	---	---	---	183040	92990	92780
MEAN	---	---	---	---	---	---	---	---	---	5905	3000	3093
MAX	---	---	---	---	---	---	---	---	---	11400	6950	5180
MIN	---	---	---	---	---	---	---	---	---	2220	1930	2040
AC-FT	---	---	---	---	---	---	---	---	---	363100	184400	184000

PLATTE RIVER BASIN

06797500 ELKHORN RIVER AT EWING, NE

LOCATION.--Lat 42°16'03", long 98°20'11", in NW1/4 SW1/4 sec.35, T.27 N., R.9 W., Holt County, Hydrologic Unit 10220001, on right bank 800 ft downstream from bridge on State Highway L-45B, 0.8 mi north of Ewing, 1.5 mi upstream from South Fork Elkhorn River, and at mile 199.

DRAINAGE AREA.--1,400 mi², approximately, of which about 740 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--August 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,836.24 ft, above sea level, levels by Nebraska Department of Roads. Prior to Oct. 22, 1952, at site 300 ft upstream at same datum.

REMARKS.--Records good except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	151	162	e290	e160	e93	e130	284	446	94	308	117	117
2	143	160	e290	e155	e96	e130	269	526	96	313	111	135
3	140	156	e300	e150	e99	e130	258	606	100	314	122	150
4	136	158	e310	e148	e100	e200	255	667	96	303	142	265
5	131	154	e315	e130	e102	e700	250	673	104	323	124	295
6	130	149	e320	e110	e102	590	247	649	102	316	115	305
7	126	147	e322	e110	e100	1030	245	624	118	358	115	319
8	133	154	e325	e115	e94	1330	242	570	122	434	113	338
9	173	158	e320	e115	e84	1030	234	514	131	427	111	322
10	250	151	e290	e115	e90	912	223	459	127	386	118	279
11	289	148	e270	e115	e95	789	218	412	117	351	132	241
12	338	155	e265	e115	e100	759	253	364	106	324	156	217
13	361	199	e260	e110	e104	774	292	321	102	419	195	197
14	342	239	e230	e105	e108	744	466	298	95	428	210	175
15	321	251	e230	e100	e110	691	779	265	89	363	192	157
16	301	259	e230	e100	e115	639	564	236	84	403	165	144
17	283	271	e230	e100	e125	586	413	210	82	630	144	135
18	269	284	e220	e105	e140	547	348	189	136	580	130	126
19	256	295	e210	e105	e170	510	289	170	434	468	118	119
20	249	293	e195	e105	e200	474	250	154	441	374	109	113
21	235	288	e180	e110	e190	448	223	143	445	306	102	111
22	225	284	e160	e110	e180	424	208	134	461	257	97	115
23	216	274	e130	e110	e160	393	195	133	605	227	92	113
24	211	e98	e145	e105	e140	370	190	127	769	210	89	112
25	203	e135	e155	e105	e130	354	188	123	770	199	93	108
26	192	e180	e175	e105	e125	329	195	116	696	183	91	105
27	185	e225	e180	e105	e125	310	204	108	589	164	91	101
28	180	e280	e170	e100	e125	301	226	107	473	151	85	97
29	172	e280	e160	e99	---	289	269	103	394	139	80	95
30	166	e290	e160	e96	---	287	353	95	340	130	88	92
31	163	---	e160	e88	---	287	---	89	---	122	95	---
TOTAL	6670	6277	7197	3501	3402	16487	8630	9631	8318	9910	3742	5198
MEAN	215	209	232	113	121	532	288	311	277	320	121	173
MAX	361	295	325	160	200	1330	779	673	770	630	210	338
MIN	126	98	130	88	84	130	188	89	82	122	80	92
AC-FT	13230	12450	14280	6940	6750	32700	17120	19100	16500	19660	7420	10310

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1994, BY WATER YEAR (WY)

MEAN	85.8	83.8	76.3	63.6	134	363	460	367	285	172	79.0	79.8
MAX	671	374	250	188	1172	2144	2081	1522	2690	1993	444	882
(WY)	1952	1952	1952	1987	1952	1987	1987	1960	1962	1993	1993	1986
MIN	19.4	27.0	27.3	19.4	26.0	61.1	59.7	51.8	45.8	19.5	12.0	9.33
(WY)	1976	1977	1956	1977	1975	1981	1981	1981	1976	1976	1976	1975

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1947 - 1994

ANNUAL TOTAL	205671	88963	
ANNUAL MEAN	563	244	187
MEDIAN OF ANNUAL MEANS			128
HIGHEST ANNUAL MEAN			536
LOWEST ANNUAL MEAN			42.8
HIGHEST DAILY MEAN	4100	May 11	1330
LOWEST DAILY MEAN	48	Jan 5	80
ANNUAL SEVEN-DAY MINIMUM	50	Jan 4	88
INSTANTANEOUS PEAK FLOW			1490
INSTANTANEOUS PEAK STAGE			6.48
ANNUAL RUNOFF (AC-FT)	407900	176500	135800
10 PERCENT EXCEEDS	1490	463	397
50 PERCENT EXCEEDS	265	180	74
90 PERCENT EXCEEDS	81	100	30

PLATTE RIVER BASIN

06799100 NORTH FORK ELKHORN RIVER NEAR PIERCE, NE

LOCATION.--Lat 42°10'44", long 97°29'04", in SW1/4 sec.31, T.26 N., R.1 W., Pierce County, Hydrologic Unit 10220002, on left downstream wingwall of county road bridge, 2.5 mi southeast of Pierce, and at mile 22.8.

DRAINAGE AREA (REVISED).--701 mi², of which about 30 mi² is noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 1,553.07 ft above sea level (U.S. Weather Bureau levels).

REMARKS.--Records good except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	117	108	115	e74	e50	100	138	349	64	140	104	64
2	111	115	122	e68	e58	103	135	318	67	220	97	71
3	107	115	132	e64	e60	274	133	237	70	186	94	73
4	105	115	143	e68	e66	1670	131	204	67	149	92	1080
5	102	115	154	e70	e74	1850	130	180	70	197	88	1140
6	101	104	165	e52	e76	1210	126	167	72	301	110	481
7	100	109	156	e50	e60	602	127	170	74	281	148	283
8	100	110	148	e60	e50	374	124	175	69	365	130	178
9	148	106	146	e64	e45	304	119	161	67	252	95	156
10	170	107	162	e68	e60	268	112	142	64	181	92	132
11	158	108	164	e66	e70	239	110	130	61	153	89	116
12	140	111	154	e72	e80	227	163	119	71	201	86	105
13	133	146	169	e70	94	214	312	112	114	1790	85	98
14	130	170	161	e60	118	207	431	117	104	2280	81	95
15	129	147	e140	e50	114	204	444	164	68	1730	76	91
16	129	130	e125	e54	e120	192	356	154	58	1280	73	84
17	130	146	e114	e52	e200	184	270	122	54	1340	69	80
18	129	157	e106	e49	638	181	230	106	585	653	64	78
19	127	157	e110	e54	2060	176	198	97	1460	373	59	75
20	125	146	e114	e54	1860	179	175	90	1800	300	56	74
21	124	139	e106	e66	461	181	164	86	419	256	54	75
22	120	137	e90	e80	221	174	154	83	236	223	53	79
23	119	132	e100	e100	e120	170	144	81	1820	197	51	102
24	117	154	e110	e86	e110	164	137	78	2130	182	49	110
25	116	245	e100	72	e140	152	129	74	1510	169	60	103
26	114	220	e90	82	e170	152	136	71	368	155	63	93
27	111	164	e80	e100	e120	150	146	69	252	141	65	88
28	111	156	e70	e80	100	147	148	67	204	129	58	85
29	112	159	e72	e70	---	145	165	67	170	120	54	83
30	107	145	e76	e56	---	141	235	70	150	112	65	81
31	101	---	e80	e45	---	139	---	66	---	106	76	---
TOTAL	3743	4173	3774	2056	7395	10473	5522	4126	12318	14162	2436	5453
MEAN	121	139	122	66.3	264	338	184	133	411	457	78.6	182
MAX	170	245	169	100	2060	1850	444	349	2130	2280	148	1140
MIN	100	104	70	45	45	100	110	66	54	106	49	64
AC-FT	7420	8280	7490	4080	14670	20770	10950	8180	24430	28090	4830	10820

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1994, BY WATER YEAR (WY)

MEAN	45.8	46.5	44.3	42.2	102	203	170	136	171	96.3	47.1	45.7
MAX	206	139	122	111	834	1120	1004	541	799	834	210	191
(WY)	1993	1994	1994	1973	1971	1962	1984	1984	1967	1993	1993	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

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1960 - 1994

ANNUAL TOTAL	104121	75631	95.3
ANNUAL MEAN	285	207	72.0
MEDIAN OF ANNUAL MEANS			287
HIGHEST ANNUAL MEAN			21.5
LOWEST ANNUAL MEAN			1993
HIGHEST DAILY MEAN	3030	Mar 10	2280
LOWEST DAILY MEAN	45	Jan 29	45
ANNUAL SEVEN-DAY MINIMUM	53	Jan 24	53
INSTANTANEOUS PEAK FLOW			2380
INSTANTANEOUS PEAK STAGE			12.97
ANNUAL RUNOFF (AC-FT)	206500	150000	69020
10 PERCENT EXCEEDS	587	300	157
50 PERCENT EXCEEDS	158	118	43
90 PERCENT EXCEEDS	62	64	21

PLATTE RIVER BASIN

157

06799350 ELKHORN RIVER AT WEST POINT, NE

LOCATION.--Lat 41°50'22", long 96°43'38", in SW1/4NW1/4 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.--5,100 mi², approximately, of which about 4,100 mi² contributes directly to surface runoff.

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 Bureau.

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.

REMARKS.--Records good except for periods of estimated record, which are poor. Some small diversions above station for irrigation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	988	860	e1300	e1150	e420	e2000	1390	1740	536	1580	700	476
2	967	835	e1320	e1100	e430	e2700	1430	1960	544	2370	685	477
3	930	842	e1300	e1050	e440	e4000	1430	2080	531	3800	814	473
4	887	858	e1300	e1020	e450	e6000	1600	2070	518	2630	1470	500
5	857	843	e1310	e750	e460	e9000	1570	2290	598	2970	1660	587
6	828	791	e1350	e540	e450	5740	1640	2560	687	5530	1530	1600
7	803	767	e1400	e500	e425	4180	1550	2290	810	6110	1310	2230
8	793	739	1540	e500	e400	3770	1570	2320	618	3650	1150	2180
9	916	776	1570	e520	e370	3590	1610	2390	589	2210	1050	1930
10	1240	816	1540	e550	e390	3340	1630	2330	576	1610	1020	1590
11	1440	848	1540	e560	e420	2630	1590	2200	600	1610	960	1350
12	1460	852	1570	e560	e430	2110	1750	1880	618	1810	933	1180
13	1480	958	1490	e540	e470	2030	2320	1790	842	8010	925	1040
14	1560	1050	1730	e500	e520	1900	2360	1760	699	7770	896	890
15	1630	1130	1590	e450	e650	1640	3000	1710	601	5110	862	762
16	1680	1260	1570	e460	e1100	1530	3580	1670	517	4770	848	659
17	1640	1320	1550	e470	e1700	1490	3070	1680	399	4900	849	583
18	1580	1340	1640	e480	e2500	1450	2370	1440	361	3810	851	523
19	1550	1330	1750	e480	e4000	1430	2000	1230	1670	2820	822	495
20	1530	1400	1680	e490	e5000	1440	1800	1090	2580	2340	750	472
21	1400	1430	e1350	e490	e3200	1390	1530	951	3720	1890	669	477
22	1360	1390	e1150	e490	e2300	1290	1410	860	3560	1580	609	539
23	1300	1290	e1000	e500	e1700	1330	1380	799	3320	1410	556	e1000
24	1260	1270	e900	e500	e1300	1370	1500	810	5020	1380	526	e1750
25	1220	532	e880	e500	e1300	1290	1530	769	4140	1380	499	e1600
26	1180	e220	e860	e490	e1300	1240	1630	669	3530	1280	502	e1030
27	1100	e300	e870	e480	e1400	1240	1670	632	2630	1270	506	1010
28	1050	e450	e880	e460	e1500	1230	1680	592	2610	1180	479	899
29	983	e650	e900	e440	---	1180	1750	643	2320	1020	477	799
30	932	e1100	e910	e420	---	1230	1670	696	1950	886	476	757
31	880	---	e980	e410	---	1330	---	611	---	771	477	---
TOTAL	37424	28247	40720	17850	35025	76090	55010	46512	47694	89457	25861	29858
MEAN	1207	942	1314	576	1251	2455	1834	1500	1590	2886	834	995
MAX	1680	1430	1750	1150	5000	9000	3580	2560	5020	8010	1660	2230
MIN	793	220	860	410	370	1180	1380	592	361	771	476	472
AC-FT	74230	56030	80770	35410	69470	150900	109100	92260	94600	177400	51300	59220

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1994, BY WATER YEAR (WY)

	MEAN	503	545	504	470	976	1906	1700	1408	1355	991	510	491
MAX	1606	1239	1314	800	2744	5256	6171	3958	3770	6945	1994	1646	
(WY)	1987	1987	1994	1987	1983	1987	1984	1984	1984	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	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1973 - 1994

ANNUAL TOTAL	847746	529748	
ANNUAL MEAN	2323	1451	946
MEDIAN OF ANNUAL MEANS			775
HIGHEST ANNUAL MEAN			2253
LOWEST ANNUAL MEAN			332
HIGHEST DAILY MEAN	26000	Mar 9	e*9000 Mar 5
LOWEST DAILY MEAN	220	Nov 26	220 Nov 26
ANNUAL SEVEN-DAY MINIMUM	449	Jan 10	412 Feb 6
INSTANTANEOUS PEAK FLOW (STAGE)			13200 (11.31) Jul 13
INSTANTANEOUS PEAK STAGE			*16.97 Mar 5
ANNUAL RUNOFF (AC-FT)	1682000		1051000
10 PERCENT EXCEEDS	4960		2620
50 PERCENT EXCEEDS	1590		1240
90 PERCENT EXCEEDS	586		480
			685100
			1890
			540
			216

e Estimated.

* Ice jam.

PLATTE RIVER BASIN

06799500 LOGAN CREEK NEAR UEHLING, NE

LOCATION.--Lat 41°42'46", long 96°31'18", in SE1/4SE1/4 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. (REVISED)--1,015 mi².

PERIOD OF RECORD.--March 1941 to current year.

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.

REMARKS.--Records good except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e430	307	e410	e400	e170	e600	275	425	201	238	231	251
2	e390	311	e450	e350	e190	e660	274	404	214	447	320	219
3	e370	313	e480	e270	e200	e740	271	380	214	321	269	218
4	e360	313	e400	e280	e190	3940	268	343	209	440	599	410
5	e350	309	e330	e280	e240	1540	266	313	451	675	327	1260
6	e340	294	314	e220	e220	892	266	305	437	2480	248	613
7	330	293	300	e210	e190	632	260	308	330	1500	231	305
8	333	303	291	e230	e170	471	271	314	264	819	225	259
9	421	310	290	e250	e140	408	265	317	244	600	221	240
10	484	308	297	e240	e280	374	259	287	234	414	220	227
11	422	306	299	e225	e270	359	252	271	222	358	218	216
12	383	307	297	e270	e300	347	289	249	230	362	218	207
13	368	348	315	e250	e290	351	369	241	878	956	224	202
14	360	355	318	e230	e400	346	463	246	547	2400	227	197
15	388	348	266	e210	e390	354	417	258	313	923	217	194
16	395	325	275	e230	e500	354	361	248	251	609	206	190
17	377	319	299	e220	e700	341	296	237	236	1150	202	186
18	363	319	321	e200	e1500	348	270	228	237	641	199	184
19	357	320	327	e240	e3500	352	e260	223	401	455	193	184
20	356	316	326	e290	e1000	352	e250	218	425	392	189	183
21	349	309	306	e350	e560	364	e250	213	483	379	185	189
22	338	303	e280	e400	e420	367	e250	213	274	335	180	222
23	333	301	e270	e450	e360	e360	e250	212	542	313	178	527
24	332	e290	e400	e400	e340	e350	e250	211	1400	306	175	489
25	327	e280	e450	e350	e400	e330	255	203	576	293	179	330
26	325	e260	e400	e320	e390	e320	259	202	545	279	240	281
27	320	e400	e350	e330	e500	e310	266	200	312	267	327	258
28	319	e500	e300	e340	e620	e300	293	195	272	254	255	245
29	318	e450	e340	e230	---	e300	390	214	250	238	216	237
30	311	e400	e370	e150	---	e290	414	222	234	225	209	230
31	305	---	e380	e160	---	280	---	210	---	225	221	---
TOTAL	11154	9817	10451	8575	14430	17332	8779	8110	11426	19294	7349	8953
MEAN	360	327	337	277	515	559	293	262	381	622	237	298
MAX	484	500	480	450	3500	3940	463	425	1400	2480	599	1260
MIN	305	260	266	150	140	280	250	195	201	225	175	183
AC-FT	22120	19470	20730	17010	28620	34380	17410	16090	22660	38270	14580	17760

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1994, BY WATER YEAR (WY)

MEAN	107	96.5	84.7	93.1	249	418	264	286	472	240	149	118
MAX	499	327	337	583	2177	2388	1741	1417	2766	1843	1056	613
(WY)	1993	1994	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

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1942 - 1994

ANNUAL TOTAL	256430	135670	
ANNUAL MEAN	703	372	214
MEDIAN OF ANNUAL MEANS			180
HIGHEST ANNUAL MEAN	710	1984	
LOWEST ANNUAL MEAN			66.4
HIGHEST DAILY MEAN	10400	3940	20100
LOWEST DAILY MEAN	115	140	6.1
ANNUAL SEVEN-DAY MINIMUM	126	183	8.8
INSTANTANEOUS PEAK FLOW		5400	25200
INSTANTANEOUS PEAK STAGE		*15.85	**20.15
ANNUAL RUNOFF (AC-FT)	508600	269100	155200
10 PERCENT EXCEEDS	1340	500	363
50 PERCENT EXCEEDS	421	306	89
90 PERCENT EXCEEDS	180	209	43

e Estimated

* Ice jam.

** From floodmark.

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

LOCATION.--Lat 41°33'39", long 96°32'27", in SW1/4NW1/4 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.--450 mi², approximately.

WATER-DISCHARGE RECORDS

ERIOD OF RECORD.--October 1951 to current year.

REVISED RECORDS.--WSP 1630: 1957-58.

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.

REMARKS.--Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89	78	e82	e80	e52	e140	79	48	e40	25	63	29
2	88	79	e80	e76	e58	e220	81	50	e45	102	81	29
3	87	81	e80	e74	e70	e900	79	50	e50	381	65	30
4	87	e78	e85	e72	e66	e1950	80	51	e42	226	141	110
5	85	e74	e82	e70	e70	e1300	78	51	72	177	121	307
6	84	e72	e88	e68	e66	e800	78	51	75	1330	67	68
7	83	e70	83	e64	e74	e250	78	50	72	1460	61	43
8	81	e68	81	e68	e60	131	79	51	67	688	75	40
9	86	e66	84	e72	e52	e120	78	50	63	160	65	41
10	113	e70	90	e80	e56	e110	79	50	59	73	59	38
11	113	73	83	e74	e60	e100	78	51	54	61	58	35
12	110	74	83	e72	e68	e98	80	50	50	123	59	34
13	106	83	95	e82	e76	e94	86	48	46	1700	58	33
14	101	103	99	e70	e90	e90	89	49	42	3020	57	30
15	97	100	81	e62	e150	e89	89	49	37	1530	55	29
16	97	89	78	e66	e270	87	87	48	34	1160	52	28
17	98	83	91	e68	e580	86	84	48	33	1170	50	27
18	98	81	104	e62	e700	85	80	47	33	431	49	27
19	96	81	111	e56	e500	86	76	46	31	167	48	26
20	93	80	e130	e64	e300	85	70	46	31	125	45	27
21	90	81	e118	e60	e220	85	66	44	35	109	42	28
22	90	81	e100	e78	e170	85	63	44	70	101	40	40
23	87	82	e90	e90	e110	85	59	42	105	94	39	273
24	86	e74	e94	e84	e120	83	56	41	193	86	35	179
25	85	e62	e100	e78	e110	84	51	41	151	129	32	76
26	84	e50	e90	e70	e120	83	47	41	94	115	36	64
27	83	e46	e80	e74	e100	83	43	e41	59	91	42	54
28	83	e60	e74	e70	e110	82	42	e40	39	79	31	47
29	81	e72	e80	e62	---	82	43	e42	35	73	30	46
30	80	e86	e84	e58	---	79	45	e45	29	70	31	44
31	78	---	e88	e52	---	80	---	e43	---	66	29	---
TOTAL	2819	2277	2788	2176	4478	7732	2123	1448	1786	15122	1716	1882
MEAN	90.9	75.9	89.9	70.2	160	249	70.8	46.7	59.5	488	55.4	62.7
MAX	113	103	130	90	700	1950	89	51	193	3020	141	307
MIN	78	46	74	52	52	79	42	40	29	25	29	26
AC-FT	5590	4520	5530	4320	8880	15340	4210	2870	3540	29990	3400	3730

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1994, BY WATER YEAR (WY)

	33.8	22.3	17.2	18.1	67.0	140	88.1	106	211	91.1	46.1	41.8
MEAN	33.8	22.3	17.2	18.1	67.0	140	88.1	106	211	91.1	46.1	41.8
MAX	323	139	89.9	77.7	446	674	590	642	1252	1023	362	383
(WY)	1983	1983	1994	1984	1971	1962	1984	1984	1960	1993	1959	1965
MIN	.38	.66	.50	.42	.55	1.36	1.01	.72	3.00	1.19	.59	.26
(WY)	1982	1982	1981	1982	1979	1957	1981	1981	1956	1976	1976	1981

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1952 - 1994

ANNUAL TOTAL	92188	46347	
ANNUAL MEAN	253	127	
MEDIAN OF ANNUAL MEANS			73.4
HIGHEST ANNUAL MEAN			54
LOWEST ANNUAL MEAN			264
HIGHEST DAILY MEAN	4530	Jul 9	3020
LOWEST DAILY MEAN	29	Jan 8	25
ANNUAL SEVEN-DAY MINIMUM	30	Jan 7	27
INSTANTANEOUS PEAK FLOW (STAGE)			3750
INSTANTANEOUS PEAK STAGE			11.54
ANNUAL RUNOFF (AC-FT)	182900		91930
10 PERCENT EXCEEDS	448		130
50 PERCENT EXCEEDS	108		78
90 PERCENT EXCEEDS	42		40

e Estimated.

* From floodmark

PLATTE RIVER BASIN

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

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. FT ³ /S (00061)	SPE-CIFIC CON- DUCT- ANCE ((μS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (° C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CaCO ₃ (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	
OCT	19...	1130	96	776	8.5	12.0	733	10.6	400	18	110
NOV	22...	1600	81	805	8.2	3.0	726	12.8	370	0	100
DEC	21...	1000	118	802	8.6	0.0	730	14.3	400	0	110
JAN	26...	1000	70	887	8.1	0.5	735	14.0	390	4	110
FEB	17...	1030	67	738	7.6	8.0	734	12.7	310	18	87
MAR	16...	1430	87	416	8.2	10.0	730	8.1	390	18	110
APR	12...	1400	80	665	8.0	6.0	721	11.7	280	30	71
MAY	26...	1030	41	682	7.8	16.5	731	10.0	300	96	74
JUN	15...	1130	37	--	8.0	24.5	720	10.0	210	0	46
JUL	07...	1030	1040	203	7.3	24.0	721	5.4	75	10	22
AUG	03...	1400	65	601	8.5	22.0	728	8.6	250	16	63
SEP	20...	1030	27	706	8.2	18.0	734	8.1	310	10	79
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINTY WAT DIS TOT IT FIELD (MG/L AS CaCO ₃) (39086)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO ₃) (00452)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO ₃) (00453)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
OCT	19...	30	30	0.7	8.3	379	5	453	59	10	0.40
NOV	22...	30	29	0.7	7.0	379	0	462	60	11	0.30
DEC	21...	30	30	0.7	9.0	400	8	471	63	12	0.40
JAN	26...	28	30	0.7	6.6	386	0	471	59	12	0.40
FEB	17...	23	24	0.6	7.3	294	0	359	49	10	0.30
MAR	16...	27	28	0.6	8.4	368	0	449	56	10	0.40
APR	12...	25	26	0.7	6.3	248	0	305	53	9.8	0.30
MAY	26...	29	30	0.7	10	208	0	254	57	17	0.40
JUN	15...	23	31	0.9	9.0	234	0	286	55	12	0.40
JUL	07...	4.8	4.3	0.2	9.1	65	0	79	11	3.1	0.40
AUG	03...	23	26	0.7	10	236	11	266	46	10	0.40
SEP	20...	28	29	0.7	9.7	302	0	369	53	12	0.30

PLATTE RIVER BASIN

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	SILICA, DIS- SOLVED (MG/L AS SIO ₂) (00955)	SOLIDS, RESIDUE AT 180 ° C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)
OCT 19...	19	530	524	0.72	137	6.57	0.030	6.60	0.030	0.67
NOV 22...	18	524	516	0.71	115	7.37	0.030	7.40	0.060	0.44
DEC 21...	20	559	545	0.76	178	6.65	0.050	6.70	0.300	1.3
JAN 26...	21	554	538	0.75	105	8.63	0.070	8.70	0.340	0.46
FEB 17...	18	461	426	0.63	83.4	6.52	0.080	6.60	0.610	1.4
MAR 16...	18	515	505	0.70	121	5.73	0.070	5.80	0.310	0.99
APR 12...	9.6	403	371	0.55	87.0	4.36	0.040	4.40	0.060	1.2
MAY 26...	14	440	370	0.60	48.7	2.90	0.200	3.10	0.040	2.2
JUN 15...	11	314	336	0.43	31.4	1.77	0.030	1.80	0.010	2.7
JUL 07...	10	120	114	0.16	337	2.12	0.080	2.20	0.270	4.4
AUG 03...	9.6	341	344	0.46	59.8	3.08	0.020	3.10	0.030	1.2
SEP 20...	17	422	427	0.57	30.8	3.87	0.030	3.90	0.020	0.48

DATE	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
OCT 19...	0.37	0.70	0.40	7.3	7.0	0.180	0.190	<3	23	8.0
NOV 22...	0.24	0.50	0.30	7.9	7.7	0.120	0.130	4	22	4.2
DEC 21...	0.60	1.6	0.90	8.3	7.6	0.170	0.170	16	51	5.0
JAN 26...	0.26	0.80	0.60	9.5	9.3	0.180	0.200	4	88	3.7
FEB 17...	1.1	2.0	1.7	8.6	8.3	0.220	0.190	13	110	6.8
MAR 16...	0.49	1.3	0.80	7.1	6.6	0.220	0.210	6	20	--
APR 12...	0.34	1.3	0.40	5.7	4.8	0.110	0.090	10	44	9.0
MAY 26...	1.4	2.2	1.4	5.3	4.5	0.120	0.100	3	40	12
JUN 15...	0.39	2.7	0.40	4.5	2.2	<0.010	<0.010	6	4	8.9
JUL 07...	0.63	4.7	0.90	6.9	3.1	0.160	0.150	140	4	9.9
AUG 03...	0.47	1.2	0.50	4.3	3.6	0.130	0.120	<3	17	4.7
SEP 20...	0.28	0.50	0.30	4.4	4.2	0.140	0.140	<3	74	3.9

PLATTE RIVER BASIN

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. FT ³ /S (00061)	TEMPER- ATURE WATER (°C) (00010)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70331)
OCT						
19...	1130	96	12.0	347	90	53
NOV						
22...	1600	81	3.0	259	57	57
DEC						
21...	1000	118	0.0	329	105	61
JAN						
26...	1000	70	0.5	235	44	58
FEB						
17...	1030	67	8.0	106	19	92
MAR						
16...	1430	87	10.0	665	156	96
APR						
12...	1400	80	6.0	716	155	83
MAY						
26...	1030	41	16.5	74	8.2	98
JUN						
15...	1130	37	24.5	149	15	92
AUG						
03...	1400	65	22.0	371	65	82
SEP						
20...	1030	27	18.0	78	5.7	83

PLATTE RIVER BASIN

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06800500 ELKHORN RIVER AT WATERLOO, NE
(National Stream-Quality Accounting Network, NASQAN, station)
(National Water-Quality Assessment, NAWQA, station)

LOCATION (REVISED).--Lat 41°17'37", long 96°17'00", in SW1/4 sec.3, T.15 N., R.10 E., Douglas County, Hydrologic Unit 10220003, on right bank at Nebraska Highway 64 bridge at north edge of Waterloo, 3.5 mi downstream from Rawhide Creek, and at mile 13.8.

DRAINAGE AREA.--6,900 mi², approximately, of which about 5,870 mi² contributes directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1899 to November 1903, May 1911 to September 1915, August 1928 to current year. Published as "at Arlington" 1899-1903, July 1913 to September 1915. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1390: 1914 (M), 1915, 1936, 1943(M). WDR NE-74: Drainage area.

GAGE (REVISED).--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.

REMARKS.--Records good except for periods of estimated record, which are poor. Some small diversions above station for irrigation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1830	1620	e1670	e1160	e925	e1800	1880	2190	1120	1690	1340	945
2	1800	1530	e1800	e1200	e930	1930	1780	2290	1190	2450	1260	974
3	1730	1580	e1900	e1260	e940	2300	1770	2690	1160	5740	1410	925
4	1700	1600	e2100	e1300	e940	8820	1760	2920	1150	4510	1580	1040
5	1640	1600	e2250	e1300	e950	8940	1720	2690	1330	3420	3050	1960
6	1630	1580	e2300	e1000	e950	14200	1720	2540	1860	7480	2280	3160
7	1590	1550	2380	e900	e960	9640	1670	2640	1730	11400	1700	3140
8	1600	1520	2180	e880	e960	5780	1580	2730	1630	7660	1550	2690
9	1680	1600	2190	e860	e960	5070	1580	2450	1370	4290	1470	2020
10	2090	1820	2340	e860	e960	4740	1530	2180	1290	3060	1400	1720
11	2450	1660	2250	e880	e970	4320	1520	2060	1320	2580	1380	1460
12	2320	1560	2160	e900	e980	4170	1560	1960	1320	2360	1330	1320
13	2160	1680	2270	e900	e1000	3820	1890	1880	1250	6160	1290	1250
14	2130	2020	2280	e880	e1050	3580	2820	1830	2090	12000	1260	1180
15	2370	2010	2210	e850	e1200	3300	3220	1800	1850	6890	1240	1120
16	2580	1850	2090	e860	e1400	3090	4190	1770	1330	5420	1190	1070
17	2440	1970	2110	e870	e2300	2890	4410	1690	1190	7090	1140	1000
18	2300	2120	2120	e880	e4000	2850	3750	1690	1070	5700	1120	947
19	2230	2120	2190	e890	e6000	2810	3130	1630	1040	4530	1120	924
20	2160	2140	2230	e900	e4800	2810	2670	1520	3790	3600	1100	905
21	2090	2110	e1850	e900	e3500	2800	2300	1420	3760	3100	1030	896
22	2030	2100	e1550	e880	e2900	2710	2090	1360	4560	2820	964	909
23	1940	2070	e1150	e870	e2300	2540	1890	1330	4550	2540	925	1200
24	1890	1990	e960	e860	e2000	2550	1720	1290	4690	2290	907	2670
25	1870	1330	e970	e850	e1700	2580	1670	1270	6230	2280	916	2310
26	1840	e660	e990	e840	e1600	2440	1650	1150	4740	2310	943	1630
27	1810	e740	e1000	e880	e1650	2280	1640	1140	3930	1900	981	1410
28	1790	e900	e1050	e900	e1750	2210	1750	1080	2410	1780	1110	1280
29	1750	e1100	e1100	e900	---	2170	1920	1140	2130	1610	984	1200
30	1710	e1400	e1100	e900	---	2040	2350	1120	1850	1510	962	1160
31	1650	---	e1140	e920	---	1980	---	1170	---	1440	969	---
TOTAL	60800	49530	55880	29230	50575	123160	65130	56620	68930	131610	39901	44415
MEAN	1961	1651	1803	943	1806	3973	2171	1826	2298	4245	1287	1480
MAX	2580	2140	2380	1300	6000	14200	4410	2920	6230	12000	3050	3160
MIN	1590	660	960	840	925	1800	1520	1080	1040	1440	907	896
AC-FT	120600	98240	110800	57980	100300	244300	129200	112300	136700	261000	79140	88100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1994-, BY WATER YEAR (WY)

MEAN	672	672	591	555	1109	2274	1915	1865	2654	1327	841	695
MAX	2780	2156	1803	1650	6439	8082	10450	7470	11950	11470	4755	2705
(WY)	1987	1987	1994	1973	1971	1993	1984	1984	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

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1929 - 1994

ANNUAL TOTAL	1425690	775781	
ANNUAL MEAN	3906	2125	
MEDIAN OF ANNUAL MEANS			1263
HIGHEST ANNUAL MEAN			1050
LOWEST ANNUAL MEAN			3870
HIGHEST DAILY MEAN	31000	Mar 11	14200
LOWEST DAILY MEAN	660	Nov 26	660
ANNUAL SEVEN-DAY MINIMUM	819	Jan 1	869
INSTANTANEOUS PEAK FLOW (STAGE)			15800 (10.29 Mar. 6)
INSTANTANEOUS PEAK STAGE			*12.43 Feb 19
ANNUAL RUNOFF (AC-FT)	2828000	1539000	914900
10 PERCENT EXCEEDS	7320	3750	2470
50 PERCENT EXCEEDS	2460	1720	670
90 PERCENT EXCEEDS	940	925	294

e Estimated.

* Ice jam.

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

PLATTE RIVER BASIN
06800500 ELKHORN RIVER AT WATERLOO, NE--Continued
 (National Water-Quality Assessment, NAWQA, station)

WATER QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1977 to September 1981

WATER TEMPERATURES: November 1977 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 750 microsiemens Jan. 10, 1979; minimum daily, 235 microsiemens Mar. 15, 1979.

WATER TEMPERATURES: Maximum, 36.0 °C Aug. 19, 1979; minimum, 0.0 °C on many days during winter periods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DISCHARGE INST. FT ³ /S (00061)	SPECIFIC CON- DUCT- ANCE (μS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (°C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	TUR- BIDITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	FORM, FECAL, 0.7 μM-MF (COLS./ 100 ML) (31625)	COLI- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	STREP- HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)
OCT	19...	1000	2230	600	8.3	11.5	733	--	10.0	--	300
NOV	08...	1400	1510	637	8.4	3.0	735	--	14.0	--	340
	10...	0930	1750	698	8.2	4.5	740	33	8.9	340	310
DEC	06...	1100	2340	--	8.3	1.0	737	--	15.0	--	280
JAN	10...	0930	860	764	8.3	0.0	731	--	11.5	--	340
	12...	1100	900	820	8.0	0.5	730	7.0	9.0	K90	370
FEB	14...	1100	1050	667	7.7	0.0	729	--	9.7	--	310
MAR	17...	1100	2920	540	7.7	6.5	720	100	7.6	K160	K100
APR	13...	1030	1820	614	8.3	7.0	723	--	10.5	--	260
MAY	25...	1000	1260	494	8.9	23.5	724	2.4	11.3	260	150
JUN	14...	1000	2210	563	8.7	26.0	720	--	6.2	--	240
	23...	1230	4980	330	7.4	23.0	724	--	4.2	--	120
JUL	07...	1230	10800	275	7.1	23.0	726	--	4.5	--	100
	13...	1430	6260	468	8.0	25.0	729	--	7.7	--	190
	21...	1015	3150	545	7.9	25.0	730	150	6.8	K6800	1400
AUG	04...	0930	1400	497	8.2	22.0	734	--	6.4	--	200
SEP	12...	1100	1320	542	8.7	24.5	731	--	10.7	--	220

PLATTE RIVER BASIN

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06800500 ELKHORN RIVER AT WATERLOO, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	HARDNESS NONCARB DISSOLV FLD. AS CaCO ₃ (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L) AS Ca (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS Mg (00925)	SODIUM, DIS- SOLVED (MG/L) AS Na (00930)	SODIUM ADSORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L) AS K (00935)	ALKA- LINTY WAT DIS TOT IT FIELD MG/L AS CaCO ₃ (39086)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO ₃ (00452)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO ₃ (00453)	SULFATE DIS- SOLVED (MG/L) AS SO ₄ (00945)	CHLO- RIDE, DIS- SOLVED (MG/L) AS Cl (00940)
OCT											
19...	44	85	21	25	0.6	8.1	254	0	310	64	10
NOV											
08...	70	87	29	94	2	13	266	0	325	290	37
10...	--	91	21	26	0.6	6.9	--	--	--	70	13
DEC											
06...	24	79	19	24	0.6	6.8	252	14	278	64	11
JAN											
10...	57	100	23	29	0.7	6.5	288	0	351	70	14
12...	52	110	24	30	0.7	7.5	321	0	392	82	15
FEB											
14...	44	90	20	24	0.6	6.9	263	0	321	60	13
MAR											
17...	--	--	--	--	--	--	200	0	244	--	--
APR											
13...	21	75	18	23	0.6	7.9	240	0	293	61	13
MAY											
25...	0	51	17	25	0.8	7.4	204	40	168	59	12
JUN											
14...	72	65	18	24	0.7	8.2	165	0	201	66	11
23...	17	34	7.9	11	0.4	9.6	101	0	123	33	6.8
JUL											
07...	19	30	6.3	7.1	0.3	9.7	82	0	100	19	5.3
13...	25	56	13	17	0.5	19	168	0	205	40	8.7
21...	60	71	16	19	0.5	10	183	4	216	53	8.5
AUG											
04...	66	51	18	26	0.8	7.9	135	0	165	62	14
SEP											
12...	17	63	15	20	0.6	10	202	25	195	55	11

DATE	FLUO- RIDE, DIS- SOLVED (MG/L) AS F (00950)	SILICA, DIS- SOLVED (MG/L) AS SiO ₂ (00955)	SOLIDS, RESIDUE AT 180 °C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L) AS N (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS N (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L) AS N (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L) AS N (00605)
OCT											
19...	0.40	26	420	410	0.57	2530	3.78	0.020	3.80	0.060	0.64
NOV											
08...	0.60	25	720	754	0.98	2940	4.06	0.040	4.10	0.100	0.60
10...	0.30	28	373	449	0.51	1760	4.25	0.050	4.30	0.090	0.61
DEC											
06...	0.20	26	408	397	0.55	2580	3.58	0.020	3.60	0.210	0.89
JAN											
10...	0.40	34	501	473	0.68	1160	4.96	0.040	5.00	0.250	0.35
12...	0.40	34	529	520	0.72	1290	5.15	0.050	5.20	0.250	0.45
FEB											
14...	0.40	33	417	425	0.57	1180	4.15	0.050	4.20	0.480	0.42
MAR											
17...	--	--	--	--	--	--	2.26	0.040	2.30	0.170	0.63
APR											
13...	0.30	21	399	371	0.54	1960	1.59	0.010	1.60	0.090	1.0
MAY											
25...	0.40	17	316	314	0.43	1080	0.350	0.030	0.380	0.020	0.58
JUN											
14...	0.30	24	346	323	0.47	2060	1.57	0.030	1.60	0.010	0.49
23...	0.30	14	215	194	0.29	2890	3.30	0.200	3.50	0.220	2.9
JUL											
07...	0.40	12	168	148	0.23	4900	1.68	0.120	1.80	0.320	0.78
13...	0.40	19	306	285	0.42	5170	2.13	0.170	2.30	0.110	5.2
21...	0.40	22	349	321	0.47	2970	1.98	0.020	2.00	0.060	2.2
AUG											
04...	0.30	17	306	282	0.42	1160	0.850	0.030	0.880	0.030	1.9
SEP											
12...	0.30	22	347	324	0.47	1240	1.37	0.030	1.40	0.020	1.7

PLATTE RIVER BASIN

06800500 ELKHORN RIVER AT WATERLOO, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS- (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (µG/L AS AL) (01106)	BARIUM, DIS- SOLVED (µG/L AS BA) (01005)	COBALT, DIS- SOLVED (µG/L AS CO) (01035)
OCT 19...	0.64	0.70	0.70	4.5	4.5	0.290	0.270	--	--	--
NOV 08...	0.30	0.70	0.40	4.8	4.5	0.200	0.200	--	--	--
NOV 10...	--	0.70	--	5.0	--	0.230	0.250	<10	170	<3
DEC 06...	1.1	1.1	1.3	4.7	4.9	0.240	0.180	--	--	--
JAN 10...	0.45	0.60	0.70	5.6	5.7	0.270	0.280	--	--	--
JAN 12...	--	0.70	--	5.9	--	0.220	0.240	--	--	--
FEB 14...	0.32	0.90	0.80	5.1	5.0	0.230	0.210	--	--	--
MAR 17...	0.53	0.80	0.70	3.1	3.0	0.200	0.180	--	--	--
APR 13...	0.21	1.1	0.30	2.7	1.9	0.110	0.110	--	--	--
MAY 25...	0.48	0.60	0.50	0.98	0.88	0.050	0.040	30	110	<3
JUN 14...	0.39	0.50	0.40	2.1	2.0	0.170	0.160	--	--	--
JUN 23...	0.78	3.1	1.0	6.6	4.5	0.330	0.220	--	--	--
JUL 07...	0.68	1.1	1.0	2.9	2.8	0.230	0.200	--	--	--
JUL 13...	0.79	5.3	0.90	7.6	3.2	0.350	0.330	--	--	--
JUL 21...	--	2.3	--	4.3	--	0.290	0.300	<10	170	5
AUG 04...	0.37	1.9	0.40	2.8	1.3	0.120	0.110	--	--	--
SEP 12...	0.38	1.7	0.40	3.1	1.8	0.280	0.280	--	--	--

DATE	IRON, DIS- SOLVED (µG/L AS FE) (01046)	LITHIUM, DIS- SOLVED (µG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (µG/L AS MO) (01060)	NICKEL, DIS- SOLVED (µG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (µG/L AS SE) (01145)	SILVER, DIS- SOLVED (µG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (µG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (µG/L AS V) (01085)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
OCT 19...	4	--	10	--	--	--	--	--	--	14
NOV 08...	<3	--	3	--	--	--	--	--	--	11
NOV 10...	4	21	38	<10	2	7	<1.0	440	<6	--
DEC 06...	17	--	26	--	--	--	--	--	--	4.0
JAN 10...	4	--	45	--	--	--	--	--	--	4.5
JAN 12...	--	--	--	--	--	--	--	--	--	--
FEB 14...	4	--	28	--	--	--	--	--	--	2.9
MAR 17...	--	--	--	--	--	--	--	--	--	18
APR 13...	6	--	19	--	--	--	--	--	--	4.8
MAY 25...	11	20	4	10	2	6	<1.0	330	8	7.2
JUN 14...	<3	--	3	--	--	--	--	--	--	3.5
JUN 23...	94	--	8	--	--	--	--	--	--	6.9
JUL 07...	180	--	3	--	--	--	--	--	--	11
JUL 13...	13	--	<1	--	--	--	--	--	--	7.6
JUL 21...	6	15	2	10	3	6	<1.0	330	10	--
AUG 04...	12	--	<1	--	--	--	--	--	--	7.2
SEP 12...	4	--	5	--	--	--	--	--	--	5.5

PLATTE RIVER BASIN

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06800500 ELKHORN RIVER AT WATERLOO, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, INST. FT ³ /S (00061)	TEMPER- ATURE WATER (°C) (00010)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70331)
NOV						
08...	1400	1510	3.0	255	1040	86
DEC						
06...	1100	2340	1.0	514	3250	74
JAN						
10...	0930	860	0.0	40	93	64
12...	1100	900	0.5	124	301	--
FEB						
14...	1100	1050	0.0	102	289	32
MAR						
17...	1100	2920	6.5	558	4400	92
APR						
13...	1030	1820	7.0	408	2000	70
MAY						
25...	1000	1260	23.5	243	827	75
JUN						
14...	1000	2210	26.0	877	5230	93
23...	1230	4980	23.0	4630	62300	91
JUL						
13...	1430	6260	25.0	4530	76600	87
21...	1015	3150	25.0	1190	10100	73
AUG						
04...	0930	1400	22.0	262	990	94
SEP						
12...	1100	1320	24.5	309	1100	85

PLATTE RIVER BASIN

06801000 PLATTE RIVER NEAR ASHLAND, NE

LOCATION.--Lat 41°03'44", long 96°19'28", in SE1/4 SW1/4 sec.29, T.13 N., R.10 E., Sarpy County, Hydrologic Unit 10200202, on left bank upstream side and 35 ft northeast of Highway 6 bridge, 3 mi northeast of Ashland, 2 mi upstream from Salt Creek, and at mile 27.9.

DRAINAGE AREA.--84,200 mi² from state base maps, scale 1:1,000,000.

PERIOD OF RECORD.--August 1928 to May 1953, July 1988 to current year.

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.

REMARKS.--Records good except for periods of estimated record 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.

CORRECTIONS.--The maximum discharge for water year 1993 is 130,000 ft³/s, Mar. 10, 1993, gage height 19.23 ft; the previously published figure was not the maximum. This discharge includes overbank flow and replaces the maximum for the period of record.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8200	7760	e3800	e4500	e3800	8030	7460	7780	3820	4470	4250	2660
2	7810	7550	e5000	e5000	e4000	9270	7180	7440	4280	4940	5490	3260
3	7450	6950	e5800	e5400	e4300	9970	5970	7620	4240	6200	5160	2410
4	7200	7620	e8000	e4600	e4500	18800	6620	8100	3780	8050	5180	3620
5	6950	7470	e9000	e4800	e4600	e22000	8120	8110	4130	6510	5730	4000
6	6970	8090	e9400	e5000	e4600	e35000	6850	7770	4750	9700	5340	5490
7	6940	7230	e9200	e4100	e4400	33600	5880	7810	4670	25000	5270	7200
8	6960	7700	e9000	e3400	e4300	24100	6410	8020	4140	21400	7610	6820
9	6670	7500	e8400	e3500	e4200	15000	6450	7680	3950	11800	6750	6060
10	7390	7310	e9200	e3600	e4000	14400	6220	7170	3520	8770	5380	5300
11	8380	7560	e8800	e3700	e4200	12300	6210	6900	4790	7770	4800	4730
12	8640	7130	e8000	e3500	e4400	e12000	6550	6220	5140	6630	4990	4160
13	8170	7610	e9000	e3400	e4600	e11000	7660	5970	5420	8900	4940	3640
14	8010	8160	e8400	e3700	e5000	e10500	11000	5930	5550	23200	4570	3530
15	8340	8100	e8000	e2500	e5300	e9800	12300	5600	5770	17500	4560	3230
16	9120	9430	e8400	e2700	e5800	e9400	11300	5930	4880	14100	4280	3200
17	8840	8930	e8600	e2900	e6800	e9200	11200	5280	4350	13500	4260	3030
18	9510	9020	e8600	e3100	e7400	e9000	10300	5010	4540	12100	4110	3010
19	9450	8710	e8800	e2800	e7800	e9400	9310	4940	4160	10800	3920	2890
20	9370	8530	e8400	e2700	e8000	e9600	8280	4110	4970	9850	3460	3090
21	9420	8720	e8000	e2800	e7600	e9800	8240	4070	5830	8870	3380	3100
22	8800	8410	e7200	e2800	e7000	e10500	6830	4120	7070	8240	3410	3660
23	8920	8370	e6400	e3000	e6600	9890	7320	3240	9740	7640	3280	4310
24	8450	8530	e5900	e3500	e6000	8600	6420	3430	9190	6790	3150	5700
25	8220	5780	e5800	e4000	e5800	8340	6370	4130	10800	6640	3160	5900
26	7820	4140	e5800	e4000	e5600	8510	6110	3740	8860	6440	3110	5220
27	7880	3660	e6200	e3900	e5800	7130	5980	3480	7450	6450	3160	4840
28	8100	3590	e5800	e3800	7360	8320	6720	3390	5690	5630	3010	4660
29	9320	e3500	e5400	e3700	---	9250	6910	3640	5250	5690	2990	3980
30	6400	e3600	e4800	e3600	---	7020	8180	3630	4440	5790	2680	4090
31	7860	---	e4300	e3700	---	8840	---	3480	---	4950	3050	---
TOTAL	251560	216660	227400	113700	153760	388570	230350	173740	165170	304320	134430	126790
MEAN	8115	7222	7335	3668	5491	12530	7678	5605	5506	9817	4336	4226
MAX	9510	9430	9400	5400	8000	35000	12300	8110	10800	25000	7610	7200
MIN	6400	3500	3800	2500	3800	7020	5880	3240	3520	4470	2680	2410
AC-FT	499000	429700	451000	225500	305000	770700	456900	344600	327600	603600	266600	251500

PLATTE RIVER BASIN

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06801000 PLATTE RIVER NEAR ASHLAND, NE --Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1994, BY WATER YEAR (WY)

MEAN	4587	4830	4684	4439	5757	10830	7300	6402	8946	9474	4670	4915
MAX	8115	7222	7335	5868	6272	23190	14830	11390	13990	31980	10290	9825
(WY)	1994	1994	1994	1990	1991	1993	1993	1993	1990	1993	1993	1993
MIN	2433	3620	2879	2939	5127	5233	4618	2969	2928	2448	1288	1533
(WY)	1992	1989	1990	1991	1990	1991	1989	1989	1989	1991	1991	1991

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1989 - 1994	
ANNUAL TOTAL	4461640		2486450			
ANNUAL MEAN	12220		6812		a6407	
HIGHEST ANNUAL MEAN					11820	
LOWEST ANNUAL MEAN					4612	
HIGHEST DAILY MEAN	110000	Mar 10	35000	Mar 6	110000	Mar 10 1993
LOWEST DAILY MEAN	3500	Jan 5	2410	Sep 3	662	Sep 2 1991
ANNUAL SEVEN-DAY MINIMUM	3630	Jan 1	2790	Jan 15	701	Aug 29 1991
INSTANTANEOUS PEAK FLOW (STAGE)			e45000	Mar 5	*130000	(**19.23)Mar 10 1993
INSTANTANEOUS PEAK STAGE			***19.10	Mar 5	21.45	Jul 25 1993
ANNUAL RUNOFF (AC-FT)	8850000		4932000		4642000	
10 PERCENT EXCEEDS	22900		9470		9800	
50 PERCENT EXCEEDS	8530		6370		5200	
90 PERCENT EXCEEDS	4800		3470		2190	

c Estimated.

a Average discharge since storage in Lake McConaughy; average for water years 1942-52, 5961 ft³/s.

* Estimated; discharge includes overbank flow.

** Backwater from ice.

*** Ice jam.

PLATTE RIVER BASIN

06803000 SALT CREEK AT ROCA, NE

LOCATION.--Lat 40°39'29", long 96°39'55", in NW1/4 SW1/4 sec.17, T.8 N., R.7 E., Lancaster County, Hydrologic Unit 10200203, on left bank 15 ft downstream from highway bridge at west edge of Roca, and at mile 54.2.

DRAINAGE AREA.--167 mi².

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.

REMARKS.--Records fair except for periods of estimated record, which are fair. Flood flow affected by several detention dams.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e180	40	25	e19	e16	17	13	30	11	164	16	9.1
2	e170	39	28	e18	e17	20	13	25	284	1850	15	8.6
3	e160	83	26	e16	e18	78	12	23	89	276	28	8.1
4	e155	128	26	e22	e18	203	12	22	60	341	53	312
5	e150	116	25	e22	e18	161	11	21	951	177	23	91
6	e145	57	21	e20	e17	117	11	141	248	230	21	53
7	e150	43	21	e16	e15	83	11	100	156	157	19	41
8	e170	40	28	e21	13	66	11	74	118	101	16	30
9	e1200	35	21	e19	16	57	11	62	95	72	14	25
10	e250	41	22	e21	15	52	11	52	77	58	14	20
11	e160	23	21	e21	14	47	21	47	92	48	13	16
12	e140	25	e22	e22	14	42	87	41	153	42	13	13
13	125	40	e23	e22	e14	38	64	40	76	42	11	12
14	109	31	e24	e21	e16	40	49	162	66	38	8.9	10
15	191	27	e26	e20	e18	38	41	149	53	34	7.4	8.3
16	127	26	e26	e19	e21	34	34	84	50	830	5.6	7.1
17	98	25	e27	e19	e24	32	30	65	42	244	5.6	5.2
18	89	24	e27	e18	35	32	28	53	33	148	5.2	4.8
19	100	23	e28	e18	57	29	26	45	30	99	11	3.6
20	83	23	e28	e19	33	28	22	38	26	77	24	2.9
21	73	22	e27	e20	19	27	21	32	32	65	7.2	2.7
22	64	25	e26	e21	14	25	20	27	41	57	5.5	4.3
23	56	23	e23	e22	17	24	18	29	201	48	4.9	10
24	53	e20	e22	e22	20	21	17	23	104	43	3.7	9.2
25	55	e18	e24	e23	15	18	17	20	76	40	3.9	19
26	52	e21	e23	e22	20	17	14	19	61	36	118	16
27	50	e22	e20	e22	18	16	11	17	53	31	50	8.2
28	49	e23	e19	e22	17	16	14	15	47	24	25	8.5
29	48	e23	e18	e21	---	14	21	14	41	17	15	7.8
30	43	22	e19	e21	---	17	24	13	36	14	12	7.1
31	41	---	e20	e20	---	14	---	11	---	12	9.6	---
TOTAL	4536	1108	736	629	549	1423	695	1494	3402	5415	578.5	773.5
MEAN	146	36.9	23.7	20.3	19.6	45.9	23.2	48.2	113	175	18.7	25.8
MAX	1200	128	28	23	57	203	87	162	951	1850	118	312
MIN	41	18	18	16	13	14	11	11	11	12	3.7	2.7
AC-FT	9000	2200	1460	1250	1090	2820	1380	2960	6750	10740	1150	1530

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1994, BY WATER YEAR (WY)

	MEAN	42.7	14.5	14.7	18.2	36.8	89.7	64.1	71.4	85.0	84.6	32.5	23.6
MAX	617	71.9	108	140	180	641	355	420	666	789	496	220	
(WY)	1974	1987	1987	1973	1958	1979	1987	1959	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	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1952 - 1994

ANNUAL TOTAL	59981.2	21339.0	
ANNUAL MEAN	164	58.5	
HIGHEST ANNUAL MEAN			48.3
LOWEST ANNUAL MEAN			200
HIGHEST DAILY MEAN	4170	Jul 25	6070
LOWEST DAILY MEAN	5.8	Feb 26	2.7
ANNUAL SEVEN-DAY MINIMUM	6.7	Feb 22	4.4
INSTANTANEOUS PEAK FLOW			3050
INSTANTANEOUS PEAK STAGE			17.09
ANNUAL RUNOFF (AC-FT)	119000	42330	34960
10 PERCENT EXCEEDS	407	127	70
50 PERCENT EXCEEDS	49	24	9.9
90 PERCENT EXCEEDS	15	11	3.8

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DRAINAGE AREA.--220 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August to September 1994.

GAGE.--Water-stage recorder. Elevation of gage is 1,150 ft above sea level.

REMARKS.-- Record good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

[illegible]

PLATTE RIVER BASIN

06803500 SALT CREEK AT LINCOLN, NE

LOCATION.--Lat 40°50'49", long 96°40'54", in NW1/4SW1/4 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 (REVISED).--685 mi².

PERIOD OF RECORD.--October 1949 to current year.

REVISED RECORDS.--WDR NE-71: 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.

REMARKS.--Records good. Flood flow affected by several detention dams.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	465	215	200	177	157	222	148	155	114	312	232	94
2	427	241	206	177	152	248	142	149	558	1420	439	90
3	395	259	206	144	154	421	137	141	351	1130	349	896
4	383	342	203	176	153	1380	134	139	199	752	330	502
5	364	360	205	173	154	1120	133	161	2320	772	236	231
6	347	319	196	152	156	744	127	250	1390	590	223	185
7	337	258	196	109	117	545	116	374	457	864	181	162
8	424	250	196	158	150	440	122	230	343	451	180	154
9	2480	252	196	137	141	381	119	204	279	333	207	140
10	789	229	199	153	136	348	116	185	240	269	197	134
11	606	233	193	152	137	323	186	172	246	251	147	127
12	529	300	193	158	138	308	376	164	320	243	144	123
13	481	282	221	160	140	289	322	192	239	336	134	118
14	496	262	231	146	165	279	241	273	195	257	123	105
15	658	234	232	140	176	273	210	405	168	213	123	88
16	552	220	234	136	184	256	190	277	153	1640	116	80
17	452	199	236	130	228	244	172	212	142	1340	112	79
18	460	166	233	126	300	239	171	176	144	581	140	97
19	451	170	229	125	390	227	162	161	126	513	150	97
20	427	169	221	131	315	215	150	154	169	496	117	152
21	378	168	202	131	242	212	146	138	509	303	102	205
22	355	171	172	139	222	205	139	127	262	271	97	193
23	331	172	189	148	194	197	133	241	3580	238	95	156
24	307	164	193	159	209	185	131	148	1490	211	93	140
25	299	144	184	173	184	167	131	126	804	198	264	150
26	286	171	187	174	220	166	118	114	587	206	265	139
27	263	172	162	171	225	163	111	103	472	193	170	129
28	259	179	158	172	211	160	183	100	403	170	133	115
29	249	188	185	168	---	152	143	102	350	153	123	104
30	233	192	175	142	---	145	183	92	310	150	112	95
31	219	---	173	151	---	146	---	82	---	143	103	---
TOTAL	14702	6681	6206	4688	5350	10400	4892	5547	16920	14999	5437	5080
MEAN	474	223	200	151	191	335	163	179	564	484	175	169
MAX	2480	360	236	177	390	1380	376	405	3580	1640	439	896
MIN	219	144	158	109	117	145	111	82	114	143	93	79
AC-FT	29160	13250	12310	9300	10610	20630	9700	11000	33560	29750	10780	10080

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1994, BY WATER YEAR (WY)

MEAN	179	103	92.6	102	171	351	280	350	491	345	188	179
MAX	1621	304	349	350	577	1972	1383	1495	3061	3205	704	1075
(WY)	1974	1987	1987	1974	1958	1987	1987	1984	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

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1950 - 1994

ANNUAL TOTAL	248706	100902	
ANNUAL MEAN	681	276	236
HIGHEST ANNUAL MEAN			721
LOWEST ANNUAL MEAN			81.4
HIGHEST DAILY MEAN	21300	3580	22100
LOWEST DAILY MEAN	73	79	21
ANNUAL SEVEN-DAY MINIMUM	78	95	26
INSTANTANEOUS PEAK FLOW		4450	28400
INSTANTANEOUS PEAK STAGE		9.78	26.52
ANNUAL RUNOFF (AC-FT)	493300	200100	171200
10 PERCENT EXCEEDS	1370	458	383
50 PERCENT EXCEEDS	279	192	91
90 PERCENT EXCEEDS	135	123	50

06803510 LITTLE SALT CREEK NEAR LINCOLN, NE

LOCATION.--Lat 40°53'36", long 96°40'52", in NW1/4 SW1/4 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 mi².

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.

REMARKS.--Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.9	9.4	11	7.7	e4.6	e8.0	e7.4	9.9	18	13	65	3.2
2	8.4	9.4	13	8.5	e4.7	e10	e7.2	8.1	16	30	32	3.2
3	8.0	9.4	11	e8.4	e4.8	131	e7.2	7.8	8.7	16	62	3.1
4	8.4	9.4	11	e8.2	e4.7	122	e7.0	7.4	8.3	65	38	10
5	8.4	9.0	11	e8.0	e4.6	57	e7.0	7.0	164	21	19	4.8
6	8.9	8.3	11	e7.4	e4.4	28	e6.8	15	27	86	17	3.0
7	8.9	9.0	11	e7.0	e4.2	18	e6.8	12	15	33	12	3.0
8	16	9.5	11	e6.4	e4.0	14	e6.6	9.9	13	27	7.1	3.1
9	13	9.4	11	e6.8	e4.8	14	e6.6	8.7	12	e23	7.1	2.9
10	11	8.8	11	e7.9	e5.8	13	e6.4	7.9	11	e20	8.1	2.8
11	11	8.9	10	e6.8	e5.4	e12	15	7.6	e9.8	e19	7.6	3.0
12	11	12	11	e6.6	e5.0	e12	37	7.3	e9.4	e17	6.3	3.0
13	12	14	11	e6.6	e5.0	12	24	7.5	e9.2	e21	6.1	3.1
14	12	11	12	e6.4	e4.8	e11	18	11	e9.0	e17	5.6	3.2
15	27	11	12	e6.4	e5.8	e11	15	12	e8.6	e15	5.3	3.0
16	14	11	12	e6.2	14	11	12	10	e8.4	54.0	4.9	3.0
17	12	11	13	e6.2	14	e10	9.2	9.6	9.4	45	4.8	2.9
18	14	9.8	13	e6.0	19	e10	8.3	e8.6	14	31	4.1	3.1
19	15	9.8	13	e6.0	21	e9.6	7.7	e8.2	38	26	3.6	3.2
20	13	9.8	13	e5.8	11	e9.2	7.4	e8.0	18	22	3.4	3.4
21	13	10	e11	e6.4	8.7	e9.2	7.2	12	9.7	18	3.5	3.4
22	12	10	e10	6.8	8.3	e9.0	e6.8	12	45	15	3.5	3.6
23	11	9.9	e9.0	7.1	e7.8	e8.8	e6.4	16	576	13	3.4	4.9
24	11	9.8	e8.6	6.8	e7.0	e8.6	e6.0	13	39	11	3.4	3.8
25	11	e9.2	e8.2	6.6	e6.6	e8.4	e5.6	10	22	e10	3.3	3.7
26	11	e9.0	e7.8	e5.8	e6.6	e8.2	e5.2	9.8	15	e9.8	3.7	3.6
27	9.9	e9.0	e7.6	e5.2	e6.2	e8.0	4.9	e8.2	13	e9.6	3.5	3.6
28	10	e9.2	e7.4	e5.0	e7.0	e7.8	7.1	e7.6	12	e9.2	3.2	3.5
29	9.8	e9.4	e7.4	e4.2	---	e7.6	10	e7.0	12	e8.6	3.2	3.6
30	9.8	e9.6	e7.4	e4.4	---	e7.6	9.3	e6.6	12	e8.2	3.4	3.5
31	9.4	---	7.6	e4.6	---	e7.4	---	e6.4	---	e8.0	3.3	---
TOTAL	358.8	295.0	324.0	202.2	209.8	613.4	291.1	292.1	1182.5	721.4	356.4	107.2
MEAN	11.6	9.83	10.5	6.52	7.49	19.8	9.70	9.42	39.4	23.3	11.5	3.57
MAX	27	14	13	8.5	21	131	37	16	576	86	65	10
MIN	8.0	8.3	7.4	4.2	4.0	7.4	4.9	6.4	8.3	8.0	3.2	2.8
AC-FT	712	585	643	401	416	1220	577	579	2350	1430	707	213

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1994, BY WATER YEAR (WY)

MEAN	11.2	7.25	6.48	7.37	12.7	29.1	18.2	20.0	23.2	30.4	12.8	11.4
MAX	87.5	20.5	16.8	25.3	42.3	134	68.6	82.7	180	379	110	87.2
(WY)	1987	1973	1987	1973	1971	1979	1987	1984	1984	1993	1987	1989
MIN	2.13	2.32	1.69	2.28	3.10	3.57	3.86	3.54	2.42	1.60	1.74	.96
(WY)	1977	1977	1977	1977	1972	1972	1970	1989	1981	1970	1976	1971

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1969 - 1994

ANNUAL TOTAL	19398.9	4953.9	
ANNUAL MEAN	53.1	13.6	
MEDIAN OF ANNUAL MEANS			16.0
HIGHEST ANNUAL MEAN			12.3
LOWEST ANNUAL MEAN			51.7
HIGHEST DAILY MEAN	5020	Jul 24	5020
LOWEST DAILY MEAN	3.0	Jan 30	2.8
ANNUAL SEVEN-DAY MINIMUM	3.5	Jan 25	3.0
INSTANTANEOUS PEAK FLOW			1230
INSTANTANEOUS PEAK STAGE			10.87
ANNUAL RUNOFF (AC-FT)	38480	9830	11600
10 PERCENT EXCEEDS	43	18	20
50 PERCENT EXCEEDS	10	9.0	5.4
90 PERCENT EXCEEDS	5.0	3.6	2.2

PLATTE RIVER BASIN

06803513 SALT CREEK AT 70th STREET AT LINCOLN, NE

LOCATION.--Lat 40°53'10", long 96°37'26", in SW1/4 SW1/4 sec. 27, T.11 N., R.7 W., Lancaster County, Hydrologic Unit 10200203, on left bank downstream from bridge.

DRAINAGE AREA.--753 mi².

PERIOD OF RECORD.--August to September 1994.

GAGE.--Water-stage recorder. Elevation of gage is 1,120 ft above sea level.

REMARKS.-- Record good except for period of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	125
2	---	---	---	---	---	---	---	---	---	---	---	119
3	---	---	---	---	---	---	---	---	---	---	---	111
4	---	---	---	---	---	---	---	---	---	---	337	794
5	---	---	---	---	---	---	---	---	---	---	235	626
6	---	---	---	---	---	---	---	---	---	---	256	248
7	---	---	---	---	---	---	---	---	---	---	189	196
8	---	---	---	---	---	---	---	---	---	---	188	171
9	---	---	---	---	---	---	---	---	---	---	207	156
10	---	---	---	---	---	---	---	---	---	---	238	146
11	---	---	---	---	---	---	---	---	---	---	167	133
12	---	---	---	---	---	---	---	---	---	---	155	126
13	---	---	---	---	---	---	---	---	---	---	148	e120
14	---	---	---	---	---	---	---	---	---	---	138	e115
15	---	---	---	---	---	---	---	---	---	---	140	e100
16	---	---	---	---	---	---	---	---	---	---	135	e96.0
17	---	---	---	---	---	---	---	---	---	---	132	e94.0
18	---	---	---	---	---	---	---	---	---	---	127	e110
19	---	---	---	---	---	---	---	---	---	---	226	e120
20	---	---	---	---	---	---	---	---	---	---	134	e160
21	---	---	---	---	---	---	---	---	---	---	133	e180
22	---	---	---	---	---	---	---	---	---	---	119	215
23	---	---	---	---	---	---	---	---	---	---	114	210
24	---	---	---	---	---	---	---	---	---	---	115	140
25	---	---	---	---	---	---	---	---	---	---	151	158
26	---	---	---	---	---	---	---	---	---	---	324	137
27	---	---	---	---	---	---	---	---	---	---	268	123
28	---	---	---	---	---	---	---	---	---	---	172	111
29	---	---	---	---	---	---	---	---	---	---	146	104
30	---	---	---	---	---	---	---	---	---	---	138	97
31	---	---	---	---	---	---	---	---	---	---	130	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	5341.0
MEAN	---	---	---	---	---	---	---	---	---	---	---	178
MAX	---	---	---	---	---	---	---	---	---	---	---	794
MIN	---	---	---	---	---	---	---	---	---	---	---	94
AC-FT	---	---	---	---	---	---	---	---	---	---	---	10590

e Estimated.

PLATTE RIVER BASIN

175

06803520 STEVENS CREEK NEAR LINCOLN, NE

LOCATION.--Lat 40°51'25", long 96°35'42", in NW1/4 NE1/4 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 mi².

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,125.57 ft above sea level.

REMARKS.--Records good except for periods of estimated record which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	16	16	e13	e6.0	e11	13	16	5.0	6.3	8.7	2.3
2	16	16	17	e14	e6.4	e14	12	13	11	12	7.7	2.3
3	16	15	16	e14	e6.6	e30	12	12	8.2	9.5	15	2.0
4	15	16	15	e11	e5.2	e200	12	11	6.8	12	48	114
5	15	14	16	e11	e4.7	120	11	10	975	10	8.9	12
6	14	13	14	e12	e4.3	60	11	18	66	12	7.5	5.5
7	13	14	14	e10	e4.3	32	11	14	20	13	6.6	4.1
8	48	14	14	e8.6	e4.5	24	11	11	15	9.9	5.6	3.0
9	208	14	14	e9.6	e5.0	21	11	10	13	7.5	5.1	2.6
10	38	14	15	e10	e5.8	20	11	9.4	12	6.4	7.6	2.4
11	24	14	15	e11	e6.0	19	21	8.4	12	5.6	8.2	3.0
12	22	19	15	e11	e6.6	19	23	8.0	11	5.0	6.3	2.4
13	19	31	16	e11	e7.6	21	14	8.1	10	7.3	5.1	2.0
14	20	17	18	e9.6	e9.0	21	13	15	9.6	6.6	4.1	1.7
15	139	16	17	e9.0	e10	17	11	18	8.7	5.6	3.9	1.8
16	35	16	18	e9.6	e11	17	11	11	8.1	343	3.5	1.8
17	24	15	22	e9.4	e12	17	10	9.0	7.5	20	3.1	1.9
18	25	16	23	e8.6	e13	16	9.8	8.1	7.9	11	2.8	1.8
19	40	15	20	e8.2	e15	17	9.6	7.8	7.6	8.6	4.7	1.8
20	29	14	18	e7.6	e16	17	9.5	7.3	7.0	7.0	5.1	1.6
21	32	14	e15	e7.4	e17	15	9.6	7.0	51	6.0	3.2	1.8
22	22	14	e14	e8.6	e16	15	10	6.8	14	5.3	2.7	2.9
23	20	e12	e12	e10	e15	15	11	6.9	243	4.9	2.5	5.4
24	18	e12	e11	e12	e15	12	11	6.3	20	4.7	2.3	4.3
25	18	e12	e12	e14	e14	13	10	6.4	12	4.7	2.1	7.6
26	16	e11	e13	e13	e13	13	10	5.4	9.2	4.9	5.2	5.5
27	16	e10	e11	e12	e12	13	9.7	5.4	8.0	4.6	3.8	3.3
28	16	e11	e10	e7.0	e11	12	11	5.3	7.5	4.3	3.3	2.6
29	16	e13	e9.8	e5.6	---	13	14	5.3	6.5	4.2	2.5	2.4
30	15	14	e11	e5.0	---	12	14	5.3	5.9	3.9	2.8	2.0
31	15	---	e12	e5.8	---	13	---	4.7	---	3.7	2.6	---
TOTAL	982	442	463.8	308.6	272.0	859	357.2	289.9	1598.5	569.5	200.5	207.8
MEAN	31.7	14.7	15.0	9.95	9.71	27.7	11.9	9.35	53.3	18.4	6.4	6.93
MAX	208	31	23	14	17	200	23	18	975	343	48	114
MIN	13	10	9.8	5.0	4.3	11	9.5	4.7	5.0	3.7	2.1	1.6
AC-FT	1950	877	920	612	540	1700	709	575	3170	1130	398	412

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1994, BY WATER YEAR (WY)

	MEAN	15.6	5.76	6.38	7.41	13.6	34.3	24.8	28.8	30.4	34.3	13.0	19.5
MAX	151	25.0	30.7	34.9	59.9	192	118	127	228	402	89.6	260	
(WY)	1974	1987	1987	1974	1983	1979	1987	1984	1984	1993	1982	1989	
MIN	.28	.57	.64	.83	1.13	1.33	1.28	1.29	.41	.27	.066	.13	
(WY)	1977	1977	1977	1982	1978	1981	1981	1981	1981	1976	1976	1976	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1969 - 1994

ANNUAL TOTAL	26734.7	6550.8	
ANNUAL MEAN	73.2	17.9	19.5
MEDIAN OF ANNUAL MEANS			16.6
HIGHEST ANNUAL MEAN			69.3
LOWEST ANNUAL MEAN			1.84
HIGHEST DAILY MEAN	4630 Jul 24	975 Jun 5	4810 Sep 8 1989
LOWEST DAILY MEAN	4.2 Jan 31	1.6 Sep 20	.00 Jul 31 1977
ANNUAL SEVEN-DAY MINIMUM	4.3 Jan 26	1.8 Sep 14	.00 Jul 29 1977
INSTANTANEOUS PEAK FLOW (STAGE)		2700 Jun 5	12900 (19.42) Sep 8 1989
INSTANTANEOUS PEAK STAGE		13.82 Jun 5	19.57 Jun 13 1984
ANNUAL RUNOFF (AC-FT)	53030	12990	14150
10 PERCENT EXCEEDS	112	20	24
50 PERCENT EXCEEDS	17	11	3.5
90 PERCENT EXCEEDS	6.0	3.9	.76

PLATTE RIVER BASIN

06803525 SALT CREEK BELOW STEVENS CREEK, NEAR WAVERLY, NE

LOCATION.--Lat 40°54'18", long 96°35'09", in NW1/4 SW1/4 sec.24, T.11 N., R.7 E., Lancaster County, Hydrologic Unit 10200203, at bridge 0.5 mi north of Interstate Highway 80 and 3 mi southwest of Waverly.

DRAINAGE AREA.--815 mi².

PERIOD OF RECORD.--Water years 1971-1992, January 1994 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. (FT ³ /S) (00061)	SPECIFIC CON-DUCT-ANCE (μS/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (°C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 μM-MF (COLS./100 ML) (31625)	STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925)
JAN 12...	1400	185	4710	7.6	4.5	12.1	K13000	K5200	400	110	31
FEB 14...	1430	180	5080	7.9	5.5	12.4	1500	3200	410	110	32
MAR 10...	1200	390	2530	7.9	6.0	11.0	1500	1700	300	83	23
APR 13...	1535	350	2230	8.1	12.5	10.1	420	120	320	83	27
MAY 24...	1430	165	--	7.0	25.0	9.7	K1700	1200	320	85	25
JUN 14...	1545	220	3880	7.9	29.0	12.9	3100	1500	330	92	24
JUL 21...	1330	330	2930	7.7	24.5	7.4	800	860	260	73	19
AUG 24...	1330	80	5570	8.2	28.0	11.5	K3000	84	350	91	30
SEP 27...	1230	135	--	7.9	18.0	8.2	9000	270	330	86	27

DATE	SODIUM DIS-SOLVED (MG/L AS Na) (00930)	SODIUM ADSORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CaCO ₃) (90410)	SULFATE DIS-SOLVED (MG/L AS SO ₄) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS Cl) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)
JAN 12...	900	20	11	325	240	1200	0.50	21	2730	3.71	1360
FEB 14...	1000	22	12	313	250	1400	0.50	21	3030	4.12	1470
MAR 10...	410	10	10	256	140	590	0.40	15	1430	1.95	1510
APR 13...	430	10	12	267	150	570	0.40	14	1460	1.98	1380
MAY 24...	890	22	12	251	220	1200	0.60	20	2620	3.56	1170
JUN 14...	720	17	12	265	200	1000	0.50	19	2240	3.05	1330
JUL 21...	440	12	10	223	140	710	0.50	15	1550	2.11	1380
AUG 24...	1300	30	21	282	300	1800	0.70	20	3750	5.10	810
SEP 27...	1000	24	7.5	277	260	1600	0.70	22	3190	4.34	1160

PLATTE RIVER BASIN

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06803525 SALT CREEK BELOW STEVENS CREEK, NEAR WAVERLY, NE--Continued

WATER QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
JAN 12...	2.76	2.76	0.140	2.90	1.70	0.50	2.2	5.1	0.800	0.800
FEB 14...	1.92	1.92	0.080	2.00	1.80	1.0	2.8	4.8	0.900	0.730
MAR 10...	1.35	1.35	0.050	1.40	1.20	0.90	2.1	3.5	0.470	0.280
APR 13...	2.03	2.03	0.070	2.10	0.430	1.1	1.5	3.6	0.560	0.360
MAY 24...	2.85	2.85	0.350	3.20	1.10	1.2	2.3	5.5	0.820	0.580
JUN 14...	2.60	2.60	0.300	2.90	0.510	1.7	2.2	5.1	0.840	0.540
JUL 21...	1.41	1.41	0.090	1.50	0.270	1.0	1.3	2.8	0.690	0.480
AUG 24...	2.27	2.27	0.530	2.80	1.40	1.5	2.9	5.7	1.80	1.50
SEP 27...	3.99	3.99	0.510	4.50	2.00	1.0	3.0	7.5	1.50	1.00

DATE	ARSENIC TOTAL (μG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (μG/L AS BA) (01007)	CADMIUM TOTAL RECOV- ERABLE (μG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (μG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (μG/L AS CU) (01042)	IRON, TOTAL RECOV- ERABLE (μG/L AS FE) (01045)	LEAD, TOTAL RECOV- ERABLE (μG/L AS PB) (01051)
FEB 14...	3	100	<1	1	4	440	10
MAY 24...	10	200	<1	<1	5	60	<1
AUG 24...	6	200	<1	<1	3	420	<1

DATE	MANGA- NESE, TOTAL RECOV- ERABLE (μG/L AS MN) (01055)	MERCURY TOTAL RECOV- ERABLE (μG/L AS HG) (71900)	SELE- NIUM, TOTAL RECOV- ERABLE (μG/L AS SE) (01147)	SILVER, TOTAL RECOV- ERABLE (μG/L AS AG) (01077)	ZINC, TOTAL RECOV- ERABLE (μG/L AS ZN) (01092)	CARBON, ORGANIC TOTAL (μG/L AS C) (00680)
FEB 14...	350	<0.10	2	<1	40	5.5
MAY 24...	260	<0.10	2	<1	10	20
AUG 24...	310	0.10	2	<1	10	9.2

PLATTE RIVER BASIN

06803530 ROCK CREEK NEAR CERESCO, NE

LOCATION.--Lat 41°00'56", long 96°32'39", in NE1/4 NE1/4 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 (REVISED).--120 mi².

PERIOD OF RECORD.--April 1970 to current year.

REVISED RECORDS.--WDR NE-76-1: 1975(M).

GAGE.--Water-stage recorder. Datum of gage is 1,112.18 ft above sea level. Apr. 1970, to Feb. 6, 1980, at present site and datum 3.0 ft higher; Feb 7, 1980, to July 13, 1981, at present site and present datum; July 14, 1981, to Feb. 29, 1984, on left bank 30 ft downstream from bridge at present datum; Mar. 1, 1984, to May 28, 1984, wire weight gage only, at present datum.

REMARKS.--Records good except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	22	25	21	e14	20	16	20	120	24	298	11
2	21	23	26	21	e15	21	16	17	185	168	86	11
3	20	23	24	20	e15	120	16	16	28	50	21	11
4	20	24	25	e18	e16	463	16	16	16	536	27	132
5	19	22	26	e15	e16	197	15	14	828	98	17	37
6	20	21	24	e16	e15	94	15	18	195	493	18	13
7	19	22	22	e14	e14	38	16	18	45	141	19	12
8	29	22	22	e12	e13	26	16	16	30	55	26	11
9	40	21	23	e13	e12	22	15	14	23	29	31	11
10	22	21	23	e14	e10	22	15	13	19	21	17	11
11	21	22	21	e15	e11	22	16	13	16	17	15	11
12	21	30	22	e14	e15	22	44	12	15	17	15	11
13	20	52	24	e16	e17	21	33	12	14	35	15	11
14	23	30	24	e14	e18	22	22	16	13	38	15	11
15	152	27	23	e13	e20	22	19	17	12	17	14	10
16	49	26	25	e13	e22	20	16	13	12	103	14	10
17	31	26	32	e12	e30	20	15	12	12	69	14	9.7
18	31	25	32	e12	e70	20	15	12	12	22	14	9.9
19	42	25	27	e13	107	20	15	11	373	18	14	10
20	33	22	25	e14	37	20	15	11	210	16	14	9.8
21	32	23	e20	e16	23	19	16	11	61	16	14	10
22	26	23	e18	e17	20	19	16	11	223	15	13	26
23	25	22	e18	e19	22	19	15	12	2880	15	13	32
24	23	e20	e19	e23	24	17	16	12	382	15	13	14
25	23	e19	e19	e20	21	16	16	11	86	15	20	12
26	22	e18	e19	e19	24	17	15	11	55	15	21	11
27	21	e21	e18	e18	22	17	14	11	37	15	13	10
28	22	23	e17	e12	21	17	15	11	26	14	12	10
29	21	23	e20	e13	---	16	21	11	21	13	12	10
30	21	23	21	e14	---	16	18	11	18	14	12	10
31	21	---	21	e14	---	16	---	10	---	14	12	---
TOTAL	913	721	705	485	664	1421	528	413	5967	2128	859	508.4
MEAN	29.5	24.0	22.7	15.6	23.7	45.8	17.6	13.3	199	68.6	27.7	16.9
MAX	152	52	32	23	107	463	44	20	2880	536	298	132
MIN	19	18	17	12	10	16	14	10	12	13	12	9.7
AC-FT	1810	1430	1400	962	1320	2820	1050	819	11840	4220	1700	1010

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1994, BY WATER YEAR (WY)

MEAN	25.8	15.9	15.1	15.7	34.2	64.3	44.2	53.0	59.9	62.6	54.5	26.9
MAX	191	45.5	44.8	63.3	116	260	236	145	239	648	527	128
(WY)	1987	1978	1985	1973	1983	1979	1984	1972	1982	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

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1971 - 1994

ANNUAL TOTAL	35393.2	15312.4	39.4
ANNUAL MEAN	97.0	42.0	123
HIGHEST ANNUAL MEAN			1987
LOWEST ANNUAL MEAN			1976
HIGHEST DAILY MEAN	8730 Jul 23	2880 Jun 23	11400 Aug 25 1987
LOWEST DAILY MEAN	7.2 Jan 30	9.7 Sep 17	.25 Jul 13 1976
ANNUAL SEVEN-DAY MINIMUM	7.8 Jan 25	9.9 Sep 15	1.1 Jul 11 1976
INSTANTANEOUS PEAK FLOW		4860 Jun 23	*23300 Aug 25 1987
INSTANTANEOUS PEAK STAGE		15.86 Jun 23	19.60 Aug 25 1987
ANNUAL RUNOFF (AC-FT)	70200	30370 28560	
10 PERCENT EXCEEDS	130	41	46
50 PERCENT EXCEEDS	24	19	12
90 PERCENT EXCEEDS	11	12	5.7

e Estimated.

* From floodmark; includes road overflow.

PLATTE RIVER BASIN

179

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 (REVISED).--1,050 mi².

PERIOD OF RECORD.--November 1951 to current year. Records furnished by Corps of Engineers prior to Oct. 1, 1972.

REVISED RECORDS.--WDR NE-71: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,068.14 ft above sea level. Prior to Nov. 5, 1964, nonrecording gage at same site and datum.

REMARKS.--Records good except for period of estimated record, which is poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	504	290	291	e215	e210	279	216	274	252	349	651	135
2	441	300	307	e210	e210	285	213	245	559	1700	623	130
3	400	327	305	e205	e220	478	207	229	576	1700	437	124
4	376	369	297	e180	e230	2790	202	223	287	1520	670	831
5	358	429	297	e200	e230	2440	215	215	4210	1120	309	903
6	339	409	288	e190	e200	1430	209	374	2760	1580	281	306
7	326	359	279	e160	e190	844	197	411	744	1220	245	217
8	474	344	276	e160	e180	622	197	326	514	676	226	188
9	2250	350	275	e170	e175	518	199	281	421	437	242	172
10	1300	338	278	e180	e175	459	191	259	371	358	256	160
11	711	330	263	e190	e180	422	238	243	353	318	233	150
12	573	384	260	e200	e190	395	518	230	352	298	188	144
13	480	500	283	e210	e240	379	473	225	391	401	178	143
14	434	401	309	e190	e260	353	355	329	296	352	166	136
15	1170	363	293	e170	e290	338	304	443	260	292	158	133
16	741	336	314	e190	e320	306	274	368	235	2190	156	127
17	508	322	335	e170	e390	311	255	283	218	2010	148	120
18	503	286	335	e160	465	297	245	249	251	730	146	116
19	575	276	323	e170	656	286	236	225	1060	532	207	112
20	491	269	302	e180	473	270	230	212	695	432	155	116
21	464	263	286	e200	333	270	225	196	892	371	142	119
22	403	262	255	e220	294	256	226	183	603	325	131	179
23	375	260	244	e270	246	257	200	242	8360	290	126	256
24	354	251	e230	e310	262	250	215	237	3280	261	125	171
25	345	e250	e210	e320	265	228	212	184	1150	241	123	170
26	333	e230	e200	e310	e260	228	205	173	769	247	352	166
27	315	e200	e220	e240	e250	229	195	163	592	231	254	151
28	307	e240	e200	e200	e260	229	229	153	497	205	195	139
29	309	285	e190	e190	---	225	300	148	429	182	159	130
30	302	280	e200	e180	---	217	276	147	380	172	147	127
31	290	---	e210	e200	---	215	---	136	---	166	140	---
TOTAL	16751	9503	8355	6340	7654	16106	7457	7606	31757	20906	7569	6071
MEAN	540	317	270	205	273	520	249	245	1059	674	244	202
MAX	2250	500	335	320	656	2790	518	443	8360	2190	670	903
MIN	290	200	190	160	175	215	191	136	218	166	123	112
AC-FT	33230	18850	16570	12580	15180	31950	14790	15090	62990	41470	15010	12040

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1994, BY WATER YEAR (WY)

MEAN	264	158	140	155	262	537	409	490	686	533	326	268
MAX	2681	475	465	520	951	3481	2023	2370	4101	5461	1748	1534
(WY)	1974	1987	1987	1974	1983	1979	1984	1984	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

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1952 - 1994

ANNUAL TOTAL	401437	146075	
ANNUAL MEAN	1100	400	350
MEDIAN OF ANNUAL MEANS			283
HIGHEST ANNUAL MEAN			1054
LOWEST ANNUAL MEAN			107
HIGHEST DAILY MEAN	35000	8360	37100
LOWEST DAILY MEAN	140	112	14
ANNUAL SEVEN-DAY MINIMUM	173	120	17
INSTANTANEOUS PEAK FLOW (STAGE)		10000	46800
INSTANTANEOUS PEAK STAGE		12.91	26.57
ANNUAL RUNOFF (AC-FT)	796300	289700	253900
10 PERCENT EXCEEDS	2050	611	563
50 PERCENT EXCEEDS	363	262	135
90 PERCENT EXCEEDS	220	160	69

PLATTE RIVER BASIN

06803920 COTTONWOOD CREEK ABOVE CZECHLAND LAKE NEAR RESCUE, NE

LOCATION.--Lat 41°20'11", long 96°50'16", in sec. 22, T.16 N., R.5 E., Saunders County, Hydrologic Unit 10200203, on left downstream bank. Gage is 1.5 mi north and 1.25 mi west of Prague.

PERIOD OF RECORD.--June to September 1994.

GAGE.--Water-stage recorder. Elevation of gage is 1400 ft above sea leve.

REMARKS.-- Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	1.7	.56	.12
2	---	---	---	---	---	---	---	---	---	1.7	.44	.12
3	---	---	---	---	---	---	---	---	---	.57	.60	.10
4	---	---	---	---	---	---	---	---	---	30	.53	19
5	---	---	---	---	---	---	---	---	---	.73	.36	.56
6	---	---	---	---	---	---	---	---	---	e83	.29	.29
7	---	---	---	---	---	---	---	---	---	2.6	.27	e.28
8	---	---	---	---	---	---	---	---	---	1.2	.26	e.35
9	---	---	---	---	---	---	---	---	---	.92	.26	e.55
10	---	---	---	---	---	---	---	---	---	.84	.27	e.80
11	---	---	---	---	---	---	---	---	---	.73	.27	e.80
12	---	---	---	---	---	---	---	---	---	.68	.26	e.76
13	---	---	---	---	---	---	---	---	---	.12	.26	e.68
14	---	---	---	---	---	---	---	---	---	.81	.26	e.58
15	---	---	---	---	---	---	---	---	---	.73	.24	e.52
16	---	---	---	---	---	---	---	---	---	.81	.24	e.50
17	---	---	---	---	---	---	---	---	---	.71	.24	e.50
18	---	---	---	---	---	---	---	---	---	.67	.22	e.52
19	---	---	---	---	---	---	---	---	---	.65	.22	e.85
20	---	---	---	---	---	---	---	---	---	.61	.24	e1.1
21	---	---	---	---	---	---	---	---	---	.66	.24	e1.7
22	---	---	---	---	---	---	---	---	---	.71	.21	8.1
23	---	---	---	---	---	---	---	---	---	.67	.20	2.1
24	---	---	---	---	---	---	---	---	---	9.1	.21	e1.8
25	---	---	---	---	---	---	---	---	---	.75	.20	e1.6
26	---	---	---	---	---	---	---	---	---	e.55	.17	e1.4
27	---	---	---	---	---	---	---	---	---	e.51	e.30	e1.2
28	---	---	---	---	---	---	---	---	---	.51	e.16	e1.1
29	---	---	---	---	---	---	---	---	---	.52	e.11	e1.0
30	---	---	---	---	---	---	---	---	.49	.52	e.13	e.98
31	---	---	---	---	---	---	---	---	---	.49	e.10	---
TOTAL	---	---	---	---	---	---	---	---	---	156.65	8.32	49.96
MEAN	---	---	---	---	---	---	---	---	---	5.05	.27	1.67
MAX	---	---	---	---	---	---	---	---	---	83	.60	19
MIN	---	---	---	---	---	---	---	---	---	.49	.10	.10
AC-FT	---	---	---	---	---	---	---	---	---	311	17	99

e Estimated.

PLATTE RIVER BASIN

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06803935 COTTONWOOD CREEK TRIBUTARY ABOVE DAM 6B NEAR PRAGUE, NE

LOCATION.--Lat 41°19'19", long 96°51'16", in sec. 28, T.16 N., R. 5 E., Saunders County, Hydrologic Unit 10200203, on left downstream side of the bridge, 0.5 mi north and 2.2 mi west of Prague.

PERIOD OF RECORD.--June to September 1994.

GAGE.--Water-stage recorder. Elevation of gage is 1410 ft above sea level.

REMARKS.-- Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	e.30	.33	.24
2	---	---	---	---	---	---	---	---	---	e.55	.23	.25
3	---	---	---	---	---	---	---	---	---	e.70	.45	.25
4	---	---	---	---	---	---	---	---	---	e10	.16	1.8
5	---	---	---	---	---	---	---	---	---	e8.0	.07	.28
6	---	---	---	---	---	---	---	---	---	e30	.07	.24
7	---	---	---	---	---	---	---	---	---	e5.0	.10	.28
8	---	---	---	---	---	---	---	---	---	e1.3	.13	.36
9	---	---	---	---	---	---	---	---	---	.92	.18	.36
10	---	---	---	---	---	---	---	---	---	.84	.07	.37
11	---	---	---	---	---	---	---	---	---	.70	.10	.32
12	---	---	---	---	---	---	---	---	---	.68	.13	.28
13	---	---	---	---	---	---	---	---	---	4.9	.05	.24
14	---	---	---	---	---	---	---	---	---	.87	.11	.23
15	---	---	---	---	---	---	---	---	---	.73	.09	.19
16	---	---	---	---	---	---	---	---	---	.73	.07	.20
17	---	---	---	---	---	---	---	---	---	.65	.12	.16
18	---	---	---	---	---	---	---	---	---	.63	.16	.18
19	---	---	---	---	---	---	---	---	---	.55	.11	.16
20	---	---	---	---	---	---	---	---	---	.48	.11	.17
21	---	---	---	---	---	---	---	---	---	.52	.10	.34
22	---	---	---	---	---	---	---	---	---	.50	.07	2.8
23	---	---	---	---	---	---	---	---	---	.46	.06	1.1
24	---	---	---	---	---	---	---	---	---	.81	.04	.80
25	---	---	---	---	---	---	---	---	---	.48	.39	.59
26	---	---	---	---	---	---	---	---	---	.35	.34	.47
27	---	---	---	---	---	---	---	---	---	.22	.10	.34
28	---	---	---	---	---	---	---	---	---	.19	.15	.30
29	---	---	---	---	---	---	---	---	---	.18	.16	.26
30	---	---	---	---	---	---	---	---	.20	.15	.21	.23
31	---	---	---	---	---	---	---	---	---	.15	.18	---
TOTAL	---	---	---	---	---	---	---	---	---	72.54	4.64	13.79
MEAN	---	---	---	---	---	---	---	---	---	2.34	.15	.46
MAX	---	---	---	---	---	---	---	---	---	30	.45	2.8
MIN	---	---	---	---	---	---	---	---	---	.15	.04	.16
AC-FT	---	---	---	---	---	---	---	---	---	144	9.2	27

e Estimated.

PLATTE RIVER BASIN

06804000 WAHOO CREEK AT ITHACA, NE

LOCATION.--Lat 41°08'40", long 96°32'10", in NW1/4 NW1/4 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 (REVISED).--273 mi², of which 268 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1949 to current year.

REVISED RECORDS.--WDR NE-71-1: Drainage area. WDR NE-78-1: 1977(P).

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.

REMARKS.--Records good except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	60	60	e64	e45	75	55	60	164	129	579	38
2	65	62	e60	e56	e45	74	55	57	919	333	348	37
3	62	62	e60	e46	e46	107	54	53	135	193	85	37
4	60	62	e58	e42	e47	900	54	51	80	933	70	111
5	59	60	e60	e44	e50	561	55	48	505	398	60	119
6	58	55	e60	e45	e45	265	53	56	351	1540	53	46
7	59	57	e58	e38	e37	135	52	59	101	1060	52	40
8	61	61	e56	e33	e31	104	52	52	85	322	140	38
9	67	61	e56	e35	e36	94	52	49	75	204	103	38
10	70	59	60	e41	e41	89	53	47	69	162	56	37
11	63	59	e58	e42	e44	85	e56	45	63	139	52	36
12	65	66	e56	e40	e47	82	e60	43	60	123	49	35
13	63	92	e58	e47	e45	78	e80	43	56	471	49	35
14	61	73	e56	e52	e50	76	e70	46	53	274	47	35
15	115	e70	e54	e80	e45	77	e60	51	49	137	45	35
16	109	e70	e48	e76	e50	72	e56	48	47	144	44	34
17	72	e68	e40	63	e56	70	e54	45	46	212	43	33
18	69	e64	e38	63	e62	72	51	43	65	113	43	33
19	68	e64	e36	60	e64	70	50	42	902	102	43	33
20	67	e62	e37	62	e60	68	49	41	1230	94	43	33
21	64	e62	e44	66	e58	67	49	40	138	86	41	35
22	62	e62	e40	72	e54	64	49	39	814	82	40	41
23	62	e62	e33	66	e52	65	49	42	4640	77	40	77
24	61	e60	e35	64	e50	62	50	42	1200	75	39	70
25	61	e58	e38	58	e52	59	50	39	313	83	40	46
26	60	e110	e42	e56	e60	58	49	39	221	77	111	44
27	59	e94	e32	e52	e70	59	46	39	182	73	60	40
28	59	e84	e26	e50	e80	57	47	38	159	65	42	38
29	59	e78	e30	e47	---	57	64	60	143	62	40	37
30	59	e70	e45	e40	---	56	64	68	129	60	39	37
31	59	---	e66	e42	---	55	---	39	---	57	38	---
TOTAL	2045	2027	1500	1642	1422	3813	1638	1464	12994	7880	2534	1348
MEAN	66.0	67.6	48.4	53.0	50.8	123	54.6	47.2	433	254	81.7	44.9
MAX	115	110	66	80	80	900	80	68	4640	1540	579	119
MIN	58	55	26	33	31	55	46	38	46	57	38	33
AC-FT	4060	4020	2980	3260	2820	7560	3250	2900	25770	15630	5030	2670

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1994, BY WATER YEAR (WY)

	MEAN	51.9	37.8	34.1	38.2	73.3	128	88.2	113	221	89.2	95.3	74.0
MAX	343	110	96.3	125	276	518	430	401	1051	728	640	663	
(WY)	1987	1987	1985	1983	1983	1979	1978	1984	1963	1993	1959	1965	
MIN	8.39	11.3	10.1	10.7	13.2	16.6	19.6	16.3	18.6	10.6	9.27	6.95	
(WY)	1956	1956	1977	1957	1957	1957	1956	1955	1976	1956	1956	1956	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1950 - 1994

ANNUAL TOTAL	58712	40307	
ANNUAL MEAN	161	110	86.9
MEDIAN OF ANNUAL MEANS			76.9
HIGHEST ANNUAL MEAN			207
LOWEST ANNUAL MEAN			15.3
HIGHEST DAILY MEAN	4030	4640	22100
LOWEST DAILY MEAN	23	26	3.3
ANNUAL SEVEN-DAY MINIMUM	27	34	4.4
INSTANTANEOUS PEAK FLOW		7120	77400
INSTANTANEOUS PEAK STAGE		21.48	22.93
ANNUAL RUNOFF (AC-FT)	116500	79950	62940
10 PERCENT EXCEEDS	224	136	110
50 PERCENT EXCEEDS	72	59	34
90 PERCENT EXCEEDS	33	38	17

PLATTE RIVER BASIN

183

06804700 WAHOO CREEK AT ASHLAND, NE

LOCATION.--Lat 41°03'13", long 96°22'04", in SE1/4NE1/4 sec.35, T.13 N., R.9 E., Saunders County, Hydrologic Unit 10200203, at right upstream side of bridge near end of guard rail on State Highway 63, 1 mi north of Ashland, and at mile 2.6.

DRAINAGE AREA.--416 mi².

PERIOD OF RECORD.--September, 1990 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,067.58 ft above sea level.

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	86	e90	e86	e58	e96	80	86	98	139	93	61
2	96	90	90	e80	e58	e100	81	86	1220	341	566	60
3	93	91	91	e70	e60	111	77	81	341	294	122	59
4	91	90	89	e74	e62	1050	78	79	124	653	90	108
5	88	88	90	e74	e66	780	75	77	423	692	84	163
6	86	83	89	e76	e60	379	76	81	787	690	75	86
7	87	83	86	e62	e52	221	74	87	180	1520	71	67
8	90	86	83	e54	e47	151	75	81	125	394	84	63
9	97	89	83	e62	e54	125	76	78	108	243	239	62
10	102	92	87	e68	e62	112	76	75	98	187	100	61
11	94	87	83	e72	e64	104	77	73	90	161	83	59
12	94	90	80	e66	e68	97	88	71	112	145	76	59
13	93	113	88	e70	e66	93	120	70	86	248	73	58
14	91	126	e80	e72	e70	88	100	73	78	390	71	58
15	134	99	e76	e110	e68	88	89	76	73	178	68	57
16	187	93	e68	e90	e72	86	84	72	70	156	67	56
17	116	93	e60	e80	e76	83	81	67	69	231	66	53
18	104	92	e58	e78	e80	84	78	65	83	148	66	53
19	105	90	e56	e78	e82	85	77	63	232	125	67	54
20	103	90	e58	e76	e80	84	75	62	1530	116	66	54
21	99	88	e66	e82	e78	82	78	63	285	108	65	54
22	94	89	e60	e90	e74	84	78	60	457	103	63	63
23	94	87	e50	e82	e72	83	76	64	2880	100	63	73
24	93	89	e52	e80	e70	81	75	66	2610	99	63	98
25	92	e84	e56	e74	e72	78	74	62	524	102	64	71
26	90	e140	e64	e70	e88	77	74	59	267	99	98	65
27	88	e130	e48	e66	e110	79	70	58	203	96	104	61
28	87	e120	e44	e62	e100	78	73	57	170	87	71	59
29	87	e100	e50	e60	---	78	82	57	151	84	64	58
30	85	e94	e70	e56	---	77	93	101	141	81	63	57
31	85	---	e90	e60	---	78	---	63	---	80	62	---
TOTAL	3045	2872	2235	2280	1969	4892	2410	2213	13615	8090	3007	2010
MEAN	98.2	95.7	72.1	73.5	70.3	158	80.3	71.4	454	261	97.0	67.0
MAX	187	140	91	110	110	1050	120	101	2880	1520	566	163
MIN	85	83	44	54	47	77	70	57	69	80	62	53
AC-FT	6040	5700	4430	4520	3910	9700	4780	4390	27010	16050	5960	3990

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1994, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994
MEAN	54.7	58.3	53.2	53.0	64.7
MAX	98.2	95.7	72.1	73.5	102
(WY)	1994	1994	1994	1994	1991
MIN	36.0	42.5	40.1	40.4	42.8
(WY)	1992	1991	1993	1993	1992

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1990 - 1994

ANNUAL TOTAL	85490	48638	
ANNUAL MEAN	234	133	
HIGHEST ANNUAL MEAN			143
LOWEST ANNUAL MEAN			223
HIGHEST DAILY MEAN	5440	2880	63.9
LOWEST DAILY MEAN	30	44	21
ANNUAL SEVEN-DAY MINIMUM	35	52	24
INSTANTANEOUS PEAK FLOW		3360	e7000
INSTANTANEOUS PEAK STAGE		18.86	20.50
ANNUAL RUNOFF (AC-FT)	169600	96470	103700
10 PERCENT EXCEEDS	328	162	175
50 PERCENT EXCEEDS	99	83	60
90 PERCENT EXCEEDS	42	60	36

e Estimated.

PLATTE RIVER BASIN

06804900 JOHNSON CREEK NEAR MEMPHIS, NE

LOCATION.--Lat 41°08'48", long 96°23'12", in NW1/4 NW1/4 sec.35, T.14 N., R. 9 E., Saunders County, Hydrologic Unit 10200203, on left downstream bank on Saunders County road No. 37, 3.5 mi north and 2 mi east of Memphis, and at mile 0.9.

DRAINAGE AREA.--21.5 mi².

PERIOD OF RECORD.--September 1990 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,070.00 ft above sea level.

REMARKS.--Records poor Oct. 1 to Mar. 3, and good Mar. 4 to Sept. 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2.4	e2.2	e2.0	e2.0	e1.9	e2.2	2.1	2.0	28	1.9	1.5	1.2
2	e2.3	e2.2	e2.0	e2.0	e2.0	e2.4	1.9	2.0	76	6.6	1.6	1.2
3	e2.2	e2.2	e2.0	e2.1	e1.9	e3.0	2.0	2.0	13	3.4	1.3	1.3
4	e2.1	e2.2	e2.0	e2.3	e1.9	4.3	2.1	2.0	4.0	15	1.1	5.8
5	e2.0	e2.1	e2.0	e2.1	e1.9	12	2.0	2.1	71	9.2	1.1	1.3
6	e2.1	e2.1	e2.1	e2.0	e1.9	8.1	1.9	3.1	31	26	.98	1.1
7	e2.2	e2.0	e2.0	e2.0	e1.9	4.6	1.8	2.3	6.5	38	1.1	1.1
8	e2.2	e2.0	e2.0	e2.0	e1.9	3.4	1.8	2.1	3.5	15	1.3	1.2
9	e4.0	e2.0	e2.0	e2.0	e2.0	3.0	1.8	2.0	2.5	4.4	1.3	1.2
10	e2.2	e2.0	e2.0	e2.0	e1.9	2.8	1.7	1.9	2.1	2.6	1.2	1.0
11	e2.2	e2.1	e2.0	e2.0	e1.9	2.8	1.8	1.9	2.3	2.0	1.2	.85
12	e2.3	e3.0	e2.0	e2.0	e1.9	2.8	2.2	1.9	1.8	1.8	1.3	.96
13	e2.4	e3.9	e2.2	e2.2	e1.9	2.8	1.9	1.9	1.9	2.3	1.2	.97
14	e2.4	e3.5	e2.5	e2.0	e1.9	2.8	1.6	1.8	1.8	1.8	1.4	1.1
15	e6.0	e3.6	e2.2	e2.0	e1.9	2.8	1.8	1.7	1.7	1.4	1.3	1.1
16	e3.5	e2.0	e2.0	e2.0	e1.9	2.7	1.9	1.7	1.7	1.7	1.1	1.1
17	e2.5	e2.0	e2.2	e2.2	e1.9	2.7	1.5	1.7	1.6	1.4	1.0	1.1
18	e2.5	e2.0	e2.0	e2.0	e2.0	2.6	1.7	1.9	1.5	1.2	1.1	1.2
19	e2.7	e2.0	e2.0	e2.0	e1.9	2.6	1.7	1.8	2.0	1.1	1.0	1.2
20	e2.8	e2.0	e2.0	e2.0	e1.9	2.7	1.8	1.8	1.9	1.2	1.0	1.3
21	e2.7	e2.0	e2.1	e2.0	e1.9	2.6	1.9	1.8	25	1.1	.99	1.4
22	e2.6	e2.0	e2.0	e2.0	e1.9	2.3	1.8	1.8	16	4.3	.99	1.9
23	e2.5	e2.0	e2.0	e2.0	e2.0	2.4	1.9	2.1	156	2.4	.90	1.7
24	e2.4	e2.2	e2.0	e2.2	e2.3	2.4	1.9	2.0	82	1.4	1.1	1.4
25	e2.4	e2.3	e2.0	e2.0	e2.5	2.4	1.9	2.0	13	1.3	1.5	1.3
26	e2.3	e2.0	e2.0	e2.0	e2.3	2.2	1.9	2.0	3.7	1.4	1.5	2.2
27	e2.3	e2.0	e2.0	e1.9	e2.2	2.2	1.9	2.0	2.1	1.4	1.2	1.6
28	e2.3	e2.2	e2.0	e1.9	e2.2	2.2	2.1	2.0	1.6	1.4	1.2	1.3
29	e2.3	e2.1	e2.0	e1.9	---	2.2	2.0	2.8	1.2	1.5	1.2	1.2
30	e2.4	e2.0	e2.0	e1.9	---	2.1	2.1	2.2	1.0	1.5	1.3	1.2
31	e2.3	---	e2.0	e1.9	---	2.1	---	2.0	---	1.4	1.2	---
TOTAL	79.5	67.9	63.3	62.6	55.6	98.2	56.4	62.3	557.4	157.1	37.16	42.48
MEAN	2.56	2.26	2.04	2.02	1.99	3.17	1.88	2.01	18.6	5.07	1.20	1.42
MAX	6.0	3.9	2.5	2.3	2.5	12	2.2	3.1	156	38	1.6	5.8
MIN	2.0	2.0	2.0	1.9	1.9	2.1	1.5	1.7	1.0	1.1	.90	.85
AC-FT	158	135	126	124	110	195	112	124	1110	312	74	84

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1994, BY WATER YEAR (WY)

MEAN	1.59	1.65	1.65	1.64	1.76	6.08	2.02	2.16	15.8	9.36	1.92	1.71
MAX	2.56	2.26	2.04	2.02	1.99	17.8	2.42	2.77	26.9	26.1	4.76	3.79
(WY)	1994	1994	1994	1994	1994	1993	1993	1993	1991	1993	1993	1993
MIN	1.02	1.22	1.40	1.42	1.52	1.54	1.82	1.48	2.15	1.21	.84	.72
(WY)	1993	1991	1991	1991	1992	1992	1992	1992	1992	1991	1991	1992

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1991 - 1994

ANNUAL TOTAL	2559.2	1339.94	
ANNUAL MEAN	7.01	3.67	
HIGHEST ANNUAL MEAN			4.07
LOWEST ANNUAL MEAN			6.79
HIGHEST DAILY MEAN	240	156	240
LOWEST DAILY MEAN	1.2	.85	.47
ANNUAL SEVEN-DAY MINIMUM	1.2	1.0	.65
INSTANTANEOUS PEAK FLOW		228	269
INSTANTANEOUS PEAK STAGE		10.49	10.49
ANNUAL RUNOFF (AC-FT)	5080	2660	2950
10 PERCENT EXCEEDS	10	3.0	3.2
50 PERCENT EXCEEDS	2.4	2.0	1.7
90 PERCENT EXCEEDS	1.8	1.2	1.0

PLATTE RIVER BASIN

185

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 NW1/4 NW1/4 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.--85,800 mi² approximately, of which about 71,000 mi² 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-76-1: Drainage area.

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.

REMARKS.--Records 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8350	9290	4710	e7200	e5600	7050	e8680	10500	5240	5890	5390	3580
2	7980	9280	6490	e7400	e5800	7840	e8480	10400	7240	7130	7550	3450
3	7870	9000	8180	e7000	e6000	11000	e7520	10100	7030	8940	6060	3200
4	7670	9340	9750	e6400	e6000	20800	e8000	11000	5540	11600	6550	4230
5	7170	9420	10000	e6600	e5900	23400	e10000	10900	7720	10200	6010	5920
6	7780	9930	10900	e5800	e5900	37800	e7400	10700	11500	9900	5540	6510
7	7370	9540	10500	e5000	e5800	32100	e7970	10700	7330	27500	5770	7960
8	7490	9470	10100	e4400	e5700	24900	e7920	10900	6210	22300	6610	8030
9	8150	9220	9770	e3900	e5600	21600	e8360	10600	5820	15000	8590	7010
10	9400	9130	10400	e4500	e5600	20100	e8240	9740	5310	11400	6030	6290
11	9580	9380	9980	e5000	e5600	17700	e8360	9390	6220	10200	5210	5610
12	10400	9530	9630	e4600	e5800	13700	e9430	8400	6890	8710	5210	5100
13	9600	9670	10100	e4800	e6000	12500	e9940	7850	6940	9150	5340	4580
14	9250	10100	10200	e5000	e6600	11700	e11300	8000	7030	21600	4740	4600
15	10000	10000	9520	e3500	e7000	11700	e14000	7500	7240	17500	4500	4380
16	10100	10300	9610	e3900	e7800	10700	e13000	7790	6450	16600	4620	4240
17	10400	10300	10000	e4400	e8400	11000	e12500	6810	5880	17100	4440	4170
18	10400	10100	10400	e4300	e9000	11100	11700	6680	5930	15200	4220	4000
19	10300	9830	10400	e4200	e10000	10900	10900	6470	6570	13300	4120	3780
20	10100	9490	e10000	e4000	e10000	11400	11400	5530	8810	12600	4090	3850
21	9770	9280	e9800	e4000	e9800	12100	11200	5440	8620	11300	3850	3640
22	9480	9050	e9600	e4200	e8800	13400	e9200	5450	9080	10500	4010	4380
23	9650	8920	e9000	e4300	e8000	12000	e9400	4560	20800	9780	3610	5010
24	9560	9000	e8400	e4500	e7400	11300	e8600	5180	20800	8680	3600	6270
25	9130	8170	e7400	e5400	e7000	11200	8190	5300	15200	8400	3500	7050
26	8710	5330	e7400	e5800	e6400	11100	7180	5120	12300	7700	3810	6090
27	9130	4610	e8000	e5200	6390	e9540	7350	4900	10300	7600	3960	5600
28	9870	4200	e7800	e5000	6610	e10100	8220	4870	8060	7200	3620	5200
29	10900	3950	e7600	e4900	---	e9080	8970	5070	7060	7000	3540	4490
30	8750	4160	e7000	e5000	---	e8500	10100	5170	6090	7300	3250	4790
31	9170	---	e6800	e5400	---	e9390	---	4990	---	6330	3350	---
TOTAL	283480	258990	279440	155600	194500	446700	283510	236010	255210	363610	150690	153010
MEAN	9145	8633	9014	5019	6946	14410	9450	7613	8507	11730	4861	5100
MAX	10900	10300	10900	7400	10000	37800	14000	11000	20800	27500	8590	8030
MIN	7170	3950	4710	3500	5600	7050	7180	4560	5240	5890	3250	3200
AC-FT	562300	513700	554300	308600	385800	886000	562300	468100	506200	721200	298900	303500

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 1994, BY WATER YEAR (WY)

	MEAN	4872	5155	4577	4408	7219	11400	9635	9278	10640	6088	3749	4121
MAX	15630	10580	10910	9755	17270	27010	34250	35350	39430	43440	13890	12870	
(WY)	1987	1987	1985	1984	1984	1993	1984	1984	1984	1993	1993	1993	
MIN	1604	2234	1456	1822	3237	4898	3701	2548	2493	978	519	975	
(WY)	1957	1956	1956	1957	1955	1957	1967	1955	1981	1974	1955	1955	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1953 - 1994

ANNUAL TOTAL	5535140	3060750	
ANNUAL MEAN	15160	8386	6776
HIGHEST ANNUAL MEAN			16210
LOWEST ANNUAL MEAN			2885
HIGHEST DAILY MEAN	138000	Jul 25	138000
LOWEST DAILY MEAN	3950	Nov 29	131
ANNUAL SEVEN-DAY MINIMUM	4100	Jan 1	159
INSTANTANEOUS PEAK FLOW			160000
INSTANTANEOUS PEAK STAGE			Jul 25 1993
ANNUAL RUNOFF (AC-FT)	10980000	6071000	4909000
10 PERCENT EXCEEDS	28100	11400	12400
50 PERCENT EXCEEDS	10000	7960	4890
90 PERCENT EXCEEDS	5800	4350	1900

PLATTE RIVER BASIN

06805500 PLATTE RIVER AT LOUISVILLE, NE--Continued
(National Stream-Quality Accounting Network, NASQAN, station
(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. 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 1993 TO SEPTEMBER 1994

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996												
DATE	TIME	DISCHARGE INST. (FT ³ /S) (00061)	PH WATER SPECIFIC CON- DUCTANCE (µS/CM) (00095)		FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (°C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	TUR- BIDITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	COLI- FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)
			DUCT- ANCE	WHOLE						µM-MF (COLS./ 100 ML) (31625)	COLS. (COLS. PER 100 ML) (31673)	(MG/L AS CaCO ₃) (00900)
OCT	25...	1100	9770	666	8.4	10.5	735	--	10.8	--	--	220
NOV	10...	1500	9090	735	7.6	6.0	736	31	11.6	280	190	230
	30...	1030	4140	985	8.3	0.5	744	--	15.1	--	--	270
DEC	28...	1000	7800	795	8.3	0.0	752	--	14.7	--	--	260
JAN	27...	0930	5200	830	8.1	0.0	733	--	13.8	--	--	230
FEB	14...	1130	6600	858	8.1	1.0	740	6.5	12.5	100	96	260
MAR	18...	1100	11400	516	7.8	8.5	734	--	6.8	--	--	230
APR	22...	1100	12700	646	8.0	12.0	737	--	10.7	--	--	210
MAY	27...	1300	4530	734	8.3	21.0	737	--	12.1	--	--	200
JUN	16...	1100	6470	648	7.9	22.0	735	--	7.2	--	--	180
	23...	1030	25000	364	7.2	21.5	726	--	4.4	--	--	86
AUG	04...	1300	7050	884	8.3	25.0	737	--	7.4	--	--	180
	24...	1130	2870	610	8.9	25.5	728	1.9	9.6	K50	K60	160
SEP	15...	1000	3810	831	8.6	23.5	729	--	7.8	--	--	180
DATE		HARDNESS NONCARB DISSOLV FLD. AS CaCO ₃ (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS- SOLVED (MG/L AS Na) (00930)	SODIUM ADSORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CaCO ₃ (39086)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO ₃ (00452)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO ₃ (00453)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS Cl) (00940)
OCT	25...	15	61	16	52	2	3.9	204	7	234	92	36
NOV	10...	--	66	16	55	2	8.8	--	--	--	90	47
	30...	28	78	19	84	2	8.4	244	16	266	99	92
DEC	28...	15	76	18	55	1	9.9	248	0	303	110	42
JAN	27...	0	67	16	56	2	8.7	233	0	284	94	49
FEB	14...	43	74	17	73	2	9.3	212	0	259	110	65
MAR	18...	37	66	15	46	1	11	189	0	231	96	34
APR	22...	0	60	15	47	1	9.4	216	0	264	81	34
MAY	27...	78	51	17	75	2	10	120	0	146	78	75
JUN	16...	28	50	14	59	2	10	154	0	188	79	59
	23...	10	24	6.3	32	2	7.3	75	0	92	32	32
AUG	04...	46	47	14	110	4	11	129	0	157	71	130
	24...	12	42	13	64	2	11	147	17	145	64	70
SEP	15...	6	49	13	91	3	10	170	17	173	66	110

PLATTE RIVER BASIN

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06805500 PLATTE RIVER AT LOUISVILLE, NE--Continued
(National Stream-Quality Accounting Network, NASQAN, station
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, RESIDUE AT 180 ° C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)
OCT 25...	0.40	31	441	423	0.60	11600	1.89	0.010	1.90	0.040	0.26
NOV 10...	0.40	33	434	454	0.59	10700	2.26	0.040	2.30	0.060	0.54
NOV 30...	0.40	32	600	573	0.82	6710	2.88	0.020	2.90	0.210	0.39
DEC 28...	0.40	38	533	511	0.72	11200	2.69	0.010	2.70	0.100	0.40
JAN 27...	0.40	36	489	478	0.67	6870	2.36	0.040	2.40	0.140	0.36
FEB 14...	0.40	35	532	523	0.72	9480	2.36	0.040	2.40	0.210	0.29
MAR 18...	0.40	28	448	421	0.61	13800	2.16	0.040	2.20	0.060	0.94
APR 22...	0.40	26	411	407	0.56	14100	0.940	0.010	0.950	0.020	0.78
MAY 27...	0.40	24	448	403	0.61	5480	0.032	0.030	0.062	0.020	1.3
JUN 16...	0.40	22	404	391	0.55	7060	0.960	0.040	1.00	0.010	0.89
JUN 23...	0.30	15	222	202	0.30	15000	1.64	0.060	1.70	0.140	4.3
AUG 04...	0.40	22	510	487	0.69	9710	0.700	0.040	0.740	0.030	2.3
AUG 24...	0.40	24	383	377	0.52	2970	--	<0.010	<0.050	0.010	1.5
SEP 15...	0.40	25	499	468	0.68	5130	0.260	0.020	0.280	0.010	1.5

DATE	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN, DIS- SOLVED (MG/L AS N) (00602)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (μG/L AS AL) (01106)	BARIUM, DIS- SOLVED (μG/L AS BA) (01005)	COBALT, DIS- SOLVED (μG/L AS CO) (01035)
OCT 25...	0.36	0.30	0.40	2.2	2.3	0.170	0.200	--	--	--
NOV 10...	--	0.60	--	2.9	--	0.190	0.200	20	130	<3
NOV 30...	0.29	0.60	0.50	3.5	3.4	0.240	0.230	--	--	--
DEC 28...	0.20	0.50	0.30	3.2	3.0	0.200	0.210	--	--	--
JAN 27...	0.16	0.50	0.30	2.9	2.7	0.190	0.200	--	--	--
FEB 14...	0.19	0.50	0.40	2.9	2.8	0.220	0.210	<10	140	<3
MAR 18...	0.54	1.0	0.60	3.2	2.8	0.210	0.260	--	--	--
APR 22...	0.48	0.80	0.50	1.7	1.5	0.160	0.150	--	--	--
MAY 27...	0.18	1.3	0.20	1.4	0.26	0.050	0.040	--	--	--
JUN 16...	0.39	0.90	0.40	1.9	1.4	0.140	0.130	--	--	--
JUN 23...	0.46	4.4	0.60	6.1	2.3	0.120	0.120	--	--	--
AUG 04...	0.37	2.3	0.40	3.0	1.1	0.200	0.200	--	--	--
AUG 24...	--	1.5	--	1.5	--	0.020	0.030	10	100	<3
SEP 15...	0.29	1.5	0.30	1.8	0.58	0.140	0.130	--	--	--

PLATTE RIVER BASIN

06805500 PLATTE RIVER AT LOUISVILLE, NE--Continued
 (National Stream-Quality Accounting Network, NASQAN, station)
 (National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	IRON, DIS- SOLVED (µG/L AS FE) (01046)	LITHIUM, DIS- SOLVED (µG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (µG/L AS MO) (01060)	NICKEL, DIS- SOLVED (µG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (µG/L AS SE) (01145)	SILVER, DIS- SOLVED (µG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (µG/L AS SR) (01080)	VANA-CARBON, DIUM, ORGANIC DIS- SOLVED (µG/L AS V) (01085)	DIS- SOLVED (MG/L AS C) (00681)
OCT 25...	<3	--	2	--	--	--	--	--	--	5.9
NOV 10...	7	21	16	<10	1	3	<1.0	420	<6	--
NOV 30...	5	--	28	--	--	--	--	--	--	6.2
DEC 28...	8	--	9	--	--	--	--	--	--	3.6
JAN 27...	12	--	10	--	--	--	--	--	--	2.7
FEB 14...	<3	23	18	10	2	3	<1.0	480	<6	2.8
MAR 18...	12	--	3	--	--	--	--	--	--	2.7
APR 22...	10	--	2	--	--	--	--	--	--	5.6
MAY 27...	<3	--	1	--	--	--	--	--	--	6.2
JUN 16...	11	--	<1	--	--	--	--	--	--	4.7
JUN 23...	85	--	55	--	--	--	--	--	--	5.6
AUG 04...	9	--	<1	--	--	--	--	--	--	4.1
AUG 24...	3	20	3	<10	1	3	<1.0	310	9	--
SEP 15...	<3	--	<1	--	--	--	--	--	--	4.6

			DIS- CHARGE, INST. FT ³ /S (00061)	TEMPER- ATURE WATER (° C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70331)
DATE	TIME						
OCT	25...	1100	9770	10.5	269	7100	74
NOV	30...	1030	4140	0.5	108	1210	74
DEC	28...	1000	7800	0.0	62	1310	88
JAN	27...	0930	5200	0.0	155	2180	17
FEB	14...	1130	6600	1.0	37	659	50
MAR	18...	1100	11400	8.5	597	18400	59
APR	22...	1100	12700	12.0	349	12000	73
MAY	27...	1300	4530	21.0	138	1690	96
JUN	16...	1100	6470	22.0	987	17200	95
	23...	1030	25000	21.5	9470	639000	91
AUG	04...	1300	7050	25.0	633	12000	100
	24...	1130	2870	25.5	117	907	94
SEP	15...	1000	3810	23.5	185	1900	92

WEeping WATER CREEK BASIN

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06806500 WEeping WATER CREEK AT UNION, NE

LOCATION.--Lat 40°47'35", long 95°54'40", in SW1/4 NW1/4 sec.36, T.10 N., R.13 E., Cass County, Hydrologic unit 10240001, on left bank near downstream side of bridge on U.S. Highways 73 and 75, 1.5 mi southeast of Union, 2.8 mi downstream from South Branch Weeping Water Creek, and at mile 6.2.

DRAINAGE AREA.--241 mi².

PERIOD OF RECORD.--February 1950 to current year.

REVISED RECORDS.--WSP 2118: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 926.72 ft above sea level. Prior to May 14, 1951, nonrecording gage at site 2 mi upstream at different datum. May 15, 1951, to Aug. 22, 1968, water-stage recorder for s tages 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.

REMARKS.--Records good except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	194	141	117	101	e98	81	69	79	102	83	59	e32
2	184	143	122	100	e104	84	68	73	1910	108	54	e33
3	179	142	119	e98	e108	120	67	66	207	98	59	e38
4	174	142	115	e94	e110	533	67	64	116	112	141	95
5	171	134	114	e90	e100	643	66	62	1650	100	94	89
6	166	127	111	e86	e86	317	64	65	941	90	55	48
7	167	129	108	e80	e70	160	64	71	196	160	53	e38
8	236	132	106	e70	e60	114	65	69	145	97	97	e37
9	320	130	107	e74	e56	96	64	65	132	86	62	e34
10	194	128	108	e78	e60	91	64	62	126	79	52	e32
11	174	128	104	e80	e64	87	70	60	144	75	53	e30
12	171	136	103	e84	e68	85	84	58	146	72	54	e29
13	165	168	112	e90	e72	84	90	56	117	73	47	e28
14	160	145	125	e74	e78	83	77	85	109	70	44	e27
15	e250	134	112	e78	e86	84	70	94	100	68	42	e27
16	e280	128	111	e80	e98	81	65	74	95	74	41	e28
17	e260	129	115	e70	115	80	64	63	93	88	e38	e27
18	e240	128	117	e80	110	81	64	59	90	75	e35	e28
19	210	121	115	e84	128	80	61	57	88	67	e33	e30
20	195	118	109	e90	110	79	60	54	127	62	e32	e30
21	179	117	102	e100	86	77	62	53	187	59	e31	e31
22	177	118	94	138	e80	75	63	52	128	57	e30	e32
23	169	117	e90	137	e70	75	62	50	832	55	e31	42
24	164	114	e88	148	e66	72	61	49	340	54	e32	e36
25	160	e100	e90	153	e70	70	61	49	124	53	e38	e33
26	153	e90	e92	142	e74	72	58	51	107	52	57	e32
27	147	e80	e88	e120	e74	71	55	48	99	e48	47	e31
28	148	e96	e84	e108	e76	70	59	47	94	e47	e38	e30
29	147	e100	e82	e102	---	70	69	47	88	e46	e35	e29
30	141	112	e90	e96	---	69	74	48	85	e46	e32	e28
31	142	---	98	e90	---	69	---	46	---	e48	e30	---
TOTAL	5817	3727	3248	3015	2377	3853	1987	1876	8718	2302	1546	1084
MEAN	188	124	105	97.3	84.9	124	66.2	60.5	291	74.3	49.9	36.1
MAX	320	168	125	153	128	643	90	94	1910	160	141	95
MIN	141	80	82	70	56	69	55	46	85	46	30	27
AC-FT	11540	7390	6440	5980	4710	7640	3940	3720	17290	4570	3070	2150

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1994, BY WATER YEAR (WY)

	63.5	43.6	38.7	40.6	84.3	134	108	165	193	193	93.7	74.2
MEAN	63.5	43.6	38.7	40.6	84.3	134	108	165	193	193	93.7	74.2
MAX	579	148	136	177	301	1049	426	678	1603	2688	507	470
(WY)	1987	1974	1987	1974	1971	1979	1984	1987	1984	1993	1987	1989
MIN	.55	1.26	2.09	2.01	4.16	7.57	4.60	3.15	2.39	1.49	.70	2.21
(WY)	1957	1957	1957	1957	1957	1956	1956	1956	1956	1954	1955	1976

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1951 - 1994

ANNUAL TOTAL	164578	39550	
ANNUAL MEAN	451	108	
MEDIAN OF ANNUAL MEANS			103
HIGHEST ANNUAL MEAN			73.6
LOWEST ANNUAL MEAN			433
HIGHEST DAILY MEAN	34000	1910	34000
LOWEST DAILY MEAN	40	27	.10
ANNUAL SEVEN-DAY MINIMUM	52	28	.13
INSTANTANEOUS PEAK FLOW		4130	65100
INSTANTANEOUS PEAK STAGE		19.12	30.97
ANNUAL RUNOFF (AC-FT)	326400	78450	74480
10 PERCENT EXCEEDS	672	160	166
50 PERCENT EXCEEDS	160	84	37
90 PERCENT EXCEEDS	66	38	8.4

MISSOURI RIVER MAIN STEM

06807000 MISSOURI RIVER AT NEBRASKA CITY, NE

LOCATION.--Lat 40°40'55", long 95°50'48", in NW1/4 NE1/4 sec.9, T.8 N., R.14 E., Otoe County, Hydrologic Unit 10240001, on right bank 2.0 mi upstream from Highway 2 Bridge at Nebraska City, and at mile 562.6.

DRAINAGE AREA.--410,000 mi², approximately. The 3,959 mi² in Great Divide basin are not included.

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 encoder. Datum of gage is 905.36 ft above sea level, supplementary adjustment of 1954. See WSP 1918 or 1919 for history of changes prior to Apr. 1, 1963.

REMARKS.--Estimated daily discharges: Feb. 12-13. Records good. Flow regulated by upstream main-stem reservoirs. U.S. Army Corps of Engineers rain-gage and satellite data collection platform at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 414,000 ft³/s Apr. 19, 1952; maximum gage height, 27.66 ft Apr. 18, 1952; minimum discharge, 1,600 ft³/s Dec. 31, 1946 (discharge measurement); minimum gage height observed, -0.28 ft Dec. 24, 1960, result of freezeup.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40800	37300	28400	26300	28200	35000	41100	43400	43100	55800	40600	37800
2	40800	37300	29500	27900	27400	36800	40100	42800	50100	56500	40500	37500
3	40300	36900	31900	29900	27300	37300	39600	42800	45200	55200	42100	37800
4	39900	36700	34100	29700	27600	42400	38900	45200	43900	59100	41400	40000
5	39600	37300	34100	28900	27600	59300	39900	49500	44900	58600	42300	40600
6	39400	37300	34700	28400	27800	79600	40700	52400	51000	57700	41300	41900
7	38800	37400	34700	26600	27700	86600	40300	52200	48400	66300	39600	40900
8	38800	36500	33800	24200	27100	74500	41200	51100	45300	68400	41200	40700
9	39100	36800	33300	21800	26500	66800	43000	49900	45700	60300	42200	39900
10	40500	36800	32600	20400	25800	63600	43600	49200	46600	52700	41100	39100
11	41000	37300	33100	22500	25300	63100	43500	49200	48900	49100	39500	38000
12	40500	38300	33600	24600	e24800	59600	44100	50000	49900	48100	39500	37200
13	39700	39000	32500	26400	e25200	55300	44500	49700	50900	47600	39400	36800
14	38700	40000	33600	26600	26100	53500	45800	49800	50400	53600	40100	36900
15	39200	41300	33500	28100	25900	51300	47900	49000	50500	58800	41100	37500
16	39900	40300	32400	27700	26800	47800	47700	48900	50700	55300	40400	37100
17	40100	40600	32800	24800	28200	46900	48800	48300	50100	54900	39800	36900
18	39500	39600	34200	24300	30500	47000	48600	47100	52900	56100	39600	36900
19	40100	38800	34000	25100	39200	46700	46600	47000	58700	53600	39200	37000
20	40800	37800	34200	24600	65800	46500	45900	46700	55300	51700	38800	37000
21	39600	37600	33800	25400	57900	45800	44700	45700	53000	49600	38900	36900
22	38100	37500	33300	27400	53200	46000	43600	45400	56700	47800	38900	37400
23	37900	37300	32100	28000	49300	46200	42000	45200	68800	46000	38700	38800
24	38400	37400	30100	28600	45100	45400	42000	44500	71400	44400	38100	40300
25	38400	36300	27900	29800	41200	44500	41100	44100	67300	43400	37700	42200
26	38200	31600	27500	30600	37500	44000	41000	44300	64700	42700	38400	40500
27	38300	27700	27500	30400	34800	43500	40700	43900	64100	42000	38900	39400
28	38600	26100	27800	29700	33300	42400	40900	43500	64000	41500	38800	38600
29	38600	26200	27600	29300	---	42400	41600	44100	59600	40900	38100	38200
30	38600	27400	26900	28800	---	42300	42500	43700	57700	40900	37800	37500
31	36600	---	26200	28800	---	41000	---	43500	---	40400	37600	---
TOTAL	1218800	1088400	981700	835600	943100	1583100	1291900	1452100	1609800	1599000	1231600	1157300
MEAN	39320	36280	31670	26950	33680	51070	43060	46840	53660	51580	39730	38580
MAX	41000	41300	34700	30600	65800	86600	48800	52400	71400	68400	42300	42200
MIN	36600	26100	26200	20400	24800	35000	38900	42800	43100	40400	37600	36800
AC-FT	2417000	2159000	1947000	1657000	1871000	3140000	2562000	2880000	3193000	3172000	2443000	2296000

e Estimated

MISSOURI RIVER MAIN STEM

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06807000 MISSOURI RIVER AT NEBRASKA CITY, NE--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1994, BY WATER YEAR (WY)

MEAN	42040	38100	25000	21060	26120	38080	47840	46350	50290	45850	41950	42030
MAX	69440	68480	52410	39970	48630	66730	95660	85160	117500	116700	65540	66510
(WY)	1987	1976	1987	1987	1983	1983	1984	1984	1984	1993	1975	1975
MIN	22420	14380	10980	11610	14040	18770	29330	32980	33530	32760	31200	32560
(WY)	1962	1962	1964	1960	1963	1990	1990	1958	1958	1961	1991	1958

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1958 - 1994a	
ANNUAL TOTAL	18144100		14992400			
ANNUAL MEAN	49710		41080		38760	
HIGHEST ANNUAL MEAN					61700	
LOWEST ANNUAL MEAN					27810	
HIGHEST DAILY MEAN	188000	Jul 25	86600	Mar 7	188000	Jul 25 1993
LOWEST DAILY MEAN	14600	Jan 3	20400	Jan 10	5000	Dec 13 1963
ANNUAL SEVEN-DAY MINIMUM	18100	Jan 1	23800	Jan 7	5930	Dec 12 1963
INSTANTANEOUS PEAK FLOW			90700	Mar 7	196000	Jul 23 1993
INSTANTANEOUS PEAK STAGE			17.72	Mar 7	27.19	Jul 23 1993
ANNUAL RUNOFF (AC-FT)	35990000		29740000		28080000	
10 PERCENT EXCEEDS	80900		53600		58600	
50 PERCENT EXCEEDS	42000		40100		37300	
90 PERCENT EXCEEDS	21800		27700		18000	

a Post-regulation period

LITTLE NEMAHA RIVER BASIN

06811500 LITTLE NEMAHA RIVER AT AUBURN, NE

LOCATION.--Lat 40°23'33", long 95°48'46", in NE1/4 NW1/4 sec.23, T.5 N., R.14 E., Nemaha County, Hydrologic Unit 10240006, on left bank at downstream side of bridge on U.S. Highway 136, 1 mi downstream from Longs Creek and Willow Creek, 1 mi east of Auburn, and at mile 10.4.

DRAINAGE AREA (REVISED).--792 mi².

PERIOD OF RECORD.--August 1949 to current year.

REVISED RECORDS.--WSP 2119: 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.

REMARKS.--Records good except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	281	265	295	e150	e140	e150	133	159	172	125	130	69
2	245	272	287	e160	e150	e200	132	158	1240	147	552	65
3	219	274	274	e160	e160	343	130	140	1020	186	214	62
4	207	276	258	e160	e160	1810	128	126	398	163	699	586
5	196	276	251	e170	e150	1430	125	119	3070	325	336	1050
6	186	255	240	e170	e150	744	124	366	3500	185	176	258
7	177	249	232	e170	e130	494	120	497	931	606	151	183
8	471	253	224	e180	e110	362	115	301	544	279	149	138
9	13200	256	218	e180	e110	288	111	226	395	186	141	114
10	2540	259	219	e190	e120	251	118	191	329	136	120	101
11	1080	260	216	e190	e120	231	120	171	311	115	115	90
12	693	302	212	e190	e130	235	171	152	535	103	127	84
13	537	402	241	e180	e130	230	228	139	413	107	103	78
14	445	375	296	e140	e140	212	194	166	267	108	94	72
15	1390	324	287	e130	e150	211	158	722	214	102	85	69
16	859	306	274	e140	e160	206	138	409	189	2140	79	66
17	527	298	280	e120	e180	198	121	248	177	1640	73	64
18	477	287	309	e120	e280	194	108	202	175	464	69	61
19	575	280	305	e130	e300	190	101	177	164	279	68	62
20	521	269	268	e130	e150	185	101	159	307	227	73	61
21	453	257	e200	e150	e120	181	105	146	200	192	77	59
22	406	254	e170	e180	e110	170	106	139	358	168	67	73
23	365	253	e150	e220	e100	160	104	135	1230	149	64	103
24	338	244	e140	e240	e100	153	102	131	991	140	62	105
25	324	e120	e150	e230	e100	146	102	126	358	131	63	111
26	310	e150	e160	e200	e110	144	97	125	234	142	151	96
27	284	e190	e160	e190	e110	146	91	120	191	134	167	86
28	283	e200	e140	e170	e120	144	107	116	166	119	103	75
29	276	e220	e140	e140	---	144	139	168	148	107	81	71
30	265	e230	e150	e130	---	140	144	119	134	105	73	64
31	261	---	e150	e130	---	137	---	108	---	100	70	---
TOTAL	28391	7856	6896	5140	3990	9829	3773	6261	18361	9110	4532	4176
MEAN	916	262	222	166	142	317	126	202	612	294	146	139
MAX	13200	402	309	240	300	1810	228	722	3500	2140	699	1050
MIN	177	120	140	120	100	137	91	108	134	100	62	59
AC-FT	56310	15580	13680	10200	7910	19500	7480	12420	36420	18070	8990	8280

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1994, BY WATER YEAR (WY)

MEAN	235	124	112	118	233	466	355	464	515	624	238	262
MAX	2003	447	509	562	747	2870	1589	2029	3524	9419	1256	1546
(WY)	1974	1962	1987	1974	1993	1979	1984	1950	1951	1993	1982	1977
MIN	25.4	25.7	23.4	19.7	28.4	49.1	30.6	29.9	14.8	16.2	14.0	26.6
(WY)	1992	1956	1957	1957	1956	1957	1956	1956	1977	1977	1955	1991

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1950 - 1994

ANNUAL TOTAL	531202	108315	
ANNUAL MEAN	1455	297	313
MEDIAN OF ANNUAL MEANS			208
HIGHEST ANNUAL MEAN			1389
LOWEST ANNUAL MEAN			64.4
HIGHEST DAILY MEAN	70400	13200	70400
LOWEST DAILY MEAN	96	59	.87
ANNUAL SEVEN-DAY MINIMUM	108	63	1.1
INSTANTANEOUS PEAK FLOW		19800	164000
INSTANTANEOUS PEAK STAGE		22.26	*27.65
ANNUAL RUNOFF (AC-FT)	1054000	214800	226600
10 PERCENT EXCEEDS	2600	448	452
50 PERCENT EXCEEDS	317	168	98
90 PERCENT EXCEEDS	140	97	33

e Estimated.

* From floodmark.

MISSOURI RIVER MAIN STEM

193

06813500 MISSOURI RIVER AT RULO, NE

LOCATION.--Lat 40°03'13", long 95°25'19", in NW1/4 NW1/4 sec.17, T.1 N., R.18 E., Richardson County, Hydrologic Unit 10240005, on right bank at downstream side of bridge on U.S. Highway 159 at Rulo, 3.2 mi upstream from Big Nemaha River, and at mile 498.0.

DRAINAGE AREA.--414,900 mi², approximately. The 3,959 mi² in Great Divide basin are not included.

PERIOD OF RECORD.--October 1949 to current year in reports of U.S. Geological Survey. Gage-height record collected at site 80 ft upstream January 1886 to December 1899 published in reports of Missouri River Commission; September 1929 to September 1950 in files of Kansas City office of U.S. Army Corps of Engineers.

GAGE.--Water-stage encoder. Datum of gage is 837.23 ft above sea level. 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.--Estimated daily discharges: Aug. 26-28 and Sept. 12-16, 18-21. Records good except those for estimated daily discharges, which are poor. Flow regulated by upstream main-stem reservoirs. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water quality data. U.S. Army Corps of Engineers satellite data collection platform at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 358,000 ft³/s Apr. 22, 1952, gage height, 25.60 ft; minimum daily discharge, 4,420 ft³/s Jan. 13, 1957; minimum gage height, -0.19 ft Dec. 25, 1990, result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1881 reached a stage of 22.9 ft, from floodmark, discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47100	43900	32300	31200	30800	38000	45800	47000	46200	61500	42700	40200
2	46000	43900	33700	32100	29900	40500	45500	47200	57500	61100	42900	40400
3	45500	43600	35700	33800	30000	42300	44900	46500	58700	62600	43800	39800
4	45300	43200	38600	34700	30300	47200	44800	46700	49200	62900	44400	41000
5	44900	43100	41000	33200	30500	65600	44500	50600	50600	68600	44800	45300
6	44700	43400	41000	32100	30700	79700	44900	56000	60900	64500	45000	44700
7	44800	43700	40600	28600	30500	90400	45100	58200	56300	66300	43700	44500
8	44700	43500	39900	28000	30200	81500	44800	56600	50600	78200	43200	43500
9	54100	43000	39000	27200	29300	75200	46000	55200	49300	72000	45300	42900
10	51400	42600	38000	24900	29000	70700	46700	53600	49700	64500	45900	41800
11	49800	42600	37900	24200	28500	70000	46300	52300	50700	59500	43300	40700
12	48600	43300	38400	26400	28400	67600	46500	52600	58800	57800	42300	e39500
13	47900	44200	38000	29000	29000	62800	47900	53100	57400	56000	42400	e38600
14	46400	44500	37900	30500	29800	59900	48300	52300	59400	58100	42200	e37900
15	46500	45300	38500	30800	29800	57900	49100	52400	56000	69000	43100	e38500
16	48900	45600	37700	30200	29900	54600	50600	51100	55500	66700	43400	e38700
17	48400	45400	37300	27300	32000	50700	49900	50000	54500	65400	42400	38100
18	47500	45300	37800	24800	35900	50500	51100	48900	55000	62200	41900	e37900
19	47500	44500	38600	26200	42600	50800	49200	48400	61300	60000	41600	e37900
20	48100	43800	38400	27100	70300	50000	48000	48600	63700	56900	41100	e38400
21	48000	43400	38400	25800	75600	49000	47800	48000	58000	55300	41100	e38600
22	46000	43300	37600	28300	70000	48800	47600	47700	58000	52500	41300	38600
23	45200	43100	36900	30500	64000	49100	46000	47600	71300	50400	41600	40000
24	45100	42400	34900	30600	57100	48400	45500	47400	88500	48100	41400	41700
25	45300	41600	33300	31100	50200	47900	45200	47300	77100	46400	40900	44100
26	44900	38900	32200	32500	43900	47300	44200	46700	72300	45300	e41700	44400
27	44500	34600	32500	33100	40300	46800	43800	46800	69700	44200	e41800	42100
28	45100	31900	31800	32600	37600	47400	44100	46600	69900	43900	e42200	41200
29	45000	30800	32200	32100	---	46900	44700	46600	66600	43300	42000	41100
30	45500	31200	31800	31600	---	46900	45200	47300	62700	43000	41300	40600
31	44100	---	31600	31300	---	46000	---	46500	---	43100	40700	---
TOTAL	1446800	1259600	1133500	921800	1096100	1730400	1394000	1545800	1795400	1789300	1321400	1222700
MEAN	46670	41990	36560	29740	39150	55820	46470	49860	59850	57720	42630	40760
MAX	54100	45600	41000	34700	75600	90400	51100	58200	88500	78200	45900	45300
MIN	44100	30800	31600	24200	28400	38000	43800	46500	46200	43000	40700	37900

e Estimated

MISSOURI RIVER MAIN STEM

06813500 MISSOURI RIVER AT RULO, NE--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1994, BY WATER YEAR (WY)

MEAN	43970	39930	26510	22280	28060	41750	51460	50330	54420	50470	44100	44790
MAX	77770	69430	55240	42280	52560	79590	102900	94370	130600	164800	67800	69780
(WY)	1987	1976	1987	1973	1983	1979	1984	1984	1984	1993	1975	1975
MIN	25580	17000	11330	12430	14530	19380	31960	34040	34830	33860	32790	34140
(WY)	1962	1962	1964	1964	1964	1964	1990	1958	1958	1963	1991	1991

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1958 - 1994a	
ANNUAL TOTAL	22626100		16656800			
ANNUAL MEAN	61990		45640		41540	
HIGHEST ANNUAL MEAN					65930	
LOWEST ANNUAL MEAN					29670	
HIGHEST DAILY MEAN	289000	Jul 24	90400	Mar 7	289000	Jul241993
LOWEST DAILY MEAN	17600	Jan 4	24200	Jan 11	5200	Jan271961
ANNUAL SEVEN-DAY MINIMUM	19700	Jan 1	26900	Jan 7	5860	Dec141963
INSTANTANEOUS PEAK FLOW			92500	Mar	7	307000Jul241993
INSTANTANEOUS PEAK STAGE			16.77	Mar	7	25.37Jul241993
ANNUAL RUNOFF (AC-FT)	44880000		33040000		30090000	
10 PERCENT EXCEEDS	108000		61200		63100	
50 PERCENT EXCEEDS	52000		44700		38900	
90 PERCENT EXCEEDS	26000		31200		19100	

a Post-regulation period

MISSOURI RIVER BASIN

195

BIG NEMAHA RIVER BASIN

06814000 TURKEY CREEK NEAR SENECA, KS

LOCATION.--Lat 39°56'52", long 96°06'30", in SW1/4 NW1/4 SW1/4 sec.20, T.1 S., R.12 E., Nemaha County, Hydrologic Unit 10240007, on left bank at downstream side of county highway bridge, 2.0 mi downstream from Clear Creek, 5.0 mi upstream from Big Nemaha River, and 8.0 mi northwest of Seneca.

DRAINAGE AREA.--276 mi²

PERIOD OF RECORD.--October 1948 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 1,037.53 ft above sea level. Prior to Oct. 19, 1956, water-stage recorder (occasional operation only) and nonrecording gage on former channel 400 ft south of present site at present datum. Oct. 19, 1956, to June 15, 1957, nonrecording gage at highway bridge 1.2 mi upstream at different datum. June 16, 1957, to Mar. 27, 1958, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemeter at station.

PEAK DISCHARGES GREATER THAN BASE FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,100 ft³/sec and maximum (*):

Date	Time	Discharge (ft ³ /sec)	Gage height (ft)	Date	Time	Discharge (ft ³ /sec)	Gage height (ft)
Mar. 4	0315	*2,060	*13.47	No peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	57	e60	e66	e45	e40	32	85	39	42	8.6	5.6
2	91	58	e58	e62	e50	e50	30	78	73	609	13	5.0
3	83	57	60	e60	e54	346	29	73	56	104	11	4.7
4	79	58	55	e56	e58	1180	29	69	44	58	12	5.7
5	73	50	53	e60	e60	377	27	62	40	41	9.0	15
6	68	48	49	e55	e60	190	27	257	38	31	e7.9	9.2
7	65	49	48	e50	e55	135	27	354	34	28	e7.1	4.8
8	77	51	46	e54	e45	102	28	138	85	30	e6.6	4.1
9	121	50	48	e58	e40	84	28	110	74	30	e6.0	4.0
10	104	49	48	e62	e42	76	46	90	46	24	e5.6	3.7
11	81	51	45	e62	e48	70	85	78	39	21	e5.3	3.6
12	76	81	47	e62	e50	67	224	70	146	19	e5.0	3.4
13	71	148	114	e60	e52	62	158	64	65	18	4.4	3.4
14	68	89	265	e55	e55	59	87	321	54	19	4.8	3.0
15	106	81	113	e50	e60	58	66	665	36	18	4.1	3.0
16	115	75	106	e46	e65	51	52	192	30	21	4.0	3.0
17	102	71	201	e44	e72	49	46	126	28	26	4.0	2.6
18	109	66	239	e42	e74	48	44	102	26	19	3.8	2.8
19	184	63	131	e42	e62	44	41	86	25	14	5.9	2.7
20	113	58	102	e43	e52	43	38	76	23	15	85	2.8
21	94	57	80	e46	e45	40	555	71	22	13	19	2.9
22	89	56	62	e50	e40	38	181	65	29	11	11	3.0
23	81	54	e56	e58	e35	36	102	60	37	e9.2	7.7	4.3
24	74	49	e52	e64	e32	32	85	56	73	e8.6	6.1	4.7
25	71	33	e60	e69	e32	30	75	50	32	e8.0	5.9	4.3
26	66	e50	e66	e75	e32	33	66	47	24	e7.5	46	3.9
27	61	e60	e62	e76	e34	34	55	44	21	e7.1	45	3.6
28	62	e60	e56	e70	e38	31	77	40	19	e6.8	13	3.5
29	59	e60	e52	e62	---	30	118	41	18	e6.6	6.9	3.3
30	54	e55	e50	e52	---	31	88	47	17	e6.6	6.2	3.2
31	54	---	e66	e46	---	31	---	39	---	e6.8	6.1	---
MEAN	85.6	61.5	82.3	56.7	49.5	113	84.9	118	43.1	41.2	12.5	4.29
MAX	184	148	265	76	74	1180	555	665	146	609	85	15
MIN	54	33	45	42	32	30	27	39	17	6.6	3.8	2.6
MED	79	57	60	58	50	49	53	73	36	19	6.6	3.6

e Estimated

MISSOURI RIVER BASIN

BIG NEMAHA RIVER BASIN

06814000 TURKEY CREEK NEAR SENECA, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 1994, BY WATER YEAR (WY)

MEAN	94.1	43.2	34.7	42.1	95.1	215	171	200	240	223	90.3	145
MAX	1050	251	206	310	372	1297	1079	881	2067	3193	914	1057
(WY)	1974	1962	1974	1962	1982	1979	1984	1993	1951	1993	1954	1958
MIN	.000	.000	.000	.000	.018	.065	.28	2.43	2.75	.92	1.48	.000
(WY)	1957	1957	1957	1957	1957	1957	1956	1989	1977	1989	1988	1956

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1949 - 1994

ANNUAL MEAN	532		62.9		131	
HIGHEST ANNUAL MEAN					547	1993
LOWEST ANNUAL MEAN					3.24	1956
HIGHEST DAILY MEAN	10600	Jul 5	1180	Mar 4	16700	Oct 11 1973
LOWEST DAILY MEAN	33	Nov 25	2.6	Sep 17	.00	Jul 28 1956
ANNUAL SEVEN-DAY MINIMUM	47	Dec 6	2.8	Sep 15	.00	Aug 21 1956
INSTANTANEOUS PEAK FLOW			2060	Mar 4	21400	Oct 11 1973
INSTANTANEOUS PEAK STAGE			13.47	Mar 4	24.77	Oct 11 1973
INSTANTANEOUS FLOW FLOW			2.3	Sep 19	.00	Jul 28 1956
10 PERCENT EXCEEDS	1150		103		210	
50 PERCENT EXCEEDS	105		50		23	
90 PERCENT EXCEEDS	54		5.7		1.9	

BIG NEMAHA RIVER BASIN

197

06814500 NORTH FORK BIG NEMAHA RIVER AT HUMBOLDT, NE

LOCATION.--Lat 40°09'25", long 95°56'40", in NW1/4NE1/4 sec.10, T.2 N., R.13 E., Richardson County, Hydrologist, Unit 10240008, on right bank near right downstream wingwall of bridge on State Highway 105 at south edge of Humboldt, 800 ft downstream from Long Branch Creek, and at mile 16.6.

DRAINAGE AREA.--548 mi².

PERIOD OF RECORD.--October 1952 to current year. Prior to October 1967 published as North Fork Nemaha River at Humboldt.

REVISED RECORDS.--WSP 2119: Drainage area.

GAGE.--Water-stage recorder; nonrecording gage read twice daily. Datum of gage is 944.44 ft above sea level. Prior to Apr. 5, 1968, nonrecording gage at present site and datum.

REMARKS.--Records good except for periods of estimated record, which are poor and period July 26 to Sept. 6, when gage did not work well, which is fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	158	125	e170	e92	e60	e114	78	88	86	59	43	41
2	140	125	e150	e88	e70	e104	78	83	363	693	43	36
3	130	122	127	e84	e80	e130	75	81	246	615	43	35
4	124	122	120	e88	e82	e200	74	75	124	318	43	461
5	115	121	119	e92	e88	e500	78	69	239	246	43	772
6	108	123	114	e80	e96	e250	74	663	172	213	43	258
7	105	118	110	e50	e92	e200	72	475	147	928	43	120
8	128	120	109	e45	e86	e170	72	236	114	373	43	79
9	302	120	108	e50	e70	e150	73	169	127	216	43	60
10	321	117	109	e54	e60	e140	89	134	116	126	45	48
11	193	119	104	e56	e56	e130	91	114	201	94	46	43
12	157	165	102	e58	e60	e125	129	97	1990	80	44	39
13	142	195	180	e60	e66	e120	121	88	514	192	43	37
14	137	160	225	e60	e70	e116	104	512	294	138	42	34
15	249	154	157	e58	e76	113	90	1180	152	100	41	34
16	275	140	167	e56	e80	108	79	454	110	434	39	33
17	210	133	222	e54	e88	106	71	236	93	1030	41	32
18	221	129	246	e51	e98	103	67	157	84	384	37	32
19	253	129	188	e52	e130	99	66	123	78	234	122	32
20	209	122	159	e52	e140	100	64	102	73	163	224	33
21	189	121	e130	e60	e130	93	73	89	71	124	101	33
22	173	120	e110	e72	e120	87	70	82	73	85	57	39
23	160	120	e82	e80	e110	84	65	75	233	72	45	52
24	149	e110	e94	e82	e100	84	63	70	295	62	41	44
25	144	e100	e100	e80	e90	81	63	70	157	54	36	42
26	136	e106	e96	e78	e100	83	62	71	99	43	212	41
27	130	e110	e90	e76	e106	85	62	65	79	44	348	32
28	130	e120	e88	e70	e120	82	75	62	69	44	141	28
29	129	e130	e92	e66	---	83	90	94	64	43	81	30
30	124	e150	e88	e54	---	80	86	75	60	43	58	32
31	124	---	e82	e56	---	77	---	65	---	43	46	---
TOTAL	5265	3846	4038	2054	2524	3997	2354	5954	6523	7293	2277	2632
MEAN	170	128	130	66.3	90.1	129	78.5	192	217	235	73.5	87.7
MAX	321	195	246	92	140	500	129	1180	1990	1030	348	772
MIN	105	100	82	45	56	77	62	62	60	43	36	28
AC-FT	10440	7630	8010	4070	5010	7930	4670	11810	12940	14470	4520	5220

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 1994, BY WATER YEAR (WY)

MEAN	167	81.3	72.4	81.6	166	360	242	269	291	407	166	224
MAX	1604	375	300	422	781	1710	1229	1087	1412	6506	1436	1455
(WY)	1974	1962	1974	1974	1969	1979	1984	1982	1954	1993	1954	1973
MIN	12.8	18.4	17.9	13.8	28.4	27.1	26.1	23.5	5.62	3.61	11.0	10.7
(WY)	1957	1957	1957	1991	1957	1956	1956	1966	1977	1977	1991	1956

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1953 - 1994

ANNUAL TOTAL	317305	48757	211
ANNUAL MEAN	869	134	152
MEDIAN OF ANNUAL MEANS			872
HIGHEST ANNUAL MEAN			36.5
LOWEST ANNUAL MEAN			1993
HIGHEST DAILY MEAN	30000	1990	30000
LOWEST DAILY MEAN	54	28	.07
ANNUAL SEVEN-DAY MINIMUM	57	33	.30
INSTANTANEOUS PEAK FLOW (STAGE)		4890	59500 (*31.25)
INSTANTANEOUS PEAK STAGE		8.09	31.70
ANNUAL RUNOFF (AC-FT)	629400	96710	152800
10 PERCENT EXCEEDS	1350	233	272
50 PERCENT EXCEEDS	151	94	52
90 PERCENT EXCEEDS	82	43	19

e Estimated.

* From floodmark.

BIG NEMAHA RIVER BASIN

06815000 BIG NEMAHA RIVER AT FALLS CITY, NE

LOCATION.--Lat 40°02'08", long 95°35'45", in NE1/4 SE1/4 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 mi².

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 861.24 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 same datum.

REMARKS.--Records good except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	570	350	410	e350	e130	e320	243	439	174	103	79	83
2	516	351	387	e320	e180	e310	240	428	234	470	89	73
3	476	355	377	e320	e190	490	231	394	615	1520	107	68
4	452	364	349	e230	e180	3050	229	387	312	626	103	129
5	437	342	335	e250	e190	2190	224	365	318	406	89	1220
6	419	316	313	e270	e230	1220	224	694	413	338	90	424
7	411	318	294	e170	e240	826	224	1290	262	773	86	247
8	434	334	287	e180	e150	615	233	927	230	535	86	164
9	554	339	281	e200	e100	488	230	629	334	339	80	129
10	755	330	274	e210	e110	415	278	524	327	237	76	113
11	641	330	257	e240	e130	382	312	450	231	160	75	100
12	549	379	244	e210	e150	362	421	400	1600	127	73	91
13	513	539	344	e220	e140	348	599	364	782	165	69	83
14	495	532	624	e190	e160	331	519	380	538	177	68	77
15	534	441	620	e170	e220	325	404	2240	302	155	67	72
16	772	410	478	e180	e210	318	337	1480	211	156	64	70
17	709	388	493	e160	e260	308	306	763	161	1070	67	66
18	648	375	652	e140	e340	299	294	479	138	549	64	64
19	714	360	673	e170	e450	292	282	367	122	346	113	63
20	707	349	466	e240	e540	288	272	305	110	234	289	62
21	587	335	372	e220	e400	278	351	263	99	417	225	61
22	557	331	275	e250	e300	262	1360	227	104	253	153	62
23	540	331	e200	e300	e230	248	574	202	151	136	96	73
24	503	318	e240	e380	e190	233	432	185	371	106	75	79
25	476	284	e290	e450	e200	224	371	171	358	92	67	81
26	454	e250	e340	e470	e220	224	339	168	239	87	182	80
27	429	e260	e300	e400	e260	233	314	161	159	90	653	71
28	417	e350	e260	e300	e290	237	323	148	131	104	353	66
29	403	e480	e270	e230	---	234	398	180	114	82	199	65
30	381	e450	e250	e160	---	235	481	196	108	78	126	62
31	355	---	e280	e120	---	235	---	170	---	78	97	---
TOTAL	16408	10891	11235	7700	6390	15820	11045	15376	9248	10009	4060	4098
MEAN	529	363	362	248	228	510	368	496	308	323	131	137
MAX	772	539	673	470	540	3050	1360	2240	1600	1520	653	1220
MIN	355	250	200	120	100	224	224	148	99	78	64	61
AC-FT	32550	21600	22280	15270	12670	31380	21910	30500	18340	19850	8050	8130

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1994, BY WATER YEAR (WY)

MEAN	452	239	186	236	450	924	780	925	1149	1046	503	688
MAX	5229	1249	1036	1446	2998	5819	4462	4225	7816	15690	3898	3408
(WY)	1974	1962	1974	1974	1949	1979	1984	1993	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

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1944 - 1994
ANNUAL TOTAL	918261	122280	
ANNUAL MEAN	2516	335	628
MEDIAN OF ANNUAL MEANS			454
HIGHEST ANNUAL MEAN			2559
LOWEST ANNUAL MEAN			86.7
HIGHEST DAILY MEAN	44000 Jul 6	3050 Mar 4	57600 Oct 11 1973
LOWEST DAILY MEAN	200 Dec 23	61 Sep 21	3.0 Jul 9 1977
ANNUAL SEVEN-DAY MINIMUM	231 Jan 14	64 Sep 16	4.0 Jul 4 1977
INSTANTANEOUS PEAK FLOW		3620 Mar 4	71600 Oct 11 1973
INSTANTANEOUS PEAK STAGE		7.31 Mar 4	31.40 Oct 11 1973
ANNUAL RUNOFF (AC-FT)	1821000	242500	455200
10 PERCENT EXCEEDS	4690	572	1060
50 PERCENT EXCEEDS	601	281	160
90 PERCENT EXCEEDS	260	83	43

KANSAS RIVER BASIN

199

06821500 ARIKAREE RIVER AT HAIGLER, NE

LOCATION.--Lat 40°01'45", long 101°58'10", in NE1/4 NE1/4 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 (REVISED).--1,700 mi², of which about 1,020 mi² 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. WSP 2119: 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.

REMARKS.--Record fair except for periods of estimated record, 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	5.8	1.4	10	18	23	11	33	1.8	4.0	14	4.0
2	4.7	2.2	1.8	11	18	22	11	27	1.2	3.6	12	4.5
3	4.7	1.7	3.4	12	19	21	11	21	2.1	4.8	12	14
4	4.8	1.6	3.4	12	19	19	11	18	2.2	9.9	11	12
5	5.8	1.4	3.5	13	22	18	11	16	2.9	11	8.1	6.9
6	6.6	1.6	3.0	13	24	15	11	12	2.2	15	7.1	7.2
7	6.6	1.4	2.5	12	24	15	12	12	1.8	16	6.5	10
8	7.6	1.4	2.7	13	e24	17	11	10	9.0	18	6.0	8.2
9	9.8	1.3	4.7	13	e23	19	15	8.7	9.8	21	6.1	7.3
10	9.6	1.3	5.0	13	22	18	40	12	14	24	5.6	7.4
11	4.5	1.4	4.9	12	21	16	42	10	14	31	6.3	9.2
12	3.6	2.2	6.3	12	20	14	40	8.0	13	39	8.7	9.0
13	4.0	1.6	5.4	13	e22	14	34	7.3	14	36	7.9	8.2
14	3.5	1.6	3.3	14	e24	14	26	8.8	6.9	38	2.5	9.5
15	4.2	1.6	2.4	12	e30	13	22	9.1	3.1	25	1.9	9.8
16	3.8	1.7	2.3	13	e41	13	19	6.6	2.4	19	.33	11
17	4.7	1.7	3.2	13	e40	13	18	4.4	2.7	15	.06	11
18	7.0	1.8	6.0	17	e34	12	16	3.7	3.7	15	.00	12
19	7.0	1.9	6.4	12	e28	12	14	2.8	2.8	17	.00	13
20	7.0	1.8	6.1	15	e24	12	14	2.7	3.1	16	4.9	13
21	6.8	1.8	7.2	17	21	12	14	2.4	4.4	18	4.0	13
22	6.2	1.8	7.3	18	18	12	13	2.9	42	15	.61	13
23	7.0	1.8	8.4	17	17	12	14	5.5	32	10	.65	14
24	7.5	2.6	9.0	15	e17	11	18	6.7	11	14	1.0	16
25	7.1	4.0	10	15	e17	11	24	8.0	9.4	16	.87	15
26	7.0	5.2	10	21	17	12	29	6.5	6.5	18	1.3	12
27	7.8	4.7	7.8	27	22	11	24	5.7	8.0	19	.01	7.3
28	8.0	3.4	9.2	26	26	10	27	4.8	5.7	19	.00	7.7
29	8.6	1.3	9.4	18	---	12	29	3.2	4.1	19	.00	5.9
30	8.1	1.4	9.7	e18	---	11	31	2.2	4.7	18	.00	6.4
31	7.2	---	10	e18	---	12	---	2.0	---	16	.56	---
TOTAL	196.4	65.0	175.7	465	652	446	612	283.0	240.5	560.3	129.99	297.5
MEAN	6.34	2.17	5.67	15.0	23.3	14.4	20.4	9.13	8.02	18.1	4.19	9.92
MAX	9.8	5.8	10	27	41	23	42	33	42	39	14	16
MIN	3.5	1.3	1.4	10	17	10	11	2.0	1.2	3.6	.00	4.0
AC-FT	390	129	349	922	1290	885	1210	561	477	1110	258	590

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 1994, BY WATER YEAR (WY)

	MEAN	10.2	8.64	7.01	8.26	16.9	30.0	24.5	43.3	42.2	20.9	19.3	16.2
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	1.41	.61	.35	.47	1.07	2.49	2.72	3.61	3.34	.068	.000	.58	
(WY)	1984	1983	1969	1979	1977	1979	1978	1986	1956	1978	1952	1953	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1932 - 1994

ANNUAL TOTAL	3803.9	4123.39	
ANNUAL MEAN	10.4	11.3	20.6
MEDIAN OF ANNUAL MEANS			17
HIGHEST ANNUAL MEAN			127
LOWEST ANNUAL MEAN			3.69
HIGHEST DAILY MEAN	66	Jul 25	42
LOWEST DAILY MEAN	1.3	Jul 5	.00
ANNUAL SEVEN-DAY MINIMUM	1.4	Nov 5	.39
INSTANTANEOUS PEAK FLOW			147
INSTANTANEOUS PEAK STAGE			6.87
ANNUAL RUNOFF (AC-FT)	7550	8180	14920
10 PERCENT EXCEEDS	21	22	32
50 PERCENT EXCEEDS	8.0	10	9.5
90 PERCENT EXCEEDS	2.6	1.8	.84

e Estimated.

* 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 SE1/4 NW1/4 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 (REVISED).--2,370 mi², of which about 174 mi² 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. WSP 2119: 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.

REMARKS.--Records fair except for estimated periods of record, which are poor. 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	52	54	51	52	52	49	39	25	7.9	11	10
2	38	53	53	50	43	51	48	42	23	8.9	9.9	11
3	35	54	53	50	44	51	45	53	21	8.3	10	12
4	33	54	55	50	47	52	47	52	21	7.4	10	15
5	28	53	53	50	46	50	50	51	15	7.9	12	15
6	25	54	52	51	49	49	48	46	11	7.8	12	15
7	25	54	53	50	51	49	46	40	14	7.7	11	15
8	29	54	53	50	51	56	44	39	19	9.4	11	16
9	36	54	53	50	51	56	42	32	20	9.0	11	16
10	43	54	53	49	e51	56	62	22	22	8.0	9.4	14
11	37	54	52	49	e51	56	68	19	21	7.8	9.2	12
12	34	58	53	49	e52	56	65	17	14	53	10	11
13	34	58	51	50	53	55	63	18	12	34	11	11
14	35	57	51	50	54	55	63	39	19	53	11	11
15	41	57	54	50	56	55	59	28	15	45	10	11
16	39	57	54	49	56	55	58	23	15	40	11	11
17	39	57	53	49	56	54	56	17	13	34	9.3	14
18	48	57	e52	e49	57	55	58	17	12	32	8.0	14
19	54	57	e52	e49	58	52	55	16	10	22	9.0	14
20	51	57	e52	49	58	52	53	16	9.5	20	9.9	15
21	48	57	e52	49	58	50	52	15	12	17	8.7	16
22	47	57	e52	50	57	49	51	12	12	17	8.5	17
23	44	57	e52	49	55	49	52	11	9.9	12	10	18
24	43	57	52	50	55	48	27	10	16	13	9.1	21
25	43	44	53	50	55	50	32	10	19	13	9.2	23
26	42	e52	53	50	53	50	47	9.7	19	13	8.5	24
27	42	e54	52	49	50	48	48	9.5	11	13	7.3	20
28	43	56	51	e50	53	44	41	20	10	11	7.5	19
29	44	58	51	51	---	43	40	22	11	12	7.8	18
30	43	54	51	52	---	43	39	22	8.0	10	9.3	14
31	43	---	51	51	---	45	---	23	---	11	9.2	---
TOTAL	1226	1651	1626	1545	1472	1586	1508	790.2	459.4	565.1	300.8	453
MEAN	39.5	55.0	52.5	49.8	52.6	51.2	50.3	25.5	15.3	18.2	9.70	15.1
MAX	54	58	55	52	58	56	68	53	25	53	12	24
MIN	25	44	51	49	43	43	27	9.5	8.0	7.4	7.3	10
AC-FT	2430	3270	3230	3060	2920	3150	2990	1570	911	1120	597	899

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 1994, BY WATER YEAR (WY)

	MEAN	37.0	57.4	61.6	61.2	63.1	65.8	58.7	42.9	35.6	19.1	19.0	27.1
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	40.5	39.4	45.0	50.7	23.5	11.0	12.2	5.36	4.12	5.78	
(WY)	1979	1989	1993	1979	1993	1980	1972	1992	1952	1978	1940	1978	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1935 - 1994

ANNUAL TOTAL	14773.3	13182.5	
ANNUAL MEAN	40.5	36.1	45.5
HIGHEST ANNUAL MEAN			65.3
LOWEST ANNUAL MEAN			30.0
HIGHEST DAILY MEAN	62	Apr 4	761
LOWEST DAILY MEAN	4.7	Aug 6	1.7
ANNUAL SEVEN-DAY MINIMUM	7.3	Aug 1	2.3
INSTANTANEOUS PEAK FLOW (STAGE)			105 (1.36) Jul 12
INSTANTANEOUS PEAK STAGE			*1.39 Dec 20
ANNUAL RUNOFF (AC-FT)	29300	26150	32960
10 PERCENT EXCEEDS	56	56	73
50 PERCENT EXCEEDS	43	44	51
90 PERCENT EXCEEDS	17	10	9.0

e Estimated.

* Backwater from ice.

06823500 BUFFALO CREEK NEAR HAIGLER, NE

LOCATION.--Lat 40°02'22", long 101°51'57", in SE1/4 NW1/4 sec.20, T.1 N., R.40 W., Dundy County, Hydrologic Unit 10250002, on left bank 15 ft upstream from county highway bridge, 0.4 mi upstream from mouth, and 4 mi northeast of Haigler.

DRAINAGE AREA (REVISED).--172 mi², of which about 8.6 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1940 to current year.

REVISED RECORDS.--WSP 2119: 1948-50(M), 1957(M), drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,188.90 ft above sea level. Prior to Sept. 19, 1980, at site 0.5 mi upstream at datum 15.67 ft higher.

REMARKS.--Records fair except for periods of estimated record, which are poor. Natural low affected by diversion about 1 mi upstream for irrigation of 880 acres.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	6.0	e7.8	7.5	e7.0	7.7	6.7	7.6	.00	.00	.00	.00
2	4.6	5.9	7.7	7.7	e6.8	7.6	6.6	7.5	.00	.00	.00	.01
3	5.0	5.6	7.4	7.5	e6.4	7.7	6.7	7.4	.00	.00	.00	.01
4	3.8	5.6	7.3	7.5	e6.0	7.7	6.7	6.8	.00	.00	.00	.01
5	.15	5.6	7.2	7.1	e5.8	7.6	6.6	6.8	.00	.00	.00	.31
6	.15	5.6	7.1	6.8	e5.6	7.1	7.0	6.8	.00	.00	.00	2.9
7	.14	6.0	8.4	e6.7	e5.2	7.3	7.1	6.8	.00	.01	.00	4.7
8	.16	5.9	7.8	e6.8	e5.1	8.0	6.8	6.7	.00	.01	.01	4.5
9	.16	5.8	7.7	e6.9	e5.0	8.2	7.1	6.5	.00	.00	.01	4.4
10	1.0	5.8	7.5	e7.0	e5.2	7.8	9.5	6.5	.00	.00	.00	4.3
11	2.0	5.9	7.1	7.3	e7.0	7.5	9.8	6.5	.00	.07	.00	4.3
12	2.2	8.2	7.0	7.5	e8.0	7.1	9.8	6.4	.00	.68	.00	4.3
13	4.8	8.6	7.0	7.2	e9.0	6.9	9.1	6.4	.00	.08	.00	4.3
14	6.8	7.5	6.8	7.1	e10	6.9	7.9	6.9	.00	.87	.00	3.8
15	6.7	6.7	7.1	7.1	e10	6.9	7.5	6.9	.00	5.6	.00	4.1
16	6.7	6.9	7.2	e7.0	e10	6.9	7.7	6.3	.00	4.2	.00	2.7
17	7.3	7.7	6.9	e6.9	e10	6.8	7.3	6.1	.00	2.2	.00	1.8
18	7.9	7.6	e6.8	e6.9	10	6.6	6.9	6.0	.00	1.5	.00	1.8
19	7.8	8.1	e6.8	e6.8	9.5	6.7	6.6	6.2	.00	.02	.00	1.7
20	7.1	7.8	e6.9	e6.8	8.6	6.6	6.7	5.8	.00	.01	.00	1.7
21	6.5	7.2	e7.0	e6.8	8.1	6.6	7.0	5.7	.00	.00	.00	3.1
22	5.8	7.0	e7.2	e6.9	8.4	6.6	7.1	5.8	.00	.00	.00	4.7
23	5.6	6.9	7.4	e6.9	9.6	6.6	7.1	5.6	.00	.00	.00	4.9
24	5.5	5.3	e7.5	e7.0	10	6.3	7.0	5.7	.00	.00	.00	4.9
25	5.5	3.9	e7.5	7.1	e10	6.3	6.8	5.9	.00	.00	.00	4.7
26	5.5	e6.0	e7.6	e7.2	e10	6.4	7.8	1.4	.00	.00	.00	4.6
27	5.5	e7.0	e7.6	e7.2	e9.8	6.4	7.4	.00	.00	.00	.00	4.6
28	5.5	e7.9	e7.6	e7.2	8.1	6.3	7.4	.00	.00	.00	.00	4.0
29	5.7	e7.9	e7.5	e7.2	---	6.0	7.4	.00	.00	.00	.01	4.4
30	5.8	e7.9	e7.5	e7.2	---	6.5	7.5	.00	.00	.00	.00	4.5
31	6.0	---	7.4	e7.1	---	6.7	---	.00	---	.00	.00	---
TOTAL	142.06	199.8	227.3	219.9	224.2	216.3	222.6	163.00	0.00	15.25	0.03	96.04
MEAN	4.58	6.66	7.33	7.09	8.01	6.98	7.42	5.26	.000	.49	.001	3.20
MAX	7.9	8.6	8.4	7.7	10	8.2	9.8	7.6	.00	5.6	.01	4.9
MIN	.14	3.9	6.8	6.7	5.0	6.0	6.6	.00	.00	.00	.00	.00
AC-FT	282	396	451	436	445	429	442	323	.00	30	.06	190

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1994, BY WATER YEAR (WY)

	MEAN	7.03	8.31	8.49	8.72	9.38	9.68	9.41	7.99	5.93	2.92	2.54	4.42
MAX	12.6	12.1	13.7	12.7	12.9	14.3	14.2	12.5	13.2	11.0	19.7	15.2	
(WY)	1943	1947	1946	1942	1960	1952	1944	1944	1962	1948	1950	1951	
MIN	2.84	5.28	4.93	5.39	5.50	6.35	3.92	2.11	.000	.000	.001	.92	
(WY)	1965	1984	1984	1963	1993	1989	1989	1965	1994	1978	1976	1974	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1941 - 1994

ANNUAL TOTAL	1787.42	1726.48	
ANNUAL MEAN	4.90	4.73	7.05
HIGHEST ANNUAL MEAN			10.9
LOWEST ANNUAL MEAN			4.51
HIGHEST DAILY MEAN	15 Aug 8	10 Feb 14	90 Aug 11 1950
LOWEST DAILY MEAN	.00 Jun 30	.00 May 27	.00 Aug 3 1955
ANNUAL SEVEN-DAY MINIMUM	.00 Jul 11	.00 May 27	.00 Aug 14 1973
INSTANTANEOUS PEAK FLOW (STAGE)		*12 (2.90) Feb 18	140 Jun 27 1948
INSTANTANEOUS PEAK STAGE		**4.01 Jan 29	**5.93 Jan 3 1976
ANNUAL RUNOFF (AC-FT)	3550	3420	5110
10 PERCENT EXCEEDS	7.8	7.8	11
50 PERCENT EXCEEDS	6.0	6.3	7.8
90 PERCENT EXCEEDS	.10	.00	.31

e Estimated.

* No ice.

** Backwater from ice.

KANSAS RIVER BASIN

06824000 ROCK CREEK AT PARKS, NE

LOCATION.--Lat 40°02'30", long 101°43'40", in SW1/4 NE1/4 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 0.6 mi upstream from mouth.

DRAINAGE AREA (REVISED).--23.6 mi², of which about 20 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1940 to current year.

REVISED RECORDS.--WSP 1630: 1951(M). WSP 2119: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,093.35 ft above sea level.

REMARKS.--Records good except for periods of estimated record, 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.8	9.8	11	11	e11	12	10	9.9	6.3	7.8	9.4	7.9
2	9.2	9.0	11	11	e11	12	10	9.6	7.4	8.1	9.2	7.8
3	9.4	9.4	11	11	e11	12	9.9	9.7	8.4	8.1	11	7.8
4	9.7	9.3	11	11	11	12	9.9	9.6	8.2	8.1	10	7.7
5	12	9.2	11	11	11	11	9.3	9.2	7.9	8.1	9.8	7.5
6	12	9.4	11	11	11	10	9.7	8.9	7.5	8.1	9.1	11
7	12	9.6	11	e11	e11	11	9.8	8.8	7.2	8.6	8.8	50
8	11	9.7	11	11	e11	12	9.8	8.7	8.3	8.3	8.5	24
9	8.3	9.7	11	11	e11	12	11	8.9	8.5	8.3	8.2	17
10	8.7	9.8	11	11	e11	12	14	9.0	9.3	8.3	8.0	12
11	9.0	9.7	11	11	e11	11	14	9.1	9.2	8.2	8.1	10
12	9.9	12	11	11	11	11	15	8.9	10	8.9	8.1	10
13	11	12	11	11	11	10	13	8.8	9.7	8.7	8.1	9.5
14	12	13	11	11	11	11	13	8.2	9.5	11	7.6	9.6
15	12	13	11	11	11	11	12	7.9	9.9	10	7.6	9.3
16	12	12	11	11	12	11	11	8.2	10	10	7.5	8.9
17	12	12	e11	e11	12	11	10	8.8	10	9.7	7.4	8.9
18	13	12	e11	e11	13	10	10	8.7	10	9.3	7.6	8.9
19	13	11	e11	11	13	9.9	10	8.4	9.6	8.9	7.2	8.7
20	12	11	e11	11	13	9.8	9.9	8.2	9.6	8.1	6.5	8.7
21	11	11	e11	11	13	9.7	9.8	7.9	10	8.0	6.5	9.1
22	10	11	e11	11	12	9.8	9.8	7.8	10	7.9	6.4	8.7
23	11	11	e11	11	14	10	9.7	7.7	10	8.1	7.0	8.5
24	11	e11	e11	11	13	10	9.7	7.5	9.5	8.7	7.1	8.5
25	10	e11	e11	11	13	11	9.9	7.4	9.2	11	7.4	8.7
26	9.1	e11	e11	e11	13	10	9.8	7.3	8.5	10	7.0	8.8
27	9.2	e11	e11	e11	12	10	9.5	7.3	7.9	10	6.9	8.7
28	9.5	e11	e11	e11	12	9.8	10	7.2	7.7	10	6.7	8.8
29	9.9	e11	e11	e11	---	10	10	7.2	7.8	10	7.2	8.9
30	9.9	e11	e11	e11	---	9.9	10	6.5	7.8	9.4	8.4	9.0
31	10	---	e11	e11	---	9.9	---	6.4	---	9.0	7.9	---
TOTAL	327.6	322.6	341	341	330	331.8	319.5	257.7	264.9	276.7	246.2	332.9
MEAN	10.6	10.8	11.0	11.0	11.8	10.7	10.6	8.31	8.83	8.93	7.94	11.1
MAX	13	13	11	11	14	12	15	9.9	10	11	11	50
MIN	8.3	9.0	11	11	11	9.7	9.3	6.4	6.3	7.8	6.4	7.5
AC-FT	650	640	676	676	655	658	634	511	525	549	488	660

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1994, BY WATER YEAR (WY)

	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952
MEAN	12.8	13.7	13.7	13.7	14.0	14.2	14.1	14.0	13.5	12.2	11.6	12.1
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	7.56	9.08	9.72	10.4	9.97	7.74	10.6	8.31	8.83	8.45	7.94	8.56
(WY)	1993	1993	1984	1985	1943	1985	1987	1994	1994	1983	1994	1990

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1941 - 1994

ANNUAL TOTAL	4154.3	3691.9	
ANNUAL MEAN	11.4	10.1	13.3
HIGHEST ANNUAL MEAN			15.8
LOWEST ANNUAL MEAN			10.1
HIGHEST DAILY MEAN	25 May 6	50 Sep 7	111 Jul 6 1965
LOWEST DAILY MEAN	7.4 Jun 30	6.3 Jun 1	2.6 Nov 19 1975
ANNUAL SEVEN-DAY MINIMUM	8.2 Jun 25	6.8 Aug 20	3.1 Feb 17 1943
INSTANTANEOUS PEAK FLOW		70 Sep 7	493 Jul 5 1965
INSTANTANEOUS PEAK STAGE		2.86 Sep 7	6.00 Jul 5 1965
ANNUAL RUNOFF (AC-FT)	8240	7320	9630
10 PERCENT EXCEEDS	14	12	16
50 PERCENT EXCEEDS	11	10	13
90 PERCENT EXCEEDS	9.1	7.8	10

06824500 REPUBLICAN RIVER AT BENKELMAN, NE

LOCATION.--Lat 40°01'55", long 101°32'30", in SE1/4 SW1/4 sec.19, T.1 N., R.37 W., Dundy County, Hydrologic Unit 10250002, on left bank at downstream side of bridge on U.S. Highway 34, 0.6 mi south of Burlington Northern Inc. track, 1 mi southwest of Benkelman, 2 mi upstream from South Fork Republican River, 11 mi downstream from Rock Creek, and at mile 410.

DRAINAGE AREA (REVISED).--4,880 mi², of which about 1,240 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1894 to September 1895 (published as North Fork Republican River at Benkelman), October 1902 to November 1906, October 1946 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1310: 1895. WSP 1919: 1952, 1956. WSP 2119: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 2,975.34 ft above sea level. Prior to Dec. 17, 1946, nonrecording gages at several sites within 1.5 mi of present site at various datums; Dec. 17, 1946, to May 26, 1972, water-stage recorder at present site and datum and May 27, 1972, to Aug 11, 1978, at site 150 ft downstream at same datum.

REMARKS.--Records fair except for periods of estimated record, which are poor. Natural flow affected by irrigation development above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	62	e80	81	e70	103	77	99	16	5.6	17	5.7
2	50	63	e80	81	e68	103	78	96	19	6.3	13	5.7
3	47	64	e81	84	e66	103	78	85	24	5.3	21	5.6
4	35	64	e82	83	e64	99	82	85	26	4.8	16	6.1
5	29	61	e82	81	e62	94	81	79	28	3.8	14	5.9
6	27	60	81	80	e61	92	69	77	25	3.6	11	8.3
7	23	62	81	73	e60	90	67	71	22	7.0	9.4	262
8	29	61	77	73	e61	93	69	68	26	6.7	8.8	60
9	35	59	77	e74	e65	102	74	64	32	4.4	7.1	34
10	38	61	e77	e75	e70	99	106	52	35	2.7	5.2	25
11	46	63	77	75	e78	96	139	47	38	3.0	5.9	23
12	44	76	76	79	e86	93	154	45	37	7.9	6.2	19
13	41	80	e75	84	e94	91	146	44	33	8.0	4.4	15
14	51	83	75	88	e104	88	133	44	26	48	4.0	13
15	52	84	71	86	e114	86	117	50	21	59	3.0	11
16	54	83	e70	83	e128	87	107	43	13	59	2.2	8.2
17	55	88	e69	77	e134	86	103	39	11	50	1.8	5.9
18	60	96	68	e76	e134	83	97	31	12	45	1.8	5.8
19	65	100	71	e76	e128	85	93	28	9.1	42	2.3	7.0
20	68	99	e72	e76	e112	85	92	27	9.9	33	2.9	7.6
21	65	93	e74	e77	e100	84	93	30	20	29	1.6	9.2
22	62	86	75	e78	e90	85	90	27	13	27	.89	8.8
23	61	88	77	e78	84	84	85	25	27	24	3.9	16
24	65	75	78	e79	e85	77	89	27	45	19	3.4	17
25	65	e75	87	e79	e85	77	79	31	22	22	3.8	18
26	62	e76	e88	e78	85	78	83	23	21	22	2.8	20
27	58	e77	90	e77	93	79	89	21	16	16	2.0	19
28	57	e78	90	e76	102	78	94	19	10	16	1.4	18
29	62	e79	92	e75	---	78	93	21	7.7	14	2.5	14
30	64	e79	92	e74	---	80	97	19	6.7	12	4.0	14
31	63	---	81	e73	---	75	---	13	---	16	4.0	---
TOTAL	1589	2275	2446	2429	2483	2733	2854	1430	651.4	622.1	187.29	687.8
MEAN	51.3	75.8	78.9	78.4	88.7	88.2	95.1	46.1	21.7	20.1	6.04	22.9
MAX	68	100	92	88	134	103	154	99	45	59	21	262
MIN	23	59	68	73	60	75	67	13	6.7	2.7	.89	5.6
AC-FT	3150	4510	4850	4820	4930	5420	5660	2840	1290	1230	371	1360

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1994, BY WATER YEAR (WY)

	MEAN	55.6	84.5	86.7	90.1	113	128	117	107	93.0	46.6	37.5	40.5
MAX	116	132	128	128	164	538	234	329	381	477	249	376	
(WY)	1966	1952	1959	1953	1949	1960	1980	1955	1948	1962	1950	1951	
MIN	8.95	46.6	56.8	45.8	70.0	79.6	55.9	23.6	19.9	.63	.44	.97	
(WY)	1979	1976	1984	1979	1978	1988	1972	1992	1963	1954	1964	1978	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1947 - 1994

ANNUAL TOTAL	26266	20387.59	82.8
ANNUAL MEAN	72.0	55.9	153
HIGHEST ANNUAL MEAN			50.7
LOWEST ANNUAL MEAN			1951
HIGHEST DAILY MEAN	178	262	3700
LOWEST DAILY MEAN	13	.89	*.00
ANNUAL SEVEN-DAY MINIMUM	17	1.9	.00
INSTANTANEOUS PEAK FLOW (STAGE)		428	6040
INSTANTANEOUS PEAK STAGE		4.99	7.80
ANNUAL RUNOFF (AC-FT)	52100	40440	59980
10 PERCENT EXCEEDS	113	93	140
50 PERCENT EXCEEDS	71	64	77
90 PERCENT EXCEEDS	29	6.2	7.9

e Estimated.

* No flow at times in most years.

KANSAS RIVER BASIN

06827500 SOUTH FORK REPUBLICAN RIVER NEAR BENKELMAN, NE

LOCATION.--Lat 40°00'34", long 101°32'32", in NE1/4 SW1/4 sec.31, T.1 N., R.37 W., Dundy County, Hydrologic Unit 10250003, on right bank 200 ft downstream from 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 mi², approximately, of which about 2,190 mi² 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.

GAGE.--Water-stage recorder. Datum of gage is 2,990.91 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 2.00 ft higher and Sept. 29, 1966, to Mar. 7, 1968, at site 300 ft upstream at datum 2.00 ft higher. Mar. 8, 1968, to May 29, 1991, at site 300 ft upstream at same datum.

REMARKS.--Records fair except for periods of estimated record, 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	21	e27	e22	e26	33	32	35	16	2.0	.00	.00
2	2.2	20	e32	e23	e27	32	30	35	17	2.0	.00	.00
3	2.3	20	e31	e22	e28	31	28	35	17	2.0	.00	.00
4	2.5	21	31	e22	e29	30	27	34	16	1.8	.00	.00
5	2.6	20	32	e21	e28	29	25	32	13	1.3	.00	.00
6	2.6	20	31	e20	e27	31	25	33	13	.94	.00	.00
7	2.4	20	30	e18	e24	37	24	32	12	1.3	.00	.00
8	4.6	20	28	e20	e22	42	22	31	18	1.5	.00	.00
9	5.2	20	27	e23	e18	46	24	30	25	.89	.00	.00
10	5.1	20	27	e25	e17	49	43	29	25	.41	.00	.00
11	5.8	20	28	26	e21	51	52	28	22	.27	.00	.00
12	6.2	23	29	28	e30	52	63	27	17	.86	.00	.00
13	7.3	25	28	29	e42	54	66	28	14	.33	.00	.00
14	8.4	25	27	28	e49	56	61	29	10	2.8	.00	.00
15	9.2	26	27	29	e48	57	53	28	8.2	3.0	.00	.00
16	10	26	27	28	e48	58	48	28	7.1	4.4	.00	.00
17	11	26	28	25	e50	58	45	28	6.7	3.1	.00	.00
18	15	27	25	e23	e54	54	43	27	6.2	2.0	.00	.00
19	19	28	25	e26	e58	49	40	25	5.3	1.2	.00	.00
20	20	28	27	e28	54	46	38	23	4.5	.69	.00	.00
21	19	28	28	e29	47	43	38	22	7.3	.40	.00	.00
22	19	29	27	e30	43	42	37	21	6.4	.24	.00	.00
23	19	28	e25	e31	38	42	37	19	7.8	.16	.00	.00
24	20	22	e24	e30	41	39	36	20	7.5	.17	.00	.00
25	20	e21	e24	e29	43	39	35	21	7.3	.35	.00	.00
26	20	e19	e25	e28	37	38	35	20	5.5	.53	.00	.00
27	19	e18	e26	e28	35	37	33	19	4.0	.32	.00	.00
28	20	e19	e24	e28	35	37	35	19	3.3	.11	.00	.00
29	21	e21	e23	e27	---	36	35	18	2.8	.00	.00	.00
30	21	e24	e22	e26	---	35	35	17	2.2	.09	.00	.00
31	20	---	e22	e24	---	35	---	16	---	.01	.00	---
TOTAL	361.5	685	837	796	1019	1318	1145	809	327.1	35.17	0.00	0.00
MEAN	11.7	22.8	27.0	25.7	36.4	42.5	38.2	26.1	10.9	1.13	.000	.000
MAX	21	29	32	31	58	58	66	35	25	4.4	.00	.00
MIN	2.1	18	22	18	17	29	12.1	16	2.2	.00	.00	.00
AC-FT	717	1360	1660	1580	2020	2610	2270	1600	649	70	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1994, BY WATER YEAR (WY)

MEAN	17.6	22.7	21.6	24.2	41.4	55.0	60.5	76.5	78.2	62.1	37.4	25.4
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	.000	.000	.000	.000	6.62	18.3	12.1	6.57	.077	.000	.000	.000
(WY)	1940	1953	1953	1977	1978	1956	1956	1979	1956	1943	1940	1939

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1938 - 1994

ANNUAL TOTAL	8430.26	7332.77	
ANNUAL MEAN	23.1	20.1	43.5
HIGHEST ANNUAL MEAN			121
LOWEST ANNUAL MEAN			9.79
HIGHEST DAILY MEAN	118	66	6220
LOWEST DAILY MEAN	.40	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.42	.00	.00
INSTANTANEOUS PEAK FLOW (STAGE)		70	19600
INSTANTANEOUS PEAK STAGE		*3.71	**8.70
ANNUAL RUNOFF (AC-FT)	16720	14540	31540
10 PERCENT EXCEEDS	38	41	91
50 PERCENT EXCEEDS	24	21	20
90 PERCENT EXCEEDS	4.1	.00	.00

e Estimated.

* Backwater from ice.

** May have been higher during flood of June 24, 1945; site and datum then in use.

KANSAS RIVER BASIN

205

06828500 REPUBLICAN RIVER AT STRATTON, NE

LOCATION.--Lat 40°08'28", long 101°13'42", in SW1/4 NW1/4 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 (REVISED).--8,200 mi², approximately, of which about 3,690 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--July 1950 to current year.

REVISED RECORDS.--WSP 2119: Drainage area. WDR NE-73: 1968-71(M), 1972.

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.

REMARKS.--Records good except for periods of estimated records, 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
51	51	76	e142	e96	e100	254	112	134	19	.14	.00	.00
2	51	76	e140	e96	e102	214	105	130	18	.15	.00	.00
3	51	81	e134	e96	e100	202	105	123	22	.19	1.7	.00
4	50	81	e126	e92	e98	193	103	123	22	.14	1.5	.00
5	43	78	e124	e88	e96	176	105	118	19	.04	.27	.00
6	39	78	117	e80	e94	162	101	105	18	.04	.05	.00
7	37	81	107	79	e92	157	92	99	17	1.2	.00	.00
8	59	85	111	e90	e90	161	90	94	31	2.4	.00	24
9	55	87	115	99	e88	164	93	88	25	.63	.00	4.1
10	55	89	109	109	e86	165	121	83	35	.09	.00	.12
11	57	91	108	127	e80	154	153	79	233	.03	.00	.00
12	60	107	107	126	e100	149	236	80	143	.18	.00	.00
13	54	117	105	126	e120	137	236	79	65	.05	.00	.00
14	53	123	100	121	e140	136	214	77	38	1.9	.00	.00
15	64	116	91	130	e160	137	185	76	19	20	.00	.00
16	64	113	99	94	e150	137	173	76	9.9	26	.00	.00
17	67	114	100	e96	e150	140	167	70	6.2	19	.00	.00
18	74	117	126	e90	e160	144	161	62	4.3	14	.00	.00
19	83	120	109	e92	e180	140	159	56	3.1	10	.00	.00
20	87	118	e104	e100	e220	128	158	52	1.3	7.4	.00	.00
21	85	116	e100	e104	e240	120	143	48	2.7	4.7	.00	.00
22	83	107	e100	e110	255	116	137	46	12	2.4	.00	.00
23	78	100	e100	e110	208	115	142	44	5.1	.87	.19	.00
24	75	e96	e96	e110	e225	110	134	40	4.5	.93	.00	.00
25	73	e92	e100	e106	e240	111	126	45	14	5.4	.00	.00
26	73	e90	e108	e104	261	114	110	45	3.8	7.9	.00	.00
27	75	e100	e110	e104	270	113	113	39	1.9	4.0	.00	.00
28	77	e108	e110	e104	258	117	129	33	.57	1.3	.00	.00
29	81	e116	e100	e104	---	117	130	33	.19	.39	.00	.00
30	80	e124	e96	e102	---	118	130	28	.09	.15	.00	.00
31	77	---	e96	e100	---	116	---	23	---	.02	.00	---
TOTAL	2011	2997	3390	3185	4363	4517	4163	2228	793.65	131.64	3.71	28.22
MEAN	64.9	99.9	109	103	156	146	139	71.9	26.5	4.25	.12	.94
MAX	87	124	142	130	270	254	236	134	233	26	1.7	24
MIN	37	76	91	79	80	110	90	23	.09	.02	.00	.00
AC-FT	3990	5940	6720	6320	8650	8960	8260	4420	1570	261	7.4	56

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1994, BY WATER YEAR (WY)

	MEAN	51.2	93.3	93.7	105	150	189	179	186	153	95.5	72.1	56.2
MAX	285	218	157	159	225	788	388	766	571	759	479	1005	
(WY)	1966	1970	1966	1974	1963	1960	1980	1957	1951	1962	1950	1951	
MIN	.000	9.52	27.6	22.8	91.9	103	75.6	37.9	26.5	.000	.000	.000	
(WY)	1977	1979	1979	1979	1978	1989	1972	1992	1994	1954	1952	1952	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1950 - 1994

ANNUAL TOTAL	36964	27811.22	
ANNUAL MEAN	101	76.2	117
MEDIAN OF ANNUAL MEANS			106
HIGHEST ANNUAL MEAN			304
LOWEST ANNUAL MEAN			61.1
HIGHEST DAILY MEAN	360	Mar 7	8180
LOWEST DAILY MEAN	14	Jul 13	.00
ANNUAL SEVEN-DAY MINIMUM	16	Jul 10	.00
INSTANTANEOUS PEAK FLOW (STAGE)		583 (7.67)	26800
INSTANTANEOUS PEAK STAGE		*7.99	9.34
ANNUAL RUNOFF (AC-FT)	73320	55160	85040
10 PERCENT EXCEEDS	169	149	226
50 PERCENT EXCEEDS	96	85	90
90 PERCENT EXCEEDS	38	.00	.00

e Estimated.

* Backwater from ice.

KANSAS RIVER BASIN

06829000 SWANSON LAKE NEAR TRENTON, NE

LOCATION.--Lat 40°10'10", long 101°03'35", in SE1/4 NE1/4 sec.5, T.2 N., R.33 W., Hitchcock County, Hydrologic Unit 10250004, in gate-control house at right end of spillway on downstream side of Trenton Dam on Republican River, 2.5 mi west of Trenton.

DRAINAGE AREA.--8,620 mi², approximately, of which about 3,940 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--May 1953 to current year.

REVISED RECORDS.--WSP 2119: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to Nov. 13, 1953, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by earthfill dam; storage began May 4, 1953. Capacity, 110,100 acre-ft between elevations 2,710.0 ft, sill of outlet gates, and 2,752.0 ft, top of storage pool. Top of flood-control pool is at elevation 2,773.0 ft, capacity, 246,300 acre-ft. Top of superstorage flood-control pool at elevation 2,785.0 ft, capacity, 353,900 acre-ft. Dead storage, 2,120 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 Feb. 1984).

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 148,900 acre-ft Aug. 2, 3, 1962, elevation, 2,757.42 ft; minimum since operation of reservoir began, 19,950 acre-ft Oct. 24, 1954, elevation, 2,722.61 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 133,300 acre-ft May 2-8, elevation, 2,756.04 ft; minimum contents, 77,890 acre-ft Sept.29-30, elevation, 2,744.30 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)

2,730	31,690	2,750	102,600
2,735	45,210	2,755	127,700
2,740	61,590	2,760	156,100
2,745	80,700		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92500	95580	99900	105100	111300	118400	125900	133200	130100	116700	96890	79150
2		9250095710	100100	105400	111400	118700	126000	133300	129900	115600	96260	79030
3	92550	95850	100400	105600	111500	119100	126200	133300	129700	114600	95580	79030
4	92550	95990	100600	105800	111700	119300	126300	133300	129500	113700	94860	79070
5	92590	96030	101000	106000	111900	119600	126500	133300	129300	112900	94190	79030
6	92640	96080	101000	106300	112000	119900	126700	133300	129000	112000	93610	78860
7	92640	96120	101100	106400	112200	120200	126900	133300	128600	111600	92990	78980
8	93120	96170	101300	106600	112200	120400	127000	133300	129200	110800	92500	78940
9	93080	96210	101600	106800	112500	120800	127200	133200	129100	110200	91970	78860
10	93080	96350	101700	107000	112600	121000	127400	133200	129100	109500	91400	78860
11	93120	96390	101900	107200	112700	121400	128200	133100	129700	108800	90660	78780
12	93170	96980	102100	107400	112800	121600	128700	133000	129900	108200	90180	78780
13	93300	96980	102400	107600	112900	121900	129100	132900	129900	107600	89700	78700
14	93430	97390	102500	107800	113200	122200	129500	132800	129600	107400	89220	78660
15	93560	97570	102700	108100	113200	122400	129800	132600	129100	107300	89360	78540
16	93650	97880	102900	108200	113600	122700	130100	132400	128600	107000	89010	78420
17	93790	97970	103100	108400	113800	123000	130400	132200	128000	106500	88060	78420
18	93970	98290	103100	108600	114200	123200	130500	132200	127300	106200	87380	78340
19	94150	98290	103300	108600	114800	123400	130800	132200	126400	105700	86860	78300
20	94280	98610	103400	108800	115100	123600	131000	132100	125500	105200	86180	78300
21	94370	98750	103500	108900	115800	123900	131200	132000	125300	104500	85450	78300
22	94500	98930	103600	109100	116300	124100	131400	131800	123700	103700	84820	78260
23	94640	99120	103700	109400	116400	124400	131600	131700	124000	103000	84450	78140
24	94770	99160	103900	109600	116700	124500	132100	131500	123200	102300	83730	78020
25	94910	99210	103900	109800	117100	124600	132200	131400	122300	101700	83270	78020
26	95000	99250	104000	110300	117400	124800	132300	131200	121400	101000	83190	77970
27	95090	99300	104200	110500	117700	125000	132300	131100	120400	100200	82310	77940
28	95130	99350	104400	110500	118000	125200	132600	130900	119400	99440	81780	77940
29	95180	99440	104600	110600	---	125300	132800	130800	118200	98800	81400	77890
30	95270	99670	104700	110800	---	125500	133000	130700	117200	98200	80910	77890
31	95440	---	105000	111000	---	125700	---	130300	---	97520	79470	---
MEAN	93810	97620	102600	108100	114000	122400	129500	132300	126400	106700	88440	78510
MAX	95440	99670	105000	111000	118000	125700	133000	133300	130100	116700	96890	79150
MIN	92500	95580	99900	105100	111300	118400	125900	130300	117200	97520	79470	77890
(*)	2748.43	2749.36	2750.50	2751.76	2753.16	2754.63	2755.98	2755.49	2753.00	2748.89	2744.70	2744.31
(**)	+2940	+4230	+5330	+6000	+7000	+7700	+7300	-2700	-13100	-19680	-18050	-1580

CAL YR 1993 MEAN 96810 MAX 113600 MIN 74120 (**) +31000

WTR YR 1994 MEAN 108300 MAX 133300 MIN 77890 (**) -14610

(*) Elevation, in feet, at end of month.

(**) Change in contents, in acre-feet.

KANSAS RIVER BASIN

207

06831500 FRENCHMAN CREEK NEAR IMPERIAL, NE

LOCATION.--Lat 40°25'45", long 101°37'25", in SW1/4 NW1/4 sec. 3, T.5 N., R.38 W., Chase County, Hydrologic Unit 10250005, on right bank 0.2 mi downstream from bridge on county highway, 5.8 mi upstream from Enders Dam, 6.1 miles south of Imperial, and at mile 82.9.

DRAINAGE AREA (REVISED).--1,050 mi², approximately, of which about 859 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1940 to current year. Published as Frenchman River near Imperial October 1965 to September 1972.

REVISED RECORDS.--WSP 976: 1942(M). WSP 2119: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 3,130 ft above sea level, from topographic map. Prior to Mar. 7, 1941, nonrecording gage at bridge 0.2 mi upstream at different datum. Mar. 7, 1941, to Sept. 30, 1958, water-stage recorder at site 0.2 mi downstream at datum 4.35 ft lower.

REMARKS.--Records fair. Natural flow affected by irrigation development above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	26	28	29	28	32	28	31	19	18	15	14
2	21	25	27	29	29	32	28	32	20	18	14	14
3	21	25	27	29	30	32	29	32	20	19	21	15
4	21	25	27	29	31	32	29	32	19	19	17	15
5	21	25	27	29	29	32	28	31	19	18	15	14
6	22	24	27	29	30	31	29	31	18	18	15	14
7	21	26	27	28	27	31	29	30	17	19	15	13
8	23	25	27	30	26	33	29	29	36	19	15	14
9	25	26	27	30	27	32	29	28	51	17	15	13
10	25	26	27	30	28	32	31	28	30	16	15	13
11	25	26	27	29	29	32	31	27	36	16	15	13
12	24	28	27	29	28	31	35	27	40	27	14	13
13	24	31	27	29	29	31	34	27	29	20	14	13
14	25	29	27	29	31	30	33	28	25	22	14	14
15	25	31	27	29	31	30	31	27	24	24	13	14
16	24	29	28	29	33	30	30	25	23	20	13	14
17	25	29	30	29	35	30	30	23	23	18	13	14
18	28	29	29	27	37	29	30	23	23	17	13	14
19	29	30	29	29	38	29	30	23	22	16	13	14
20	27	29	30	31	38	29	29	21	22	16	13	15
21	26	29	29	29	35	28	30	21	24	16	13	17
22	25	28	28	31	34	28	29	21	25	16	12	18
23	25	28	30	30	31	28	30	38	23	15	13	18
24	25	20	27	30	34	28	30	31	22	16	13	17
25	24	21	31	30	30	28	29	26	20	16	14	17
26	24	25	30	31	33	28	30	24	19	17	14	17
27	24	26	29	24	32	28	29	22	18	16	13	17
28	24	30	29	32	32	29	31	22	18	15	13	18
29	25	29	29	34	---	29	31	21	18	15	13	17
30	25	27	29	32	---	28	31	20	18	15	14	17
31	25	---	29	28	---	29	---	19	---	15	14	---
TOTAL	749	807	872	913	875	931	902	820	721	549	438	450
MEAN	24.2	26.9	28.1	29.5	31.2	30.0	30.1	26.5	24.0	17.7	14.1	15.0
MAX	29	31	31	34	38	33	35	38	51	27	21	18
MIN	21	20	27	24	26	28	28	19	17	15	12	13
AC-FT	1490	1600	1730	1810	1740	1850	1790	1630	1430	1090	869	893

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1994, BY WATER YEAR (WY)

MEAN	49.1	54.8	58.8	61.6	61.5	60.1	54.9	56.8	58.9	50.0	45.3	47.4
MAX	83.2	84.4	88.9	89.5	98.8	303	95.7	136	208	107	84.5	97.4
(WY)	1952	1957	1952	1952	1949	1960	1949	1951	1967	1962	1951	1951
MIN	15.9	19.4	17.9	19.9	22.6	24.2	22.2	17.9	18.7	14.5	11.5	11.3
(WY)	1991	1992	1991	1992	1992	1990	1992	1992	1992	1990	1991	1990

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1941 - 1994

ANNUAL TOTAL	9702	9027	
ANNUAL MEAN	26.6	24.7	54.7
HIGHEST ANNUAL MEAN			87.1
LOWEST ANNUAL MEAN			19.7
HIGHEST DAILY MEAN	65	51	1820
LOWEST DAILY MEAN	14	12	*4.8
ANNUAL SEVEN-DAY MINIMUM	15	13	9.1
INSTANTANEOUS PEAK FLOW		62	2340
INSTANTANEOUS PEAK STAGE		1.65	8.43
ANNUAL RUNOFF (AC-FT)	19240	17910	39650
10 PERCENT EXCEEDS	31	31	83
50 PERCENT EXCEEDS	26	27	56
90 PERCENT EXCEEDS	21	14	24

* Backwater from ice.

KANSAS RIVER BASIN

06832000 ENDERS RESERVOIR NEAR ENDERS, NE

LOCATION.--Lat 40°25'05", long 101°30'55", in NE1/4 sec.9, T.5 N., R.37 W., Chase County, Hydrologic Unit 10250005, near right bank in control house at outlet tube of Enders Dam on Frenchman Creek, 2.2 mi southeast of Enders.

DRAINAGE AREA.--950 mi², approximately, of which about 790 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1950 to current year.

REVISED RECORDS.--WSP 2119: Drainage area.

GAGE.--Water-stage recorder. 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.

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, 32,510 acre-ft June 13, elevation, 3,104.55 ft; minimum, 19,770 acre-ft Aug. 14, elevation, 3,094.07 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)

3,085	11,770	3,100	26,540
3,090	15,830	3,110	40,660

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21620	23130	24620	26110	27620	29120	30350	31330	31850	27640	22240	20110
2	21680	23170	24700	26130	27700	29170	30360	31370	31870	27270	22100	20140
3	21710	23260	24730	26190	27710	29230	30430	31450	31820	26970	21950	20210
4	21730	23270	24780	26240	27750	29280	30400	31490	31800	26690	21870	20270
5	21800	23280	24800	26280	27810	29340	30430	31530	31850	26430	21810	20270
6	21840	23370	24840	26320	27860	29380	30470	31500	31870	26120	21760	20260
7	21860	23410	24870	26340	26620	29420	30530	31560	31870	25900	21550	20320
8	21910	23460	24930	26400	27890	29490	30560	31610	31830	25720	21310	20360
9	21920	23500	24980	26450	27950	29540	30600	31650	31940	25580	21050	20380
10	21970	23570	25010	26520	28030	29580	30640	31700	32010	25420	20750	20380
11	22010	23610	25060	26560	28070	29630	30730	31750	32010	25200	20430	20430
12	22060	23730	25100	26630	28120	29670	30810	31750	32050	25060	20140	20460
13	22100	23760	25130	26680	28180	29740	30900	31780	32480	24830	19820	20470
14	22190	23850	25170	26720	28230	29780	30900	31760	32340	24720	19770	20430
15	22240	23910	25220	26770	28290	29810	30940	31790	32160	24720	19800	20390
16	22270	23960	25310	26790	28340	29870	30980	31820	31920	24680	19840	20410
17	22310	24020	25350	26840	28410	29920	31080	31830	31640	24670	19850	20420
18	22410	24110	25400	26890	28500	29940	31110	31820	31380	24670	19890	20440
19	22470	24120	25430	26940	28550	30020	31080	31820	31060	24620	19880	20460
20	22520	24190	25490	26980	28620	29990	31150	31820	30730	24550	19910	20450
21	22580	24230	25500	27040	28660	30070	31120	31800	30430	24520	19930	20450
22	22640	24260	25550	27080	28710	30100	31120	31820	30160	24420	20000	20430
23	22710	24290	25610	27130	28780	30080	31220	31820	29920	24240	20000	20480
24	22780	24290	25690	27190	28840	30080	31270	31860	29730	24060	20050	20520
25	22800	24310	25740	27250	28870	30150	31190	31890	29480	23780	20070	20560
26	22840	24370	25790	27330	28930	30160	31150	31890	29250	23490	20100	20570
27	22890	24430	25800	27380	28990	30160	31160	31890	28950	23230	20100	20610
28	22930	24500	25870	27430	29040	30220	31220	31870	28660	22990	20110	20640
29	22950	24540	25920	27500	---	30220	31250	31920	28310	22810	20150	20700
30	22990	24580	25980	27530	---	30270	31290	31900	28020	22590	20150	20720
31	23060	---	26040	27590	---	30310	---	31940	---	22410	20120	---
MEAN	22320	23880	25300	26810	28250	29800	30880	31730	30980	24840	20530	20420
MAX	23060	24580	26040	27590	29040	30310	31290	31940	32480	27640	22240	20720
MIN	21620	23130	24620	26110	26620	29120	30350	31330	28020	22410	19770	20110
(*)	3097.09	3098.38	3099.60	3100.83	3101.97	3102.93	3103.66	3104.14	3101.17	3096.51	3094.40	3094.97
(**)	+1440	+1520	+1460	+1550	+1450	+1270	+980	+650	-3920	-5610	-2290	+600

CAL YR 1993 MEAN 24180 MAX 28590 MIN 20220 (**) +5130
WTR YR 1994 MEAN 26290 MAX 32480 MIN 19770 (**) -900

(*) Elevation, in feet, at end of month.

(**) Change in contents, in acre-feet.

KANSAS RIVER BASIN

209

06834000 FRENCHMAN CREEK AT PALISADE, NE

LOCATION.--Lat 40°21'12", long 101°07'35", in SW1/4 SE1/4 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 (REVISED).--1,300 mi², approximately, of which about 1,110 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1894 to October 1896, June 1950 to current year. Published as Frenchman River at Palisade, October 1894 to October 1896 and October 1965 to September 1972.

REVISED RECORDS.--WSP 2119: 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).

CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	29	e39	28	e25	35	30	29	22	149	119	21
2	25	29	e38	27	e24	36	31	29	22	162	116	21
3	25	28	32	e27	e24	35	30	29	22	166	112	21
4	25	28	29	e27	e24	34	30	29	23	155	113	22
5	25	28	28	e27	e24	34	31	29	22	144	90	20
6	25	28	e28	28	e24	34	31	29	21	134	73	20
7	25	30	e28	e31	e24	34	31	29	21	139	62	21
8	26	28	e29	e34	e24	34	30	29	23	148	95	20
9	29	28	29	e35	e24	34	30	28	33	121	117	19
10	28	28	29	e36	e24	34	31	28	31	108	127	18
11	28	28	29	e35	e25	34	31	27	27	95	130	18
12	28	30	29	e33	e25	33	32	27	161	102	139	18
13	28	30	29	28	e26	33	32	27	59	282	157	17
14	29	29	29	27	e27	33	31	27	40	162	159	17
15	30	29	28	e26	e28	33	31	27	46	148	107	17
16	29	28	27	e26	e28	32	30	26	77	122	57	17
17	29	27	e27	e26	e28	33	29	25	96	89	46	17
18	30	27	e27	e26	e29	32	30	25	125	64	40	17
19	33	27	e26	e26	e29	32	30	24	134	61	37	18
20	32	27	e26	e26	e30	32	30	26	158	57	34	19
21	31	27	e26	e26	31	31	30	25	170	54	32	19
22	29	26	e26	e26	e32	31	30	25	174	51	30	20
23	30	27	e27	e27	33	31	30	24	144	63	29	21
24	30	e26	e27	e27	e34	31	30	25	132	77	28	20
25	29	e26	e28	e27	34	31	30	26	116	382	26	20
26	28	e27	e28	e27	e35	32	29	25	109	192	25	20
27	28	e28	e29	e27	e35	32	29	25	112	163	23	19
28	29	e31	e29	e26	35	33	29	24	114	156	22	19
29	28	e36	e29	e26	---	33	30	24	128	145	21	19
30	29	e39	e28	e25	---	32	29	23	142	128	21	18
31	30	---	e28	e25	---	31	---	22	---	122	21	---
TOTAL	875	859	891	868	785	1019	907	817	2504	4141	2208	573
MEAN	28.2	28.6	28.7	28.0	28.0	32.9	30.2	26.4	83.5	134	71.2	19.1
MAX	33	39	39	36	35	36	32	29	174	382	159	22
MIN	25	26	26	25	24	31	29	22	21	51	21	17
AC-FT	1740	1700	1770	1720	1560	2020	1800	1620	4970	8210	4380	1140

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1994, BY WATER YEAR (WY)

	MEAN	41.8	36.7	36.7	38.7	44.5	50.2	49.5	56.0	74.7	190	180	74.2
MAX	120	88.9	97.4	102	147	247	198	151	270	340	367	232	
(WY)	1963	1959	1959	1953	1952	1960	1960	1957	1967	1968	1962	1962	
MIN	16.5	23.1	21.6	19.3	23.9	26.7	21.6	20.4	19.5	67.0	38.5	8.32	
(WY)	1991	1990	1990	1979	1993	1991	1972	1992	1992	1951	1990	1990	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1950 - 1994

ANNUAL TOTAL	16638	16447	
ANNUAL MEAN	45.6	45.1	73.5
HIGHEST ANNUAL MEAN			115
LOWEST ANNUAL MEAN			37.9
HIGHEST DAILY MEAN	441	Jul 24	2090
LOWEST DAILY MEAN	20	Feb 18	5.4
ANNUAL SEVEN-DAY MINIMUM	20	Feb 18	5.8
INSTANTANEOUS PEAK FLOW			5560
INSTANTANEOUS PEAK STAGE			7.36
ANNUAL RUNOFF (AC-FT)	33000	32620	53220
10 PERCENT EXCEEDS	108	118	172
50 PERCENT EXCEEDS	29	29	40
90 PERCENT EXCEEDS	25	22	23

e Estimated.

* Site and datum then in use.

KANSAS RIVER BASIN

06835000 STINKING WATER CREEK NEAR PALISADE, NE

LOCATION.--Lat 40°2'10", long 101°06'50", in SW1/4 NW1/4 sec. 30, T. 5 N., R. 33 W., Hayes County, Hydrologic Unit 10250006, on right bank 25 ft downstream from county bridge, 1.2 mi upstream from mouth, and 1.8 mi northwest of Palisade.

DRAINAGE AREA.--1,500 mi², approximately, of which about 380 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1949 to current year.

REVISED RECORDS.--WSP 1730: 1952(M). WSP 1919: 1951(P), 1955. WSP 2119: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,740.99 ft above sea level.

REMARKS.--Records good except for periods of estimated record, which are poor. Natural flow affected by irrigation development above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	28	29	31	e33	37	31	32	21	15	20	14
2	25	28	29	32	e33	41	31	33	21	15	19	14
3	25	29	29	33	e32	45	31	33	21	16	19	15
4	25	30	30	33	e32	43	31	32	21	16	23	15
5	25	29	30	33	e31	42	30	34	21	15	23	14
6	25	27	30	33	e31	42	30	32	20	15	21	15
7	25	27	30	e32	e30	40	30	31	20	15	21	26
8	27	26	29	e31	e30	38	30	30	21	16	20	19
9	28	27	29	31	e29	37	29	29	23	17	19	15
10	32	27	29	31	e28	36	30	29	22	16	17	15
11	31	27	30	31	e28	36	30	30	22	15	17	14
12	30	29	30	30	e29	36	32	29	22	16	17	14
13	29	31	30	31	e30	36	34	28	24	40	17	14
14	30	35	30	31	30	36	36	27	23	72	16	14
15	31	34	30	31	29	35	35	27	21	32	16	14
16	31	32	30	31	30	35	33	26	20	36	15	13
17	31	31	30	29	36	34	32	25	19	25	15	13
18	31	31	30	29	48	34	32	25	19	23	15	14
19	32	32	28	e29	58	33	32	24	19	24	15	14
20	34	32	e28	e29	55	32	31	24	18	24	15	15
21	33	31	28	e30	50	32	30	24	19	22	15	15
22	32	30	30	e30	45	31	30	24	24	21	15	15
23	31	30	e31	31	42	31	30	23	21	20	15	16
24	30	e30	31	31	36	31	30	23	19	21	14	16
25	30	30	31	32	e35	30	30	24	18	46	14	16
26	30	e30	31	32	e34	30	30	23	17	37	14	15
27	29	e29	32	e32	34	30	29	23	16	58	14	15
28	29	29	32	e32	34	30	30	23	16	47	13	15
29	29	29	31	e33	---	30	31	23	16	25	14	15
30	28	29	30	e33	---	30	32	22	16	22	14	15
31	28	---	31	e33	---	31	---	21	---	21	14	---
TOTAL	901	889	928	970	992	1084	932	833	600	803	516	454
MEAN	29.1	29.6	29.9	31.3	35.4	35.0	31.1	26.9	20.0	25.9	16.6	15.1
MAX	34	35	32	33	58	45	36	34	24	72	23	26
MIN	25	26	28	29	28	30	29	21	16	15	13	13
AC-FT	1790	1760	1840	1920	1970	2150	1850	1650	1190	1590	1020	901

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1994, BY WATER YEAR (WY)

MEAN	29.1	34.7	34.5	35.5	42.3	50.1	43.9	44.0	47.2	32.1	26.2	25.2
MAX	53.7	48.8	49.0	50.0	68.0	215	61.1	116	185	113	85.1	76.6
(WY)	1966	1952	1966	1964	1963	1960	1971	1951	1956	1958	1962	1951
MIN	16.0	22.3	22.0	21.1	24.1	28.1	24.1	18.9	20.0	10.4	10.2	8.80
(WY)	1992	1984	1991	1979	1989	1991	1992	1992	1994	1990	1991	1990

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1950 - 1994

ANNUAL TOTAL	12846	9902	
ANNUAL MEAN	35.2	27.1	
HIGHEST ANNUAL MEAN			37.0
LOWEST ANNUAL MEAN			57.2
HIGHEST DAILY MEAN	338	72	1640
LOWEST DAILY MEAN	17	13	4.9
ANNUAL SEVEN-DAY MINIMUM	23	14	6.2
INSTANTANEOUS PEAK FLOW (STAGE)		94 (4.43)	3030
INSTANTANEOUS PEAK STAGE		*4.82	11.30
ANNUAL RUNOFF (AC-FT)	25480	19640	26820
10 PERCENT EXCEEDS	41	34	53
50 PERCENT EXCEEDS	30	29	33
90 PERCENT EXCEEDS	25	15	18

e Estimated.

* Backwater from ice.

KANSAS RIVER BASIN

211

06835500 FRENCHMAN CREEK AT CULBERTSON, NE

LOCATION.--Lat 40°14'05", long 100°52'40", in SW1/4 SE1/4 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 (REVISED).--2,990 mi², of which about 1,590 mi² 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). WSP 2119: Drainage area. WDR NE-84-1: 1979, 1982(M).

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.

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). Principal diversion is by Culbertson Canal, 20,800 acres.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	80	78	83	66	86	76	37	11	7.3	15	14
2	62	79	79	80	e68	91	76	37	11	7.5	13	14
3	59	79	83	80	69	99	76	41	11	7.2	13	13
4	52	82	83	80	e69	97	76	43	10	7.7	12	15
5	53	80	82	80	e68	95	75	42	9.4	7.4	14	14
6	55	77	79	80	e66	95	74	41	9.4	6.6	13	14
7	61	79	79	74	e62	93	75	35	8.9	7.1	10	23
8	75	79	80	70	57	91	75	33	8.7	5.9	9.3	30
9	80	78	81	78	63	89	75	32	8.9	5.8	8.8	31
10	80	75	80	76	e65	88	77	31	8.8	5.9	10	25
11	82	76	80	77	e71	87	79	31	9.4	5.8	9.3	25
12	77	81	82	78	e69	87	78	31	11	6.3	8.0	23
13	76	84	83	81	67	85	75	31	90	21	6.8	17
14	77	86	82	77	e69	85	72	30	21	145	5.2	21
15	79	90	81	77	e70	84	77	30	14	114	4.3	23
16	81	87	83	73	78	84	69	30	15	101	3.5	23
17	80	84	80	71	88	84	74	29	13	63	3.4	29
18	81	84	77	59	106	82	72	29	11	32	3.1	27
19	83	84	69	58	122	82	71	29	12	17	2.7	23
20	83	84	73	e62	120	81	55	28	11	15	2.8	23
21	81	84	76	e68	107	79	46	28	12	12	3.1	29
22	83	85	73	e72	100	79	44	28	16	12	4.7	25
23	82	83	73	e76	92	79	42	27	16	10	21	25
24	82	76	76	79	85	77	42	27	14	11	17	26
25	82	56	81	80	e83	76	40	20	12	45	15	27
26	76	60	82	78	81	77	38	14	10	218	15	28
27	76	74	83	56	82	76	36	13	9.0	63	14	29
28	76	76	76	62	e82	75	37	13	7.9	74	13	30
29	76	79	75	e64	---	75	37	12	7.4	48	12	31
30	90	80	76	e65	---	75	37	12	7.0	29	12	33
31	80	---	79	e65	---	76	---	11	---	19	14	---
TOTAL	2315	2381	2444	2259	2225	2609	1876	875	415.8	1129.5	308.0	710
MEAN	74.7	79.4	78.8	72.9	79.5	84.2	62.5	28.2	13.9	36.4	9.94	23.7
MAX	90	90	83	83	122	99	79	43	90	218	21	33
MIN	52	56	69	56	57	75	36	11	7.0	5.8	2.7	13
AC-FT	4590	4720	4850	4480	4410	5170	3720	1740	825	2240	611	1410

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 1994, BY WATER YEAR (WY)

	MEAN	78.1	96.2	102	103	124	134	105	91.0	110	60.8	39.3	60.9
MAX	204	188	207	183	224	543	290	522	384	269	258	245	
(WY)	1947	1947	1941	1948	1949	1960	1960	1935	1935	1962	1962	1951	
MIN	22.5	42.8	49.2	46.3	64.6	62.3	31.2	18.0	13.9	2.90	2.25	1.70	
(WY)	1937	1940	1984	1979	1989	1991	1972	1986	1994	1990	1986	1990	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1935 - 1994

ANNUAL TOTAL	24918.7	19547.3	
ANNUAL MEAN	68.3	53.6	90.5
HIGHEST ANNUAL MEAN			165
LOWEST ANNUAL MEAN			35.7
HIGHEST DAILY MEAN	504	218	5500
LOWEST DAILY MEAN	9.2	2.7	.00
ANNUAL SEVEN-DAY MINIMUM	12	3.3	.26
INSTANTANEOUS PEAK FLOW		294	15000
INSTANTANEOUS PEAK STAGE		5.18	*14.80
ANNUAL RUNOFF (AC-FT)	49430	38770	65540
10 PERCENT EXCEEDS	88	84	170
50 PERCENT EXCEEDS	68	68	77
90 PERCENT EXCEEDS	23	9.4	23

e Estimated.

* From floodmark.

KANSAS RIVER BASIN

06836500 DRIFTWOOD CREEK NEAR MCCOOK, NE

LOCATION.--Lat 40°08'45", long 100°40'22", in SW1/4 SE1/4 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.

DRAINAGE AREA (REVISED).--361 mi², of which about 351 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--March 1946 to current year.

REVISED RECORDS.--WSP 1210: 1950.

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.

REMARKS.--Records good except for periods of estimated record, which are poor. Natural flow affected by waste from Meeker-Driftwood Canal and by irrigation development above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	5.1	5.3	4.9	e5.4	5.5	4.8	5.2	5.6	4.1	9.3	6.1
2	3.5	5.2	5.3	4.9	e5.4	8.1	4.8	5.0	5.5	4.2	8.4	6.4
3	3.4	5.0	5.3	4.9	e5.3	7.6	4.7	5.2	3.7	4.7	7.5	4.8
4	3.4	5.1	5.3	4.8	4.9	6.8	4.8	5.1	3.5	6.8	7.0	4.4
5	3.5	4.8	5.4	4.9	5.2	6.5	4.9	4.9	3.5	5.0	7.4	4.2
6	3.8	4.7	5.1	4.9	5.0	6.0	4.8	4.9	3.3	4.0	9.3	4.2
7	3.9	4.8	5.7	e4.7	e5.0	6.1	4.8	4.8	3.6	5.8	10	4.1
8	5.2	4.9	5.7	4.6	e5.0	6.0	4.9	4.8	7.7	5.8	10	4.4
9	8.4	4.7	5.7	4.6	4.6	5.8	5.0	4.8	51	5.7	9.6	4.2
10	5.6	4.7	5.9	4.7	5.0	5.8	5.2	4.7	10	6.8	30	4.1
11	5.4	4.7	5.9	4.7	4.9	5.6	5.5	4.7	6.2	5.9	91	4.0
12	5.3	5.8	5.9	4.8	4.9	5.3	8.7	4.7	5.5	5.6	43	3.8
13	5.1	5.7	5.9	4.7	4.9	6.2	9.0	4.6	4.9	5.6	16	3.8
14	5.1	5.2	5.9	4.6	5.1	5.5	7.0	4.5	8.9	11	11	3.7
15	5.5	5.4	5.9	4.6	5.8	5.0	6.3	4.4	11	57	9.2	3.6
16	5.2	5.4	5.9	4.6	6.7	5.2	5.9	4.3	6.5	22	7.0	3.7
17	5.0	5.3	5.7	e3.4	7.9	5.5	6.1	4.1	4.6	17	6.2	3.8
18	5.0	5.4	5.2	e5.8	8.6	5.1	6.0	3.9	4.0	17	6.8	3.7
19	4.8	5.4	5.1	4.7	10	5.0	5.7	3.9	4.1	15	6.5	3.6
20	4.9	5.3	5.1	e4.6	8.0	4.9	5.6	3.9	3.5	8.6	6.2	3.6
21	4.7	5.1	5.1	4.6	7.1	5.0	5.7	3.7	4.1	7.0	6.7	3.7
22	4.7	5.1	5.1	4.6	6.7	5.1	5.3	3.7	4.1	6.7	7.2	4.0
23	4.8	5.0	5.1	4.9	e6.2	5.1	5.2	3.7	4.5	9.1	8.5	4.0
24	4.8	e4.9	5.3	4.9	6.1	5.0	5.1	8.2	3.6	11	7.8	3.8
25	4.8	5.2	5.4	5.0	e5.8	5.0	4.9	4.7	3.7	11	5.9	3.8
26	4.8	5.3	5.4	e4.7	e5.7	4.8	5.0	3.7	3.7	11	5.6	3.8
27	5.0	5.1	5.3	e5.5	5.3	4.8	4.7	3.8	4.0	12	5.0	3.7
28	5.3	5.4	4.8	5.0	5.2	4.8	5.1	3.7	4.2	12	4.8	3.5
29	5.3	5.5	4.8	5.0	---	4.8	5.6	3.7	3.8	13	4.6	3.6
30	4.8	5.3	4.8	e4.8	---	4.8	5.3	3.6	4.4	13	4.7	3.7
31	4.9	---	4.8	e5.2	---	4.7	---	3.3	---	9.7	4.9	---
TOTAL	149.3	154.5	167.1	148.6	165.7	171.4	166.4	138.2	196.7	333.1	377.1	121.8
MEAN	4.82	5.15	5.39	4.79	5.92	5.53	5.55	4.46	6.56	10.7	12.2	4.06
MAX	8.4	5.8	5.9	5.8	10	8.1	9.0	8.2	51	57	91	6.4
MIN	3.4	4.7	4.8	3.4	4.6	4.7	4.7	3.3	3.3	4.0	4.6	3.5
AC-FT	296	306	331	295	329	340	330	274	390	661	748	242

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1994, BY WATER YEAR (WY)

MEAN	7.38	3.47	3.43	3.40	5.85	8.24	4.18	10.2	18.8	21.3	17.5	14.1
MAX	137	7.22	7.44	7.96	31.4	209	13.3	112	85.8	100	156	302
(WY)	1947	1974	1974	1974	1960	1960	1977	1957	1947	1956	1950	1951
MIN	.071	.083	.077	.052	.048	.039	.20	.19	.23	.052	.055	.040
(WY)	1956	1956	1955	1955	1956	1956	1948	1956	1954	1955	1946	1953

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1946 - 1994

ANNUAL TOTAL	2751.1	2289.9	
ANNUAL MEAN	7.54	6.27	
MEDIAN OF ANNUAL MEANS			9.86
HIGHEST ANNUAL MEAN			8.08
LOWEST ANNUAL MEAN			35.0
HIGHEST DAILY MEAN	80 Jul 26	91 Aug 11	3950 Aug 7 1950
LOWEST DAILY MEAN	2.5 Jun 21	3.3 May 31	.00 Apr 25 1946
ANNUAL SEVEN-DAY MINIMUM	2.9 Jun 18	3.6 Oct 1	.00 Jun 12 1946
INSTANTANEOUS PEAK FLOW		110 Jun 9	4740 Aug 7 1950
INSTANTANEOUS PEAK STAGE		6.72 Jun 9	25.43 Aug 7 1950
ANNUAL RUNOFF (AC-FT)	5460	4540	7140
10 PERCENT EXCEEDS	9.6	8.4	11
50 PERCENT EXCEEDS	5.4	5.1	4.7
90 PERCENT EXCEEDS	3.7	3.8	.20

KANSAS RIVER BASIN

213

06837000 REPUBLICAN RIVER AT MCCOOK, NE

LOCATION.--Lat 40°11'15", long 100°37'05", in SW1/4 NE1/4 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 (REVISED).--12,240 mi², of which about 6,220 mi² 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.--WSP 2119: 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.

REMARKS.--Records good except for periods of estimated record, 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	106	e100	109	e92	129	101	128	26	158	121	74
2	95	105	e104	111	e98	136	100	143	29	160	114	61
3	98	106	e106	109	e100	142	99	e150	29	154	183	45
4	96	106	e108	109	e108	143	101	e160	27	158	134	38
5	90	106	e110	109	e104	139	103	e160	26	145	103	32
6	91	106	113	110	e98	135	103	e150	25	127	97	29
7	93	107	113	101	e86	133	101	150	23	135	94	31
8	112	108	113	101	e80	129	99	148	24	125	89	37
9	118	108	113	104	e72	127	102	145	89	113	94	38
10	112	108	111	110	e68	125	109	144	62	111	101	35
11	111	113	113	106	e70	124	116	140	42	104	178	32
12	111	115	113	106	e74	121	151	e135	39	112	152	31
13	109	115	113	105	e76	123	147	e125	41	132	98	27
14	107	117	113	108	e78	120	128	e115	69	176	86	25
15	106	117	111	107	e80	119	116	e105	48	335	79	25
16	108	117	115	109	e84	117	104	e96	93	304	73	25
17	109	115	111	102	e90	116	98	e86	120	210	71	26
18	112	115	107	95	e100	113	96	e74	120	176	71	29
19	113	113	107	e92	e108	108	95	e70	128	156	69	27
20	111	113	107	e92	e102	109	89	e66	152	140	66	25
21	107	113	109	e90	e96	110	79	63	184	130	66	28
22	108	113	109	e88	e92	110	77	59	189	121	66	34
23	108	109	113	e90	e90	110	77	54	200	118	131	35
24	110	100	111	e90	e96	107	74	49	180	120	113	37
25	110	e90	113	e90	e108	107	72	56	175	129	87	41
26	105	e80	120	94	120	108	69	42	170	196	80	39
27	107	e84	113	e88	122	107	73	37	166	205	79	37
28	103	e92	122	e88	125	105	88	33	162	151	75	34
29	106	e96	120	e86	---	105	77	32	159	152	75	36
30	106	e98	113	e82	---	104	80	30	156	140	75	36
31	109	---	115	e84	---	103	---	28	---	130	75	---
TOTAL	3273	3191	3459	3065	2617	3684	2924	2973	2953	4823	2995	1049
MEAN	106	106	112	98.9	93.5	119	97.5	95.9	98.4	156	96.6	35.0
MAX	118	117	122	111	125	143	151	160	200	335	183	74
MIN	90	80	100	82	68	103	69	28	23	104	66	25
AC-FT	6490	6330	6860	6080	5190	7310	5800	5900	5860	9570	5940	2080

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 1994, BY WATER YEAR (WY)

MEAN	104	116	113	116	158	191	174	189	202	227	183	102
MAX	466	341	321	269	398	901	577	1022	1070	1142	970	286
(WY)	1966	1966	1959	1959	1958	1960	1958	1957	1962	1962	1962	1962
MIN	30.0	62.4	63.4	59.7	82.2	88.0	70.6	22.6	39.8	104	66.1	6.03
(WY)	1992	1991	1993	1979	1981	1991	1989	1956	1992	1980	1978	1991

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1955 - 1994

ANNUAL TOTAL	39885	37006	156
ANNUAL MEAN	109	101	383
HIGHEST ANNUAL MEAN			70.1
LOWEST ANNUAL MEAN			1991
HIGHEST DAILY MEAN	480	335	5020
LOWEST DAILY MEAN	31	23	.99
			*.00
ANNUAL SEVEN-DAY MINIMUM	33	26	1.3
INSTANTANEOUS PEAK FLOW		437	5890
INSTANTANEOUS PEAK STAGE		5.01	9.14
ANNUAL RUNOFF (AC-FT)	79110	73400	113300
10 PERCENT EXCEEDS	140	146	283
50 PERCENT EXCEEDS	108	106	113
90 PERCENT EXCEEDS	63	38	60

KANSAS RIVER BASIN

06837300 RED WILLOW CREEK ABOVE HUGH BUTLER LAKE, NE

LOCATION.--Lat 40°24'06", long 100°46'48", in NE1/4 SE1/4 sec.13, T.5 N., R.31 W., Hayes County, Hydrologic Unit 10250007, on left bank 30 ft above county road bridge, 7.0 mi upstream from Red Willow Dam, 12 mi northeast of Culbertson, and at mile 27.6.

DRAINAGE AREA (REVISED).--582 mi² of which about 194 mi² contributes directly to surface runoff.

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 2588.80 ft above sea level. Prior to Mar. 23, 1961, nonrecording gage, and Mar. 24, 1961 to Sept. 22, 1992, recording gage, at site 1000 ft upstream and at datum 6.00 ft higher. Artificial control March 1961 to Sept. 22, 1992.

REMARKS.--Records fair except for Oct. 11 to Nov. 9 and period of estimated record, which are poor. Natural flow affected by pump irrigation development above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	21	25	25	e27	34	27	37	15	11	12	11
2	19	21	25	25	e27	52	27	38	15	10	11	10
3	18	21	25	25	e27	72	27	36	15	10	22	11
4	18	22	26	26	e27	67	27	37	15	10	15	13
5	18	22	27	27	e27	67	27	39	15	9.6	13	12
6	18	22	28	27	e27	60	27	37	15	8.7	13	12
7	18	21	28	e27	e27	55	27	34	14	9.5	12	12
8	25	20	27	e27	e27	49	27	30	14	10	11	12
9	28	22	26	e26	e27	43	27	28	15	11	12	11
10	44	22	26	e26	e27	39	27	26	14	9.5	14	11
11	65	22	26	e26	e28	37	28	24	14	9.8	15	11
12	61	25	27	e25	e28	36	34	23	14	11	12	11
13	40	33	27	e25	e29	36	45	22	14	94	11	9.8
14	27	39	28	25	e29	36	50	22	14	214	10	9.8
15	24	45	28	26	29	35	54	21	13	112	9.9	9.6
16	21	41	29	e26	e30	34	47	20	12	43	10	9.3
17	21	35	29	e26	e30	34	37	19	11	39	12	9.4
18	21	33	e29	e26	e30	33	34	19	11	48	11	8.8
19	22	33	e28	e26	e31	32	31	19	11	34	11	9.1
20	26	34	e28	e26	e31	31	28	18	11	24	11	10
21	29	33	e27	e26	e32	30	27	18	14	20	11	13
22	29	32	e27	e26	e32	29	26	18	16	18	11	13
23	26	30	e26	e26	e32	28	26	17	15	16	12	13
24	23	27	e25	e26	e33	28	26	17	15	15	17	13
25	22	e24	e25	e26	e33	27	25	17	14	15	17	13
26	21	e24	24	e26	e33	27	25	17	14	14	16	13
27	21	e25	26	e26	e34	26	25	17	13	13	15	12
28	21	e25	27	e26	e34	26	26	16	13	13	13	12
29	21	e25	e27	e26	---	26	30	16	12	10	12	12
30	21	e25	e26	e27	---	27	33	16	12	10	11	12
31	21	---	e25	e27	---	27	---	16	---	11	11	---
TOTAL	808	824	827	806	828	1183	927	734	410	883.1	393.9	338.8
MEAN	26.1	27.5	26.7	26.0	29.6	38.2	30.9	23.7	13.7	28.5	12.7	11.3
MAX	65	45	29	27	34	72	54	39	16	214	22	13
MIN	18	20	24	25	27	26	25	16	11	8.7	9.9	8.8
AC-FT	1600	1630	1640	1600	1640	2350	1840	1460	813	1750	781	672

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1994, BY WATER YEAR (WY)

MEAN	20.3	24.3	22.6	22.1	30.1	37.2	32.8	31.3	32.6	23.4	19.4	17.9
MAX	36.6	32.9	30.4	34.9	41.2	83.1	54.1	49.1	142	73.6	59.4	84.0
(WY)	1974	1970	1970	1974	1963	1978	1977	1972	1962	1962	1962	1963
MIN	13.0	16.0	15.8	12.2	19.5	23.5	17.6	16.8	13.7	6.61	6.50	6.91
(WY)	1992	1990	1990	1982	1981	1991	1992	1989	1994	1990	1991	1990

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1961 - 1994	
ANNUAL TOTAL	11712.0		8962.8			
ANNUAL MEAN	32.1		24.6		26.1	
HIGHEST ANNUAL MEAN					43.4	
LOWEST ANNUAL MEAN					16.8	
HIGHEST DAILY MEAN	319		214		734	
LOWEST DAILY MEAN	5.0		8.7		3.1	
ANNUAL SEVEN-DAY MINIMUM	11		9.4		4.0	
INSTANTANEOUS PEAK FLOW			267		4020	
INSTANTANEOUS PEAK STAGE			7.21		*13.27	
ANNUAL RUNOFF (AC-FT)	23230		17780		18920	
10 PERCENT EXCEEDS	42		36		39	
50 PERCENT EXCEEDS	26		25		22	
90 PERCENT EXCEEDS	6		11		12	

e Estimated

* Site and datum, then in use.

06837390 HUGH BUTLER LAKE NEAR MCCOOK, NE

LOCATION.--Lat 40°21'35", long 100°39'55", in SW1/4NW1/4 sec.31, T.5 N., R.29 W., Frontier County, Hydrologic Unit 10250007, in gate-control house at outlet tube of Red Willow Dam on Red Willow Creek, 12 mi north of McCook.

DRAINAGE AREA.--730 mi², approximately, of which about 310 mi² contributes directly to surface runoff.

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

REVISED RECORDS.--WSP 2119: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to July 10, 1962, nonrecording gage at present datum.

REMARKS.--Reservoir is formed by earthfill dam; storage began Sept. 5, 1961. Capacity, 31,470 acre-ft between elevations 2,522.0 ft, sill of outlet works, and 2,581.8 ft, top of irrigation pool. Top of flood-control pool and crest of mean spillway at elevation 2,604.9 ft, capacity, 86,360 acre-ft. Top of superstorage flood control pool at elevation 2,627.8 ft, capacity, 162,600 acre-ft. Dead storage, 6,310 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 41,680 acre-ft July 15, 16, 1967, elevation, 2,584.14 ft; minimum since operation of reservoir began, 16,930 acre-ft Sept. 8, 1978, elevation, 2,565.31 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 39,700 acre-ft Apr. 26, elevation, 2,582.97 ft; minimum, 30,770 acre-ft Sept. 23, elevation, 2,577.20 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)

2,565	16,630	2,575	27,800
2,570	21,800	2,580	34,910

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34850	35770	36500	37190	37990	39090	38780	39310	38800	35820	33360	31000
2	34830	35800	36530	37230	38020	39210	38800	39320	38750	35640	33230	30980
3	34830	35850	36560	37290	38050	39340	38810	39340	38710	35570	33160	31100
4	34830	35860	36580	37260	38120	39370	38810	39360	38730	35500	33110	31100
5	34860	35770	36610	37290	38150	39360	38800	39390	38730	35390	33010	31100
6	34880	35770	36590	37320	38170	39320	38800	39360	38700	35270	32980	31080
7	34880	35820	36640	37310	38150	39240	38860	39340	38680	35160	32940	31080
8	35280	35820	36640	37340	38150	39160	38850	39310	38610	35050	32890	31080
9	35190	35830	36690	37390	38180	39130	38850	39310	38530	34970	32890	31070
10	35190	35850	36670	37440	38220	39060	38880	39260	38430	34860	32800	31070
11	35300	35860	36720	37450	38270	39010	39040	39240	38420	34770	32710	31060
12	35390	36070	36770	37480	38270	38960	39090	39180	38380	34690	32650	31060
13	35440	36040	36770	37520	38280	38930	39210	39140	38330	34650	32600	31070
14	35550	36120	36760	37520	38300	38910	39310	39080	38250	34930	32490	31080
15	35600	36150	36760	37530	38320	38900	39320	39010	38180	35100	32360	30980
16	35600	36210	36840	37570	38350	38880	39390	38990	38080	35130	32200	30940
17	35600	36230	36850	37570	38420	38880	39490	39010	37990	35110	32200	30930
18	35630	36310	36870	37580	38530	38810	39520	39010	37840	35140	32080	30880
19	35640	36310	36880	37610	38550	38830	39500	38990	37710	35130	31940	30880
20	35670	36320	36900	37650	38580	38750	39520	38960	37580	35000	31840	30880
21	35660	36350	36950	37680	38660	38700	39540	38990	37420	34890	31750	30870
22	35710	36390	36950	37710	38810	38730	39540	39010	37290	34740	31650	30810
23	35750	36400	36970	37740	38830	38710	39570	38990	37100	34590	31610	30770
24	35780	36370	37010	37780	38910	38680	39620	38990	36970	34400	31550	30780
25	35820	36350	37030	37790	38910	38650	39680	38960	36790	34220	31520	30810
26	35800	36390	37050	37890	38880	38680	39450	38930	36630	34030	31490	30810
27	35780	36400	37050	37910	38960	38660	39360	38860	36430	33880	31450	30830
28	35830	36450	37080	37920	39010	38680	39400	38900	36260	33740	31370	30810
29	35750	36450	37100	37940	---	38650	39370	38880	36080	33620	31300	30840
30	35690	36480	37130	37950	---	38710	39360	38900	35960	33530	31230	30850
31	35750	---	37180	37970	---	38760	---	38830	---	33460	31060	---
MEAN	35430	36130	36830	37570	38430	38930	39220	39100	37810	34770	32240	30950
MAX	35830	36480	37180	37970	39010	39370	39680	39390	38800	35820	33360	31100
MIN	34830	35770	36500	37190	37990	38650	38780	38830	35960	33460	31060	30770
(*)	2580.54	2581.00	2581.43	2581.92	2582.55	2582.40	2582.76	2582.44	2580.67	2579.05	2577.40	2577.26
(**)	+890	+730	+700	+790	+1040	-250	+600	-530	-2870	-2500	-2400	-210

CAL YR 1993 MEAN 32890 MAX 37180 MIN 25960 (**) +11230
WTR YR 1994 MEAN 36440 MAX 39680 MIN 30770 (**) -4010

(*) Elevation, in feet, at end of month.

(**) Change in contents, in acre-feet.

KANSAS RIVER BASIN

06838000 RED WILLOW CREEK NEAR RED WILLOW, NE

LOCATION.--Lat 40°14'10", long 100°30'00", in NE1/4 NE1/4 sec.17, T.3 N., R.28 W., Red Willow County, Hydrologic Unit 10250007, at temporary site during bridge construction on left bank 30 ft below U.S. Highways 6 and 34, 0.8 mi north of Red Willow and 2.1 mi upstream from mouth.

DRAINAGE AREA (REVISED).--820 mi², of which about 405 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--September 1939 to current year.

REVISED RECORDS.--WSP 1510: 1945(M). WSP 2119: 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.

REMARKS.--Records good except for periods of estimated record, 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	11	10	10	e9.0	12	12	36	1.1	22	7.3	2.2
2	9.2	11	10	10	e9.0	14	12	36	.95	20	3.6	6.3
3	9.3	10	10	10	e9.0	14	12	36	1.0	22	14	5.1
4	9.3	10	10	10	e9.0	13	12	37	1.2	27	15	4.6
5	9.4	8.0	10	10	e9.0	50	12	36	1.3	20	4.5	3.7
6	9.9	9.8	9.6	9.9	e8.6	59	12	36	1.5	8.9	2.9	3.5
7	10	11	10	e9.6	e8.4	61	12	36	1.5	14	1.9	3.5
8	15	10	11	e9.2	e8.0	62	11	36	10	8.2	2.1	3.5
9	15	10	11	e9.4	e8.0	63	11	36	19	7.8	6.4	3.9
10	10	10	11	e9.6	e8.4	64	12	36	18	6.6	2.9	2.8
11	9.9	10	11	9.7	e8.8	64	12	13	19	5.2	.10	2.6
12	9.9	11	12	9.7	e9.2	58	16	2.7	23	3.6	.03	2.9
13	9.7	11	12	9.8	e9.2	56	14	8.1	23	28	.07	2.7
14	10	10	11	9.8	e9.4	57	12	8.5	21	38	.14	2.6
15	11	10	e11	9.8	e9.6	43	12	8.3	21	22	4.4	2.7
16	10	10	e11	e9.6	e9.8	41	11	14	21	21	1.5	3.1
17	9.7	10	e11	e9.0	e10	41	12	4.0	17	20	2.5	3.7
18	9.9	10	e11	e8.6	e11	40	12	2.0	8.7	20	1.3	3.8
19	9.7	11	e11	e7.8	11	40	11	1.9	17	12	17	3.6
20	9.9	11	e10	e8.0	10	41	11	1.7	17	2.0	11	3.8
21	9.7	11	e10	e8.2	e10	41	11	1.7	21	5.4	6.2	5.2
22	10	11	e10	e8.4	e9.6	41	11	1.5	40	4.9	27	7.1
23	10	10	e10	e8.8	e9.6	20	11	1.3	33	3.1	53	6.5
24	9.9	9.0	e10	e9.4	e9.6	15	11	1.3	29	4.1	34	6.4
25	9.9	e8.6	11	10	e10	14	11	1.3	24	12	24	6.0
26	9.7	e8.2	11	e9.8	e9.6	14	23	1.2	21	22	20	5.3
27	10	e8.6	11	e9.4	e9.6	13	32	1.2	14	13	17	5.4
28	11	e9.2	11	e9.2	e10	13	35	1.2	13	13	16	4.7
29	9.6	e9.6	e10	e9.2	---	13	35	1.2	20	15	11	5.3
30	10	e10	10	e9.0	---	12	36	1.1	17	11	1.5	4.9
31	11	---	10	e9.0	---	12	---	.97	---	8.8	1.2	---
TOTAL	317.0	300.0	327.6	289.9	262.4	1101	457	439.17	475.25	440.6	309.54	127.4
MEAN	10.2	10.0	10.6	9.35	9.37	35.5	15.2	14.2	15.8	14.2	9.99	4.25
MAX	15	11	12	10	11	64	36	37	40	38	53	7.1
MIN	9.2	8.0	9.6	7.8	8.0	12	11	.97	.95	2.0	.03	2.2
AC-FT	629	595	650	575	520	2180	906	871	943	874	614	253

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1994, BY WATER YEAR (WY)

	MEAN	8.70	8.45	8.88	9.89	11.4	12.1	11.9	12.6	22.9	22.3	23.0	11.2
MAX	18.8	10.9	12.1	21.1	32.9	35.5	41.5	36.6	124	59.9	92.4	29.0	
(WY)	1970	1968	1966	1962	1968	1994	1970	1973	1967	1967	1978	1978	
MIN	3.84	4.98	5.95	5.46	7.15	7.55	4.98	2.87	4.56	7.44	4.02	3.22	
(WY)	1978	1978	1984	1979	1962	1991	1978	1978	1992	1992	1963	1991	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1962 - 1994

(SINCE STORAGE IN HUGH BUTLER LAKE)

ANNUAL TOTAL	4543.89	4846.86	
ANNUAL MEAN	12.4	13.3	
HIGHEST ANNUAL MEAN			13.6
LOWEST ANNUAL MEAN			25.5
HIGHEST DAILY MEAN	176	64	668
LOWEST DAILY MEAN	.99	.03	.02
ANNUAL SEVEN-DAY MINIMUM	4.3	1.1	.93
INSTANTANEOUS PEAK FLOW (STAGE)		66 (5.29)	30000
INSTANTANEOUS PEAK STAGE		5.39	18.36
ANNUAL RUNOFF (AC-FT)	9010	9610	9870
10 PERCENT EXCEEDS	18	32	22
50 PERCENT EXCEEDS	9.7	10	9.4
90 PERCENT EXCEEDS	6.6	2.7	5.9

06841000 MEDICINE CREEK ABOVE HARRY STRUNK LAKE, NE

LOCATION.--Lat 40°30'10", long 100°19'20", in SW1/4 sec.7, T.6 N., R.26 W., Frontier County, Hydrologic Unit 10250008, on right bank 0.3 mi downstream from top of Harry Strunk Lake flood-control pool, 2.5 mi upstream from top of irrigation pool, 3.8 mi southeast of Stockville, 13.5 mi upstream from Medicine Creek Dam, and at mile 25.6.

DRAINAGE AREA.--770 mi², approximately, of which about 530 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--January 1950 to current year. Prior to October 1950, published as "above Medicine Creek Reservoir."

REVISED RECORDS.--WSP 2119: Drainage area. WRD NE-93-1: 1987 (M), 1989-92 (M).

GAGE.--Water-stage recorder. Concrete control since November 1950. Datum of gage is 2,380.94 ft above sea level. (Bureau of Reclamation bench mark).

REMARKS.--Records good except for periods of estimated record, which are poor. Natural flow affected by irrigation development above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	57	62	60	e63	81	63	70	47	37	30	27
2	57	57	62	61	e64	176	63	70	46	35	31	28
3	56	59	62	61	e65	244	62	68	46	35	32	31
4	55	60	62	62	e66	182	62	69	47	37	41	33
5	55	59	62	63	e67	114	61	71	46	34	38	32
6	55	58	61	62	e68	96	61	71	45	35	38	32
7	55	58	62	63	e69	87	61	67	44	34	38	33
8	57	58	62	64	e70	81	61	65	44	36	35	33
9	57	58	61	72	e71	76	61	64	44	39	35	33
10	73	57	61	64	e72	74	60	63	46	39	41	32
11	66	59	62	63	e73	73	61	62	47	36	42	31
12	67	68	63	62	e74	72	67	61	46	36	43	31
13	63	71	63	62	e75	71	77	59	46	47	40	31
14	61	77	62	60	e76	71	83	59	45	51	37	30
15	60	72	63	61	e76	70	76	58	43	54	35	28
16	60	70	64	67	e76	70	72	58	42	57	36	29
17	59	68	64	66	e75	70	68	57	41	57	35	29
18	59	68	63	e63	e75	69	66	57	40	51	33	30
19	60	67	64	e63	e75	69	64	57	40	49	32	30
20	62	66	62	e63	e74	68	62	55	39	45	31	31
21	61	66	63	e63	e74	67	62	54	48	43	31	33
22	60	65	60	e63	e74	66	61	53	52	42	32	35
23	60	65	63	e63	75	65	63	52	46	39	32	37
24	60	64	63	e63	73	63	63	55	51	39	32	37
25	60	e62	63	e63	75	63	63	72	47	37	33	37
26	59	e64	62	e63	71	63	62	65	42	34	32	36
27	57	e63	63	e63	71	62	61	58	36	34	31	36
28	58	e63	62	e63	72	61	63	56	34	32	30	35
29	57	e63	62	e63	---	61	66	53	34	32	31	35
30	56	63	61	e63	---	61	70	51	34	31	30	35
31	56	---	60	e63	---	62	---	49	---	29	29	---
TOTAL	1838	1905	1929	1955	2009	2608	1945	1879	1308	1236	1066	970
MEAN	59.3	63.5	62.2	63.1	71.7	84.1	64.8	60.6	43.6	39.9	34.4	32.3
MAX	73	77	64	72	76	244	83	72	52	57	43	37
MIN	55	57	60	60	63	61	60	49	34	29	29	27
AC-FT	3650	3780	3830	3880	3980	5170	3860	3730	2590	2450	2110	1920

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1994, BY WATER YEAR (WY)

	MEAN	46.5	52.7	53.1	53.7	71.0	77.0	65.4	79.8	92.8	69.7	46.2	41.4
MAX	66.1	63.8	62.4	64.1	193	371	101	343	433	348	130	152	
(WY)	1966	1970	1970	1953	1960	1960	1964	1951	1962	1962	1962	1951	
MIN	33.4	42.8	43.7	38.2	48.7	50.5	45.7	39.7	33.4	18.9	18.6	20.2	
(WY)	1992	1976	1991	1977	1981	1991	1992	1992	1988	1990	1980	1990	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1950 - 1994

ANNUAL TOTAL	31036	20648	
ANNUAL MEAN	85.0	56.6	62.3
MEDIAN OF ANNUAL MEANS			56.0
HIGHEST ANNUAL MEAN			127
LOWEST ANNUAL MEAN			43.3
HIGHEST DAILY MEAN	994	Jul 12	244
LOWEST DAILY MEAN	32	Jan 13	27
ANNUAL SEVEN-DAY MINIMUM	39	Jan 9	29
INSTANTANEOUS PEAK FLOW			261
INSTANTANEOUS PEAK STAGE			7.54
ANNUAL RUNOFF(AC-FT)	61560	40960	45110
10 PERCENT EXCEEDS	111	72	73
50 PERCENT EXCEEDS	61	61	53
90 PERCENT EXCEEDS	52	33	30

KANSAS RIVER BASIN

06842000 HARRY STRUNK LAKE NEAR CAMBRIDGE, NE

LOCATION.--Lat 40°22'40", long 100°13'00", in NE1/4 sec.25, T.5 N., R.26 W., Frontier County, Hydrologic Unit 10250008, near right bank in control house at outlet tube of Medicine Creek Dam on Medicine Creek, 7 mi northwest of Cambridge.

DRAINAGE AREA.--880 mi², approximately, of which about 640 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--August 1949 to current year.

REVISED RECORDS.--WSP 2119: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to Aug. 18, 1960, nonrecording gage at present datum.

REMARKS.--Reservoir is formed by earthfill dam; storage began Aug. 8, 1949. Capacity, 31,540 acre-ft between elevation 2,335.0 ft, sill of outlet gates, and 2,366.1 ft, top of storage pool and crest of slot in spillway. Top of flood-control pool and crest of main spillway at elevation 2,386.2 ft, capacity, 88,420 acre-ft. Top of superstorage flood-control pool at elevation 2,400.0 ft, capacity, 146,300 acre-ft. Maximum water-surface elevation, 2,408.9 ft, 194,100 acre-ft. Dead storage, 4,160 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 Oct. 1982).

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 55,750 acre-ft Mar. 23, 1960, elevation, 2,374.10 ft; minimum since operation of reservoir began, 7,840 acre-ft Sept. 7, 1978, elevation, 2,340.39 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 39,700 acre-ft May 25, elevation, 2,368.18 ft; minimum, 18,510 acre-ft Sept. 1, elevation, 2,354.00 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)

2,345	10,320	2,360	25,910
2,350	14,500	2,365	33,730
2,355	19,630	2,370	43,470

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38620	37880	34980	34590	34790	34930	36770	37860	39380	33910	27990	18510
2	38540	37780	34930	34570	34800	35250	36850	38010	39220	33440	27540	18520
3	38540	37720	34840	34660	34800	35650	36940	38270	39220	33330	27250	18700
4	38520	37660	34750	34570	34800	35590	37070	38400	39240	33270	27080	18760
5	38520	37580	34620	34590	34820	35270	37030	38600	39240	33200	26870	18800
6	38560	37430	34530	34550	34800	34870	37130	38600	39260	33200	26810	18870
7	38460	37350	34530	34500	34800	34620	37280	38700	39200	32990	26710	18920
8	38480	37280	34530	34500	34750	34550	37370	38850	39140	32890	26450	18960
9	38340	37240	34550	34520	34770	34550	37450	38910	39050	32920	26040	19050
10	38330	37200	34550	34550	34750	34530	37550	38970	38990	32850	25670	19110
11	38400	37150	34550	34550	34710	34530	37800	39090	38950	32540	25230	19160
12	38400	37110	34660	34610	34730	34530	37970	39140	39010	32200	24960	19220
13	38440	37090	34610	34660	34730	34500	38130	39180	38950	31850	24650	19270
14	38420	37070	34700	34660	34770	34570	38110	39180	38850	31700	24250	19310
15	38480	36960	34570	34640	34770	34700	38030	39240	38700	31730	23840	19290
16	38420	36870	34590	34680	34840	34860	37950	39340	38330	31760	23390	19290
17	38380	36740	34610	34640	35000	35040	37950	39400	38050	31910	22940	19330
18	38360	36640	34620	34550	35290	35140	37900	39400	37620	31990	22490	19360
19	38340	36510	34640	34520	35480	35300	37700	39440	37280	31990	22040	19430
20	38330	36400	34610	34680	35540	35380	37600	39460	36790	31890	21730	19460
21	38310	36310	34610	34550	35610	35520	37510	39520	36380	31780	21290	19470
22	38330	36190	34570	34870	35670	35670	37390	39580	36230	31500	20810	19500
23	38330	36060	34550	34660	35540	35760	37470	39600	36080	31190	20400	19540
24	38330	35910	34590	34710	35450	35800	37450	39660	36040	30680	20040	19610
25	38330	35690	34590	34700	35290	35890	37430	39660	35990	30120	19730	19710
26	38210	35540	34620	34840	35160	36080	37370	39560	35860	29500	19510	19780
27	38170	35470	34550	34790	35040	36160	37320	39480	35630	29110	19310	19840
28	38210	35390	34530	34800	34930	36290	37550	39560	35230	28830	19080	19900
29	38070	35290	34550	34800	---	36320	37640	39560	34820	28600	18940	19980
30	38010	35090	34570	34770	---	36440	37720	39560	34340	28390	18800	20060
31	37940	---	34590	34790	---	36620	---	39420	---	28200	18710	---
(*)	2367.28	2365.76	2365.48	2365.59	2365.67	2366.59	2367.17	2368.04	2365.34	2361.59	2354.18	2355.37
(**)	-780	-2850	-500	+200	+140	+1690	+1100	+1700	-5080	-6140	-9490	+1350
MEAN	38360	36690	34620	34650	35020	35320	37510	39140	37700	31600	23240	19290
MAX	38620	37880	34980	34870	35670	36620	38130	39660	39380	33910	27990	20060
MIN	37940	35090	34530	34500	34710	34500	36770	37860	34340	28200	18710	18510
CAL YR 1993	MEAN 37270	MAX 46770	MIN 34230	(**) -210								
WTR YR 1994	MEAN 33590	MAX 39660	MIN 18510	(**) -18660								

(*) Elevation, in feet, at end of month.

(**) Change in contents, in acre-feet.

KANSAS RIVER BASIN

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06842500 MEDICINE CREEK BELOW HARRY STRUNK LAKE, NE

LOCATION.--Lat 40°22'20", long 100°13'20", at center of sec. 25, T. 5 N., R. 26 W., Frontier County, Hydrologic Unit 10250008, on right bank 0.5 mi downstream from Medicine Creek Dam, 6.5 mi northwest of Cambridge, and at mile 10.8.

DRAINAGE AREA (REVISED).--900 mi² of which about 655 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1949 to current year. Prior to October 1950, published as "below Medicine Creek Dam." Monthly discharge only for some periods, published in WSP 1730.

REVISED RECORDS.--WSP 2119: Drainage area.

GAGE.--Water-stage recorder. Concrete control since August 1950. Datum of gage is 2,295.26 ft above sea level (Bureau of Reclamation bench mark). Prior to Apr. 24, 1950, nonrecording gage at site 0.5 mi upstream at different datum.

REMARKS.--Records good except those below 1.0 ft³/s, which are poor. Flow regulated by Harry Strunk Lake (station 06842000).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	70	116	63	63	93	4.9	1.2	50	203	153	75
2	73	114	115	63	63	100	5.5	1.3	50	196	191	2.8
3	71	136	115	63	63	174	6.5	.94	49	145	185	.49
4	70	137	115	63	63	255	7.2	1.1	48	81	129	.43
5	68	131	113	64	63	278	8.0	1.8	48	60	106	.43
6	67	126	91	65	63	278	9.9	3.5	48	64	103	.40
7	65	127	76	65	64	195	10	4.2	56	58	102	.39
8	73	124	68	65	65	118	10	6.3	62	46	161	.28
9	72	121	63	65	67	102	6.9	8.2	62	46	195	.19
10	69	117	63	65	67	94	1.4	10	61	65	195	.13
11	71	114	63	65	67	90	3.2	12	60	178	206	.11
12	70	116	63	64	67	90	3.6	14	59	258	204	.11
13	70	115	61	63	67	90	78	15	59	211	195	.19
14	73	113	61	63	67	45	112	19	77	111	213	.21
15	74	132	61	63	67	1.9	111	18	127	48	246	.23
16	74	144	61	63	67	2.2	111	20	165	41	228	.25
17	74	140	61	63	67	2.8	111	21	186	43	233	.28
18	74	137	61	63	67	5.2	111	22	192	40	240	.25
19	74	135	61	63	67	1.9	111	23	205	39	215	.90
20	76	132	61	62	67	2.6	86	23	246	37	203	.85
21	74	128	61	61	67	2.9	75	24	214	95	214	1.1
22	74	127	61	61	106	3.3	76	24	150	185	260	1.1
23	73	126	61	62	133	3.7	77	25	104	183	267	.77
24	72	123	61	63	133	4.2	77	28	74	207	204	.21
25	73	121	61	63	133	4.4	78	49	67	316	180	.20
26	74	119	61	63	133	4.6	27	83	86	278	139	.53
27	72	119	63	63	133	3.7	1.2	63	149	195	133	1.1
28	71	117	63	63	132	3.4	1.3	53	195	170	121	1.4
29	73	117	63	63	---	3.8	1.1	53	233	150	98	1.2
30	70	117	63	63	---	3.7	1.2	53	230	122	87	.66
31	68	---	63	63	---	4.2	---	51	---	122	82	---
TOTAL	2227	3695	2230	1961	2281	2060.5	1322.9	731.54	3412	3993	5488	92.19
MEAN	71.8	123	71.9	63.3	81.5	66.5	44.1	23.6	114	129	177	3.07
MAX	76	144	116	65	133	278	112	83	246	316	267	.75
MIN	65	70	61	61	63	1.9	1.1	.94	48	37	82	.11
AC-FT	4420	7330	4420	3890	4520	4090	2620	1450	6770	7920	10890	183

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1994, BY WATER YEAR WY)

	11.6	15.2	17.7	20.5	31.2	48.3	42.4	54.6	107	184	138	29.7
MEAN	11.6	15.2	17.7	20.5	31.2	48.3	42.4	54.6	107	184	138	29.7
MAX	74.8	123	98.4	69.7	115	337	185	280	464	431	256	235
(WY)	1958	1994	1982	1952	1966	1960	1960	1957	1962	1962	1962	1951
MIN	.28	.30	.32	.35	.24	.47	.47	.38	3.08	3.95	4.23	.50
(WY)	1991	1991	1991	1991	1991	1992	1992	1992	1950	1950	1950	1963

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1950 - 1994

ANNUAL TOTAL	37054.03	29494.13	
ANNUAL MEAN	102	80.8	59.8
HIGHEST ANNUAL MEAN			119
LOWEST ANNUAL MEAN			17.2
HIGHEST DAILY MEAN	543 Jul 28	316 Jul 25	1290 Mar 23 1960
LOWEST DAILY MEAN	.24 May 1	.11 Sep 11	.00 Sep 11 1990
ANNUAL SEVEN-DAY MINIMUM	3.6 Apr 30	.17 Sep 9	.04 Sep 7 1990
INSTANTANEOUS PEAK FLOW		337 Jul 25-26	1300 Mar 23 1960
INSTANTANEOUS PEAK STAGE		2.79 Jul 25-26	5.97 Mar 23 1960
ANNUAL RUNOFF (AC-FT)	73500	58500	43330
10 PERCENT EXCEEDS	238	188	173
50 PERCENT EXCEEDS	70	67	27
90 PERCENT EXCEEDS	30	1.4	.53

KANSAS RIVER BASIN

06843500 REPUBLICAN RIVER AT CAMBRIDGE, NE

LOCATION.--Lat 40°17'05", long 100°08'35", in NW1/4 SE1/4 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 (REVISED).--14,460 mi², of which about 7,780 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--September 1945 to current year.

REVISED RECORDS.--WSP 2119: Drainage area. WDR NE-84: 1983(M).

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 except for periods of estimated record, which are poor, and Aug. 30 to Sept. 30 which are fair. Natural flow affected by irrigation development above station and since 1949 by regulation from upstream reservoirs.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	214	208	304	208	e188	290	168	141	85	257	254	109
2	208	218	313	207	e196	288	167	140	82	273	281	89
3	207	263	310	208	e192	368	164	142	79	282	318	70
4	205	260	293	209	e201	447	160	144	77	220	281	53
5	197	246	285	211	e209	509	163	163	75	190	239	39
6	190	237	272	207	e210	538	157	171	71	182	212	33
7	188	233	240	199	e187	482	150	184	68	191	204	32
8	201	233	233	e177	e172	369	143	196	75	179	217	30
9	237	232	225	e171	e73	319	137	198	91	165	256	29
10	229	226	220	e177	e198	305	141	200	115	153	238	30
11	225	225	220	e171	e204	297	150	198	116	210	239	28
12	222	259	226	e169	e217	296	195	177	108	336	290	27
13	224	257	228	e161	e220	292	265	172	100	294	314	25
14	231	248	232	e154	e221	283	335	190	100	239	279	24
15	232	258	231	e151	e222	213	311	183	139	203	310	23
16	232	287	234	e161	e237	190	293	160	187	357	289	23
17	227	288	225	e156	e249	191	282	144	221	331	274	22
18	229	285	223	e108	e299	198	272	133	245	272	292	23
19	231	277	224	e147	e270	200	263	126	247	238	272	24
20	231	268	226	e185	296	197	245	119	297	206	235	24
21	226	261	215	e197	280	189	213	97	330	179	225	25
22	219	262	208	e207	292	192	203	87	265	302	264	31
23	214	259	210	e214	357	187	193	81	211	295	340	33
24	215	245	208	e210	349	166	185	98	165	294	369	32
25	214	188	216	e202	331	164	178	96	138	423	305	32
26	215	197	206	e150	327	166	160	122	131	417	223	34
27	211	232	205	e151	313	167	121	120	182	348	196	33
28	211	258	193	e178	306	169	131	102	237	313	179	33
29	210	279	216	e206	---	169	141	97	273	277	147	32
30	204	290	216	e197	---	171	144	96	289	270	128	33
31	209	---	212	e179	---	171	---	90	---	235	109	---
TOTAL	6708	7479	7269	5628	6816	8183	5830	4367	4799	8131	7779	1075
MEAN	216	249	234	182	243	264	194	141	160	262	251	35.8
MAX	237	290	313	214	357	538	335	200	330	423	369	109
MIN	188	188	193	108	73	164	121	81	68	153	109	22
AC-FT	13310	14830	14420	11160	13520	16230	11560	8660	9520	16130	15430	2130

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1994, BY WATER YEAR (WY)

	MEAN	126	159	155	162	253	314	277	329	368	382	306	163
	MAX	515	425	389	384	579	1684	756	1624	1743	1613	1202	1935
	(WY)	1966	1966	1966	1959	1966	1960	1958	1957	1962	1962	1962	1951
	MIN	11.4	64.3	74.3	44.4	109	111	91.3	48.0	60.7	160	98.9	5.59
	(WY)	1992	1991	1979	1979	1991	1991	1992	1992	1992	1952	1952	1990

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1950 - 1994

(
ANNUAL TOTAL					93626			74064					
ANNUAL MEAN					257			203			250		
HIGHEST ANNUAL MEAN											686		1951
LOWEST ANNUAL MEAN											110		1991
HIGHEST DAILY MEAN					1540	Jul 24		538	Mar 6		8610		Mar 22 1960
LOWEST DAILY MEAN					67	Jun 17		22	Sep 17		.07		Sep 27 1978
ANNUAL SEVEN-DAY MINIMUM					83	Jan 4		23	Sep 14		.11		Sep 21 1978
INSTANTANEOUS PEAK FLOW								547	Mar 6		160000		Jun 22 1947
INSTANTANEOUS PEAK STAGE								4.55	Mar 6		*16.70		Jun 22 1947
ANNUAL RUNOFF (AC-FT)					185700			146900			180800		
10 PERCENT EXCEEDS					357			297			432		
50 PERCENT EXCEEDS					225			208			173		
90 PERCENT EXCEEDS					128			82			77		

e Estimated.

* From floodmark.

KANSAS RIVER BASIN

221

06844500 REPUBLICAN RIVER NEAR ORLEANS, NE

LOCATION.--Lat 40°07'53", long 99°30'08", in NE1/4 NE1/4 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 (REVISED).--15,580 mi², approximately, of which about 8,880 mi² contributes directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1947 to current year.

REVISED RECORDS.--WSP 2119: 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.

REMARKS.--Records good except for period July 28 to Aug. 17, which is fair, and for period of estimated discharge, which is poor. Natural flow affected by irrigation development above station and regulation by upstream reservoirs.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	300	290	e290	e220	e140	e230	224	247	99	58	90	60
2	296	291	e300	e220	e150	e260	223	245	94	62	70	56
3	294	293	e310	e200	e160	e320	216	240	92	76	75	63
4	292	303	e310	e200	e165	957	215	237	91	123	122	82
5	290	307	e320	e200	e170	1380	205	235	89	122	113	86
6	289	305	326	e185	e160	957	200	244	84	110	114	75
7	288	303	320	e145	e145	769	199	265	79	110	104	64
8	289	304	312	e140	e130	681	198	275	81	104	95	63
9	290	304	307	e145	e115	567	198	279	84	101	87	57
10	295	303	301	e155	e120	493	213	281	86	98	76	53
11	299	305	297	e170	e130	470	219	278	98	86	74	50
12	297	308	298	e190	e150	447	264	266	104	98	74	48
13	294	314	299	e205	e170	436	300	250	105	118	66	46
14	297	322	298	e200	e195	422	345	242	82	140	68	44
15	299	321	297	e180	e225	410	399	230	65	145	81	40
16	301	317	297	e170	e230	378	392	243	55	162	80	37
17	305	321	297	e160	e240	343	378	225	53	169	72	35
18	307	325	297	e150	e250	317	365	188	59	293	61	35
19	307	325	295	e150	e250	307	354	162	53	250	53	36
20	307	323	291	e160	e250	297	346	146	55	177	59	35
21	304	323	294	e175	e220	292	337	135	94	132	69	35
22	304	323	292	e185	e205	292	310	129	110	97	63	37
23	302	320	e270	e200	e195	282	296	115	159	76	59	41
24	302	e300	e260	e215	e170	269	291	105	170	82	61	44
25	300	e280	e260	e220	e160	257	281	103	201	73	84	49
26	299	e260	e260	e210	e155	245	276	110	144	107	109	50
27	297	e240	e250	e200	e150	238	269	111	95	139	107	50
28	297	e260	e220	e190	e185	235	249	128	77	121	89	48
29	294	e270	e220	e175	---	229	236	138	62	113	78	48
30	292	e280	e220	e160	---	229	252	118	66	98	72	47
31	292	---	e220	e130	---	226	---	106	---	91	61	---
TOTAL	9219	9040	8828	5605	4985	13235	8250	6076	2786	3731	2486	1514
MEAN	297	301	285	181	178	427	275	196	92.9	120	80.2	50.5
MAX	307	325	326	220	250	1380	399	281	201	293	122	86
MIN	288	240	220	130	115	226	198	103	53	58	53	35
AC-FT	18290	17930	17510	11120	9890	26250	16360	12050	5530	7400	4930	3000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1994, BY WATER YEAR (WY)

	MEAN	132	173	174	173	307	400	344	413	502	279	187	154
MAX	840	519	438	392	772	1720	915	1528	2732	1602	1396	2026	
(WY)	1966	1966	1966	1953	1949	1960	1949	1951	1948	1962	1962	1951	
MIN	.000	38.5	50.4	24.2	118	144	124	54.8	56.6	10.8	3.51	.007	
(WY)	1992	1979	1979	1979	1978	1991	1991	1956	1988	1991	1955	1991	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1948 - 1994

ANNUAL TOTAL	142758	75755	
ANNUAL MEAN	391	208	269
HIGHEST ANNUAL MEAN			746
LOWEST ANNUAL MEAN			78.4
HIGHEST DAILY MEAN	4940	1380	18400
LOWEST DAILY MEAN	52	35	.00
ANNUAL SEVEN-DAY MINIMUM	69	36	.00
INSTANTANEOUS PEAK FLOW (STAGE)		1520	40600 (11.25)
INSTANTANEOUS PEAK STAGE		*5.82	**12.95
ANNUAL RUNOFF (AC-FT)	283200	150300	195100
10 PERCENT EXCEEDS	530	317	506
50 PERCENT EXCEEDS	299	201	168
90 PERCENT EXCEEDS	145	62	45

e Estimated.

* From floodmark.

* Backwater from ice.

KANSAS RIVER BASIN

06844500 REPUBLICAN RIVER NEAR ORLEANS, NE--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969 to September 1994 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DISCHARGE, INST. (FT ³ /S) (00061)	SPECIFIC CON- DUCT- ANCE (μS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (°C) (00010)	BARO- METRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY LAB (MG/L AS CaCO ₃) (90410)	
OCT	13...	0930	294	690	7.5	12.0	708	10.0	36	17	266
DEC	07...	0930	320	696	8.6	0.0	708	13.6	36	15	263
JAN	14...	1300	200	700	7.3	0.0	714	14.4	37	15	267
MAR	08...	1300	691	585	8.5	4.5	715	11.7	27	15	232
APR	22...	1130	305	728	8.5	16.0	713	8.8	41	16	280
JUN	13...	1000	107	679	8.3	24.0	700	8.4	44	5.5	223
JUL	13...	1230	120	555	8.4	21.5	708	8.0	35	15	199
SEP	13...	1200	45	655	8.8	24.5	695	10.8	48	18	232

DATE	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	
OCT	13...	76	19	0.60	37	--	<0.010	1.90	0.020	0.170	0.190
DEC	07...	73	19	0.60	40	--	<0.010	2.20	0.030	0.100	0.120
JAN	14...	72	20	0.70	41	--	<0.010	2.60	0.070	0.160	0.110
MAR	08...	53	16	0.60	36	1.89	0.010	1.90	0.060	0.170	0.160
APR	22...	80	23	0.70	39	1.58	0.020	1.60	0.010	0.120	0.110
JUN	13...	88	24	0.60	35	0.320	0.020	0.340	0.030	0.050	0.040
JUL	13...	66	17	0.60	28	0.290	0.020	0.310	0.030	0.180	0.170
SEP	13...	94	27	0.70	38	--	<0.010	<0.050	<0.010	0.010	<0.010

DATE	TIME	BORON, DISSOLVED (μG/L AS B) (01020)	IRON, DISSOLVED (μG/L AS FE) (01046)	MANGANESE, DISSOLVED (μG/L AS MN) (01056)	
OCT	13...	0930	120	7	4
DEC	07...	0930	100	12	5
JAN	14...	1300	120	7	4
MAR	08...	1300	80	10	<10
APR	22...	1130	120	<3	4
JUN	13...	1000	140	10	<10
JUL	13...	1230	110	30	<10
SEP	13...	1200	150	<3	16

KANSAS RIVER BASIN

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06846500 BEAVER CREEK AT CEDAR BLUFFS, KS

LOCATION.--Lat 39°59'06", long 100°33'35", in NW1/4 NE1/4 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 mi², of which 294 mi² is probably noncontributing.

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

REVISED RECORDS.--WSP 1510: 1947, 1950-51.

GAGE.--Water-stage recorder. Datum of gage is 2,520.33 ft above sea level. 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 good except those for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in July 1944 reached a stage of 18.16 ft, from floodmark.

PEAK DISCHARGES GREATER THAN BASE FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/sec and maximum (*):

Date	Time	Discharge (ft ³ /sec)	Gage height (ft)	Date	Time	Discharge (ft ³ /sec)	Gage height (ft)
July 16	2130	*427	*8.48	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.5	e.80	e2.4	e3.1	e2.8	e11	4.6	8.6	e6.4	3.5	3.6	.48
2	e1.2	e.75	e2.8	e3.3	e3.1	e12	4.6	8.4	e6.3	3.4	3.2	.31
3	e1.0	e.70	3.1	e3.5	e3.5	e13	4.5	8.6	e6.2	5.9	3.0	e.25
4	e.90	e.65	e3.3	e3.3	e4.0	e13	4.5	8.5	e6.1	10	2.6	e.20
5	e.80	e.60	3.4	3.2	e4.5	e12	4.6	8.5	e6.0	13	4.6	e.18
6	e.75	e.50	e3.2	e3.0	e5.0	e11	4.6	8.6	5.9	8.1	3.5	e.16
7	e.75	e.60	3.1	e2.8	e5.0	e10	4.8	8.6	5.2	3.4	2.0	e.15
8	e.80	e.70	e3.0	2.7	e4.5	e9.5	4.8	10	17	2.5	1.5	e.15
9	e.80	e.90	e2.9	2.1	e4.0	e9.0	5.1	8.8	14	9.0	1.4	1.8
10	e.80	1.3	e2.9	2.2	e4.5	e9.5	5.4	8.4	8.7	23	1.4	5.6
11	e.80	1.9	e2.9	e2.5	e4.7	e9.0	5.6	8.2	2.6	11	37	9.7
12	e.80	2.3	e3.0	e2.7	e5.0	e8.5	7.1	8.0	2.3	7.1	17	4.1
13	e.80	2.6	e3.2	e2.9	e5.5	e8.0	8.6	8.0	13	6.3	20	1.6
14	e.80	2.4	e3.1	e3.0	e6.0	8.9	12	7.9	80	5.2	88	1.0
15	e.80	2.4	e3.0	e2.8	e6.5	6.3	16	7.6	45	152	27	.34
16	e.80	2.6	3.1	e2.6	e7.0	5.4	16	7.4	18	364	6.4	e.25
17	e.80	2.6	e2.9	e2.5	e7.5	5.1	16	7.2	12	134	3.2	e.20
18	e.85	2.9	e2.7	2.3	e8.0	5.2	16	6.8	e9.7	16	2.4	e.15
19	.90	2.6	e2.6	e2.5	e9.0	5.4	14	6.7	e8.2	12	2.1	e.12
20	1.0	2.3	e2.6	e2.3	e10	5.4	13	6.8	e6.8	9.3	1.8	e.10
21	1.2	2.5	e2.6	e2.4	e11	5.5	12	6.9	5.9	7.9	1.3	e.08
22	1.7	2.8	e2.6	e2.5	e10	5.5	11	7.0	5.9	6.5	.87	e.05
23	1.5	e2.5	e2.6	e2.8	e9.5	5.4	11	7.0	5.8	5.7	.96	e.01
24	1.2	e2.0	2.5	e3.0	e9.0	5.4	11	6.8	7.1	5.0	45	e.00
25	.82	1.4	2.3	e3.0	e9.0	5.3	10	7.0	7.3	5.0	14	e.00
26	.66	e1.3	2.7	e2.8	e9.0	4.9	9.9	7.2	8.2	5.4	4.0	e.00
27	.89	e1.2	e2.8	e2.6	e9.5	4.9	9.3	e7.0	7.1	5.1	2.0	e.00
28	1.0	e1.3	e2.7	e2.5	e10	4.9	8.8	e6.8	4.9	6.3	1.1	e.00
29	1.0	e1.5	e2.6	e2.4	---	4.9	8.8	e6.7	3.9	3.7	.77	e.00
30	e.90	e1.8	e2.6	e2.5	---	4.8	8.8	e6.6	3.7	2.9	.70	e.00
31	e.85	---	e3.0	e2.6	---	4.8	---	e6.5	---	3.3	.36	---
MEAN	.95	1.68	2.85	2.72	6.68	7.53	9.08	7.65	11.3	27.6	9.77	.90
MAX	1.7	2.9	3.4	3.5	11	13	16	10	80	364	88	9.7
MIN	.66	.50	2.3	2.1	2.8	4.8	4.5	6.5	2.3	2.5	.36	.00
AC-FT	58	100	175	167	371	463	540	470	673	1700	601	54

e Estimated

KANSAS RIVER BASIN

06846500 BEAVER CREEK AT CEDAR BLUFFS, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1994, BY WATER YEAR (WY)

MEAN	9.64	2.96	2.54	2.16	3.96	12.6	7.41	25.4	41.6	32.5	15.0	17.0
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	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1954	1955	1955	1955	1956	1955	1955	1955	1979	1980	1955	1953

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1946 - 1994

ANNUAL MEAN	8.68	7.42	14.5
HIGHEST ANNUAL MEAN			106
LOWEST ANNUAL MEAN			.000
HIGHEST DAILY MEAN	539	364	4560
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
INSTANTANEOUS PEAK FLOW		427	7940
INSTANTANEOUS PEAK STAGE		8.48	18.71
ANNUAL RUNOFF (AC-FT)	6290	5370	10490
10 PERCENT EXCEEDS	17	11	25
50 PERCENT EXCEEDS	.80	3.7	.00
90 PERCENT EXCEEDS	.00	.76	.00

06847000 BEAVER CREEK NEAR BEAVER CITY, NE

LOCATION.--Lat 40°07'12", long 99°53'35", in SW1/4SW1/4 sec.23, T.2 N., R.23 W., Fumas County, Hydrologic Unit 10250014, on left bank 400 ft downstream from bridge on U.S. Highway 283, 3.5 mi west of Beaver City, and at mile 25.5.

DRAINAGE AREA (REVISED).--2080 mi², of which about 1,760 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1936 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1340: 1937-38(M), 1939, 1940-41(M), 1943(M). WSP 2119: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,164.84 ft (corrected from previous figure) above sea level, adjustment of 1988. Prior to Aug. 13, 1947, nonrecording gages and Aug. 13, 1947, to Nov. 14, 1957, water-stage recorder, at site 400 ft upstream at datum 2.0 ft higher. Nov. 15, 1957, to Sept. 22, 1958 at site 3.6 mi upstream at different datum.

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.81	2.0	2.2	2.4	2.6	3.1	2.9	4.8	2.7	1.7	1.9	.30
2	.65	2.0	2.3	2.4	2.7	3.7	3.2	4.7	3.1	1.5	1.5	.32
3	.60	1.9	2.3	2.4	2.6	6.3	3.6	4.5	2.9	2.3	1.3	.35
4	.61	1.7	2.3	2.4	2.6	8.8	3.5	4.4	2.7	2.3	1.1	.38
5	.75	1.6	2.3	2.6	2.6	9.2	3.4	4.2	2.4	1.7	.92	.35
6	1.3	1.6	2.3	2.5	2.5	8.0	3.4	4.0	2.2	1.6	.85	.37
7	1.4	1.6	2.3	2.6	e2.4	6.5	3.4	4.0	2.1	1.8	.79	.39
8	1.5	1.7	2.2	2.5	e2.4	5.7	3.3	3.9	2.4	1.8	.69	.36
9	1.6	1.7	2.2	2.5	e2.3	5.1	3.6	3.9	2.4	1.8	.64	.31
10	1.6	1.8	2.2	2.5	e2.3	5.2	4.0	3.9	10	1.5	.63	.29
11	1.6	1.7	2.2	2.4	e2.2	5.3	4.1	3.9	17	1.4	.57	.29
12	1.3	2.2	2.5	2.4	e2.1	5.2	4.8	3.8	8.6	1.3	.55	.16
13	1.5	2.4	2.6	2.4	2.0	5.1	5.3	3.8	13	1.8	.47	.16
14	1.5	2.6	2.5	2.4	2.0	4.9	7.0	3.8	11	1.8	.41	.18
15	1.6	2.9	2.4	2.3	2.1	4.5	7.1	4.0	5.9	1.8	.37	.17
16	1.8	2.8	2.4	2.3	2.2	4.6	6.5	4.1	3.9	1.9	.28	.16
17	2.0	2.5	2.4	2.3	2.2	4.7	5.7	3.9	3.4	1.9	.24	.15
18	2.0	2.3	2.4	2.4	3.1	5.1	5.1	3.7	2.9	2.1	.24	.15
19	2.1	2.3	2.4	2.7	4.3	5.1	5.1	3.6	2.6	3.7	6.1	.18
20	1.9	2.1	2.3	2.6	5.1	5.1	4.9	3.5	2.2	11	11	.18
21	2.0	2.2	2.3	2.6	5.3	4.9	4.7	3.5	3.0	46	7.5	.16
22	2.0	2.2	2.3	2.6	5.2	4.4	4.7	3.4	6.8	27	5.3	.20
23	2.2	2.2	2.2	2.5	3.9	4.3	4.6	3.3	8.3	15	3.6	.19
24	2.3	2.1	2.3	2.6	3.4	4.0	4.4	3.1	5.8	11	2.1	.19
25	2.2	2.0	2.4	2.5	3.1	3.9	4.4	3.1	4.5	9.3	1.5	.22
26	1.9	2.0	2.4	2.8	3.1	3.8	4.5	2.9	3.7	7.6	.61	.22
27	2.0	2.1	2.4	2.6	3.4	3.6	4.4	2.7	2.9	5.8	.38	.16
28	2.1	2.2	2.4	2.5	3.2	3.5	4.3	2.8	2.4	4.5	.29	.11
29	2.1	2.2	2.4	2.4	---	3.6	4.5	3.7	2.2	3.2	.24	.09
30	2.1	2.2	2.4	2.3	---	3.7	4.9	3.1	1.8	2.5	.23	.09
31	2.0	---	2.5	2.5	---	3.4	---	2.7	---	2.2	.29	---
TOTAL	51.02	62.8	72.7	76.9	82.9	154.3	135.3	114.7	144.8	180.8	52.59	6.83
MEAN	1.65	2.09	2.35	2.48	2.96	4.98	4.51	3.70	4.83	5.83	1.70	.23
MAX	2.3	2.9	2.6	2.8	5.3	9.2	7.1	4.8	17	46	11	.39
MIN	.60	1.6	2.2	2.3	2.0	3.1	2.9	2.7	1.8	1.3	.23	.09
AC-FT	101	125	144	153	164	306	268	228	287	359	104	14

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1994, BY WATER YEAR (WY)

MEAN	14.2	4.32	4.20	3.43	6.40	12.0	12.8	24.6	67.2	45.1	23.0	18.3
MAX	400	66.1	47.8	37.8	52.0	222	87.3	226	350	450	166	430
(WY) 1947	1966	1966	1966	1966	1966	1960	1960	1949	1983	1951	1951	1951
MIN	.000	.000	.035	.043	.003	.20	.20	.16	.14	.022	.000	.000
(WY) 1956	1956	1956	1956	1979	1979	1956	1956	1956	1955	1978	1955	1955

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1938 - 1994
ANNUAL TOTAL	1196.59	1135.64	
ANNUAL MEAN	3.28	3.11	19.7
MEDIAN OF ANNUAL MEANS			7.8
HIGHEST ANNUAL MEAN			116
LOWEST ANNUAL MEAN			.25
HIGHEST DAILY MEAN	68 Mar 9	46 Jul 21	5130 Jun141983
LOWEST DAILY MEAN	.20 Jan 1	.09 Sep 29	.00 Nov191937
ANNUAL SEVEN-DAY MINIMUM	.29 Jun 16	.15 Sep 24	.00 Jul191940
INSTANTANEOUS PEAK FLOW		52 Jul 21	9510 Jun141983
INSTANTANEOUS PEAK STAGE		4.52 Jul 21	15.68 Jun141983
ANNUAL RUNOFF (AC-FT)	2370	2250	14250
10 PERCENT EXCEEDS	7.0	5.2	36
50 PERCENT EXCEEDS	1.1	2.4	1.2
90 PERCENT EXCEEDS	.35	.38	.12

KANSAS RIVER BASIN

06847500 SAPPA CREEK NEAR STAMFORD, NE

LOCATION.--Lat 40°7'53", long 99°33'15", in NW1/4 NW1/4 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 (REVISED).--3,840 mi², of which about 3,370 mi² 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. WSP 2119: Drainage area. WDR NE-71-1: Calendar year totals. WRD NE-82-1: 1979(M).

GAGE.--Water-stage recorder. Datum of gage is 1,981.31 ft above sea level.

REMARKS.--Records fair. Natural flow affected by irrigation development above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	19	29	28	e22	59	30	44	22	15	21	11
2	22	19	32	27	e24	62	30	43	21	16	18	11
3	22	19	27	35	e25	69	29	44	20	23	17	10
4	22	21	32	28	e25	63	30	44	20	102	15	10
5	20	20	37	28	e27	107	29	44	20	35	13	9.3
6	19	20	33	22	e28	86	29	44	19	26	12	8.6
7	18	20	30	e10	e28	70	29	43	18	23	14	8.5
8	18	20	34	e22	e12	53	30	43	19	28	11	8.7
9	18	20	33	e27	e13	52	30	41	19	27	7.3	10
10	18	20	31	e29	e14	50	32	40	18	27	6.3	7.9
11	17	21	27	e31	e16	50	36	40	90	25	9.9	6.9
12	15	23	27	e30	e18	43	42	42	227	18	12	6.4
13	16	24	30	e29	e20	41	47	48	112	19	7.7	5.9
14	19	24	29	e28	e20	40	53	46	72	47	9.3	5.7
15	21	29	28	e23	e20	39	54	41	45	48	10	6.7
16	21	36	27	e21	e22	38	55	38	26	36	124	13
17	21	32	26	e19	e24	38	54	36	20	42	122	10
18	23	29	24	e15	e26	37	53	35	16	123	32	7.8
19	23	28	27	e17	e28	37	51	34	13	173	18	6.4
20	24	27	33	e19	e31	36	53	32	11	216	93	5.5
21	23	26	36	e22	e28	35	53	31	18	133	72	5.0
22	21	26	31	e23	e25	35	52	29	60	75	48	5.0
23	21	26	37	e24	e45	34	55	28	71	64	34	5.0
24	21	e18	37	e25	e105	33	54	28	160	51	26	5.0
25	21	e10	28	e25	102	32	51	28	57	37	21	5.0
26	21	e23	30	e25	91	32	49	28	30	73	18	5.0
27	21	32	33	e26	77	32	46	28	30	34	15	5.0
28	20	31	e18	e27	67	31	45	25	25	30	18	5.0
29	19	33	e24	e26	---	30	44	25	17	28	18	5.0
30	19	30	35	e23	---	30	44	25	16	25	12	5.0
31	19	---	31	e20	---	30	---	23	---	22	11	---
TOTAL	627	726	936	754	983	1424	1289	1120	1312	1641	865.5	219.3
MEAN	20.2	24.2	30.2	24.3	35.1	45.9	43.0	36.1	43.7	52.9	27.9	7.31
MAX	24	36	37	35	105	107	55	48	227	216	124	13
MIN	15	10	18	10	12	30	29	23	11	15	6.3	5.0
AC-FT	1240	1440	1860	1500	1950	2820	2560	2220	2600	3250	1720	435

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1994, BY WATER YEAR (WY)

MEAN	42.9	12.2	9.49	7.78	18.2	35.2	23.8	58.1	158	95.9	58.0	43.2
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	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1954	1955	1955	1955	1956	1956	1956	1956	1981	1977	1955	1959

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1946 - 1994

ANNUAL TOTAL	12791.20	11896.8	
ANNUAL MEAN	35.0	32.6	47.1
MEDIAN OF ANNUAL MEANS			20.2
HIGHEST ANNUAL MEAN			229
LOWEST ANNUAL MEAN			.59
HIGHEST DAILY MEAN	400	Mar 9	227
LOWEST DAILY MEAN	.00	Jan 1	5.0
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	5.0
INSTANTANEOUS PEAK FLOW			244
INSTANTANEOUS PEAK STAGE			6.76
ANNUAL RUNOFF (AC-FT)	25370	23600	34110
10 PERCENT EXCEEDS	71	54	85
50 PERCENT EXCEEDS	23	27	5.1
90 PERCENT EXCEEDS	.00	1	.00

e Estimated.

* From floodmark.

KANSAS RIVER BASIN

227

06848500 PRAIRIE DOG CREEK NEAR WOODRUFF, KS

LOCATION.--Lat 39°59'09", long 99°28'39", in NW1/4 NW1/4 sec.9, T.1 S., R.19 W., Phillips County, Hydrologic Unit 10250015, on left bank atdownstream side of bridge on U.S. Highway 383, 1.0 mi south of Kansas-Nebraska State line, 2.5 mi west of Woodruff, and at mile 26.5.

DRAINAGE AREA.--1,007 mi².

PERIOD OF RECORD.--October 1928 to September 1932, October 1944 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 2,016.20 ft above sea level. 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 1993 TO SEPTEMBER 1994

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	8.1	7.5	9.2	e11	15	5.1	7.7	2.8	6.6	4.6	.37
2	3.0	8.1	7.8	9.6	e12	16	3.7	8.6	4.2	6.2	21	.27
3	2.8	8.2	7.9	9.7	e12	31	2.8	8.5	4.2	8.6	17	.26
4	2.8	8.2	e7.6	9.7	13	46	2.8	8.5	4.1	52	11	.25
5	2.8	7.9	7.9	9.9	13	43	4.3	8.2	2.9	432	7.9	.19
6	2.5	7.8	e7.4	10	e11	32	5.0	8.1	2.7	69	4.6	.13
7	1.8	8.3	7.6	9.9	e10	21	5.2	8.1	3.1	32	2.5	.11
8	5.8	8.6	e7.4	9.0	e10	22	5.4	8.0	2.9	16	1.1	.13
9	6.5	8.5	8.0	e8.6	e11	19	5.8	7.0	3.1	23	.64	.14
10	4.3	9.4	7.8	e8.0	e11	17	9.7	6.5	3.3	18	.70	.10
11	3.8	9.6	8.3	e8.0	e12	12	14	6.1	3.8	5.9	.55	.09
12	3.8	11	7.8	e8.0	12	9.6	20	5.9	5.8	1.7	.31	.07
13	3.7	10	8.5	e7.0	12	7.7	24	5.7	12	.81	.14	.04
14	4.8	10	8.6	e7.0	14	6.5	25	7.6	4.4	3.7	.15	.00
15	5.5	11	9.0	e6.0	15	6.1	36	9.6	3.2	7.9	13	.00
16	6.5	12	9.1	e6.0	18	5.6	25	10	1.4	14	42	.00
17	6.8	16	9.1	e6.4	25	5.6	14	7.2	.83	17	23	.00
18	7.5	13	e9.0	e7.0	35	5.6	10	5.9	1.0	9.4	5.4	.00
19	8.8	7.7	e8.0	e7.2	36	5.4	8.4	5.4	1.3	15	1.2	.00
20	7.9	7.6	e7.0	e8.0	32	5.4	7.4	5.1	1.1	6.1	.33	.00
21	7.0	7.4	e8.0	e9.0	e32	5.7	7.3	5.2	8.1	1.9	.40	.00
22	7.0	7.3	e8.0	e10	e32	5.4	5.3	6.0	6.8	.93	.68	.00
23	6.9	7.5	8.8	e11	35	3.1	5.4	6.2	31	.78	.70	.00
24	7.4	7.6	8.6	e11	21	1.7	6.5	6.2	18	.99	.55	.00
25	7.0	7.1	9.0	e10	20	1.2	6.6	6.3	20	.67	.33	.02
26	6.8	6.7	9.2	e9.0	16	1.1	6.6	6.3	7.9	.26	.26	.09
27	6.7	6.8	9.2	e9.0	15	4.5	6.1	6.3	3.8	.26	.14	.09
28	7.4	6.9	9.1	e10	14	6.7	6.4	6.4	2.5	.32	.11	.09
29	7.6	7.0	e8.8	e10	---	6.3	6.5	6.5	1.5	.19	.11	.08
30	7.9	7.3	e8.8	e11	---	5.1	6.9	4.1	1.4	.13	.15	.07
31	7.8	---	9.2	e10	---	5.0	---	2.0	---	.10	.48	---
MEAN	5.61	8.75	8.32	8.85	18.2	12.2	9.91	6.75	5.64	24.2	5.19	.086
MAX	8.8	16	9.2	11	36	46	36	10	31	432	42	.37
MIN	1.8	6.7	7.0	6.0	10	1.1	2.8	2.0	.83	.10	.11	.00
AC-FT	345	521	512	544	1010	748	589	415	335	1490	319	5.1

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1994, BY WATER YEAR (WY)

MEAN	20.9	6.04	4.66	4.55	16.3	17.8	9.78	43.5	93.6	66.1	35.0	24.6
MAX	429	56.5	26.0	22.5	230	240	36.6	422	1041	1070	430	402
(WY)	1947	1931	1947	1931	1932	1960	1952	1949	1947	1951	1950	1951
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1955	1956	1956	1956	1957	1957	1985	1992	1984	1984	1959	1960

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1929 - 1994

ANNUAL MEAN	17.9	9.44	27.8
HIGHEST ANNUAL MEAN			208
LOWEST ANNUAL MEAN			.051
HIGHEST DAILY MEAN	800	Mar 8	432
LOWEST DAILY MEAN	.00	Jan 1	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00
INSTANTANEOUS PEAK FLOW			634
INSTANTANEOUS PEAK STAGE			11.23
ANNUAL RUNOFF (AC-FT)	12930	6840	20170
10 PERCENT EXCEEDS	18	17	30
50 PERCENT EXCEEDS	4.3	7.0	3.5
90 PERCENT EXCEEDS	.02	.26	.00

e Estimated

KANSAS RIVER BASIN

06849000 HARLAN COUNTY LAKE NEAR REPUBLICAN CITY, NE

LOCATION.--Lat 40°04'10", long 99°12'30", in 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 mi², approximately, of which about 13,530 mi² 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.

REMARKS.--Reservoir is formed by earthfill dam with gravity-type concrete spillway section; storage began Nov. 14, 1952. Capacity, 315,100 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, 811,810 acre-ft. Top of superstorage flood-control pool at elevation 1,975.5 ft, capacity, 858,700 acre-ft. Figures given herein represent total contents. Water used for irrigation is the Bostwick irrigation project.

COOPERATION.--Capacity table furnished by Corps of Engineers (revised Jan. 1, 1990).

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 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 FOR CURRENT YEAR.--Maximum contents, 343,400 acre-ft June 14, elevation, 1,948.07 ft; minimum, 265,200 acre-ft Sept. 29-30, elevation, 1,941.96 ft.

Capacity table, (elevation, in feet, and contents, in acre-feet)

1,928	128,300	1,940	243,100
1,930	144,300	1,945	302,000
1,935	190,800		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	408200	366500	328700	317100	320000	321600	317200	337800	341200	322000	301900	268900
2	406800	365000	327900	317500	319800	321800	317200	338900	341300	320400	301000	268700
3	405300	363200	327100	317800	319400	322000	317500	339600	341300	320400	300100	268600
4	403400	362200	325800	317900	319000	323100	317600	340300	341500	321000	298900	268700
5	402000	360500	325000	318400	318600	324800	317800	340900	341700	320600	297200	268400
6	400600	359000	323100	318400	318200	326100	317800	341200	341700	319900	296100	268300
7	398600	357900	322500	318600	317800	326800	318000	341200	341700	320800	295300	268500
8	399800	356300	321400	318600	317400	326900	318600	341500	341700	320300	294100	268500
9	398300	355300	320300	318600	316700	327200	320300	341600	342200	319900	293100	268400
10	396600	353800	319000	318600	316700	327200	321100	341700	342200	319200	291800	268100
11	395300	352300	317600	318800	316800	326800	323100	341900	342300	318200	290700	268000
12	393500	352700	316600	319100	317100	326400	323900	341900	342600	316800	290000	267800
13	392400	350800	316000	319400	317000	325700	324800	342200	343100	317100	289500	267700
14	391500	350400	316000	319600	317100	325000	326000	342700	342600	316400	288400	267700
15	390100	349000	316000	319900	317400	324400	326500	342700	341900	315900	287300	267200
16	389300	347800	316200	320200	317600	323400	327300	342400	340800	315100	285800	266900
17	387800	346400	316400	320200	317900	322900	328200	342400	339800	315200	285000	266900
18	387200	345700	316400	320300	318700	321600	328800	342600	338500	315000	283900	266600
19	385800	344400	316400	320300	319200	321600	329700	342400	337000	314800	282800	266600
20	384600	343300	316300	320200	319800	320400	330600	342300	335500	314400	281600	266500
21	383100	342000	316300	320200	320600	319400	331300	342400	335000	313800	280200	266400
22	381800	340900	316200	320200	321600	318400	332100	342400	334600	312600	278800	265800
23	380400	339900	315900	320200	321600	318300	333000	342400	333200	311400	278100	265600
24	378900	338500	316400	320600	321900	318000	333700	342300	332300	310100	276800	265500
25	377600	336700	316200	320800	321900	317400	334400	341900	331200	308600	275500	265500
26	376100	334900	316200	322000	321600	317500	334800	341900	329700	308600	274200	265400
27	374400	333200	316300	321900	321500	316800	335000	341700	328300	307700	273000	265400
28	372600	332000	316400	321800	321500	316600	336400	341700	326800	306600	272300	265200
29	371000	330800	316600	321200	---	316400	336600	341700	324600	305500	271200	265200
30	369400	329800	316700	321000	---	316400	337300	341600	323900	304500	270500	265200
31	367600	---	317000	320300	---	316800	---	341300	---	303300	269500	---
MEAN	388700	348000	318900	319700	319100	321900	326600	341600	337300	314700	285600	267100
MAX	408200	366500	328700	322000	321900	327200	337300	342700	343100	322000	301900	268900
MIN	367600	329800	315900	317100	316700	316400	317200	337800	323900	303300	269500	265200
(*)	1949.75	1947.09	1946.14	1946.39	1946.48	1946.13	1947.63	1947.92	1946.66	1945.10	1942.23	1941.96
(**)	-41400	-37800	-12800	+3300	+1200	-4700	+20500	+4000	-17400	-20600	-33800	-4300

CAL YR 1993 MEAN 311800 MAX 427300 MIN 177400 (**) +139700
WTR YR 1994 MEAN 324200 MAX 408200 MIN 265200 (**) -143800

(*) Elevation, in feet, at end of month.

(**) Change in contents, in acre-feet.

KANSAS RIVER BASIN

229

06849500 REPUBLICAN RIVER BELOW HARLAN COUNTY DAM, NE

LOCATION.--Lat 40°04'45", long 99°10'05", in SW1/4 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 (REVISED).--20,820 mi², of which about 13,590 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--December 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,863.38 ft above sea level (Corps of Engineers bench mark).

REMARKS.--Records good except for period Oct. 17-26, which is fair. Flow completely regulated by Harlan County Lake (station 06849000) and partially regulated by six upstream reservoirs.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	626	969	1000	214	511	541	133	21	59	559	425	14
2	1110	969	999	214	515	541	130	23	46	528	438	12
3	1110	970	997	221	516	570	127	22	16	453	450	11
4	1110	972	996	213	518	682	127	20	14	399	434	10
5	1100	966	991	211	518	627	128	32	13	287	415	10
6	1110	964	991	205	519	611	129	138	12	331	407	9.5
7	1100	973	987	210	511	603	97	221	12	308	404	8.8
8	1090	976	984	210	510	595	24	223	13	193	402	4.8
9	1080	979	985	205	415	589	22	221	13	214	379	4.5
10	1060	983	980	205	248	639	23	219	11	270	361	4.7
11	1060	979	977	205	247	781	22	221	11	314	336	4.9
12	1050	986	989	203	247	777	21	219	12	452	310	4.7
13	1040	980	810	201	247	777	21	221	12	467	295	4.7
14	1040	987	338	199	248	778	18	223	74	356	325	4.6
15	1030	987	332	197	248	780	16	221	244	313	333	4.4
16	1020	988	328	197	250	781	15	224	388	294	330	4.7
17	1000	990	327	197	250	781	15	227	422	354	328	5.1
18	1000	992	327	194	307	780	15	229	475	331	353	5.0
19	1000	994	326	196	343	782	14	229	562	292	369	4.5
20	1000	990	327	197	341	777	14	230	639	316	366	4.4
21	1000	994	326	196	342	775	15	230	640	344	365	4.1
22	1000	998	324	195	347	661	15	233	617	376	365	3.5
23	1000	994	272	195	347	427	17	234	600	412	369	3.0
24	1000	992	229	196	350	417	17	234	528	464	369	2.9
25	1000	986	229	197	436	417	18	212	496	472	366	2.9
26	1000	991	229	197	537	417	19	163	522	444	368	2.8
27	980	1000	227	195	537	417	19	134	545	371	360	2.5
28	970	1000	223	342	538	419	21	133	564	344	350	2.3
29	965	998	221	506	---	322	20	132	634	344	316	2.2
30	965	1000	219	509	---	180	20	129	620	367	261	2.6
31	967	---	215	508	---	133	---	104	---	409	152	---
TOTAL	31583	29547	17705	7330	10943	18377	1292	5322	8814	11378	11101	165.1
MEAN	1019	985	571	236	391	593	43.1	172	294	367	358	5.50
MAX	1110	1000	1000	509	538	782	133	234	640	559	450	14
MIN	626	964	215	194	247	133	14	20	11	193	152	2.2
AC-FT	62640	58610	35120	14540	21710	36450	2560	10560	17480	22570	22020	327

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 1994, BY WATER YEAR (WY)

	MEAN	119	77.6	61.4	61.1	131	143	202	216	382	745	419	115
MAX	2044	985	571	535	680	941	2400	2069	1763	2761	1726	809	
(WY)	1966	1994	1994	1966	1966	1963	1960	1960	1962	1962	1962	1962	1962
MIN	3.79	2.50	2.40	2.30	2.15	2.88	2.63	2.70	14.4	70.3	91.0	2.95	
(WY)	1990	1992	1977	1991	1977	1991	1992	1992	1993	1993	1981	1991	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1953 - 1994

ANNUAL TOTAL	106631.0	153557.1	
ANNUAL MEAN	292	421	226
HIGHEST ANNUAL MEAN			690
LOWEST ANNUAL MEAN			37.4
HIGHEST DAILY MEAN	1130	Sep 9	4210
LOWEST DAILY MEAN	1.1	Feb 20	.60
ANNUAL SEVEN-DAY MINIMUM	1.1	Feb 20	.87
INSTANTANEOUS PEAK FLOW			1110
INSTANTANEOUS PEAK STAGE			3.90
ANNUAL RUNOFF (AC-FT)	211500	304600	163600
10 PERCENT EXCEEDS	1000	994	651
50 PERCENT EXCEEDS	16	333	14
90 PERCENT EXCEEDS	3.1	13	4.5

06851500 THOMPSON CREEK AT RIVERTON, NE

LOCATION.--Lat 40°05'21", long 98°45'38", in NW1/4NW1/4 sec.2, T.1 N., R.13 W., Franklin County, Hydrologic Unit 10250016, on left bank at downstream side of bridge on State Highway 136, at west edge of Riverton, 240 ft upstream from Burlington Northern Inc. bridge, and 0.6 mi upstream from mouth.

DRAINAGE AREA (REVISED).--290 mi², of which about 197 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--April 1948 to September 1956, October 1968 to September 1975. Annual maximums, water years 1962-68 and occasional low-flow measurements, water years 1961-68. October 1977 to current year.

REVISED RECORDS.--WRD Nebr. 1972: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,753.38 ft above sea level. Apr. 1 to Oct. 1, 1948, nonrecording gage 240 ft downstream at datum 2.32 ft higher. Oct. 1, 1948, to July 11, 1950, water-stage recorder at present site at datum 1.32 ft higher, July 12, 1950, to Sept. 30, 1956, and Oct. 1, 1968, to Sept. 30, 1975, at present site and datum. Sept. 7, 1961, to Sept. 30, 1968, crest-stage gage at present site and datum. Non-recording gage only, June 27, 1983 to Mar. 29, 1984 at site 240 ft downstream at present datum.

REMARKS.--Records fair except for periods of estimated record, which are poor. Natural flow affected by irrigation development above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	26	28	33	26	32	26	24	23	32	21	19
2	29	25	28	32	24	36	26	27	25	22	31	18
3	29	23	28	32	22	166	27	27	25	43	87	19
4	29	24	28	28	23	480	27	25	25	62	23	18
5	30	23	29	28	24	559	25	25	23	67	22	17
6	33	24	29	28	24	253	27	23	21	42	22	19
7	29	24	30	e28	24	76	25	23	26	57	22	13
8	31	26	32	e29	e23	37	24	24	26	36	21	17
9	175	27	29	30	e21	32	26	23	26	23	22	15
10	39	26	30	30	e22	30	35	25	27	22	21	14
11	25	27	32	30	e23	31	42	28	26	35	23	15
12	22	41	36	29	24	30	61	25	26	43	22	15
13	24	30	45	30	27	30	41	27	26	47	22	14
14	24	31	37	29	26	29	32	28	23	45	22	14
15	29	32	35	e29	29	28	29	26	24	29	21	15
16	34	30	32	e29	61	30	30	27	27	32	20	15
17	27	31	34	e29	78	28	27	26	25	57	20	14
18	27	34	33	e28	109	27	25	25	24	40	19	14
19	30	33	33	e27	59	29	25	26	25	36	19	14
20	27	33	33	e27	34	29	26	31	20	28	21	14
21	25	36	35	e26	29	30	27	44	216	38	23	15
22	24	32	34	26	e28	29	27	43	58	30	20	15
23	23	35	34	24	e28	28	28	34	41	22	15	17
24	24	e33	e33	24	e29	28	27	38	55	23	16	18
25	24	e33	33	23	e30	28	27	35	33	21	16	16
26	23	e34	31	31	e29	27	25	29	39	36	17	15
27	23	34	e31	27	e30	30	24	29	25	32	14	18
28	24	28	e31	24	33	29	27	29	29	21	15	16
29	21	29	31	23	---	27	27	24	37	19	15	14
30	22	28	32	22	---	26	26	24	44	20	17	12
31	24	---	33	28	---	27	---	22	---	21	18	---
TOTAL	977	892	999	863	939	2301	871	866	1070	1081	687	469
MEAN	31.5	29.7	32.2	27.8	33.5	74.2	29.0	27.9	35.7	34.9	22.2	15.6
MAX	175	41	45	33	109	559	61	44	216	67	87	19
MIN	21	23	28	22	21	26	24	22	20	19	14	12
AC-FT	1940	1770	1980	1710	1860	4560	1730	1720	2120	2140	1360	930

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1994, BY WATER YEAR (WY)

	MEAN	22.6	22.0	21.6	22.1	26.1	38.6	29.0	44.6	40.6	58.1	31.9	27.6
MAX	41.7	29.7	32.2	28.6	47.0	218	102	147	135	484	127	129	
(WY)	1974	1994	1994	1984	1982	1993	1984	1985	1982	1993	1969	1983	
MIN	15.9	15.3	15.3	16.4	16.7	19.0	19.5	17.4	16.6	14.8	15.4	11.9	
(WY)	1981	1981	1981	1981	1981	1989	1989	1989	1988	1980	1948	1991	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1948 - 1994

ANNUAL TOTAL	33276	12015	
ANNUAL MEAN	91.2	32.9	
HIGHEST ANNUAL MEAN			32.4
LOWEST ANNUAL MEAN			88.6
HIGHEST DAILY MEAN	2510	559	3230
LOWEST DAILY MEAN	20	12	8.1
ANNUAL SEVEN-DAY MINIMUM	21	14	9.5
INSTANTANEOUS PEAK FLOW		883	12200
INSTANTANEOUS PEAK STAGE		7.81	14.70
ANNUAL RUNOFF (AC-FT)	66000	23830	23510
10 PERCENT EXCEEDS	112	38	31
50 PERCENT EXCEEDS	29	27	22
90 PERCENT EXCEEDS	23	19	17

KANSAS RIVER BASIN

231

06852500 COURTLAND CANAL AT NEBRASKA-KANSAS STATE LINE

LOCATION.--Lat 40°00'15", long 98°07'55", in SW1/4 SE1/4 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.

REMARKS.--Records good except for periods of estimated record, 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	98	347	237	167
2	.00	.00	.00	.00	.00	.00	.00	.00	126	338	250	28
3	.00	.00	.00	.00	.00	.00	.00	.00	126	375	270	23
4	.00	.00	.00	.00	.00	.00	.00	.00	126	370	285	19
5	.00	.00	.00	.00	.00	.00	.00	.00	125	332	288	6.6
6	.00	.00	.00	.00	.00	.00	.00	.00	116	330	285	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	118	338	293	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	119	252	293	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	118	178	293	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	118	176	286	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	119	168	276	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	119	172	266	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	119	168	236	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	117	187	224	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	102	199	222	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	99	197	244	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	155	209	242	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	222	223	234	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	252	220	234	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	273	206	249	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	313	199	260	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	394	212	263	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	400	237	261	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	382	245	260	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	360	278	263	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	358	306	271	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	41	352	284	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	50	358	217	.00
29	.00	.00	.00	.00	---	.00	.00	.00	50	346	253	.00
30	.00	.00	.00	.00	---	.00	.00	.00	50	333	254	.00
31	.00	---	.00	.00	---	.00	---	.00	61	249	304	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	252.00	6363	7719	8224	243.60
MEAN	.000	.000	.000	.000	.000	.000	.000	8.13	212	249	265	8.12
MAX	.00	.00	.00	.00	.00	.00	.00	61	400	375	304	167
MIN	.00	.00	.00	.00	.00	.00	.00	.00	98	168	222	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	500	12620	15310	16310	483

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 1994, BY WATER YEAR (WY)

	MEAN	29.5	10.9	3.02	2.11	2.84	6.99	12.1	53.2	108	348	278	58.7
MAX	464	212	73.6	84.4	82.9	87.1	97.8	237	362	627	570	170	
(WY)	1958	1967	1992	1992	1992	1991	1991	1958	1988	1976	1976	1976	
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	21.2	44.4	80.3	.000
(WY)	1955	1955	1955	1955	1955	1955	1955	1957	1957	1957	1955	1992	1977

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1955 - 1994

ANNUAL TOTAL	10293.34	22801.60	
ANNUAL MEAN	28.2	62.5	77.0
HIGHEST ANNUAL MEAN			138
LOWEST ANNUAL MEAN			19.5
HIGHEST DAILY MEAN	242 Aug 18	400 Jun 23	731 Oct 22 1957
LOWEST DAILY MEAN	.00 Jan 1	.00 Oct 1	*.00 Oct 1 1954
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Oct 1	.00 Oct 1 1954
INSTANTANEOUS PEAK FLOW			781 Sep 2 1973
INSTANTANEOUS PEAK STAGE			5.05 Sep 2 1973
ANNUAL RUNOFF (AC-FT)	20420	45230	55760
10 PERCENT EXCEEDS	98	268	274
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

* No flow for many days each year.

KANSAS RIVER BASIN

06853020 REPUBLICAN RIVER AT GUIDE ROCK, NE

LOCATION.--Lat 40°03'49", long 98°19'53", in NE1/4 SE1/4 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 (REVISED).--22,030 mi², approximately, of which about 14,560 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--August 1950 to current year. August 1950 to September 1984 published as Republican River near Guide Rock (06853000).

REVISED RECORDS.--WSP 2119: 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.

REMARKS.--Records good except for periods of estimated record, 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).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	376	1290	1180	452	e240	e500	461	277	118	47	118	265
2	386	1280	1180	453	e270	e560	431	283	95	43	98	326
3	1040	1280	1170	443	e280	e660	411	303	75	46	102	255
4	1150	1290	1180	439	e290	e1000	403	299	67	127	183	237
5	1180	1270	1170	439	e300	e2000	390	270	48	185	101	201
6	1210	1250	1150	e430	e280	1810	375	264	38	197	80	184
7	1220	1260	1150	e340	e245	1300	368	257	60	187	81	163
8	1230	1260	1150	e270	e205	1080	367	329	49	202	85	129
9	1330	1260	1160	e250	e180	994	341	376	36	213	75	115
10	1540	1260	1140	e370	e170	967	355	381	28	121	71	103
11	1380	1260	1130	e410	e190	951	394	386	24	89	54	94
12	1340	1310	1150	e380	e225	1090	571	382	21	90	59	89
13	1330	1380	1170	e440	e270	1110	614	382	19	62	46	86
14	1330	1320	1230	e430	e350	1120	473	392	14	171	53	85
15	1380	1300	783	e390	e390	1120	414	399	10	191	57	83
16	1410	1290	670	e300	e450	1110	373	377	11	119	38	83
17	1400	1290	635	e270	e520	1110	350	364	50	86	17	81
18	1410	1280	601	e260	e600	1100	335	359	35	169	18	81
19	1430	1260	581	e260	e680	1080	314	337	25	432	21	81
20	1410	1250	574	e270	e580	1070	302	333	37	270	35	81
21	1370	1250	567	e280	e520	1050	295	334	46	156	38	82
22	1360	1250	e540	e330	e470	1050	286	332	223	108	39	86
23	1350	1240	e500	e370	e400	1020	281	322	98	92	35	91
24	1350	e1200	e480	e400	e350	764	279	313	138	72	31	93
25	1330	e1100	e490	e360	e370	704	270	310	66	69	33	94
26	1310	e1080	483	e340	e340	688	270	285	21	91	34	94
27	1310	e1080	468	e320	e380	675	253	235	16	165	40	88
28	1310	e1160	e430	e290	e430	661	251	204	11	166	55	86
29	1300	1170	e400	e250	---	650	256	188	4.8	112	77	87
30	1290	1180	e430	e220	---	631	275	185	11	105	78	84
31	1280	---	e450	e210	---	526	---	157	---	111	59	---
TOTAL	39042	37350	25392	10666	9975	30151	10758	9615	1494.8	4294	1911	3707
MEAN	1259	1245	819	344	356	973	359	310	49.8	139	61.6	124
MAX	1540	1380	1230	453	680	2000	614	399	223	432	183	326
MIN	376	1080	400	210	170	500	251	157	4.8	43	17	81
AC-FT	77440	74080	50370	21160	19790	59800	21340	19070	2960	8520	3790	7350

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1994, BY WATER YEAR (WY)

MEAN	206	184	164	158	268	335	369	415	501	547	246	296
MAX	2073	1245	819	588	948	1077	2484	2511	3619	4298	1712	3602
(WY)	1966	1994	1994	1952	1952	1952	1960	1960	1951	1951	1962	1951
MIN	1.19	2.41	3.13	4.11	3.86	22.5	6.86	7.04	11.5	23.3	33.8	1.97
(WY)	1992	1992	1992	1992	1992	1992	1992	1989	1992	1970	1971	1991

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1950 - 1994

ANNUAL TOTAL	272218	184355.8	
ANNUAL MEAN	746	505	306
HIGHEST ANNUAL MEAN			1495
LOWEST ANNUAL MEAN			52.1
HIGHEST DAILY MEAN	9320	2000	20900
LOWEST DAILY MEAN	15	4.8	.10
ANNUAL SEVEN-DAY MINIMUM	50	18	.62
INSTANTANEOUS PEAK FLOW (STAGE)		2220 (8.88)	29200
INSTANTANEOUS PEAK STAGE		*10.19	**20.73
ANNUAL RUNOFF (AC-FT)	539900	365700	221900
10 PERCENT EXCEEDS	1350	1280	689
50 PERCENT EXCEEDS	400	340	117
90 PERCENT EXCEEDS	70	50	22

e Estimated.

* Backwater from ice.

** Site and datum then in use.

KANSAS RIVER BASIN

233

06853500 REPUBLICAN RIVER NEAR HARDY, NE

LOCATION.--Lat 39°59'33", long 97°55'53", in NE1/4 NE1/4 SE1/4 sec.1, T.1 S., R.6 W., in Kansas, Republic County, Hydrologic Unit 10250016, on right bank at upstream side of county highway bridge, 1.2 mi southwest of Hardy, NE, and at mile 141.2.

DRAINAGE AREA.--22,401 mi², of which about 7,500 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--June 1904 to September 1915 (no winter records), April 1931 to current year. Prior to May 1932, published as "at Bostwick." Records for June 1896 to November 1903 published as "near Superior" in 18th to 22nd Ann. Repts., inclusive, Pt. 4, and WSP 75, 84, and 99, have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 806: Drainage area. WSP 1006: 1941. WSP 1340: 1905(M), 1907-09, 1912, 1914-15, 1931. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 1,501.46 ft above sea level. 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).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stages since at least 1895, that of June 2, 1935, and 17.00 ft June 24, 1947, discharge, 100,000 ft³/sec, based on records for upstream stations.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	492	1290	1290	e480	e360	e600	515	338	203	97	205	168
2	469	1290	1290	e480	e380	e650	453	339	186	207	206	259
3	618	1290	1280	e480	e410	e800	430	346	159	283	205	308
4	1210	1300	1270	e480	e440	2550	417	359	144	337	206	264
5	1250	1280	1270	e480	e460	2890	401	336	139	331	275	232
6	1260	1270	1260	e480	e500	2340	393	308	114	327	200	205
7	1270	1280	1260	e480	e420	1620	385	305	126	336	176	194
8	1270	1280	1250	e430	e360	1280	385	311	278	417	179	175
9	1280	1280	1260	e360	e330	1140	384	401	205	390	179	153
10	1440	1280	1250	e390	e350	1080	379	430	126	290	168	137
11	1480	1290	1240	e450	e390	1040	417	435	102	201	162	127
12	1360	1340	1260	e480	e450	1060	538	427	90	169	145	122
13	1340	1410	1290	e480	e540	1160	743	416	88	169	124	114
14	1330	1390	1360	e480	e620	1160	619	437	86	204	117	108
15	1360	1340	1200	e460	e700	1150	494	433	73	357	116	103
16	1380	1330	820	e380	e750	1130	434	432	66	258	116	97
17	1380	1330	753	e330	e780	1130	396	384	61	202	103	93
18	1370	1330	721	e310	e800	1120	377	392	106	208	73	94
19	1390	1320	689	e330	e800	1110	359	361	129	576	72	94
20	1380	1310	666	e400	e700	1100	345	342	102	448	69	95
21	1350	1310	651	e480	e600	1090	330	352	99	289	96	95
22	1330	1300	642	e540	e560	1090	324	373	135	210	103	101
23	1330	1300	e600	e580	e530	1090	322	373	317	186	104	112
24	1330	1370	e580	e620	e510	964	319	371	208	172	102	115
25	1320	1360	e560	e640	e500	746	315	368	239	183	99	115
26	1300	1290	e540	e640	e500	719	315	353	145	251	99	113
27	1290	1270	e530	e640	e520	700	307	327	94	279	107	109
28	1310	1280	e520	e600	e550	678	309	282	80	344	116	105
29	1300	1260	e500	e520	---	670	314	252	76	290	141	102
30	1290	1280	e480	e450	---	661	315	243	83	230	167	98
31	1290	---	e480	e350	---	615	---	228	---	217	168	---
MEAN	1251	1308	928	474	529	1133	401	357	135	273	142	140
MAX	1480	1410	1360	640	800	2890	743	437	317	576	275	308
MIN	469	1260	480	310	330	600	307	228	61	97	69	93
AC-FT	76900	77850	57050	29160	29380	69690	23870	21930	8050	16780	8720	8340

e Estimated

KANSAS RIVER BASIN

06853500 REPUBLICAN RIVER NEAR HARDY, NE--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1994, BY WATER YEAR (WY)

MEAN	285	224	202	191	322	456	458	474	514	556	322	330
MAX	1970	1308	928	636	968	1584	2415	2523	2031	3210	1800	1455
(WY)	1966	1994	1994	1966	1966	1993	1960	1960	1960	1993	1962	1973
MIN	17.2	22.3	26.2	33.7	27.0	66.5	39.1	29.6	46.5	54.3	58.7	15.3
(WY)	1992	1992	1992	1992	1992	1991	1991	1992	1992	1991	1991	1991

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1958 - 1994	
ANNUAL MEAN	1028	591	361			
HIGHEST ANNUAL MEAN					800	1960
LOWEST ANNUAL MEAN					72.5	1991
HIGHEST DAILY MEAN	9080	Jul 19	2890	Mar 5	15000	Oct 1 1983
LOWEST DAILY MEAN	90	Jan 14	61	Jun 17	4.8	Aug 3 1991
ANNUAL SEVEN-DAY MINIMUM	101	Jan 8	81	Jun 11	9.0	Jun 26 1992
INSTANTANEOUS PEAK FLOW			3100	Mar 5	225000	Jun 2 1935
INSTANTANEOUS PEAK STAGE			7.87	Mar 5	19.40	Jun 2 1935
ANNUAL RUNOFF (AC-FT)	744500		427700		261700	
10 PERCENT EXCEEDS	1650		1300		796	
50 PERCENT EXCEEDS	652		420		170	
90 PERCENT EXCEEDS	158		107		65	

KANSAS RIVER BASIN

235

06880000 LINCOLN CREEK NEAR SEWARD, NE

LOCATION.--Lat 40°54'57", long 97°08'43", in NW1/4 NE1/4 sec.24, T.11 N., R.2 E., Seward County, Hydrologic Unit 10270201, on left bank at downstream side of county road bridge, 2 mi west of Seward, and 3.8 mi upstream from mouth.

DRAINAGE AREA (REVISED).--438 mi².

PERIOD OF RECORD.--October 1953 to September 1973, March 1974 to current ear. Monthly discharge only for some periods, published in WSP 1730.

REVISED RECORDS.--WSP 2119: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,429.27 ft above sea level. June 27, 1984 to June 2, 1985 at temporary site upstream from county road at same datum.

REMARKS.--Records good except for periods of estimated record, which are poor. Small diversions for irrigation above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	30	38	e36	e18	e23	31	31	33	54	44	24
2	37	31	35	e37	e17	e25	30	30	33	70	41	e22
3	34	31	35	e37	e17	e29	30	29	33	52	43	e22
4	33	30	35	e30	e21	e50	30	29	34	130	46	e24
5	33	30	35	e27	e22	e200	30	28	196	159	42	e27
6	34	29	35	e28	e21	e520	29	52	57	189	46	e29
7	33	29	35	e21	e19	316	29	39	30	255	56	e28
8	33	29	35	e20	e18	238	30	38	29	161	68	e26
9	33	29	36	e22	e18	227	30	168	30	97	167	e25
10	33	29	36	e24	e16	204	29	96	29	81	170	e22
11	35	29	36	e27	e15	106	30	55	29	68	262	e21
12	35	31	37	e29	e18	67	37	45	30	55	209	e20
13	34	33	38	e31	e22	53	36	42	34	97	94	e20
14	34	31	40	e23	e26	47	36	41	30	58	57	e20
15	41	31	39	e20	e33	43	36	39	29	65	43	e20
16	36	31	40	e21	e37	40	34	37	29	238	37	e19
17	34	31	40	e23	e50	39	35	38	28	286	34	e19
18	33	31	40	e22	e54	38	36	35	29	181	31	e19
19	34	31	39	e19	e66	37	32	34	29	92	30	e20
20	34	31	40	e18	e78	36	30	33	28	256	29	e20
21	34	32	40	e20	e80	35	29	33	27	343	29	e21
22	32	33	e40	e21	e50	34	29	33	58	154	28	23
23	32	32	e31	e25	e37	34	29	33	1170	88	26	24
24	32	e30	e27	e31	e30	32	29	33	890	66	25	24
25	32	e28	e27	e38	e26	31	28	32	249	58	24	24
26	32	e26	e29	e25	e21	31	28	32	163	53	25	23
27	31	e32	e32	e19	e20	32	26	32	170	48	27	22
28	31	e34	e22	e17	e21	31	28	32	194	46	28	22
29	31	e36	e24	e16	---	31	30	33	129	46	35	27
30	30	e37	e26	e15	---	31	30	33	69	41	30	24
31	30	---	e31	e16	---	31	---	32	---	40	26	---
TOTAL	1044	927	1073	758	871	2691	926	1297	3918	3627	1852	681
MEAN	33.7	30.9	34.6	24.5	31.1	86.8	30.9	41.8	131	117	59.7	22.7
MAX	44	37	40	38	80	520	37	168	1170	343	262	29
MIN	30	26	22	15	15	23	26	28	27	40	24	19
AC-FT	2070	1840	2130	1500	1730	5340	1840	2570	7770	7190	3670	1350

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1994, BY WATER YEAR (WY)

MEAN	25.2	14.3	12.9	17.7	46.3	100	45.5	54.0	144	86.3	52.3	46.5
MAX	177	63.1	34.6	156	224	651	297	278	1007	538	316	443
(WY)	1966	1984	1994	1973	1984	1993	1984	1984	1967	1986	1987	1989
MIN	4.64	6.06	5.37	5.02	6.31	8.04	8.06	8.27	8.68	4.77	3.99	4.49
(WY)	1957	1977	1977	1977	1957	1981	1972	1967	1976	1970	1955	1956

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1954 - 1994

ANNUAL TOTAL	42835	19665	
ANNUAL MEAN	117	53.9	54.5
HIGHEST ANNUAL MEAN			135
LOWEST ANNUAL MEAN			9.65
HIGHEST DAILY MEAN	3120	1170	6320
LOWEST DAILY MEAN	15	15	1.3
ANNUAL SEVEN-DAY MINIMUM	18	17	2.3
INSTANTANEOUS PEAK FLOW		1600	10100
INSTANTANEOUS PEAK STAGE		15.81	20.53
ANNUAL RUNOFF (AC-FT)	84960	39010	39490
10 PERCENT EXCEEDS	151	90	76
50 PERCENT EXCEEDS	42	32	15
90 PERCENT EXCEEDS	27	21	6.7

KANSAS RIVER BASIN

06880500 BIG BLUE RIVER AT SEWARD, NE

LOCATION.--Lat 40°54'10", long 97°06'40", in SE1/4 SW1/4 sec.20, T.11 N., R.3 E., Seward County, Hydrologic Unit 10270201, at downstream end of right abutment of bridge on U.S. Highway 34 at west edge of Seward, 1.7 mi upstream from Plum Creek, 0.2 mi downstream from Lincoln Creek, and at mile 213.

DRAINAGE AREA (REVISED).--1,107 mi².

PERIOD OF RECORD.--October 1953 to current year. Monthly discharge only for some periods, published in WSP 1730.

REVISED RECORDS.--WSP 1919: Drainage area. WDR NE-80-1: 1979(M).

GAGE.--Water-stage recorder. Datum of gage is 1,421.49 ft above sea level. Prior to Dec. 19, 1969, at present site and datum. Dec. 19, 1969 to Nov. 7, 1983 at site 1.2 mi downstream at datum 6.33 ft lower.

REMARKS.--Records good except for period of estimated record, which is poor. Natural flow of stream affected by ground-water withdrawals and diversions for irrigation and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	73	93	91	e54	e60	86	116	64	91	78	48
2	93	73	96	93	e58	e64	86	113	69	105	75	47
3	87	76	100	e90	e56	e80	86	112	94	95	95	46
4	84	77	102	e80	e60	e300	87	104	80	243	105	59
5	81	76	100	e68	e66	e1000	87	100	369	237	94	58
6	84	74	99	e60	e66	e1500	84	129	507	272	107	69
7	81	72	95	e54	e62	1170	85	116	168	541	108	71
8	79	71	91	e48	e56	744	85	161	121	593	101	56
9	81	73	91	e54	e56	562	86	216	99	345	201	52
10	80	77	94	e70	e52	430	87	152	86	198	192	52
11	91	78	96	80	e50	243	91	112	81	173	280	46
12	94	80	95	80	e56	166	108	114	78	149	267	42
13	99	83	95	e80	e58	141	117	109	83	236	160	40
14	97	87	99	e62	e62	129	139	100	74	212	111	39
15	103	90	100	e50	e70	121	129	94	68	209	91	38
16	120	86	93	e52	e80	117	119	89	65	611	76	38
17	120	86	100	e56	e110	113	117	88	59	853	66	37
18	106	84	110	e54	e300	108	113	83	54	533	62	37
19	103	84	114	e50	e900	106	105	78	49	272	57	36
20	98	83	113	e47	e800	103	99	75	45	312	54	36
21	95	83	e96	e50	e200	101	95	73	38	409	53	35
22	89	e86	e74	e58	e160	99	93	73	144	241	53	39
23	86	e70	e64	e64	e120	94	93	70	2240	159	52	45
24	84	e60	e62	e74	e114	89	92	70	2530	133	50	57
25	83	e52	e70	83	e90	88	90	69	1250	118	48	81
26	81	e50	e74	86	e76	88	88	68	429	107	49	66
27	77	e68	e64	e64	e68	87	84	67	244	97	53	61
28	76	e78	e70	e62	e58	88	88	66	203	91	60	54
29	75	e84	e66	e58	---	87	94	66	160	85	67	54
30	73	89	e74	e52	---	86	107	66	108	79	58	50
31	73	---	e90	e50	---	86	---	64	---	76	51	---
TOTAL	2776	2303	2780	2020	3958	8250	2920	3013	9659	7875	2974	1489
MEAN	89.5	76.8	89.7	65.2	141	266	97.3	97.2	322	254	95.9	49.6
MAX	120	90	114	93	900	1500	139	216	2530	853	280	81
MIN	73	50	62	47	50	60	84	64	38	76	48	35
AC-FT	5510	4570	5510	4010	7850	16360	5790	5980	19160	15620	5900	2950

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1994, BY WATER YEAR (WY)

	MEAN	68.7	35.4	29.5	37.6	116	268	131	157	379	206	107	103
MAX	455	168	102	359	630	1493	808	672	2991	1348	652	813	
(WY)	1974	1974	1987	1973	1983	1993	1984	1984	1967	1986	1987	1977	
MIN	3.84	5.22	8.02	7.79	9.49	15.4	13.5	14.3	12.4	4.69	3.67	4.12	
(WY)	1957	1957	1977	1977	1957	1957	1956	1967	1970	1970	1956	1956	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1954 - 1994

ANNUAL TOTAL	112865	50017											
ANNUAL MEAN	309	137	138										
HIGHEST ANNUAL MEAN										338		1984	
LOWEST ANNUAL MEAN										14.1		1956	
HIGHEST DAILY MEAN	7230	Mar 11	2530	Jun 24						13400		Jun 16 1967	
LOWEST DAILY MEAN	32	Jan 29	35	Sep 21						.00		Jul 30 1955	
ANNUAL SEVEN-DAY MINIMUM	38	Jan 24	37	Sep 15						.83		Jul 29 1955	
INSTANTANEOUS PEAK FLOW (STAGE)			2830	Jun 24						15300	(22.34)	Jun 18 1957	
INSTANTANEOUS PEAK STAGE			17.25	Jun 24						*22.83		Jun 16 1967	
ANNUAL RUNOFF (AC-FT)	223900	99210								100100			
10 PERCENT EXCEEDS	553	210								221			
50 PERCENT EXCEEDS	110	86								32			
90 PERCENT EXCEEDS	56	52								12			

e Estimated.

* From stage readings during 1957 flood, gage height was approximately 25.66 ft at downstream site and datum.

06880800 WEST FORK BIG BLUE RIVER NEAR DORCHESTER, NE

LOCATION.--Lat 40°43'52", long 97°10'38", in SW1/4 SW1/4 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 (REVISED).--1,192 mi².

PERIOD OF RECORD.--August 1958 to current year.

REVISED RECORDS.--WSP 1919: 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.

REMARKS.--Records fair except for periods of estimated record, 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	117	105	80	e52	e68	e80	120	116	88	150	104	59
2	108	106	82	e50	e66	e100	117	110	88	315	102	55
3	101	106	84	e48	e64	139	112	111	86	177	213	51
4	98	106	82	e46	e62	498	112	112	86	548	389	160
5	92	106	82	e45	e58	877	109	113	104	556	159	511
6	91	106	81	e45	e50	1170	108	127	89	650	126	603
7	89	104	82	e48	e45	1310	107	757	83	549	122	504
8	93	102	83	e50	e44	1430	107	741	84	576	243	457
9	286	102	83	e54	e45	1170	107	391	86	424	389	425
10	561	103	84	e58	e46	542	107	203	90	302	343	303
11	404	104	85	e58	46	376	111	151	89	234	250	202
12	343	107	85	e90	e47	310	134	132	93	229	198	150
13	227	111	97	e110	e48	263	148	121	102	236	150	123
14	190	111	105	e100	e49	233	154	114	103	242	114	104
15	186	110	104	e86	e52	209	153	134	116	237	93	93
16	193	111	104	e78	e56	191	141	122	130	563	82	85
17	165	107	103	e70	e60	180	155	110	134	614	73	77
18	158	107	102	e64	e90	170	137	103	130	381	65	71
19	185	109	100	e58	e70	165	120	96	119	363	78	72
20	193	108	99	e60	e50	155	113	96	114	410	98	70
21	173	108	96	e64	e48	147	113	96	97	286	106	66
22	152	109	91	e68	e46	144	111	96	103	209	111	67
23	137	110	e84	e74	e38	140	220	107	164	164	102	71
24	131	108	e76	e80	e40	132	185	92	324	137	84	77
25	126	103	e74	e76	e42	129	132	88	440	119	76	86
26	122	e70	e68	e70	e45	128	120	88	402	109	233	89
27	117	e72	e64	e64	e54	125	113	84	267	101	373	86
28	112	e78	e62	e60	e70	120	112	84	270	94	162	84
29	111	e78	e58	e54	---	119	119	85	198	93	97	81
30	111	e80	e56	e60	---	119	117	84	151	95	77	82
31	109	---	e54	e66	---	119	---	86	---	102	67	---
TOTAL	5281	3047	2590	2006	1499	10990	3814	4950	4430	9265	4879	4964
MEAN	170	102	83.5	64.7	53.5	355	127	160	148	299	157	165
MAX	561	111	105	110	90	1430	220	757	440	650	389	603
MIN	89	70	54	45	38	80	107	84	83	93	65	51
AC-FT	10470	6040	5140	3980	2970	21800	7570	9820	8790	18380	9680	9850

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1994, BY WATER YEAR (WY)

MEAN	123	71.8	61.8	71.3	150	337	183	257	344	336	188	162
MAX	812	176	92.9	377	671	1762	887	1147	1749	1395	480	855
(WY)	1974	1974	1987	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

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1958 - 1994

ANNUAL TOTAL	162736	57715	
ANNUAL MEAN	446	158	190
HIGHEST ANNUAL MEAN			441
LOWEST ANNUAL MEAN			54.4
HIGHEST DAILY MEAN	11100	1430	11100
LOWEST DAILY MEAN	30	38	12
ANNUAL SEVEN-DAY MINIMUM	36	44	17
INSTANTANEOUS PEAK FLOW		1440	12400
INSTANTANEOUS PEAK STAGE		10.20	22.62
ANNUAL RUNOFF (AC-FT)	322800	114500	137900
10 PERCENT EXCEEDS	745	332	318
50 PERCENT EXCEEDS	145	106	79
90 PERCENT EXCEEDS	57	58	45

KANSAS RIVER BASIN

06881000 BIG BLUE RIVER NEAR CRETE, NE

LOCATION.--Lat 40°35'47", long 96°57'33", in SW1/4 SE1/4 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 (REVISED).--2,710 mi².

PERIOD OF RECORD.--March 1945 to current year. Prior to Oct. 1, 1953, discharge published only for stages above 12.0 ft because of variable backwater from dam downstream until 1952 and diurnal fluctuation from powerplant upstream in 1952-53.

REVISED RECORDS.--WSP 1919: 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.

REMARKS.--Records good except for periods of estimated record, 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	436	269	255	244	e175	e270	278	270	189	357	235	202
2	396	266	254	234	e175	e290	277	276	224	796	239	191
3	368	263	259	211	e170	333	269	268	211	955	246	186
4	350	263	258	e200	e170	753	267	264	201	500	1070	809
5	337	258	257	e190	e170	2290	261	258	235	1010	591	1450
6	330	253	252	e180	e165	3050	255	397	781	892	318	1370
7	325	248	250	e160	e165	3070	253	447	707	1060	282	918
8	615	242	247	e170	e170	2530	251	944	363	1740	297	696
9	1130	238	242	e190	e170	2220	249	842	284	1330	496	627
10	1020	238	240	220	e175	1650	247	569	262	817	638	496
11	983	227	239	235	e185	1030	266	409	251	553	514	347
12	736	243	240	219	190	725	306	309	237	454	516	272
13	612	247	245	218	199	585	343	302	231	449	477	236
14	501	251	250	e210	190	506	349	298	233	547	341	215
15	508	263	249	e200	194	456	339	278	237	495	273	201
16	501	264	247	e190	204	421	326	281	233	975	237	191
17	495	258	248	e180	226	399	305	259	231	2320	216	182
18	462	255	252	e180	369	382	304	247	222	1620	201	176
19	438	250	e240	e190	1040	369	284	239	211	996	259	172
20	442	249	e220	e190	1450	357	263	229	199	719	304	168
21	428	245	e210	e190	1390	344	255	223	186	720	221	167
22	399	244	e200	191	861	337	246	219	169	691	227	172
23	367	249	e200	194	550	328	243	223	667	505	218	177
24	340	250	e210	201	375	315	318	245	2880	361	212	181
25	326	e190	e210	210	e250	304	296	217	3910	311	206	187
26	312	e200	e220	218	e220	298	254	211	2050	280	297	205
27	302	e220	e210	216	e230	292	240	209	867	262	762	194
28	294	e250	e200	211	e250	286	240	206	647	235	619	180
29	285	255	e190	e200	---	280	248	205	534	226	282	169
30	278	251	e220	e180	---	277	264	203	426	222	235	164
31	273	---	246	e175	---	278	---	203	---	221	217	---
TOTAL	14589	7399	7260	6197	10078	25025	8296	9750	18078	22619	11246	10901
MEAN	471	247	234	200	360	807	277	315	603	730	363	363
MAX	1130	269	259	244	1450	3070	349	944	3910	2320	1070	1450
MIN	273	190	190	160	165	270	240	203	169	221	201	164
AC-FT	28940	14680	14400	12290	19990	49640	16460	19340	35860	44860	22310	21620

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1994, BY WATER YEAR (WY)

	MEAN	249	141	119	135	316	757	415	507	918	694	344	337
MAX	1864	439	239	865	1576	3968	2257	2339	5808	4739	1048	2065	
(WY)	1974	1974	1987	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	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1954 - 1994

ANNUAL TOTAL	378949	151438	
ANNUAL MEAN	1038	415	411
HIGHEST ANNUAL MEAN			1030
LOWEST ANNUAL MEAN			96.6
HIGHEST DAILY MEAN	18700	Mar 12	21400
LOWEST DAILY MEAN	110	Jan 29	6.0
ANNUAL SEVEN-DAY MINIMUM	124	Jan 24	11
INSTANTANEOUS PEAK FLOW (STAGE)			27600 (28.74)
INSTANTANEOUS PEAK STAGE			*29.86
ANNUAL RUNOFF (AC-FT)	751600	300400	297900
10 PERCENT EXCEEDS	1740	801	760
50 PERCENT EXCEEDS	378	255	144
90 PERCENT EXCEEDS	190	190	76

e Estimated.

* From floodmark.

06881200 TURKEY CREEK NEAR WILBER, NE

LOCATION.--Lat 40°28'48", long 97°00'43", in NE1/4 NE1/4 sec.19, T.6 N., R.4 E., Saline County, Hydrologic Unit 10270204, on left bank near downstream side of bridge on State Highway 41, 2.8 mi west of Wilber, and at mile 19.1.

DRAINAGE AREA (REVISED).--461 mi².

PERIOD OF RECORD.--October 1959 to current year.

REVISED RECORDS.--WSP 1919: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,322.00 ft above sea level. Prior to July 10, 1970, at site 0.2 mile downstream at same datum.

REMARKS.--Records good except for periods of estimated record, which are poor. Many diversions above station for irrigation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	30	e30	e27	e13	e27	29	38	31	12	20	15
2	40	31	e29	e27	e14	e30	29	41	30	118	20	13
3	35	31	e30	e24	e15	e35	30	38	31	203	22	11
4	32	32	e30	e23	e16	e50	30	38	33	64	53	159
5	32	30	e30	e24	e18	e200	29	37	32	61	71	833
6	31	29	e30	e17	e19	e800	29	315	30	39	35	243
7	29	27	e29	e13	e20	775	29	1300	29	93	31	176
8	28	27	e29	e11	e20	451	29	2080	29	127	30	121
9	415	28	e28	e9.8	e15	191	29	393	29	52	38	86
10	259	28	28	e11	e11	114	29	185	28	31	28	50
11	115	28	28	e19	e9.8	81	33	122	35	23	25	34
12	83	31	28	e22	e9.4	65	100	92	32	18	24	28
13	75	37	29	e22	e9.4	56	97	81	37	17	21	23
14	71	44	32	e15	e9.6	50	89	79	29	22	17	19
15	75	35	34	e13	e17	46	79	69	25	21	14	e17
16	78	32	34	e14	e23	44	50	74	24	338	12	e15
17	62	31	e32	e13	e30	42	44	83	23	508	9.2	e14
18	58	31	e30	e12	e35	41	39	61	21	111	9.4	e13
19	50	30	e26	e14	e120	40	35	53	19	61	16	e12
20	55	30	e26	e15	e205	38	33	51	16	35	28	e12
21	47	29	e28	e16	e160	37	32	47	21	26	18	e11
22	45	29	e26	e17	e115	35	32	45	30	24	10	e11
23	40	29	e24	e20	e90	34	161	43	26	22	8.6	e11
24	39	25	e23	23	e35	32	119	41	22	20	8.3	e14
25	41	e23	e24	25	e29	31	62	39	18	18	11	e23
26	36	e20	e23	25	e26	30	48	37	16	17	255	e20
27	34	e22	e20	e23	e25	30	39	36	17	17	897	e17
28	33	e24	e17	e20	e25	30	36	35	16	14	121	e16
29	31	e26	e16	e18	---	29	36	34	12	14	36	e15
30	31	e28	e16	e14	---	29	40	34	12	15	21	e15
31	30	---	e19	e12	---	29	---	33	---	17	17	---
TOTAL	2080	877	828	558.8	1134.2	3522	1496	5654	753	2158	1926.5	2047
MEAN	67.1	29.2	26.7	18.0	40.5	114	49.9	182	25.1	69.6	62.1	68.2
MAX	415	44	34	27	205	800	161	2080	37	508	897	833
MIN	28	20	16	9.8	9.4	27	29	33	12	12	8.3	11
AC-FT	4130	1740	1640	1110	2250	6990	2970	11210	1490	4280	3820	4060

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1994, BY WATER YEAR (WY)

	MEAN	78.3	18.3	13.2	20.5	62.6	203	112	131	248	149	49.7	60.5
MAX	929	97.6	41.7	165	487	1148	677	632	1972	1186	245	377	
(WY)	1974	1974	1987	1973	1984	1979	1984	1982	1984	1993	1977	1973	
MIN	.12	.22	.17	.21	2.08	3.57	3.89	3.36	9.01	3.11	.32	.039	
(WY)	1992	1992	1977	1977	1992	1992	1992	1992	1976	1991	1991	1991	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1960 - 1994

ANNUAL TOTAL	100924.0	23034.5	
ANNUAL MEAN	277	63.1	95.5
MEDIAN OF ANNUAL MEANS			62
HIGHEST ANNUAL MEAN			370
LOWEST ANNUAL MEAN			14.3
HIGHEST DAILY MEAN	4790	2080	13100
LOWEST DAILY MEAN	5.4	8.3	.00
ANNUAL SEVEN-DAY MINIMUM	7.3	12	.02
INSTANTANEOUS PEAK FLOW		2710	33000
INSTANTANEOUS PEAK STAGE		14.18	*21.43
ANNUAL RUNOFF (AC-FT)	200200	45690	69220
10 PERCENT EXCEEDS	750	98	130
50 PERCENT EXCEEDS	51	30	16
90 PERCENT EXCEEDS	17	14	3.6

e Estimated.

* From floodmark.

KANSAS RIVER BASIN

06881500 BIG BLUE RIVER AT BEATRICE, NE

LOCATION.--Lat 40°15'22", long 96°44'47", in SW1/4 NW1/4 sec.3, T.3 N., R.6 E., Gage County, Hydrologic Unit 10270202, at left upstream corner of 6th Street and U.S. Highway 77 bridge in Beatrice, 0.7 mi south of the intersection of U.S. Highways 136 77, 1.2 mi downstream from Indian Creek, and 3.1 mi upstream from Bear Creek, and at mile 117.

DRAINAGE AREA.--3,900 mi², of which about 3,830 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1910 to September 1915, (monthly discharge only for some periods, published in WSP 1310), 1954, 1960-65, 1967-69, 1971-74 (discharge measurements only), October 1974 to current year. Gage-height records collected 1905-10, 1916-74, are in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 1,219.90 ft above sea level. October 1910 to September 1915, non-recording gage at present site and datum.

REMARKS.--Records good except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1190	522	e380	e340	e270	e340	292	354	326	625	289	319
2	1050	514	384	e350	e270	e370	298	368	925	3810	306	291
3	949	501	380	e300	e270	e380	299	381	712	1930	316	273
4	878	493	387	e280	e300	e440	296	381	517	1770	464	807
5	808	484	384	e290	e310	e1500	290	389	428	1060	1070	1840
6	759	475	379	e290	e320	e3400	286	2180	496	1950	906	2520
7	733	459	371	e250	e235	4010	286	3420	725	1490	507	1900
8	724	451	363	e260	e205	3860	286	2690	997	1740	405	1310
9	888	439	359	e280	e205	3100	281	2650	682	2000	373	969
10	1960	430	357	e290	e205	2550	292	1510	487	1540	517	827
11	1700	422	347	e290	e215	1930	307	1060	471	1050	679	664
12	1540	435	351	e300	e230	1310	344	812	716	771	617	503
13	1210	434	366	e340	e245	947	439	752	688	629	591	385
14	1070	429	365	e300	e260	754	496	2290	464	569	576	328
15	980	425	367	e250	e270	639	486	2490	391	637	459	297
16	965	425	371	e240	e280	564	475	1030	370	974	353	273
17	955	422	371	e270	e300	521	422	712	360	2090	295	255
18	909	420	372	e270	e340	485	392	582	351	2900	255	244
19	880	413	375	e245	e540	452	380	493	337	1940	248	239
20	831	430	381	e225	1210	427	364	442	333	1230	323	230
21	801	423	381	e260	e1700	411	382	413	311	897	377	227
22	783	416	e360	e280	e1000	394	407	394	305	825	320	228
23	743	410	e330	e290	e600	378	374	373	534	781	275	237
24	701	e350	e300	e300	e350	335	415	359	709	627	273	241
25	658	e270	e310	e280	e320	322	457	380	2700	472	279	256
26	632	e290	e330	e270	e280	318	436	364	3670	381	1120	258
27	605	e310	e310	e250	e280	308	360	344	2230	335	1520	258
28	587	e310	e280	e240	e310	303	351	338	1120	315	1740	263
29	564	e340	e280	e220	---	304	346	337	834	283	1050	255
30	545	e360	e280	e250	---	300	342	333	689	258	525	242
31	531	---	e340	e270	---	292	---	326	---	250	362	---
TOTAL	28129	12502	10911	8570	11320	31644	10881	28947	23878	36129	17390	16939
MEAN	907	417	352	276	404	1021	363	934	796	1165	561	565
MAX	1960	522	387	350	1700	4010	496	3420	3670	3810	1740	2520
MIN	531	270	280	220	205	292	281	326	305	250	248	227
AC-FT	55790	24800	21640	17000	22450	62770	21580	57420	47360	71660	34490	33600

eEstimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1994, BY WATER YEAR (WY)

MEAN	498	254	216	201	585	1596	884	1033	1620	1628	677	678
MAX	4022	739	539	386	2546	8306	4323	3977	7838	7718	1560	3033
(WY)	1987	1987	1987	1987	1984	1979	1984	1984	1984	1993	1993	1989
MIN	89.3	76.5	76.4	66.3	108	129	144	174	133	151	60.2	77.3
(WY)	1992	1977	1977	1977	1977	1977	1981	1989	1981	1980	1976	1976

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1975 - 1994

ANNUAL TOTAL	758537	237240	
ANNUAL MEAN	2078	650	
MEDIAN OF ANNUAL MEANS			824
HIGHEST ANNUAL MEAN			615
LOWEST ANNUAL MEAN			2019
HIGHEST DAILY MEAN	25700	Jul 27	184
LOWEST DAILY MEAN	140	Jan 14	44400
ANNUAL SEVEN-DAY MINIMUM	151	Jan 13	20
INSTANTANEOUS PEAK FLOW			32
INSTANTANEOUS PEAK STAGE			55100
ANNUAL RUNOFF (AC-FT)	1505000	470600	31.27
10 PERCENT EXCEEDS	5720	1490	Jun 14 1984
50 PERCENT EXCEEDS	826	382	Aug 15 1976
90 PERCENT EXCEEDS	280	262	Aug 26 1976
			Jun 14 1984

06882000 BIG BLUE RIVER AT BARNESTON, NE

LOCATION.--Lat 40°02'40", long 96°35'12", in NE1/4 NW1/4 sec.24, T.1 N., R.7 E., Gage County, Hydrologic Unit 10270202, 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 mi², of which about 4,370 mi² 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.

REMARKS.--Records good except for periods of estimated record, 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 ground-water withdrawals for irrigation and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1290	578	538	e380	e320	e540	357	228	407	664	340	395
2	1110	579	505	e400	e330	e640	353	250	1110	4480	392	349
3	1010	574	495	e390	e340	804	346	270	1970	3080	403	320
4	911	573	489	e350	e350	1400	349	279	1100	2370	484	435
5	830	553	493	e370	e350	1960	335	275	737	1460	809	1710
6	776	537	476	e390	e320	3260	327	1720	674	1770	1330	2540
7	737	539	464	e380	e300	4350	325	3710	646	2320	777	2060
8	715	537	456	e340	e260	4330	329	3270	1240	1990	552	1540
9	685	536	452	e300	e230	3700	321	3000	1030	2080	484	1120
10	1510	522	449	e340	e250	2990	330	2010	685	2010	512	934
11	1860	519	432	e380	e270	2440	341	1340	552	1380	752	802
12	1640	554	428	e408	e290	1630	402	1060	1240	1000	802	629
13	1330	602	465	e420	e310	1170	472	861	1130	799	704	483
14	1160	603	498	e420	e320	913	578	3760	830	678	694	390
15	1090	591	481	e400	343	757	565	6250	539	673	617	343
16	1040	584	480	e390	339	658	534	2990	454	836	477	309
17	1050	580	523	e380	335	607	486	1820	424	1850	386	284
18	1000	570	549	e330	409	560	437	1300	399	2890	330	267
19	984	527	528	e300	613	526	398	1000	377	2540	296	255
20	941	514	502	e320	992	500	380	813	354	1600	367	250
21	887	508	508	e350	1700	471	600	699	332	1160	426	243
22	882	496	451	e360	1870	461	462	629	310	986	451	241
23	834	490	e400	e370	1370	445	408	581	800	954	355	266
24	785	476	e350	387	e900	417	316	548	759	848	322	266
25	736	e350	e330	384	e400	398	371	525	1930	646	306	279
26	690	e300	e350	386	e380	396	330	518	3670	505	1060	290
27	659	e310	e340	e380	e440	387	240	480	3160	429	1700	285
28	641	e350	e320	e350	e500	377	196	457	1480	390	1830	296
29	614	e450	e310	e340	---	370	210	453	974	369	1400	291
30	597	540	e300	e300	---	364	208	450	793	334	821	273
31	580	---	e340	e310	---	358	---	431	---	319	496	---
TOTAL	29574	15442	13702	11305	14831	38179	11306	41977	30106	43410	20675	18145
MEAN	954	515	442	365	530	1232	377	1354	1004	1400	667	605
MAX	1860	603	549	420	1870	4350	600	6250	3670	4480	1830	2540
MIN	580	300	300	300	230	358	196	228	310	319	296	241
AC-FT	58660	30630	27180	22420	29420	75730	22430	83260	59720	86100	41010	35990

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 1994, BY WATER YEAR (WY)

	MEAN	573	269	222	285	655	1437	867	1140	2074	1379	710	741
MAX	7451	1014	721	1596	2876	10560	5280	4646	10460	12270	5227	3420	
(WY)	1974	1974	1987	1973	1984	1979	1984	1984	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	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1933 - 1994

ANNUAL TOTAL	1027749	288652	
ANNUAL MEAN	2816	791	
HIGHEST ANNUAL MEAN			863
LOWEST ANNUAL MEAN			2781
HIGHEST DAILY MEAN	31000	6250	115
LOWEST DAILY MEAN	210	196	50000
ANNUAL SEVEN-DAY MINIMUM	226	229	1.0
INSTANTANEOUS PEAK FLOW		8460	15
INSTANTANEOUS PEAK STAGE		13.57	57700
ANNUAL RUNOFF (AC-FT)	2039000	572500	34.30
10 PERCENT EXCEEDS	7200	1710	625100
50 PERCENT EXCEEDS	1090	500	1770
90 PERCENT EXCEEDS	326	308	261
			99

06883000 LITTLE BLUE RIVER NEAR DEWEESE, NE

LOCATION.--Lat 40°19'58", long 98°04'00", in SW1/4 NW1/4 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.--979 mi².

PERIOD OF RECORD.--February 1953 to September 1972, October 1974 to current year.

REVISED RECORDS.--WSP 1919: Drainage area.

GAGE.--Water-stage recorder and peak-stage indicator gage.. Datum of gage is 1,632.67 ft above sea level. Prior to May 16, 1957, non-recording gage and Oct. 1, 1974, to Mar. 24, 1981, recording gage at present site and datum; May 16, 1957, to Sept. 30, 1972, and Mar. 25, 1981 to Mar. 24, 1982, at site 1,500 ft upstream from bridge at present datum.

REMARKS.--Records fair except for periods of estimated record and Oct. 1-24, and July 6 to Aug. 7, when the gage functioned poorly, which are poor. Natural flow affected by irrigation development above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	99	105	92	e50	e86	96	98	86	128	121	58
2	104	99	103	93	e52	91	96	99	86	257	113	59
3	102	101	104	89	e60	208	93	98	86	270	107	61
4	101	98	102	e86	e66	1040	94	99	89	523	104	118
5	99	94	102	91	e72	1640	91	99	90	762	102	373
6	104	96	98	90	78	1240	88	101	88	702	185	622
7	107	98	99	60	59	657	89	91	124	572	165	421
8	107	98	99	e62	e54	360	92	89	181	654	147	234
9	115	94	100	e66	e50	226	91	90	158	413	107	160
10	115	96	98	e70	e48	179	103	89	154	318	93	122
11	113	104	96	e80	e58	164	113	90	180	219	101	103
12	113	120	99	e86	e64	150	160	88	145	174	120	94
13	112	115	113	92	e70	135	169	87	118	174	107	88
14	145	108	112	91	e80	129	165	92	110	167	92	85
15	1800	106	105	87	91	124	133	88	102	189	84	84
16	1210	111	103	77	133	118	112	86	98	167	82	79
17	375	102	101	67	164	115	107	85	94	722	83	73
18	279	105	99	e62	193	111	107	84	96	638	80	69
19	199	102	99	e56	314	111	105	85	93	714	75	67
20	174	102	98	e56	290	110	102	83	108	534	69	68
21	147	103	95	e58	203	104	120	85	104	185	73	68
22	136	102	e90	e60	147	105	110	87	92	176	74	66
23	130	97	e86	e70	109	106	107	87	234	168	67	73
24	121	64	e88	89	108	100	110	88	702	168	62	64
25	110	e54	94	90	103	99	110	86	375	165	59	64
26	102	e48	95	91	e94	100	110	86	215	170	64	62
27	104	e60	92	91	e86	98	99	85	158	490	61	60
28	101	e70	e86	91	e84	96	106	86	112	327	61	61
29	94	e90	e88	85	---	96	101	109	99	187	59	63
30	94	103	91	84	---	92	100	97	110	142	59	64
31	98	---	89	68	---	94	---	90	---	128	58	---
TOTAL	6815	2839	3029	2430	2980	8084	3279	2807	4487	10603	2834	3683
MEAN	220	94.6	97.7	78.4	106	261	109	90.5	150	342	91.4	123
MAX	1800	120	113	93	314	1640	169	109	702	762	185	622
MIN	94	48	86	56	48	86	88	83	86	128	58	58
AC-FT	13520	5630	6010	4820	5910	16030	6500	5570	8900	21030	5620	7310

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1994, BY WATER YEAR (WY)

	MEAN	83.5	62.9	63.0	68.4	96.7	204	134	256	272	266	156	142
MAX	347	94.6	102	207	245	1140	762	1348	1145	2655	883	911	
(WY)	1966	1994	1986	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	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1954 - 1994

ANNUAL TOTAL	177131	53870	
ANNUAL MEAN	485	148	
MEDIAN OF ANNUAL MEANS			151
HIGHEST ANNUAL MEAN			128
LOWEST ANNUAL MEAN			464
HIGHEST DAILY MEAN	11800	Jul 25	1800
LOWEST DAILY MEAN	30	Jan 1	48
ANNUAL SEVEN-DAY MINIMUM	40	Jan 1	58
INSTANTANEOUS PEAK FLOW			2200
INSTANTANEOUS PEAK STAGE			6.60
ANNUAL RUNOFF (AC-FT)	351300	106900	109300
10 PERCENT EXCEEDS	804	211	198
50 PERCENT EXCEEDS	104	99	69
90 PERCENT EXCEEDS	58	64	43

KANSAS RIVER BASIN

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06884000 LITTLE BLUE RIVER NEAR FAIRBURY, NE

LOCATION.--Lat 40°06'54", long 97°10'13", in NW1/4NE1/4 sec.26, T.2 N., R.2 E., Jefferson County, Hydrologic Unit 10270207, at right downstream wingwall of bridge on State Highway 15, 0.8 mi south of Fairbury, 5.2 mi upstream from Rose Creek, and at mile 62.0.

DRAINAGE AREA.--2,350 mi².

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.

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 1,277.19 ft above sea level. May 23, 1908, to Sept. 30, 1915, nonrecording gage at present 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 present site at datum 5.0 ft higher.

REMARKS.--Records fair except for periods of estimated record, which are poor. Some regulation at low stage by thermoelectric plant above station. Natural flow of stream affected by irrigation development above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	425	309	268	e185	e135	e240	193	218	205	199	289	e105
2	406	305	275	e195	e140	e270	190	210	666	268	259	e105
3	393	298	248	e160	e145	287	185	212	344	361	246	105
4	382	293	244	e150	e145	731	184	210	310	446	246	e105
5	371	289	234	e160	e150	2630	177	204	286	507	251	e110
6	363	280	224	e145	e155	2740	176	2000	273	555	253	110
7	358	273	223	e130	e160	2050	174	1430	271	687	258	124
8	358	271	221	e135	e150	1340	176	561	288	714	e280	377
9	358	268	222	e140	e140	896	173	400	324	673	267	404
10	350	268	221	e155	e130	647	183	333	462	647	e240	293
11	373	279	219	e160	e145	515	190	300	397	527	e210	230
12	463	272	217	e165	e180	427	221	275	331	444	e190	194
13	452	286	223	e170	e195	372	306	263	305	392	e175	169
14	428	286	231	e180	e210	334	400	294	274	382	e160	153
15	414	286	231	e175	e220	310	320	318	231	363	e150	141
16	1300	275	231	e155	e230	294	284	268	214	331	e140	130
17	1260	263	231	e140	e235	287	258	254	202	292	e130	117
18	813	258	227	e125	e245	274	239	246	191	286	e120	110
19	627	255	224	e140	e260	259	227	238	183	318	e130	105
20	567	250	224	e160	e280	251	217	230	177	713	180	102
21	515	250	218	e175	e270	239	413	226	171	608	e170	103
22	466	250	190	e190	e240	233	417	223	204	422	e140	104
23	430	247	e185	e210	e210	226	282	229	236	341	e130	111
24	406	208	e180	e220	e160	219	251	214	232	294	e125	116
25	386	e125	e175	e200	e170	214	229	204	439	279	e120	123
26	370	e115	e180	e180	e160	215	218	204	486	264	190	125
27	356	e120	e175	e170	e180	212	203	200	360	258	e170	117
28	344	e150	e160	e150	e210	207	206	198	272	287	e120	114
29	331	e175	e155	e140	---	202	216	196	220	468	e115	113
30	321	e220	e170	e115	---	199	214	198	197	438	e120	115
31	313	---	e175	e125	---	197	---	199	---	332	e110	---
TOTAL	14699	7424	6601	5000	5250	17517	7122	10755	8771	13096	5684	4430
MEAN	474	247	213	161	187	565	237	347	292	422	183	148
MAX	1300	309	275	220	280	2740	417	2000	666	714	289	404
MIN	313	115	155	115	130	197	173	196	171	199	110	102
AC-FT	29160	14730	13090	9920	10410	34740	14130	21330	17400	25980	11270	8790

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 1994, BY WATER YEAR (WY)

	MEAN	288	164	140	159	275	518	336	538	894	608	358	371
MAX	4406	653	282	594	1004	2821	2019	2419	4735	6413	2142	2189	
(WY)	1974	1947	1914	1973	1948	1987	1987	1945	1951	1993	1985	1973	
MIN	44.3	68.7	74.7	75.0	93.3	103	99.8	96.6	78.1	55.4	48.3	28.7	
(WY)	1992	1992	1981	1930	1981	1981	1981	1992	1934	1934	1936	1991	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1910 - 1994

ANNUAL TOTAL	460103	106349	
ANNUAL MEAN	1261	291	
HIGHEST ANNUAL MEAN			391
LOWEST ANNUAL MEAN			1239
HIGHEST DAILY MEAN	22400	2740	107
LOWEST DAILY MEAN	82	102	1993
ANNUAL SEVEN-DAY MINIMUM	99	107	1940
INSTANTANEOUS PEAK FLOW		3660	36400
INSTANTANEOUS PEAK STAGE		12.19	14
ANNUAL RUNOFF (AC-FT)	912600	210900	24
10 PERCENT EXCEEDS	2890	440	24
50 PERCENT EXCEEDS	400	229	54000
90 PERCENT EXCEEDS	163	130	24.33
			283600
			590
			160
			91

KANSAS RIVER BASIN

06884025 LITTLE BLUE RIVER AT HOLLENBERG, KS

LOCATION.--Lat 39°58'48", long 97°00'16", NE1/4 SW1/4 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 mi².

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.

REMARKS.--Records good except for periods of estimated record, 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 1993 TO SEPTEMBER 1994
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	607	352	380	e230	e210	e280	318	407	316	288	304	128
2	589	350	375	e240	e215	e350	316	395	2440	563	267	128
3	557	343	340	e245	e220	501	309	392	1150	881	262	129
4	555	341	333	e230	e225	883	307	387	714	693	320	132
5	529	339	322	e200	e230	3000	299	374	483	762	326	137
6	454	336	310	e185	e230	3530	299	2470	398	854	322	135
7	463	334	304	e170	e220	2760	300	3150	400	1040	322	128
8	461	329	299	e170	e200	1870	301	1050	426	990	353	490
9	454	332	299	e180	e200	1220	299	647	562	953	326	491
10	443	322	297	e210	e210	839	323	512	939	941	281	350
11	479	312	293	e230	e210	661	336	443	598	669	259	269
12	499	349	297	e235	e230	558	399	413	463	545	233	227
13	495	367	336	e240	e260	494	427	1440	426	480	213	198
14	474	357	346	e250	e270	461	582	1180	395	454	205	179
15	468	376	334	e240	e300	435	508	1340	353	429	201	167
16	638	364	338	e235	e300	413	418	602	355	397	184	151
17	1290	350	343	e200	e310	403	377	467	329	345	166	136
18	1240	338	326	e205	e320	393	351	425	310	372	157	133
19	902	329	317	e210	e340	381	328	398	291	454	225	131
20	674	323	314	e225	e370	370	315	372	281	963	249	125
21	583	323	e300	e230	e360	354	872	356	291	877	234	121
22	497	321	e260	e245	e330	345	1190	349	589	531	180	125
23	448	318	e250	e260	e300	339	542	352	566	401	159	131
24	427	317	e240	e270	e250	329	442	350	669	332	156	133
25	423	e220	e240	e280	e230	327	400	326	799	307	149	151
26	414	e180	e230	e300	e200	332	376	327	773	286	299	145
27	407	e170	e220	e290	e220	328	340	321	527	279	237	132
28	397	e200	e215	e270	e250	322	346	315	405	314	149	135
29	379	e250	e210	e245	---	319	375	318	324	714	139	132
30	363	e300	e220	e225	---	316	381	313	283	515	144	130
31	351	---	e225	e200	---	315	---	308	---	371	131	---
TOTAL	16960	9442	9113	7145	7210	23428	12376	20499	16855	18000	7152	5299
MEAN	547	315	294	230	257	756	413	661	562	581	231	177
MAX	1290	376	380	300	370	3530	1190	3150	2440	1040	353	491
MIN	351	170	210	170	200	280	299	308	281	279	131	121
AC-FT	33640	18730	18080	14170	14300	46470	24550	40660	33430	35700	14190	10510

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1994, BY WATER YEAR (WY)

MEAN	369	206	187	182	366	955	618	715	1008	1246	596	444
MAX	2163	405	424	576	1059	3816	2379	2059	4373	9014	2572	1320
(WY)	1987	1993	1993	1984	1993	1993	1987	1984	1984	1993	1985	1977
MIN	45.3	81.1	102	98.5	115	118	125	108	151	111	72.5	32.0
(WY)	1992	1992	1977	1977	1992	1981	1981	1992	1981	1991	1991	1991

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1975 - 1994

ANNUAL TOTAL	680490	153479	
ANNUAL MEAN	1864	420	
HIGHEST ANNUAL MEAN			576
LOWEST ANNUAL MEAN			1891
HIGHEST DAILY MEAN	24400	Jul 27	39300
LOWEST DAILY MEAN	160	Jan 1	26
ANNUAL SEVEN-DAY MINIMUM	179	Jan 1	27
INSTANTANEOUS PEAK FLOW			5760
INSTANTANEOUS PEAK STAGE		8.91	May 6
ANNUAL RUNOFF (AC-FT)	1350000	304400	417200
10 PERCENT EXCEEDS	4570	671	973
50 PERCENT EXCEEDS	702	327	211
90 PERCENT EXCEEDS	238	180	104

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 1994

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
Platte River basin						
*Dane Creek (06788495)	North Loup River	Lat 41° 36' 31", long 98° 56' 36", in NE1/4 NE1/4 sec.20, T.19N., R.14 W. Valley County, at bridge on State Highway 11 at northwest edge of Ord.	---	*1962 1977-93	11-24-93 05-12-94	.98 .93
*Mira Creek (06788990)	North Loup River	Lat 41° 29 '54", long 98° 46' 46", in SE1/4 SW1/4 sec.26, T.18 N., R.13 W Valley County, at bridge on State Highway 11 at west edge of North Loup.	---	1977-93	11-24-93 05-03-94	2.0 1.5
South Loup River (06781800)	Middle Loup River	Lat 41° 18' 12", long 99° 55' 50", in NE1/4 NE1/4 sec. 3, T.15 N., R.23 W, Custer County, at county road bridge, 0.8 mi NW of Callaway	---	---	03-14-94 08-01-94	113 104
Loup River (06791150)	Platte River	Lat 41° 16' 34", long 98° 15' 05", in NE1/4 NE1/4 sec.17, T.15 N., R.8 W, Nance County, at county road bridge, 4.6 mi north of Palmer.	---	---	10-23-93 11-22-93 12-07-93 01-05-94 02-16-94 03-07-94 03-18-94 04-20-94 05-24-94 06-15-94 07-19-94 08-13-94 09-19-94	3,490 3,020 2,700 2,710 3,200 6,710 3,400 2,360 1,620 1,450 2,370 1,620 1,700
Kansas River basin						
Republican River (06851090)	Kansas River	Lat 40° 05' 26", long 98° 46' 03", in SE1/4 SE1/4 sec.34, T.2 N., R.13 W., Franklin County, at bridge on county road 0.5 mile west of Riverton.	21,300	1963-67, 1970-78, 1980 1983, 1985 1988-93	10-27-93 01-04-94	1,200 301

* Also published with additional data elsewhere in this report.

a Gage heights, or gage heights and discharge measurements only.

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 1994

Station No.	Station name	Location	Draiage area (mi ²)	Period of record	Date	Annual maximum	
						Gage height (feet)	Dis-charge (ft ³ /s)
Kansas River basin							
06850000	Turkey Creek at Naponee, NE	Lat 40° 04' 34", long 99° 08' 17", in SW1/4 SW1/4 sec.4, T.1 N., R.16 W., Franklin County, on downstream side of county bridge at east side of Naponee.	129	*1948-53 a1954-61 b1962-77 a1978-89 1991-94	10-09-93	7.61	1400
06881450	Indian Creek at Beatrice, NE	Lat 40° 17' 08", long 96° 44' 47", in SE1/4 NE1/4 sec. 28, T.4 N., R.6 E., Gage County, at bridge on U.S.Highway 77 at north edge of Beatrice.	74.7	1960-89, 1991-94	07-02-94	14.70	3500

* 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.

LOW-FLOW INVESTIGATIONS

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KANSAS RIVER BASIN

Low-flow investigations made in the Big Blue and Little Blue River basins in Nebraska during water year 1994 to obtain data on ground-water/surface-water relationships.

BIG BLUE RIVER BASIN

<i>Location</i>	<i>Observation of zero flow or measured discharge in cubic feet per second June 17, 1994</i>
Big Blue River 1.5 miles north of DeWitt in SW1/4 NE1/4 sec. 12, T.5 N., R.4 E.-----	246
Clatonia Creek 1 mile northeast of DeWitt in NW1/4 NW1/4 sec. 17, T.5 N., R.5 E.-----	1.93
Turkey Creek 1.5 miles west of DeWitt in SE1/4 NW1/4 sec. 15, T.5 N., R.4 E.-----	42.6
Turkey Creek 0.5 miles south of DeWitt in SE1/4 NW1/4 sec. 24, T.5 N., R.4 E.-----	47.2
Turkey Creek 1.5 miles southeast of DeWitt in NW1/4 SW1/4 sec. 29, T.5 N., R.5 E.-----	49.4
Big Blue River 2.5 miles southeast of DeWitt in NW1/4 NE1/4 sec. 33, T.5 N., R.5 E.-----	289
Soap Creek 3.5 miles southeast of DeWitt in SE1/4 SW1/4 sec. 27, T.5 N., R.5 E.-----	0.255
Unnamed tributary to Big Blue River 1 mile north of Hoag in NW1/4 NE1/4 sec. 10, T.4 N., R.5 E.-----	0
Snake Creek 2 miles northeast of Hoag in NW1/4 NW1/4 sec. 1, T.4 N., R.5 E.-----	0
Big Blue River 1 mile east of Hoag in NE1/4 NW1/4 sec. 13, T.4 N., R.5 E.-----	308
Cub Creek 2 miles south of Hoag in SW1/4 SW1/4 sec. 24, T.4 N., R.5 E.-----	3.51
Bottle Creek 1.5 miles northwest of Beatrice in NW1/4 SW1/4 sec. 30, T.4 N., R.6 E.-----	.252
Unnamed tributary to Big Blue River 0.5 miles northwest of Beatrice in SW1/4 SW1/4 sec. 29, T.4 N., R.6 E.-----	.197
Indian Creek at Beatrice in SE1/4 SE1/4 sec. 28, T.4 N., R.6 E.-----	6.49
Big Blue River at Beatrice in SW1/4 NW1/4 sec. 3, T.3 N., R.6 E. (Gage)-----	314

LITTLE BLUE RIVER BASIN

June 16, 1994

Little Blue River 2.7 miles south of Alexandria in SE1/4 SE1/4 sec. 23, T.3 N., R.1 W. (Gage)-----	174
Big Sandy Creek 0.8 miles south of Alexandria in SE1/4 SE1/4 sec. 11, T.3 N., R.1 W. (Gage)-----	31.7
Big Sandy Creek 1.2 miles west of Powell in SE1/4 SE1/4 sec. 16, T.3 N., R.1 E.-----	30.3
Little Blue River 1.2 miles southwest of Powell in SE1/4 SE1/4 sec. 22, T.3 N., R.1 E.-----	227
Little Sandy Creek 2.0 miles east of Powell in NW1/4 NE1/4 sec. 19, T.3 N., R.2 E.-----	2.13
Whiskey Creek 2.1 miles northwest of Fairbury in SW1/4 SE1/4 sec. 33, T.3 N., R.2 E.-----	.432
Little Blue River 1.3 miles northwest of Fairbury in NW1/4 NE1/4 sec. 9, T.2 N., R.2 E.-----	210
Trib. to Little Blue River 0.8 miles southwest of Fairbury in NE1/4 SW1/4 sec. 22, T.2 N., R.2 E.-----	0
Little Blue River 0.8 miles south of Fairbury in NW1/4 NE1/4 sec. 26, T.2 N., R.2 E. (Gage)-----	218
Brawner Creek 0.4 miles southeast of Fairbury in SE1/4 NE1/4 sec. 23, T.2 N., R.2 E.-----	.035
Rose Creek 4.0 miles southwest of Endicott in NW1/4 NW1/4 sec. 12, T.1 N., R.2 E.-----	43.3
Smith Creek 0.2 miles northwest of Endicott in NW1/4 SE1/4 sec. 5, T.1 N., R.3 E.-----	.349
Little Blue River 0.3 miles south of Endicott in SE1/4 SW1/4 sec. 4, T.1 N., R.3 E.-----	294
Rock Creek 0.3 miles southeast of Endicott in SE1/4 SE1/4 sec. 4, T.1 N., R.3 E.-----	1.29
Coon Creek 2.6 miles northwest of Steele City in NW1/4 NE1/4 sec. 15, T.1 N., R.3 E.-----	.64
Little Blue River 0.5 miles south of Steele City in NW1/4 NW1/4 sec. 30, T.1 N., R.4 E.-----	317
Little Blue River 0.6 miles west of Hollenberg in NE1/4 SW1/4 sec. 8, T.1 S., R.4 E. (Gage)-----	378

LOW-FLOW INVESTIGATIONS

PLATTE RIVER BASIN

WAHOO CREEK BASIN

Discharge measurements were made during water year 1994 at numerous locations within the Wahoo Creek basin in Saunders County, Nebraska near the Nebraska Ordnance Plant (NOP) to determine ground-water/surface-water relationships.

<i>Location</i>	<i>Discharge in cubic feet per second on indicated dates.</i>		
	<i>6-3-94</i>	<i>7-28-94</i>	<i>9-7-94</i>
Wahoo Creek at SW corner of NOP NW1/4 NW1/4 sec. 2, T.13 N., R.8 E.	123	7.12	53.7
Wahoo Cr below confluence with Silver Creek NE1/4 NW1/4 sec. 20, T.13 N., R.9 E.	217	87.3	65.5
Wahoo Creek at Ashland (Gage site 06804700) SE1/4 NE1/4 sec. 35, T.13 N., R.9 E.	245	89.2	66.0
Silver Creek near Ithaca SW 1/4 NW 1/2 sec. 35, T.14 N, R. 8 E.	---	11.3	8.29
Silver Creek near Ashland NW1/4 NE1/4 sec. 35, T.13 N., R.9 E.	3.0	0.5	0.93
Johnson Creek north of NOP SW1/4 SW1/4 sec. 5, T.14 N., R.9 E.	1.22	0.44	0.40
Johnson Creek below dam outlet SW1/4 SE1/4 sec. 16, T.14 N., R.9 E.	7.08	0.05	0
Johnson Creek near Memphis (1 mi above Clear Creek) (Gage site 06804900) NW1/4 NW1/4 4 sec. 35, T.14 N., R.9 E.	12.3	1.51	1.17
Clear Creek near Memphis NW1/4 NW1/4 sec. 14, T.13 N., R.9 E.	8.69	9.73	8.69
Clear Creek near Ashland NE 1/2 NE 1/4 sec. 35, T.13 N., R. 9 E.	---	12.1	9.65

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

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WATER DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE INST. (FT ³ /S) (00061)	SPECIFIC CONDUCTANCE (μS/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (°C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	HARDNESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DISSOLVED (MG/L AS Ca) (00915)	MAGNESIUM, DISSOLVED (MG/L AS Mg) (00925)	SODIUM, DISSOLVED (MG/L AS Na) (00930)	
06788495 DANE C AT ORD, NEBR. (LAT 41 36 31N LONG 098 56 36W)											
NOV 1993	24...	1530	0.98	1050	7.8	0.5	22	490	150	29	
MAY 1994	12...	1545	0.93	906	7.8	17.0	38	400	120	24	
06788990 MIRA C AT NORTH LOUP, NEBR. (LAT 41 29 54N LONG 098 46 46W)											
NOV 1993	24...	1350	2.0	902	8.1	0.5	14	420	120	30	
MAY 1994	13...	1015	1.5	865	7.8	17.5	48	380	110	26	
DATE		SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY LAB (MG/L AS CaCO ₃) (90410)	SULFATE DISSOLVED (MG/L AS SO ₄) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	SOLIDS, DISSOLVED (TONS PER DAY) (70302)
06788495 DANE C AT ORD, NEBR. (LAT 41 36 31N LONG 098 56 36W)											
NOV 1993	24...	0.5	22	459	88	17	0.30	47	678	0.92	1.79
MAY 1994	12...	0.5	22	393	75	17	0.30	43	576	0.78	1.45
06788990 MIRA C AT NORTH LOUP, NEBR. (LAT 41 29 54N LONG 098 46 46W)											
NOV 1993	24...	0.6	20	420	78	14	0.20	35	584	0.79	3.15
MAY 1994	13...	0.6	20	385	83	13	0.30	28	541	0.74	2.19
DATE		NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO ₂ +NO ₃ DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	BORON, DISSOLVED (μG/L AS B) (01020)	IRON, DISSOLVED (μG/L AS FE) (01046)	MANGANESE, DISSOLVED (μG/L AS MN) (01056)	
06788495 DANE C AT ORD, NEBR. (LAT 41 36 31N LONG 098 56 36W)											
NOV 1993	24...		4.35	0.050	4.40	0.190	0.330	0.330	80	18	
MAY 1994	12...		2.68	0.120	2.80	0.150	0.660	0.670	90	17	
06788990 MIRA C AT NORTH LOUP, NEBR. (LAT 41 29 54N LONG 098 46 46W)											
NOV 1993	24...		0.910	0.020	0.930	0.100	0.360	0.360	80	10	
MAY 1994	13...		0.160	0.020	0.180	0.050	0.550	0.550	100	9	

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Special Protection Areas (SPA) Hitchcock-Red Willow Counties

DATE	TIME	DIS- CHARGE, INST. FT ³ /S (00061)	PH SPE- CIFIC CON- DUCT- ANCE (μ S/L) (00095)	WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (° C) (00010)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS- SOLVED (MG/L AS Na) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY LAB (MG/L AS CaCO ₃) (90410)
06828500 REPUBLICAN RIVER AT STRATTON, NE. (LAT 40 08 28N LONG 101 13 42W)												
JUL 1994												
18...	1245	16	58	8.6	32.0	--	--	--	--	--	--	--
06835010 CULBERTSON CNL AT HWY 25, 5MI BLW DIV, NR PALISADE, NE (LAT 40 18 36N LONG 101 00 28W)												
JUL 1994												
18...	1330	92	42	8.1	26.5	--	--	--	--	--	--	--
06835040 CULBERTSON EXT CNL AT CNTY RD, 3MI N OF MCCOOK, NE (LAT 40 15 04N LONG 100 38 41W)												
JUL 1994												
18...	1535	16	38	8.1	28.5	--	--	--	--	--	--	--
18...	1540	16	38	8.1	28.5	140	37	11	14	0.5	14	162
06835500 FRENCHMAN CREEK AT CULBERTSON, NE (LAT 40 14 05N LONG 100 52 40W)												
JUL 1994												
18...	1415	32	47	8.1	28.5	--	--	--	--	--	--	--
18...	1425	32	47	8.1	28.5	180	47	14	19	0.6	18	198
06837000 REPUBLICAN RIVER AT MCCOOK NE (LAT 40 11 15N LONG 100 37 05W)												
JUL 1994												
18...	1635	173	65	8.1	31.5	--	--	--	--	--	--	--
18...	1640	173	65	8.1	31.5	200	48	20	43	1	19	213
06838560 REPUBLICAN RIVER AT BARTLEY, NE (LAT 40 14 07N LONG 100 18 21W)												
JUL 1994												
19...	1130	155	66	8.4	27.0	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Special Protection Areas (SPA) Hitchcock-Red Willow Counties --Continued

DATE	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, RESIDUE AT 180 °C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	IRON, DIS- SOLVED (µ G/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (µ G/L AS MN) (01056)
06828500 REPUBLICAN RIVER AT STRATTON, NE. (LAT 40 08 28N LONG 101 13 42W)											
JUL 1994 18...	--	--	--	--	--	--	--	--	0.010	--	--
06835010 CULBERTSON CNL AT HWY 25, 5MI BLW DIV, NR PALISADE, NE (LAT 40 18 36N LONG 101 00 28W)											
JUL 1994 18...	--	--	--	--	--	--	--	--	0.600	--	--
06835040 CULBERTSON EXT CNL AT CNTY RD, 3MI N OF MCCOOK, NE (LAT 40 15 04N LONG 100 38 41W)											
JUL 1994 18... 18...	-- 22	-- 4.6	-- 0.80	-- 30	-- 241	-- 231	-- 0.33	-- 10.4	0.500 --	-- 43	-- 3
06835500 FRENCHMAN CREEK AT CULBERTSON, NE. (LAT 40 14 05N LONG 100 52 40W)											
JUL 1994 18... 18...	-- 32	-- 5.9	-- 0.80	-- 40	-- 308	-- 295	-- 0.42	-- 26.6	1.60 --	-- 4	-- 3
06837000 REPUBLICAN RIVER AT MCCOOK NE (LAT 40 11 15N LONG 100 37 05W)											
JUL 1994 18... 18...	-- 82	-- 17	-- 1.0	-- 20	-- 391	-- 378	-- 0.53	-- 183	1.00 --	-- 7	-- 3
06838560 REPUBLICAN RIVER AT BARTLEY, NE (LAT 40 14 07N LONG 100 18 21W)											
JUL 1994 19...	--	--	--	--	--	--	--	--	1.10	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
NATIONAL WATER-QUALITY ASSESSMENT (NAWQA) -- Wetland Synoptic Stations

	SPECIFIC CON- DUCT- ANCE (μS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (°C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CaCO₃) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CaCO₃ (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
421836100034200 AMERICAN GAME MARSH WMA						(LAT 42 18 22N LONG 100 03 25W)				
MAY 1994										
19...1130	187	7.9	21.0	690	64	6.5	64	0	21	2.9
19...1141	--	--	--	--	--	--	--	--	--	--
AUG										
12...1000	315	7.6	22.5	--	10	--	110	0	37	4.5
12...1011	--	--	--	--	--	--	--	--	--	--
404123098541800 BASSWAY STRIP WMA						(LAT 40 41 14N LONG 098 54 11W)				
MAY 1994										
23...0900	1010	8.0	20.5	705	34	--	300	52	75	27
23...0911	--	--	--	--	--	--	--	--	--	--
AUG										
09...1400	804	7.8	27.5	--	10	--	220	0	51	22
09...1411	--	--	--	--	--	--	--	--	--	--
405734096431100 BENNETT SALINE WETLAND						(LAT 40 57 20N LONG 096 43 07W)				
MAY 1994										
12...1100	3150	7.8	16.5	732	9.0	7.9	290	0	80	23
12...1111	--	--	--	--	--	--	--	--	--	--
AUG										
17...0830	3860	7.6	18.0	--	43	--	370	0	100	28
17...0841	--	--	--	--	--	--	--	--	--	--
405026099504100 BITTERNS CALL WMA						(LAT 40 50 15N LONG 099 50 25W)				
MAY 1994										
22...1000	1460	7.9	21.5	697	17	1.0	470	120	120	42
22...1011	--	--	--	--	--	--	--	--	--	--
AUG										
10...1800	1570	7.6	23.5	--	1.0	--	540	110	140	47
10...1811	--	--	--	--	--	--	--	--	--	--
420001097000700 BLACK ISLAND WMA						(LAT 42 00 01N LONG 097 00 04W)				
MAY 1994										
15...1300	666	7.5	19.5	724	2.0	3.5	290	0	86	18
15...1311	--	--	--	--	--	--	--	--	--	--
AUG										
15...1800	755	7.3	22.0	--	8.0	--	340	0	100	22
15...1811	--	--	--	--	--	--	--	--	--	--
404120099234100 BLUE HOLE WMA						(LAT 40 41 12N LONG 099 23 25W)				
MAY 1994										
23...1600	1250	8.1	23.5	709	--	17.2	370	64	95	33
23...1611	--	--	--	--	--	--	--	--	--	--
AUG										
10...0930	1260	7.8	20.5	--	9.0	--	380	73	100	31
10...0941	--	--	--	--	--	--	--	--	--	--
410529097595000DEPARTMENT OF ROADS - CENTRAL CITY						(LAT 41 05 17N LONG 097 59 30W)				
MAY 1994										
11...0930	606	8.5	16.5	713	3.0	8.2	170	17	30	22
11...0941	--	--	--	--	--	--	--	--	--	--
AUG										
18...1600	1320	9.1	37.0	--	2.5	--	510	450	130	46
18...1611	--	--	--	--	--	--	--	--	--	--
414455100014300 DEPARTMENT OF ROADS - DUNNING						(LAT 41 44 33N LONG 100 01 26W)</				

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
NATIONAL WATER-QUALITY ASSESSMENT (NAWQA) -- Wetland Synoptic Stations--Continued

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CA CO ₃ (39086)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO ₃ (00452)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO ₃ (00453)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO ₂) (00955)	SOLIDS, RESIDUE AT 180° C DIS- SOLVED (MG/L) (70300)
421836100034200 AMERICAN GAME MARSH WMA (LAT 42 18 22N LONG 100 03 25W)											
MAY 1994											
19...	11	0.6	7.1	77	0	94	0.20	1.1	0.90	20	141
19...	--	--	--	--	--	--	--	--	--	--	--
AUG											
12...	16	0.7	11	142	0	174	1.2	1.9	1.3	43	293
12...	--	--	--	--	--	--	--	--	--	--	--
404123098541800 BASSWAY STRIP WMA (LAT 40 41 14N LONG 098 54 11W)											
MAY 1994											
23...	84	2	12	246	0	300	200	38	0.70	34	667
23...	--	--	--	--	--	--	--	--	--	--	--
AUG											
09...	79	2	10	232	0	283	120	32	0.50	35	529
09...	--	--	--	--	--	--	--	--	--	--	--
405734096431100 BENNETT SALINE WETLAND (LAT 40 57 20N LONG 096 43 07W)											
MAY 1994											
12...	530	13	6.2	368	0	449	250	650	0.70	19	1860
12...	--	--	--	--	--	--	--	--	--	--	--
AUG											
17...	680	15	6.0	525	0	641	250	810	0.80	31	2280
17...	--	--	--	--	--	--	--	--	--	--	--
405026099504100 BITTERN'S CALL WMA (LAT 40 50 15N LONG 099 50 25W)											
MAY 1994											
22...	120	2	6.0	354	0	432	390	49	0.70	32	1080
22...	--	--	--	--	--	--	--	--	--	--	--
AUG											
10...	130	2	36	432	0	527	360	44	0.60	54	1140
10...	--	--	--	--	--	--	--	--	--	--	--
420001097000700 BLACK ISLAND WMA (LAT 42 00 01N LONG 097 00 04W)											
MAY 1994											
15...	23	0.6	5.5	311	0	379	27	11	0.30	31	429
15...	--	--	--	--	--	--	--	--	--	--	--
AUG											
15...	26	0.6	7.5	398	0	486	8.4	11	0.40	46	417
15...	--	--	--	--	--	--	--	--	--	--	--
404120099234100 BLUE HOLE WMA (LAT 40 41 12N LONG 099 23 25W)											
MAY 1994											
23...	120	3	21	309	0	377	330	33	0.50	25	874
23...	--	--	--	--	--	--	--	--	--	--	--
AUG											
10...	120	3	23	304	0	371	320	32	0.60	37	870
10...	--	--	--	--	--	--	--	--	--	--	--
410529097595000 DEPARTMENT OF ROAD - CENTRAL CITY (LAT 41 05 17N LONG 097 59 30W)											
MAY 1994											
11...	37	1	9.4	149	7	167	110	19	1.1	1.1	375
11...	--	--	--	--	--	--	--	--	--	--	--
AUG											
18...	67	1	31	67	17	48	600	21	0.90	18	1040
18...	--	--	--	--	--	--	--	--	--	--	--
414455100014300 DEPARTMENT OF ROADS - DUNNING (LAT 41 44 33N LONG 100 01 26W)											
MAY 1994											
20...	13	0.7	7.1	109	0	133	0.20	1.3	0.40	23	183
20...	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
NATIONAL WATER-QUALITY ASSESSMENT (NAWQA) -- Wetland Synoptic Stations

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)
421836100034200 AMERICAN GAME MARSH WMA (LAT 42 18 22N LONG 100 03 25W)											
MAY1994											
19...	111	0.19	--	0.020	<0.050	0.030	5.5	1.2	5.5	1.2	5.5
19...	--	--	--	--	--	--	--	--	--	--	--
AUG											
12...	208	0.40	--	<0.010	<0.050	1.60	6.2	3.0	7.8	4.6	7.8
12...	--	--	--	--	--	--	--	--	--	--	--
404123098541800 BASSWAY STRIP WMA (LAT 40 41 14N LONG 098 54 11W)											
MAY1994											
23... 622	0.91	--	<0.010	<0.050	0.260	3.1	0.94	3.4	1.2	3.4	
23... --	--	--	--	--	--	--	--	--	--	--	--
AUG											
09... 489	0.72	--	<0.010	<0.050	0.020	2.6	0.78	2.6	0.80	2.6	
09... --	--	--	--	--	--	--	--	--	--	--	--
405734096431100 BENNETT SALINE WETLAND (LAT 40 57 20N LONG 096 43 07W)											
MAY 1994											
12...	1780	2.53	0.430	0.040	0.470	0.080	1.1	0.42	1.2	0.50	1.7
12...	--	--	--	--	--	--	--	--	--	--	--
AUG											
17...	2230	3.10	0.440	0.020	0.460	0.070	1.6	0.53	1.7	0.60	2.2
17...	--	--	--	--	--	--	--	--	--	--	--
405026099504100 BITTERNS CALL WMA (LAT 40 50 15N LONG 099 50 25W)											
MAY 1994											
22...	975	1.47	--	<0.010	<0.050	0.300	1.6	1.3	1.9	1.6	1.9
22...	--	--	--	--	--	--	--	--	--	--	--
AUG											
10...	1070	1.55	--	<0.010	<0.050	0.020	4.8	1.1	4.8	1.1	4.8
10...	--	--	--	--	--	--	--	--	--	--	--
420001097000700 BLACK ISLAND WMA (LAT 42 00 01N LONG 097 00 04W)											
MAY 1994											
15... 392	0.58	--	0.020	<0.050	0.020	0.58	0.58	0.60	0.60	0.60	
15... --	--	--	--	--	--	--	--	--	--	--	--
AUG											
15... 470	0.57	--	<0.010	<0.050	0.070	0.73	0.43	0.80	0.50	0.80	
15... --	--	--	--	--	--	--	--	--	--	--	--
404120099234100 BLUE HOLE WMA (LAT 40 41 12N LONG 099 23 25W)											
MAY 1994											
23...	848	1.19	1.02	0.080	1.10	0.070	0.53	0.43	0.60	0.50	1.7
23...	--	--	--	--	--	--	--	--	--	--	--
AUG											
10...	848	1.18	0.260	0.040	0.300	0.080	1.5	0.42	1.6	0.50	1.9
10...	--	--	--	--	--	--	--	--	--	--	--
410529097595000 DEPARTMENT OF ROADS - CENTRAL CITY (LAT 41 05 17N LONG 097 59 30W)											
MAY 1994											
11...	319	0.51	--	<0.010	<0.050	0.020	1.4	0.98	1.4	1.0	1.4
11...	--	--	--	--	--	--	--	--	--	--	--
AUG											
18...	955	1.41	0.090	0.030	0.120	0.220	5.9	2.4	6.1	2.6	6.2
18...	--	--	--	--	--	--	--	--	--	--	--
414455100014300 DEPARTMENT OF ROADS - DUNNING (LAT 41 44 33N LONG 100 01 26W)											
MAY 1994											
20...	139	0.25	--	0.020	<0.050	0.030	1.8	1.1	1.8	1.1	1.8
20...	--	--	--	--	--	--	--	--	--	--	--

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
NATIONAL WATER-QUALITY ASSESSMENT (NAWQA) -- Wetland Synoptic Stations--Continued

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE TIME	SPE- CIFIC CON- DUCT- ANCE (µG/L (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (° C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CaCO ₃ (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
422552098390800 DEPARTMENT OF ROADS - ONEILL										
(LAT 42 25 31N LONG 098 39 05W)										
MAY 1994										
18...0800	344	7.5	18.5	708	2.0	1.5	120	0	38	6.1
18...0811	--	--	--	--	--	--	--	--	--	--
AUG										
14...1430	213	6.7	21.0	--	1.5	--	85	0	27	4.3
14...1441	--	--	--	--	--	--	--	--	--	--
420009098453200 FOXLEY FARMS NO. 1										
(LAT 42 00 05N LONG 098 45 19W)										
MAY 1994										
17...1330	301	8.2	20.0	701	5.0	8.7	97	0	28	6.6
17...1341	--	--	--	--	--	--	--	--	--	--
AUG										
13...0930	303	8.5	24.0	--	2.5	--	99	0	28	7.1
13...0941	--	--	--	--	--	--	--	--	--	--
420219098421000 FOXLEY FARMS NO 5										
(LAT 42 02 12N LONG 098 42 06W)										
MAY 1994										
18...1130	519	8.8	20.5	708	31	12.2	170	0	54	9.7
18...1141	--	--	--	--	--	--	--	--	--	--
AUG										
13...1430	507	7.2	24.5	--	1.0	--	170	1	51	9.1
13...1441	--	--	--	--	--	--	--	--	--	--
415948098423500 FOXLEY LAKE FRED										
(LAT 41 59 29N LONG 098 42 21W)										
MAY 1994										
17...1000	594	7.6	18.0	701	11	0.6	160	0	47	11
17...1011	--	--	--	--	--	--	--	--	--	--
420657098341600 GOOSE LAKE WMA										
(LAT 42 06 34N LONG 098 34 09W)										
MAY 1994										
18...1530	390	8.3	23.5	708	3.0	12.0	140	0	40	9.8
18...1541	--	--	--	--	--	--	--	--	--	--
AUG										
14...0900	281	7.6	23.0	--	1.0	--	89	0	20	9.5
14...0911	--	--	--	--	--	--	--	--	--	--
421059098093400 HACKBERRY CREEK WMA										
(LAT 42 10 35N LONG 098 09 20W)										
MAY 1994										
16...1430	578	8.1	26.5	711	4.0	18.5	260	0	79	15
16...1441	--	--	--	--	--	--	--	--	--	--
AUG										
15...1000	668	7.2	17.5	--	28	--	350	8	110	18
15...1011	--	--	--	--	--	--	--	--	--	--
403331099192600 JOHNSON WPA										
(LAT 40 33 18N LONG 099 19 16W)										
MAY 1994										
22...1400	653	8.8	25.0	699	--	16.9	410	170	110	33
22...1411	--	--	--	--	--	--	--	--	--	--
AUG										
10...1330	532	9.1	26.5	--	1.9	--	170	0	45	14
10...1341	--	--	--	--	--	--	--	--	--	--
404854098254300 LOCH LINDA WMA										
(LAT 40 48 32N LONG 098 25 26W)										
MAY 1994										
10...0930	780	7.6	16.0	713	16	1.4	210	21	48	21
AUG										
19...0830	854	7.0	20.5	--	30	--	250	0	72	18
19...0841	--	--	--	--	--	--	--	--	--	--

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO ₃ (39086)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO ₃ (00452)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO ₃ (00453)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO ₂) (00955)	SOLIDS, RESIDUE AT180 DEG.C DIS- SOLVED (MG/L) (70300)
422552098390800 DEPARTMENT OF ROADS - ONEILL (LAT 42 25 31N LONG 098 39 05W)											
MAY 1994											
18...	17	0.7	13	144	0	176	6.4	10	0.30	0.88	260
18...	--	--	--	--	--	--	--	--	--	--	--
AUG											
14...	8.8	0.4	6.1	98	0	120	1.3	3.7	0.20	14	118
14...	--	--	--	--	--	--	--	--	--	--	--
420009098453200 FOXLEY FARMS NO. 1 (LAT 42 00 05N LONG 098 45 19W)											
MAY 1994											
17...	14	0.6	18	119	4	138	1.6	12	0.20	1.6	230
17...	--	--	--	--	--	--	--	--	--	--	--
AUG											
13...	15	0.7	22	130	4	151	0.90	11	0.20	0.76	208
13...	--	--	--	--	--	--	--	--	--	--	--
420219098421000 FOXLEY FARMS NO. 5 (LAT 42 02 12N LONG 098 42 06W)											
MAY 1994											
18...	24	0.8	26	192	12	210	16	35	0.10	0.10	365
18...	--	--	--	--	--	--	--	--	--	--	--
AUG											
13...	20	0.7	33	164	0	200	18	36	<0.10	8.6	329
13...	--	--	--	--	--	--	--	--	--	--	--
415948098423500 FOXLEY LAKE FRED (LAT 41 59 29N LONG 098 42 21W)											
MAY 1994											
17...	21	0.7	51	190	0	232	9.1	50	<0.10	3.0	414
17...	--	--	--	--	--	--	--	--	--	--	--
420657098341600 GOOSE LAKE WMA (LAT 42 06 34N LONG 098 34 09W)											
MAY 1994											
18...	22	0.8	9.9	192	2	229	1.0	3.8	0.30	4.5	266
18...	--	--	--	--	--	--	--	--	--	--	--
AUG											
14...	23	1	7.0	141	0	172	0.40	1.7	0.30	12	172
14...	--	--	--	--	--	--	--	--	--	--	--
421059098093400 HACKBERRY CREEK WMA (LAT 42 10 35N LONG 098 09 20W)											
MAY 1994											
16...	8.9	0.2	12	263	0	321	26	1.2	0.30	25	359
16...	--	--	--	--	--	--	--	--	--	--	--
AUG											
15...	10	0.2	14	340	0	415	20	1.4	0.30	53	430
15...	--	--	--	--	--	--	--	--	--	--	--
403331099192600 JOHNSON WPA (LAT 40 33 18N LONG 099 19 16W)											
MAY 1994											
22...	170	4	11	238	25	239	500	58	0.60	3.5	1110
22...	--	--	--	--	--	--	--	--	--	--	--
AUG											
10...	32	1	30	200	36	171	48	24	0.30	2.2	345
10...	--	--	--	--	--	--	--	--	--	--	--
404854098254300 LOCH LINDA WMA (LAT 40 48 32N LONG 098 25 26W)											
MAY 1994											
10...	78	2	9.3	185	0	226	160	29	0.70	7.8	514
AUG											
19...	53	1	8.2	390	0	476	75	19	0.50	38	511
19...	--	--	--	--	--	--	--	--	--	--	--

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WATER-QUALITY DATA. WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITROGEN DIS- SOLVED (MG/L AS N) (00602)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (µG/L AS AL) (01106)	ARSENIC DIS- SOLVED (µG/L AS AS) (01000)	BARIUM, DIS- SOLVED (µG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (µG/L AS BE) (01010)	CADMIUM DIS- SOLVED (µG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (µG/L AS CR) (01030)	COBALT, DIS- SOLVED (µG/L AS CO) (01035)
422552098390800 DEPARTMENT OF ROADS - ONEILL (LAT 42 25 31N LONG 098 39 05W)											
MAY 1994											
18...	--	0.360	0.360	0.300	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
AUG											
14...	--	0.290	0.110	0.110	9	3	150	<1	<1.0	<1	<1
14...	--	--	--	--	--	--	--	--	--	--	--
420009098453200 FOXLEY FARMS NO. 1 (LAT 42 00 05N LONG 098 45 19W)											
MAY 1994											
17...	--	0.740	0.670	0.640	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
AUG											
13...	--	1.00	1.00	1.00	5	2	110	<1	<1.0	1	<1
13...	--	--	--	--	--	--	--	--	--	--	--
420219098421000 FOXLEY FARMS NO. 5 (LAT 42 02 12N LONG 098 42 06W)											
MAY 1994											
18...	2.9	1.90	1.30	1.20	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
AUG											
13...	2.2	1.80	1.80	1.60	7	1	240	<1	<1.0	2	<1
13...	--	--	--	--	--	--	--	--	--	--	--
415948098423500 FOXLEY LAKE FRED (LAT 41 59 29N LONG 098 42 21W)											
MAY 1994											
17...	--	6.60	6.20	6.10	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
420657098341600 GOOSE LAKE WMA (LAT 42 06 34N LONG 098 34 09W)											
MAY 1994											
18...	--	0.050	0.020	<0.010	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
AUG											
14...	--	0.050	0.040	0.010	<1	2	120	<1	<1.0	<1	<1
14...	--	--	--	--	--	--	--	--	--	--	--
421059098093400 HACKBERRY CREEK WMA (LAT 42 10 35N LONG 098 09 20W)											
MAY 1994											
16...	--	0.280	0.140	0.150	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
AUG											
15...	--	0.420	0.250	0.280	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
403331099192600 JOHNSON WPA (LAT 40 33 18N LONG 099 19 16W)											
MAY 1994											
22...	--	2.00	1.90	1.80	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--
AUG											
10...	--	1.70	1.50	1.40	5	3	50	<1	<1.0	<1	<1
10...	--	--	--	--	--	--	--	--	--	--	--
404854098254300 LOCH LINDA WMA (LAT 40 48 32N LONG 098 25 26W)											
MAY 1994											
10...	--	0.180	0.050	0.020	--	--	--	--	--	--	--
AUG											
19...	--	0.120	0.020	<0.010	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
NATIONAL WATER-QUALITY ASSESSMENT (NAWQA) -- Wetland Synoptic Stations--Continued

DATE	COPPER, DIS- SOLVED (µ G/L AS CU) (01040)	IRON, DIS- SOLVED (µ G/L AS FE) (01046)	LEAD, DIS- SOLVED (µ G/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (µ G/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (µ G/L AS MO) (01060)	NICKEL, DIS- SOLVED (µ G/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (µ G/L AS SE) (01145)	SILVER, DIS- SOLVED (µ G/L AS AG) (01075)	ZINC, DIS- SOLVED (µ G/L AS ZN) (01090)	ANTI- MONY, DIS- SOLVED (µ G/L AS SB) (01095)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)
422552098390800 DEPARTMENT OF ROADS - ONEILL (LAT 42 25 31N LONG 098 39 05W)											
MAY 1994											
18...	--	320	--	250	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	3.45
AUG											
14...	<1	350	<1	340	<1	<1	<1	<1.0	4	<1	--
14...	--	--	--	--	--	--	--	--	--	--	41.6
420009098453200 FOXLEY FARMS NO. 1 (LAT 42 00 05N LONG 098 45 19W)											
MAY 1994											
17...	--	260	--	28	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	29.8
AUG											
13...	<1	110	<1	61	<1	<1	<1	<1.0	4	<1	--
13...	--	--	--	--	--	--	--	--	--	--	57.8
420219098421000 FOXLEY FARMS NO. 5 (LAT 42 02 12N LONG 098 42 06W)											
MAY 1994											
18...	--	42	--	88	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	206
AUG											
13...	<1	88	<1	190	<1	<1	<1	<1.0	5	<1	--
13...	--	--	--	--	--	--	--	--	--	--	109
415948098423500 FOXLEY LAKE FRED (LAT 41 59 29N LONG 098 42 21W)											
MAY 1994											
17...	--	400	--	240	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	34.2
420657098341600 GOOSE LAKE WMA (LAT 42 06 34N LONG 098 34 09W)											
MAY 1994											
18...	--	25	--	12	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	5.18
AUG											
14...	<1	17	<1	30	<1	<1	<1	<1.0	1	<1	--
14...	--	--	--	--	--	--	--	--	--	--	12.8
421059098093400 HACKBERRY CREEK WMA (LAT 42 10 35N LONG 098 09 20W)											
MAY 1994											
16...	--	120	--	370	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	60.1
AUG											
15...	--	260	--	2700	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	12.7
403331099192600 JOHNSON WPA (LAT 40 33 18N LONG 099 19 16W)											
MAY 1994											
22...	--	34	--	17	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	54.3
AUG											
10...	1	10	<1	190	<1	<1	<1	<1.0	2	<1	--
10...	--	--	--	--	--	--	--	--	--	--	14.4
404854098254300 LOCH LINDA WMA (LAT 40 48 32N LONG 098 25 26W)											
MAY 1994											
10...	--	79	--	630	--	--	--	--	--	--	--
AUG											
19...	--	60	--	350	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	346

NATIONAL WATER-QUALITY ASSESSMENT (NAWQA) -- Wetland Synoptic Stations--Continued

DATE TIME	SPE- CIFIC CON- DUCT- ANCE (µG/L (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (° C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CaCO ₃ (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
421735100062600 LONG LAKE SRA (LAT 42 17 21N LONG 100 06 15W)										
MAY 1994										
19...1430	116	9.2	22.5	690	--	10.0	39	0	13	1.6
19...1441	--	--	--	--	--	--	--	--	--	--
AUG										
12...1500	161	10.0	28.5	--	31	--	59	0	20	2.3
12...1511	--	--	--	--	--	--	--	--	--	--
414453099463000 MILBURN DAM WMA (LAT 41 44 32N LONG 099 46 18W)										
MAY 1994										
20...1330	91	7.5	20.5	693	6.0	11.9	31	0	10	1.5
20...1341	--	--	--	--	--	--	--	--	--	--
AUG										
11...1700	117	7.1	20.0	--	4.2	--	37	0	12	1.7
11...1711	--	--	--	--	--	--	--	--	--	--
410512100374600 MILLER LAKE OUTFLOW (LAT 41 05 07N LONG 100 37 28W)										
MAY 1994										
21...1100	1120	7.9	20.5	687	9.0	3.0	350	130	89	30
21...1111	--	--	--	--	--	--	--	--	--	--
AUG										
11...1000	1090	8.0	23.5	--	1.5	--	290	30	68	30
11...1011	--	--	--	--	--	--	--	--	--	--
410318096350100 OTTO SALINE WETLAND (LAT 41 03 11N LONG 096 35 01W)										
MAY 1994										
12...1430	2770	8.4	26.0	732	40	10.3	390	0	72	52
12...1441	--	--	--	--	--	--	--	--	--	--
AUG										
17...1100	1630	8.5	23.0	--	33	--	290	0	63	31
17...1111	--	--	--	--	--	--	--	--	--	--
414252096422600 POWDER HORN WMA (LAT 41 42 31N LONG 096 42 15W)										
MAY 1994										
14...1300	599	8.2	19.5	721	46	14.7	250	0	71	18
14...1311	--	--	--	--	--	--	--	--	--	--
AUG										
16...0930	650	7.4	19.0	--	13	--	300	0	86	21
16...0941	--	--	--	--	--	--	--	--	--	--
412516097433200 PRAIRIE WOLF WMA (LAT 41 25 09N LONG 097 43 19W)										
MAY 1994										
11...1300	423	8.1	23.0	720	9.0	6.3	240	24	71	16
11...1311	--	--	--	--	--	--	--	--	--	--
AUG										
18...1030	445	7.4	21.5	--	19	--	190	0	54	13
18...1041	--	--	--	--	--	--	--	--	--	--
410348096345100 SABATKA SALINE WETLAND (LAT 41 03 29N LONG 096 34 30W)										
MAY 1994										
13...1000	2390	7.9	17.5	724	12	2.7	360	0	80	40
13...1011	--	--	--	--	--	--	--	--	--	--
AUG										
17...1600	1370	7.8	27.0	--	6.5	--	240	0	57	23
17...1611	--	--	--	--	--	--	--	--	--	--
412020096255600 TODD VALLEY - MEDUNA SITE (LAT 41 20 12N LONG 096 35 34W)										
MAY 1994										
14...0900	140	7.0	18.0	718	7.0	1.7	28	0	7.3	2.3
14...0911	--	--	--	--	--	--	--	--	--	--
AUG										
16...1700	82	6.6	25.0	--	3.0	--	17	0	4.0	1.6
16...1711	--	--	--	--	--	--	--	--	--	--

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CA CO ₃ (39086)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO ₃ (00452)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO ₃ (00453)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO ₂) (00955)	SOLIDS, RESIDUE AT 180 DEG.C DIS- SOLVED (MG/L) (70300)
421735100062600 LONG LAKE SRA											
(LAT 42 17 21N LONG 100 06 15W)											
MAY 1994											
19...	6.0	0.4	4.6	49	4	52	<0.10	0.80	0.40	0.99	87
19...	--	--	--	--	--	--	--	--	--	--	--
AUG											
12...	7.2	0.4	6.2	74	26	37	0.20	0.80	0.40	13	142
12...	--	--	--	--	--	--	--	--	--	--	--
414453099463000 MILBURN DAM WMA											
(LAT 41 44 32N LONG 099 46 18W)											
MAY 1994											
20...	3.9	0.3	2.8	35	0	43	2.5	0.40	0.20	31	183
20...	--	--	--	--	--	--	--	--	--	--	--
AUG											
11...	4.5	0.3	3.5	93	0	113	1.8	0.30	0.20	44	95
11...	--	--	--	--	--	--	--	--	--	--	--
410512100374600 MILLER LAKE OUTFLOW											
(LAT 41 05 07N LONG 100 37 28W)											
MAY 1994											
21...	100	2	11	213	0	260	310	41	0.60	21	746
21...	--	--	--	--	--	--	--	--	--	--	--
AUG											
11...	110	3	13	263	0	321	290	41	0.50	30	718
11...	--	--	--	--	--	--	--	--	--	--	--
410318096350100 OTTO SALINE WETLAND											
(LAT 41 03 11N LONG 096 35 01W)											
MAY 1994											
12...	440	10	11	612	0	747	65	510	0.90	1.8	1620
12...	--	--	--	--	--	--	--	--	--	--	--
AUG											
17...	240	6	9.5	431	2	521	64	240	0.80	2.7	936
17...	--	--	--	--	--	--	--	--	--	--	--
414252096422600 POWDER HORN WMA											
(LAT 41 42 31N LONG 096 42 15W)											
MAY 1994											
14...	13	0.4	8.5	289	10	333	2.7	13	0.40	17	336
14...	--	--	--	--	--	--	--	--	--	--	--
AUG											
16...	16	0.4	14	345	0	421	5.3	12	0.30	17	384
16...	--	--	--	--	--	--	--	--	--	--	--
412516097433200 PRAIRIE WOLF WMA											
(LAT 41 25 09N LONG 097 43 19W)											
MAY 1994											
11...	32	0.9	27	219	0	267	66	25	0.30	13	467
11...	--	--	--	--	--	--	--	--	--	--	--
AUG											
18...	19	0.6	5.0	233	0	284	0.30	2.8	0.40	47	292
18...	--	--	--	--	--	--	--	--	--	--	--
410348096345100 SABATKA SALINE WETLAND											
(LAT 41 03 29N LONG 096 34 30W)											
MAY 1994											
13...	350	8	10	487	0	594	120	410	0.70	1.0	1410
13...	--	--	--	--	--	--	--	--	--	--	--
AUG											
17...	170	5	19	309	0	377	91	190	0.60	1.4	776</

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)
421735100062600 LONG LAKE SRA						(LAT 42 17 21N LONG 100 06 15W)					
MAY 1994											
19...	--	--	0.020	<0.050	0.030	5.5	0.97	5.5	1.0	5.5	--
19...	--	--	--	--	--	--	--	--	--	--	--
AUG											
12...	95	0.19	<0.010	<0.050	0.020	9.0	1.9	9.0	1.9	9.0	--
12...	--	--	--	--	--	--	--	--	--	--	--
414453099463000 MILBURN DAM WMA						(LAT 41 44 32N LONG 099 46 18W)					
MAY 1994											
20...	75	0.25	0.020	<0.050	0.010	0.39	0.29	0.40	0.30	0.40	--
20...	--	--	--	--	--	--	--	--	--	--	--
AUG											
11...	125	0.13	<0.010	<0.050	0.030	1.1	0.17	1.1	0.20	1.1	--
11...	--	--	--	--	--	--	--	--	--	--	--
410512100374600 MILLER LAKE OUTFLOW						(LAT 41 05 07N LONG 100 37 28W)					
MAY 1994											
21...	731	1.01	0.020	<0.050	0.040	0.56	0.36	0.60	0.40	0.60	--
21...	--	--	--	--	--	--	--	--	--	--	--
AUG											
11...	741	0.98	<0.010	0.130	0.040	0.56	0.36	0.60	0.40	0.73	0.53
11...	--	--	--	--	--	--	--	--	--	--	--
410318096350100 OTTO SALINE WETLAND						(LAT 41 03 11N LONG 096 35 01W)					
MAY 1994											
12...	1520	2.20	0.010	<0.050	0.040	1.7	1.4	1.7	1.4	1.7	--
12...	--	--	--	--	--	--	--	--	--	--	--
AUG											
17...	912	1.27	<0.010	<0.050	0.040	3.4	1.7	3.4	1.7	3.4	--
17...	--	--	--	--	--	--	--	--	--	--	--
414252096422600 POWDER HORN WMA						(LAT 41 42 31N LONG 096 42 15W)					
MAY 1994											
14...	320	0.46	<0.010	<0.050	0.040	1.5	1.3	1.5	1.3	1.5	--
14...	--	--	--	--	--	--	--	--	--	--	--
AUG											
16...	383	0.52	<0.010	<0.050	0.070	0.93	0.73	1.0	0.80	1.0	--
16...	--	--	--	--	--	--	--	--	--	--	--
412516097433200 PRAIRIE WOLF WMA						(LAT 41 25 09N LONG 097 43 19W)					
MAY 1994											
11...	382	0.64	<0.010	<0.050	0.020	1.3	0.78	1.3	0.80	1.3	--
11...	--	--	--	--	--	--	--	--	--	--	--
AUG											
18...	282	0.40	<0.010	<0.050	0.050	2.6	0.75	2.7	0.80	2.7	--
18...	--	--	--	--	--	--	--	--	--	--	--
410348096345100 SABATKA SALINE WETLAND						(LAT 41 03 29N LONG 096 34 30W)					
MAY 1994											
13...	1310	1.92	<0.010	<0.050	0.030	1.5	0.67	1.5	0.70	1.5	--
13...	--	--	--	--	--	--	--	--	--	--	--
AUG											
17...	739	1.06	<0.010	<0.050	0.060	1.4	1.1	1.5	1.2	1.5	--
17...	--	--	--	--	--	--	--	--	--	--	--
412020096255600 TODD VALLEY - MEDUNA SITE						(LAT 41 20 12N LONG 096 35 34W)					
MAY 1994											
14...	75	0.15	<0.010	<0.050	0.040	3.2	2.0	3.2	2.0	3.2	--
14...	--	--	--	--	--	--	--	--	--	--	--
AUG											
16...	42	0.08	<0.010	<0.050	<0.010	1.2	--	1.2	0.80	1.2	--
16...	--	--	--	--	--	--	--	--	--	--	--

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DATE	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (µG/L AS AL) (01106)	ARSENIC DIS- SOLVED (µG/L AS AS) (01000)	BARIUM, DIS- SOLVED (µG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (µG/L AS BE) (01010)	CADMIUM DIS- SOLVED (µG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (µG/L AS CR) (01030)	COBALT, DIS- SOLVED (µG/L AS CO) (01035)	COPPER, DIS- SOLVED (µG/L AS CU) (01040)
421735100062600 LONG LAKE SRA (LAT 42 17 21N LONG 100 06 15W)											
MAY 1994											
19...	0.530	0.020	0.010	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--
AUG											
12...	1.10	0.080	0.020	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
414453099463000 MILBURN DAM WMA (LAT 41 44 32N LONG 099 46 18W)											
MAY 1994											
20...	0.290	0.150	0.180	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
AUG											
11...	0.410	0.150	0.130	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--
410512100374600 MILLER LAKE OUTFLOW (LAT 41 05 07N LONG 100 37 28W)											
MAY 1994											
21...	0.040	0.010	<0.010	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
AUG											
11...	0.060	0.010	<0.010	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--
410318096350100 OTTO SALINE WETLAND (LAT 41 03 11N LONG 096 35 01W)											
MAY 1994											
12...	1.20	1.00	0.960	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
AUG											
17...	1.00	0.500	0.470	6	28	97	<1	<1.0	3	<1	<1
17...	--	--	--	--	--	--	--	--	--	--	--
414252096422600 POWDER HORN WMA (LAT 41 42 31N LONG 096 42 15W)											
MAY 1994											
14...	0.190	0.100	0.090	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
AUG											
16...	0.120	0.050	0.030	<1	10	300	<1	<1.0	4	<1	<1
16...	--	--	--	--	--	--	--	--	--	--	--
412516097433200 PRAIRIE WOLF WMA (LAT 41 25 09N LONG 097 43 19W)											
MAY 1994											
11...	0.290	0.130	0.130	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--
AUG											
18...	0.420	0.060	0.030	4	5	260	<1	<1.0	1	<1	<1
18...	--	--	--	--	--	--	--	--	--	--	--
410348096345100 SABATKA SALINE WETLAND (LAT 41 03 29N LONG 096 34 30W)											
MAY 1994											
13...	0.390	0.080	0.060	--	--	--					

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

NATIONAL WATER-QUALITY ASSESSMENT (NAWOA) -- Wetland Synoptic Stations--Continued

DATE	IRON, DIS- SOLVED (µG/L AS FE) (01046)	LEAD, DIS- SOLVED (µG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (µG/L AS MO) (01060)	NICKEL, DIS- SOLVED (µG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (µG/L AS SE) (01145)	SILVER, DIS- SOLVED (µG/L AS AG) (01075)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)	ANTI- MONY, DIS- SOLVED (µG/LFLUOROM AS SB) (01095)	CHLOR-A PHYTO- PLANK- TON CHROMO (UG/L) (70953)
421735100062600 LONG LAKE SRA (LAT 42 17 21N LONG 100 06 15W)										
MAY 1994										
19...	110	--	5	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	173
AUG										
12...	190	--	7	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	832
414453099463000 MILBURN DAM WMA (LAT 41 44 32N LONG 099 46 18W)										
MAY 1994										
20...	940	--	130	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	5.39
AUG										
11...	640	--	110	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	10.2
410512100374600 MILLER LAKE OUTFLOW (LAT 41 05 07N LONG 100 37 28W)										
MAY 1994										
21...	9	--	830	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	3.88
AUG										
11...	6	--	270	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	9.88
410318096350100 OTTO SALINE WETLAND (LAT 41 03 11N LONG 096 35 01W)										
MAY 1994										
12...	18	--	790	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	24.4
AUG										
17...	16	<1	1000	5	4	<1	<1.0	3	<1	--
17...	--	--	--	--	--	--	--	--	--	75.4
414252096422600 POWDER HORN WMA (LAT 41 42 31N LONG 096 42 15W)										
MAY 1994										
14...	570	--	2200	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	333
AUG										
16...	360	<1	3500	3	2	<1	<1.0	3	<1	--
16...	--	--	--	--	--	--	--	--	--	22.4
412516097433200 PRAIRIE WOLF WMA (LAT 41 25 09N LONG 097 43 19W)										
MAY 1994										
11...	26	--	260	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	36.8
AUG										
18...	65	2	>1000	<1	<1	<1	<1.0	15	<1	--
18...	--	--	--	--	--	--	--	--	--	137
410348096345100 SABATKA SALINE WETLAND (LAT 41 03 29N LONG 096 34 30W)										
MAY 1994										
13...	48	--	1500	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	6.43
AUG										
17...	84	1	1100	5	4	<1	<1.0	4	<1	--
17...	--	--	--	--	--	--	--	--	--	16.7
412020096255600 TODD VALLEY - MEDUNA SITE (LAT 41 20 12N LONG 096 35 34W)										
MAY 1994										
14...	2300	--	430	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	10.6
AUG										
16...	1200	--	63	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	68.8

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

NATIONAL WATER-QUALITY ASSESSMENT (NAWQA) -- Wetland Synoptic Stations--Continued

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO ₃ (39086)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO ₂ (00452)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO ₃ (00453)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO ₂) (00955)	SOLIDS, RESIDUE AT180 DEG.C DIS- SOLVED (MG/L) (70300)
410720096255300 TODD VALLEY - PROCTOR SITE							(LAT 41 07 12N LONG 096 25 32W)				
MAY 1994											
13...	1.4	0.1	10	24	0	29	3.7	1.7	0.10	0.32	80
13...	--	--	--	--	--	--	--	--	--	--	--
AUG											
16...	2.8	0.2	10	42	0	51	2.5	3.0	0.10	5.5	77
16...	--	--	--	--	--	--	--	--	--	--	--
404205098480600 TRUST - DIPPEL SITE							(LAT 40 42 03N LONG 098 48 04W)				
MAY 1994											
24...	110	2	15	257	0	314	390	40	0.60	22	936
24...	--	--	--	--	--	--	--	--	--	--	--
AUG											
09...	110	2	20	273	0	333	370	37	0.60	33	895
09...	--	--	--	--	--	--	--	--	--	--	--
403939099283500 TRUST - ELM CREEK SLOUGH							(LAT 40 39 23N LONG 099 28 21W)				
MAY 1994											
23...	130	3	34	288	0	351	360	47	1.1	28	986
23...	--	--	--	--	--	--	--	--	--	--	--
AUG											
09...	120	3	29	375	0	458	310	47	1.0	46	958
09...	--	--	--	--	--	--	--	--	--	--	--
404828098230100 TRUST - MORMON ISLAND CRANE MEADOW, EAST SLOUGH							(LAT 40 48 30N LONG 098 22 58W)				
MAY 1994											
09...	120	3	5.6	319	14	360	320	46	0.80	16	920
09...	--	--	--	--	--	--	--	--	--	--	--
AUG											
19...	100	2	15	298	0	364	270	44	0.50	35	834
19...	--	--	--	--	--	--	--	--	--	--	--
404802098240300 TRUST - MORMON ISLAND CRANE MEADOW, WEST SLOUGH							(LAT 40 48 01N LONG 098 24 02W)				
MAY 1994											
09...	18	0.6	9.2	238	25	239	0.30	4.5	0.50	20	253
09...	--	--	--	--	--	--	--	--	--	--	--
AUG											
19...	60	2	57	224	5	264	150	54	0.60	39	646
19...	--	--	--	--	--	--	--	--	--	--	--
404751098263500 TRUST - WILD ROSE SLOUGH							(LAT 40 47 31N LONG 098 26 21W)				
MAY 1994											
10...	82	2	9.3	200	0	244	240	29	0.80	15	650
10...	--	--	--	--	--	--	--	--	--	--	--
AUG											
20...	89	2	15	200	0	244	240	36	0.70	30	656
20...	--	--	--	--	--	--	--	--	--	--	--
415533097172000 WOOD DUCK WMA							(LAT 41 55 20N LONG 097 17 12W)				
MAY 1994											
16...	12	0.3	7.9	254	0	310	2.3	3.2	0.80	27	336
16...	--	--	--	--	--	--	--	--	--	--	--
AUG											
15...	9.3	0.2	2.8	300	0	366	0.30	0.20	0.70	44	361
15...	--	--	--	--	--	--	--	--	--	--	--

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ - DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)
410720096255300 TODD VALLEY - PROCTOR SITE							(LAT 41 07 12N	LONG 096 25 32W)			
MAY 1994											
13...	38	0.11	--	0.020	<0.050	0.040	--	0.66	<0.20	0.70	--
13...	--	--	--	--	--	--	--	--	--	--	--
AUG											
16...	60	0.10	--	<0.010	0.070	0.020	1.1	0.68	1.1	0.70	1.2
16...	--	--	--	--	--	--	--	--	--	--	--
404205098480600 TRUST - DIPPEL SITE							(LAT 40 42 03N	LONG 098 48 04W)			
MAY 1994											
24...	883	1.27	--	<0.010	<0.050	0.040	0.86	0.46	0.90	0.50	0.90
24...	--	--	--	--	--	--	--	--	--	--	--
AUG											
09...	884	1.22	--	<0.010	<0.050	0.070	0.83	0.43	0.90	0.50	0.90
09...	--	--	--	--	--	--	--	--	--	--	--
403939099283500 TRUST - ELM CREEK SLOUGH							(LAT 40 39 23N	LONG 099 28 21W)			
MAY 1994											
23...	917	1.34	1.47	0.030	1.50	0.180	1.8	0.92	2.0	1.1	3.5
23...	--	--	--	--	--	--	--	--	--	--	--
AUG											
09...	928	1.30	0.310	0.010	0.320	0.960	6.4	0.84	7.4	1.8	7.7
09...	--	--	--	--	--	--	--	--	--	--	--
404828098230100 TRUST - MORMON ISLAND CRANE MEADOW, EAST SLOUGH							(LAT 40 48 30N	LONG 098 22 58W)			
MAY 1994											
09...	850	1.25	--	<0.010	<0.050	0.030	0.87	0.87	0.90	0.90	0.90
09...	--	--	--	--	--	--	--	--	--	--	--
AUG											
19...	789	1.13	--	<0.010	<0.050	0.100	1.8	1.5	1.9	1.6	1.9
19...	--	--	--	--	--	--	--	--	--	--	--
404802098240300 TRUST - MORMON ISLAND CRANE MEADOW, WEST SLOUGH							(LAT 40 48 01N	LONG 098 24 02W)			
MAY 1994											
09...	257	0.34	--	<0.010	<0.050	0.030	1.6	1.5	1.6	1.5	1.6
09...	--	--	--	--	--	--	--	--	--	--	--
AUG											
19...	590	0.88	0.033	0.030	0.063	3.70	16	3.9	20	7.6	20
19...	--	--	--	--	--	--	--	--	--	--	--
404751098263500 TRUST - WILD ROSE SLOUGH							(LAT 40 47 31N	LONG 098 26 21W)			
MAY 1994											
10...	607	0.88	--	<0.010	<0.050	0.030	1.4	0.87	1.4	0.90	1.4
AUG											
20...	633	0.89	--	0.030	<0.050	6.30	13	2.6	19	8.9	19
20...	--	--	--	--	--	--	--	--	--	--	--
415533097172000 WOOD DUCK WMA							(LAT 41 55 20N	LONG 097 17 12W)			
MAY 1994											
16...	293	0.46	--	0.020	<0.050	0.040	0.96	0.86	1.0	0.90	1.0
16...	--	--	--	--	--	--	--	--	--	--	--
AUG											
15...	343	0.49	--	<0.010	<0.050	0.130	2.0	1.6	2.1	1.7	2.1
15...	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[illegible]

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	COPPER, DIS- SOLVED (µ G/L AS CU) (01040)	IRON, DIS- SOLVED (µ G/L AS FE) (01046)	LEAD, DIS- SOLVED (µ G/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (µ G/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (µ G/L AS MO) (01060)	NICKEL, DIS- SOLVED (µ G/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (µ G/L AS SE) (01145)	SILVER, DIS- SOLVED (µ G/L AS AG) (01075)	ZINC, DIS- SOLVED (µ G/L AS ZN) (01090)	ANTI- MONY, DIS- SOLVED (µ G/L AS SB) (01095)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (µ G/L) (70953)
410720096255300 TODD VALLEY - PROCTOR SITE (LAT 41 07 12N LONG 096 25 32W)											
MAY 1994											
13...	--	220	--	64	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	26.4
AUG											
16...	--	200	--	23	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	32.2
404205098480600 TRUST - DIPPEL SITE (LAT 40 42 03N LONG 098 48 04W)											
MAY 1994											
24...	--	30	--	5200	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	12.2
AUG											
09...	--	42	--	5500	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	12.3
403939099283500 TRUST - ELM CREEK SLOUGH (LAT 40 39 23N LONG 099 28 21W)											
MAY 1994											
23...	--	23	--	260	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	12.9
AUG											
09...	--	24	--	260	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	59.4
404828098230100 TRUST - MORMON ISLAND CRANE MEADOW, EAST SLOUGH (LAT 40 48 30N LONG 098 22 58W)											
MAY 1994											
09...	--	26	--	200	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	2.03
AUG											
19...	4	75	<1	>1000	3	2	<1	<1.0	14	<1	--
19...	--	--	--	--	--	--	--	--	--	--	9.28
404802098240300 TRUST - MORMON ISLAND CRANE MEADOW, WEST SLOUGH (LAT 40 48 01N LONG 098 24 02W)											
MAY 1994											
09...	--	230	--	220	--	--	--	--	--	--	--
AUG											
19...	3	94	<1	130	6	2	<1	<1.0	2	<1	--
19...	--	--	--	--	--	--	--	--	--	--	902
404751098263500 TRUST - WILD ROSE SLOUGH (LAT 40 47 31N LONG 098 26 21W)											
MAY 1994											
10...	--	48	--	300	--	--	--	--	--	--	--
AUG											
20...	3	51	<1	400	4	2	<1	<1.0	5	<1	--
20...	--	--	--	--	--	--	--	--	--	--	19.9
415533097172000 WOOD DUCK WMA (LAT 41 55 20N LONG 097 17 12W)											
MAY 1994											
16...	--	140	--	1500	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	5.11
AUG											
15...	<1	290	<1	4300	<1	1	<1	<1.0	4	<1	--
15...	--	--	--	--	--	--	--	--	--	--	25.5

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
 NATIONAL WATER-QUALITY ASSESSMENT (NAWQA) -- Wetland Synoptic Stations--Continued

DATE TIME	NITRO- GEN, NO ₂ +NO ₃ TOT IN BOT MAT (MG/KG AS N) (00633)	NITRO- GEN,NH ₄ TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	NITRO- GEN,NH ₄ + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (µG/L AS AS) (01003)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (µG/L AS PB) (01052)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (µG/L AS HG) (71921)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (µG/L (01148)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (GM/KG AS C) (00687)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C) (00686)
405734096431100 BENNETT SALINE WETLAND	(LAT 40 57 20N LONG 096 43 07W)										
AUG 1994 17...0830	5.0	5.5	6800	430	4	30	0.03	<1	33	39	6.5
422552098390800 DEPARTMENT OF ROADS - ONEILL	(LAT 42 25 31N LONG 098 39 05W)										
AUG 1994 14...1430	5.0	14	1100	63	4	30	0.02	<1	--	14	<0.1
420009098453200 FOXLEY FARMS NO. 1	(LAT 42 00 05N LONG 098 45 19W)										
AUG 1994 13...0930	4.0	17	1100	79	2	20	0.01	<1	12	14	1.7
420219098421000 FOXLEY FARMS NO. 5	(LAT 42 02 12N LONG 098 42 06W)										
AUG 1994 13...1430	16	28	2200	180	3	30	0.02	<1	--	22	<0.1
420657098341600 GOOSE LAKE WMA	(LAT 42 06 34N LONG 098 34 09W)										
AUG 1994 14...0900	9.0	6.6	820	<40	3	20	0.02	<1	7.9	8.2	0.3
403331099192600 JOHNSON WPA	(LAT 40 33 18N LONG 099 19 16W)										
AUG 1994 10...1330	36	30	1900	300	2	10	0.01	<1	--	20	<0.1
410318096350100 OTTO SALINE WETLAND	(LAT 41 03 11N LONG 096 35 01W)										
AUG 1994 17...1100	2.0	48	1500	730	5	20	0.04	<1	35	37	2.2
414252096422600 POWDER HORN WMA	(LAT 41 42 31N LONG 096 42 15W)										
AUG 1994 16...0930	8.0	140	3500	840	8	20	0.04	<1	27	29	1.6
412516097433200 PRAIRIE WOLF WMA	(LAT 41 25 09N LONG 097 43 19W)										
AUG 1994 18...1030	28	35	7500	400	3	20	0.03	<1	28	28	0.3
410348096345100 SABATKA SALINE WETLAND	(LAT 41 03 29N LONG 096 34 30W)										
AUG 1994 17...1600	<2.0	60	860	560	4	20	0.04	<1	23	24	1.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
 NATIONAL WATER-QUALITY ASSESSMENT (NAWQA) -- Wetland Synoptic Stations--Continued

DATE	TIME	NITRO- GEN, NO ₂ +NO ₃ TOT. IN BOT MAT (MG/KG AS N) (00633)	NITRO- GEN,NH ₄ TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	NITRO- GEN,NH ₄ + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	PHOS- PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (μG/L AS AS) (01003)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (μG/L AS PB) (01052)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (μG/L AS HG) (71921)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (μG/L AS C) (01148)	CARBON, ORGANIC TOT. IN BOT- TOM MA- TERIAL (GM/KG AS C) (00687)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (GM/KG AS C) (00693)	CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C) (00686)
404828098230100 TRUST - MORMON ISLAND CRANE MEADOW, EAST SLOUGH (LAT 40 48 30N LONG 098 22 58W)												
AUG 1994	19...1200	<2.0	8.9	1600	340	1	20	0.03	<1	24	30	6.5
04802098240300 TRUST - MORMON ISLAND CRANE MEADOW, WEST SLOUGH (LAT 40 48 01N LONG 098 24 02W)												
AUG 1994	19...1530	<2.0	4.7	1400	190	2	30	0.06	<1	24	24	0.2
404751098263500 TRUST - WILD ROSE SLOUGH (LAT 40 47 31N LONG 098 26 21W)												
AUG 1994	20...0830	10	42	7400	150	3	20	0.02	1	21	29	8.0
415533097172000 WOOD DUCK WMA (LAT 41 55 20N LONG 097 17 12W)												
AUG 1994	15...1430	5.0	9.8	9700	1200	8	20	0.03	<1	63	66	3.3

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

NATIONAL WATER-QUALITY ASSESSMENT (NAWQA) -- Wetland Synoptic Stations--Continued

DATE	TIME	ALUMI- NUM, BIO TIS LIVER, DRY WGT REC (μ G/L) (49237)	BARIUM, BIOTA, TISSUE, LIVER, DRY WGT REC (μ G/L) (49238)	BORON, BIOTA, TISSUE, LIVER, DRY WGT REC (μ G/L) (49239)	CHROM- IUM, BIO TIS LIVER, DRY WGT REC (μ G/L) (49240)	COPPER, BIOTA, TISSUE, LIVER, DRY WGT REC (μ G/L) (49241)	IRON, BIOTA, TISSUE, LIVER, DRY WGT REC (μ G/L) (49242)	MANGAN- ESE, BIO TIS LIVER, DRY WGT REC (μ G/L) (49243)	STRON- TIUM, BIO TIS LIVER, DRY WGT REC (μ G/L) (49244)	ZINC, BIOTA, TISSUE, LIVER, DRY WGT REC (μ G/L) (49245)	ANTI- MONY, BIO TIS LIVER, DRY WGT REC (μ G/L) (49246)	ARSENIC BIOTA, TISSUE, LIVER, DRY WGT REC (μ G/L) (49247)
422552098390800 DEPARTMENT OF ROADS - ONEILL												
(LAT 42 25 31N LONG 098 39 05W)												
AUG 1994	14...1430	35	5.0	1.5	0.6	18	190	85	4.5	83	<0.5	0.8
420657098341600 GOOSE LAKE WMA												
(LAT 42 06 34N LONG 098 34 09W)												
AUG 1994	14...0900	3.8	2.3	1.7	<0.5	19	43	18	4.5	88	<0.3	0.5
403331099192600 JOHNSON WPA												
(LAT 40 33 18N LONG 099 19 16W)												
AUG 1994	10...1330	56	2.7	2.5	0.6	9.1	98	28	6.9	81	<0.4	0.7
410348096345100 SABATKA SALINE WETLAND												
(LAT 41 03 29N LONG 096 34 30W)												
AUG 1994	17...1600	450	17	2.4	1.0	17	510	280	8.5	83	<0.3	2.2
412020096255600 TODD VALLEY - MEDUNA SITE												
(LAT 41 20 12N LONG 096 35 34W)												
AUG 1994	16...1700	49	4.5	0.8	0.5	12	200	81	3.0	89	<0.4	0.8
404828098230100 TRUST - MORMON ISLAND CRANE MEADOW, EAST SLOUGH												
(LAT 40 48 30N LONG 098 22 58W)												
AUG 1994	19...1200	650	19	2.3	1.3	13	1300	240	23	94	<0.4	1.6
404751098263500 TRUST - WILD ROSE SLOUGH												
(LAT 40 47 31N LONG 098 26 21W)												
AUG 1994	20...0830	78	4.2	1.9	0.6	12	200	69	7.7	87	<0.3	1.1
415533097172000 WOOD DUCK WMA												
(LAT 41 55 20N LONG 097 17 12W)												
AUG 1994	15...1430	43	20	1.8	0.6	18	430	200	7.3	85	<0.4	6.1

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
 NATIONAL WATER-QUALITY ASSESSMENT (NAWQA) -- Wetland Synoptic Stations--Continued

DATE	BERYL- LIUM, BIO TIS LIVER, DRY WGT REC (μ G/L) (49248)	CADMIUM BIOTA, TISSUE, LIVER, DRY WGT REC (μ G/L) (49249)	COBALT, BIOTA, TISSUE, LIVER, DRY WGT REC (μ G/L) (49250)	LEAD, BIOTA, TISSUE, LIVER, DRY WGT REC (μ G/L) (49251)	MOLYB- DENUM, BIO TIS LIVER, DRY WGT REC (μ G/L) (49252)	NICKEL, BIOTA, TISSUE, LIVER, DRY WGT REC (μ G/L) (49253)	SELEN- IUM, BIO TIS LIVER, DRY WGT REC (μ G/L) (49254)	SILVER, BIOTA, TISSUE, LIVER, DRY WGT REC (μ G/L) (49255)	URANIUM BIOTA, TISSUE, LIVER, DRY WGT REC (μ G/L) (49257)	MERCURY BIOTA, TISSUE, LIVER, DRY WGT REC (μ G/L) (49258)	WATER, PRESENT BIO TIS LIVER, DRY WGT REC (μ G/L) (49273)	VANA- DIUM BIO TIS LIVER, DRY WGT REC (μ G/L) (49465)
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422552098390800 DEPARTMENT OF ROADS - ONEILL

(LAT 42 25 31N LONG 098 39 05W)

AUG 1994

14...	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	0.5	86	<0.5
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420657098341600 GOOSE LAKE WMA

(LAT 42 06 34N LONG 098 34 09W)

AUG 1994

14...	<0.3	<0.3	<0.3	<0.3	<0.3	0.4	<0.3	<0.3	<0.3	<0.1	84	<0.3
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403331099192600 JOHNSON WPA

(LAT 40 33 18N LONG 099 19 16W)

AUG 1994

10...	<0.4	<0.4	<0.4	0.4	<0.4	0.6	0.4	<0.4	<0.4	<0.1	88	<0.4
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410348096345100 SABATKA SALINE WETLAND

(LAT 41 03 29N LONG 096 34 30W)

AUG 1994

17...	<0.3	<0.3	1.0	0.4	0.4	1.4	0.9	<0.3	<0.3	0.2	83	1.5
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412020096255600 TODD VALLEY - MEDUNA SITE

(LAT 41 20 12N LONG 096 35 34W)

AUG 1994

16...	<0.4	<0.4	2.6	<0.4	<0.4	0.6	0.5	<0.4	<0.4	<0.1	82	<0.4
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404828098230100 TRUST - MORMON ISLAND CRANE MEADOW, EAST SLOUGH(LAT 40 48 30N LONG 098 22 58W)

AUG 1994

19...	<0.4	<0.4	2.0	1.5	<0.4	2.7	1.5	<0.4	<0.4	<0.1	86	1.6
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404751098263500 TRUST - WILD ROSE SLOUGH

(LAT 40 47 31N LONG 098 26 21W)

AUG 1994

20...	<0.3	<0.3	0.5	<0.3	<0.3	0.7	1.4	<0.3	<0.3	<0.1	84	0.5
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415533097172000 WOOD DUCK WMA

(LAT 41 55 20N LONG 097 17 12W)

AUG 1994

15...	<0.4	<0.4	0.9	<0.4	0.6	0.7	<0.4	<0.4	<0.4	0.1	88	<0.4
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ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Platte River Mixing

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	DIS- CHARGE, INST. FT ³ /S (00061)	SPE- CIFIC CON- DUCT- ANCE (μG/L) (00095)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (°C) (00020)	TEMPER- ATURE WATER (°C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
06796500 PLATTE RIVER NR LESHARA NE					(LAT 41 19 12N LONG 096 24 14W)				
MAR 1994									
23...	1255	700	6710	610	7.2	8.5	15.5	7.0	719
23...	1300	650	6710	611	7.2	8.5	14.5	7.0	719
23...	1310	620	6710	609	7.2	8.5	14.5	7.0	719
23...	1315	260	6710	582	7.2	8.5	14.5	7.0	719
23...	1320	180	6710	588	7.2	8.5	14.5	7.0	719
23...	1330	390	6710	586	7.1	8.5	14.5	7.5	719
23...	1340	330	6710	582	7.2	8.5	14.5	7.0	719
23...	1355	300	6710	584	7.3	8.5	15.0	7.0	719
23...	1405	240	6710	586	7.2	8.5	15.0	7.0	719
23...	1415	130	6710	580	7.2	8.5	15.0	7.0	719
JUL									
26...	0920	515	3700	510	8.6	8.8	25.0	24.0	732
26...	0930	410	3700	498	8.6	8.9	25.0	24.0	732
26...	0940	215	3700	490	8.5	8.8	25.0	24.0	732
26...	0950	540	3700	478	8.6	8.8	25.0	24.0	732
26...	1000	480	3700	468	8.5	8.8	25.0	24.0	732
26...	1010	412	3700	466	8.5	8.7	26.0	24.0	732
26...	1020	324	3700	458	8.5	8.8	27.0	24.5	732
26...	1030	272	3700	450	8.5	8.7	27.0	24.5	732
26...	1040	236	3700	448	8.6	8.7	27.0	24.5	732
26...	1050	135	3700	443	8.5	8.6	27.0	24.5	732
SEP									
13...	1015	660	2100	423	8.5	8.8	28.0	22.5	727
13...	1025	430	2100	418	8.6	8.8	28.0	22.5	727
13...	1035	120	2100	410	8.6	8.8	28.0	23.0	727
13...	1045	420	2100	393	8.6	8.7	29.0	22.5	727
13...	1055	365	2100	389	8.6	8.7	28.0	22.5	727
13...	1105	300	2100	384	8.6	8.8	28.0	23.0	727
13...	1115	145	2100	377	8.5	8.8	28.0	23.0	727
13...	1125	125	2100	374	8.6	8.8	29.0	23.0	727
13...	1135	110	2100	371	8.6	8.8	29.0	23.0	727
13...	1145	90.0	2100	372	8.6	8.7	29.0	23.0	727
06800500 ELKHORN RIVER AT WATERLOO, NE					(LAT 41 17 25N LONG 096 17 05W)				
MAR 1994									
23...	0940	105	2550	600	7.6	8.1	20.0	11.5	713
23...	0950	142	2550	601	7.3	8.3	20.0	11.5	713
23...	1000	178	2550	600	7.7	8.2	20.0	11.5	713
23...	1005	198	2550	601	7.7	8.2	20.0	11.5	713
23...	1015	219	2550	525	7.8	8.3	20.0	11.5	713
23...	1020	240	2550	601	7.4	8.3	20.0	12.0	713
23...	1030	258	2550	594	7.4	8.3	20.0	12.0	713
23...	1040	274	2550	601	7.3	8.3	20.0	12.0	713
23...	1050	294	2550	602	7.1	8.3	20.0	12.0	713
23...	1100	321	2550	602	7.4	8.2	20.0	12.0	713
JUN									
02...	1220	--	1180	534	8.2	8.3	17.0	19.0	739
JUL									
26...	0955	110	3170	551	7.8	8.2	24.5	24.5	730
26...	1000	160	3170	550	8.0	8.3	24.5	24.5	730
26...	1005	175	3170	550	8.1	8.3	24.5	24.5	730
26...	1015	190	3170	550	8.1	8.3	24.5	24.5	730
26...	1020	205	3170	550	8.1	8.2	24.5	24.5	730
26...	1025	220	3170	550	8.1	8.3	24.5	25.0	730
26...	1030	230	3170	551	8.1	8.3	24.5	25.0	730
26...	1035	245	3170	551	8.1	8.3	25.0	24.0	730
26...	1045	260	3170	551	8.1	8.3	24.5	25.0	730
26...	1050	305	3170	552	8.1	8.2	24.5	25.0	730
SEP									
13...	0950	120	1220	531	8.4	8.6	--	22.5	728
13...	1000	183	1220	527	8.4	8.7	--	23.0	728
13...	1020	203	1220	528	8.5	8.7	--	23.0	728
13...	1025	220	1220	529	8.5	8.8	--	23.0	728
13...	1030	234	1220	525	8.5	8.8	--	23.0	728
13...	1040	250	1220	533	7.9	8.8	--	23.0	728
13...	1050	264	1220	538	8.5	8.8	--	23.5	728
13...	1100	283	1220	533	8.1	8.8	--	23.5	728
13...	1110	299	1220	602	8.6	8.8	--	23.5	728
13...	1115	316	1220	534	8.6	8.8	--	23.5	728

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Platte River Mixing--Continued

DATE	OXYGEN, DIS- SOLVED (MG/L) (00300)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L) AS PO ₄ (00660)	SOLIDS, RESIDUE AT 180 °C DIS- SOLVED (MG/L) (70300)	URANIUM NATURAL DIS- SOLVED (µG/L) AS U (22703)	URANIUM NATURAL 2 SIGMA WATER, DISS, (µG/L) (75990)
06796500 PLATTE RIVER NR LESHARA NE					(LAT 41 19 12N LONG 096 24 14W)				
MAR 1994									
23...	6.5	0.010	1.60	0.040	0.170	0.52	406	--	--
23...	6.5	0.010	1.60	0.050	0.160	0.49	404	--	--
23...	6.5	0.010	1.60	0.040	0.160	0.49	402	--	--
23...	6.6	<0.010	1.50	0.060	0.160	0.49	402	--	--
23...	6.6	0.010	1.60	0.040	0.160	0.49	402	--	--
23...	6.7	<0.010	1.50	0.050	0.170	0.52	384	--	--
23...	6.7	<0.010	1.50	0.040	0.170	0.52	380	--	--
23...	6.8	0.010	1.60	0.040	0.170	0.52	384	--	--
23...	7.0	0.020	1.60	0.040	0.170	0.52	370	--	--
23...	7.0	<0.010	1.50	0.050	0.170	0.52	364	--	--
JUL									
26...	8.3	<0.010	<0.050	0.020	0.020	0.06	342	--	--
26...	8.3	<0.010	<0.050	0.010	0.020	0.06	318	10	1.5
26...	8.1	<0.010	<0.050	0.010	0.030	0.09	294	--	--
26...	8.3	<0.010	<0.050	0.020	0.030	0.09	306	--	--
26...	7.9	<0.010	<0.050	0.010	0.050	0.15	270	8.9	1.3
26...	7.7	<0.010	<0.050	0.010	0.060	0.18	312	--	--
26...	7.9	<0.010	<0.050	0.020	0.070	0.21	298	--	--
26...	8.2	<0.010	<0.050	0.020	0.070	0.21	292	--	--
26...	8.0	<0.010	<0.050	0.030	0.080	0.25	314	7.8	1.2
26...	7.4	<0.010	<0.050	0.020	0.080	0.25	284	--	--
SEP									
13...	10.1	<0.010	<0.050	0.020	0.050	0.15	286	--	--
13...	10.2	<0.010	<0.050	0.010	0.050	0.15	288	5.6	0.8
13...	10.2	<0.010	<0.050	0.010	0.050	0.15	280	--	--
13...	10.4	<0.010	<0.050	0.010	0.060	0.18	258	--	--
13...	10.2	<0.010	<0.050	0.010	0.060	0.18	260	--	--
13...	10.3	<0.010	<0.050	0.020	0.070	0.21	248	5.1	0.8
13...	10.4	<0.010	<0.050	0.020	0.080	0.25	256	--	--
13...	10.6	<0.010	<0.050	0.020	0.080	0.25	268	--	--
13...	10.5	<0.010	<0.050	0.020	0.080	0.25	248	4.8	0.7
13...	10.4	<0.010	<0.050	0.020	0.080	0.25	264	--	--
06800500 ELKHORN RIVER AT WATERLOO, NE					(LAT 41 17 25N LONG 096 17 05W)				
MAR 1994									
23...	9.3	0.030	2.60	0.090	0.210	0.64	360	--	--
23...	9.2	0.030	2.60	0.090	0.220	0.67	368	--	--
23...	9.3	0.030	2.60	0.090	0.220	0.67	362	--	--
23...	9.3	0.030	2.60	0.100	0.220	0.67	370	--	--
23...	9.3	0.030	2.50	0.170	0.200	0.61	370	--	--
23...	9.2	0.030	2.70	0.080	0.220	0.67	364	--	--
23...	9.2	0.030	2.50	0.100	0.210	0.64	354	--	--
23...	9.2	0.030	2.50	0.100	0.210	0.64	350	--	--
23...	8.9	0.030	2.50	0.110	0.220	0.67	360	--	--
23...	9.0	0.030	2.50	0.130	0.210	0.64	344	--	--
JUN									
02...	6.4	0.020	0.420	0.040	0.060	0.18	324	--	--
JUL									
26...	6.4	0.030	2.40	0.040	0.330	1.0	354	--	--
26...	6.4	0.030	2.40	0.040	0.340	1.0	326	7.6	1.1
26...	6.6	0.030	2.40	0.040	0.340	1.0	352	--	--
26...	6.5	0.030	2.40	0.040	0.330	1.0	350	--	--
26...	6.6	0.030	2.40	0.040	0.330	1.0	350	7.4	1.1
26...	6.8	0.030	2.40	0.030	0.330	1.0	344	--	--
26...	6.7	0.030	2.40	0.040	0.330	1.0	364	--	--
26...	6.7	0.020	2.40	0.030	0.340	1.0	356	--	--
26...	6.7	0.020	2.40	0.030	0.330	1.0	350	7.5	1.1
26...	6.7	0.020	2.40	0.040	0.330	1.0	352	--	--
SEP									
13...	7.7	0.020	1.20	0.020	0.260	0.80	312	--	--
13...	8.0	0.020	1.20	0.030	0.260	0.80	354	6.8	1.0
13...	8.1	0.020	1.20	0.020	0.250	0.77	342	--	--
13...	8.3	0.020	1.20	0.020	0.260	0.80	344	--	--
13...	8.6	0.030	1.20	0.020	0.250	0.77	352	6.8	1.0
13...	8.8	0.030	1.20	0.020	0.250	0.77	354	--	--
13...	9.0	0.030	1.20	0.020	0.250	0.77	342	--	--
13...	8.3	0.030	1.20	0.020	0.250	0.77	366	--	--
13...	9.1	0.020	1.00	0.020	0.210	0.64	350	5.7	0.9
13...	9.3	0.030	1.20	0.050	0.260	0.80	352	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Platte River Mixing--Continued

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	DIS- CHARGE, INST. FT ³ /S (00061)	SPE- CIFIC CON- DUCT- ANCE (μG/L) (00095)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (°C) (00020)	TEMPER- ATURE WATER (°C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
06801000 PLATTE R NR ASHLAND, NE					(LAT 41 03 44N LONG 096 19 28W)				
MAR 1994									
24...	0925	1140	8900	593	7.1	8.4	5.5	7.0	739
24...	0930	834	8900	568	7.1	8.5	5.5	6.5	739
24...	0950	654	8900	619	7.4	8.5	5.5	7.0	739
24...	0955	490	8900	492	7.6	8.5	5.5	6.5	739
24...	1005	348	8900	627	7.2	8.4	5.5	7.0	739
24...	1015	287	8900	625	7.6	8.4	5.5	7.0	739
24...	1017	287	8900	625	7.3	9.3	5.5	7.0	739
24...	1025	244	8900	615	7.7	8.5	5.5	7.0	739
24...	1030	188	8900	616	7.9	8.5	6.5	7.5	739
24...	1040	132	8900	624	7.6	8.5	5.5	7.5	739
24...	1050	55.0	8900	611	7.8	8.5	5.5	8.0	739
JUN									
02...	1340	--	5160	530	8.0	8.3	17.5	19.0	847
JUL									
27...	0935	100	8160	559	8.2	8.2	21.0	23.5	735
27...	0940	135	8160	555	8.0	8.3	21.0	23.5	735
27...	0950	165	8160	550	8.1	8.3	21.0	23.5	735
27...	1000	190	8160	546	8.2	8.2	21.0	23.5	735
27...	1005	230	8160	533	8.2	8.1	21.0	23.5	735
27...	1020	255	8160	529	8.3	8.5	21.0	23.5	735
27...	1025	275	8160	525	8.3	8.5	21.0	23.5	735
27...	1030	295	8160	523	8.2	8.5	21.0	23.0	735
27...	1040	340	8160	527	8.4	8.6	21.0	23.5	735
27...	1050	740	8160	524	8.4	8.7	21.0	23.5	735
SEP									
14...	0930	105	4410	450	8.1	8.8	--	23.5	--
14...	0940	135	4410	460	8.6	8.9	--	33.5	--
14...	0950	170	4410	453	8.5	8.9	--	23.5	--
14...	1000	200	4410	451	8.6	8.9	--	23.5	--
14...	1005	235	4410	466	8.6	9.0	--	23.5	--
14...	1015	270	4410	433	8.6	9.0	--	23.5	--
14...	1025	300	4410	417	8.5	9.0	--	23.5	--
14...	1030	305	4410	417	8.8	9.0	--	23.5	--
14...	1040	345	4410	416	8.6	9.0	--	24.0	--
14...	1050	565	4410	416	8.6	8.9	--	23.5	--
06805010 PLATTE RIVER NEAR SOUTH BEND, NEBR.					(LAT 41 01 30N LONG 096 17 50W)				
MAR 1994									
24...	1030	1050	9080	1240	7.2	8.4	3.5	8.5	737
24...	1045	810	9080	725	7.1	8.4	3.5	8.0	737
24...	1055	770	9080	642	--	8.4	3.5	7.0	737
24...	1105	650	9080	620	7.0	8.4	3.5	7.5	737
24...	1110	595	9080	625	7.4	8.4	3.5	7.5	737
24...	1115	530	9080	622	7.6	8.4	3.5	8.0	737
24...	1120	493	9080	620	7.4	8.4	3.5	8.0	737
24...	1125	470	9080	622	7.6	8.4	3.5	8.0	737
24...	1130	445	9080	614	7.6	8.4	3.5	8.0	737
24...	1135	410	9080	619	7.6	8.3	3.5	8.5	737
JUN									
02...	1530	--	7750	516	7.6	8.0	17.5	19.0	741
JUL									
27...	1040	1340	9000	1250	8.4	8.6	26.0	24.0	734
27...	1050	1140	9000	1030	8.3	8.6	26.0	24.5	734
27...	1100	905	9000	570	8.3	8.5	26.0	24.0	734
27...	1110	810	9000	551	8.3	8.5	27.0	24.0	734
27...	1120	660	9000	545	8.0	8.5	27.0	24.0	734
27...	1130	500	9000	544	--	7.9	27.0	24.5	734
27...	1140	440	9000	546	8.1	8.1	27.0	24.5	734
27...	1150	400	9000	544	8.2	8.1	28.0	24.5	734
27...	1200	320	9000	548	8.2	8.2	28.0	24.5	734
27...	1210	200	9000	557	8.0	8.2	28.0	25.0	734
SEP									
14...	1040	80.0	4690	452	8.6	8.8	32.0	24.0	--
14...	1050	270	4690	452	8.6	8.8	32.0	24.0	--
14...	1100	350	4690	455	8.5	8.9	32.0	24.0	--
14...	1110	460	4690	447	8.6	8.9	32.0	24.0	--
14...	1120	540	4690	445	8.6	8.8	32.0	24.5	--
14...	1130	600	4690	444	8.6	8.9	32.0	24.5	--
14...	1140	720	4690	428	8.7	8.9	32.0	24.5	--
14...	1150	930	4690	623	8.5	8.8	32.0	25.0	--
14...	1200	1250	4690	1080	8.5	8.6	32.0	25.0	--
14...	1210	1340	4690	941	8.5	8.8	32.0	25.0	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Platte River Mixing--Continued

DATE	OXYGEN, DIS- SOLVED (MG/L) (00300)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L) (00660)	SOLIDS, RESIDUE AT 180 °C DIS- SOLVED (MG/L) (70300)	URANIUM NATURAL DIS- SOLVED (µG/L) AS U) (22703)	URANIUM NATURAL 2 SIGMA WATER, DISS, (µG/L) (75990)
06801000 PLATTE R NR ASHLAND, NE (LAT 41 03 44N LONG 096 19 28W)									
MAR 1994									
24...	4.2	0.010	1.60	0.050	0.180	0.55	394	--	--
24...	4.2	<0.010	1.60	0.050	0.170	0.52	386	--	--
24...	4.6	--	--	--	--	--	382	--	--
24...	4.9	0.010	1.70	0.050	0.170	0.52	396	--	--
24...	4.4	0.020	1.80	0.050	0.180	0.55	400	--	--
24...	6.1	0.020	1.90	0.050	0.180	--	408	--	--
24...	6.1	<0.010	<0.050	0.010	<0.010	--	410	--	--
24...	7.2	0.020	2.00	0.060	0.180	0.55	390	--	--
24...	6.5	0.020	2.10	0.050	0.190	0.58	398	--	--
24...	6.5	0.020	2.00	0.060	0.190	0.58	394	--	--
24...	8.8	0.020	2.10	0.060	0.200	0.61	394	--	--
JUN 02...	8.5	0.050	1.10	0.030	0.120	0.37	344	--	--
JUL 27...	7.3	0.010	1.70	0.020	0.250	0.77	372	--	--
27...	7.3	0.010	1.60	<0.010	0.240	0.74	376	8.7	1.3
27...	7.4	0.010	1.50	<0.010	0.230	0.71	366	--	--
27...	7.4	0.010	1.30	0.010	0.200	0.61	370	--	--
27...	7.4	<0.010	0.630	<0.010	0.140	0.43	360	9.6	1.4
27...	7.5	<0.010	0.320	<0.010	0.100	0.31	346	--	--
27...	7.6	<0.010	0.130	<0.010	0.080	0.25	356	--	--
27...	7.6	<0.010	<0.050	<0.010	0.050	0.15	352	--	--
27...	7.6	<0.010	<0.050	<0.010	0.050	0.15	340	11	1.7
27...	7.8	<0.010	<0.050	<0.010	0.040	0.12	360	--	--
SEP 14...	8.0	0.020	0.270	0.020	0.130	0.40	286	--	--
14...	8.0	0.020	0.240	0.020	0.120	0.37	286	6.0	0.9
14...	8.1	0.020	0.230	0.010	0.130	0.40	310	--	--
14...	8.2	0.020	0.220	0.020	0.120	0.37	296	--	--
14...	8.2	0.020	0.180	0.010	0.110	0.34	290	5.9	0.9
14...	8.2	0.010	0.073	0.020	0.090	0.28	290	--	--
14...	8.2	<0.010	<0.050	0.020	0.080	0.25	284	--	--
14...	8.2	<0.010	<0.050	0.020	0.070	0.21	280	--	--
14...	8.2	<0.010	<0.050	0.020	0.060	0.18	260	5.6	0.8
14...	8.2	<0.010	<0.050	0.010	0.060	0.18	292	--	--
06805010 PLATTE RIVER NEAR SOUTH BEND, NEBR. (LAT 41 01 30N LONG 096 17 50W)									
MAR 1994									
24...	10.2	0.030	1.70	0.100	0.260	0.80	676	--	--
24...	10.7	0.020	1.70	0.060	0.190	0.58	404	--	--
24...	10.5	0.010	1.50	0.060	0.160	0.49	--	--	--
24...	10.7	0.010	1.80	0.050	0.190	0.58	372	--	--
24...	10.7	0.020	1.80	0.050	0.170	0.52	388	--	--
24...	10.6	0.020	2.00	0.040	0.190	0.58	382	--	--
24...	10.5	0.020	2.10	0.050	0.190	0.58	370	--	--
24...	10.5	--	--	--	--	--	364	--	--
24...	10.4	--	--	--	--	--	392	--	--
24...	10.4	--	--	--	--	--	374	--	--
JUN 02...	9.0	0.050	1.40	0.190	0.090	0.28	366	--	--
JUL 27...	8.9	0.030	0.650	0.020	0.160	0.49	736	--	--
27...	8.7	0.020	0.360	<0.010	0.110	0.34	572	10	1.5
27...	7.8	<0.010	0.700	<0.010	0.060	0.18	386	--	--
27...	7.7	<0.010	<0.050	0.020	0.060	0.18	368	--	--
27...	7.5	0.020	0.110	0.010	0.080	0.25	342	11	1.7
27...	7.7	0.010	0.320	<0.010	0.110	0.34	--	--	--
27...	7.6	0.010	0.660	0.010	0.150	0.46	354	--	--
27...	7.5	0.010	0.770	0.020	0.160	0.49	368	--	--
27...	7.5	0.010	1.10	0.010	0.200	0.61	372	9.4	1.4
27...	7.5	0.010	1.60	0.010	0.250	0.77	344	--	--
SEP 14...	9.1	0.020	0.160	0.020	0.120	0.37	292	--	--
14...	9.2	0.020	0.180	0.020	0.130	0.40	306	5.9	0.9
14...	8.6	0.020	0.170	0.020	0.130	0.40	296	--	--
14...	9.0	0.020	0.150	0.020	0.120	0.37	298	--	--
14...	8.9	0.020	0.110	0.010	0.120	0.37	294	5.7	0.9
14...	8.9	0.020	0.085	0.020	0.110	0.34	288	--	--
14...	9.1	<0.010	<0.050	0.020	0.090	0.28	268	--	--
14...	9.2	0.010	0.075	0.020	0.120	0.37	384	--	--
14...	9.1	0.020	0.410	0.020	0.210	0.64	628	4.9	0.7
14...	8.8	0.020	0.300	0.010	0.170	0.52	526	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Platte River Mixing--Continued

DATE	TIME	SI- MAZINE, WATER, DISS, REC (μ G/L) (04035)	PRO- METRYN, WATER, DISS, REC (μ G/L) (04036)	PRO- METON, WATER, DISS, REC (μ G/L) (04037)	DEISO- PROPYL ATRAZIN WATER, DISS, REC (μ G/L) (04038)	DEETHYL ATRA- ZINE, WATER, DISS, REC (μ G/L) (04040)	CYANA- ZINE, WATER, DISS, REC (μ G/L) (04041)
06796500 PLATTE RIVER NR LESHARA NE		(LAT 41 19 12N LONG 096 24 14W)					
MAR 1994							
23...	1258	<0.05	<0.05	<0.05	<0.05	0.09	<0.05
23...	1303	<0.05	<0.05	<0.05	<0.05	0.09	<0.05
23...	1313	<0.05	<0.05	<0.05	<0.05	0.09	<0.05
23...	1318	<0.05	<0.05	<0.05	<0.05	0.08	<0.05
23...	1323	<0.05	<0.05	<0.05	<0.05	0.06	<0.05
23...	1333	<0.05	<0.05	<0.05	<0.05	0.09	<0.05
23...	1343	<0.05	<0.05	<0.05	<0.05	0.08	<0.05
23...	1358	<0.05	<0.05	<0.05	<0.05	0.09	<0.05
23...	1408	<0.05	<0.05	<0.05	<0.05	0.11	<0.05
23...	1418	<0.05	<0.05	<0.05	<0.05	0.10	<0.05
JUL							
26...	0923	<0.05	<0.05	<0.05	0.10	0.23	<0.05
26...	0933	<0.05	<0.05	<0.05	0.09	0.21	<0.05
26...	0943	<0.05	<0.05	<0.05	0.09	0.21	<0.05
26...	0953	<0.05	<0.05	<0.05	0.08	0.19	<0.05
26...	1003	<0.05	<0.05	<0.05	0.05	0.19	<0.05
26...	1013	<0.05	<0.05	<0.05	0.08	0.21	<0.05
26...	1023	<0.05	<0.05	<0.05	0.09	0.20	0.05
26...	1033	<0.05	<0.05	<0.05	0.09	0.18	<0.05
26...	1043	<0.05	<0.05	<0.05	0.08	0.18	0.05
26...	1053	<0.05	<0.05	<0.05	0.09	0.17	0.06
SEP							
13...	1018	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
13...	1028	<0.05	<0.05	<0.05	<0.05	0.10	<0.05
13...	1038	<0.05	<0.05	<0.05	<0.05	0.11	<0.05
13...	1048	<0.05	<0.05	<0.05	<0.05	0.09	<0.05
13...	1058	<0.05	<0.05	<0.05	<0.05	0.07	<0.05
13...	1108	<0.05	<0.05	<0.05	<0.05	0.09	<0.05
13...	1118	<0.05	<0.05	<0.05	<0.05	0.08	<0.05
13...	1128	<0.05	<0.05	<0.05	<0.05	0.07	<0.05
13...	1138	<0.05	<0.05	<0.05	<0.05	0.07	<0.05
13...	1148	<0.05	<0.05	<0.05	<0.05	0.06	<0.05
06800500 ELKHORN RIVER AT WATERLOO, NE		(LAT 41 17 25N LONG 096 17 05W)					
MAR 1994							
23...	0943	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
23...	0953	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
23...	1003	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
23...	1008	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
23...	1018	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
23...	1023	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
23...	1033	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
23...	1043	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
23...	1053	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
23...	1103	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
JUN							
02...	1223	<0.05	<0.05	0.06	0.26	0.25	4.3
JUL							
26...	0958	<0.05	<0.05	<0.05	0.12	0.13	0.32
26...	1003	<0.05	<0.05	<0.05	0.12	0.12	0.24
26...	1008	<0.05	<0.05	<0.05	0.13	0.12	0.40
26...	1018	<0.05	<0.05	<0.05	0.12	0.12	0.19
26...	1023	<0.05	<0.05	<0.05	0.08	0.08	0.30
26...	1028	<0.05	<0.05	<0.05	0.11	0.11	0.13
26...	1033	<0.05	<0.05	<0.05	0.08	0.11	0.13
26...	1038	<0.05	<0.05	<0.05	0.09	0.10	0.26
26...	1048	<0.05	<0.05	<0.05	0.11	0.12	0.33
26...	1053	<0.05	<0.05	<0.05	0.15	0.16	0.42
SEP							
13...	0953	<0.05	<0.05	<0.05	<0.05	0.06	<0.05
13...	1003	<0.05	<0.05	<0.05	<0.05	0.06	<0.05
13...	1023	<0.05	<0.05	<0.05	<0.05	0.05	<0.05
13...	1028	<0.05	<0.05	<0.05	0.05	0.06	<0.05
13...	1033	<0.05	<0.05	<0.05	<0.05	0.05	<0.05
13...	1043	<0.05	<0.05	<0.05	<0.05	0.05	<0.05
13...	1053	<0.05	<0.05	<0.05	<0.05	0.06	<0.05
13...	1103	<0.05	<0.05	<0.05	<0.05	0.06	<0.05
13...	1113	<0.05	<0.05	<0.05	<0.05	0.06	<0.05
13...	1118	<0.05	<0.05	<0.05	<0.05	0.05	<0.05

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Platte River Mixing--Continued

DATE	AMETRYN WATER, DISS, REC, (μ G/L) (38401)	PROP- AZINE WATER, DISS, REC (μ G/L) (38535)	TER- BUTRYN WATER, DISS, REC (μ G/L) (38888)	METO- LACHLOR WATER, DISSOLV (μ G/L) (39415)	ATRA- ZINE, WATER, DISS, REC (μ G/L) (39632)	ALA- CHLOR, WATER, DISS, REC, (μ G/L) (46342)	METRI- BUZIN WATER, DISSOLV (μ G/L) (82630)
06796500 PLATTE RIVER NR LESHARA NE (LAT 41 19 12N LONG 096 24 14W)							
MAR 1994							
23...	<0.05	<0.05	<0.05	<0.05	0.10	<0.05	<0.05
23...	<0.05	<0.05	<0.05	<0.05	0.14	<0.05	<0.05
23...	<0.05	<0.05	<0.05	<0.05	0.10	<0.05	<0.05
23...	<0.05	<0.05	--	<0.05	0.10	<0.05	<0.05
23...	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	<0.05
23...	<0.05	<0.05	<0.05	<0.05	0.15	<0.05	<0.05
23...	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	<0.05
23...	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	<0.05
23...	<0.05	<0.05	<0.05	<0.05	0.10	<0.05	<0.05
23...	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	<0.05
JUL							
26...	<0.05	<0.05	<0.05	0.08	0.47	<0.05	<0.05
26...	<0.05	<0.05	<0.05	0.08	0.43	<0.05	<0.05
26...	<0.05	<0.05	<0.05	0.09	0.45	<0.05	<0.05
26...	<0.05	<0.05	<0.05	0.09	0.41	<0.05	<0.05
26...	<0.05	<0.05	<0.05	0.10	0.42	<0.05	<0.05
26...	<0.05	<0.05	<0.05	0.11	0.45	<0.05	<0.05
26...	<0.05	<0.05	<0.05	0.11	0.52	<0.05	<0.05
26...	<0.05	<0.05	<0.05	0.11	0.42	<0.05	<0.05
26...	<0.05	<0.05	<0.05	0.12	0.43	0.07	<0.05
26...	<0.05	<0.05	<0.05	0.11	0.41	<0.05	<0.05
SEP							
13...	<0.05	<0.05	<0.05	<0.05	0.31	<0.05	<0.05
13...	<0.05	<0.05	<0.05	<0.05	0.17	<0.05	<0.05
13...	<0.05	<0.05	<0.05	<0.05	0.19	<0.05	<0.05
13...	<0.05	<0.05	<0.05	<0.05	0.16	<0.05	<0.05
13...	<0.05	<0.05	<0.05	<0.05	0.15	<0.05	<0.05
13...	<0.05	<0.05	<0.05	<0.05	0.16	<0.05	<0.05
13...	<0.05	<0.05	<0.05	<0.05	0.15	<0.05	<0.05
13...	<0.05	<0.05	<0.05	<0.05	0.15	<0.05	<0.05
13...	<0.05	<0.05	<0.05	<0.05	0.13	<0.05	<0.05
13...	<0.05	<0.05	<0.05	<0.05	0.15	<0.05	<0.05
06800500 ELKHORN RIVER AT WATERLOO, NE (LAT 41 17 25N LONG 096 17 05W)							
MAR 1994							
23...	<0.05	<0.05	<0.05	<0.05	0.14	<0.05	<0.05
23...	<0.05	<0.05	<0.05	<0.05	0.14	<0.05	<0.05
23...	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	<0.05
23...	<0.05	<0.05	<0.05	<0.05	0.11	<0.05	<0.05
23...	<0.05	<0.05	<0.05	<0.05	0.11	<0.05	<0.05
23...	<0.05	<0.05	<0.05	<0.05	0.11	<0.05	<0.05
23...	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	<0.05
23...	<0.05	<0.05	<0.05	<0.05	0.11	<0.05	<0.05
23...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
23...	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	<0.05
JUN							
02...	<0.05	<0.05	<0.05	1.2	3.0	0.84	0.16
JUL							
26...	<0.05	<0.05	<0.05	0.11	0.39	<0.05	<0.05
26...	<0.05	<0.05	<0.05	0.11	0.37	<0.05	<0.05
26...	<0.05	<0.05	<0.05	0.12	0.37	<0.05	<0.05
26...	<0.05	<0.05	<0.05	0.11	0.34	<0.05	<0.05
26...	<0.05	<0.05	<0.05	0.09	0.29	<0.05	<0.05
26...	<0.05	<0.05	<0.05	0.10	0.34	<0.05	<0.05
26...	<0.05	<0.05	<0.05	0.09	0.33	<0.05	<0.05
26...	<0.05	<0.05	<0.05	0.09	0.32	<0.05	<0.05
26...	<0.05	<0.05	<0.05	0.10	0.34	<0.05	<0.05
26...	<0.05	<0.05	<0.05	0.14	0.45	<0.05	<0.05
SEP							
13...	<0.05	<0.05	<0.05	<0.05	0.15	<0.05	<0.05
13...	<0.05	<0.05	<0.05	<0.05	0.14	<0.05	<0.05
13...	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	<0.05
13...	<0.05	<0.05	<0.05	<0.05	0.14	<0.05	<0.05
13...	<0.05	<0.05	<0.05	<0.05	0.14	<0.05	<0.05
13...	<0.05	<0.05	<0.05	<0.05	0.14	<0.05	<0.05
13...	<0.05	<0.05	<0.05	<0.05	0.14	<0.05	<0.05
13...	<0.05	<0.05	<0.05	<0.05	0.14	<0.05	<0.05
13...	<0.05	<0.05	<0.05	<0.05	0.15	<0.05	<0.05
13...	<0.05	<0.05	<0.05	<0.05	0.14	<0.05	<0.05

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Platte River Mixing--Continued

DATE	TIME	SI- MAZINE, WATER, DISS, REC ($\mu\text{G/L}$) (04035)	PRO- METRYN, WATER, DISS, REC ($\mu\text{G/L}$) (04036)	PRO- METON, WATER, DISS, REC ($\mu\text{G/L}$) (04037)	DEISO- PROPYL ATRAZIN WATER, DISS, REC ($\mu\text{G/L}$) (04038)	DEETHYL ATRA- ZINE, WATER, DISS, REC ($\mu\text{G/L}$) (04040)	CYANA- ZINE, WATER, DISS, REC ($\mu\text{G/L}$) (04041)
06801000 PLATTE R NR ASHLAND, NE		(LAT 41 03 44N LONG 096 19 28W)					
MAR 1994							
24...	0928	<0.05	<0.05	<0.05	<0.05	0.12	<0.05
24...	0933	<0.05	<0.05	<0.05	<0.05	0.11	<0.05
24...	0953	<0.05	<0.05	<0.05	<0.05	0.11	<0.05
24...	0958	<0.05	<0.05	<0.05	<0.05	0.11	<0.05
24...	1008	<0.05	<0.05	<0.05	<0.05	0.11	<0.05
24...	1018	<0.05	<0.05	<0.05	<0.05	0.08	<0.05
24...	1020	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
24...	1028	<0.05	<0.05	<0.05	<0.05	0.07	<0.05
24...	1033	<0.05	<0.05	<0.05	<0.05	0.07	<0.05
24...	1043	<0.05	<0.05	<0.05	<0.05	0.08	<0.05
24...	1053	<0.05	<0.05	<0.05	<0.05	0.06	<0.05
JUN							
02...	1343	<0.05	<0.05	<0.05	0.35	0.60	2.2
JUL							
27...	0938	<0.05	<0.05	<0.05	0.13	0.18	0.32
27...	0943	<0.05	<0.05	<0.05	0.11	0.17	0.30
27...	0953	<0.05	<0.05	<0.05	0.09	0.15	0.36
27...	1003	<0.05	<0.05	<0.05	0.07	0.19	0.13
27...	1008	<0.05	<0.05	<0.05	0.09	0.19	0.11
27...	1023	<0.05	<0.05	<0.05	0.08	0.21	0.05
27...	1028	<0.05	<0.05	<0.05	0.10	0.24	0.15
27...	1033	<0.05	<0.05	<0.05	0.07	0.20	<0.05
27...	1043	<0.05	<0.05	<0.05	0.10	0.25	0.05
27...	1053	<0.05	<0.05	<0.05	0.07	0.22	<0.05
SEP							
14...	0933	<0.05	<0.05	<0.05	<0.05	0.06	<0.05
14...	0943	<0.05	<0.05	<0.05	<0.05	0.07	<0.05
14...	0953	<0.05	<0.05	<0.05	<0.05	0.07	<0.05
14...	1003	<0.05	<0.05	<0.05	<0.05	0.08	<0.05
14...	1008	<0.05	<0.05	<0.05	<0.05	0.07	<0.05
14...	1018	<0.05	<0.05	<0.05	<0.05	0.09	<0.05
14...	1028	<0.05	<0.05	<0.05	<0.05	0.08	<0.05
14...	1033	<0.05	<0.05	<0.05	<0.05	0.08	<0.05
14...	1043	<0.05	<0.05	<0.05	<0.05	0.10	<0.05
14...	1053	<0.05	<0.05	<0.05	<0.05	0.10	<0.05
06805010 PLATTE RIVER NEAR SOUTH BEND, NEBR.		(LAT 41 01 30N LONG 096 17 50W)					
MAR 1994							
24...	1033	<0.05	<0.05	<0.05	<0.05	0.11	<0.05
24...	1058	<0.05	<0.05	<0.05	<0.05	0.11	<0.05
24...	1108	<0.05	<0.05	<0.05	<0.05	0.11	<0.05
24...	1113	<0.05	<0.05	<0.05	<0.05	0.08	<0.05
24...	1118	<0.05	<0.05	<0.05	<0.05	0.07	<0.05
24...	1123	<0.05	<0.05	<0.05	<0.05	0.06	<0.05
24...	1128	<0.05	<0.05	<0.05	<0.05	0.07	<0.05
24...	1133	<0.05	<0.05	<0.05	<0.05	0.06	<0.05
24...	1138	<0.05	<0.05	<0.05	<0.05	0.07	<0.05
JUN							
02...	1533	<0.05	<0.05	<0.05	0.81	1.2	11
JUL							
27...	1043	<0.05	<0.05	<0.05	0.10	0.23	0.12
27...	1053	<0.05	<0.05	<0.05	0.09	0.22	0.10
27...	1103	<0.05	<0.05	<0.05	0.07	0.21	0.07
27...	1113	<0.05	<0.05	<0.05	0.05	0.20	<0.05
27...	1123	<0.05	<0.05	<0.05	0.10	0.24	0.05
27...	1133	<0.05	<0.05	<0.05	0.08	0.21	0.10
27...	1143	<0.05	<0.05	<0.05	0.10	0.21	0.21
27...	1153	<0.05	<0.05	<0.05	0.10	0.19	0.09
27...	1203	<0.05	<0.05	<0.05	0.09	0.16	0.18
27...	1213	<0.05	<0.05	<0.05	0.12	0.16	0.28
SEP							
14...	1043	<0.05	<0.05	<0.05	0.05	0.08	<0.05
14...	1053	<0.05	<0.05	<0.05	<0.05	0.08	<0.05
14...	1103	<0.05	<0.05	<0.05	<0.05	0.07	<0.05
14...	1113	<0.05	<0.05	<0.05	<0.05	0.06	<0.05
14...	1123	<0.05	<0.05	<0.05	<0.05	0.08	<0.05
14...	1133	<0.05	<0.05	<0.05	<0.05	0.08	<0.05
14...	1143	<0.05	<0.05	<0.05	<0.05	0.08	<0.05
14...	1153	<0.05	<0.05	<0.05	<0.05	0.09	<0.05
14...	1203	<0.05	<0.05	<0.05	0.05	0.11	<0.05
14...	1213	<0.05	<0.05	<0.05	<0.05	0.10	<0.05

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Platte River Mixing--Continued

DATE	AMETRYN WATER, DISS, REC, (μ G/L) (38401)	PROP- AZINE WATER, DISS, REC (μ G/L) (38535)	TER- BUTRYN WATER, DISS, REC (μ G/L) (38888)	METO- LACHLOR WATER DISSOLV (μ G/L) (39415)	ATRA- ZINE, WATER, DISS, REC (μ G/L) (39632)	ALA- CHLOR, WATER, DISS, REC, (μ G/L) (46342)	METRI- BUZIN SENCOR WATER DISSOLV (μ G/L) (82630)
06801000 PLATTE R NR ASHLAND, NE (LAT 41 03 44N LONG 096 19 28W)							
MAR 1994							
24...	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	<0.05
24...	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	<0.05
24...	<0.05	<0.05	<0.05	<0.05	0.13	<0.05	<0.05
24...	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	<0.05
24...	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	<0.05
24...	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	<0.05
24...	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	<0.05
24...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
24...	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	<0.05
24...	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	<0.05
24...	<0.05	<0.05	<0.05	<0.05	0.11	<0.05	<0.05
24...	<0.05	<0.05	<0.05	<0.05	0.11	<0.05	<0.05
JUN							
02...	<0.05	<0.05	<0.05	3.8	6.5	1.3	<0.05
JUL							
27...	<0.05	<0.05	<0.05	0.13	0.49	<0.05	<0.05
27...	<0.05	<0.05	<0.05	0.11	0.43	<0.05	<0.05
27...	<0.05	<0.05	<0.05	0.11	0.41	<0.05	<0.05
27...	<0.05	<0.05	<0.05	0.11	0.42	<0.05	<0.05
27...	<0.05	<0.05	<0.05	0.10	0.41	<0.05	<0.05
27...	<0.05	<0.05	<0.05	0.08	0.47	<0.05	<0.05
27...	<0.05	<0.05	<0.05	0.09	0.58	<0.05	<0.05
27...	<0.05	<0.05	<0.05	0.07	0.46	<0.05	<0.05
27...	<0.05	<0.05	<0.05	0.09	0.60	<0.05	<0.05
27...	<0.05	<0.05	<0.05	0.07	0.48	<0.05	<0.05
SEP							
14...	<0.05	<0.05	<0.05	<0.05	0.15	<0.05	<0.05
14...	<0.05	<0.05	<0.05	<0.05	0.16	<0.05	<0.05
14...	<0.05	<0.05	<0.05	<0.05	0.17	<0.05	<0.05
14...	<0.05	<0.05	<0.05	<0.05	0.17	<0.05	<0.05
14...	<0.05	<0.05	<0.05	<0.05	0.15	<0.05	<0.05
14...	<0.05	<0.05	<0.05	<0.05	0.16	<0.05	<0.05
14...	<0.05	<0.05	<0.05	<0.05	0.18	<0.05	<0.05
14...	<0.05	<0.05	<0.05	<0.05	0.16	<0.05	<0.05
14...	<0.05	<0.05	<0.05	<0.05	0.18	<0.05	<0.05
14...	<0.05	<0.05	<0.05	<0.05	0.19	<0.05	<0.05
06805010 PLATTE RIVER NEAR SOUTH BEND, NEBR. (LAT 41 01 30N LONG 096 17 50W)							
MAR 1994							
24...	<0.05	<0.05	<0.05	<0.05	0.18	<0.05	<0.05
24...	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	<0.05
24...	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	<0.05
24...	<0.05	<0.05	<0.05	<0.05	0.10	<0.05	<0.05
24...	<0.05	<0.05	<0.05	<0.05	0.10	<0.05	<0.05
24...	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	<0.05
24...	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	<0.05
24...	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	<0.05
24...	<0.05	<0.05	<0.05	<0.05	0.13	<0.05	<0.05
JUN							
02...	<0.05	0.08	<0.05	5.4	15	3.9	0.24
JUL							
27...	<0.05	<0.05	<0.05	0.14	0.68	<0.05	<0.05
27...	<0.05	<0.05	<0.05	0.14	0.60	<0.05	<0.05
27...	<0.05	<0.05	<0.05	0.11	0.46	<0.05	<0.05
27...	<0.05	<0.05	<0.05	0.09	0.46	<0.05	<0.05
27...	<0.05	<0.05	<0.05	0.11	0.51	<0.05	<0.05
27...	<0.05	<0.05	<0.05	0.10	0.46	<0.05	<0.05
27...	<0.05	<0.05	<0.05	0.11	0.47	<0.05	<0.05
27...	<0.05	<0.05	<0.05	0.11	0.46	<0.05	<0.05
27...	<0.05	<0.05	<0.05	0.11	0.41	<0.05	<0.05
27...	<0.05	<0.05	<0.05	0.11	0.38	<0.05	<0.05
SEP							
14...	<0.05	<0.05	<0.05	<0.05	0.17	<0.05	<0.05
14...	<0.05	<0.05	<0.05	<0.05	0.18	<0.05	<0.05
14...	<0.05	<0.05	<0.05	<0.05	0.15	<0.05	<0.05
14...	<0.05	<0.05	<0.05	<0.05	0.17	<0.05	<0.05
14...	<0.05	<0.05	<0.05	<0.05	0.19	<0.05	<0.05
14...	<0.05	<0.05	<0.05	<0.05	0.18	<0.05	<0.05
14...	<0.05	<0.05	<0.05	<0.05	0.17	<0.05	<0.05
14...	<0.05	<0.05	<0.05	<0.05	0.21	<0.05	<0.05
14...	<0.05	<0.05	<0.05	<0.05	0.30	<0.05	<0.05
14...	<0.05	<0.05	<0.05	<0.05	0.25	<0.05	<0.05

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Waste water study

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (μ S/CM) (00095)	PH WATER WHOLE LAB (STAND-ARD UNITS) (00403)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (° C) (00020)	TEMPER-ATURE WATER (° C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS TOTAL (MG/L AS CaCO3) (00900)	CALCIUM DIS-SOLVED (MG/L ASCA) (00915)	
06803080 SALT CREEK ABOVE BEAL SLOUGH, AT LINCOLN, NE. (LAT 40 46 13N LONG 096 43 05W)													
JUN 1994	20...	0910	34	733	7.8	7.5	30.0	24.0	732	6.8	28	260	74
AUG	16...	0845	22	971	8.1	8.2	22.0	21.5	729	6.9	23	310	88
SEP	28...	0900	15	408	7.7	8.1	11.5	13.5	736	8.2	15	250	74
06803100 SALT CREEK AT SOUTH STREET, AT LINCOLN, NE (LAT 40 47 31N LONG 096 43 27W)													
JUN 1994	20...	1100	46	1710	7.8	8.2	33.0	24.0	732	8.2	30	290	80
AUG	16...	1045	23	2540	8.1	8.3	25.0	21.0	729	9.1	33	320	85
SEP	28...	1030	22	1490	7.6	7.9	16.5	13.5	736	10.8	59	260	66
06803185 SALT CREEK AT O ST AT LINCOLN, NE (LAT 40 48 48N LONG 096 43 21W)													
JUN 1994	20...	1200	54	4120	8.0	8.2	36.0	30.5	732	11.1	39	340	93
AUG	16...	1145	33	5930	8.0	8.3	28.5	23.5	729	12.5	40	390	98
SEP	28...	1200	29	1740	7.4	8.2	22.0	16.0	736	13.8	210	360	95
06803190 SALT CREEK AT 14TH STREET, AT LINCOLN, NE. (LAT 40 50 03N LONG 096 42 03W)													
JUN 1994	20...	1300	56	5580	8.1	8.2	37.0	32.5	733	11.9	54	370	99
AUG	16...	1245	37	7650	8.1	8.3	23.5	23.5	729	16.5	54	370	89
SEP	28...	1300	33	8260	7.7	8.3	23.0	18.0	736	13.9	110	390	97
06803495 SALT CREEK AT FAIRGROUNDS AT LINCOLN, NE (LAT 40 50 20N LONG 096 41 30W)													
JUN 1994	20...	1400	170	4600	7.9	8.3	37.0	31.0	--	11.6	46	360	100
AUG	16...	1315	82	6070	8.2	8.5	34.0	26.0	729	14.4	50	310	78
	17...	0815	72	6560	7.9	8.2	25.0	21.5	728	7.8	40	370	94
SEP	28...	1415	59	8740	--	8.3	24.0	18.0	736	13.6	--	--	--
	29...	0830	55	8940	7.6	8.1	16.0	13.5	--	8.1	97	380	97
06803496 LINCOLN SEWER EFFLUENT, THERESA ST. PLANT (LAT 40 50 24N LONG 096 41 17W)													
AUG 1994	17...	1015	--	--	7.0	--	--	--	--	--	39	230	67
SEP	29...	0930	--	744	7.3	7.6	--	22.0	--	--	140	220	62
06803500 SALT CREEK AT LINCOLN, NE. (LAT 40 50 49N LONG 096 40 54W)													
AUG 1994	17...	0845	103	5840	7.6	8.0	27.0	21.5	728	8.2	41	350	89
SEP	29...	1000	99	5630	7.6	7.5	18.0	18.0	730	7.6	72	360	95
06803505 SALT CREEK AT SUPERIOR ST AT LINCOLN, NE (LAT 40 51 27N LONG 096 39 53W)													
AUG 1994	17...	0915	103	6370	7.6	8.1	29.0	22.0	729	8.7	49	360	94
SEP	29...	1030	92	7940	7.5	8.0	19.0	18.0	--	9.5	96	380	100

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Waste water study--Continued

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CAO ₃) (90410)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180° C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	RESIDUE TOTAL AT 105 °C, SUS- PENDED (MG/L) (00530)
06803080 SALT CREEK ABOVE BEAL SLOUGH, AT LINCOLN, NE. (LAT 40 46 13N LONG 096 43 05W)												
JUN 1994												
20...	18	53	1	7.3	249	68	42	449	418	0.61	41.2	67
AUG												
16...	21	93	2	6.8	265	83	110	569	566	0.77	33.0	35
SEP												
28...	17	57	2	7.6	246	65	57	471	434	0.64	19.1	44
06803100 SALT CREEK AT SOUTH STREET, AT LINCOLN, NE (LAT 40 47 31N LONG 096 43 27W)												
JUN 1994												
20...	21	240	6	7.6	265	110	320	982	944	1.34	122	81
AUG												
16...	25	450	11	6.8	274	150	620	1500	1510	2.04	93.1	52
SEP												
28...	22	360	10	8.5	263	130	560	1430	1310	1.94	84.9	30
06803185 SALT CREEK AT O ST AT LINCOLN, NE (LAT 40 48 48N LONG 096 43 21W)												
JUN 1994												
20...	27	740	17	9.2	276	190	1000	2320	2230	3.16	338	46
AUG												
16...	35	1100	24	9.7	280	260	1700	3430	3370	4.66	306	30
SEP												
28...	29	1100	25	9.2	284	240	1500	3230	3150	4.39	253	36
06803190 SALT CREEK AT 14TH STREET, AT LINCOLN, NE. (LAT 40 50 03N LONG 096 42 03W)												
JUN 1994												
20...	30	1100	25	9.9	284	230	1500	3150	3140	4.28	476	51
AUG												
16...	35	1500	34	9.7	283	310	2200	4120	4320	5.60	412	12
SEP												
28...	36	1700	37	11	294	320	2300	4690	4650	6.38	418	12
06803495 SALT CREEK AT FAIRGROUNDS AT LINCOLN, NE (LAT 40 50 20N LONG 096 41 30W)												
JUN 1994												
20...	27	840	19	10	306	190	1200	2570	2560	3.50	1180	324
AUG												
16...	27	1100	27	9.6	292	250	1800	3400	3440	4.62	753	24
17...	33	1300	29	11	305	260	1900	3510	3780	4.77	682	49
SEP												
28...	--	--	--	--	--	--	--	--	--	--	--	--
29...	33	1500	34	11	333	300	2100	4380	4250	5.96	650	46
06803496 LINCOLN SEWER EFFLUENT, THERESA ST. PLANT (LAT 40 50 24N LONG 096 41 17W)												
AUG 1994												
17...	16	170	5	23	179	130	210	798	784	1.09	--	8
SEP												
29...	16	170	5	22	268	110	200	820	825	1.12	--	19
06803500 SALT CREEK AT LINCOLN, NE. (LAT 40 50 49N LONG 096 40 54W)												
AUG 1994												
17...	30	1100	26	14	283	240	1600	3240	3260	4.41	901	20
SEP												
29...	29	1100	25	8.2	271	240	1600	3740	3260	5.09	1000	13
06803505 SALT CREEK AT SUPERIOR ST AT LINCOLN, NE (LAT 40 51 27N LONG 096 39 53W)												
AUG 1994												
17...	31	1200	27	13	291	260	1800	3560	3580	4.84	990	16
SEP												
29...	32	1300	29	7.8	300	270	1800	3250	3710	4.42	807	29

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Waste water study--Continued

DATE	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	OIL AND GREASE, TOTAL RECOV. GRAVI- METRIC (MG/L) (00556)
06803080 SALT CREEK ABOVE BEAL SLOUGH, AT LINCOLN, NE. (LAT 40 46 13N LONG 096 43 05W)												
JUN 1994												
20...	1.48	1.48	0.02	1.50	0.020	0.78	0.80	2.3	0.410	0.290	8.5	4
AUG												
16...	1.09	1.09	0.01	1.10	0.040	0.66	0.70	1.8	--	0.260	6.3	<1
SEP												
28...	1.73	1.73	0.07	1.80	0.800	0.50	1.3	3.1	0.390	0.300	5.7	<1
06803100 SALT CREEK AT SOUTH STREET, AT LINCOLN, NE (LAT 40 47 31N LONG 096 43 27W)												
JUN 1994												
20...	1.36	1.36	0.04	1.40	0.050	0.85	0.90	2.3	0.410	0.260	10	1
AUG												
16...	0.860	0.860	0.02	0.880	0.070	0.73	0.80	1.7	0.280	0.200	5.9	<1
SEP												
28...	1.45	1.45	0.05	1.50	0.490	0.51	1.0	2.5	0.290	0.240	8.0	<1
06803185 SALT CREEK AT O ST AT LINCOLN, NE (LAT 40 48 48N LONG 096 43 21W)												
JUN 1994												
20...	1.26	1.26	0.04	1.30	0.090	0.61	0.70	2.0	0.300	0.230	8.0	<1
AUG												
16...	0.920	0.920	0.03	0.950	0.140	0.56	0.70	1.7	0.240	0.170	4.9	<1
SEP												
28...	1.14	1.14	0.06	1.20	0.390	0.41	0.80	2.0	0.260	0.220	34	--
06803190 SALT CREEK AT 14TH STREET, AT LINCOLN, NE. (LAT 40 50 03N LONG 096 42 03W)												
JUN 1994												
20...	1.06	1.06	0.04	1.10	0.080	0.82	0.90	2.0	0.320	0.200	8.4	1
AUG												
16...	0.480	0.480	0.03	0.510	0.080	0.82	0.90	1.4	0.240	0.150	7.5	<1
SEP												
28...	1.13	1.13	0.07	1.20	0.440	0.36	0.80	2.0	0.240	0.200	6.9	--
06803495 SALT CREEK AT FAIRGROUNDS AT LINCOLN, NE (LAT 40 50 20N LONG 096 41 30W)												
JUN 1994												
20...	0.950	0.950	0.05	1.00	0.160	0.84	1.0	2.0	0.330	0.220	5.3	<1
AUG												
16...	0.540	0.540	0.02	0.560	0.050	0.85	0.90	1.5	0.210	0.140	7.2	<1
17...	0.750	0.750	0.03	0.780	0.180	0.62	0.80	1.6	0.230	0.150	6.6	<1
SEP												
28...	1.23	1.23	0.07	1.30	0.380	0.42	0.80	2.1	0.240	0.180	--	--
29...	0.940	0.940	0.06	1.00	0.320	0.48	0.80	1.8	0.230	0.170	35	1
06803496 LINCOLN SEWER EFFLUENT, THERESA ST. PLANT (LAT 40 50 24N LONG 096 41 17W)												
AUG 1994												
17...	12.4	12.4	0.63	13.0	2.70	1.8	4.5	17	3.70	3.50	9.4	<1
SEP												
29...	16.6	16.6	0.40	17.0	6.90	2.0	8.9	26	5.40	5.60	44	<1
06803500 SALT CREEK AT LINCOLN, NE. (LAT 40 50 49N LONG 096 40 54W)												
AUG 1994												
17...	2.70	2.70	0.20	2.90	0.880	1.2	2.1	5.0	0.860	0.760	8.1	<1
SEP												
29...	4.90	4.90	0.20	5.10	2.50	1.4	3.9	9.0	2.10	2.20	9.6	<1
06803505 SALT CREEK AT SUPERIOR ST AT LINCOLN, NE (LAT 40 51 27N LONG 096 39 53W)												
AUG 1994												
17...	2.22	2.22	0.18	2.40	0.770	0.93	1.7	4.1	0.710	0.630	5.7	<1
SEP												
29...	3.91	3.91	0.19	4.10	1.90	0.90	2.8	6.9	1.60	1.60	15	<1

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Waste water study--Continued

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (μ S/CM) (00095)	PH WATER WHOLE LAB (STAND-ARD UNITS) (00403)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (° C) (00020)	TEMPER-ATURE WATER (° C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L ASCA) (00915)	
06803511 SALT CREEK BLW LITTLE SALT AT LINCOLN, NE (LAT 40 52 40N LONG 096 39 44W)													
AUG 1994	17...	1015	112	6700	7.7	8.1	22.0	32.0	729	8.8	51	360	93
SEP	29...	1130	104	7420	7.6	7.8	21.0	17.5	730	9.0	96	390	100
06803513 SALT CREEK AT 70th ST AT LINCOLN, NE (LAT 40 53 10N LONG 096 37 26W)													
AUG 1994	17...	1115	119	7040	7.7	8.1	30.0	23.0	730	10.6	51	370	95
SEP	29...	1315	108	8410	7.5	8.1	23.0	20.5	733	9.9	120	420	110
068035135 LINCOLN NORTHEAST TREATMENT PLANT EFFLUENT (LAT 40 53 07N LONG 096 37 09W)													
AUG 1994	17...	1030	--	--	7.2	--	--	--	--	--	120	240	69
SEP	29...	1400	--	767	7.2	7.7	--	24.0	--	--	110	230	65
06803514 SALT CREEK BLW NE TREAT. PLANT AT LINCOLN, NE (LAT 40 53 08N LONG 096 36 50W)													
AUG 1994	17...	1200	125	6680	7.6	8.1	31.0	23.5	730	10.5	57	390	100
SEP	29...	1400	113	7680	7.6	7.9	24.0	20.5	730	8.7	210	410	110
06803525 SALT CR BL STEVENS CR NR WAVERLY NE (LAT 40 54 18N LONG 096 35 09W)													
AUG 1994	17...	1430	130	6210	7.7	8.1	31.0	25.0	730	12.7	64	360	93
SEP	29...	1620	110	7220	7.6	8.1	25.0	22.0	--	10.0	110	360	92

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Waste water study--Continued

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINIT LAB (MG/L AS CAO ₃) (90410)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180° C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	RESIDUE TOTAL AT 105 °C, SUS- PENDED (MG/L) (00530)
06803511 SALT CREEK BLW LITTLE SALT AT LINCOLN, NE (LAT 40 52 40N LONG 096 39 44W)												
AUG 1994												
17...	32	1300	30	15	293	280	1800	3700	3710	5.03	1120	14
SEP												
29...	34	1500	33	16	300	330	2100	4370	4280	5.94	1230	40
06803513 SALT CREEK AT 70th ST AT LINCOLN, NE (LAT 40 53 10N LONG 096 37 26W)												
AUG 1994												
17...	32	1300	29	15	299	320	1900	3960	3850	5.39	1270	11
SEP												
29...	35	1700	36	17	325	370	2400	4890	4840	6.65	1430	15
068035135 LINCOLN NORTHEAST TREATMENT PLANT EFFLUENT (LAT 40 53 07N LONG 096 37 09W)												
AUG 1994												
17...	17	140	4	19	237	130	130	690	663	0.94	--	9
SEP												
29...	16	140	4	18	234	120	140	736	676	1.00	--	10
06803514 SALT CREEK BLW NE TREAT. PLANT AT LINCOLN, NE (LAT 40 53 08N LONG 096 36 50W)												
AUG 1994												
17...	35	1300	29	16	293	300	2000	3760	3940	5.11	1270	14
SEP												
29...	34	1600	34	17	309	350	2200	4640	4510	6.31	1420	22
06803525 SALT CR BL STEVENS CR NR WAVERLY NE (LAT 40 54 18N LONG 096 35 09W)												
AUG 1994												
17...	31	1200	28	15	292	290	1800	3390	3620	4.61	1190	14
SEP												
29...	31	1400	32	8.0	319	330	2000	4130	4070	5.62	1230	28

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Waste water study--Continued

DATE	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	OIL AND GREASE, TOTAL RECOV. GRAVI- METRIC (MG/L) (00556)
06803511 SALT CREEK BLW LITTLE SALT AT LINCOLN, NE (LAT 40 52 40N LONG 096 39 44W)												
AUG 1994												
17...	2.18	2.18	0.22	2.40	0.700	0.90	1.6	4.0	0.680	0.590	5.4	<1
SEP												
29...	3.57	3.57	0.23	3.80	1.40	1.1	2.5	6.3	1.50	1.30	9.7	2
06803513 SALT CREEK AT 70th ST AT LINCOLN, NE (LAT 40 53 10N LONG 096 37 26W)												
AUG 1994												
17...	2.21	2.21	0.29	2.50	0.670	1.0	1.7	4.2	0.710	0.650	6.3	<1
SEP												
29...	3.02	3.02	0.28	3.30	1.30	0.70	2.0	5.3	1.20	1.10	16	1
068035135 LINCOLN NORTHEAST TREATMENT PLANT EFFLUENT (LAT 40 53 07N LONG 096 37 09W)												
AUG 1994												
17...	2.20	2.20	1.10	3.30	0.940	11	12	15	7.60	7.00	39	<1
SEP												
29...	4.80	4.80	1.00	5.80	8.40	2.6	11	17	9.80	9.80	12	5
06803514 SALT CREEK BLW NE TREAT. PLANT AT LINCOLN, NE (LAT 40 53 08N LONG 096 36 50W)												
AUG 1994												
17...	2.15	2.15	0.35	2.50	1.20	1.0	2.2	4.7	1.20	1.10	7.8	<1
SEP												
29...	3.17	3.17	0.43	3.60	1.40	1.2	2.6	6.2	1.80	1.60	61	1
06803525 SALT CR BL STEVENS CR NR WAVERLY NE (LAT 40 54 18N LONG 096 35 09W)												
AUG 1994												
17...	2.48	2.48	0.42	2.90	0.790	1.1	1.9	4.8	1.20	1.20	9.9	<1
SEP												
29...	3.41	3.41	0.59	4.00	1.60	0.90	2.5	6.5	2.00	2.00	25	2

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Stream Over-bank and Bed Sediment Quality

STATION NUMBER	LOCAL IDENTIFIER	DATE	TIME	SEDIMENT TYPE	NITRO-GEN, NO ₃ +NO ₂ TOT. IN BOT. MAT. (MG/KG AS N) (00633)	NITRO-GEN, NH ₄ TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	NITRO-GEN, NH ₄ + ORG. TOT. IN BOT. MAT. (MG/KG AS N) (00626)	PHOS-PHORUS TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	CARBON, INORG + ORGANIC TOT. IN BOT. MAT. (GM/KG AS C) (00693)	ALUM-INUM, RECOV. FM BOT-TOM MA-TERIAL (µG/G) (01108)
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CASS COUNTY

404937095592001	10N	13E19AAAB1	09-22-94	1035	OVER BANK SED.	11	13	1000	2200	33	9400
404915095581001	10N	13E20ADDD1	09-22-94	1540	OVER BANK SED.	4.0	3.0	630	530	9.5	7800
404913095570301	10N	13E21DAAB1	09-26-94	1230	BED SEDIMENT	<2.0	48	730	400	15	8700
404913095570302	10N	13E21DAAB2	09-26-94	1230	BED SEDIMENT	<2.0	20	990	570	17	9900
404917095565901	10N	13E22BCCC1	09-22-94	1400	OVER BANK SED.	9.0	3.5	1200	360	12	8800

GAGE COUNTY

402328096540801	5N	5E19ABCB1	09-20-94	1144	OVER BANK SED.	6.0	4.0	900	670	11	9000
402258096534401	5N	5E19DADB1	09-20-94	1400	OVER BANK SED.	18	6.0	900	690	11	13000
402202096513401	5N	5E28DCAA1	09-27-94	1330	BED SEDIMENT	<2.0	13	170	110	2.7	3400
402202096513402	5N	5E28DCAA2	09-27-94	1350	BED SEDIMENT	2.0	56	590	410	5.2	7100
402241096540801	5N	5E30ABBB1	09-20-94	1500	OVER BANK SED.	5.0	8.5	2000	600	21	14000

NEMAHA COUNTY

401938095413601	4N	15E11ADCD1	09-28-94	1500	BED SEDIMENT	<2.0	41	580	380	8.2	13000
401938095413602	4N	15E11ADCD2	09-28-94	1530	BED SEDIMENT	2.0	43	670	320	8.6	7400

RICHARDSON COUNTY

400303095251701	1N	18E17BCDD1	09-21-94	1130	OVER BANK SED.	<2.0	4.2	430	490	11	6300
400231095250901	1N	18E20BABD1	09-21-94	1440	OVER BANK SED.	19	4.8	1300	360	16	12000
400141095240801	1N	18E28BBAA1	09-21-94	1300	OVER BANK SED.	37	7.1	900	970	18	17000

DATE	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (µG/G AS AS) (01003)	BORON, RECOV. FM BOT-TOM MA-TERIAL (µG/G AS B) (01023)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (µG/G AS CD) (01028)	CHROMIUM, RECOV. FM BOT-TOM MA-TERIAL (µG/G) (01029)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (µG/G AS CO) (01038)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (µG/G AS CU) (01043)	IRON, RECOV. FM BOT-TOM MA-TERIAL (µG/G AS FE) (01170)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (µG/G AS PB) (01052)	MANGANESE, RECOV. FM BOT-TOM MA-TERIAL (µG/G) (01053)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (µG/G AS HG) (71921)	SELENIUM, TOTAL IN BOT-TOM MA-TERIAL (µG/G) (01148)	STRONTIUM, RECOV. FM BOT-TOM MA-TERIAL (µG/G) (01083)
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CASS COUNTY

09-22-94	3	490	1	20	<5	20	11000	40	460	0.03	<1	70
09-22-94	3	230	<1	9	<5	10	8700	10	410	0.02	<1	30
09-26-94	4	260	<1	10	10	10	11000	10	880	0.02	<1	30
09-26-94	3	280	<1	10	<5	10	11000	10	670	0.02	<1	20
09-22-94	3	250	<1	10	<5	10	98000	10	3700	0.02	<1	30

GAGE COUNTY

09-20-94	2	490	<1	10	<5	10	9400	10	510	0.03	<1	30
09-20-94	3	360	<1	10	10	10	10000	10	470	0.03	<1	30
09-27-94	2	170	<1	4	<5	3	3800	<10	160	<0.01	<1	10
09-27-94	2	270	<1	7	<5	7	6900	210	260	0.02	<1	20
09-20-94	2	290	<1	20	10	20	14000	20	320	0.03	<1	40

NEMAHACOUNTY

09-28-94	4	280	<1	10	10	20	13000	10	560	0.02	<1	40
09-28-94	5	250	<1	9	<5	8	8700	<10	460	0.01	<1	20

RICHARDSONCOUNTY

09-21-94	4	300	<1	9	<5	9	9000	<10	330	0.02	<1	20
09-21-94	6	300	<1	20	10	20	16000	20	830	0.04	<1	40
09-21-94	6	390	<1	20	20	30	23000	20	860	0.05	<1	50

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Stream Over-bank and Bed Sediment Quality--Continued

DATE	ZINC, RECOV. FM BOT- TOM MA- TERIAL (μG/G AS ZN) (01093)	ACE- NAPHTH- YLENE BOT.MAT (μG/KG) (34203)	ACE- NAPHTH- ENE BOT.MAT (μG/KG) (34208)	ANTHRA- CENE BOT.MAT (μG/KG) (34223)	BENZO B FLUOR- AN- THENE BOT.MAT (μG/KG) (34233)	BENZO K FLUOR- AN- THENE BOT.MAT (μG/KG) (34245)	BENZO- A- PYRENE BOT.MAT (μG/KG) (34250)	BIS (2- CHLORO- ETHYL) ETHER BOT.MAT (μG/KG) (34276)	BIS (2- CHLORO- ETHOXY) METHANE BOT.MAT (μG/KG) (34281)	BIS (2- CHLORO- ISO- PROPYL) ETHER BOT.MAT (μG/KG) (34286)	N-BUTYL BENZYL PHTHAL- ATE BOT.MAT (μG/KG) (34295)	CHRY- SENE BOT.MAT (μG/KG) (34323)
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CASS COUNTY

09-22-94	210	<200	<200	<200	550	420	<400	<200	<200	<200	<200	<400
09-22-94	40	<200	<200	<200	<400	<400	<400	<200	<200	<200	<200	<400
09-26-94	40	<200	<200	<200	<400	<400	<400	<200	<200	<200	<200	<400
09-26-94	40	<200	<200	<200	<400	<400	<400	<200	<200	<200	<200	<400
09-22-94	440	<200	<200	<200	<400	<400	<400	<200	<200	<200	<200	<400

GAGE COUNTY

09-20-94	50	<200	<200	<200	<400	<400	<400	<200	<200	<200	<200	<400
09-20-94	60	<200	<200	<200	<400	<400	<400	<200	<200	<200	<200	<400
09-27-94	10	<200	<200	<200	<400	<400	<400	<200	<200	<200	<200	<400
09-27-94	30	<200	<200	<200	<400	<400	<400	<200	<200	<200	<200	<400
09-20-94	60	<200	<200	<200	<400	<400	<400	<200	<200	<200	<200	<400

NEMAHA COUNTY

09-28-94	50	<200	<200	<200	<400	<400	<400	<200	<200	<200	<200	<400
09-28-94	30	<200	<200	<200	<400	<400	<400	<200	<200	<200	<200	<400

RICHARDSON COUNTY

09-21-94	40	<200	<200	<200	<400	<400	<400	<200	<200	<200	<200	<400
09-21-94	70	<200	<200	<200	<400	<400	<400	<200	<200	<200	<200	<400
09-21-94	100	<200	<200	<200	<400	<400	<400	<200	<200	<200	<200	<400

DATE	DIETHYL PHTHAL- ATE BOT.MAT (μG/KG) (34339)	DI- METHYL PHTHAL- ATE BOT.MAT (μG/KG) (34344)	FLUOR- ANTHENE BOT.MAT (μG/KG) (34379)	FLUOR- ENE BOT.MAT (μG/KG) (34384)	HEXA- CHLORO- CYCLO- PENT- ADIENE BOT.MAT (μG/KG) (34389)	HEXA- CHLORO- ETHANE BOT.MAT (μG/KG) (34399)	INDENO (1,2,3- CD) PYRENE BOT.MAT (μG/KG) (34406)	ISO- PHORONE BOT.MAT (μG/KG) (34411)	N- NITRO- SODI-N- PROPYL- AMINE BOT.MAT (μG/KG) (34431)	N-NITRO -SODI- PHENY- LAMINE BOT.MAT (μG/KG) (34436)	N-NITRO -SODI- METHY- LAMINE BOT.MAT (μG/KG) (34441)	NAPHTH- ALENE BOT.MAT (μG/KG) (34445)
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CASS COUNTY

09-22-94	<200	<200	230	<200	<200	<200	<400	<200	<200	<200	<200	<200
09-22-94	<200	<200	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200
09-26-94	<200	<200	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200
09-26-94	<200	<200	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200
09-22-94	<200	<200	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200

GAGE COUNTY

09-20-94	<200	<200	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200
09-20-94	<200	<200	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200
09-27-94	<200	<200	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200
09-27-94	<200	<200	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200
09-20-94	<200	<200	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200

NEMAHA COUNTY

09-28-94	<200	<200	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200
09-28-94	<200	<200	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200

RICHARDSON COUNTY

09-21-94	<200	<200	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200
09-21-94	<200	<200	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200
09-21-94	<200	<200	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Stream Over-bank and Bed Sediment Quality--Continued

DATE	NITRO- BENZENE BOT.MAT (µG/KG) (34450)	PARA- CHLORO- META- CRESOL BOT.MAT (µG/KG) (34455)	PHENAN- THRENE BOT.MAT (µG/KG) (34464)	PYRENE BOT.MAT (µG/KG) (34472)	BENZOGH IPERYL ENE1,12 -BENZOP ERYLENE BOT.MAT (µG/KG) (34524)	BENZO A ANTHRAC ENE1,2- BENZANT HRACENE BOT.MAT (µG/KG) (34529)	1,2-DI- CHLORO- BENZENE BOT.MAT (µG/KG) (34539)	1,2,4- TRI- CHLORO- BENZENE BOT.MAT (µG/KG) (34554)	1,2,5,6 -DIBENZ -CENE BOT.MAT (µG/KG) (34559)	1,3-DI- CHLORO- BENZENE BOT.MAT (µG/KG) (34569)	1,4-DI- CHLORO- BENZENE BOT.MAT (µG/KG) (34574)	2- CHLORO- NAPH- THALENE BOT.MAT (µG/KG) (34584)
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CASS COUNTY

09-22-94	<200	<600	<200	220	<400	<400	<200	<200	<400	<200	<200	<200
09-22-94	<200	<600	<200	<200	<400	<400	<200	<200	<400	<200	<200	<200
09-26-94	<200	<600	<200	<200	<400	<400	<200	<200	<400	<200	<200	<200
09-26-94	<200	<600	<200	<200	<400	<400	<200	<200	<400	<200	<200	<200
09-22-94	<200	<600	<200	<200	<400	<400	<200	<200	<400	<200	<200	<200

GAGE COUNTY

09-20-94	<200	<600	<200	<200	<400	<400	<200	<200	<400	<200	<200	<200
09-20-94	<200	<600	<200	<200	<400	<400	<200	<200	<400	<200	<200	<200
09-27-94	<200	<600	<200	<200	<400	<400	<200	<200	<400	<200	<200	<200
09-27-94	<200	<600	<200	<200	<400	<400	<200	<200	<400	<200	<200	<200
09-20-94	<200	<600	<200	<200	<400	<400	<200	<200	<400	<200	<200	<200

NEMAHA COUNTY

09-28-94	<200	<600	<200	<200	<400	<400	<200	<200	<400	<200	<200	<200
09-28-94	<200	<600	<200	<200	<400	<400	<200	<200	<400	<200	<200	<200

RICHARDSON COUNTY

09-21-94	<200	<600	<200	<200	<400	<400	<200	<200	<400	<200	<200	<200
09-21-94	<200	<600	<200	<200	<400	<400	<200	<200	<400	<200	<200	<200
09-21-94	<200	<600	<200	<200	<400	<400	<200	<200	<400	<200	<200	<200

DATE	2- CHLORO- PHENOL BOT.MAT (µG/KG) (34589)	2- NITRO- PHENOL BOT.MAT (µG/KG) (34594)	DI-N- OCTYL PHTHAL- ATE BOT.MAT (µG/KG) (34599)	2,4-DI- CHLORO- PHENOL BOT.MAT (µG/KG) (34604)	2,4-DP, IN BOT.MAT (µG/KG) (34609)	2,4-DI- NITRO- TOLUENE BOT.MAT (µG/KG) (34614)	2,4- DI- NITRO- PHENOL BOT.MAT (µG/KG) (34619)	2,4,6- TRI- CHLORO- PHENOL BOT.MAT (µG/KG) (34624)	2,6-DI- NITRO- TOLUENE BOT.MAT (µG/KG) (34629)	4- BROMO- PHENYL ETHER BOT.MAT (µG/KG) (34639)	4- CHLORO- PHENYL ETHER BOT.MAT (µG/KG) (34644)	4- NITRO- PHENOL BOT.MAT (µG/KG) (34649)
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CASS COUNTY

09-22-94	<200	<200	<400	<200	<200	<200	<600	<600	<200	<200	<200	<600
09-22-94	<200	<200	<400	<200	<200	<200	<600	<600	<200	<200	<200	<600
09-26-94	<200	<200	<400	<200	<200	<200	<600	<600	<200	<200	<200	<600
09-26-94	<200	<200	<400	<200	<200	<200	<600	<600	<200	<200	<200	<600
09-22-94	<200	<200	<400	<200	<200	<200	<600	<600	<200	<200	<200	<600

GAGE COUNTY

09-20-94	<200	<200	<400	<200	<200	<200	<600	<600	<200	<200	<200	<600
09-20-94	<200	<200	<400	<200	<200	<200	<600	<600	<200	<200	<200	<600
09-27-94	<200	<200	<400	<200	<200	<200	<600	<600	<200	<200	<200	<600
09-27-94	<200	<200	<400	<200	<200	<200	<600	<600	<200	<200	<200	<600
09-20-94	<200	<200	<400	<200	<200	<200	<600	<600	<200	<200	<200	<600

NEMAHA COUNTY

09-28-94	<200	<200	<400	<200	<200	<200	<600	<600	<200	<200	<200	<600
09-28-94	<200	<200	<400	<200	<200	<200	<600	<600	<200	<200	<200	<600

RICHARDSON COUNTY

09-21-94	<200	<200	<400	<200	<200	<200	<600	<600	<200	<200	<200	<600
09-21-94	<200	<200	<400	<200	<200	<200	<600	<600	<200	<200	<200	<600
09-21-94	<200	<200	<400	<200	<200	<200	<600	<600	<200	<200	<200	<600

YEAR OCTOBER 1993 TO SEPTEMBER 1994

Stream Over-bank and Bed Sediment Quality—Continued

DATE	4,6-DINITRO- ORTHO-CRESOL BOT.MAT (μG/KG) (34660)	PHENOL (C6H- 5OH) BOT.MAT (μG/KG) (34695)	PENTA- CHLORO- PHENOL BOT.MAT (μG/KG) (39061)	BIS(2- ETHYL HEXYL- PHTHAL- ATE BOT.MAT (μG/KG) (39102)	DI-N- BUTYL PHTHAL- ATE BOT.MAT (μG/KG) (39112)	PCN, TOTAL IN BOT- TOM MA- TERIAL (μG/KG) (39251)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (μG/KG) (39333)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (μG/KG) (39343)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (μG/KG) (39351)	DDD, TOTAL IN BOT- TOM MA- TERIAL (μG/KG) (39363)	DDE, TOTAL IN BOT- TOM MA- TERIAL (μG/KG) (39368)	DDT, TOTAL IN BOT- TOM MA- TERIAL (μG/KG) (39373)
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CASS COUNTY

09-22-94	<600	<200	<600	480	<200	<1.0	0.8	<0.2	120	5.3	0.6	2.8
09-22-94	<600	<200	<600	<200	<200	<1.0	<0.1	<0.1	<1.0	<0.1	<0.1	0.4
09-26-94	<600	<200	<600	<200	<200	<1.0	<0.1	<0.1	<1.0	<0.1	0.2	<0.1
09-26-94	<600	<200	<600	<200	<200	<1.0	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1
09-22-94	<600	<200	<600	<200	<200	<1.0	0.1	<0.1	<1.0	0.1	0.1	0.2

GAGE COUNTY

09-20-94	<600	<200	<600	<200	<200	<1.0	<0.1	<0.1	<1.0	0.2	0.2	0.2
09-20-94	<600	<200	<600	<200	<200	<1.0	<0.1	<0.1	<1.0	0.2	0.1	0.2
09-27-94	<600	<200	<600	<200	<200	<1.0	<0.1	<0.1	<1.0	0.1	0.2	<0.1
09-27-94	<600	<200	<600	<200	<200	<1.0	<0.1	<0.1	<1.0	<0.1	0.1	<0.1
09-20-94	<600	<200	<600	<200	<200	<1.0	<0.1	<0.1	1.0	0.3	0.1	0.1

NEMAHA COUNTY

09-28-94	<600	<200	<600	<200	<200	<1.0	0.1	<0.1	<1.0	<0.1	0.2	<0.1
09-28-94	<600	<200	<600	<200	<200	<1.0	<0.1	<0.1	<1.0	<0.1	0.2	<0.1

RICHARDSON COUNTY

09-21-94	<600	<200	<600	<200	<200	<1.0	<0.1	<0.1	<1.0	0.2	0.2	0.2
09-21-94	<600	<200	<600	<200	<200	<1.0	<0.1	<0.1	2.0	0.4	0.5	0.2
09-21-94	<600	<200	<600	<200	<200	<1.0	<0.1	<0.1	1.0	0.4	0.4	0.1

DATE	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (μG/KG) (39383)	ENDO- SULFAN, TOTAL IN BOT- TOM MA- TERIAL (μG/KG) (39389)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (μG/KG) (39393)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (μG/KG) (39403)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (μG/KG) (39413)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (μG/KG) (39423)	METH- OXY- CHLOR, TOT. IN BOTTOM MATL. (μG/KG) (39481)	PCB, TOTAL IN BOT- TOM MA- TERIAL (μG/KG) (39519)	HEXA- CHLORO- BENZENE TOT. IN BOT TOM MATL. (μG/KG) (39701)	HEXA- CHLORO- BUT- ADIENCE BOT.MAT (μG/KG) (39705)	MIREX, TOTAL IN BOT- TOM MA- TERIAL (μG/KG) (39758)	PER- THANE IN BOT- TOM MA- TERIAL (μG/KG) (81886)
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CASS COUNTY

09-22-94	38	<0.4	<1.2	<100	<0.7	0.8	<4.0	3	<200	<200	<0.1	<10.0
09-22-94	<0.4	<0.1	<0.1	<10	<0.1	<0.1	<0.4	<1	<200	<200	<0.1	<1.00
09-26-94	<0.4	<0.1	<0.1	<10	<0.1	<0.1	<0.8	<1	<200	<200	<0.1	<1.00
09-26-94	<0.4	<0.1	<0.1	<10	<0.1	<0.1	<0.8	<1	<200	<200	<0.1	<1.00
09-22-94	1.0	<0.1	<0.1	<10	<0.1	<0.1	<0.4	<1	<200	<200	<0.1	<1.00

GAGE COUNTY

09-20-94	0.4	<0.1	<0.1	<10	<0.1	<0.1	<0.4	1	<200	<200	<0.1	<1.00
09-20-94	0.4	<0.1	<0.1	<10	<0.1	<0.1	<0.4	1	<200	<200	<0.1	<1.00
09-27-94	<0.8	<0.1	<0.1	<10	<0.1	<0.1	<0.8	1	<200	<200	<0.1	<1.00
09-27-94	<0.8	<0.1	<0.1	<10	<0.1	<0.1	<0.8	<1	<200	<200	<0.1	<1.00
09-20-94	1.6	<0.1	<0.1	<10	<0.1	<0.1	<0.4	1	<200	<200	<0.1	<1.00

NEMAHA COUNTY

09-28-94	<0.8	<0.1	<0.1	<10	<0.1	<0.1	<0.8	<1	<200	<200	<0.1	<1.00
09-28-94	<0.8	<0.1	<0.1	<10	<0.1	<0.1	<0.8	<1	<200	<200	<0.1	<1.00

RICHARDSON COUNTY

09-21-94	0.6	<0.1	<0.1	<10	<0.1	<0.1	<0.4	1	<200	<200	<0.1	<1.00
09-21-94	1.0	<0.1	<0.1	<10	<0.1	<0.1	<0.4	1	<200	<200	<0.1	<1.00
09-21-94	1.4	<0.1	<0.1	<10	<0.1	0.1	<0.4	1	<200	<200	<0.1	<1.00

GROUND-WATER LEVELS

ADAMS COUNTY

403403098244001. Local number 7N 10W 23AB.

LOCATION.--Lat 40°34'03", long 98°24'40", NW1/4 NE1/4 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. Owner: Henry Fricke.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled unused irrigation water-table well, diameter 8 in, depth 155 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,927 ft. Measuring point: Top of casing 1.0 ft above land-surface datum.

REMARKS.--Large amounts of ground water are pumped from municipal and industrial wells located east and northeast of the well and from irrigation wells in other directions.

PERIOD OF RECORD.--August 1934 to October 1938; August 1948 to December 1950; January 1951 to September 1994 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 99.95 ft below land-surface datum, Jan. 22, 1935 lowest, 128.82 ft below land-surface datum, July 10, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	114.76	114.05	113.41	112.96	112.70	112.31	112.55	112.10	114.73	115.00	119.14	116.92
10	114.62	113.92	113.48	113.00	112.44	112.45	112.14	111.92	114.57	115.10	118.20	116.62
15	114.52	113.83	113.44	112.99	114.12	112.39	112.18	111.91	114.79	115.43	116.84	116.46
20	114.50	113.72	113.27	113.04	112.60	112.25	112.22	113.10	115.33	115.23	119.35	116.33
25	114.29	113.58	113.17	112.80	112.48	112.36	111.95	114.73	114.64	116.50	117.85	---
EOM	114.06	---	---	112.80	112.33	112.16	112.15	114.66	117.30	118.05	118.04	---

WTR YEAR 1994: MAX 111.77 MAY 08, 1994
MIN 119.35 AUG 20, 1994

BLAINE COUNTY

414958100061501. Local number 22N 24W 33CA.

LOCATION.--Lat 41°49'58", long 100°06'15", NE1/4 SW1/4 sec. 33, T. 22 N., R. 24 W., Hydrologic Unit 10210001, approximately 500 ft west of junction of State Highways 91 and 2 north of Dunning. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits, undifferentiated, of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1 in, depth 13 ft, screened 11 to 13 ft.

DATUM.--Altitude of land-surface datum is 2,618 ft. Measuring point: Top of casing 1.40 ft above land-surface datum.

PERIOD OF RECORD.--December 1934 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.04 ft below land-surface datum, Mar. 8, 1950 lowest, 6.97 ft below land-surface datum, Aug. 8, 1951.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03	3.80	DEC 22	3.45	May 25	4.98	Jul 06	4.63	Aug 10	4.46		

295

413323098074501. Local number 18N 7W 4CA.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.15 ft below land-surface datum, May 17, 1984; lowest, 15.17 ft below land-surface datum, Oct. 26, 1940.

WATER		WATER		WATER		WATER		WATER		WATER	
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
OCT 26	10.14	MAY 17	10.45								

420945102551501. Local number 25N 48W 4DDD.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 63.14 ft below land-surface datum, Jan. 25, 1950; lowest, 108.48 ft below land-surface datum, Mar. 31, 1993.

[illegible]

BROWN COUNTY

423307099494501. Local number 30N 21W 19CC.

LOCATION.--Lat 42°33'07", long 99°49'45", SW1/4 SW1/4 sec.19, T.30 N., R.21 W., Hydrologic Unit 10150004, 1.2 mi east of junction of U.S. Highway 20 and Route 7 in Ainsworth. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in, depth 52 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 2,511.44 ft. Measuring point: Top of casing 0.20 ft above land-surface datum.

REMARKS.--Water levels in well are affected by pumpage of ground water for irrigation and seepage losses from nearby irrigation project.

PERIOD OF RECORD.--November 1947 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 30.91 ft below land-surface datum, Nov. 3, 1988; lowest, 40.96 ft below land-surface datum, Sept. 7, 1965.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	33.25	32.95	32.81	32.77	32.91	33.09	33.21	33.34	33.47	33.59	33.37	32.92
10	33.17	32.89	32.80	32.85	32.95	33.12	33.25	33.36	33.52	33.60	33.17	32.79
15	33.09	32.87	32.79	32.86	33.00	33.13	33.27	33.38	33.51	33.56	33.03	32.73
20	33.08	32.84	32.78	32.92	33.04	33.13	33.27	33.40	33.54	33.56	32.96	32.66
25	33.01	32.82	32.79	32.89	33.10	33.17	33.21	33.45	33.49	33.55	32.95	32.59
EOM	32.94	32.79	32.79	32.94	33.07	33.17	33.32	33.50	33.56	33.37	33.01	32.53

WTR YEAR 1994: MAX 32.50 SEP 30, 1994
MIN 33.61 JUL 8, 1994

BUFFALO COUNTY

404618098504401. Local number 9N 14W 1DC.

LOCATION.--Lat 40°46'18", long 98°50'44", SW1/4 SE1/4 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, 15.36 ft below land-surface datum, June 11, 1952; lowest, 29.22 ft below land-surface datum, Aug. 10, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	18.87	18.60	18.28	18.03	17.85	17.69	17.65	17.46	17.18	18.11	18.75	18.60
10	18.92	18.49	18.25	18.16	17.86	17.62	17.61	17.43	17.15	18.28	18.32	18.42
15	18.72	18.53	18.23	18.13	17.93	17.67	17.65	17.39	17.02	18.33	18.18	18.27
20	18.74	18.40	18.14	18.14	17.92	17.65	17.59	17.30	16.94	18.86	18.06	18.21
25	18.66	18.34	18.17	17.97	17.95	17.77	17.34	17.25	16.85	19.34	18.92	18.13
EOM	18.63	18.26	18.07	18.06	17.81	17.61	17.61	17.30	18.23	19.04	18.97	18.01

WTR YEAR 1994: MAX 16.79 JUN 15, 1994
MIN 19.38 JUL 24, 1994

BUFFALO COUNTY

404345098560001. Local number 9N 14W 19DD.

LOCATION.--Lat 40°43'45", long 98°56'00", SE1/4 SE1/4 sec. 19, T.9 N., R.14 W., Hydrologic Unit 10200102, 4.7 mi west-southwest of Gibbon on U.S. Highway 30. Owner: Robert D. Lewis.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 24 in, depth 54 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 2,102.16 ft. Measuring point: Hole in pump base 0.70 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 LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	26.46	APR 19	25.82								

BUTLER COUNTY

411420097173002. Local number 15N 1E 27DD2.

LOCATION.--Lat 41°14'20", long 97°17'30", SE1/4 SE1/4 sec.27, T.15 N., R.1 E., Hydrologic Unit 10270201, 2 mi north of the northeast corner of Rising City. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 5 in, depth 210.0 ft, perforated 199 to 210 ft.

DATUM.--Altitude of land-surface datum is 1,618 ft. Measuring point: Top of platform, at land-surface datum.

REMARKS.--Replacement for 411420097173001, local number 15N-1E-27DD, period of record June 1958 to January 1977. Water levels in well affected by pumping from nearby wells during irrigation season.

PERIOD OF RECORD.--February 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 96.28 ft below land-surface datum, Apr. 26, 1994; lowest, 174.50 ft below land-surface datum, Aug. 3, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	100.46	98.23	97.54	97.21	97.00	96.80	96.60	96.53	98.56	---	---	---
10	99.65	98.18	97.45	97.24	96.97	96.88	96.62	96.33	97.55	---	---	---
15	99.38	97.84	97.31	97.74	96.96	96.77	96.44	96.39	96.94	---	116.50	---
20	99.18	97.83	97.36	97.24	96.83	96.60	96.60	98.18	102.53	---	131.41	---
25	98.90	97.74	97.30	97.05	96.81	96.70	96.42	100.26	101.12	---	---	---
EOM	98.53	97.65	97.35	97.08	96.90	96.79	96.58	100.50	102.47	120.70	125.87	---

WTR YEAR 1994: MAX 96.28 APR 26, 1994
MIN 133.47 AUG 26, 1994

GROUND-WATER LEVELS

CHASE COUNTY

403220101384001. Local number 7N 38W 28CC.

LOCATION.--Lat 40°32'20", long 101°38'40", SW1/4 SW1/4 sec.28, T.7 N., R.38 W., Hydrologic Unit 10250005, about 0.5 mi north of Imperial. Owner: Roy Hust.

AQUIFER.--Ogallala Formation of Pliocene age.

WELL CHARACTERISTICS.--Drilled unused observation water-table well, diameter 18 in, depth 143 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 3,284.6 ft. Measuring point: Top of casing 0.30 ft above land-surface datum.

REMARKS.--Recording gage was installed on this well from December 1948 to December 1963. Water levels in well are affected by irrigation pumpage in area.

PERIOD OF RECORD.--December 1944; December 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 72.82 ft below land-surface datum, June 29, 1964; lowest measured, 110.26 ft below land-surface datum, Oct. 15, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	107.56	MAR 09	105.89								

CHASE COUNTY

403235101395501. Local number 7N 38W 29CBB.

LOCATION.--Lat 40°32'35", long 101°39'55", NW1/4 NW1/4 SW1/4 sec.29, T.7 N., R.38 W., Hydrologic Unit 10250005, 0.5 mi north and 1 mi west of Imperial on U.S. Highway 6, then 0.5 mi north on gravel road. Owner: U.S. Geological Survey.

AQUIFER.--Ogallala Formation of Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 5.50 in, depth 230 ft, perforated 190 to 230 ft.

DATUM.--Altitude of land-surface datum is 3,290.30 ft. Measuring point: Top of casing 0.50 ft above land-surface datum.

REMARKS.--Water levels in well are affected by irrigation pumpage in area.

PERIOD OF RECORD.--June 1964 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 55.87 ft below land-surface datum, July 4, 1964; lowest, 97.48 ft below land-surface datum, Aug. 29, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	93.98	93.59	93.08	92.47	92.13	91.74	91.41	90.78	91.42	94.48	94.54	96.10
10	93.96	93.45	93.03	92.58	92.06	91.66	91.26	91.39	91.37	93.50	95.76	95.21
15	93.76	93.45	92.99	92.52	92.06	91.58	91.27	91.39	91.07	93.46	95.77	95.16
20	93.77	93.31	92.83	92.49	92.05	91.56	91.06	91.29	92.43	94.87	95.53	94.93
25	93.64	93.26	92.76	93.32	92.05	91.56	90.81	91.05	93.59	94.43	95.48	94.84
EOM	93.52	93.11	92.65	92.34	91.83	91.33	90.90	90.97	94.22	95.54	95.48	94.68

WTR YEAR 1994: MAX 90.75 APR. 25, 1994
MIN 96.31 AUG 24, 1994

GROUND-WATER LEVELS

299

CHERRY COUNTY

423205100321501. Local number 30N 28W 36AAA.

LOCATION.--Lat 42°32'05", long 100°32'15", NE1/4 NE1/4 NE1/4 sec. 36, T.30 N., R.28 W., Hydrologic Unit 10150004, 8 mi south of the intersection of U.S. Highway 83 and State Highway 483, south of Valentine. Owner: U.S. Geological Survey.

AQUIFER.--Sand deposits of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation water-table well, diameter 1.25 in, depth 12 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 LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05	0.97										

COLFAX COUNTY

412810097054501. Local number 17N 3E 4CC.

LOCATION.--Lat 41°28'10", long 97°05'45", SW1/4 SW1/4 sec.4, T.17 N., R.3 E., Hydrologic Unit 10200201, 2 mi west and 1 mi north of intersection of U.S. Highway 30 and State Highway 15 in Schuyler. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Driven observation water-table well, diameter 1.25 in, depth 16 ft, screened 14 to 16 ft.

DATUM.--Altitude of land-surface datum is 1,370.58 ft. Measuring point: Top of casing 1.00 ft above land-surface datum.

PERIOD OF RECORD.--September 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.15 ft below land-surface datum, Apr. 1, 1952; lowest, 10.68 ft below land-surface datum, Oct. 29, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	7.89	JAN 15	8.48	MAR 07	8.09						
DEC 12	8.04	FEB 10	8.69	APR 19	8.20						

DAWES COUNTY

424100103243501. Local number 31N 52W 3DC.

LOCATION.--Lat 42°41'00", long 103°24'35", SW1/4 SE1/4 sec.3, T.31 N., R.52 W., Hydrologic Unit 10140201, behind house at 312 Annin Street in Crawford. Owner: T. P. Moody.

AQUIFER.--Sand and gravel deposits, undifferentiated, of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in, depth 39 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 3,685 ft. Measuring point: Edge of iron plate 1.07 ft above land-surface datum.

PERIOD OF RECORD.--August 1934 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.87 ft below land-surface datum, May 30, 1948; lowest, 22.60 ft below land-surface datum, Nov. 5, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

WATER		WATER		WATER		WATER		WATER		WATER	
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
MAR 22	20.40										

DAWSON COUNTY

404949099445701. Local number 10N 21W 18DDD.

LOCATION.--Lat 40°49'49", long 99°44'57", SE1/4 SE1/4 SE1/4 sec. 18, T. 10 N., R. 21 W., Hydrologic Unit 10200101, 3.5 mi north of the intersection of Route 21 and U.S. Highway 30 in Lexington. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in, depth 120 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 2,420.58 ft. Measuring point: Top of casing 0.50 ft above land-surface datum.

REMARKS.--Water levels in well affected by pumpage from nearby irrigation wells and by seepage from irrigation canals.

PERIOD OF RECORD.--July 1964 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.20 ft below land-surface datum, July 24 and 25, 1993; lowest, 21.50 ft below land-surface datum, July 16, 1981.

**WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	8.21	9.12	9.56	9.97	10.34	10.35	10.50	10.07	9.42	8.67	8.24	8.43
10	8.43	9.19	9.62	10.09	10.39	10.27	10.58	10.04	9.22	8.46	7.62	8.65
15	8.53	9.31	9.66	10.16	10.47	10.29	10.51	10.06	9.04	7.84	8.20	8.95
20	8.72	9.35	9.74	10.23	10.51	10.30	10.38	10.06	9.14	7.83	8.63	9.13
25	8.88	9.46	9.85	10.24	10.58	10.35	10.18	9.79	9.20	8.08	8.11	9.30
EOM	8.97	9.47	9.90	10.32	10.56	10.40	10.18	9.62	10.02	8.57	8.32	9.49

WTR YEAR 1994: MAX 7.53 AUG 10, 1994
MIN 10.58 FEB 25-26, 1994

DUNDY COUNTY

400155101521302. Local number 1N 40W 29BB2.

LOCATION.--Lat 40°01'55", long 101°52'13", NW1/4 NW1/4 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. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits, undifferentiated, of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in, depth 48.8 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 3,205 ft. Measuring point: South side of casing 1.6 ft above land-surface datum.

REMARKS.--Replacement for well 400155101521301, local number 1N 40W 29BB1 with period of record from May 1946 to June 1975. Water levels in well are affected by pumping from nearby irrigation wells, evapotranspiration, and changes in stage of Republican River.

PERIOD OF RECORD.--October 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.41 ft below land-surface datum, June 21, 1984; lowest, 20.97 ft below land-surface datum, Sept. 13, 1976.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	18.45	17.69	17.35	17.12	16.93	16.73	16.58	16.46	17.36	18.05	18.70	19.61
10	18.17	17.63	17.31	17.09	16.90	16.70	16.55	16.43	17.45	17.89	18.82	19.82
15	18.03	17.57	17.27	17.06	16.86	16.67	16.54	16.40	17.47	17.75	19.08	19.86
20	17.94	17.51	17.23	17.03	16.81	16.65	16.52	16.70	17.64	17.87	19.26	20.09
25	17.85	17.46	17.20	16.99	16.79	16.65	16.48	16.98	17.70	18.15	19.46	19.69
EOM	17.75	17.40	17.16	16.97	16.76	16.60	16.48	17.17	17.92	18.33	19.72	20.04

WTR YEAR 1994: MAX 16.47 APR 25, 30, 1994
 MIN 20.09 SEP 19-20, 1994

FILLMORE COUNTY

402504097432201. Local number 5N 4W 12BDC.

LOCATION.--Lat 40°25'04", long 97°43'22", SW1/4 SE1/4 NW1/4 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. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 5 in, depth 260.0 ft, perforated 100 to 260 ft.

DATUM.--Altitude of land-surface datum is 1651 ft. Measuring point: Top of casing 1.5 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 September 1994 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 90.85 ft below land-surface datum, June 8, 1978; lowest, 101.53 ft below land-surface datum, Sept. 9, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	96.86	96.53	96.08	95.27	94.74	94.87	94.07	93.38	93.03	94.86	96.11	96.32
10	96.74	96.31	96.01	95.46	94.70	94.34	93.91	93.36	93.12	94.94	96.17	96.14
15	96.60	96.39	95.73	94.83	94.83	94.30	93.97	93.37	93.37	95.25	96.10	96.18
20	96.67	96.16	95.60	95.35	94.80	94.27	93.75	93.23	93.98	95.41	96.18	96.07
25	96.62	96.11	95.73	95.17	94.82	94.21	93.37	93.17	94.43	95.63	96.18	
EOM	96.35	95.97	95.30	94.98	94.98	94.50	93.86	93.53	94.77	95.90	96.36	

WTR YEAR 1994: MAX 92.63 JUN 12, 1994
 MIN 97.05 OCT 9, 1993

FILLMORE COUNTY

403800097300701. Local number 8N 2W 26AD.

LOCATION.--Lat 40°38'00", long 97°30'07", SE1/4 NE1/4 sec.26, T.8 N., R.2 W., Hydrologic Unit 10270203, 2.5 mi west on Route 6 from the principal street of Exeter, then 0.4 mi south. Owner: U.S. Geological Survey.

AQUIFER.--Loess of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in., depth 40 ft., perforated 25 to 40 ft.

DATUM.--Altitude of land-surface datum is 1,610 ft. Measuring point: Top of casing at land-surface datum.

REMARKS.--Perched aquifer, water levels affected by infiltration and deep percolation of applied irrigation water pumped from deeper aquifer.

PERIOD OF RECORD.--October 1956 to September 1994 (discontinued).

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 LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	3.26	3.11	3.80	4.24	4.86	3.28	4.75	4.16	4.25	4.54	5.09	4.50
10	2.08	3.42	3.87	4.42	4.98	3.80	4.88	3.04	4.48	4.35	5.14	5.12
15	2.06	3.36	3.87	4.57	4.92	4.02	4.57	3.03	4.60	4.52	5.24	5.59
20	2.03	3.42	3.74	4.73	5.36	4.10	4.26	3.38	4.84	3.66	5.49	6.03
25	2.21	3.62	3.93	4.75	5.12	4.45	4.27	3.64	4.73	4.26	5.79	---
EOM	2.80	3.82	4.15	4.86	4.97	4.67	4.35	4.08	4.93	4.77	6.12	---

WTR YEAR 1994:	MAX	1.95	OCT 11, 1993
	MIN	6.27	SEP 3, 1994

GARDEN COUNTY

414124102230101. Local number 20N 44W 22CB.

LOCATION.--Lat 41°41'24", long 102°23'01", NW1/4 SW1/4 sec.22, T.20 N., R.44 W., Hydrologic Unit 10180009, 5.8 mi southeast of refuge headquarters. Owner: Crescent Lake Migratory Bird Refuge.

AQUIFER.--Sand deposits of Pleistocene age.

WELL CHARACTERISTICS.--Driven observation water-table well, diameter 1.50 in, depth 22.1 ft below land-surface datum.

DATUM.--Altitude of land-surface datum is 3783.16 ft. Measuring point: Top of casing 1.61 ft above land-surface datum.

PERIOD OF RECORD.--August 1934-39; 1943 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.57 ft below land-surface datum, Oct. 7, 1934; lowest, 20.92 ft below land-surface datum, Mar. 27, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[illegible]

303

414718099083201. Local number 21N 16W 14CB.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.07 ft below land-surface datum, Oct. 13, 1983; lowest, 24.92 ft below land-surface datum, Oct. 28, 1959.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[illegible]

GOSPER COUNTY

403626099451401. Local number 7N 21W 6BC

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 35.04 ft below land-surface datum, Nov. 04, 1993; lowest, 117.80 ft below land-surface datum, Sept. 26, 1935.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[illegible]

HALL COUNTY

405315098304302. Local number 11N 11W 25CC2.

LOCATION.--Lat 40°53'15", long 98°30'43", SW1/4 SW1/4 sec.25, T.11 N., R.11 W., Hydrologic Unit 10200103, 1.0 mi north and 2.0 mi west of Alda. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in, depth 65 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,924.0 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

REMARKS.--Replacement for 405315098304301, local number 11N 11W 25CC, 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, 13.86 ft below land-surface datum, June 22, 1994; lowest, 25.98 ft below land-surface datum, Aug. 31, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	14.47	14.48	14.35	14.33	---	14.14	14.16	---	---	14.10	---	---
10	14.49	14.44	14.37	---	---	14.12	14.15	---	---	14.19	---	14.61
15	14.42	14.47	14.36	---	14.23	14.14	14.14	---	---	14.23	---	14.64
20	---	14.41	14.31	---	14.24	14.13	---	---	---	---	---	14.60
25	---	14.40	14.33	---	14.24	14.21	---	---	13.94	---	---	14.60
EOM	14.46	14.36	14.27	---	14.17	14.14	---	---	14.01	---	---	14.55

WTR YEAR 1994: MAX 14.02 MAR 23, 1994
MIN 14.66 SEP 17, 1994

HAMILTON COUNTY

404836097584101 Local number 10N 6W 27ACAA.

LOCATION.--Lat 40°48'36", long 97°58'41", SE1/4 NE1/4 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. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of the Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in, depth 170 ft, casing perforated below water-table.

DATUM.--Altitude of land surface datum is 1791.3 ft. Measuring point: Top of casing 1.5 ft above land surface datum.

REMARKS.--Replacement for well 404825097583301. Local number 10N-6W-26BC with period of record March 1956 to March 1982 located across the county road to the east.

PERIOD OF RECORD.--October 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 89.19 ft below land-surface datum, May 24, 1994; lowest, 107.40 ft below land-surface datum, Aug. 24, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	92.46	91.96	---	90.97	90.47	90.20	89.95	89.51	---	---	92.50	94.44
10	93.37	91.81	91.43	91.00	90.43	89.95	89.83	89.45	---	---	92.26	93.95
15	92.19	91.84	91.28	90.90	90.48	89.97	89.84	89.43	---	---	92.15	93.59
20	92.22	---	91.14	90.88	90.45	90.05	89.70	89.31	---	---	93.73	93.30
25	92.11	---	91.20	90.74	90.42	90.17	89.49	89.30	---	---	94.50	93.06
EOM	91.94	---	90.89	90.66	90.25	89.85	89.60	89.31	---	91.49	94.99	92.82

WTR YEAR 1994: MAX 89.14 MAY 28, 1994
MIN 94.99 AUG 31, 1994

HAMILTON COUNTY

405514097573901. Local number 11N 6W 13CB

LOCATION.--Lat 40°55'14", long 97°57'39", NW1/4 SW1/4 sec.13, T.11 N., R.6 W., Hydrologic Unit 10270201, 2 mi east and 3.5 mi north of Aurora. Owner: O. S. Swedberg.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 24 in, depth 194 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,812.2 ft. Measuring point: Hole in south side turbine base at land-surface datum.

REMARKS.--Water levels affected by pumping during irrigation season.

PERIOD OF RECORD.--September 1934 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 90.04 ft below land-surface datum, Sept. 29, 1934; lowest, 117.18 ft below land-surface datum, Nov. 15, 1976.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

WATER		WATER		WATER		WATER		WATER		WATER	
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
NOV 08	95.07	APR 25	91.07								

HARLAN COUNTY

400920099215501. Local number 2N 18W 9BCC.

LOCATION.--Lat 40°09'20", long 99°21'55", SW1/4 SW1/4 NW1/4 sec. 9, T.2 N., R.18 W., Hydrologic Unit 10250009, 3.5 mi north of the junction of Route 3 and U.S. Highway 183 in Alma. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 5.50 in, depth 170 ft, perforated from 140 to 170 ft.

DATUM.--Altitude of land-surface datum is 2,120 ft. Measuring point: Top of casing 0.50 ft above land-surface datum.

REMARKS.--Water levels affected by pumping from nearby wells during irrigation season.

PERIOD OF RECORD.--June 1964 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 84.39 ft below land-surface datum, May 11, 1966; lowest, 109.96 ft below land-surface datum, Sept. 15, 1974.

**WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	90.78	90.54	90.17	89.86	89.68	89.49	89.42	89.15	89.22	91.91	98.03	---
10	90.82	90.43	90.17	89.94	89.70	89.49	89.34	89.16	91.27	90.43	94.57	92.02
15	90.57	90.43	90.12	89.92	89.73	89.50	89.40	89.19	91.19	91.10	97.82	91.00
20	90.65	90.32	90.00	89.94	89.75	89.50	89.33	89.12	98.09	90.11	100.97	90.85
25	90.56	90.32	90.01	89.79	89.75	89.60	89.04	89.10	90.53	98.94	98.90	90.74
EOM	90.50	90.19	89.88	89.86	89.57	89.36	89.28	89.19	99.41	98.26	---	90.63

WTR YEAR 1994: MAX 89.03 JUN 5, 1994
MIN 100.98 AUG 21, 1994

HOLT COUNTY

421605098203001. Local number 27N 9W 34DA.

LOCATION.--Lat 42°16'05", long 98°20'30", NE1/4 SE1/4 sec.34, T.27 N., R.9 W., Hydrologic Unit 10220001, 0.5 mi north of Ewing. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1 in, depth 17 ft, screened 15 to 17 ft.

DATUM.--Altitude of land-surface datum is 1,841 ft. Measuring point: Top of casing 1.10 ft above land-surface datum.

PERIOD OF RECORD.--December 1934 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.34 ft below land-surface datum, Apr. 9, 1984; lowest, 9.90 ft below land-surface datum, Sept. 1, 1948.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

WATER		WATER		WATER		WATER		WATER		WATER	
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
OCT 05	7.90	DEC 07	6.90	FEB 01	7.29	APR 14	6.65	JUL 21	6.78		
NOV 10	7.93	JAN 04	7.58	MAR 03	7.03	JUN 08	7.68				

HOLT COUNTY

423148098300601. Local number 30N 10W 32DAA.

LOCATION.--Lat 42°31'48", long 98°30'06", NE1/4 NE1/4 SE1/4 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. Owner: William J. Murphy.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in, depth 85 ft, perforated 25.5 to 85 ft.

DATUM.--Altitude of land-surface datum is 1,952 ft. Measuring point: Top of casing 1.00 ft above land-surface datum.

REMARKS.--Water levels in this well affected by withdrawals by nearby irrigation wells completed in this aquifer and withdrawals from a deeper aquifer which has resulted in water movement from the upper aquifer to the deeper aquifer.

PERIOD OF RECORD.--October 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest 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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	48.81	48.41	48.08	47.77	47.53	47.34	47.13	46.89	46.91	46.99	47.20	47.62
10	48.73	48.33	48.04	47.76	47.50	47.31	47.08	46.87	46.93	46.99	47.30	47.60
15	48.64	48.30	47.98	47.72	47.50	47.27	47.04	46.87	46.89	46.97	47.32	47.60
20	48.59	48.22	47.90	47.70	47.49	47.22	47.01	46.88	46.96	46.94	47.40	47.59
25	48.52	48.16	47.90	47.63	47.45	47.23	46.92	46.92	46.95	47.02	47.48	47.61
EOM	48.44	48.10	47.81	47.59	47.38	47.13	46.98	46.97	46.94	47.08	47.60	47.56

WTR YEAR 1994: MAX 46.81 MAY 13, 1994
MIN 48.87 OCT 1, 1993

HOLT COUNTY

423730098560001. Local number 31N 14W 27DDD

LOCATION.--Lat 42°37'30", long 98°56'00", SE1/4 SE1/4 SE1/4 sec.27, T.31 N., R.14 W., Hydrologic Unit 10150007, 6 mi north from Atkinson on Route 11, then 2 mi east. Owner: Elmer Goldfuss.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in, depth 72 ft, perforated 32 to 72 ft.

DATUM.--Altitude of land-surface datum is 2,080 ft. Measuring point: Top of casing at land-surface datum.

REMARKS.--Water levels in well affected by pumping of nearby wells during irrigation season.

PERIOD OF RECORD.--July 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 30.91 ft below land-surface datum, July 7, 1966; lowest, 43.30 ft below land-surface datum, Sept. 10, 1976.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	34.03	33.25	32.79	32.54	32.36	32.23	32.07	32.00	32.32	32.77	34.22	34.47
10	33.88	33.15	32.77	32.52	32.34	32.17	32.06	32.07	32.35	32.74	34.27	34.30
15	33.71	33.09	32.74	32.51	32.35	32.14	32.03	32.07	32.40	32.94	34.15	34.18
20	33.57	33.01	32.64	32.50	32.37	32.10	32.05	32.10	32.58	33.11	34.41	33.99
25	33.44	32.94	32.63	32.42	32.34	32.15	31.96	32.18	32.51	33.39	34.63	33.78
EOM	33.34	32.87	32.57	32.43	32.29	32.10	32.07	32.33	32.66	33.78	34.65	33.54

WTR YEAR 1994: MAX 31.93 APR 26, 1994
MIN 34.65 AUG 26-28, 30-31, SEP 1, 1994

KEARNEY COUNTY

402625098594501. Local number 6N 15W 34DC.

LOCATION.--Lat 40°26'25", long 98°59'45", SW1/4 SE1/4 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. Owner: Conservation and Survey Division, University of Nebraska-Lincoln.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in, depth 210 ft, cased with steel, perforated 190 to 210 ft.

DATUM.--Altitude of land-surface datum is 2,210 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 August 1994 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 67.38 ft below land-surface datum, June 14, 1994; lowest, 119.05 ft below land-surface datum, July 25, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	71.97	71.11	70.33	69.79	69.25	69.08	68.48	68.31	68.97	71.14		
10	71.96	71.03	70.50	69.83	69.25	69.21	68.42	68.22	67.94	69.52		
15	71.42	70.97	70.27	69.86	69.30	68.86	68.36	68.28	67.53	70.20		
20	71.53	70.78	70.14	69.86	69.18	68.63	68.43	67.99	77.66	68.90		
25	71.28	70.79	70.11	69.45	69.24	68.87	67.79	68.38	68.01	79.31		
EOM	71.25	70.55	69.94	69.65	68.95	68.76	68.40	67.92	80.32	97.04		

WTR YEAR 1994: MAX 67.38 JUN 14, 1994
MIN 104.66 AUG 2, 1994

403354098553702. Local number 7N 14W 20BA2.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 56.27 ft below land-surface datum, Oct. 2, 1987; lowest, 61.33 ft below land surface datum, Oct. 8, 1992.

[illegible]

411416103361101. Local number 15N 55W 26CCC.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.82 ft below land-surface datum, Jan. 2, 1936; lowest, 54.07 ft below land-surface datum, Oct. 18, 1977.

[illegible]

309

403929096401001. Local number 8N 7E 18DDB.

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.

[illegible]

403833096385501. Local number 8N 7E 20DDA.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, .16 ft below land-surface datum, Mar. 27, 1960; lowest, 12.28 ft below land-surface datum, Oct. 17, 1979.

[illegible]

404706096413001. Local number 10N 6E 36CDD.

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		WATER		WATER		WATER		WATER		WATER	
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
OCT 12	48.68	MAY 24	48.10								

414058103054001. Local number 20N 50W 28BBC.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.88 ft below land-surface datum, May 10, 1983; lowest, 15.95 ft below land-surface datum, Mar. 25, 1992.

WATER		WATER		WATER		WATER		WATER		WATER	
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
NOV 08	15.30	MAR 07	15.64								

GROUND-WATER LEVELS

311

NUCKOLLS COUNTY

400240098111301. Local number 1N 8W 23AB

LOCATION.--Lat 40°02'40", long 98°11'13", NW1/4 NE1/4 sec.23, T.1 N., R.8 W., Hydrologic Unit 10250016, 0.5 mi south and 0.5 mi west of Bostwick. Owner: U.S. Geological Survey.

AQUIFER.--Loess of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in, depth 18 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,598.15 ft. Measuring point: Top of casing 1.50 ft above land-surface datum.

PERIOD OF RECORD.--April 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.02 ft below land-surface datum, July 29, 1951; lowest, 7.91 ft below land-surface datum, July 8-9, 1950.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	3.63	MAY 18	4.30								

PHELPS COUNTY

403123099261501. Local number 6N 19W 2AA.

LOCATION.--Lat 40°31'23", long 99°26'15", NE1/4 NE1/4 sec.2, T.6 N., R.19 W., Hydrologic Unit 10200101, 10 mi east of Bertrand. Owner: Central Nebraska Public Power and Irrigation District.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1 in, depth 151 ft, screened 149 to 151 ft.

DATUM.--Altitude of land-surface datum is 2,360.81 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, 37.86 ft below land-surface datum, Oct. 13, 1989; lowest, 123.70 ft below land-surface datum, Mar. 9, 1945.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	41.10	NOV 04	36.55	MAR 14	39.64						

GROUND-WATER LEVELS

PLATTE COUNTY

412955097192001. Local number 18N 1E 28CD.

LOCATION.--Lat 41°29'55", long 97°19'20", SE1/4 SW1/4 sec.28, T.18 N., R.1 E., Hydrologic Unit 10200201, 3 mi south and 8.5 mi east of Platte Center. Owner: Loup River Public Power District.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2 in, depth 99 ft, screened 97 to 99 ft.

DATUM.--Altitude of land-surface datum is 1,511.8 ft. Measuring point: Top of casing 0.50 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, 60.30 ft below land-surface datum, Mar. 27, 1940; lowest, 72.81 ft below land-surface datum, Oct. 9, 1958.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	66.80										

SALINE COUNTY

403855097072501. Local number 8N 3E 19ADA.

LOCATION.--Lat 40°38'55", long 97°07'25", NE1/4 SE1/4 NE1/4 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. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 5 in, depth 151 ft, perforated 142 to 151 ft.

DATUM.--Altitude of land-surface datum is 1,496 ft. Measuring point: Top of casing at land-surface datum.

REMARKS.--Water levels in well affected by pumping of nearby wells during irrigation season.

PERIOD OF RECORD.--October 1959 to September 1994 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 93.32 ft below land-surface datum, May 31, 1988; lowest, 107.15 ft below land-surface datum, Aug. 25, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	99.60	99.55	98.87	98.53	98.14	97.75	97.61	97.20	96.77	99.25	---	98.95
10	99.90	99.44	99.21	98.63	98.24	97.88	97.60	97.29	97.10	99.01	---	98.69
15	99.37	99.55	99.01	98.80	98.28	97.77	97.65	97.20	96.92	98.76	---	98.50
20	99.64	99.22	98.76	98.74	98.36	97.68	97.68	97.10	98.04	98.48	99.24	
25	99.34	99.33	98.83	98.35	98.35	98.15	96.85	96.90	98.14	98.58	99.14	
EOM	99.55	99.19	98.49	99.22	97.94	97.77	97.65	97.25	99.58	---	99.15	

WTR YEAR 1994: MAX 96.54 JUN 12, 1994
MIN 99.91 OCT 9, 1993

SARPY COUNTY

410233096181801. Local number 12N 10E 4BADB.

LOCATION.--Lat 41°02'33", long 96°18'18", NW1/4 SE1/4 NE1/4 NW1/4 sec. 4, T.12N., R.10 E., Hydrologic Unit 100200202, approximately 600 ft from left bank of Platte River 2.5 mi northeast of Ashland and approximately 1.5 mi south and .7 mi east of U.S. Highway 6 and Linoma Beach road. owner: City of Lincoln, NE.

AQUIFER.--Alluvial sand and gravel deposits of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth ft, screened to ft., casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1052 ft. Measuring point: Top of casing 2.80 ft. above land-surface datum.

REMARKS.--Water levels in well affected by Platte River stage.

PERIOD OF RECORD.--August 1988 to December 1992 (recorder destroyed).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.60 ft below land-surface datum, Jun 7, 1991 ; lowest, 5.78 ft below land-surface datum, Sept. 3, 6, 1991.

SARPY COUNTY

410308096190701. Local number 13N 10E 32DBBA.

LOCATION.--Lat 41°03'08", long 96°19'07", NE1/4 NW1/4 NW1/4 SE1/4 sec.32, T.13N., R.10 E., Hydrologic Unit 10200202, 0.5 mi south of northern end of Platte River Island 2.5 mi northeast of Ashland and approximately 1 mi south of U.S. Highway 6 and Linoma Beach Road. Owner: City of Lincoln, NE.

AQUIFER.--Alluvial sand and gravel deposits of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 83 ft, screened 43 to 83 ft., casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1056.4 ft. Measuring point: Top of casing 4.40 ft above land-surface datum.

REMARKS.--Water levels in well affected by Platte River stages.

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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	3.66	7.70	3.16	3.56	2.46	2.34	3.89	3.59	4.42	3.88	4.06	4.40
10	3.61	7.39	3.31	2.24	2.53	2.57	3.91	3.72	4.37	3.31	4.05	4.11
15	3.66	6.42	6.43	1.98	2.73	3.26	3.18	4.02	4.00	2.53	4.16	4.36
20	4.03	3.88	3.35	2.98	2.64	3.39	3.59	4.23	4.39	3.26	4.37	4.46
25	4.68	4.25	3.82	2.75	3.37	3.51	3.94	4.45	3.35	3.80	4.53	3.92
EOM	6.37	4.51	3.96	2.51	3.85	3.72	3.66	4.46	4.24	4.10	4.60	4.27

WTR YEAR 1994: MAX 0.91 MAR 6, 1994
MIN 7.70 NOV 4-5, 1993

SAUNDERS COUNTY

410558096210601. Local number 13N 9E 13ADBA

LOCATION.--Lat 41°05'58", long 96°21'06", NE1/4 NW1/4 SE1/4 NE1/4 sec.13, T.13 N., R.9E., Hydrologic Unit 10200202, approximately 3.75 mi north and .85 mi east of Ashland. Owner: City of Lincoln.

AQUIFER.--Alluvial sand and gravel deposits of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in, depth 91 ft., screened 80 to 91 ft., casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,075 ft. Measuring point: Top of casing 4.40 ft above land-surface datum.

REMARKS.--Well drilled June 1990. Starting in April 1991, recorder instrument set to read depth below measuring point.

PERIOD OF RECORD.--August 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.77 ft below land-surface datum, Mar 13, 1993; lowest, 14.39 ft below land-surface datum, Oct. 1, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	11.33	11.89	12.23	12.44	12.69	12.10	12.45	12.70	12.31	12.12	---	---
10	11.48	12.00	12.29	12.52	12.71	12.13	12.57	12.71	12.20	11.97	---	---
15	11.57	12.04	12.34	12.55	12.73	12.22	12.60	12.73	12.43	12.06	---	---
20	11.54	12.06	12.30	12.60	12.38	12.22	12.64	12.61	12.46	12.10	---	---
25	11.61	12.14	12.33	12.62	12.12	12.23	12.64	12.70	12.22	12.34	---	---
EOM	11.77	12.22	12.39	12.65	12.10	12.37	12.70	12.81	12.36	---	---	---

WTR YEAR 1994: MAX 11.04 OCT 1, 1993

MIN 12.82 JUN 1, 1994

SAUNDERS COUNTY

410426096220401. Local number 13N 9E 24CC

LOCATION.--Lat 41°04'26", long 96°22'04", SW1/4 SW1/4 sec.24, T.13 N., R.9 E., Hydrologic Unit 10200202, 2 mi north of Ashland. Owner: City of Lincoln.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1.25 in, depth 12 ft, screened 10 to 12 ft., casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,065.22 ft. Measuring point: Top of casing 4.50 ft above land-surface datum.

REMARKS.--Water levels affected by pumping of nearby wells in City of Lincoln well field and high water in the Platte River.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, +0.30 ft above land-surface datum, Apr. 25, 1985; lowest, 9.65 ft below land-surface datum, Oct. 18, 1976.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	2.30	DEC 25	3.28	FEB 25	4.54	APR 25	4.41	JUN 25	1.84	AUG 25	5.28
NOV 25	3.28	JAN 25	4.41	MAR 25	3.90	MAY 25	4.73	JUL 25	4.22	SEP 25	5.41

SAUNDERS COUNTY

410428096211001. Local number 13N 9E 24DDCC.

LOCATION.--Lat 41°04'28", long 96°21'10", SW1/4 SW1/4 SE1/4 SE1/4 sec.24, T.13 N., R.9E., Hydrologic Unit 10200202, 2 mi north on Highway 63 and .8 mi east of Ashland. Owner: City of Lincoln.

AQUIFER.--Alluvial sand and gravel deposits of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in, depth 55 ft., screened 45 to 55 ft., casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,064 ft. Measuring point: Top of casing 4.5 ft above land-surface datum.

REMARKS.--Water levels affected by nearby pumping of municipal wells. 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, +4.20 ft above land-surface datum, Mar 12, 1993; lowest, 18.61 ft below land-surface datum, Oct. 15, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	---	2.87	3.24	3.72	---	3.77	4.26	4.31	4.04	3.21	3.99	4.40
10	---	3.01	3.38	3.87	---	3.88	4.25	4.43	3.93	3.33	4.00	4.46
15	---	3.10	3.50	3.92	---	3.99	4.30	4.44	4.23	3.51	4.19	4.63
20	---	2.97	3.55	4.03	---	3.58	4.47	4.64	4.04	3.50	4.28	4.94
25	---	3.11	3.55	4.07	---	3.67	---	4.59	3.40	3.82	4.57	4.86
EOM	---	3.25	3.66	4.11	---	4.07	4.28	4.75	3.61	4.00	4.50	4.99

WTR YEAR 1994: MAX 3.03 JUL 6, 1994
MIN 5.00 SEP 28, 1993

SAUNDERS COUNTY

410334096211601. Local number 13N 9E 36ABAA.

LOCATION.--Lat 41°03'34", long 96°21'16", NE1/4 NE1/4 NW1/4 NE1/4 sec.36, T.13 N., R.9E., Hydrologic Unit 10200202, 1 mi north and .65 mi east of Ashland. Owner: City of Lincoln.

AQUIFER.--Alluvial sand and gravel deposits of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in, depth 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 passage of trains on nearby railroad track. 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, +2.55 ft. above land-surface datum, Jul 23, 1993; lowest, 21.40 ft below land-surface datum, Oct. 30, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	4.01	5.64	7.42	8.70	9.24	10.37	9.79	10.96	9.98	9.32	12.06	12.70
10	4.72	5.94	7.75	9.06	9.45	10.23	10.12	11.31	9.20	9.67	12.04	12.89
15	4.79	6.32	7.99	9.16	10.25	9.74	10.09	11.33	10.17	10.17	11.87	13.06
20	4.41	6.99	8.15	9.24	9.98	9.81	10.37	11.70	10.22	10.34	12.10	13.20
25	5.56	6.91	8.50	9.10	10.13	10.07	10.33	11.92	8.73	10.60	12.32	13.28
EOM	5.28	7.13	8.55	9.34	10.52	9.77	10.95	12.09	9.70	11.76	12.61	13.35

WTR YEAR 1994: MAX 3.36 OCT 1, 1993
MIN 13.41 SEP 28, 1994

GROUND-WATER LEVELS

SAUNDERS COUNTY

410527096203201. Local number 13N 10E 18CDBD.

LOCATION.--Lat 41°05'27", long 96°20'32", SE1/4 NW1/4 SE1/4SW1/4 sec.18, T.13 N., R.10E., Hydrologic Unit 10200202, 3.15 mi north and 1.3 mi east of Ashland. Northern end of city's north well field. Located on Nebraska National Guard camp approximately 600 ft from right bank of Platte River. Owner: City of Lincoln.

AQUIFER.--Alluvial sand and gravel deposits of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in, depth 56 ft., screened 45 to 56 ft., casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,065 ft. Measuring point: Top of casing 4.0 ft above land-surface datum.

REMARKS.--Water levels affected by nearby pumping and Platte River stage. 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, +1.15 ft above land-surface datum, Mar. 10, 1993; lowest, 10.93 ft below land-surface datum, Sept. 10 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	7.18	7.04	6.51	6.49	6.25	5.48	6.94	7.12	7.67	7.00	7.43	7.46
10	7.30	7.01	6.66	6.04	5.73	5.66	6.82	6.91	7.56	6.43	7.12	7.17
15	6.56	6.90	6.61	5.76	6.41	6.27	6.35	6.91	7.24	6.11	7.51	7.22
20	6.37	6.38	6.43	6.18	4.60	6.07	6.60	7.03	7.58	6.54	7.82	7.72
25	6.82	6.65	7.28	6.26	5.90	6.09	6.86	7.53	6.66	7.01	7.78	7.40
EOM	6.92	7.23	6.87	5.64	6.32	6.67	7.13	7.70	7.35	7.47	7.80	7.42

WTR YEAR 1994: MAX 3.64 MAR 6, 1994
MIN 7.82 AUG 20, 1994

SAUNDERS COUNTY

410427096202501. Local number 13N 10E 19CDDD.

LOCATION.--Lat 41°04'27", long 96°20'25", SE1/4 SE1/4 SE1/4 SW1/4 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. Owner: City of Lincoln.

AQUIFER.--Alluvial sand and gravel deposits of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in, depth 56 ft., screened 45 to 56 ft., casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,065 ft. Measuring point: Top of casing 4.0 ft above land-surface datum.

REMARKS.--Water levels affected by Platte River stage. Starting in April 1991, recorder instrument set to read depth below measuring point. GOES system installed in September 1992.

PERIOD OF RECORD.--August 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, +0.18 ft above land-surface datum, July 10, 1993; lowest, 17.38 ft below land-surface datum, Oct. 27, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	9.35	JAN 31	10.75	MAR 22	11.13	MAY 20	12.49	JUL 27	11.23		
NOV 23	10.00	FEB 16	10.94	APR 25	12.39	JUN 15	12.58	SEP 20	12.22		
DEC 21	10.70	FEB 28	11.48	MAY 19	12.86	JUL 14	10.64				

SAUNDERS COUNTY

410340096202201. Local number 13N 10E 30CDDA.

LOCATION.--Lat 41°03'40", long 96°20'22", NE1/4 SE1/4 SE1/4 SW1/4 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. Owner: City of Lincoln.

AQUIFER.--Alluvial sand and gravel deposits of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in, depth 70 ft., screened 55 to 70 ft., casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,059 ft. Measuring point: Top of casing 4.1 ft above land-surface datum.

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.

PERIOD OF RECORD.--August 1990 to current 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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 23	10.97	JAN 21	10.85	FEB 28	9.45	APR 25	15.17	JUN 15	17.20	JUL 27	16.21
DEC 21	11.34	JAN 31	11.72	MAR 22	10.23	MAY 18	14.27	JUN 17	18.16	SEP 20	16.44

SAUNDERS COUNTY

410401096195201. Local number 13N 10E 30DAAB.

LOCATION.--Lat 41°04'01", long 96°19'52", NW1/4 NE1/4 NE1/4 SE1/4 sec.30, T.13 N., R.10E., Hydrologic Unit 10200202, 1.5 mi north and 1.9 mi east of Ashland. Near Administration building for Nebraska National Guard camp, approximately 75 ft from right bank of Platte River. Owner: City of Lincoln.

AQUIFER.--Alluvial sand and gravel deposits of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in, depth 71 ft., screened 60 to 71 ft., casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,060 ft. Measuring point: Top of casing 3.6 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.

PERIOD OF RECORD.--August 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.72 ft below land-surface datum, July 24-25, 1993; lowest, 11.92 ft below land-surface datum, Sep 6, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	8.01	8.28	8.03	8.51	---	---	8.86	8.70	9.57	8.98	9.21	---
10	7.92	8.39	8.14	7.32	---	---	9.06	8.91	9.46	8.17	9.11	---
15	7.85	8.29	8.28	6.72	---	---	8.21	9.29	9.15	7.34	---	---
20	7.76	8.20	8.33	8.45	---	---	8.64	9.43	9.55	8.19	---	---
25	7.97	9.12	8.82	7.33	---	---	---	9.57	8.23	8.99	---	---
EOM	8.03	9.63	8.97	7.06	---	---	8.66	9.68	9.36	9.42	---	---

WTR YEAR 1994: MAX 6.55 JAN 15, 1994
MIN 9.82 NOV 28-29, 1994

SAUNDERS COUNTY

410314096201101. Local number 13N 10E 31ACDB.

LOCATION.--Lat 41°03'14", long 96°20'11", NW1/4 SE1/4 SW1/4 NE1/4 sec.31, T.13 N., R.10E., Hydrologic Unit 10200203, 1.4 mi northeast of Ashland north of U.S. Highway 6. Owner: City of Lincoln.

AQUIFER.--Alluvial sand and gravel deposits of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in, depth 49 ft., screened 35 to 49 ft., casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,060 ft. Measuring point: Top of casing 5.9 ft (April 1994) above land-surface datum.

REMARKS.--Starting in April 1991, recorder instrument set to read depth below measuring point.

PERIOD OF RECORD.--November 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, +0.86 ft above land-surface datum, Mar 12, 1993; lowest, 20.37 ft below land-surface datum, Oct 10, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

WATER		WATER		WATER		WATER		WATER		WATER	
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
OCT 28	13.77	DEC 21	14.20	FEB 28	12.33	APR 25	14.42	JUN 15	15.30	SEP 20	15.92
NOV 23	14.63	JAN 31	11.56	MAR 22	11.40	MAY 19	13.86	AUG 11	14.58		

SAUNDERS COUNTY

410303096192901. Local number 13N 10E 32CABC.

LOCATION.--Lat 41°03'03", long 96°19'29", SW1/4 NW1/4 NE1/4 SW1/4 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. Owner: City of Lincoln.

AQUIFER.--Alluvial sand and gravel deposits of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in, depth 86 ft., screened 51 to 86 ft., casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,056 ft. Measuring point: Top of casing 3.60 ft above land-surface datum.

REMARKS.--Water levels affected by nearby pumping of municipal wells and Platte River stage. Starting in April 1991, recorder instrument set to read depth below measuring point. GOES unit installed in September 1992.

PERIOD OF RECORD.--December 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.18 ft below land-surface datum, July 25, 1993; lowest, 11.81 ft below land-surface datum, Oct 23, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	6.46	6.54	6.64	---	---	---	---	---	8.82	7.41	---	7.95
10	6.55	6.60	6.45	---	---	5.80	---	---	7.91	6.64	7.98	7.75
15	6.41	6.56	6.36	---	---	6.22	---	7.58	8.06	---	8.15	8.87
20	6.23	6.62	6.36	---	---	---	---	8.44	---	---	8.55	8.33
25	6.35	6.68	---	---	---	---	---	7.86	7.70	---	8.81	7.86
EOM	6.53	7.65	---	---	---	---	---	8.81	8.33	---	8.86	7.81

WTR YEAR 1994: MAX 5.70 MAR 10, 1994
MIN 8.94 SEP 16, 1994

SAUNDERS COUNTY

410307096193801. Local number 13N 10E 32CBAB.

LOCATION.--Lat 41°03'07", long 96°19'38", NW1/4 NE1/4 NW1/4 SW1/4 sec.32, T.13 N., R.10E., Hydrologic Unit 10200202, 2.0 mi northeast of Ashland on highway 6 and 0.5 mi south of highway 6 entrance to City of Lincoln southern well field. Southern end of well field. Owner: City of Lincoln.

AQUIFER.--Alluvial sand and gravel deposits of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in, depth 46 ft., screened 11 to 46 ft., casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,060 ft. Measuring point: Top of casing 3.8 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.

PERIOD OF RECORD.--November 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, +2.83 ft above land-surface datum, July 24 and 25, 1993; lowest, 13.97 ft below land-surface datum, Sep 7, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	5.82	5.78	5.82	6.02	4.61	6.36	6.70	7.09	8.59	7.41	7.11	8.12
10	6.04	5.84	5.15	5.33	5.05	4.37	6.93	7.15	7.44	5.80	6.84	8.05
15	5.74	6.13	4.97	4.84	4.62	5.33	6.54	6.83	7.96	5.09	7.43	9.18
20	5.07	6.17	5.08	4.97	3.86	6.12	7.02	7.07	8.87	6.47	8.17	9.09
25	5.23	6.10	6.44	4.71	5.47	6.30	7.01	7.35	7.30	7.19	8.82	8.40
EOM	5.72	6.68	7.18	4.72	6.17	6.27	7.29	8.45	8.03	7.73	8.50	7.89

WTR YEAR 1994: MAX 3.54 FEB 20, 1994
MIN 9.25 SEP 16, 1994

SAUNDERS COUNTY

411005096281502. Local number 14N 8E 24ACD2.

LOCATION.--Lat 41°10'05", long 96°28'15", SE1/4 SW1/4 NE1/4 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. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in, depth 80 ft, screened 60 to 80 ft.

DATUM.--Altitude of land-surface datum is 1,171 ft. Measuring point: Top of casing 0.5 ft above land-surface datum.

REMARKS.--Replacement for well 411005096281501, local number 14N-8E-24ACD1, with period of record July 1964 to November 1970. Water levels in well affected by pumping of nearby wells during irrigation season.

PERIOD OF RECORD.--April 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 39.26 ft below land-surface datum, Apr. 4, 1988; lowest, 46.98 ft below land-surface datum, Sept. 25, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	41.70	41.53	41.37	41.25	41.16	41.16	41.20	41.24	41.34	41.28	41.36	41.61
10	41.70	41.49	41.37	41.29	41.19	41.20	41.20	41.23	41.32	41.24	41.41	41.60
15	41.61	41.53	41.33	41.27	41.21	41.16	41.19	41.21	41.29	41.20	41.41	41.56
20	41.60	41.47	41.29	41.26	41.22	41.17	41.24	41.24	41.39	41.21	41.44	41.54
25	41.56	41.44	41.33	41.21	41.23	41.23	41.14	41.23	41.30	41.25	41.56	41.55
EOM	41.56	41.43	41.25	41.25	41.18	41.22	41.25	41.29	41.26	41.31	41.60	41.47

WTR YEAR 1994: MAX 41.10 APR 04, 1994
MIN 41.72 OCT 09, 1993

SCOTTS BLUFF COUNTY

415325103392801. Local number 22N 55W 11DDC.

LOCATION.--Lat 41°53'25", long 103°39'28", SW1/4 NE1/4 NE1/4 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. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits, undifferentiated, of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in, depth 32 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 3,953 ft. Measuring point: Top of casing 0.00 ft above land-surface datum.

REMARKS.--Recorder removed in January 1984. Well measured monthly until recorder reinstalled January 1985.

PERIOD OF RECORD.--August 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.—Highest water level, 21.27 ft below land-surface datum, Sept. 9, 1986; lowest, 28.08 ft below land-surface datum, May 31, 1994.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	26.18	26.08	26.22	26.35	26.43	26.51	26.67	26.88	27.01	26.87	26.17	25.73
10	26.16	26.09	26.24	26.38	26.45	26.54	26.71	26.89	27.06	26.85	26.09	25.69
15	26.14	26.12	26.25	26.39	26.46	26.56	26.74	26.92	27.06	26.75	26.15	25.70
20	26.11	26.14	26.28	26.42	26.47	26.59	26.78	26.98	27.07	26.42	26.05	25.66
25	26.10	26.17	26.30	26.42	26.47	26.61	26.81	27.05	27.01	26.47	26.01	25.62
EOM	26.08	26.19	26.33	26.43	26.51	26.64	26.85	27.08	26.98	26.27	25.92	25.60

WTR YEAR 1994: MAX 25.60 SEP 30, 1994
MIN 28.08 MAY 31, 1994

SCOTTS BLUFF COUNTY

420000103511501. Local number 23N 56W 6ABAB.

LOCATION.--Lat 42°00'01", long 103°51'51", NW1/4 NE1/4 NW1/4 NE1/4 sec.6, T.23 N., R.56 W., Hydrologic Unit 10180009, 4 mi north and 2 mi west of intersection of U.S. Highway 26 and State Highway 29 in Mitchell. Owner: Carl Gompert.

AQUIFER.--Sand and gravel deposits, undifferentiated, of Quaternary age.

WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 6 in, depth 118 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 4,087.7 ft. Measuring point: Hole in pump base 0.7 ft above land-surface datum.

REMARKS.--Local number formerly listed as 23N 56W 6AA. Water levels affected by withdrawals during irrigation season.

PERIOD OF RECORD.--November 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 29.24 ft below land-surface datum, Oct. 26, 1949; lowest, 44.96 ft below land-surface datum, Apr. 7, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[illegible]

SEWARD COUNTY

405406097115001. Local number 11N 2E 21DD.

LOCATION.--Lat 40°54'06", long 97°11'50", SE1/4 SE1/4 sec.21, T.11 N., R.2 E., Hydrologic Unit 10270201, 4.5 mi west of Seward. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 5 in, depth 123 ft, perforated 112 to 123 ft.

DATUM.--Altitude of land-surface datum is 1,550 ft. Measuring point: Top of casing 0.00 ft above land-surface datum.

REMARKS.--Water levels in well affected by withdrawals from nearby irrigation wells.

PERIOD OF RECORD.--May 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 73.25 ft below land-surface datum, May 31 1988; lowest, 90.17 ft below land-surface datum, Aug. 5, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	77.85	77.07	76.50	76.04	75.64	75.23	74.86	74.75	75.05	76.90	78.40	79.27
10	77.76	77.13	76.45	76.07	75.59	75.30	74.86	74.64	74.99	76.51	77.95	78.90
15	77.51	76.92	76.29	76.07	75.54	75.11	74.69	74.46	74.70	76.16	78.64	78.22
20	77.45	76.82	76.32	76.06	75.35	74.82	74.90	74.68	76.77	75.80	79.62	77.99
25	77.34	76.81	76.23	75.66	75.38	75.11	74.56	74.85	76.73	76.39	79.67	77.49
EOM	77.25	76.67	76.20	75.83	75.50	75.21	74.88	74.85	76.83	78.15	79.50	77.18

WTR YEAR 1994: MAX 74.44 MAY 14, 1994
MIN 79.67 AUG 25, 1994

SHERIDAN COUNTY

423034102415001. Local number 29N 46W 10AA

LOCATION.--Lat 42°30'34", long 102°41'50", NE1/4 NE1/4 sec.10, T.29 N., R.46 W., Hydrologic Unit 10150003, at Mirage Flats project headquarters, 11.5 mi south of Hay Springs. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in, depth 100 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 3,794.5 ft. Measuring point: Top of casing 1.5 ft above land-surface datum.

REMARKS.--Water levels affected by seepage losses from nearby irrigation canal and laterals and by withdrawals from nearby irrigation wells.

PERIOD OF RECORD.--September 1953 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 32.47 ft below land-surface datum, Aug. 25, 1969; lowest, 44.49 ft below land-surface datum, Aug. 20, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02	41.61	FEB 17	41.15	JUN 15	41.27						
DEC 09	41.46	MAR 15	41.10	JUL 12	42.76						
JAN 15	41.32	MAY 04	40.95	AUG 18	43.47						

THOMAS COUNTY

415845100334001. Local number 23N 28W 9DA.

LOCATION.--Lat 41°58'45", long 100°33'40", NE1/4 SE1/4 sec.9, T.23 N., R.28 W., Hydrologic Unit 10210001, 1 mi east of courthouse in Thedford. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits, undifferentiated, of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1.25 in, depth 15 ft, screened from 13 to 15 ft.

DATUM.--Altitude of land-surface datum is 2,842 ft. Measuring point: Top of pipe 2.3 ft above land-surface datum.

PERIOD OF RECORD.--December 1934 to November 1942; August 1944 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.73 ft below land-surface datum, Oct. 16, 1970; lowest, 10.98 ft below land-surface datum, July 23, 1940.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[illegible]**VALLEY COUNTY**

412955099123201. Local number 18N 16W 30CC.

LOCATION.--Lat 41°29'55", long 99°12'32", SW1/4 SW1/4 sec.30, T.18 N., R.16 W., Hydrologic Unit 10210003, 4 mi west and 5 mi north of Arcadia. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 0.75 in., depth 15 ft, screened from 13 to 15 ft.

DATUM.--Altitude of land-surface datum is 2,217.61 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

REMARKS.--Water levels in well affected by evapotranspiration.

PERIOD OF RECORD.--August 1949 to June 1956; June 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.25 ft below land-surface datum, May 3, 1983; lowest, 5.90 ft below land-surface datum, Mar. 1, 1973.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[illegible]

WEBSTER COUNTY

400423098314001. Local number 1N 11W 11AB.

LOCATION.--Lat 40°04'23", long 98°31'40", NW1/4 NE1/4 sec.11, T.1 N., R.11 W., Hydrologic Unit 10250016, 1 mi south and 0.25 mi west of intersection of U.S. Highways 136 and 281 in Red Cloud. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in, depth 16.9 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,686 ft. Measuring point: Top of casing 1.1 ft above land-surface datum.

PERIOD OF RECORD.--May 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.34 ft below land-surface datum, July 11, 1951; lowest, 10.56 ft below land-surface datum, Apr. 5, 1957.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	4.05	MAY 18	4.81								

YORK COUNTY

404618097482201. Local number 9N 4W 5CCC.

LOCATION.--Lat 40°46'18", long 97°48'22", SW1/4 SW1/4 SW1/4 sec.5, T.9 N., R.4 W., Hydrologic Unit 10270203, 0.5 mi south of Henderson. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 5 in, depth 170 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,708 ft. Measuring point: Top of casing 1.50 ft above land-surface datum.

REMARKS.--Replacement for well 404620097482501, local number 9N 4W 6DD with period of record May 1959 to September 1981 located on east side of highway across from old well.

PERIOD OF RECORD.--April 1982 to September 1994 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 74.33 ft below land-surface datum, May 5, 1994; lowest, 87.52 ft below land-surface datum, Aug. 20, 1982.

**WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	76.67	76.53	76.13	75.56	75.24	75.07	74.91	74.58	74.61	74.96	75.60	75.60
10	76.67	76.28	76.11	75.76	75.23	75.07	74.90	74.59	74.60	74.94	75.49	75.48
15	76.43	76.40	75.91	75.65	75.38	75.08	74.99	74.68	74.63	75.90	75.40	75.56
20	76.53	76.17	75.74	75.66	75.40	75.11	74.79	74.54	74.76	74.88	75.50	
25	76.48	76.13	75.89	75.52	75.38	75.09	74.51	74.55	74.76	74.86	75.57	
EOM	76.30	76.04	75.53	75.43	75.14	74.81	74.67	74.74	74.85	75.12	75.70	

WTR YEAR 1994: MAX 74.33 MAY 5, 1994
MIN 76.86 OCT 9, 1993

GROUND-WATER LEVELS

YORK COUNTY

405305097351503. Local number 11N 2W 31BA3.

LOCATION.--Lat 40°53'05", long 97°35'15", NE1/4 NW1/4 sec.31, T.11 N., R.2 W., Hydrologic Unit 10270203, south edge of York County Fairgrounds on the north side of York. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in, depth 165 ft, perforated below water table.

DATUM.--Altitude of land-surface datum is 1,659 ft. Measuring point: Top of casing 1.6 ft above land-surface datum.

REMARKS.--Replacement for well 405305097351501, local number 11N 2W 31BA1, with period of record October 1957 to January 1969. Water levels in well affected by withdrawals from nearby municipal well and by withdrawals from nearby irrigation wells.

PERIOD OF RECORD.--May 1969 to September 1994 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 80.97 ft below land-surface datum, Apr. 4, 1994; lowest, 120.81 ft below land-surface datum, July 15, 1974.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	83.42	---	82.36	81.90	81.66	81.35	81.23	---	82.86	---	85.15	82.42
10	83.14	---	82.37	81.94	81.61	81.25	---	---	82.25	---	83.20	82.45
15	83.05	82.59	82.19	81.85	81.65	81.25	---	---	83.03	---	83.53	82.55
20	---	82.46	82.12	81.85	81.53	81.15	---	---	---	---	84.49	
25	---	82.49	82.02	81.67	81.57	81.33	---	82.66	---	82.57	85.23	
EOM	---	82.50	82.00	81.65	81.49	81.25	---	82.50	---	85.73	82.94	

WTR YEAR 1994: MAX 80.97 APR 4, 1994
MIN 98.60 JUN 20, 1994

(Local identifier: indicates location by township, range, and section. Geologic unit: 110 SDGV, Quaternary sand and gravel deposits, undifferentiated; 111 ALVM, Holocene alluvium; 112 SDGV, Pleistocene sand and gravel deposits; 121 OGLL, Pliocene Ogallala Formation; 122 ARKR, Miocene Arikaree Group; 123 BRUL, Oligocene Brule Formation; 123 CDRN, Oligocene Chadron Formation; 123 CDRNB, Oligocene Chadron Formation, basal sand and gravel; 211 FXHL, Upper Cretaceous Fox Hills Formation; 211 LNCE, Upper Cretaceous Lance Formation.)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

STATION NUMBER	LOCAL IDENTIFIER		LATITUDE	LONGITUDE	GEOLOGIC UNIT	DATE	TIME	DEPTH OF WELL, TOTAL (FEET) (72008)	SPECIFIC CONDUCTANCE (μS/CM) (00095)
ADAMS COUNTY									
403508098182601	7N	9W11CDA1	40 35 08 N	098 18 26 W	112SDGV	08-23-94	1630	203.00	739
BROWN COUNTY									
422849099521501	29N	22W14CCBB1	42 28 49 N	099 52 15 W	121OGLL	11-01-93	1530	400.00	154
					121OGLL	11-30-93	0855	400.00	159
					121OGLL	06-28-94	1400	400.00	153
422849099521502	29N	22W14CCBB2			121OGLL	11-01-93	1515	200.00	108
					121OGLL	11-30-93	0930	200.00	105
					121OGLL	06-28-94	1245	200.00	103
422849099521503	29N	22W14CCBB3			112SDGV	11-01-93	1600	50.00	95
					112SDGV	11-30-93	1000	50.00	94
					112SDGV	06-28-94	1500	50.00	96
423553099434101	30N	21W 1CACC1	42 35 53 N	099 43 41 W	121OGLL	11-02-93	1455	295.00	146
					121OGLL	12-02-93	0935	295.00	146
					121OGLL	06-30-94	1245	295.00	136
423553099434102	30N	21W 1CACC2			121OGLL	11-02-93	1440	203.00	293
					121OGLL	12-02-93	1010	203.00	294
					121OGLL	06-30-94	1345	203.00	279
423553099434103	30N	21W 1CACC3			121OGLL	11-02-93	1535	150.00	486
					121OGLL	12-02-93	1045	150.00	500
					121OGLL	06-30-94	1310	150.00	430
423259099475101	30N	21W29AABB1	42 32 59 N	099 47 51 W	121OGLL	11-01-93	1735	250.00	116
					121OGLL	12-01-93	1545	250.00	114
					121OGLL	06-30-94	0930	250.00	116
423259099475102	30N	21W29AABB2			112SDGV	11-01-93	1715	50.00	266
					121OGLL	12-01-93	1615	50.00	283
					112SDGV	06-30-94	0900	50.00	294
423531099552301	30N	22W 8BBBC1	42 35 31 N	099 55 23 W	121OGLL	11-02-93	1155	250.00	120
					121OGLL	11-30-93	1610	250.00	120
					121OGLL	06-29-94	1205	250.00	120
423531099552302	30N	22W 8BBBC2			112SDGV	11-02-93	1140	70.00	859
					112SDGV	11-30-93	1645	70.00	847
					112SDGV	06-29-94	1100	70.00	814
423443100003701	30N	23W 9DDDC1	42 34 43 N	100 00 37 W	121OGLL	11-02-93	1035	200.00	181
					121OGLL	11-30-93	1420	200.00	185
					121OGLL	06-29-94	0918	200.00	201
423443100003702	30N	23W 9DDDC2			112SDGV	11-02-93	1015	65.00	410
					112SDGV	11-30-93	1450	65.00	400
					112SDGV	06-29-94	0844	65.00	445
423256099580701	30N	23W26AAAA1	42 32 56 N	099 58 07 W	121OGLL	11-02-93	0850	350.00	175
					121OGLL	11-30-93	1125	350.00	174
					121OGLL	06-28-94	1830	350.00	170
423256099580702	30N	23W26AAAA2			121OGLL	11-02-93	0835	150.00	128
					121OGLL	11-30-93	1200	150.00	133
					121OGLL	06-28-94	1800	150.00	130
423256099580703	30N	23W26AAAA3			112SDGV	11-02-93	0910	40.00	373
					112SDGV	11-30-93	1230	40.00	363
					112SDGV	06-28-94	1900	40.00	394
424000099424701	31N	20W 7CCCC1	42 40 00 N	099 42 47 W	121OGLL	11-03-93	1035	180.00	131
					121OGLL	12-01-93	1110	180.00	130
					121OGLL	06-30-94	1635	180.00	128
423958099453001	31N	21W10DDCC1	42 39 58 N	099 45 30 W	121OGLL	11-02-93	1700	255.00	379
					121OGLL	12-01-93	1230	255.00	381
					121OGLL	06-29-94	1935	255.00	386
423958099453002	31N	21W10DDCC2			121OGLL	11-02-93	1740	187.00	403
					121OGLL	12-01-93	1305	187.00	411
					121OGLL	06-29-94	2000	187.00	404
423720099521401	31N	22W35BBBB1	42 37 20 N	099 52 14 W	121OGLL	11-03-93	0855	352.00	185

CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (° C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL AS (MG/L CaCO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS- SOLVED (MG/L AS Na) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY LAB (MG/L AS CaCO ₃) (90410)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS Cl) (00940)
ADAMS COUNTY												
08-23-94	7.6	15.0	--	270	86	13	37	1	7.6	172	120	28
BROWN COUNTY												
11-01-93	8.0	13.5	7.8	65	21	3.1	3.5	0.2	4.3	69	1.2	0.40
11-30-93	8.2	13.5	8.9	64	21	2.9	3.6	0.2	0.70	69	1.3	0.20
06-28-94	7.5	13.5	6.2	65	21	3.0	3.4	0.2	4.2	69	1.1	0.40
11-01-93	7.5	12.5	7.9	38	12	1.9	5.8	0.4	3.7	50	1.1	0.40
11-30-93	7.6	12.0	8.8	38	12	1.9	4.9	0.3	3.7	49	1.0	0.20
06-28-94	8.1	15.0	5.9	38	12	2.0	4.2	0.3	3.5	48	0.80	0.40
11-01-93	7.1	11.5	9.4	32	10	1.6	4.4	0.3	3.7	34	3.3	0.60
11-30-93	7.0	11.0	10.6	32	10	1.6	4.2	0.3	3.5	34	3.4	0.60
06-28-94	7.8	12.5	7.1	31	10	1.5	4.4	0.3	3.4	33	4.1	0.70
11-02-93	7.9	13.5	7.0	61	20	2.6	5.1	0.3	4.6	71	1.2	0.80
12-02-93	7.8	13.0	8.5	58	19	2.6	5.3	0.3	4.3	70	1.1	0.40
06-30-94	7.4	15.5	5.6	58	19	2.6	4.8	0.3	3.9	70	1.9	0.80
11-02-93	7.7	13.0	8.5	120	39	4.5	11	0.4	6.7	118	11	2.2
12-02-93	7.9	12.5	10.4	120	40	4.6	10	0.4	6.1	118	8.4	2.5
06-30-94	7.8	16.0	3.7	120	41	4.6	9.2	0.4	6.0	117	8.6	2.1
11-02-93	7.5	13.0	9.9	210	72	7.9	13	0.4	7.8	193	12	1.8
12-02-93	7.6	12.5	11.1	220	73	8.0	13	0.4	8.3	195	13	2.0
06-30-94	7.5	15.5	6.4	190	66	7.1	12	0.4	7.7	180	11	1.8
11-01-93	7.2	11.5	7.2	42	14	1.8	4.8	0.3	4.0	54	1.3	0.60
12-01-93	7.4	12.0	9.6	44	15	1.7	4.3	0.3	3.9	54	1.2	0.50
06-30-94	7.6	13.0	6.5	42	14	1.7	4.4	0.3	3.9	54	1.1	0.50
11-01-93	6.8	10.5	7.6	100	31	5.6	8.1	0.4	5.5	75	13	3.1
12-01-93	6.8	10.5	9.5	100	32	5.8	8.4	0.4	6.1	66	11	2.5
06-30-94	6.9	11.5	5.7	110	35	6.1	7.9	0.3	5.8	68	10	2.9
11-02-93	7.6	12.5	5.6	46	15	2.1	4.5	0.3	4.0	58	0.90	0.60
11-30-93	--	12.0	6.8	46	15	2.0	4.4	0.3	4.0	60	1.1	0.60
06-29-94	7.6	13.5	4.6	46	15	2.0	4.3	0.3	3.7	57	1.0	0.70
11-02-93	7.3	11.5	8.2	290	90	17	61	2	16	356	28	4.5
11-30-93	7.4	10.5	10.8	300	90	18	57	1	13	357	27	4.0
06-29-94	7.4	12.5	6.5	290	90	17	58	1	13	353	26	3.4
11-02-93	8.0	12.5	1.0	71	23	3.2	7.1	0.4	4.8	89	1.6	0.50
11-30-93	8.2	12.0	1.1	74	24	3.3	5.8	0.3	4.3	90	1.7	0.60
06-29-94	7.9	13.5	1.1	81	26	4.0	6.3	0.3	6.3	95	2.7	1.0
11-02-93	6.6	11.0	7.4	150	47	6.9	13	0.5	6.9	72	25	8.4
11-30-93	6.8	11.0	9.3	150	48	6.9	13	0.5	6.1	71	24	8.4
06-29-94	6.6	12.5	5.6	170	55	7.8	13	0.4	6.3	75	29	10
11-02-93	8.0	13.5	3.6	74	24	3.3	4.9	0.2	5.3	86	1.2	0.60
11-30-93	8.1	13.5	4.6	71	23	3.3	4.9	0.3	5.1	87	1.2	0.20
06-28-94	--	14.5	3.2	74	24	3.3	4.5	0.2	4.6	85	1.1	0.40
11-02-93	7.9	11.5	5.8	51	17	2.0	4.5	0.3	3.5	60	1.2	0.60
11-30-93	8.2	12.0	7.7	51	17	2.1	4.4	0.3	3.7	--	1.8	0.40
06-28-94	8.2	12.5	5.2	51	17	2.0	4.2	0.3	3.7	60	1.4	0.70
11-02-93	6.6	11.0	6.2	140	43	7.2	7.7	0.3	4.9	24	23	8.1
11-30-93	6.6	11.5	7.9	130	41	6.9	7.4	0.3	5.2	25	22	8.1
06-28-94	7.1	11.5	5.4	150	46	7.5	7.9	0.3	4.7	25	24	9.0
11-03-93	6.9	14.0	6.6	50	17	1.9	4.9	0.3	--	56	4.9	0.70
12-01-93	7.0	13.5	8.0	51	17	2.0	3.9	0.2	5.0	54	5.0	0.70
06-30-94	7.8	16.5	6.5	48	16	2.0	3.9	0.2	4.7	54	5.2	0.50
11-02-93	7.7	14.0	8.2	170	59	6.0	5.4	0.2	6.2	150	10	2.5
12-01-93	7.7	14.0	10.9	170	59	5.9	5.3	0.2	6.4	150	10	3.2
06-29-94	7.6	17.5	4.8	180	61	6.0	5.5	0.2	5.9	146	10	3.0
11-02-93	7.9	12.0	--	180	63	6.3	7.3	0.2	6.7	171	9.3	1.8
12-01-93	7.5	15.0	8.6	180	63	6.2	7.4	0.2	7.1	172	10	1.8
06-29-94	7.7	15.5	6.4	180	64	5.8	7.5	0.2	6.3	163	9.8	2.2
11-03-93	7.7	13.5	5.3	74	24	3.3	5.3	0.3	6.1	80	2.8	1.0

CHEMICAL ANALYSES OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	FLUORIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	BORON, DIS- SOLVED (µG/L AS B) (01020)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	SI- MAZINE, WATER, DISS, REC (µG/L) (04035)
ADAMS COUNTY												
08-23-94	0.30	29	461	0.63	<0.010	8.10	0.020	0.170	150	<3	<1	--
BROWN COUNTY												
11-01-93	0.50	62	148	0.20	<0.010	2.30	0.020	0.020	--	5	<1	--
11-30-93	0.40	62	143	0.19	<0.010	2.20	0.030	0.040	--	<3	<1	--
06-28-94	0.40	58	143	0.19	<0.010	2.20	0.020	0.010	--	<3	<1	<0.05
11-01-93	0.30	60	119	0.16	<0.010	0.830	0.020	0.140	--	16	3	--
11-30-93	0.30	62	119	0.16	<0.010	0.820	0.020	0.140	--	5	4	--
06-28-94	0.30	59	115	0.16	<0.010	0.810	0.020	0.130	--	4	2	<0.05
11-01-93	0.20	55	110	0.15	<0.010	2.30	<0.010	0.280	--	7	<1	--
11-30-93	0.20	52	107	0.14	<0.010	2.20	0.020	0.280	--	7	1	--
06-28-94	0.10	52	107	0.15	<0.010	2.40	0.010	0.280	--	4	<1	--
11-02-93	0.20	64	146	0.20	<0.010	1.00	<0.010	0.070	--	5	<1	--
12-02-93	0.20	59	138	0.19	<0.010	0.960	0.020	0.060	--	3	<1	--
06-30-94	0.20	60	139	0.19	<0.010	0.800	0.030	0.050	--	<3	<1	--
11-02-93	0.20	59	230	0.31	<0.010	5.70	0.010	0.050	--	<3	<1	--
12-02-93	0.20	57	224	0.31	<0.010	5.60	0.020	0.040	--	<3	<1	--
06-30-94	0.20	58	223	0.30	<0.010	5.10	0.030	0.040	--	<3	<1	--
11-02-93	0.30	54	342	0.47	<0.010	13.0	0.020	0.060	--	4	1	--
12-02-93	0.30	53	350	0.48	<0.010	14.0	0.020	0.050	--	<3	5	--
06-30-94	0.30	54	317	0.43	<0.010	11.0	0.030	0.030	--	<3	<1	--
11-01-93	0.20	61	125	0.17	<0.010	0.990	0.020	0.190	--	6	<1	--
12-01-93	0.20	63	127	0.17	<0.010	0.940	0.020	0.190	--	14	<1	--
06-30-94	0.20	57	120	0.16	<0.010	0.910	0.030	0.170	--	<3	<1	--
11-01-93	0.20	49	219	0.30	<0.010	13.0	0.020	0.180	--	<3	<1	--
12-01-93	0.10	48	216	0.29	<0.010	14.0	0.020	0.170	--	<3	<1	--
06-30-94	0.10	47	189	0.26	<0.010	7.40	0.040	0.160	--	<3	<1	--
11-02-93	0.20	65	130	0.18	<0.010	0.560	0.010	0.100	--	6	<1	--
11-30-93	0.20	65	131	0.18	<0.010	0.620	0.010	0.090	--	<3	<1	--
06-29-94	0.20	59	123	0.17	<0.010	0.610	0.020	0.080	--	<3	<1	--
11-02-93	0.40	42	570	0.78	<0.010	22.0	0.020	0.190	--	<3	<1	--
11-30-93	0.30	40	553	0.75	<0.010	20.0	0.070	0.190	--	<3	<1	--
06-29-94	0.40	42	542	0.74	<0.010	18.0	0.030	0.180	--	<3	<1	--
11-02-93	0.30	66	163	0.22	<0.010	0.580	0.010	0.030	--	4	3	--
11-30-93	0.20	66	163	0.22	<0.010	0.700	0.020	0.030	--	7	4	--
06-29-94	0.20	57	168	0.23	<0.010	1.70	0.030	0.030	--	<3	2	--
11-02-93	0.20	40	289	0.39	<0.010	22.0	0.020	0.170	--	7	<1	--
11-30-93	0.10	38	285	0.39	<0.010	22.0	0.020	0.180	--	7	<1	--
06-29-94	0.20	39	316	0.43	<0.010	25.0	0.030	0.160	--	<3	<1	--
11-02-93	0.40	65	159	0.22	<0.010	0.550	0.020	0.030	--	<3	<1	--
11-30-93	0.40	67	160	0.22	<0.010	0.550	0.020	0.020	--	<3	<1	--
06-28-94	0.40	65	157	0.21	<0.010	0.500	0.030	<0.010	--	<3	<1	<0.05
11-02-93	0.20	62	132	0.18	<0.010	0.910	0.010	0.250	--	6	2	--
11-30-93	0.20	63	--	--	<0.010	1.40	0.010	0.260	--	6	1	--
06-28-94	0.20	59	130	0.18	<0.010	1.20	0.030	0.230	--	<3	<1	--
11-02-93	0.10	33	266	0.36	<0.010	28.0	0.020	0.120	--	4	<1	--
11-30-93	<0.10	32	253	0.34	<0.010	26.0	0.020	0.110	--	<3	1	--
06-28-94	0.10	32	279	0.38	<0.010	30.0	0.030	0.100	--	<3	<1	--
11-03-93	0.20	71	--	--	<0.010	1.30	<0.010	0.440	--	<3	1	--
12-01-93	0.20	73	146	0.20	<0.010	1.30	0.020	0.430	--	10	3	--
06-30-94	0.20	69	141	0.19	<0.010	1.30	0.010	0.420	--	14	1	--
11-02-93	0.20	60	280	0.38	<0.010	9.10	0.020	0.050	--	4	<1	--
12-01-93	0.10	62	283	0.39	<0.010	9.30	0.030	0.050	--	3	<1	--
06-29-94	0.20	59	282	0.38	<0.010	9.80	0.030	0.040	--	6	<1	--
11-02-93	0.20	55	287	0.39	<0.010	7.90	0.020	0.070	--	5	6	--
12-01-93	0.10	52	286	0.39	<0.010	8.00	0.030	0.080	--	11	20	--
06-29-94	0.10	60	295	0.40	<0.010	9.30	0.040	0.050	--	6	6	--
11-03-93	0.40	66	170	0.23	<0.010	2.80	0.020	0.110	--	9	1	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[illegible]

CHEMICAL ANALYSES OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

STATION	NUMBER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	GEOLOGIC UNIT	DATE	TIME
BROWN COUNTY							
423720099521401	31N	22W35BBBB1	42 37 20 N	099 52 14 W	121OGLL	12-01-93	0845
423720099521402	31N	22W35BBBB2			121OGLL	06-29-94	1535
					121OGLL	11-03-93	0825
					121OGLL	12-01-93	0915
					121OGLL	06-29-94	1500
BUFFALO COUNTY							
404209098481101	9N	13W32DCAA3	40 42 09 N	098 48 11 W	112SDGV	02-03-94	1200
					112SDGV	03-24-94	1500
404217098475101	9N	13W32DAAC1	40 42 17 N	098 47 51 W	112SDGV	06-21-94	1030
404217098475102	9N	13W32DAAC2			112SDGV	06-24-94	1430
					112SDGV	06-24-94	1400
404217098475103	9N	13W32DAAC3			112SDGV	06-24-94	1300
404217098480401	9N	13W32DABD1	40 42 17 N	098 48 04 W	112SDGV	02-01-94	1330
					112SDGV	03-22-94	1600
					112SDGV	06-22-94	1130
404217098480103	9N	13W32DABD10	40 42 17 N	098 48 01 W	112SDGV	06-24-94	1130
404217098480402	9N	13W32DABD2	40 42 17 N	098 48 04 W	112SDGV	02-01-94	1600
					112SDGV	03-22-94	1430
					112SDGV	06-22-94	1230
404217098480301	9N	13W32DABD3	40 42 17 N	098 48 03 W	112SDGV	02-04-94	1130
					112SDGV	03-22-94	1830
					112SDGV	06-22-94	1600
404217098480302	9N	13W32DABD4			112SDGV	02-04-94	1000
					112SDGV	03-23-94	0930
					112SDGV	06-22-94	1500
404217098480203	9N	13W32DABD5	40 42 17 N	098 48 02 W	112SDGV	02-02-94	1200
					112SDGV	03-23-94	1100
					112SDGV	06-23-94	1130
404217098480201	9N	13W32DABD6			112SDGV	02-02-94	1400
					112SDGV	03-23-94	1430
					112SDGV	06-23-94	1330
404217098480202	9N	13W32DABD7			112SDGV	02-02-94	1015
					112SDGV	03-23-94	1530
					112SDGV	06-23-94	1230
404217098480101	9N	13W32DABD8	40 42 17 N	098 48 01 W	112SDGV	03-23-94	1730
					112SDGV	06-23-94	1800
404217098480102	9N	13W32DABD9			112SDGV	06-23-94	1900
404209098481201	9N	13W32DCAA1	40 42 09 N	098 48 12 W	112SDGV	02-02-94	1730
					112SDGV	03-24-94	1030
					112SDGV	06-21-94	0900
404209098481202	9N	13W32DCAA2			112SDGV	02-03-94	1015
					112SDGV	03-24-94	1130
					112SDGV	06-20-94	1700
404209098481001	9N	13W32DCAA4	40 42 09 N	098 48 10 W	112SDGV	02-03-94	1320
					112SDGV	03-24-94	1630
					112SDGV	06-21-94	1130
404209098480901	9N	13W32DCAA5	40 42 09 N	098 48 09 W	112SDGV	02-03-94	1600
					112SDGV	03-24-94	1830
					112SDGV	06-21-94	1330
404209098480501	9N	13W32DDBA1	40 42 09 N	098 48 05 W	112SDGV	03-24-94	2000
					112SDGV	06-21-94	1630
404226098471201	9N	13W33ACCA1	40 42 26 N	098 47 12 W	112SDGV	03-22-94	0935
					112SDGV	06-21-94	1800

CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	DEPTH OF WELL, TOTAL (FEET) (72008)	SPE- CIFIC CON- DUCT- ANCE (μ S/CM) (00095)	PH WATER FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (° C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)
BROWN COUNTY										
12-01-93	352.00	186	7.6	14.0	6.6	74	24	3.3	5.1	0.3
06-29-94	352.00	176	7.5	15.0	4.1	70	23	3.1	5.1	0.3
11-03-93	130.00	176	7.1	12.0	8.2	67	22	3.0	4.6	0.2
12-01-93	130.00	172	7.3	12.0	10.4	64	21	2.9	4.4	0.2
06-29-94	130.00	162	6.9	13.5	6.6	61	20	2.8	4.4	0.2
BUFFALO COUNTY										
02-03-94	29.50	1240	7.2	11.5	0.3	430	120	31	100	2
03-24-94	29.50	1080	7.1	12.5	0.0	350	98	25	92	2
06-21-94	29.50	1140	7.0	12.5	0.2	360	98	27	94	2
06-24-94	12.00	1510	7.0	12.5	0.1	470	130	35	110	2
06-24-94	30.00	1430	7.1	12.5	0.1	460	130	33	110	2
06-24-94	50.00	1220	7.4	13.0	0.2	400	120	25	89	2
02-01-94	29.50	790	7.0	12.0	0.9	430	120	31	100	2
03-22-94	29.50	1230	7.0	10.5	0.0	420	120	29	100	2
06-22-94	29.50	1260	7.1	12.5	0.2	390	110	29	100	2
06-24-94	49.50	1220	7.4	13.0	0.3	410	120	26	89	2
02-01-94	14.00	1320	6.9	9.5	0.6	440	120	33	110	2
03-22-94	14.00	1270	7.1	9.0	0.0	460	130	33	110	2
06-22-94	14.00	1240	7.0	13.5	0.2	390	110	29	96	2
02-04-94	15.00	1320	6.9	9.0	0.6	460	130	34	110	2
03-22-94	15.00	1300	7.0	8.5	0.1	430	120	32	100	2
06-22-94	15.00	1260	7.0	12.0	0.2	400	110	30	99	2
02-04-94	29.50	1240	7.0	11.0	0.2	430	120	32	100	2
03-23-94	29.50	1210	7.1	11.5	0.1	420	120	30	100	2
06-22-94	29.50	1250	7.0	12.5	0.3	400	110	30	100	2
02-02-94	44.00	1180	7.2	12.0	0.4	420	120	28	95	2
03-23-94	44.00	1170	7.3	11.5	0.0	410	120	27	92	2
06-23-94	44.00	1230	7.3	13.5	0.2	410	120	27	92	2
02-02-94	15.00	1380	6.9	10.5	--	470	130	36	110	2
03-23-94	15.00	1330	7.0	12.5	0.2	420	120	29	100	2
06-23-94	15.00	1300	7.2	12.5	0.3	430	120	31	100	2
02-02-94	29.50	1250	7.1	12.5	0.1	430	120	31	100	2
03-23-94	29.50	1200	7.0	12.5	0.0	420	120	29	100	2
06-23-94	29.50	1240	7.1	13.0	0.2	390	110	28	99	2
03-23-94	15.00	1340	7.0	9.5	0.1	460	130	34	100	2
06-23-94	15.00	1310	7.2	12.0	0.2	400	110	31	100	2
06-23-94	31.00	1260	7.3	12.0	0.3	390	110	29	97	2
02-02-94	14.00	1410	6.7	9.0	0.3	520	140	42	110	2
03-24-94	14.00	1370	6.8	8.5	0.0	510	140	38	110	2
06-21-94	14.00	1340	6.8	12.0	0.2	470	130	36	99	2
02-03-94	29.50	1200	7.1	11.5	0.6	400	110	30	100	2
03-24-94	29.50	1120	7.0	11.5	0.0	390	110	27	96	2
06-20-94	29.50	1220	7.1	12.0	0.3	400	110	30	96	2
02-03-94	29.50	1210	7.1	11.5	0.2	400	110	31	100	2
03-24-94	29.50	1090	7.1	12.5	0.0	360	100	26	95	2
06-21-94	29.50	1130	7.3	12.5	0.2	350	95	27	93	2
02-03-94	29.50	1100	7.1	11.0	0.2	360	100	27	94	2
03-24-94	29.50	1150	7.0	11.5	0.0	390	110	28	96	2
06-21-94	29.50	1130	7.3	13.0	0.2	350	97	27	94	2
03-24-94	30.00	1150	7.0	11.5	0.0	380	110	26	95	2
06-21-94	30.00	1170	7.3	12.0	0.2	390	110	27	94	2
03-22-94	74.00	560	7.4	12.0	3.3	200	60	11	37	1
06-21-94	74.00	604	7.6	13.0	3.3	190	58	12	34	1

CHEMICAL ANALYSES OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CaCO ₃ (39086)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO ₃ (00452)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO ₃ (00453)	SOLIDS, ALKA- LITY LAB (MG/L AS CaCO ₃) (90410)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)
BROWN COUNTY										
12-01-93	6.3	--	--	--	83	2.9	0.70	0.40	67	172
06-29-94	5.6	--	--	--	81	2.0	0.70	0.40	63	160
11-03-93	5.3	--	--	--	56	6.8	1.9	0.20	61	162
12-01-93	5.5	--	--	--	64	6.9	1.5	0.20	60	163
06-29-94	5.2	--	--	--	55	6.9	1.5	0.20	58	151
BUFFALO COUNTY										
02-03-94	9.6	242	0	295	247	350	37	0.80	25	830
03-24-94	12	198	0	242	214	300	35	0.80	24	712
06-21-94	11	224	0	273	223	320	34	0.70	23	750
06-24-94	9.0	263	0	321	265	420	43	1.0	23	987
06-24-94	12	264	0	322	266	400	40	0.40	24	929
06-24-94	8.3	240	0	293	241	330	34	0.40	22	787
02-01-94	15	233	0	284	249	340	34	0.60	26	825
03-22-94	13	231	0	282	248	340	33	0.50	25	817
06-22-94	13	249	0	304	233	350	34	0.50	25	831
06-24-94	7.4	237	0	289	246	330	33	0.40	23	786
02-01-94	9.7	236	0	288	253	360	37	1.1	25	882
03-22-94	8.8	236	0	288	252	360	38	1.1	24	878
06-22-94	9.0	237	0	289	244	340	36	1.0	24	810
02-04-94	9.2	255	0	311	253	350	38	1.1	26	896
03-22-94	9.3	239	0	292	379	350	37	1.1	24	854
06-22-94	8.4	247	0	301	248	340	36	1.0	24	823
02-04-94	14	247	0	301	249	340	31	0.60	26	831
03-23-94	13	233	0	284	247	340	33	0.60	25	819
06-22-94	13	245	0	299	251	350	33	0.50	25	839
02-02-94	9.2	227	0	277	244	330	34	0.50	24	792
03-23-94	9.9	235	0	287	245	320	34	0.50	23	782
06-23-94	9.3	260	0	317	252	340	34	0.40	23	819
02-02-94	8.8	249	0	304	255	360	40	1.2	26	928
03-23-94	13	235	0	287	251	340	34	0.50	25	856
06-23-94	9.2	244	0	298	249	350	35	1.2	25	853
02-02-94	13	228	0	278	252	350	35	0.50	25	831
03-23-94	13	238	0	290	251	340	34	0.50	25	823
06-23-94	11	244	0	298	250	340	33	0.40	25	811
03-23-94	8.9	233	0	284	250	360	38	1.1	25	886
06-23-94	9.4	241	0	294	249	350	37	1.1	24	845
06-23-94	10	244	0	298	250	350	34	0.50	24	820
02-02-94	7.7	240	0	293	382	430	37	1.4	25	969
03-24-94	7.6	258	0	315	251	410	36	1.3	22	950
06-21-94	7.5	240	0	293	243	400	39	1.4	23	912
02-03-94	11	230	0	281	237	340	36	0.80	25	800
03-24-94	11	222	0	271	222	320	34	0.80	24	764
06-20-94	9.7	230	0	281	234	340	35	0.70	24	794
02-03-94	10	238	0	290	242	300	33	0.70	25	762
03-24-94	13	204	0	249	217	310	34	0.70	25	732
06-21-94	11	210	0	256	222	310	36	0.70	24	730
02-03-94	11	206	0	251	217	300	35	0.70	25	722
03-24-94	13	213	0	260	231	320	34	0.70	24	761
06-21-94	12	222	0	271	223	310	35	0.70	23	739
03-24-94	11	220	0	268	443	320	35	0.50	25	762
06-21-94	9.9	228	0	278	236	320	36	0.50	25	768
03-22-94	4.2	144	0	176	152	110	14	0.40	22	347
06-21-94	3.7	159	0	194	157	130	16	0.40	20	372

CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	NITRO- GEN, NITRATE SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)
BROWN COUNTY									
12-01-93	0.23	--	<0.010	2.70	0.020	--	0.080	4	<1
06-29-94	0.22	--	<0.010	1.90	0.030	--	0.050	7	<1
11-03-93	0.22	--	<0.010	5.10	0.020	--	0.280	3	<1
12-01-93	0.22	--	<0.010	4.90	0.020	--	0.250	16	2
06-29-94	0.21	--	<0.010	4.10	0.010	--	0.300	<3	<1
BUFFALO COUNTY									
02-03-94	1.17	2.47	0.030	2.50	0.010	0.020	0.030	<3	140
03-24-94	0.99	--	<0.010	1.30	0.030	0.030	0.030	<3	130
06-21-94	1.06	--	<0.010	1.80	0.020	0.040	0.020	<3	140
06-24-94	1.40	--	<0.010	13.0	0.030	0.020	0.020	12	61
06-24-94	1.35	--	<0.010	4.70	0.030	0.030	0.030	<3	15
06-24-94	1.12	--	<0.010	3.20	0.020	0.020	0.020	<3	8
02-01-94	1.19	4.08	0.020	4.10	0.010	0.020	0.030	4	12
03-22-94	1.14	--	<0.010	4.00	0.030	0.030	0.030	<3	11
06-22-94	1.16	--	<0.010	4.50	0.020	0.030	0.030	<3	12
06-24-94	1.13	--	<0.010	3.40	0.020	0.040	0.030	<3	6
02-01-94	1.25	9.87	0.030	9.90	0.010	0.020	0.030	<3	<1
03-22-94	1.25	--	<0.010	7.00	0.040	0.020	0.030	<3	2
06-22-94	1.15	--	<0.010	5.00	0.010	0.030	0.030	<3	2
02-04-94	1.27	9.98	0.020	10.0	0.010	0.030	0.030	3	<1
03-22-94	1.20	--	<0.010	8.30	0.030	0.030	0.030	<3	<1
06-22-94	1.18	--	<0.010	5.90	0.010	0.020	0.020	<3	2
02-04-94	1.20	4.37	0.030	4.40	0.020	0.020	0.030	5	4
03-23-94	1.16	--	<0.010	4.00	0.040	0.020	0.030	<3	3
06-22-94	1.16	--	<0.010	6.80	0.020	0.030	0.020	<3	5
02-02-94	1.12	3.38	0.020	3.40	0.010	0.020	0.030	3	6
03-23-94	1.10	--	<0.010	3.30	0.030	0.020	0.030	<3	6
06-23-94	1.14	--	<0.010	3.80	0.020	0.030	0.020	<3	8
02-02-94	1.35	15.0	0.010	15.0	0.020	0.030	0.040	<3	<1
03-23-94	1.16	--	<0.010	12.0	0.030	0.020	0.020	<3	13
06-23-94	1.22	--	<0.010	7.90	0.020	0.030	0.020	<3	4
02-02-94	1.18	4.38	0.020	4.40	0.010	0.030	0.030	9	12
03-23-94	1.16	--	<0.010	4.20	0.040	0.020	0.030	<3	13
06-23-94	1.15	--	<0.010	4.10	0.020	0.030	0.020	<3	15
03-23-94	1.25	--	<0.010	11.0	0.030	0.020	0.020	<3	4
06-23-94	1.22	--	<0.010	8.40	0.020	0.030	0.020	<3	3
06-23-94	1.16	--	<0.010	4.30	0.020	0.040	0.030	<3	19
02-02-94	1.37	6.85	0.050	6.90	<0.010	<0.010	0.010	<3	780
03-24-94	1.34	6.68	0.020	6.70	0.030	<0.010	0.010	<3	750
06-21-94	1.27	6.89	0.010	6.90	0.020	0.020	0.010	<3	760
02-03-94	1.11	1.89	0.010	1.90	0.010	0.020	0.030	<3	220
03-24-94	1.07	--	<0.010	1.60	0.020	0.020	0.020	4	210
06-20-94	1.11	--	<0.010	2.20	0.010	0.010	0.020	<3	230
02-03-94	1.14	2.17	0.030	2.20	0.020	0.020	0.030	<3	120
03-24-94	1.00	--	<0.010	1.30	0.020	0.030	0.030	<3	110
06-21-94	1.04	--	<0.010	1.50	0.020	0.030	0.020	<3	110
02-03-94	1.02	1.27	0.030	1.30	0.010	0.040	0.020	<3	94
03-24-94	1.06	--	<0.010	1.70	0.020	0.020	0.020	<3	110
06-21-94	1.05	--	<0.010	1.60	0.020	0.020	0.020	<3	92
03-24-94	1.09	--	<0.010	1.70	0.030	0.020	0.020	<3	110
06-21-94	1.09	--	<0.010	1.90	0.020	0.030	0.020	<3	120
03-22-94	0.49	--	<0.010	0.420	0.040	0.020	0.030	<3	<1
06-21-94	0.54	--	<0.010	0.510	0.020	0.020	0.030	6	2

CHEMICAL ANALYSES OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

STATION	NUMBER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	GEOLOGIC UNIT	DATE	TIME
BURT COUNTY							
414242096141201	20N	10E13ABAA1	41 42 42 N	096 14 12 W	211DKOT	08-10-94	1255
414413096105401	20N	11E 4ACBA1	41 44 13 N	096 10 54 W	110QRNR	08-17-94	1000
414256096071601	20N	11E12DBDD1	41 42 56 N	096 07 16 W	110QRNR	08-10-94	1445
414850096133401	21N	11E 7BABB1	41 48 50 N	096 13 34 W	110QRNR	08-09-94	1135
414820096082301	21N	11E11DBBD1	41 48 20 N	096 08 23 W	110QRNR	08-09-94	1040
414707096134901	21N	11E19BBCD1	41 47 07 N	096 13 49 W	211DKOT	08-08-94	1600
415052096085401	22N	11E26CDAC1	41 50 52 N	096 08 54 W	--	09-01-94	1035
415924096130901	23N	10E 8DCCD1	41 59 24 N	096 13 09 W	--	09-01-94	1150
415608096091501	23N	11E27DA 1	41 56 08 N	096 09 15 W	110QRNR	08-09-94	0920
BUTLER COUNTY							
410715097010501	13N	4E 6CDBC1	41 07 15 N	097 01 05 W	--	08-23-94	1632
410448096592701	13N	4E20DBDA1	41 04 48 N	096 59 27 W	--	09-06-94	1207
CASS COUNTY							
404802095505801	10N	14E28CCAD1	40 48 02 N	095 50 58 W	112SDGV	08-24-94	1250
425100095510401	10N	14E16BBBA1	42 51 00 N	095 51 04 W	112SDGV	08-19-94	1530
404925095504501	10N	14E21BDAB1	40 49 25 N	095 50 45 W	112SDGV	08-25-94	1130
404704095523501	10N	14E31DDDC1	40 47 04 N	095 52 35 W	112SDGV	08-19-94	1702
405353095491301	11N	14E27ABDB1	40 53 53 N	095 49 13 W	112SDGV	09-07-94	1413
405256095493001	11N	14E34ACAB1	40 52 56 N	095 49 30 W	112SDGV	09-07-94	1458
410042096231301	12N	9E15CADA1	41 00 42 N	096 23 13 W	112SDGV	07-28-94	1147
410002096232501	12N	9E22AABA1	41 00 02 N	096 23 25 W	112SDGV	08-15-94	1750
405754096274701	12N	9E31CBBB1	40 57 54 N	096 27 47 W	112SDGV	08-15-94	1017
410039096092401	12N	11E14BCBD1	41 00 39 N	096 09 24 W	112SDGV	08-22-94	1409
410131095524701	12N	14E 7ACDA1	41 01 31 N	095 52 47 W	112SDGV	08-23-94	1347
405846096261001	12N	9E29BDDD1	40 58 46 N	096 26 10 W	112SDGV	07-26-94	1530
405748096262901	12N	9E32CBAD1	40 57 48 N	096 26 29 W	112SDGV	08-18-94	1000
410247096055901	13N	12E31DDDD1	41 02 47 N	096 05 59 W	112SDGV	07-28-94	1007
410252095562201	13N	13E34CDAC1	41 02 52 N	095 56 22 W	112SDGV	08-15-94	1440
410252095562201	13N	13E34CDAC1	41 02 52 N	095 56 22 W	112SDGV	08-23-94	1114
410252095562201	13N	13E34CDAC1	41 02 52 N	095 56 22 W	112SDGV	08-22-94	1617
CLAY COUNTY							
403634097504301	7N	5W 2AA 1	40 36 34 N	097 50 43 W	112SDGV	08-23-94	1445
403739098054801	8N	7W27DC 1	40 37 39 N	098 05 48 W	112SDGV	08-23-94	1600
DAKOTA COUNTY							
421640096221401	27N	9E26DCDD1	42 16 40 N	096 22 14 W	110QRNR	08-08-94	1040
422316096353301	28N	7E22ADCD1	42 23 16 N	096 35 33 W	211DKOT	08-08-94	0915
422524096332801	28N	7E 1DBDD1	42 25 24 N	096 33 28 W	110QRNR	08-08-94	0720
422838096313701	29N	8E27ACDA1	42 28 38 N	096 31 37 W	110QRNR	08-08-94	0825
DAWSON COUNTY							
404553099341301	9N	20W10ADDD1	40 45 53 N	099 34 13 W	112SDGV	08-09-94	1305
404553099341301	9N	20W10ADDD1	40 45 53 N	099 34 13 W	112SDGV	08-09-94	1310

CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	DEPTH OF WELL, TOTAL (FEET) (72008)	SPE- CIFIC CON- DUCT- ANCE (μ S/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (° C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CaCO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS- SOLVED (MG/L AS Na) (00930)	SODIUM AD- SORP- TION RATIO (00931)
BURT COUNTY										
08-10-94	92.00	810	7.6	12.0	3.5	--	--	--	--	--
08-17-94	101.00	943	--	11.5	6.5	--	--	--	--	--
08-10-94	104.00	1280	7.5	12.0	0.3	--	--	--	--	--
08-09-94	115.00	804	7.2	11.5	0.4	--	--	--	--	--
08-09-94	122.00	843	7.1	11.5	0.3	--	--	--	--	--
08-08-94	--	926	7.1	12.5	6.0	--	--	--	--	--
09-01-94	110.00	812	6.8	12.0	8.3	--	--	--	--	--
09-01-94	--	778	7.5	11.5	4.2	--	--	--	--	--
08-09-94	--	1100	7.0	11.5	8.5	--	--	--	--	--
BUTLER COUNTY										
08-23-94	365.00	830	7.3	14.0	0.2	390	110	29	20	0.4
09-06-94	--	776	7.3	13.0	1.6	340	90	27	32	0.8
CASS COUNTY										
08-24-94	62.00	941	--	12.5	0.1	460	130	34	17	0.3
08-19-94	100.00	664	7.2	14.0	1.4	280	77	22	26	0.7
08-25-94	65.00	704	7.4	13.0	--	300	77	25	22	0.6
08-19-94	--	744	7.2	12.5	1.3	370	100	30	8.8	0.2
09-07-94	62.00	1140	7.4	13.0	--	510	140	40	46	0.9
09-07-94	83.00	988	7.2	12.5	1.3	440	120	35	42	0.9
07-28-94	--	503	7.0	13.5	4.5	210	58	16	30	0.9
08-15-94	--	498	6.8	14.0	--	--	--	--	--	--
08-15-94	93.00	--	7.4	13.0	--	230	72	12	34	1
08-18-94	93.00	764	7.0	12.5	0.5	--	--	--	--	--
08-22-94	--	717	7.8	12.5	2.2	210	59	14	63	2
08-23-94	72.00	966	7.4	13.0	0.2	430	120	32	29	0.6
07-26-94	80.00	645	7.0	12.0	2.1	250	67	19	47	1
08-18-94	80.00	620	6.8	12.5	--	--	--	--	--	--
07-28-94	105.50	630	7.0	14.5	2.0	260	75	18	32	0.9
08-15-94	105.50	626	7.1	15.0	--	--	--	--	--	--
08-23-94	--	588	7.3	17.0	0.7	190	58	11	42	1
08-22-94	--	586	7.1	13.5	1.7	270	80	18	16	0.4
CLAY COUNTY										
08-23-94	215.00	--	--	--	--	--	--	--	--	--
08-23-94	204.00	607	7.6	15.0	--	250	78	13	25	0.7
DAKOTA COUNTY										
08-08-94	103.00	1040	7.1	12.0	5.3	--	--	--	--	--
08-08-94	149.00	611	7.2	11.5	4.3	--	--	--	--	--
08-08-94	130.00	1550	7.2	12.5	8.9	--	--	--	--	--
08-08-94	107.00	970	7.3	11.5	0.3	--	--	--	--	--
DAWSON COUNTY										
08-09-94	38.00	2060	6.9	14.5	0.8	--	--	--	--	--
08-09-94	38.00	--	--	--	--	--	--	--	--	--

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CaCO ₃) (009410)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L (73031)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (73033)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)
------	--	--	---	--	---	---	---	--	--	---

08-10-94	--	--	--	--	--	--	--	7.60
08-17-94	--	--	--	--	--	--	--	0.110
08-10-94	--	--	--	--	--	--	--	0.390
08-09-94	--	--	--	--	--	--	--	0.093
08-09-94	--	--	--	--	--	--	--	0.073
08-08-94	--	--	--	--	--	--	--	13.0
09-01-94	--	--	--	--	--	--	--	<0.050
09-01-94	--	--	--	--	--	--	--	<0.050
08-09-94	--	--	--	--	--	--	--	0.084

08-23-94	8.1	332	100	5.9	0.40	49	530	0.72	--	1.90
09-06-94	13	375	39	4.1	0.30	50	481	0.65	--	<0.050

08-24-94	6.4	426	67	5.7	0.40	29	557	0.76	--	0.093
08-19-94	3.6	330	7.0	5.0	0.40	26	371	0.50	--	0.200
08-25-94	4.3	330	7.2	11	0.30	24	378	0.51	--	<0.050
08-19-94	4.8	360	26	1.4	0.40	18	424	0.58	--	4.20
09-07-94	7.1	528	85	9.2	0.30	28	684	0.93	--	0.062
09-07-94	5.4	409	51	10	0.30	28	545	0.74	--	<0.050
07-28-94	7.1	223	25	11	0.30	48	329	0.45	--	<0.050
08-15-94	--	--	--	--	--	--	--	--	--	4.90
08-15-94	4.3	274	14	2.4	0.30	34	350	0.48	--	2.80
08-18-94	--	--	--	--	--	--	--	--	--	0.610
08-22-94	8.9	201	74	53	0.50	28	423	0.58	--	<0.050
08-23-94	8.1	413	63	15	0.30	31	561	0.76	--	<0.050
07-26-94	5.2	244	72	6.7	0.30	33	397	0.54	--	--
08-18-94	--	--	--	--	--	--	--	--	--	4.80
07-28-94	5.5	258	59	8.8	0.30	34	387	0.53	--	--
08-15-94	--	--	--	--	--	--	--	--	--	3.10
08-23-94	5.2	234	5.9	37	0.30	33	340	0.46	--	0.110
08-22-94	3.8	248	27	5.4	0.40	31	361	0.49	--	6.80

08-23-94	--	--	--	--	--	--	--	--	--	--
08-23-94	6.8	175	100	16	0.30	33	385	0.52	<0.010	1.70

[illegible][illegible]

CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	BORON, DIS- SOLVED (µG/L AS B) (01020)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	RN-222 2 SIGMA WATER, WHOLE, TOTAL, (PCI/L) (76002)	RADON 222 TOTAL (PCI/L) (82303)	SI- MAZINE, WATER, DISS, REC (µG/L) (04035)	PRO- METRYN, WATER, DISS, REC (µG/L) (04036)	PRO- METON, WATER, DISS, REC (µG/L) (04037)
BURT COUNTY										
08-10-94	--	--	--	--	--	--	--	--	--	--
08-17-94	--	--	--	--	--	--	--	--	--	--
08-10-94	--	--	--	--	--	--	--	--	--	--
08-09-94	--	--	--	--	--	--	--	--	--	--
08-09-94	--	--	--	--	--	--	--	--	--	--
08-08-94	--	--	--	--	--	--	--	--	--	--
09-01-94	--	--	--	--	--	--	--	--	--	--
09-01-94	--	--	--	--	--	--	--	--	--	--
08-09-94	--	--	--	--	--	--	--	--	--	--
BUTLER COUNTY										
08-23-94	--	--	--	6	67	19	200	<0.05	<0.05	<0.05
09-06-94	--	--	--	150	450	22	350	<0.05	<0.05	<0.05
CASS COUNTY										
08-24-94	--	--	--	11000	600	20	260	--	--	--
08-19-94	--	--	--	4500	680	17	200	<0.05	<0.05	<0.05
08-25-94	--	--	--	8200	910	--	--	<0.05	<0.05	<0.05
08-19-94	--	--	--	4	370	18	220	<0.05	<0.05	<0.05
09-07-94	--	--	--	8800	2500	20	250	<0.05	<0.05	<0.05
09-07-94	--	--	--	7600	850	20	200	<0.05	<0.05	<0.05
07-28-94	--	--	--	8	5	20	260	<0.05	<0.05	<0.05
08-15-94	--	--	--	--	--	--	--	--	--	--
08-15-94	--	--	--	4	17	19	160	<0.05	<0.05	<0.05
08-18-94	--	--	--	--	--	--	--	--	--	--
08-22-94	--	--	--	150	2300	21	290	0.12	<0.05	<0.05
08-23-94	--	--	--	13000	1900	19	260	<0.05	<0.05	<0.05
07-26-94	--	--	--	120	89	24	400	<0.05	<0.05	<0.05
08-18-94	--	--	--	--	--	--	--	--	--	--
07-28-94	--	--	--	12	2	25	550	<0.05	<0.05	<0.05
08-15-94	--	--	--	--	--	--	--	--	--	--
08-23-94	--	--	--	3300	3600	21	330	--	--	--
08-22-94	--	--	--	4	250	19	270	<0.05	<0.05	<0.05
CLAYCOUNTY										
08-23-94	--	--	--	--	--	--	--	--	--	--
08-23-94	0.020	0.160	40	<3	<1	--	--	--	--	--
DAKOTACOUNTY										
08-08-94	--	--	--	--	--	--	--	--	--	--
08-08-94	--	--	--	--	--	--	--	--	--	--
08-08-94	--	--	--	--	--	--	--	--	--	--
08-08-94	--	--	--	--	--	--	--	--	--	--
DAWSONCOUNTY										
08-09-94	0.020	0.050	--	--	--	--	--	--	--	--
08-09-94	--	--	--	--	--	--	--	<0.05	<0.05	<0.05

CHEMICAL ANALYSES OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	DEISO- PROPYL ATRAZIN WATER, DISS, REC (µG/L) (04038)	DEETHYL ATRA- ZINE, WATER, DISS, REC (µG/L) (04040)	CYANA- ZINE, WATER, DISS, REC (µG/L) (04041)	AMETRYN WATER, DISS, REC (µG/L) (38401)	PROP- AZINE WATER, DISS, REC (µG/L) (38535)	TER- BUTRYN WATER, DISS, REC (µG/L) (38888)	METO- LACHLOR WATER, DISSOLV (µG/L) (39415)	ATRA- ZINE, WATER, DISS, REC (µG/L) (39632)	ALA- CHLOR, WATER, DISS, REC (µG/L) (46342)	METRI- BUZIN WATER, DISSOLV (µG/L) (82630)
BURT COUNTY										
08-10-94	--	--	--	--	--	--	--	--	--	--
08-17-94	--	--	--	--	--	--	--	--	--	--
08-10-94	--	--	--	--	--	--	--	--	--	--
08-09-94	--	--	--	--	--	--	--	--	--	--
08-09-94	--	--	--	--	--	--	--	--	--	--
08-08-94	--	--	--	--	--	--	--	--	--	--
09-01-94	--	--	--	--	--	--	--	--	--	--
09-01-94	--	--	--	--	--	--	--	--	--	--
08-09-94	--	--	--	--	--	--	--	--	--	--
BUTLER COUNTY										
08-23-94	<0.05	<0.05	<0.20	<0.05	<0.05	--	<0.05	<0.05	<0.05	0.09
09-06-94	<0.05	<0.05	<0.20	<0.05	<0.05	--	<0.05	<0.05	<0.05	<0.05
CASS COUNTY										
08-24-94	--	--	--	--	--	--	--	--	--	--
08-19-94	<0.05	<0.05	<0.20	<0.05	<0.05	--	<0.05	<0.05	<0.05	<0.05
08-25-94	<0.05	<0.05	<0.20	<0.05	<0.05	--	<0.05	<0.05	<0.05	<0.05
08-19-94	<0.05	<0.05	<0.20	<0.05	<0.05	--	<0.05	<0.05	<0.05	<0.05
09-07-94	<0.05	<0.05	<0.20	<0.05	<0.05	--	<0.05	<0.05	<0.05	<0.05
09-07-94	<0.05	<0.05	<0.20	<0.05	<0.05	--	<0.05	<0.05	<0.05	<0.05
07-28-94	<0.05	<0.05	<0.20	<0.05	<0.05	--	<0.05	<0.05	<0.05	<0.05
08-15-94	--	--	--	--	--	--	--	--	--	--
08-15-94	<0.05	<0.05	<0.20	<0.05	<0.05	--	<0.05	<0.05	<0.05	<0.05
08-18-94	--	--	--	--	--	--	--	--	--	--
08-22-94	<0.05	0.08	<0.20	<0.05	<0.05	--	<0.05	0.45	<0.05	<0.05
08-23-94	<0.05	<0.05	<0.20	<0.05	<0.05	--	<0.05	<0.05	<0.05	<0.05
07-26-94	<0.05	<0.05	<0.20	<0.05	<0.05	--	<0.05	<0.05	<0.05	<0.05
08-18-94	--	--	--	--	--	--	--	--	--	--
07-28-94	<0.05	<0.05	<0.20	<0.05	<0.05	--	<0.05	<0.05	<0.05	<0.05
08-15-94	--	--	--	--	--	--	--	--	--	--
08-23-94	--	--	--	--	--	--	--	--	--	--
08-22-94	<0.05	<0.05	<0.20	<0.05	<0.05	--	<0.05	<0.05	<0.05	<0.05
CLAYCOUNTY										
08-23-94	--	--	--	--	--	--	--	--	--	--
08-23-94	--	--	--	--	--	--	--	--	--	--
DAKOTACOUNTY										
08-08-94	--	--	--	--	--	--	--	--	--	--
08-08-94	--	--	--	--	--	--	--	--	--	--
08-08-94	--	--	--	--	--	--	--	--	--	--
08-08-94	--	--	--	--	--	--	--	--	--	--
DAWSONCOUNTY										
08-09-94	--	--	--	--	--	--	--	--	--	--
08-09-94	<0.05	0.28	<0.05	--	<0.05	<0.05	<0.05	0.10	<0.05	<0.05

CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

STATION	NUMBER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	GEOLOGIC UNIT	DATE	TIME
DOUGLAS COUNTY							
411237096081301	14N	11E 1CBCA1	41 12 37 N	096 08 13 W	--	08-18-94	1010
411218096082101	14N	11E11AAAA1	41 12 18 N	096 08 21 W	211DKOT	08-11-94	1445
411645096153702	15N	10E11DCAA1	41 16 45 N	096 15 37 W	110QRNR	08-18-94	1200
411500096160101	15N	10E23CDCB1	41 15 00 N	096 16 01 W	211DKOT	08-12-94	0920
411413096194401	15N	10E29CCBA1	41 14 13 N	096 19 44 W	110QRNR	08-12-94	1450
411719096135601	15N	11E 7BBDC1	41 17 19 N	096 13 56 W	211DKOT	08-12-94	1325
411945096200701	16N	10E30DABB1	41 19 45 N	096 20 07 W	110QRNR	08-12-94	1205
412018096084701	16N	11E23DCBA1	41 20 18 N	096 08 47 W	110QRNR	08-11-94	1610
FILLMORE COUNTY							
403145097360901	7N	3W36DB 1	40 31 45 N	097 36 09 W	112SDGV	08-23-94	1320
FRANKLIN COUNTY							
400530098453701	2N	13W35CCAD1	40 05 30 N	098 45 37 W	112SDGV	07-25-94	1120
					112SDGV	07-25-94	1125
GAGE COUNTY							
402016096511901	4N	5E 3CCAD1	40 20 16 N	096 51 19 W	112SDGV	07-28-94	0908
					112SDGV	07-28-94	0913
GARDEN COUNTY							
412137102130101	16N	43W14ACCB1	41 21 37 N	102 13 01 W	112SDGV	10-05-93	0955
					112SDGV	11-30-93	0750
					112SDGV	02-01-94	0855
					112SDGV	05-03-94	0830
					112SDGV	08-01-94	1320
412416102182301	17N	43W31BDAD1	41 24 16 N	102 19 06 W	112SDGV	09-01-94	0830
					112SDGV	10-05-93	1125
					112SDGV	02-01-94	1140
					112SDGV	05-03-94	1130
					112SDGV	08-01-94	1515
412416102182302	17N	43W31BDAD2	41 24 16 N	102 18 23 W	112SDGV	09-01-94	1000
					112SDGV	10-05-93	1140
					112SDGV	11-30-93	1040
					112SDGV	02-01-94	1155
					112SDGV	05-03-94	1200
412345102182301	17N	43W32CCCA1	41 23 45 N	102 18 23 W	112SDGV	08-01-94	1540
					112SDGV	09-01-94	1015
					112SDGV	10-05-93	1045
					112SDGV	11-30-93	1505
					112SDGV	02-01-94	0940
412648102274001	17N	44W13BCCD1	41 26 48 N	102 27 40 W	112SDGV	05-03-94	0940
					112SDGV	08-01-94	1425
					112SDGV	09-01-94	0910
					112SDGV	10-05-93	1610
					112SDGV	11-30-93	1345
412549102255401	17N	44W19DBBA1	41 25 49 N	102 25 54 W	112SDGV	02-02-94	1345
					112SDGV	05-04-94	1200
					112SDGV	08-02-94	1400
					112SDGV	09-01-94	1735
					112SDGV	10-06-93	1020

CHEMICAL ANALYSES OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	DEPTH OF WELL, TOTAL (FEET) (72008)	SPE- CIFIC CON- DUCT- ANCE (μ S/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (°C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)
DOUGLAS COUNTY										
08-18-94	170.00	518	--	12.0	5.0	--	--	--	--	--
08-11-94	290.00	559	7.7	13.5	4.9	--	--	--	--	--
08-18-94	46.00	571	--	13.0	4.5	--	--	--	--	--
08-12-94	50.00	684	6.3	12.5	5.2	--	--	--	--	--
08-12-94	--	628	7.4	11.5	0.4	--	--	--	--	--
08-12-94	238.00	702	7.0	12.0	4.9	--	--	--	--	--
08-12-94	90.00	549	5.3	11.0	0.4	--	--	--	--	--
08-11-94	56.00	725	7.2	12.0	2.0	--	--	--	--	--
FILLMORE COUNTY										
08-23-94	196.00	591	7.6	13.5	--	220	70	12	36	1
FRANKLIN COUNTY										
07-25-94	45.00	937	7.6	12.0	0.1	--	--	--	--	--
07-25-94	45.00	--	--	--	--	--	--	--	--	--
GAGE COUNTY										
07-28-94	101.00	584	7.3	12.5	5.8	--	--	--	--	--
07-28-94	101.00	--	--	--	--	--	--	--	--	--
GARDEN COUNTY										
10-05-93	130.00	826	7.3	13.5	--	--	--	--	--	--
11-30-93	130.00	820	7.4	13.0	5.5	320	100	16	46	1
02-01-94	130.00	760	7.5	12.5	4.1	--	--	--	--	--
05-03-94	130.00	862	7.3	13.5	4.9	--	--	--	--	--
08-01-94	130.00	918	7.2	13.5	--	370	120	17	42	1
09-01-94	130.00	845	7.5	13.5	3.9	--	--	--	--	--
10-05-93	115.00	389	7.8	15.0	--	--	--	--	--	--
02-01-94	115.00	348	7.8	13.5	5.2	--	--	--	--	--
05-03-94	115.00	377	7.7	14.5	5.1	--	--	--	--	--
08-01-94	115.00	393	7.6	14.5	--	120	39	5.8	31	1
09-01-94	115.00	363	8.0	14.0	6.4	--	--	--	--	--
10-05-93	65.00	365	7.6	14.5	--	--	--	--	--	--
11-30-93	65.00	363	7.8	14.0	6.6	120	38	5.5	25	1
02-01-94	65.00	325	7.7	13.5	5.2	--	--	--	--	--
05-03-94	65.00	364	7.6	14.5	6.0	--	--	--	--	--
08-01-94	65.00	382	7.6	14.0	--	120	39	5.6	26	1
09-01-94	65.00	354	7.8	14.0	7.4	--	--	--	--	--
10-05-93	58.00	140	7.2	13.0	--	--	--	--	--	--
11-30-93	58.00	1530	7.4	12.0	3.6	350	110	19	200	5
02-01-94	58.00	1460	7.5	11.5	3.3	--	--	--	--	--
05-03-94	58.00	1640	7.3	12.0	3.7	--	--	--	--	--
08-01-94	58.00	1580	7.2	12.5	--	380	120	20	200	4
09-01-94	58.00	1480	7.4	12.0	6.2	--	--	--	--	--
10-05-93	34.00	580	7.5	14.5	--	--	--	--	--	--
11-30-93	34.00	584	7.7	12.5	7.8	230	73	12	26	0.7
02-02-94	34.00	539	7.5	13.0	7.1	--	--	--	--	--
05-04-94	34.00	604	7.6	13.5	7.3	--	--	--	--	--
08-02-94	34.00	--	--	--	--	250	79	13	26	0.7
09-01-94	34.00	584	7.5	13.0	6.5	--	--	--	--	--
10-06-93	10.00	1530	7.6	15.5	4.2	--	--	--	--	--

CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO- GEN, NO ₂ +NO ₃ - DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	BORON, DIS- SOLVED (µG/L AS B) (01020)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	SI- MAZINE, WATER, DISS, REC (µG/L) (04035)	PRO- METRYN, WATER, DISS, REC (µG/L) (04036)	PRO- METON, WATER, DISS, REC (µG/L) (04037)	DEISO- PROPYL ATRAZIN WATER, DISS, REC (µG/L) (04038)
DOUGLAS COUNTY										
08-18-94	0.850	--	--	--	--	--	--	--	--	--
08-11-94	<0.050	--	--	--	--	--	--	--	--	--
08-18-94	1.70	--	--	--	--	--	--	--	--	--
08-12-94	<0.050	--	--	--	--	--	--	--	--	--
08-12-94	5.60	--	--	--	--	--	--	--	--	--
08-12-94	5.40	--	--	--	--	--	--	--	--	--
08-12-94	6.30	--	--	--	--	--	--	--	--	--
08-11-94	4.60	--	--	--	--	--	--	--	--	--
FILLMORE COUNTY										
08-23-94	2.90	<0.010	0.170	60	<3	<1	--	--	--	--
FRANKLIN COUNTY										
07-25-94	0.890	0.050	0.340	--	--	--	--	--	--	--
07-25-94	--	--	--	--	--	--	<0.05	0.68	<0.05	<0.05
GAGE COUNTY										
07-28-94	10.0	0.030	0.170	--	--	--	--	--	--	--
07-28-94	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05
GARDEN COUNTY										
10-05-93	8.60	--	--	--	--	--	--	--	--	--
11-30-93	8.90	--	--	--	7	<1	--	--	--	--
02-01-94	8.80	--	--	--	--	--	--	--	--	--
05-03-94	8.20	--	--	--	--	--	--	--	--	--
08-01-94	9.20	0.030	0.030	--	<3	<1	--	<0.05	<0.05	<0.05
09-01-94	8.90	--	--	--	--	--	--	--	--	--
10-05-93	5.30	--	--	--	--	--	--	--	--	--
02-01-94	2.50	--	--	--	--	--	--	--	--	--
05-03-94	2.20	--	--	--	--	--	--	--	--	--
08-01-94	3.20	0.010	0.020	--	6	<1	--	<0.05	<0.05	<0.05
09-01-94	2.80	--	--	--	--	--	--	--	--	--
10-05-93	3.00	--	--	--	--	--	--	--	--	--
11-30-93	2.40	--	--	--	<3	<1	--	--	--	--
02-01-94	2.40	--	--	--	--	--	--	--	--	--
05-03-94	2.10	--	--	--	--	--	--	--	--	--
08-01-94	2.80	0.020	0.030	--	<3	<1	--	<0.05	<0.05	<0.05
09-01-94	3.10	--	--	--	--	--	--	--	--	--
10-05-93	26.0	--	--	--	--	--	--	--	--	--
11-30-93	28.0	--	--	--	3	<1	--	--	--	--
02-01-94	30.0	--	--	--	--	--	--	--	--	--
05-03-94	--	--	--	--	--	--	--	--	--	--
08-01-94	31.0	0.030	0.070	--	<3	<1	--	<0.05	<0.05	<0.05
09-01-94	31.0	--	--	--	--	--	--	--	--	--
10-05-93	8.50	--	--	--	--	--	--	--	--	--
11-30-93	8.70	--	--	--	<3	<1	--	--	--	--
02-02-94	8.50	--	--	--	--	--	--	--	--	--
05-04-94	7.90	--	--	--	--	--	--	--	--	--
08-02-94	8.10	0.020	0.030	--	5	<1	--	<0.05	<0.05	<0.05
09-01-94	8.50	--	--	--	--	--	--	--	--	--
10-06-93	50.0	--	--	--	--	--	--	--	--	--

CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[illegible]

CHEMICAL ANALYSES OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

STATION NUMBER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	GEOLOGIC UNIT	DATE	TIME	DEPTH OF WELL, TOTAL (FEET) (72008)	SPECIFIC CONDUCTANCE (μ S/CM) (00095)
GARDEN COUNTY								
412549102255401	17N 44W19DBBA1	41 25 49 N	102 25 54 W	112SDGV	11-29-93	1600	10.00	1440
				112SDGV	02-01-94	0910	10.00	1520
				112SDGV	05-02-94	0935	10.00	1540
				112SDGV	08-02-94	1302	10.00	--
412549102255402	17N 44W19DBBA2			112SDGV	02-01-94	0905	15.00	1510
				112SDGV	08-02-94	1304	15.00	--
				112SDGV	09-01-94	1715	15.00	--
				112SDGV	02-01-94	0900	20.00	1570
412549102255403	17N 44W19DBBA3			112SDGV	08-02-94	1300	20.00	--
				112SDGV	02-01-94	0855	25.00	1620
412549102255404	17N 44W19DBBA4			112SDGV	08-02-94	1258	25.00	--
				112SDGV	10-06-93	1015	30.00	1570
				112SDGV	11-29-93	1555	30.00	1610
				112SDGV	02-01-94	0850	30.00	1550
412549102255405	17N 44W19DBBA5			112SDGV	05-02-94	0930	30.00	1370
				112SDGV	08-02-94	1256	30.00	--
				112SDGV	09-01-94	1705	30.00	1480
				112SDGV	02-01-94	0845	40.00	1300
412549102255406	17N 44W19DBBA6			112SDGV	08-02-94	1254	40.00	--
				112SDGV	02-01-94	0840	50.00	1320
412549102255407	17N 44W19DBBA7			112SDGV	08-02-94	1252	50.00	--
				112SDGV	10-06-93	1005	60.00	1330
				112SDGV	11-29-93	1545	60.00	1370
				112SDGV	02-01-94	0835	60.00	1220
412549102255408	17N 44W19DBBA8			112SDGV	05-02-94	0925	60.00	1230
				112SDGV	08-02-94	1250	60.00	--
				112SDGV	09-01-94	1655	60.00	1390
				112SDGV	10-06-93	0945	10.00	1410
412526102252701	17N 44W19DDDD1	41 25 26 N	102 25 27 W	112SDGV	11-29-93	1525	10.00	1500
				112SDGV	02-01-94	1000	10.00	1600
				112SDGV	05-02-94	1030	10.00	1540
				112SDGV	08-02-94	1228	10.00	--
412526102252702	17N 44W19DDDD2			112SDGV	09-01-94	1645	10.00	--
				112SDGV	02-01-94	0955	15.00	1520
				112SDGV	08-02-94	1227	15.00	--
412526102252703	17N 44W19DDDD3			112SDGV	02-01-94	0950	20.00	1520
				112SDGV	08-02-94	1225	20.00	--
412526102252704	17N 44W19DDDD4			112SDGV	02-01-94	0945	25.00	1490
				112SDGV	08-02-94	1225	25.00	--
412526102252705	17N 44W19DDDD5			112SDGV	10-06-93	0935	30.00	1550
				112SDGV	11-29-93	1515	30.00	1580
				112SDGV	02-01-94	0940	30.00	1470
				112SDGV	05-02-94	1000	30.00	1490
412526102252706	17N 44W19DDDD6			112SDGV	08-02-94	1221	30.00	--
				112SDGV	09-01-94	1635	30.00	1360
412526102252707	17N 44W19DDDD7			112SDGV	02-01-94	0935	40.00	1360
				112SDGV	08-02-94	1219	40.00	--
412526102252708	17N 44W19DDDD8			112SDGV	02-01-94	0930	50.00	1390
				112SDGV	08-02-94	1217	50.00	--
				112SDGV	10-06-93	0930	60.00	1340
412553102250701	17N 44W20BDCC1	41 25 53 N	102 25 07 W	112SDGV	11-29-93	1505	60.00	1520
				112SDGV	02-01-94	0925	60.00	1360
				112SDGV	05-02-94	0955	60.00	1360
				112SDGV	08-02-94	1215	60.00	--
412553102250701	17N 44W20BDCC1			112SDGV	09-01-94	1625	60.00	1170
				112SDGV	10-05-93	1545	163.00	802
				112SDGV	11-30-93	1305	163.00	732
				112SDGV	05-04-94	1245	163.00	791
412553102250701	17N 44W20BDCC1			112SDGV	08-02-94	1145	163.00	--
				112SDGV	09-01-94	1610	163.00	680

CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	PH WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (° C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS- SOLVED (MG/L AS Na) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY LAB (MG/L AS CaCO ₃) (90410)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)
GARDENCOUNTY											
11-29-93	7.5	10.0	--	390	110	28	150	3	48	427	120
02-01-94	7.7	8.0	--	--	--	--	--	--	--	--	--
05-02-94	7.6	8.5	--	--	--	--	--	--	--	--	--
08-02-94	--	--	--	--	--	--	--	--	--	--	--
02-01-94	7.6	8.0	--	--	--	--	--	--	--	--	--
08-02-94	--	--	--	410	120	26	140	3	48	413	120
09-01-94	--	12.0	--	--	--	--	--	--	--	--	--
02-01-94	7.6	9.0	--	--	--	--	--	--	--	--	--
08-02-94	--	--	--	--	--	--	--	--	--	--	--
02-01-94	7.5	9.5	--	--	--	--	--	--	--	--	--
08-02-94	--	--	--	--	--	--	--	--	--	--	--
10-06-93	7.4	14.0	2.9	--	--	--	--	--	--	--	--
11-29-93	7.6	9.5	--	540	170	28	120	2	24	436	230
02-01-94	7.5	9.5	--	--	--	--	--	--	--	--	--
05-02-94	7.4	10.0	--	--	--	--	--	--	--	--	--
08-02-94	--	--	--	--	--	--	--	--	--	--	--
09-01-94	7.4	12.0	--	--	--	--	--	--	--	--	--
02-01-94	7.5	9.5	--	--	--	--	--	--	--	--	--
08-02-94	--	--	--	--	--	--	--	--	--	--	--
02-01-94	7.5	9.5	--	--	--	--	--	--	--	--	--
08-02-94	--	--	--	--	--	--	--	--	--	--	--
10-06-93	7.5	14.0	2.3	--	--	--	--	--	--	--	--
11-29-93	7.5	9.5	--	440	140	23	100	2	11	352	220
02-01-94	7.3	9.5	--	--	--	--	--	--	--	--	--
05-02-94	7.3	10.5	--	--	--	--	--	--	--	--	--
08-02-94	--	--	--	--	--	--	--	--	--	--	--
09-01-94	7.3	12.5	--	--	--	--	--	--	--	--	--
10-06-93	7.5	15.5	3.5	--	--	--	--	--	--	--	--
11-29-93	7.4	10.0	--	450	110	43	100	2	30	431	180
02-01-94	7.6	6.5	--	--	--	--	--	--	--	--	--
05-02-94	7.8	9.0	--	--	--	--	--	--	--	--	--
08-02-94	--	--	--	--	--	--	--	--	--	--	--
09-01-94	--	--	--	--	--	--	--	--	--	--	--
02-01-94	7.6	10.0	--	--	--	--	--	--	--	--	--
08-02-94	--	--	--	400	93	41	140	3	63	419	220
02-01-94	7.6	9.0	--	--	--	--	--	--	--	--	--
08-02-94	--	--	--	--	--	--	--	--	--	--	--
02-01-94	7.6	10.0	--	--	--	--	--	--	--	--	--
08-02-94	--	--	--	--	--	--	--	--	--	--	--
10-06-93	7.6	12.5	3.1	--	--	--	--	--	--	--	--
11-29-93	7.5	9.5	--	400	110	31	130	3	54	370	290
02-01-94	7.5	9.5	--	--	--	--	--	--	--	--	--
05-02-94	7.7	9.5	--	--	--	--	--	--	--	--	--
08-02-94	--	--	--	--	--	--	--	--	--	--	--
09-01-94	7.5	12.0	--	--	--	--	--	--	--	--	--
02-01-94	7.5	9.0	--	--	--	--	--	--	--	--	--
08-02-94	--	--	--	--	--	--	--	--	--	--	--
02-01-94	7.5	8.5	--	--	--	--	--	--	--	--	--
08-02-94	--	--	--	--	--	--	--	--	--	--	--
10-06-93	7.4	13.5	2.0	--	--	--	--	--	--	--	--
11-29-93	7.4	9.5	--	420	130	22	110	2	33	329	300
02-01-94	7.4	9.5	--	--	--	--	--	--	--	--	--
05-02-94	7.5	10.0	--	--	--	--	--	--	--	--	--
08-02-94	--	--	--	--	--	--	--	--	--	--	--
09-01-94	7.0	12.0	--	--	--	--	--	--	--	--	--
10-05-93	7.4	14.0	--	--	--	--	--	--	--	--	--
11-30-93	7.6	12.5	8.9	260	81	14	44	1	14	249	57
05-04-94	7.3	13.0	8.3	--	--	--	--	--	--	--	--
08-02-94	--	--	--	290	92	15	54	1	16	235	63
09-01-94	7.6	13.0	7.0	--	--	--	--	--	--	--	--

CHEMICAL ANALYSES OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	CHLORIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)
GARDEN COUNTY											
11-29-93	47	1.0	60	1050	1.43	--	52.0	--	--	4	<1
02-01-94	--	--	--	--	--	--	50.0	--	--	--	--
05-02-94	--	--	--	--	--	--	51.0	--	--	--	--
08-02-94	--	--	--	--	--	<0.010	45.0	0.020	0.070	--	--
02-01-94	--	--	--	--	--	--	51.0	--	--	--	--
08-02-94	56	1.1	60	1040	1.41	<0.010	50.0	0.020	0.050	<3	<1
09-01-94	--	--	--	--	--	--	51.0	--	--	--	--
02-01-94	--	--	--	--	--	--	53.0	--	--	--	--
08-02-94	--	--	--	--	--	<0.010	54.0	0.030	0.050	--	--
02-01-94	--	--	--	--	--	--	50.0	--	--	--	--
08-02-94	--	--	--	--	--	<0.010	52.0	0.020	0.040	--	--
10-06-93	--	--	--	--	--	--	40.0	--	--	--	--
11-29-93	31	0.60	57	1110	1.51	--	43.0	--	--	13	<1
02-01-94	--	--	--	--	--	--	45.0	--	--	--	--
05-02-94	--	--	--	--	--	--	30.0	--	--	--	--
08-02-94	--	--	--	--	--	<0.010	55.0	0.020	0.040	--	--
09-01-94	--	--	--	--	--	--	56.0	--	--	--	--
02-01-94	--	--	--	--	--	--	23.0	--	--	--	--
08-02-94	--	--	--	--	--	<0.010	31.0	0.020	0.030	--	--
02-01-94	--	--	--	--	--	--	29.0	--	--	--	--
08-02-94	--	--	--	--	--	<0.010	26.0	0.030	0.030	--	--
10-06-93	--	--	--	--	--	--	29.0	--	--	--	--
11-29-93	27	0.50	57	905	1.23	--	26.0	--	--	<3	<1
02-01-94	--	--	--	--	--	--	23.0	--	--	--	--
05-02-94	--	--	--	--	--	--	18.0	--	--	--	--
08-02-94	--	--	--	--	--	<0.010	41.0	0.030	0.020	--	--
09-01-94	--	--	--	--	--	--	47.0	--	--	--	--
10-06-93	--	--	--	--	--	--	32.0	--	--	--	--
11-29-93	29	1.3	70	950	1.29	--	29.0	--	--	6	<1
02-01-94	--	--	--	--	--	--	35.0	--	--	--	--
05-02-94	--	--	--	--	--	--	31.0	--	--	--	--
08-02-94	--	--	--	--	--	<0.010	30.0	0.020	0.050	--	--
09-01-94	--	--	--	--	--	--	29.0	--	--	--	--
02-01-94	--	--	--	--	--	--	35.0	--	--	--	--
08-02-94	31	1.5	61	1030	1.41	<0.010	30.0	0.010	0.050	<3	<1
02-01-94	--	--	--	--	--	--	31.0	--	--	--	--
08-02-94	--	--	--	--	--	<0.010	28.0	0.010	0.070	--	--
02-01-94	--	--	--	--	--	--	26.0	--	--	--	--
08-02-94	--	--	--	--	--	<0.010	27.0	0.020	0.070	--	--
10-06-93	--	--	--	--	--	--	28.0	--	--	--	--
11-29-93	29	1.5	51	1030	1.41	--	26.0	--	--	8	<1
02-01-94	--	--	--	--	--	--	23.0	--	--	--	--
05-02-94	--	--	--	--	--	--	23.0	--	--	--	--
08-02-94	--	--	--	--	--	<0.010	22.0	0.030	0.070	--	--
09-01-94	--	--	--	--	--	--	24.0	--	--	--	--
02-01-94	--	--	--	--	--	--	20.0	--	--	--	--
08-02-94	--	--	--	--	--	<0.010	18.0	0.020	0.060	--	--
02-01-94	--	--	--	--	--	--	17.0	--	--	--	--
08-02-94	--	--	--	--	--	<0.010	18.0	0.020	0.060	--	--
10-06-93	--	--	--	--	--	--	16.0	--	--	--	--
11-29-93	27	0.60	52	947	1.29	--	17.0	--	--	<3	<1
02-01-94	--	--	--	--	--	--	16.0	--	--	--	--
05-02-94	--	--	--	--	--	--	15.0	--	--	--	--
08-02-94	--	--	--	--	--	<0.010	13.0	0.020	0.030	--	--
09-01-94	--	--	--	--	--	--	14.0	--	--	--	--
10-05-93	--	--	--	--	--	--	18.0	--	--	--	--
11-30-93	15	0.40	63	517	0.70	--	18.0	--	--	<3	<1
05-04-94	--	--	--	--	--	--	19.0	--	--	--	--
08-02-94	19	0.50	61	563	0.77	<0.010	23.0	0.020	0.030	<3	<1
09-01-94	--	--	--	--	--	--	18.0	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[illegible]

CHEMICAL ANALYSES OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

STATION NUMBER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	GEOLOGIC UNIT	DATE	TIME	DEPTH OF WELL, TOTAL (FEET) (72008)	SPECIFIC CONDUCTANCE (μ S/CM) (00095)
GARDEN COUNTY								
412605102211001	17N 44W23ACAA1	41 26 05 N	102 21 10 W	112SDGV	10-05-93	1245	70.00	516
				112SDGV	11-30-93	1135	70.00	503
				112SDGV	02-01-94	1240	70.00	460
				112SDGV	05-03-94	1355	70.00	356
				112SDGV	08-02-94	0735	70.00	490
412526102212301	17N 44W26ABBB1	41 25 26 N	102 21 23 W	112SDGV	09-01-94	1145	70.00	477
				112SDGV	10-05-93	1320	38.00	412
				112SDGV	11-30-93	1225	38.00	412
				112SDGV	02-02-94	1305	38.00	371
				112SDGV	05-03-94	1500	38.00	407
412435102223301	17N 44W27DCCC1	41 24 35 N	102 22 33 W	112SDGV	08-02-94	0820	38.00	435
				112SDGV	09-01-94	1235	38.00	384
				112SDGV	10-05-93	1435	48.00	1360
				112SDGV	12-01-93	0827	48.00	1220
				112SDGV	02-02-94	1110	48.00	1240
412435102223302	17N 44W27DCCC2			112SDGV	05-04-94	0920	48.00	1410
				112SDGV	08-02-94	0945	48.00	1470
				112SDGV	09-01-94	1410	48.00	1340
				112SDGV	10-05-93	1450	28.00	1350
				112SDGV	12-01-93	0844	28.00	1200
412500102240301	17N 44W28CBAA1	41 25 00 N	102 24 03 W	112SDGV	02-02-94	1130	28.00	1210
				112SDGV	05-04-94	0940	28.00	1430
				112SDGV	08-02-94	1000	28.00	1490
				112SDGV	09-01-94	1425	28.00	1360
				112SDGV	10-05-93	1510	137.00	933
412500102241801	17N 44W29DAAA1	41 25 00 N	102 24 18 W	112SDGV	11-30-93	1415	137.00	961
				112SDGV	05-04-94	1415	137.00	957
				112SDGV	08-02-94	1035	137.00	1520
				112SDGV	09-01-94	1505	137.00	1200
				112SDGV	10-06-93	0840	60.00	2180
412500102241802	17N 44W29DAAA2			112SDGV	11-29-93	1435	60.00	2040
				112SDGV	02-01-94	1050	60.00	2010
				112SDGV	05-02-94	1050	60.00	1800
				112SDGV	08-02-94	1111	60.00	--
				112SDGV	09-01-94	1550	60.00	680
412500102241802	17N 44W29DAAA2			112SDGV	02-01-94	1045	15.00	1580
412500102241803	17N 44W29DAAA3			112SDGV	08-02-94	1113	15.00	--
412500102241804	17N 44W29DAAA4			112SDGV	02-01-94	1040	20.00	1570
				112SDGV	08-02-94	1109	20.00	--
412500102241805	17N 44W29DAAA5			112SDGV	02-01-94	1035	25.00	1520
				112SDGV	08-02-94	1108	25.00	--
				112SDGV	10-06-93	0835	30.00	1720
				112SDGV	11-29-93	1425	30.00	1350
				112SDGV	02-01-94	1030	30.00	1220
412500102241806	17N 44W29DAAA6			112SDGV	05-02-94	1045	30.00	1560
				112SDGV	08-02-94	1107	30.00	--
				112SDGV	09-01-94	1535	30.00	1250
				112SDGV	02-01-94	1025	40.00	1280
				112SDGV	08-02-94	1106	40.00	--
412500102241807	17N 44W29DAAA7			112SDGV	02-01-94	1020	50.00	1020
412500102241808	17N 44W29DAAA8			112SDGV	08-02-94	1104	50.00	--
				112SDGV	10-06-93	0830	60.00	1140
				112SDGV	11-29-93	1405	60.00	--
				112SDGV	02-01-94	1015	60.00	1030
				112SDGV	05-02-94	1040	60.00	1100
412434102214201	17N 44W35BBAA1	41 24 34 N	102 21 42 W	112SDGV	08-02-94	1102	60.00	--
				112SDGV	09-01-94	1530	60.00	949
				112SDGV	10-05-93	1400	48.00	548
				112SDGV	12-01-93	0735	48.00	485
				112SDGV	02-02-94	1025	48.00	491

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (° C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CaCO ₃) (90410)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
GARDEN COUNTY												
10-05-93	7.4	14.5	--	--	--	--	--	--	--	--	--	--
11-30-93	7.5	12.5	7.0	190	63	7.7	24	0.8	12	160	60	4.5
02-01-94	7.3	11.5	--	--	--	--	--	--	--	--	--	--
05-03-94	7.8	12.5	6.4	--	--	--	--	--	--	--	--	--
08-02-94	7.5	11.5	--	200	67	8.1	15	0.5	9.5	157	71	3.5
09-01-94	7.4	12.0	1.9	--	--	--	--	--	--	--	--	--
10-05-93	7.5	13.0	--	--	--	--	--	--	--	--	--	--
11-30-93	7.7	11.5	1.2	170	55	7.5	14	0.5	9.2	184	24	3.4
02-02-94	7.4	11.0	1.0	--	--	--	--	--	--	--	--	--
05-03-94	7.7	12.0	1.6	--	--	--	--	--	--	--	--	--
08-02-94	7.2	12.0	--	170	57	7.7	15	0.5	9.6	181	24	3.8
09-01-94	7.7	12.0	1.1	--	--	--	--	--	--	--	--	--
10-05-93	7.3	13.0	--	--	--	--	--	--	--	--	--	--
12-01-93	7.4	11.5	--	360	110	20	160	4	14	439	200	30
02-02-94	7.3	11.5	0.2	--	--	--	--	--	--	--	--	--
05-04-94	7.2	--	0.5	--	--	--	--	--	--	--	--	--
08-02-94	7.1	12.0	--	390	120	21	150	3	16	408	210	30
09-01-94	7.5	12.0	0.4	--	--	--	--	--	--	--	--	--
10-05-93	7.4	13.0	--	--	--	--	--	--	--	--	--	--
12-01-93	7.4	11.5	--	290	87	17	180	5	16	453	200	25
02-02-94	7.4	11.0	0.1	--	--	--	--	--	--	--	--	--
05-04-94	7.3	10.5	1.8	--	--	--	--	--	--	--	--	--
08-02-94	7.1	11.0	--	320	100	18	190	5	15	481	210	29
09-01-94	7.6	12.0	0.4	--	--	--	--	--	--	--	--	--
10-05-93	7.5	13.5	--	--	--	--	--	--	--	--	--	--
11-30-93	7.6	12.0	0.6	310	97	17	78	2	14	292	180	21
05-04-94	7.3	13.0	0.4	--	--	--	--	--	--	--	--	--
08-02-94	7.2	12.0	--	350	81	36	140	3	110	458	150	34
09-01-94	7.5	12.5	2.5	--	--	--	--	--	--	--	--	--
10-06-93	7.6	13.0	1.5	--	--	--	--	--	--	--	--	--
11-29-93	7.5	9.5	--	330	100	20	380	9	24	465	640	48
02-01-94	7.6	4.5	--	--	--	--	--	--	--	--	--	--
05-02-94	7.7	8.5	--	--	--	--	--	--	--	--	--	--
08-02-94	7.4	12.5	--	--	--	--	--	--	--	--	--	--
09-01-94	7.5	13.0	--	--	--	--	--	--	--	--	--	--
02-01-94	7.6	7.5	--	--	--	--	--	--	--	--	--	--
08-02-94	7.4	12.0	--	290	91	16	200	5	20	356	330	31
02-01-94	7.6	8.0	--	--	--	--	--	--	--	--	--	--
08-02-94	7.3	12.0	--	--	--	--	--	--	--	--	--	--
02-01-94	7.5	8.5	--	--	--	--	--	--	--	--	--	--
08-02-94	7.3	12.0	--	--	--	--	--	--	--	--	--	--
10-06-93	7.5	12.0	2.2	--	--	--	--	--	--	--	--	--
11-29-93	7.3	9.5	--	480	150	25	120	2	16	369	380	32
02-01-94	7.5	8.5	--	--	--	--	--	--	--	--	--	--
05-02-94	7.5	10.0	--	--	--	--	--	--	--	--	--	--
08-02-94	7.3	12.5	--	--	--	--	--	--	--	--	--	--
09-01-94	7.4	11.5	--	--	--	--	--	--	--	--	--	--
02-01-94	7.5	8.5	--	--	--	--	--	--	--	--	--	--
08-02-94	7.2	12.5	--	--	--	--	--	--	--	--	--	--
02-01-94	7.6	9.0	--	--	--	--	--	--	--	--	--	--
08-02-94	7.2	13.5	--	--	--	--	--	--	--	--	--	--
10-06-93	7.7	12.0	2.1	--	--	--	--	--	--	--	--	--
11-29-93	--	--	--	320	100	17	110	3	13	294	240	28
02-01-94	7.4	10.0	--	--	--	--	--	--	--	--	--	--
05-02-94	7.4	10.5	--	--	--	--	--	--	--	--	--	--
08-02-94	7.1	13.5	--	--	--	--	--	--	--	--	--	--
09-01-94	7.6	12.0	--	--	--	--	--	--	--	--	--	--
10-05-93	7.6	13.0	--	--	--	--	--	--	--	--	--	--
12-01-93	7.7	12.0	--	210	62	13	28	0.8	11	194	64	13
02-02-94	7.7	11.5	4.8	--	--	--	--	--	--	--	--	--

CHEMICAL ANALYSES OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	FLUORIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)
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GARDEN COUNTY

10-05-93	--	--	--	--	--	--	11.0	--	--	--	--
11-30-93	0.40	54	365	0.50	--	--	9.80	--	--	11	<1
02-01-94	--	--	--	--	--	--	8.10	--	--	--	--
05-03-94	--	--	--	--	--	--	5.30	--	--	--	--
08-02-94	0.30	53	332	0.45	--	<0.010	2.40	0.020	0.030	4	<1
09-01-94	--	--	--	--	--	--	2.10	--	--	--	--
10-05-93	--	--	--	--	--	--	2.30	--	--	--	--
11-30-93	0.50	58	289	0.39	--	--	1.70	--	--	<3	<1
02-02-94	--	--	--	--	--	--	1.80	--	--	--	--
05-03-94	--	--	--	--	--	--	1.50	--	--	--	--
08-02-94	0.50	56	290	0.39	--	<0.010	1.80	0.020	0.030	<3	<1
09-01-94	--	--	--	--	--	--	1.80	--	--	--	--
10-05-93	--	--	--	--	--	--	18.0	--	--	--	--
12-01-93	0.40	60	946	1.29	--	--	20.0	--	--	15	7
02-02-94	--	--	--	--	--	--	19.0	--	--	--	--
05-04-94	--	--	--	--	--	--	18.0	--	--	--	--
08-02-94	0.40	61	942	1.28	--	<0.010	20.0	0.020	0.030	<3	9
09-01-94	--	--	--	--	--	--	21.0	--	--	--	--
10-05-93	--	--	--	--	--	--	14.0	--	--	--	--
12-01-93	0.60	61	920	1.25	--	--	14.0	--	--	<3	15
02-02-94	--	--	--	--	--	--	15.0	--	--	--	--
05-04-94	--	--	--	--	--	--	18.0	--	--	--	--
08-02-94	0.60	59	990	1.35	18.0	0.030	18.0	0.020	0.030	<3	23
09-01-94	--	--	--	--	--	--	18.0	--	--	--	--
10-05-93	--	--	--	--	--	--	5.30	--	--	--	--
11-30-93	0.30	58	674	0.92	--	--	7.50	--	--	19	<1
05-04-94	--	--	--	--	--	--	7.50	--	--	--	--
08-02-94	1.2	72	1050	1.43	--	<0.010	34.0	0.030	0.070	<3	<1
09-01-94	--	--	--	--	--	--	24.0	--	--	--	--
10-06-93	--	--	--	--	--	--	1.90	--	--	--	--
11-29-93	1.0	50	1550	2.11	--	--	1.70	--	--	20	50
02-01-94	--	--	--	--	--	--	2.00	--	--	--	--
05-02-94	--	--	--	--	--	--	1.90	--	--	--	--
08-02-94	--	--	--	--	2.34	0.060	2.40	0.020	0.100	--	--
09-01-94	--	--	--	--	--	--	2.10	--	--	--	--
02-01-94	--	--	--	--	--	--	2.70	--	--	--	--
08-02-94	0.70	50	965	1.31	2.78	0.020	2.80	0.020	0.050	<3	16
02-01-94	--	--	--	--	--	--	2.80	--	--	--	--
08-02-94	--	--	--	--	2.58	0.020	2.60	0.020	0.040	--	--
02-01-94	--	--	--	--	--	--	2.70	--	--	--	--
08-02-94	--	--	--	--	2.79	0.010	2.80	0.020	0.040	--	--
10-06-93	--	--	--	--	--	--	3.10	--	--	--	--
11-29-93	0.50	53	1010	1.37	--	--	2.90	--	--	<3	15
02-01-94	--	--	--	--	--	--	3.30	--	--	--	--
05-02-94	--	--	--	--	--	--	2.10	--	--	--	--
08-02-94	--	--	--	--	--	<0.010	3.40	0.020	0.030	--	--
09-01-94	--	--	--	--	--	--	3.20	--	--	--	--
02-01-94	--	--	--	--	--	--	3.20	--	--	--	--
08-02-94	--	--	--	--	--	<0.010	3.40	0.030	0.030	--	--
02-01-94	--	--	--	--	--	--	2.60	--	--	--	--
08-02-94	--	--	--	--	--	<0.010	3.10	0.020	0.030	--	--
10-06-93	--	--	--	--	--	--	2.60	--	--	--	--
11-29-93	0.50	55	753	1.02	--	--	3.00	--	--	<3	1
02-01-94	--	--	--	--	--	--	2.70	--	--	--	--
05-02-94	--	--	--	--	--	--	2.70	--	--	--	--
08-02-94	--	--	--	--	--	<0.010	2.90	0.020	0.030	--	--
09-01-94	--	--	--	--	--	--	2.40	--	--	--	--
10-05-93	--	--	--	--	--	--	2.80	--	--	--	--
12-01-93	0.50	62	383	0.52	--	--	3.00	--	--	6	<1
02-02-94	--	--	--	--	--	--	2.90	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[illegible]

CHEMICAL ANALYSES OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

STATION	NUMBER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	GEOLOGIC UNIT	DATE	TIME
GARDEN COUNTY							
412434102214201	17N	44W35BBAA1	41 24 34 N	102 21 42 W	112SDGV	05-03-94	1550
					112SDGV	08-02-94	0900
					112SDGV	09-01-94	1315
412434102214202	17N	44W35BBAA2			112SDGV	10-05-93	1415
					112SDGV	12-01-93	0755
					112SDGV	02-02-94	1040
					112SDGV	05-03-94	1615
					112SDGV	08-02-94	0915
					112SDGV	09-01-94	1335
412424102201801	17N	44W36BADD1	41 24 24 N	102 20 18 W	112SDGV	10-05-93	1215
					112SDGV	11-30-93	0925
					112SDGV	02-01-94	1020
					112SDGV	05-03-94	1040
					112SDGV	08-01-94	1615
					112SDGV	09-01-94	1055
HALL COUNTY							
404801098293101	10N	10W30CCCC1	40 48 01 N	098 29 31 W	112SDGV	07-25-94	1410
					112SDGV	07-25-94	1415
HAMILTON COUNTY							
404633098091202	9N	7W 6DAD 2	40 46 33 N	098 09 12 W	112SDGV	08-24-94	0845
405147098004501	10N	6W 4CB 1	40 51 47 N	098 00 45 W	112SDGV	08-24-94	0955
405225097595201	11N	6W33DDDA1	40 52 25 N	097 59 52 W	112SDGV	07-29-94	0912
					112SDGV	07-29-94	0917
HITCHCOCK COUNTY							
401014100571601	2N	32W 5AC 1	40 10 14 N	100 57 16 W	--	07-21-94	0915
401016101025201	2N	33W 4AC 1	40 10 16 N	101 02 52 W	--	07-21-94	0845
401013101023601	2N	33W 4AD 1	40 10 13 N	101 02 36 W	--	07-21-94	0830
400918101023201	2N	33W 9ADD 1	40 09 18 N	101 02 32 W	--	07-20-94	1630
400934101020301	2N	33W10B 1	40 09 34 N	101 02 03 W	--	07-20-94	1645
400859101115101	2N	34W 7DC 1	40 08 59 N	101 11 51 W	--	07-20-94	1500
400842101114101	2N	34W18AA 1	40 08 42 N	101 11 41 W	--	07-20-94	1515
400818101124001	2N	35W13AAAD1	40 08 18 N	101 12 40 W	112SDGV	10-20-93	1125
					112SDGV	11-22-93	1105
					112SDGV	01-13-94	1110
					112SDGV	02-16-94	1030
					112SDGV	03-21-94	1110
					112SDGV	04-13-94	1140
					112SDGV	04-13-94	1145
					112SDGV	05-23-94	1125
					112SDGV	06-20-94	1035
					112SDGV	07-18-94	1130
					112SDGV	08-15-94	1120
					112SDGV	09-19-94	1135
400818101124002	2N	35W13AAAD2			112SDGV	10-20-93	1140
					112SDGV	11-22-93	1125
					112SDGV	01-13-94	1125
					112SDGV	02-16-94	1045
					112SDGV	03-21-94	1125
					112SDGV	04-13-94	1205
					112SDGV	04-13-94	1210
					112SDGV	05-23-94	1140
					112SDGV	06-20-94	1050
					112SDGV	07-18-94	1145
					112SDGV	08-15-94	1235

CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	DEPTH OF WELL, TOTAL (FEET) (72008)	SPE- CIFIC CON- DUCT- ANCE (μ S/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (° C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)
GARDEN COUNTY										
05-03-94	48.00	540	7.7	12.5	5.8	--	--	--	--	--
08-02-94	48.00	551	7.0	12.0	--	190	56	11	34	1
09-01-94	48.00	502	7.9	12.0	4.6	--	--	--	--	--
10-05-93	28.00	610	7.4	13.5	--	--	--	--	--	--
12-01-93	28.00	561	7.5	12.5	--	190	59	10	52	2
02-02-94	28.00	604	7.5	11.5	4.7	--	--	--	--	--
05-03-94	28.00	655	7.6	11.0	6.2	--	--	--	--	--
08-02-94	28.00	849	6.9	11.5	--	260	81	13	67	2
09-01-94	28.00	776	7.4	12.0	4.6	--	--	--	--	--
10-05-93	87.00	380	7.6	13.0	--	--	--	--	--	--
11-30-93	87.00	424	7.6	12.0	3.7	170	55	8.9	18	0.6
02-01-94	87.00	340	7.8	11.0	3.2	--	--	--	--	--
05-03-94	87.00	468	7.6	12.5	3.5	--	--	--	--	--
08-01-94	87.00	1240	7.0	12.0	--	520	160	29	59	1
09-01-94	87.00	1070	7.2	--	1.4	--	--	--	--	--
HALL COUNTY										
07-25-94	42.00	903	7.5	14.0	0.2	--	--	--	--	--
07-25-94	42.00	--	--	--	--	--	--	--	--	--
HAMILTON COUNTY										
08-24-94	190.00	879	7.1	14.0	--	360	110	20	38	0.9
08-24-94	248.00	622	7.4	13.0	--	250	77	13	29	0.8
07-29-94	192.00	623	6.9	16.0	4.9	--	--	--	--	--
07-29-94	192.00	--	--	--	--	--	--	--	--	--
HITCHCOCKCOUNTY										
07-21-94	--	826	7.4	14.5	--	--	--	--	--	--
07-21-94	--	653	7.5	13.5	--	--	--	--	--	--
07-21-94	36.00	919	7.3	13.0	--	--	--	--	--	--
07-20-94	40.00	950	7.5	15.0	--	--	--	--	--	--
07-20-94	--	578	7.5	15.5	--	--	--	--	--	--
07-20-94	--	1470	7.5	14.5	--	--	--	--	--	--
07-20-94	--	1040	7.4	15.0	--	--	--	--	--	--
10-20-93	46.00	1120	7.6	12.5	--	--	--	--	--	--
11-22-93	46.00	1330	7.4	12.5	--	--	--	--	--	--
01-13-94	46.00	1360	7.3	13.0	--	--	--	--	--	--
02-16-94	46.00	1360	7.3	12.5	--	--	--	--	--	--
03-21-94	46.00	1330	7.5	13.0	--	--	--	--	--	--
04-13-94	46.00	1350	7.4	13.0	--	--	--	--	--	--
04-13-94	46.00	--	--	--	--	450	120	37	110	2
05-23-94	46.00	1350	7.5	13.5	--	--	--	--	--	--
06-20-94	46.00	1330	7.1	13.0	--	--	--	--	--	--
07-18-94	46.00	1340	7.1	13.0	--	--	--	--	--	--
08-15-94	46.00	1330	7.4	13.5	--	--	--	--	--	--
09-19-94	46.00	1270	8.3	13.0	--	--	--	--	--	--
10-20-93	30.00	1250	7.5	12.5	--	--	--	--	--	--
11-22-93	30.00	1460	7.4	12.5	--	--	--	--	--	--
01-13-94	30.00	1480	7.2	13.0	--	--	--	--	--	--
02-16-94	30.00	1450	7.4	12.5	--	--	--	--	--	--
03-21-94	30.00	1430	7.4	13.0	--	--	--	--	--	--
04-13-94	30.00	1450	7.4	13.5	--	--	--	--	--	--
04-13-94	30.00	--	--	--	--	440	110	39	130	3
05-23-94	30.00	1440	7.4	13.0	--	--	--	--	--	--
06-20-94	30.00	1420	7.2	13.0	--	--	--	--	--	--
07-18-94	30.00	1490	7.1	12.5	--	--	--	--	--	--
08-15-94	30.00	1480	7.3	13.0	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

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DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO ₃) (90410)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	BORON, DIS- SOLVED (µG/L AS B) (01020)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	SI- MAZINE, WATER, DISS, REC (µG/L) (04035)	PRO- METRYN, WATER, DISS, REC (µG/L) (04036)	PRO- METON, WATER, DISS, REC (µG/L) (04037)	DEISO- PROPYL ATRAZIN WATER, DISS, REC (µG/L) (04038)
GARDEN COUNTY										
05-03-94	2.70	--	--	--	--	--	--	--	--	--
08-02-94	3.40	0.020	0.030	--	<3	<1	--	<0.05	<0.05	<0.05
09-01-94	3.50	--	--	--	--	--	--	--	--	--
10-05-93	4.80	--	--	--	--	--	--	--	--	--
12-01-93	5.50	--	--	--	12	<1	--	--	--	--
02-02-94	5.90	--	--	--	--	--	--	--	--	--
05-03-94	5.50	--	--	--	--	--	--	--	--	--
08-02-94	7.80	0.020	0.030	--	<3	<1	--	<0.05	<0.05	<0.05
09-01-94	7.70	--	--	--	--	--	--	--	--	--
10-05-93	2.20	--	--	--	--	--	--	--	--	--
11-30-93	2.50	--	--	--	9	<1	--	--	--	--
02-01-94	2.10	--	--	--	--	--	--	--	--	--
05-03-94	2.00	--	--	--	--	--	--	--	--	--
08-01-94	2.70	0.020	0.050	--	<3	2	--	<0.05	<0.05	<0.05
09-01-94	2.80	--	--	--	--	--	--	--	--	--
HALL COUNTY										
07-25-94	1.50	0.040	0.020	--	--	--	--	--	--	--
07-25-94	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05
HAMILTON COUNTY										
08-24-94	11.0	0.020	0.270	50	<3	14	--	--	--	--
08-24-94	6.90	0.020	0.210	50	<3	<1	--	--	--	--
07-29-94	6.70	0.020	0.200	--	--	--	--	--	--	--
07-29-94	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05
HITCHCOCK COUNTY										
07-21-94	10.0	--	--	--	--	--	--	--	--	--
07-21-94	1.40	--	--	--	--	--	--	--	--	--
07-21-94	9.60	--	--	--	--	--	--	--	--	--
07-20-94	11.0	--	--	--	--	--	--	--	--	--
07-20-94	3.00	--	--	--	--	--	--	--	--	--
07-20-94	19.0	--	--	--	--	--	--	--	--	--
07-20-94	0.500	--	--	--	--	--	--	--	--	--
10-20-93	15.0	--	--	--	--	--	--	--	--	--
11-22-93	14.0	--	--	--	--	--	--	--	--	--
01-13-94	15.0	--	--	--	--	--	--	--	--	--
02-16-94	14.0	--	--	--	--	--	--	--	--	--
03-21-94	15.0	--	--	--	--	--	--	--	--	--
04-13-94	15.0	--	--	--	--	--	--	--	--	--
04-13-94	--	--	--	--	<3	530	--	--	--	--
05-23-94	16.0	--	--	--	--	--	--	--	--	--
06-20-94	14.0	--	--	--	--	--	--	--	--	--
07-18-94	14.0	--	--	--	--	--	--	--	--	--
08-15-94	14.0	--	--	--	--	--	--	--	--	--
09-19-94	15.0	--	--	--	--	--	--	--	--	--
10-20-93	20.0	--	--	--	--	--	--	--	--	--
11-22-93	19.0	--	--	--	--	--	--	--	--	--
01-13-94	20.0	--	--	--	--	--	--	--	--	--
02-16-94	18.0	--	--	--	--	--	--	--	--	--
03-21-94	19.0	--	--	--	--	--	--	--	--	--
04-13-94	18.0	--	--	--	--	--	--	--	--	--
04-13-94	--	--	--	--	<3	160	--	--	--	--
05-23-94	19.0	--	--	--	--	--	--	--	--	--
06-20-94	17.0	--	--	--	--	--	--	--	--	--
07-18-94	19.0	--	--	--	--	--	--	--	--	--
08-15-94	19.0	--	--	--	--	--	--	--	--	--

CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

STATION NUMBER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	GEOLOGIC UNIT	DATE	TIME	DEPTH OF WELL, TOTAL (FEET) (72008)	SPE-CIFIC CON-DUCT-ANCE (μS/CM) (00095)
HITCHCOCK COUNTY								
400818101124002	2N 35W13AAAD2	40 08 18 N	101 12 40 W	112SDGV	09-19-94	1150	30.00	1410
400802101155901	2N 35W16DD 1	40 08 02 N	101 15 59 W	--	07-20-94	1430	--	2230
400749101175601	2N 35W20BB 1	40 07 49 N	101 17 56 W	--	07-20-94	1400	--	2010
401525100464501	3N 31W 2AD 1	40 15 25 N	100 46 45 W	--	07-21-94	1330	--	680
401459100542501	3N 32W 2CD 1	40 14 59 N	100 54 25 W	--	07-21-94	1145	--	755
401459100544201	3N 32W 3DD 1	40 14 59 N	100 54 42 W	--	07-21-94	1115	--	737
401748100520801	4N 31W19CB 1	40 17 48 N	100 52 08 W	--	07-21-94	1515	--	583
401722100455401	4N 31W25AB 1	40 17 22 N	100 45 54 W	--	07-21-94	1415	--	570
401556100502701	4N 31W32DC 1	40 15 56 N	100 50 27 W	--	07-21-94	1500	--	440
401551100495101	4N 31W33CC 1	40 15 51 N	100 49 51 W	--	07-21-94	1445	--	685
402007100563501	4N 32W 9BBA 1	40 20 07 N	100 56 35 W	--	07-21-94	1545	--	429
401713100582501	4N 32W30AD 1	40 17 13 N	100 58 25 W	--	07-20-94	1130	--	720
401655100583201	4N 32W30DCBB 1	40 16 55 N	100 58 32 W	112SDGV	10-20-93	0955	61.00	1060
				112SDGV	11-22-93	0920	61.00	1270
				112SDGV	01-12-94	0935	61.00	1280
				112SDGV	02-16-94	0855	61.00	1280
				112SDGV	03-21-94	0930	61.00	1250
				112SDGV	04-13-94	0940	61.00	1270
				112SDGV	04-13-94	0945	61.00	--
				112SDGV	05-23-94	0935	61.00	1250
				112SDGV	06-20-94	0900	61.00	1190
				112SDGV	07-18-94	1000	61.00	1210
				112SDGV	08-15-94	1030	61.00	1270
				112SDGV	09-19-94	1005	61.00	1230
				112SDGV	10-20-93	1010	45.00	974
401655100583202	4N 32W30DCBB2			112SDGV	11-22-93	0940	45.00	1140
				112SDGV	01-12-94	1000	45.00	1150
				112SDGV	02-16-94	0915	45.00	1160
				112SDGV	03-21-94	0950	45.00	1170
				112SDGV	04-13-94	1005	45.00	1180
				112SDGV	04-13-94	1010	45.00	--
				112SDGV	05-23-94	1005	45.00	1130
				112SDGV	06-20-94	0915	45.00	1050
				112SDGV	07-18-94	1015	45.00	1180
				112SDGV	08-15-94	1045	45.00	1350
401655100583203	4N 32W30DCBB3			112SDGV	09-19-94	1020	45.00	1340
				112SDGV	10-20-93	1025	25.00	1540
				112SDGV	11-22-93	1005	25.00	1870
				112SDGV	01-12-94	1100	25.00	1960
				112SDGV	02-16-94	0935	25.00	2000
				112SDGV	03-21-94	1010	25.00	2060
				112SDGV	04-13-94	1025	25.00	2160
				112SDGV	04-13-94	1030	25.00	--
				112SDGV	05-23-94	1025	25.00	2000
				112SDGV	06-20-94	0940	25.00	1780
				112SDGV	07-18-94	1030	25.00	1610
				112SDGV	08-15-94	1105	25.00	1640
				112SDGV	09-19-94	1040	25.00	1600
401944101041601	4N 33W 8BD 1	40 19 44 N	101 04 16 W	--	07-20-94	0945	--	907
401931101031001	4N 33W 9CA 1	40 19 31 N	101 03 10 W	--	07-20-94	1000	--	675
401839101011201	4N 33W14CB 1	40 18 39 N	101 01 12 W	--	07-20-94	1030	--	664
402036101065201	4N 34W 1BC 1	40 20 36 N	101 06 52 W	--	07-20-94	0900	--	423
LANCASTER COUNTY								
403340096503301	7N 5E22ACDA 1	40 33 40 N	096 50 33 W	112SDGV	08-18-94	1255	192.00	720
403505096423301	7N 6E11D 1	40 35 05 N	096 42 33 W	112SDGV	08-17-94	1250	216.00	815
403425096425001	7N 6E14DBBB 1	40 34 25 N	096 42 50 W	112SDGV	08-22-94	1411	258.00	2040
403347096465501	7N 6E19AACD 1	40 33 47 N	096 46 55 W	112SDGV	08-02-94	1442	257.00	1200
403203096463001	7N 6E32B 1	40 32 03 N	096 46 30 W	112SDGV	08-18-94	1526	282.00	890

CHEMICAL ANALYSES OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (° C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS- SOLVED (MG/L AS Na) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY LAB (MG/L AS CaCO ₃) (90410)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)
HITCHCOCK COUNTY											
09-19-94	8.2	29.5	--	--	--	--	--	--	--	--	--
07-20-94	7.3	13.0	--	--	--	--	--	--	--	--	--
07-20-94	7.4	14.5	--	--	--	--	--	--	--	--	--
07-21-94	7.5	15.5	--	--	--	--	--	--	--	--	--
07-21-94	7.4	14.5	--	--	--	--	--	--	--	--	--
07-21-94	7.6	14.5	--	--	--	--	--	--	--	--	--
07-21-94	7.6	15.0	--	--	--	--	--	--	--	--	--
07-21-94	7.4	15.5	--	--	--	--	--	--	--	--	--
07-21-94	7.8	31.5	--	--	--	--	--	--	--	--	--
07-21-94	7.4	16.0	--	--	--	--	--	--	--	--	--
07-21-94	7.6	16.0	--	--	--	--	--	--	--	--	--
07-20-94	7.4	13.5	--	--	--	--	--	--	--	--	--
10-20-93	7.3	13.5	--	--	--	--	--	--	--	--	--
11-22-93	7.3	13.0	--	--	--	--	--	--	--	--	--
01-12-94	7.1	13.0	--	--	--	--	--	--	--	--	--
02-16-94	7.1	13.0	--	--	--	--	--	--	--	--	--
03-21-94	7.3	13.5	--	--	--	--	--	--	--	--	--
04-13-94	7.3	13.5	--	--	--	--	--	--	--	--	--
04-13-94	--	--	--	490	130	40	76	1	18	311	300
05-23-94	7.2	14.0	--	--	--	--	--	--	--	--	--
06-20-94	7.2	14.0	--	--	--	--	--	--	--	--	--
07-18-94	7.0	13.5	--	--	--	--	--	--	--	--	--
08-15-94	7.3	14.0	--	--	--	--	--	--	--	--	--
09-19-94	8.3	13.5	--	--	--	--	--	--	--	--	--
10-20-93	7.3	13.0	--	--	--	--	--	--	--	--	--
11-22-93	7.4	13.0	--	--	--	--	--	--	--	--	--
01-12-94	7.2	13.5	--	--	--	--	--	--	--	--	--
02-16-94	7.2	13.0	--	--	--	--	--	--	--	--	--
03-21-94	7.3	13.5	--	--	--	--	--	--	--	--	--
04-13-94	7.3	13.5	--	--	--	--	--	--	--	--	--
04-13-94	--	--	--	440	120	35	78	2	20	274	270
05-23-94	7.3	14.0	--	--	--	--	--	--	--	--	--
06-20-94	7.3	14.0	--	--	--	--	--	--	--	--	--
07-18-94	7.0	13.5	--	--	--	--	--	--	--	--	--
08-15-94	7.3	14.0	--	--	--	--	--	--	--	--	--
09-19-94	8.3	13.5	--	--	--	--	--	--	--	--	--
10-20-93	7.2	13.0	--	--	--	--	--	--	--	--	--
11-22-93	7.2	13.0	--	--	--	--	--	--	--	--	--
01-12-94	7.1	13.0	--	--	--	--	--	--	--	--	--
02-16-94	7.1	12.5	--	--	--	--	--	--	--	--	--
03-21-94	7.1	13.0	--	--	--	--	--	--	--	--	--
04-13-94	7.1	13.0	--	--	--	--	--	--	--	--	--
04-13-94	--	--	--	870	230	72	140	2	23	424	670
05-23-94	7.2	13.0	--	--	--	--	--	--	--	--	--
06-20-94	7.1	13.5	--	--	--	--	--	--	--	--	--
07-18-94	7.0	13.0	--	--	--	--	--	--	--	--	--
08-15-94	7.2	14.0	--	--	--	--	--	--	--	--	--
09-19-94	8.2	13.5	--	--	--	--	--	--	--	--	--
07-20-94	7.4	13.5	--	--	--	--	--	--	--	--	--
07-20-94	7.4	23.5	--	--	--	--	--	--	--	--	--
07-20-94	7.4	15.5	--	--	--	--	--	--	--	--	--
07-20-94	7.7	14.5	--	--	--	--	--	--	--	--	--
LANCASTER COUNTY											
08-18-94	7.2	13.0	10.5	340	100	23	13	0.3	4.2	302	43
08-17-94	7.4	13.0	--	350	110	19	29	0.7	3.6	252	37
08-22-94	7.1	13.5	1.3	400	120	25	240	5	5.4	302	110
08-02-94	7.3	14.0	0.4	360	110	21	110	3	4.6	297	73
08-18-94	7.2	14.0	2.5	370	99	31	51	1	4.8	390	80

CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	CHLORIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	MANGANESE, DIS- SOLVED (µG/L AS MN) (01056)	RN-222 2 SIGMA WATER, WHOLE, TOTAL, (PCI/L) (76002)	RADON 222 TOTAL (PCI/L) (82303)	SILICAZINE, TER, DISS, REC (µG/L) (04035)
HITCHCOCK COUNTY											
09-19-94	--	--	--	--	--	19.0	--	--	--	--	--
07-20-94	--	--	--	--	--	7.40	--	--	--	--	--
07-20-94	--	--	--	--	--	1.10	--	--	--	--	--
07-21-94	--	--	--	--	--	12.0	--	--	--	--	--
07-21-94	--	--	--	--	--	15.0	--	--	--	--	--
07-21-94	--	--	--	--	--	8.10	--	--	--	--	--
07-21-94	--	--	--	--	--	14.0	--	--	--	--	--
07-21-94	--	--	--	--	--	12.0	--	--	--	--	--
07-21-94	--	--	--	--	--	4.60	--	--	--	--	--
07-21-94	--	--	--	--	--	12.0	--	--	--	--	--
07-21-94	--	--	--	--	--	5.30	--	--	--	--	--
07-20-94	--	--	--	--	--	10.0	--	--	--	--	--
10-20-93	--	--	--	--	--	12.0	--	--	--	--	--
11-22-93	--	--	--	--	--	11.0	--	--	--	--	--
01-12-94	--	--	--	--	--	11.0	--	--	--	--	--
02-16-94	--	--	--	--	--	11.0	--	--	--	--	--
03-21-94	--	--	--	--	--	11.0	--	--	--	--	--
04-13-94	--	--	--	--	--	12.0	--	--	--	--	--
04-13-94	25	0.70	63	839	1.21	--	<3	<1	--	--	--
05-23-94	--	--	--	--	--	12.0	--	--	--	--	--
06-20-94	--	--	--	--	--	10.0	--	--	--	--	--
07-18-94	--	--	--	--	--	11.0	--	--	--	--	--
08-15-94	--	--	--	--	--	11.0	--	--	--	--	--
09-19-94	--	--	--	--	--	12.0	--	--	--	--	--
10-20-93	--	--	--	--	--	12.0	--	--	--	--	--
11-22-93	--	--	--	--	--	11.0	--	--	--	--	--
01-12-94	--	--	--	--	--	11.0	--	--	--	--	--
02-16-94	--	--	--	--	--	11.0	--	--	--	--	--
03-21-94	--	--	--	--	--	11.0	--	--	--	--	--
04-13-94	--	--	--	--	--	11.0	--	--	--	--	--
04-13-94	24	0.80	61	773	1.13	--	<3	<1	--	--	--
05-23-94	--	--	--	--	--	11.0	--	--	--	--	--
06-20-94	--	--	--	--	--	10.0	--	--	--	--	--
07-18-94	--	--	--	--	--	11.0	--	--	--	--	--
08-15-94	--	--	--	--	--	12.0	--	--	--	--	--
09-19-94	--	--	--	--	--	13.0	--	--	--	--	--
10-20-93	--	--	--	--	--	9.30	--	--	--	--	--
11-22-93	--	--	--	--	--	8.40	--	--	--	--	--
01-12-94	--	--	--	--	--	8.30	--	--	--	--	--
02-16-94	--	--	--	--	--	7.40	--	--	--	--	--
03-21-94	--	--	--	--	--	7.30	--	--	--	--	--
04-13-94	--	--	--	--	--	7.60	--	--	--	--	--
04-13-94	73	0.70	61	1520	2.20	--	<3	2	--	--	--
05-23-94	--	--	--	--	--	8.80	--	--	--	--	--
06-20-94	--	--	--	--	--	8.50	--	--	--	--	--
07-18-94	--	--	--	--	--	11.0	--	--	--	--	--
08-15-94	--	--	--	--	--	12.0	--	--	--	--	--
09-19-94	--	--	--	--	--	14.0	--	--	--	--	--
07-20-94	--	--	--	--	--	13.0	--	--	--	--	--
07-20-94	--	--	--	--	--	6.80	--	--	--	--	--
07-20-94	--	--	--	--	--	12.0	--	--	--	--	--
07-20-94	--	--	--	--	--	2.20	--	--	--	--	--
LANCASTER COUNTY											
08-18-94	4.0	0.60	35	440	0.60	8.20	29	8	21	300	<0.05
08-17-94	53	0.40	33	494	0.67	13.0	10	76	--	--	--
08-22-94	390	0.30	30	1100	1.50	0.073	1000	620	21	370	<0.05
08-02-94	170	0.30	33	701	0.95	<0.050	570	430	21	400	--
08-18-94	8.9	0.40	34	544	0.74	0.190	5	300	31	1000	--

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	PRO-METRYN, WATER, DISS, REC	PRO-METON, WATER, DISS, REC	DEISO- ATRAPYL AZINZINE, WATER, DISS, REC	DEETHYL ATRA- ZINE, WATER, DISS, REC	CYANA- ZINE, WATER, DISS, REC	AMETRYN WATER, DISS, REC,	PROP-AZINE WATER, DISS, REC	METO-LACHLOR WATER, DISSOLV	ATRA-ZINE, WATER, DISS, REC	ALA-CHLOR, WATER, DISS, REC,	METRIBUZIN SENCOR WATER, DISSOLV
DATE	(μ G/L) (04036)	(μ G/L) (04037)	(μ G/L) (04038)	(μ G/L) (04040)	(μ G/L) (04041)	(μ G/L) (38401)	(μ G/L) (38535)	(μ G/L) (39415)	(μ G/L) (39632)	(μ G/L) (46342)	(μ G/L) (82630)

[illegible][illegible]

CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

STATION	NUMBER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	GEOLOGIC UNIT	DATE	TIME
LANCASTER COUNTY							
403456096373901	7N	7E10CCCD1	40 34 56 N	096 37 39 W	112SDGV	08-19-94	1215
403600096454401	7N	6E 5DACC1	40 36 00 N	096 45 44 W	112SDGV	08-17-94	1650
403645096303901	8N	8E34DCBC1	40 36 45 N	096 30 39 W	112SDGV	08-17-94	1031
405640096292301	11N	8E 2DCCA1	40 56 40 N	096 29 23 W	112SDGV	07-25-94	1545
					112SDGV	08-16-94	1420
405631096302301	11N	8E10ABAD1	40 56 31 N	096 30 23 W	112SDGV	07-26-94	1220
405546096292501	11N	8E11DCCD1	40 55 46 N	096 29 25 W	112SDGV	07-25-94	1730
					112SDGV	08-16-94	1350
405522096302001	11N	8E15ADCC1	40 55 22 N	096 30 20 W	112SDGV	08-16-94	1720
405454096322501	11N	8E16CDCD1	40 54 54 N	096 32 25 W	112SDGV	07-27-94	1435
					112SDGV	08-15-94	1545
405413096323401	11N	8E20DDAA1	40 54 13 N	096 32 34 W	112SDGV	08-15-94	1130
405326096322501	11N	8E29DABB1	40 53 26 N	096 32 25 W	112SDGV	07-27-94	1540
					112SDGV	08-15-94	1630
405228096331301	11N	8E32C 1	40 52 28 N	096 33 13 W	211DKOT	07-27-94	1115
					211DKOT	08-19-94	2000
405320096341001	11N	7E25DDBA1	40 53 20 N	096 34 10 W	112SDGV	07-26-94	1015
					12SDGV	08-16-94	1510
403228096444901	7N	6E28DO 1	40 32 28 N	096 44 49 W	112SDGV	08-02-94	1624
403452096372801	7N	7E15BABB1	40 34 52 N	096 37 28 W	112SDGV	08-02-94	1124
403740096444701	8N	6E28DDBA1	40 37 40 N	096 44 47 W	112SDGV	08-02-94	1015
NEMAHA COUNTY							
402249095472701	5N	14E24DCBC1	40 22 49 N	095 47 27 W	112SDGV	07-26-94	0940
					112SDGV	07-26-94	0945
OTOE COUNTY							
404000096014001	8N	12E13BABB1	40 40 00 N	096 01 40 W	112SDGV	07-28-94	1150
					112SDGV	07-28-94	1155
PLATTE COUNTY							
414217097415101	20N	3W18DADC1	41 42 17 N	097 41 51 W	112SDGV	07-29-94	1312
					112SDGV	07-29-94	1317
POLK COUNTY							
410434097471102	13N	4W21CCD 2	41 04 34 N	097 47 11 W	112SDGV	08-24-94	1215
411120096253001	14N	1W15BBCC1	41 11 20 N	096 25 30 W	112SDGV	08-25-94	1010
RED WILLOW COUNTY							
400449100121701	1N	26W 2DD 1	40 04 49 N	100 12 17 W	--	07-26-94	1225
400357100135201	1N	26W11CBBB1	40 03 57 N	100 13 52 W	112SDGV	10-21-93	1110
					112SDGV	11-22-93	1630
					112SDGV	01-12-94	1510
					112SDGV	02-17-94	1050
					112SDGV	03-22-94	1055
					112SDGV	04-14-94	1125
					112SDGV	04-14-94	1130
					112SDGV	05-24-94	1045
					112SDGV	06-21-94	1115

CHEMICAL ANALYSES OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	DEPTH OF WELL, TOTAL (FEET) (72008)	SPE- CIFIC CON- DUCT- ANCE (μ S/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (° C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS Na) (00930)	SODIUM AD- SORP- TION RATIO (00931)
LANCASTER COUNTY										
08-19-94	104.00	585	--	13.0	5.5	260	78	15	17	0.5
08-17-94	91.00	800	7.4	14.0	--	280	90	14	57	1
08-17-94	228.00	833	7.0	14.0	--	360	90	32	49	1
07-25-94	88.00	--	7.0	12.5	8.0	390	120	23	55	1
08-16-94	88.00	650	7.2	12.5	--	--	--	--	--	--
07-26-94	65.00	1010	7.5	12.0	8.5	--	--	--	--	--
07-25-94	96.00	--	6.9	12.5	4.9	370	110	24	59	1
08-16-94	96.00	640	7.3	12.0	--	--	--	--	--	--
08-16-94	--	920	--	12.0	4.2	--	--	--	--	--
07-27-94	59.00	--	7.1	13.5	1.0	290	84	19	43	1
08-15-94	59.00	687	6.8	13.5	--	--	--	--	--	--
08-15-94	65.00	477	7.0	13.5	5.5	--	--	--	--	--
07-27-94	172.00	449	7.0	13.0	6.6	250	69	20	48	1
08-15-94	172.00	579	6.8	13.0	--	--	--	--	--	--
07-27-94	153.00	650	7.0	12.5	8.8	290	82	21	52	1
08-19-94	153.00	794	7.1	12.5	7.6	--	--	--	--	--
07-26-94	60.00	508	7.1	12.0	2.4	--	--	--	--	--
08-16-94	60.00	490	6.8	12.5	--	--	--	--	--	--
08-02-94	300.00	855	7.1	14.5	0.6	400	110	30	39	0.9
08-02-94	100.00	--	7.1	15.5	--	260	76	16	18	0.5
08-02-94	45.00	971	7.1	14.0	5.5	--	--	--	--	--
NEMAHA COUNTY										
07-26-94	50.00	714	7.0	12.0	0.8	--	--	--	--	--
07-26-94	50.00	--	--	--	--	--	--	--	--	--
OTOE COUNTY										
07-28-94	47.00	688	6.7	13.0	3.8	--	--	--	--	--
07-28-94	47.00	--	--	--	--	--	--	--	--	--
PLATTE COUNTY										
07-29-94	85.00	592	7.1	12.0	5.3	--	--	--	--	--
07-29-94	85.00	--	--	--	--	--	--	--	--	--
POLK COUNTY										
08-24-94	150.00	544	7.6	15.5	--	220	68	11	27	0.8
08-25-94	273.00	530	7.6	15.0	--	240	78	12	15	0.4
RED WILLOW COUNTY										
07-26-94	--	960	7.1	12.5	--	--	--	--	--	--
10-21-93	64.00	693	7.5	13.5	--	--	--	--	--	--
11-22-93	64.00	729	7.4	13.5	--	--	--	--	--	--
01-12-94	64.00	733	7.4	13.5	--	--	--	--	--	--
02-17-94	64.00	653	6.4	13.5	--	--	--	--	--	--
03-22-94	64.00	712	7.4	13.5	--	--	--	--	--	--
04-14-94	64.00	722	7.4	13.5	--	--	--	--	--	--
04-14-94	64.00	--	--	--	--	290	84	19	39	1
05-24-94	64.00	730	7.4	14.0	--	--	--	--	--	--
06-21-94	64.00	710	7.1	13.5	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[illegible]

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[illegible]

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[illegible]

CHEMICAL ANALYSES OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

STATION	NUMBER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	GEOLOGIC UNIT	DATE	TIME
RED WILLOW COUNTY							
400357100135201	1N	26W11CBBB1	40 03 57 N	100 13 52 W	112SDGV	07-19-94	1350
					112SDGV	08-16-94	1135
400357100135202	1N	26W11CBBB2			112SDGV	09-20-94	1110
					112SDGV	10-21-93	1130
					112SDGV	11-22-93	1645
					112SDGV	01-12-94	1530
					112SDGV	02-17-94	1105
					112SDGV	03-22-94	1110
					112SDGV	04-14-94	1155
					112SDGV	04-14-94	1200
					112SDGV	05-24-94	1105
					112SDGV	06-21-94	1130
					112SDGV	07-19-94	1405
					112SDGV	08-16-94	1150
					112SDGV	09-20-94	1125
400330100150601	1N	26W15BB 1	40 03 30 N	100 15 06 W	--	07-26-94	1205
400316100242901	1N	27W18ADA 1	40 03 16 N	100 24 29 W	--	07-26-94	1105
400237100244401	1N	27W19AB 1	40 02 37 N	100 24 44 W	--	07-26-94	1135
400210100272701	1N	28W23CB 1	40 02 10 N	100 27 27 W	--	07-26-94	1040
401013100360101	2N	29W 4AC 1	40 10 13 N	100 36 01 W	--	07-20-94	1520
401014100391601	2N	30W 1AC 1	40 10 14 N	100 39 16 W	--	07-22-94	1435
401016100391801	2N	30W1ACDD 1	40 10 16 N	100 39 18 W	112SDGV	10-20-93	1325
					112SDGV	11-22-93	1455
					112SDGV	01-13-94	0935
					112SDGV	02-16-94	1200
					112SDGV	03-21-94	1450
					112SDGV	04-14-94	0910
					112SDGV	04-14-94	0915
					112SDGV	05-23-94	1400
					112SDGV	06-20-94	1400
					112SDGV	07-18-94	1455
					112SDGV	08-15-94	1435
401016100391802	2N	30W 1ACDD2			112SDGV	09-19-94	1420
					112SDGV	10-20-93	1345
					112SDGV	11-22-93	1515
					112SDGV	01-13-94	0950
					112SDGV	02-16-94	1225
					112SDGV	03-21-94	1505
					112SDGV	04-14-94	0940
					112SDGV	04-14-94	0945
					112SDGV	05-23-94	1420
					112SDGV	06-20-94	1420
					112SDGV	07-18-94	1510
					112SDGV	08-15-94	1455
					112SDGV	09-19-94	1435
401016100391803	2N	30W 1ACDD3			112SDGV	10-20-93	1400
					112SDGV	11-22-93	1530
					112SDGV	01-13-94	1005
					112SDGV	02-16-94	1245
					112SDGV	03-21-94	1520
					112SDGV	04-14-94	0955
					112SDGV	04-14-94	1000
					112SDGV	05-23-94	1435
					112SDGV	06-20-94	1445
					112SDGV	07-18-94	1525
					112SDGV	08-15-94	1520
					112SDGV	09-19-94	1450
400902100422701	2N	30W 9D 1	40 09 02 N	100 42 27 W	--	07-20-94	1330
400830100430801	2N	30W16BC 1	40 08 30 N	100 43 08 W	--	07-20-94	1345
400659100452101	2N	30W30BB 1	40 06 59 N	100 45 21 W	--	07-20-94	1400

CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	DEPTH OF WELL, TOTAL (FEET) (72008)	SPE- CIFIC CON- DUCT- ANCE (μ S/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (° C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
RED WILLOW COUNTY										
07-19-94	64.00	704	7.2	14.5	--	--	--	--	--	--
08-16-94	64.00	700	7.2	14.0	--	--	--	--	--	--
09-20-94	64.00	686	7.2	14.0	--	--	--	--	--	--
10-21-93	36.00	988	7.6	13.0	--	--	--	--	--	--
11-22-93	36.00	1070	7.6	13.0	--	--	--	--	--	--
01-12-94	36.00	1180	7.5	13.0	--	--	--	--	--	--
02-17-94	36.00	1030	6.9	13.0	--	--	--	--	--	--
03-22-94	36.00	1100	7.5	14.0	--	--	--	--	--	--
04-14-94	36.00	1110	7.5	14.0	--	--	--	--	--	--
04-14-94	36.00	--	--	--	470	140	29	53	1	23
05-24-94	36.00	1190	7.6	14.0	--	--	--	--	--	--
06-21-94	36.00	1150	7.2	13.5	--	--	--	--	--	--
07-19-94	36.00	1270	7.4	14.0	--	--	--	--	--	--
08-16-94	36.00	1460	7.3	14.0	--	--	--	--	--	--
09-20-94	36.00	1140	7.4	13.5	--	--	--	--	--	--
07-26-94	--	1030	7.1	13.5	--	--	--	--	--	--
07-26-94	--	1010	7.2	13.0	--	--	--	--	--	--
07-26-94	--	1490	7.1	14.5	--	--	--	--	--	--
07-26-94	--	610	7.3	14.0	--	--	--	--	--	--
07-20-94	--	1360	7.0	15.0	--	--	--	--	--	--
07-22-94	--	1100	7.0	13.5	--	--	--	--	--	--
10-20-93	72.00	926	7.6	14.0	--	--	--	--	--	--
11-22-93	72.00	1110	7.3	13.5	--	--	--	--	--	--
01-13-94	72.00	1180	7.2	13.0	--	--	--	--	--	--
02-16-94	72.00	1210	7.3	13.5	--	--	--	--	--	--
03-21-94	72.00	1200	7.2	14.5	--	--	--	--	--	--
04-14-94	72.00	1210	7.4	13.5	--	--	--	--	--	--
04-14-94	72.00	--	--	--	460	130	33	56	1	20
05-23-94	72.00	1240	7.3	14.5	--	--	--	--	--	--
06-20-94	72.00	1090	--	14.5	--	--	--	--	--	--
07-18-94	72.00	1040	6.8	14.0	--	--	--	--	--	--
08-15-94	72.00	1010	7.2	14.5	--	--	--	--	--	--
09-19-94	72.00	974	8.2	14.0	--	--	--	--	--	--
10-20-93	55.00	957	7.5	13.5	--	--	--	--	--	--
11-22-93	55.00	1100	7.3	13.5	--	--	--	--	--	--
01-13-94	55.00	1160	7.1	13.0	--	--	--	--	--	--
02-16-94	55.00	1160	7.2	13.5	--	--	--	--	--	--
03-21-94	55.00	1140	7.2	14.0	--	--	--	--	--	--
04-14-94	55.00	1160	7.4	13.5	--	--	--	--	--	--
04-14-94	55.00	--	--	--	450	140	25	61	1	25
05-23-94	55.00	1190	7.3	14.5	--	--	--	--	--	--
06-20-94	55.00	1140	6.9	14.5	--	--	--	--	--	--
07-18-94	55.00	1130	6.8	14.0	--	--	--	--	--	--
08-15-94	55.00	--	--	--	--	--	--	--	--	--
09-19-94	55.00	1070	8.1	14.0	--	--	--	--	--	--
10-20-93	36.00	1030	7.5	13.5	--	--	--	--	--	--
11-22-93	36.00	1160	7.3	13.5	--	--	--	--	--	--
01-13-94	36.00	1170	7.1	13.0	--	--	--	--	--	--
02-16-94	36.00	1150	7.1	13.5	--	--	--	--	--	--
03-21-94	36.00	1130	7.2	14.5	--	--	--	--	--	--
04-14-94	36.00	1160	7.4	14.0	--	--	--	--	--	--
04-14-94	36.00	--	--	--	430	140	20	72	2	16
05-23-94	36.00	1160	7.3	14.5	--	--	--	--	--	--
06-20-94	36.00	1150	--	14.0	--	--	--	--	--	--
07-18-94	36.00	1200	6.8	14.0	--	--	--	--	--	--
08-15-94	36.00	1190	7.3	15.0	--	--	--	--	--	--
09-19-94	36.00	1130	8.1	14.0	--	--	--	--	--	--
07-20-94	--	1170	7.1	15.0	--	--	--	--	--	--
07-20-94	--	1270	7.0	15.0	--	--	--	--	--	--
07-20-94	--	1450	7.1	15.0	--	--	--	--	--	--

CHEMICAL ANALYSES OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	ALKA- LINTY LAB (MG/L AS CAO ₃) (90410)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO ₂) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)
RED WILLOW COUNTY										
07-19-94	--	--	--	--	--	--	--	0.010	--	--
08-16-94	--	--	--	--	--	--	--	0.010	--	--
09-20-94	--	--	--	--	--	--	--	0.010	--	--
10-21-93	--	--	--	--	--	--	--	1.70	--	--
11-22-93	--	--	--	--	--	--	--	2.00	--	--
01-12-94	--	--	--	--	--	--	--	5.00	--	--
02-17-94	--	--	--	--	--	--	--	3.00	--	--
03-22-94	--	--	--	--	--	--	--	1.70	--	--
04-14-94	--	--	--	--	--	--	--	1.60	--	--
04-14-94	385	180	26	0.60	27	717	0.97	1.40	790	160
05-24-94	--	--	--	--	--	--	--	3.20	--	--
06-21-94	--	--	--	--	--	--	--	3.10	--	--
07-19-94	--	--	--	--	--	--	--	7.30	--	--
08-16-94	--	--	--	--	--	--	--	15.0	--	--
09-20-94	--	--	--	--	--	--	--	3.20	--	--
07-26-94	--	--	--	--	--	--	--	0.800	--	--
07-26-94	--	--	--	--	--	--	--	0.010	--	--
07-26-94	--	--	--	--	--	--	--	8.40	--	--
07-26-94	--	--	--	--	--	--	--	5.30	--	--
07-20-94	--	--	--	--	--	--	--	15.0	--	--
07-22-94	--	--	--	--	--	--	--	19.0	--	--
10-20-93	--	--	--	--	--	--	--	21.0	--	--
11-22-93	--	--	--	--	--	--	--	23.0	--	--
01-13-94	--	--	--	--	--	--	--	26.0	--	--
02-16-94	--	--	--	--	--	--	--	27.0	--	--
03-21-94	--	--	--	--	--	--	--	28.0	--	--
04-14-94	--	--	--	--	--	--	--	25.0	--	--
04-14-94	260	180	56	0.60	44	676	1.08	--	<3	<1
05-23-94	--	--	--	--	--	--	--	29.0	--	--
06-20-94	--	--	--	--	--	--	--	23.0	--	--
07-18-94	--	--	--	--	--	--	--	19.0	--	--
08-15-94	--	--	--	--	--	--	--	17.0	--	--
09-19-94	--	--	--	--	--	--	--	18.0	--	--
10-20-93	--	--	--	--	--	--	--	18.0	--	--
11-22-93	--	--	--	--	--	--	--	19.0	--	--
01-13-94	--	--	--	--	--	--	--	20.0	--	--
02-16-94	--	--	--	--	--	--	--	20.0	--	--
03-21-94	--	--	--	--	--	--	--	20.0	--	--
04-14-94	--	--	--	--	--	--	--	20.0	--	--
04-14-94	333	160	38	0.50	35	685	1.03	--	<3	28
05-23-94	--	--	--	--	--	--	--	21.0	--	--
06-20-94	--	--	--	--	--	--	--	20.0	--	--
07-18-94	--	--	--	--	--	--	--	19.0	--	--
08-15-94	--	--	--	--	--	--	--	18.0	--	--
09-19-94	--	--	--	--	--	--	--	19.0	--	--
10-20-93	--	--	--	--	--	--	--	12.0	--	--
11-22-93	--	--	--	--	--	--	--	11.0	--	--
01-13-94	--	--	--	--	--	--	--	9.80	--	--
02-16-94	--	--	--	--	--	--	--	10.0	--	--
03-21-94	--	--	--	--	--	--	--	10.0	--	--
04-14-94	--	--	--	--	--	--	--	9.80	--	--
04-14-94	388	150	39	0.40	39	709	1.0	--	<3	<1
05-23-94	--	--	--	--	--	--	--	10.0	--	--
06-20-94	--	--	--	--	--	--	--	10.0	--	--
07-18-94	--	--	--	--	--	--	--	13.0	--	--
08-15-94	--	--	--	--	--	--	--	13.0	--	--
09-19-94	--	--	--	--	--	--	--	12.0	--	--
07-20-94	--	--	--	--	--	--	--	14.0	--	--
07-20-94	--	--	--	--	--	--	--	12.0	--	--
07-20-94	--	--	--	--	--	--	--	12.0	--	--

CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

STATION	NUMBER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	GEOLOGIC UNIT	DATE	TIME
RED WILLOW COUNTY							
401529100144901	3N	26W 3BD 1	40 15 29 N	100 14 49 W	--	07-22-94	0955
401424100143201	3N	26W10DB 1	40 14 24 N	100 14 32 W	--	07-26-94	1345
401541100230401	3N	27W 4BBC 1	40 15 41 N	100 23 04 W	--	07-21-94	1425
401410100232101	3N	27W 8DD 1	40 14 10 N	100 23 21 W	--	07-21-94	1450
401454100215401	3N	27W9AAAA1	40 14 54 N	100 21 54 W	112SDGV	10-21-93	1000
					112SDGV	11-22-93	1740
					112SDGV	01-12-94	1620
					112SDGV	02-17-94	0940
					112SDGV	03-22-94	0940
					112SDGV	04-14-94	1355
					112SDGV	04-14-94	1400
					112SDGV	05-24-94	0925
					112SDGV	06-21-94	1000
					112SDGV	07-19-94	0930
					112SDGV	08-16-94	0950
401454100215402	3N	27W 9AAAA2			112SDGV	09-20-94	1005
					112SDGV	10-21-93	1015
					112SDGV	11-22-93	1755
					112SDGV	01-12-94	1640
					112SDGV	02-17-94	0950
					112SDGV	03-22-94	0950
					112SDGV	04-14-94	1410
					112SDGV	04-14-94	1415
					112SDGV	05-24-94	0940
					112SDGV	06-21-94	1015
					112SDGV	07-19-94	0945
					112SDGV	08-16-94	1025
					112SDGV	09-20-94	1015
401410100192001	3N	27W12CD 1	40 14 10 N	100 19 20 W	--	07-22-94	1100
401342100301601	3N	28W17AC 1	40 13 42 N	100 30 16 W	--	07-20-94	1610
401211100315101	3N	28W30BB 1	40 12 11 N	100 31 51 W	--	07-26-94	1535
401145100310601	3N	28W30DA 1	40 11 45 N	100 31 06 W	--	07-26-94	1520
401539100345401	3N	29W 3BA 1	40 15 39 N	100 34 54 W	--	07-26-94	0945
401434100380201	3N	29W 7ACC 1	40 14 34 N	100 38 02 W	--	07-21-94	1010
401412100364201	3N	29W 8DDBA1	40 14 12 N	100 36 42 W	121OGLL	10-20-93	1600
					121OGLL	11-22-93	1320
					121OGLL	01-12-94	1320
					121OGLL	02-16-94	1420
					121OGLL	03-21-94	1330
					121OGLL	04-13-94	1435
					121OGLL	04-13-94	1440
					121OGLL	05-23-94	1530
					121OGLL	06-20-94	1545
					121OGLL	07-18-94	1635
					121OGLL	08-16-94	1400
01412100364202	3N	29W 8DDBA2			121OGLL	09-19-94	1605
					121OGLL	10-20-93	1620
					121OGLL	11-22-93	1345
					121OGLL	01-12-94	1340
					121OGLL	02-16-94	1440
					121OGLL	03-21-94	1350
					121OGLL	04-13-94	1455
					121OGLL	04-13-94	1500
					121OGLL	05-23-94	1555
					121OGLL	06-20-94	1605
					121OGLL	07-18-94	1655
					121OGLL	08-16-94	1430
					121OGLL	09-19-94	1635
401412100364203	3N	29W 8DDBA3			112SDGV	10-20-93	1635
					112SDGV	11-22-93	1410

CHEMICAL ANALYSES OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	DEPTH OF WELL, TOTAL (FEET) (72008)	SPE- CIFIC CON- DUCT- ANCE (μ S/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (° C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVRD (MG/L AS K) (00935)
RED WILLOW COUNTY										
07-22-94	--	750	7.0	14.0	--	--	--	--	--	--
07-26-94	--	470	7.3	15.0	--	--	--	--	--	--
07-21-94	--	525	7.2	15.5	--	--	--	--	--	--
07-21-94	--	1500	7.1	14.0	--	--	--	--	--	--
10-21-93	40.00	630	7.4	13.0	--	--	--	--	--	--
11-22-93	40.00	673	7.6	13.0	--	--	--	--	--	--
01-12-94	40.00	677	7.4	13.5	--	--	--	--	--	--
02-17-94	40.00	603	7.1	13.0	--	--	--	--	--	--
03-22-94	40.00	664	7.6	13.5	--	--	--	--	--	--
04-14-94	40.00	671	7.6	14.0	--	--	--	--	--	--
04-14-94	40.00	--	--	--	250	73	17	32	0.9	18
05-24-94	40.00	666	7.5	13.5	--	--	--	--	--	--
06-21-94	40.00	653	7.1	13.5	--	--	--	--	--	--
07-19-94	40.00	657	7.4	13.5	--	--	--	--	--	--
08-16-94	40.00	648	7.3	13.5	--	--	--	--	--	--
09-20-94	40.00	602	7.5	13.5	--	--	--	--	--	--
10-21-93	32.00	613	7.4	13.0	--	--	--	--	--	--
11-22-93	32.00	670	7.5	13.0	--	--	--	--	--	--
01-12-94	32.00	684	7.2	13.5	--	--	--	--	--	--
02-17-94	32.00	627	7.0	13.0	--	--	--	--	--	--
03-22-94	32.00	661	7.5	13.5	--	--	--	--	--	--
04-14-94	32.00	657	7.6	13.5	--	--	--	--	--	--
04-14-94	32.00	--	--	--	250	72	16	32	0.9	18
05-24-94	32.00	658	7.5	13.5	--	--	--	--	--	--
06-21-94	32.00	636	7.1	13.5	--	--	--	--	--	--
07-19-94	32.00	643	7.4	13.0	--	--	--	--	--	--
08-16-94	32.00	638	7.3	13.5	--	--	--	--	--	--
09-20-94	32.00	596	7.4	13.5	--	--	--	--	--	--
07-22-94	--	840	7.2	17.5	--	--	--	--	--	--
07-20-94	--	1260	6.9	14.5	--	--	--	--	--	--
07-26-94	--	790	7.7	14.0	--	--	--	--	--	--
07-26-94	--	1500	7.1	14.0	--	--	--	--	--	--
07-26-94	--	600	7.0	22.5	--	--	--	--	--	--
07-21-94	--	645	7.0	15.0	--	--	--	--	--	--
10-20-93	174.00	429	7.8	15.0	--	--	--	--	--	--
11-22-93	174.00	505	7.5	15.0	--	--	--	--	--	--
01-12-94	174.00	513	7.2	15.0	--	--	--	--	--	--
02-16-94	174.00	513	7.4	15.0	--	--	--	--	--	--
03-21-94	174.00	503	7.5	15.5	--	--	--	--	--	--
04-13-94	174.00	511	7.6	15.5	--	--	--	--	--	--
04-13-94	174.00	--	--	--	210	56	16	21	0.6	11
05-23-94	174.00	495	7.6	15.5	--	--	--	--	--	--
06-20-94	174.00	503	7.5	15.5	--	--	--	--	--	--
07-18-94	174.00	505	7.1	15.5	--	--	--	--	--	--
08-16-94	174.00	504	7.4	17.0	--	--	--	--	--	--
09-19-94	174.00	481	8.6	15.5	--	--	--	--	--	--
10-20-93	159.00	520	7.6	15.0	--	--	--	--	--	--
11-22-93	159.00	597	7.6	15.0	--	--	--	--	--	--
01-12-94	159.00	609	7.5	15.0	--	--	--	--	--	--
02-16-94	159.00	592	7.6	15.0	--	--	--	--	--	--
03-21-94	159.00	585	7.5	15.0	--	--	--	--	--	--
04-13-94	159.00	598	7.6	15.0	--	--	--	--	--	--
04-13-94	159.00	--	--	--	240	67	18	20	0.6	11
05-23-94	159.00	597	7.6	15.5	--	--	--	--	--	--
06-20-94	159.00	605	7.5	15.5	--	--	--	--	--	--
07-18-94	159.00	608	7.1	15.0	--	--	--	--	--	--
08-16-94	159.00	612	7.6	16.5	--	--	--	--	--	--
09-19-94	159.00	587	8.6	15.0	--	--	--	--	--	--
10-20-93	135.00	746	7.7	14.5	--	--	--	--	--	--
11-22-93	135.00	877	7.6	14.5	--	--	--	--	--	--

CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	ALKA- LINTY LAB (MG/L AS CaCO ₃) (90410)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)
RED WILLOW COUNTY										
07-22-94	--	--	--	--	--	--	--	4.50	--	--
07-26-94	--	--	--	--	--	--	--	2.20	--	--
07-21-94	--	--	--	--	--	--	--	3.70	--	--
07-21-94	--	--	--	--	--	--	--	9.80	--	--
10-21-93	--	--	--	--	--	--	--	1.80	--	--
11-22-93	--	--	--	--	--	--	--	2.20	--	--
01-12-94	--	--	--	--	--	--	--	4.90	--	--
02-17-94	--	--	--	--	--	--	--	2.00	--	--
03-22-94	--	--	--	--	--	--	--	1.80	--	--
04-14-94	--	--	--	--	--	--	--	2.00	--	--
04-14-94	246	64	19	0.60	55	426	0.61	--	<3	<1
05-24-94	--	--	--	--	--	--	--	2.00	--	--
06-21-94	--	--	--	--	--	--	--	2.00	--	--
07-19-94	--	--	--	--	--	--	--	1.90	--	--
08-16-94	--	--	--	--	--	--	--	2.00	--	--
09-20-94	--	--	--	--	--	--	--	2.00	--	--
10-21-93	--	--	--	--	--	--	--	2.70	--	--
11-22-93	--	--	--	--	--	--	--	3.70	--	--
01-12-94	--	--	--	--	--	--	--	3.60	--	--
02-17-94	--	--	--	--	--	--	--	6.30	--	--
03-22-94	--	--	--	--	--	--	--	4.70	--	--
04-14-94	--	--	--	--	--	--	--	4.20	--	--
04-14-94	246	50	16	0.60	54	406	0.58	--	6	<1
05-24-94	--	--	--	--	--	--	--	4.40	--	--
06-21-94	--	--	--	--	--	--	--	4.60	--	--
07-19-94	--	--	--	--	--	--	--	4.90	--	--
08-16-94	--	--	--	--	--	--	--	4.50	--	--
09-20-94	--	--	--	--	--	--	--	3.70	--	--
07-22-94	--	--	--	--	--	--	--	5.20	--	--
07-20-94	--	--	--	--	--	--	--	8.80	--	--
07-26-94	--	--	--	--	--	--	--	2.60	--	--
07-26-94	--	--	--	--	--	--	--	10.0	--	--
07-26-94	--	--	--	--	--	--	--	10.0	--	--
07-21-94	--	--	--	--	--	--	--	8.00	--	--
10-20-93	--	--	--	--	--	--	--	3.60	--	--
11-22-93	--	--	--	--	--	--	--	3.80	--	--
01-12-94	--	--	--	--	--	--	--	8.90	--	--
02-16-94	--	--	--	--	--	--	--	3.60	--	--
03-21-94	--	--	--	--	--	--	--	3.20	--	--
04-13-94	--	--	--	--	--	--	--	3.60	--	--
04-13-94	229	19	7.3	0.70	57	325	0.46	--	<3	<1
05-23-94	--	--	--	--	--	--	--	3.90	--	--
06-20-94	--	--	--	--	--	--	--	3.60	--	--
07-18-94	--	--	--	--	--	--	--	3.60	--	--
08-16-94	--	--	--	--	--	--	--	3.60	--	--
09-19-94	--	--	--	--	--	--	--	3.60	--	--
10-20-93	--	--	--	--	--	--	--	9.30	--	--
11-22-93	--	--	--	--	--	--	--	9.00	--	--
01-12-94	--	--	--	--	--	--	--	22.0	--	--
02-16-94	--	--	--	--	--	--	--	8.30	--	--
03-21-94	--	--	--	--	--	--	--	8.80	--	--
04-13-94	--	--	--	--	--	--	--	24.0	--	--
04-13-94	216	35	17	0.70	57	355	0.55	--	<3	<1
05-23-94	--	--	--	--	--	--	--	8.90	--	--
06-20-94	--	--	--	--	--	--	--	9.40	--	--
07-18-94	--	--	--	--	--	--	--	9.90	--	--
08-16-94	--	--	--	--	--	--	--	10.0	--	--
09-19-94	--	--	--	--	--	--	--	10.0	--	--
10-20-93	--	--	--	--	--	--	--	22.0	--	--
11-22-93	--	--	--	--	--	--	--	22.0	--	--

CHEMICAL ANALYSES OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

STATION NUMBER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	GEOLOGIC UNIT	DATE	TIME	DEPTH OF WELL, TOTAL (FEET) (72008)	SPECIFIC CONDUCTANCE (μS/CM) (00095)
RED WILLOW COUNTY								
401412100364203	3N 29W 8DDBA3	40 14 12 N	100 36 42 W	112SDGV	01-12-94	1400	135.00	881
				112SDGV	02-16-94	1500	135.00	881
				112SDGV	03-21-94	1410	135.00	849
				112SDGV	04-13-94	1510	135.00	814
				112SDGV	04-13-94	1515	135.00	--
				112SDGV	05-23-94	1615	135.00	866
				112SDGV	06-20-94	1625	135.00	867
				112SDGV	07-18-94	1710	135.00	857
				112SDGV	08-16-94	1500	135.00	860
				112SDGV	09-19-94	1700	135.00	826
401447100333101	3N 29W11AB 1	40 14 47 N	100 33 31 W	--	07-21-94	1110	--	600
401342100352801	3N 29W16AD 1	40 13 42 N	100 35 28 W	--	07-22-94	1245	--	770
401040100351101	3N 29W34CC 1	40 10 40 N	100 35 11 W	--	07-26-94	1605	--	1410
401513100450401	3N 30W 6CA 1	40 15 13 N	100 45 04 W	--	07-22-94	1340	--	840
401329100405501	3N 30W14CBB 1	40 13 29 N	100 40 55 W	--	07-22-94	1320	--	980
401355100441401	3N 30W17BBC 1	40 13 55 N	100 44 14 W	--	07-20-94	20-94	1140	--940
401240100424701	3N 30W21CAA 1	40 12 40 N	100 42 47 W	--	07-20-94	1200	12.00	1060
401132100403901	3N 30W26CD 1	40 11 32 N	100 40 39 W	--	07-22-94	1405	--	1200
401119100420201	3N 30W34BBC 1	40 11 19 N	100 42 02 W	--	07-22-94	1450	53.00	110
401607100202901	4N 27W35CA 1	40 16 07 N	100 20 29 W	--	07-22-94	0905	--	540
401632100310601	4N 28W31AA 1	40 16 32 N	100 31 06 W	--	07-21-94	1225	--	500
401632100294201	4N 28W33BB 1	40 16 32 N	100 29 42 W	--	07-21-94	1300	--	472
401619100265401	4N 28W35AC 1	40 16 19 N	100 26 54 W	--	07-21-94	1330	--	484
401632100252901	4N 28W36AA 1	40 16 32 N	100 25 29 W	--	07-21-94	1400	--	560
401553100374301	4N 29W31DB 1	40 15 53 N	100 37 43 W	--	07-21-94	1040	--	470
401617100350001	4N 29W34CA 1	40 16 17 N	100 35 00 W	--	07-26-94	0930	--	710
401723100412901	4N 30W27AB 1	40 17 23 N	100 41 29 W	--	07-20-94	1010	--	450
401631100425101	4N 30W33BA 1	40 16 31 N	100 42 51 W	--	07-20-94	1030	--	495
ROCK COUNTY								
423232099392501	30N 20W28DAAA1	42 32 32 N	099 39 25 W	121OGLL	12-02-93	1440	262.00	186
423232099392502	30N 20W28DAAA2			121OGLL	12-02-93	1515	110.00	416
423046099392601	32N 20W27CCBB1	42 42 46 N	099 39 26 W	121OGLL	11-03-93	1150	155.00	337
				121OGLL	12-01-93	1415	155.00	338
				121OGLL	06-30-94	1800	155.00	322
SALINECOUNTY								
403902097064901	8N 3E20BAD 1	40 39 02 N	097 06 49 W	112SDGV	08-23-94	0830	190.00	--
SARPYCOUNTY								
410233096181801	12N 10E 4BADB1	41 02 33 N	096 18 18 W	--	05-12-94	1230	--	543
				--	07-20-94	1200	--	521
				--	09-06-94	1230	--	558
410159096181001	12N 10E 4CDAA1	41 01 59 N	096 18 10 W	112SDGV	02-17-94	0955	--	532
				112SDGV	05-12-94	0941	--	546
				112SDGV	07-19-94	1230	--	550
				112SDGV	09-06-94	0930	--	565
410610096144401	13N 10E13BABB1	41 06 10 N	096 14 44 W	110QRNR	08-17-94	--	--	531
410604096191201	13N 10E17BBC 1	41 06 04 N	096 19 12 W	--	09-01-94	1555	--	567
410312096183901	13N 10E32ADDD1	41 03 12 N	096 18 39 W	112SDGV	05-12-94	1325	46.00	474
				112SDGV	07-20-94	1400	46.00	450
				112SDGV	09-06-94	1330	46.00	478
410324096191801	13N 10E32BADC1	41 03 24 N	096 19 18 W	112SDGV	02-17-94	1125	--	519
				112SDGV	05-12-94	1110	--	512
				112SDGV	07-19-94	1545	--	512

CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (° C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS- SOLVED (MG/L AS Na) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY LAB (MG/L AS CaCO ₃) (90410)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS Cl) (00940)
RED WILLOW COUNTY												
01-12-94	7.4	14.5	--	--	--	--	--	--	--	--	--	--
02-16-94	7.5	14.5	--	--	--	--	--	--	--	--	--	--
03-21-94	7.4	15.0	--	--	--	--	--	--	--	--	--	--
04-13-94	7.5	15.0	--	--	--	--	--	--	--	--	--	--
04-13-94	--	--	--	360	100	27	19	0.4	12	183	89	46
05-23-94	7.5	15.5	--	--	--	--	--	--	--	--	--	--
06-20-94	7.4	15.5	--	--	--	--	--	--	--	--	--	--
07-18-94	7.0	15.0	--	--	--	--	--	--	--	--	--	--
08-16-94	7.3	17.5	--	--	--	--	--	--	--	--	--	--
09-19-94	8.4	15.0	--	--	--	--	--	--	--	--	--	--
07-21-94	7.3	15.0	--	--	--	--	--	--	--	--	--	--
07-22-94	7.3	16.0	--	--	--	--	--	--	--	--	--	--
07-26-94	7.2	14.5	--	--	--	--	--	--	--	--	--	--
07-22-94	7.3	16.0	--	--	--	--	--	--	--	--	--	--
07-22-94	7.3	15.5	--	--	--	--	--	--	--	--	--	--
07-20-94	7.4	14.5	--	--	--	--	--	--	--	--	--	--
07-20-94	7.0	14.5	--	--	--	--	--	--	--	--	--	--
07-22-94	7.2	14.0	--	--	--	--	--	--	--	--	--	--
07-22-94	7.2	15.5	--	--	--	--	--	--	--	--	--	--
07-22-94	7.2	15.0	--	--	--	--	--	--	--	--	--	--
07-21-94	7.2	15.5	--	--	--	--	--	--	--	--	--	--
07-21-94	7.4	15.5	--	--	--	--	--	--	--	--	--	--
07-21-94	7.2	15.0	--	--	--	--	--	--	--	--	--	--
07-21-94	7.1	14.5	--	--	--	--	--	--	--	--	--	--
07-21-94	7.3	17.0	--	--	--	--	--	--	--	--	--	--
07-26-94	7.2	17.0	--	--	--	--	--	--	--	--	--	--
07-20-94	7.2	16.0	--	--	--	--	--	--	--	--	--	--
07-20-94	7.4	17.0	--	--	--	--	--	--	--	--	--	--
ROCK COUNTY												
12-02-93	8.1	12.5	8.8	--	--	--	--	--	--	--	--	--
12-02-93	6.7	11.5	10.2	--	--	--	--	--	--	--	--	--
11-03-93	7.4	14.0	3.8	140	50	4.0	12	0.4	7.7	163	8.6	0.80
12-01-93	7.5	13.5	4.6	140	51	4.1	12	0.4	6.7	164	12	1.0
06-30-94	7.4	17.0	2.6	150	52	4.0	11	0.4	6.5	163	11	1.0
SALINE COUNTY												
08-23-94	--	--	--	240	75	12	28	0.8	4.8	229	61	10
SARPY COUNTY												
05-12-94	8.0	13.0	4.2	220	65	14	26	0.8	8.7	210	62	11
07-20-94	7.6	13.0	0.1	230	68	15	26	0.7	8.9	212	69	12
09-06-94	8.6	13.5	0.0	240	72	15	27	0.8	10	214	79	14
02-17-94	7.5	11.5	2.2	210	59	14	30	0.9	8.9	195	68	12
05-12-94	7.9	11.5	1.0	220	64	14	29	0.9	9.0	198	72	13
07-19-94	7.6	12.5	--	210	59	14	28	0.9	9.9	199	74	13
09-06-94	7.9	12.0	0.0	220	65	15	29	0.8	10	196	80	14
08-17-94	--	12.5	7.7	--	--	--	--	--	--	--	--	--
09-01-94	7.6	13.0	5.0	--	--	--	--	--	--	--	--	--
05-12-94	7.8	15.0	1.6	180	47	15	25	0.8	10	175	49	11
07-20-94	7.4	14.0	0.0	190	49	16	24	0.8	10	191	48	12
09-06-94	8.5	11.5	0.5	190	49	16	24	0.8	10	195	40	12
02-17-94	7.6	11.5	El.5	200	62	11	29	0.9	6.6	177	75	13
05-12-94	7.4	11.5	3.2	200	63	11	28	0.9	6.5	175	74	12
07-19-94	7.6	12.5	0.1	180	54	10	25	0.8	6.1	180	71	13

CHEMICAL ANALYSES OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO-+NO- DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ARSENIC DIS- SOLVED (µG/L AS AS) (01000)	BARIUM, DIS- SOLVED (µG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (µG/L AS BE) (01010)	BORON, DIS- SOLVED (µG/L AS B) (01020)
RED WILLOW COUNTY												
01-12-94	--	--	--	--	--	22.0	--	--	--	--	--	--
02-16-94	--	--	--	--	--	23.0	--	--	--	--	--	--
03-21-94	--	--	--	--	--	22.0	--	--	--	--	--	--
04-13-94	--	--	--	--	--	24.0	--	--	--	--	--	--
04-13-94	0.70	58	462	0.80	--	--	--	--	--	--	--	--
05-23-94	--	--	--	--	--	26.0	--	--	--	--	--	--
06-20-94	--	--	--	--	--	25.0	--	--	--	--	--	--
07-18-94	--	--	--	--	--	22.0	--	--	--	--	--	--
08-16-94	--	--	--	--	--	23.0	--	--	--	--	--	--
09-19-94	--	--	--	--	--	24.0	--	--	--	--	--	--
07-21-94	--	--	--	--	--	8.50	--	--	--	--	--	--
07-22-94	--	--	--	--	--	16.0	--	--	--	--	--	--
07-26-94	--	--	--	--	--	13.0	--	--	--	--	--	--
07-22-94	--	--	--	--	--	13.0	--	--	--	--	--	--
07-22-94	--	--	--	--	--	13.0	--	--	--	--	--	--
07-20-94	--	--	--	--	--	9.90	--	--	--	--	--	--
07-20-94	--	--	--	--	--	11.0	--	--	--	--	--	--
07-22-94	--	--	--	--	--	3.60	--	--	--	--	--	--
07-22-94	--	--	--	--	--	1.30	--	--	--	--	--	--
07-22-94	--	--	--	--	--	7.80	--	--	--	--	--	--
07-21-94	--	--	--	--	--	3.60	--	--	--	--	--	--
07-21-94	--	--	--	--	--	2.60	--	--	--	--	--	--
07-21-94	--	--	--	--	--	2.90	--	--	--	--	--	--
07-21-94	--	--	--	--	--	4.30	--	--	--	--	--	--
07-21-94	--	--	--	--	--	2.00	--	--	--	--	--	--
07-26-94	--	--	--	--	--	22.0	--	--	--	--	--	--
07-20-94	--	--	--	--	--	2.20	--	--	--	--	--	--
07-20-94	--	--	--	--	--	2.90	--	--	--	--	--	--
ROCK COUNTY												
12-02-93	--	--	--	--	<0.010	3.70	0.020	0.020	--	--	--	--
12-02-93	--	--	--	--	<0.010	29.0	0.030	0.120	--	--	--	--
11-03-93	0.20	49	236	0.32	<0.010	1.30	0.020	0.120	--	--	--	--
12-01-93	0.20	47	238	0.32	<0.010	1.30	0.020	0.120	--	--	--	--
06-30-94	0.20	48	238	0.32	<0.010	1.30	0.030	0.110	--	--	--	--
SALINE COUNTY												
08-23-94	0.30	32	365	0.50	<0.010	0.890	0.010	0.150	--	--	--	60
SARPY COUNTY												
05-12-94	0.40	29	344	0.47	--	--	--	--	7	170	<0.5	60
07-20-94	0.30	30	359	0.49	--	--	--	--	6	190	<0.5	60
09-06-94	0.20	30	378	0.51	--	--	--	--	9	200	<0.5	50
02-17-94	0.30	32	342	0.47	--	--	--	--	8	150	<0.5	70
05-12-94	0.40	34	355	0.48	--	--	--	--	8	170	<0.5	60
07-19-94	0.40	35	354	0.48	--	--	--	--	6	170	<0.5	70
09-06-94	0.30	35	367	0.50	--	--	--	--	9	180	<0.5	60
08-17-94	--	--	--	--	--	1.90	--	--	--	--	--	--
09-01-94	--	--	--	--	--	<0.050	--	--	--	--	--	--
05-12-94	0.30	19	283	0.38	--	--	--	--	5	230	<0.5	50
07-20-94	0.30	18	294	0.40	--	--	--	--	3	250	<0.5	40
09-06-94	0.20	16	286	0.39	--	--	--	--	4	250	<0.5	50
02-17-94	0.30	32	336	0.46	--	--	--	--	4	140	<0.5	70
05-12-94	0.30	33	333	0.45	--	--	--	--	3	140	<0.5	60
07-19-94	0.30	31	319	0.43	--	--	--	--	2	130	<0.5	60

CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	CADMIUM, DIS- SOLVED (μG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (μG/L AS CR) (01030)	COBALT, DIS- SOLVED (μG/L AS CO) (01035)	COPPER, DIS- SOLVED (μG/L AS CU) (01040)	IRON, DIS- SOLVED (μG/L AS FE) (01046)	LEAD, DIS- SOLVED (μG/L AS PB) (01049)	LITHIUM, DIS- SOLVED (μG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (μG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (μG/L AS MO) (01060)	NICKEL, DIS- SOLVED (μG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (μG/L AS SE) (01145)	SILVER, DIS- SOLVED (μG/L AS AG) (01075)
RED WILLOW COUNTY												
01-12-94	--	--	--	--	--	--	--	--	--	--	--	--
02-16-94	--	--	--	--	--	--	--	--	--	--	--	--
03-21-94	--	--	--	--	--	--	--	--	--	--	--	--
04-13-94	--	--	--	--	--	--	--	--	--	--	--	--
04-13-94	--	--	--	--	<3	--	--	<1	--	--	--	--
05-23-94	--	--	--	--	--	--	--	--	--	--	--	--
06-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-18-94	--	--	--	--	--	--	--	--	--	--	--	--
08-16-94	--	--	--	--	--	--	--	--	--	--	--	--
09-19-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
ROCK COUNTY												
12-02-93	--	--	--	--	--	--	--	--	--	--	--	--
12-02-93	--	--	--	--	--	--	--	--	--	--	--	--
11-03-93	--	--	--	--	<3	--	--	<1	--	--	--	--
12-01-93	--	--	--	--	10	--	--	4	--	--	--	--
06-30-94	--	--	--	--	<3	--	--	<1	--	--	--	--
SALINE COUNTY												
08-23-94	--	--	--	--	<3	--	--	<1	--	--	--	--
SARPY COUNTY												
05-12-94	<1.0	<5	<3	<10	470	20	19	1100	10	<10	<1	<1.0
07-20-94	<1.0	<5	<3	<10	450	<10	14	1200	<10	<10	<1	<1.0
09-06-94	<1.0	<5	<3	<10	400	<10	23	1200	<10	<10	<1	<1.0
02-17-94	<1.0	<5	<3	<10	4	<10	19	240	<10	<10	<1	<1.0
05-12-94	<1.0	<5	<3	<10	5	<10	21	510	<10	<10	<1	<1.0
07-19-94	<1.0	<5	<3	<10	3	<10	18	470	<10	<10	<1	<1.0
09-06-94	<1.0	<5	<3	<10	7	<10	24	540	<10	<10	<1	<1.0
08-17-94	--	--	--	--	--	--	--	--	--	--	--	--
09-01-94	--	--	--	--	--	--	--	--	--	--	--	--
05-12-94	<1.0	<5	<3	<10	720	<10	19	370	<10	<10	<1	<1.0
07-20-94	<1.0	<5	<3	<10	710	<10	11	370	<10	<10	<1	<1.0
09-06-94	<1.0	<5	3	<10	600	<10	14	370	<10	<10	<1	<1.0
02-17-94	<1.0	<5	<3	<10	32	<10	16	47	<10	<10	<1	<1.0
05-12-94	<1.0	<5	<3	<10	32	<10	18	53	<10	<10	<1	<1.0
07-19-94	<1.0	<5	<3	<10	12	<10	13	41	<10	<10	<1	<1.0

CHEMICAL ANALYSES OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	STRONTIUM, DIS- SOLVED (μG/L AS SR) (01080)	VANADIUM, DIS- SOLVED (μG/L AS V) (01085)	ZINC, DIS- SOLVED (μG/L AS ZN) (01090)	SILICA, WATER, DISS, REC (μG/L) (04035)	PRO- METRYN, WATER, DISS, REC (μG/L) (04036)	PRO- METON, WATER, DISS, REC (μG/L) (04037)	DEISO- PROPYL ATRAZIN, WATER, DISS, REC (μG/L) (04038)	DEETHYL ATRA- ZINE, WATER, DISS, REC (μG/L) (04040)	CYANA- ZINE, WATER, DISS, REC (μG/L) (04041)	DI- BROMO- METHANE WHOLE RECOVER (μG/L) (30217)	DI- CHLORO- BROMO- METHANE TOTAL (μG/L) (32101)	CARBON- TETRA- CHLO- RIDE TOTAL (μG/L) (32102)
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RED WILLOW COUNTY

01-12-94	--	--	--	--	--	--	--	--	--	--	--	--
02-16-94	--	--	--	--	--	--	--	--	--	--	--	--
03-21-94	--	--	--	--	--	--	--	--	--	--	--	--
04-13-94	--	--	--	--	--	--	--	--	--	--	--	--
04-13-94	--	--	--	--	--	--	--	--	--	--	--	--
05-23-94	--	--	--	--	--	--	--	--	--	--	--	--
06-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-18-94	--	--	--	--	--	--	--	--	--	--	--	--
08-16-94	--	--	--	--	--	--	--	--	--	--	--	--
09-19-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--

ROCK COUNTY

12-02-93	--	--	--	--	--	--	--	--	--	--	--	--
12-02-93	--	--	--	--	--	--	--	--	--	--	--	--
11-03-93	--	--	--	--	--	--	--	--	--	--	--	--
12-01-93	--	--	--	--	--	--	--	--	--	--	--	--
06-30-94	--	--	--	<0.05	<0.05	<0.05	<0.05	<0.05	<0.20	--	--	--

SALINE COUNTY

08-23-94	--	--	--	--	--	--	--	--	--	--	--	--
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SARPY COUNTY

05-12-94	370	<6	15	<0.05	<0.05	<0.05	<0.05	0.10	0.30	<3.0	<3.0	<3.0
07-20-94	380	<6	8	0.72	<0.05	<0.05	<0.05	0.07	<0.20	<3.0	<3.0	<3.0
09-06-94	400	<6	12	<0.05	<0.05	<0.05	<0.05	<0.05	<0.20	<3.0	<3.0	<3.0
02-17-94	370	8	12	<0.05	<0.05	<0.05	<0.05	0.07	<0.20	<3.0	<3.0	<3.0
05-12-94	370	<6	15	<0.05	<0.05	<0.05	<0.05	0.08	<0.20	<3.0	<3.0	<3.0
07-19-94	360	7	5	0.68	<0.05	<0.05	<0.05	<0.05	<0.20	<3.0	<3.0	<3.0
09-06-94	380	6	5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.20	<3.0	<3.0	<3.0
08-17-94	--	--	--	--	--	--	--	--	--	--	--	--
09-01-94	--	--	--	--	--	--	--	--	--	--	--	--
05-12-94	330	<6	4	<0.05	<0.05	<0.05	<0.05	0.08	<0.20	<3.0	<3.0	<3.0
07-20-94	340	<6	<3	0.84	<0.05	<0.05	<0.05	<0.05	<0.20	<3.0	<3.0	<3.0
09-06-94	330	<6	10	<0.05	<0.05	<0.05	<0.05	0.05	<0.20	<3.0	<3.0	<3.0
02-17-94	350	<6	7	<0.05	<0.05	<0.05	<0.05	0.05	<0.20	<3.0	<3.0	<3.0
05-12-94	340	<6	13	<0.05	<0.05	<0.05	<0.05	0.05	<0.20	<3.0	<3.0	<3.0
07-19-94	310	<6	17	0.98	<0.05	<0.05	<0.05	0.05	<0.20	<3.0	<3.0	<3.0

CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	1,2-DI- CHLORO- ETHANE TOTAL (μ G/L) (32103)	BROMO- FORM TOTAL (μ G/L) (32104)	CHLORO- DI- BROMO- METHANE TOTAL (μ G/L) (32105)	CHLORO- FORM TOTAL (μ G/L) (32106)	TOLUENE TOTAL (μ G/L) (34010)	BENZENE TOTAL (μ G/L) (34030)	ACE- NAPHTH- YLENE TOTAL (μ G/L) (34200)	ACE- NAPHTH- ENE TOTAL (μ G/L) (34205)	ACRO- LEIN TOTAL (μ G/L) (34210)	ACRYLO- NITRILE TOTAL (μ G/L) (34215)	ANTHRA- CENE TOTAL (μ G/L) (34220)	BENZO B FLUOR- AN- THENE TOTAL (μ G/L) (34230)
RED WILLOW COUNTY												
01-12-94	--	--	--	--	--	--	--	--	--	--	--	--
02-16-94	--	--	--	--	--	--	--	--	--	--	--	--
03-21-94	--	--	--	--	--	--	--	--	--	--	--	--
04-13-94	--	--	--	--	--	--	--	--	--	--	--	--
04-13-94	--	--	--	--	--	--	--	--	--	--	--	--
05-23-94	--	--	--	--	--	--	--	--	--	--	--	--
06-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-18-94	--	--	--	--	--	--	--	--	--	--	--	--
08-16-94	--	--	--	--	--	--	--	--	--	--	--	--
09-19-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
ROCK COUNTY												
12-02-93	--	--	--	--	--	--	--	--	--	--	--	--
12-02-93	--	--	--	--	--	--	--	--	--	--	--	--
11-03-93	--	--	--	--	--	--	--	--	--	--	--	--
12-01-93	--	--	--	--	--	--	--	--	--	--	--	--
06-30-94	--	--	--	--	--	--	--	--	--	--	--	--
SALINE COUNTY												
08-23-94	--	--	--	--	--	--	--	--	--	--	--	--
SARPY COUNTY												
05-12-94	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<5.0	<5.0	<20	<20	<5.0	<10.0
07-20-94	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<5.0	<5.0	<20	<20	<5.0	<10.0
09-06-94	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<5.0	<5.0	<20	<20	<5.0	<10.0
02-17-94	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<5.0	<5.0	<20	<20	<5.0	<10.0
05-12-94	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<5.0	<5.0	<20	<20	<5.0	<10.0
07-19-94	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<5.0	<5.0	<20	<20	<5.0	<10.0
09-06-94	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<5.0	<5.0	<20	<20	<5.0	<10.0
08-17-94	--	--	--	--	--	--	--	--	--	--	--	--
09-01-94	--	--	--	--	--	--	--	--	--	--	--	--
05-12-94	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<5.0	<5.0	<20	<20	<5.0	<10.0
07-20-94	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<5.0	<5.0	<20	<20	<5.0	<10.0
09-06-94	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<5.0	<5.0	<20	<20	<5.0	<10.0
02-17-94	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<5.0	<5.0	<20	<20	<5.0	<10.0
05-12-94	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<5.0	<5.0	<20	<20	<5.0	<10.0
07-19-94	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<5.0	<5.0	<20	<20	<5.0	<10.0

CHEMICAL ANALYSES OF GROUND WATER

377

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	BENZO K FLUOR- AN- THENE TOTAL (μG/L) (34242)	BENZO- A- PYRENE TOTAL (μG/L) (34247)	BIS 2- CHLORO- ETHYL ETHER TOTAL (μG/L) (34273)	BIS (2- CHLORO- ETHOXY) METHANE TOTAL (μG/L) (34278)	BIS (2- CHLORO- ISO- PROPYL) ETHER TOTAL (μG/L) (34283)	N-BUTYL BENZYL PHTHAL- ATE TOTAL (μG/L) (34292)	CHLORO- BENZENE TOTAL (μG/L) (34301)	CHLORO- ETHANE TOTAL (μG/L) (34311)	CHRY- SENE TOTAL (μG/L) (34320)	DIETHYL PHTHAL- ATE TOTAL (μG/L) (34336)	DI- METHYL PHTHAL- ATE TOTAL (μG/L) (34341)	ETHYL- BENZENE TOTAL (μG/L) (34371)
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RED WILLOW COUNTY

01-12-94	--	--	--	--	--	--	--	--	--	--	--	--
02-16-94	--	--	--	--	--	--	--	--	--	--	--	--
03-21-94	--	--	--	--	--	--	--	--	--	--	--	--
04-13-94	--	--	--	--	--	--	--	--	--	--	--	--
04-13-94	--	--	--	--	--	--	--	--	--	--	--	--
05-23-94	--	--	--	--	--	--	--	--	--	--	--	--
06-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-18-94	--	--	--	--	--	--	--	--	--	--	--	--
08-16-94	--	--	--	--	--	--	--	--	--	--	--	--
09-19-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--

ROCK COUNTY

12-02-93	--	--	--	--	--	--	--	--	--	--	--	--
12-02-93	--	--	--	--	--	--	--	--	--	--	--	--
11-03-93	--	--	--	--	--	--	--	--	--	--	--	--
12-01-93	--	--	--	--	--	--	--	--	--	--	--	--
06-30-94	--	--	--	--	--	--	--	--	--	--	--	--

SALINE COUNTY

08-23-94	--	--	--	--	--	--	--	--	--	--	--	--
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SARPY COUNTY

05-12-94	<10.0	<10.0	≤5.0	≤5.0	≤5.0	≤5.0	≤3.0	≤3.0	<10.0	≤5.0	≤5.0	≤3.0
07-20-94	<10.0	<10.0	≤5.0	≤5.0	≤5.0	≤5.0	≤3.0	≤3.0	<10.0	≤5.0	≤5.0	≤3.0
09-06-94	<10.0	<10.0	≤5.0	≤5.0	≤5.0	≤5.0	≤3.0	≤3.0	<10.0	≤5.0	≤5.0	≤3.0
02-17-94	<10.0	<10.0	≤5.0	≤5.0	≤5.0	≤5.0	≤3.0	≤3.0	<10.0	≤5.0	≤5.0	≤3.0
05-12-94	<10.0	<10.0	≤5.0	≤5.0	≤5.0	≤5.0	≤3.0	≤3.0	<10.0	≤5.0	≤5.0	≤3.0
07-19-94	<10.0	<10.0	≤5.0	≤5.0	≤5.0	≤5.0	≤3.0	≤3.0	<10.0	≤5.0	≤5.0	≤3.0
09-06-94	<10.0	<10.0	≤5.0	≤5.0	≤5.0	≤5.0	≤3.0	≤3.0	<10.0	≤5.0	≤5.0	≤3.0
08-17-94	--	--	--	--	--	--	--	--	--	--	--	--
09-01-94	--	--	--	--	--	--	--	--	--	--	--	--
05-12-94	<10.0	<10.0	≤5.0	≤5.0	≤5.0	≤5.0	≤3.0	≤3.0	<10.0	≤5.0	≤5.0	≤3.0
07-20-94	<10.0	<10.0	≤5.0	≤5.0	≤5.0	≤5.0	≤3.0	≤3.0	<10.0	≤5.0	≤5.0	≤3.0
09-06-94	<10.0	<10.0	≤5.0	≤5.0	≤5.0	≤5.0	≤3.0	≤3.0	<10.0	≤5.0	≤5.0	≤3.0
02-17-94	<10.0	<10.0	≤5.0	≤5.0	≤5.0	≤5.0	≤3.0	≤3.0	<10.0	≤5.0	≤5.0	≤3.0
05-12-94	<10.0	<10.0	≤5.0	≤5.0	≤5.0	≤5.0	≤3.0	≤3.0	<10.0	≤5.0	≤5.0	≤3.0
07-19-94	<10.0	<10.0	≤5.0	≤5.0	≤5.0	≤5.0	≤3.0	≤3.0	<10.0	≤5.0	≤5.0	≤3.0

CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	FLUOR- ANTHENE TOTAL (μ G/L) (34376)	FLUOR- ENE TOTAL (μ G/L) (34381)	HEXA- CHLORO- CYCLO- PENT- ADIENE TOTAL (μ G/L) (34386)	HEXA- CHLORO- ETHANE TOTAL (μ G/L) (34396)	INDENO (1,2,3- CD) PYRENE TOTAL (μ G/L) (34403)	ISO- PHORONE TOTAL (μ G/L) (34408)	METHYL- BROMIDE TOTAL (μ G/L) (34413)	METHYL- CHLO- RIDE TOTAL (μ G/L) (34418)	METHYL- ENE CHLO- RIDE TOTAL (μ G/L) (34423)	N- SODI-N- PROPYL- AMINE TOTAL (μ G/L) (34428)	N-NITRO -SODI- PHENY- LAMINE TOTAL (μ G/L) (34433)	N-NITRO -SODI- METHY- LAMINE TOTAL (μ G/L) (34438)
RED WILLOW COUNTY												
01-12-94	--	--	--	--	--	--	--	--	--	--	--	--
02-16-94	--	--	--	--	--	--	--	--	--	--	--	--
03-21-94	--	--	--	--	--	--	--	--	--	--	--	--
04-13-94	--	--	--	--	--	--	--	--	--	--	--	--
04-13-94	--	--	--	--	--	--	--	--	--	--	--	--
05-23-94	--	--	--	--	--	--	--	--	--	--	--	--
06-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-18-94	--	--	--	--	--	--	--	--	--	--	--	--
08-16-94	--	--	--	--	--	--	--	--	--	--	--	--
09-19-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
ROCK COUNTY												
12-02-93	--	--	--	--	--	--	--	--	--	--	--	--
12-02-93	--	--	--	--	--	--	--	--	--	--	--	--
11-03-93	--	--	--	--	--	--	--	--	--	--	--	--
12-01-93	--	--	--	--	--	--	--	--	--	--	--	--
06-30-94	--	--	--	--	--	--	--	--	--	--	--	--
SALINE COUNTY												
08-23-94	--	--	--	--	--	--	--	--	--	--	--	--
SARPY COUNTY												
05-12-94	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<3.0	<3.0	<3.0	<5.0	<5.0	<5.0
07-20-94	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<3.0	<3.0	<3.0	<5.0	<5.0	<5.0
09-06-94	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<3.0	<3.0	<3.0	<5.0	<5.0	<5.0
02-17-94	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<3.0	<3.0	<3.0	<5.0	<5.0	<5.0
05-12-94	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<3.0	<3.0	<3.0	<5.0	<5.0	<5.0
07-19-94	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<3.0	<3.0	<3.0	<5.0	<5.0	<5.0
09-06-94	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<3.0	<3.0	<3.0	<5.0	<5.0	<5.0
08-17-94	--	--	--	--	--	--	--	--	--	--	--	--
09-01-94	--	--	--	--	--	--	--	--	--	--	--	--
05-12-94	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<3.0	<3.0	<3.0	<5.0	<5.0	<5.0
07-20-94	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<3.0	<3.0	<3.0	<5.0	<5.0	<5.0
09-06-94	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<3.0	<3.0	<3.0	<5.0	<5.0	<5.0
02-17-94	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<3.0	<3.0	<3.0	<5.0	<5.0	<5.0
05-12-94	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<3.0	<3.0	<3.0	<5.0	<5.0	<5.0
07-19-94	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<3.0	<3.0	<3.0	<5.0	<5.0	<5.0

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DATE	NITRO-BENZENE TOTAL (µG/L (34447)	PARA-CHLORO-META CRESOL TOTAL (µG/L (34452)	PHENAN-THRENE TOTAL (µG/L (34461)	PYRENE TOTAL (µG/L (34469)	TETRA-CHLORO-ETHYL-ENE TOTAL (µG/L (34475)	TRI-CHLORO-FLUORO-METHANE TOTAL (µG/L (34488)	1,1-DI-CHLORO-ETHANE TOTAL (µG/L (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (µG/L (34501)	1,1,1-TRI-CHLORO-ETHANE TOTAL (µG/L (34506)	1,1,2-TRI-CHLORO-ETHANE TOTAL (µG/L (34511)	ETHANE, BENZOGH 1,1,2,2-TETRA-CHLORO-WAT UNF REC (µG/L (34516)	PERYLYNE 1,2,3,4,9,10-BENZOPERYLENE TOTAL (µG/L (34521)
RED WILLOW COUNTY												
01-12-94	--	--	--	--	--	--	--	--	--	--	--	--
02-16-94	--	--	--	--	--	--	--	--	--	--	--	--
03-21-94	--	--	--	--	--	--	--	--	--	--	--	--
04-13-94	--	--	--	--	--	--	--	--	--	--	--	--
04-13-94	--	--	--	--	--	--	--	--	--	--	--	--
05-23-94	--	--	--	--	--	--	--	--	--	--	--	--
06-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-18-94	--	--	--	--	--	--	--	--	--	--	--	--
08-16-94	--	--	--	--	--	--	--	--	--	--	--	--
09-19-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
ROCK COUNTY												
12-02-93	--	--	--	--	--	--	--	--	--	--	--	--
12-02-93	--	--	--	--	--	--	--	--	--	--	--	--
11-03-93	--	--	--	--	--	--	--	--	--	--	--	--
12-01-93	--	--	--	--	--	--	--	--	--	--	--	--
06-30-94	--	--	--	--	--	--	--	--	--	--	--	--
SALINE COUNTY												
08-23-94	--	--	--	--	--	--	--	--	--	--	--	--
SARPY COUNTY												
05-12-94	<5.0	<30.0	<5.0	<5.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<10.0
07-20-94	<5.0	<30.0	<5.0	<5.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<10.0
09-06-94	<5.0	<30.0	<5.0	<5.0	<3.0	<3.0						

CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	BENZO A ANTHRACENE TOTAL (μG/L) (34526)	BENZENE O-CHLORO- WATER REC (μG/L) (34536)	1,2-DI- CHLORO- PROPANE TOTAL (μG/L) (34541)	1,2- TRANSDI- CHLORO- ETHENE TOTAL (μG/L) (34546)	BENZENE 1,2,4- TRI- CHLORO- WAT UNF REC (μG/L) (34551)	1,2,5,6 -DIBENZ- -ANTHRA TOTAL (μG/L) (34556)	BENZENE 1,3-DI- CHLORO- WATER REC (μG/L) (34566)	BENZENE 1,4-DI- CHLORO- WATER REC (μG/L) (34571)	2- CHLORO- ETHYL- VINYL- ETHER TOTAL (μG/L) (34576)	2- CHLORO- NAPH- THALENE TOTAL (μG/L) (34581)	2- CHLORO- PHENOL TOTAL (μG/L) (34586)	2- NITRO- PHENOL TOTAL (μG/L) (34591)
RED WILLOW COUNTY												
01-12-94	--	--	--	--	--	--	--	--	--	--	--	--
02-16-94	--	--	--	--	--	--	--	--	--	--	--	--
03-21-94	--	--	--	--	--	--	--	--	--	--	--	--
04-13-94	--	--	--	--	--	--	--	--	--	--	--	--
04-13-94	--	--	--	--	--	--	--	--	--	--	--	--
05-23-94	--	--	--	--	--	--	--	--	--	--	--	--
06-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-18-94	--	--	--	--	--	--	--	--	--	--	--	--
08-16-94	--	--	--	--	--	--	--	--	--	--	--	--
09-19-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
ROCK COUNTY												
12-02-93	--	--	--	--	--	--	--	--	--	--	--	--
12-02-93	--	--	--	--	--	--	--	--	--	--	--	--
11-03-93	--	--	--	--	--	--	--	--	--	--	--	--
12-01-93	--	--	--	--	--	--	--	--	--	--	--	--
06-30-94	--	--	--	--	--	--	--	--	--	--	--	--
SALINE COUNTY												
08-23-94	--	--	--	--	--	--	--	--	--	--	--	--
SARPY COUNTY												
05-12-94	<10.0	<5.0	<3.0	<3.0	<5.0	<10.0	<5.0	<5.0	<3.0	<5.0	<5.0	<5.0
07-20-94	<10.0	<5.0	<3.0	<3.0	<5.0	<10.0	<5.0	<5.0	<3.0	<5.0	<5.0	<5.0
09-06-94	<10.0	<5.0	<3.0	<3.0	<5.0	<10.0	<5.0	<5.0	<3.0	<5.0	<5.0	<5.0
02-17-94	<10.0	<5.0	<3.0	<3.0	<5.0	<10.0	<5.0	<5.0	<3.0	<5.0	<5.0	<5.0
05-12-94	<10.0	<5.0	<3.0	<3.0	<5.0	<10.0	<5.0	<5.0	<3.0	<5.0	<5.0	<5.0
07-19-94	<10.0	<5.0	<3.0	<3.0	<5.0	<10.0	<5.0	<5.0	<3.0	<5.0	<5.0	<5.0
09-06-94	<10.0	<5.0	<3.0	<3.0	<5.0	<10.0	<5.0	<5.0	<3.0	<5.0	<5.0	<5.0
08-17-94	--	--	--	--	--	--	--	--	--	--	--	--
09-01-94	--	--	--	--	--	--	--	--	--	--	--	--
05-12-94	<10.0	<5.0	<3.0	<3.0	<5.0	<10.0	<5.0	<5.0	<3.0	<5.0	<5.0	<5.0
07-20-94	<10.0	<5.0	<3.0	<3.0	<5.0	<10.0	<5.0	<5.0	<3.0	<5.0	<5.0	<5.0
09-06-94	<10.0	<5.0	<3.0	<3.0	<5.0	<10.0	<5.0	<5.0	<3.0	<5.0	<5.0	<5.0
02-17-94	<10.0	<5.0	<3.0	<3.0	<5.0	<10.0	<5.0	<5.0	<3.0	<5.0	<5.0	<5.0
05-12-94	<10.0	<5.0	<3.0	<3.0	<5.0	<10.0	<5.0	<5.0	<3.0	<5.0	<5.0	<5.0
07-19-94	<10.0	<5.0	<3.0	<3.0	<5.0	<10.0	<5.0	<5.0	<3.0	<5.0	<5.0	<5.0

CHEMICAL ANALYSES OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	DI-N- OCTYL PHTHAL- ATE TOTAL (μG/L) (34596)	2,4-DI- CHLORO- PHENOL TOTAL (μG/L) (34601)	2,4-DI- METHYL- PHENOL TOTAL (μG/L) (34606)	2,4-DI- NITRO- TOLUENE TOTAL (μG/L) (34611)	2,4- DI- NITRO- PHENOL TOTAL (μG/L) (34616)	2,4,6- TRI- CHLORO- PHENOL TOTAL (μG/L) (34621)	2,6-DI- NITRO- TOLUENE TOTAL (μG/L) (34626)	3,3'- DI- CHLORO- BENZI- DINE TOTAL (μG/L) (34631)	4- BROMO- PHENYL ETHER TOTAL (μG/L) (34636)	4- CHLORO- PHENYL ETHER TOTAL (μG/L) (34641)	4- NITRO- PHENOL TOTAL (μG/L) (34646)	4,6- DINITRO- ORTHO- CRESOL TOTAL (μG/L) (34657)
RED WILLOW COUNTY												
01-12-94	--	--	--	--	--	--	--	--	--	--	--	--
02-16-94	--	--	--	--	--	--	--	--	--	--	--	--
03-21-94	--	--	--	--	--	--	--	--	--	--	--	--
04-13-94	--	--	--	--	--	--	--	--	--	--	--	--
04-13-94	--	--	--	--	--	--	--	--	--	--	--	--
05-23-94	--	--	--	--	--	--	--	--	--	--	--	--
06-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-18-94	--	--	--	--	--	--	--	--	--	--	--	--
08-16-94	--	--	--	--	--	--	--	--	--	--	--	--
09-19-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
ROCK COUNTY												
12-02-93	--	--	--	--	--	--	--	--	--	--	--	--
12-02-93	--	--	--	--	--	--	--	--	--	--	--	--
11-03-93	--	--	--	--	--	--	--	--	--	--	--	--
12-01-93	--	--	--	--	--	--	--	--	--	--	--	--
06-30-94	--	--	--	--	--	--	--	--	--	--	--	--
SALINE COUNTY												
08-23-94	--	--	--	--	--	--	--	--	--	--	--	--
SARPY COUNTY												
05-12-94	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0
07-20-94	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0
09-06-94	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0
02-17-94	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0
05-12-94	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0
07-19-94	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0
09-06-94	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0
08-17-94	--	--	--	--	--	--	--	--	--	--	--	--
09-01-94	--	--	--	--	--	--	--	--	--	--	--	--
05-12-94	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0
07-20-94	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0
09-06-94	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0
02-17-94	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0
05-12-94	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0
07-19-94	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0

CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	DI-CHLORO- DI-FLUORO- METHANE TOTAL (μ G/L) (34668)	PHENOL (C6H- 5OH) TOTAL (μ G/L) (34694)	NAPHTH- ALENE TOTAL (μ G/L) (34696)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (μ G/L) (34699)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (μ G/L) (34704)	AMETRYN WATER, DISS, REC, (μ G/L) (38401)	PROP- AZINE WATER DISS REC (μ G/L) (38535)	PENTA- CHLORO- PHENOL TOTAL (μ G/L) (39032)	BIS(2- ETHYL HEXYL) PHTHAL- ATE TOTAL (μ G/L) (39100)	DI-N- BUTYL PHTHAL- ATE TOTAL (μ G/L) (39110)	BENZI- DINE TOTAL (μ G/L) (39120)	VINYL CHLO- RIDE TOTAL (μ G/L) (39175)
RED WILLOW COUNTY												
01-12-94	--	--	--	--	--	--	--	--	--	--	--	--
02-16-94	--	--	--	--	--	--	--	--	--	--	--	--
03-21-94	--	--	--	--	--	--	--	--	--	--	--	--
04-13-94	--	--	--	--	--	--	--	--	--	--	--	--
04-13-94	--	--	--	--	--	--	--	--	--	--	--	--
05-23-94	--	--	--	--	--	--	--	--	--	--	--	--
06-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-18-94	--	--	--	--	--	--	--	--	--	--	--	--
08-16-94	--	--	--	--	--	--	--	--	--	--	--	--
09-19-94	--	--	--	--	--	--	--	--	--	--	--	--
*												
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--	--
ROCK COUNTY												
12-02-93	--	--	--	--	--	--	--	--	--	--	--	--
12-02-93	--	--	--	--	--	--	--	--	--	--	--	--
11-03-93	--	--	--	--	--	--	--	--	--	--	--	--
12-01-93	--	--	--	--	--	--	--	--	--	--	--	--
06-30-94	--	--	--	--	--	<0.05	<0.05	--	--	--	--	--
SALINE COUNTY												
08-23-94	--	--	--	--	--	--	--	--	--	--	--	--
SARPY COUNTY												
05-12-94	<3.0	<5.0	<5.0	<3.0	<3.0	<0.05	<0.05	<30.0	<5.0	<5.0	<40.0	<1.0
07-20-94	<3.0	<5.0	<5.0	<3.0	<3.0	<0.05	<0.05	<30.0	<5.0	<5.0	<40.0	<1.0
09-06-94	<3.0	<5.0	<5.0	<3.0	<3.0	<0.05	<0.05	<30.0	<5.0	<5.0	<40.0	<1.0
02-17-94	<3.0	<5.0	<5.0	<3.0	<3.0	<0.05	<0.05	<30.0	<5.0	<5.0	<40.0	<1.0
05-12-94	<3.0	<5.0	<5.0	<3.0	<3.0	<0.05	<0.05	<30.0	<5.0	<5.0	<40.0	<1.0
07-19-94	<3.0	<5.0	<5.0	<3.0	<3.0	<0.05	<0.05	<30.0	<5.0	<5.0	<40.0	<1.0
09-06-94	<3.0	<5.0	<5.0	<3.0	<3.0	<0.05	<0.05	<30.0	<5.0	<5.0	<40.0	<1.0
08-17-94	--	--	--	--	--	--	--	--	--	--	--	--
09-01-94	--	--	--	--	--	--	--	--	--	--	--	--
05-12-94	<3.0	<5.0	<5.0	<3.0	<3.0	<0.05	<0.05	<30.0	<5.0	<5.0	<40.0	<1.0
07-20-94	<3.0	<5.0	<5.0	<3.0	<3.0	<0.05	<0.05	<30.0	<5.0	<5.0	<40.0	<1.0
09-06-94	<3.0	<5.0	<5.0	<3.0	<3.0	<0.05	<0.05	<30.0	<5.0	<5.0	<40.0	<1.0
02-17-94	<3.0	<5.0	<5.0	<3.0	<3.0	<0.05	<0.05	<30.0	<5.0	<5.0	<40.0	<1.0
05-12-94	<3.0	<5.0	<5.0	<3.0	<3.0	<0.05	<0.05	<30.0	<5.0	<5.0	<40.0	<1.0
07-19-94	<3.0	<5.0	<5.0	<3.0	<3.0	0.47	<0.05	<30.0	<5.0	<5.0	<40.0	<1.0

CHEMICAL ANALYSES OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TRI- CHLORO- ETHYL- ENE TOTAL (µG/L) (39180)	METO- LACHLOR WATER DISSOLV (µG/L) (39415)	ATRA- ZINE, WATER, DISS, REC (µG/L) (39632)	HEXA- CHLORO- BENZENE TOTAL (µG/L) (39700)	HEXA- CHLORO- BUT- ADIENE TOTAL (µG/L) (39702)	ALA- CHLOR, WATER, DISS, REC, (µG/L) (46342)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (µG/L) (77093)	STYRENE TOTAL (µG/L) (77128)	1,1-DI CHLORO- PRO- PENE, WAT. WH TOTAL (µG/L) (77168)	2,2-DI CHLORO- PRO- PANE WAT. WH TOTAL (µG/L) (77170)	1,3-DI- CHLORO- PROPANE WAT. WH TOTAL (µG/L) (77173)
RED WILLOW COUNTY											
01-12-94	--	--	--	--	--	--	--	--	--	--	--
02-16-94	--	--	--	--	--	--	--	--	--	--	--
03-21-94	--	--	--	--	--	--	--	--	--	--	--
04-13-94	--	--	--	--	--	--	--	--	--	--	--
04-13-94	--	--	--	--	--	--	--	--	--	--	--
05-23-94	--	--	--	--	--	--	--	--	--	--	--
06-20-94	--	--	--	--	--	--	--	--	--	--	--
07-18-94	--	--	--	--	--	--	--	--	--	--	--
08-16-94	--	--	--	--	--	--	--	--	--	--	--
09-19-94	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--
ROCK COUNTY											
12-02-93	--	--	--	--	--	--	--	--	--	--	--
12-02-93	--	--	--	--	--	--	--	--	--	--	--
11-03-93	--	--	--	--	--	--	--	--	--	--	--
12-01-93	--	--	--	--	--	--	--	--	--	--	--
06-30-94	--	<0.05	<0.05	--	--	<0.05	--	--	--	--	--
SALINE COUNTY											
08-23-94	--	--	--	--	--	--	--	--	--	--	--
SARPY COUNTY											
05-12-94	<3.0	<0.05	0.62	<5.0	<5.0	<0.05	<3.0	<3.0	<3.0	<3.0	<3.0
07-20-94	<3.0	<0.05	0.39	<5.0	<5.0	<0.05	<3.0	<3.0	<3.0	<3.0	<3.0
09-06-94	<3.0	<0.05	0.17	<5.0	<5.0	<0.05	<3.0	<3.0	<3.0	<3.0	<3.0
02-17-94	<3.0	<0.05	0.38	<5.0	<5.0	<0.05	<3.0	<3.0	<3.0	<3.0	<3.0
05-12-94	<3.0	<0.05	0.31	<5.0	<5.0	<0.05	<3.0	<3.0	<3.0	<3.0	<3.0
07-19-94	<3.0	<0.05	0.20	<5.0	<5.0	<0.05	<3.0	<3.0	<3.0	<3.0	<3.0
09-06-94	<3.0	<0.05	0.18	<5.0	<5.0	<0.05	<3.0	<3.0	<3.0	<3.0	<3.0
08-17-94	--	--	--	--	--	--	--	--	--	--	--
09-01-94	--	--	--	--	--	--	--	--	--	--	--
05-12-94	<3.0	<0.05	0.24	<5.0	<5.0	<0.05	<3.0	<3.0	<3.0	<3.0	<3.0
07-20-94	<3.0	<0.05	0.21	<5.0	<5.0	<0.05	<3.0	<3.0	<3.0	<3.0	<3.0
09-06-94	<3.0	<0.05	0.22	<5.0	<5.0	<0.05	<3.0	<3.0	<3.0	<3.0	<3.0
02-17-94	<3.0	<0.05	0.25	<5.0	<5.0	<0.05	<3.0	<3.0	<3.0	<3.0	<3.0
05-12-94	<3.0	<0.05	0.21	<5.0	<5.0	<0.05	<3.0	<3.0	<3.0	<3.0	<3.0
07-19-94	<3.0	<0.05	0.21	<5.0	<5.0	<0.05	<3.0	<3.0	<3.0	<3.0	<3.0

CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	PSEUDO-CUMENE UNFLTRD REC (μ G/L) (77222)	ISO-PROPYL-BENZENE WATER WHOLE REC (μ G/L) (77223)	BENZENE N-PROPYL WATER UNFLTRD REC (μ G/L) (77224)	MESIT-YLENE WATER UNFLTRD REC (μ G/L) (77226)	CHLORO-TOLUENE WATER WHOLE TOTAL (μ G/L) (77275)	TOLUENE P-CHLOR WATER UNFLTRD REC (μ G/L) (77277)	METHANE BROMO-CHLORO- WAT UNFLTRD REC (μ G/L) (77297)	BENZENE N-BUTYL WATER UNFLTRD REC (μ G/L) (77342)	BENZENE SEC-BUTYL WATER UNFLTRD REC (μ G/L) (77350)	BENZENE TERT-BUTYL WATER UNFLTRD REC (μ G/L) (77353)	P-ISO-PROPYL-TOLUENE WATER WHOLE REC (μ G/L) (77356)
RED WILLOW COUNTY											
01-12-94	--	--	--	--	--	--	--	--	--	--	--
02-16-94	--	--	--	--	--	--	--	--	--	--	--
03-21-94	--	--	--	--	--	--	--	--	--	--	--
04-13-94	--	--	--	--	--	--	--	--	--	--	--
04-13-94	--	--	--	--	--	--	--	--	--	--	--
05-23-94	--	--	--	--	--	--	--	--	--	--	--
06-20-94	--	--	--	--	--	--	--	--	--	--	--
07-18-94	--	--	--	--	--	--	--	--	--	--	--
08-16-94	--	--	--	--	--	--	--	--	--	--	--
09-19-94	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--
07-22-94	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--
07-21-94	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--
07-20-94	--	--	--	--	--	--	--	--	--	--	--
ROCK COUNTY											
12-02-93	--	--	--	--	--	--	--	--	--	--	--
12-02-93	--	--	--	--	--	--	--	--	--	--	--
11-03-93	--	--	--	--	--	--	--	--	--	--	--
12-01-93	--	--	--	--	--	--	--	--	--	--	--
06-30-94	--	--	--	--	--	--	--	--	--	--	--
SALINE COUNTY											
08-23-94	--	--	--	--	--	--	--	--	--	--	--
SARPY COUNTY											
05-12-94	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.00	<3.0	<3.0	<3.0	<3.0
07-20-94	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.00	<3.0	<3.0	<3.0	<3.0
09-06-94	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.00	<3.0	<3.0	<3.0	<3.0
02-17-94	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.00	<3.0	<3.0	<3.0	<3.0
05-12-94	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.00	<3.0	<3.0	<3.0	<3.0
07-19-94	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.00	<3.0	<3.0	<3.0	<3.0
09-06-94	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.00	<3.0	<3.0	<3.0	<3.0
08-17-94	--	--	--	--	--	--	--	--	--	--	--
09-01-94	--	--	--	--	--	--	--	--	--	--	--
05-12-94	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.00	<3.0	<3.0	<3.0	<3.0
07-20-94	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.00	<3.0	<3.0	<3.0	<3.0
09-06-94	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.00	<3.0	<3.0	<3.0	<3.0
02-17-94	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.00	<3.0	<3.0	<3.0	<3.0
05-12-94	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.00	<3.0	<3.0	<3.0	<3.0
07-19-94	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.00	<3.0	<3.0	<3.0	<3.0

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DATE	123-TRI CHLORO- PROPANE	ETHANE, 1112- TETRA- CHLORO- WATER	1,2,3- TRI- CHLORO- BENZENE	1,2- DIBROMO ETHANE	FREON- 113	METHYL ETHER TERT- BUTYL	XYLENE WATER	BROMO- BENZENE WATER,	DIBROMO CHLORO- PROPANE	1,2-DI- PHENYL- HYDRA-	METRI- BUZIN ZINC WATER
	TOTAL	REC	REC	TOTAL	REC	REC	REC	TOTAL	TOT.REC	TOT.REC	DISSOLV
	(µG/L)	(µG/L)	(µG/L)	(µG/L)	(µG/L)	(µG/L)	(µG/L)	(µG/L)	(µG/L)	(µG/L)	(µG/L)
	(77443)	(77562)	(77613)	(77651)	(77652)	(78032)	(81551)	(81555)	(82626)	(82630)	

[illegible][illegible][illegible][illegible]

CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

STATION NUMBER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	GEOLOGIC UNIT	DATE	TIME	DEPTH OF WELL, TOTAL (FEET) (72008)	SPECIFIC CONDUCTANCE (µS/CM) (00095)
SARPY COUNTY								
410324096191801	13N 10E32BADC1	41 03 24 N	096 19 18 W	112SDGV	09-06-94	1100	--	525
410254096185501	13N 10E32DCBB1	41 02 54 N	096 18 55 W	112SDGV	09-14-94	1230	84.50	490
410651096134801	13N 11E 7BCAA1	41 06 51 N	096 13 48 W	112SDGV	08-17-94	0730	198.00	531
410351096080901	13N 11E25CCBB1	41 03 51 N	096 08 09 W	211DKOT	08-11-94	1040	66.00	528
410728096134501	13N 12E 6CABB1	41 07 28 N	096 13 45 W	--	09-01-94	1520	--	582
410404096032801	13N 12E27BCDD1	41 04 04 N	096 03 28 W	112SDGV	07-29-94	1405	64.00	657
410327096061801	13N 12E30DC 1	41 03 27 N	096 06 18 W	112SDGV	07-29-94	1410	64.00	--
410337095594001	13N 13E30DCCC1	41 03 37 N	095 59 40 W	112SDGV	08-11-94	0920	68.00	578
410337095583001	13N 13E32ABBB1	41 03 37 N	095 58 30 W	112SDGV	08-19-94	1523	46.00	639
				112SDGV	08-19-94	1344	54.00	629
411017096174401	14N 10E21ADBB1	41 10 17 N	096 17 44 W	110QRNR	08-11-94	1225	54.00	730
SAUNDERS COUNTY								
410613096504901	13N 5E15BBAB1	41 06 13 N	096 50 49 W	112SDGV	08-26-94	1226	76.00	683
410516096500201	13N 5E22AACA1	41 05 14 N	096 50 04 W	112SDGV	08-16-94	1154	160.00	790
410534096425301	13N 6E14CCBA1	41 05 34 N	096 42 53 W	112SDGV	08-18-94	1330	--	626
410509096453401	13N 6E20ABDD1	41 05 09 N	096 45 34 W	112SDGV	08-29-94	1800	235.00	399
410521096423801	13N 6E23BABB1	41 05 21 N	096 42 38 W	112SDGV	08-12-94	1357	115.00	457
410427096442401	13N 6E28AABB1	41 04 27 N	096 44 24 W	112SDGV	08-26-94	1011	135.00	441
410707096220601	13N 9E 2DDDD1	41 07 07 N	096 22 06 W	110QRNR	10-20-93	1220	130.00	854
				110QRNR	02-16-94	1405	130.00	695
				110QRNR	05-11-94	1625	130.00	712
				110QRNR	07-14-94	1345	130.00	729
				110QRNR	07-18-94	1530	130.00	729
				110QRNR	09-07-94	0930	130.00	780
410612096220601	13N 9E14AAAA1	41 06 12 N	096 22 06 W	110QRNR	10-20-93	1130	98.00	851
				110QRNR	02-16-94	1325	98.00	840
				110QRNR	05-11-94	1535	98.00	842
				110QRNR	07-14-94	1235	98.00	842
				110QRNR	07-19-94	1610	98.00	842
410703096205301	13N 10E 7BBBB1	41 07 03 N	096 20 53 W	110QRNR	09-07-94	0850	98.00	835
				110QRNR	10-20-93	1305	96.00	564
				110QRNR	02-16-94	1445	96.00	502
				110QRNR	05-11-94	1715	96.00	451
				110QRNR	07-14-94	1430	96.00	447
				110QRNR	07-18-94	1650	96.00	447
				110QRNR	09-07-94	1030	96.00	608
410557096204001	13N 10E18BCAA1	41 05 57 N	096 20 40 W	112SDGV	05-23-94	1200	87.00	500
				112SDGV	07-26-94	1430	87.00	349
				112SDGV	09-13-94	1315	87.00	496
410527096202701	13N 10E18CDAC1	41 05 27 N	096 20 27 W	112SDGV	05-23-94	1125	54.00	554
				112SDGV	07-27-94	1330	54.00	344
				112SDGV	09-13-94	1230	54.00	451
410427096202501	13N 10E19CDDD1	41 04 27 N	096 20 25 W	112SDGV	10-20-93	1040	56.00	520
				112SDGV	02-16-94	1235	56.00	569
				112SDGV	05-11-94	1230	56.00	644
				112SDGV	07-14-94	1120	56.00	572
				112SDGV	09-06-94	1330	56.00	500
410402096201801	13N 10E30ACCC1	41 04 02 N	096 20 18 W	--	05-23-94	1055	96.00	578
				--	07-26-94	1215	96.00	411
				--	09-13-94	1145	96.00	566
410341096201101	13N 10E30DCDB1	41 03 41 N	096 20 11 W	112SDGV	05-23-94	1225	82.00	784
				112SDGV	07-26-94	1120	82.00	530
				112SDGV	09-13-94	1050	82.00	731
410322096191701	13N 10E32BACD1	41 03 22 N	096 19 17 W	112SDGV	05-16-94	1110	86.00	--
				112SDGV	05-17-94	1020	86.00	598
				112SDGV	05-18-94	1018	86.00	596
				112SDGV	05-19-94	0812	86.00	--

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DATE	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (° C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS- SOLVED (MG/L AS Na) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CaCO ₃) (90410)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS Cl) (00940)
SARPY COUNTY												
09-06-94	7.9	12.5	0.1	200	63	11	29	0.9	7.5	182	74	13
09-14-94	8.0	17.5	0.7	--	--	--	--	--	--	--	--	--
08-17-94	--	12.5	8.4	--	--	--	--	--	--	--	--	--
08-11-94	7.5	19.0	7.5	--	--	--	--	--	--	--	--	--
09-01-94	7.3	14.0	0.5	--	--	--	--	--	--	--	--	--
07-29-94	7.3	11.0	0.2	--	--	--	--	--	--	--	--	--
07-29-94	--	--	--	--	--	--	--	--	--	--	--	--
08-11-94	7.4	11.5	5.5	--	--	--	--	--	--	--	--	--
08-19-94	7.4	12.0	0.7	230	64	16	38	1	9.4	199	72	28
08-19-94	7.1	12.5	0.8	250	75	16	27	0.7	6.8	207	80	20
08-11-94	7.9	12.5	7.1	--	--	--	--	--	--	--	--	--
SAUNDERS COUNTY												
08-26-94	7.0	15.5	4.6	310	91	20	13	0.3	5.3	272	41	2.9
08-16-94	7.2	12.5	1.6	430	130	26	13	0.3	7.0	341	83	13
08-18-94	7.6	13.0	8.8	290	89	17	18	0.5	5.3	284	46	2.6
08-29-94	7.0	12.5	8.1	150	45	9.4	20	0.7	4.4	183	7.2	2.4
08-12-94	7.4	12.5	6.7	--	--	--	--	--	--	--	--	--
08-26-94	6.9	12.0	7.5	170	46	13	21	0.7	3.7	174	18	2.0
10-20-93	7.0	12.0	0.2	300	79	24	67	2	10	310	120	19
02-16-94	7.1	12.0	1.5	240	70	16	49	1	8.9	232	100	20
05-11-94	7.5	12.5	1.9	220	60	17	54	2	9.3	240	110	15
07-14-94	7.1	12.5	2.1	240	64	19	58	2	10	259	110	16
07-18-94	7.1	12.5	2.1	--	--	--	--	--	--	--	--	--
09-07-94	6.8	12.0	0.1	240	61	21	71	2	11	265	130	15
10-20-93	7.2	11.5	0.2	250	75	14	80	2	10	224	150	40
02-16-94	7.1	12.0	2.0	240	74	14	80	2	11	220	150	42
05-11-94	7.5	12.0	1.8	250	77	14	78	2	11	221	150	42
07-14-94	7.0	12.0	2.0	250	77	14	77	2	11	225	150	41
07-19-94	7.0	12.0	2.0	--	--	--	--	--	--	--	--	--
09-07-94	6.7	11.5	0.1	240	72	14	78	2	11	218	150	41
10-20-93	7.0	13.0	0.2	230	71	13	28	0.8	7.0	211	74	12
02-16-94	7.1	12.0	1.4	200	62	11	25	0.8	6.7	180	66	9.8
05-11-94	7.8	12.0	1.6	170	53	9.6	21	0.7	6.2	157	64	8.4
07-14-94	7.1	12.0	2.0	180	56	10	23	0.7	6.1	154	66	8.5
07-18-94	7.1	12.0	2.0	--	--	--	--	--	--	--	--	--
09-07-94	6.8	14.0	0.0	240	74	13	31	0.9				

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	FLUORIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS AMMONIA DIS- SOLVED (MG/L AS P) (00608)	ORTHO, DIS- SOLVED (μG/L AS AS) (00671)	ARSENIC DIS- SOLVED (μG/L AS BA) (01000)	BARIUM, DIS- SOLVED (μG/L AS BE) (01005)	BERYL- LIUM, DIS- SOLVED (μG/L AS B) (01010)
SARPY COUNTY												
09-06-94	0.30	34	342	0.46	--	--	--	--	--	4	150	<0.5
09-14-94	--	--	--	--	0.240	0.020	0.260	0.050	0.180	--	--	--
08-17-94	--	--	--	--	--	--	9.90	--	--	--	--	--
08-11-94	--	--	--	--	--	--	2.50	--	--	--	--	--
09-01-94	--	--	--	--	--	--	<0.050	--	--	--	--	--
07-29-94	--	--	--	--	0.160	0.010	0.170	0.160	0.170	--	--	--
07-29-94	--	--	--	--	--	--	--	--	--	--	--	--
08-11-94	--	--	--	--	--	--	2.30	--	--	--	--	--
08-19-94	0.40	28	381	0.52	--	--	1.30	--	--	--	--	--
08-19-94	0.40	30	384	0.52	--	--	0.780	--	--	--	--	--
08-11-94	--	--	--	--	--	--	1.70	--	--	--	--	--
SAUNDERS COUNTY												
08-26-94	0.40	47	432	0.59	--	--	11.0	--	--	--	--	--
08-16-94	0.40	38	545	0.74	--	--	6.80	--	--	--	--	--
08-18-94	0.30	45	397	0.54	--	--	0.730	--	--	--	--	--
08-29-94	0.30	50	262	0.36	--	--	3.10	--	--	--	--	--
08-12-94	--	--	--	--	--	--	0.950	--	--	--	--	--
08-26-94	0.30	49	290	0.39	--	--	7.40	--	--	--	--	--
10-20-93	0.60	35	545	0.74	--	--	--	--	--	4	57	<0.5
02-16-94	0.60	29	437	0.59	--	--	--	--	--	6	44	<0.5
05-11-94	0.60	32	445	0.61	--	--	--	--	--	3	47	<0.5
07-14-94	0.60	34	471	0.64	--	--	--	--	--	3	49	<0.5
07-18-94	--	--	--	--	--	--	--	--	--	--	--	--
09-07-94	0.60	34	506	0.69	--	--	--	--	--	5	48	<0.5
10-20-93	0.70	31	539	0.73	--	--	--	--	--	6	57	0.5
02-16-94	0.70	30	538	0.73	--	--	--	--	--	7	55	<0.5
05-11-94	0.70	33	543	0.74	--	--	--	--	--	5	59	<0.5
07-14-94	0.70	32	542	0.74	--	--	--	--	--	6	61	<0.5
07-19-94	--	--	--	--	--	--	--	--	--	--	--	--
09-07-94	0.70	31	533	0.72	--	--	--	--	--	6	56	<0.5
10-20-93	0.30	35	369	0.50	--	--	--	--	--	3	120	0.5
02-16-94	0.30	31	321	0.44	--	--	--	--	--	3	99	<0.5
05-11-94	0.30	30	288	0.39	--	--	--	--	--	3	87	<0.5
07-14-94	0.30	32	295	0.40	--	--	--	--	--	3	81	<0.5
07-18-94	--	--	--	--	--	--	--	--	--	--	--	--
09-07-94	0.40	39	395	0.54	--	--	--	--	--	4	140	<0.5
05-23-94	--	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--	--
09-13-94	--	--	--	--	--	--	--	--	--	--	--	--
05-23-94	--	--	--	--	--	--	--	--	--	--	--	--
07-27-94	--	--	--	--	--	--	--	--	--	--	--	--
09-13-94	--	--	--	--	--	--	--	--	--	--	--	--
10-20-93	0.30	32	334	0.45	--	--	--	--	--	9	91	0.5
02-16-94	0.40	31	366	0.50	--	--	--	--	--	8	98	<0.5
05-11-94	0.30	28	406	0.55	--	--	--	--	--	5	110	<0.5
07-14-94	0.30	31	364	0.50	--	--	--	--	--	6	89	<0.5
09-06-94	0.40	35	326	0.44	--	--	--	--	--	8	80	<0.5
05-23-94	--	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--	--
09-13-94	--	--	--	--	--	--	--	--	--	--	--	--
05-23-94	--	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--	--
09-13-94	--	--	--	--	--	--	--	--	--	--	--	--
05-16-94	--	--	--	--	--	--	--	--	--	--	--	--
05-17-94	--	--	--	--	--	--	--	--	--	--	--	--
05-18-94	--	--	--	--	--	--	--	--	--	--	--	--
05-19-94	--	--	--	--	--	--	--	--	--	--	--	--

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DATE	BORON DIS- SOLVED (µG/L AS B (01020)	CADMIUM DIS- SOLVED (µG/L AS CD (01025)	CHRO- MIUM, DIS- SOLVED (µG/L AS CR (01030)	COBALT, DIS- SOLVED (µG/L AS CO (01035)	COPPER, DIS- SOLVED (µG/L AS CU (01040)	IRON, DIS- SOLVED (µG/L AS FE (01046)	LEAD, DIS- SOLVED (µG/L AS PB (01049)	LITHIUM DIS- SOLVED (µG/L AS LI (01130)	MANGA- NESE, DIS- SOLVED (µG/L AS MN (01056)	MOLYB- DENUM, DIS- SOLVED (µG/L AS MO (01060)	NICKEL, DIS- SOLVED (µG/L AS NI (01065)	SELE- NIUM, DIS- SOLVED (µG/L AS SE (01145)
SARPY COUNTY												
09-06-94	80	<1.0	<3	<3	<10	9	<10	15	42	<10	<10	<1
09-14-94	--	--	--	--	--	--	--	--	--	--	--	--
08-17-94	--	--	--	--	--	--	--	--	--	--	--	--
08-11-94	--	--	--	--	--	--	--	--	--	--	--	--
09-01-94	--	--	--	--	--	--	--	--	--	--	--	--
07-29-94	--	--	--	--	--	--	--	--	--	--	--	--
07-29-94	--	--	--	--	--	--	--	--	--	--	--	--
08-11-94	--	--	--	--	--	--	--	--	--	--	--	--
08-19-94	--	--	--	--	--	<3	--	--	62	--	--	--
08-19-94	--	--	--	--	--	260	--	--	770	--	--	--
08-11-94	--	--	--	--	--	--	--	--	--	--	--	--
SAUNDERS COUNTY												
08-26-94	--	--	--	--	--	<3	--	--	1	--	--	--
08-16-94	--	--	--	--	--	<3	--	--	26	--	--	--
08-18-94	--	--	--	--	--	6	--	--	<1	--	--	--
08-29-94	--	--	--	--	--	20	--	--	1	--	--	--
08-12-94	--	--	--	--	--	--	--	--	--	--	--	--
08-26-94	--	--	--	--	--	8	--	--	2	--	--	--
10-20-93	140	<1.0	<3	<3	<10	3200	<10	54	460	10	<10	<1
02-16-94	140	<1.0	<3	<3	<10	3200	<10	42	400	<10	<10	<1
05-11-94	120	<1.0	<3	10	<10	2500	<10	41	330	<10	<10	<1
07-14-94	130	<1.0	<3	10	<10	2600	<10	38	370	<10	<10	<1
07-18-94	--	--	--	--	--	--	--	--	--	--	--	--
09-07-94	130	<1.0	<3	10	<10	2600	<10	42	370	<10	<10	<1
10-20-93	230	<1.0	<3	4	<10	2800	<10	68	250	10	<10	<1
02-16-94	240	2.0	<3	4	<10	3000	<10	63	250	<10	<10	<1
05-11-94	230	<1.0	<3	<3	<10	3000	<10	57	260	10	<10	<1
07-14-94	240	<1.0	<3	9	<10	2900	<10	59	250	<10	<10	<1
07-19-94	--	--	--	--	--	--	--	--	--	--	--	--
09-07-94	230	<1.0	<3	10	<10	2800	<10	65	240	<10	<10	<1
10-20-93	50	<1.0	<3	<3	<10	230	<10	10	870	10	<10	<1
02-16-94	40	<1.0	<3	<3	<10	170	<10	17	680	<10	<10	<1
05-11-94	30	<1.0	<3	<3	<10	200	<10	15	550	<10	<10	<1
07-14-94	40	2.0	<3	3	<10	52	<10	19	560	<10	<10	<1
07-18-94	--	--	--	--	--	--	--	--	--	--	--	--
09-07-94	50	<1.0	<3	6								

CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	SILVER, DIS- SOLVED (µG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (µG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (µG/L AS V) (01085)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (µG/L AS U) (22703)	URANIUM NATURAL 2 SIGMA WATER, DISS, (UG/L) (75990)	RN-222 2 SIGMA WATER, WHOLE, TOTAL, (PCI/L) (76002)	RADON 222 TOTAL (PCI/L) (82303)	SI- MAZINE, WATER, DISS, REC (µG/L) (04035)	PRO- METRYN, WATER, DISS, REC (µG/L) (04036)	PRO- METON, WATER, DISS, REC (µG/L) (04037)	DEISO- PROPYL WATER, DISS, REC (µG/L) (04038)
SARPY COUNTY												
09-06-94	<1.0	350	<6	<3	--	--	--	--	<0.05	<0.05	<0.05	<0.05
09-14-94	--	--	--	--	5.4	0.8	39	240	--	--	--	--
08-17-94	--	--	--	--	--	--	--	--	--	--	--	--
08-11-94	--	--	--	--	--	--	--	--	--	--	--	--
09-01-94	--	--	--	--	--	--	--	--	--	--	--	--
07-29-94	--	--	--	--	--	--	--	--	--	--	--	--
07-29-94	--	--	--	--	--	--	--	--	--	<0.05	<0.05	0.10
08-11-94	--	--	--	--	--	--	--	--	--	--	--	--
08-19-94	--	--	--	--	--	--	23	440	<0.05	<0.05	<0.05	0.05
08-19-94	--	--	--	--	--	--	21	260	<0.05	<0.05	<0.05	<0.05
08-11-94	--	--	--	--	--	--	--	--	--	--	--	--
SAUNDERS COUNTY												
08-26-94	--	--	--	--	--	--	24	480	<0.05	<0.05	<0.05	<0.05
08-16-94	--	--	--	--	--	--	22	260	<0.05	<0.05	<0.05	<0.05
08-18-94	--	--	--	--	--	--	17	110	<0.05	<0.05	<0.05	<0.05
08-29-94	--	--	--	--	--	--	19	240	--	--	--	--
08-12-94	--	--	--	--	--	--	--	--	--	--	--	--
08-26-94	--	--	--	--	--	--	23	410	<0.05	<0.05	<0.05	<0.05
10-20-93	<1.0	730	ΔΔ	4	--	--	--	--	<0.05	<0.05	<0.05	<0.05
02-16-94	<1.0	620	ΔΔ	5	--	--	--	--	<0.05	<0.05	<0.05	<0.05
05-11-94	<1.0	580	ΔΔ	5	--	--	--	--	<0.05	<0.05	<0.05	<0.05
07-14-94	<1.0	610	ΔΔ	7	--	--	--	--	0.08	<0.05	<0.05	<0.05
07-18-94	--	--	--	--	--	--	--	--	--	--	--	--
09-07-94	<1.0	590	ΔΔ	3	--	--	--	--	<0.05	<0.05	<0.05	<0.05
10-20-93	<1.0	900	ΔΔ	7	--	--	--	--	<0.05	<0.05	<0.05	<0.05
02-16-94	<1.0	890	ΔΔ	9	--	--	--	--	<0.05	<0.05	<0.05	<0.05
05-11-94	<1.0	910	ΔΔ	<3	--	--	--	--	<0.05	<0.05	<0.05	<0.05
07-14-94	2.0	910	Δ	17	--	--	--	--	0.07	<0.05	<0.05	<0.05
07-19-94	--	--	--	--	--	--	--	--	--	--	--	--
09-07-94	<1.0	870	ΔΔ	9	--	--	--	--	<0.05	<0.05	<0.05	<0.05
10-20-93	<1.0	460	ΔΔ	4	--	--	--	--	<0.05	<0.05	<0.05	<0.05
02-16-94	<1.0	400	ΔΔ	5	--	--	--	--	<0.05	<0.05	<0.05	<0.05
05-11-94	<1.0	350	ΔΔ	5	--	--	--	--	<0.05	<0.05	<0.05	<0.05
07-14-94	4.0	370	ΔΔ	7	--	--	--	--	0.08	<0.05	<0.05	<0.05
07-18-94	--	--	--	--	--	--	--	--	--	--	--	--
09-07-94	<1.0	430	ΔΔ	7	--	--	--	--	<0.05	<0.05	<0.05	<0.05
05-23-94	--	--	--	--	5.5	0.8	26	510	--	--	--	--
07-26-94	--	--	--	--	3.9	0.6	22	290	--	--	--	--
09-13-94	--	--	--	--	3.5	0.5	24	410	--	--	--	--
05-23-94	--	--	--	--	10	1.6	23	340	--	--	--	--
07-27-94	--	--	--	--	5.3	0.8	16	150	--	--	--	--
09-13-94	--	--	--	--	5.6	0.8	20	260	--	--	--	--
10-20-93	<1.0	370	ΔΔ	<3	--	--	--	--	0.06	<0.05	<0.05	0.07
02-16-94	<1.0	390	10	<3	--	--	--	--	<0.05	<0.05	<0.05	0.06
05-11-94	<1.0	460	ΔΔ	6	--	--	--	--	<0.05	<0.05	<0.05	<0.05
07-14-94	2.0	390	8	8	--	--	--	--	0.08	<0.05	<0.05	<0.05
09-06-94	<1.0	320	10	10	--	--	--	--	<0.05	<0.05	<0.05	<0.05
05-23-94	--	--	--	--	12	1.7	24	330	--	--	--	--
07-26-94	--	--	--	--	12	1.7	20	190	--	--	--	--
09-13-94	--	--	--	--	9.9	1.5	20	230	--	--	--	--
05-23-94	--	--	--	--	9.2	1.4	20	150	--	--	--	--
07-26-94	--	--	--	--	9.0	1.3	19	150	--	--	--	--
09-13-94	--	--	--	--	7.6	1.1	19	130	--	--	--	--
05-16-94	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	0.06
05-17-94	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	0.05
05-18-94	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	<0.05
05-19-94	--	--	--	--	--	--	--	--	<0.05	<0.05	<0.05	0.05

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

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	ETHANE, 1,1-DI- CHLORO- ETHYL- ENE	BENZOGH 1,1,1- TRI- CHLORO- ETHANE	BENZO A 1,1,2- TRI- CHLORO- ETHANE	BENZENE 1,2,2- TETRA- CHLORO- WAT UNF	BENZOGH 1,1,2,2- TETRA- CHLORO- WAT UNF	BENZO A 1,2,2- TRI- CHLORO- BENZANT	BENZENE O- CHLORO- WATER	BENZENE 1,2-DI- CHLORO- PROPANE	BENZENE 1,2- TRANS DI- CHLORO- ETHENE	BENZENE 1,2,4- TRI- CHLORO-- WAT UNF	BENZENE 1,2,5,6- DIBENZ- ANTHRA- CENE
DATE	TOTAL (µG/L)	TOTAL (µG/L)	TOTAL (µG/L)	TOTAL (µG/L)	TOTAL (µG/L)	TOTAL (µG/L)	TOTAL (µG/L)	TOTAL (µG/L)	TOTAL (µG/L)	TOTAL (µG/L)	TOTAL (µG/L)
	(34501)	(34506)	(34511)	(34516)	(34521)	(34526)	(34536)	(34541)	(34546)	(34551)	(34556)

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[illegible]

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CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TRANS- 1,3-DI- CHLORO- PROPENE (μG/L) (34699)	CIS 1,3-DI- CHLORO- PROPENE (μG/L) (34704)	AMETRYN WATER, DISS, REC, (μG/L) (38401)	PROP- AZINE WATER DISS REC (μG/L) (38535)	TER- BUTRYN WATER, DISS, REC (μG/L) (38888)	TER- BUTRYN SED, BOT MAT DRY WGT REC (μG/L) (38890)	PENTA- CHLORO- PHENOL TOTAL (μG/L) (39032)	BIS(2- ETHYL HEXYL) PHTHAL- ATE TOTAL (μG/L) (39100)	DI-N- BUTYL PHTHAL- ATE TOTAL (μG/L) (39110)	BENZI- DINE TOTAL (μG/L) (39120)	VINYL CHLO- RIDE TOTAL (μG/L) (39175)
SARPY COUNTY											
09-06-94	<3.0	<3.0	<0.05	<0.05	--	--	<30.0	<5.0	<5.0	<40.0	<1.0
09-14-94	--	--	--	--	--	--	--	--	--	--	--
08-17-94	--	--	--	--	--	--	--	--	--	--	--
08-11-94	--	--	--	--	--	--	--	--	--	--	--
09-01-94	--	--	--	--	--	--	--	--	--	--	--
07-29-94	--	--	--	--	--	--	--	--	--	--	--
07-29-94	--	--	--	<0.05	<0.05	--	--	--	--	--	--
08-11-94	--	--	--	--	--	--	--	--	--	--	--
08-19-94	--	--	<0.05	<0.05	--	--	--	--	--	--	--
08-19-94	--	--	<0.05	<0.05	--	--	--	--	--	--	--
08-11-94	--	--	--	--	--	--	--	--	--	--	--
SAUNDERS COUNTY											
08-26-94	--	--	<0.05	<0.05	--	--	--	--	--	--	--
08-16-94	--	--	<0.05	<0.05	--	--	--	--	--	--	--
08-18-94	--	--	<0.05	<0.05	--	--	--	--	--	--	--
08-29-94	--	--	--	--	--	--	--	--	--	--	--
08-12-94	--	--	--	--	--	--	--	--	--	--	--
08-26-94	--	--	<0.05	<0.05	--	--	--	--	--	--	--
10-20-93	<0.2	<0.2	<0.05	<0.05	--	--	--	--	--	--	<0.2
02-16-94	--	--	<0.05	<0.05	--	--	--	--	--	--	--
05-11-94	--	--	<0.05	<0.05	--	--	--	--	--	--	--
07-14-94	<3.0	<3.0	<0.05	<0.05	--	--	<30.0	<5.0	<5.0	<40.0	<1.0
07-18-94	--	--	--	--	--	--	--	--	--	--	--
09-07-94	--	--	<0.05	<0.05	--	--	--	--	--	--	--
10-20-93	<0.2	<0.2	<0.05	<0.05	--	--	--	--	--	--	<0.2
02-16-94	--	--	<0.05	<0.05	--	--	--	--	--	--	--
05-11-94	--	--	<0.05	<0.05	--	--	--	--	--	--	--
07-14-94	<3.0	<3.0	<0.05	<0.05	--	--	<30.0	<5.0	<5.0	<40.0	<1.0
07-19-94	--	--	--	--	--	--	--	--	--	--	--
09-07-94	--	--	<0.05	<0.05	--	--	--	--	--	--	--
10-20-93	<0.2	<0.2	<0.05	<0.05	--	--	--	--	--	--	<0.2
02-16-94	--	--	<0.05	<0.05	--	--	--	--	--	--	--
05-11-94	--	--	<0.05	<0.05	--	--	--	--	--	--	--
07-14-94	<3.0	<3.0	<0.05	<0.05	--	--	<30.0	<5.0	<5.0	<40.0	<1.0
07-18-94	--	--	--	--	--	--	--	--	--	--	--
09-07-94	--	--	<0.05	<0.05	--	--	--	--	--	--	--
05-23-94	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--
09-13-94	--	--	--	--	--	--	--	--	--	--	--
05-23-94	--	--	--	--	--	--	--	--	--	--	--
07-27-94	--	--	--	--	--	--	--	--	--	--	--
09-13-94	--	--	--	--	--	--	--	--	--	--	--
10-20-93	--	--	<0.05	<0.05	--	--	--	--	--	--	--
02-16-94	--	--	<0.05	<0.05	--	--	--	--	--	--	--
05-11-94	--	--	<0.05	<0.05	--	--	--	--	--	--	--
07-14-94	<3.0	<3.0	<0.05	<0.05	--	--	<30.0	<5.0	<5.0	<40.0	<1.0
09-06-94	--	--	<0.05	<0.05	--	--	--	--	--	--	--
05-23-94	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--
09-13-94	--	--	--	--	--	--	--	--	--	--	--
05-23-94	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--
09-13-94	--	--	--	--	--	--	--	--	--	--	--
05-16-94	--	--	<0.05	<0.05	--	<0.05	--	--	--	--	--
05-17-94	--	--	<0.05	<0.05	--	<0.05	--	--	--	--	--
05-18-94	--	--	<0.05	<0.05	--	<0.05	--	--	--	--	--
05-19-94	--	--	<0.05	<0.05	--	<0.05	--	--	--	--	--

CHEMICAL ANALYSES OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TRI- CHLORO- ETHYL- ENE TOTAL (μG/L) (39180)	METO- LACHLOR WATER DISSOLV (μG/L) (39415)	ATRA- ZINE, WATER, DISS, REC (μG/L) (39632)	HEXA- CHLORO- BENZENE TOTAL (μG/L) (39700)	HEXA- CHLORO- BUT- ADIENE TOTAL (μG/L) (39702)	ALA- CHLOR, WATER, DISS, REC, (μG/L) (46342)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (μG/L) (77093)	STYRENE TOTAL (μG/L) (77128)	1,1-DI CHLORO- PRO- PENE, WAT. WH TOTAL (μG/L) (77168)	2,2-DI CHLORO- PRO- PANE, WH TOTAL (μG/L) (77170)	1,3-DI- CHLORO- PROPANE WAT. WH TOTAL (μG/L) (77173)
SARPY COUNTY											
09-06-94	<3.0	<0.05	0.15	<5.0	<5.0	<0.05	<3.0	<3.0	<3.0	<3.0	<3.0
09-14-94	--	--	--	--	--	--	--	--	--	--	--
08-17-94	--	--	--	--	--	--	--	--	--	--	--
08-11-94	--	--	--	--	--	--	--	--	--	--	--
09-01-94	--	--	--	--	--	--	--	--	--	--	--
07-29-94	--	--	--	--	--	--	--	--	--	--	--
07-29-94	--	0.07	0.46	--	--	<0.05	--	--	--	--	--
08-11-94	--	--	--	--	--	--	--	--	--	--	--
08-19-94	--	<0.05	0.40	--	--	<0.05	--	--	--	--	--
08-19-94	--	<0.05	<0.05	--	--	<0.05	--	--	--	--	--
08-11-94	--	--	--	--	--	--	--	--	--	--	--
SAUNDERS COUNTY											
08-26-94	--	<0.05	<0.05	--	--	<0.05	--	--	--	--	--
08-16-94	--	<0.05	<0.05	--	--	<0.05	--	--	--	--	--
08-18-94	--	<0.05	<0.05	--	--	<0.05	--	--	--	--	--
08-29-94	--	--	--	--	--	--	--	--	--	--	--
08-12-94	--	--	--	--	--	--	--	--	--	--	--
08-26-94	--	<0.05	<0.05	--	--	<0.05	--	--	--	--	--
10-20-93	<0.2	<0.05	<0.05	--	--	<0.05	--	<0.2	--	--	--
02-16-94	--	<0.05	<0.05	--	--	<0.05	--	--	--	--	--
05-11-94	--	<0.05	<0.05	--	--	<0.05	--	--	--	--	--
07-14-94	<3.0	<0.05	<0.05	<5.0	<5.0	<0.05	<3.0	<3.0	<3.0	<3.0	<3.0
07-18-94	--	--	--	--	--	--	--	--	--	--	--
09-07-94	--	<0.05	<0.05	--	--	<0.05	--	--	--	--	--
10-20-93	<0.2	<0.05	<0.05	--	--	<0.05	--	<0.2	--	--	--
02-16-94	--	<0.05	<0.05	--	--	<0.05	--	--	--	--	--
05-11-94	--	<0.05	<0.05	--	--	<0.05	--	--	--	--	--
07-14-94	<3.0	0.07	0.12	<5.0	<5.0	<0.05	<3.0	<3.0	<3.0	<3.0	<3.0
07-19-94	--	--	--	--	--	--	--	--	--	--	--
09-07-94	--	<0.05	<0.05	--	--	<0.05	--	--	--	--	--
10-20-93	<0.2	<0.05	<0.05	--	--	<0.05	--	<0.2	--	--	--
02-16-94	--	<0.05	<0.05	--	--	<0.05	--	--	--	--	--
05-11-94	--	<0.05	<0.05	--	--	<0.05	--	--	--	--	--
07-14-94	<3.0	<0.05	<0.05	<5.0	<5.0	<0.05	<3.0	<3.0	<3.0	<3.0	<3.0
07-18-94	--	--	--	--	--	--	--	--	--	--	--
09-07-94	--	<0.05	<0.05	--	--	<0.05	--	--	--	--	--
05-23-94	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--
09-13-94	--	--	--	--	--	--	--	--	--	--	--
05-23-94	--	--	--	--	--	--	--	--	--	--	--
07-27-94	--	--	--	--	--	--	--	--	--	--	--
09-13-94	--	--	--	--	--	--	--	--	--	--	--
10-20-93	--	0.30	1.9	--	--	<0.05	--	--	--	--	--
02-16-94	--	<0.05	0.61	--	--	<0.05	--	--	--	--	--
05-11-94	--	<0.05	0.14	--	--	<0.05	--	--	--	--	--
07-14-94	<3.0	<0.05	0.17	<5.0	<5.0	<0.05	<3.0	<3.0	<3.0	<3.0	<3.0
09-06-94	--	0.08	0.66	--	--	<0.05	--	--	--	--	--
05-23-94	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--
09-13-94	--	--	--	--	--	--	--	--	--	--	--
05-23-94	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--
09-13-94	--	--	--	--	--	--	--	--	--	--	--
05-16-94	--	<0.05	0.47	--	--	<0.05	--	--	--	--	--
05-17-94	--	<0.05	0.44	--	--	<0.05	--	--	--	--	--
05-18-94	--	<0.05	0.49	--	--	<0.05	--	--	--	--	--
05-19-94	--	0.11	0.62	--	--	0.08	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	PSEUDO-CUMENE	ISO-PROPYLBENZENE	BENZENE-N-PROPYLYNE	MESITYLENE	O-CHLOROTOLUENE	TOLUENE	METHANEBROMO	BENZENE	BENZENE	BENZENE	P-ISO-PROPYLTOLUENE
	WATER	WATER	WATER	WATER	WATER	P-CHLOR	CHLORO-	N-BUTYL	SEC BUTYL-	TERT-BUTYL-	WATER
	UNFLTRD	WHOLE	UNFLTRD	UNFLTRD	WHOLE	UNFLTRD	UNFLTRD	UNFLTRD	UNFLTRD	UNFLTRD	WHOLE
	REC	REC	REC	REC	TOTAL	REC	REC	REC	REC	REC	REC
	(µG/L)	(µG/L)	(µG/L)	(µG/L)	(µG/L)	(µG/L)	(µG/L)	(µG/L)	(µG/L)	(µG/L)	(µG/L)
	(71222)	(71223)	(71224)	(71226)	(71215)	(71217)	(71297)	(71342)	(71350)	(71353)	(71356)

SARPY COUNTY[illegible]

SAUNDERS COUNTY

[illegible]

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DATE	123-TRI CHLORO- PROPANE WATER WHOLE TOTAL (µG/L) (77443)	ETHANE, 1112- TETRA- CHLORO- WAT UNF REC (µG/L) (77562)	1,2,3- TRI- CHLORO BENZENE WAT, WH REC (µG/L) (77613)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (µG/L) (77651)	FREON- 113 WATER UNFLTRD REC (µG/L) (77652)	METHYL ETHER TERT- BUTYL WAT UNF REC (µG/L) (78032)	XYLENE WATER UNFLTRD REC (µG/L) (81551)	BROMO- BENZENE WATER, WHOLE, TOTAL (µG/L) (81555)	DIBROMO CHLORO- PROPANE WATER WHOLE TOT.REC (µG/L) (82625)	1,2-DI- PHENYL- HYDRA- ZINE WATER TOT.REC (µG/L) (82626)	METRI- BUZIN SENCOR WATER DISSOLV (µG/L) (82630)
12/1/88	123-TRI CHLORO- PROPANE WATER WHOLE TOTAL (µG/L) (77443)	ETHANE, 1112- TETRA- CHLORO- WAT UNF REC (µG/L) (77562)	1,2,3- TRI- CHLORO BENZENE WAT, WH REC (µG/L) (77613)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (µG/L) (77651)	FREON- 113 WATER UNFLTRD REC (µG/L) (77652)	METHYL ETHER TERT- BUTYL WAT UNF REC (µG/L) (78032)	XYLENE WATER UNFLTRD REC (µG/L) (81551)	BROMO- BENZENE WATER, WHOLE, TOTAL (µG/L) (81555)	DIBROMO CHLORO- PROPANE WATER WHOLE TOT.REC (µG/L) (82625)	1,2-DI- PHENYL- HYDRA- ZINE WATER TOT.REC (µG/L) (82626)	METRI- BUZIN SENCOR WATER DISSOLV (µG/L) (82630)

[illegible][illegible]

CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

STATION NUMBER		LOCAL IDENTIFIER	LATITUDE	LONGITUDE	GEOLOGIC UNIT	DATE	TIME	DEPTH OF WELL, TOTAL (FEET) (72008)	SPECIFIC CONDUCTANCE (μS/CM) (00095)
SAUNDERS COUNTY									
410322096191701	13N	10E32BACD1	41 03 22 N	096 19 17 W	112SDGV	05-20-94	0821	86.00	544
					112SDGV	05-21-94	1025	86.00	531
					112SDGV	05-22-94	0905	86.00	522
					112SDGV	05-23-94	0920	86.00	520
					112SDGV	06-17-94	1335	86.00	528
					112SDGV	06-20-94	0940	86.00	516
410323096194501	13N	10E32BBCC1	41 03 23 N	096 19 45W	112SDGV	09-13-94	1015	86.00	460
410303096192901	13N	10E32CABC1	41 03 03 N	096 19 29 W	112SDGV	05-23-94	0945	96.00	597
					112SDGV	10-20-93	0945	86.00	477
					112SDGV	02-16-94	1135	86.00	615
					112SDGV	05-11-94	1110	86.00	608
					112SDGV	07-14-94	1015	86.00	--
410307096193201	13N	10E32CBAA1	41 03 07 N	096 19 32 W	112SDGV	09-07-94	1200	86.00	479
					112SDGV	05-23-94	1020	82.00	588
					112SDGV	07-26-94	1520	82.00	351
410801096523701	14N	5E32DCCD1	41 08 01 N	096 52 37 W	112SDGV	09-13-94	0930	82.00	475
					--	08-29-94	1647	80.00	778
SEWARD COUNTY									
405402097202301	11N	1E29BAAD1	40 54 02 N	097 20 23 W	112SDGV	08-24-94	1540	241.00	731
405343097093906	11N	2E26AD 6	40 53 43 N	097 09 39 W	112SDGV	08-25-94	1220	117.00	811
THURSTON COUNTY									
420840096292402	25N	8E11DBCB2	42 08 40 N	096 29 24 W	211DKOT	08-08-94	1210	200.00	813
420848096245101	25N	9E 9DCCC1	42 08 48 N	096 24 51 W	112PLSC	08-08-94	1320	100.00	702
WASHINGTON COUNTY									
410242096083101	12N	11E 2AAAB1	41 02 42 N	096 08 31 W	110QRNR	08-18-94	1400	73.00	538
412836096210701	17N	9E 1AACC1	41 28 36 N	096 21 07 W	110QRNR	08-09-94	1300	161.00	655
412751096203901	17N	10E 7BBAC1	41 27 51 N	096 20 39 W	110QRNR	08-10-94	0945	164.00	726
412706096200901	17N	10E 7DCDC1	41 27 06 N	096 20 09 W	110QRNR	08-10-94	--	143.00	832
413625096082601	18N	12E 5BBDA1	41 36 25 N	096 08 26 W	110QRNR	08-10-94	1755	89.00	1470
413656096230901	19N	9E14CBBB1	41 36 56 N	096 23 09 W	211DKOT	08-10-94	1115	398.00	1490
413621096083502	19N	11E23ACAA1	41 36 21 N	096 08 35 W	110QRNR	08-10-94	1635	97.00	1350
YORK COUNTY									
404646097485101	9N	4W 6AC 1	40 46 46 N	097 48 51 W	112SDGV	08-24-94	1110	171.00	671
405242097352403	11N	2W31CA 3	40 52 42 N	097 35 24 W	112SDGV	08-24-94	1430	368.00	772
410137097241302	12N	1W11BC 2	41 01 37 N	097 24 13 W	112SDGV	08-25-94	0850	156.00	744

CHEMICAL ANALYSES OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	PH WATER FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (° C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS- SOLVED (MG/L AS Na) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY LAB (MG/L AS CaCO ₃) (90410)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS Cl) (00940)
SAUNDERS COUNTY												
05-20-94	7.6	12.0	--	--	--	--	--	--	--	--	--	--
05-21-94	7.6	14.0	--	--	--	--	--	--	--	--	--	--
05-22-94	7.6	14.5	--	--	--	--	--	--	--	--	--	--
05-23-94	7.6	15.5	--	--	--	--	--	--	--	--	--	--
06-17-94	7.7	15.0	--	--	--	--	--	--	--	--	--	--
06-20-94	8.4	17.0	--	--	--	--	--	--	--	--	--	--
09-13-94	7.7	22.0	0.0	--	--	--	--	--	--	--	--	--
05-23-94	7.5	10.0	3.5	--	--	--	--	--	--	--	--	--
10-20-93	6.9	16.0	0.1	170	51	11	29	1	8.9	161	70	13
02-16-94	7.4	13.5	4.8	220	66	14	39	1	11	185	110	16
05-11-94	7.9	6.0	4.6	210	63	13	37	1	7.4	178	100	17
07-14-94	--	--	--	170	51	10	33	1	7.8	149	75	14
09-07-94	8.3	15.5	0.1	160	47	10	32	1	8.1	150	74	13
05-23-94	7.6	6.5	0.8	--	--	--	--	--	--	--	--	--
07-26-94	6.5	17.5	3.5	--	--	--	--	--	--	--	--	--
09-13-94	7.7	20.0	--	--	--	--	--	--	--	--	--	--
08-29-94	7.3	12.0	--	370	110	22	18	0.4	5.9	347	58	8.2
SEWARD COUNTY												
08-24-94	7.5	13.0	--	300	97	15	20	0.5	5.3	272	75	8.8
08-25-94	7.2	13.5	--	300	94	16	46	1	9.7	215	130	16
THURSTON COUNTY												
08-08-94	7.1	11.5	0.3	--	--	--	--	--	--	--	--	--
08-08-94	7.2	11.5	2.1	--	--	--	--	--	--	--	--	--
WASHINGTON COUNTY												
08-18-94	--	13.0	5.5	--	--	--	--	--	--	--	--	--
08-09-94	7.5	12.0	0.4	--	--	--	--	--	--	--	--	--
08-10-94	7.1	11.5	2.7	--	--	--	--	--	--	--	--	--
08-10-94	--	12.0	0.7	--	--	--	--	--	--	--	--	--
08-10-94	7.5	11.5	0.3	--	--	--	--	--	--	--	--	--
08-10-94	7.3	13.0	0.3	--	--	--	--	--	--	--	--	--
08-10-94	7.4	12.5	5.2	--	--	--	--	--	--	--	--	--
YORK COUNTY												
08-24-94	7.5	15.0	--	280	91	13	27	0.7	8.3	250	37	20
08-24-94	7.3	13.0	--	270	85	15	53	1	7.0	318	30	15
08-25-94	7.4	15.0	--	310	100	15	33	0.8	7.8	307	21	20

CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO ₂) (00955)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ARSENIC DIS- SOLVED (µG/L AS AS) (01000)	BARIUM, DIS- SOLVED (µG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (µG/L AS BE) (01010)	BORON, DIS- SOLVED (µG/L AS B) (01020)
SAUNDERS COUNTY												
05-20-94	--	--	--	--	--	--	--	--	--	--	--	--
05-21-94	--	--	--	--	--	--	--	--	--	--	--	--
05-22-94	--	--	--	--	--	--	--	--	--	--	--	--
05-23-94	--	--	--	--	--	--	--	--	--	--	--	--
06-17-94	--	--	--	--	--	--	--	--	--	--	--	--
06-20-94	--	--	--	--	--	--	--	--	--	--	--	--
09-13-94	--	--	--	--	<0.010	0.072	0.030	0.220	--	--	--	--
05-23-94	--	--	--	--	--	--	--	--	--	--	--	--
10-20-93	0.40	38	319	0.43	--	--	--	--	7	98	0.7	70
02-16-94	0.40	23	391	0.53	--	--	--	--	8	120	<0.5	60
05-11-94	0.40	23	368	0.50	--	--	--	--	8	98	<0.5	60
07-14-94	0.50	35	316	0.43	--	--	--	--	9	77	<0.5	90
09-07-94	0.50	38	313	0.43	--	--	--	--	10	77	<0.5	80
05-23-94	--	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--	--
09-13-94	--	--	--	--	--	--	--	--	--	--	--	--
08-29-94	0.30	43	479	0.65	--	1.20	--	--	--	--	--	--
SEWARD COUNTY												
08-24-94	0.20	37	423	0.57	<0.010	<0.050	0.090	0.030	--	--	--	50
08-25-94	0.20	34	524	0.71	<0.010	11.0	0.010	0.180	--	--	--	80
THURSTON COUNTY												
08-08-94	--	--	--	--	--	<0.050	--	--	--	--	--	--
08-08-94	--	--	--	--	--	7.70	--	--	--	--	--	--
WASHINGTON COUNTY												
08-18-94	--	--	--	--	--	6.70	--	--	--	--	--	--
08-09-94	--	--	--	--	--	<0.050	--	--	--	--	--	--
08-10-94	--	--	--	--	--	3.60	--	--	--	--	--	--
08-10-94	--	--	--	--	--	<0.050	--	--	--	--	--	--
08-10-94	--	--	--	--	--	0.099	--	--	--	--	--	--
08-10-94	--	--	--	--	--	<0.050	--	--	--	--	--	--
08-10-94	--	--	--	--	--	<0.050	--	--	--	--	--	--
YORK COUNTY												
08-24-94	0.40	34	415	0.56	<0.010	7.60	0.010	0.220	--	--	--	40
08-24-94	0.20	41	480	0.65	<0.010	9.50	0.010	0.330	--	--	--	60
08-25-94	0.30	41	472	0.64	<0.010	11.0	0.010	0.220	--	--	--	50

CHEMICAL ANALYSES OF GROUND WATER

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	CADMIUM DIS- SOLVED (μ G/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (μ G/L AS CR) (01030)	COBALT, DIS- SOLVED (μ G/L AS CO) (01035)	COPPER, DIS- SOLVED (μ G/L AS CU) (01040)	IRON, DIS- SOLVED (μ G/L AS FE) (01046)	LEAD, DIS- SOLVED (μ G/L AS PB) (01049)	LITHIUM DIS- SOLVED (μ G/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (μ G/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (μ G/L AS MO) (01060)	NICKEL, DIS- SOLVED (μ G/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (μ G/L AS SE) (01145)	SILVER, DIS- SOLVED (μ G/L AS AG) (01075)
SAUNDERS COUNTY												
05-20-94	--	--	--	--	--	--	--	--	--	--	--	--
05-21-94	--	--	--	--	--	--	--	--	--	--	--	--
05-22-94	--	--	--	--	--	--	--	--	--	--	--	--
05-23-94	--	--	--	--	--	--	--	--	--	--	--	--
06-17-94	--	--	--	--	--	--	--	--	--	--	--	--
06-20-94	--	--	--	--	--	--	--	--	--	--	--	--
09-13-94	--	--	--	--	--	--	--	--	--	--	--	--
05-23-94	--	--	--	--	--	--	--	--	--	--	--	--
10-20-93	<1.0	<5	<3	<10	5	<10	9	140	<10	<10	<1	<1.0
02-16-94	<1.0	<5	<3	<10	9	<10	15	92	<10	<10	3	<1.0
05-11-94	3.0	<5	<3	<10	<3	<10	16	54	<10	<10	3	<1.0
07-14-94	<1.0	<5	<3	<10	3	<10	17	43	<10	<10	<1	<1.0
09-07-94	<1.0	<5	<3	<10	4	<10	26	39	<10	<10	<1	<1.0
05-23-94	--	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--	--
09-13-94	--	--	--	--	--	--	--	--	--	--	--	--
08-29-94	--	--	--	--	160	--	--	33	--	--	--	--
SEWARD COUNTY												
08-24-94	--	--	--	--	680	--	--	380	--	--	--	--
08-25-94	--	--	--	--	42	--	--	7	--	--	--	--
THURSTON COUNTY												
08-08-94	--	--	--	--	--	--	--	--	--	--	--	--
08-08-94	--	--	--	--	--	--	--	--	--	--	--	--
WASHINGTON COUNTY												
08-18-94	--	--	--	--	--	--	--	--	--	--	--	--
08-09-94	--	--	--	--	--	--	--	--	--	--	--	--
08-10-94	--	--	--	--	--	--	--	--	--	--	--	--
08-10-94	--	--	--	--	--	--	--	--	--	--	--	--
08-10-94	--	--	--	--	--	--	--	--	--	--	--	--
08-10-94	--	--	--	--	--	--	--	--	--	--	--	--
08-10-94	--	--	--	--	--	--	--	--	--	--	--	--
YORK COUNTY												
08-24-94	--	--	--	--	<3	--	--	<1	--	--	--	--
08-24-94	--	--	--	--	<3	--	--	<1	--	--	--	--
08-25-94	--	--	--	--	<3	--	--	1	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[illegible]

407

[illegible][illegible][illegible][illegible][illegible][illegible]

CHEMICAL ANALYSES OF GROUND WATER

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[illegible]

409

DATE	CHRYSENE	DIETHYL PHTHALATE	METHYL PHTHALATE	ETHYLBENZENE	FLUORANTHENE	FLUORENE	HEXACHLORO- CYCLO-PENTADIENE	HEXACHLORO- ETHANE	INDENO (1,2,3-CD) PYRENE	ISO- PHORONE	METHYLBROMIDE
	TOTAL (μG/L)	TOTAL (μG/L)	TOTAL (μG/L)	TOTAL (μG/L)	TOTAL (μG/L)	TOTAL (μG/L)	TOTAL (μG/L)	TOTAL (μG/L)	TOTAL (μG/L)	TOTAL (μG/L)	TOTAL (μG/L)
	(34320)	(34336)	(34341)	(34371)	(34376)	(34381)	(34386)	(34396)	(34403)	(34408)	(34413)

[illegible][illegible][illegible][illegible][illegible]

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[illegible]

411

[illegible][illegible][illegible][illegible][illegible][illegible]

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	BENZENE		BENZENE		2-CHLORO-		2-CHLORO-		DI-N-OC		2,4-DI-		2,4-DI-		2,4-DI-	
	1,2,5,6	1,3-DI-	1,4-DI-	CHLORO-	ETHYL-	CHLORO-	2-	2-	THAL-	CHLORO-	METHYL-	NITRO-	CHLORO-	METHYL-	NITRO-	CHLORO-
	DIBENZ	CHLORO-	CHLORO-	VINYL-	NAPH-	CHLORO-	NITRO-	PHTHAL-	CHLORO-	METHYL-	NITRO-	CHLORO-	METHYL-	NITRO-	CHLORO-	METHYL-
	CENE	WATER	WATER	ETHER	THALENE	PHENOL	PHENOL	ATE	PHENOL	PHENOL	PHENOL	PHENOL	PHENOL	PHENOL	PHENOL	PHENOL
	UNFLTRD	UNFLTRD	UNFLTRD	UNFLTRD	UNFLTRD	UNFLTRD	UNFLTRD	UNFLTRD	UNFLTRD	UNFLTRD	UNFLTRD	UNFLTRD	UNFLTRD	UNFLTRD	UNFLTRD	UNFLTRD
TOTAL	REC	REC	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL
(μG/L)	(μG/L)	(μG/L)	(μG/L)	(μG/L)	(μG/L)	(μG/L)	(μG/L)	(μG/L)	(μG/L)	(μG/L)	(μG/L)	(μG/L)	(μG/L)	(μG/L)	(μG/L)	(μG/L)
(34556)	(34566)	(34571)	(34576)	(34581)	(34586)	(34591)	(34596)	(34601)	(34606)	(34611)	(34616)	(34621)	(34626)	(34631)	(34636)	(34641)

SAUNDERS COUNTY[illegible]**SEWARD COUNTY**[illegible]**THURSTON COUNTY**[illegible]**WASHINGTON COUNTY**[illegible]**YORK COUNTY**

08-24-94	--	--	--	--	--	--	--	--
08-24-94	--	--	--	--	--	--	--	--
08-25-94	--	--	--	--	--	--	--	--

413

	2,4-DI-NITRO- PHENOL	2,4,6-TRI-CHLORO- PHENOL	2,6-DI-NITRO-TOLUENE	3,3'-DI-CHLORO-BENZIDINE	4-BROMO-PHENYL ETHER	4-CHLORO-PHENYL ETHER	4-NITRO-PHENOL	4,6-DINITRO-ORTHO-CRESOL	DI-CHLORO-DI-FLUOROMETHANE	PHENOL (C6H5OH)	NAPHTH-ALENE
DATE	TOTAL (µ G/L) (34616)	TOTAL (µ G/L) (34621)	TOTAL (µ G/L) (34626)	TOTAL (µ G/L) (34631)	TOTAL (µ G/L) (34636)	TOTAL (µ G/L) (34641)	TOTAL (µ G/L) (34646)	TOTAL (µ G/L) (34657)	TOTAL (µ G/L) (34668)	TOTAL (µ G/L) (34694)	TOTAL (µ G/L) (34696)

[illegible][illegible][illegible][illegible][illegible]

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[illegible]

415

	TRI- CHLORO- ETHYL- ENE	METO- LACHLOR WATER	ATRA- ZINE, DISS.	HEXA- CHLORO- BENZENE	HEXA- CHLORO- BUT- ADIENE	ALA- CHLOR, DISS.	CIS-1,2 -DI- CHLORO- ETHENE	STYRENE	1,1-DI CHLORO- PRO- PENE	2,2-DI CHLORO- PANE	1,3-DI- CHLORO- PROPANE
DATE	TOTAL (µG/L)	TOTAL DISSOLV (µG/L)	REC (µG/L)	TOTAL (µG/L)	TOTAL (µG/L)	REC, (µG/L)	TOTAL (µG/L)	TOTAL (µG/L)	TOTAL (µG/L)	TOTAL (µG/L)	TOTAL (µG/L)
	(39180)	(39415)	(39632)	(39700)	(39702)	(46342)	(77093)	(77128)	(77168)	(77170)	(77173)

05-20-94	--	0.45	1.7	--	--	0.39	--	--	--	--	--
05-21-94	--	0.46	1.5	--	--	0.33	--	--	--	--	--
05-22-94	--	0.49	1.8	--	--	0.37	--	--	--	--	--
05-23-94	--	0.60	1.9	--	--	0.40	--	--	--	--	--
06-17-94	--	0.32	1.7	--	--	0.19	--	--	--	--	--
06-20-94	--	0.40	2.1	--	--	0.10	--	--	--	--	--
09-13-94	--	--	--	--	--	--	--	--	--	--	--
05-23-94	--	--	--	--	--	--	--	--	--	--	--
10-20-93	--	<0.05	0.44	--	--	<0.05	--	--	--	--	--
02-16-94	--	<0.05	0.15	--	--	<0.05	--	--	--	--	--
05-11-94	--	<0.05	0.10	--	--	<0.05	--	--	--	--	--
07-14-94	<3.0	0.34	1.8	<5.0	<5.0	<0.05	<3.0	<3.0	<3.0	<3.0	<3.0
09-07-94	--	0.05	0.38	--	--	<0.05	--	--	--	--	--
05-23-94	--	--	--	--	--	--	--	--	--	--	--
07-26-94	--	--	--	--	--	--	--	--	--	--	--
09-13-94	--	--	--	--	--	--	--	--	--	--	--
08-29-94	--	<0.05	<0.05	--	--	<0.05	--	--	--	--	--

[illegible][illegible][illegible][illegible]

DATE	PSEUDO-CUMENE	ISO-PROPYL-BENZENE	BENZENE	MESIT- N-PROPYLYNE	O-CHLORO-TOLUENE	TOLUENE	METHANE BROMO CHLORO-	BENZENE N-BUTYL	BENZENE SEC BUTYL-	BENZENE TERT-BUTYL-	P-ISO-PROPYL-TOLUENE
	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	UNFLTRD	WHOLE	UNFLTRD	UNFLTRD	WHOLE	UNFLTRD	UNFLTRD	UNFLTRD	UNFLTRD	UNFLTRD	WHOLE
	REC	REC	REC	REC	TOTAL	REC	REC	REC	REC	REC	REC
(μ G/L)	(μ G/L)	(μ G/L)	(μ G/L)	(μ G/L)	(μ G/L)	(μ G/L)	(μ G/L)	(μ G/L)	(μ G/L)	(μ G/L)	(μ G/L)
	(71222)	(71223)	(71224)	(71226)	(71215)	(71217)	(71297)	(71342)	(71350)	(71353)	(71356)

[illegible]

08-24-94	--	--	--	--	--	--	--	--
08-25-94	--	--	--	--	--	--	--	--

[illegible][illegible][illegible]

417

DATE	123-TRI CHLORO- PROPANE WATER WHOLE	ETHANE, 1112- TETRA- CHLORO- WAT UNF	1,2,3- TRI- CHLORO BENZENE WAT, WH	1,2- DIBROMO ETHANE WATER WHOLE	FREON- 113 WATER UNFLTRD	METHYL ETHER TERT- BUTYL WAT UNF	XYLENE WATER UNFLTRD	BROMO- BENZENE WATER, WHOLE,	DIBROMO CHLORO- PROPANE WATER WHOLE	1,2-DI- PHENYL- HYDRA- ZINE WATER	METRI- BUZIN SENCOR WATER
	TOTAL (µG/L) (77443)	REC (µG/L) (77562)	REC (µG/L) (77613)	TOTAL (µG/L) (77651)	REC (µG/L) (77652)	REC (µG/L) (78032)	REC (µG/L) (81551)	TOTAL (µG/L) (81555)	TOT.REC (µG/L) (82625)	TOT.REC (µG/L) (82626)	DISSOLV (µG/L) (82630)
10/1/88	123-TRI CHLORO- PROPANE WATER WHOLE	ETHANE, 1112- TETRA- CHLORO- WAT UNF	1,2,3- TRI- CHLORO BENZENE WAT, WH	1,2- DIBROMO ETHANE WATER WHOLE	FREON- 113 WATER UNFLTRD	METHYL ETHER TERT- BUTYL WAT UNF	XYLENE WATER UNFLTRD	BROMO- BENZENE WATER, WHOLE,	DIBROMO CHLORO- PROPANE WATER WHOLE	1,2-DI- PHENYL- HYDRA- ZINE WATER	METRI- BUZIN SENCOR WATER
	TOTAL (µG/L) (77443)	REC (µG/L) (77562)	REC (µG/L) (77613)	TOTAL (µG/L) (77651)	REC (µG/L) (77652)	REC (µG/L) (78032)	REC (µG/L) (81551)	TOTAL (µG/L) (81555)	TOT.REC (µG/L) (82625)	TOT.REC (µG/L) (82626)	DISSOLV (µG/L) (82630)

[illegible][illegible][illegible][illegible][illegible]

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CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
<i>Length</i>		
inch (in.)	2.54×10^1	millimeter
	2.54×10^{-2}	meter
foot (ft)	3.048×10^{-1}	meter
mile (mi)	1.609×10^0	kilometer
<i>Area</i>		
acre	4.047×10^3	square meter
	4.047×10^{-1}	square hectometer
	4.047×10^{-3}	square kilometer
square mile (mi ²)	2.590×10^0	square kilometer
<i>Volume</i>		
gallon (gal)	3.785×10^0	liter
	3.785×10^0	cubic decimeter
	3.785×10^{-3}	cubic meter
million gallons (Mgal)	3.785×10^3	cubic meter
	3.785×10^{-3}	cubic hectometer
cubic foot (ft ³)	2.832×10^1	cubic decimeter
	2.832×10^{-2}	cubic meter
cubic-foot-per-second day [(ft ³ /s) d]	2.447×10^3	cubic meter
	2.447×10^{-3}	cubic hectometer
acre-foot (acre-ft)	1.233×10^3	cubic meter
	1.233×10^{-3}	cubic hectometer
	1.233×10^{-6}	cubic kilometer
<i>Flow</i>		
cubic foot per second (ft ³ /s)	2.832×10^1	liter per second
	2.832×10^1	cubic decimeter per second
	2.832×10^{-2}	cubic meter per second
gallon per minute (gal/min)	6.309×10^{-2}	liter per second
	6.309×10^{-2}	cubic decimeter per second
	6.309×10^{-5}	cubic meter per second
million gallons per day (Mgal/d)	4.381×10^1	cubic decimeter per second
	4.381×10^{-2}	cubic meter per second
<i>Mass</i>		
ton (short)	9.072×10^{-1}	megagram or metric ton

Sea level: In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment for the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

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