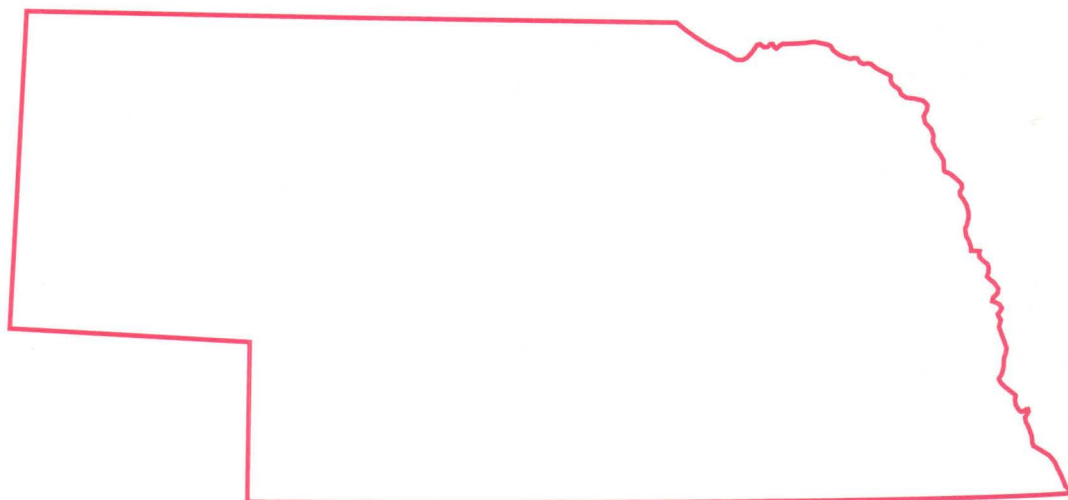
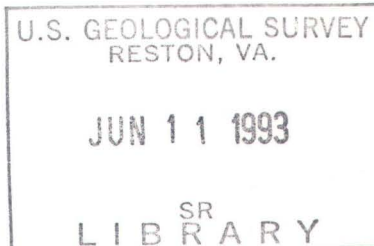


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Water Resources Data Nebraska Water Year 1992



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NE-92-1
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, and with other State and Federal agencies

CALENDAR FOR WATER YEAR 1992

1991

OCTOBER

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

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DECEMBER

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1992

JANUARY

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FEBRUARY

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APRIL

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31						

JUNE

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JULY

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AUGUST

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30	31					

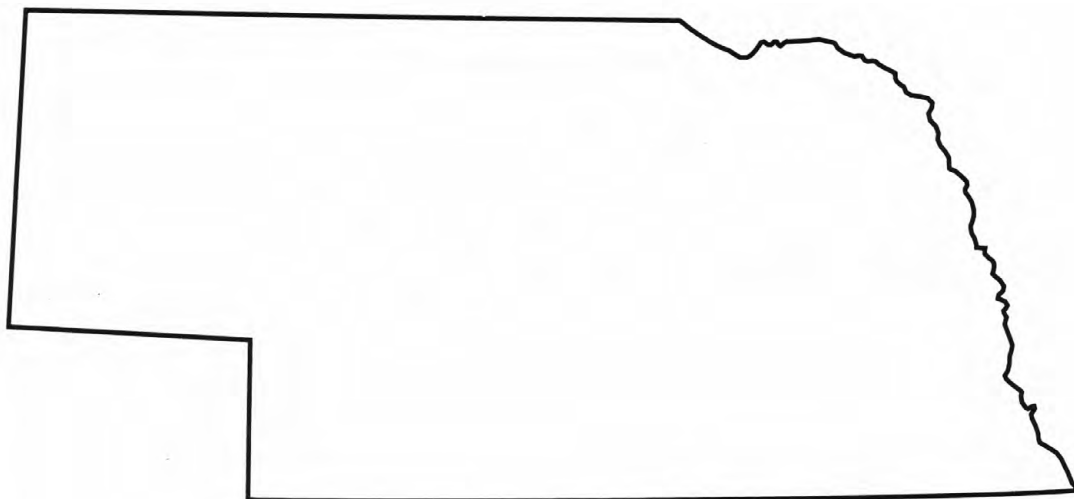
SEPTEMBER

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20	21	22	23	24	25	26
27	28	29	30			



Water Resources Data Nebraska Water Year 1992

by J.A. Boohar, C.G. Hoy, and G.V. Steele



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NE-92-1
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, and with other State and Federal agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

BRUCE BABBITT, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

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

District Chief
U.S. Geological Survey
406 Federal Building
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, N.R. Harmon, L.C. Blackburn, F.J. Jelinek, J.C. Beard, R.A. Adams,, and P.A. Bartz of the District office.

M. Kubicek, S.H. Hull, V.C. Walczyk, D.M. Schwartz, S.M. Johnson, and T.G. Shudak of the Lincoln field office

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

R.B. Swanson and D.L. Curtis 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 M.V. Shulters, District Chief, Nebraska.

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15. Supplementary Notes Prepared in cooperation with the State of Nebraska and other agencies				
16. Abstract (Limit: 200 words) Water resources data for the 1992 water year for Nebraska consist of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs; and water levels and water quality in wells. This report contains discharge records for 139 streamflow-gaging stations, 5 partial-record or miscellaneous streamflow stations, and 4 crest-stage, partial-record streamflow stations; stage and contents records for 11 lakes and reservoirs; water-quality records for 17 streamflow-gaging stations, 3 ungaged streamsites, and 250 wells; and water-levels for 65 observation wells. These data represent that part of the National Water-Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Nebraska.				
17. Document Analysis. a. Descriptors *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rate, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperatures, Sampling sites, Water levels, Water analyses b. Identifiers/Open-Ended Terms *Nebraska c. COSATI Field/Group				
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SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER,
FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

VII

[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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LANCASTER COUNTY

Well 403929096401001 Local number 8N 7E 18DDB ----- 279

Well 403833096385501 Local number 8N 7E 20DDA ----- 280

Well 404730096440401 Local number 10N 6E 34CA ----- 280

Well 404706096413001 Local number 10N 6E 36CDD ----- 281

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Well 414058103054001 Local number 20N 50W 28BBC ----- 281

NUCKOLLS COUNTY

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Well 403123099261501 Local number 6N 19W 2AA ----- 282

PLATTE COUNTY

Well 412955097192001 Local number 18N 1E 28CD ----- 283

SALINE COUNTY

Well 403855097072501 Local number 8N 3E 19ADA ----- 283

SARPY COUNTY

Well 410233096181801 Local number 12N 10E 4BADB ----- 284

Well 410308096190701 Local number 13N 10E 32DBBA ----- 284

SAUNDERS COUNTY

Well 410558096210601 Local number 13N 9E 13ADBA ----- 285

Well 410426096220401 Local number 13N 9E 24CC ----- 285

Well 410428096211001 Local number 13N 9E 24DDCC ----- 286

Well 410334096211601 Local number 13N 9E 36ABAA ----- 286

Well 410527096203201 Local number 13N 10E 18CDBD ----- 287

Well 410427096202501 Local number 13N 10E 19CDDD ----- 287

Well 410340096202201 Local number 13N 10E 30CDDA ----- 288

Well 410401096195201 Local number 13N 10E 30DAAB ----- 288

Well 410314096201101 Local number 13N 10E 31ACDB ----- 289

Well 410303096192901 Local number 13N 10E 32CABC ----- 289

Well 410307096193801 Local number 13N 10E 32CBAB ----- 290

Well 411005096281502 Local number 14N 8E 24ACD2 ----- 290

SCOTTS BLUFF

Well 415325103392801 Local number 22N 55W 11DDC ----- 291

Well 420000103511501 Local number 23N 56W 6ABAB ----- 291

SEWARD COUNTY

Well 405406097115001 Local number 11N 2E 21DD ----- 292

SHERIDAN COUNTY

Well 423034102415001 Local number 29N 46W 10AA ----- 292

THOMAS COUNTY

Well 415845100334001 Local number 23N 28W 9DA ----- 293

VALLEY COUNTY

Well 412955099123201 Local number 18N 16W 30CC ----- 293

WEBSTER COUNTY

Well 400423098314001 Local number 1N 11W 11AB ----- 294

YORK COUNTY

Well 404618097482201 Local number 9N 4W 5CCC ----- 294

Well 405305097351503 Local number 11N 2W 31BA3 ----- 295

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	** 1932-43, 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 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
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
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>
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	25.4	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
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

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 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	61300	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	22.2	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	3950	1952-56, 1958 1960-64
Middle Loup River at Walworth (d)	7775	4650	1941-60
Middle Loup River at Sargent (d)	7780	4790	1937-38, 1953-70
Middle Loup River near Comstock (d)	7785	4960	* 1937
Middle Loup River at Loup City (d)	7795	5170	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	1570	1941-58, 1968-75
Mud Creek near Broken Bow (d)	7830	126	1949-53
Oak Creek near Loup City (d)	7843	41.9	1952-60, 1961-64
Oak Creek near Dannebrog (d)	7845	122	1949-57
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

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 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
Beaver Creek at Loretto (d)	7935	311	**** 1945-53, 1980-
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-
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-
Clearwater Creek near Clearwater (d)	7983210		**** 1962-64, 1978-
Elkhorn River at Meadow Grove (d) 7988	2500		1960-65
Salt Creek subwatershed No. 3 near Sprague	8013	4.14	1955-59
Salt Creek subwatershed No. 1 near Roca (d)	8014	1.33	1955-61
Salt Creek subwatershed No. 12 near Roca (d)	8015	1.11	1954-61
Salt Creek subwatershed No. 34 near Roca (d)	8025	5.91	1954-61
Antelope Creek at 17th St., at Lincoln (d)	8034	12.1	1958-62
Oak Creek near Raymond (d)	803450	83.6	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	1617	1948-69
Little Nemaha River Basin			
Little Nemaha River near Syracuse (d)	8105	212	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

WATER RESOURCES DATA - NEBRASKA, 1992
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			
Pioneer Canal at CO-NE State Line (d)	8225		** 1950-51
Republican River at Max (d)	8280	7880	1928-45
Muddy Creek at Stratton (d)	828490	157	1978
Republican River at Culbertson (d)	8300	8740	1931-50
Frenchman Creek near Champion (d)	8305	480	1932-40
Frenchman Creek below Champion (d)	8310	519	1935-56
Frenchman Creek near Hamlet (d)	8335	1090	1929-56
Stinking Water Creek near Wauneta (d)	8345	1330	1941-50
Blackwood Creek near Culbertson (d)	8360	320	1946-86
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	**** 1952-58, 1978-
Dry Creek near Curtis (d)	8405	21.7	1951-58
Mitchell Creek above Harry Strunk Lake (d)	8415	52.0	1950-74
Medicine Creek at Cambridge (d)	8430	909	1936-57
Sappa Creek near Beaver City (d)	8452	1510	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
Republican River near Guide Rock (d)	8530	22040	1951-84
Beaver Creek near Rosemont (d)	8531	.75	1968-70
Little Blue River below Pawnee Creek, near Pauline (d)	8829	881	1963-68
Little Blue River at Angus (d)	8835		1950-53

* Partial year only.

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

*** Not published.

**** Run by Nebraska Department of Water resources.

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 preceding 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	1951-78
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	1950-67
South Omaha Creek near Walthill	6007	15.1	1950-67
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	1950-78
South Branch Tekamah Creek near Tekamah	6079	9.73	1950-67
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, 1951-70
North Plum Creek near Farnam	7674	38.3	1947, 1951-70
Plum Creek near Farnam	767410	79.8	1947, 1951-78
Plum Creek near Smithfield	7675	229	1954-67, 1978-78
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	1.58	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	1951-67
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	1951-67
Davis Creek tributary No. 2 near North Loup	7892	6.79	1951-70
Davis Creek near North Loup	7893	21.1	1951-67
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	1951-67
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	1969
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
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	1950-67
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	21.4	1950-67, 1971
Stove Creek near Elmwood	806420	4.94	1950-67, 1971
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	1950-67
Wolf Creek near Syracuse	8103	25.4	1950-67
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

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 north of Curtis	839850	13.8	1952-70
Fox Creek above Cut Canyon near Curtis	8399	31.8	1951-78
Cut Canyon near Curtis	839950	25.6	1951-78
* Fox Creek at Curtis	8400	73.2	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 Frabklin	8510	146	1961-68
Republican River at Riverton	851090	-	1970-78
West Branch Thompson Creek at Hildreth	8511	27.4	1953-70
West Branch Thompson Creek near Hildreth	8512	56.6	1953-70
West Branch Thompson Creek tributary near Hildreth	8513	13.9	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	1952-70
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	1952-70
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	881	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	49.4	1952-70
South Fork Big Sandy Creek near Hebron	8839	81.9	1952-70
Little Sandy Creek near Ohioa	883955	11.6	1968-78
Dry Branch tributary near Fairbury	884005	4.51	1968-78

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			
** Minnechaduza Creek at Valentine	4610	* 1948-49	c
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	c
		1951-72	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	c
		* 1948-51	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	t
		1972-89	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
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	c
		1965-70	s
** Elkhorn River at Ewing	7975	* 1948-49, 1960-66, 1968-69, 1976	c
		1948-52, 1961	s
** South Fork Elkhorn River at Ewing	7980	* 1948, 1960-66	c
		1961, 1963-67	s
Cache Creek near Ewing	798150	* 1967-68	c
Clearwater Creek at Clearwater	798302	* 1964, *1967-69	c
		1962-64	s
Antelope Creek near Neligh	798450	* 1967-68	c
** Elkhorn River at Neligh	7985	* 1947, *1967-68, 1974-81	c t
		1948-51	s
		1962-64	s
Cedar Creek at Oakdale	798550	* 1967-69	s
Elkhorn River at Meadow Grove	7988	* 1943, *1964, *1967-69	c
		1963-65	s
Elkhorn River near Battle Creek	7989	* 1968-69	c
Battle Creek at Battle Creek	798920	* 1968-69	c
** Elkhorn River near Norfolk	7990	* 1976-77	s t
		1960-69, 1974-89	c m
North Fork Elkhorn River above Pierce	799020	* 1968-69	c
Dry Creek near Pierce	799030	* 1968-69	c
North Fork Elkhorn River below Dry Creek	799031	* 1968	c
Yankton Slough near Pierce	799040	* 1968	c
Willow Creek near Pierce	799050	* 1968-69	c
** North Fork Elkhorn River near Pierce	7991	* 1944, 1959-64, 1968-69	c
		* 1961, 1963-64	s
North Fork Elkhorn River at Hadar	799110	* 1968-69	c
North Fork Elkhorn River at Norfolk	799130	* 1965, 1968-69	c
		1965-68	s
Union Creek near Stanton	799290	* 1964, *1968-69	c
		1962-65	s
Elkhorn River at Stanton	7993	* 1943, *1968-69	c
Humbug Creek near Pilger	799310	* 1968-69	c
Rock Creek near Beemer	799325	* 1968-69	c
Plum Creek near Beemer	799345	* 1968-69	c
** Elkhorn River at West Point	799350	1968-69, 1981-89	c m
Cuming Creek near Scribner	799365	* 1968-69	c
** Pebble Creek at Scribner	799385	* 1968-69	c
Elkhorn River near Hooper	7994	* 1968-69	c
Middle Logan Creek at Laurel	799410	* 1968-69	c

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
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
Platte River near Plattsmouth	805550	1969-72	c m t

WATER RESOURCES DATA - NEBRASKA, 1992
DISCONTINUED SURFACE-WATER QUALITY STATIONS--continued

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<i>Station name</i>	<i>Station number</i>	<i>Period of record (water years)</i>	<i>Type of record</i>
Platte River Basin--continued			
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
** 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
Repullican 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
Big Blue River at Crete	880950	* 1951, *1963	c s
** Big Blue River near Crete	8810	1961-62, *1964, 1968-84	c m
		1960-62, *1964	s
		1962, 1968-84	t
Squaw Creek near Crete	881010	* 1968	c
Big Blue River at Wilber	881050	* 1964, *1969	c
Big Blue River near Wilber	881052	* 1964	c
Big Blue River at DeWitt	8811	* 1964	c
Clatonia Creek near DeWitt	881105	* 1968	c
Turkey Creek near Milligan	881110	1968-69	c

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 above Brush Creek near Wilber	881150	* 1964	c
** Turkey Creek near Wilber	8812	1965-72, 1966-70, 1973-89	s c m
Turkey Creek 2 miles SW of Wilber	881210	* 1964	c
Turkey Creek above Swan Creek near DeWitt	881220	* 1964	c
North Fork Swan Creek near Swanton	881353	* 1964	c
Swan Creek at Swanton	881356	* 1964	c
Swan Creek near DeWitt	881357	* 1968-69	c
Turkey Creek near DeWitt	881358	* 1964	c
Big Blue River near DeWitt	881420	* 1968-69	c
Cub Creek near Beatrice	881430	* 1968-69	c
Indian Creek at Beatrice	881450	* 1968-69	c
** Big Blue River at Beatrice	8815	* 1960-69 * 1960-61, *1963 1978-83	c s c m t
Bear Creek near Beatrice	881520	* 1968-69	c
Cedar Creek near Holmesville	881530	* 1968	c
Mud Creek near Holmesville	881650	* 1968-69	c
Big Indian Creek at Wymore	881750	* 1968-69	c
Wildcat Creek near Barneston	881950	* 1968	c
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
Little Blue River at Fairbury	883995	* 1968-69	c
** Little Blue River near Fairbury	8840	1951-53, 1955-57 1952-63, *1960-61, * 1968	s c

WATER RESOURCES DATA - NEBRASKA. 1992

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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			
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 streamflow station.

*** Streamflow station run by USGS from different state

**** Current reservoir stations

WATER RESOURCES DATA - NEBRASKA, 1992

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 139 streamflow-gaging stations, for 5 partial-record or miscellaneous streamflow stations, and for 4 crest-stage, partial-record streamflow stations; (2) stage and contents for 11 lakes and reservoirs; (3) water-quality records for 17 streamflow-gaging stations, for 3 ungaged streamsites, and for 250 wells; and (4) water-level records for 65 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; 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 4 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.

OVERVIEW OF WATER YEAR 1992

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 1992 at selected locations is discussed in this overview 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 in order to emphasize temporal as well as areal variation of precipitation during water year 1992.

With the exception of the Panhandle division during the first quarter, precipitation in all divisions was greater than normal during the first two quarters and less than normal during the third quarter. The fourth quarter showed greater-than-normal precipitation in all divisions. During the month of July greater-than-normal precipitation ranged from 0.72 inches in the Panhandle to 7.46 inches in the Southeast.

A comparison of precipitation totals during water years 1990, 1991, and 1992 with normal precipitation totals in the eight divisions is shown in figure 2. With the exception of the Panhandle division, all divisions had increased precipitation over both water years 1990 and 1991, with greater-than-normal totals for water year 1992 ranging from .24 inches for the Panhandle division to 7.69 inches for the Northeast division.

Table 1. -- Precipitation and departures from normal, in inches
[Period of record for normal, 1951-80]

National Weather Service Division	Precipitation											
	First quarter (October-December)			Second quarter (January-March)			Third quarter (April-June)			Fourth quarter (July-September)		
	Normal	Water year 1992	Departure	Normal	Water year 1992	Departure	Normal	Water year 1992	Departure	Normal	Water year 1992	Departure
Panhandle	1.71	1.51	-0.20	1.71	3.20	1.49	7.91	6.11	-1.80	5.28	6.03	0.75
North Central	2.24	3.19	.95	2.17	4.54	2.37	9.16	6.83	-2.33	7.25	10.73	3.48
Northeast	3.08	5.26	2.18	3.01	5.29	2.28	10.53	8.40	-2.13	8.69	14.05	5.36
Central	2.54	4.73	2.19	2.57	5.24	2.67	9.89	5.92	-3.97	8.08	10.78	2.70
East Central	3.76	6.03	2.27	3.43	5.29	1.86	11.11	7.45	-3.66	9.94	13.50	3.56
Southwest	1.95	3.68	1.73	1.95	4.67	2.72	8.28	5.74	-2.54	6.69	9.82	3.13
South Central	2.63	3.87	1.24	2.60	4.87	2.27	9.85	5.75	-4.10	8.55	10.22	1.67
Southeast	4.22	6.63	2.41	3.75	5.78	2.03	11.15	7.56	-3.59	11.18	17.25	6.07

Streamflow

Monthly mean discharges during water year 1992 and long-term monthly mean discharges at representative 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 conditions in the State during the year.

Except for the month of August, streamflow was less than the long-term means at station 06841000, Medicine Creek above Harry Strunk Lake. Snowfall was less than normal, so there was not much runoff in early spring. Heavy precipitation during August in the Southwest division contributed to the increase in streamflow by 47 percent.

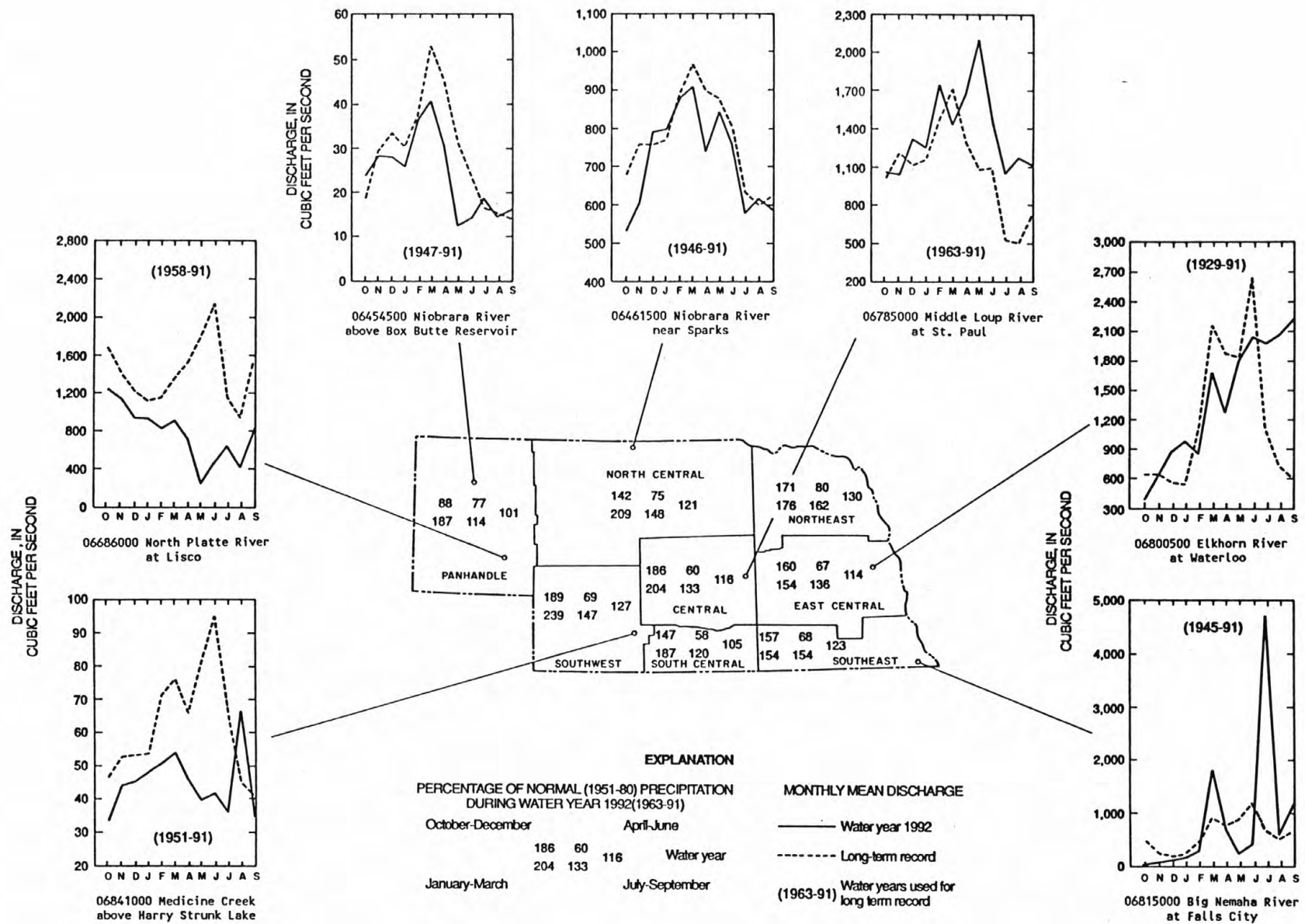


Figure 1.--Comparison of precipitation and streamflow during water year 1992 to long-term means.

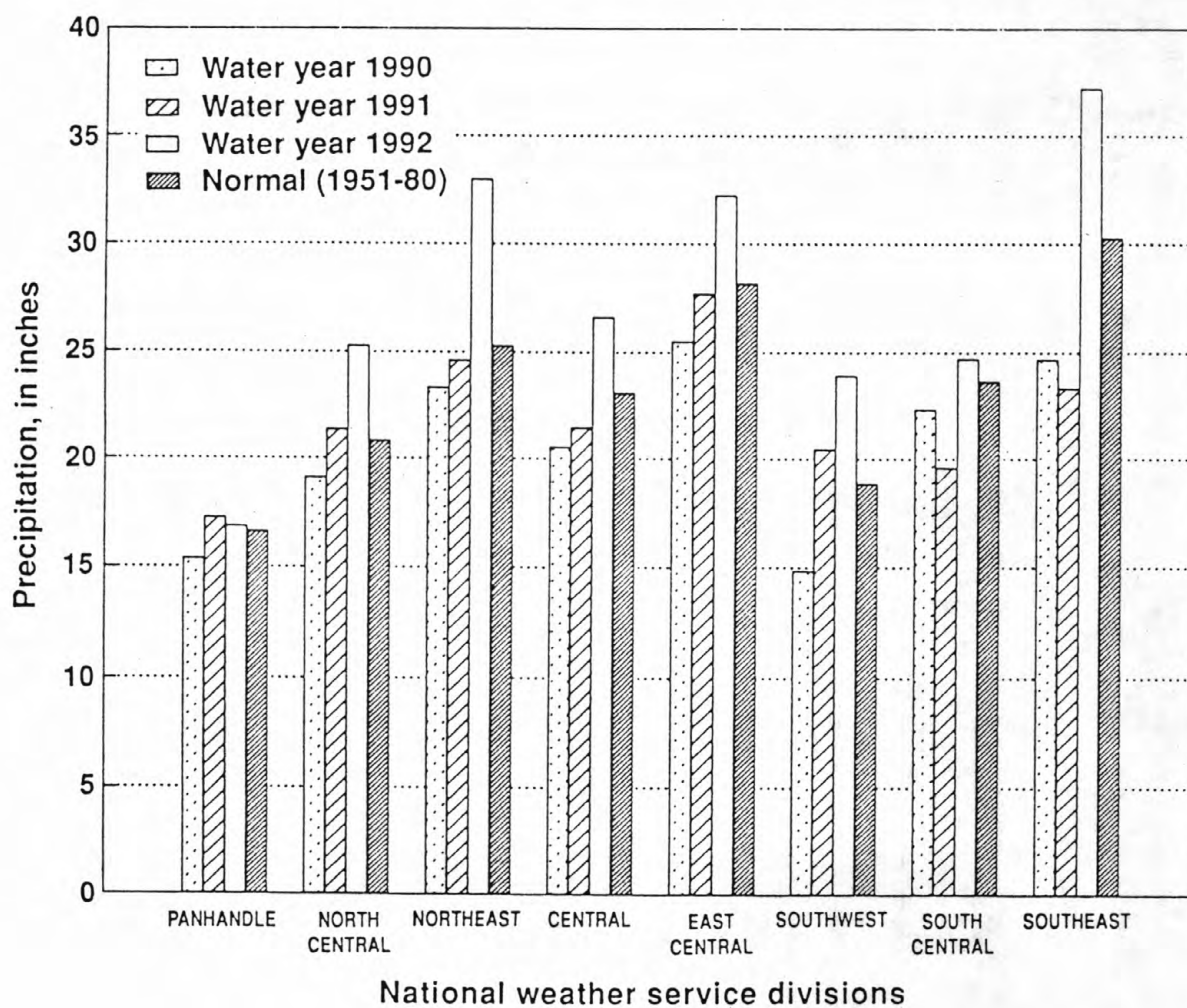


Figure 2.--Comparison of precipitation for water years 1990, 1991, and 1992 with normal precipitation for the eight Weather Service divisions in Nebraska.

Two of the representative stations located in the Panhandle division showed smaller monthly means compared with the long-term means during the entire water year. Discharges for station 06686000, North Platte River at Lisco, are determined more by reservoir releases. Snowmelt runoff from the North Platte River basin in the Rocky Mountains was less than normal, therefore, releases from upstream reservoirs were also less than normal. Streamflow for station 06686000 for the water year was 54 percent of the long-term mean. Except for the month of October and September, streamflow at station 06454500, Niobrara River above Box Butte Reservoir, was less than the long-term mean for the water year. Streamflow increased slightly in March as a result of snowmelt and in July as a result of heavy precipitation.

Station 06785000, Middle Loup River at St. Paul, generally indicated greater-than-normal monthly means for the water year. This station is located in the sandhills region of the State where the main part of the flow is derived from ground-water discharge. The greater-than-normal precipitation during the first six months and in July and August contributed to the increase in streamflow at this station. Streamflow for the water year was 29 percent greater than the long-term mean.

Streamflow at station 06461500, Niobrara River near Sparks, generally had the normal pattern of discharge. Groundwater also provides a major contribution to the discharge at this site since much of the drainage area include sandhills. An increase in streamflow was indicated in December and January due to snowmelt and in August due to greater than normal rainfall.

The representative station (06800500, Elkhorn River at Waterloo) in the East Central division showed streamflow that was greater than the long term means in December, January and July as a result of greater than normal precipitation in each of those months. Streamflow was also greater than the long term means in August and September even though precipitation was less than normal during those month. However,, much of the drainage area of the Elkhorn River lies in the Northeast division and this division received greater-than-normal rainfall during August and September.

Station 06815000, Big Nemaha River at Falls City, in the Southeast division showed streamflow that was more than twice as great as the long term mean for the month of March, almost seven times greater for the month of July, slightly greater for the month of August, and almost twice as great for the month of September as a result of greater-than-normal precipitation during those months. The mean for water year 1992 for this station was 146 percent of the long term mean while this comparison of the water year mean to the long term mean was 27 percent for water year 1991 and 44 percent for water year 1990.

Thunderstorms in southeast Nebraska were responsible for 11 inches of precipitation during July. Three gaging stations on the Little Blue River in the Southeast division, (06883570, Little Blue River near Alexandria, 06884000, Little Blue River near Fairbury, and 06884025, Little Blue River at Hollenberg, KS) recorded new discharge maximums for the period of record (table 2).

Table 2.--Maximum discharges during water year 1992 and period of record

Station number	Station name	Water year 1992 maximum discharge			Previous maximum discharge (period of record)			Number of years of record	Recurrence interval (years)
		Discharge (ft ³ /s)	(stage) (ft)	Date	Discharge (ft ³ /s)	(stage) (ft)	Date		
06883570	Little Blue River near Alexandria	32,600	(21.07)	7/25	25,600	(17.30)	3/28/60	31	1.1 x 100
06884000	Little Blue River near Fairbury	54,000	(24.33)	7/25	41,900	(16.98)	6/13/84	71	100
06884025	Little Blue River at Hollenberg, KS	47,800	(21.21)	7/26	36,600	(21.00)	6/13/84	18	1.1 x 100

Chemical Quality of Streamflow

The National Stream Quality Accounting Network (NASQAN) is a data-collection network used to assess the quality of the Nation's water through systematic and continual measurements at key locations on major streams. Presently, there are 410 sites located throughout the Nation; the following stations are located in Nebraska.

06465500 Niobrara River near Verdel
06686000 North Platte River at Lisco
06774000 Platte River near Duncan
06792000 Cedar River at Fullerton
06800500 Elkhorn River at Waterloo
06805500 Platte River at Louisville
06882000 Big Blue River at Barneston.

Water samples collected from these sites are analyzed for a number of constituents. Collection is quarterly or during alternate months such that the number of samples varies from 4-6. Selected constituents are listed in table 3. The constituents listed are from samples taken during periods of high and low discharges and show the effect of flow on concentration.

Generally, the concentration of dissolved solids (and major ions) in streams are related inversely to streamflow. High streamflows resulting from snowmelt and rainfall runoff have small dissolved-solids concentration per unit volume; on the other hand, low streamflows composed largely of ground water discharging to streams (base flow) have a larger dissolved-solids concentration. This inverse relationship between dissolved solids and streamflow is less pronounced at sites downstream from lakes and reservoirs, where two components of flow (runoff and base flow) can be retained and mixed. North Platte River at Lisco, downstream from reservoirs in Wyoming, is an example of such a site.

Phosphorus, along with nitrogen, is recognized as a major constituent for growth of aquatic plants. Excessive phosphorus concentrations, commonly caused by agricultural fertilization, can result in biological enrichment such as growths of algae and other aquatic plants.

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

Turbidity is directly related to suspended-sediment concentration and generally increases with stream discharge as a result of eroded sediment transported by runoff. This relationship is demonstrated in table 3.

Table 3.--Comparison of selected constituents from NASQAN samples taken during periods of high and low discharges.

Station name	Drainage area (mi ²)	Discharge (cfs) (date)		Specific Conductance (μ s/cm)	Dissolved solids (mg/L)	Dissolved Phosphorus (mg/l)	Dissolved Oxygen (mg/l)	Turbidity (ntu)
		High	Low					
Niobrara River near Verdel	12,600	4,060 (Nov)	- 1,240 (May)	249 - 257	171 - 193	.04 - .04	12.8 - 8.0	100 - 34
North Platte River at Lisco	26,700	1,200 (Nov)	- 243 (May)	940 - 865	679 - 609	.01 - .05	13.2 - 9.2	22 - 4.6
Platte River near Duncan	60,900	3,690 (Mar)	- 415 (May)	772 - 960	603 - 637	.10 - .04	7.9 - 10.5	31 - 3.4
Cedar River at Fullerton	1,220	495 (July)	- 218 (Nov.)	239 - 265	152 - 183	.26 - .17	7.0 - 11.4	690 - 25
Elkhorn River at Waterloo	6,900	2,090 (July)	- 878 (May)	439 - 485	268 - 300	.23 - .04	6.1 - 10.1	1,100 - 26
Platte River at Louisville	85,800	9,930 (Aug)	- 4,010 (May)	372 - 604	315 - 480	.32 - .08	7.0 - 11.8	130 - 16
Big Blue River near Barneston	4,447	956 (July)	- 190 (May)	588 - 766	344 - 456	.51 - .32	7.7 - 9.5	150 - 43

Ground-Water Levels

Water-level changes during water year 1992 were determined from a statewide network of observation wells measured by 38 federal, state, and local agencies. The network consists of more than 3,700 wells measured annually, semiannually, or monthly and 117 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 3.

During water year 1992, the greatest water-level declines probably resulted from the increased irrigation demands due to less than the 30-year (1950 to 1980) normal precipitation which occurred during the first three months, April, May, and June, of the 1992 growing season (April through September). The lack of precipitation resulted in less-than-normal amounts of recharge to some aquifers prior to the growing season throughout most of Nebraska. At the end of water year 1992, water levels in 29 of the 53 observation wells published were lower than they were at the end of water year 1991. These 53 observation wells had a mean water-level rise of 0.28 foot from the end of water year 1991 to the end of water year 1992. In some instances, recorder wells show that the lowest water-levels recorded during the 1992 growing season were higher than the lowest water-levels recorded the previous year. This is due to the abundant rainfall which occurred throughout much of Nebraska during the critical irrigation months of July and August. In the Panhandle, North-Central, Southwest and South-Central sections of Nebraska, the greater than 30-year normal rainfall occurred as early as June.

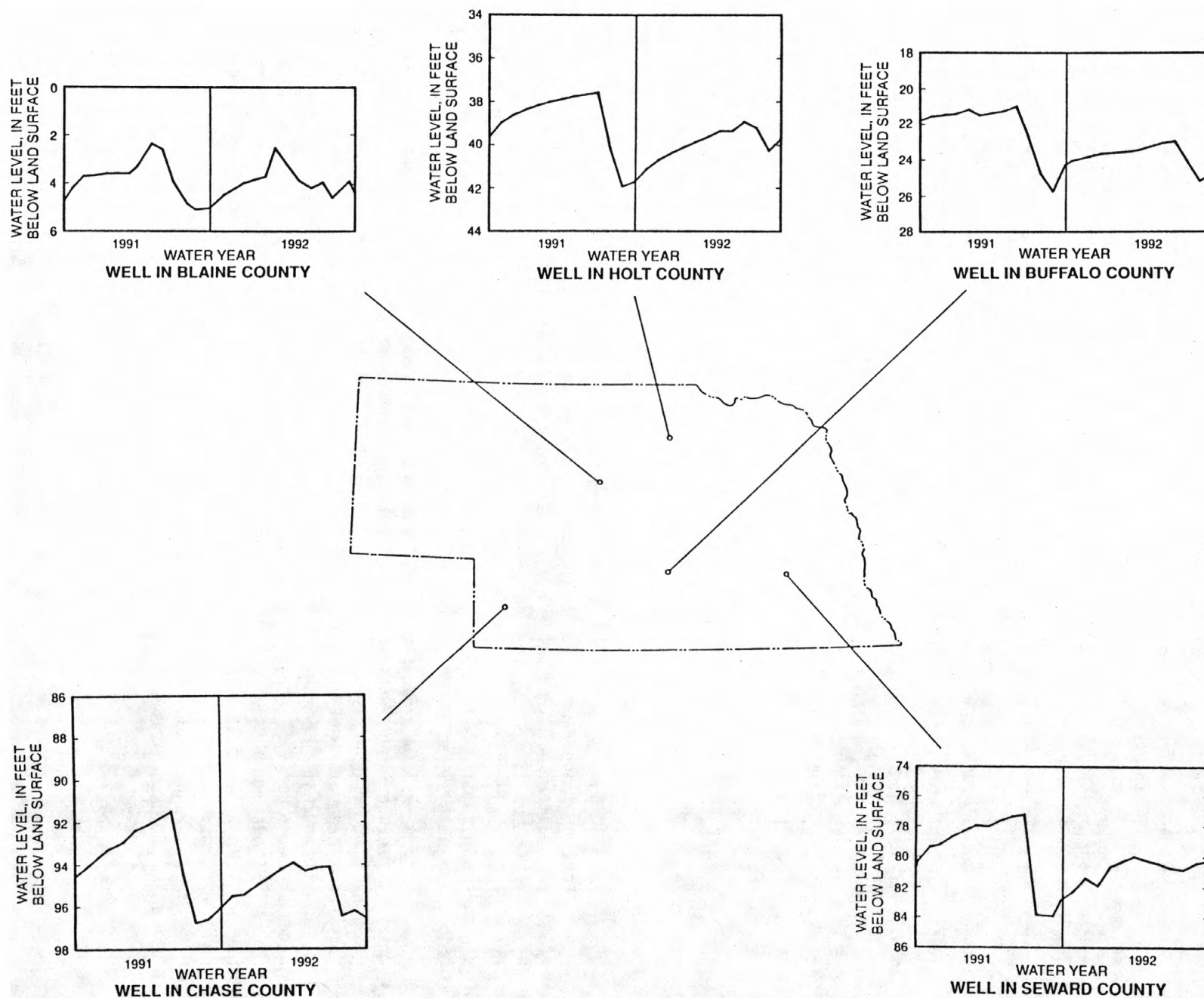


Figure 3.--Water levels in representative observation wells, water years 1991 and 1992.

The hydrograph for the observation well in Seward County is representative of water-level fluctuations that occurred in the east-central part of the state during water years 1991 and 1992. The water level in this well was 2.64 feet higher at the end of water year 1992 than at the end of water year 1991. This rise seems to typify most water-level measurements in the east-central region of the state and can probably be attributed to the greater-than-normal precipitation which occurred during July and the early part of August when irrigation demands are typically greatest.

Throughout much of the central, and south-central parts of Nebraska, precipitation during the growing season was generally less than normal from April to June, and water levels measured in observation wells in these areas generally were lower at the end of water year 1992 than they were at the end of water year 1991. The hydrograph for the Buffalo County well is generally representative of water levels in central and south-central Nebraska. As shown, these water levels generally recovered slightly during the 1991-92 dormant season. However, as mentioned previously, these slight recoveries were lessened by the decrease demand for groundwater during the some months (July and August) of the growing season. At the end of water year 1992, the water level in the Buffalo County well was 0.44 foot lower than at the end of water year 1991.

In the southwestern part of the state, precipitation during the water year was near normal. Counties in this division had average water level changes which ranged from 0.34 feet higher to 1.91 feet lower at the end of water year 1992 than they were at the end of water year 1991. Most of the water-level declines occurred in the areas where the large amounts of ground water used for irrigation usually exceed the amounts of water the aquifer receives from recharge. Recorder wells in the southwestern part of Nebraska, like the recorder wells in the Central and South-Central parts of Nebraska, show that water levels did not recover as much as the previous year, but because more water from precipitation was available during the 1992 water year than during the 1991 water year, declines generally were less severe than those during the previous year. Water-level fluctuations shown for an observation well in Chase County are representative of those that occurred in irrigated areas in the southwestern part of the state during water years 1991 and 1992. The hydrograph shows that the water level at the end of water year 1992 was 0.49 foot lower than at the end of water year 1991.

Precipitation in north-central and northeastern Nebraska was near normal throughout most of water year 1992 non-growing season (October 1991 to March 1992). Water levels measured in recorder wells at the end of water year 1992 averaged 2.90 feet higher than they were at the end of water year 1991. In Pierce County, the recorder well water level at the end of water year 1992 was 8.16 feet above the water level at the end of water year 1991. The hydrograph for an observation well in Holt County is representative of water-level fluctuations that occurred in this part of Nebraska during water years 1991 and 1992. This hydrograph shows that the water-level recoveries during the dormant season of water year 1992 were approximately 1.5 feet less than the recoveries during water year 1991, however, the water-level declines during water year 1992 growing season were approximately 1.5 feet less than the declines during water year 1991 growing season. The water level in this well at the end of water year 1992 was 2.04 feet higher than at the end of water year 1991.

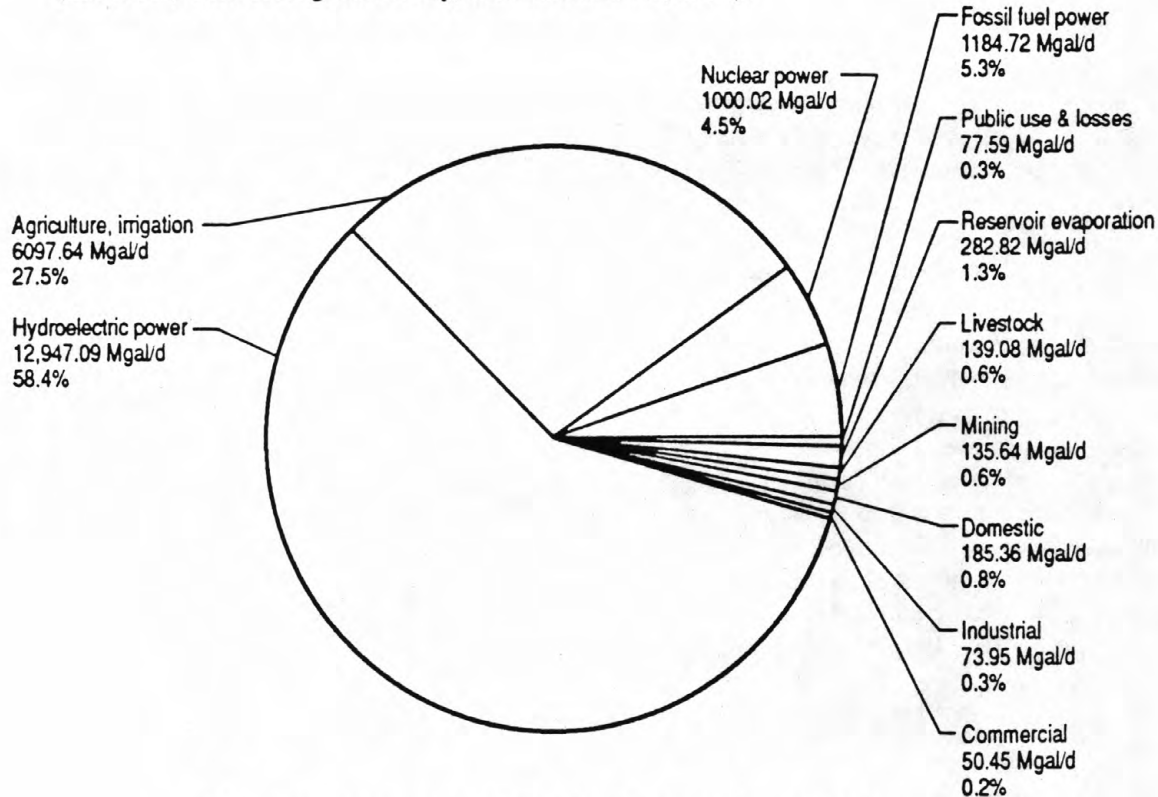
In those parts of Nebraska where ground water is used only for domestic and stock supplies, most water-level fluctuations are caused by variations in natural recharge to and discharge from the aquifers. Commonly, water levels rise during the fall and winter months when recharge from precipitation exceeds discharge by seepage to streams and by evapotranspiration; they 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 shows these annual fluctuations. The rising water levels between October 1991 and February 1992 can be attributed to near normal to much greater-than-normal precipitation that occurred during most of the months throughout this period. The water level in the Blaine County well at the end of water year 1992 was 0.66 feet higher than at the end of water year 1991.

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.

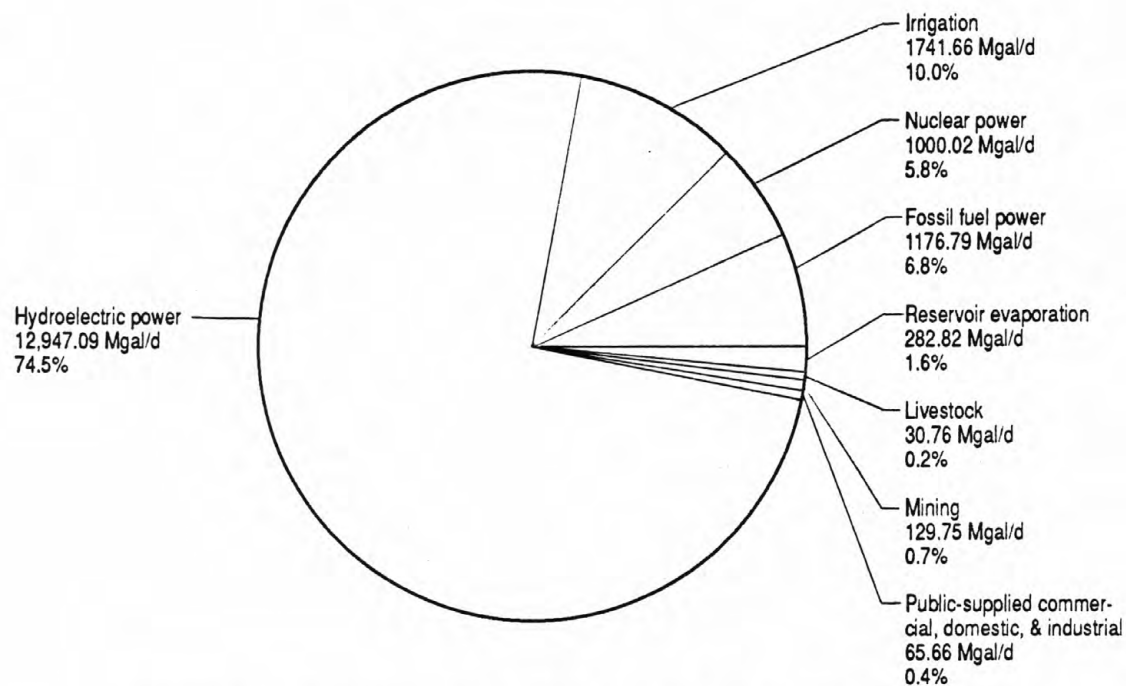
- Total water use in Nebraska was 22,174.36 million gallons per day (Mgal/d).
- Surface water use was 17,376.92 Mgal/d, or 78.4 percent of total water use.
- Ground-water use was 4,797.44 Mgal/d, or 21.6 percent of total water use, of which 4,355.98 Mgal/d or 90.8 percent was used for irrigation.
- The 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).



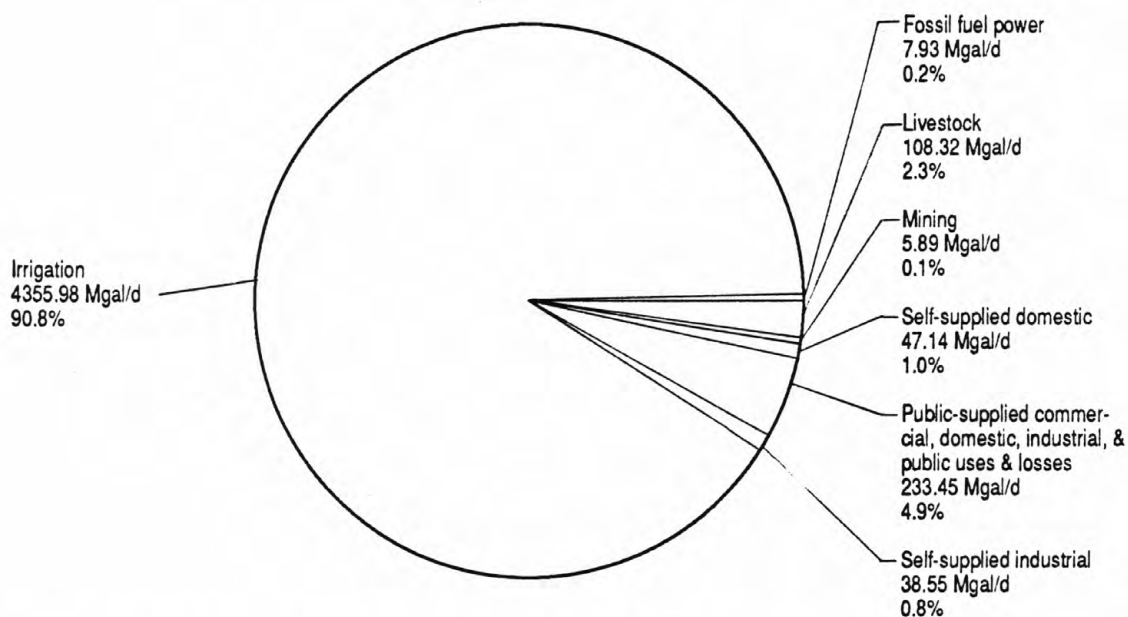
Total water use: 22,174.36 million gallons per day

Figure 4a.--Estimated total water use in Nebraska, 1990.



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

Figure 4b.--Estimated total surface-water use in Nebraska, 1990.



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

Figure 4c.--Estimated total ground-water use in Nebraska, 1990.

SPECIAL NETWORKS AND PROGRAMS

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.

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 410 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.

The 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.

Assessment activities have begun in more than one-third 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 1992 water year that began October 1, 1991, and ended September 30, 1992. 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 5, 6, and 7. 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.

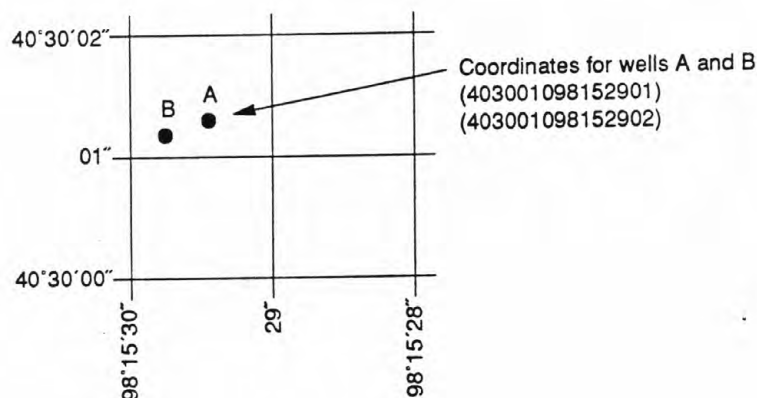
Downstream Order System

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 5.

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 A6.

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.

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,

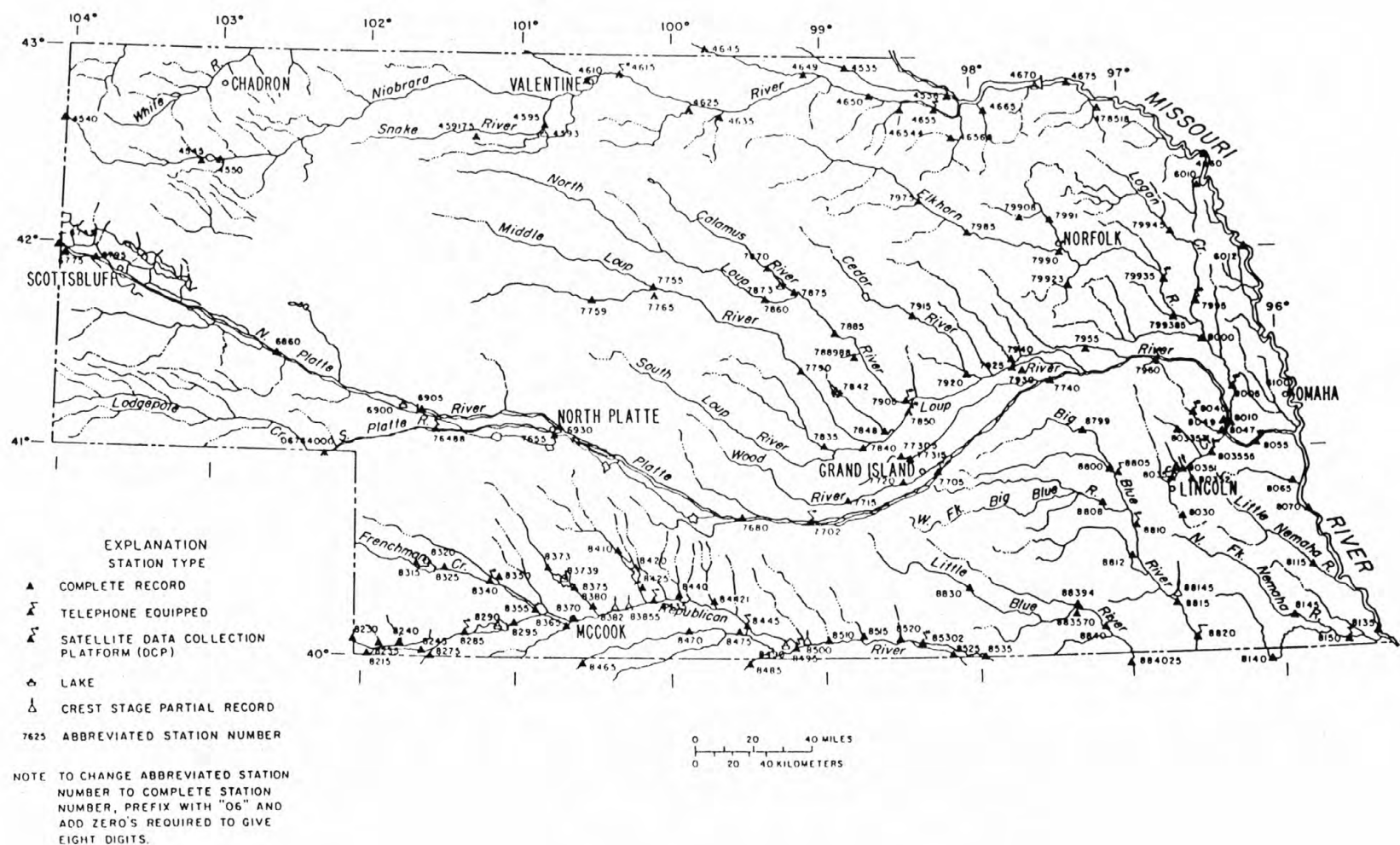


Figure 5.--Location of active surface-water gaging stations.

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 National Geodetic Vertical Datum of 1929 (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 is exceeded by 10 percent of the flow for the designated period.

50 PERCENT EXCEEDS.--The discharge that is exceeded by 50 percent of the flow for the designated period.

90 PERCENT EXCEEDS.--The discharge that is exceeded by 90 percent of the flow 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 6.

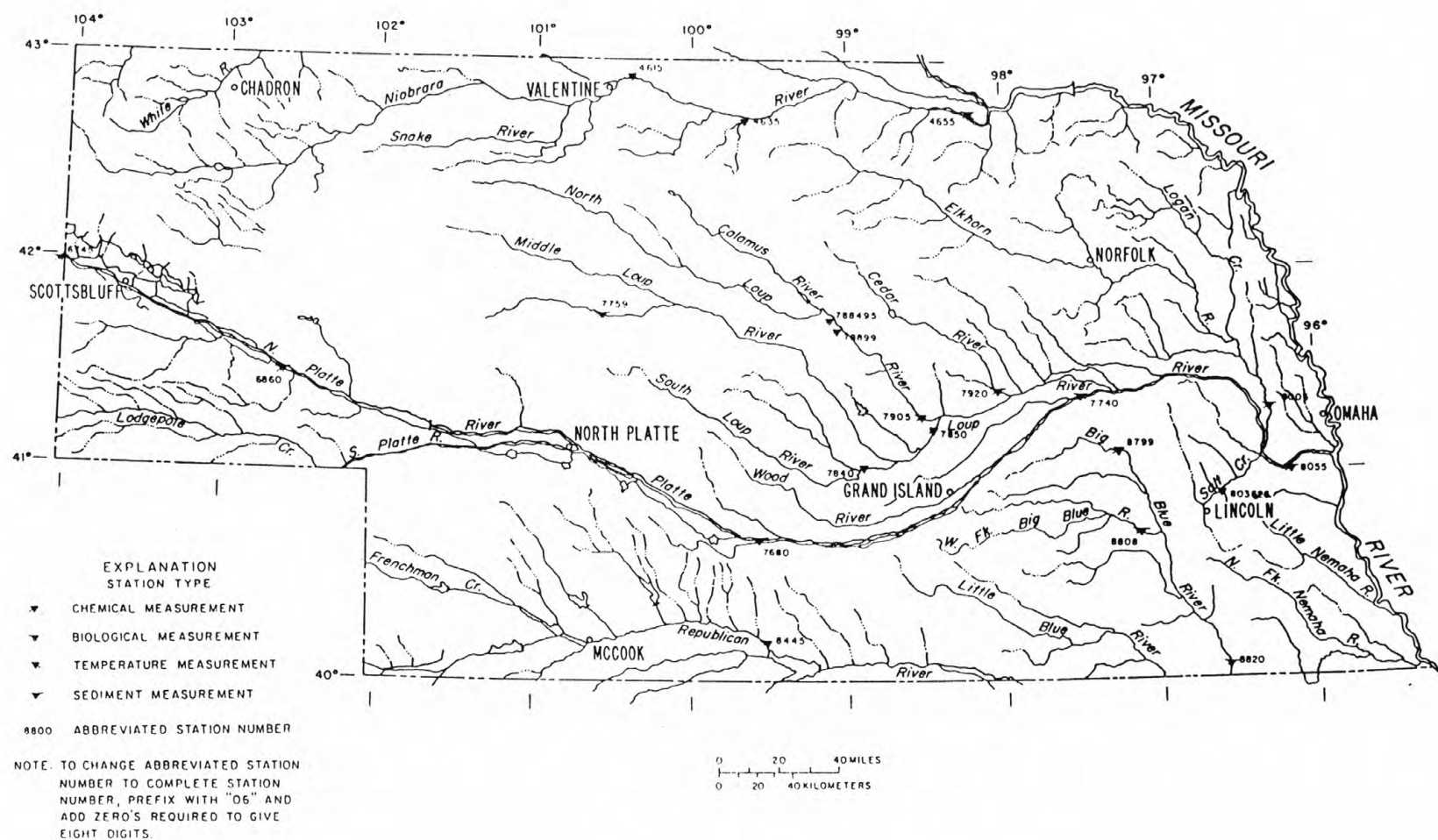


Figure 6.--Location of active surface-water quality stations.

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 given in publications on "Techniques of Water-Resources 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 (1992) 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. 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.

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 7.

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).

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.

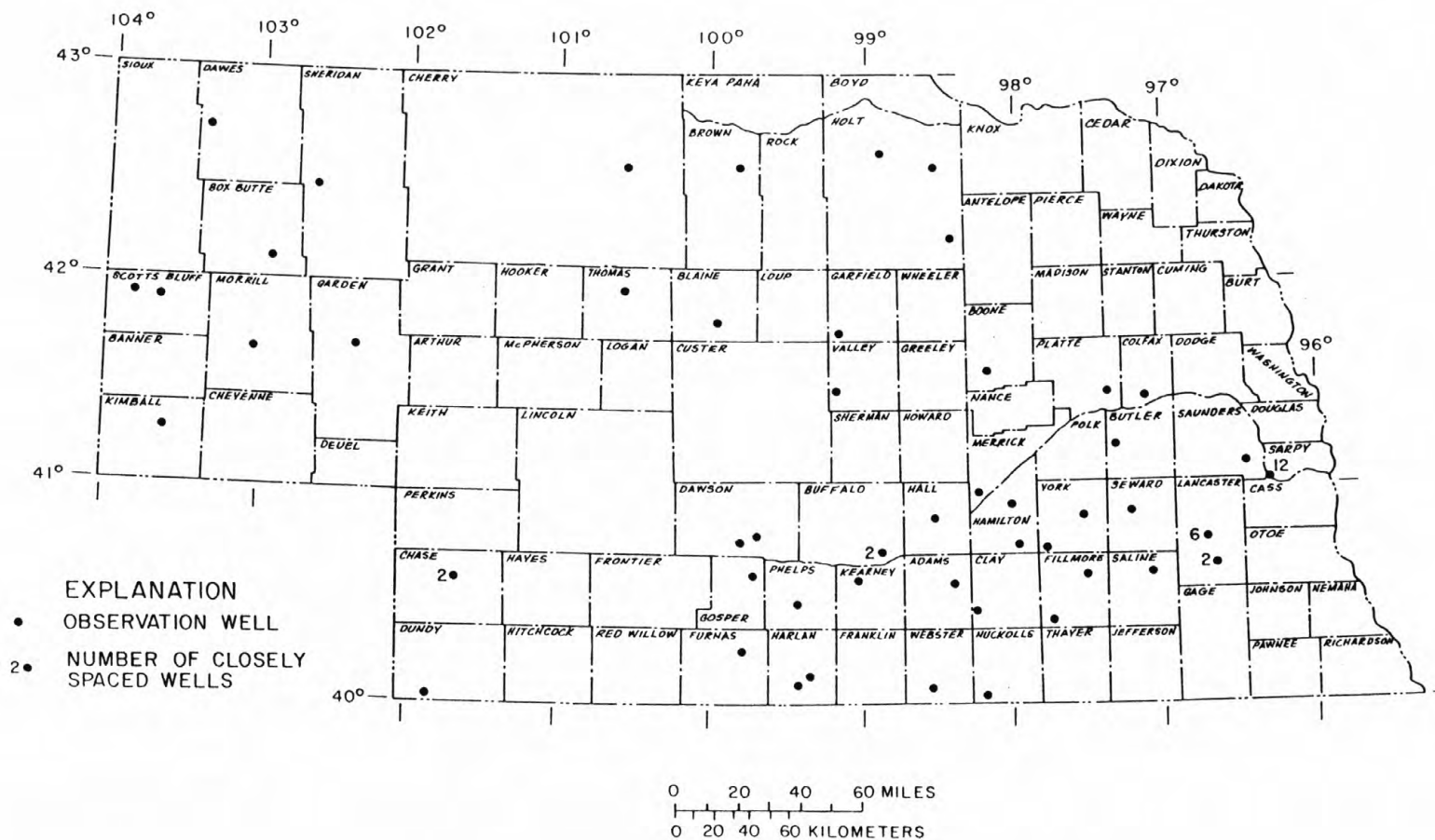


Figure 7.--Location of selected observation wells.

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) National Geodetic Vertical Datum of 1929 (NGVD of 1929); 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 Techniques of Water-Resources Investigations" manuals listed at the end of the introductory text. 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. 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 µm 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 410 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.

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 ($7 Q_{10}$) 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 emersed 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 μ m 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 μ m 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
<u>Genus.....</u>	<u>Hexagenia</u>
<u>Species.....</u>	<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, 1992, is called the "1992 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.

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, Books and Open-File Reports Section, Federal Center, Box 25425, 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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- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
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- 3-A19. *Levels of streamflow gaging stations*, by E.J. Kennedy: USGS--TWRI Book 3, Chapter A19. 1990. 27 pages.
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- 3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.
- 3-B4. *Regression modeling of ground-water flow*, by Richard L. Cooley and Richard L. Naff: USGS--TWRI Book 3, Chapter B4. 1990. 232 pages.
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- 3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
- 3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.
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- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M. J. Fishman and L. C. Friedman: USGS--TWRI Book 5, Chapter A1. 1989. 545 pages.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.
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- 5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments*, by L. C. Friedman and D. E. Erdmann: USGS--TWRI Book 5, Chapter A6. 1982. 181 pages.
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- 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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PONCA CREEK BASIN
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.--505 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 National Geodetic Vertical Datum of 1929, 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	e1.3	e1.2	e1.3	e10	11	8.0	6.6	3.9	4.7	29	25
2	.00	e1.4	e1.1	e1.6	e9.0	8.8	8.0	5.7	4.1	147	25	40
3	.19	e1.6	e1.0	e1.8	e8.0	7.3	7.3	5.5	3.9	50	22	33
4	.90	e1.5	e1.3	e1.7	e8.4	7.2	6.3	5.0	5.0	23	22	28
5	.61	e1.1	e1.5	e1.6	e7.0	17	5.4	4.6	5.9	91	45	33
6	.38	e.90	e1.8	e1.7	e7.4	43	5.3	4.6	7.0	78	48	53
7	.40	e1.2	e1.9	e1.4	e11	40	5.4	4.7	5.5	48	191	68
8	.35	e1.3	e1.7	e1.3	e10	e23	5.4	5.8	51	45	84	61
9	.30	e1.5	e1.7	e1.4	e13	e22	6.4	4.9	28	35	54	55
10	.31	e1.4	e1.4	e2.0	e12	e26	5.3	4.7	10	195	38	40
11	.34	e1.6	e1.3	e2.4	e11	e30	5.9	5.2	6.2	81	28	33
12	.36	e1.8	e1.4	e2.0	e12	37	6.6	5.2	4.9	1450	24	28
13	.36	e1.9	e1.2	e1.9	e13	40	5.3	4.9	4.1	448	20	26
14	.32	e1.6	e1.1	e1.6	e12	38	5.7	5.4	3.7	192	20	23
15	.37	e1.3	e1.1	e1.5	e15	36	7.4	7.3	4.2	104	17	21
16	.43	e1.1	e1.3	e1.9	e20	28	9.6	35	5.9	66	17	19
17	.43	e1.2	e1.1	e2.2	e22	22	11	11	144	42	15	19
18	.42	e1.3	e1.2	e2.1	e25	18	12	5.9	54	34	15	17
19	.47	e1.2	e1.3	e2.5	e29	17	20	4.6	32	30	14	16
20	.50	e1.1	e1.1	e2.7	e27	15	18	4.0	20	27	14	15
21	.51	e1.1	e1.2	e2.5	e26	14	14	3.8	12	26	13	14
22	.55	e1.0	e1.1	e2.3	e23	13	13	3.5	8.4	44	12	13
23	.50	e1.1	e1.2	e2.7	e20	13	12	3.4	6.2	35	13	12
24	.49	e1.0	e1.3	e2.9	e15	12	13	3.7	5.8	33	98	11
25	.54	e1.2	e1.4	e3.2	e14	12	10	4.0	4.9	254	202	11
26	.81	e1.4	e1.1	e2.8	e14	9.1	7.3	3.8	4.1	190	125	10
27	.77	e1.5	e.96	e4.7	16	7.1	5.9	3.7	4.5	93	75	9.9
28	1.9	e1.3	e1.0	e4.5	15	6.9	5.5	3.7	4.9	51	51	9.3
29	e1.3	e1.3	e1.2	e5.0	12	7.4	4.9	3.7	4.2	38	38	9.0
30	e1.6	e1.1	e1.3	e7.0	---	6.7	6.2	3.8	3.8	38	29	9.1
31	e1.4	---	e1.4	e9.0	---	6.7	---	3.6	---	33	25	---
TOTAL	17.81	39.30	39.86	83.2	436.8	594.2	256.1	181.3	462.1	4025.7	1423	761.3
MEAN	.57	1.31	1.29	2.68	15.1	19.2	8.54	5.85	15.4	130	45.9	25.4
MAX	1.9	1.9	1.9	9.0	29	43	20	35	144	1450	202	68
MIN	.00	.90	.96	1.3	7.0	6.7	4.9	3.4	3.7	4.7	12	9.0
1AC-FT	35	78	79	165	866	1180	508	360	917	7980	2820	1510

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1992, BY WATER YEAR (WY)

	MEAN	6.94	7.77	5.64	5.07	27.6	147	118	79.0	74.3	35.3	19.5	10.2
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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1950 - 1992

ANNUAL TOTAL	4340.96	8320.67	
ANNUAL MEAN	11.9	22.7	44.7
MEDIAN OF ANNUAL MEANS			30
HIGHEST ANNUAL MEAN			258
LOWEST ANNUAL MEAN			2.43
HIGHEST DAILY MEAN	543 Jun 1	1450 Jul 12	7990 Mar 27 1960
LOWEST DAILY MEAN	.00 Jan 1	.00 Oct 1	*.00 Dec 29 1949
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.33 Oct 8	.00 Dec 29 1949
INSTANTANEOUS PEAK FLOW		6310 Jul 12	9810 Mar 27 1960
INSTANTANEOUS PEAK STAGE		**13.29 Jul 12	16.86 Mar 27 1960
ANNUAL RUNOFF (AC-FT)	8610	16500	32410
10 PERCENT EXCEEDS	25	42	82
50 PERCENT EXCEEDS	1.3	6.5	5.7
90 PERCENT EXCEEDS	.00	1.1	.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 NE1/4NE1/4 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 (revised) 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 National Geodetic Vertical Datum of 1929 (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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.96	e1.7	e2.5	e6.0	13	25	21	19	11	7.8	57	48
2	.93	e1.9	e2.6	e6.4	13	22	20	16	13	12	58	46
3	1.1	e2.3	e2.3	e6.7	17	20	21	17	11	27	57	49
4	1.3	e2.9	e2.5	e6.0	17	22	19	16	11	102	45	52
5	.95	e2.5	e3.0	e6.2	e9.0	32	18	15	9.6	58	46	73
6	.85	e2.0	e3.7	e6.3	e9.6	38	17	14	13	45	62	49
7	1.1	e2.4	e4.1	e5.8	e9.8	43	16	13	11	119	83	65
8	1.1	e3.0	e3.5	e5.2	e9.0	55	14	13	15	76	200	88
9	1.0	e4.0	e3.1	e5.0	e10	e40	15	12	14	55	123	89
10	1.0	e3.7	e3.1	e5.4	e11	e42	15	12	41	55	79	74
11	1.1	e5.4	e3.0	e6.4	e12	56	14	13	34	126	59	61
12	1.2	e6.4	e3.3	e7.2	e14	61	12	13	22	1080	46	51
13	1.1	e7.6	e3.0	e6.2	e15	66	14	11	15	1430	41	46
14	.94	e6.9	e2.7	e5.4	16	62	16	12	13	362	39	51
15	1.2	e6.5	e2.7	e5.0	19	62	19	38	12	192	35	42
16	1.4	e6.0	e2.9	e6.0	26	61	23	271	11	127	33	38
17	1.2	e4.2	e3.2	e7.4	30	51	24	178	11	92	31	36
18	1.0	e4.5	e2.9	e7.0	33	43	28	88	44	72	28	32
19	1.1	e5.0	e3.3	e9.0	30	38	33	52	116	60	26	30
20	1.3	e5.2	e4.2	e12	32	36	36	34	61	52	24	29
21	1.5	e4.5	e4.0	e11	31	33	40	25	44	47	23	26
22	1.5	e4.0	e4.7	e10	31	31	40	19	34	57	21	25
23	1.3	e3.5	e4.5	e9.4	29	31	36	17	23	55	20	24
24	1.3	e3.0	e5.0	e10	32	30	36	16	16	54	33	21
25	1.2	e2.8	e5.2	e11	29	28	33	14	13	51	132	20
26	1.5	e3.0	e4.5	e10	28	25	31	15	10	259	295	19
27	1.6	e3.6	e3.8	e10	26	23	28	15	13	205	187	18
28	e2.0	e4.5	e4.5	e11	26	28	25	14	15	131	123	19
29	e1.3	e3.4	e5.4	e11	25	29	23	13	15	101	87	18
30	e1.5	e2.7	e5.8	e12	---	28	21	12	10	73	66	17
31	e1.8	---	e5.6	13	---	24	---	11	---	63	55	---
TOTAL	38.33	119.1	114.6	249.0	602.4	1185	708	1028	681.6	5245.8	2214	1256
MEAN	1.24	3.97	3.70	8.03	20.8	38.2	23.6	33.2	22.7	169	71.4	41.9
MAX	2.0	7.6	5.8	13	33	66	40	271	116	1430	295	89
MIN	.85	1.7	2.3	5.0	9.0	20	12	11	9.6	7.8	20	17
AC-FT	76	236	227	494	1190	2350	1400	2040	1350	10410	4390	2490

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1992, BY WATER YEAR (WY)

	MEAN	15.4	18.4	11.6	11.4	46.2	236	175	129	133	67.6	31.4	19.6
	MAX	83.4	69.8	46.6	57.9	229	1333	818	562	1237	729	327	213
	(WY)	1974	1983	1987	1973	1973	1960	1984	1962	1962	1962	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1958 - 1992

ANNUAL TOTAL	6889.72	13441.83	
ANNUAL MEAN	18.9	36.7	74.6
MEDIAN OF ANNUAL MEANS			56
HIGHEST ANNUAL MEAN			343
LOWEST ANNUAL MEAN			3.75
HIGHEST DAILY MEAN	708 Jun 2	1430 Jul 13	14800 Mar 28 1960
LOWEST DAILY MEAN	.00 Aug 25	.85 Oct 6	*.00 Oct 1 1957
ANNUAL SEVEN-DAY MINIMUM	.01 Aug 25	1.0 Oct 5	.00 Oct 1 1957
INSTANTANEOUS PEAK FLOW		4220 Jul 12	15700 Mar 27 1960
INSTANTANEOUS PEAK STAGE		11.03 Jul 12	*15.10 Mar 27 1960
ANNUAL RUNOFF (AC-FT)	13670	26660	54070
10 PERCENT EXCEEDS	32	64	154
50 PERCENT EXCEEDS	4.5	16	15
90 PERCENT EXCEEDS	.61	2.4	.00

e Estimated.

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

** Site and datum then in use.

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.--450 mi², approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 4,687.70 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Diversions for irrigation of about 4,700 acres above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	1.7	2.1	2.0	2.3	3.4	3.3	2.6	2.7	2.6	1.7	1.9
2	2.1	2.1	2.2	2.1	2.3	3.5	3.3	2.6	2.6	2.9	1.7	1.9
3	2.1	1.8	2.3	2.1	2.3	3.6	3.2	2.5	2.6	2.7	1.7	1.8
4	2.1	1.8	2.3	2.1	2.3	3.5	3.1	2.6	2.7	2.6	1.7	1.8
5	2.1	1.9	2.3	2.1	2.3	3.6	3.1	2.5	2.9	2.5	1.7	1.8
6	2.2	1.9	2.3	2.1	2.4	3.6	2.9	2.4	2.7	2.6	1.7	1.8
7	2.2	1.9	2.3	e2.1	2.4	3.4	2.8	2.3	2.4	2.5	1.7	1.8
8	2.1	1.9	2.4	e2.1	2.4	e3.4	2.8	2.3	2.3	2.5	1.6	1.8
9	2.1	2.0	2.3	2.0	2.3	e3.7	2.8	2.3	2.2	2.5	1.6	1.9
10	2.0	2.1	2.3	2.0	2.3	3.8	2.8	2.5	2.1	2.5	1.7	1.8
11	2.0	2.1	2.3	2.0	2.3	4.0	2.7	2.4	2.1	2.5	1.7	1.8
12	2.0	2.2	2.3	2.1	2.4	4.3	2.8	2.3	2.1	2.6	1.7	1.8
13	1.9	2.4	2.3	2.0	2.4	4.2	2.8	2.3	2.1	2.6	1.7	1.8
14	1.9	2.6	2.2	e2.1	2.5	4.4	2.8	2.3	2.2	2.5	1.7	1.9
15	2.0	2.6	2.2	e2.2	2.5	4.2	2.7	2.4	2.7	2.3	1.7	1.8
16	1.9	2.1	2.2	2.3	2.5	4.2	2.7	2.4	2.5	2.2	1.8	1.8
17	1.8	2.1	2.2	2.2	2.5	4.1	2.7	2.3	2.4	2.2	1.7	1.8
18	1.9	2.1	2.2	2.2	3.0	4.2	2.7	2.2	2.5	2.2	1.7	1.8
19	1.9	2.1	2.2	2.2	2.9	4.3	2.9	2.1	2.5	2.1	1.7	1.8
20	1.9	2.1	2.1	2.2	2.8	4.1	2.8	2.1	2.5	2.2	1.7	1.8
21	1.8	2.1	2.1	2.1	2.8	4.0	2.7	2.6	2.4	2.4	1.7	1.8
22	1.8	2.2	2.1	2.2	2.9	3.9	2.8	3.2	2.3	2.3	1.6	1.8
23	1.9	2.1	2.0	2.3	3.1	3.9	2.9	2.6	2.2	2.2	1.8	1.7
24	1.8	2.1	2.0	2.3	3.1	3.9	2.8	2.7	2.2	2.2	1.9	1.7
25	1.8	2.2	2.0	2.3	3.2	3.7	2.8	2.8	2.7	2.2	2.0	1.8
26	1.8	2.5	2.0	2.3	3.2	3.6	2.8	2.6	2.6	2.1	2.2	1.8
27	1.8	2.4	1.9	2.3	3.4	3.6	2.8	2.5	2.6	2.0	2.0	1.8
28	e1.8	2.3	1.9	2.3	3.4	3.5	2.7	2.5	2.6	1.9	1.9	1.8
29	e1.8	e2.3	2.0	2.3	3.5	3.5	2.7	2.5	2.6	1.8	1.9	1.8
30	1.7	e2.2	2.0	2.2	---	3.4	2.7	2.4	2.7	1.8	1.9	1.8
31	1.6	---	2.0	2.3	---	3.4	---	2.5	---	1.7	1.9	---
TOTAL	59.9	63.9	67.0	67.1	77.7	117.9	85.4	76.3	73.7	71.9	54.7	54.2
MEAN	1.93	2.13	2.16	2.16	2.68	3.80	2.85	2.46	2.46	2.32	1.76	1.81
MAX	2.2	2.6	2.4	2.3	3.5	4.4	3.3	3.2	2.9	2.9	2.2	1.9
MIN	1.6	1.7	1.9	2.0	2.3	3.4	2.7	2.1	2.1	1.7	1.6	1.7
AC-FT	119	127	133	133	154	234	169	151	146	143	108	108

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 1992, BY WATER YEAR (WY)

MEAN	2.70	2.94	2.96	3.14	4.43	5.54	5.40	4.58	3.99	3.36	2.59	2.24
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 1991 CALENDAR YEAR	FOR 1992 WATER YEAR	WATER YEARS 1956 - 1992
ANNUAL TOTAL	1259.1	869.7	
ANNUAL MEAN	3.45	2.38	3.65
HIGHEST ANNUAL MEAN			5.77
LOWEST ANNUAL MEAN			2.14
HIGHEST DAILY MEAN	17 May 28	4.4 Mar 14	352 Jul 18 1969
LOWEST DAILY MEAN	1.6 Oct 31	1.6 Oct 31	.54 Aug 9 1975
ANNUAL SEVEN-DAY MINIMUM	1.7 Oct 26	1.7 Aug 3	.58 Aug 8 1975
INSTANTANEOUS PEAK FLOW		5.9 Mar 14	2120 Aug 16 1977
INSTANTANEOUS PEAK STAGE		*2.79 Jan 8	8.28 Aug 16 1977
ANNUAL RUNOFF (AC-FT)	2500	1730	2640
10 PERCENT EXCEEDS	5.9	3.2	5.5
50 PERCENT EXCEEDS	2.5	2.3	3.0
90 PERCENT EXCEEDS	1.9	1.8	1.8

e Estimated.

* Backwater from ice.

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 National Geodetic Vertical Datum of 1929.

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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	e23	e30	26	30	44	33	20	11	22	14	15
2	21	e22	e30	26	32	41	33	20	13	25	13	16
3	21	e22	e29	26	31	40	33	21	12	25	15	16
4	23	22	28	26	32	41	32	20	12	24	16	17
5	23	26	28	27	31	47	31	13	11	24	16	16
6	24	26	29	28	33	45	32	15	11	22	16	17
7	24	25	31	30	32	45	31	15	11	22	15	17
8	24	26	32	e26	30	47	31	14	11	20	15	16
9	24	28	29	e24	31	45	31	12	9.9	17	14	16
10	24	30	28	23	32	44	32	15	10	18	14	17
11	23	29	30	23	33	43	31	15	10	18	14	17
12	24	28	29	24	33	44	31	14	10	20	14	18
13	24	30	30	25	33	43	32	13	9.6	20	15	9.7
14	24	30	e29	23	36	43	32	12	9.5	20	15	22
15	23	30	e25	e22	33	43	33	13	9.8	19	16	17
16	23	29	e26	e23	35	41	31	12	11	16	14	17
17	24	29	e29	e23	37	39	32	11	12	15	15	18
18	24	29	28	e24	37	39	33	10	13	16	15	18
19	24	29	28	e24	35	38	32	8.9	17	15	14	18
20	25	30	e28	24	38	39	33	7.2	14	15	14	18
21	24	31	e27	25	39	39	32	7.3	13	17	12	18
22	24	31	e25	25	39	39	32	11	13	18	11	11
23	25	30	28	26	43	38	31	10	13	18	12	19
24	25	26	26	27	48	38	29	8.5	12	18	12	11
25	25	28	27	27	46	38	26	8.7	14	16	13	12
26	24	32	26	26	44	37	25	9.3	14	16	15	12
27	25	32	26	27	45	37	25	9.4	18	15	15	13
28	25	32	27	28	44	37	25	9.5	29	15	15	13
29	24	33	26	29	43	35	23	8.9	40	15	15	14
30	24	31	25	30	---	35	21	8.9	25	16	14	14
31	e23	---	25	31	---	35	---	10	---	15	14	---
TOTAL	735	849	864	798	1055	1259	908	382.6	418.8	572	442	472.7
MEAN	23.7	28.3	27.9	25.7	36.4	40.6	30.3	12.3	14.0	18.5	14.3	15.8
MAX	25	33	32	31	48	47	33	21	40	25	16	22
MIN	21	22	25	22	30	35	21	7.2	9.5	15	11	9.7
AC-FT	1460	1680	1710	1580	2090	2500	1800	759	831	1130	877	938

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1992, BY WATER YEAR (WY)

	MEAN	18.7	29.2	33.4	30.0	37.5	52.8	44.6	31.1	23.6	16.8	15.3	14.1
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	1967	1951	1951	1951	
MIN	3.86	13.2	17.0	10.0	21.6	31.7	19.7	12.3	3.11	3.50	5.39	2.83	
(WY)	1957	1990	1990	1949	1989	1991	1967	1992	1956	1956	1964	1956	

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1947 - 1992

ANNUAL TOTAL	11402	8756.1	
ANNUAL MEAN	31.2	23.9	28.9
HIGHEST ANNUAL MEAN			42.8
LOWEST ANNUAL MEAN			18.6
HIGHEST DAILY MEAN	485	48	1080
LOWEST DAILY MEAN	14	7.2	1.6
ANNUAL SEVEN-DAY MINIMUM	15	8.8	2.3
INSTANTANEOUS PEAK FLOW (STAGE)		49 (3.60)	4950
INSTANTANEOUS PEAK STAGE		*4.50	10.30
ANNUAL RUNOFF (AC-FT)	22620	17370	20920
10 PERCENT EXCEEDS	44	37	50
50 PERCENT EXCEEDS	26	24	26
90 PERCENT EXCEEDS	17	12	8.9

e Estimated.

* Backwater from ice.

NIOBRARA RIVER BASIN

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 National Geodetic Vertical Datum of 1929.

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, 18,000 acre-ft July 8, elevation, 3,997.57 ft; minimum observed, 6,470 acre-ft Sept. 6, elevation, 3,984.97 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sep. 30	3,986.03	7,170	-
Oct. 31	3,987.90	8,530	+1,360
Nov. 30	3,990.00	10,270	+1,740
Dec. 31	3,991.68	11,800	+1,530
CAL YR 1991.....	-	-	+3,750
Jan. 31	3,992.95	13,020	+1,220
Feb. 29	3,994.57	14,660	+1,640
Mar. 31	3,996.39	16,640	+1,980
Apr. 30	3,997.28	17,660	+1,020
May 31	3,997.11	17,460	-200
June 30	3,997.32	17,710	+250
July 31	3,993.13	13,200	-4,510
Aug. 31	3,987.78	8,440	-4,760
Sept. 30	3,986.01	7,160	-1,280
WTR YR 1992.....	-	-	-10

NIOBRARA RIVER BASIN

06459175 SNAKE RIVER AT DOUGHBOY, NE

LOCATION.--Lat 42°36'51", long 101°16'38", in NE1/4NW1/4, sec .2, T.30 N., R.34 W., Cherry County, Hydrologic Unit 10150005, on left bank 21 ft downstream from centerline of Doughboy bridge, 24 mi southwest of Nenzel and at mile 28.0.

DRAINAGE AREA.--405 mi², approximately, of which about 26 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1981 to current year. Discharge measurements only, July 1963, April 1980, May-September 1981.

GAGE.--Water stage recorder. Datum of gage is 3,097.92 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1988, at datum 1.00 ft higher.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	147	148	146	156	183	165	136	148	180	145	131	143
2	142	101	e160	156	190	161	142	144	169	135	127	145
3	137	e130	e167	156	184	162	150	145	162	137	133	141
4	152	e150	171	155	176	166	154	142	171	134	200	136
5	148	165	177	165	171	188	154	146	180	151	156	169
6	138	174	177	164	160	206	153	147	170	172	147	181
7	140	157	176	177	150	203	151	144	166	162	144	200
8	144	158	181	169	145	189	151	147	163	136	140	176
9	149	174	173	e160	147	181	153	147	162	124	139	165
10	150	175	167	165	147	160	152	144	163	121	137	158
11	152	182	165	175	144	170	145	147	162	123	136	155
12	152	171	166	173	133	181	135	147	161	124	139	158
13	147	170	160	167	e140	195	146	145	161	127	139	159
14	135	163	146	161	151	187	154	149	188	129	139	155
15	140	157	146	133	155	174	163	147	176	127	137	157
16	149	152	154	e130	157	167	160	149	172	121	140	157
17	150	158	156	136	160	153	153	145	168	121	146	158
18	141	158	153	135	161	142	159	148	169	123	149	158
19	146	154	150	135	140	146	148	146	180	128	146	151
20	149	153	157	144	149	155	132	143	200	143	146	157
21	157	156	154	149	150	156	132	148	178	150	141	157
22	157	152	160	149	158	150	141	171	167	154	144	152
23	154	154	158	144	168	157	144	166	160	147	151	153
24	152	157	158	150	174	154	136	158	152	145	160	152
25	153	156	148	156	179	150	136	156	141	154	175	149
26	160	159	149	157	179	149	139	146	134	141	170	148
27	168	163	148	156	175	146	137	146	154	135	162	150
28	164	166	150	160	173	145	142	151	150	131	157	150
29	147	165	150	168	167	144	148	154	143	141	142	153
30	138	153	148	169	---	141	150	155	139	137	138	158
31	153	---	154	178	---	141	---	157	---	128	139	---
TOTAL	4611	4731	4925	4848	4666	5084	4396	4628	4941	4246	4550	4701
MEAN	149	158	159	156	161	164	147	149	165	137	147	157
MAX	168	182	181	178	190	206	163	171	200	172	200	200
MIN	135	101	146	130	133	141	132	142	134	121	127	136
AC-FT	9150	9380	9770	9620	9260	10080	8720	9180	9800	8420	9020	9320

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 1992, BY WATER YEAR (WY)

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
MEAN	161	163	164	164	169	174	169	174	167	152	158
MAX	174	184	182	182	179	197	203	218	195	180	176
(WY)	1986	1987	1987	1984	1990	1988	1986	1983	1991	1988	1989
MIN	148	149	147	150	152	154	147	149	144	137	140
(WY)	1990	1990	1990	1982	1982	1982	1992	1992	1985	1989	1990

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1982 - 1992

ANNUAL TOTAL	59032	56327	
ANNUAL MEAN	162	154	164
HIGHEST ANNUAL MEAN			173
LOWEST ANNUAL MEAN			154
HIGHEST DAILY MEAN	307	206	338
LOWEST DAILY MEAN	101	101	79
ANNUAL SEVEN-DAY MINIMUM	126	125	124
INSTANTANEOUS PEAK FLOW (STAGE)		245	367 (1.88)
INSTANTANEOUS PEAK STAGE		1.46	*3.92
ANNUAL RUNOFF (AC-FT)	117100	111700	118900
10 PERCENT EXCEEDS	184	174	187
50 PERCENT EXCEEDS	158	152	161
90 PERCENT EXCEEDS	138	136	142

e Estimated.

* Backwater from ice.

NIOBRARA RIVER BASIN

47

06459300 MERRITT RESERVOIR NEAR BURGE, NE

LOCATION.--Lat 42°38'06", long 100°2'18", in SW1/4NW1/4 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 National Geodetic Vertical Datum of 1929.

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 75,080 acre-ft June 19, elevation, 2,946.2 ft; minimum observed 42,010 acre-ft Oct. 1, elevation, 2,932.3 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	2,932.1	41,640	-
Oct. 31	2,939.1	56,250	+14,610
Nov. 30	2,944.0	68,830	+12,580
Dec. 31	2,943.9	68,560	-270
CAL YR 1991	-	-	-270
Jan. 31	2,944.0	68,830	+270
Feb. 29	2,944.0	68,830	0
Mar. 31	2,945.0	71,620	+2,790
Apr. 30	2,946.1	74,780	+3,160
May 31	2,946.1	74,780	0
June 30	2,946.1	74,780	0
July 31	2,941.5	62,190	-12,590
Aug. 31	2,937.7	53,010	-9,180
Sept. 30	2,939.1	56,250	+3,240
WTR YR 1992	-	-	+14,610

NIOBRARA RIVER BASIN
06459500 SNAKE RIVER NEAR BURGE, NE

LOCATION.--Lat 42°39'15", long 100°51'28", in NE1/4 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.--660 mi², approximately, of which about 44 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 National Geodetic Vertical Datum of 1929, (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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	13	138	216	288	265	171	264	116	93	57	57
2	16	13	106	216	288	265	163	265	120	68	57	58
3	14	13	193	216	288	265	167	260	140	66	57	59
4	16	13	313	215	288	268	165	256	152	65	57	58
5	15	12	318	217	288	268	168	252	195	63	57	59
6	15	12	285	217	256	242	168	227	192	56	57	59
7	15	11	291	215	210	206	168	150	186	42	57	59
8	14	12	290	212	210	208	165	104	179	37	57	59
9	13	12	204	211	210	208	166	117	193	47	57	59
10	13	11	214	210	228	206	169	108	198	54	56	59
11	12	11	247	210	288	207	168	87	193	54	55	60
12	12	11	248	212	243	206	168	45	157	54	54	61
13	13	11	284	210	210	207	167	44	138	54	54	61
14	13	11	302	224	243	207	167	44	153	54	54	61
15	12	38	268	237	265	206	165	47	170	57	54	61
16	12	63	180	210	270	208	165	52	174	57	55	61
17	12	64	185	210	270	208	175	54	185	57	55	61
18	12	69	244	210	270	211	170	64	187	57	55	61
19	12	74	278	209	270	210	173	66	194	57	54	61
20	12	72	257	246	252	211	176	77	202	57	54	60
21	12	72	244	268	231	213	173	80	217	58	54	59
22	12	72	244	280	231	211	171	82	214	59	54	59
23	12	72	206	288	231	211	166	95	216	59	54	59
24	12	72	203	258	248	211	161	99	217	59	55	59
25	12	72	239	207	270	210	168	101	208	59	57	59
26	12	100	239	207	270	210	174	100	202	59	57	61
27	12	134	239	207	265	210	208	102	200	59	57	61
28	13	138	237	229	265	205	207	101	195	59	57	61
29	13	139	235	283	264	195	216	116	152	58	57	61
30	13	138	223	283	---	194	243	116	128	57	57	61
31	14	---	216	288	---	196	---	113	---	57	57	---
TOTAL	405	1555	7370	7121	7410	6748	5251	3688	5373	1792	1729	1794
MEAN	13.1	51.8	238	230	256	218	175	119	179	57.8	55.8	59.8
MAX	16	139	318	288	288	268	243	265	217	93	57	61
MIN	12	11	106	207	210	194	161	44	116	37	54	57
AC-FT	803	3080	14620	14120	14700	13380	10420	7320	10660	3550	3430	3560

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1992, BY WATER YEAR (WY)

	MEAN	88.3	177	223	230	247	216	189	183	151	62.6	53.5	67.2
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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1963 - 1992

ANNUAL TOTAL	53635	50236	
ANNUAL MEAN	147	137	157
HIGHEST ANNUAL MEAN			261
LOWEST ANNUAL MEAN			103
HIGHEST DAILY MEAN	318	Dec 5	732
LOWEST DAILY MEAN	11	Nov 7	5.8
ANNUAL SEVEN-DAY MINIMUM	11	Nov 7	5.9
INSTANTANEOUS PEAK FLOW			3170
INSTANTANEOUS PEAK STAGE			6.96
ANNUAL RUNOFF (AC-FT)	106400	99640	113600
10 PERCENT EXCEEDS	269	264	277
50 PERCENT EXCEEDS	152	139	194
90 PERCENT EXCEEDS	14	14	15

NIOBRARA RIVER BASIN
06461000 MINNECHADUZA CREEK AT VALENTINE, NE

LOCATION.--Lat 42°53'10", long 100°33'10", in SW1/4 sec.30, T.34 N., R.27 W., Cherry County, Hydrologic Unit 10150004, on right bank 500 ft downstream from powerplant in city park at north edge of Valentine and 5 mi (revised) upstream from mouth.

DRAINAGE AREA.--390 mi², approximately, of which about 200 mi² contributes directly to surface runoff.

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

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

GAGE.--Water-stage recorder. Elevation of gage is 2,470 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharge. Records good. Flow regulated by powerplant 500 ft above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	27	24	30	49	53	31	26	34	21	9.3	35
2	23	20	29	30	55	49	31	12	25	25	20	30
3	24	22	30	29	64	47	31	24	23	11	35	28
4	22	25	35	29	74	46	31	36	26	24	27	27
5	9.2	28	37	30	83	52	30	29	25	28	30	7.0
6	23	28	37	30	73	56	30	27	11	28	33	20
7	35	26	41	31	63	58	29	21	28	35	46	32
8	27	29	41	27	54	61	29	16	39	30	45	40
9	27	37	40	15	53	69	29	14	29	28	46	34
10	23	41	41	23	51	68	29	22	16	25	45	36
11	27	39	41	28	42	65	29	31	35	10	40	30
12	9.2	41	40	30	34	64	28	20	29	22	33	25
13	24	41	42	33	42	61	27	24	9.6	35	31	31
14	35	41	36	24	43	58	29	20	54	29	30	41
15	28	42	29	15	42	55	25	22	36	26	14	30
16	22	42	36	17	41	51	38	8.1	51	25	23	29
17	27	43	39	28	44	47	27	17	31	16	37	28
18	20	42	32	29	47	44	34	30	31	6.2	29	27
19	10	40	32	31	46	41	34	19	35	15	28	7.5
20	24	38	35	32	45	40	41	19	38	33	20	20
21	35	36	34	32	47	39	34	21	41	25	7.8	35
22	27	35	33	33	49	37	32	21	61	27	12	27
23	28	34	32	30	50	36	34	5.3	35	28	19	22
24	25	34	30	35	52	35	31	18	37	25	33	21
25	27	32	30	36	56	35	21	24	34	15	32	22
26	9.1	42	31	35	60	34	30	31	35	26	32	4.7
27	25	38	28	36	62	33	38	27	18	33	33	14
28	32	34	31	36	62	33	32	25	28	29	33	29
29	25	35	32	38	58	32	28	27	40	28	24	24
30	31	27	29	42	---	32	28	9.6	31	21	31	23
31	16	---	28	45	---	31	---	20	---	25	39	---
TOTAL	744.5	1039	1055	939	1541	1462	920	666.0	965.6	754.2	917.1	779.2
MEAN	24.0	34.6	34.0	30.3	53.1	47.2	30.7	21.5	32.2	24.3	29.6	26.0
MAX	35	43	42	45	83	69	41	36	61	35	46	41
MIN	9.1	20	24	15	34	31	21	5.3	9.6	6.2	7.8	4.7
AC-FT	1480	2060	2090	1860	3060	2900	1820	1320	1920	1500	1820	1550

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 -1992, BY WATER YEAR (WY)

MEAN	26.1	30.2	29.1	27.2	36.8	56.6	53.0	47.1	36.3	24.2	20.9	20.9
MAX	33.9	38.8	39.4	41.4	72.6	114	107	96.5	117	76.4	35.6	43.6
(WY)	1950	1957	1955	1984	1984	1978	1977	1983	1962	1983	1956	1966
MIN	16.4	20.2	23.6	15.1	23.6	30.3	28.9	21.5	11.2	9.84	9.41	10.7
(WY)	1977	1977	1977	1949	1975	1975	1976	1992	1976	1974	1976	1976

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1948 - 1992

ANNUAL TOTAL	12687.0	11782.6	34.1
ANNUAL MEAN	34.8	32.2	21.0
HIGHEST ANNUAL MEAN			44.4 1983
LOWEST ANNUAL MEAN			21.0 1976
HIGHEST DAILY MEAN	98 Jun 10	83 Feb 5	814 Mar 23 1960
LOWEST DAILY MEAN	4.7 Aug 31	4.7 Sep 26	2.3 Jul 13 1985
ANNUAL SEVEN-DAY MINIMUM	13 Aug 27	18 May 19	5.3 Jul 11 1985
INSTANTANEOUS PEAK FLOW (STAGE)		115 (2.45) Feb 5	1100 Mar 22 1960
INSTANTANEOUS PEAK STAGE		2.47 Jun 22	8.00 Mar 22 1960
ANNUAL RUNOFF (AC-FT)	25160	23370	24690
10 PERCENT EXCEEDS	55	47	55
50 PERCENT EXCEEDS	33	31	29
90 PERCENT EXCEEDS	19	19	15

NIOBRARA RIVER BASIN
06461500 NIOBRARA RIVER NEAR SPARKS, NE

LOCATION.--Lat 42°54'10", long 100°21'40", in SE1/4 sec.22, T.34 N., R.26 W., Cherry County, Hydrologic Unit 10150004, on left bank 18 ft downstream from highway bridge, 2.2 mi downstream from Big Beaver Creek, 5.5 mi downstream from Minnechaduza Creek, 6.5 mi southwest of Sparks, and at mile 342.

DRAINAGE AREA.--8,090 mi², approximately.

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 National Geodetic Vertical Datum of 1929.

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 1991 TO SEPTEMBER 1992

DAY	MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	487	e390	e660	786	888	910	779	767	667	662	634	613
2	491	380	e660	798	898	896	741	728	692	622	642	598
3	511	367	e653	799	906	880	785	737	671	557	616	593
4	549	e480	e680	779	929	933	764	748	714	575	617	584
5	533	e560	e760	789	938	1070	761	738	741	615	667	611
6	543	e537	e820	799	920	1030	768	734	779	595	675	634
7	547	e470	874	816	852	933	762	694	753	629	730	706
8	531	e540	905	e780	839	937	754	610	762	560	660	671
9	535	e640	878	763	813	1090	753	590	717	532	624	616
10	536	e580	764	723	810	998	737	606	707	535	603	610
11	538	e600	850	778	880	945	735	622	724	526	617	589
12	512	e620	834	807	917	963	699	566	700	554	577	575
13	527	635	849	820	800	951	712	535	607	604	561	591
14	554	618	e800	810	805	955	731	535	872	586	564	609
15	539	623	e780	657	851	943	766	552	763	576	546	597
16	535	655	e760	620	848	912	783	538	729	545	560	591
17	549	691	753	719	884	911	742	534	731	505	590	585
18	551	689	e760	813	928	919	779	563	771	478	588	573
19	541	683	e740	827	865	911	741	542	811	501	571	552
20	543	682	e800	815	860	894	740	544	837	543	588	558
21	576	672	838	861	839	872	704	555	966	560	546	583
22	563	661	814	844	838	880	713	594	869	649	543	574
23	569	676	824	857	855	848	724	611	791	629	549	560
24	574	653	743	846	871	839	699	610	816	600	642	553
25	578	642	824	801	899	858	670	637	792	570	703	549
26	553	650	814	802	914	830	688	655	750	583	666	543
27	576	706	825	816	914	834	707	637	725	591	697	546
28	e540	e700	804	798	917	810	727	643	748	568	658	570
29	e480	e680	812	847	923	809	729	632	764	588	607	566
30	e430	e660	821	887	---	790	737	624	670	611	602	566
31	e400	---	800	892	---	788	---	630	---	604	618	---
TOTAL	16491	18140	24499	24749	25401	28139	22130	19311	22639	17853	19061	17666
MEAN	532	605	790	798	876	908	738	623	755	576	615	589
MAX	578	706	905	892	938	1090	785	767	966	662	730	706
MIN	400	367	653	620	800	788	670	534	607	478	543	543
AC-FT	32710	35980	48590	49090	50380	55810	43890	38300	44900	35410	37810	35040

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1992, BY WATER YEAR (WY)

MEAN	675	754	756	770	882	967	895	873	801	631	597	614
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

OR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1946 - 1992

ANNUAL TOTAL	262298	256079	
ANNUAL MEAN	719	700	767
HIGHEST ANNUAL MEAN			911
LOWEST ANNUAL MEAN			598
HIGHEST DAILY MEAN	1420	1090	5000
LOWEST DAILY MEAN	367	367	100
ANNUAL SEVEN-DAY MINIMUM	418	418	327
INSTANTANEOUS PEAK FLOW (STAGE)		1150 (3.10)	10200 (6.73)
INSTANTANEOUS PEAK STAGE		*3.26	10.06
ANNUAL RUNOFF (AC-FT)	520300	507900	555800
10 PERCENT EXCEEDS	908	885	1020
50 PERCENT EXCEEDS	753	691	760
90 PERCENT EXCEEDS	485	543	498

e Estimated.

* Ice jam.

NIOBRARA RIVER BASIN
06461500 NIOBRARA RIVER NEAR SPARKS, NE--Continued

WATER QUALITY RECORDS

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

PERIOD OF DAILY RECORD.-

SPECIFIC CONDUCTANCE: October 1982 to current year.

WATER TEMPERATURES: October 1982 to current year.

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.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 280 microsiemens Nov. 3; minimum daily, 180 microsiemens Dec. 25.

WATER TEMPERATURES: Maximum daily, 30.0°C Aug. 9; minimum daily, 1.0°C Feb. 12.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS-CHARGE, INST. (FT³/S) (00061)	SPECIFIC CON-DUCT-ANCE (µS/CM) (00095)	PH	TEMPER-ATURE WATER (°C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	HARDNESS 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)	
				WATER WHOLE FIELD (STAND-ARD UNITS) (00400)								
OCT	09...	0905	506	233	8.6	11.0	6	94	31	4.1	9.2	0.4
NOV	06...	0840	537	--	8.1	0.5	7	100	33	4.5	10	0.4
DEC	03...	1450	653	263	8.6	0.5	12	100	33	4.4	10	0.4
JAN	02...	1040	803	231	8.5	0.5	5	91	30	3.9	8.3	0.4
FEB	26...	1605	900	225	8.5	9.5	15	91	30	4.0	8.8	0.4
MAR	25...	0830	899	231	8.5	5.5	10	97	32	4.2	9.1	0.4
APR	15...	0855	731	218	8.3	11.5	5	91	30	3.9	8.3	0.4
MAY	21...	0840	528	228	8.7	19.5	5	96	32	3.9	8.8	0.4
JUN	15...	1510	703	218	8.7	19.5	10	93	31	3.9	8.3	0.4
JUL	07...	0815	630	229	8.5	21.5	--	91	30	3.9	9.8	0.4
AUG	12...	0900	546	229	8.6	18.0	3	97	32	4.1	9.1	0.4
SEP	16...	0910	565	221	8.5	18.0	7	87	29	3.6	8.7	0.4
DATE		POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CaCO₃) (90410)	SULFATE DIS-SOLVED (MG/L AS SO₄) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SiO₂) (00955)	SOLIDS, 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	09...	6.7	116	11	2.4	0.20	54	190	0.26	259	--	<0.010
NOV	06...	5.8	119	6.0	2.6	0.30	54	191	0.26	277	--	<0.010
DEC	03...	6.2	122	7.0	1.8	0.30	58	204	0.28	359	2.09	0.010
JAN	02...	6.6	104	5.8	1.0	0.30	52	173	0.24	375	0.590	0.010
FEB	26...	6.0	108	6.0	2.3	0.40	53	177	0.24	431	--	<0.010
MAR	25...	5.1	108	9.8	2.6	0.40	51	184	0.25	446	0.960	0.010
APR	15...	6.5	104	6.4	2.3	0.30	49	171	0.23	337	--	<0.010
MAY	21...	6.5	111	6.2	2.1	<0.10	53	180	0.25	257	--	<0.010
JUN	15...	6.5	107	5.3	1.2	0.40	49	171	0.23	324	--	<0.010
JUL	07...	7.2	113	5.3	1.1	0.40	52	179	0.24	304	--	<0.010
AUG	12...	6.0	115	4.8	1.3	0.50	51	179	0.24	263	--	<0.010
SEP	16...	6.4	109	5.4	1.2	0.30	56	177	0.24	270	--	<0.010

NIOBRARA RIVER BASIN

06461500 NIOBRARA RIVER NEAR SPARKS, NE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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 09...	0.360	<0.010	--	<0.20	--	0.090	0.050	0.040	20	7	<1
NOV 06...	0.690	0.020	--	<0.20	--	0.130	0.090	0.080	30	12	4
DEC 03...	2.10	0.040	--	<0.20	--	0.210	0.160	0.150	30	12	3
JAN 02...	0.600	0.010	--	<0.20	--	0.120	0.110	0.070	30	15	2
FEB 26...	0.410	<0.010	--	0.20	0.61	0.170	0.060	0.060	70	23	3
MAR 25...	0.970	0.080	0.72	0.80	1.8	--	0.070	0.070	30	14	<1
APR 15...	0.350	0.020	--	<0.20	--	0.130	0.050	0.050	20	7	<1
MAY 21...	0.200	0.020	--	<0.20	--	0.090	0.050	0.050	30	7	2
JUN 15...	0.180	0.030	--	<0.20	--	0.110	0.090	0.070	30	13	4
JUL 07...	0.200	0.030	--	<0.20	--	0.130	0.020	0.040	30	9	3
AUG 12...	0.160	0.010	--	<0.20	--	0.100	0.040	0.040	30	9	2
SEP 16...	0.240	0.020	--	<0.20	--	0.150	0.100	0.050	30	7	2

SPECIFIC CONDUCTANCE, µS/CM @ 25 DEGREES CELSIUS WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	232	232	213	220	217	224	226	227	231	226	222	228
2	228	266	214	226	222	228	227	218	227	230	226	224
3	231	280	231	222	224	227	223	219	226	233	252	223
4	226	270	232	223	225	225	222	229	224	237	232	223
5	228	250	221	222	227	222	223	226	224	234	217	219
6	235	240	218	220	231	222	225	216	220	234	232	---
7	234	235	222	218	232	225	224	229	218	236	228	221
8	231	238	221	218	232	231	225	226	224	240	232	226
9	229	235	219	191	230	229	222	224	222	237	235	228
10	231	222	225	226	228	232	224	225	224	235	233	230
11	233	223	223	220	229	237	223	232	226	232	235	225
12	246	230	222	220	220	236	221	231	225	231	235	224
13	230	233	224	221	225	239	225	242	223	229	231	230
14	232	240	221	223	226	242	224	232	230	230	232	231
15	243	246	227	209	226	242	214	239	223	223	225	224
16	236	244	230	235	222	241	227	227	227	228	226	227
17	233	235	253	226	220	239	220	231	226	227	232	225
18	235	237	229	225	217	238	225	238	229	230	224	228
19	231	235	223	227	217	236	224	237	224	225	225	226
20	230	236	222	228	216	235	236	232	215	229	220	228
21	239	236	223	224	219	233	234	234	221	222	219	230
22	231	238	223	220	222	235	234	232	226	220	222	226
23	230	237	222	221	225	232	224	223	227	228	227	229
24	236	236	225	218	224	235	224	221	232	224	233	226
25	231	235	180	219	224	230	225	223	234	221	221	226
26	234	234	222	223	227	231	227	233	231	224	222	225
27	234	233	220	217	226	229	231	227	225	236	226	231
28	225	230	221	217	226	227	225	231	227	223	222	228
29	216	227	220	217	225	228	220	230	226	224	223	225
30	213	239	223	219	---	226	222	222	221	228	227	222
31	232	---	223	217	---	---	---	222	---	226	232	---
MEAN	231	239	222	220	224	---	225	228	225	229	228	---

NIOBRARA RIVER BASIN
06461500 NIOBRARA RIVER NEAR SPARKS, NE--Continued
WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	3.0	3.0	4.0	5.0	10.0	10.0	21.0	18.0	21.0	27.0	21.0
2	20.0	2.0	3.0	5.0	6.0	13.0	5.0	20.0	20.0	19.0	28.0	23.0
3	15.0	3.0	2.0	3.0	7.0	14.0	15.0	19.0	24.0	23.0	24.0	23.0
4	15.0	4.0	5.0	3.0	4.0	11.0	18.0	20.0	25.0	26.0	21.0	22.0
5	12.0	5.0	3.0	7.0	6.0	11.0	18.0	21.0	18.0	24.0	23.0	23.0
6	14.0	3.0	5.0	5.0	6.0	11.0	15.0	19.0	20.0	27.0	25.0	---
7	15.0	4.0	5.0	5.0	4.0	10.0	15.0	24.0	21.0	27.0	25.0	18.0
8	17.0	3.0	7.0	4.0	3.0	9.0	10.0	24.0	17.0	28.0	27.0	18.0
9	16.0	4.0	7.0	2.0	4.0	5.0	14.0	23.0	21.0	27.0	30.0	18.0
10	17.0	4.0	7.0	3.0	3.0	3.0	12.0	20.0	22.0	26.0	25.0	18.0
11	18.0	3.0	6.0	4.0	2.0	9.0	10.0	24.0	24.0	24.0	25.0	20.0
12	18.0	5.0	4.0	4.0	1.0	9.0	6.0	21.0	25.0	26.0	24.0	22.0
13	19.0	6.0	5.0	3.0	4.0	12.0	11.0	18.0	24.0	23.0	24.0	24.0
14	16.0	7.0	2.0	3.0	4.0	11.0	12.0	22.0	25.0	21.0	24.0	22.0
15	15.0	6.0	3.0	4.0	5.0	12.0	13.0	23.0	21.0	24.0	23.0	21.0
16	13.0	6.0	5.0	4.0	8.0	15.0	13.0	25.0	24.0	25.0	25.0	20.0
17	14.0	8.0	4.0	4.0	5.0	10.0	16.0	19.0	22.0	24.0	24.0	22.0
18	10.0	9.0	2.0	3.0	3.0	6.0	15.0	24.0	25.0	25.0	24.0	17.0
19	11.0	9.0	3.0	5.0	4.0	6.0	11.0	23.0	25.0	22.0	25.0	18.0
20	12.0	5.0	4.0	2.0	5.0	10.0	6.0	27.0	18.0	20.0	26.0	23.0
21	10.0	8.0	4.0	6.0	4.0	6.0	7.0	25.0	20.0	18.0	25.0	20.0
22	12.0	5.0	5.0	5.0	5.0	7.0	12.0	17.0	26.0	19.0	26.0	19.0
23	10.0	4.0	3.0	2.0	8.0	5.0	11.0	19.0	25.0	20.0	20.0	20.0
24	10.0	3.0	4.0	5.0	7.0	12.0	10.0	20.0	27.0	26.0	17.0	19.0
25	8.0	3.0	5.0	7.0	5.0	9.0	10.0	13.0	27.0	25.0	15.0	16.0
26	8.0	6.0	3.0	8.0	10.0	10.0	12.0	17.0	25.0	24.0	16.0	16.0
27	15.0	6.0	2.0	6.0	7.0	11.0	15.0	16.0	22.0	28.0	20.0	16.0
28	6.0	3.0	5.0	7.0	11.0	9.0	18.0	18.0	27.0	27.0	22.0	15.0
29	4.0	4.0	5.0	8.0	7.0	12.0	20.0	22.0	25.0	26.0	21.0	16.0
30	2.0	3.0	3.0	8.0	---	14.0	21.0	24.0	26.0	23.0	20.0	18.0
31	3.0	---	2.0	6.0	---	10.0	---	18.0	---	22.0	22.0	---
MEAN	12.8	4.8	4.1	4.7	5.3	9.7	12.7	20.8	23.0	23.9	23.3	---

NIOBRARA RIVER BASIN
06462500 PLUM CREEK AT MEADVILLE, NE

LOCATION.--Lat 42°45'05", long 99°52'05", in NE1/4NW1/4 sec.14, T.32 N., R.22 W., Brown County, Hydrologic Unit 10150004, on left bank 0.4 mi upstream from county road bridge, 1.1 mi (revised) upstream from mouth, 1 mi southwest of Meadville, and 17 mi north of Ainsworth.

DRAINAGE AREA.--600 mi², approximately, 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 2,032 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Nov. 25, 1962, at site 6.5 mi upstream at different datum. Nov. 25, 1962, to Nov. 14, 1966, at present site at datum 3.0 ft higher. Nov. 15, 1966 to Oct. 2, 1979, at present site at datum 2.0 ft higher. Oct. 3, 1979 to June 3, 1982, at present site at datum 1.0 ft higher.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	e98	e110	112	106	112	118	111	106	e108	109	109
2	94	e96	116	113	106	111	117	110	111	e120	110	112
3	94	e102	e108	112	107	108	119	108	104	e116	108	109
4	99	e110	114	111	106	112	118	e108	e106	e112	107	108
5	100	117	116	112	107	125	118	e108	e110	e118	102	111
6	100	115	116	111	107	130	114	e106	e118	115	104	113
7	101	110	117	116	107	132	114	e108	e114	117	109	117
8	102	e104	117	e110	106	136	112	e108	e130	117	117	114
9	103	114	118	113	106	163	113	e112	e120	113	107	115
10	102	117	117	112	108	151	113	e118	e114	112	105	116
11	102	119	117	112	106	148	112	e125	e108	111	104	115
12	101	118	116	112	105	164	110	e120	e102	125	103	112
13	99	116	114	112	106	176	110	e120	e106	120	99	110
14	95	115	111	110	107	209	109	e122	e135	107	105	107
15	97	115	109	e100	109	204	115	e120	150	107	109	104
16	97	114	112	104	108	185	122	e122	134	99	104	103
17	99	116	112	e106	113	169	119	e130	132	95	102	105
18	99	117	113	107	116	159	121	e124	122	95	101	102
19	98	115	113	108	116	150	122	e116	121	102	103	100
20	97	115	115	109	115	144	120	e110	122	102	102	101
21	97	114	113	109	117	138	120	108	122	101	100	102
22	98	114	113	109	118	134	121	107	121	111	99	103
23	96	114	113	108	119	127	120	114	115	117	98	103
24	95	114	112	106	121	132	120	112	115	108	103	103
25	96	113	111	107	119	130	118	114	114	105	118	102
26	99	114	111	107	118	128	115	118	e112	106	129	104
27	100	114	112	107	116	126	115	114	e112	104	125	113
28	111	116	110	109	115	126	115	111	e112	103	119	111
29	114	117	113	108	113	127	113	110	e114	108	112	113
30	103	117	113	107	---	122	113	108	e112	115	110	112
31	101	---	111	106	---	120	---	103	---	111	107	---
TOTAL	3084	3390	3513	3385	3223	4398	3486	3525	3514	3400	3330	3249
MEAN	99.5	113	113	109	111	142	116	114	117	110	107	108
MAX	114	119	118	116	121	209	122	130	150	125	129	117
MIN	94	96	108	100	105	108	109	103	102	95	98	100
AC-FT	6120	6720	6970	6710	6390	8720	6910	6990	6970	6740	6610	6440

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1992, BY WATER YEAR (WY)

	100	102	100	99.0	113	142	152	152	132	114	100	100
MEAN	100	102	100	99.0	113	142	152	152	132	114	100	100
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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1948 - 1992

ANNUAL TOTAL	44193	41497	
ANNUAL MEAN	121	113	118
HIGHEST ANNUAL MEAN			196
LOWEST ANNUAL MEAN			91.6
HIGHEST DAILY MEAN	245	209	1540
LOWEST DAILY MEAN	90	94	15
ANNUAL SEVEN-DAY MINIMUM	92	97	53
INSTANTANEOUS PEAK FLOW (STAGE)		223	2070(6.98)
INSTANTANEOUS PEAK STAGE		1.40	*8.54
ANNUAL RUNOFF (AC-FT)	87660	82310	85480
10 PERCENT EXCEEDS	165	123	160
50 PERCENT EXCEEDS	112	112	102
90 PERCENT EXCEEDS	98	101	83

e Estimated.

* Maximum observed, backwater from ice.

LOCATION.--Lat 42°41'21", long 99°40'43", in SE1/4NE1/4 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.--460 mi², approximately.

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	158	154	150	160	161	159	170	151	181	163	181	194
2	159	e140	158	160	160	156	167	147	179	163	187	192
3	161	e145	155	158	159	155	166	146	170	175	183	188
4	171	e150	158	157	156	159	160	146	177	175	220	194
5	163	156	158	158	153	183	159	145	176	199	211	201
6	161	160	159	157	154	204	158	145	183	195	206	197
7	163	e150	162	167	150	229	161	144	183	196	233	216
8	162	153	160	179	149	218	160	146	203	196	206	210
9	161	161	160	166	147	234	160	162	191	178	191	209
10	157	173	159	164	148	225	159	165	183	173	180	170
11	157	166	157	163	144	274	157	181	175	174	191	183
12	157	164	156	165	148	391	154	158	164	184	204	181
13	157	162	155	163	151	352	155	175	149	186	182	188
14	158	160	149	157	154	264	156	184	192	185	183	191
15	160	159	150	148	157	220	169	184	206	183	191	189
16	162	158	150	159	161	204	169	234	206	165	201	188
17	160	167	148	153	171	192	165	202	201	157	196	188
18	159	168	147	150	184	188	168	202	187	173	192	181
19	160	164	152	153	180	185	162	195	190	175	181	169
20	161	162	153	154	177	184	160	178	185	180	189	173
21	162	162	154	155	178	181	156	173	186	202	187	175
22	162	160	157	154	173	179	158	167	186	241	183	173
23	159	157	154	151	172	177	158	174	176	220	180	174
24	159	157	153	153	172	177	154	178	180	203	236	179
25	159	157	152	153	169	174	153	183	174	183	311	189
26	160	159	152	156	168	174	154	187	176	184	271	183
27	159	158	151	156	167	171	153	182	176	181	243	185
28	170	160	156	155	163	178	153	176	179	175	232	185
29	163	160	159	156	160	191	154	174	177	187	222	189
30	154	155	158	159	---	187	154	177	174	196	212	194
31	154	---	157	162	---	177	---	175	---	177	202	---
TOTAL	4968	4757	4799	4901	4686	6342	4782	5336	5465	5724	6387	5628
MEAN	160	159	155	158	162	205	159	172	182	185	206	188
MAX	171	173	162	179	184	391	170	234	206	241	311	216
MIN	154	140	147	148	144	155	153	144	149	157	180	169
AC-FT	9850	9440	9520	9720	9290	12580	9490	10580	10840	11350	12670	11160

MEAN	133	135	133	131	138	162	159	168	164	153	152	148
MAX	173	175	169	172	203	257	309	297	396	368	236	263
(WY)	1989	1989	1989	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	64639		63775			
ANNUAL MEAN	177		174		148	
HIGHEST ANNUAL MEAN					202	1984
LOWEST ANNUAL MEAN					111	1949
HIGHEST DAILY MEAN	460	May 4	391	Mar 12	3050	Jul 1 1962
LOWEST DAILY MEAN	140	Nov 2	140	Nov 2	44	Jan 10 1963
ANNUAL SEVEN-DAY MINIMUM	150	Dec 14	146	May 2	76	Jan 10 1963
INSTANTANEOUS PEAK FLOW			446	Mar 12	9650	Jul 1 1962
INSTANTANEOUS PEAK STAGE			3.96	Mar 12	*15.68	Jul 1 1962
ANNUAL RUNOFF (AC-FT)	128200		126500		107500	
10 PERCENT EXCEEDS	219		202		184	
50 PERCENT EXCEEDS	163		167		138	
90 PERCENT EXCEEDS	154		153		110	

* Backwater from fallen bridge.

NIOBRARA RIVER BASIN
06463500 LONG PINE CREEK NEAR RIVERVIEW, NE--Continued

WATER QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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)	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)
OCT											
10...	0945	158	199	8.4	10.5	2	77	25	3.5	7.8	0.4
NOV											
06...	1205	165	210	8.5	3.0	6	78	25	3.7	8.5	0.4
DEC											
02...	1420	158	205	8.6	5.0	5	77	25	3.5	7.6	0.4
JAN											
02...	1340	164	201	8.5	7.5	11	79	26	3.5	7.5	0.4
FEB											
27...	1100	168	196	8.6	9.0	13	77	25	3.6	8.1	0.4
MAR											
25...	1210	175	200	8.4	10.0	10	82	27	3.6	7.4	0.4
APR											
13...	1520	156	192	8.9	13.0	5	80	26	3.6	7.4	0.4
MAY											
19...	0950	199	191	8.4	17.5	5	74	24	3.4	6.8	0.3
JUN											
17...	1050	203	201	8.5	16.0	13	83	27	3.8	7.9	0.4
JUL											
08...	1000	199	189	8.5	18.5	--	71	23	3.4	7.8	0.4
AUG											
12...	1210	216	180	8.5	18.0	13	74	24	3.4	7.2	0.4
SEP											
16...	1320	190	192	8.6	17.0	5	74	24	3.3	7.6	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											
10...	6.2	89	4.2	3.5	0.30	54	166	0.23	70.7	--	<0.010
NOV											
06...	5.9	88	7.2	3.7	0.30	53	170	0.23	75.7	2.09	0.010
DEC											
02...	5.4	88	4.8	3.7	0.40	55	162	0.22	68.9	--	<0.010
JAN											
02...	6.0	85	3.5	2.1	0.20	54	164	0.22	72.6	2.18	0.020
FEB											
27...	5.1	86	5.2	3.7	0.30	56	168	0.23	76.1	1.99	0.010
MAR											
25...	4.5	85	4.7	3.8	0.30	55	157	0.21	74.3	--	--
APR											
13...	5.3	85	4.8	3.5	0.20	53	164	0.22	68.9	1.89	0.010
MAY											
19...	5.4	85	4.9	2.6	0.30	53	159	0.22	85.2	1.49	0.010
JUN											
17...	6.0	88	4.6	2.9	0.30	53	166	0.23	91.0	1.58	0.020
JUL											
08...	5.9	86	4.6	2.1	0.20	52	157	0.21	84.3	--	<0.010
AUG											
12...	5.7	81	4.5	1.8	0.20	46	148	0.20	86.2	1.29	0.010
SEP											
16...	5.6	85	4.3	3.1	0.30	58	164	0.22	84.3	--	<0.010

NIOBRARA RIVER BASIN
06463500 LONG PINE CREEK NEAR RIVERVIEW, NE--Continued

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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 10...	1.70	0.040	--	<0.20	--	0.160	0.130	0.110	10	9	2
NOV 06...	2.10	0.040	0.16	0.20	2.3	0.230	0.180	0.160	20	10	3
DEC 02...	0.700	0.030	--	<0.20	--	0.150	0.090	0.090	30	8	3
JAN 02...	2.20	<0.010	--	<0.20	--	0.190	0.180	0.140	30	8	2
FEB 27...	2.00	<0.010	--	<0.20	--	0.210	0.120	0.120	30	16	2
MAR 25...	--	--	--	--	--	0.130	--	--	20	10	<1
APR 13...	1.90	<0.010	--	<0.20	--	0.150	0.120	0.110	30	3	<1
MAY 19...	1.50	0.030	--	<0.20	--	0.160	0.130	0.150	30	11	3
JUN 17...	1.60	0.020	0.18	0.20	1.8	0.290	0.180	0.180	30	24	3
JUL 08...	1.30	0.020	--	<0.20	--	0.220	0.160	0.140	20	14	3
AUG 12...	1.30	0.020	--	<0.20	--	0.320	0.180	0.170	20	36	5
SEP 16...	1.50	0.030	0.27	0.30	1.8	0.210	0.130	0.130	20	10	3

NIOBRARA RIVER BASIN
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.76 W., Tripp County, Hydrologic Unit 10150006, on right bank at downstream side of bridge on U.S. Highway 183, 1.0 mi north of Wewela, 4.5 mi upstream from Holt Creek, and 11.5 mi downstream from Lost Creek.

DRAINAGE AREA.--1,070 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 1991 TO SEPTEMBER 1992

DAY	MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	e25	e30	e33	e46	72	56	48	30	47	74	48
2	23	e26	e30	e32	e50	69	54	45	30	54	69	47
3	25	e26	e31	e34	e90	66	54	43	31	53	62	47
4	29	e27	e29	e33	e140	67	52	41	34	55	96	43
5	28	e29	e30	e32	139	78	51	42	35	77	217	46
6	28	e33	e31	e33	108	85	51	42	38	131	195	48
7	28	e32	e32	e34	91	92	50	40	37	129	214	53
8	27	e37	e34	e32	77	86	48	40	38	102	175	55
9	26	e42	e35	e31	75	93	47	38	35	82	136	55
10	25	e48	e36	e30	85	89	47	38	33	124	109	55
11	26	e55	e38	e31	87	94	47	38	31	147	91	53
12	26	e66	e40	e32	87	104	47	38	30	124	76	46
13	27	e72	e40	e31	94	107	49	37	29	139	65	43
14	26	e70	e39	e30	111	99	52	37	35	133	63	41
15	27	68	e38	e29	108	89	60	36	52	114	56	43
16	28	58	e39	e28	103	83	69	36	54	99	54	42
17	27	52	e40	e30	95	77	69	35	64	88	56	42
18	27	46	e39	e29	89	74	72	34	64	84	54	40
19	28	44	e38	e30	82	73	74	33	61	72	50	38
20	29	44	e38	e31	76	73	73	31	61	68	46	37
21	30	41	e37	e33	75	72	71	31	60	70	42	37
22	31	43	e38	e32	77	69	70	30	62	93	39	35
23	30	e40	e37	e31	78	68	68	30	58	102	38	34
24	30	e34	e36	e30	80	66	65	32	63	105	44	33
25	30	e30	e35	e31	79	64	62	34	68	106	59	32
26	32	e32	e35	e32	78	64	58	34	65	116	64	33
27	33	e34	e34	e33	79	62	55	33	61	105	69	32
28	37	e33	e34	e33	79	62	53	32	56	91	66	32
29	28	e32	e33	e35	75	63	52	32	51	79	66	33
30	e25	e31	e33	e37	---	61	49	31	47	79	62	33
31	e23	---	e33	e40	---	59	---	30	---	77	53	---
TOTAL	863	1250	1092	992	2533	2380	1725	1121	1413	2945	2560	1256
MEAN	27.8	41.7	35.2	32.0	87.3	76.8	57.5	36.2	47.1	95.0	82.6	41.9
MAX	37	72	40	40	140	107	74	48	68	147	217	55
MIN	23	25	29	28	46	59	47	30	29	47	38	32
AC-FT	1710	2480	2170	1970	5020	4720	3420	2220	2800	5840	5080	2490

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939-1940, 1948-1992, BY WATER YEAR (WY)

MEAN	34.7	39.3	31.0	26.4	52.9	175	151	122	93.0	60.5	32.5	27.3
MAX	82.2	77.6	64.5	85.5	178	598	605	358	512	607	143	69.5
(WY)	1983	1983	1983	1983	1982	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1939-1940,
1948-1992

ANNUAL TOTAL	20696.7	20130	a70.6
ANNUAL MEAN	56.7	55.0	
HIGHEST ANNUAL MEAN			175
LOWEST ANNUAL MEAN			19.5
HIGHEST DAILY MEAN	574 Jun 6	217 Aug 5	4930 Mar 30 1952
LOWEST DAILY MEAN	2.9 Jan 6	23 Oct 2, 31	.00 bJan 10 1949
ANNUAL SEVEN-DAY MINIMUM	3.3 Jan 1	26 Oct 29	.00 Jan 10 1949
INSTANTANEOUS PEAK FLOW (STAGE)		248 Aug 7	5430 (13.08) Mar 31 1952
INSTANTANEOUS PEAK STAGE		2.51 Aug 7	c13.50 Mar 25 1950
ANNUAL RUNOFF (AC-FT)	41050	39930	51120
10 PERCENT EXCEEDS	110	92	139
50 PERCENT EXCEEDS	35	46	38
90 PERCENT EXCEEDS	12	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 SE1/4SE1/4 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 Napier, and 8.8 mi (revised) upstream from mouth.

DRAINAGE AREA.--1,630 mi², approximately.

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, 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	e33	e56	e70	140	128	106	95	58	123	98	122
2	38	e32	e52	e66	120	125	108	89	62	153	86	116
3	45	e30	e50	e69	120	117	100	84	63	157	74	88
4	58	e32	e60	e66	123	122	96	81	69	146	99	81
5	55	e36	e74	e62	98	147	93	78	71	172	383	104
6	52	e34	e82	e64	119	169	89	74	90	201	708	123
7	50	e33	e86	e60	113	194	98	73	83	296	628	128
8	47	e32	e80	e58	75	197	98	70	111	241	778	146
9	45	e34	e74	e56	79	270	95	70	100	189	666	126
10	46	e35	e76	e58	77	216	97	73	94	186	380	114
11	45	e40	e78	e58	60	239	91	70	84	193	255	106
12	42	e45	e72	e62	73	268	85	65	78	559	191	92
13	42	e56	e66	e56	106	266	83	64	71	217	158	88
14	39	e62	e60	e45	100	257	89	66	83	182	137	81
15	43	e80	e60	e45	109	238	109	79	111	154	119	76
16	44	e72	e64	e62	155	204	119	111	200	117	106	74
17	38	e70	e60	e58	153	173	127	90	351	88	100	75
18	34	e70	e64	e60	164	152	158	82	166	79	96	69
19	43	e66	e64	e68	147	143	160	78	167	75	87	65
20	55	e72	e67	e66	146	143	149	71	152	77	81	66
21	53	e74	e72	e63	130	135	153	67	158	77	76	67
22	52	e70	e72	e60	113	131	149	62	144	117	68	64
23	49	e65	e70	e56	124	127	143	59	129	185	62	61
24	48	e58	e68	e56	129	125	139	60	121	227	99	59
25	50	e66	e64	e60	126	118	124	62	124	274	203	56
26	55	e77	e62	e58	133	116	112	67	169	205	316	56
27	58	e74	e62	e70	139	114	100	66	162	165	333	63
28	71	e66	e70	e80	135	116	100	65	139	143	282	62
29	67	e58	e78	e90	132	122	95	63	124	123	214	63
30	e35	e54	e80	e94	---	116	95	60	113	109	152	62
31	e33	---	e78	e100	---	113	---	57	---	103	125	---
TOTAL	1469	1626	2121	1996	3438	5101	3360	2251	3647	5333	7160	2553
MEAN	47.4	54.2	68.4	64.4	119	165	112	72.6	122	172	231	85.1
MAX	71	80	86	100	164	270	160	111	351	559	778	146
MIN	33	30	50	45	60	113	83	57	58	75	62	56
AC-FT	2910	3230	4210	3960	6820	10120	6660	4460	7230	10580	14200	5060

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1992, BY WATER YEAR (WY)

	MEAN	67.5	76.0	63.0	57.1	116	317	284	229	193	129	59.3	47.7
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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1958 - 1992

ANNUAL TOTAL	40469.7		40055	
ANNUAL MEAN	111	109	137	
HIGHEST ANNUAL MEAN				389
LOWEST ANNUAL MEAN				44.5
HIGHEST DAILY MEAN	746	Jun 7	778	Aug 8
LOWEST DAILY MEAN	9.2	Sep 4	30	Nov 3
ANNUAL SEVEN-DAY MINIMUM	11	Sep 1	33	Nov 2
INSTANTANEOUS PEAK FLOW (STAGE)			2540	Jul 12
INSTANTANEOUS PEAK STAGE			8.17	Jul 12
ANNUAL RUNOFF (AC-FT)	80270		79450	
10 PERCENT EXCEEDS	234		185	
50 PERCENT EXCEEDS	65		82	
90 PERCENT EXCEEDS	25		51	

e Estimated.

* Backwater from ice.

NIOBRARA RIVER BASIN
06465000 NIOBRARA RIVER NEAR SPENCER, NE

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

DRAINAGE AREA.--12,100 mi², approximately.

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 National Geodetic Vertical Datum of 1929. Elevation of taintor gate sill, 1,491.12 ft above National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1330	733	604	1650	1990	1800	1560	1280	1210	1410	1160	1360
2	1260	528	641	1750	1890	1770	1490	1370	1220	1860	1090	1410
3	1580	378	712	1560	2160	1780	1470	1370	1140	1580	1160	1250
4	1560	325	640	1460	2180	1840	1390	1280	1270	1210	1250	1150
5	1590	549	690	1610	2090	2170	1320	1280	1390	1580	2390	1260
6	1530	918	1080	1520	2030	2310	1320	1290	1700	1850	1950	1310
7	1020	844	1760	1770	1370	1980	1680	1260	1390	1470	2330	1560
8	1050	1120	2580	1950	1370	1980	1990	1170	1900	1390	2090	1610
9	1070	1460	2240	1080	1370	2370	1740	1130	1800	1370	1760	1420
10	1080	1760	2160	1120	1470	2590	1660	1130	1390	1380	1500	1380
11	1070	2140	2020	1420	1040	2600	1370	1210	1400	1180	1390	1180
12	1020	2630	1840	1500	538	2430	1530	1050	1280	1850	1310	1140
13	1060	2650	1840	1520	1460	2510	1380	1210	1220	1510	1350	1110
14	1080	2270	1430	1330	2030	2510	1420	1140	1260	1310	1190	1110
15	1080	1420	1120	610	2090	2380	1740	1060	1830	1230	1120	1200
16	1020	1130	1370	365	2180	1950	1800	1870	1840	1240	1100	1590
17	1020	1210	1460	592	1660	1900	1640	1680	2150	1140	1090	1590
18	1090	1660	1370	1140	1940	1940	1700	1240	1660	1090	1090	1450
19	1180	2330	1130	1190	1970	1970	1830	1130	1520	1200	1060	1290
20	1120	1700	1390	1370	1910	1920	1740	1100	1810	1190	1000	1230
21	1090	1600	1530	1690	1810	1810	1680	1010	1680	1150	984	1310
22	1070	1380	1840	1940	1810	1770	1690	1090	1580	1670	978	1230
23	1100	1210	1740	1920	1740	1800	1490	1210	1560	1730	944	1240
24	1150	1380	1580	1730	1870	1670	1480	1070	1510	1490	1900	1160
25	1140	1160	1360	1710	1780	1660	1460	1180	1690	1540	2600	1220
26	1170	1400	1280	1880	1840	1620	1390	1340	1460	1800	2450	1420
27	1100	1420	1300	1930	1850	1640	1350	1170	1680	1370	1980	1310
28	1500	1400	1330	1880	1820	1780	1340	1190	1490	1260	1680	1220
29	1480	1380	1610	2060	1810	1930	1310	1090	1290	1280	1540	1250
30	813	770	1740	2070	---	1720	1310	1050	1410	1390	1470	1230
31	666	---	1720	2120	---	1620	---	1070	---	1360	1240	---
TOTAL	36089	40855	45107	47437	51068	61720	46270	37720	45730	44080	46146	39190
MEAN	1164	1362	1455	1530	1761	1991	1542	1217	1524	1422	1489	1306
MAX	1590	2650	2580	2120	2180	2600	1990	1870	2150	1860	2600	1610
MIN	666	325	604	365	538	1620	1310	1010	1140	1090	944	1110
AC-FT	71580	81040	89470	94090	101300	122400	91780	74820	90710	87430	91530	77730

NIOBRARA RIVER BASIN
06465000 NIOBRARA RIVER NEAR SPENCER, NE--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 1992, BY WATER YEAR (WY)

MEAN	1240	1302	1130	1200	1580	2240	1886	1783	1587	1115	1017	1086
MAX	1865	1771	1556	1749	2687	3941	3720	4052	3972	4156	2167	2143
(WY)	1947	1987	1980	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 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1927 - 1992	
ANNUAL TOTAL	554012		541412		1431	
ANNUAL MEAN	1518		1479		2066	
HIGHEST ANNUAL MEAN					1962	
LOWEST ANNUAL MEAN					1096	
HIGHEST DAILY MEAN	4040	Jun 12	2650	Nov 13	19000	Mar 27 1960
LOWEST DAILY MEAN	325	Nov 4	325	Nov 4	5.0	Nov 14,
					Dec. 18-19, 1940	
ANNUAL SEVEN-DAY MINIMUM	570	Oct 30	570	Oct 30	168	Dec 8 1932
INSTANTANEOUS PEAK FLOW					27400	Mar 12 1955
INSTANTANEOUS PEAK STAGE					12.16	Mar 12 1955
ANNUAL RUNOFF (AC-FT)	1099000		1074000		1037000	
10 PERCENT EXCEEDS	2300		1980		2190	
50 PERCENT EXCEEDS	1440		1410		1270	
90 PERCENT EXCEEDS	837		1070		760	

NIOBRARA RIVER BASIN

06465440 REDBIRD CREEK AT REDBIRD, NE

LOCATION.--Lat 42°45'36", long 98°26'26", in NW1/4/SW1/4/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 National Geodetic Vertical Datum of 1929. 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 fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	e20	e18	32	33	30	32	29	24	21	26	27
2	18	e19	e16	33	32	31	34	27	26	27	24	28
3	20	e18	e15	32	30	30	35	28	25	23	22	26
4	27	e19	e17	32	29	34	35	28	25	21	22	26
5	24	e21	e25	32	29	50	35	29	24	36	42	50
6	21	e18	e30	32	29	59	34	29	29	31	33	39
7	20	e23	e36	34	28	54	35	30	26	30	43	45
8	20	e27	e38	e32	26	45	33	31	32	25	35	39
9	20	e31	e41	e29	29	53	33	32	34	21	29	35
10	20	e30	e38	e29	27	48	34	31	31	20	23	30
11	21	e35	e36	e26	26	50	33	35	26	20	20	27
12	21	e40	e33	e25	28	53	31	35	23	32	20	25
13	21	43	e30	e21	28	52	32	33	21	33	20	25
14	20	33	e29	e18	30	53	34	36	20	28	28	32
15	21	31	e27	e19	32	46	37	85	22	24	25	33
16	22	28	e28	e19	37	42	39	204	22	21	23	30
17	21	33	e23	e25	42	39	39	67	22	19	22	28
18	21	37	e20	e23	44	36	40	46	21	19	23	26
19	21	32	e21	e27	41	35	44	37	24	18	22	24
20	22	30	e25	e40	34	36	39	32	22	19	21	24
21	23	31	e24	e45	32	35	35	30	21	20	21	24
22	25	30	e25	e60	32	33	37	27	20	39	22	23
23	23	30	e24	e64	33	34	50	26	20	35	21	23
24	23	30	e25	74	33	34	46	25	20	32	33	22
25	22	29	e23	71	34	33	40	24	20	31	67	21
26	23	31	e21	60	35	32	34	26	19	31	69	21
27	25	31	e20	42	35	31	33	25	22	26	59	21
28	32	30	e24	36	32	34	33	24	26	28	44	20
29	42	30	e28	36	31	41	30	23	24	32	36	21
30	29	e17	31	35	---	37	29	23	22	30	29	22
31	24	---	32	33	---	33	---	23	---	26	27	---
TOTAL	709	857	823	1116	931	1253	1075	1180	713	818	951	837
MEAN	22.9	28.6	26.5	36.0	32.1	40.4	35.8	38.1	23.8	26.4	30.7	27.9
MAX	42	43	41	74	44	59	50	204	34	39	69	50
MIN	17	17	15	18	26	30	29	23	19	18	20	20
AC-FT	1410	1700	1630	2210	1850	2490	2130	2340	1410	1620	1890	1660

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 1992, BY WATER YEAR (WY)

MEAN	33.4	35.6	31.8	32.9	45.3	55.9	58.7	57.4	38.7	26.6	28.3	31.2
MAX	58.9	48.1	41.4	43.8	72.9	108	144	103	62.3	42.5	62.6	87.0
(WY)	1985	1985	1985	1987	1984	1987	1984	1985	1983	1984	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1981 - 1992

ANNUAL TOTAL	10127.5	11263	
ANNUAL MEAN	27.7	30.8	39.6
HIGHEST ANNUAL MEAN			58.6
LOWEST ANNUAL MEAN			21.1
HIGHEST DAILY MEAN	90 May 18	204 May 16	897 Aug 23 1990
LOWEST DAILY MEAN	7.0 Aug 28	15 Dec 3	3.8 Jul 14 1981
ANNUAL SEVEN-DAY MINIMUM	8.3 Aug 25	20 Nov 1	6.3 Jul 12 1981
INSTANTANEOUS PEAK FLOW (STAGE)		811 May 15	2140 (6.07) Aug 23 1990
INSTANTANEOUS PEAK STAGE		5.74 May 15	*6.49 May 11 1985
ANNUAL RUNOFF (AC-FT)	20090	22340	28680
10 PERCENT EXCEEDS	50	42	63
50 PERCENT EXCEEDS	25	29	33
90 PERCENT EXCEEDS	12	20	17

e Estimated.

* From floodmark, site then in use.

NIOBRARA RIVER BASIN

63

06465500 NIOBRARA RIVER NEAR VERDEL, NE
National stream-quality accounting network 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 Verdigr Creek, and at mile 14.8.

DRAINAGE AREA.--12,600 mi², approximately.

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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1740	820	702	1740	2140	1900	1690	1380	1270	1370	1280	1360
2	1350	694	690	1820	2060	1880	1610	1400	1300	1870	1160	1560
3	1380	442	762	1760	2120	1870	1590	1490	1250	1790	1180	1340
4	1770	415	683	1570	2240	1890	1370	1380	1290	1340	1270	1270
5	1700	482	750	1620	2370	2230	1450	1380	1370	1520	2400	1400
6	1640	911	989	1690	2020	2440	1410	1370	1780	2010	1970	1400
7	1250	925	1600	1700	1600	2280	1760	1390	1530	1610	2290	1600
8	1110	1120	2550	2210	1570	2120	1890	1290	1730	1480	2410	1800
9	1120	1400	2510	1400	1390	2400	1900	1210	2110	1430	1990	1570
10	1130	1810	2300	1100	1570	2550	1810	1210	1610	1450	1610	1510
11	1150	2070	2180	1370	1290	2940	1550	1350	1420	1280	1500	1310
12	1100	2650	2010	1620	696	2570	1550	1180	1440	1750	1340	1220
13	1120	2750	1960	1590	1120	2650	1540	1280	1310	1760	1380	1210
14	1120	2680	1700	1490	2060	2730	1570	1290	1210	1480	1400	1190
15	1170	1750	1240	934	2270	2600	1680	1310	1830	1300	1200	1240
16	1110	1270	1390	451	2380	2190	1990	2290	1890	1300	1180	1440
17	1090	1270	1490	587	1790	2020	1820	2050	2080	1250	1150	1920
18	1110	1560	1490	969	2010	2050	1770	1480	1990	1160	1170	1490
19	1230	2480	1260	1330	2100	2100	1960	1270	1510	1170	1140	1450
20	1220	1690	1350	1390	2060	2060	1890	1200	1870	1080	1100	1300
21	1180	1920	1550	1700	1930	1950	1790	1140	1780	1160	1060	1380
22	1150	1490	1870	2090	1910	1900	1830	1110	1640	1530	1040	1340
23	1140	1350	1890	2150	1850	1900	1720	1290	1690	1990	1040	1330
24	1200	1410	1700	2060	1960	1830	1600	1190	1560	1700	1570	1220
25	1220	1350	1500	1910	1920	1770	1600	1240	1720	1500	2660	1330
26	1240	1400	1350	1980	1920	1720	1530	1370	1510	1970	2820	1360
27	1210	1540	1350	2100	1970	1730	1480	1310	1660	1550	2320	1440
28	1550	1510	1380	1980	1940	1820	1470	1280	1740	1310	1890	1310
29	1710	1530	1570	2080	1910	2060	1420	1210	1300	1380	1690	1370
30	1140	985	1840	2220	---	1910	1400	1130	1550	1420	1600	2040
31	705	---	1840	2210	---	1770	---	1070	---	1530	1400	---
TOTAL	39055	43674	47446	50821	54166	65830	49640	41540	47940	46440	49210	42700
MEAN	1260	1456	1531	1639	1868	2124	1655	1340	1598	1498	1587	1423
MAX	1770	2750	2550	2220	2380	2940	1990	2290	2110	2010	2820	2040
MIN	705	415	683	451	696	1720	1370	1070	1210	1080	1040	1190
AC-FT	77470	86630	94110	100800	107400	130600	98460	82390	95090	92110	97610	84700

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1992, BY WATER YEAR (WY)

MEAN	1348	1448	1292	1373	1787	2555	2163	1981	1711	1301	1068	1194
MAX	1913	2142	1656	1858	2910	4425	4129	3345	4442	5370	2049	2094
(WY)	1974	1974	1980	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1938 - 1992

ANNUAL TOTAL	589237	578462	
ANNUAL MEAN	1614	1580	1607
HIGHEST ANNUAL MEAN			2461
LOWEST ANNUAL MEAN			1269
HIGHEST DAILY MEAN	4330	Jun 12	25100
LOWEST DAILY MEAN	415	Nov 4	104
ANNUAL SEVEN-DAY MINIMUM	638	Oct 31	210
INSTANTANEOUS PEAK FLOW (STAGE)			39000 (10.10)
INSTANTANEOUS PEAK STAGE			*10.62
ANNUAL RUNOFF (AC-FT)	1169000	1147000	1164000
10 PERCENT EXCEEDS	2430	2120	2450
50 PERCENT EXCEEDS	1550	1530	1430
90 PERCENT EXCEEDS	899	1120	844

* Backwater from ice.

NIOBRARA RIVER BASIN
06465500 NIOBRARA RIVER NEAR VERDEL, NE--Continued
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 1991 TO SEPTEMBER 1992

DATE	TIME	DIS-CHARGE, INST. FT ³ /S (00061)	SPECIFIC CONDUCTANCE (μS/CM) (00095)	PH WATER	TEMPERATURE WATER (°C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	TURBIDITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLIFORM, FECAL, 0.7 μM-MF (COLS./100 ML) (31625)	STREP-TOCOCOCCI, KF AGAR (COLS. PER 100 ML) (31673)	HARDNESS TOTAL (MG/L AS CaCO ₃) (00900)	
				WHOLE FIELD (STANDARD UNITS) (00400)								
NOV	13...	0855	4060	249	8.2	1.0	718	100	12.8	220	940	99
FEB	20...	0950	2500	253	8.4	3.0	727	99	12.7	43	110	100
MAY	28...	0905	1240	257	8.6	14.0	726	34	8.9	41	79	110
AUG	04...	1330	1520	245	8.8	18.5	723	17	8.6	130	290	100

DATE	HARDNESS NONCARB DISSOLV FLD. AS CaCO ₃ (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)	MAGNESIUM	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKALINITY WATER TOTAL FIELD (MG/L AS CaCO ₃) (39086)	CARBONATE WATER DIS-SOLVED (MG/L AS CO ₃) (00452)	BICARBONATE WATER DIS-SOLVED (MG/L AS HCO ₃) (00453)	SULFATE DIS-SOLVED (MG/L AS SO ₄) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS Cl) (00940)	
			SOLVED (MG/L AS Mg) (00925)									
NOV	13...	0	32	4.5	8.6	0.4	5.4	101	0	123	13	2.2
FEB	20...	0	34	4.3	8.9	0.4	5.7	109	5	123	15	3.0
MAY	28...	0	38	4.7	9.1	0.4	6.5	123	13	123	14	1.5
AUG	04...	0	33	4.4	9.5	0.4	6.3	109	1	131	11	3.1

DATE	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, RESIDUE AT 180 °C	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 TOTAL (MG/L AS N) (00620)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	
			DIS-SOLVED (MG/L) (70300)								
NOV	13...	0.30	40	167	171	0.23	1830	0.900	--	0.040	<0.010
FEB	20...	0.20	44	184	186	0.25	1240	1.06	1.08	0.040	0.020
MAY	28...	0.30	44	196	194	0.27	656	0.500	--	0.030	<0.010
AUG	04...	0.40	44	180	177	0.24	739	--	--	0.030	<0.010

NIOBRARA RIVER BASIN
06465500 NIOBRARA RIVER NEAR VERDEL, NE--Continued

WATER QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	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 13...	0.940	0.900	0.060	0.050	1.2	1.3	2.2	0.590	0.070	0.070
FEB 20...	1.10	1.10	0.040	0.040	0.66	0.70	1.8	0.330	0.080	0.080
MAY 28...	0.530	0.510	0.030	0.030	0.37	0.40	0.93	0.150	0.040	0.030
AUG 04...	<0.050	<0.050	0.040	0.040	1.1	1.1	--	0.210	0.010	<0.010

DATE	TIME	ALUM- NUM, 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 13...	0855	20	91	<3	29	13	17
FEB 20...	0950	20	92	<3	23	13	5
MAY 28...	0905	10	91	<3	16	14	5
AUG 04...	1330	<10	79	<3	8	12	<1

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 13...	<10	<1	1	<1.0	170	<6
FEB 20...	<10	<1	1	<1.0	170	7
MAY 28...	<10	1	1	<1.0	200	9
AUG 04...	<10	<1	<1	<1.0	180	12

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)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 13...	0855	4060	1.0	3180	34900	12
FEB 20...	0950	2500	3.0	1340	9040	24
MAY 28...	0905	1240	14.0	1260	4220	11
AUG 04...	1330	1520	18.5	629	2580	12

NIOBRARA RIVER BASIN

06465680 NORTH BRANCH VERDIGRE CREEK NEAR VERDIGRE, NE

LOCATION.--Lat 42°35'51", long 98°08'03", in SE1/4SE1/4 sec.4, T.30 N., R.7 W., Knox County, Hydrologic Unit 10150007, on right bank 15 ft downstream from bridge on paved county road 5 mi west of Verdigre and at mile 5.1.

DRAINAGE AREA.--137 mi².

PERIOD OF RECORD.--October 1979 to September 30 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 1,466.06 ft above National Geodetic Vertical Datum of 1929 (levels by Nebraska Natural Resources Commission).

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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	e19	e18	18	20	19	21	20	21	20	19	21
2	18	e18	e17	19	20	20	22	19	22	23	17	22
3	21	e18	e15	18	20	19	21	19	21	18	17	21
4	23	e17	e17	18	19	21	21	19	20	17	17	20
5	21	e17	e18	19	22	26	21	19	20	26	23	22
6	19	e16	e19	19	20	27	21	18	23	22	24	20
7	19	e15	e20	e19	19	23	21	18	20	20	26	23
8	18	e14	e21	e18	e20	22	21	18	23	18	23	22
9	18	e18	e22	e17	e21	e21	21	18	25	17	21	20
10	18	e20	e22	e16	20	26	21	18	25	18	20	19
11	18	e24	19	e19	e21	27	21	18	21	16	19	19
12	19	26	20	22	22	27	20	17	20	17	16	19
13	18	24	18	20	21	25	20	14	19	16	17	19
14	17	22	e17	e19	21	26	20	17	18	15	19	25
15	18	21	e15	17	21	25	22	41	19	15	20	23
16	19	21	e17	e16	21	25	23	136	19	16	20	22
17	18	24	e16	e15	23	24	22	42	19	13	21	21
18	17	23	e17	e14	23	22	24	33	18	10	20	20
19	18	21	e18	e13	21	22	24	29	17	7.9	14	20
20	19	20	e20	e14	20	22	21	27	18	9.6	7.1	20
21	19	21	e22	e16	19	22	21	26	18	10	7.7	19
22	19	20	21	e18	20	22	24	24	18	23	9.9	17
23	19	20	19	e20	20	22	26	23	16	20	12	18
24	19	e19	19	e25	21	22	25	23	14	19	17	19
25	18	e17	20	23	20	22	23	22	12	26	34	19
26	19	e19	16	22	20	21	22	22	10	24	28	19
27	20	22	20	21	20	21	22	21	11	19	25	19
28	22	20	16	24	20	25	22	19	16	20	23	19
29	23	20	16	21	19	24	22	18	21	22	22	20
30	21	19	17	20	---	23	22	18	22	21	20	20
31	e20	---	17	20	---	22	---	18	---	20	21	---
TOTAL	593	595	569	580	594	715	657	794	566	558.5	599.7	607
MEAN	19.1	19.8	18.4	18.7	20.5	23.1	21.9	25.6	18.9	18.0	19.3	20.2
MAX	23	26	22	25	23	27	26	136	25	26	34	25
MIN	17	14	15	13	19	19	20	14	10	7.9	7.1	17
AC-FT	1180	1180	1130	1150	1180	1420	1300	1570	1120	1110	1190	1200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1992, BY WATER YEAR (WY)

MEAN	23.9	24.6	22.9	22.6	26.4	29.1	30.4	29.3	25.9	17.3	18.4	22.2
MAX	35.1	33.5	32.2	34.1	35.2	47.1	53.8	52.0	36.7	33.0	28.7	33.3
(WY)	1985	1985	1985	1984	1984	1987	1984	1984	1984	1987	1984	1986
MIN	17.8	19.8	16.1	11.6	19.7	19.7	17.8	19.3	16.8	7.07	6.61	15.1
(WY)	1981	1981	1991	1980	1981	1981	1981	1981	1980	1991	1991	1991

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1980 - 1992

ANNUAL TOTAL	6978.9	7428.2	24.4
ANNUAL MEAN	19.1	20.3	34.9
HIGHEST ANNUAL MEAN			17.7
LOWEST ANNUAL MEAN			159
HIGHEST DAILY MEAN	119	136	159
LOWEST DAILY MEAN	1.2	7.1	1.2
ANNUAL SEVEN-DAY MINIMUM	3.4	12	3.2
INSTANTANEOUS PEAK FLOW (STAGE)		329	329 (4.76)
INSTANTANEOUS PEAK STAGE		4.76	*5.54
ANNUAL RUNOFF (AC-FT)	13840	14730	17670
10 PERCENT EXCEEDS	26	24	34
50 PERCENT EXCEEDS	20	20	23
90 PERCENT EXCEEDS	7.0	16	14

e Estimated.

* From floodmark.

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 (revised) 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 National Geodetic Vertical Datum of 1929. 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 good except for period of estimated record, which is poor. Minor diversions for irrigation above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	e22	e28	e60	42	48	52	61	51	62	68	70
2	15	e20	e26	e64	41	46	50	57	54	52	60	135
3	21	e19	e24	e66	40	46	50	54	50	42	54	138
4	27	e20	e32	e68	40	47	49	52	50	37	54	101
5	27	e21	e40	e64	38	62	48	52	47	46	71	644
6	25	e18	e47	e62	42	91	45	52	55	45	64	450
7	26	e24	e50	e58	39	90	45	51	50	42	142	212
8	25	e35	e47	e54	e35	e74	45	51	51	37	178	199
9	24	e48	e46	e45	e37	e66	46	51	50	39	111	143
10	24	e45	e47	e37	e34	e72	46	50	47	209	80	115
11	25	e47	e46	e40	e40	e86	43	51	44	102	63	92
12	24	e51	e45	e38	e38	96	43	49	40	234	65	78
13	24	e52	e46	e32	e45	98	42	48	39	159	65	73
14	24	e54	e44	e27	e50	104	41	49	39	93	64	87
15	25	e52	e43	e25	e54	103	41	53	39	65	56	97
16	26	50	e45	e27	55	91	45	1890	40	52	51	85
17	26	49	e47	e29	56	78	43	551	48	46	48	74
18	24	49	e45	e30	62	72	45	239	43	43	45	68
19	25	46	e44	e35	60	64	51	145	40	41	40	63
20	26	44	e46	e44	57	60	52	107	37	40	38	64
21	27	42	e48	e38	51	57	63	90	34	39	37	63
22	27	40	e46	e40	48	55	67	79	33	69	36	60
23	27	33	e48	e45	50	54	68	71	32	63	35	58
24	28	e30	e50	e50	57	54	97	66	31	72	41	56
25	27	e32	e54	e48	53	52	90	60	30	228	107	54
26	28	e33	e52	e54	55	50	88	57	28	446	162	54
27	29	e31	e50	e66	53	49	81	56	29	137	137	53
28	e27	e28	e54	e64	52	52	73	55	35	84	104	50
29	e25	e27	e58	e68	50	59	69	54	72	100	77	49
30	e24	e26	e60	e70	---	57	64	51	114	122	66	50
31	e25	---	e62	e60	---	56	---	49	---	84	61	---
TOTAL	773	1088	1420	1508	1374	2089	1682	4401	1352	2930	2280	3535
MEAN	24.9	36.3	45.8	48.6	47.4	67.4	56.1	142	45.1	94.5	73.5	118
MAX	29	54	62	70	62	104	97	1890	114	446	178	644
MIN	15	18	24	25	34	46	41	48	28	37	35	49
AC-FT	1530	2160	2820	2990	2730	4140	3340	8730	2680	5810	4520	7010

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1992, BY WATER YEAR (WY)

MEAN	45.9	50.4	43.7	44.0	77.9	150	127	119	158	62.4	50.1	41.7
MAX	108	88.3	83.1	87.1	213	621	587	469	933	275	326	118
(WY)	1985	1985	1987	1986	1971	1962	1960	1960	1957	1958	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1952 - 1992

ANNUAL TOTAL	21236.98	24432	
ANNUAL MEAN	58.2	66.8	81.0
MEDIAN OF ANNUAL MEANS			68.0
HIGHEST ANNUAL MEAN			194
LOWEST ANNUAL MEAN			34.9
HIGHEST DAILY MEAN	2790	Jun 5	12300
LOWEST DAILY MEAN	.36	Aug 29	.00
ANNUAL SEVEN-DAY MINIMUM	.83	Sep 3	.77
INSTANTANEOUS PEAK FLOW (STAGE)		21 Nov 1	Aug 25 1976
INSTANTANEOUS PEAK STAGE		4580 May 16	68600(19.96) Jun 16 1957
ANNUAL RUNOFF (AC-FT)	42120	17.40 May 16	*20.25 Feb 19 1971
10 PERCENT EXCEEDS	81	96	130
50 PERCENT EXCEEDS	39	50	49
90 PERCENT EXCEEDS	10	27	22

e Estimated.

* 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 National Geodetic Vertical Datum of 1929. Prior to Dec. 9, 1955, recorder at temporary location on wall of intake structure unit 3.

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

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, 455,000 acre-ft, Oct. 7; minimum contents, 326,000 acre-ft, Sept. 24.

MONTHEND ELEVATION AND CONTENTS AT 2400 HOURS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	1,208.15	436,000	
Oct. 31.....	1,208.20	432,000	-4,000
Nov. 30.....	1,207.57	419,000	-13,000
Dec. 31.....	1,207.49	417,000	-2,000
CAL YR 1991	-	-	+6,000
Jan. 31.....	1,207.16	408,000	-9,000
Feb. 29.....	1,206.57	392,000	-16,000
Mar. 31.....	1,206.31	387,000	-5,000
Apr. 30.....	1,206.48	390,000	+3,000
May 31.....	1,206.17	381,000	-9,000
June 30.....	1,206.17	382,000	+1,000
July 31.....	1,205.44	363,000	-19,000
Aug. 31.....	1,206.66	396,000	+33,000
Sept 30.....	1,206.51	390,000	-6,000
WTR YR 1992	-	-46,000	

NOTE.--Lake did not freeze over.

MISSOURI-LEWIS AND CLARK RIVER BASIN
06467500 MISSOURI RIVER AT YANKTON, SD

69

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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31100	10300	e14000	12200	e11000	6990	23500	23100	24100	25000	22900	23600
2	30800	10200	e14500	12200	e11000	6340	23600	23000	28300	26500	23100	23000
3	30700	10900	e15000	12200	e11000	5680	23500	23200	24600	25100	23300	22000
4	30500	10300	e14500	12300	e11000	5350	23600	23700	24200	24900	23400	21300
5	30100	9210	e13000	12300	e11500	5260	23600	24100	28100	26500	23300	21200
6	30300	9100	13000	12300	e12500	5070	23600	24200	24400	25200	23500	21100
7	30200	9100	12500	12500	e13500	5480	23600	24100	24100	25100	23400	21000
8	30000	9140	11900	12200	e14000	8950	23600	24300	28300	26800	23300	21400
9	29700	9110	11900	12300	e14000	10300	23500	29100	24800	25400	23000	21300
10	29800	9020	11900	13100	e14000	9790	23600	e23500	24400	25200	22300	21400
11	29800	9070	11900	14800	e13500	8710	23500	e23500	28200	27000	21900	21700
12	29900	9070	11800	e15000	e13000	7360	23600	e29000	25200	25500	21900	22400
13	29800	9060	12300	e15000	e13000	6090	23600	24000	24800	24500	21900	22800
14	30000	9010	13200	e15500	e12000	6140	23600	23900	28200	23400	22100	22900
15	30200	9060	13500	e16000	e12000	6090	23600	28700	25300	23600	22000	22900
16	30200	9050	12800	e16000	e12000	7850	23700	24700	24800	23500	22100	22500
17	30300	9070	12200	e16000	e11500	11600	23700	23900	26100	23600	22400	22300
18	30300	8980	11800	e15500	11300	14900	23600	28600	27400	23600	22700	22300
19	30100	8920	12100	e14500	10300	18100	23300	25200	26400	23700	23300	22800
20	30300	8980	12000	e12700	9720	21400	23300	25300	25300	23700	23300	22900
21	30300	9590	12100	12500	9780	23400	23200	28700	28000	23700	23300	23400
22	30400	11400	12100	12500	9710	23400	23500	24300	25100	23800	23400	23400
23	30300	11900	12200	12300	9670	23600	23300	23900	24600	23800	23800	23600
24	29900	12000	12200	12500	9620	23500	22600	28400	26100	23800	24000	24200
25	29800	10700	12100	12400	9180	23500	22500	24800	25500	23800	24000	24300
26	26400	9960	12100	e12000	8750	23700	22700	24400	26400	23800	23800	24300
27	22400	9950	12200	e12000	8450	23600	22700	28500	24900	23900	23400	24300
28	18600	10400	12200	e12000	7650	23700	23000	24700	24800	23200	23200	24400
29	14500	13200	12300	e11500	7140	23600	23100	24200	26400	23000	23000	24300
30	12800	14200	12200	e11000	---	23500	23200	28400	25100	22900	23300	24300
31	10900	---	12100	e11000	---	23500	---	24700	---	22900	23300	---
TOTAL	860400	299950	389600	406300	321770	436450	701000	784100	773900	756400	713600	683300
MEAN	27750	9998	12570	13110	11100	14080	23370	25290	25800	24400	23020	22780
MAX	31100	14200	15000	16000	14000	23700	23700	29100	28300	27000	24000	24400
MIN	10900	8920	11800	11000	7140	5070	22500	23000	24100	22900	21900	21000
AC-FT	1707000	595000	772800	805900	638200	865700	1390000	1555000	1535000	1500000	1415000	1355000

MISSOURI-LEWIS AND CLARK RIVER BASIN
06467500 MISSOURI RIVER AT YANKTON, SD--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1992, BY WATER YEAR (WY)

MEAN	37250	32790	20880	17650	17430	19060	25980	29100	29960	33120	34610	34850
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	27430	8979	12390	11510	10300	10930	15320	20090	17100	24400	23020	22780
(WY)	1991	1991	1991	1990	1991	1991	1984	1984	1984	1992	1992	1992

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

*WATER YEARS 1976 - 1992

ANNUAL TOTAL	7534250		7126770			
ANNUAL MEAN	20640		19470			27760
HIGHEST ANNUAL MEAN						38220
LOWEST ANNUAL MEAN						19470
HIGHEST DAILY MEAN	32100	Sep 5	31100	Oct 1		63400
LOWEST DAILY MEAN	7080	Mar 23	5070	Mar 6		5070
ANNUAL SEVEN-DAY MINIMUM	7580	Mar 17	5740	Mar 1		5740
INSTANTANEOUS PEAK FLOW (STAGE)			31300	Oct 1		63700
INSTANTANEOUS PEAK STAGE			15.87	Oct 1		23.17
ANNUAL RUNOFF (AC-FT)	14940000		14140000			20110000
10 PERCENT EXCEEDS ³	0400		28200			39000
50 PERCENT EXCEEDS	23500		23000			28900
90 PERCENT EXCEEDS	9100		9610			14200

e Estimated

* Period of record since main-stem reservoirs reached maximum pool elevation (1976 - 92). See REMARKS.

BOW CREEK BASIN
06478518 BOW CREEK NEAR ST. JAMES, NE

LOCATION.--Lat 42°43'48", long 97°08'53", in SE1/4 SW1/4 sec.24, T.32 N., R.2 E., Cedar County, Hydrologic Unit 10170101, on right downstream end of bridge on State Highway 12, 0.25 mi west of intersection of St. James road and State Highway 12, 0.7 mi south of St. James, and at mile 6.5.

DRAINAGE AREA.--304 mi².

PERIOD OF RECORD.--October 1978 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,180.88 ft above National Geodetic Vertical Datum of 1929.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	e22	e20	e28	e32	48	23	e74	60	57	35	179
2	16	e18	e18	e30	e30	47	27	e66	76	43	28	263
3	17	e14	e18	e30	29	44	28	e60	59	45	28	130
4	22	e16	e20	e28	30	45	25	e60	50	46	34	95
5	23	e18	e16	e28	31	52	24	e58	59	38	36	189
6	24	e19	e22	e30	31	58	44	53	62	34	34	428
7	25	e14	e28	e30	26	54	76	53	40	38	538	322
8	26	e18	e32	e26	26	52	74	58	44	40	250	309
9	26	e20	e36	e25	e30	108	69	57	61	37	84	161
10	25	e23	e36	e24	e28	65	69	54	58	42	2290	125
11	27	e24	e38	e26	e26	71	68	192	43	48	406	125
12	26	e28	e38	e28	e28	61	66	81	36	75	181	113
13	28	e40	e36	e24	e36	58	65	71	33	63	123	114
14	30	e42	e32	e20	43	62	65	64	33	47	90	127
15	35	e40	e30	e18	43	54	63	63	32	41	85	140
16	32	e40	e30	e26	45	55	62	1550	1200	40	80	102
17	30	e38	e28	e24	44	50	e62	645	249	41	79	85
18	29	e38	e24	e24	52	45	e64	228	84	34	60	77
19	31	e36	e26	e30	47	51	e72	129	59	24	43	67
20	34	e34	e30	e34	39	47	e72	124	61	34	44	71
21	35	e32	e28	e38	42	45	e68	100	43	33	36	75
22	33	e31	e32	e41	45	44	e80	100	37	49	34	79
23	35	e30	e30	e38	47	36	e100	81	36	39	43	68
24	36	e26	e28	e36	65	33	e130	76	25	41	54	55
25	38	e24	e26	e34	58	33	e120	71	24	51	165	47
26	39	e26	e28	e38	52	30	e96	67	33	79	198	55
27	38	e28	e28	e36	54	23	e88	66	37	62	106	60
28	e37	e26	e30	e33	49	33	e80	63	32	64	76	53
29	e33	e26	e32	e32	45	46	e78	63	185	47	74	49
30	e30	e24	e34	e32	---	33	e76	61	268	34	70	47
31	e27	---	e32	e33	---	24	---	57	---	32	55	---
TOTAL	903	815	886	924	1153	1507	2034	4545	3119	1398	5459	3810
MEAN	29.1	27.2	28.6	29.8	39.8	48.6	67.8	147	104	45.1	176	127
MAX	39	42	38	41	65	108	130	1550	1200	79	2290	428
MIN	16	14	16	18	26	23	23	53	24	24	28	47
AC-FT	1790	1620	1760	1830	2290	2990	4030	9020	6190	2770	10830	7560

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1992, BY WATER YEAR (WY)

MEAN	41.1	45.3	41.5	42.0	64.8	93.4	115	113	147	57.4	60.3	44.5
MAX	87.0	85.2	65.6	112	177	280	521	325	678	142	176	127
(WY)	1985	1985	1987	1986	1988	1986	1984	1984	1984	1984	1992	1992
MIN	17.7	20.8	21.7	12.8	19.6	33.5	27.8	23.7	26.9	16.6	10.1	11.0
(WY)	1982	1979	1990	1979	1979	1981	1981	1981	1989	1989	1989	1981

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1979 - 1992

ANNUAL TOTAL	18347.0	26553	
ANNUAL MEAN	50.3	72.5	72.0
MEDIAN OF ANNUAL MEANS			59.1
HIGHEST ANNUAL MEAN			188
LOWEST ANNUAL MEAN			28.0
HIGHEST DAILY MEAN	1880 Jun 1	2290 Aug 10	5400 Jun 21 1984
LOWEST DAILY MEAN	6.5 Sep 2	14 Nov 3, 7	6.1 Aug 18 1989
ANNUAL SEVEN-DAY MINIMUM	7.9 Aug 27	17 Nov 2	6.6 Aug 6 1989
INSTANTANEOUS PEAK FLOW		5790 Aug 10	21400 Jun 21 1984
INSTANTANEOUS PEAK STAGE		7.15 Aug 10	*13.23 Jun 21 1984
ANNUAL RUNOFF (AC-FT)	36390	52670	52170
10 PERCENT EXCEEDS	58	103	112
50 PERCENT EXCEEDS	30	41	46
90 PERCENT EXCEEDS	14	24	19

e Estimated.

* From floodmark.

MISSOURI RIVER MAIN STEM
06486000 MISSOURI RIVER AT SIOUX CITY, IA

LOCATION.--Lat 42°29'09", long 96°24'49", in NW1/4SE1/4 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: Feb. 7-13. Records good except those for estimated daily discharges, which are poor. Flow regulated by upstreammain- 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31300	12400	13800	12900	11700	13500	24500	24600	26700	29400	26200	25900
2	31200	10600	13900	13200	12000	14100	24100	24600	25100	28800	25700	27200
3	31000	10300	14000	13100	12200	14100	24300	24300	27700	29700	25400	27700
4	31000	9940	10500	12900	12300	14300	24100	24200	26900	29700	25800	27800
5	30800	11400	10900	12900	12200	14200	24000	24500	24900	30600	26200	28400
6	30200	10700	14100	12900	12400	12900	24000	24600	27200	33100	26200	28300
7	30000	9550	15200	12900	12600	11500	24100	24700	26000	33500	27400	27400
8	30200	9440	14600	13100	13200	11000	24000	24600	24100	32000	27600	26800
9	30200	10100	13500	12400	13800	13300	24100	24500	27400	31700	27400	26200
10	29800	10100	13400	12300	14200	15400	24100	27300	26800	31100	28800	25800
11	29900	9830	13400	13600	14400	15500	24000	27100	25100	31600	30400	25300
12	29700	9950	14000	14500	14000	14600	24000	24700	27600	35000	28800	25100
13	29900	10100	14400	15400	14300	13500	23900	27500	27000	34900	27500	25600
14	30100	10100	12900	15300	14400	11900	23900	26600	25500	33200	26900	26000
15	30100	10000	11600	13900	13700	11400	24100	24400	27900	31100	26400	26500
16	30200	9950	16300	12700	13500	11200	24300	29900	28800	31100	25800	26600
17	30200	10000	14200	18500	13600	11700	24200	30500	27600	31100	25400	26100
18	30300	10200	13300	16500	14100	13800	24200	26100	27200	29100	25300	25200
19	30500	10100	12100	16100	13400	16900	24500	28600	28100	27300	25300	24700
20	30300	9880	13100	16300	12800	19600	24300	27900	28400	26700	25600	24900
21	30300	9810	13400	14900	13500	22400	24800	26500	26400	26200	25500	25000
22	30300	9950	12900	13100	13500	24700	24500	28500	28600	26800	25000	25100
23	30400	11200	12800	12600	12900	25100	24700	26900	27700	26500	24300	25100
24	30400	11500	12800	12000	13000	24800	25400	24600	26400	26600	24400	25000
25	30200	11900	12800	12100	12600	24800	25100	27500	27800	27200	26100	25300
26	29700	11700	12900	12100	12900	24700	24700	26900	28200	27600	26700	25900
27	27000	11600	12800	12600	12200	24600	24700	25000	29300	27700	26400	25600
28	23400	10700	12800	12100	12100	24900	24600	27700	28900	29200	26200	25400
29	19700	10900	12900	12600	12800	25000	24800	26800	28300	29300	26100	25300
30	15700	11800	13000	12400	---	24800	24700	24900	30000	28000	26000	25200
31	13800	---	12900	11700	---	24600	---	27500	---	27200	25800	---
TOTAL	887800	315700	411200	419600	380300	544800	730700	814000	817600	923000	816600	780400
MEAN	28640	10520	13260	13540	13110	17570	24360	26260	27250	29770	26340	26010
MAX	31300	12400	16300	18500	14400	25100	25400	30500	30000	35000	30400	28400
MIN	13800	9440	10500	11700	11700	11000	23900	24200	24100	26200	24300	24700
AC-FT	1761000	626200	815600	832300	754300	1081000	1449000	1615000	1622000	1831000	1620000	1548000

MISSOURI RIVER MAIN STEM
06486000 MISSOURI RIVER AT SIOUX CITY, IA --Continued

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1992, BY WATER YEAR (WY) a

MEAN	35670	31050	18550	15820	16680	21780	32600	32250	33750	35110	36310	36080
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	25640	25790
(WY)	1962	1962	1962	1964	1963	1958	1961	1962	1960	1958	1962	1962

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1958 - 1992) a	
ANNUAL TOTAL	7778910		7841700			
ANNUAL MEAN	21310		21430		28850	
HIGHEST ANNUAL MEAN					40750	
LOWEST ANNUAL MEAN					20030	
HIGHEST DAILY MEAN	32600	Sep 11	35000	Jul 12	103000	Jun 25 1984
LOWEST DAILY MEAN	8880	Mar 7	9440	Nov 8	3000	Dec 11 1961
ANNUAL SEVEN-DAY MINIMUM	9270	Mar 3	9870	Nov 7	5430	Feb 22 1963
INSTANTANEOUS PEAK FLOW			36500	Jul 12	10100	Apr 3 1960
INSTANTANEOUS PEAK STAGE			19.90	Jul 12	30.65	Feb 19 1971
ANNUAL RUNOFF (AC-FT)	15430000		15550000		20900000	
10 PERCENT EXCEEDS	30500		30000		43700	
50 PERCENT EXCEEDS	24300		24600		30000	
90 PERCENT EXCEEDS	10100		11700		11600	

a Post-regulation period.

OMAHA CREEK BASIN
06601000 OMAHA CREEK AT HOMER, NE

LOCATION.--Lat 42°19'29", long 96°29'43", in SW1/4SE1/4 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.--168 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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	e6.3	e30	37	22	26	49	51	51	31	41	44
2	10	e5.0	e26	55	22	26	48	46	68	46	40	54
3	16	e6.2	e25	32	23	26	49	43	61	38	38	51
4	27	e8.0	e25	28	22	27	47	45	60	40	38	42
5	22	e10	e25	28	18	45	43	43	54	43	40	224
6	16	e8.0	26	29	24	73	42	42	58	34	41	119
7	15	e10	29	31	20	54	42	42	57	32	166	255
8	15	e25	34	53	20	43	42	42	55	31	107	138
9	15	28	38	28	22	60	42	42	62	31	51	78
10	14	28	36	42	26	52	44	40	64	32	46	64
11	15	29	31	32	23	51	43	41	58	29	42	57
12	14	28	67	31	19	51	40	41	59	286	46	53
13	14	36	113	25	25	47	41	38	59	63	44	52
14	14	36	43	30	23	48	43	41	60	34	40	59
15	14	39	34	e17	32	44	44	46	64	32	35	60
16	15	37	41	e30	32	42	48	203	209	30	37	54
17	16	38	37	33	34	41	45	195	326	27	39	43
18	15	51	25	27	56	38	47	69	84	27	37	41
19	14	39	26	24	35	37	52	56	60	26	34	42
20	15	30	33	27	29	36	45	51	58	27	32	42
21	17	28	30	28	26	36	48	51	53	27	29	46
22	17	28	33	29	26	35	48	54	50	55	29	46
23	17	20	33	28	27	34	67	50	46	40	28	43
24	19	e26	24	15	29	34	79	48	43	40	28	42
25	18	21	24	e20	27	32	72	50	40	46	111	40
26	19	20	29	19	27	31	64	50	38	66	100	45
27	21	22	25	23	29	30	60	50	35	35	45	44
28	27	25	29	16	28	55	59	49	31	156	37	41
29	28	e30	27	28	26	94	61	49	39	158	33	41
30	18	e35	26	23	---	61	55	48	36	69	31	40
31	e10	---	28	23	---	54	---	47	---	44	33	---
TOTAL	516.3	752.5	1052	891	772	1363	1509	1763	2038	1675	1498	2000
MEAN	16.7	25.1	33.9	28.7	26.6	44.0	50.3	56.9	67.9	54.0	48.3	66.7
MAX	28	51	113	55	56	94	79	203	326	286	166	255
MIN	9.3	5.0	24	15	18	26	40	38	31	26	28	40
AC-FT	1020	1490	2090	1770	1530	2700	2990	3500	4040	3320	2970	3970

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1992, BY WATER YEAR(WY)

MEAN	16.7	15.4	14.0	14.4	45.4	65.5	50.6	52.9	82.9	43.5	24.9	20.5
MAX	59.2	52.2	49.4	82.0	472	237	426	248	356	171	95.4	77.2
(WY)	1952	1985	1985	1973	1971	1950	1985	1984	1967	1958	1951	1951
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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1946 - 1992

ANNUAL TOTAL	14650.1	15829.8	
ANNUAL MEAN	40.1	43.3	37.1
HIGHEST ANNUAL MEAN			113
LOWEST ANNUAL MEAN			6.20
HIGHEST DAILY MEAN	453 May 15	326 Jun 17	6840 Feb 18 1971
LOWEST DAILY MEAN	5.0 Sep 10	5.0 Nov 2	.10 Sep 16 1948
ANNUAL SEVEN-DAY MINIMUM	5.6 Sep 4	7.6 Oct 31	.16 Sep 8 1955
INSTANTANEOUS PEAK FLOW		748 Jul 12	18100 Feb 19 1971
INSTANTANEOUS PEAK STAGE		6.65 Jul 12	28.47 Feb 19 1971
ANNUAL RUNOFF (AC-FT)	29060	31400	26880
10 PERCENT EXCEEDS	82	61	58
50 PERCENT EXCEEDS	25	37	15
90 PERCENT EXCEEDS	8.3	19	3.8

e Estimated.

* From floodmark.

MISSOURI RIVER MAIN STEM
06601200 MISSOURI RIVER AT DECATUR, NE

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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.--No estimated daily discharges. 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 platform at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31500	14700	13100	13300	12400	13200	25300	25300	29900	30700	27800	27000
2	31600	13000	14200	13400	12500	13900	25300	25400	27000	29200	27200	27500
3	31400	11900	14200	13500	12600	14200	25200	25200	27300	29700	27000	28500
4	31300	11500	14000	13500	12800	14200	25200	25000	29600	30600	27000	28600
5	31200	11800	10400	13600	12700	14400	25000	24900	26500	30600	27000	29300
6	30800	12500	12600	13700	12700	14000	25000	25200	26700	32600	26900	29700
7	30600	11200	14700	13900	13000	12600	25100	25300	29100	35100	27100	29500
8	30600	10600	15300	14000	13600	11700	25100	25300	25900	34100	28700	28500
9	30600	10600	14600	14300	14100	12100	25000	25200	26500	33500	27700	27500
10	30300	10900	14000	13200	14400	14200	25000	25800	29400	33600	28600	27300
11	30300	10600	13900	14100	14800	15200	24900	28800	26500	33500	30200	26900
12	30200	10300	14300	14800	14500	14900	24800	26200	26700	36400	30100	26500
13	30100	10400	15100	15600	14500	14200	24900	26000	29200	39300	28500	26300
14	30300	10400	14600	15900	15000	13100	25000	28800	26800	36900	27600	26600
15	30400	10500	12900	15500	14100	12000	25000	25700	27100	34800	27000	26800
16	30400	10400	14200	13200	13800	11900	25200	27300	30400	34000	26400	26900
17	30400	10500	15400	16000	13900	11800	25400	33400	30200	34300	25900	26800
18	30300	10700	14200	17500	14200	12700	25300	28400	28800	33100	25600	26100
19	30600	10800	13100	16100	14400	15000	25500	27400	29600	30600	25400	25800
20	30600	10700	12400	16100	13600	17700	25600	30200	31000	29400	25500	25900
21	30400	10600	13900	16100	13400	20400	25800	27700	29200	28800	25800	26500
22	30400	10700	13500	14500	13700	23200	26100	28200	29400	28700	25600	26700
23	30400	11100	13400	13600	13300	25000	25900	30100	31100	28700	25200	26600
24	30400	11900	13200	13100	12900	24900	26500	26500	28400	28300	25100	26200
25	30200	12000	13100	12600	12800	25000	26600	26700	28400	28600	26300	26100
26	30000	12400	13100	12700	12700	25100	26100	29900	29500	30000	27700	26500
27	28900	12100	13100	12800	12700	25100	25700	27000	29700	28900	27000	26300
28	25600	12200	12800	12800	12300	25600	25500	27100	30600	29900	26900	25900
29	22100	11700	13000	13000	12700	26100	25400	29900	29800	31100	26900	25800
30	19000	12100	13200	13100	---	25800	25500	26800	30200	29900	27100	25800
31	16200	---	13300	12800	---	25500	---	27100	---	28800	27000	---
TOTAL	907100	340800	422800	438300	390100	544700	761900	841800	860500	983700	837800	810400
MEAN	29260	11360	13640	14140	13450	17570	25400	27150	28680	31730	27030	27010
MAX	31600	14700	15400	17500	15000	26100	26600	33400	31100	39300	30200	29700
MIN	16200	10300	10400	12600	12300	11700	24800	24900	25900	28300	25100	25800
AC-FT	1799000	676000	838600	869400	773800	1080000	1511000	1670000	1707000	1951000	1662000	1607000

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR			FOR 1992 WATER YEAR		PERIOD OF RECORD	
ANNUAL TOTAL	7961250			8139900			
ANNUAL MEAN	21810			22240		24010	
HIGHEST ANNUAL MEAN						29030	
LOWEST ANNUAL MEAN						21450	
HIGHEST DAILY MEAN	33600	Sep 12		39300	Jul 13	40100	Sep 16 1988
LOWEST DAILY MEAN	9500	Mar 15		10300	Nov 12	7130	Dec 22 1990
ANNUAL SEVEN-DAY MINIMUM	9690	Mar 13		10400	Nov 11	9660	Dec 12 1990
INSTANTANEOUS PEAK FLOW				40200	Jul 13	40900	May 19 1990
INSTANTANEOUS PEAK STAGE				25.12	Jul 13	25.59	Sep 16 1988
ANNUAL RUNOFF (AC-FT)	15790000			16150000		17390000	
10 PERCENT EXCEEDS	31000			30400		32900	
50 PERCENT EXCEEDS	24800			25500		26600	
90 PERCENT EXCEEDS	10700			12500		11900	

MISSOURI RIVER MAIN STEM
06610000 MISSOURI RIVER AT OMAHA, NE

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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.--No estimated daily discharges. 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, 396,000 ft³/s Apr. 18, 1952, gage height, 40.20 ft, present datum; minimum, about 2,000 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32700	18200	15200	17100	16600	16400	30100	33800	30900	34900	36300	32600
2	32600	16100	15400	17000	16300	17300	30000	33000	33000	36100	35100	33100
3	32700	14700	16700	17100	16500	18100	29900	32400	30400	34300	33700	33400
4	32700	13700	16400	17000	17000	18900	29800	31700	30700	34000	33300	34600
5	32600	13400	16100	16700	17200	19500	29600	31100	33000	35100	32900	34000
6	32600	13300	13700	16600	17400	20000	29400	30700	30400	34400	32500	34100
7	32400	14100	14700	16700	17500	19600	29400	30700	31000	36400	32900	34800
8	32300	13300	17100	16800	17200	18400	29300	30800	33400	38600	32900	36600
9	32200	12600	17900	17200	17600	17900	29100	30700	30500	37500	35600	34500
10	32100	12600	17500	17800	17700	18500	29000	30500	31200	38200	33600	32900
11	31800	13000	16800	16800	18100	21000	28900	31200	33900	37200	33900	31600
12	31800	13100	17300	17400	18200	22900	28500	33000	30700	37700	35400	30900
13	31800	12900	20000	18900	17700	22700	28500	30100	30800	41900	34900	30600
14	31500	13100	20800	19400	17900	21500	28700	29600	32900	48600	32900	32000
15	31600	13300	20000	19100	18800	20100	28600	31800	30400	49200	31600	33100
16	31700	13400	17500	17900	17900	18700	28400	29700	31500	43000	30700	32700
17	31800	13500	17600	16100	18000	18000	28500	34200	38700	41600	29800	32500
18	31400	13500	19500	17800	18400	17600	28800	44500	39700	41800	29000	32200
19	31300	13600	17900	20900	18100	17900	29200	37600	35200	40900	28900	31500
20	31700	13800	16600	19600	19000	19700	29800	35400	34400	38400	28900	30800
21	32000	13700	15700	19600	18600	22600	30800	38400	35400	37100	29200	30600
22	31700	13600	16900	20000	18300	25300	32900	37400	33400	36600	29800	30700
23	31500	13600	17000	19400	18400	28300	36100	37100	33700	35900	30000	30500
24	31700	13400	16600	19100	18000	30200	37000	37900	35300	35900	29800	30400
25	31700	13600	16400	17900	17300	29900	36600	33600	32600	36500	30000	30000
26	31700	13600	16400	16900	17100	29900	36600	33500	32700	39900	32300	30200
27	31400	14100	16500	16700	16700	29400	36100	35900	33800	37500	34900	30700
28	30500	14200	16500	16800	16600	29700	35500	32600	34100	36400	33900	30700
29	27200	14500	16600	16700	16000	30200	34800	32200	35100	37500	33200	30400
30	24000	14500	16600	16500	---	31200	34100	34000	34400	40700	32900	30200
31	21000	---	16700	16900	---	30500	---	30800	---	37900	32900	---
TOTAL	965700	414000	526600	550400	510100	701900	934000	1035900	993200	1191700	1003700	962900
MEAN	31150	13800	16990	17750	17590	22640	31130	33420	33110	38440	32380	32100
MAX	32700	18200	20800	20900	19000	31200	37000	44500	39700	49200	36300	36600
MIN	21000	12600	13700	16100	16000	16400	28400	29600	30400	34000	28900	30000
AC-FT	1915000	821200	1045000	1092000	1012000	1392000	1853000	2055000	1970000	2364000	1991000	1910000

MISSOURI RIVER MAIN STEM
06610000 MISSOURI RIVER AT OMAHA, NE--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1992, BY WATER YEAR (WY) a

MEAN	37640	33660	20320	17210	19140	26760	38100	36690	39120	38400	38250	38240
MAX	64410	66130	42800	33250	36590	53980	66320	60430	75730	58070	64830	65020
(WY)	1976	1976	1987	1987	1983	1983	1969	1986	1984	1984	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 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1958 - 1992 a	
ANNUAL TOTAL	9472000		9790100			
ANNUAL MEAN	25950		26750		32000	
HIGHEST ANNUAL MEAN					46090	1984
LOWEST ANNUAL MEAN					20790	1958
HIGHEST DAILY MEAN	74100	Jun 15	49200	Jul 15	116000	Apr 4 1960
LOWEST DAILY MEAN	12600	Nov 9	12600	Nov 9	2440	Dec 14 1961
ANNUAL SEVEN-DAY MINIMUM	12900	Nov 8	12900	Nov 8	4650	Dec 10 1961
INSTANTANEOUS PEAK FLOW			50800	Jul 15	120000	Apr 1 1960
INSTANTANEOUS PEAK STAGE			21.21	Jul 15	29.02	Jun 27 1984
ANNUAL RUNOFF (AC-FT)	18790000		19420000		23180000	
10 PERCENT EXCEEDS	35100		36200		49900	
50 PERCENT EXCEEDS	30000		30100		32300	
90 PERCENT EXCEEDS	13800		16100		13700	

a Post-regulation period.

06674500 NORTH PLATTE RIVER AT WYOMING-NEBRASKA STATE LINE

LOCATION.--Lat 41°59'25", long 104°02'57", in SWU NEU SEU sec.4, T.23 N., R.58 W., Scottsbluff County, NE, Hydrologic Unit 10180009, on right bank 650 ft upstream from bridge on NE State Highway 86, 700 ft downstream from Wyoming-Nebraska State line, and 0.5 mi south of Henry, NE.

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. Datum of gage is 4,021.35 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 6, 1929, non-recording gage and Nov. 6, 1929, to Sept. 30, 1959, water-stage recorder at site 0.5 mi upstream at datum 4.42 ft higher. Oct. 7, 1959 to Feb. 22, 1972, water-stage recorder at site 0.5 mi upstream at datum 3.42 ft higher.

REMARKS.--Estimated daily discharges: Nov. 2, 3, 30, Dec. 1, and Jan. 15-22. 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 0.8 mi upstream. U.S. Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	526	296	230	214	183	165	151	138	74	529	1240	975
2	468	280	232	213	183	165	151	135	14	913	1230	932
3	443	280	231	212	183	165	154	88	13	779	1310	876
4	458	287	233	210	183	170	152	50	11	668	1330	844
5	539	288	234	201	189	183	152	20	9.1	615	1320	838
6	483	288	234	190	183	179	152	14	8.5	570	1290	825
7	442	282	232	194	180	172	152	9.9	7.7	646	1280	847
8	422	273	229	184	179	173	153	6.9	7.2	889	1300	861
9	403	264	220	171	180	186	152	5.9	6.4	944	1300	849
10	388	263	217	174	181	184	152	5.3	104	956	1310	870
11	379	256	214	184	181	179	150	4.6	143	1060	1290	816
12	373	252	217	203	177	182	148	4.1	138	1160	1290	783
13	362	253	217	203	176	183	150	3.9	132	1240	1270	755
14	351	252	217	199	177	179	157	18	113	1230	1240	740
15	344	252	215	190	176	176	169	94	114	1210	1210	677
16	336	250	218	187	176	176	166	155	40	1290	1180	635
17	326	254	220	187	175	172	163	168	6.4	1250	1270	578
18	314	252	214	186	172	169	166	193	5.6	1210	1220	542
19	310	250	213	187	172	169	160	220	5.1	1220	1190	548
20	310	247	213	186	172	167	159	236	4.7	1300	1120	547
21	322	246	212	186	172	165	158	269	4.3	1320	1050	539
22	308	246	210	184	172	165	158	465	4.1	1220	1060	492
23	301	239	210	185	181	164	159	474	4.1	1150	1070	519
24	294	239	208	188	180	164	155	377	4.2	1090	1140	623
25	294	238	210	190	172	159	153	307	4.5	993	1140	680
26	291	239	212	190	169	156	151	261	4.8	1060	1100	459
27	292	241	212	188	167	155	153	240	5.6	1120	1050	345
28	294	238	212	185	168	155	150	232	6.4	1140	967	285
29	291	235	214	184	165	155	143	217	106	1200	955	274
30	298	228	215	185	---	154	139	200	371	1260	942	268
31	300	---	215	186	---	154	---	187	---	1260	938	---
TOTAL	11262	7708	6780	5926	5124	5240	4628	4798.6	1471.7	32492	36602	19822
MEAN	363	257	219	191	177	169	154	155	49.1	1048	1181	661
MAX5	39	296	234	214	189	186	169	474	371	1320	1330	975
MIN	291	228	208	171	165	154	139	3.9	4.1	529	938	268
AC-FT	22340	15290	13450	11750	10160	10390	9180	9520	2920	64450	72600	39320

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1992, BY WATER YEAR (WY)

MEAN	521	439	391	346	353	511	621	1195	1630	1538	1277	879
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	169	149	141	141	43.9	49.1	611	154	230
(WY)	1957	1935	1991	1991	1982	1991	1991	1990	1992	1934	1934	1934

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1929 - 1992

ANNUAL TOTAL	171355	141854.3	--
ANNUAL MEAN	469	388	790
HIGHEST ANNUAL MEAN	--	--	2863
LOWEST ANNUAL MEAN	--	--	388
HIGHEST DAILY MEAN	2820	1330	17600
LOWEST DAILY MEAN	70	3.9	3.9
ANNUAL SEVEN-DAY MINIMUM	131	4.4	4.4
INSTANTANEOUS PEAK FLOW	--	*1360	**17900
INSTANTANEOUS PEAK STAGE	--	3.28	**7.04
ANNUAL RUNOFF (AC-FT)	339900	281400	572000
10 PERCENT EXCEEDS	1180	1140	1450
50 PERCENT EXCEEDS	238	214	496
90 PERCENT EXCEEDS	141	105	218

* Gage height, 3.26 ft.

** Maximum observed.

*** 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 1991 TO SEPTEMBER 1992

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (μ S/CM)	TEMPER- ATURE WATER (°C)
OCT 22...	0900	309	920	9.5
DEC 05...	1154	234	910	5.0
JAN 22...	1000	184	890	1.0
MAR 03...	1325	164	975	12.0
APR 14...	1645	169	980	15.0
MAY 21...	0930	238	810	18.5
JUN 26...	0945	4.4	894	17.0
JUL 28...	1910	1130	810	24.0
SEP 01...	1315	993	788	18.5

06677500 HORSE CREEK NEAR LYMAN, NE

LOCATION.--Lat 41°56'21", long 103°59'13", in SE1/4NE1/4 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.--1,570 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 National Geodetic Vertical Datum of 1929 (levels by private engineering firm). See WSP 2118 for history of changes prior to Apr. 17, 1967.

REMARKS.--Records fair Mar. 13 to Sept. 30 and poor Oct. 1 to Mar. 12 because of estimated record or poor gage-height record.. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	35	e20	20	24	e14	36	10	8.9	47	76	99
2	81	44	e23	21	23	e14	34	9.6	8.1	98	61	93
3	75	50	e23	20	23	e13	30	30	7.0	109	63	81
4	75	46	e24	21	e23	e13	22	24	6.5	122	70	77
5	69	58	e24	24	e22	e14	18	7.1	6.4	109	71	77
6	65	e50	e24	24	e22	e20	16	6.9	6.3	117	68	81
7	61	e50	e24	e20	e21	e22	16	6.7	6.2	103	65	89
8	59	e48	e23	e22	e21	e24	17	6.7	6.1	104	59	95
9	57	e46	e23	e23	e20	e26	17	6.5	6.0	121	57	108
10	55	e44	e23	e24	e20	e28	18	6.4	5.6	97	53	115
11	55	e40	e22	e25	e19	e30	17	6.1	5.4	120	59	110
12	54	e40	e22	e21	e19	e31	17	4.9	5.8	159	60	88
13	54	e38	e21	e23	e18	31	16	4.3	14	140	57	182
14	53	e38	e21	e19	e18	32	16	3.8	6.3	103	52	170
15	54	e37	e20	e25	e17	30	13	3.7	6.0	74	44	204
16	51	e37	e20	e30	e17	28	12	3.6	6.1	102	42	131
17	48	e37	e20	e30	e16	36	12	3.9	6.2	99	55	111
18	46	e36	23	e24	e16	56	12	3.8	6.4	112	70	91
19	46	e34	24	e25	e16	58	11	3.9	6.6	97	66	97
20	48	e31	29	e26	e17	59	12	4.3	6.5	92	59	84
21	46	e28	27	e25	e17	58	12	17	6.4	114	58	70
22	44	e28	27	e22	e16	56	12	154	6.6	123	60	63
23	39	e28	29	e27	e17	56	13	13	6.8	122	66	61
24	37	e29	24	e28	e17	55	12	10	6.9	111	87	59
25	41	e29	24	27	e17	47	12	8.2	12	116	86	56
26	43	e29	23	27	e17	43	12	7.7	29	118	75	54
27	44	e26	23	24	e17	42	12	8.0	50	114	77	53
28	27	e22	22	28	e16	42	12	8.6	41	95	79	51
29	30	e22	25	29	e15	43	12	8.6	37	82	74	50
30	30	e22	24	27	---	43	11	8.7	53	94	73	49
31	34	---	19	28	---	41	---	8.7	---	95	75	---
TOTAL	1606	1102	720	759	541	1105	482	408.7	385.1	3309	2017	2749
MEAN	51.8	36.7	23.2	24.5	18.7	35.6	16.1	13.2	12.8	107	65.1	91.6
MAX	85	58	29	30	24	59	36	154	53	159	87	204
MIN	27	22	19	19	15	13	11	3.6	5.4	47	42	49
AC-FT	3190	2190	1430	1510	1070	2190	956	811	764	6560	4000	5450

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATERYEARS 1931 - 1992, BY WATER YEAR (WY)

	70.0	40.7	30.6	24.7	30.6	35.2	39.1	101	160	98.7	93.8	163
MEAN	70.0	40.7	30.6	24.7	30.6	35.2	39.1	101	160	98.7	93.8	163
MAX	146	117	138	100	141	173	229	464	456	209	273	349
(WY)	1985	1985	1985	1974	1984	1984	1984	1983	1983	1984	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1931 - 1992

ANNUAL TOTAL	24741	15183.8	
ANNUAL MEAN	67.8	41.5	74.1
HIGHEST ANNUAL MEAN			174
LOWEST ANNUAL MEAN			18.1
HIGHEST DAILY MEAN	628	204	1160
LOWEST DAILY MEAN	11	3.6	.40
ANNUAL SEVEN-DAY MINIMUM	14	3.9	.69
INSTANTANEOUS PEAK FLOW		719	5110
INSTANTANEOUS PEAK STAGE		6.04	10.82
ANNUAL RUNOFF (AC-FT)	49070	30120	53680
10 PERCENT EXCEEDS	196	95	180
50 PERCENT EXCEEDS	33	28	41
90 PERCENT EXCEEDS	16	7.1	16

PLATTE RIVER BASIN

06679500 NORTH PLATTE RIVER AT MITCHELL, NE

LOCATION.--Lat 41°55'38", long 103°48'48", in NE1/4NE1/4 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 (revised) above National Geodetic Vertical Datum of 1929. 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.

REMARKS.--Records good except for period of estimated record, which is 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	930	581	500	424	366	346	360	238	248	77	202	259
2	847	536	497	417	366	344	361	233	205	145	181	271
3	795	545	490	416	365	343	360	243	178	327	194	237
4	779	566	492	416	358	346	358	233	166	322	224	226
5	830	582	499	414	353	371	358	192	152	283	242	221
6	868	586	506	412	353	374	344	133	148	241	237	213
7	806	590	507	412	346	364	337	102	148	181	223	215
8	775	590	499	392	344	361	341	88	147	165	217	222
9	737	590	487	399	348	361	346	88	134	169	221	247
10	712	590	485	401	349	366	340	85	131	186	220	252
11	699	582	477	400	349	372	335	84	146	321	223	291
12	688	580	476	400	349	377	328	78	155	319	222	261
13	674	580	474	397	355	383	327	79	167	303	227	279
14	652	568	462	395	361	378	342	80	159	239	217	317
15	652	565	460	359	358	381	343	78	150	203	214	309
16	646	565	460	377	354	371	331	79	144	211	217	292
17	640	568	460	383	352	357	332	76	116	246	239	261
18	611	570	459	379	348	364	328	78	116	225	285	250
19	613	570	459	374	351	376	320	76	103	205	322	252
20	614	560	459	369	353	393	316	76	85	239	327	280
21	614	560	456	362	349	400	318	99	83	345	274	366
22	609	560	451	362	349	381	325	338	80	397	254	491
23	589	549	447	355	356	391	317	200	80	291	244	658
24	586	541	442	361	362	390	309	157	83	245	261	743
25	591	540	437	366	360	382	281	175	80	222	293	846
26	587	540	434	366	351	370	259	304	81	215	300	787
27	590	540	431	366	350	364	262	309	95	210	299	647
28	582	544	432	369	350	366	264	311	93	204	279	551
29	569	541	428	371	348	364	272	298	93	191	247	529
30	567	514	425	371	---	366	255	280	83	197	238	518
31	576	---	424	372	---	365	---	268	---	216	236	---
TOTAL	21028	16893	14415	11957	10253	11467	9669	5158	3849	7340	7579	11291
MEAN	678	563	465	386	354	370	322	166	128	237	244	376
MAX	930	590	507	424	366	400	361	338	248	397	327	846
MIN	567	514	424	355	344	343	255	76	80	77	181	213
AC-FT	41710	33510	28590	23720	20340	22740	19180	10230	7630	14560	15030	22400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1992, BY WATER YEAR (WY)

	MEAN	859	678	573	510	500	774	1004	1249	1544	825	587	752
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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1958 - 1992
(SINCE GLENDO PROJECT)

ANNUAL TOTAL	167649		130899		822	
ANNUAL MEAN	459		358		539	
MEDIAN OF ANNUAL MEANS					3008	1984
HIGHEST ANNUAL MEAN					330	1961
LOWEST ANNUAL MEAN					11400	Jun 2 1971
HIGHEST DAILY MEAN	3000	Jun 9	930	Oct 1	54	May 3 1965
LOWEST DAILY MEAN	199	Aug 24	76	May 17	65	Jun 25 1961
ANNUAL SEVEN-DAY MINIMUM	214	Aug 23	78	May 14	27500(*6.45)	Jun 3 1909
INSTANTANEOUS PEAK FLOW (STAGE)			967	Oct 1	*7.80	May 29 1984
INSTANTANEOUS PEAK STAGE			**3.34	Oct 1		
ANNUAL RUNOFF (AC-FT)	332500		259600		595500	
10 PERCENT EXCEEDS	722		586		1440	
50 PERCENT EXCEEDS	346		350		500	
90 PERCENT EXCEEDS	246		147		234	

* Datum then in use.

** Present datum.

06686000 NORTH PLATTE RIVER AT LISCO, NE
(National stream-quality accounting network station)

LOCATION.--Lat: 41°29'24", long 102°37'24", in SW1/4NE1/4 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 National Geodetic Vertical Datum of 1929. 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1350	1090	1000	899	879	877	786	472	355	512	272	810
2	1360	1050	e1000	868	883	858	748	447	337	491	267	786
3	1300	e1000	e1000	866	863	839	717	433	314	489	279	783
4	1360	e980	1010	863	847	900	709	409	298	639	303	780
5	1370	e1020	982	868	831	1000	705	373	315	784	292	795
6	1350	e1100	1000	880	805	995	692	341	345	776	295	774
7	1380	1290	948	927	808	944	697	304	347	737	312	780
8	1390	1300	941	965	820	949	701	288	352	563	295	786
9	1350	1310	946	960	803	1080	703	252	586	455	268	773
10	1290	1300	959	940	786	1020	732	257	471	389	260	776
11	1230	1250	971	920	776	1010	760	230	359	390	253	764
12	1210	1230	956	900	790	1060	788	226	309	925	249	796
13	1220	1210	925	895	784	1070	777	197	336	1070	234	804
14	1240	1200	901	932	797	1030	775	186	412	1080	242	772
15	1280	1170	913	e900	804	1020	830	173	1000	996	260	752
16	1300	1160	923	e860	804	959	797	149	831	878	268	761
17	1270	1180	901	e840	803	923	815	133	620	779	305	759
18	1190	e1160	889	e880	788	892	760	121	507	679	319	715
19	1160	e1140	952	e900	755	910	711	104	446	631	313	682
20	1160	e1120	949	e920	780	892	703	e84	403	590	324	686
21	1160	e1040	929	e940	815	884	705	e82	379	602	342	680
22	1130	1050	936	e960	816	870	692	e92	390	676	389	681
23	1100	1060	971	e1000	782	859	689	e80	399	828	434	722
24	1140	1060	954	e1000	871	839	664	e94	375	826	459	800
25	1140	1090	930	e1020	900	802	671	194	405	667	639	856
26	1150	1110	867	e1080	872	771	670	255	450	543	740	877
27	1160	1100	858	937	856	791	672	320	607	451	846	942
28	1220	1130	860	939	862	831	666	330	641	394	916	936
29	1150	1130	886	955	873	821	625	304	627	344	909	905
30	1140	1080	863	952	---	810	565	294	578	321	815	892
31	1130	---	870	905	---	803	---	329	---	284	764	---
TOTAL	38380	34110	28990	28671	23853	28309	21525	7553	13794	19789	12863	23625
MEAN	1238	1137	935	925	823	913	717	244	460	638	415	787
MAX	1390	1310	1010	1080	900	1080	830	472	1000	1080	916	942
MIN	1100	980	858	840	755	771	565	80	298	284	234	680
AC-FT	76130	67660	57500	56870	47310	56150	42690	14980	27360	39250	25510	46860

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958-1992, BY WATER YEAR (WY)

MEAN	1668	1408	1212	1112	1142	1343	1495	1761	2089	1148	960	1510
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	1147	957	833	790	810	778	644	244	263	101	188	404
(WY)	1961	1990	1991	1962	1990	1991	1991	1992	1960	1960	1960	1960

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1958 - 1992
(SINCE GLENDO PROJECT)

ANNUAL TOTAL	325055		281462		1403	
ANNUAL MEAN	891		769		1160	
MEDIAN OF ANNUAL MEANS						
HIGHEST ANNUAL MEAN			3403		1984	
LOWEST ANNUAL MEAN					769	
HIGHEST DAILY MEAN	3660	Jun11	1390	Oct 8	11700	Jun 3 1971
LOWEST DAILY MEAN	215	Jul 19	80	May 23	8	Aug 4 1934
ANNUAL SEVEN-DAY MINIMUM	242	Jul 16	94	May 18	61	Jul 10 1960
INSTANTANEOUS PEAK FLOW (STAGE)			1410 (1.82)	Oct 7	20100	Jun 27 1917
INSTANTANEOUS PEAK STAGE			*4.10	Nov 4		
ANNUAL RUNOFF (AC-FT)	644700		558300		1017000	
10 PERCENT EXCEEDS	1320		1150		2170	
50 PERCENT EXCEEDS	859		815		1160	
90 PERCENT EXCEEDS	354		301		535	

e Estimated.

* Backwater from ice.

PLATTE RIVER BASIN
06686000 NORTH PLATTE RIVER AT LISCO, NE--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970 to current year.

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 1991 TO SEPTEMBER 1992

DATE	TIME	DIS-CHARGE, INST. FT ³ /S (00061)	SPECIFIC CON- DUCT- ANCE (μ S/CM) (00095)	PH WATER	TEMPER- ATURE WATER (°C) (00010)	BARO- METRIC PRES- SURE (MM OF (HG) (00025)	TURBID- (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	COLIFORM,	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARDNESS	
				WHOLE FIELD (STAND- ARD UNITS) (00400)		FECAL, 0.7 μM-MF (COLS./ 100 ML) (31625)			TOTAL (MG/L AS CaCO ₃) (00900)			
NOV	12...	0810	1220	940	8.5	0.5	668	22	13.2	20	200	310
JAN	13...	0845	903	994	8.4	0.5	668	17	12.9	K12	220	320
MAR	16...	0930	968	992	8.5	8.0	662	21	10.1	48	220	300
MAY	11...	0900	243	865	8.5	14.0	662	4.6	9.2	62	140	260
JUL	20...	0800	581	983	8.6	19.0	673	140	7.8	420	800	290

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- 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)	
NOV	12...	66	88	21	99	2	11	241	11	272	230	30
JAN	13...	91	93	22	100	2	11	232	7	268	260	28
MAR	16...	48	85	21	100	3	8.8	252	18	271	230	28
MAY	11...	53	71	21	94	3	11	212	18	222	210	26
JUL	20...	65	81	22	90	2	9.9	228	22	234	230	26

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 TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	
NOV	12...	0.50	38	664	679	0.90	2190	3.49	3.49	0.010	0.010
JAN	13...	0.50	43	683	714	0.93	1670	3.97	3.87	0.030	0.030
MAR	16...	0.50	37	651	677	0.89	1700	3.39	3.29	0.010	0.010
MAY	11...	0.40	38	597	609	0.81	392	2.17	2.18	0.030	0.020
JUL	20...	0.40	28	636	633	0.86	998	--	--	<0.010	<0.010

PLATTE RIVER BASIN
06686000 NORTH PLATTE RIVER AT LISCO, NE--Continued

WATER QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	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 12...	3.50	3.50	0.040	0.040	0.66	0.70	4.2	0.120	0.010	0.030
JAN 13...	4.00	3.90	0.060	0.050	0.64	0.70	4.7	0.110	0.020	0.030
MAR 16...	3.40	3.30	0.030	<0.010	0.57	0.60	4.0	0.120	0.020	0.030
MAY 11...	2.20	2.20	--	0.020	--	<0.20	--	0.080	0.050	0.040
JUL 20...	1.80	1.80	0.020	0.020	1.7	1.7	3.5	0.520	0.070	0.040

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 12...	0810	20	100	<3	5	42	2
MAR 16...	0930	20	94	<3	10	45	2
MAY 11...	0900	10	85	<3	38	34	4
JUL 20...	0800	<10	110	<3	4	34	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 12...		<10	<1	4	<1.0	920	9
MAR 16...		<10	<1	4	<1.0	920	11
MAY 11...		<10	1	3	<1.0	840	10
JUL 20...		<10	<1	4	<1.0	810	11

DATE	TIME	DISCHARGE, INST. FT ³ /S (00061)	TEMPER- ATURE WATER (°C) (00010)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDIMENT, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 12...	0810	1220	0.5	293	965	41
JAN 13...	0845	903	0.5	179	436	37
MAR 16...	0930	968	8.0	209	546	46
MAY 11...	0900	243	14.0	40	26	70
JUL 20...	0800	581	19.0	467	733	83

PLATTE RIVER BASIN

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 National Geodetic Vertical Datum of 1929.

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, 1,204,000 acre-ft May 1-6, elevation, 3,245.1 ft; minimum observed, 854,100 acre-ft Oct. 1, elevation, 3,228.9 ft.

MONTHEND ELEVATION AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	3,228.8	852,200	-
Oct. 31	3,232.3	922,600	+70,400
Nov. 30	3,235.2	983,000	+60,400
Dec. 31	3,237.3	1,028,000	+45,000
CAL YR 1991	-	-	+4,000
Jan. 31	3,239.3	1,071,000	+43,000
Feb. 29	3,241.3	1,116,000	+45,000
Mar. 31	3,243.7	1,171,000	+55,000
Apr. 30	3,245.0	1,202,000	+31,000
May 31	3,243.0	1,155,000	-47,000
June 30	3,242.2	1,137,000	-18,000
July 31	3,238.7	1,058,000	-79,000
Aug. 31	3,233.8	953,000	-104,000
Sept. 30	3,234.2	962,000	+8,400
WTR YR 1992	-	-	+109,800

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.--29,300 mi², approximately, of which about 25,800 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 National Geodetic Vertical Datum of 1929 (Nebraska Public Power District bench mark). See WSP 1918 for history of changes prior to May 1, 1964.

REMARKS.--Records 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. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	61	157	829	737	9.6
2	.00	.00	.00	.00	.00	.00	.00	49	145	702	812	13
3	.00	.00	.00	.00	.00	.00	.00	74	132	656	858	16
4	.00	.00	.00	.00	.00	.00	.00	75	136	850	1010	117
5	.00	.00	.00	.00	.00	.00	.00	74	136	972	776	230
6	.00	.00	.00	.00	.00	.00	.00	119	139	1100	610	254
7	.00	.00	.00	.00	.00	.00	.00	184	137	1130	575	253
8	.00	.00	.00	.00	.00	.00	.00	233	139	1070	753	258
9	.00	.00	.00	.00	.00	.00	.00	247	164	1210	908	266
10	.00	.00	.00	.00	.00	.00	.00	234	189	1450	913	266
11	.00	.00	.00	.00	.00	.00	.00	242	183	1240	1020	262
12	.00	.00	.00	.00	.00	.00	.00	248	183	656	1140	263
13	.00	.00	.00	.00	.00	.00	.00	290	182	540	1150	261
14	.00	.00	.00	.00	.00	.00	.00	327	185	558	1100	261
15	.00	.00	.00	.00	.00	.00	.00	290	169	757	1030	234
16	.00	.00	.00	.00	.00	.00	.00	252	142	1040	998	206
17	.00	.00	.00	.00	.00	.00	.00	251	123	1070	910	206
18	.00	.00	.00	.00	.00	.00	.00	256	103	955	796	243
19	.00	.00	.00	.00	.00	.00	.00	227	97	771	741	428
20	.00	.00	.00	.00	.00	.00	.00	159	97	599	764	510
21	.00	.00	.00	.00	.00	.00	.00	161	94	459	806	257
22	.00	.00	.00	.00	.00	.00	.00	162	92	399	856	428
23	.00	.00	.00	.00	.00	.00	.00	170	161	358	895	510
24	.00	.00	.00	.00	.00	.00	.00	166	394	340	736	405
25	.00	.00	.00	.00	.00	.00	.00	165	640	304	282	262
26	.00	.00	.00	.00	.00	.00	.00	164	892	317	44	154
27	.00	.00	.00	.00	.00	.00	.00	160	1020	356	44	152
28	.00	.00	.00	.00	.00	.00	.00	159	1020	422	47	159
29	.00	.00	.00	.00	.00	.00	9.7	161	888	535	51	133
30	.00	.00	.00	.00	---	.00	61	164	747	642	53	117
31	.00	---	.00	.00	---	.00	---	159	---	589	12	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	70.70	5683	8886	22876	21427	7133.6
MEAN	.000	.000	.000	.000	.000	.000	2.36	183	296	738	691	238
MAX	.00	.00	.00	.00	.00	.00	61	327	1020	1450	1150	510
MIN	.00	.00	.00	.00	.00	.00	.00	49	92	304	12	9.6
AC-FT	.00	.00	.00	.00	.00	.00	140	11270	17630	45370	42500	14150

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1992, BY WATER YEAR (WY)

MEAN	299	146	99.1	72.4	119	202	297	571	897	1572	1322	581
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	324	75.9
(WY)	1992	1975	1975	1975	1975	1979	1982	1958	1962	1962	1981	1989

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1943 - 1992

ANNUAL TOTAL	146898.15	66076.30	
ANNUAL MEAN	402	181	518
HIGHEST ANNUAL MEAN			2162
LOWEST ANNUAL MEAN			168
HIGHEST DAILY MEAN	2790	1450	8490
LOWEST DAILY MEAN	.00	.00	.00
	Many days	Many days	Many days
			1975-92
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
INSTANTANEOUS PEAK FLOW			
INSTANTANEOUS PEAK STAGE			
ANNUAL RUNOFF (AC-FT)	291400	131100	375400
10 PERCENT EXCEEDS	2120	754	1730
50 PERCENT EXCEEDS	25	.00	62
90 PERCENT EXCEEDS	.00	.00	.00

PLATTE RIVER BASIN

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 National Geodetic Vertical Datum of 1929 (Nebraska Department of Roads bench mark). See WSP 2118 for history of changes prior to June 3, 1968.

REMARKS.--Estimated daily discharges: Records good except for period 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	323	e350	399	386	378	393	401	297	333	860	502	429
2	322	e350	e400	379	369	397	393	299	324	910	536	411
3	314	e360	e400	366	371	394	384	299	312	872	550	384
4	335	e360	e400	358	367	449	376	282	296	705	630	361
5	343	e370	e390	366	357	631	372	290	291	700	849	344
6	328	e380	380	377	365	749	367	291	287	768	908	354
7	327	e380	379	398	361	612	360	308	286	836	765	381
8	317	e390	388	443	361	571	354	322	300	864	697	360
9	323	385	382	417	365	693	354	313	315	759	702	338
10	334	388	379	407	380	652	347	352	324	760	825	327
11	334	392	376	401	388	656	349	374	323	979	840	325
12	330	393	407	384	402	763	341	340	331	1070	833	335
13	344	388	387	386	385	800	342	316	334	759	893	348
14	350	380	373	392	401	701	341	435	362	615	953	367
15	336	369	360	e370	404	615	331	447	423	512	932	371
16	333	374	354	e360	415	563	343	450	534	504	937	371
17	331	452	364	e350	429	517	334	391	476	708	962	353
18	334	425	370	e350	427	483	331	395	408	866	958	337
19	341	398	378	e340	402	493	331	379	368	844	899	329
20	335	393	379	e340	401	486	331	362	360	739	830	396
21	343	388	381	e340	396	481	332	325	392	632	791	523
22	360	391	373	e330	389	467	332	319	404	538	791	565
23	362	380	350	e320	411	456	323	318	385	526	793	586
24	319	385	344	e340	460	455	321	318	362	450	1020	553
25	336	389	343	358	434	436	318	357	389	420	1440	521
26	356	377	345	367	413	412	311	341	546	397	1170	525
27	352	386	351	377	400	399	308	350	838	376	758	470
28	e340	383	362	381	394	415	311	372	1050	346	612	427
29	e350	391	373	391	394	429	309	355	1080	336	537	410
30	e350	396	373	397	---	405	297	331	1020	390	495	405
31	e350	---	380	392	---	400	---	318	---	451	447	---
TOTAL	10452	11543	11620	11563	11419	16373	10244	10646	13453	20492	24855	12206
MEAN	337	385	375	373	394	528	341	343	448	661	802	407
MAX	362	452	407	443	460	800	401	450	1080	1070	1440	586
MIN	314	350	343	320	357	393	297	282	286	336	447	325
AC-FT	20730	22900	23050	22940	22650	32480	20320	21120	26680	40650	49300	24210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1992, BY WATER YEAR (WY)

MEAN	634	538	475	415	501	620	664	810	984	1411	1284	762
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	472	248
(WY)	1951	1989	1944	1983	1981	1981	1981	1956	1961	1947	1981	1960

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1943 - 1992

(ANNUAL TOTAL	215945	164866	
ANNUAL MEAN	592	450	760
MEDIAN OF ANNUAL MEANS			595
HIGHEST ANNUAL MEAN			2467
LOWEST ANNUAL MEAN			450
HIGHEST DAILY MEAN	2150	1440	9100
LOWEST DAILY MEAN	263	282	*97
ANNUAL SEVEN-DAY MINIMUM	278	294	128
INSTANTANEOUS PEAK FLOW		1520	**29600
INSTANTANEOUS PEAK STAGE		4.40	Aug 25
ANNUAL RUNOFF (AC-FT)	428300	327000	550800
10 PERCENT EXCEEDS	1610	761	1660
50 PERCENT EXCEEDS	380	381	417
90 PERCENT EXCEEDS	331	323	296

e Estimated.

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

** Maximum observed (discharge measurement).

PLATTE RIVER BASIN

89

06764000 SOUTH PLATTE RIVER AT JULESBURG, CO

LOCATION.--Lat 40°58'46", long 102°15'15", in NW1/4NE1/4 and NE1/4SE1/4 (two channels) sec.33, T.12 N., R.44 W., Sedgwick County, Hydrologic Unit 10190018, on left bank of channel 4 (left channel) 215 ft downstream from bridge, 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.

WATER-DISCHARGE RECORDS

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 National Geodetic Vertical Datum of 1929. See WSP 1710 or 1730 for history of changes prior to Oct. 1, 1956. Since Oct. 1, 1956, water-stage recorders on channels nos. 2 and 4. Channel no. 2: Oct. 1, 1956, to Sept. 22, 1965, at site 300 ft downstream at present datum. Channel no. 4: Oct. 1, 1956, to Dec. 10, 1958, at site 135 ft downstream at present datum. Since May 11, 1973, supplementary water-stage recorder on channel no. 2 at bridge 800 ft upstream at same datum.

REMARKS.--Estimated daily discharges: Jan. 12-22, June 15-17, July 1-9, 25, July 28 to Aug. 12, and Aug. 18-28. 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 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	169	95	73	338	1240	944	522	155	129	856	103	1680
2	195	85	82	338	1270	935	925	134	177	762	107	1330
3	204	100	74	356	1270	944	1140	117	161	681	98	1130
4	232	124	125	370	1170	983	1420	108	153	616	92	957
5	223	136	170	410	1140	1080	1390	104	149	565	89	832
6	230	180	230	467	1060	954	1260	83	137	514	90	717
7	236	175	235	586	905	976	1200	61	126	478	131	667
8	229	163	206	607	837	1020	1240	54	115	432	140	589
9	220	138	198	599	804	1320	1340	48	136	373	134	554
10	216	121	224	627	771	1310	1280	39	119	310	112	517
11	210	114	248	748	763	1360	1160	33	102	198	102	527
12	181	110	255	946	764	1380	860	28	101	127	106	492
13	178	108	257	979	770	1590	729	28	135	124	102	446
14	190	104	267	868	803	1830	650	28	184	114	77	438
15	184	106	269	775	963	1820	624	27	499	91	78	446
16	171	104	284	336	1010	1800	573	28	1400	127	84	458
17	148	108	289	311	1060	1770	504	27	1520	141	136	493
18	125	109	299	286	1000	1870	462	25	813	103	181	534
19	112	104	311	433	917	1880	417	23	658	95	293	534
20	109	95	311	784	873	1920	384	23	605	87	290	523
21	104	92	309	799	959	1910	377	24	592	87	241	523
22	104	76	281	930	1040	1780	387	28	518	81	203	505
23	98	71	285	978	1090	1580	411	31	404	101	178	508
24	95	70	278	1060	1190	1380	449	34	271	296	223	516
25	91	75	296	1160	1190	1160	385	45	254	238	383	518
26	91	77	303	1410	1190	854	322	41	277	199	535	512
27	96	79	299	1490	1080	650	285	41	1280	171	724	512
28	100	80	328	1440	1040	622	263	44	1170	168	1040	504
29	97	81	347	1460	989	578	234	46	1070	152	2570	495
30	104	80	333	1460	---	515	182	48	986	105	2740	478
31	95	---	340	1410	---	468	---	54	---	85	2100	---
TOTAL	4837	3160	7806	24761	29158	39183	21375	1609	14241	8477	13482	18935
MEAN	156	105	252	799	1005	1264	712	51.9	475	273	435	631
MAX	236	180	347	1490	1270	1920	1420	155	1520	856	2740	1680
MIN	91	70	73	286	763	468	182	23	101	81	77	438
AC-FT	9590	6270	15480	49110	57830	77720	42400	3190	28250	16810	26740	37560

PLATTE RIVER BASIN

06764000 SOUTH PLATTE RIVER AT JULESBURG, CO--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1902 - 1992, BY WATER YEAR (WY)

MEAN	287	352	398	508	599	552	563	1089	1390	268	154	218
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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1902 -1992

ANNUAL TOTAL	124948			187024			535	
ANNUAL MEAN	342			511			2882	1983
HIGHEST ANNUAL MEAN							76.3	1956
LOWEST ANNUAL MEAN							30800	Jun 16 1921
HIGHEST DAILY MEAN	1880	Jun 7		2740	Aug 30		c.00	Aug 18 1902
LOWEST DAILY MEAN	a31	Aug 26		b23	May 19		.00	Jul 25 1903
ANNUAL SEVEN-DAY MINIMUM	35	Aug 25		25	May 15		37600	Jun 20 1965
INSTANTANEOUS PEAK FLOW				3040	Aug 29		d10.44	Jun 20 1965
INSTANTANEOUS PEAK STAGE				6.01	Aug 29		387400	
ANNUAL RUNOFF (AC-FT)	247800			371000			1130	
10 PERCENT EXCEEDS	881			1260			220	
50 PERCENT EXCEEDS	210			306			28	
90 PERCENT EXCEEDS	46			80				

a-Also occurred Aug 27.

b-Also occurred May 20.

c-Also occurred Aug 19, 20, 1902, and Jul 25 to Aug 7, 1903.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	164	e84	e66	e220	1570	925	709	252	48	899	65	1970
2	170	e82	e60	e230	1300	895	816	220	84	803	57	1670
3	169	e84	e100	e230	1170	865	1080	198	109	728	199	1260
4	171	e86	e150	e260	1080	891	1150	181	133	633	102	1090
5	171	e100	e160	e270	1030	981	1300	156	135	540	76	907
6	176	e150	e200	e300	946	995	1350	134	133	542	74	734
7	178	e180	e250	e330	842	941	1320	114	133	513	73	635
8	134	e180	260	e350	777	887	1260	98	151	469	93	565
9	131	e175	215	e300	768	962	1220	84	160	435	99	529
10	140	e160	187	e360	741	1180	1230	75	181	367	75	484
11	183	e150	208	e480	695	1310	1140	70	183	316	50	482
12	178	141	248	e500	661	1340	953	61	192	281	44	468
13	170	134	268	e520	688	1390	742	58	188	272	42	435
14	157	127	253	e600	679	1490	624	57	207	220	47	407
15	163	110	262	e620	718	1680	597	54	531	173	45	401
16	168	111	253	e500	885	1800	549	47	1170	151	66	374
17	171	132	255	e460	977	1800	515	41	1200	166	75	359
18	144	136	250	e450	1020	1830	474	38	1300	145	97	349
19	121	128	267	e450	1000	1930	417	34	739	112	96	375
20	113	117	287	e500	981	1940	369	31	629	95	172	396
21	106	117	284	e540	961	1820	336	30	593	95	203	417
22	101	104	275	e800	916	1750	330	29	606	159	171	404
23	94	100	267	e820	926	1660	370	26	e550	135	171	407
24	88	91	255	e1000	940	1500	386	25	e450	144	188	407
25	82	87	268	e1040	945	1400	404	30	360	206	275	388
26	81	83	e260	e1100	985	1290	337	28	305	188	358	359
27	80	85	e260	e1160	1000	1080	293	38	527	181	435	355
28	80	81	e260	e1200	992	943	302	38	1340	139	549	362
29	96	81	e260	e1200	948	936	293	45	1290	125	750	371
30	89	73	e260	e1300	---	834	279	41	1060	102	1360	373
31	e86	---	e250	e1450	---	788	---	44	---	80	2070	---
TOTAL	4155	3469	7098	19540	27141	40033	21145	2377	14687	9414	8177	17733
MEAN	134	116	229	630	936	1291	705	76.7	490	304	264	591
MAX	183	180	287	1450	1570	1940	1350	252	1340	899	2070	1970
MIN	80	73	60	220	661	788	279	25	48	80	42	349
AC-FT	8240	6880	14080	38760	53830	79410	41940	4710	29130	18670	16220	35170

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1992, BY WATER YEAR (WY)

MEAN	540	544	634	1041	1291	1000	1137	1928	2423	662	266	575
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	757	391	199	76.7	89.0	13.1	8.21	56.6
(WY)	1989	1990	1990	1991	1991	1991	1989	1992	1990	1990	1991	1990

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEAR 1983 - 1992

ANNUAL TOTAL	111254.56	174969	999
ANNUAL MEAN	305	478	2941
HIGHEST ANNUAL MEAN			1983
LOWEST ANNUAL MEAN			1989
HIGHEST DAILY MEAN	2030	2070	13900
LOWEST DAILY MEAN	.71	25	.50
ANNUAL SEVEN-DAY MINIMUM	1.3	28	1.3
INSTANTANEOUS PEAK FLOW (STAGE)		2130 (6.18)	14700(9.31)
INSTANTANEOUS PEAK STAGE		*6.61	*10.23
ANNUAL RUNOFF (AC-FT)	220700	347100	724100
10 PERCENT EXCEEDS	693	1200	2190
50 PERCENT EXCEEDS	200	275	500
90 PERCENT EXCEEDS	13	75	37

Estimated

* Backwater from ice.

PLATTE RIVER BASIN

06765500 SOUTH PLATTE RIVER AT NORTH PLATTE, NE

LOCATION.--Lat 41°07'08", long 100°45'45", in NE1/4NW1/4 sec.9, T.13 N., R.30 W., Lincoln County, Hydrologic Unit 10190018, on left bank 50 ft downstream from bridge on U.S. Highway 83, 0.5 mi north of intersection of U.S. Highway 83 and Interstate 80 south of North Platte, and 4.5 mi upstream from confluence with North Platte River.

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

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 National Geodetic Vertical Datum of 1929. See WSP 1918 for history of changes prior to Dec. 11, 1956. Dec. 11, 1956, to Mar. 29, 1973, at site 50 ft upstream at same datum. Mar. 30, 1973, to Aug. 12, 1981, at site 0.5 mi upstream 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 1991 TO SEPTEMBER 1992

DAY	MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	123	201	159	219	573	333	377	218	188	256	189	341
2	131	187	155	219	641	350	346	196	182	266	187	471
3	136	173	151	213	573	374	343	192	197	239	176	536
4	163	178	157	192	414	415	349	183	193	207	173	479
5	164	e175	169	172	364	456	356	172	186	193	282	411
6	165	e170	189	185	368	522	348	173	174	184	258	356
7	166	e170	209	244	403	488	315	170	173	211	240	245
8	168	e165	222	266	381	408	335	165	197	190	230	207
9	199	e160	218	231	369	452	279	153	198	162	214	258
10	236	e160	191	186	373	493	229	136	216	183	214	267
11	255	e155	175	181	363	576	217	148	220	211	195	279
12	260	e150	193	241	334	587	231	159	203	200	188	290
13	271	e150	190	278	361	545	279	177	183	213	174	329
14	276	e145	197	e270	352	557	297	196	228	233	162	424
15	275	e145	206	e250	329	517	300	197	212	226	182	442
16	269	142	216	e270	321	558	281	174	229	198	198	424
17	263	170	212	271	399	680	273	176	322	193	202	443
18	248	170	207	217	374	839	292	161	318	191	205	436
19	236	169	208	208	340	935	285	158	384	192	199	399
20	232	162	209	205	320	966	258	146	333	181	192	398
21	238	167	232	211	312	942	256	141	312	170	186	415
22	221	152	227	222	284	813	272	142	265	212	202	429
23	221	137	211	273	333	734	286	136	204	203	223	448
24	221	143	202	288	354	707	256	147	201	207	351	458
25	211	146	199	316	326	608	247	193	218	215	488	483
26	217	155	193	322	324	499	215	188	207	240	394	464
27	218	165	192	319	362	396	196	178	228	237	360	450
28	246	168	199	297	367	330	201	202	271	229	305	418
29	241	170	207	306	356	320	216	190	310	235	282	453
30	224	167	223	409	---	304	220	176	289	213	293	474
31	231	---	220	490	---	331	---	188	---	211	254	---
TOTAL	6725	4867	6138	7971	10970	17035	8355	5331	7041	6501	7398	11927
MEAN	217	162	198	257	378	550	278	172	235	210	239	398
MAX	276	201	232	490	641	966	377	218	384	266	488	536
MIN	123	137	151	172	284	304	196	136	173	162	162	207
AC-FT	13340	9650	12170	15810	21760	33790	16570	10570	13970	12890	14670	23660

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1992, BY WATER YEAR (WY)

MEAN	272	217	208	290	418	327	381	1011	1277	397	199	265
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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1947 - 1992
(SINCE SUTHERLAND CANAL DIVERSION)

ANNUAL TOTAL	81262	100259	438
ANNUAL MEAN	223	274	264
MEDIAN OF ANNUAL MEANS			2316
HIGHEST ANNUAL MEAN			131
LOWEST ANNUAL MEAN			1955
HIGHEST DAILY MEAN	1190 Jun 23	966 Mar 20	19700 Jun 22 1965
LOWEST DAILY MEAN	90 Sep 3	123 Oct 1	35 Jan 4 1949
ANNUAL SEVEN-DAY MINIMUM	101 Aug 30	147 May 18	58 Jan 3 1949
INSTANTANEOUS PEAK FLOW		983 Mar 20	*37100 Jun 3 1935
INSTANTANEOUS PEAK STAGE		2.98 Mar 20	14.02 Jun 3 1935
ANNUAL RUNOFF (AC-FT)	161200	198900	317000
10 PERCENT EXCEEDS	329	444	839
50 PERCENT EXCEEDS	184	223	167
90 PERCENT EXCEEDS	128	165	121

* Observed.

PLATTE RIVER BASIN
06768000 PLATTE RIVER NEAR OVERTON, NE

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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.--57,700 mi², approximately, of which about 52,900 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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	567	460	769	1090	1480	1710	1970	476	395	582	286	970
2	568	606	769	1100	1480	1650	1760	503	410	625	254	759
3	555	608	733	1120	1480	1640	1590	499	391	533	252	759
4	549	685	735	1110	1470	1650	1450	502	397	356	274	572
5	549	769	812	1110	1630	1670	1440	502	391	354	299	468
6	579	872	865	1090	1610	2020	1140	491	391	312	308	449
7	609	820	960	1100	1590	2450	1380	493	384	299	274	434
8	611	877	1050	1140	1540	2590	1530	494	387	273	264	354
9	603	956	1120	1150	1470	2280	1570	478	391	337	293	366
10	546	955	1060	1150	1480	2470	1590	477	395	341	345	298
11	480	931	1050	1110	1310	2480	1620	484	437	511	346	259
12	475	1060	1160	1110	1300	2460	1570	492	419	1070	292	242
13	475	1180	1220	1090	1120	2570	1460	488	417	1510	260	241
14	471	1200	1200	1100	1370	2730	1300	472	465	1380	250	241
15	552	1210	1130	914	1270	2800	1320	406	443	756	248	237
16	512	1140	1080	1210	1290	2760	1220	384	431	301	221	240
17	508	1120	1110	1130	1360	2600	1220	446	510	298	218	226
18	488	1170	1050	1180	1340	2490	1240	502	927	326	264	210
19	500	1190	1060	1170	1500	2520	1200	422	1070	362	309	204
20	524	1110	1090	1230	1560	2600	1040	381	946	979	282	207
21	514	1070	1120	1420	1520	2610	881	395	836	904	238	226
22	509	1080	1080	1370	1520	2570	792	399	639	1900	234	259
23	498	1000	1050	1310	1470	2660	589	421	353	2110	230	277
24	503	959	1050	1300	1510	2630	523	417	313	1610	243	275
25	535	971	1020	1300	1510	2520	572	381	419	1400	885	246
26	562	842	1030	1250	1590	2480	583	379	400	1120	1940	288
27	572	780	1060	1360	1730	2420	566	382	375	977	2310	350
28	572	707	1070	1460	1770	2240	518	402	389	726	3100	608
29	539	768	1050	1450	1730	2200	479	437	671	348	2160	1080
30	612	772	1080	1430	---	2020	511	397	716	328	1510	1250
31	476	---	1080	1420	---	2170	---	414	---	322	1120	---
TOTAL	16613	27868	31713	37474	43000	72660	34624	13816	15108	23250	19509	12595
MEAN	536	929	1023	1209	1483	2344	1154	446	504	750	629	420
MAX	612	1210	1220	1460	1770	2800	1970	503	1070	2110	3100	1250
MIN	471	460	733	914	1120	1640	479	379	313	273	218	204
AC-FT	32950	55280	62900	74330	85290	144100	68680	27400	29970	46120	38700	24980

PLATTE RIVER BASIN
06768000 PLATTE RIVER NEAR OVERTON, NE --Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1992, BY WATER YEAR (WY)

MEAN	1334	1419	1538	1616	1939	2129	1953	2300	2360	982	629	1116
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 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1942 - 1992	
ANNUAL TOTAL	313236		348230		1606	
ANNUAL MEAN	858		951		1190	
MEDIAN OF ANNUAL MEANS					5835	
HIGHEST ANNUAL MEAN					*558	
LOWEST ANNUAL MEAN					1983	
HIGHEST DAILY MEAN	4140	May 24	3100	Aug 28	22300	Jun 22 1983
LOWEST DAILY MEAN	179	Aug 31	204	Sep 19	2.0	Aug 31 1942
ANNUAL SEVEN-DAY MINIMUM	195	Aug 25	221	Sep 15	5.4	Aug 25 1942
INSTANTANEOUS PEAK FLOW (STAGE)			3230	Aug 28	37600(**6.25)	Jun 5 1935
INSTANTANEOUS PEAK STAGE			4.01	Aug 28	7.44	Jun 22 1983
ANNUAL RUNOFF (AC-FT)	621300		690700		1164000	
10 PERCENT EXCEEDS	1380		1730		2960	
50 PERCENT EXCEEDS	798		828		1160	
90 PERCENT EXCEEDS	310		296		259	

* No flow at times in 1919, 1922, 1925, 1927-28, 1930-41.

** South channel, datum then in use.

PLATTE RIVER BASIN
06768000 PLATTE RIVER NEAR OVERTON, NE--Continued

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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, 1,160 microsiemens Mar. 31 (south channel); minimum daily, 446 microsiemens July 22 (south chan.).

WATER TEMPERATURES: Maximum daily, 33.0 °C Aug. 7 (south channel); minimum daily, 1.0 °C on many days during winter period.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DISCHARGE, INST. (FT ³ /S) (00061)	PH WATER			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- LINTY LAB (MG/L AS CACO ₃) (90410)
			SPECIFIC CON- DUCT- ANCE (µS/CM) (00095)	WHOLE FIELD (STAND- ARD UNITS) (00400)							
OCT	09...	0800	583	894	8.4	12.5	706	9.1	83	14	194
DEC	04...	1115	652	1000	8.3	0.0	705	12.8	75	15	244
	31...	1345	1090	910	8.6	3.0	705	12.4	74	18	208
MAR	17...	1315	2590	851	8.6	10.0	--	--	71	14	223
APR	22...	1120	652	898	8.6	8.0	694	10.8	90	13	188
JUN	24...	0800	250	965	8.3	21.5	695	9.5	86	14	205
JUL	28...	1115	900	1010	8.6	25.0	697	8.3	93	13	194
SEP	11...	1245	259	996	8.3	18.5	710	9.7	85	9.3	235

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	09...	240	33	<0.10	24	0.910	0.010	0.920	0.020	0.040	0.020
DEC	04...	210	31	0.60	37	2.19	0.010	2.20	0.080	0.100	0.090
	31...	240	35	1.0	32	1.67	0.030	1.70	0.030	0.080	0.040
MAR	17...	210	28	0.60	29	--	<0.010	1.30	<0.010	0.040	0.040
APR	22...	290	47	0.60	19	1.49	0.010	1.50	0.020	0.030	0.020
JUN	24...	240	36	0.50	25	1.18	0.020	1.20	0.040	0.090	0.090
JUL	28...	270	41	0.50	18	1.18	0.020	1.20	0.080	0.060	0.070
SEP	11...	240	35	0.50	29	1.19	0.010	1.20	0.010	0.030	0.030

PLATTE RIVER BASIN
06768000 PLATTE RIVER NEAR OVERTON, NE--Continued

WATER QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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 09...	0800	150	5	7
DEC 04...	1115	140	4	11
31...	1345	130	<3	5
MAR 17...	1315	130	<3	9
APR 22...	1120	160	<3	6
JUN 24...	0800	150	<3	19
JUL 28...	1115	180	<3	7
SEP 11...	1245	150	<3	7

PLATTE RIVER BASIN

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06767998 PLATTE RIVER NEAR OVERTON, NE (NORTH CHANNEL)

SPECIFIC CONDUCTANCE, $\mu\text{S}/\text{CM}$ @ 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	944	959	912	855	877	861	876	932	956	930	947	927
2	941	962	898	870	877	875	871	953	959	936	1020	950
3	949	965	933	863	880	858	875	952	987	895	1010	969
4	884	1020	893	876	877	845	871	867	981	914	938	946
5	928	868	873	890	878	847	874	968	984	833	1010	997
6	917	857	881	861	878	787	874	946	982	899	877	1000
7	905	888	883	859	878	786	873	982	984	926	991	1010
8	909	913	877	876	877	770	876	967	983	867	937	965
9	893	860	886	880	880	792	874	921	993	953	944	1000
10	907	837	894	925	897	827	880	959	966	974	944	992
11	898	860	898	891	879	860	866	955	983	820	968	991
12	902	882	857	871	887	882	871	959	982	780	970	1010
13	887	811	861	850	892	876	885	959	939	901	1010	1010
14	913	880	878	903	871	812	887	947	873	967	1020	986
15	905	894	893	992	870	797	903	937	938	994	955	995
16	899	889	897	1020	867	814	877	946	954	1000	1030	1020
17	910	861	896	936	867	864	865	840	981	997	1010	1010
18	871	860	920	876	868	871	867	828	991	991	959	1030
19	905	890	900	887	890	836	873	900	990	972	965	1030
20	905	873	903	850	866	827	874	924	971	883	996	1030
21	893	894	898	890	866	829	886	953	---	957	948	1030
22	877	865	895	890	864	829	885	988	896	746	986	1050
23	893	880	890	871	854	813	875	1120	977	821	985	1030
24	884	895	876	879	858	816	938	958	974	935	958	1040
25	905	830	891	855	844	830	935	967	985	971	865	1040
26	903	863	891	871	844	837	931	976	963	996	758	990
27	886	890	887	883	843	842	936	976	982	1020	710	993
28	872	857	885	884	850	852	920	967	943	1040	831	984
29	881	895	887	882	855	841	922	956	931	1010	969	988
30	881	900	901	880	---	865	921	952	957	975	888	989
31	906	---	904	891	---	885	---	950	---	974	920	---
MEAN	902	887	892	887	870	836	889	949	---	932	946	1000

06767999 PLATTE RIVER NEAR OVERTON, NE (SOUTH CHANNEL)

SPECIFIC CONDUCTANCE, $\mu\text{S}/\text{CM}$ @ 25 DEGREES CELSIUS WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	898	843	888	861	933	1060	1130	1110	1120	1060	948	963
2	907	846	950	892	922	1050	1120	1110	1110	1060	914	965
3	897	874	888	872	931	1060	1140	1080	1110	1060	878	965
4	888	884	914	887	931	1020	1140	1100	1120	1040	940	936
5	894	931	895	881	940	1040	1130	1100	1120	981	929	955
6	885	857	891	876	948	1060	1130	1110	1100	994	959	966
7	882	891	893	853	946	1060	1100	1120	1100	1040	860	962
8	886	883	877	884	969	1070	1120	1120	1100	1010	858	1000
9	881	898	881	890	965	1060	1100	1110	1100	1030	908	963
10	888	891	900	876	980	1080	1110	1120	1080	1020	924	957
11	900	877	897	881	981	1080	1120	1120	1100	800	895	950
12	920	869	873	861	995	1080	1140	1130	1110	780	891	938
13	922	886	875	885	985	1080	1100	1140	1100	1020	896	945
14	910	892	863	887	999	1080	1100	1120	1080	1030	959	948
15	903	890	897	917	1030	1080	1080	1110	1090	1030	883	937
16	902	887	859	895	1010	1080	1080	1110	1090	991	927	935
17	881	872	854	891	1000	1090	1110	1120	1100	982	936	933
18	880	877	882	879	1000	1080	1120	1120	1130	985	867	857
19	883	880	872	881	1020	1090	1080	1120	1110	960	945	855
20	903	887	883	892	1030	1090	1080	1110	1110	670	936	843
21	879	883	883	884	1030	1080	1070	1110	956	880	866	896
22	863	889	887	878	1010	1090	1080	1130	1090	446	850	954
23	910	895	855	868	1030	1120	1090	984	1060	675	893	955
24	901	892	884	889	1030	1110	1090	1120	1000	929	915	980
25	905	906	844	891	1030	1110	1080	1100	1090	956	790	929
26	884	896	849	892	1050	1140	1100	1120	1090	1000	954	915
27	888	900	876	917	1040	1130	1070	1100	1080	1000	972	918
28	857	882	868	915	1050	1130	1050	1090	1080	1010	966	972
29	894	892	868	921	1050	1150	1060	1100	1070	966	824	977
30	880	885	881	920	---	1150	1070	1110	1090	959	972	980
31	843	---	879	920	---	1160	---	1110	---	948	971	---
MEAN	891	884	881	888	994	1090	1100	1110	1090	946	911	942

PLATTE RIVER BASIN

06767998 PLATTE RIVER NEAR OVERTON, NE (NORTH CHANNEL)

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.0	1.0	1.0	3.0	5.0	13.0	5.0	18.0	14.0	25.0	20.0	19.0
2	22.0	1.0	1.0	4.0	9.0	10.0	8.0	15.0	15.0	16.0	27.0	18.0
3	15.0	1.0	1.0	1.0	7.0	15.0	16.0	24.0	16.0	18.0	27.0	19.0
4	13.0	2.0	1.0	2.0	5.0	12.0	18.0	15.0	16.0	30.0	20.0	23.0
5	13.0	2.0	2.0	5.0	3.0	12.0	18.0	4.0	22.0	29.0	20.0	27.0
6	12.0	1.0	2.0	2.0	5.0	14.0	18.0	13.0	23.0	26.0	28.0	20.0
7	18.0	1.0	3.0	4.0	3.0	12.0	14.0	12.0	24.0	22.0	32.0	21.0
8	20.0	2.0	7.0	1.0	1.0	14.0	13.0	18.0	22.0	28.0	32.0	15.0
9	19.0	3.0	6.0	1.0	4.0	6.0	12.0	19.0	18.0	22.0	25.0	17.0
10	17.0	6.0	5.0	2.0	8.0	3.0	13.0	23.0	23.0	22.0	25.0	16.0
11	20.0	8.0	4.0	2.0	3.0	4.0	10.0	24.0	18.0	21.0	27.0	16.0
12	14.0	9.0	7.0	4.0	1.0	8.0	12.0	15.0	16.0	23.0	28.0	19.0
13	17.0	7.0	6.0	2.0	2.0	8.0	10.0	14.0	27.0	22.0	25.0	26.0
14	10.0	8.0	4.0	1.0	5.0	9.0	12.0	15.0	28.0	22.0	17.0	19.0
15	18.0	5.0	3.0	1.0	10.0	12.0	15.0	28.0	25.0	30.0	25.0	21.0
16	16.0	5.0	5.0	1.0	9.0	9.0	11.0	22.0	27.0	28.0	20.0	21.0
17	17.0	6.0	5.0	1.0	7.0	11.0	13.0	26.0	28.0	26.0	20.0	20.0
18	8.0	6.0	1.0	1.0	4.0	7.0	13.0	15.0	31.0	26.0	26.0	22.0
19	8.0	10.0	1.0	1.0	2.0	5.0	11.0	16.0	19.0	28.0	21.0	21.0
20	10.0	9.0	3.0	1.0	4.0	5.0	9.0	18.0	21.0	22.0	20.0	23.0
21	11.0	10.0	2.0	1.0	6.0	9.0	5.0	19.0	22.0	20.0	28.0	22.0
22	18.0	5.0	4.0	2.0	10.0	8.0	7.0	16.0	30.0	24.0	28.0	16.0
23	10.0	4.0	5.0	1.0	10.0	6.0	10.0	13.0	20.0	20.0	27.0	14.0
24	11.0	5.0	2.0	3.0	6.0	9.0	17.0	24.0	30.0	21.0	19.0	18.0
25	12.0	5.0	5.0	3.0	4.0	9.0	18.0	20.0	22.0	26.0	15.0	22.0
26	7.0	6.0	5.0	7.0	5.0	10.0	19.0	10.0	25.0	27.0	16.0	21.0
27	15.0	7.0	3.0	3.0	7.0	8.0	10.0	11.0	23.0	29.0	16.0	21.0
28	10.0	4.0	4.0	2.0	13.0	9.0	12.0	8.0	28.0	23.0	20.0	16.0
29	7.0	3.0	4.0	4.0	8.0	8.0	14.0	24.0	29.0	29.0	19.0	18.0
30	5.0	1.0	3.0	3.0	---	7.0	17.0	25.0	22.0	27.0	23.0	13.0
31	1.0	---	3.0	4.0	---	9.0	---	17.0	---	25.0	18.0	---
MEAN	13.5	4.8	3.5	2.4	5.7	9.1	12.7	17.5	22.8	24.4	23.0	19.5

06767999 PLATTE RIVER NEAR OVERTON, NE (SOUTH CHANNEL)

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.0	1.0	4.0	3.0	3.0	11.0	5.0	14.0	14.0	26.0	20.0	19.0
2	22.0	1.0	4.0	4.0	6.0	7.0	6.0	14.0	15.0	18.0	28.0	17.0
3	16.0	2.0	5.0	1.0	5.0	11.0	15.0	23.0	15.0	20.0	27.0	18.0
4	14.0	4.0	1.0	2.0	3.0	9.0	16.0	12.0	15.0	30.0	19.0	24.0
5	15.0	5.0	7.0	5.0	2.0	9.0	17.0	12.0	21.0	30.0	18.0	26.0
6	16.0	1.0	7.0	1.0	3.0	12.0	17.0	11.0	22.0	28.0	28.0	20.0
7	20.0	4.0	3.0	4.0	2.0	11.0	10.0	11.0	24.0	20.0	33.0	21.0
8	20.0	6.0	7.0	1.0	3.0	12.0	10.0	18.0	22.0	26.0	32.0	15.0
9	20.0	8.0	7.0	1.0	5.0	5.0	10.0	19.0	17.0	22.0	23.0	17.0
10	18.0	7.0	6.0	3.0	7.0	4.0	11.0	23.0	22.0	22.0	24.0	14.0
11	20.0	9.0	4.0	1.0	2.0	6.0	12.0	24.0	17.0	21.0	26.0	15.0
12	15.0	9.0	7.0	3.0	1.0	7.0	10.0	14.0	15.0	22.0	27.0	24.0
13	17.0	6.0	6.0	2.0	2.0	7.0	11.0	14.0	26.0	22.0	24.0	27.0
14	12.0	7.0	4.0	1.0	3.0	8.0	11.0	14.0	27.0	22.0	17.0	17.0
15	20.0	4.0	5.0	1.0	8.0	14.0	12.0	28.0	25.0	28.0	25.0	19.0
16	18.0	4.0	5.0	1.0	7.0	7.0	12.0	22.0	24.0	27.0	20.0	19.0
17	18.0	6.0	5.0	1.0	5.0	9.0	13.0	26.0	27.0	26.0	18.0	18.0
18	11.0	7.0	1.0	1.0	3.0	7.0	13.0	16.0	28.0	25.0	26.0	23.0
19	10.0	9.0	3.0	1.0	2.0	5.0	12.0	16.0	19.0	27.0	17.0	23.0
20	13.0	7.0	3.0	1.0	3.0	5.0	8.0	18.0	21.0	22.0	17.0	26.0
21	13.0	9.0	2.0	1.0	7.0	9.0	5.0	18.0	22.0	20.0	29.0	21.0
22	18.0	4.0	5.0	2.0	8.0	8.0	6.0	17.0	28.0	22.0	29.0	16.0
23	10.0	5.0	5.0	1.0	6.0	6.0	8.0	16.0	18.0	18.0	28.0	13.0
24	14.0	5.0	2.0	2.0	4.0	7.0	17.0	25.0	30.0	21.0	18.0	18.0
25	15.0	6.0	4.0	1.0	3.0	7.0	19.0	19.0	20.0	26.0	15.0	23.0
26	8.0	4.0	5.0	3.0	7.0	20.0	11.0	25.0	27.0	18.0	23.0	---
27	15.0	8.0	4.0	1.0	4.0	8.0	8.0	13.0	23.0	30.0	16.0	23.0
28	11.0	4.0	4.0	1.0	11.0	9.0	10.0	10.0	29.0	21.0	19.0	17.0
29	3.0	3.0	4.0	6.0	5.0	8.0	11.0	24.0	29.0	29.0	19.0	19.0
30	1.0	4.0	3.0	2.0	---	6.0	14.0	24.0	21.0	25.0	24.0	14.0
31	1.0	---	3.0	2.0	---	7.0	---	17.0	---	23.0	17.0	---
MEAN	14.5	5.4	4.3	2.0	4.3	8.0	11.6	17.5	22.0	24.1	22.6	19.6

PLATTE RIVER BASIN
06770200 PLATTE RIVER NEAR KEARNEY, NE

99

LOCATION.--Lat 40°39'32", long 99°05'08", in SE1/4SE1/4 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.--58,200 mi², approximately, of which about 53,400 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 National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	533	e230	e640	1140	1770	1520	2090	398	281	497	509	1290
2	532	e270	e720	1140	1790	1440	1820	352	311	563	449	1210
3	505	e500	e800	1150	1790	1320	1920	388	309	591	395	1150
4	515	e800	e860	1120	1690	1370	1740	384	309	519	368	1010
5	528	e900	e1020	1110	1790	1410	1730	363	315	409	383	854
6	537	e1000	1130	1140	1790	1720	1600	345	298	368	398	669
7	578	e1100	906	1280	1740	2080	1470	352	289	385	397	626
8	589	e1200	968	1380	1780	2270	1580	385	288	361	363	547
9	589	e1250	1030	1290	1710	2280	1650	391	295	346	343	448
10	586	1180	1050	1430	1580	2050	1810	380	338	388	344	397
11	517	1030	973	1420	1540	2170	1850	390	318	460	345	384
12	410	1050	1140	1420	1370	2250	1920	329	314	728	312	384
13	412	1120	1140	1400	1240	2270	1990	293	303	1060	292	358
14	390	1150	1110	1280	1220	2310	1860	316	311	1170	286	351
15	412	1250	1120	e660	1270	2310	1720	330	344	1070	273	347
16	458	1150	1120	e700	1310	2290	1610	272	293	534	279	303
17	428	1180	1090	e1200	1380	2340	1450	229	267	318	264	264
18	385	1090	1050	e1800	1400	2320	1310	247	355	280	272	273
19	376	1090	1000	e2000	1410	2280	1290	308	450	301	281	274
20	404	1070	1050	e1950	1550	2230	1180	312	523	345	305	265
21	434	1040	1090	e1900	1580	2310	1030	284	544	678	295	241
22	433	1040	1120	1800	1570	2260	898	258	490	1030	264	251
23	431	1000	1110	1640	1590	2290	742	255	337	2020	257	279
24	424	938	1080	1590	1540	2310	650	266	237	2110	253	284
25	415	990	1120	1600	1520	2250	662	273	194	1670	348	291
26	407	955	1130	1590	1490	2300	763	254	224	1500	948	288
27	434	908	1100	1630	1580	2370	756	246	192	1290	1670	308
28	516	823	1060	1810	1570	2420	600	260	177	1230	2140	276
29	495	845	1050	1880	1520	2360	560	278	185	862	2610	400
30	e400	e800	1040	1750	---	2220	470	283	373	588	2050	766
31	e300	---	1050	1760	---	2150	---	263	---	533	1550	---
TOTAL	14373	28949	31867	44960	45080	65470	40721	9684	9464	24204	19243	14788
MEAN	464	965	1028	1450	1554	2112	1357	312	315	781	621	493
MAX	589	1250	1140	2000	1790	2420	2090	398	544	2110	2610	1290
MIN	300	230	640	660	1220	1320	470	229	177	280	253	241
AC-FT	28510	57420	63210	89180	89420	129900	80770	19210	18770	48010	38170	29330

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1992, BY WATER YEAR (WY)

MEAN	1683	1705	1958	2252	2848	2971	2897	3260	3822	1912	1315	2090
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	1479	1132	724	289	315	123	288	230
(WY)	1992	1990	1990	1991	1990	1991	1989	1989	1992	1990	1991	1990

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1983 - 1992

ANNUAL TOTAL	302801	348803	
ANNUAL MEAN	830	953	
HIGHEST ANNUAL MEAN			2387
LOWEST ANNUAL MEAN			5418
HIGHEST DAILY MEAN	4530 May 25	2610 Aug 29	797 1991
LOWEST DAILY MEAN	40 Sep 1	177 Jun 28	22300 Jun 29 1983
ANNUAL SEVEN-DAY MINIMUM	54 Aug 26	221 Jun 23	3.0 Sep 7 1990
INSTANTANEOUS PEAK FLOW (STAGE)		2760(4.11) Aug 29	13 Sep 2 1990
INSTANTANEOUS PEAK STAGE		*5.32 Jan 16	23700 Jun 29 1983
ANNUAL RUNOFF (AC-FT)	600600	691900	7.42 Jun 29 1983
10 PERCENT EXCEEDS	1430	1910	1729000
50 PERCENT EXCEEDS	796	857	5190
90 PERCENT EXCEEDS	232	280	1630
			319

e Estimated.

* Backwater from ice.

PLATTE RIVER BASIN

06770500 PLATTE RIVER NEAR GRAND ISLAND, NE

LOCATION.--Lat 40°52'28", long 98°16'54", in SW1/4SW1/4 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.--58,800 mi², approximately, of which about 54,000 mi² contributes directly to surface runoff.

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 National Geodetic Vertical Datum of 1929 (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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	311	e200	540	1240	1700	1570	1830	536	473	164	564	1520
2	340	e160	574	1270	1690	1620	1880	476	493	371	484	1200
3	338	e190	616	1140	1660	1640	1780	485	488	402	417	1060
4	381	e210	e700	1080	1610	1750	1720	493	462	404	503	861
5	452	e450	e800	1160	1510	1900	1570	492	479	472	484	762
6	463	e700	e900	1140	1590	1810	1500	461	731	292	376	626
7	475	e900	e1500	1210	1780	1900	1550	406	668	252	353	557
8	473	e1000	1430	1250	1730	2190	1360	372	521	232	343	435
9	469	e1100	1140	1370	1780	2650	1460	327	500	224	330	421
10	430	e1400	941	1360	1750	2640	1520	309	998	185	295	336
11	356	e1700	882	1390	1550	2680	1520	343	1100	288	250	308
12	301	e1600	1150	1440	1450	2620	1480	348	775	380	239	274
13	272	1280	1170	1440	1380	2470	1520	369	602	626	252	240
14	221	942	1020	1320	1460	2450	1550	397	764	840	320	184
15	231	916	979	e700	1460	2490	1390	408	772	1190	221	171
16	221	932	1060	e800	1540	2580	1290	563	937	1230	204	174
17	259	1040	1040	e860	1510	2550	1280	424	645	1010	195	156
18	278	1050	929	e900	1580	2570	1300	337	487	543	189	136
19	265	1030	930	e1100	1530	2590	1270	289	425	397	189	129
20	264	1030	1090	e1300	1490	2440	1130	350	524	354	182	132
21	260	1010	948	e1200	1540	2350	1100	364	695	336	170	129
22	276	965	955	e1300	1520	2370	1100	320	683	691	167	120
23	282	878	1020	e1700	1460	2390	1020	319	709	1170	141	112
24	277	927	946	e1900	1450	2470	882	291	641	1860	121	113
25	309	866	922	e1800	1430	2530	754	314	475	2550	217	128
26	320	806	922	1740	1410	2490	692	323	295	1960	273	153
27	326	749	925	1510	1420	2370	718	321	268	1590	360	145
28	342	677	942	1420	1460	2430	675	304	276	1300	1010	127
29	347	695	937	1560	1550	2440	629	323	248	1140	1450	135
30	378	641	926	1630	---	2230	577	286	201	1060	2030	139
31	e300	---	913	1630	---	2030	---	357	---	672	1930	---
TOTAL	10217	26044	29747	40860	44990	71210	38047	11707	17335	24185	14259	10983
MEAN	330	868	960	1318	1551	2297	1268	378	578	780	460	366
MAX	475	1700	1500	1900	1780	2680	1880	563	1100	2550	2030	1520
MIN	221	160	540	700	1380	1570	577	286	201	164	121	112
AC-FT	20270	51660	59000	81050	89240	141200	75470	23220	34380	47970	28280	21780

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1992, BY WATER YEAR (WY)

MEAN	1189	1292	1343	1448	2032	2384	2066	2310	2364	1023	458	861
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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1942 - 1992

	291406.6	339584	(SINCE STORAGE IN LAKE McCONAUGHY)
ANNUAL TOTAL	798	928	1560
ANNUAL MEAN			1180
MEDIAN OF ANNUAL MEANS			5380
HIGHEST ANNUAL MEAN			414
LOWEST ANNUAL MEAN			1956
HIGHEST DAILY MEAN	4950 May 26	2680 Mar 11	23500 Jun 30 1983
LOWEST DAILY MEAN	5.0 Sep 3	112 Sep 23	*.00 Oct 1 1941
ANNUAL SEVEN-DAY MINIMUM	7.1 Aug 28	123 Sep 19	.00 Oct 1 1941
INSTANTANEOUS PEAK FLOW (STAGE)		2770 (2.75) Mar 18	30000 Jun 6 1935
INSTANTANEOUS PEAK STAGE		**2.81 Jan 22	**6.16 Mar 27 1960
ANNUAL RUNOFF (AC-FT)	578000	673600	1130000
10 PERCENT EXCEEDS	1420	1790	3130
50 PERCENT EXCEEDS	700	800	1080
90 PERCENT EXCEEDS	103	221	101

e Estimated.

* No flow at times in many years.

** Backwater from ice.

PLATTE RIVER BASIN
06771500 WOOD RIVER NEAR GIBBON, NE

101

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.--572 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 the National Geodetic Vertical Datum of 1929.

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, 56 ft³/s June 5, gage height, 4.22 ft; minimum daily during period May to September, 0.28 ft³/s Sept. 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	3.0	.45	3.2	.62	.69
2	---	---	---	---	---	---	---	2.7	1.7	3.3	1.2	.69
3	---	---	---	---	---	---	---	2.0	.97	3.1	3.0	.55
4	---	---	---	---	---	---	---	1.7	.63	2.6	4.6	.57
5	---	---	---	---	---	---	---	2.1	5.2	3.4	8.2	1.0
6	---	---	---	---	---	---	---	1.3	14	3.7	10	.98
7	---	---	---	---	---	---	---	.58	12	3.3	9.2	.76
8	---	---	---	---	---	---	---	.51	3.3	2.7	6.7	.57
9	---	---	---	---	---	---	---	.55	3.0	2.7	4.7	.52
10	---	---	---	---	---	---	---	.48	2.9	2.6	3.6	.39
11	---	---	---	---	---	---	---	.49	1.8	9.6	4.8	.44
12	---	---	---	---	---	---	---	.54	.70	17	10	1.0
13	---	---	---	---	---	---	---	.52	.61	6.0	9.2	1.1
14	---	---	---	---	---	---	---	.86	.86	3.1	11	.85
15	---	---	---	---	---	---	---	1.2	1.1	1.7	5.8	.74
16	---	---	---	---	---	---	---	1.3	1.0	1.6	4.6	.61
17	---	---	---	---	---	---	---	1.0	.63	1.4	5.6	.46
18	---	---	---	---	---	---	---	1.0	1.1	2.9	5.3	.37
19	---	---	---	---	---	---	---	.94	2.8	4.5	4.1	.28
20	---	---	---	---	---	---	---	4.0	2.7	4.2	5.8	.91
21	---	---	---	---	---	---	---	4.3	2.4	3.3	6.4	2.6
22	---	---	---	---	---	---	---	4.2	2.6	9.2	2.7	2.6
23	---	---	---	---	---	---	---	3.7	2.6	8.5	1.4	2.8
24	---	---	---	---	---	---	---	2.8	2.6	7.7	1.9	2.9
25	---	---	---	---	---	---	---	2.7	2.4	3.1	6.9	2.7
26	---	---	---	---	---	---	---	2.5	2.4	3.6	2.7	3.1
27	---	---	---	---	---	---	---	1.7	2.3	2.9	3.3	2.4
28	---	---	---	---	---	---	---	.53	2.1	2.9	2.6	2.2
29	---	---	---	---	---	---	---	.32	2.6	2.0	1.5	2.5
30	---	---	---	---	---	---	---	.30	3.1	1.4	.85	3.2
31	---	---	---	---	---	---	---	.36	---	1.0	.63	---
TOTAL	---	---	---	---	---	---	---	50.18	82.55	128.2	148.90	40.48
MEAN	---	---	---	---	---	---	---	1.62	2.75	4.14	4.80	1.35
MAX	---	---	---	---	---	---	---	4.3	14	17	11	3.2
MIN	---	---	---	---	---	---	---	.30	.45	1.0	.62	.28
AC-FT	---	---	---	---	---	---	---	100	164	254	295	80

PLATTE RIVER BASIN
06772000 WOOD RIVER NEAR ALDA, NE

LOCATION.--Lat 40°51'10", long 98°28'20", in NE1/4SE1/4 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.--628 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 1,897.66 ft above National Geodetic Vertical Datum of 1929 (Bureau of Reclamation bench mark).

REMARKS--Records poor. Numerous small pump diversions for irrigation above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	2.6	.00	2.4	.00	.18	.67	.00	.09	1.3	.11
2	.00	.00	1.4	.00	2.2	.00	.02	.88	.00	1.4	.90	.02
3	.00	.00	e.56	.00	1.6	.00	.00	.77	.00	1.9	.75	.07
4	.00	.00	e.20	.00	1.1	.00	.00	.30	.00	1.5	.85	.00
5	.00	.00	.00	.00	.57	.00	.00	.00	.00	1.9	1.9	.00
6	.00	.00	2.0	.00	.09	.29	.00	.00	.18	1.6	.40	.03
7	.00	.00	8.8	.00	.00	1.4	.00	.00	9.6	1.3	1.8	.00
8	.00	.00	11	.00	.00	1.1	.00	.00	7.3	.87	5.2	.00
9	.00	.00	6.8	.00	.00	11	.00	.00	7.1	1.1	6.8	.00
10	.00	.00	4.2	.00	.00	18	.00	.00	16	1.2	4.8	.00
11	.00	.00	2.7	.00	.00	7.0	.00	.00	5.2	2.2	3.7	.00
12	.00	.00	6.4	e.00	.00	2.3	.00	.00	3.0	1.1	3.5	.00
13	.00	.00	6.9	e.00	.00	3.7	.00	.00	1.1	28	3.5	.00
14	.00	.00	2.1	e.00	.00	3.1	.00	.00	1.3	25	6.3	.00
15	.00	.00	2.0	e.00	.00	1.5	.00	.00	2.1	11	4.9	.00
16	.00	.00	1.2	.00	.00	.80	.00	.00	2.6	5.6	3.9	.00
17	.00	.00	.59	.00	.00	.24	.00	.00	1.7	2.2	3.2	.00
18	.00	.00	.00	.00	.00	.02	.00	.00	1.3	1.8	1.7	.00
19	.00	.00	.00	.17	.00	.00	.00	.00	.31	.94	.88	.00
20	.00	.00	.00	6.9	.00	.00	.00	.00	.02	.14	1.8	.00
21	.00	.00	.00	6.0	.00	.00	.00	.00	.00	.00	1.7	.00
22	.00	.00	.00	2.7	.00	.00	.29	.00	.00	3.5	1.4	.00
23	.00	.55	.00	5.2	.00	.00	.57	.00	.00	5.0	1.7	.00
24	.00	1.5	.00	2.7	.00	.00	.65	.00	.00	12	2.6	.00
25	.00	2.3	.00	4.0	.00	.00	.85	.00	.00	17	4.2	.00
26	.00	2.7	.00	3.8	.00	.00	.87	.00	.00	11	2.1	.00
27	.00	2.7	.00	3.8	.00	.00	.48	.00	.07	5.4	.51	.00
28	.00	2.4	.00	2.8	.00	.00	.31	.00	.16	2.3	2.2	.00
29	.00	3.1	.00	2.2	.00	.00	.19	.00	.16	1.8	2.1	.00
30	.00	2.4	.00	2.7	---	.08	.01	.00	.09	1.7	.86	.00
31	.00	---	.00	2.4	---	.20	---	.00	---	.86	.31	---
TOTAL	0.00	17.65	59.45	45.37	7.96	50.73	4.42	2.62	59.29	151.40	77.76	0.23
MEAN	.000	.59	1.92	1.46	.27	1.64	.15	.085	1.98	4.88	2.51	.008
MAX	.00	3.1	11	6.9	2.4	18	.87	.88	16	28	6.8	.11
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.31	.00
AC-FT	.00	35	118	90	16	101	8.8	5.2	118	300	154	.5

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1992, BY WATER YEAR (WY)

MEAN	2.75	.26	.22	.91	4.54	15.6	3.82	12.5	38.9	24.7	12.1	6.31
MAX	48.9	3.60	3.02	27.2	51.2	155	34.9	83.4	467	173	63.3	76.3
(WY)	1966	1986	1986	1973	1966	1978	1984	1965	1967	1958	1962	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1954 - 1992

ANNUAL TOTAL	3661.04	476.88	
ANNUAL MEAN	10.0	1.30	10.2
HIGHEST ANNUAL MEAN			41.6
LOWEST ANNUAL MEAN			.089
HIGHEST DAILY MEAN	413 Jun 1	28 Jul 13	1590 Jun 17 1967
LOWEST DAILY MEAN	.00 Jan 1	.00 Oct 1	.00 Oct 1 1953
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Oct 1	.00 Oct 1 1953
INSTANTANEOUS PEAK FLOW		43 Jul 13	1630 Jun 16 1967
INSTANTANEOUS PEAK STAGE		5.71 Jul 13	12.22 Jun 16 1967
ANNUAL RUNOFF (AC-FT)	7260	946	7410
10 PERCENT EXCEEDS	13	3.7	13
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

PLATTE RIVER BASIN
06773050 PRAIRIE CREEK NEAR OVINA, NE

LOCATION (REVISED).--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.

PERIOD OF RECORD.--June, 1991 to current year (irrigation season only).

GAGE.--Water-stage recorder. Datum of gage is 1,873 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records poor. Natural flow affected by beaver activity, small pump diversions and runoff from irrigation above gage.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period April 25 to September, 441 ft³/s May 18, gage height 8.06 ft; minimum daily during period April 25 to September, 0.22 ft³/s May 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	.46	3.0	5.5	4.4	2.9
2	---	---	---	---	---	---	---	.38	2.9	6.5	4.0	2.8
3	---	---	---	---	---	---	---	.43	2.1	6.0	4.0	2.6
4	---	---	---	---	---	---	---	.37	1.5	8.4	11	2.7
5	---	---	---	---	---	---	---	.34	1.5	8.4	75	2.6
6	---	---	---	---	---	---	---	.32	39	9.0	35	3.9
7	---	---	---	---	---	---	---	.34	166	7.6	14	3.5
8	---	---	---	---	---	---	---	.31	32	14	8.6	2.9
9	---	---	---	---	---	---	---	.31	12	20	7.7	2.6
10	---	---	---	---	---	---	---	.27	104	9.9	6.1	2.1
11	---	---	---	---	---	---	---	.23	79	8.4	5.4	1.9
12	---	---	---	---	---	---	---	.22	29	52	6.3	1.8
13	---	---	---	---	---	---	---	.32	23	93	9.4	1.8
14	---	---	---	---	---	---	---	.33	26	26	17	1.7
15	---	---	---	---	---	---	---	.59	35	8.7	16	1.7
16	---	---	---	---	---	---	---	56	93	5.2	9.2	1.6
17	---	---	---	---	---	---	---	162	24	4.6	6.2	1.6
18	---	---	---	---	---	---	---	376	17	4.4	5.3	1.4
19	---	---	---	---	---	---	---	37	8.8	4.3	5.6	1.4
20	---	---	---	---	---	---	---	12	7.1	6.0	5.3	1.4
21	---	---	---	---	---	---	---	6.2	6.3	8.1	5.5	1.4
22	---	---	---	---	---	---	---	5.4	6.3	89	5.5	1.4
23	---	---	---	---	---	---	---	5.5	5.9	120	6.6	1.3
24	---	---	---	---	---	---	---	5.2	5.5	57	7.0	1.3
25	---	---	---	---	---	---	.68	5.3	5.4	22	11	1.4
26	---	---	---	---	---	---	.70	5.3	5.3	8.7	16	1.4
27	---	---	---	---	---	---	.69	4.9	5.5	5.2	8.1	1.3
28	---	---	---	---	---	---	.66	4.4	5.9	5.2	4.6	1.3
29	---	---	---	---	---	---	.58	4.0	5.8	4.2	3.7	1.3
30	---	---	---	---	---	---	.57	3.6	5.6	4.2	2.9	1.3
31	---	---	---	---	---	---	---	3.2	---	4.1	2.9	---
TOTAL	---	---	---	---	---	---	---	701.22	763.4	635.6	329.3	58.3
MEAN	---	---	---	---	---	---	---	22.6	25.4	20.5	10.6	1.94
MAX	---	---	---	---	---	---	---	376	166	120	75	3.9
MIN	---	---	---	---	---	---	---	.22	1.5	4.1	2.9	1.3
AC-FT	---	---	---	---	---	---	---	1390	1510	1260	653	116

PLATTE RIVER BASIN
06773150 SILVER CREEK AT OVINA, NE

LOCATION.--Lat. 40° 57' 34", Long 98° 27' 18", in NW1/4NW1/4NW1/4, 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 the National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period May to September, 358 ft³/s June 10, gage height, 5.49 ft; no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	.00	.20	.68	.76	.07
2	---	---	---	---	---	---	---	.00	1.1	.89	.57	.00
3	---	---	---	---	---	---	---	.00	1.9	1.0	.46	.00
4	---	---	---	---	---	---	---	.00	1.5	1.1	1.7	.00
5	---	---	---	---	---	---	---	.00	1.0	1.2	9.0	.18
6	---	---	---	---	---	---	---	.00	7.7	1.5	16	.03
7	---	---	---	---	---	---	---	.00	27	1.8	9.1	.00
8	---	---	---	---	---	---	---	.00	8.1	1.9	4.3	.00
9	---	---	---	---	---	---	---	.00	3.1	2.4	2.1	.00
10	---	---	---	---	---	---	---	.00	184	1.8	1.1	.00
11	---	---	---	---	---	---	---	.00	216	2.3	.67	.00
12	---	---	---	---	---	---	---	.00	45	8.0	.62	.00
13	---	---	---	---	---	---	---	.00	14	7.0	1.5	.00
14	---	---	---	---	---	---	---	.00	22	4.7	1.3	.00
15	---	---	---	---	---	---	---	.00	41	2.6	.79	.00
16	---	---	---	---	---	---	---	43	16	1.4	.79	.00
17	---	---	---	---	---	---	---	139	8.6	1.4	.40	.00
18	---	---	---	---	---	---	---	53	5.3	1.2	.87	.00
19	---	---	---	---	---	---	---	10	4.0	.66	1.5	.00
20	---	---	---	---	---	---	---	3.4	3.1	.39	.79	.00
21	---	---	---	---	---	---	---	1.5	3.0	.99	.53	.00
22	---	---	---	---	---	---	---	.74	2.9	12	.44	.00
23	---	---	---	---	---	---	---	.43	2.7	17	.49	.00
24	---	---	---	---	---	---	---	.35	2.4	9.7	.32	.00
25	---	---	---	---	---	---	---	.26	2.0	5.7	2.2	.00
26	---	---	---	---	---	---	---	.19	1.7	3.6	1.4	.00
27	---	---	---	---	---	---	---	.24	1.6	2.4	2.5	.00
28	---	---	---	---	---	---	---	.19	1.4	1.7	.85	.00
29	---	---	---	---	---	---	---	.11	.87	1.1	.51	.00
30	---	---	---	---	---	---	---	.07	.75	.95	.30	.00
31	---	---	---	---	---	---	---	.03	---	.75	.16	---
TOTAL	---	---	---	---	---	---	---	252.51	629.92	99.81	64.02	0.28
MEAN	---	---	---	---	---	---	---	8.15	21.0	3.22	2.07	.009
MAX	---	---	---	---	---	---	---	139	216	17	16	.18
MIN	---	---	---	---	---	---	---	.00	.20	.39	.16	.00
AC-FT	---	---	---	---	---	---	---	501	1250	198	127	.6

PLATTE RIVER BASIN
06774000 PLATTE RIVER NEAR DUNCAN, NE
(National stream-quality accounting network station)

LOCATION.--Lat 41°22'04", long 97°29'40", in SE1/4SW1/4 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 (revised) upstream from Loup River.

DRAINAGE AREA.--60,900 mi², approximately, of which about 56,100 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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	189	226	e1500	1270	2050	2290	2490	672	370	555	1790	2200
2	190	226	e1300	1410	1940	2070	2330	572	502	481	1440	1920
3	184	e210	e1100	1470	2010	1950	2330	539	535	467	1220	1550
4	212	e190	e1000	1400	1970	2080	2210	484	517	696	1030	1360
5	241	e430	e1100	1480	2030	2250	1960	460	544	1160	1100	1310
6	234	e290	e1200	1550	1980	2490	1860	476	1550	1230	1630	1140
7	241	e350	e1300	1600	1850	2360	1690	492	1580	1290	1740	1090
8	273	e290	e1400	1510	1950	2250	1650	488	1230	1050	1800	996
9	299	e350	e1500	1400	2010	2700	1410	497	907	848	1680	850
10	312	e410	e1900	1340	2300	3630	1380	469	799	729	1360	702
11	326	e1100	e2200	1540	2200	3730	1460	449	851	792	999	632
12	352	1930	e1800	1580	1990	3150	1470	422	1350	817	753	579
13	354	2280	1590	1700	1990	3130	1560	452	1200	1040	633	569
14	313	1570	1240	1710	2130	3000	1630	488	1080	1150	673	538
15	292	1240	1220	e1400	2380	2930	1650	538	1370	1260	922	475
16	299	1080	1090	e1700	2170	2900	1560	1120	1880	1450	806	419
17	279	1200	1170	e1500	2260	2900	1410	1540	1680	1710	681	390
18	238	1270	1090	e1900	2210	2960	1360	1380	1450	1740	578	468
19	260	1180	1040	e1800	2230	2920	1350	1060	1160	1390	492	385
20	315	1160	1010	e1800	2160	3010	1230	905	893	953	453	326
21	322	1130	1120	e2000	2040	2850	1250	883	743	754	410	321
22	309	1170	1220	e2300	2090	2730	1290	895	785	998	357	306
23	293	1130	1290	e2100	2110	2750	1220	670	911	1110	309	299
24	304	1050	1240	e2000	1950	2770	1070	575	933	1460	261	287
25	317	1140	1090	e2000	1940	2990	919	497	921	2180	468	268
26	324	1150	1050	e2100	2000	2870	796	430	781	3110	513	295
27	352	1170	1020	e2200	1970	2870	707	414	651	2990	566	295
28	372	1160	1100	e2200	1970	2990	627	392	548	2500	569	277
29	334	1310	1080	2590	2050	3200	638	352	483	2220	641	273
30	297	e1700	1090	1980	---	3100	665	328	464	2420	1230	259
31	435	---	1090	2020	---	2690	---	308	---	2240	1750	---
TOTAL	9062	29092	39140	54550	59930	86510	43172	19247	28668	42790	28854	20779
MEAN	292	970	1263	1760	2067	2791	1439	621	956	1380	931	693
MAX	435	2280	2200	2590	2380	3730	2490	1540	1880	3110	1800	2200
MIN	184	190	1000	1270	1850	1950	627	308	370	467	261	259
AC-FT	17970	57700	77630	108200	118900	171600	85630	38180	56860	84870	57230	41220

PLATTE RIVER BASIN

06774000 PLATTE RIVER NEAR DUNCAN, NE --Continued
(National stream-quality accounting network station)

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1992, BY WATER YEAR (WY)

MEAN	1229	1392	1383	1498	2243	2900	2482	2639	2736	1243	482	848
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

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1942 - 1992
(SINCE STORAGE IN LAKE McCONAUGHY)

ANNUAL TOTAL	391697.23	461794	1751
ANNUAL MEAN	1073	1262	1330
MEDIAN OF ANNUAL MEANS			6652
HIGHEST ANNUAL MEAN			494
LOWEST ANNUAL MEAN			23800
HIGHEST DAILY MEAN	7550 Jun 3	3730 Mar 11	Jul 1 1983
LOWEST DAILY MEAN	.00 Sep 1	184 Oct 3	.00 Many years
ANNUAL SEVEN-DAY MINIMUM	.00 Sep 1	213 Oct 1	.00 Oct 1 1943
INSTANTANEOUS PEAK FLOW (STAGE)		3950(4.83)Mar 10	44100(*6.50)Jun 23 1905
INSTANTANEOUS PEAK STAGE		**5.33 Dec 1	6.78 Mar 24 1987
ANNUAL RUNOFF (AC-FT)	776900	916000	1269000
10 PERCENT EXCEEDS	2100	2290	3730
50 PERCENT EXCEEDS	1080	1160	1150
90 PERCENT EXCEEDS	71	311	68

e Estimated.

* Site and datum then in use.

** Backwater from ice.

PLATTE RIVER BASIN
06774000 PLATTE RIVER NEAR DUNCAN, NE--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965 to current year.

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 1991 TO SEPTEMBER 1992

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 PRESSURE (MM OF HG) (00025)	TUR- BIDITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	COLI- FORM, FECAL, 0.7 μ M-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
NOV 21...	1530	1180	950	8.5	8.0	716	15	12.0	--	80
JAN 09...	1430	1480	916	8.2	0.5	726	10	9.6	K10	K63
MAR 11...	1430	3690	--	8.3	3.5	714	31	7.9	K10	K23
MAY 12...	1400	415	960	8.5	22.5	724	3.4	10.5	--	K30
JUL 06...	1430	1240	--	8.3	20.5	720	55	6.9	K12000	K19000

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 21...	270	86	68	23	83	2	12	179	13	192
JAN 09...	260	79	68	21	77	2	12	178	0	216
MAR 11...	300	120	80	24	79	2	10	179	0	218
MAY 12...	270	120	63	26	110	3	15	148	10	161
JUL 06...	170	61	43	15	49	2	13	108	0	132

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 DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
NOV 21...	250	35	0.50	21	601	604	0.82	1910	0.780	0.010
JAN 09...	220	35	0.50	23	642	570	0.87	2570	1.57	0.030
MAR 11...	240	35	0.50	20	631	603	0.86	6290	--	<0.010
MAY 12...	270	52	0.40	9.4	612	637	0.83	686	0.150	0.010
JUL 06...	140	25	0.40	12	375	369	0.51	1260	1.07	0.030

PLATTE RIVER BASIN
06774000 PLATTE RIVER NEAR DUNCAN, NE--Continued

WATER QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	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 21...	0.790	0.790	0.030	0.040	0.67	0.70	1.5	0.170	0.040	0.050
JAN 09...	1.60	1.60	0.050	0.050	0.55	0.60	2.2	0.170	0.100	0.080
MAR 11...	1.30	1.30	0.060	0.040	0.94	1.0	2.3	0.300	0.100	0.080
MAY 12...	0.170	0.160	0.010	0.020	0.49	0.50	0.67	0.080	0.040	<0.010
JUL 06...	1.10	1.10	0.020	0.030	0.78	0.80	1.9	0.450	0.320	0.270

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 21...	1530	<10	64	<3	<3	32	3
MAR 11...	1430	<10	72	<3	9	31	4
MAY 12...	1400	10	85	<3	<3	37	4
JUL 06...	1430	30	94	<3	20	18	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 21...	<10	1	2	<1.0	660	<6
MAR 11...	<10	<1	2	<1.0	700	<6
MAY 12...	<10	2	2	<1.0	720	<6
JUL 06...	<10	2	<1	<1.0	390	6

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)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 21...	1530	1180	8.0	63	201	46
JAN 09...	1430	1480	0.5	82	328	30
MAR 11...	1430	3690	3.5	257	2560	44
MAY 12...	1400	415	22.5	44	49	26
JUL 06...	1430	1240	20.5	268	897	93

06775500 MIDDLE LOUP RIVER AT DUNNING, NE

LOCATION.--Lat 41°49'50", long 100°06'20", in NW1/4SE1/4 sec.33, T.22 N., R.24 W., Blaine County, Hydrologic Unit 10210001, on left bank near upstream end of bridge on State Highway 2 at north edge of Dunning, 1.0 mi upstream from Dismal River, and at mile 204.

DRAINAGE AREA.--1,850 mi², approximately, of which about 80 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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	446	427	448	505	484	513	480	478	441	502	450	437
2	450	410	452	505	493	515	488	470	431	507	451	429
3	449	415	394	489	506	516	500	449	440	485	444	413
4	459	498	408	488	490	558	501	449	451	497	480	413
5	439	472	410	497	495	577	500	442	454	480	517	423
6	417	513	401	491	487	567	504	437	431	482	517	418
7	424	551	420	518	481	546	506	429	421	494	529	496
8	441	532	446	495	446	e520	506	432	518	488	485	443
9	435	557	444	455	453	e500	508	439	464	478	473	431
10	432	565	444	411	475	494	503	436	446	471	454	415
11	426	570	455	429	484	476	500	430	429	472	429	407
12	425	571	476	434	457	473	486	420	415	470	429	413
13	434	578	470	424	469	501	474	416	410	463	450	421
14	414	582	436	433	499	539	495	420	517	451	431	445
15	406	554	446	378	505	545	507	433	506	452	416	436
16	422	552	451	434	514	547	507	447	469	441	417	418
17	426	563	462	415	536	536	507	425	442	425	428	419
18	425	565	452	400	508	518	524	415	425	426	423	409
19	408	559	450	402	496	493	504	414	479	461	422	401
20	407	551	474	402	483	499	457	408	496	461	421	407
21	415	559	452	430	459	501	438	426	508	458	425	418
22	419	557	448	441	490	471	446	421	494	487	423	411
23	422	527	460	395	496	488	476	402	467	454	433	405
24	415	507	471	397	485	505	456	406	457	449	512	408
25	401	464	478	414	486	492	450	427	444	456	532	411
26	397	462	483	435	494	485	452	406	439	452	498	421
27	405	455	488	438	499	478	460	411	443	440	469	409
28	468	476	472	442	507	507	468	396	462	444	455	409
29	399	482	431	456	513	525	465	397	464	456	452	426
30	402	449	464	425	---	502	478	399	443	537	438	427
31	424	---	451	462	---	505	---	415	---	471	427	---
TOTAL	13152	15523	13937	13740	14190	15892	14546	13195	13706	14510	14130	12639
MEAN	424	517	450	443	489	513	485	426	457	468	456	421
MAX	468	582	488	518	536	577	524	478	518	537	532	496
MIN	397	410	394	378	446	471	438	396	410	425	416	401
AC-FT	26090	30790	27640	27250	28150	31520	28850	26170	27190	28780	28030	25070

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1992 BY WATER YEAR (WY)

MEAN	399	409	407	402	425	449	444	432	409	385	386	391
MAX	475	517	479	490	499	522	545	560	507	473	468	477
(WY)	1987	1992	1988	1967	1988	1955	1958	1983	1983	1962	1985	1987
MIN	346	364	336	322	370	359	334	353	342	324	341	330
(WY)	1951	1948	1950	1949	1948	1968	1951	1948	1948	1970	1947	1955

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1946 - 1992

ANNUAL TOTAL	167788	169160	
ANNUAL MEAN	460	462	411
HIGHEST ANNUAL MEAN			482
LOWEST ANNUAL MEAN			365
HIGHEST DAILY MEAN	730 May 17	582 Nov 14	778 Apr 20 1971
LOWEST DAILY MEAN	370 Jan 2	378 Jan 15	100 Dec 5 1950
ANNUAL SEVEN-DAY MINIMUM	396 Jan 1	406 May 24	231 Jan 1 1949
INSTANTANEOUS PEAK FLOW (STAGE)		636 Aug 5	2160(*3.55 Mar 8 1989
INSTANTANEOUS PEAK STAGE		3.90 Aug 5	**7.02 Mar 31 1949
ANNUAL RUNOFF (AC-FT)	332800	335500	298000
10 PERCENT EXCEEDS	518	517	482
50 PERCENT EXCEEDS	452	454	405
90 PERCENT EXCEEDS	410	411	349

e Estimated.

* Result of bridge collapsing and releasing ice jam 0.2 mi upstream.

** Backwater from ice, site and datum then in use.

PLATTE RIVER BASIN

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

LOCATION.--Lat 41°46'45", long 100°31'30", in SE1/4NW1/4 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.--960 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 National Geodetic Vertical Datum of 1929.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	193	203	202	e208	206	202	200	199	198	277	210	207
2	191	202	195	e208	207	202	203	195	199	276	212	210
3	188	192	201	e208	204	202	203	196	198	217	210	206
4	193	202	202	e210	203	213	206	192	200	209	221	206
5	190	211	211	e208	203	217	207	194	195	210	227	211
6	186	218	212	e208	198	214	206	194	193	240	215	208
7	190	211	209	e208	205	208	205	193	194	213	216	219
8	193	210	206	e208	200	215	206	198	210	210	212	207
9	192	218	207	e208	202	221	207	198	191	208	213	209
10	192	217	207	e208	200	200	207	194	189	205	210	204
11	193	215	206	e209	201	204	205	195	189	202	207	204
12	195	214	208	e210	194	209	200	192	192	206	207	206
13	196	216	204	e210	202	208	201	194	196	209	205	209
14	193	215	193	e210	203	210	206	208	230	205	204	219
15	192	210	193	e210	206	200	206	197	224	205	207	209
16	197	212	199	e210	206	204	203	206	205	203	209	206
17	199	220	198	e208	206	204	202	205	197	200	205	202
18	194	214	197	e208	203	202	203	193	190	203	210	198
19	194	209	197	e210	205	199	202	195	198	206	209	197
20	198	211	198	e210	205	205	193	194	204	208	206	198
21	200	212	196	e210	201	198	194	198	213	211	205	198
22	201	212	194	207	207	202	197	194	212	222	209	192
23	199	203	198	196	208	207	197	191	200	215	204	193
24	199	198	197	202	211	205	193	193	194	211	217	192
25	199	208	199	205	207	198	196	198	195	211	233	193
26	203	209	202	205	206	203	196	194	191	209	219	192
27	205	209	205	197	201	200	197	192	194	210	211	187
28	210	207	206	203	207	208	202	192	220	214	208	187
29	202	209	206	200	207	213	199	192	215	220	208	189
30	201	207	204	202	---	205	198	192	195	225	205	192
31	203	---	e208	201	---	206	---	197	---	213	205	---
TOTAL	6081	6294	6260	6405	5914	6384	6040	6065	6021	6673	6539	6050
MEAN	196	210	202	207	204	206	201	196	201	215	211	202
MAX	210	220	212	210	211	221	207	208	230	277	233	219
MIN	186	192	193	196	194	198	193	191	189	200	204	187
AC-FT	12060	12480	12420	12700	11730	12660	11980	12030	11940	13240	12970	12000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1992, BY WATER YEAR (WY)

	194	199	197	197	199	204	206	203	195	193	191	193
MEAN	194	199	197	197	199	204	206	203	195	193	191	193
MAX	221	219	221	230	226	236	231	240	220	215	211	227
(WY)	1987	1989	1985	1985	1986	1986	1991	1987	1986	1992	1992	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1967 - 1992

ANNUAL TOTAL	76755	74726	
ANNUAL MEAN	210	204	197
HIGHEST ANNUAL MEAN			211
LOWEST ANNUAL MEAN			188
HIGHEST DAILY MEAN	288	277	463
LOWEST DAILY MEAN	183	186	125
ANNUAL SEVEN-DAY MINIMUM	185	190	153
INSTANTANEOUS PEAK FLOW (STAGE)		413	1160(3.83)
INSTANTANEOUS PEAK STAGE		2.06	*5.10
ANNUAL RUNOFF (AC-FT)	152200	148200	143100
10 PERCENT EXCEEDS	229	213	217
50 PERCENT EXCEEDS	209	205	195
90 PERCENT EXCEEDS	191	193	180

e Estimated.

* Backwater from ice.

PLATTE RIVER BASIN
06775900 DISMAL RIVER NEAR THEDFORD, NE--Continued

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WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DIS-CHARGE, INST. FT ³ /S (00061)	SPECIFIC CON- DUCT- ANCE (μS/CM) (00095)	PH WATER	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- TOCOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/AS CACO ₃) (00900)	
				WHOLE FIELD (STAND- ARD UNITS) (00400)								
NOV	07...	1045	210	174	8.2	6.0	695	15	11.1	26	39	71
FEB	18...	1345	204	175	8.5	6.0	685	17	10.6	42	62	69
MAY	13...	1215	194	174	8.2	17.0	690	5.5	8.7	110	47	71
AUG	03...	1145	213	175	8.3	19.5	686	12	8.0	100	150	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- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (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	07...	0	23	3.3	6.9	0.4	4.9	93	0	113	9.0
FEB	18...	0	22	3.3	6.7	0.4	4.7	80	0	99	5.4
MAY	13...	0	23	3.3	6.8	0.4	5.1	87	0	106	6.4
AUG	03...	0	22	3.3	6.9	0.4	5.0	82	1	98	5.8

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 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, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
NOV	07...	1.6	0.30	55	147	162	0.20	83.3	0.510	0.020	<0.010
FEB	18...	0.70	0.40	53	151	148	0.21	83.2	0.510	0.020	<0.010
MAY	13...	0.70	0.40	59	155	159	0.21	81.2	0.420	0.010	<0.010
AUG	03...	0.40	0.30	56	144	151	0.20	82.8	0.380	0.020	<0.010

DATE		NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	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	07...	0.530	0.510	<0.010	<0.010	--	0.30	0.83	0.210	0.150	0.140
FEB	18...	0.530	0.560	0.020	0.020	0.28	0.30	0.83	0.230	0.130	0.140
MAY	13...	0.430	0.430	0.030	0.030	--	<0.20	--	0.180	0.130	0.130
AUG	03...	0.400	0.400	0.030	0.010	0.27	0.30	0.70	0.260	0.140	0.130

PLATTE RIVER BASIN
06775900 DISMAL RIVER NEAR THEDFORD, NE--Continued

WATER QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

		ALUM- INUM, DIS- SOLVED (µ G/L (01106)	BARIUM, DIS- SOLVED (µ G/L (01005)	COBALT, DIS- SOLVED (µ G/L (01035)	IRON, DIS- SOLVED (µ G/L (01046)	LITHIUM DIS- SOLVED (µ G/L (01130)	MANGA- NESE, DIS- SOLVED (µ G/L (01056)		
NOV	07...	30	48	<3	19	12	2		
FEB	18...	20	43	<3	21	11	3		
MAY	13...	30	46	<3	16	11	2		
AUG	03...	<10	56	<3	18	12	3		
DATE		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)		
NOV	07...	<10	<1	1	<1.0	110	8		
FEB	18...	<10	<1	<1	<1.0	110	10		
MAY	13...	<10	<1	<1	<1.0	120	11		
AUG	03...	<10	<1	<1	<1.0	120	10		
DATE	TIME	GROSS ALPHA, DIS- SOLVED (µ G/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (µ G/L AS U-NAT) (80040)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90) (80060)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L) (09511)	URANIUM NATURAL DIS- SOLVED (µ G/L AS U) (22703)
NOV	07...1045	<0.6	4.6	4.2	3.7	3.3	3.3	0.04	0.30
MAY	13...1215	0.9	1.5	4.7	2.4	3.6	2.3	0.05	0.32
DATE		ALPHA, COUNT, 2 SIGMA WAT DIS AS NAT U (µ G/L) (75986)	ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L) (75987)	BETA, 2 SIGMA WATER, DISS, AS SR90 (PCI/L) (75988)	BETA, 2 SIGMA WATER, DISS, AS CS-137 (PCI/L) (75989)	URANIUM NATURAL 2 SIGMA WATER, DISS, (µ G/L) (75990)	RA-226 2 SIGMA WATER, DISS, (PCI/L) (76001)	ALPHA, 2 SIGMA SED SUS TOT DRY AS TH-230 (PCI/L) (76004)	BETA, 2 SIGMA SED, SUSP, TOT DRY SR90Y90 (PCI/L) (76005)
NOV	07...	0.60	<0.60	0.80	1.2	<1.0	0.010	2.5	1.0
MAY	13...	0.91	0.60	0.82	1.3	<1.0	0.010	1.3	0.78
DATE	TIME	DISCHARGE, INST. FT ³ /S (00061)			TEMPER- ATURE WATER (°C) (00010)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDIMENT, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	
NOV	07...	210			6.0	686	389	15	
FEB	18...	204			6.0	767	422	14	
MAY	13...	194			17.0	356	186	18	
AUG	03...	213			19.5	439	252	19	

PLATTE RIVER BASIN
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 (revised) 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 National Geodetic Vertical Datum of 1929. 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 good except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	329	282	329	369	360	360	335	347	344	443	313	337
2	330	309	341	370	362	365	348	334	334	419	315	335
3	324	371	315	369	359	364	354	328	339	370	314	335
4	326	373	345	367	349	396	360	324	342	395	354	330
5	306	367	343	370	350	404	358	320	346	366	384	337
6	299	357	356	370	355	393	356	324	334	379	328	336
7	315	352	362	385	345	368	354	320	333	373	328	336
8	324	336	368	373	337	383	354	326	361	359	322	333
9	322	358	362	358	336	396	362	332	350	360	317	322
10	319	356	363	339	335	326	358	323	343	367	312	316
11	327	360	360	353	330	350	350	314	336	355	306	317
12	327	362	361	362	333	359	336	310	340	355	302	326
13	325	366	360	355	330	356	334	300	337	351	315	333
14	303	362	349	352	335	365	347	322	397	348	334	352
15	312	352	339	323	336	368	354	359	376	345	301	348
16	327	350	345	370	356	363	348	347	357	336	312	343
17	328	366	343	316	367	354	348	344	341	330	314	339
18	308	356	346	294	352	349	360	339	326	335	305	325
19	299	351	355	307	344	340	348	336	350	353	310	325
20	311	340	352	332	350	346	330	333	350	349	306	338
21	319	354	358	344	340	348	314	339	353	348	307	334
22	328	355	363	338	352	331	325	336	362	349	299	327
23	320	333	353	330	359	346	340	318	347	322	302	327
24	306	337	353	335	349	351	330	326	340	322	391	328
25	296	343	358	343	348	347	323	333	334	323	390	330
26	303	357	357	350	351	346	326	321	326	316	355	323
27	314	348	354	350	351	346	335	325	331	313	343	323
28	346	349	360	345	353	348	342	322	332	316	339	317
29	297	356	371	349	353	357	341	327	368	323	337	322
30	278	339	367	353	---	352	350	329	339	344	329	328
31	289	---	363	357	---	353	---	335	---	316	331	---
TOTAL	9757	10497	10951	10828	10077	11130	10320	10193	10368	10880	10115	9922
MEAN	315	350	353	349	347	359	344	329	346	351	326	331
MAX	346	373	371	385	367	404	362	359	397	443	391	352
MIN	278	282	315	294	330	326	314	300	326	313	299	316
AC-FT	19350	20820	21720	21480	19990	22080	20470	20220	20560	21580	20060	19680

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1992, BY WATER YEAR (WY)

	MEAN	322	326	324	321	336	343	343	338	328	315	317	318
	MAX	369	364	380	371	391	421	427	408	419	361	356	366
	(WY)	1988	1988	1986	1988	1988	1977	1977	1983	1983	1962	1957	1987
	MIN	296	300	279	278	270	305	305	294	275	269	279	285
	(WY)	1952	1979	1973	1950	1962	1951	1946	1946	1946	1946	1971	1956

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1946 - 1992

ANNUAL TOTAL	126427	125038	
ANNUAL MEAN	346	342	328
HIGHEST ANNUAL MEAN			368 1988
LOWEST ANNUAL MEAN			305 1948
HIGHEST DAILY MEAN	554 May 17	443 Jul 1	672 Jun 13 1983
LOWEST DAILY MEAN	278 Oct 30	278 Oct 30	100 Jan 25 1950
ANNUAL SEVEN-DAY MINIMUM	301 Oct 26	301 Oct 26	191 Jan 5 1962
INSTANTANEOUS PEAK FLOW (STAGE)		534 Jul 1	1290(2.40) Jun 13 1983
INSTANTANEOUS PEAK STAGE		1.18 Jul 1	*5.21 Jan 19 1947
INSTANTANEOUS LOW FLOW		278 Oct 30	100 Jan 9 1962
ANNUAL RUNOFF (AC-FT)	250800	248000	237300
10 PERCENT EXCEEDS	378	366	368
50 PERCENT EXCEEDS	345	343	325
90 PERCENT EXCEEDS	312	314	290

* Maximum observed, backwater from ice.

PLATTE RIVER BASIN

06779000 MIDDLE LOUP RIVER AT ARCADIA, NE

LOCATION.--Lat 41°25'20", long 99°08'10", in sec.26, T.17 N., R.16 W., Valley County, Hydrologic Unit 10210003, at right downstream end of bridge on State Highway 70 at southwest edge of Arcadia and at mile 135.

DRAINAGE AREA.--5,040 mi², approximately, of which about 820 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--July 1937 to current year.

REVISED RECORDS.--WDR NE-72: Drainage area. WDR NE-82-1: 1981(M).

GAGE.--Water-stage recorder. Datum of gage is 2,146.30 ft above National Geodetic Vertical Datum of 1929 (levels by Bureau of Reclamation). Prior to Apr. 23, 1938, nonrecording gage at bridge at datum 1.23 ft lower. Apr. 24, 1938 to July 24, 1991, water-stage recorder on left bank 80 ft downstream from bridge, at present datum.

REMARKS.--Records fair except for Nov. 8 to Feb. 20 and periods of estimated record, which are poor. Middle Loup Public Power and Irrigation District began diversion above station Mar. 30, 1938. Farwell Irrigation District canal began diversion from river in November 1962 at point 8 mi above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	296	e450	e540	1150	1120	973	788	584	1460	151	326	950
2	391	e500	e820	1090	1020	959	726	646	1420	357	254	1000
3	320	e600	e1000	1420	937	915	863	604	1130	230	331	999
4	695	e740	e1040	1480	1230	1050	732	538	845	268	392	956
5	630	e780	e1200	1170	e1400	1210	825	506	1140	292	683	859
6	445	e820	e1300	985	e1200	1160	793	515	1540	181	1440	850
7	401	e840	e1400	897	e1100	825	883	552	987	333	1760	1060
8	284	e850	e1300	1270	e1000	835	1020	540	1010	420	1640	950
9	332	e860	e1200	1130	e980	2000	969	475	1130	280	944	602
10	779	e880	e1100	1190	e1000	1220	1240	565	1130	315	717	424
11	1020	e880	e1140	1250	e1040	1240	1020	650	919	213	600	394
12	900	e880	e1200	1220	e1060	1670	840	498	865	222	625	352
13	913	e860	e1000	1010	1120	1620	523	360	777	304	603	382
14	785	e860	893	598	1340	1310	556	428	947	154	770	454
15	700	e880	950	134	1370	1340	857	425	1330	176	1090	571
16	773	e880	1010	e600	1180	1290	575	819	1270	212	605	506
17	851	e900	828	e1200	1120	1100	632	837	1000	166	516	1060
18	759	933	1420	645	1690	1450	731	645	791	155	557	1070
19	702	987	937	821	1360	1460	724	608	520	316	441	810
20	717	975	1390	1350	1100	1130	736	538	608	284	275	660
21	779	e960	1160	1120	1290	1390	615	585	808	253	215	725
22	729	e920	1410	1160	808	1270	366	681	836	917	199	681
23	984	e860	1190	e980	633	1010	501	745	574	887	213	767
24	1010	e860	1070	e1000	1070	1050	570	598	487	522	471	905
25	995	e880	850	e1020	1190	1030	444	564	402	423	2150	808
26	723	1020	694	e1000	1100	892	380	806	374	417	1300	623
27	716	887	976	e980	840	728	308	716	373	364	772	537
28	e710	e780	701	e1000	1020	998	493	806	411	269	909	555
29	e700	e680	1020	e1000	1100	1150	505	712	277	275	1070	522
30	689	e520	631	980	---	801	520	933	154	1330	732	590
31	e560	---	886	1200	---	723	---	1370	---	772	790	---
TOTAL	21288	24722	32256	32050	32418	35799	20735	19849	25515	11458	23390	21622
MEAN	687	824	1041	1034	1118	1155	691	640	850	370	755	721
MAX	1020	1020	1420	1480	1690	2000	1240	1370	1540	1330	2150	1070
MIN	284	450	540	134	633	723	308	360	154	151	199	352
AC-FT	42220	49040	63980	63570	64300	71010	41130	39370	50610	22730	46390	42890

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1992, BY WATER YEAR (WY)

	MEAN	761	936	838	894	1053	1099	820	679	530	214	252	493
MAX	1324	1309	1120	1344	1362	1906	1335	1039	1371	1050	755	1406	
(WY)	1985	1978	1985	1984	1980	1978	1984	1984	1962	1962	1992	1985	
MIN	217	587	570	651	741	790	511	286	233	38.6	49.9	116	
(WY)	1964	1965	1971	1978	1979	1970	1981	1975	1981	1974	1980	1967	

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1962 - 1992
(SINCE FARWELL DIVERSION)

ANNUAL TOTAL	256258	301102	712
ANNUAL MEAN	702	823	965
HIGHEST ANNUAL MEAN			528
LOWEST ANNUAL MEAN			1983
HIGHEST DAILY MEAN	2000	Feb 14	4800
LOWEST DAILY MEAN	72	Aug 3	6.0
ANNUAL SEVEN-DAY MINIMUM	86	Jul 2	9.0
INSTANTANEOUS PEAK FLOW (STAGE)			1974
INSTANTANEOUS PEAK STAGE			1974
ANNUAL RUNOFF (AC-FT)	508300	597200	515600
10 PERCENT EXCEEDS	1220	1270	1200
50 PERCENT EXCEEDS	759	835	744
90 PERCENT EXCEEDS	100	346	113

e Estimated.

* Backwater from ice.

PLATTE RIVER BASIN

06783500 MUD CREEK NEAR SWEETWATER, NE

LOCATION.--Lat 41°02'15", long 98°59'35", in NE1/4SE1/4 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 National Geodetic Vertical Datum of 1929.

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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	e11	e11	e17	17	17	21	20	21	14	15	15
2	13	e10	e11	e17	18	17	21	22	22	14	15	15
3	12	e9.0	e11	e17	18	17	21	20	23	14	16	15
4	13	e9.0	e11	17	18	20	20	18	23	12	15	15
5	14	e10	e13	e17	17	25	20	18	41	12	13	15
6	14	e12	e15	e17	18	26	20	18	26	12	15	15
7	13	e11	e16	17	17	30	20	17	20	24	15	36
8	15	e11	e18	e16	17	29	20	17	19	111	20	79
9	16	e11	e17	e14	e18	29	20	17	20	68	17	31
10	14	e12	e17	e15	19	27	20	16	107	56	13	18
11	12	e12	18	e16	e18	25	20	16	29	31	12	15
12	11	e13	e18	e18	e17	28	20	17	20	25	12	14
13	11	e15	e18	e17	e17	26	20	16	18	19	13	15
14	10	e16	16	e17	e18	25	21	16	19	16	13	15
15	11	e16	e18	e16	19	25	21	18	19	16	13	15
16	11	e16	e19	e15	18	24	21	871	18	15	14	15
17	11	16	19	e17	18	22	20	94	19	15	24	12
18	10	15	16	e16	19	22	21	33	20	14	33	13
19	11	15	e15	e16	19	23	21	25	21	13	35	14
20	11	15	e15	e17	18	23	21	23	18	13	20	15
21	11	16	e17	e18	18	22	21	22	18	16	15	16
22	10	16	e18	e18	17	22	20	21	17	27	14	16
23	10	15	e18	e17	17	22	20	20	17	44	12	16
24	10	15	16	e17	17	22	20	20	18	36	12	15
25	10	16	15	e18	17	21	19	20	18	23	23	14
26	10	16	17	e17	18	21	19	21	17	21	85	15
27	11	16	e17	e17	18	21	19	22	16	17	68	14
28	11	14	e15	e16	19	21	19	20	15	17	36	14
29	12	14	e16	e17	18	22	20	20	15	16	22	14
30	13	e12	e17	e18	---	21	20	20	14	19	16	15
31	e11	---	17	18	---	21	---	20	---	19	15	---
TOTAL	364	405.0	495	520	517	716	606	1538	688	769	661	546
MEAN	11.7	13.5	16.0	16.8	17.8	23.1	20.2	49.6	22.9	24.8	21.3	18.2
MAX	16	16	19	18	19	30	21	871	107	111	85	79
MIN	10	9.0	11	14	17	17	19	16	14	12	12	12
AC-FT	722	803	982	1030	1030	1420	1200	3050	1360	1530	1310	1080

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1992, BY WATER YEAR (WY)

MEAN	22.0	20.7	21.0	22.9	37.9	60.6	35.9	44.5	95.1	42.2	24.4	20.1
MAX	154	34.6	32.7	56.0	131	432	88.1	130	1002	191	146	58.5
(WY)	1947	1952	1966	1973	1966	1978	1984	1960	1947	1950	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1946 - 1992

ANNUAL TOTAL	6841.8	7825.0	
ANNUAL MEAN	18.7	21.4	37.2
HIGHEST ANNUAL MEAN			128
LOWEST ANNUAL MEAN			17.4
HIGHEST DAILY MEAN	190 Jun 4	871 May 16	11400 Jun 22 1947
LOWEST DAILY MEAN	1.6 Aug 29	9.0 Nov 3	.00 Jul 31 1955
ANNUAL SEVEN-DAY MINIMUM	2.0 Aug 26	10 Oct 20	.03 Aug 24 1955
INSTANTANEOUS PEAK FLOW		1310 May 16	27000 Jun 22 1947
INSTANTANEOUS PEAK STAGE		16.05 May 16	23.20 Jun 22 1947
ANNUAL RUNOFF (AC-FT)	13570	15520	26980
10 PERCENT EXCEEDS	27	24	47
50 PERCENT EXCEEDS	16	17	22
90 PERCENT EXCEEDS	4.8	12	11

PLATTE RIVER BASIN

06784000 SOUTH LOUP RIVER AT ST. MICHAEL, NE

LOCATION.--Lat 41°01'53", long 98°44'25", in NW1/4NW1/4 sec.12, T.12 N., R.13 W., Buffalo County, Hydrologic Unit 10210004, 5 ft downstream and 30 ft shoreward from left downstream corner of county highway bridge, 0.6 mi northeast of St. Michael, 3.4 mi upstream from Sweet Creek, and at mile 9.0.

DRAINAGE AREA.--2,350 mi², approximately, of which about 1,610 mi² contributes directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1943 to current year.

REVISED RECORDS.--WDR NE-74: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,921.26 ft above National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96	e150	e140	250	192	214	222	175	142	129	129	206
2	97	e140	e140	270	185	213	212	172	166	151	114	e190
3	98	e130	e140	269	176	212	198	172	163	153	112	e170
4	106	e130	e140	247	190	238	189	153	170	138	120	e175
5	111	e140	e150	248	198	268	180	143	181	125	120	e180
6	119	e160	e165	226	191	332	177	133	434	129	120	185
7	127	e145	e170	244	184	316	189	119	255	156	131	255
8	124	e150	e185	266	193	307	192	108	204	255	155	502
9	119	e155	e180	e240	186	490	186	107	182	355	135	423
10	122	e170	e180	249	200	385	187	100	233	282	122	255
11	120	e165	e180	229	202	324	188	103	312	235	111	216
12	120	e180	e175	242	195	335	174	100	206	226	182	190
13	120	e205	e180	234	188	349	155	95	189	190	149	180
14	117	218	e175	222	178	325	147	100	181	175	130	175
15	120	195	e170	e150	158	308	154	123	197	164	118	185
16	121	184	e180	e130	159	288	151	1820	191	138	120	180
17	120	203	e193	e150	164	282	146	865	177	120	129	165
18	117	212	204	e145	180	323	159	287	166	108	210	153
19	117	199	200	e150	180	337	187	239	155	103	233	146
20	118	188	213	e160	175	317	185	205	146	91	257	156
21	122	167	220	e180	182	352	191	181	152	104	166	133
22	128	171	198	e190	191	336	166	165	158	200	139	129
23	123	162	204	e205	203	309	154	149	153	197	142	126
24	135	168	212	204	218	293	144	137	155	218	e120	118
25	135	161	213	199	216	284	143	137	148	229	170	106
26	137	157	222	176	220	276	151	132	138	174	395	111
27	145	157	231	182	222	263	146	128	138	146	676	107
28	161	148	223	193	214	283	140	134	135	133	402	99
29	179	169	217	194	217	276	152	132	126	122	316	96
30	204	e155	216	198	---	259	171	129	131	139	238	104
31	e185	---	210	197	---	228	---	113	---	133	227	---
TOTAL	3963	5034	5826	6439	5557	9322	5136	6856	5484	5218	5888	5416
MEAN	128	168	188	208	192	301	171	221	183	168	190	181
MAX	204	218	231	270	222	490	222	1820	434	355	676	502
MIN	96	130	140	130	158	212	140	95	126	91	111	96
AC-FT	7860	9980	11560	12770	11020	18490	10190	13600	10880	10350	11680	10740

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1992, BY WATER YEAR (WY)

	MEAN	172	188	175	180	261	345	275	301	424	207	143	149
MAX	619	272	225	281	543	1747	549	562	2741	706	482	370	
(WY)	1947	1947	1966	1973	1966	1978	1984	1951	1947	1958	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1944 - 1992

ANNUAL TOTAL	72504	70139	
ANNUAL MEAN	199	192	234
HIGHEST ANNUAL MEAN			483
LOWEST ANNUAL MEAN			161
HIGHEST DAILY MEAN	2890 May 25	1820 May 16	28000 Jun 23 1947
LOWEST DAILY MEAN	38 Sep 1	91 Jul 20	.00 Aug 5 1980
ANNUAL SEVEN-DAY MINIMUM	42 Aug 26	102 May 8	.65 Aug 4 1980
INSTANTANEOUS PEAK FLOW		2600 May 16	e50000 Jun 22 1947
INSTANTANEOUS PEAK STAGE		5.98 May 16	e12.00 Jun 22 1947
ANNUAL RUNOFF (AC-FT)	143800	139100	169800
10 PERCENT EXCEEDS	285	272	333
50 PERCENT EXCEEDS	162	175	190
90 PERCENT EXCEEDS	82	120	100

e Estimated.

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 1991 TO SEPTEMBER 1992

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 21...	1120	122	412	8.6	11.5	10.8			
NOV 21...	1020	179	420	--	5.0	12.2			
DEC 17...	1050	193	462	8.5	0.5	13.3			
JAN 13...	1040	243	433	8.5	1.0	13.2			
FEB 11...	1250	204	442	8.6	1.0	12.9			
MAR 10...	1330	389	411	8.4	5.5	12.0			
APR 08...	1040	196	430	8.7	12.5	10.3			
MAY 04...	1130	153	394	8.7	19.0	9.8			
JUN 02...	1500	177	401	8.5	16.5	9.5			
JUL 27...	1120	145	391	8.8	24.5	9.7			
AUG 25...	1215	188	335	8.7	16.5	9.7			
SEP 22...	1140	124	425	8.7	17.0	9.8			
DATE	TIME	COLOR (PLAT- INUM- COBALT UNITS) (00080)	HARDNESS TOTAL AS CA CO 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- LINTY LAB (MG/L AS CA CO ₃) (90410)
MAR 10...	1330	40	180	59	8.9	12	0.4	8.6	181
JUL 27...	1120	25	170	54	8.2	11	0.4	9.5	191
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 CONSTI- TUENTS, 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 10...		23	7.4	0.30	41	273	0.37	286	--
JUL 27...		18	6.4	0.10	46	270	0.37	106	0.310
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 10...		<0.010	0.720	0.090	0.190	0.180	50	24	23
JUL 27...		0.020	0.330	0.060	0.200	0.180	50	10	2

PLATTE RIVER BASIN

06784200 SHERMAN RESERVOIR NEAR LOUP CITY, NE

LOCATION.--Lat 41°18'10", long 98°52'45", in SW1/4NW1/4 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 National Geodetic Vertical Datum of 1929.

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, 69,650 acre-ft June 2, elevation, 2,162.5 ft; minimum observed, 47,140 acre-ft Apr. 12, elevation, 2153.7 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	2,153.6	46,920	-
Oct. 31	2,156.1	52,720	+5,800
Nov. 30	2,155.6	51,530	-1,190
Dec. 31	2,155.2	50,580	-950
CAL YR 1991	-	-	0
Jan. 31	2,154.8	49,650	-930
Feb. 29	2,154.4	48,730	-920
Mar. 31	2,154.1	48,040	-690
Apr. 30	2,157.1	55,170	+7,130
May 31	2,162.4	69,360	+14,190
June 30	2,162.4	69,360	0
July 31	2,161.4	66,530	-2,830
Aug. 31	2,156.0	52,480	-14,050
Sept. 30	2,156.8	54,430	+1,950
WTR YR 1992	-	-	+7,510

PLATTE RIVER BASIN

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06784800 TURKEY CREEK NEAR DANNEBROG, NE

LOCATION.--Lat 41°09'24", long 98°33'22", in SW1/4NW1/4 sec.26, T.14 N., R.11 W., Howard County, Hydrologic Unit 10210003, on left bank 25 ft downstream from bridge on State Highway 11, 2.8 mi north of Dannebrog, and 11 mi (revised) upstream from mouth.

DRAINAGE AREA.--66.2 mi².

PERIOD OF RECORD.--May 1966 to September 1970, October 1978 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,870.35 ft above National Geodetic Vertical Datum of 1929 (Bureau of Reclamation bench mark).

REMARKS.--Records good except for periods of estimated record, which are poor. Low flow includes return water from Farwell Irrigation District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	e7.0	8.5	15	10	9.1	11	8.8	15	13	19	23
2	5.1	e6.6	7.7	19	10	9.4	10	8.2	43	18	17	25
3	5.1	e6.4	e7.4	15	10	9.2	11	7.9	18	21	16	20
4	5.5	e6.0	7.4	12	11	10	11	8.0	14	20	149	21
5	5.8	e8.0	7.2	12	9.5	13	11	7.8	34	23	858	18
6	5.5	e7.2	8.3	12	9.7	16	9.9	7.5	141	27	174	18
7	5.5	e7.0	10	13	9.4	15	9.9	7.4	22	199	107	22
8	5.4	e7.6	12	16	8.9	13	9.7	7.4	16	65	127	20
9	5.4	e8.4	10	13	9.0	26	9.7	7.4	78	21	28	17
10	5.5	e8.2	9.1	12	9.0	22	10	7.2	249	20	21	15
11	5.7	e8.6	9.1	12	8.8	18	10	7.2	98	23	17	13
12	5.8	e10	21	14	8.4	20	9.1	7.3	27	22	15	11
13	5.8	e11	23	13	8.7	17	8.9	6.8	22	22	18	11
14	6.1	e10	14	11	11	15	9.3	6.2	27	21	22	11
15	6.3	e9.6	11	e9.5	12	14	9.6	4.4	41	19	24	11
16	6.1	e9.0	11	e10	10	14	9.5	358	21	22	25	10
17	6.3	e9.4	9.7	e11	11	13	9.2	133	18	31	29	10
18	6.4	e10	e9.0	11	13	13	9.7	26	16	31	31	10
19	6.4	9.6	9.7	11	11	14	10	18	15	32	29	9.6
20	7.1	8.1	9.7	11	10	12	9.5	16	15	36	28	9.7
21	8.0	7.6	9.6	12	10	12	9.0	15	15	37	34	9.6
22	7.7	9.9	9.8	12	9.8	12	10	14	15	262	41	9.5
23	6.7	9.2	12	11	10	11	10	13	14	71	42	8.8
24	6.8	7.6	11	11	11	12	9.3	13	13	30	44	9.1
25	6.5	7.5	10	11	9.8	11	8.8	13	13	24	120	9.5
26	6.7	8.0	9.0	11	9.8	11	8.5	12	13	22	73	9.7
27	7.0	8.6	8.5	11	10	11	8.4	12	16	20	28	9.4
28	9.0	8.5	8.6	10	10	12	9.0	11	18	18	24	8.3
29	9.7	9.1	9.1	10	9.5	14	9.2	11	18	19	24	8.5
30	7.9	e8.6	9.3	10	---	12	8.9	11	14	122	24	8.3
31	e7.6	---	9.3	10	---	11	---	10	---	66	21	---
TOTAL	199.5	252.3	321.0	371.5	290.3	421.7	289.1	795.5	1079	1377	2229	396.0
MEAN	6.44	8.41	10.4	12.0	10.0	13.6	9.64	25.7	36.0	44.4	71.9	13.2
MAX	9.7	11	23	19	13	26	11	358	249	262	858	25
MIN	5.1	6.0	7.2	9.5	8.4	9.1	8.4	4.4	13	13	15	8.3
AC-FT	396	500	637	737	576	836	573	1580	2140	2730	4420	785

e Estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1992, BY WATER YEAR (WY)

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
MEAN	9.16	8.08	8.21	8.58	12.6	21.7	14.8	18.1	40.7	30.2	30.2	14.5															
MAX	28.2	15.1	18.5	23.6	35.1	79.9	53.6	55.8	165	51.4	71.9	52.1															
(WY)	1967	1967	1985	1984	1988	1979	1984	1985	1967	1986	1992	1985															
MIN	.34	.31	.26	.34	.54	.48	.42	.96	2.23	12.9	10.3	4.29															
(WY)	1967	1967	1967	1967	1967	1967	1967	1966	1970	1967	1980	1968															

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1966 - 70
1979 - 92

ANNUAL TOTAL	4911.7	8021.9	18.3
ANNUAL MEAN	13.5	21.9	33.4
HIGHEST ANNUAL MEAN			1984
LOWEST ANNUAL MEAN			1970
HIGHEST DAILY MEAN	154	858	1690
LOWEST DAILY MEAN	4.3	4.4	.00
ANNUAL SEVEN-DAY MINIMUM	4.7	5.4	.04
INSTANTANEOUS PEAK FLOW (STAGE)		936	2680
INSTANTANEOUS PEAK STAGE		14.68	19.26
ANNUAL RUNOFF (AC-FT)	9740	15910	13280
10 PERCENT EXCEEDS	27	28	31
50 PERCENT EXCEEDS	9.2	11	10
90 PERCENT EXCEEDS	5.8	7.2	1.1

PLATTE RIVER BASIN

06785000 MIDDLE LOUP RIVER AT ST. PAUL, NE

LOCATION.--Lat 41°12'13", long 98°26'46", in SE1/4NW1/4NE1/4 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.--8,090 mi², approximately, 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 National Geodetic Vertical Datum of 1929. 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 poor. Diversions above station for irrigation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	448	496	e1000	1740	1600	2200	1090	1720	2980	459	1440	628
2	459	225	e900	1890	1540	2050	1430	1790	3040	540	1170	1060
3	457	422	e790	1600	1990	1960	1810	1880	2890	580	704	1240
4	518	559	e1000	1300	2000	1490	2240	1990	2680	732	1030	1210
5	684	549	e1300	1190	2090	1860	1810	2160	2740	603	2110	1370
6	927	985	e1450	1130	2060	1610	1990	2000	4250	692	1270	1060
7	678	e990	e1550	1140	1920	1530	2160	1910	1460	1350	1240	1280
8	621	e1000	e1600	1380	1900	1780	1990	1900	1060	2190	1560	1600
9	589	e1020	e1620	1430	1700	2340	2120	1980	1170	1310	1450	1610
10	546	e1030	e1640	1270	1750	2640	e1430	1880	1600	1190	1190	1220
11	1060	e1040	1660	1190	1730	905	e1590	1990	1750	1050	1010	857
12	1500	e1050	1660	1300	1810	582	1890	2230	1150	1070	967	661
13	1370	e1060	2030	1240	1940	843	2000	2100	956	982	1200	742
14	1410	e1080	1420	1180	1940	1110	1860	1790	1050	830	1020	863
15	1410	1090	1300	e1050	1970	1150	1550	1920	1260	794	940	875
16	1090	1160	1280	e800	2180	1370	1660	5850	1280	596	936	1000
17	1040	1190	1280	e750	1570	1570	1260	3860	1370	543	965	956
18	1270	1170	1270	e900	1660	1680	1220	1660	1080	532	983	1040
19	1470	1200	1190	e1000	1550	1700	1440	1550	986	504	958	1680
20	1340	1180	991	e1100	1590	1880	1220	1560	910	562	946	1340
21	1240	1280	1090	e1100	1190	1450	1270	1520	872	662	828	1090
22	1380	1260	940	e1090	1530	1070	1110	1300	1160	2230	648	1240
23	1400	1390	1090	e1090	1330	1240	1260	1650	1350	2670	547	966
24	1410	1440	1140	e1100	1490	913	1650	1980	1020	1730	641	869
25	1260	1250	1230	e1150	1660	1130	2130	2060	926	1380	2330	1100
26	1050	1260	1120	e1220	1350	1130	1960	2060	743	1030	2000	1260
27	1190	1200	1170	1280	1590	869	1720	2080	677	804	1870	1080
28	1290	1240	1450	1290	1790	1070	1740	2250	678	656	1250	1210
29	1290	e1200	1750	1270	2050	955	1820	2090	687	583	1190	1210
30	1150	e1100	1460	1440	---	898	1900	2120	638	1430	1130	1220
31	1050	---	1460	2060	---	1290	---	2090	---	2090	763	---
TOTAL	32597	31116	40831	38670	50470	44265	50320	64920	44413	32374	36286	33537
MEAN	1052	1037	1317	1247	1740	1428	1677	2094	1480	1044	1171	1118
MAX	1500	1440	2030	2060	2180	2640	2240	5850	4250	2670	2330	1680
MIN	448	225	790	750	1190	582	1090	1300	638	459	547	628
AC-FT	64660	61720	80990	76700	100100	87800	99810	128800	88090	64210	71970	66520

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1992, BY WATER YEAR (WY)

MEAN	1019	1212	1117	1162	1472	1695	1315	1113	1109	542	517	721
MAX	1715	1692	1836	1844	2478	4022	2291	2094	3253	1044	1171	1790
(WY)	1987	1988	1971	1990	1984	1978	1984	1992	1992	1992	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1963 - 1992
(SINCE FARWELL DIVERSION)

ANNUAL TOTAL	365406	499799	1080
ANNUAL MEAN	1001	1366	1551
HIGHEST ANNUAL MEAN			1984
LOWEST ANNUAL MEAN			831
HIGHEST DAILY MEAN	4780	May 25	21800
LOWEST DAILY MEAN	195	Aug 30	23
ANNUAL SEVEN-DAY MINIMUM	213	Aug 27	31
INSTANTANEOUS PEAK FLOW (STAGE)			72000
INSTANTANEOUS PEAK STAGE			12.69
ANNUAL RUNOFF (AC-FT)	724800	991400	782400
10 PERCENT EXCEEDS	1550	2050	1750
50 PERCENT EXCEEDS	1080	1260	1040
90 PERCENT EXCEEDS	255	690	328

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 1991 TO SEPTEMBER 1992

								PH WATER					
								WHOLE FIELD					
								(STAND- ARD					
								UNITS)					
								(00400)					
				</									

PLATTE RIVER BASIN

06786000 NORTH LOUP RIVER AT TAYLOR, NE

LOCATION.--Lat 41°46'37", long 99°22'45", in NE1/4SE1/4 sec.22, T.21 N., R.18 W., Loup County, Hydrologic Unit 10210006, on left bank 25 ft downstream from bridge on U.S. Highway 183, 0.4 mi north of Taylor and at mile 80.6.

DRAINAGE AREA.--2,280 mi², approximately, of which about 180 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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	504	e270	295	555	582	565	580	540	402	506	526	470
2	498	e350	313	552	548	566	568	507	442	505	441	466
3	474	e450	361	554	578	573	577	480	451	406	370	440
4	541	e500	392	542	575	597	594	312	436	475	377	423
5	513	e520	553	548	597	710	588	316	526	517	749	423
6	471	e500	557	555	581	805	595	400	559	445	742	409
7	477	e500	505	596	526	775	595	403	521	422	1090	593
8	491	e500	522	e580	507	735	608	414	564	396	778	570
9	487	e520	503	476	508	800	596	413	608	424	517	461
10	485	e500	513	503	464	680	601	434	540	394	458	413
11	493	e520	522	565	444	645	605	424	475	358	444	384
12	483	e540	541	610	417	716	568	410	430	392	476	391
13	498	e560	547	610	496	726	570	395	414	347	454	404
14	473	514	520	482	486	729	607	391	482	290	459	508
15	476	458	507	e280	536	724	634	364	643	271	494	497
16	482	470	500	e400	560	694	659	423	655	237	463	448
17	492	556	524	535	579	667	665	444	566	221	430	426
18	475	565	533	e580	600	639	670	444	483	217	424	418
19	469	449	572	e580	544	564	620	387	492	269	409	402
20	492	465	564	e560	520	584	556	364	524	320	390	401
21	521	528	563	e540	506	593	489	346	625	340	354	409
22	522	494	570	e520	481	585	537	382	643	556	335	407
23	508	467	564	e520	543	606	556	371	595	566	348	406
24	471	434	550	526	557	582	569	366	543	528	581	396
25	462	406	528	543	556	580	550	411	502	451	864	411
26	456	426	555	569	559	574	528	398	446	450	772	413
27	499	470	562	503	559	526	511	395	417	416	614	420
28	619	449	559	558	573	557	552	391	419	387	536	445
29	545	457	563	555	552	680	546	384	449	387	498	477
30	328	382	554	570	---	652	550	374	445	648	481	478
31	294	---	551	587	---	619	---	367	---	576	460	---
TOTAL	14999	14220	15963	16654	15534	20048	17444	12450	15297	12717	16334	13209
MEAN	484	474	515	537	536	647	581	402	510	410	527	440
MAX	619	565	572	610	600	805	670	540	655	648	1090	593
MIN	294	270	295	280	417	526	489	312	402	217	335	384
AC-FT	29750	28210	31660	33030	30810	39770	34600	24690	30340	25220	32400	26200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 1992, BY WATER YEAR (WY)

	MEAN	471	505	470	479	553	617	588	528	472	309	296	381
	MAX	706	730	637	738	863	859	776	848	861	716	527	665
(WY)	1984	1987	1989	1941	1984	1987	1984	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	1940	1974	1969	1940

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1937 - 1992

ANNUAL TOTAL	179035	184869	
ANNUAL MEAN	491	505	473
HIGHEST ANNUAL MEAN			619
LOWEST ANNUAL MEAN			354
HIGHEST DAILY MEAN	1140	1090	2490
LOWEST DAILY MEAN	165	217	45
ANNUAL SEVEN-DAY MINIMUM	189	261	74
INSTANTANEOUS PEAK FLOW (STAGE)		1410 (4.91)	3210 (5.94)
INSTANTANEOUS PEAK STAGE		*5.21	**9.50
ANNUAL RUNOFF (AC-FT)	355100	366700	342400
10 PERCENT EXCEEDS	695	610	669
50 PERCENT EXCEEDS	503	506	467
90 PERCENT EXCEEDS	222	386	260

e Estimated.

* Backwater from ice.

** From floodmark, ice jam.

06787000 CALAMUS RIVER NEAR HARROP, NE

LOCATION.--Lat 41°56'48", long 99°23'10" in NW1/4SE1/4 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.--983 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.

GAGE.--Water-stage recorder. Elevation of gage is 2,260 ft above National Geodetic Vertical Datum of 1929, 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 of estimated records, which are poor. Diversions for irrigation above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	225	205	207	241	239	236	286	233	211	304	236	255
2	224	e165	209	240	242	236	270	227	216	306	237	247
3	224	208	e200	240	245	235	266	227	220	249	231	237
4	244	221	e215	239	243	247	260	224	217	239	225	231
5	247	e250	e250	239	242	289	258	222	224	243	229	228
6	238	272	230	237	239	319	250	220	236	255	225	226
7	235	280	239	244	237	334	249	218	232	251	305	263
8	234	298	240	278	233	338	251	217	251	244	276	266
9	231	325	244	258	234	362	251	217	257	230	258	255
10	229	290	238	257	235	335	250	217	251	244	252	244
11	228	257	235	255	233	341	248	217	233	225	253	237
12	233	266	248	250	234	353	245	217	220	222	240	231
13	232	263	248	245	236	354	242	213	214	216	230	231
14	229	262	238	249	242	361	246	215	226	213	229	245
15	230	251	235	e205	242	337	250	229	241	209	223	244
16	231	244	238	e225	247	315	256	231	249	201	221	240
17	233	250	234	217	253	297	263	235	258	195	222	237
18	232	251	233	233	269	285	271	222	244	193	225	229
19	235	249	234	245	268	276	275	215	228	192	226	227
20	236	242	233	252	263	275	266	211	229	201	226	226
21	239	238	234	248	253	272	260	206	231	209	230	227
22	240	239	237	237	250	267	256	206	240	262	221	225
23	240	231	236	234	250	266	256	208	235	250	216	226
24	239	222	234	232	253	264	253	207	226	239	304	224
25	238	223	231	233	250	253	249	207	217	229	390	223
26	239	226	235	233	246	254	244	207	206	225	353	225
27	247	227	233	235	244	251	243	209	204	228	340	226
28	268	228	232	234	244	251	244	209	206	225	349	226
29	289	227	232	234	240	267	239	207	210	224	326	228
30	259	211	239	234	---	272	240	207	212	248	283	228
31	251	---	237	234	---	281	---	207	---	253	261	---
TOTAL	7399	7321	7228	7437	7106	9023	7637	6707	6844	7224	8042	7057
MEAN	239	244	233	240	245	291	255	216	228	233	259	235
MAX	289	325	250	278	269	362	286	235	258	306	390	266
MIN	224	165	200	205	233	235	239	206	204	192	216	223
AC-FT	14680	14520	14340	14750	14090	17900	15150	13300	13580	14330	15950	14000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1992, BY WATER YEAR (WY)

MEAN	239	240	233	233	256	291	279	267	249	222	222	223
MAX	286	284	261	272	308	405	397	313	353	278	259	265
(WY)	1985	1985	1980	1984	1984	1987	1984	1984	1983	1983	1992	1986
MIN	219	217	199	188	219	230	212	216	200	186	194	193
(WY)	1981	1986	1981	1982	1981	1981	1981	1992	1981	1980	1991	1980

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1979 - 1992

ANNUAL TOTAL	88122	89025	
ANNUAL MEAN	241	243	246
HIGHEST ANNUAL MEAN			278
LOWEST ANNUAL MEAN			214
HIGHEST DAILY MEAN	393 May 20	390 Aug 25	792 Jun 30 1983
LOWEST DAILY MEAN	165 Nov 2	165 Nov 2	90 Jan 7 1980
ANNUAL SEVEN-DAY MINIMUM	172 Jul 15	200 Jul 15	169 Jan 10 1982
INSTANTANEOUS PEAK FLOW (STAGE)		409 (2.37) Aug 25	1170 (*4.80) May 4 1964
INSTANTANEOUS PEAK STAGE		**3.31 Jan 16	**5.34 Mar 29 1987
ANNUAL RUNOFF (AC-FT)	174800	176600	178400
10 PERCENT EXCEEDS	286	273	299
50 PERCENT EXCEEDS	239	237	237
90 PERCENT EXCEEDS	191	215	201

e Estimated.

* From floodmark, datum then in use.

** Backwater from ice.

PLATTE RIVER BASIN

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 National Geodetic Vertical Datum of 1929.

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, 129,000 acre-ft June 6, elevation, 2244.31 ft; minimum observed, 62,080 acre-ft Oct. 1, elevation, 2228.20 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	2,228.28	62,340	-
Oct. 31	2,232.55	77,190	+14,850
Nov. 30	2,237.07	95,050	+17,860
Dec. 31	2,240.11	108,470	+13,420
CAL YR 1991	-	-	+1,650
Jan. 31	2,240.19	108,840	+370
Feb. 29	2,240.29	109,300	+460
Mar. 31	2,243.42	124,450	+15,150
Apr. 30	2,243.55	125,110	+660
May 31	2,244.16	128,220	+3,110
June 30	2,243.06	122,640	-5,580
July 31	2,240.50	110,280	-12,360
Aug. 31	2,237.95	98,820	-11,460
Sept. 30	2,233.67	81,400	-17,420
WTR YR 1992	-	-	+19,060

06787500 CALAMUS RIVER NEAR BURWELL, NE

LOCATION.--Lat 41°48'35", long 99°10'56", in NW1/4NW1/4 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 (revised) upstream from mouth, and 3 mi northwest of Burwell.

DRAINAGE AREA.--1,060 mi², approximately, of which about 110 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 National Geodetic Vertical Datum of 1929 (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 good except for periods of estimated record, which are fair. Diversions for irrigation above station, and since Oct. 1, 1985, flow regulated by the Calamus Dam.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	e50	34	283	283	302	178	281	130	334	374	380
2	45	e48	34	294	282	287	229	220	132	375	373	378
3	45	e47	33	300	293	275	262	155	155	377	375	374
4	45	54	33	301	298	202	280	108	170	374	379	375
5	45	51	31	301	300	155	291	85	202	326	378	368
6	45	51	32	298	303	100	300	35	258	325	376	366
7	45	52	34	313	301	81	302	30	249	332	386	371
8	49	54	33	350	302	86	298	25	253	336	376	366
9	53	48	33	380	295	87	286	24	327	337	375	365
10	49	32	32	338	308	84	277	23	367	336	379	380
11	46	31	33	341	318	84	277	22	372	339	380	387
12	47	30	35	359	319	88	277	33	374	339	382	387
13	46	30	33	362	314	93	279	32	380	339	376	386
14	45	31	37	359	310	87	277	26	360	343	372	387
15	51	32	37	309	310	87	280	24	357	339	371	388
16	59	33	38	295	310	90	281	26	366	336	371	387
17	42	35	42	276	325	88	282	31	373	322	377	385
18	43	34	42	271	338	86	294	71	381	324	377	383
19	42	33	43	266	338	86	305	72	384	324	375	385
20	42	33	43	269	339	87	316	71	378	327	372	372
21	42	33	43	315	342	85	315	77	378	334	367	363
22	37	33	44	309	347	82	285	129	381	335	367	362
23	28	33	44	307	344	81	275	137	382	331	366	363
24	22	38	46	307	344	82	277	122	385	332	363	364
25	40	38	100	301	344	87	274	149	350	327	364	364
26	44	35	214	324	325	88	274	106	323	327	358	360
27	48	35	242	298	324	87	277	98	297	326	374	358
28	52	35	254	295	323	89	277	98	297	325	380	358
29	44	35	262	284	311	92	286	99	301	328	380	359
30	46	34	271	276	---	96	282	97	299	329	380	361
31	50	---	279	282	---	148	---	110	---	360	380	---
TOTAL	1465	1158	2511	9563	9190	3552	8393	2616	9361	10438	11603	11182
MEAN	47.3	38.6	81.0	308	317	115	280	84.4	312	337	374	373
MAX	128	54	279	380	347	302	316	281	385	377	386	388
MIN	22	30	31	266	282	81	178	22	130	322	358	358
AC-FT	2910	2300	4980	18970	18230	7050	16650	5190	18570	20700	23010	22180

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1992, BY WATER YEAR (WY)

	1986	1987	1988	1989	1990	1991	1992
MEAN	184	169	243	281	288	235	210
MAX	404	293	333	314	318	338	489
(WY)	1989	1986	1987	1987	1991	1988	1987
MIN	47.3	38.6	81.0	159	151	115	78.7
(WY)	1992	1992	1992	1986	1986	1992	1988

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1986 - 1992
(SINCE CALAMUS DAM)

ANNUAL TOTAL	84389	81032	259
ANNUAL MEAN	231	221	277
HIGHEST ANNUAL MEAN			221
LOWEST ANNUAL MEAN			221
HIGHEST DAILY MEAN	647	May 18	787
LOWEST DAILY MEAN	19	May 21	22
ANNUAL SEVEN-DAY MINIMUM	31	Nov 10	26
INSTANTANEOUS PEAK FLOW (STAGE)			490
INSTANTANEOUS PEAK STAGE			4.60
ANNUAL RUNOFF (AC-FT)	167400	160700	187500
10 PERCENT EXCEEDS	401	376	377
50 PERCENT EXCEEDS	282	282	285
90 PERCENT EXCEEDS	36	34	61

e Estimated.

* Due to temporary closure of dam

** Backwater from ice.

PLATTE RIVER BASIN

06788500 NORTH LOUP RIVER AT ORD, NE

LOCATION.--Lat 4°03'27", long 98°55'17", in SW1/4NW1/4 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.--3,750 mi², approximately, of which about 700 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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	903	e380	e580	883	991	1180	857	957	676	782	975	1030
2	603	e370	e570	909	981	1170	858	939	696	925	938	1030
3	607	e350	e550	942	999	1140	892	753	697	857	881	1000
4	707	e380	584	918	1010	1130	913	721	695	875	1410	984
5	747	e440	848	943	1000	1230	919	514	841	932	1580	1010
6	709	e430	977	941	990	1330	910	506	1190	872	1390	998
7	684	e380	1020	964	992	1280	930	553	843	840	2150	1230
8	661	e360	905	1070	984	1190	934	583	858	824	1650	1250
9	671	e410	901	1020	978	1270	919	523	959	799	1310	1080
10	682	e430	793	994	964	1190	899	511	1060	824	1170	992
11	687	e450	672	973	995	1110	899	517	974	761	1110	996
12	677	e500	728	1080	926	1110	881	437	932	768	1000	978
13	669	e480	652	1080	922	1130	907	485	887	791	994	981
14	659	e600	580	1080	1010	1130	880	515	927	707	978	1080
15	633	810	589	519	989	1080	924	513	958	656	979	1130
16	626	731	645	597	990	1050	957	547	1080	651	991	1080
17	612	777	654	748	1090	1030	1000	537	1040	593	977	1060
18	598	809	656	828	1140	1010	998	541	976	590	974	1030
19	606	776	710	1040	1060	950	1070	551	965	658	972	1020
20	614	724	704	1180	1090	901	1090	521	975	699	971	1010
21	625	683	698	1360	1080	912	1100	532	1010	691	965	1040
22	641	690	727	1180	1060	861	1050	527	1100	955	932	1030
23	635	645	730	965	1100	747	1050	599	1030	975	905	941
24	628	643	733	941	1120	758	1070	572	1010	922	1010	907
25	642	635	731	974	1110	776	1080	587	961	886	1790	903
26	622	625	784	976	1110	788	1020	644	899	834	1540	888
27	614	647	801	960	1140	773	1000	619	835	815	1310	887
28	e580	628	794	970	1170	785	962	614	812	781	1210	885
29	e490	e600	818	981	1180	792	933	618	814	782	1140	906
30	e410	e580	853	979	---	850	933	633	821	970	1110	900
31	e370	---	841	1000	---	799	---	635	---	1020	1050	---
TOTAL	19612	16963	22828	29995	30171	31452	28835	18304	27521	25035	36362	30256
MEAN	633	565	736	968	1040	1015	961	590	917	808	1173	1009
MAX	903	810	1020	1360	1180	1330	1100	957	1190	1020	2150	1250
MIN	370	350	550	519	922	747	857	437	676	590	881	885
AC-FT	38900	33650	45280	59500	59840	62390	57190	36310	54590	49660	72120	60010

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1992, BY WATER YEAR (WY)

	MEAN	881	890	839	859	1022	1148	1060	984	904	636	654	791
MAX	1170	1165	1161	1123	1388	1701	1665	1391	1835	1267	1173	1317	1317
(WY)	1985	1985	1985	1989	1984	1978	1984	1988	1962	1962	1992	1988	1988
MIN	633	565	673	635	806	890	763	543	640	303	341	564	564
(WY)	1992	1992	1968	1954	1981	1972	1989	1989	1976	1974	1955	1955	1955

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1952 - 1992

ANNUAL TOTAL	297558	317334	888
ANNUAL MEAN	815	867	1098
HIGHEST ANNUAL MEAN			1976
LOWEST ANNUAL MEAN			769
HIGHEST DAILY MEAN	1900	2150	6240
LOWEST DAILY MEAN	350	350	10
ANNUAL SEVEN-DAY MINIMUM	386	386	254
INSTANTANEOUS PEAK FLOW (STAGE)		2990	10100 (5.52)
INSTANTANEOUS PEAK STAGE		4.18	*6.56
ANNUAL RUNOFF (AC-FT)	590200	629400	643700
10 PERCENT EXCEEDS	1120	1110	1200
50 PERCENT EXCEEDS	780	903	873
90 PERCENT EXCEEDS	531	571	541

e Estimated.

* Ice jam.

PLATTE RIVER BASIN

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06788988 MIRA CREEK NEAR NORTH LOUP, NE

LOCATION.--Lat 41°30'09", long 98°47'47", in NW1/4SE1/4 sec.27, T.18 N., R.13 W., Valley County, Hydrologic Unit 10210007, on left bank near county road 1.4 mi northwest of North Loup.

DRAINAGE AREA.--65.8 mi².

PERIOD OF RECORD.--October 1979 to current year.

REVISED RECORDS.--WDR NE-83-1: 1982(M).

GAGE.--Water-stage recorder. Datum of gage is 1,964.41 ft above National Geodetic Vertical Datum of 1929, (levels by Nebraska Department of Roads).

REMARKS.--Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	.30	.49	1.0	.82	1.2	.60	.43	.16	4.1	16	5.9
2	1.1	.28	.41	1.2	.81	1.2	.64	.40	.20	3.4	9.7	5.5
3	.98	.27	.42	.90	.84	1.3	.56	.38	.30	3.5	6.8	5.1
4	.96	.34	.37	.71	.78	1.8	.45	.37	.32	3.9	308	4.6
5	.59	e.38	.41	.71	.72	3.2	.49	.35	13	3.3	243	4.4
6	.45	.42	.51	.64	.73	7.0	.48	.31	64	2.6	50	4.4
7	.31	.47	.57	.82	.66	6.9	.45	.28	26	2.8	599	9.2
8	.20	.47	.60	1.2	.58	5.6	.42	.26	15	4.8	171	10
9	.18	.57	.61	.98	.57	6.4	.48	.23	11	4.0	55	7.2
10	.16	.70	.61	.80	.58	6.9	.57	.21	8.4	3.6	25	5.4
11	.15	.96	.64	.84	.57	6.7	.60	.23	7.1	3.3	16	4.9
12	.13	1.2	1.5	.86	.52	6.7	.48	.22	6.4	3.6	12	4.2
13	.14	1.2	1.9	.68	.60	6.3	.49	.22	6.0	3.3	10	4.4
14	.16	1.1	1.4	.59	2.3	6.4	.52	.21	5.7	3.5	8.8	4.0
15	.16	.98	1.0	.33	3.1	4.2	.56	.21	5.8	4.1	7.5	4.3
16	.16	.74	.94	.35	1.7	3.1	.86	.39	20	4.0	6.3	4.4
17	.16	.80	.85	.41	1.8	2.2	.91	.41	12	3.5	6.2	4.4
18	.14	.80	.69	.40	2.7	2.2	1.2	.30	6.0	3.6	5.5	4.6
19	.14	.62	.65	.41	2.0	2.5	1.1	.22	5.8	3.6	5.5	4.9
20	.14	.42	.71	.47	1.5	2.2	.71	.18	5.6	3.6	5.2	4.9
21	.14	.44	.76	.55	1.4	1.9	.96	.16	5.5	3.8	5.6	5.1
22	.14	.54	.79	.60	1.2	1.6	1.1	.15	5.5	8.6	4.7	5.2
23	.14	.80	.76	.54	1.2	1.4	1.7	.15	5.2	7.6	4.2	5.3
24	.14	.44	.63	.52	1.3	1.1	.88	.15	4.7	4.9	4.2	5.0
25	.14	.42	.58	.53	1.3	.83	.61	.16	4.4	3.9	22	5.0
26	.11	.43	.53	.60	1.2	4.3	.49	.16	3.9	3.9	65	5.1
27	.12	.44	.51	.58	1.2	.90	.44	.22	3.1	3.7	38	4.9
28	.28	.44	.50	.64	1.2	.73	.45	.24	3.0	3.6	22	4.3
29	.41	.43	.52	.78	1.1	1.2	.42	.20	24	33	14	4.3
30	.47	.45	.63	.83	---	1.0	.43	.18	14	223	9.5	3.7
31	.38	---	.66	.84	---	.63	---	.15	---	39	6.0	---
TOTAL	10.08	17.85	22.15	21.31	34.98	99.59	20.05	7.73	292.08	407.1	1761.7	154.6
MEAN	.33	.59	.71	.69	1.21	3.21	.67	.25	9.74	13.1	56.8	5.15
MAX	1.2	1.2	1.9	1.2	3.1	7.0	1.7	.43	64	223	599	10
MIN	.11	.27	.37	.33	.52	.63	.42	.15	.16	2.6	4.2	3.7
AC-FT	20	35	44	42	69	198	40	15	579	807	3490	307

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1992, BY WATER YEAR (WY)

	MEAN	.44	.45	.51	.50	2.51	2.04	1.55	1.69	10.8	2.86	9.81	1.67
MAX	1.24	1.04	1.18	1.18	13.3	5.16	5.71	5.89	87.0	13.1	56.9	8.05	
(WY)	1991	1985	1985	1984	1982	1987	1984	1984	1990	1992	1981	1989	
MIN	.030	.061	.063	.053	.071	.096	.043	.063	.020	.000	.006	.015	
(WY)	1981	1981	1981	1981	1981	1981	1981	1981	1981	1980	1980	1980	

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1980 - 1992

ANNUAL TOTAL	655.90	2849.22	
ANNUAL MEAN	1.80	7.78	2.89
HIGHEST ANNUAL MEAN			8.38
LOWEST ANNUAL MEAN			.56
HIGHEST DAILY MEAN	30 May 23	599 Aug 7	1330 Aug 5 1981
LOWEST DAILY MEAN	.05 Jan 25	.11 Oct 26	.00 Jun 28 1980
ANNUAL SEVEN-DAY MINIMUM	.07 Jan 20	.13 Oct 21	.00 Jul 1 1980
INSTANTANEOUS PEAK FLOW		1370 Aug 4	3460 Aug 5 1981
INSTANTANEOUS PEAK STAGE		7.22 Aug 4	*10.56 Aug 5 1981
ANNUAL RUNOFF (AC-FT)	1300	5650	2100
10 PERCENT EXCEEDS	3.7	7.5	3.6
50 PERCENT EXCEEDS	.98	.95	.51
90 PERCENT EXCEEDS	.16	.22	.08

e Estimated.

* From floodmark.

PLATTE RIVER BASIN

06790500 NORTH LOUP RIVER NEAR ST. PAUL, NE

LOCATION.--Lat 41°15'48", long 98°26'56", in NW1/4NW1/4NE1/4 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 (revised) upstream from confluence with Middle Loup River.

DRAINAGE AREA.--4,290 mi², approximately, 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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1150	516	e800	1090	1110	1250	866	902	676	916	1100	1330
2	1040	446	673	1050	1150	1230	852	912	758	909	1040	1320
3	680	e480	565	1060	1190	1240	826	873	728	1050	1000	1260
4	718	e499	434	991	1180	1220	838	723	708	1010	1780	1250
5	791	e560	541	989	1100	1340	813	682	826	1060	5300	1220
6	787	e520	e720	988	1070	1420	832	512	2260	1120	1660	1200
7	716	e490	e960	970	1110	1370	904	481	1530	1090	4500	1270
8	671	e470	e1040	1180	1110	1270	932	472	1210	1010	2640	1650
9	651	e540	1020	1050	1110	1360	954	533	1290	929	2250	1500
10	631	e560	995	976	1160	1220	978	488	1460	932	1540	1260
11	627	e640	1020	936	1160	1100	990	488	1470	961	1260	1090
12	651	e800	1130	979	1220	1150	982	487	1180	921	1170	1050
13	696	e1000	1090	1100	1180	1120	972	425	1030	904	1180	1040
14	728	e1100	884	1120	1220	1170	1010	464	1040	872	1260	1060
15	747	1180	942	e500	1230	1100	995	494	1140	755	1230	1130
16	759	1210	888	e560	1200	1090	1030	663	1230	660	1220	1160
17	791	1240	936	600	1200	1060	979	682	1290	621	1240	1130
18	819	1290	898	767	1290	1040	1040	550	1180	584	1240	1200
19	831	1300	841	819	1320	989	1130	528	1090	583	1240	1090
20	854	1200	967	984	1240	941	1150	536	1080	731	1160	1080
21	822	1220	993	1160	1200	890	1160	529	1070	748	1070	1050
22	811	1250	932	1310	1160	859	1010	554	1120	1030	1010	1120
23	819	1250	945	1240	1050	866	935	574	1220	1290	920	1050
24	808	1140	876	1060	1150	846	940	665	1190	1200	859	990
25	781	1030	828	1120	1120	832	943	665	1150	1130	1840	980
26	763	1000	817	1040	1110	828	956	649	1060	1090	2310	986
27	724	985	894	1050	1130	811	942	670	990	1010	1970	974
28	792	1040	896	1010	1150	854	963	624	950	954	1670	976
29	e660	1090	962	1040	1220	942	959	615	919	892	1490	998
30	e600	1110	948	1050	---	950	923	603	938	1310	1320	1030
31	e560	---	1040	1060	---	980	---	589	---	1180	1270	---
TOTAL	23478	27156	27475	30849	33840	33338	28804	18632	33783	29452	50739	34444
MEAN	757	905	886	995	1167	1075	960	601	1126	950	1637	1148
MAX	1150	1300	1130	1310	1320	1420	1160	912	2260	1310	5300	1650
MIN	560	446	434	500	1050	811	813	425	676	583	859	974
AC-FT	46570	53860	54500	61190	67120	66130	57130	36960	67010	58420	100600	68320

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 1992, BY WATER YEAR (WY)

MEAN	883	915	852	865	1098	1262	1103	1048	1031	661	647	788
MAX	1182	1198	1306	1308	1613	2589	1843	1498	2516	1675	1812	1384
(WY)	1989	1980	1980	1990	1984	1936	1987	1983	1947	1950	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1928 - 1992

ANNUAL TOTAL	349401	371990	
ANNUAL MEAN	957	1016	928
HIGHEST ANNUAL MEAN			1182
LOWEST ANNUAL MEAN			668
HIGHEST DAILY MEAN	2340	5300	21300
LOWEST DAILY MEAN	434	425	85
ANNUAL SEVEN-DAY MINIMUM	485	480	98
INSTANTANEOUS PEAK FLOW (STAGE)		8700(*5.41)	90000
INSTANTANEOUS PEAK STAGE		***5.50	**14.90
ANNUAL RUNOFF (AC-FT)	693000	737800	672100
10 PERCENT EXCEEDS	1350	1270	1340
50 PERCENT EXCEEDS	948	1000	880
90 PERCENT EXCEEDS	524	600	487

e Estimated.

* From floodmark.

** From floodmark, datum then in use.

*** Backwater from ice.

PLATTE RIVER BASIN
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 1991 TO SEPTEMBER 1992

DATE	TIME	DIS-CHARGE, INST. FT ³ /S (00061)	SPECIFIC CONDUCTANCE (μ S/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (°C) (00010)	OXYGEN-DISSOLVED (MG/L) (00300)						
OCT 08...	1040	672	243	8.2	12.0	10.0						
NOV 04...	1445	499	342	8.1	0.0	13.0						
DEC 03...	1130	575	243	8.0	0.0	13.9						
30...	1200	904	237	8.1	2.5	13.0						
FEB 25...	..1000	1170	228	8.4	2.0	13.1						
MAR 16...	..1145	1130	257	8.2	10.0	11.0						
APR 23...	..1345	938	232	8.4	14.0	9.8						
MAY 21...	1620	531	250	8.7	25.0	8.5						
JUN 10...	1035	1460	269	8.1	19.0	7.6						
JUL 29...	..1605	869	221	9.0	25.0	8.8						
AUG 24...	..1540	855	234	9.1	20.5	9.5						

DATE	TIME	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)	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)
MAR 16...	1145	50	110	33	5.5	9.7	0.4	7.8	116	9.3	3.9	0.40
JUL 29...	1605	15	85	27	4.3	8.2	0.4	7.0	109	6.5	1.9	0.30

DATE	DIS-SOLVED (MG/L AS SiO ₂) (00955)	SILICA, CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, SUM OF DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SOLIDS, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITROGEN, NO ₂ +NO ₃ DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, PHOSPHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOSPHORUS, BORON, DIS-SOLVED (μG/L AS B) (01020)	IRON, DIS-SOLVED (μG/L AS Fe) (01046)	MANGANESE, DIS-SOLVED (μG/L AS Mn) (01056)
MAR 16...	44	187	0.25	569	<0.010	0.690	0.020	0.120	0.110	40	21	4
JUL 29...	32	153	0.21	358	<0.010	<0.050	0.060	0.010	0.030	30	14	2

PLATTE RIVER BASIN
06791500 CEDAR RIVER NEAR SPALDING, NE

LOCATION.--Lat 41°42'41", long 98°26'48", in NE1/4NE1/4NE1/4 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.--762 mi², approximately, of which about 50 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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	135	e130	e140	170	159	155	148	138	149	169	173	346
2	135	e135	e145	172	159	154	146	133	165	180	165	292
3	136	e140	e145	171	159	154	146	130	155	180	159	266
4	151	e145	e150	168	158	160	147	129	149	196	171	246
5	158	e160	e165	165	154	189	147	127	146	282	230	234
6	151	e155	e180	164	150	223	146	128	155	275	304	214
7	145	e150	194	168	147	252	147	129	152	290	403	218
8	143	e155	182	e160	147	249	147	131	159	268	431	230
9	141	e170	175	e155	147	304	150	134	171	260	441	275
10	139	e180	170	170	147	306	152	132	191	261	429	310
11	137	188	166	171	147	259	141	136	219	242	486	270
12	136	185	192	172	148	236	142	135	203	219	513	278
13	135	185	196	169	150	204	143	133	178	180	487	255
14	133	183	187	164	162	310	147	143	181	181	333	240
15	133	178	172	e140	166	208	157	153	181	180	294	255
16	135	169	165	e155	163	330	155	215	226	171	262	241
17	136	175	159	e160	164	266	154	203	181	162	215	238
18	135	176	153	e155	172	227	158	194	162	153	211	230
19	134	168	151	e160	171	181	167	181	160	156	201	213
20	135	161	152	e170	167	147	167	167	156	173	191	198
21	136	157	154	171	162	155	167	155	156	176	179	189
22	137	159	157	162	158	149	170	148	154	198	169	164
23	137	151	157	156	157	147	173	141	150	194	155	171
24	137	147	154	153	159	145	169	139	150	194	159	169
25	138	147	152	154	157	144	159	140	148	188	258	167
26	140	149	152	154	158	141	152	138	146	190	301	167
27	143	151	149	154	159	140	149	137	145	185	347	163
28	164	154	149	155	158	146	145	137	146	180	331	160
29	169	155	150	156	156	156	144	136	147	177	358	156
30	171	e150	153	158	---	157	142	135	152	189	341	153
31	181	---	154	159	---	154	---	133	---	187	303	---
TOTAL	4436	4808	5020	5011	4561	6148	4577	4510	4933	6236	9000	6708
MEAN	143	160	162	162	157	198	153	145	164	201	290	224
MAX	181	188	196	172	172	330	173	215	226	290	513	346
MIN	133	130	140	140	147	140	141	127	145	153	155	153
AC-FT	8800	9540	9960	9940	9050	12190	9080	8950	9780	12370	17850	13310

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1992, BY WATER YEAR (WY)

	147	149	146	149	168	199	200	190	185	146	144	144
MEAN	147	149	146	149	168	199	200	190	185	146	144	144
MAX	261	220	208	208	308	601	475	352	530	324	290	296
(WY)	1987	1987	1987	1984	1952	1987	1987	1951	1962	1950	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1945-53, 1958-92

ANNUAL TOTAL	55692	65948	
ANNUAL MEAN	153	180	164
HIGHEST ANNUAL MEAN			260
LOWEST ANNUAL MEAN			112
HIGHEST DAILY MEAN	399	513	2240
LOWEST DAILY MEAN	92	127	30
ANNUAL SEVEN-DAY MINIMUM	94	130	55
INSTANTANEOUS PEAK FLOW		522	4000
INSTANTANEOUS PEAK STAGE		4.34	7.50
ANNUAL RUNOFF (AC-FT)	110500	130800	118800
10 PERCENT EXCEEDS	187	258	222
50 PERCENT EXCEEDS	150	159	147
90 PERCENT EXCEEDS	114	138	110

PLATTE RIVER BASIN
06792000 CEDAR RIVER NEAR FULLERTON, NE
(National stream-quality accounting network station)

LOCATION.--Lat 41°23'36", long 98°00'15", in NE1/4NE1/4 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 (revised) upstream from mouth.

DRAINAGE AREA.--1,220 mi², approximately, of which about 480 mi² contributes directly to surface runoff.

WATER-DISCHARGE RECORDS

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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	162	62	169	243	231	292	247	235	236	221	307	399
2	158	e120	217	252	233	291	231	230	263	252	308	604
3	155	e160	208	251	233	281	230	223	271	248	380	428
4	166	e150	120	249	231	292	226	216	256	244	279	354
5	176	e170	240	250	230	321	236	202	431	438	377	323
6	184	e220	330	252	230	349	228	173	515	535	458	309
7	191	e200	359	254	226	388	233	197	337	472	699	300
8	182	e230	364	281	223	408	224	200	270	468	660	316
9	175	e250	348	286	230	432	221	213	253	411	490	335
10	170	e270	322	254	238	425	230	220	513	377	507	301
11	164	e300	311	282	222	396	230	208	411	426	497	366
12	160	e320	324	250	214	360	224	207	314	332	495	333
13	157	e330	343	240	220	295	221	198	284	308	538	352
14	155	e330	295	227	230	345	221	197	278	284	746	337
15	154	296	287	e210	251	385	224	207	310	253	426	331
16	190	235	283	e200	258	315	224	354	287	248	355	309
17	167	209	282	e230	273	432	229	559	448	246	348	324
18	164	215	265	e220	302	386	233	405	273	189	295	319
19	160	214	241	e250	304	315	243	310	237	291	273	307
20	161	218	270	e260	295	306	246	277	226	222	269	296
21	163	213	262	e270	281	271	259	257	215	221	261	282
22	165	203	266	e280	282	271	264	254	210	404	249	288
23	160	206	258	e270	289	259	263	230	205	326	242	228
24	160	191	253	e260	300	271	267	222	208	297	223	241
25	160	203	258	e250	304	263	267	224	209	303	289	252
26	160	223	259	e260	296	262	258	222	199	296	478	243
27	160	220	246	257	309	246	246	221	201	258	406	220
28	174	216	246	239	295	260	236	219	208	271	413	239
29	187	228	248	236	290	268	234	216	204	278	410	241
30	197	244	246	236	---	266	235	235	183	609	413	247
31	193	---	239	233	---	246	---	199	---	445	407	---
TOTAL	5230	6646	8359	7732	7520	9897	7130	7530	8455	10173	12498	9424
MEAN	169	222	270	249	259	319	238	243	282	328	403	314
MAX	197	330	364	286	309	432	267	559	515	609	746	604
MIN	154	62	120	200	214	246	221	173	183	189	223	220
AC-FT	10370	13180	16580	15340	14920	19630	14140	14940	16770	20180	24790	18690

PLATTE RIVER BASIN
06792000 CEDAR RIVER NEAR FULLERTON, NE--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1992, BY WATER YEAR (WY)

MEAN	202	213	199	201	270	327	295	306	353	224	212	200
MAX	387	325	296	334	666	931	668	522	1436	1380	1693	421
(WY)	1987	1987	1982	1984	1948	1987	1987	1984	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 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1941 - 1992	
ANNUAL TOTAL	77696		100594			
ANNUAL MEAN	213		275		250	
HIGHEST ANNUAL MEAN					378	
LOWEST ANNUAL MEAN					172	
HIGHEST DAILY MEAN	409	May 8	746	Aug 14	37100	Aug 13 1966
LOWEST DAILY MEAN	62	Nov 1	62	Nov 1	30	Jul 18 1974
ANNUAL SEVEN-DAY MINIMUM	75	Aug 22	150	Oct 30	33	Jul 14 1974
INSTANTANEOUS PEAK FLOW			1330	Aug 14	64700	Aug 13 1966
INSTANTANEOUS PEAK STAGE			4.31	Aug 14	*16.90	Aug 13 1966
ANNUAL RUNOFF (AC-FT)	154100		199500		181000	
10 PERCENT EXCEEDS	315		405		358	
50 PERCENT EXCEEDS	227		252		209	
90 PERCENT EXCEEDS	100		188		134	

e Estimated.

* From high point on surge.

PLATTE RIVER BASIN
06792000 CEDAR RIVER NEAR FULLERTON, NE--Continued

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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 1991 TO SEPTEMBER 1992

DATE	TIME	DIS-CHARGE, INST. FT ³ /S (00061)	SPECIFIC CON- DUCT- ANCE (µ S/CM) (00095)	PH WATER FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (°C) (00010)	BARO- METRIC PRESSURE (MM OF HG) (00025)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	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)
OCT												
	09...1025	174	256	8.3	12.0	722	12	--	10.4	--	--	110
NOV												
	21...1200	218	265	8.2	6.0	716	14	25	11.4	K85	1200	110
DEC												
	10...1300	320	272	8.0	1.5	--	15	--	--	--	--	120
JAN												
	09...1100	316	278	8.0	0.5	724	--	25	8.3	440	7400	120
FEB												
	12...1320	211	306	8.1	0.0	--	25	--	--	--	--	130
MAR												
	11...1100	417	249	8.0	2.5	716	90	60	--	3700	4500	120
APR												
	15...1045	224	302	8.0	16.0	--	--	--	--	--	--	130
MAY												
	12...1120	212	286	8.5	18.0	718	5	22	10.8	K190	210	130
JUN												
	09...1415	258	286	8.2	21.5	--	25	--	--	--	--	130
JUL												
	06...1115	495	239	7.9	20.5	717	--	690	7.0	--	K31000	100
AUG												
	12...1530	512	259	8.1	26.0	--	65	--	--	--	--	94
SEP												
	23...1435	215	286	8.1	19.0	726	25	24	9.3	260	560	120

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)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
OCT												
	09... --	35	5.7	7.3	0.3	7.1	--	--	--	14	2.7	0.50
NOV												
	21... 0	36	5.7	7.7	0.3	6.6	118	0	144	10	2.6	0.20
DEC												
	10... --	32	10	15	0.6	6.4	--	--	--	21	5.0	0.20
JAN												
	09... 0	36	6.1	8.1	0.3	7.2	130	0	159	11	3.1	0.30
FEB												
	12... --	41	6.4	8.1	0.3	6.5	--	--	--	10	1.3	0.30
MAR												
	11... 0	37	6.1	10	0.4	6.7	121	0	148	12	4.8	0.30
APR												
	15... --	41	6.7	8.2	0.3	6.8	--	--	--	10	4.0	0.30
MAY												
	12... 0	41	6.5	8.5	0.3	7.0	133	0	162	9.7	2.6	0.30
JUN												
	09... --	41	6.6	8.0	0.3	7.2	--	--	--	9.0	2.2	0.30
JUL												
	06... 0	32	5.1	5.2	0.2	9.6	101	0	123	6.9	1.3	0.30
AUG												
	12... --	30	4.7	6.8	0.3	6.8	--	--	--	5.5	3.6	0.30
SEP												
	23... 0	39	6.4	8.9	0.3	7.1	150	0	183	8.6	2.3	0.10

PLATTE RIVER BASIN
06792000 CEDAR RIVER NEAR FULLERTON, NE--Continued

WATER QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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 TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)
OCT 09...	39	--	189	0.26	88.8	--	--	--	<0.010	--	0.330
NOV 21...	40	199	183	0.27	117	0.560	0.560	0.020	0.010	0.580	0.570
DEC 10...	38	--	205	0.28	177	--	--	--	--	--	--
JAN 09...	39	202	192	0.27	172	0.570	--	0.030	<0.010	0.600	0.590
FEB 12...	40	--	202	0.28	115	--	--	--	<0.010	--	0.530
MAR 11...	32	194	184	0.26	218	0.290	0.320	0.040	0.010	0.330	0.330
APR 15...	35	--	200	0.27	121	--	--	--	<0.010	--	<0.050
MAY 12...	33	200	189	0.27	114	--	--	0.020	0.010	<0.050	<0.050
JUN 09...	32	--	191	0.26	133	--	0.200	--	0.010	--	0.210
JUL 06...	25	151	152	0.21	202	1.05	1.05	0.050	0.050	1.10	1.10
AUG 12...	30	--	151	0.21	209	--	--	--	--	--	--
SEP 23...	40	209	205	0.28	121	0.470	--	0.010	<0.010	0.480	0.490

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	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)	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)
OCT 09...	--	0.030	--	0.27	--	0.30	--	0.63	0.240	0.180	0.180
NOV 21...	0.050	0.050	0.45	--	0.50	--	1.1	--	0.280	0.170	0.180
DEC 10...	--	--	--	--	--	--	--	--	--	--	--
JAN 09...	0.110	0.070	0.49	--	0.60	--	1.2	--	0.360	0.180	0.190
FEB 12...	--	0.040	--	0.16	--	0.20	--	0.73	0.240	0.190	0.150
MAR 11...	0.120	0.090	1.2	--	1.3	--	1.6	--	0.320	0.160	0.130
APR 15...	--	0.040	--	--	--	<0.20	--	--	0.230	0.100	0.120
MAY 12...	0.020	0.020	0.28	--	0.30	--	--	--	0.190	0.140	0.150
JUN 09...	--	0.030	--	--	--	<0.20	--	--	0.340	0.170	0.180
JUL 06...	0.070	0.110	0.63	--	0.70	--	1.8	--	0.430	0.260	0.230
AUG 12...	--	--	--	--	--	--	--	--	0.310	--	--
SEP 23...	0.020	0.010	0.68	--	0.70	--	1.2	--	0.260	0.180	0.160

PLATTE RIVER BASIN
06792000 CEDAR RIVER NEAR FULLERTON, NE--Continued

WATER QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	ALUMINUM, DIS- SOLVED (μ G/L AS AL) (01106)	BARIUM, DIS- SOLVED (μ G/L AS BA) (01005)	BORON, DIS- SOLVED (μ G/L AS B) (01020)	COBALT, DIS- SOLVED (μ G/L AS CO) (01035)	IRON, DIS- SOLVED (μ G/L AS FE) (01046)	LITHIUM, DIS- SOLVED (μ G/L AS LI) (01130)
NOV	21... 1200	<10	140	30	<3	7	12
MAR	11... 1100	20	130	30	<3	50	14
MAY	12... 1120	<10	130	30	<3	3	15
JUL	06... 1115	60	130	--	<3	46	9

DATE	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)
NOV	21...	8	<10	<1	1	<1.0	210
MAR	11...	33	<10	<1	<1	<1.0	210
MAY	12...	8	<10	<1	1	<1.0	250
JUL	06...	3	<10	2	<1	<1.0	150

DATE	TIME	DISCHARGE, INST. FT ³ /S (00061)	TEMPER- ATURE WATER (°C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV	21... 1200	218	6.0	194	114	--
JAN	09... 1100	316	0.5	342	292	40
MAR	11... 1100	417	2.5	862	971	58
MAY	12... 1120	212	18.0	332	190	46
JUL	06... 1115	495	20.5	2570	3430	93
SEP	23... 1435	215	19.0	246	143	39

PLATTE RIVER BASIN

06792500 LOUP RIVER POWER CANAL NEAR GENOA, NE

LOCATION.--Lat 41°25'03", long 97°47'37", in NE1/4NE1/4 sec.32, T.17 N., R.4 W., Nance County, Hydrologic Unit 10210009, at skimming weir on downstream end of settling basin on left bank, 2 mi downstream from point of diversion and 3.5 mi southwest of Genoa.

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

GAGE.--Water-stage recorder and concrete weir. Datum of gage is 1,566.26 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1956, at datum 3.0 feet higher.

REMARKS.--Records good. Canal diverts from Loup River in sec. 6, T.16 N., R.4 W.; water is used in powerplants near Monroe and Columbus and is returned to Platte River 1.5 mi downstream from Loup River. Diversion began Dec. 2, 1936.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1630	46	30	2640	2510	2380	1880	1730	1760	1620	2010	2080
2	1590	21	26	2730	2560	2310	1890	1720	1990	1660	2010	2090
3	1550	15	84	2790	2550	2340	1880	1760	2040	1640	1990	2030
4	1440	64	103	2770	2650	2420	1770	1730	2050	1720	1950	2120
5	1560	222	198	2780	2680	2610	1770	1620	1860	1860	1930	2070
6	1700	115	651	2760	2570	2730	1760	1620	1990	2040	1990	2100
7	1770	112	1240	2720	2530	2880	1770	1450	2070	2060	2050	2100
8	1590	168	570	2620	622	2680	1790	1400	2290	2000	2010	2190
9	1490	163	1130	145	111	2520	1840	1400	2180	1990	2070	2170
10	1450	502	1950	145	1750	2630	1990	1480	2490	1990	1970	2110
11	1430	166	2700	1160	939	2440	1850	1420	2490	2000	2050	2130
12	1650	470	2730	2590	61	2410	2110	1410	2560	1910	2070	2110
13	1830	747	2730	2630	999	2410	2160	1440	2350	1890	2100	2110
14	1820	1440	666	212	2160	2220	2080	1390	2140	1860	2040	2060
15	1950	2030	35	38	1670	2170	1860	1460	2230	1700	2020	2040
16	2010	2300	444	49	2650	2080	1830	2440	2310	1550	1990	2050
17	1820	2300	744	76	2680	2060	2000	e2490	2020	1370	2050	2130
18	1780	2310	84	88	2730	2160	1950	e2490	2030	1230	2010	2150
19	1960	2310	58	84	2790	2170	2110	e2140	2000	1340	2040	2070
20	2080	2290	781	798	2690	2190	2280	e1850	1910	1250	2030	2120
21	1980	2240	792	1390	2680	2000	2350	1660	1850	1280	2040	2110
22	1900	2170	1470	1080	2490	2010	2000	1620	1760	1870	1920	2130
23	1860	2610	2550	287	2460	2000	1880	1590	1790	2080	1710	2120
24	1970	1380	1600	601	2630	1910	1830	1570	2050	2020	1580	2210
25	2110	841	1260	1250	2750	1840	1920	1660	2020	2010	1940	2160
26	2100	1180	1480	1220	2680	1810	1960	1700	1960	1990	2000	2180
27	2040	2270	606	2250	2480	1850	1860	1660	1830	1960	2010	2140
28	2010	2190	1340	2160	2450	1950	1820	1650	1740	1800	1960	2220
29	2150	1740	2510	2640	2430	2000	1770	1630	1650	1730	2020	2100
30	2230	47	2490	2580	---	2010	1760	1580	1610	2010	2080	2020
31	268	---	2530	2570	---	1930	---	1560	---	1990	2140	---
TOTAL	54718	34459	35582	47853	62952	69120	57720	52320	61020	55420	61780	63420
MEAN	1765	1149	1148	1544	2171	2230	1924	1688	2034	1788	1993	2114
MAX	2230	2610	2730	2790	2790	2880	2350	2490	2560	2080	2140	2220
MIN	268	15	26	38	61	1810	1760	1390	1610	1230	1580	2020
AC-FT	108500	68350	70580	94920	124900	137100	114500	103800	121000	109900	122500	125800

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1992, BY WATER YEAR (WY)

	1900	1796	1002	1204	1542	1858	2131	1974	1902	1312	1173	1537
MEAN	1900	1796	1002	1204	1542	1858	2131	1974	1902	1312	1173	1537
MAX	2730	2624	1886	2194	2375	2673	2778	2767	2944	2706	2224	2640
(WY)	1987	1985	1982	1983	1987	1990	1977	1957	1962	1962	1951	1951
MIN	544	508	155	129	438	506	537	378	534	309	417	660
(WY)	1938	1939	1975	1985	1958	1939	1939	1984	1938	1980	1971	1938

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1938 - 1992

ANNUAL TOTAL	597867	656364	
ANNUAL MEAN	1638	1793	1609
HIGHEST ANNUAL MEAN			1986
LOWEST ANNUAL MEAN			585
HIGHEST DAILY MEAN	2850	Mar 13	3410
LOWEST DAILY MEAN	15	Nov 3	.00
ANNUAL SEVEN-DAY MINIMUM	85	Nov 1	11
ANNUAL RUNOFF (AC-FT)	1186000	1302000	1166000
10 PERCENT EXCEEDS	2600	2550	2570
50 PERCENT EXCEEDS	1900	1990	1710
90 PERCENT EXCEEDS	596	604	530

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.--14,400 mi², approximately, of which about 5,650 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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	1210	2490	358	184	207	1040	133	52	51	1420	834
2	41	574	2160	585	130	206	809	75	213	50	584	1410
3	39	250	1760	372	126	226	651	60	306	41	421	946
4	42	e1000	1300	270	202	355	614	48	179	42	55	458
5	38	e2000	953	206	271	617	678	64	377	244	6760	472
6	35	e1900	1070	119	266	1620	686	14	2100	444	2810	428
7	34	e2500	719	142	273	1800	854	11	2070	291	3930	179
8	32	e2600	2150	254	1820	1150	889	11	564	480	5100	681
9	25	e2400	1840	3330	2340	1590	731	10	255	934	2420	1320
10	24	e2800	1390	3020	1110	2430	706	11	1180	221	1960	837
11	27	e3500	510	1610	1690	2190	581	11	1880	191	1100	297
12	34	e4500	649	287	2740	1280	662	9.8	871	104	634	139
13	29	6460	1020	449	1720	1300	476	9.6	227	60	619	63
14	26	2930	2290	2580	609	2220	397	9.5	203	54	2680	52
15	25	1550	1740	2660	1470	2040	300	11	243	45	1490	52
16	22	711	1620	924	75	1650	271	2410	351	44	603	56
17	20	627	1320	1140	73	1540	357	3720	898	41	419	68
18	20	548	2100	1920	435	1720	344	1160	706	42	417	339
19	22	510	1950	4110	643	1540	353	127	361	50	205	369
20	21	552	1500	2380	493	1450	469	84	294	53	195	707
21	23	376	1600	1830	218	1360	655	56	287	45	143	471
22	23	583	1140	2500	333	1190	841	52	277	66	98	286
23	21	286	343	3630	208	862	360	46	456	1800	109	461
24	25	1440	949	2980	239	704	167	45	285	1800	148	210
25	31	1920	1180	1910	321	629	140	52	129	826	157	112
26	25	1630	967	1880	351	976	223	46	65	470	3330	166
27	23	135	1740	893	259	779	153	44	61	150	2010	316
28	26	94	1490	763	241	900	96	42	55	106	1270	168
29	80	803	174	214	195	1050	101	39	47	68	1090	263
30	836	3120	137	191	---	1020	147	40	45	626	1200	328
31	2170	---	124	167	---	882	---	41	---	2190	660	---
TOTAL	3884	49509	40375	43674	19035	37483	14751	8491.9	15037	11629	44037	12488
MEAN	125	1650	1302	1409	656	1209	492	274	501	375	1421	416
MAX	2170	6460	2490	4110	2740	2430	1040	3720	2100	2190	6760	1410
MIN	20	94	124	119	73	206	96	9.5	45	41	55	52
AC-FT	7700	98200	80080	86630	37760	74350	29260	16840	29830	23070	87350	24770

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1992, BY WATER YEAR (WY)

	MEAN	117	409	945	842	1209	598	590	879	257	239	158
MAX	934	1650	2521	2632	3866	5650	3745	4777	7365	4574	4253	1327
(WY)	1947	1992	1987	1990	1988	1978	1984	1984	1947	1950	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1944 - 1992

ANNUAL TOTAL	224207	300393.9	
ANNUAL MEAN	614	821	647
HIGHEST ANNUAL MEAN			1934
LOWEST ANNUAL MEAN			182
HIGHEST DAILY MEAN	6460 Nov 13	6760 Aug 5	70800 Aug 13 1966
LOWEST DAILY MEAN	14 Jul 27	9.5 May 14	.00 Aug 20 1956
ANNUAL SEVEN-DAY MINIMUM	21 Oct 17	10 May 8	.00 Aug 20 1956
INSTANTANEOUS PEAK FLOW		12600 Aug 5	129000 Aug 13 1966
INSTANTANEOUS PEAK STAGE		8.62 Nov 8	13.93 Aug 13 1966
ANNUAL RUNOFF (AC-FT)	444700	595800	468400
10 PERCENT EXCEEDS	2000	2160	1910
50 PERCENT EXCEEDS	137	418	100
90 PERCENT EXCEEDS	25	40	11

PLATTE RIVER BASIN
06794000 BEAVER CREEK AT GENOA, NE

LOCATION.--Lat 41°26'32", long 97°44'11", in NE1/4SE1/4 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 (revised) upstream from mouth.

DRAINAGE AREA.--647 mi², of which about 410 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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	e60	e68	e100	98	113	108	92	85	146	144	166
2	51	e58	e66	e102	98	107	102	88	90	137	152	161
3	48	e54	e64	e102	97	102	102	84	96	97	143	213
4	51	e50	e62	e104	e92	102	101	83	95	155	111	189
5	53	e56	e64	e108	e90	108	99	81	125	628	214	222
6	57	e60	e70	e108	e88	116	98	77	182	e250	181	252
7	57	e66	e74	e106	e86	141	97	77	89	e574	304	175
8	54	e92	e86	e104	e82	228	93	77	91	e280	403	197
9	53	e96	e96	e104	e76	219	93	80	86	134	253	195
10	53	e100	e106	e108	e74	202	94	76	96	133	232	258
11	52	e106	113	e108	e70	219	93	76	114	149	184	248
12	52	e110	e130	e110	e68	191	88	96	129	113	179	218
13	52	e118	e170	e112	e70	221	85	89	102	171	141	187
14	52	e122	e350	113	e84	273	89	76	94	233	965	170
15	51	e127	e250	e112	100	254	92	77	94	151	342	167
16	52	102	e200	e110	117	221	91	114	108	116	219	177
17	53	99	e170	e106	126	184	90	373	172	102	240	166
18	53	99	e150	e106	128	154	92	149	154	91	240	152
19	51	94	e140	e104	134	135	92	120	108	92	184	131
20	52	91	e130	e102	155	132	93	110	98	86	153	123
21	54	85	e125	e102	160	131	98	108	91	83	137	119
22	55	84	e125	e100	148	125	97	137	89	209	127	112
23	56	79	e120	e100	131	121	98	92	88	153	118	106
24	55	75	e114	e98	122	120	103	85	91	113	109	102
25	55	e74	e108	e96	117	115	106	87	91	267	122	98
26	55	e72	e106	e94	120	110	100	82	88	151	230	96
27	57	e72	e104	e96	124	104	95	78	85	113	281	95
28	59	e70	e102	96	123	107	94	79	82	102	293	91
29	63	e70	e100	98	118	108	98	80	82	125	265	88
30	e62	e66	e98	98	---	109	96	79	83	396	224	89
31	e60	---	e98	97	---	114	---	78	---	218	185	---
TOTAL	1675	2507	3759	3204	3096	4686	2877	3080	3078	5768	7075	4763
MEAN	54.0	83.6	121	103	107	151	95.9	99.4	103	186	228	159
MAX	63	127	350	113	160	273	108	373	182	628	965	258
MIN	47	50	62	94	68	102	85	76	82	83	109	88
AC-FT	3320	4970	7460	6360	6140	9290	5710	6110	6110	11440	14030	9450

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEAR, 1941 - 1992, BY WATER YEAR (WY)

MEAN	78.2	83.9	82.1	82.3	132	191	160	173	233	130	92.0	79.0
MAX	184	173	150	197	537	506	519	432	808	1248	601	215
(WY)	1987	1983	1973	1973	1971	1978	1984	1984	1967	1950	1966	1951
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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1941 - 1992

ANNUAL TOTAL	34083.2	45568	
ANNUAL MEAN	93.4	125	
HIGHEST ANNUAL MEAN			126
LOWEST ANNUAL MEAN			248
HIGHEST DAILY MEAN	938 May 17	965 Aug 14	70.9 1981
LOWEST DAILY MEAN	1.3 Aug 28	47 Oct 1	10000 Jul 19 1950
ANNUAL SEVEN-DAY MINIMUM	3.3 Aug 26	52 Oct 1	.41 Jul 25 1974
INSTANTANEOUS PEAK FLOW		1540 Aug 14	.90 Jul 24 1974
INSTANTANEOUS PEAK STAGE		9.50 Aug 14	21200 Jul 19 1950
ANNUAL RUNOFF (AC-FT)	67600	90380	*18.70 Jul 19 1950
10 PERCENT EXCEEDS	162	218	91400
50 PERCENT EXCEEDS	82	102	199
90 PERCENT EXCEEDS	15	62	86
			48

e Estimated.

* Site and datum then in use.

PLATTE RIVER BASIN
06795500 SHELL CREEK NEAR COLUMBUS, NE

LOCATION.--Lat 41°31'33", long 97°16'55", in NE1/4NW1/4 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.--270 mi², approximately.

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 National Geodetic Vertical Datum of 1929.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	e12	e13	15	e11	16	22	16	19	e137	78	12
2	6.9	e11	e13	e15	e11	16	20	16	22	e385	38	57
3	4.7	e12	e11	e16	e11	16	19	15	25	63	26	54
4	4.6	e13	e11	e17	e10	16	19	14	24	31	20	22
5	7.4	e14	e12	e17	e10	18	19	13	23	e75	18	15
6	5.3	e11	e14	17	e9.6	29	18	14	37	e235	22	112
7	4.9	e12	e15	17	e9.4	32	19	14	26	e182	28	79
8	4.4	e13	e17	16	e9.4	25	19	14	20	e258	e310	257
9	5.0	e14	e19	e17	e9.2	23	19	13	19	75	111	66
10	5.6	e15	e20	e16	e9.2	34	19	12	17	38	39	45
11	5.6	e17	e21	e17	e9.0	29	18	12	16	59	23	23
12	5.2	e19	e22	e16	e9.8	31	17	13	16	30	16	16
13	8.1	e21	e28	18	e11	33	16	12	18	29	16	14
14	7.9	e18	e40	e16	e12	31	16	11	16	45	194	16
15	8.3	e17	e35	e11	e14	30	17	11	15	30	70	14
16	8.8	e17	e30	e13	17	25	18	25	82	23	42	14
17	9.4	18	e28	e14	20	23	18	e255	47	22	29	14
18	10	18	e26	e14	33	23	18	e341	42	22	20	13
19	11	21	e24	e13	60	22	19	87	22	20	16	12
20	11	18	e23	e14	30	21	21	43	15	18	14	11
21	12	16	e23	e14	20	21	20	32	15	17	14	12
22	12	15	e22	e14	17	20	18	91	14	26	13	11
23	11	e15	e22	e15	16	20	20	131	14	106	12	10
24	12	e14	e21	e15	16	19	24	39	14	45	12	8.9
25	12	e13	e20	e14	17	19	24	28	15	56	37	8.2
26	10	e12	e20	e14	17	19	22	25	18	e355	102	9.5
27	11	e12	21	e13	17	18	21	21	16	75	52	10
28	14	e13	22	e13	17	19	17	21	14	42	37	10
29	15	e12	20	e12	16	24	17	21	14	45	21	11
30	14	e13	17	e12	---	27	17	20	14	134	15	11
31	e13	---	15	e12	---	24	---	19	---	149	13	---
TOTAL	273.9	446	645	457	468.6	723	571	1399	669	2827	1458	967.6
MEAN	8.84	14.9	20.8	14.7	16.2	23.3	19.0	45.1	22.3	91.2	47.0	32.3
MAX	15	21	40	18	60	34	24	341	82	385	310	257
MIN	3.8	11	11	11	9.0	16	16	11	14	17	12	8.2
AC-FT	543	885	1280	906	929	1430	1130	2770	1330	5610	2890	1920

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1992, BY WATER YEAR (WY)

MEAN	15.1	14.2	13.3	16.7	48.0	91.6	39.3	67.8	120	52.4	34.9	20.8
MAX	74.6	59.9	27.2	84.7	322	369	210	552	702	365	202	195
(WY)	1983	1983	1985	1973	1971	1962	1984	1982	1990	1950	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1948 - 1992

ANNUAL TOTAL	10872.0	10905.1	
ANNUAL MEAN	29.8	29.8	
HIGHEST ANNUAL MEAN			44.4
LOWEST ANNUAL MEAN			95.5
HIGHEST DAILY MEAN	1070	385	13.6
LOWEST DAILY MEAN	2.8	3.8	4900
ANNUAL SEVEN-DAY MINIMUM	3.4	5.1	.40
INSTANTANEOUS PEAK FLOW		645	.86
INSTANTANEOUS PEAK STAGE		*11.25	8000
ANNUAL RUNOFF (AC-FT)	21560	21630	22.76
10 PERCENT EXCEEDS	42	46	32190
50 PERCENT EXCEEDS	17	17	60
90 PERCENT EXCEEDS	5.6	11	14
			5.6

e Estimated.

* From floodmark.

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.--77,100 mi², approximately, of which about 63,300 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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1810	e2700	3620	4320	4660	5230	6040	2950	2380	2790	5950	5100
2	1920	e2200	3690	4430	4940	6940	5150	3080	2690	3240	5150	5560
3	1860	e1900	2780	5020	5070	5420	4760	2890	3140	3690	3970	5910
4	1850	e1800	1450	4640	5630	5380	5630	2390	3140	2750	4170	5390
5	2000	e1700	1340	4920	5080	5720	5740	2530	3180	3450	3720	4580
6	1960	e1600	1790	4640	5370	6070	5330	2530	3880	5570	10500	4770
7	2180	e1400	3210	4290	5670	5850	5370	2090	7510	5550	6590	4050
8	2290	e1300	3270	4650	4770	7270	4470	2130	5800	4680	10500	3910
9	2000	e1600	4500	3700	4380	7800	5310	2500	4180	4690	8560	4240
10	1890	e2200	4660	5090	5240	8440	5410	1830	3450	4050	6000	4430
11	1960	e2700	4440	4980	5880	10000	5530	2310	3930	3550	5230	4330
12	1880	e4200	4880	5240	3760	8420	4860	2530	5250	3820	4760	3840
13	1970	e6000	4940	4610	5080	7680	5780	2090	4240	3750	4160	3620
14	2360	e7800	4410	4230	5840	7160	5050	2050	4330	3540	4390	3270
15	2430	5840	4020	3430	4720	7040	5160	2290	3010	3220	6870	3460
16	2400	5000	3690	4150	6380	6900	5000	4170	4920	2980	5030	3260
17	2370	4690	3660	e2200	5650	7130	4350	10200	5660	3270	4220	3090
18	2510	4680	3390	e2400	5530	7230	4660	10400	5040	3100	3790	3030
19	2110	4470	3320	e2300	5870	8070	4610	6210	4380	3090	3550	3000
20	2540	4490	3340	e2200	6320	7210	4450	4490	3940	2730	3270	3110
21	2650	4170	3430	e2500	5710	7750	5670	3520	3000	2810	3190	3350
22	2690	4380	3830	e5000	5160	6560	4250	3200	3270	2700	3190	3060
23	2540	3870	4390	e4900	5360	7280	5330	3360	3150	3480	3000	3390
24	2540	3790	4070	e4800	5580	6390	4760	3110	3230	4390	2490	2970
25	2100	3430	4230	e4800	5460	6180	3910	2680	3770	5660	2820	3200
26	2960	3640	3780	e4800	6130	5880	3690	2410	4050	6790	3370	3300
27	2860	4040	3690	e4900	4880	6220	3780	2690	3660	7120	8040	3270
28	2550	3560	3440	e5000	5360	6820	3860	2470	2740	5880	5890	3030
29	2900	3810	4510	e4800	5010	6940	3060	2400	2430	5140	4780	3010
30	2650	2690	3490	7610	---	7110	3780	2370	2660	4640	4550	3040
31	3730	---	3910	5210	---	6820	---	2510	---	5180	4930	---
TOTAL	72460	105650	113170	135760	154490	214910	144750	102380	116010	127300	156630	113570
MEAN	2337	3522	3651	4379	5327	6933	4825	3303	3867	4106	5053	3786
MAX	3730	7800	4940	7610	6380	10000	6040	10400	7510	7120	10500	5910
MIN	1810	1300	1340	2200	3760	5230	3060	1830	2380	2700	2490	2970
AC-FT	143700	209600	224500	269300	306400	426300	287100	203100	230100	252500	310700	225300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 1992, BY WATER YEAR (WY)

	MEAN	3603	3970	3428	3387	5346	7414	6017	5970	6375	3291	2259	2896
MAX	10130	9462	8581	7361	11850	15290	19400	21770	25340	15740	8021	9022	
(WY)	1974	1985	1985	1984	1984	1987	1984	1984	1983	1983	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1949 - 1992

ANNUAL TOTAL	1254753	1557080	
ANNUAL MEAN	3438	4254	
HIGHEST ANNUAL MEAN			4473
LOWEST ANNUAL MEAN			10070
HIGHEST DAILY MEAN	17900 Jun 3	10500 Aug 6	1984
LOWEST DAILY MEAN	493 Aug 28	1300 Nov 8	1956
ANNUAL SEVEN-DAY MINIMUM	547 Aug 27	1610 Nov 3	67600 Mar 29 1960
INSTANTANEOUS PEAK FLOW (STAGE)		15900(5.97)Aug 6	36 Jul 29 1974
INSTANTANEOUS PEAK STAGE		*6.48 Jan 22	146 Jul 24 1974
ANNUAL RUNOFF (AC-FT)	2489000	3088000	112000(10.04)Mar 29 1960
10 PERCENT EXCEEDS	5630	6340	**15.55 Mar 19 1978
50 PERCENT EXCEEDS	3150	4110	3241000
90 PERCENT EXCEEDS	981	2310	8330
			3590
			1350

e Estimated.

* Backwater from ice.

** Ice jam.

PLATTE RIVER BASIN

06797500 ELKHORN RIVER AT EWING, NE

LOCATION.--Lat 42°16'03", long 98°20'11", in NW1/4SW1/4 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 National Geodetic Vertical Datum of 1929, 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	e27	e44	83	100	129	182	115	76	103	119	772
2	15	e23	e42	84	103	123	174	108	80	101	129	688
3	19	e21	e46	e76	109	118	167	101	81	95	120	601
4	24	e20	e48	e72	109	115	161	96	79	94	117	530
5	26	e21	e50	e74	108	137	152	92	75	153	123	477
6	29	e22	e54	e76	106	306	148	90	78	138	131	432
7	31	e23	e58	82	103	303	144	86	80	134	223	415
8	32	e26	e62	e84	e92	383	137	84	88	125	265	391
9	31	e29	e66	e74	e82	491	132	82	96	126	324	352
10	30	e31	e68	e70	e88	426	129	77	101	123	392	317
11	30	e35	e78	e78	e84	407	126	78	101	110	478	292
12	30	e38	e78	e86	e80	510	122	78	114	118	522	271
13	29	e42	e70	e82	e74	590	122	75	124	125	507	254
14	29	e49	e76	e76	108	630	120	74	120	131	507	261
15	29	e60	e80	e66	113	609	121	75	113	119	421	253
16	29	e58	e78	e90	111	551	128	100	124	105	362	232
17	30	e56	e90	e120	119	475	129	150	133	93	316	210
18	30	e58	e82	e115	139	389	137	150	144	85	275	210
19	31	e58	e80	e110	153	324	149	128	144	80	241	193
20	31	e57	e80	e110	168	290	147	117	138	77	208	174
21	32	e56	e80	e105	177	272	145	107	128	74	181	162
22	32	e54	e80	e105	175	259	142	100	117	88	165	150
23	33	e51	e78	e100	161	248	172	91	108	97	151	141
24	33	e48	e78	e98	151	234	183	86	102	102	158	132
25	33	e46	e76	e96	144	219	175	83	95	107	308	125
26	34	e50	e78	e92	144	205	163	80	92	106	403	119
27	35	e60	e80	e88	143	189	151	80	94	104	433	113
28	39	e66	88	e88	140	185	141	79	103	117	504	108
29	48	e58	75	e82	135	193	132	78	107	125	636	104
30	40	e47	77	e88	---	196	123	76	102	122	736	101
31	e32	---	80	100	---	192	---	72	---	118	784	---
TOTAL	942	1290	2200	2750	3519	9698	4354	2888	3137	3395	10239	8580
MEAN	30.4	43.0	71.0	88.7	121	313	145	93.2	105	110	330	286
MAX	48	66	90	120	177	630	183	150	144	153	784	772
MIN	15	20	42	66	74	115	120	72	75	74	117	101
AC-FT	1870	2560	4360	5450	6980	19240	8640	5730	6220	6730	20310	17020

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1992, BY WATER YEAR (WY)

	MEAN	82.2	80.3	72.5	62.6	135	351	450	350	285	128	70.1	75.7
MAX	671	374	250	188	1172	2144	2081	1522	2690	809	402	882	
(WY)	1952	1952	1952	1987	1952	1987	1987	1960	1962	1962	1951	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1947 - 1992

ANNUAL TOTAL	51124.7	52992	
ANNUAL MEAN	140	145	178
MEDIAN OF ANNUAL DISCHARGES			121
HIGHEST ANNUAL MEAN			527
LOWEST ANNUAL MEAN			42.8
HIGHEST DAILY MEAN	1230 May 21	784 Aug 31	6700 Jun 10 1962
LOWEST DAILY MEAN	7.2 Sep 6	15 Oct 2	5.2 Sep 6 1976
ANNUAL SEVEN-DAY MINIMUM	7.7 Sep 3	22 Nov 2	6.5 Aug 24 1976
INSTANTANEOUS PEAK FLOW		800 Aug 31	7500 Jun 10 1962
INSTANTANEOUS PEAK STAGE		5.54 Aug 31	10.60 Jun 10 1962
ANNUAL RUNOFF (AC-FT)	101400	105100	129300
10 PERCENT EXCEEDS	404	316	370
50 PERCENT EXCEEDS	58	105	71
90 PERCENT EXCEEDS	14	34	29

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

ANNUAL TOTAL	92765		122007		
ANNUAL MEAN	254		333		303
MEDIAN OF ANNUAL MEANS					240
HIGHEST ANNUAL MEAN					935
LOWEST ANNUAL MEAN					108
HIGHEST DAILY MEAN	1700	Jun 4	1360	Aug 29	12600
LOWEST DAILY MEAN	38	Aug 27	70	Nov 4	12
ANNUAL SEVEN-DAY MINIMUM	41	Aug 26	83	Nov 1	17
INSTANTANEOUS PEAK FLOW (STAGE)			1480	Aug 28	14100(11.99)
INSTANTANEOUS PEAK STAGE			5.65	Aug 28	12.53
ANNUAL RUNOFF (AC-FT)	184000		242000		219200
10 PERCENT EXCEEDS	562		693		557
50 PERCENT EXCEEDS	188		242		169
90 PERCENT EXCEEDS	66		121		83

06799000 ELKHORN RIVER AT NORFOLK, NE

LOCATION.--Lat 42°00'14", long 97°25'31", in SW1/4SW1/4 sec.34, T.24 N., R.1 W., Madison County, Hydrologic Unit 10220001, on left bank 200 ft downstream from U.S. Highway 81 bridge, 1 mi south of intersection of U.S. Highways 81 275, and 3.6 mi upstream from North Fork Elkhorn River, and at mile 129.

DRAINAGE AREA.--2,790 mi², approximately, of which about 1,790 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--July 1896 to November 1903 (no winter records), October 1945 to current year. Gage height records collected at site 200 ft upstream from May 10, 1941 to Sept. 26, 1945 are contained in reports of U.S. Weather Bureau. Published as "near Norfolk" from October 1957 to September 1977.

REVISED RECORDS.--WSP 1390: 1898-1900. WSP 1730: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,502.95 ft above National Geodetic Vertical Datum of 1929. See WSP 1918 for history of changes prior to Aug. 30, 1958. Aug. 30, 1958, to July 27, 1978, water-stage recorder at site 3.2 mi upstream at datum 19.88 ft higher and July 28, 1978 to Mar. 18, 1987, present site at datum 2.00 ft higher.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	125	e170	e180	334	340	437	456	459	317	328	512	1150
2	126	e160	e170	348	340	429	449	423	330	313	428	1080
3	132	e150	e160	352	342	428	451	418	331	314	400	1150
4	147	e140	e170	340	337	416	456	413	322	316	416	1110
5	150	e130	e215	330	332	439	469	383	317	464	435	1180
6	155	e150	e270	334	328	504	473	357	317	964	477	1220
7	157	e162	e275	345	326	634	475	337	314	782	599	1140
8	158	e175	e280	373	320	829	475	334	310	722	1260	1120
9	161	e190	e280	393	285	931	466	328	334	693	1080	995
10	160	e220	e290	400	287	1200	464	333	356	733	1120	973
11	166	e250	e300	387	272	953	456	352	345	721	1170	923
12	169	e290	e330	367	260	901	435	365	372	606	1320	847
13	172	e330	e370	368	268	997	427	362	371	554	1150	775
14	165	e320	e270	361	269	1180	420	351	372	655	967	738
15	162	e310	e250	184	283	1280	419	364	362	505	1120	735
16	170	e305	e260	203	309	1150	414	468	405	490	1010	743
17	177	e300	e280	261	326	925	403	669	422	484	1000	702
18	172	e290	e240	330	374	778	421	807	377	441	911	656
19	166	286	e210	361	396	589	439	633	371	398	811	590
20	176	288	318	361	394	519	483	743	369	365	670	575
21	191	298	311	375	404	511	503	808	353	344	562	566
22	190	299	324	e380	403	539	498	644	347	349	487	523
23	190	265	335	e400	421	557	529	542	342	355	449	495
24	195	e240	306	e390	449	533	539	460	338	385	423	463
25	197	e250	285	368	427	506	544	416	329	576	484	441
26	203	e260	297	361	420	440	544	373	308	434	833	428
27	205	e275	296	325	421	439	539	353	298	422	1210	404
28	219	e270	290	314	431	450	529	334	297	425	1180	367
29	217	e230	316	322	434	477	495	329	302	568	1310	350
30	e200	e200	328	333	---	468	479	325	305	654	1210	346
31	e185	---	327	332	---	457	---	313	---	670	1230	---
TOTAL	5358	7203	8533	10632	10198	20896	14150	13796	10233	16030	26234	22785
MEAN	173	240	275	343	352	674	472	445	341	517	846	759
MAX	219	330	370	400	449	1280	544	808	422	964	1320	1220
MIN	125	130	160	184	260	416	403	313	297	313	400	346
AC-FT	10630	14290	16930	21090	20230	41450	28070	27360	20300	31800	52040	45190

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1992, BY WATER YEAR (WY)

	MEAN	301	307	282	277	480	874	960	771	870	408	285	263
MAX	1418	847	607	624	1862	3819	3715	2682	4673	1479	1398	1444	
(WY)	1952	1952	1952	1983	1952	1987	1984	1951	1962	1950	1951	1986	
MIN	125	163	151	146	129	298	254	228	201	99.1	61.9	87.3	
(WY)	1981	1979	1977	1977	1978	1981	1981	1981	1989	1980	1976	1956	

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1946 - 1992

ANNUAL TOTAL	145508	166048	
ANNUAL MEAN	399	454	506
MEDIAN OF ANNUAL MEANS			411
HIGHEST ANNUAL MEAN			1188
LOWEST ANNUAL MEAN			224
HIGHEST DAILY MEAN	4950	Jun 5	1320
LOWEST DAILY MEAN	47	Aug 30	125
ANNUAL SEVEN-DAY MINIMUM	52	Aug 26	142
INSTANTANEOUS PEAK FLOW (STAGE)			1700
INSTANTANEOUS PEAK STAGE			4.87
ANNUAL RUNOFF (AC-FT)	288600	329400	366400
10 PERCENT EXCEEDS	886	904	991
50 PERCENT EXCEEDS	280	371	295
90 PERCENT EXCEEDS	99	190	159

e Estimated

* Site and datum then in use.

** Backwater from ice.

PLATTE RIVER BASIN
06799080 WILLOW CREEK NEAR FOSTER, NE

LOCATION.--Lat 42°10'38", long 97°40'02" in NW1/4NE1/4 sec.4, T.25 N., R.3 W., Pierce County, Hydrologic Unit 10220002, on left downstream bank at county road bridge, 6.8 mi south of Foster, 7.2 mi southwest of Pierce, and at mile 14.1.

DRAINAGE AREA.--137 mi².

PERIOD OF RECORD.--October 1975 (monthly discharge only) to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,650 ft above National Geodetic Vertical Datum of 1929, from topographic map.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	e2.0	e5.6	8.5	6.8	11	14	9.7	9.3	7.6	7.7	17
2	3.4	e1.6	e5.0	8.9	6.8	11	13	9.1	9.8	8.0	7.4	17
3	3.6	e1.3	e4.8	8.4	7.0	11	13	8.9	9.0	7.6	7.0	16
4	4.2	e1.0	e5.2	7.9	6.7	13	13	8.7	8.5	6.6	6.9	17
5	4.5	e1.1	e4.8	8.0	6.5	16	12	8.5	8.4	7.8	9.1	21
6	4.2	e1.0	e5.4	7.9	6.7	19	12	8.4	10	8.3	8.7	66
7	4.2	e1.0	e6.2	8.3	e7.0	e38	12	8.3	9.0	8.5	21	106
8	4.0	e1.2	e6.8	e7.8	e6.6	e45	11	8.1	9.6	7.7	31	83
9	4.0	e1.7	e7.2	e8.0	e6.4	e58	11	8.0	11	7.1	60	76
10	3.9	e2.7	e7.2	e8.0	e6.8	51	11	7.7	10	7.2	73	56
11	4.0	e3.6	e6.8	e8.0	e6.4	65	11	8.4	9.7	6.9	44	37
12	3.9	e5.4	e8.0	e7.8	e6.6	63	11	7.9	9.1	8.4	25	27
13	3.9	e6.8	e7.8	e7.6	e6.4	70	11	7.5	8.7	7.6	20	22
14	3.9	e8.4	e7.0	e6.8	e7.4	70	11	7.8	8.3	7.2	18	20
15	4.0	e11	e7.4	e5.8	e8.0	60	11	8.1	8.4	6.8	15	19
16	4.1	e11	e9.0	e7.0	e9.4	37	10	11	9.0	5.6	13	17
17	4.1	e11	e9.8	e7.6	e11	26	11	17	9.4	5.1	12	18
18	3.9	e12	e6.8	e7.4	e14	21	11	78	8.9	5.1	12	20
19	3.9	13	e6.0	e7.8	e13	18	12	138	8.7	5.7	11	17
20	4.0	11	e6.4	e7.8	e14	17	11	56	8.4	5.9	10	18
21	4.1	7.3	e6.8	e8.4	e18	16	6.9	28	8.5	4.7	9.8	18
22	4.1	6.9	e6.4	e7.8	e19	15	19	20	8.4	7.1	9.4	15
23	4.1	7.4	e7.8	e7.8	e15	14	18	16	8.0	6.2	9.1	13
24	4.1	e7.0	e7.6	e7.6	e11	14	18	14	8.1	6.1	9.0	12
25	4.1	e6.8	e7.2	e7.6	e12	13	15	13	8.1	6.9	16	11
26	4.1	e7.2	e7.0	e7.4	e13	13	13	11	7.6	7.7	18	11
27	4.2	e7.4	e8.0	e7.2	e12	12	12	11	7.6	7.0	25	10
28	4.6	e7.2	e7.4	e6.8	e12	14	11	10	8.0	7.9	30	9.4
29	e4.0	e7.0	e8.8	e7.0	e11	16	11	9.8	7.5	9.5	27	9.3
30	e3.0	e6.4	e8.2	7.0	---	16	10	9.2	8.2	8.5	21	9.2
31	e2.3	---	8.5	6.8	---	15	---	8.5	---	8.1	17	---
TOTAL	121.8	178.4	216.9	236.7	286.5	878	365.9	575.6	263.2	220.4	603.1	807.9
MEAN	3.93	5.95	7.00	7.64	9.88	28.3	12.2	18.6	8.77	7.11	19.5	26.9
MAX	4.6	13	9.8	8.9	19	70	19	138	11	9.5	73	106
MIN	2.3	1.0	4.8	5.8	6.4	11	6.9	7.5	7.5	4.7	6.9	9.2
AC-FT	242	354	430	469	568	1740	726	1140	522	437	1200	1600

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1992, BY WATER YEAR (WY)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
MEAN	7.84	8.85	8.67	8.06	14.4	30.8	30.2	20.8	14.4	8.01	6.78	7.14					
MAX	26.0	18.0	15.8	15.1	49.6	130	132	59.4	47.6	24.1	19.5	26.9					
(WY)	1987	1987	1987	1984	1983	1987	1984	1984	1984	1983	1992	1992					
MIN	3.70	4.36	4.56	3.80	3.20	6.72	5.81	5.28	6.67	3.77	3.12	2.78					
(WY)	1979	1979	1991	1991	1979	1981	1981	1981	1976	1990	1990	1991					

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1976 - 1992

ANNUAL TOTAL	2380.4	4754.4	
ANNUAL MEAN	6.52	13.0	13.8
MEDIAN OF ANNUAL MEANS			9.45
HIGHEST ANNUAL MEAN			35.1
LOWEST ANNUAL MEAN			5.67
HIGHEST DAILY MEAN			516
LOWEST DAILY MEAN	33	138	516
ANNUAL SEVEN-DAY MINIMUM	1.0	1.0	1.0
INSTANTANEOUS PEAK FLOW (STAGE)	1.2	1.2	1.2
INSTANTANEOUS PEAK STAGE		146	574
ANNUAL RUNOFF (AC-FT)	4720	9430	10010
10 PERCENT EXCEEDS	11	20	21
50 PERCENT EXCEEDS	6.4	8.5	8.3
90 PERCENT EXCEEDS	2.8	4.2	4.0

e Estimated.

* Backwater from ice.

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.--700 mi², approximately, 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 National Geodetic Vertical Datum of 1929 (U.S. Weather Bureau levels).

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	e12	e12	e17	31	44	64	54	52	62	78	127
2	11	e11	e11	e17	31	42	60	50	53	60	67	169
3	11	e10	e13	e16	31	41	57	48	53	49	60	105
4	15	e9.4	e13	e15	32	42	54	46	50	43	55	120
5	16	e10	e12	e14	32	49	51	45	48	45	61	342
6	14	e9.8	e14	e12	33	81	49	43	50	47	65	685
7	13	e10	e15	e10	33	99	48	42	49	44	567	897
8	13	e11	e16	e9.0	35	84	48	41	50	42	443	598
9	13	e12	e16	e7.8	36	138	49	39	59	38	256	379
10	13	e13	e16	e7.0	37	160	48	42	66	37	262	237
11	12	e15	e15	e7.4	39	136	47	83	56	36	161	155
12	12	e18	e14	e8.0	60	158	46	48	51	407	103	122
13	12	e20	e15	e7.8	47	177	46	41	46	202	85	106
14	12	e19	e14	e7.0	33	189	46	40	44	71	78	106
15	13	e18	e14	e6.4	34	174	46	38	44	68	72	114
16	13	e19	e14	e8.0	34	128	46	508	545	60	67	107
17	13	e20	e13	e11	41	108	45	1610	255	51	62	98
18	13	e20	e12	e10	104	92	45	833	109	45	57	354
19	13	e19	e13	e12	74	82	48	397	79	40	53	156
20	13	e18	e14	e13	56	75	49	177	67	37	49	99
21	14	e17	e15	e15	51	71	63	130	61	34	46	90
22	14	e15	e15	e16	47	68	51	109	56	58	42	80
23	14	e14	e15	e18	46	65	66	96	52	55	40	73
24	15	e14	e16	e20	51	64	71	85	49	48	37	67
25	15	e15	e16	e23	55	61	76	78	48	108	99	64
26	15	e16	e16	e25	54	58	95	74	44	413	172	63
27	15	e15	e16	e27	53	55	97	70	43	99	132	60
28	17	e15	e17	e30	50	58	79	65	42	96	134	57
29	18	e14	e17	32	46	69	69	60	42	582	101	56
30	15	e13	e17	31	---	73	61	57	42	161	76	57
31	e13	---	e17	30	---	72	---	53	---	90	64	---
TOTAL	420	442.2	453	482.4	1306	2813	1720	5102	2305	3228	3644	5743
MEAN	13.5	14.7	14.6	15.6	45.0	90.7	57.3	165	76.8	104	118	191
MAX	18	20	17	32	104	189	97	1610	545	582	567	897
MIN	10	9.4	11	6.4	31	41	45	38	42	34	37	56
AC-FT	833	877	899	957	2590	5580	3410	10120	4570	6400	7230	11390

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1992, BY WATER YEAR (WY)

	MEAN	38.4	41.2	40.8	40.9	96.3	187	159	131	161	62.0	41.2	38.2
MAX	109	98.8	89.3	111	834	1120	1004	541	799	321	175	191	191
(WY)	1987	1987	1983	1973	1971	1962	1984	1984	1967	1972	1960	1992	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	9.53
(WY)	1992	1992	1992	1992	1978	1990	1990	1981	1989	1989	1990	1990	1990

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1960 - 1992

ANNUAL TOTAL	12933.7	27658.6	85.8
ANNUAL MEAN	35.4	75.6	66.3
MEDIAN OF ANNUAL MEANS			239
HIGHEST ANNUAL MEAN			21.5
LOWEST ANNUAL MEAN			1984
HIGHEST DAILY MEAN	522	1610	10400
LOWEST DAILY MEAN	5.0	6.4	2.7
ANNUAL SEVEN-DAY MINIMUM	6.4	7.3	3.7
INSTANTANEOUS PEAK FLOW		1810	15200
INSTANTANEOUS PEAK STAGE		12.35	15.10
ANNUAL RUNOFF (AC-FT)	25650	54860	62140
10 PERCENT EXCEEDS	53	133	133
50 PERCENT EXCEEDS	19	46	41
90 PERCENT EXCEEDS	9.4	13	20

PLATTE RIVER BASIN

06799230 UNION CREEK AT MADISON, NE

LOCATION.--Lat 41°49'52", long 97°27'19", in SW1/4SE1/4 sec.32, T.22 N., R.1 W., Madison County, Hydrologic Unit 10220003, on left bank 12 ft downstream from bridge on U.S. Highway 81, in Madison.

DRAINAGE AREA.--174 mi².

PERIOD OF RECORD.--October 1978 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,549.70 ft, above National Geodetic Vertical Datum of 1929, levels by Nebraska Natural Resources Commission.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	16	18	26	19	20	23	21	24	20	27	17
2	9.0	15	18	27	19	20	22	19	24	68	18	46
3	9.5	13	17	28	18	19	21	18	22	22	16	25
4	11	13	17	24	18	20	20	17	21	17	17	16
5	10	13	17	23	18	26	20	17	21	344	21	48
6	9.5	14	19	21	18	31	19	18	21	116	18	158
7	10	14	20	24	17	29	19	18	20	118	264	126
8	11	14	20	26	17	25	20	18	20	135	229	253
9	11	14	20	24	17	33	20	18	24	30	35	38
10	11	15	20	24	18	34	20	19	21	21	21	21
11	12	15	19	23	17	31	20	21	23	22	18	16
12	11	16	64	21	17	33	23	18	22	21	17	15
13	13	17	99	20	18	36	22	15	19	19	41	16
14	13	17	35	19	20	35	20	14	19	18	72	16
15	14	19	26	25	21	31	20	16	21	18	30	16
16	14	18	25	19	22	28	21	138	36	17	21	17
17	13	20	21	19	29	25	20	900	86	16	18	16
18	12	20	19	18	37	24	21	196	67	16	17	16
19	12	19	19	18	39	23	21	37	28	16	16	15
20	13	17	19	19	25	22	21	28	20	15	16	16
21	13	17	19	20	21	21	22	26	19	14	16	16
22	13	16	20	20	20	21	25	26	18	20	16	15
23	12	15	20	19	21	21	27	32	19	20	16	15
24	12	15	20	18	23	21	28	26	21	24	16	15
25	12	15	20	18	22	20	26	23	20	39	46	15
26	12	15	20	18	22	20	23	21	21	44	55	16
27	13	16	19	18	21	19	21	21	22	27	31	16
28	15	16	19	18	20	27	20	21	21	29	20	15
29	14	20	20	19	20	29	20	20	20	75	17	16
30	13	19	20	20	---	27	20	19	20	147	16	16
31	13	---	20	19	---	25	---	20	---	121	16	---
TOTAL	370.3	483	749	655	614	796	645	1821	760	1629	1197	1062
MEAN	11.9	16.1	24.2	21.1	21.2	25.7	21.5	58.7	25.3	52.5	38.6	35.4
MAX	15	20	99	28	39	36	28	900	86	344	264	253
MIN	9.0	13	17	18	17	19	19	14	18	14	16	15
AC-FT	734	958	1490	1300	1220	1580	1280	3610	1510	3230	2370	2110

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1992, BY WATER YEAR (WY)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
MEAN	18.3	21.9	19.8	19.5	41.7	62.0	42.5	64.9	110	32.7	19.7	27.5		
MAX	39.6	57.2	27.9	27.0	124	162	162	250	588	82.2	39.0	117		
(WY)	1987	1983	1988	1989	1982	1987	1984	1982	1990	1986	1986	1987		
MIN	9.79	11.7	12.4	12.4	12.9	16.3	12.5	12.2	16.7	6.91	4.78	7.91		
(WY)	1979	1979	1981	1981	1979	1981	1981	1981	1989	1991	1991	1980		

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1979 - 1992

ANNUAL TOTAL	9531.1	10781.3	
ANNUAL MEAN	26.1	29.5	39.9
HIGHEST ANNUAL MEAN			69.4 1990
LOWEST ANNUAL MEAN			17.2 1980
HIGHEST DAILY MEAN	1320 Jun 4	900 May 17	7590 Jun 16 1990
LOWEST DAILY MEAN	2.0 Aug 28	9.0 Oct 2	2.0 Aug 28 1991
ANNUAL SEVEN-DAY MINIMUM	3.1 Aug 22	9.8 Oct 1	3.1 Aug 22 1991
INSTANTANEOUS PEAK FLOW		1010 May 17	15100 Jun 16 1990
INSTANTANEOUS PEAK STAGE		15.19 May 17	25.72 Jun 16 1990
ANNUAL RUNOFF (AC-FT)	18900	21380	28940
10 PERCENT EXCEEDS	32	35	42
50 PERCENT EXCEEDS	17	20	19
90 PERCENT EXCEEDS	5.9	14	11

PLATTE RIVER BASIN

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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 National Geodetic Vertical Datum of 1929. Prior to May 18, 1976, at site on left bank 50 ft upstream from bridge at same datum.

REMARKS.--Records fair except for periods of estimated record, which are poor. Some small diversions above station for irrigation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	204	e330	e370	498	564	706	795	683	536	392	1630	1490
2	203	e310	e310	539	545	677	748	613	553	381	1060	1460
3	201	e300	e250	555	541	637	720	567	572	396	803	1550
4	217	e280	e210	562	545	613	693	529	575	418	730	1460
5	243	e275	e225	548	534	634	664	508	567	535	743	1250
6	253	e270	e300	523	528	710	636	486	553	1700	800	1290
7	256	e240	e410	519	510	785	618	480	545	2170	900	3700
8	261	e225	e540	559	504	842	608	477	543	1200	3160	5040
9	264	e240	e560	593	487	1240	601	481	543	980	5120	2530
10	264	e280	e580	596	497	2130	613	460	550	836	3590	1540
11	264	e310	e750	569	512	1280	610	461	566	726	3150	1240
12	268	e340	e900	580	496	1150	625	477	580	745	2050	1130
13	271	e390	e1400	537	505	1280	617	491	586	707	2060	1040
14	272	e540	e880	525	526	1590	616	486	592	815	1980	1000
15	265	e500	e800	e290	526	1790	624	440	592	991	1950	980
16	269	e440	e780	e350	525	1830	614	597	6730	716	2060	930
17	276	e400	e660	e430	571	1560	598	1680	3040	576	2110	894
18	272	e390	e700	e500	695	1600	595	4130	1780	567	1830	873
19	270	e380	e760	e680	772	1390	651	1870	1190	551	1430	838
20	280	e370	e660	e760	846	1180	646	1440	847	505	1120	946
21	289	e360	e560	e800	792	1090	740	1350	691	476	966	825
22	289	e350	e500	e740	765	1010	701	1500	660	468	841	749
23	287	e340	e520	e700	744	928	681	1220	635	476	739	718
24	287	e340	e560	e720	752	857	787	1020	601	490	683	696
25	289	e270	e480	e560	767	794	912	873	529	543	757	662
26	287	e280	e440	e600	779	764	909	776	498	1890	1650	644
27	288	e330	e480	e520	750	741	853	703	472	1340	1730	638
28	294	e380	436	e560	720	786	835	658	448	900	1770	602
29	300	e460	438	e520	707	984	807	624	427	827	1700	587
30	304	e450	436	e560	---	986	737	596	407	1520	1620	578
31	329	---	455	627	---	872	---	563	---	1930	1560	---
TOTAL	8316	10370	17350	17620	18005	33436	20854	27239	27408	26767	52292	37880
MEAN	268	346	560	568	621	1079	695	879	914	863	1687	1263
MAX	329	540	1400	800	846	2130	912	4130	6730	2170	5120	5040
MIN	201	225	210	290	487	613	595	440	407	381	683	578
AC-FT	16490	20570	34410	34950	35710	66320	41360	54030	54360	53090	103700	75130

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1992, BY WATER YEAR (WY)

	442	509	451	462	941	1766	1623	1338	1298	598	420	434
MEAN	442	509	451	462	941	1766	1623	1338	1298	598	420	434
MAX	1606	1239	864	800	2744	5256	6171	3958	3770	1725	1687	1646
(WY)	1987	1987	1987	1987	1983	1987	1984	1984	1984	1986	1992	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1973 - 1992

ANNUAL TOTAL	238540	297537	855
ANNUAL MEAN	654	813	1932
HIGHEST ANNUAL MEAN			1984
LOWEST ANNUAL MEAN			332
HIGHEST DAILY MEAN	19600	6730	25500
LOWEST DAILY MEAN	109	201	41
ANNUAL SEVEN-DAY MINIMUM	115	225	45
INSTANTANEOUS PEAK FLOW (STAGE)		13500	33000 (13.21)
INSTANTANEOUS PEAK STAGE		*10.79	**16.09
ANNUAL RUNOFF (AC-FT)	473100	590200	619400
10 PERCENT EXCEEDS	1310	1560	1660
50 PERCENT EXCEEDS	436	611	500
90 PERCENT EXCEEDS	195	289	210

e Estimated.

* From floodmark.

** Ice jam.

PLATTE RIVER BASIN
06799385 PEBBLE CREEK AT SCRIBNER, NE

LOCATION.--Lat 41°39'34", long 96°41'00", in NW1/4SE1/4 sec.36, T.20 N., R.6 E., Dodge County, Hydrologic Unit 10220003, on right bank 12 ft downstream from bridge on county road, 1 mi southwest of Scribner and 3.4 mi (revised) upstream from mouth.

DRAINAGE AREA.--204 mi².

PERIOD OF RECORD.--October 1978 to current year.

REVISED RECORDS.--WRD NE-82-1: 1980.

GAGE.--Water-stage recorder. Datum of gage is 1,234.72 ft above National Geodetic Vertical Datum of 1929.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e7.0	e8.0	e20	21	16	18	34	37	36	32	53	25
2	e7.2	e7.8	e10	26	16	17	31	31	53	32	51	26
3	e7.2	e7.0	e9.0	22	15	18	31	26	38	31	41	25
4	e7.4	e6.6	e8.0	20	15	19	30	25	32	34	35	22
5	e7.6	e9.0	e10	20	15	35	27	25	30	216	38	22
6	e7.6	e10	13	20	15	77	26	24	34	94	38	21
7	e7.6	e10	15	22	15	53	27	24	32	42	64	66
8	e7.4	e9.2	27	e22	14	38	27	25	29	36	56	172
9	e7.6	9.5	26	e22	e12	50	27	25	30	33	36	120
10e	7.8	11	16	27	e11	e44	28	23	30	32	66	41
11	e8.2	15	9.8	23	13	43	26	23	29	32	56	31
12	e8.2	9.4	98	22	14	44	25	21	28	32	28	29
13e	8.2	10	179	19	15	40	24	21	27	72	28	28
14	e7.4	9.4	48	e15	16	37	26	21	27	57	27	223
15	e7.4	7.1	48	e12	18	34	25	21	29	35	26	128
16	e7.8	4.6	38	e21	29	30	26	111	4050	31	27	38
17	e8.4	6.1	28	e20	78	29	26	473	1200	30	30	32
18e	8.6	14	30	e17	90	28	26	76	101	29	27	29
19	e7.8	9.5	26	e19	41	28	33	49	57	28	25	27
20	e7.8	6.2	24	e22	30	26	32	42	50	28	23	26
21	e8.0	4.8	23	26	27	26	68	43	46	27	23	26
22	e8.6	2.8	22	21	26	25	26	59	43	67	23	24
23	e9.0	2.6	21	18	26	23	45	37	41	41	22	22
24	e9.0	e10	19	22	28	24	103	33	40	156	22	22
25	e8.0	e8.0	18	26	26	22	100	34	40	643	52	21
26	e8.2	5.4	17	21	20	21	79	35	38	1630	145	22
27	e8.8	2.8	16	16	22	21	61	32	37	128	39	22
28	e9.2	1.7	16	17	19	33	54	30	37	103	32	21
29	e9.0	e5.6	15	16	18	87	52	30	36	114	29	20
30	e8.8	e30	16	15	---	51	44	28	35	84	26	20
31	e8.2	---	15	16	---	40	---	28	---	69	24	---
TOTAL	249.0	253.1	880.8	626	700	1081	1189	1512	6335	4018	1212	1351
MEAN	8.03	8.44	28.4	20.2	24.1	34.9	39.6	48.8	211	130	39.1	45.0
MAX	9.2	30	179	27	90	87	103	473	4050	1630	145	223
MIN	7.0	1.7	8.0	12	11	17	24	21	27	27	22	20
AC-FT	494	502	1750	1240	1390	2140	2360	3000	12570	7970	2400	2680

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1992, BY WATER YEAR (WY)

MEAN	42.4	26.4	20.8	22.4	52.6	89.0	70.9	85.9	238	53.7	28.6	36.9
MAX	279	96.6	48.2	48.7	183	284	243	285	968	150	96.0	140
(WY)	1983	1983	1983	1988	1984	1979	1984	1984	1984	1987	1982	1989
MIN	3.74	5.17	4.93	4.68	6.44	8.37	6.70	5.82	12.9	3.32	5.95	3.77
(WY)	1982	1982	1982	1982	1979	1981	1981	1981	1981	1981	1981	1981

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1979 - 1992

ANNUAL TOTAL	16557.4	19406.9	
ANNUAL MEAN	45.4	53.0	63.7
MEDIAN OF ANNUAL MEANS			50
HIGHEST ANNUAL MEAN			174
LOWEST ANNUAL MEAN			6.45
HIGHEST DAILY MEAN	7700 Jun 5	4050 Jun 16	9100 Jun 16 1984
LOWEST DAILY MEAN	1.7 Nov 28	1.7 Nov 28	.29 Jul 20 1981
ANNUAL SEVEN-DAY MINIMUM	4.6 Sep 17	4.8 Nov 22	.51 Jul 15 1981
INSTANTANEOUS PEAK FLOW		11900 Jun 16	27900 Jun 5 1991
INSTANTANEOUS PEAK STAGE		23.45 Jun 16	*24.15 Jun 5 1991
ANNUAL RUNOFF (AC-FT)	32840	38490	46160
10 PERCENT EXCEEDS	39	62	76
50 PERCENT EXCEEDS	16	26	22
90 PERCENT EXCEEDS	6.6	8.2	5.6

e Estimated.

* From floodmark.

06799450 LOGAN CREEK AT PENDER, NE

LOCATION.--Lat 42°06'40", long 96°42'00", in NW1/4 sec.26, T.25 N., R.6 E., Thurston County, Hydrologic Unit 10220004, on right bank 200 ft downstream from bridge on Nebraska State Highway 94 at Pender, 0.7 mi downstream from Rattlesnake Creek, and at mile 45.7.

DRAINAGE AREA.--731 mi², approximately.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,300.96 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 23, 1966, nonrecording gage at same site and datum.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	e45	e40	65	73	82	113	115	100	343	217	262
2	43	e40	e32	81	73	79	109	105	105	209	193	775
3	43	e30	e32	86	71	77	104	102	100	153	174	294
4	48	e25	e38	69	68	79	101	99	95	137	164	205
5	50	e34	e56	69	67	89	103	99	90	135	165	550
6	49	e36	e66	70	69	133	93	97	90	129	165	1080
7	48	e32	e76	78	67	135	90	99	87	118	1470	788
8	46	e38	e88	e72	e62	108	91	97	85	112	944	821
9	46	e42	e100	e68	e62	140	93	97	101	107	330	344
10	45	e48	e110	e66	e60	158	93	94	100	105	2120	263
11	45	e50	e125	e64	e64	149	88	164	88	177	851	226
12	45	e60	e150	e68	e68	152	91	147	80	2320	554	211
13	46	e70	e270	e50	e74	147	96	110	76	762	299	199
14	45	104	e110	e36	89	149	94	102	76	261	232	199
15	46	81	e87	e30	82	148	93	206	76	199	207	208
16	47	70	e80	e38	83	131	93	1030	1810	173	193	200
17	47	64	e76	e60	90	119	94	1240	1010	156	186	180
18	49	61	e74	e66	137	113	101	282	349	144	178	289
19	46	60	e70	e66	131	106	104	190	201	134	169	384
20	47	55	e68	e64	97	102	84	163	168	127	162	191
21	49	49	e66	e64	87	97	91	150	146	121	158	176
22	49	47	e66	e64	83	96	93	144	135	204	151	165
23	49	40	e66	e64	82	93	113	136	126	228	146	156
24	48	e44	e64	e66	90	91	150	129	117	179	139	150
25	47	e46	e64	e66	100	87	164	126	112	377	258	145
26	47	e48	e64	e70	92	85	164	124	107	2000	506	143
27	49	e50	e64	e72	88	86	150	120	105	350	256	145
28	53	e52	e64	e74	87	107	149	114	105	245	195	139
29	54	57	64	e74	86	160	140	108	483	1820	175	131
30	49	56	64	e74	---	144	127	102	821	640	163	130
31	50	---	63	e74	---	122	---	97	---	264	154	---
TOTAL	1468	1534	2457	2028	2382	3564	3269	5988	7144	12429	11274	9149
MEAN	47.4	51.1	79.3	65.4	82.1	115	109	193	238	401	364	305
MAX	54	104	270	86	137	160	164	1240	1810	2320	2120	1080
MIN	43	25	32	30	60	77	84	94	76	105	139	130
AC-FT	2910	3040	4870	4020	4720	7070	6480	11880	14170	24650	22360	18150

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1992, BY WATER YEAR (WY)

	MEAN	82.2	76.6	70.8	78.2	223	242	221	203	362	151	88.1	79.0
MAX	238	202	157	242	1974	1048	1290	786	1858	524	364	305	
(WY)	1983	1985	1987	1973	1971	1986	1984	1984	1967	1972	1992	1992	
MIN	33.1	34.1	29.3	30.9	29.9	53.1	47.9	43.6	44.6	25.4	17.6	27.4	
(WY)	1977	1977	1977	1977	1979	1991	1981	1981	1976	1976	1976	1976	

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1966 - 1992

ANNUAL TOTAL	46983		62686	
ANNUAL MEAN	129	171	156	
MEDIAN OF ANNUAL MEANS				124
HIGHEST ANNUAL MEAN				474
LOWEST ANNUAL MEAN				52.5
HIGHEST DAILY MEAN	10900	Jun 15	2320	Jul 12
LOWEST DAILY MEAN	22	Aug 25	25	Nov 4
ANNUAL SEVEN-DAY MINIMUM	23	Aug 27	34	Nov 2
INSTANTANEOUS PEAK FLOW			4690	Aug 10
INSTANTANEOUS PEAK STAGE			12.11	Aug 10
ANNUAL RUNOFF (AC-FT)	93190		124300	
10 PERCENT EXCEEDS	148		262	
50 PERCENT EXCEEDS	54		97	
90 PERCENT EXCEEDS	33		47	

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 (revised) upstream from mouth.

DRAINAGE AREA.--1,030 mi², approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 1,208.73 ft above National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	e84	e50	134	102	124	190	198	180	857	365	187
2	59	e70	e48	147	96	122	177	174	191	405	306	539
3	59	e60	e54	150	95	121	172	159	189	285	274	722
4	64	e44	e50	141	95	124	166	152	180	227	254	317
5	74	e58	e58	134	91	148	157	146	170	223	247	271
6	75	e48	e70	129	90	190	153	142	170	215	246	1320
7	70	e46	e74	127	92	209	151	139	165	199	335	1130
8	68	e66	e80	134	e88	211	147	137	159	177	2090	1600
9	68	e76	e88	e120	e90	183	146	135	161	168	805	1080
10	65	e86	e94	e120	e88	188	144	132	171	159	763	461
11	65	e100	e100	e120	e88	228	144	131	172	154	2250	339
12	67	e130	e150	e130	e90	217	137	199	159	1240	923	295
13	67	168	e370	e100	e100	214	135	196	149	2180	626	273
14	67	173	e470	e70	131	219	138	150	145	716	355	261
15	67	179	e250	e60	121	215	143	145	146	327	296	268
16	67	181	e160	e66	117	214	143	1140	1970	266	273	267
17	69	144	e145	e74	142	189	139	2790	3720	232	258	252
18	67	125	e140	e110	166	172	140	1490	1500	210	244	244
19	67	117	e135	e120	179	165	150	602	575	196	226	397
20	68	113	e130	e110	148	159	156	399	363	182	212	371
21	70	105	e130	e110	125	155	145	368	307	172	199	249
22	71	104	e125	e110	120	151	134	391	275	186	191	227
23	71	e100	e125	e112	117	146	139	287	253	276	183	216
24	71	e100	e120	e115	121	146	202	254	234	307	174	217
25	71	101	e120	e120	125	145	294	240	220	715	206	207
26	73	105	e130	e120	131	141	307	233	203	3040	400	202
27	73	e100	176	e110	129	135	296	221	195	1530	514	206
28	76	e90	187	e110	126	140	271	210	191	458	307	202
29	81	e80	182	e130	125	240	256	199	185	890	250	192
30	78	e76	176	e150	---	266	229	188	1060	2380	218	190
31	85	---	142	114	---	226	---	178	---	706	198	---
TOTAL	2151	3029	4329	3597	3328	5503	5301	11525	13758	19278	14188	12702
MEAN	69.4	101	140	116	115	178	177	372	459	622	458	423
MAX	85	181	470	150	179	266	307	2790	3720	3040	2250	1600
MIN	58	44	48	60	88	121	134	131	145	154	174	187
AC-FT	4270	6010	8590	7130	6600	10920	10510	22860	27290	38240	28140	25190

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1992, BY WATER YEAR (WY)

	MEAN	94.6	88.8	78.0	88.5	240	392	256	282	467	201	136	104
MAX	350	272	234	583	2177	2388	1741	1417	2766	622	1056	517	
(WY)	1983	1987	1987	1973	1971	1962	1984	1984	1984	1992	1951	1951	
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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1942 - 1992

ANNUAL TOTAL	64600	98689	
ANNUAL MEAN	177	270	202
MEDIAN OF ANNUAL MEANS			168
HIGHEST ANNUAL MEAN			710
LOWEST ANNUAL MEAN			66.4
HIGHEST DAILY MEAN	6810	Jun 15	20100
LOWEST DAILY MEAN	35	Jan 27	6.1
ANNUAL SEVEN-DAY MINIMUM	38	Jan 7	8.8
INSTANTANEOUS PEAK FLOW			25200
INSTANTANEOUS PEAK STAGE		11.04	20.15
			*Mar 27 1962,
			*Feb 20 1971
ANNUAL RUNOFF (AC-FT)	128100	195700	146200
10 PERCENT EXCEEDS	250	401	324
50 PERCENT EXCEEDS	83	156	86
90 PERCENT EXCEEDS	47	71	43

e Estimated.

* From floodmark.

06800000 MAPLE CREEK NEAR NICKERSON, NE

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 (revised) upstream from mouth.

DRAINAGE AREA.--450 mi², approximately.

PERIOD 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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992

DAY	MEAN VALUES										
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	SEP
1	2.8	e3.2	e6.0	26	28	26	36	41	44	37	83
2	2.4	e3.0	e10	30	28	25	32	35	53	38	71
3	2.5	e2.6	e14	e40	27	25	30	32	61	38	58
4	3.0	e3.0	e12	38	27	25	30	28	52	36	52
5	2.4	e3.2	e11	39	24	29	29	24	45	594	49
6	1.9	e3.0	9.3	37	25	37	28	24	42	580	55
7	2.1	e2.8	9.8	37	24	47	27	25	43	169	60
8	2.3	e3.0	11	39	22	38	27	25	42	111	89
9	2.3	3.5	14	36	16	35	27	25	40	83	61
10	2.0	3.6	19	e35	22	42	27	25	39	69	77
11	1.9	4.5	28	e35	20	39	27	24	38	64	243
12	1.9	5.9	30	e33	17	42	27	23	37	61	78
13	2.1	9.0	66	e30	23	44	27	23	38	102	73
14	2.1	13	107	e26	29	40	26	21	36	216	53
15	2.1	15	47	e25	23	40	26	20	36	66	55
16	2.1	16	36	e32	32	36	26	43	2950	57	54
17	2.1	20	e34	e27	38	33	26	665	1500	53	53
18	2.1	27	e34	e25	72	33	26	230	217	49	52
19	2.1	26	33	e23	52	33	27	68	95	47	47
20	2.2	27	25	23	38	31	39	55	75	47	42
21	2.5	21	e24	23	34	30	37	54	66	46	40
22	2.6	17	23	24	32	30	32	59	60	64	39
23	2.5	9.9	e22	26	30	28	26	75	56	93	39
24	2.6	e11	e22	e26	29	27	61	49	52	133	39
25	2.7	e9.8	e21	26	30	27	116	47	49	262	40
26	3.0	e11	e21	26	30	26	94	47	45	2060	375
27	4.1	e9.0	21	23	28	25	69	47	40	351	124
28	4.2	e8.0	22	22	27	28	59	46	39	107	66
29	e4.0	e6.5	22	23	27	43	55	44	39	396	54
30	e3.5	e6.0	22	24	---	60	49	43	38	186	48
31	e3.2	---	23	25	---	44	---	41	---	154	43
TOTAL	79.3	303.5	799.1	904	854	1068	1168	2008	5967	6369	2312
MEAN	2.56	10.1	25.8	29.2	29.4	34.5	38.9	64.8	199	205	74.6
MAX	4.2	27	107	40	72	60	116	665	2950	2060	375
MIN	1.9	2.6	6.0	22	16	25	26	20	36	36	39
AC-FT	157	602	1590	1790	1690	2120	2320	3980	11840	12630	4590

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1992 BY WATER YEAR (WY)

MEAN	29.9	20.5	14.8	16.5	64.8	126	86.3	103	214	58.7	42.2	39.4
MAX	323	139	65.3	77.7	446	674	590	642	1252	236	362	383
(WY)	1983	1983	1985	1984	1971	1962	1984	1984	1960	1957	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1952 - 1992

ANNUAL TOTAL	19680.4	23992.9	
ANNUAL MEAN	53.9	65.6	67.8
MEDIAN OF ANNUAL MEANS			53
HIGHEST ANNUAL MEAN			264
LOWEST ANNUAL MEAN			5.19
HIGHEST DAILY MEAN	4930 Jun 5	2950 Jun 16	9050 Jun 21 1960
LOWEST DAILY MEAN	1.8 Sep 9	1.9 Oct 6	.10 Jan 15 1956
ANNUAL SEVEN-DAY MINIMUM	2.0 Oct 10	2.0 Oct 10	.19 Sep 17 1981
INSTANTANEOUS PEAK FLOW (STAGE)		5370 Jun 16	11600(*17.65) Jun 17 1990
INSTANTANEOUS PEAK STAGE		13.72 Jun 16	*17.65 Jun 17 1984
ANNUAL RUNOFF (AC-FT)	39040	47590	49090
10 PERCENT EXCEEDS	67	77	102
50 PERCENT EXCEEDS	15	32	15
90 PERCENT EXCEEDS	2.5	3.5	1.2

e Estimated.

* From floodmark, site and datum then in use.

PLATTE RIVER BASIN

06800500 ELKHORN RIVER AT WATERLOO, NE
(National stream-quality accounting network station)

LOCATION.--Lat 41°17'25", long 96°17'05", in SW1/4 sec.3, T.15 N., R.10 E., Douglas County, Hydrologic Unit 10220003, on right bank 800 ft downstream from 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.--Water-stage recorder. Datum of gage is 1,104.73 ft above National Geodetic Vertical Datum of 1929. Oct. 1, 1960, to July 28, 1978, at datum 2.00 ft higher. See WSP 1918 for history of changes prior to Oct. 1, 1960.

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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	293	410	e600	800	937	952	1490	1500	1060	1560	2280	2260
2	292	e390	e560	900	838	933	1340	1330	1130	1430	1970	2180
3	288	e370	e350	999	738	915	1270	1180	1190	1140	1720	2930
4	292	e480	e230	1050	716	902	1220	1080	1190	1040	1430	2930
5	307	e490	473	1000	684	944	1170	1030	1130	1140	1280	2340
6	336	e500	640	1000	664	1180	1120	982	1110	2070	1230	2200
7	364	e520	566	955	659	1530	1100	964	1080	2050	1360	3760
8	379	e540	698	937	636	1630	1080	935	1030	2060	2240	5760
9	385	e540	728	935	576	1660	1050	916	1020	1600	3590	5250
10	391	e550	798	859	579	2440	1030	887	1040	1450	3000	3740
11	383	e550	811	868	592	3140	1010	877	1050	1330	4150	2740
12	379	e560	1030	e880	551	2370	969	870	1060	1280	3050	2260
13	372	563	2230	e900	583	2100	930	900	1050	2920	2540	1990
14	357	590	2470	e840	642	2200	926	959	1010	2590	2360	2030
15	357	733	1600	e900	715	2530	944	903	1020	1900	2050	2930
16	360	916	1070	e1160	732	2730	958	991	5520	1640	1980	2090
17	369	1060	948	e1200	768	2570	958	5760	16700	1280	2100	1730
18	372	1060	938	e1140	960	2190	955	6380	6840	1120	1980	1610
19	373	1000	877	e1100	1290	2000	959	5160	2920	1070	1760	1530
20	379	908	768	e1100	1240	1790	1040	2850	2030	1020	1630	1700
21	385	845	743	e1140	1200	1560	1140	2300	1600	953	1510	1710
22	396	787	754	e1160	1130	1420	1090	3150	1340	936	1390	1510
23	408	720	909	e1140	1050	1340	1130	2530	1190	1020	1260	1330
24	411	578	872	e1100	1020	1290	1430	2000	1100	1210	1170	1250
25	411	e460	818	1070	1020	1220	2090	1690	1040	1790	1190	1190
26	408	e350	812	960	1040	1160	2380	1550	1010	7680	1530	1170
27	422	e380	760	893	1060	1120	2100	1420	988	4560	3030	1150
28	441	e450	701	837	1020	1130	1840	1300	977	2600	2500	1120
29	461	e540	730	793	984	1380	1730	1220	975	2200	2410	1080
30	468	e600	738	765	---	1920	1670	1160	951	3510	2160	1050
31	477	---	733	841	---	1770	---	1100	---	3130	2270	---
TOTAL	11716	18440	26955	30222	24624	52016	38119	55874	61351	61279	64120	66520
MEAN	378	615	870	975	849	1678	1271	1802	2045	1977	2068	2217
MAX	477	1060	2470	1200	1290	3140	2380	6380	16700	7680	4150	5760
MIN	288	350	230	765	551	902	926	870	951	936	1170	1050
AC-FT	23240	36580	53470	59950	48840	103200	75610	110800	121700	121500	127200	131900

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1992, BY WATER YEAR (WY)

MEAN	629	641	562	544	1089	2157	1866	1833	2636	1123	793	651
MAX	2780	2156	1612	1650	6439	7590	10450	7470	11950	3548	4755	2705
(WY)	1987	1987	1987	1973	1971	1962	1984	1984	1984	1951	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1929-1992

ANNUAL TOTAL	455203	511236	
ANNUAL MEAN	1247	1397	1209
MEDIAN OF ANNUAL MEANS			1040
HIGHEST ANNUAL MEAN			3750
LOWEST ANNUAL MEAN			417
HIGHEST DAILY MEAN	21600	Jun 6	93800
LOWEST DAILY MEAN	73	Sep 4	64
ANNUAL SEVEN-DAY MINIMUM	187	Sep 1	66
INSTANTANEOUS PEAK FLOW			100000
INSTANTANEOUS PEAK STAGE1			*16.60
ANNUAL RUNOFF(AC-FT)	902900	1014000	875700
10 PERCENT EXCEEDS	2530	2480	2320
50 PERCENT EXCEEDS	780	1060	652
90 PERCENT EXCEEDS	307	457	290

e Estimated.

* From floodmark, site and datum then in use.

PLATTE RIVER BASIN
06800500 ELKHORN RIVER AT WATERLOO, NE--Continued

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 1991 TO SEPTEMBER 1992

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)	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)
NOV	15... 1130	728	582	8.1	3.0	740	45	11.2	K12000	K11000	230
JAN	10... 1100	840	616	8.2	0.5	740	34	6.5	2800	5800	240
MAR	12... 0945	2420	535	8.2	2.0	739	180	8.2	K32000	K15000	220
MAY	11... 1100	878	485	8.6	19.0	728	26	10.1	K120	K58	190
JUL	07... 1030	2090	439	7.8	22.0	729	1100	6.1	K120000	K170000	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- 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)
NOV	15... 29	69	15	26	0.7	9.4	206	0	251	56	24
JAN	10... 17	69	16	25	0.7	8.7	221	0	270	51	16
MAR	12... 26	64	14	21	0.6	8.0	192	0	234	47	14
MAY	11... --	48	18	29	0.9	7.0	--	--	--	66	18
JUL	07... 16	53	12	15	0.5	10	166	0	203	36	12

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 TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
NOV	15... 0.30	26	340	360	0.46	668	1.64	1.65	0.060	0.050
JAN	10... 0.30	27	407	358	0.55	923	2.24	2.26	0.060	0.040
MAR	12... 0.30	23	324	318	0.44	2120	2.16	2.06	0.040	0.040
MAY	11... 0.40	11	287	300	0.39	680	0.250	0.210	0.030	0.020
JUL	07... 0.40	15	269	268	0.37	1520	2.83	2.84	0.170	0.160

PLATTE RIVER BASIN
06800500 ELKHORN RIVER AT WATERLOO, NE--Continued

WATER QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	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 15...	1.70	1.70	1.00	1.20	2.0	3.0	4.7	0.840	0.430	0.370
JAN 10...	2.30	2.30	0.800	0.830	1.1	1.9	4.2	0.680	0.390	0.370
MAR 12...	2.20	2.10	0.410	0.440	2.2	2.6	4.8	0.680	0.270	0.230
MAY 11...	0.280	0.230	0.030	0.020	0.77	0.80	1.1	0.230	0.040	0.030
JUL 07...	3.00	3.00	0.110	0.140	1.1	1.2	4.2	0.410	0.230	0.200

DATE	TIME	ALUM- NUM, 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 15...	1130	<10	180	<3	11	20	100
MAR 12...	0945	40	170	<3	64	18	20
MAY 11...	1100	<10	120	<3	<3	23	9
JUL 07...	1030	40	170	<3	23	10	<1

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 15...	<10	2	5	<1.0	350	<6
MAR 12...	<10	3	6	<1.0	310	<6
MAY 11...	<10	2	8	<1.0	390	<6
JUL 07...	<10	5	4	<1.0	250	<6

DATE	TIME	DISCHARGE, INST. FT ³ /S (00061)	TEMPER- ATURE WATER (°C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 15...	1130	728	3.0	201	395	95
JAN 10...	1100	840	0.5	271	615	32
MAR 12...	0945	2420	2.0	1300	8490	85
MAY 11...	1100	878	19.0	158	375	69
JUL 07...	1030	2090	22.0	4490	25300	98

06801000 PLATTE RIVER NEAR ASHLAND, NE

LOCATION.--Lat 41°03'44", long 96°19'28", in SE1/4SW1/4 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 National Vertical Datum of 1929. 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1840	e3500	3930	4870	e5600	5430	7980	5320	3870	3710	7850	7240
2	1890	e2200	3550	5130	e5400	5460	7250	4590	3860	4450	8330	7560
3	1910	e2000	4240	5250	e5400	6320	6720	4590	4010	4280	7270	7790
4	1850	e2000	2380	5590	e5300	5520	6440	4270	4650	4680	6120	8540
5	1900	1920	1600	5630	e5400	5890	6760	3870	4550	4040	6000	7730
6	1940	1900	1830	5800	5280	6510	6670	3890	4750	4780	5870	6900
7	1970	1710	2570	5590	5390	7040	6420	3920	5130	7060	12100	7280
8	2040	1630	3530	5440	5510	7080	6350	3250	8470	6750	8270	8870
9	2250	2560	4090	5410	4870	8490	5670	3350	6800	6040	15500	10100
10	2200	3080	5170	5010	4800	8850	6050	3500	5720	5750	11800	8150
11	2270	3660	5720	5760	5670	11600	6020	3140	5190	5400	9710	6880
12	2290	4940	6030	5630	5890	10800	5890	3330	5380	5550	9440	6360
13	2240	7400	6450	6220	4530	9100	5480	3270	6600	6360	7470	5710
14	2330	8740	6670	5860	5370	8660	5880	3070	5890	7110	6840	5520
15	2580	7880	6300	4080	6060	8440	5660	2830	5810	5820	6520	5740
16	2720	6620	e5600	2330	5480	8430	5740	3260	6770	4950	8360	5530
17	2740	5950	e5200	3250	6270	8190	5630	7400	23100	4190	7010	4780
18	2570	5620	e4800	3630	6110	8150	5360	16100	13800	4240	6510	4320
19	2670	5330	e4400	2620	6200	8170	5480	13200	8330	3850	6020	4250
20	2390	5090	4090	2600	6350	8550	5450	8290	6650	3710	5910	4160
21	2540	5020	4270	4980	6420	8140	5910	6580	6000	3380	5470	4430
22	2760	4890	4610	7500	6070	8490	6050	6510	5060	3620	5400	4550
23	2760	4760	5140	5430	5720	7670	5470	6100	4860	3280	5200	4090
24	2710	4310	5290	5600	5800	7620	6140	5950	4670	3820	4900	4210
25	2610	3840	5190	5660	5840	6910	5970	5470	4660	5210	4670	3830
26	2400	3890	5110	5530	5700	6900	5610	4580	4670	13100	4850	3870
27	3090	4190	4890	5600	6110	6720	5510	4420	4870	13200	6320	3970
28	3070	4680	4710	6020	5450	7200	5700	4250	4620	9210	10700	3930
29	2780	4350	4470	5700	5730	7790	5470	4010	3960	7730	8450	3810
30	3040	4750	4940	6140	---	8270	4910	3690	3560	7700	7290	3690
31	3060	---	4610	5860	---	8480	---	3910	---	8420	6880	---
TOTAL	75410	128410	141380	159720	163720	240870	179640	159910	186260	181390	233030	173790
MEAN	2433	4280	4561	5152	5646	7770	5988	5158	6209	5851	7517	5793
MAX	3090	8740	6670	7500	6420	11600	7980	16100	23100	13200	15500	10100
MIN	1840	1630	1600	2330	4530	5430	4910	2830	3560	3280	4670	3690
AC-FT	149600	254700	280400	316800	324700	477800	356300	317200	369400	359800	462200	344700

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1992, BY WATER YEAR (WY)

	MEAN	3284	3956	3781	4701	5715	7316	5323	5356	9197	3760	3347	3860
MAX	4411	4280	4561	5868	6272	9980	5988	7340	13990	5851	7517	6329	
(WY)	1989	1992	1992	1990	1991	1989	1992	1991	1990	1992	1992	1989	
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	

SUMMAR STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1989 - 1992

ANNUAL TOTAL	1738216	2023530	
ANNUAL MEAN	4762	5529	*4954
HIGHEST ANNUAL MEAN			5529 1992
LOWEST ANNUAL MEAN			4612 1989
HIGHEST DAILY MEAN	40000 Jun 6	23100 Jun 17	62700 Jun 18 1990
LOWEST DAILY MEAN	662 Sep 2	1600 Dec 5	662 Sep 2 1991
ANNUAL SEVEN-DAY MINIMUM	701 Aug 29	1900 Oct 1	701 Aug 29 1991
INSTANTANEOUS PEAK FLOW		26100 Jun 17	**107000 Jun 12 1944
INSTANTANEOUS PEAK STAGE		18.15 Jun 17	***8.10 Jun 12 1944
ANNUAL RUNOFF (AC-FT)	3448000	4014000	3589000
10 PERCENT EXCEEDS	7790	8270	7620
50 PERCENT EXCEEDS	4280	5440	4470
90 PERCENT EXCEEDS	1360	2700	1840

e Estimated.

* Average discharge, since storage in Lake McConaughy, water years 1942-52, 5961 ft³/s.

** Includes overbank flow caused by breaking of dikes.

*** Site and datum then in use.

PLATTE RIVER BASIN
06803000 SALT CREEK AT ROCA, NE

LOCATION.--Lat 40°39'29", long 96°39'55", in NW1/4SW1/4 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 National Geodetic Vertical Datum of 1929, Kansas City supplementary adjustment of 1943. Prior to May 16, 1956, nonrecording gage at present site and datum.

REMARKS.--Records good except for periods of estimated record, which are fair. Flood flow affected by several detention dams.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN ALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	4.6	4.3	6.5	6.0	6.0	11	9.1	7.4	4.9	e250	8.8
2	1.5	4.1	4.4	8.7	6.0	6.1	10	8.8	10	5.0	e165	295
3	1.4	3.5	3.9	8.2	5.8	6.0	10	9.0	9.4	4.5	143	45
4	1.4	3.1	3.9	7.0	5.6	6.2	7.8	7.7	8.1	4.9	103	24
5	1.6	3.5	3.9	7.7	5.4	9.1	7.0	7.9	12	9.9	79	20
6	2.0	4.1	4.1	9.3	5.6	12	6.3	7.4	213	11	67	22
7	1.6	4.0	4.3	8.8	5.7	10	7.0	7.2	35	8.0	60	16
8	1.6	3.7	4.5	8.5	5.8	9.3	6.7	7.1	17	7.2	51	13
9	1.2	3.6	4.6	8.6	5.8	8.0	7.4	8.1	12	6.5	44	12
10	.94	4.0	4.3	7.1	5.9	6.7	6.7	7.8	11	7.9	39	10
11	1.0	4.2	4.2	7.4	5.7	6.4	6.3	8.1	11	7.6	33	9.2
12	1.0	4.7	6.0	7.9	5.8	6.3	5.7	8.5	9.5	10	30	8.4
13	1.1	5.4	10	9.0	5.9	6.0	5.4	8.6	7.9	822	27	7.8
14	.96	5.8	5.7	8.3	6.1	5.7	5.7	7.0	7.0	94	33	7.1
15	1.3	5.1	4.7	5.9	7.0	6.3	6.3	7.3	6.8	31	29	6.8
16	1.7	4.5	4.5	6.9	6.9	6.0	7.4	8.7	6.5	22	25	6.9
17	1.6	4.3	5.0	6.7	6.5	6.3	7.7	29	41	17	22	7.4
18	1.5	5.3	4.2	6.7	7.7	8.6	7.8	16	25	14	21	8.5
19	1.5	5.0	4.6	6.3	7.9	12	8.7	10	8.6	63	19	7.9
20	1.6	4.2	5.2	6.7	7.2	11	9.1	8.6	5.9	27	18	7.4
21	1.8	3.7	5.4	6.7	6.8	11	11	7.6	5.3	13	15	7.2
22	2.1	3.8	5.8	8.1	6.4	10	11	9.0	5.2	50	14	6.9
23	1.9	3.9	10	9.8	6.3	9.5	94	7.6	5.0	38	12	5.8
24	2.0	3.5	12	8.2	6.5	8.6	36	6.7	4.6	633	11	5.8
25	2.5	3.6	7.8	7.2	6.3	8.6	14	6.8	6.8	5040	11	5.4
26	2.4	3.7	6.3	6.5	6.1	8.6	11	6.7	5.0	852	13	6.3
27	2.9	4.3	5.9	6.3	6.2	8.2	10	6.6	4.8	398	13	6.6
28	3.0	4.6	5.7	6.3	6.3	9.5	9.6	6.2	4.8	e300	11	6.4
29	3.9	4.9	5.7	6.3	6.3	82	9.3	5.8	4.9	e230	10	5.9
30	3.0	5.5	5.0	6.4	---	27	9.5	5.7	5.4	e800	8.7	6.3
31	3.7	---	5.2	6.1	---	15	---	5.4	---	e380	8.6	---
TOTAL	57.20	128.2	171.1	230.1	181.5	352.0	365.4	266.0	515.9	9911.4	1385.3	605.8
MEAN	1.85	4.27	5.52	7.42	6.26	11.4	12.2	8.58	17.2	320	44.7	20.2
MAX	3.9	5.8	12	9.8	7.9	82	94	29	213	5040	250	295
MIN	.94	3.1	3.9	5.9	5.4	5.7	5.4	5.4	4.6	4.5	8.6	5.4
AC-FT	113	254	339	456	360	698	725	528	1020	19660	2750	1200

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1992, BY WATER YEAR (WY)

	MEAN	41.0	13.8	14.3	18.3	36.5	89.4	64.9	67.4	82.0	65.3	31.0	21.4
MAX	617	71.9	108	140	180	641	355	420	666	412	496	220	
(WY)	1974	1987	1987	1973	1958	1979	1987	1959	1984	1958	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1952 - 1992

ANNUAL TOTAL	2504.86	14169.90	45.5
ANNUAL MEAN	6.86	38.7	200
HIGHEST ANNUAL MEAN			6.15
LOWEST ANNUAL MEAN			1987
HIGHEST DAILY MEAN	136	5040	6070
LOWEST DAILY MEAN	.94	.94	.20
ANNUAL SEVEN-DAY MINIMUM	1.1	1.1	.61
INSTANTANEOUS PEAK FLOW		7710	16700
INSTANTANEOUS PEAK STAGE		21.76	22.70
ANNUAL RUNOFF (AC-FT)	4970	28110	32970
10 PERCENT EXCEEDS	10	29	63
50 PERCENT EXCEEDS	5.2	6.9	9.5
90 PERCENT EXCEEDS	1.6	3.7	3.7

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.--684 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 National Geodetic Vertical Datum of 1929. 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.

ISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	52	54	119	67	51	79	79	158	46	608	93
2	52	55	56	84	65	50	73	74	83	58	442	542
3	48	46	29	71	65	51	69	66	77	63	355	373
4	50	50	46	60	66	77	68	67	71	49	294	147
5	48	75	50	115	64	203	66	57	166	225	253	308
6	42	73	52	74	65	107	67	55	386	229	221	169
7	48	54	52	78	65	84	92	56	221	314	504	142
8	50	51	50	76	60	69	70	60	119	165	303	119
9	49	66	50	61	58	79	71	58	93	127	213	114
10	50	78	49	56	62	58	73	50	85	94	194	106
11	49	71	47	57	65	66	63	74	77	123	176	96
12	45	97	258	86	68	64	60	62	70	394	159	92
13	42	90	106	74	68	66	65	58	62	3520	185	88
14	43	82	76	60	90	62	65	61	55	981	226	98
15	46	77	61	26	84	56	67	63	58	298	159	93
16	50	66	57	57	66	62	81	334	118	200	138	145
17	46	108	56	62	99	64	65	199	374	153	126	122
18	43	112	46	53	139	183	64	137	157	128	121	140
19	42	65	54	55	78	108	85	115	113	131	110	86
20	44	60	88	63	70	89	92	103	74	156	102	83
21	47	56	49	65	65	75	140	129	55	106	97	83
22	48	67	71	132	62	66	142	151	56	241	89	81
23	49	65	167	86	58	66	228	151	56	183	81	77
24	60	52	77	72	66	66	174	102	67	522	82	73
25	48	52	64	70	59	63	120	124	55	5440	139	70
26	47	62	59	63	56	60	93	101	54	4310	97	113
27	46	71	54	65	58	60	83	100	51	681	96	66
28	133	63	53	65	57	159	79	92	49	444	88	66
29	58	127	52	67	53	137	78	76	50	340	81	65
30	50	95	55	68	---	129	75	70	46	3820	72	66
31	56	---	54	69	---	97	---	64	---	1670	72	---
TOTAL	1583	2138	2092	2209	1998	2627	2647	2988	3156	25211	5883	3916
MEAN	51.1	71.3	67.5	71.3	68.9	84.7	88.2	96.4	105	813	190	131
MAX	133	127	258	132	139	203	228	334	386	5440	608	542
MIN	42	46	29	26	53	50	60	50	46	46	72	65
AC-FT	3140	4240	4150	4380	3960	5210	5250	5930	6260	50010	11670	7770

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1992, BY WATER YEAR (WY)

	MEAN	173	100	89.8	101	167	341	283	346	485	275	179	171
MAX	1621	304	349	350	577	1972	1383	1495	3061	1713	704	1075	
(WY)	1974	1987	1987	1974	1958	1987	1987	1984	1951	1958	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1950 - 1992

ANNUAL TOTAL	31427		56448										
ANNUAL MEAN	86.1		154										
HIGHEST ANNUAL MEAN										226			
LOWEST ANNUAL MEAN										721			1987
HIGHEST DAILY MEAN	1000	Jul 9	5440	Jul 25						81.4			1970
LOWEST DAILY MEAN	29	Jul 7	26	Jan 15						22100	Jun	2	1951
ANNUAL SEVEN-DAY MINIMUM	38	Jul 2	45	Oct 13						21	Jul	10	1977
INSTANTANEOUS PEAK FLOW			7310	Jul 26						26	May	19	1956
INSTANTANEOUS PEAK STAGE			12.39	Jul 26						28200	Jun	2	1951
ANNUAL RUNOFF (AC-FT)	62340		112000							26.15	Jun	2	1951
10 PERCENT EXCEEDS	133		201							163800			
50 PERCENT EXCEEDS	64		71							362			
90 PERCENT EXCEEDS	45		50							88			
										50			

PLATTE RIVER BASIN

06803510 LITTLE SALT CREEK NEAR LINCOLN, NE

LOCATION.--Lat 40°53'36", long 96°40'52", in NW1/4SW1/4 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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992

DAY	MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	4.6	7.0	5.7	6.4	6.9	e6.2	4.4	3.5	5.4	e5.6	2.7
2	3.9	4.6	6.1	6.2	6.2	7.5	e6.0	4.2	4.2	5.5	e5.0	27
3	4.0	4.6	4.5	5.6	6.6	7.4	e5.8	3.9	6.0	5.9	e4.6	6.1
4	3.7	e4.0	3.8	4.9	6.8	8.8	e5.6	3.8	5.8	5.9	e4.4	3.0
5	3.4	e4.2	4.1	7.7	e6.2	13	e5.6	3.6	5.7	19	e4.3	4.1
6	3.2	e4.2	4.6	6.5	e7.0	12	e5.6	3.4	6.2	9.3	e4.2	4.1
7	3.1	e4.4	4.6	5.1	e6.4	7.6	e7.0	3.6	5.5	25	e4.2	3.0
8	2.9	e4.6	4.5	5.5	e5.8	7.3	e6.6	4.1	5.3	17	e4.0	2.8
9	2.8	e4.6	4.4	5.8	e6.0	7.6	e6.0	4.6	5.9	7.8	e4.0	2.8
10	2.6	4.9	4.5	e5.8	e6.2	7.0	e5.8	4.8	6.4	8.6	e3.9	2.6
11	2.6	4.9	4.6	7.0	e6.0	6.9	e5.8	4.8	6.5	16	4.0	2.3
12	3.2	4.9	10	7.8	e5.6	e6.8	e5.4	e4.4	6.5	69	3.8	2.1
13	3.1	5.7	6.1	9.5	5.0	e6.6	e5.4	e4.0	6.5	e700	3.7	1.8
14	3.8	6.8	4.7	e7.4	4.8	e6.6	e5.2	e3.9	6.5	e150	5.3	2.1
15	4.1	6.5	5.7	e6.0	5.1	e6.4	e5.2	e3.8	5.6	e15	4.5	2.3
16	3.9	6.1	6.1	e6.8	5.3	e6.4	e5.2	e3.8	8.1	7.3	3.5	e4.1
17	3.5	6.6	e5.8	e6.4	5.5	e6.2	5.2	e10	12	7.0	3.5	e3.0
18	3.8	10	e5.6	e6.0	5.2	e6.0	5.1	e6.0	6.7	6.7	3.1	e2.6
19	4.0	8.1	e6.0	7.2	5.6	e8.8	5.7	e5.0	6.7	6.5	2.2	e2.5
20	4.0	7.6	6.3	6.2	5.4	e6.6	5.3	e10	5.5	7.2	2.3	e2.4
21	4.0	7.5	6.5	5.7	4.6	e6.4	6.4	22	5.4	7.0	2.4	e2.3
22	3.8	7.1	7.7	6.8	4.9	e6.2	8.1	120	4.8	12	2.3	e2.3
23	3.9	7.0	15	7.9	5.3	e6.2	11	27	3.7	9.8	2.2	e2.3
24	4.2	e6.4	7.3	6.1	5.4	e6.2	8.7	7.7	3.7	7.2	2.2	e2.2
25	4.2	e6.6	6.2	5.8	5.4	e6.2	7.0	5.2	4.2	7.9	2.7	e2.3
26	4.3	6.7	5.6	5.9	5.5	e6.4	5.9	4.5	4.5	5.9	3.9	e3.0
27	4.3	6.4	5.5	5.8	5.9	e6.2	5.5	7.9	5.2	4.9	3.1	e2.5
28	4.2	6.2	7.5	5.7	5.8	e10	5.4	8.4	5.4	4.6	3.4	e2.4
29	4.4	6.7	9.3	5.7	6.6	e7.4	5.2	7.5	5.4	4.6	3.8	e2.3
30	4.5	9.1	8.9	6.0	---	e7.0	4.3	6.1	5.4	e8.0	3.7	e2.2
31	4.6	---	6.8	6.3	---	e6.6	---	4.7	---	e6.4	2.7	---
TOTAL	116.2	181.6	195.3	196.8	166.5	227.2	181.2	317.1	172.8	1172.4	112.5	107.2
MEAN	3.75	6.05	6.30	6.35	5.74	7.33	6.04	10.2	5.76	37.8	3.63	3.57
MAX	4.6	10	15	9.5	7.0	13	11	120	12	700	5.6	27
MIN	2.6	4.0	3.8	4.9	4.6	6.0	4.3	3.4	3.5	4.6	2.2	1.8
AC-FT	230	360	387	390	330	451	359	629	343	2330	223	213

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1992, BY WATER YEAR (WY)

MEAN	11.5	7.27	6.32	7.55	12.5	27.4	18.9	20.3	22.2	16.2	12.2	11.4
MAX	87.5	20.5	16.8	25.3	42.3	134	68.6	82.7	180	89.9	110	87.2
(WY)	1987	1973	1987	1973	1971	1979	1987	1984	1984	1985	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1969 - 1992

ANNUAL TOTAL	2383.7	3146.8	
ANNUAL MEAN	6.53	8.60	
MEDIAN OF ANNUAL MEANS			14.6
HIGHEST ANNUAL MEAN			11.9
LOWEST ANNUAL MEAN			41.8
HIGHEST DAILY MEAN	353 Jul 9	700 Jul 13	2820 Jun 13 1984
LOWEST DAILY MEAN	1.4 Aug 14	1.8 Sep 13	.20 Sep 29 1969
ANNUAL SEVEN-DAY MINIMUM	1.8 Aug 10	2.3 Sep 9	.28 Sep 28 1969
INSTANTANEOUS PEAK FLOW (STAGE)		1090 Jul 13	8000(*18.24) Jul 19 1985
INSTANTANEOUS PEAK STAGE		*11.77 Jul 13	20.02 Aug 25 1987
ANNUAL RUNOFF (AC-FT)	4730	6240	10550
10 PERCENT EXCEEDS	8.1	8.1	19
50 PERCENT EXCEEDS	4.6	5.6	5.1
90 PERCENT EXCEEDS	2.5	3.0	2.2

e Estimated.

* From floodmark.

PLATTE RIVER BASIN

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06803520 STEVENS CREEK NEAR LINCOLN, NE

LOCATION.--Lat 40°51'25", long 96°35'42", in NW1/4NE1/4 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 National Geodetic Vertical Datum of 1929.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	e1.4	2.2	2.2	2.9	2.9	5.3	5.6	3.6	2.5	6.6	2.2
2	.18	e1.3	1.8	3.0	2.9	2.8	4.9	5.1	4.4	2.5	5.5	221
3	.30	e1.2	1.6	3.0	2.9	2.7	4.7	4.8	4.2	2.5	4.9	9.2
4	e.30	e1.2	1.2	2.8	2.9	2.6	4.6	4.7	4.0	2.7	4.6	5.3
5	e.36	e1.3	1.3	2.7	2.8	5.4	4.5	4.4	3.3	4.7	4.3	45
6	.30	e1.3	1.5	3.4	2.7	12	4.3	4.3	9.3	6.0	3.9	8.8
7	.36	e1.2	1.7	3.3	2.7	6.5	4.2	4.3	6.5	24	7.8	4.9
8	.36	e1.2	1.8	3.2	2.6	5.2	4.1	4.1	4.4	6.3	6.3	3.9
9	.49	e1.3	1.5	3.0	2.6	4.7	4.1	4.1	4.0	3.9	4.7	3.7
10	.36	e1.3	1.5	2.8	2.6	4.4	4.2	4.2	4.1	4.0	4.4	3.6
11	.39	e1.3	1.5	2.8	2.6	4.3	4.1	3.8	4.1	4.2	4.1	3.1
12	.36	e1.4	3.6	2.8	2.6	4.3	4.1	4.0	3.9	8.4	3.7	3.1
13	.36	1.4	4.1	3.1	2.7	4.2	3.9	4.0	3.7	806	3.5	2.7
14	e.49	1.6	2.4	3.1	3.0	4.1	3.8	3.7	3.4	33	3.7	2.5
15	.56	1.3	1.8	3.0	3.3	3.9	3.9	3.7	3.0	11	4.1	2.3
16	.64	1.2	1.8	2.6	3.4	3.9	4.2	5.8	2.9	8.3	3.3	2.5
17	.74	1.3	1.8	2.8	3.3	3.8	5.0	19	7.7	6.6	3.2	2.7
18	.88	1.5	1.6	2.9	3.8	4.8	4.8	7.1	5.2	5.9	3.3	12
19	1.0	1.4	1.6	2.9	4.2	7.8	4.8	5.2	3.6	5.1	2.8	4.1
20	1.3	1.2	1.9	2.8	3.5	6.8	4.8	4.7	2.8	4.6	2.7	3.6
21	1.3	.99	2.1	2.8	3.2	6.2	5.8	4.2	2.6	4.5	2.7	3.0
22	1.3	.89	2.2	3.2	2.9	5.7	7.8	4.3	2.6	5.4	2.2	2.7
23	1.3	.88	7.7	5.1	3.1	5.1	71	4.3	2.7	6.1	2.2	2.7
24	1.1	1.1	4.1	3.8	2.8	4.9	51	4.1	2.9	7.4	2.3	2.3
25	1.1	1.1	2.9	3.3	2.8	4.8	13	3.9	3.0	319	2.4	2.3
26	1.3	1.2	2.5	3.0	2.8	4.6	9.4	3.9	2.7	12	2.4	2.0
27	1.2	1.5	2.2	2.9	2.8	4.3	7.7	4.0	2.6	7.7	2.4	2.1
28	1.4	2.0	2.1	2.9	2.8	4.5	7.3	3.8	2.6	6.2	2.4	2.0
29	e1.3	2.1	2.0	2.9	2.9	6.6	6.6	3.4	2.6	5.3	2.4	1.5
30	e1.4	3.1	2.0	2.9	---	6.9	6.0	3.4	2.6	39	2.0	1.7
31	e1.4	---	2.0	2.9	---	5.9	---	3.2	---	11	2.3	---
TOTAL	23.94	41.16	70.0	93.9	86.1	156.6	273.9	149.1	115.0	1375.8	113.1	368.5
MEAN	.77	1.37	2.26	3.03	2.97	5.05	9.13	4.81	3.83	44.4	3.65	12.3
MAX	1.4	3.1	7.7	5.1	4.2	12	71	19	9.3	806	7.8	221
MIN	.11	.88	1.2	2.2	2.6	2.6	3.8	3.2	2.6	2.5	2.0	1.5
AC-FT	47	82	139	186	171	311	543	296	228	2730	224	731

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1992, BY WATER YEAR (WY)

	MEAN	15.5	5.39	6.03	7.43	13.5	32.9	25.4	27.8	26.6	19.6	11.3	18.8
MAX	151	25.0	30.7	34.9	59.9	192	118	127	228	124	89.6	260	
(WY)	1974	1987	1987	1974	1983	1979	1987	1984	1984	1990	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1969 - 1992

ANNUAL TOTAL	1607.53	2867.10	
ANNUAL MEAN	4.40	7.83	17.5
MEDIAN OF ANNUAL MEANS			14
HIGHEST ANNUAL MEAN			52.8
LOWEST ANNUAL MEAN			1.84
HIGHEST DAILY MEAN	162 Jun 5	806 Jul 13	4810 Sep 8 1989
LOWEST DAILY MEAN	.08 Sep 29	.11 Oct 1	.00 Jul 31 1977
ANNUAL SEVEN-DAY MINIMUM	.10 Sep 25	.27 Oct 1	.00 Jul 29 1977
INSTANTANEOUS PEAK FLOW (STAGE)		1690 Jul 13	12900 (19.42) Sep 8 1989
INSTANTANEOUS PEAK STAGE		10.99 Jul 13	19.57 Jun 13 1984
ANNUAL RUNOFF (AC-FT)	3190	5690	12690
10 PERCENT EXCEEDS	6.8	6.6	23
50 PERCENT EXCEEDS	1.9	3.1	3.1
90 PERCENT EXCEEDS	.42	1.3	.70

PLATTE RIVER BASIN

06803525 SALT CREEK BELOW STEVENS CREEK, NEAR WAVERLY, NE

LOCATION.--Lat 40°54'18", long 96°35'09", in NW1/4SW1/4 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 to September 1992 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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)	OXYGEN, DIS- SOLVED (MG/L) (00300)	COLI- FORM, FECAL, 0.7 μ M-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)	SODIUM, DIS- SOLVED (MG/L AS Na) (00930)
OCT												
	07...1330	70	8100	8.1	14.5	11.3	K80000	640	350	89	31	1600
NOV												
	22...1545	91	7760	8.0	8.0	9.8	K9600	980	340	85	31	1400
DEC												
	18...1015	40	7440	8.0	1.5	11.4	K19000	4100	340	89	29	1400
JAN												
	10...1400	82	--	7.8	3.0	8.6	K21000	K4400	340	89	29	1200
FEB												
	19...1315	90	5760	7.9	6.5	--	--	110000	310	81	26	1000
MAR												
	13...0930	70	6870	7.9	3.0	8.0	K12000	9600	360	91	32	1300
APR												
	10...1130	100	7030	8.0	16.0	11.9	370	K36	350	88	32	1400
MAY												
	13...1530	80	7670	7.8	22.5	13.9	1300	830	370	93	34	1700
JUN												
	09...1000	110	5570	7.9	19.0	6.2	830	1300	310	80	27	1100
JUL												
	07...1300	400	1240	7.3	24.0	4.2	41000	K210000	88	25	6.1	200
AUG												
	11...1500	200	4030	7.6	25.5	6.7	1600	230	290	75	24	720
SEP												
	21...1400	100	6620	8.0	22.0	--	K1500	K170	360	90	32	1300

DATE	SODIUM ADSORP- 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)	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 TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)
OCT												
	07... 37	20	275	420	2400	1.6	25	4790	6.52	906	5.80	5.50
NOV												
	22... 33	17	265	360	2300	1.5	25	4400	5.99	1080	2.08	2.08
DEC												
	18... 33	18	273	340	1900	1.7	25	3990	5.43	431	2.63	2.73
JAN												
	10... 28	3.0	271	320	1700	0.90	24	3550	4.83	786	2.53	2.54
FEB												
	19... 25	13	253	300	1500	0.80	20	3110	4.23	756	1.68	1.79
MAR												
	13... 30	14	277	320	1800	0.80	20	3760	5.12	711	2.57	2.48
APR												
	10... 32	15	265	380	2100	1.0	17	4210	5.73	1140	2.29	2.39
MAY												
	13... 38	16	288	390	2300	0.90	19	4750	6.46	1030	2.70	2.73
JUN												
	09... 27	15	230	290	1500	1.0	20	3200	4.35	950	3.93	3.94
JUL												
	07... 9	8.7	108	62	280	0.10	8.1	664	0.90	717	1.63	1.63
AUG												
	11... 19	13	215	210	1000	0.70	16	2200	2.99	1190	1.87	1.87
SEP												
	21... 30	15	276	340	2100	0.40	21	4080	5.55	1100	1.97	1.97

PLATTE RIVER BASIN

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06803525 SALT CREEK BELOW STEVENS CREEK, NEAR WAVERLY, NE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	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)
OCT 07...	1.10	1.10	6.90	6.60	1.90	1.80	0.70	2.6	9.5	3.60	3.10
NOV 22...	0.920	0.920	3.00	3.00	3.10	3.00	0.50	3.6	6.6	2.70	2.60
DEC 18...	0.370	0.370	3.00	3.10	3.00	3.00	0.90	3.9	6.9	2.10	1.90
JAN 10...	0.270	0.260	2.80	2.80	4.30	4.10	1.1	5.4	8.2	1.90	1.50
FEB 19...	0.220	0.210	1.90	2.00	3.70	3.70	1.4	5.1	7.0	1.40	1.10
MAR 13...	0.330	0.320	2.90	2.80	1.50	1.40	1.0	2.5	5.4	1.40	1.10
APR 10...	0.410	0.410	2.70	2.80	2.10	1.90	1.0	3.1	5.8	1.80	1.60
MAY 13...	0.800	0.770	3.50	3.50	2.30	2.20	1.0	3.3	6.8	1.90	1.80
JUN 09...	0.870	0.860	4.80	4.80	1.90	1.80	0.90	2.8	7.6	1.30	0.970
JUL 07...	0.170	0.170	1.80	1.80	0.410	0.500	1.3	1.7	3.5	0.580	0.270
AUG 11...	0.230	0.230	2.10	2.10	0.720	0.700	1.2	1.9	4.0	0.950	0.730
SEP 21..	0.730	0.730	2.70	2.70	2.40	2.40	1.0	3.4	6.1	1.70	1.60

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)
NOV 22...	3	<100	<1	<1	--	60	<1
FEB 19...	3	100	<1	4	6	930	3
MAY 13...	6	<100	<1	2	3	810	<2
AUG 11...	8	200	2	<1	7	2600	5

DATE	MANGA- NESE, TOTAL RECOV- ERABLE (µG/L AS MN) (01055)	MERCURY TOTAL RECOV- ERABLE (µG/L AS HG) (71900)	SELE- NIUM, TOTAL (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)
NOV 22...	150	<0.10	2	<1	50	9.2
FEB 19...	260	0.20	1	<1	30	11
MAY 13...	300	<0.10	1	<1	20	9.9
AUG 11...	220	<0.10	1	<1	40	11

PLATTE RIVER BASIN
06803530 ROCK CREEK NEAR CERESCO, NE

LOCATION.--Lat 41°00'56", long 96°32'39", in NE1/4NE1/4 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.--119 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 National Geodetic Vertical Datum of 1929. Prior to Feb. 6, 1980, at present site at datum 3.0 ft higher. July 14, 1981 to Feb. 29, 1984, on left bank 30 ft downstream from bridge at present datum.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	6.8	14	22	13	15	14	14	13	11	16	8.8
2	3.9	6.4	10	21	13	16	14	13	15	15	13	50
3	4.0	6.0	8.4	16	12	16	14	12	14	32	13	14
4	4.6	5.4	8.0	13	12	17	14	12	13	12	12	8.9
5	4.6	6.8	9.9	19	12	47	14	12	12	310	12	10
6	4.5	5.8	9.8	21	11	65	14	12	17	105	12	13
7	4.6	6.4	11	17	11	26	16	12	13	97	88	9.6
8	5.2	8.0	11	15	10	21	15	12	13	32	29	8.2
9	5.1	10	10	12	9.0	23	15	12	13	13	13	8.2
10	6.0	11	11	12	11	19	14	12	14	13	12	7.9
11	5.9	10	11	13	10	18	14	12	15	49	12	7.9
12	6.1	12	38	16	9.9	17	13	12	15	577	11	7.8
13	6.4	12	28	17	11	16	13	11	14	789	11	8.2
14	6.3	11	13	15	12	16	13	10	14	102	12	9.1
15	6.7	12	11	e14	15	15	13	11	14	24	12	11
16	7.4	10	11	e14	15	15	13	14	59	20	11	8.8
17	8.4	12	9.7	e13	17	15	13	15	164	18	11	8.3
18	8.2	19	9.6	e13	22	16	13	13	20	17	11	7.7
19	8.7	12	9.5	13	18	17	14	12	13	16	11	7.5
20	8.7	9.7	11	13	16	16	13	12	12	16	10	7.5
21	8.2	9.0	11	13	15	15	15	13	11	15	10	8.0
22	7.8	8.9	11	18	15	14	21	41	12	20	9.9	7.7
23	8.1	8.5	53	20	15	14	67	31	11	19	9.8	7.4
24	7.6	8.2	18	16	15	14	51	13	11	16	9.5	7.4
25	7.8	7.6	13	14	15	14	23	12	12	17	10	7.4
26	8.6	8.5	12	14	15	15	17	12	11	16	12	7.8
27	8.2	9.5	11	12	15	13	15	12	11	15	10	7.6
28	8.2	10	11	12	15	16	14	12	11	15	9.7	7.4
29	8.0	13	11	12	15	18	15	11	11	15	9.3	7.2
30	7.4	19	11	12	---	16	13	11	11	493	8.8	7.5
31	7.0	---	11	12	---	15	---	11	---	61	8.5	---
TOTAL	206.3	294.5	427.9	464	394.9	590	527	424	589	2970	439.5	297.8
MEAN	6.65	9.82	13.8	15.0	13.6	19.0	17.6	13.7	19.6	95.8	14.2	9.93
MAX	8.7	19	53	22	22	65	67	41	164	789	88	50
MIN	3.9	5.4	8.0	12	9.0	13	13	10	11	11	8.5	7.2
AC-FT	409	584	849	920	783	1170	1050	841	1170	5890	872	591

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1992, BY WATER YEAR (WY)

	MEAN	26.4	15.7	14.9	16.0	34.6	64.3	46.2	55.3	53.8	35.7	54.1	24.8
MAX	191	45.5	44.8	63.3	116	260	236	145	239	153	527	128	
(WY)	1987	1978	1985	1973	1983	1979	1984	1972	1982	1990	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1971 - 1992

ANNUAL TOTAL	8253.2	7624.9	
ANNUAL MEAN	22.6	20.8	36.9
MEDIAN OF ANNUAL MEANS			27.6
HIGHEST ANNUAL MEAN			123
LOWEST ANNUAL MEAN			8.68
HIGHEST DAILY MEAN	1320 Jul 9	789 Jul 13	11400 Aug 25 1987
LOWEST DAILY MEAN	2.6 Aug 30	3.9 Oct 2	.25 Jul 13 1976
ANNUAL SEVEN-DAY MINIMUM	3.1 Aug 27	4.3 Oct 1	1.1 Jul 11 1976
INSTANTANEOUS PEAK FLOW		1290 Jul 12	23300 Aug 25 1987
INSTANTANEOUS PEAK STAGE		7.81 Jul 12	*19.60 Aug 25 1987
ANNUAL RUNOFF (AC-FT)	16370	15120	26700
10 PERCENT EXCEEDS	21	20	44
50 PERCENT EXCEEDS	11	12	12
90 PERCENT EXCEEDS	4.3	7.7	5.5

e Estimated.

* From floodmark.

06803555 SALT CREEK AT GREENWOOD, NE

LOCATION.--Lat 40°57'56", long 96°27'01", at center of sec.31, T.12 N., R.9 E., Cass County, Hydrologic Unit 10200203, on right bank just downstream from county road bridge, 0.5 mi west of Greenwood, and at mile 13.0.

DRAINAGE AREA.--1,051 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 National Geodetic Vertical Datum of 1929 Prior to Nov. 5, 1964, nonrecording gage at same site and datum.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	e92	136	147	108	104	135	137	175	118	789	125
2	73	e88	121	172	108	103	130	132	162	125	566	1100
3	71	e90	118	135	107	101	125	126	130	151	454	564
4	73	e110	101	122	107	103	119	124	120	130	379	232
5	79	135	143	157	106	270	117	121	113	424	337	659
6	76	112	128	161	105	379	114	119	468	556	301	290
7	75	94	106	132	104	186	134	118	321	824	822	204
8	75	e120	103	137	103	153	128	118	202	405	521	170
9	73	e130	102	129	104	160	122	119	151	209	318	154
10	74	127	101	118	103	146	122	114	137	224	268	147
11	76	125	99	115	102	137	119	118	130	196	247	139
12	75	141	306	126	105	136	116	121	124	910	230	132
13	73	174	229	142	105	131	116	114	119	6160	219	129
14	74	152	149	123	109	126	117	112	114	1860	350	130
15	76	146	127	102	136	120	117	113	113	577	231	133
16	77	137	119	138	113	119	126	281	154	342	206	131
17	76	146	116	147	117	118	125	283	575	264	210	191
18	76	207	111	147	183	178	123	193	321	226	191	386
19	76	146	110	144	144	219	141	162	188	211	181	146
20	79	130	137	133	123	156	133	141	147	230	173	133
21	79	125	122	110	115	141	186	154	132	203	166	129
22	81	122	114	155	113	134	215	187	126	323	156	124
23	81	133	311	182	110	130	526	324	125	255	149	121
24	83	124	175	127	110	124	420	157	127	233	145	116
25	92	122	134	119	113	120	258	141	136	3640	177	114
26	83	118	120	113	109	119	202	144	123	4730	191	140
27	80	137	116	113	107	115	176	125	122	977	149	116
28	116	123	111	110	106	175	163	121	121	569	141	108
29	130	134	110	110	105	199	153	116	121	437	132	107
30	92	243	108	110	---	172	143	112	121	3360	126	107
31	95	---	107	109	---	155	---	108	---	2420	123	---
TOTAL	2512	3983	4190	4085	3280	4729	4921	4555	5218	31289	8648	6477
MEAN	81.0	133	135	132	113	153	164	147	174	1009	279	216
MAX	130	243	311	182	183	379	526	324	575	6160	822	1100
MIN	71	88	99	102	102	101	114	108	113	118	123	107
AC-FT	4980	7900	8310	8100	6510	9380	9760	9030	10350	62060	17150	12850

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 1992, BY WATER YEAR (WY)

MEAN	260	152	136	151	259	510	399	486	665	399	305	258
MAX	2681	475	465	520	951	3481	2023	2370	4101	1857	1748	1534
(WY)	1974	1987	1987	1974	1983	1979	1984	1984	1958	1958	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1953 - 1992

ANNUAL TOTAL	63021	83887	
ANNUAL MEAN	173	229	
MEDIAN OF ANNUAL MEANS			332
HIGHEST ANNUAL MEAN			278
LOWEST ANNUAL MEAN			1054
HIGHEST DAILY MEAN	4500	6160	37100
LOWEST DAILY MEAN	66	71	14
ANNUAL SEVEN-DAY MINIMUM	70	74	17
INSTANTANEOUS PEAK FLOW		8890	46800
INSTANTANEOUS PEAK STAGE		11.67	26.50
ANNUAL RUNOFF (AC-FT)	125000	166400	240300
10 PERCENT EXCEEDS	257	321	524
50 PERCENT EXCEEDS	125	129	128
90 PERCENT EXCEEDS	76	101	68

PLATTE RIVER BASIN

06804000 WAHOO CREEK AT ITHACA, NE

LOCATION.--Lat 41°08'40", long 96°32'10", in NW1/4NW1/4 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.--271 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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	e26	e21	31	26	26	31	43	44	33	e52	32
2	16	e24	e20	35	26	26	31	39	56	75	e43	36
3	17	e23	e20	32	26	26	31	37	44	74	e38	36
4	17	e21	e19	28	26	27	31	36	40	33	36	35
5	17	e23	24	31	26	51	30	36	38	361	40	36
6	18	e22	23	34	25	71	29	35	40	399	39	104
7	18	e23	25	32	25	49	32	34	44	138	43	41
8	19	e24	27	32	24	37	32	34	36	124	73	44
9	17	26	28	30	23	48	32	47	36	41	37	35
10	14	25	26	25	25	45	31	34	37	35	35	29
11	16	25	26	29	26	38	32	34	37	46	37	26
12	16	25	58	31	25	36	29	33	35	1120	38	26
13	17	26	140	31	25	35	29	32	34	1150	39	27
14	17	e27	41	27	27	35	29	30	33	499	39	31
15	16	e27	28	33	30	33	30	32	33	90	41	49
16	17	e28	26	34	30	33	29	188	53	65	41	32
17	20	e28	26	30	33	32	26	249	159	59	39	26
18	20	e30	22	27	38	33	32	79	87	55	38	25
19	24	e27	23	28	35	35	34	49	38	58	38	24
20	25	23	24	26	30	33	35	42	34	55	37	24
21	26	21	25	25	28	32	39	146	33	50	36	25
22	27	21	27	29	27	31	46	150	32	64	35	25
23	28	21	53	34	27	30	62	64	31	64	35	27
24	28	22	57	31	28	31	87	47	31	57	34	26
25	28	20	31	27	28	31	83	43	31	169	40	28
26	28	20	28	24	28	30	67	43	31	323	54	26
27	29	21	25	26	27	29	55	41	30	69	44	21
28	30	22	25	26	27	33	49	39	29	46	36	26
29	29	e21	25	25	27	41	48	39	29	141	35	27
30	28	e21	25	26	---	46	45	38	28	84	34	30
31	27	---	26	23	---	35	---	36	---	68	32	---
TOTAL	665	713	994	902	798	1118	1196	1829	1263	5645	1238	979
MEAN	21.5	23.8	32.1	29.1	27.5	36.1	39.9	59.0	42.1	182	39.9	32.6
MAX	30	30	140	35	38	71	87	249	159	1150	73	104
MIN	14	20	19	23	23	26	26	30	28	33	32	21
AC-FT	1320	1410	1970	1790	1580	2220	2370	3630	2510	11200	2460	1940

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1992, BY WATER YEAR (WY)

	MEAN	52.1	37.3	33.9	38.1	74.4	123	88.8	115	217	70.5	95.5	74.0
MAX	343	110	96.3	125	276	518	430	401	1051	196	640	663	
(WY)	1987	1987	1985	1983	1983	1979	1978	1984	1963	1958	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1950 - 1992

ANNUAL TOTAL	28452	17340	
ANNUAL MEAN	78.0	47.4	84.8
HIGHEST ANNUAL MEAN			207
LOWEST ANNUAL MEAN			15.3
HIGHEST DAILY MEAN	5840 Jun 14	1150 Jul 13	22100 Jun 24 1963
LOWEST DAILY MEAN	13 Sep 5	14 Oct 10	3.3 Jun 11 1955
ANNUAL SEVEN-DAY MINIMUM	14 Sep 14	16 Oct 9	4.4 Oct 12 1955
INSTANTANEOUS PEAK FLOW		2400 Jul 12	77400 Jun 24 1963
INSTANTANEOUS PEAK STAGE		16.34 Jul 12	22.93 Jun 24 1963
ANNUAL RUNOFF AC-FT)	56430	34390	61430
10 PERCENT EXCEEDS	67	58	107
50 PERCENT EXCEEDS	28	31	33
90 PERCENT EXCEEDS	17	23	17

PLATTE RIVER BASIN

165

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 National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	e41	e45	51	45	41	53	69	57	36	74	36
2	34	e41	e44	55	44	41	51	64	68	53	65	44
3	33	e41	e44	54	44	42	52	61	67	100	61	37
4	36	e40	e42	50	43	43	51	59	59	52	58	34
5	35	e42	e44	51	42	63	50	51	57	61	54	34
6	35	e41	e47	56	42	119	50	51	57	548	56	71
7	35	e39	e50	53	41	79	55	50	58	103	78	53
8	35	e43	54	54	43	65	51	51	55	198	81	36
9	36	e47	44	54	40	66	51	55	53	80	69	43
10	34	e53	43	52	40	69	51	60	53	61	58	32
11	35	e60	43	47	41	62	51	54	53	60	54	29
12	35	e54	62	50	40	58	49	54	51	581	51	29
13	37	47	146	51	40	58	48	53	50	1260	48	29
14	34	49	87	51	41	55	49	53	49	924	49	32
15	36	47	61	e48	43	54	50	51	49	164	48	39
16	36	46	55	e60	43	54	51	53	52	110	47	43
17	37	48	48	e58	46	53	50	286	76	88	47	31
18	34	56	e45	e56	53	55	52	144	181	77	46	29
19	31	57	e46	e52	50	57	53	75	61	70	45	33
20	34	46	e46	e56	45	55	55	65	49	67	41	36
21	35	41	e47	e52	42	55	62	63	46	63	40	38
22	37	41	47	e48	41	54	67	278	45	65	39	37
23	38	41	73	56	41	52	108	112	45	70	40	36
24	38	e41	76	52	42	50	123	74	44	64	37	35
25	38	e43	56	47	43	50	121	64	44	126	40	34
26	36	e41	50	48	42	49	107	61	43	261	48	37
27	38	e40	48	44	42	48	90	60	41	153	52	36
28	40	40	48	44	42	52	82	58	39	80	41	34
29	40	44	48	44	41	57	76	57	39	120	39	35
30	40	e45	47	45	---	63	74	56	36	129	37	37
31	41	---	47	44	---	58	---	54	---	107	34	---
TOTAL	1117	1355	1683	1583	1242	1777	1933	2396	1677	5931	1577	1109
MEAN	36.0	45.2	54.3	51.1	42.8	57.3	64.4	77.3	55.9	191	50.9	37.0
MAX	41	60	146	60	53	119	123	286	181	1260	81	71
MIN	31	39	42	44	40	41	48	50	36	36	34	29
AC-FT	2220	2690	3340	3140	2460	3520	3830	4750	3330	11760	3130	2200

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1992 BY WATER YEAR (WY)

MEAN	37.9	43.8	50.4	49.0	71.8	58.6	87.6	86.0	544	197	45.2	33.8
MAX	39.8	45.2	54.3	51.1	102	59.9	111	94.8	1031	202	50.9	37.0
(WY)	1991	1992	1992	1992	1991	1991	1991	1991	1991	1991	1992	1992
MIN	36.0	42.5	46.4	46.9	42.8	57.3	64.4	77.3	55.9	191	39.5	30.6
(WY)	1992	1991	1991	1991	1992	1992	1992	1992	1992	1992	1991	1991

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1991 - 1992

ANNUAL TOTAL	55923	23380	108
ANNUAL MEAN	153	63.9	153
HIGHEST ANNUAL MEAN			1991
LOWEST ANNUAL MEAN			63.9
HIGHEST DAILY MEAN	7000	1260	7000
LOWEST DAILY MEAN	25	29	25
ANNUAL SEVEN-DAY MINIMUM	26	33	26
ANNUAL RUNOFF (AC-FT)	110900	46370	78390
10 PERCENT EXCEEDS	170	76	104
50 PERCENT EXCEEDS	50	50	50
90 PERCENT EXCEEDS	33	36	35

PLATTE RIVER BASIN
06804900 JOHNSON CREEK NEAR MEMPHIS, NE

LOCATION.--Lat 41°08'48", long 96°23'12", in NW1/4NW1/4 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 National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.3	1.5	2.0	1.5	1.4	1.3	1.8	2.4	.51	1.0	.79
2	1.1	1.4	1.5	2.0	1.6	1.4	1.4	1.7	2.3	.74	.91	1.0
3	1.1	1.3	1.4	1.8	1.6	1.4	1.3	1.6	2.2	.69	e.96	.76
4	1.2	1.3	1.4	1.7	1.6	1.5	1.3	1.6	2.2	.72	e1.0	.72
5	1.2	1.3	1.4	2.0	1.5	2.2	1.3	1.6	2.3	1.4	e1.0	.87
6	1.2	1.3	1.4	2.0	1.5	2.3	1.4	1.5	2.9	.97	e1.0	.77
7	1.1	1.2	1.4	1.9	1.5	1.7	1.6	1.5	2.6	1.1	e1.0	.77
8	1.1	1.2	1.5	1.8	1.4	1.6	1.5	1.5	3.0	1.1	e1.0	.76
9	1.1	1.2	1.5	1.6	1.4	2.4	1.4	1.6	3.3	1.3	e1.0	.75
10	1.2	1.2	1.5	1.6	1.5	1.6	1.5	1.6	3.2	1.4	1.0	.72
11	1.1	1.2	1.5	1.6	1.5	1.5	1.5	1.8	2.7	2.1	.90	.69
12	1.1	1.3	2.6	1.7	1.4	1.5	1.4	1.6	2.4	28	.83	.69
13	1.2	1.3	1.9	1.7	1.5	1.4	1.4	1.4	2.3	47	.95	.67
14	1.2	1.4	1.7	1.6	1.5	1.4	1.4	1.4	2.4	28	.64	.87
15	1.2	1.4	1.6	1.4	1.5	1.3	1.5	1.5	2.4	6.4	.64	.70
16	1.2	1.4	1.5	1.5	1.6	1.3	1.6	1.7	2.5	2.0	.71	.66
17	1.2	1.5	1.5	1.4	1.9	1.3	1.6	1.6	3.6	1.5	.68	.66
18	1.2	1.5	1.5	1.4	2.0	1.5	1.6	1.5	2.4	1.3	.92	.71
19	1.2	1.4	1.5	1.4	1.7	1.5	1.6	1.4	2.4	1.2	.96	.70
20	1.2	1.3	1.6	1.4	1.5	1.5	1.8	1.5	2.4	1.1	.91	.70
21	1.2	1.3	1.6	1.4	1.5	1.4	3.3	1.6	2.2	1.1	.93	.71
22	1.2	1.4	1.7	1.9	1.5	1.4	2.0	1.5	1.9	2.2	1.0	.68
23	1.3	1.4	2.4	1.7	1.5	1.4	4.5	1.3	1.6	1.6	.86	.69
24	1.3	1.4	1.8	1.5	1.5	1.4	3.5	1.1	1.6	1.8	.77	.66
25	1.3	1.4	1.7	1.5	1.4	1.4	2.4	1.4	1.4	2.0	1.2	.65
26	1.3	1.5	1.7	1.5	1.4	1.4	1.9	1.2	1.0	1.5	.80	.69
27	1.3	1.5	1.6	1.5	1.4	1.3	1.9	1.1	.91	1.3	.80	.66
28	1.3	1.5	1.7	1.5	1.4	1.6	1.9	1.1	.81	1.3	.76	.64
29	1.2	1.8	1.7	1.5	1.4	1.7	1.9	1.3	.62	1.4	.76	.65
30	1.2	1.9	1.7	1.5	---	1.5	1.8	1.3	.47	13	.74	.68
31	1.3	---	1.7	1.5	---	1.4	---	1.5	---	1.2	.74	---
TOTAL	37.1	41.5	50.7	50.5	44.2	47.6	54.5	45.8	64.41	156.93	27.37	21.67
MEAN	1.20	1.38	1.64	1.63	1.52	1.54	1.82	1.48	2.15	5.06	.88	.72
MAX	1.3	1.9	2.6	2.0	2.0	2.4	4.5	1.8	3.6	47	1.2	1.0
MIN	1.1	1.2	1.4	1.4	1.4	1.3	1.3	1.1	.47	.51	.64	.64
AC-FT	74	82	101	100	88	94	108	91	128	311	54	43

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1992, BY WATER YEAR (WY)

MEAN	1.26	1.30	1.52	1.52	1.57	1.68	1.88	1.94	14.5	3.14	.86	.82
MAX	1.33	1.38	1.64	1.63	1.62	1.83	1.95	2.40	26.9	5.06	.88	.92
(WY)	1991	1992	1992	1992	1991	1991	1991	1991	1991	1992	1992	1991
MIN	1.20	1.22	1.40	1.42	1.52	1.54	1.82	1.48	2.15	1.21	.84	.72
(WY)	1992	1991	1991	1991	1992	1992	1992	1992	1992	1991	1991	1992

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1991 - 1992

ANNUAL TOTAL	1306.76	642.28	
ANNUAL MEAN	3.58	1.75	2.66
HIGHEST ANNUAL MEAN			3.56
LOWEST ANNUAL MEAN			1.75
HIGHEST DAILY MEAN	191	47	191
LOWEST DAILY MEAN	.65	.47	.47
ANNUAL SEVEN-DAY MINIMUM	.73	.65	.65
INSTANTANEOUS PEAK FLOW		70	269
INSTANTANEOUS PEAK STAGE		7.19	10.25
ANNUAL RUNOFF (AC-FT)	2590	1270	1920
10 PERCENT EXCEEDS	2.2	2.1	2.2
50 PERCENT EXCEEDS	1.5	1.4	1.4
90 PERCENT EXCEEDS	.87	.76	.85

PLATTE RIVER BASIN

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06805500 PLATTE RIVER AT LOUISVILLE, NE

(National stream-quality accounting network station)

LOCATION.--Lat 41°00'55", long 96°09'28", in NW1/4NW1/4 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 National Geodetic Vertical Datum of 1929. Dec. 5, 1961, to Sept. 30, 1973, at site 7 mi upstream at datum 31.43 feet higher.

REMARKS.--Records good except for period of estimated record, which is fair. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1870	4250	4460	5490	6150	6520	9770	5780	4110	3900	9960	7420
2	1930	3680	3250	5910	5730	6370	8570	5000	4420	4980	10100	8860
3	2050	2460	e3000	6350	6100	7340	7550	5180	4420	4950	8520	9280
4	2100	e2400	e2700	6540	5460	6670	6980	4720	5170	5460	7070	9250
5	2100	e2400	2210	6730	6170	7020	7590	4600	5050	4670	6790	9130
6	2090	e2300	2770	7000	5940	8660	7230	4580	5610	6150	6200	8320
7	2030	e2150	3210	6400	6170	8600	7110	4730	5740	8080	12700	7910
8	2050	e2010	3750	6160	6280	8810	7010	4040	9240	8200	10000	9270
9	2300	2370	4640	6290	5810	10200	6060	4210	8150	6860	14000	11900
10	2390	3390	5930	5840	5110	11000	6570	4200	6450	6660	12400	9810
11	2220	3510	7230	5850	6300	13300	7040	4130	5920	6130	10400	8230
12	2280	4010	7730	6940	7360	13900	6630	4330	5530	6830	10900	7530
13	2240	7060	9050	7460	5350	12000	6100	4360	7350	13800	8430	6530
14	2250	10000	9070	6570	6040	11200	6410	4430	6400	12500	7670	6170
15	2390	8380	7750	5720	7430	10900	6450	4330	6210	7730	7140	7160
16	2530	7190	6170	2390	6550	10900	6880	4500	5740	6180	8750	6630
17	2520	6630	5890	3340	8080	10800	6390	8110	24000	5090	7990	6030
18	2540	6320	5500	4000	7470	10900	6230	18100	17400	5240	7100	5750
19	2600	6020	5120	3210	7880	10500	6190	14900	9510	4460	6260	5520
20	2380	5860	4760	2720	7990	10800	6440	9980	7540	4250	6110	5040
21	2340	5530	4740	3770	8150	9750	6790	7640	6870	4120	5450	5300
22	2660	5260	5340	8260	7690	10000	7660	7470	5700	4400	5550	5500
23	2760	5500	6200	7650	7170	8800	7280	7230	5110	4180	4970	4940
24	2790	5070	6590	6780	6820	9230	8620	6620	5040	4520	4680	4900
25	2810	4290	6070	6950	6840	8830	7740	6110	5080	6950	4570	4470
26	2780	3980	5710	6480	6570	8380	6600	5070	4800	18700	4920	4310
27	2980	4130	5300	6250	7080	7970	6290	4860	5260	16800	5860	4550
28	3310	5010	5130	6630	6410	8770	5860	4560	5060	10900	10100	4410
29	3270	4860	4770	6740	6760	9850	6080	4270	4460	9300	8730	4680
30	3270	5340	5970	6530	---	10300	5370	3750	4080	10500	7720	4340
31	3350	---	5540	6500	---	10500	---	4280	---	13600	6920	---
TOTAL	77180	141360	165550	183450	192860	298770	207490	186070	205420	236090	247960	203140
MEAN	2490	4712	5340	5918	6650	9638	6916	6002	6847	7616	7999	6771
MAX	3350	10000	9070	8260	8150	13900	9770	18100	24000	18700	14000	11900
MIN	1870	2010	2210	2390	5110	6370	5370	3750	4080	3900	4570	4310
AC-FT	153100	280400	328400	363900	382500	592600	411600	369100	407500	468300	491800	402900

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 1992, BY WATER YEAR (WY)

MEAN	4679	5022	4418	4378	7223	10920	9457	9217	10590	5013	3467	3877
MAX	15630	10580	10910	9755	17270	25950	34250	35350	39430	18850	9128	12720
(WY)	1987	1987	1985	1984	1984	1987	1984	1984	1984	1983	1983	1986
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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1953 - 1992

ANNUAL TOTAL	1974232	2345340	6531
ANNUAL MEAN	5409	6408	16210
HIGHEST ANNUAL MEAN			1984
LOWEST ANNUAL MEAN			2885
HIGHEST DAILY MEAN	50100 Jun 6	24000 Jun 17	123000 Jun 14 1984
LOWEST DAILY MEAN	985 Sep 2	1870 Oct 1	131 Sep 3 1976
ANNUAL SEVEN-DAY MINIMUM	1010 Aug 30	2020 Oct 1	159 Aug 29 1976
INSTANTANEOUS PEAK FLOW (STAGE)		28000 Jun 17	144000 (11.34) Jun 14 1984
INSTANTANEOUS PEAK STAGE		7.11 Jun 17	12.45 Mar 30 1960
ANNUAL RUNOFF (AC-FT)	3916000	4652000	4731000
10 PERCENT EXCEEDS	9020	9990	12000
50 PERCENT EXCEEDS	4730	6160	4700
90 PERCENT EXCEEDS	1650	2790	1860

PLATTE RIVER BASIN
06805500 PLATTE RIVER AT LOUISVILLE, NE--Continued

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 1991 TO SEPTEMBER 1992

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)	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)
NOV											
15...	1600	8300	--	8.1	3.5	740	180	9.2	1900	5400	150
FEB											
19...	1100	8070	833	8.3	3.0	743	46	--	--	K11000	200
MAY											
11...	1500	4010	--	--	21.0	729	16	11.8	K77	K63	180
AUG											
11...	1300	9930	--	8.2	26.0	745	130	7.0	K7200	1400	140

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)
NOV											
15...	17	45	9.6	55	2	8.2	135	0	165	72	62
FEB											
19...	48	59	13	80	2	8.9	153	0	187	100	79
MAY											
11...	14	48	14	90	3	9.1	163	22	155	89	110
AUG											
11...	16	40	9.5	48	2	11	123	0	150	49	55

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 TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
NOV										
15...	0.30	34	347	373	0.47	7780	0.860	0.920	0.060	0.010
FEB										
19...	0.40	31	481	472	0.65	10500	1.57	1.58	0.030	0.020
MAY										
11...	0.30	20	464	480	0.63	5020	--	0.065	0.020	0.010
AUG										
11...	0.40	22	321	315	0.44	8610	1.08	1.08	0.020	0.020

PLATTE RIVER BASIN
06805500 PLATTE RIVER AT LOUISVILLE, NE--Continued

WATER QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- GEN, 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 15...	0.920	0.930	0.200	0.210	2.6	2.8	3.7	0.800	0.210	0.190
FEB 19...	1.60	1.60	0.150	0.150	1.0	1.2	2.8	0.520	0.310	0.190
MAY 11...	<0.050	0.075	0.010	0.040	0.49	0.50	--	0.230	0.080	0.050
AUG 11...	1.10	1.10	0.020	0.020	2.1	2.1	3.2	1.00	0.320	0.290

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 15...	1600	30	120	<3	35	20	2
FEB 19...	1100	<10	120	<3	<3	25	5
MAY 11...	1500	40	98	<3	<3	28	4
AUG 11...	1300	50	120	<3	46	17	4

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 15...		<10	<1	2	<1.0	290	<6
FEB 19...		<10	1	2	<1.0	410	<6
MAY 11...		<10	2	4	<1.0	400	9
AUG 11...		<10	3	2	<1.0	260	11

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 15...	1600	8300	3.5	914	20500	85
FEB 19...	1100	8070	3.0	385	8390	62
MAY 11...	1500	4010	21.0	151	1630	49
AUG 11...	1300	9930	26.0	1170	31400	95

WEeping WATER CREEK BASIN
06806500 WEeping WATER CREEK AT UNION, NE

LOCATION.--Lat 40°47'35", long 95°54'40", in SW1/4NW1/4 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 National Geodetic Vertical Datum of 1929. Prior to May 14, 1951, nonrecording gage at site 2 mi upstream at different datum. May 15, 1951, to Aug. 22, 1968, water-stage recorder for stages above 7.9 ft and nonrecording gage, Aug. 23, 1968 to Aug. 22, 1980, water-stage recorder on downstream side of bridge pier, Aug. 23, 1980 to Nov. 4, 1980 at present site, all at datum 3.00 ft higher. Nov. 5, 1980 to Aug. 23, 1984 at present site and datum. Aug. 24, 1984, to Mar. 5, 1986, on left bank 200 ft upstream at present datum.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	e30	47	28	28	28	53	e120	32	31	88	29
2	5.6	e22	e33	35	27	25	49	e96	37	33	75	148
3	5.5	e17	e26	39	27	26	49	e82	33	33	71	200
4	7.7	e12	e22	36	e25	28	48	e76	30	31	66	73
5	9.2	e13	20	32	e23	46	45	e70	26	32	63	e140
6	9.1	e14	21	39	e24	214	43	e68	34	e42	62	e250
7	7.7	e14	23	48	e24	116	46	e58	34	e50	112	e180
8	8.4	e15	25	38	25	71	45	e62	30	e70	142	e110
9	8.7	16	25	30	24	62	43	e62	30	e52	80	e60
10	15	17	24	33	25	53	42	e60	28	e56	62	e42
11	8.7	18	22	35	25	49	41	e68	29	e50	55	e40
12	8.0	19	44	38	25	49	37	e66	26	e46	52	e38
13	8.2	e20	74	e25	25	47	34	e60	22	e1450	50	e40
14	7.7	e24	60	e20	28	45	36	e60	20	569	48	e42
15	6.9	28	34	e25	32	42	38	e54	19	118	47	e40
16	7.7	27	e28	30	32	41	55	e52	26	83	45	e40
17	8.1	26	e20	27	35	41	45	e60	30	73	44	e50
18	7.3	36	e17	e22	46	91	45	e150	54	69	44	e90
19	8.7	41	e22	24	47	125	81	e100	55	65	42	e80
20	9.9	28	26	26	41	77	58	e72	45	62	40	e70
21	9.9	22	32	28	36	64	78	41	42	60	38	e60
22	10	18	30	38	33	59	96	44	42	68	37	e50
23	11	e17	73	104	33	55	408	55	40	73	36	e39
24	11	e15	105	e60	32	51	567	52	39	298	35	34
25	12	e16	62	e40	32	50	258	39	39	936	33	33
26	13	e17	46	35	30	46	169	41	37	118	34	46
27	13	21	37	e32	30	43	151	37	35	79	35	50
28	17	23	32	e30	29	56	148	34	34	71	35	37
29	22	32	29	e28	27	91	143	32	33	69	33	32
30	18	188	28	e27	---	74	134	29	33	1110	30	32
31	21	---	27	e28	---	61	---	27	---	146	29	---
TOTAL	322.0	806	1114	1080	870	1926	3085	1927	1014	6043	1663	2175
MEAN	10.4	26.9	35.9	34.8	30.0	62.1	103	62.2	33.8	195	53.6	72.5
MAX	22	188	105	104	47	214	567	150	55	1450	142	250
MIN	5.5	12	17	20	23	25	34	27	19	31	29	29
AC-FT	639	1600	2210	2140	1730	3820	6120	3820	2010	11990	3300	4310

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1992, BY WATER YEAR (WY)

MEAN	60.8	40.9	36.2	38.9	82.1	130	108	158	187	136	89.2	70.2
MAX	579	148	136	177	301	1049	426	678	1603	755	507	470
(WY)	1987	1974	1987	1974	1971	1979	1984	1987	1984	1978	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1951 - 1992

ANNUAL TOTAL	19546.0	22025.0	
ANNUAL MEAN	53.6	60.2	94.8
MEDIAN OF ANNUAL MEANS			71.7
HIGHEST ANNUAL MEAN			277
LOWEST ANNUAL MEAN			19.9
HIGHEST DAILY MEAN	4650	1450	25000
LOWEST DAILY MEAN	5.5	5.5	.10
ANNUAL SEVEN-DAY MINIMUM	6.0	7.3	.13
INSTANTANEOUS PEAK FLOW		4760	60300
INSTANTANEOUS PEAK STAGE		*19.80	*29.80
ANNUAL RUNOFF (AC-FT)	38770	43690	68690
10 PERCENT EXCEEDS	70	91	153
50 PERCENT EXCEEDS	25	37	35
90 PERCENT EXCEEDS	8.5	17	8.0

e Estimated.

* From floodmark.

MISSOURI RIVER MAIN STEM
06807000 MISSOURI RIVER AT NEBRASKA CITY, NE

171

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 h to Apr. 1, 1963.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by upstream main-stem reservoirs. U.S. Army Corps of Engineers 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33200	23200	19100	19500	20800	20400	36600	38700	33500	34800	43400	35500
2	33300	21800	18300	19600	20500	20800	36300	38600	34800	35800	41400	37300
3	33300	17900	17500	19900	20200	21700	35800	37600	34800	36700	39700	38600
4	33400	15200	19000	20100	20600	23500	34800	37100	33200	35200	37700	38800
5	33400	14400	17600	20500	20800	23800	33700	36000	35000	36500	36400	41000
6	33100	14000	16000	20600	21500	25800	32800	34700	34900	36100	36000	41700
7	32800	13900	14300	20500	21400	26100	33100	34000	33400	37900	39100	40100
8	32400	13900	16400	20400	21500	25000	32900	33700	35600	41400	40600	41300
9	32300	12700	19700	20300	21300	24100	32800	32900	38000	41300	39800	42800
10	32400	13300	21300	21000	21000	24900	32200	32400	34300	40800	44100	41700
11	32300	14000	21900	20600	20800	26600	32500	32300	35600	41100	40500	38600
12	32100	14500	22800	20100	21800	30300	32000	33400	35200	42800	41500	37000
13	32300	16300	24400	21500	22000	29500	31600	34200	34100	50800	41000	36000
14	32000	20000	25900	22600	20300	28000	31200	32200	36100	54700	38900	36300
15	31900	22300	25100	21900	21400	27200	31700	33200	35700	52700	37400	37600
16	32200	19900	22500	19600	22300	26400	31800	33500	34700	47800	36400	36800
17	32500	18500	20100	17200	21300	25900	31600	33400	43300	43800	37000	36900
18	32200	18400	20800	16600	22900	25800	31700	46800	52200	42300	35000	36600
19	31900	17900	21700	19600	22600	25600	32400	51700	42900	41700	34200	34900
20	32200	17600	20400	21200	22800	26000	32600	45400	39600	39200	33600	33500
21	32300	17500	18900	20300	23400	27800	34000	44000	38800	37200	33100	32900
22	32500	17000	18700	21700	23100	29400	36200	43300	37600	37000	32900	32800
23	32600	17100	21200	25900	22700	31700	39700	42800	35400	37100	32800	32700
24	32700	17300	21700	23200	22300	33100	41400	41900	36400	37500	32200	32000
25	32900	17000	21200	22500	22000	34400	41400	40000	35800	39800	31700	31900
26	32700	16400	20300	21300	21500	33700	41000	36900	34400	45000	32500	31700
27	32400	16200	20000	20500	21000	33800	40900	37100	35100	52800	34800	31900
28	32700	16800	19700	20300	21100	34300	40200	36600	35500	45200	36900	32100
29	31200	18000	19300	20900	20500	35200	40000	34800	35800	43400	37800	31800
30	28200	19200	19000	20600	---	35900	39300	35400	35300	46600	36300	31300
31	25900	---	19800	20800	---	36700	---	35000	---	46600	35500	---
TOTAL	997300	512200	624600	641300	625400	873400	1054200	1159600	1097000	1301600	1150200	1084100
MEAN	32170	17070	20150	20690	21570	28170	35140	37410	36570	41990	37100	36140
MAX	33400	23200	25900	25900	23400	36700	41400	51700	52200	54700	44100	42800
MIN	25900	12700	14300	16600	20200	20400	31200	32200	33200	34800	31700	31300
AC-FT	1978000	1016000	1239000	1272000	1240000	1732000	2091000	2300000	2176000	2582000	2281000	2150000

MISSOURI RIVER MAIN STEM
06807000 MISSOURI RIVER AT NEBRASKA CITY, NE --Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1992, BY WATER YEAR (WY) ^a

MEAN	42310	38600	24870	20900	25960	37230	47730	46090	49780	43670	41820	42030
MAX	69440	68480	52410	39970	48630	66730	95660	85160	117500	68870	65540	66510
(WY)	1987	1976	1987	1987	1983	1983	1984	1984	1984	1984	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	1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1958 - 1992 ^a	
ANNUAL TOTAL	10705200		11120900			
ANNUAL MEAN	29330		30380		38440	
HIGHEST ANNUAL MEAN					61700	
LOWEST ANNUAL MEAN					27810	
HIGHEST DAILY MEAN	89200	Jun 16	54700	Jul 14	180000	Jun 15 1984
LOWEST DAILY MEAN	12700	Nov 9	12700	Nov 9	5000	Dec 13 1963
ANNUAL SEVEN-DAY MINIMUM	13700	Nov 5	13700	Nov 5	5930	Dec 12 1963
INSTANTANEOUS PEAK FLOW			55400	Jul 27	182000	Jun 15 1984
INSTANTANEOUS PEAK STAGE			13.78	Jun 17, 18	24.78	Jun 15 1984
ANNUAL RUNOFF (AC-FT)	21230000		22060000		27850000	
10 PERCENT EXCEEDS	41400		41200		58300	
50 PERCENT EXCEEDS	31100		32500		37100	
90 PERCENT EXCEEDS	17300		19100		17500	

^a Post-regulation period.

LITTLE NEMAHA RIVER BASIN
06811500 LITTLE NEMAHA RIVER AT AUBURN, NE

173

LOCATION.--Lat 40°23'33", long 95°48'46", in NE1/4NW1/4 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.--793 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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	e100	128	67	66	53	188	227	117	104	1200	90
2	19	e58	90	82	63	52	150	200	126	98	673	136
3	19	e54	e70	88	61	50	135	178	125	96	475	202
4	30	e52	e66	80	58	52	126	168	113	88	375	142
5	26	e48	e64	83	56	148	125	158	105	97	322	482
6	24	e50	e62	127	57	1900	125	149	211	111	291	858
7	24	e54	e66	119	54	602	133	143	302	130	287	497
8	24	e47	70	94	50	268	132	139	171	189	336	216
9	23	e48	58	77	49	187	122	139	136	143	256	163
10	21	e50	54	e70	54	154	117	131	144	155	215	120
11	21	52	52	e68	51	132	116	130	150	142	187	99
12	21	55	65	e66	51	121	109	134	127	133	168	90
13	20	53	96	e64	54	113	104	130	108	3890	156	86
14	20	52	e70	e60	60	104	99	120	98	1520	151	83
15	20	51	e54	e54	66	97	97	117	92	489	148	84
16	23	47	e52	e52	66	93	301	114	3110	294	146	81
17	23	53	e50	e60	73	92	247	178	909	212	138	101
18	21	68	e47	e62	141	1150	164	268	542	173	132	169
19	23	73	e43	e62	149	1770	235	183	294	152	128	150
20	23	63	e49	e62	110	545	257	145	220	181	121	105
21	25	51	e60	e64	86	316	274	292	191	145	113	89
22	27	44	e80	84	75	233	632	238	175	161	108	82
23	27	e43	140	184	69	189	4670	354	164	185	106	77
24	25	e42	196	165	65	164	2190	207	153	1770	101	74
25	26	e37	122	113	63	149	778	159	146	28700	98	72
26	27	e42	97	90	62	137	466	153	137	5920	97	96
27	29	e50	81	81	60	129	351	144	126	1880	97	96
28	e39	e70	74	76	57	137	296	130	119	1110	95	81
29	e37	71	70	70	55	412	265	121	115	810	91	75
30	e36	255	66	69	---	607	254	113	110	13100	86	72
31	e45	---	64	66	---	263	---	108	---	2880	84	---
TOTAL	788	1833	2356	2559	1981	10419	13258	5170	8636	65058	6981	4768
MEAN	25.4	61.1	76.0	82.5	68.3	336	442	167	288	2099	225	159
MAX	45	255	196	184	149	1900	4670	354	3110	28700	1200	858
MIN	19	37	43	52	49	50	97	108	92	88	84	72
AC-FT	1560	3640	4670	5080	3930	20670	26300	10250	17130	129000	13850	9460

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1992, BY WATER YEAR (WY)

MEAN	223	117	106	118	223	453	357	450	502	427	228	249
MAX	2003	447	509	562	736	2870	1589	2029	3524	2427	1256	1546
(WY)	1974	1962	1987	1974	1962	1979	1984	1950	1951	1958	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1950 - 1992

ANNUAL TOTAL	26405	123807	
ANNUAL MEAN	72.3	338	
MEDIAN OF ANNUAL MEANS			288
HIGHEST ANNUAL MEAN			203
LOWEST ANNUAL MEAN			863
HIGHEST DAILY MEAN	808 Jul 10	28700 Jul 25	44900 May 9 1950
LOWEST DAILY MEAN	15 Aug 2	19 Oct 2	.87 Jul 6 1977
ANNUAL SEVEN-DAY MINIMUM	15 Aug 22	21 Oct 9	1.1 Jul 3 1977
INSTANTANEOUS PEAK FLOW		40300 Jul 25	164000 May 9 1950
INSTANTANEOUS PEAK STAGE		*25.02 Jul 25	*27.65 May 9 1950
ANNUAL RUNOFF (AC-FT)	52370	245600	208700
10 PERCENT EXCEEDS	143	326	429
50 PERCENT EXCEEDS	55	104	94
90 PERCENT EXCEEDS	19	45	32

e Estimated.

* From floodmark.

MISSOURI RIVER MAIN STEM
06813500 MISSOURI RIVER AT RULO, NE

LOCATION.--Lat 40°03'13", long 95°25'19", in NW1/4 NW1/4 sec.17, T.1 N., R.18 E., Richardson County, Hydrologic Unit 10240005, on right bank at downstream side of bridge on U.S. Highway 159 at Rulo, 3.2 mi upstream from Big Nemaha River, and at mile 498.0.

DRAINAGE AREA.--414,900 mi², approximately. The 3,959 mi² in Great Divide basin are not included.

PERIOD OF RECORD.--October 1949 to current year in reports of U.S. Geological Survey. Gage-height record collected at site 80 ft upstream December 1899 published in reports of Missouri River Commission; September 1929 to September 1950 in files of Kansas City office 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 to Apr. 19, 1983, recording gage on downstream end of middle pier, all at same datum.

REMARKS.--Estimated daily discharges: Nov. 7-11. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33800	27700	21300	21400	23800	22500	36500	42100	36400	38100	47100	37500
2	34200	24200	20800	21300	23200	22800	35800	41300	35900	37700	41000	45900
3	34000	21100	19200	21700	22600	23400	35400	40200	37500	39000	40700	43600
4	34500	18500	18600	22300	22500	24700	35200	39300	36000	38600	40100	41800
5	34600	16600	19600	22600	22600	26700	35400	38000	35700	38100	40700	41500
6	34100	15700	17700	23700	23200	31000	35700	37100	37900	39400	41300	50400
7	34000	15500	16200	23700	23600	32700	35700	36300	37500	40000	41100	51000
8	33800	15300	15400	23600	23600	30500	36400	36100	36300	42000	47400	48100
9	33300	14600	17900	23300	23300	28800	36200	35800	39600	43600	44500	45000
10	33400	14000	21200	23600	23100	27900	35700	35400	39700	42400	46700	44800
11	33400	14600	22600	24600	22700	29400	36300	35300	37100	42200	46400	42500
12	33000	15300	23700	23200	23300	32800	35800	35500	39100	43300	43900	40200
13	33100	16000	25200	23800	24600	35400	35000	37000	37100	73400	45300	38700
14	33200	17900	28100	25700	23700	32800	34500	36400	37800	78600	43600	37700
15	32900	21700	29500	25800	22700	30900	34300	35100	39200	63600	41900	42000
16	33100	23000	27000	23800	24900	29900	35200	36500	40500	54900	40500	43800
17	33500	20900	23300	20200	24700	29100	35600	36100	41100	47800	40500	45000
18	33400	19700	21400	18300	25500	34300	35200	38300	56500	44500	40200	42400
19	33100	19500	22700	18300	27400	38500	35600	52000	52100	43700	38500	42400
20	32700	19000	22600	22400	26600	33400	36400	48400	43600	43200	37500	39600
21	33000	19100	21000	23000	27000	32500	38800	43800	41300	40800	36700	37800
22	33300	18900	19500	22500	26900	33200	40300	44900	40800	39500	35900	37000
23	33600	18700	21000	26600	26100	34800	47700	43700	38400	40100	35500	36700
24	33300	18500	24700	28900	25600	36300	51800	43300	37000	38500	34900	36100
25	33600	18400	24900	26100	24900	37300	47600	42400	38400	61100	34000	35400
26	33700	18000	22900	25000	24400	37400	46000	39900	37200	79800	33400	35500
27	33700	17400	21300	23700	23900	36600	45300	38300	36900	62500	34900	35800
28	33800	17700	21000	23100	23400	36800	45000	39200	38400	51900	37600	36000
29	33600	19000	20700	23500	23400	40800	44100	37400	38800	44700	39900	35700
30	30800	20400	20400	24200	---	38700	43300	36700	38000	76600	39100	35200
31	28700	---	20900	23400	---	37300	---	37500	---	65200	38100	---
TOTAL	1032200	556900	672300	723300	703200	999200	1161800	1219300	1181800	1534800	1248900	1225100
MEAN	33300	18560	21690	23330	24250	32230	38730	39330	39390	49510	40290	40840
MAX	34600	27700	29500	28900	27400	40800	51800	52000	56500	79800	47400	51000
MIN	28700	14000	15400	18300	22500	22500	34300	35100	35700	37700	33400	35200
AC-FT	2047000	1105000	1334000	1435000	1395000	1982000	2304000	2418000	2344000	3044000	2477000	2430000

MISSOURI RIVER MAIN STEM
06813500 MISSOURI RIVER AT RULO, NE

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1992, BY WATER YEAR (WY) a

MEAN	44050	40260	26220	22060	27710	40710	51190	49770	53670	47000	43540	44520
MAX	77770	69430	55240	42280	52560	79590	102900	94370	130600	77010	67800	69780
(WY)	1987	1976	1987	1973	1983	1979	1984	1984	1984	1984	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 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1958 - 1992 a	
ANNUAL TOTAL	11666700		12258800			
ANNUAL MEAN	31960		33490		40920	
HIGHEST ANNUAL MEAN					65930	
LOWEST ANNUAL MEAN					29670	
HIGHEST DAILY MEAN	94600	Jun 15	79800	Jul 26	216000	Jun161984
LOWEST DAILY MEAN	14000	Nov 10	14000	Nov10	5200	Jan271961
ANNUAL SEVEN-DAY MINIMUM	15000	Nov 6	15000	Nov 6	5860	Dec141963
INSTANTANEOUD PEAK FLOW			87200	Jul 26	242000	Jun161984
INSTANTANEOUS PEAK STAGE			b 20.51	Jul 30	24.40	Jun161984
ANNUAL RUNOFF (AC-FT)	23140000		24320000		29640000	
10 PERCENT EXCEEDS	48000		44500		62100	
50 PERCENT EXCEEDS	32700		35200		38600	
90 PERCENT EXCEEDS	18900		20600		18700	

a Post-regulation period.

b Backwater from Big Nemaha River.

MISSOURI RIVER BASIN
BIG NEMAH RIVER BASIN

06814000 TURKEY CREEK NEAR SENECA, KS

LOCATION.--Lat 39° 56' 52", long 96° 06' 30", in SW1/4 NW1/4 sec.20, T.1 S., R.12 E., Nemaha County, Hydrologic Unit 10240007, on left bank at downstream side of 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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 18	2400	4,210	19.20	July 31	0100	4,090	18.89
Mar. 29	1500	3,110	16.23	Sep. 1	2400	3,790	18.09
July 13	0200	4,110	18.92	Sep. 2	0600	6,680	22.29
July 25	1100	*19,600	*24.47	Sep. 7	1915	3,320	16.58

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	e1.0	e15	36	22	24	181	71	30	14	498	218
2	2.2	e1.0	e10	106	20	23	142	61	47	13	337	4470
3	2.0	e1.5	e7.0	52	19	21	124	53	38	13	256	452
4	1.9	e2.0	e4.9	30	17	22	113	50	31	39	203	203
5	3.8	e3.0	e6.0	54	15	217	97	47	25	e361	172	147
6	2.9	3.3	9.4	118	15	963	89	44	1020	e104	152	175
7	1.9	e3.0	9.5	48	15	256	89	42	242	103	182	1470
8	2.1	e3.0	8.8	33	14	125	91	41	102	95	142	565
9	2.1	e3.2	7.1	24	13	90	82	41	71	40	117	203
10	2.1	e3.5	6.1	17	15	64	76	38	244	32	103	138
11	2.2	3.8	5.7	e15	14	55	89	38	343	27	89	107
12	2.2	4.2	6.4	e15	13	53	72	40	109	875	83	91
13	2.1	4.7	7.4	e15	16	47	63	37	71	3040	78	83
14	2.1	4.4	6.7	e15	21	42	66	34	55	1070	82	74
15	2.3	3.7	5.6	16	32	38	63	33	49	201	78	70
16	2.0	3.4	6.0	19	24	37	59	32	44	135	63	64
17	1.9	4.1	5.8	20	106	36	58	31	39	91	53	59
18	1.8	38	6.8	22	1060	2470	61	53	35	72	47	61
19	2.0	25	6.6	20	266	1980	78	36	29	63	44	62
20	2.1	7.5	9.5	22	109	838	100	30	26	824	39	58
21	2.0	4.4	36	21	73	551	116	31	24	154	35	59
22	1.8	4.0	29	53	55	268	151	72	23	1350	32	51
23	1.8	4.5	243	271	47	185	995	52	22	372	29	44
24	1.8	5.0	101	90	41	151	417	38	20	149	26	41
25	1.8	4.8	43	61	36	129	198	31	23	10100	24	39
26	1.8	4.4	28	42	33	113	140	29	19	5200	23	76
27	1.7	4.6	21	40	32	97	112	29	16	692	25	69
28	2.1	5.2	17	34	29	111	98	28	16	399	23	44
29	2.3	6.3	14	29	25	1830	88	25	16	289	20	36
30	1.0	e10	13	27	---	596	80	24	16	2700	17	35
31	e1.0	---	12	24	---	266	---	22	---	2090	16	---
MEAN	2.03	5.88	22.8	44.8	75.8	377	140	39.8	94.8	991	99.6	309
MAX	3.8	38	243	271	1060	2470	995	72	1020	10100	498	4470
MIN	1.0	1.0	4.9	15	13	21	58	22	16	13	16	35
AC-FT	125	350	1400	2760	4360	23200	8310	2450	5640	60910	6130	18380

e Estimated

MISSOURI RIVER BASIN
BIG NEMAHIA RIVER BASIN --Continued
06814000 TURKEY CREEK NEAR SENECA, KS

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 1992, BY WATER YEAR (WY)

MEAN	95.2	38.7	31.1	41.3	91.2	211	166	186	245	160	91.4	143
MAX	1050	251	206	310	372	1297	1079	838	2067	1021	914	1057
(WY)	1974	1962	1974	1962	1982	1979	1984	1951	1951	1951	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1949 - 1992

ANNUAL MEAN	27.8	185	123
HIGHEST ANNUAL MEAN			518
LOWEST ANNUAL MEAN			3.24
HIGHEST DAILY MEAN	2630 May 17	10100 Jul 25	16700 Oct 11 1973
LOWEST DAILY MEAN	.41 Aug 29	1.0 Oct 30	.00 Jul 28 1956
ANNUAL SEVEN-DAY MINIMUM	.67 Aug 26	1.4 Oct 29	.00 Aug 21 1956
INSTANTANEOUS PEAK FLOW		19600 Jul 25	21400 Oct 11 1973
INSTANTANEOUS PEAK STAGE		24.47 Jul 25	24.77 Oct 11 1973
INSTANTANEOUS LOW FLOW		.69 Oct 30	.00 Jul 28 1956
ANNUAL RUNOFF (AC-FT)	20140	134000	89020
10 PERCENT EXCEEDS	48	259	202
50 PERCENT EXCEEDS	5.6	37	21
90 PERCENT EXCEEDS	1.2	3.0	1.8

BIG NEMAHA RIVER BASIN

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 National Geodetic Vertical Datum of 1929. Prior to Apr. 5, 1968, nonrecording 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	e30	67	54	43	37	e200	87	64	49	e500	67
2	11	e35	e40	79	41	36	e175	78	72	50	e250	454
3	11	e30	e36	76	40	36	e160	69	65	48	e200	117
4	28	e28	e33	60	38	43	e145	66	61	48	e180	76
5	23	e26	e35	99	36	1450	e135	62	59	53	e150	154
6	16	e30	e37	130	36	1930	e125	59	972	118	e120	607
7	14	e33	e38	95	e33	331	e124	58	529	111	e140	865
8	14	e30	32	76	e31	154	e110	58	196	95	e160	258
9	14	e29	28	e62	e31	103	e104	58	132	63	e135	132
10	13	e30	27	e56	33	75	e98	55	140	62	e130	90
11	13	30	26	e54	33	68	e680	57	173	62	e120	79
12	12	27	33	e56	33	65	e200	62	112	285	e120	68
13	12	26	38	e52	33	58	e86	55	89	1870	e104	56
14	12	26	34	e48	39	53	e80	54	84	845	e94	e40
15	12	25	32	e45	47	50	e76	54	85	256	e86	e37
16	13	25	39	e48	39	47	e100	54	302	146	e80	e36
17	14	31	31	e56	78	49	e200	153	472	93	e76	e50
18	14	41	e33	e54	440	4940	e160	171	359	71	71	75
19	13	38	e32	e56	160	1930	e135	86	149	148	51	62
20	13	32	e40	e62	90	744	e140	69	105	181	41	46
21	15	e27	e45	67	69	334	e160	76	85	76	42	47
22	18	e26	50	75	56	187	e240	82	75	482	47	45
23	16	e24	189	176	48	128	e2400	188	69	200	44	39
24	16	e22	115	108	46	104	e1000	82	66	98	44	38
25	16	e23	66	87	45	89	e450	65	65	9790	44	37
26	17	e24	57	74	43	78	e300	63	61	3670	45	63
27	18	e27	49	65	43	67	e160	59	58	1190	47	52
28	28	e32	44	53	38	84	e125	57	58	694	47	39
29	e23	34	42	49	38	e5000	114	55	55	522	44	34
30	e18	174	42	47	---	e1000	98	53	52	14800	42	34
31	e20	---	42	45	---	e250	---	52	---	e1000	42	---
TOTAL	489	1015	1452	2164	1780	19520	8280	2297	4864	37176	3296	3797
MEAN	15.8	33.8	46.8	69.8	61.4	630	276	74.1	162	1199	106	127
MAX	28	174	189	176	440	5000	2400	188	972	14800	500	865
MIN	11	22	26	45	31	36	76	52	52	48	41	34
AC-FT	970	2010	2880	4290	3530	38720	16420	4560	9650	73740	6540	7530

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 1992, BY WATER YEAR (WY)

MEAN	169	75.4	69.2	82.4	169	364	243	255	291	259	165	213
MAX	1604	375	300	422	781	1710	1229	1087	1412	1795	1436	1455
(WY)	1974	1962	1974	1974	1969	1979	1984	1982	1954	1958	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1953 - 1992

ANNUAL TOTAL	14251.5	86130	196
ANNUAL MEAN	39.0	235	152
MEDIAN OF ANNUAL MEANS			534
HIGHEST ANNUAL MEAN			1987
LOWEST ANNUAL MEAN			1991
HIGHEST DAILY MEAN	774 May 17	14800 Jul 30	24600 Oct 11 1973
LOWEST DAILY MEAN	7.4 Aug 28	11 Oct 2	.07 Jul 22 1977
ANNUAL SEVEN-DAY MINIMUM	7.9 Aug 26	12 Oct 10	.30 Jul 18 1977
INSTANTANEOUS PEAK FLOW (STAGE)		43000 Jul 30	59500(*31.25) Aug 13 1982
INSTANTANEOUS PEAK STAGE		*25.25 Jul 30	31.70 Jul 10 1958
ANNUAL RUNOFF (AC-FT)	28270	170800	142200
10 PERCENT EXCEEDS	66	257	263
50 PERCENT EXCEEDS	26	50	
90 PERCENT EXCEEDS	11	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 NE1/4SE1/4 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 (revised) upstream from mouth.

DRAINAGE AREA.--1,340 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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	e102	218	96	119	157	868	406	160	110	3110	177
2	12	e92	e130	121	114	146	665	365	189	106	1790	9010
3	13	e76	e86	202	111	140	575	324	209	104	1350	3330
4	21	e66	e64	173	107	141	511	297	193	105	1020	760
5	41	e60	e50	178	107	664	451	281	167	168	846	517
6	34	e70	e54	300	105	5420	402	253	1100	537	758	3110
7	28	e64	e58	312	e100	2010	376	239	2310	549	867	6480
8	25	e56	e60	207	e98	812	365	230	712	399	785	2930
9	24	e62	64	157	e92	540	340	224	447	305	648	944
10	24	e64	63	e120	e100	419	322	217	410	216	584	612
11	23	e66	60	e110	101	336	1330	211	1030	242	522	485
12	22	e64	68	e110	105	298	378	216	701	2340	483	411
13	21	e62	71	e106	107	279	297	208	398	21100	457	358
14	21	e58	71	e96	113	251	270	200	305	12300	434	323
15	20	e58	67	e82	168	225	266	194	272	2430	422	301
16	18	e56	65	e94	198	205	268	193	247	1410	396	277
17	18	e60	65	e118	218	245	478	188	698	928	369	254
18	18	e70	e45	e124	2030	8300	316	350	520	716	345	252
19	19	86	e41	e128	1510	10500	301	278	353	646	317	257
20	19	107	e46	e134	628	3820	399	236	239	1110	302	254
21	19	91	e70	139	397	2030	613	211	196	1160	278	233
22	20	e70	e120	138	309	1200	875	211	175	2260	258	250
23	22	e54	218	179	267	777	3430	263	162	2460	240	201
24	40	e48	462	433	240	613	3060	336	152	992	225	178
25	49	e44	268	258	219	522	1140	214	147	14300	213	168
26	49	e50	159	191	201	453	735	195	153	23900	205	226
27	e47	e62	128	163	190	394	583	187	136	5790	207	308
28	e62	e74	111	148	181	380	506	181	125	2050	200	248
29	e42	78	101	137	167	8340	466	170	120	1640	190	193
30	e39	154	95	127	---	4760	439	159	116	33300	173	176
31	e48	---	91	122	---	1410	---	149	---	12700	164	---
TOTAL	870	2124	3269	5003	8402	55787	21025	7386	12142	146373	18158	33223
MEAN	28.1	70.8	105	161	290	1800	701	238	405	4722	586	1107
MAX	62	154	462	433	2030	10500	3430	406	2310	33300	3110	9010
MIN	12	44	41	82	92	140	266	149	116	104	164	168
AC-FT	1730	4210	6480	9920	16670	110700	41700	14650	24080	290300	36020	65900

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1992, BY WATER YEAR (WY)

MEAN	455	223	172	235	444	917	760	866	1164	761	505	680
MAX	5229	1249	1036	1446	2998	5819	4462	3211	7816	4722	3898	3408
(WY)	1974	1962	1974	1974	1949	1979	1984	1951	1951	1992	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 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1944-1992	
ANNUAL TOTAL	60859		313762			
ANNUAL MEAN	167		857		594	
MEDIAN OF ANNUAL MEANS					468	
HIGHEST ANNUAL MEAN					2010	
LOWEST ANNUAL MEAN					86.7	
HIGHEST DAILY MEAN	7930	May 17	33300	Jul 30	57600	Oct 11 1973
LOWEST DAILY MEAN	12	Oct 1-2	12	Oct 1	3.0	Jul 9 1977
ANNUAL SEVEN-DAY MINIMUM	16	Aug 28	19	Oct 15	4.0	Jul 4 1977
INSTANTANEOUS PEAK FLOW			40900	Jul 30	71600	Oct 11 1973
INSTANTANEOUS PEAK STAGE			28.03	Jul 30	31.40	Oct 11 1973
ANNUAL RUNOFF (AC-FT)	120700		622300		430500	
10 PERCENT EXCEEDS	313		1340		1010	
50 PERCENT EXCEEDS	80		210		151	
90 PERCENT EXCEEDS	21		50		42	

06821500 ARIKAREE RIVER AT HAIGLER, NE

LOCATION.--Lat 40°01'45", long 101°58'10", in NE1/4NE1/4 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 (revised) upstream from confluence with North Fork Republican River, 2 mi northwest of Haigler, and 3.2 mi downstream from Kansas-Nebraska State line.

DRAINAGE AREA.--1,640 mi², approximately, of which about 980 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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	2.1	5.6	32	30	17	15	16	8.2	7.5	8.2	35
2	4.3	2.1	5.6	31	28	17	16	13	8.2	7.5	9.0	28
3	4.2	2.6	4.9	e25	29	17	16	13	8.0	5.9	9.9	22
4	4.2	2.9	7.3	e20	27	25	15	14	7.8	6.1	9.8	16
5	5.4	3.3	11	e18	25	28	15	11	11	6.6	12	11
6	7.2	2.3	12	17	23	28	14	9.2	10	6.9	11	8.8
7	8.6	1.9	13	17	21	24	14	11	9.0	5.3	11	7.8
8	7.9	1.9	12	12	20	24	14	11	14	5.0	10	7.0
9	5.0	3.2	9.8	10	21	23	14	11	12	3.3	7.6	6.0
10	3.2	2.6	9.7	12	21	29	14	11	8.6	2.2	7.4	6.2
11	2.3	2.4	10	15	20	29	13	11	5.1	3.9	11	5.4
12	2.3	2.5	24	15	19	30	13	12	3.9	9.8	109	3.7
13	2.3	2.7	18	13	20	27	14	10	3.5	12	21	2.7
14	4.6	2.6	13	e11	21	25	20	7.7	11	11	19	3.6
15	4.8	2.5	13	e10	19	23	30	6.7	17	5.6	18	3.1
16	3.0	4.5	14	e10	19	22	29	4.6	12	3.4	18	2.5
17	1.7	13	14	e13	26	21	30	4.8	10	3.4	17	2.1
18	1.4	12	12	e12	25	20	28	3.8	8.6	3.9	17	2.0
19	1.5	9.3	14	e12	20	20	29	2.6	5.7	5.0	16	2.9
20	1.5	8.5	15	e14	20	20	29	2.1	4.3	7.1	13	5.0
21	1.5	9.0	12	e16	19	19	30	2.3	5.8	6.7	12	5.9
22	1.4	9.3	16	14	19	19	26	5.4	9.5	7.6	14	6.9
23	1.4	7.0	15	13	20	19	22	7.0	7.9	8.2	15	6.7
24	1.3	6.4	11	13	23	19	19	7.8	6.0	15	30	7.7
25	1.3	9.0	11	16	21	17	21	8.3	7.5	17	69	7.8
26	1.4	12	12	21	20	17	21	7.8	7.8	27	57	8.1
27	1.4	8.7	11	23	19	17	17	8.1	9.3	62	35	8.3
28	1.5	8.5	15	26	18	17	16	7.6	8.2	28	29	7.6
29	1.4	9.1	12	27	18	17	15	7.1	8.3	16	53	7.5
30	1.2	5.4	12	29	---	16	17	7.5	8.2	10	38	8.2
31	2.1	---	19	31	---	16	---	10	---	8.7	30	---
TOTAL	95.3	169.3	383.9	548	631	662	586	264.4	256.4	327.6	736.9	255.5
MEAN	3.07	5.64	12.4	17.7	21.8	21.4	19.5	8.53	8.55	10.6	23.8	8.52
MAX	8.6	13	24	32	30	30	30	16	17	62	109	35
MIN	1.2	1.9	4.9	10	18	16	13	2.1	3.5	2.2	7.4	2.0
AC-FT	189	336	761	1090	1250	1310	1160	524	509	650	1460	507

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 1992, BY WATER YEAR (WY)

MEAN	10.3	8.73	7.00	8.18	16.9	30.5	24.6	44.2	43.3	21.1	19.8	16.4
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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEAR 1932 - 1992

ANNUAL TOTAL	3495.17		4916.3		
ANNUAL MEAN	9.58		13.4		20.9
MEDIAN OF ANNUAL MEANS					17.0
HIGHEST ANNUAL MEAN					127
LOWEST ANNUAL MEAN					3.69
HIGHEST DAILY MEAN	245	Jul 24	109	Aug 12	17000
LOWEST DAILY MEAN	.52	Sep 9	1.2	Oct 30	.00
ANNUAL SEVEN-DAY MINIMUM	.65	Jan 5	1.4	Oct 24	.00
INSTANTANEOUS PEAK FLOW			351	Aug 12	50000
INSTANTANEOUS PEAK STAGE			8.49	Aug 12	*11.20
ANNUAL RUNOFF (AC-FT)	6930		9750		15150
10 PERCENT EXCEEDS	21		26		32
50 PERCENT EXCEEDS	5.0		11		9.5
90 PERCENT EXCEEDS	.90		2.7		.80

e Estimated.

From floodmark, site and datum then in use.

KANSAS RIVER BASIN

06823000 NORTH FORK REPUBLICAN RIVER AT COLORADO-NEBRASKA STATE LINE

LOCATION.--Lat 40°04'10", long 102°03'05", in SE1/4NW1/4 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.--1,360 mi², approximately, of which about 100 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 National Geodetic Vertical Datum of 1929. 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 Pioneer Canal for irrigation of about 2,700 acres in Colorado and Nebraska.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	57	51	56	63	54	51	19	e15	15	11	44
2	19	56	53	55	62	55	50	18	e17	14	9.1	42
3	28	e56	51	55	62	54	50	18	e20	16	8.4	42
4	23	e58	51	56	63	59	49	18	19	16	11	43
5	20	59	51	56	63	63	49	17	23	16	10	42
6	15	63	52	56	63	60	45	16	20	16	9.4	41
7	13	58	51	57	62	58	46	14	16	15	9.3	42
8	13	56	50	58	61	57	46	13	18	12	9.3	42
9	15	55	50	e58	61	59	44	12	28	9.8	8.5	42
10	18	54	51	e56	61	58	44	11	35	9.6	8.5	37
11	22	54	51	55	61	59	45	10	35	9.6	9.4	36
12	27	53	57	56	61	59	47	9.4	35	9.6	120	35
13	31	53	55	55	61	58	45	11	35	11	48	34
14	34	51	52	57	61	56	25	10	33	11	44	33
15	39	51	52	57	60	55	28	10	30	10	43	31
16	46	53	52	56	60	53	32	10	28	11	44	31
17	48	62	52	e56	61	53	30	12	26	12	46	32
18	49	60	52	55	60	53	28	12	25	11	53	27
19	50	56	52	56	60	54	26	15	24	9.3	49	27
20	50	54	52	55	59	53	25	9.4	24	8.1	46	26
21	51	54	53	55	58	52	26	e7.4	22	8.8	46	25
22	51	55	54	54	58	52	26	e6.0	19	8.0	46	25
23	51	53	55	54	60	52	25	e4.5	18	8.4	43	24
24	52	52	54	55	64	51	26	e4.0	17	11	52	24
25	52	53	53	57	62	51	24	e3.5	16	11	78	24
26	54	53	53	59	60	52	23	e3.6	14	9.1	63	25
27	54	52	53	60	57	51	23	e4.0	14	9.4	55	25
28	53	52	54	61	54	51	22	e6.0	18	9.9	51	23
29	53	52	55	62	53	51	21	e10	20	9.1	47	24
30	53	51	54	63	---	50	19	e13	19	10	45	23
31	54	---	55	63	---	50	---	e13	---	11	44	---
TOTAL	1154	1646	1631	1764	1751	1693	1040	339.8	683	347.7	1166.9	971
MEAN	37.2	54.9	52.6	56.9	60.4	54.6	34.7	11.0	22.8	11.2	37.6	32.4
MAX	54	63	57	63	64	63	51	19	35	16	120	44
MIN	13	51	50	54	53	50	19	3.5	14	8.0	8.4	23
AC-FT	2290	3260	3240	3500	3470	3360	2060	674	1350	690	2310	1930

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 1992, BY WATER YEAR (WY)

MEAN	37.1	57.8	62.1	61.6	63.5	66.2	59.0	43.3	36.0	19.1	19.2	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	44.8	39.4	49.1	50.7	23.5	11.0	12.2	5.36	4.12	5.78
(WY)	1979	1989	1991	1979	1988	1980	1972	1992	1952	1978	1940	1978

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1935 - 1992

ANNUAL TOTAL	14740.6	14187.4	
ANNUAL MEAN	40.4	38.8	45.8
HIGHEST ANNUAL MEAN			65.3 1951
LOWEST ANNUAL MEAN			30.0 1979
HIGHEST DAILY MEAN	79 Jul 24	120 Aug 12	761 May 15 1951
LOWEST DAILY MEAN	4.2 Jul 6	3.5 May 25	1.7 Jul 11 1938
ANNUAL SEVEN-DAY MINIMUM	5.2 Jul 3	4.5 May 22	2.3 Aug 5 1940
INSTANTANEOUS PEAK FLOW		1260 Aug 12	2110 Apr 28 1947
INSTANTANEOUS PEAK STAGE		*4.74 Aug 12	5.9 Apr 28 1947
ANNUAL RUNOFF (AC-FT)	29240	28140	33190
10 PERCENT EXCEEDS	58	59	73
50 PERCENT EXCEEDS	51	46	52
90 PERCENT EXCEEDS	11	10	9.0

e Estimated.

* From floodmark.

KANSAS RIVER BASIN

06823500 BUFFALO CREEK NEAR HAIGLER, NE

LOCATION.--Lat 40°02'22", long 101°51'57", in SE1/4NW1/4 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.--260 mi², approximately, of which about 13 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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.70	6.2	e5.6	4.7	7.5	6.3	5.9	5.7	.70	4.2	.05	3.7
2	e5.6	e5.8	e5.4	e5.4	7.3	6.2	5.9	5.6	.64	4.9	.00	3.7
3	5.5	e5.0	e5.2	e6.4	7.4	6.2	5.9	5.4	.57	4.0	.00	3.2
4	5.7	e5.0	6.8	e7.6	7.2	7.4	5.8	5.4	.57	1.2	.00	3.9
5	5.7	e6.0	6.3	e8.2	6.9	7.9	5.7	5.4	3.4	.67	.00	2.3
6	5.7	e6.4	5.8	8.5	6.9	7.2	5.5	5.4	6.0	.53	.00	.30
7	5.7	e5.8	5.8	8.4	6.7	6.6	5.7	5.3	5.5	.22	.00	.07
8	5.8	e5.8	5.6	4.3	6.5	6.5	5.8	5.2	5.7	.74	.00	.03
9	5.7	6.6	5.6	e7.0	7.1	5.8	5.8	5.2	5.8	.00	.00	2.1
10	5.8	6.0	5.6	e8.0	6.7	e8.0	5.9	5.1	5.8	.00	.00	3.7
11	5.8	5.7	5.7	e9.4	6.6	8.3	5.9	5.0	5.6	.00	.00	3.6
12	5.8	5.7	6.8	e9.0	6.7	8.0	5.9	5.1	5.3	.00	1.5	3.3
13	5.7	5.7	6.7	e8.0	6.6	7.1	6.0	5.2	5.1	.00	2.7	2.3
14	5.6	5.7	6.3	e7.0	6.6	6.2	6.0	5.1	5.5	.00	.07	.08
15	5.6	5.6	6.9	4.1	6.6	6.1	6.1	3.8	5.7	.00	.04	.00
16	5.7	6.0	7.1	e6.0	6.4	6.0	6.2	2.6	5.3	.00	.02	.00
17	5.7	7.0	6.2	e7.6	8.4	6.0	6.2	2.4	4.7	.00	.03	.00
18	5.7	7.0	6.2	e7.2	7.9	6.0	6.0	2.2	4.6	1.0	.04	.00
19	5.6	6.1	6.0	e6.0	7.0	6.2	6.0	2.1	4.6	2.2	.03	.00
20	5.7	5.8	5.9	e6.0	6.8	6.1	6.0	2.0	4.8	2.1	.02	1.4
21	6.0	5.8	5.9	e7.4	6.7	6.0	6.1	1.9	4.9	2.3	.02	1.2
22	6.0	5.6	6.0	e7.4	6.7	5.9	6.0	1.9	4.9	1.4	.02	.17
23	5.9	5.5	6.1	e7.2	6.9	5.9	6.0	1.9	5.0	.02	.13	.07
24	5.9	6.2	6.2	e7.0	7.2	5.9	5.9	1.8	4.8	.15	3.3	.04
25	5.9	e6.2	e6.4	e7.0	6.8	5.8	5.8	1.8	3.3	.55	11	.03
26	5.8	e6.0	e6.3	e7.2	6.6	5.6	5.8	1.7	2.6	.06	11	.02
27	5.9	5.9	e6.2	7.4	6.5	5.6	5.9	1.8	4.9	.00	7.2	.02
28	6.1	5.6	6.1	7.1	6.4	5.7	5.9	1.0	5.8	.00	5.9	.02
29	e5.8	5.7	6.1	7.7	6.4	5.9	5.9	2.1	4.9	.00	5.1	.02
30	e5.8	5.9	6.2	7.7	---	5.9	5.8	1.2	3.9	.00	4.1	.02
31	5.9	---	6.2	7.7	---	6.0	---	1.1	---	.00	3.6	---
TOTAL	173.80	177.3	189.2	219.6	200.0	198.3	177.3	107.4	130.88	26.24	55.87	35.29
MEAN	5.61	5.91	6.10	7.08	6.90	6.40	5.91	3.46	4.36	.85	1.80	1.18
MAX	6.1	7.0	7.1	9.4	8.4	8.3	6.2	5.7	6.0	4.9	11	3.9
MIN	.70	5.0	5.2	4.1	6.4	5.6	5.5	1.0	.57	.00	.00	.00
AC-FT	345	352	375	436	397	393	352	213	260	52	111	70

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1992 BY WATER YEAR (WY)

	MEAN	7.11	8.40	8.57	8.80	9.48	9.79	9.50	8.05	6.13	3.02	2.59	4.47
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	6.18	6.35	3.92	2.11	.20	.000	.001	.92	
(WY)	1965	1984	1984	1963	1986	1989	1989	1965	1977	1978	1976	1974	

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1941 - 1992

ANNUAL TOTAL	1918.27	1691.18	7.14
ANNUAL MEAN	5.26	4.62	10.9
HIGHEST ANNUAL MEAN			4.51
LOWEST ANNUAL MEAN			90
HIGHEST DAILY MEAN	11 Feb 2	11 Aug 25	Aug 11 1950
LOWEST DAILY MEAN	.01 Jul 7	.00 Jul 9	.00 Many years
ANNUAL SEVEN-DAY MINIMUM	.01 Jul 6	.00 Jul 9	.00 Aug 14 1973
INSTANTANEOUS PEAK FLOW (STAGE)		12 (3.43) Aug 25	140 (4.37) Jun 27 1948
INSTANTANEOUS PEAK STAGE		*4.02 Jan 18	*5.93 Jan 3 1976
ANNUAL RUNOFF (AC-FT)	3800	3350	5170
10 PERCENT EXCEEDS	7.8	7.1	11
50 PERCENT EXCEEDS	6.0	5.7	7.9
90 PERCENT EXCEEDS	.02	.02	.40

e Estimated.

* Backwater from ice.

06824000 ROCK CREEK AT PARKS, NE

LOCATION.--Lat 40°02'30", long 101°43'40", in SW1/4NE1/4 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 (revised) mi upstream from mouth

DRAINAGE AREA.--20 mi², approximately, of which about 17 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 National Geodetic Vertical Datum of 1929.

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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	e12	11	11	12	11	11	11	9.2	11	11	e13
2	8.5	e11	e11	11	12	11	12	10	9.3	11	11	e12
3	8.4	e12	11	11	12	11	12	10	9.1	10	11	e11
4	8.5	e13	11	11	12	13	12	9.9	9.3	10	11	e11
5	8.0	14	11	11	12	13	12	9.6	12	9.9	11	e11
6	8.6	13	11	10	11	12	11	10	11	9.5	11	e11
7	8.4	13	11	11	11	12	11	10	10	9.5	10	e11
8	8.2	13	11	11	11	12	11	10	10	9.3	10	11
9	8.0	13	11	e12	11	12	11	9.7	11	10	9.7	11
10	8.1	12	11	11	11	12	11	9.2	10	10	11	11
11	8.2	12	11	12	11	13	11	8.7	9.7	10	12	10
12	8.5	12	12	11	11	13	11	8.7	9.0	10	12	10
13	11	12	11	11	11	13	10	8.9	8.7	10	12	10
14	9.9	12	11	11	11	12	10	9.4	11	9.4	11	9.9
15	9.9	12	11	e10	11	12	11	9.0	11	9.0	11	9.5
16	10	12	11	e12	11	12	10	9.1	9.8	9.2	11	9.2
17	10	12	11	e13	12	12	11	8.2	9.4	9.2	11	9.2
18	10	12	11	11	12	12	11	8.5	8.8	9.7	e11	8.3
19	10	11	11	11	11	12	11	8.5	8.8	9.8	e11	8.2
20	10	11	11	11	11	12	11	8.7	8.7	10	e11	8.7
21	10	11	11	11	11	12	11	8.8	8.8	10	e11	8.8
22	10	11	11	11	11	11	11	8.6	9.0	10	e11	8.3
23	10	11	10	11	11	11	11	8.1	10	10	e11	7.6
24	10	11	11	11	12	11	11	8.3	11	17	e12	7.8
25	10	11	10	11	11	11	11	8.8	11	14	e13	7.9
26	10	12	10	11	11	11	11	8.7	9.8	13	e15	8.0
27	11	11	10	11	11	11	12	9.4	17	12	e14	8.0
28	e10	13	10	11	11	12	12	9.4	16	12	e12	7.9
29	e10	13	10	11	11	11	11	9.7	13	12	e12	7.9
30	e11	12	10	12	---	11	11	9.4	11	11	e12	8.2
31	e12	---	11	12	---	11	---	9.3	---	10	e13	---
TOTAL	294.8	360	335	346	327	365	333	285.6	312.4	327.5	355.7	286.4
MEAN	9.51	12.0	10.8	11.2	11.3	11.8	11.1	9.21	10.4	10.6	11.5	9.55
MAX	12	14	12	13	12	13	12	11	17	17	15	13
MIN	8.0	11	10	10	11	11	10	8.1	8.7	9.0	9.7	7.6
AC-FT	585	714	664	686	649	724	661	566	620	650	706	568

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1992, BY WATER YEAR (WY)

MEAN	12.9	13.9	13.8	13.8	14.1	14.3	14.2	14.1	13.6	12.3	11.7	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	8.69	9.78	9.72	10.4	9.97	7.74	10.6	9.21	9.88	8.45	8.94	8.56
(WY)	1991	1991	1984	1985	1943	1985	1987	1992	1985	1983	1984	1990

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1941 - 1992

ANNUAL TOTAL	4154.0	3928.4	
ANNUAL MEAN	11.4	10.7	13.4
HIGHEST ANNUAL MEAN			15.8
LOWEST ANNUAL MEAN			10.6
HIGHEST DAILY MEAN	83	17	111
LOWEST DAILY MEAN	7.8	7.6	2.6
ANNUAL SEVEN-DAY MINIMUM	8.0	7.9	3.1
INSTANTANEOUS PEAK FLOW (STAGE)		21 (1.71)	493
INSTANTANEOUS PEAK STAGE		*1.99	6.00
ANNUAL RUNOFF (AC-FT)	8240	7790	9710
10 PERCENT EXCEEDS	13	12	16
50 PERCENT EXCEEDS	11	11	13
90 PERCENT EXCEEDS	8.5	8.8	10

e Estimated.

* Backwater from ice.

KANSAS RIVER BASIN

06824500 REPUBLICAN RIVER AT BENKELMAN, NE

LOCATION.--Lat 40°01'55", long 101°32'30", in SE1/4SW1/4 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.--4,830 mi², approximately, of which about 1,230 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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	e68	75	94	131	101	85	54	28	45	24	100
2	23	e60	65	80	128	101	87	47	32	e40	17	98
3	24	e52	71	84	132	100	91	45	32	e30	31	90
4	28	e58	75	89	130	120	92	41	34	e25	26	81
5	29	e80	78	95	126	130	90	40	51	e19	21	74
6	29	e110	82	95	121	131	91	39	49	e14	19	68
7	30	e100	87	106	115	119	94	35	51	e12	17	65
8	31	e80	88	102	106	113	93	32	54	e11	14	64
9	32	89	87	93	105	117	87	28	67	e10	11	60
10	34	82	83	92	109	114	84	20	73	e10	11	57
11	34	79	82	94	108	125	85	19	73	e11	17	55
12	35	75	105	97	105	128	87	17	68	e12	44	54
13	38	77	111	97	106	126	89	19	64	e16	181	50
14	40	79	101	85	112	116	88	20	75	19	86	47
15	41	78	87	65	111	110	78	17	75	16	62	41
16	43	82	86	56	109	110	87	17	75	18	55	36
17	45	103	87	94	122	111	89	16	65	16	64	36
18	48	107	88	92	125	107	88	18	56	17	67	34
19	54	100	84	89	119	101	83	15	53	17	63	32
20	56	93	84	102	114	99	79	14	53	16	59	31
21	57	90	85	e150	109	102	77	14	52	16	50	34
22	57	92	87	123	102	100	78	13	50	14	45	37
23	59	88	94	e140	104	97	79	12	54	11	42	33
24	62	80	89	110	113	93	76	12	52	69	65	30
25	64	78	81	108	116	91	72	12	47	36	148	30
26	63	82	81	109	113	92	71	13	46	33	199	31
27	68	86	83	115	108	93	71	17	207	32	179	28
28	71	83	83	119	103	95	68	21	132	57	121	28
29	71	87	88	121	100	97	66	20	66	41	100	28
30	78	84	85	131	---	97	63	20	51	28	112	28
31	76	---	83	135	---	93	---	25	---	23	97	---
TOTAL	1443	2502	2645	3162	3302	3329	2468	732	1885	734	2047	1480
MEAN	46.5	83.4	85.3	102	114	107	82.3	23.6	62.8	23.7	66.0	49.3
MAX	78	110	111	150	132	131	94	54	207	69	199	100
MIN	23	52	65	56	100	91	63	12	28	10	11	28
AC-FT	2860	4960	5250	6270	6550	6600	4900	1450	3740	1460	4060	2940

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1992, BY WATER YEAR (WY)

	MEAN	56.0	84.9	86.9	90.9	114	129	118	109	95.3	47.4	38.2	40.7
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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1947 - 1992

ANNUAL TOTAL	24698.2	25729	83.6
ANNUAL MEAN	67.7	70.3	153
HIGHEST ANNUAL MEAN			50.7
LOWEST ANNUAL MEAN			3700
HIGHEST DAILY MEAN	260 Jul 25	207 Jun 27	Jul 1 1962
LOWEST DAILY MEAN	5.3 Sep 8	10 Jul 9	*.00 Aug 22 1947
ANNUAL SEVEN-DAY MINIMUM	6.4 Sep 3	11 Jul 6	.00 Jul 25 1953
INSTANTANEOUS PEAK FLOW (STAGE)		926 Jun 27	6040 (7.58) Sep 7 1951
INSTANTANEOUS PEAK STAGE		6.25 Jun 27	7.80 Aug 9 1950
ANNUAL RUNOFF (AC-FT)	48990	51030	60590
10 PERCENT EXCEEDS	106	114	141
50 PERCENT EXCEEDS	70	75	78
90 PERCENT EXCEEDS	20	18	7.6

e Estimated.

* No flow at times in most years.

06827500 SOUTH FORK REPUBLICAN RIVER NEAR BENKELMAN, NE

LOCATION.--Lat 40°00'34", long 101°32'32", in NE1/4SW1/4 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 (revised) 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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	8.7	e20	28	34	66	e50	27	16	11	3.4	42
2	4.6	15	e22	e30	34	63	e50	25	16	11	5.3	41
3	4.5	17	e23	e29	36	61	e49	24	15	11	11	37
4	4.0	18	e24	e29	37	66	e48	23	17	9.1	8.6	34
5	4.0	22	e25	e29	36	73	e47	23	21	8.3	10	32
6	4.6	34	e26	e29	36	72	e45	20	20	7.9	8.1	31
7	6.6	40	26	30	35	73	44	20	18	8.0	6.2	29
8	6.8	29	25	e30	35	70	43	20	18	9.6	4.2	29
9	6.3	27	24	e29	36	69	41	19	22	9.7	3.3	29
10	6.8	23	24	e30	35	67	41	17	26	9.4	2.7	28
11	7.3	21	24	e32	34	69	39	17	24	9.0	25	27
12	7.7	19	34	29	33	70	37	16	23	8.1	745	27
13	8.5	18	35	e29	33	e70	37	16	21	8.1	851	25
14	8.4	16	34	e28	37	e68	37	19	21	7.2	257	25
15	10	15	e33	e27	47	e66	36	16	21	6.5	151	25
16	12	17	e31	e26	57	e66	36	15	19	7.7	99	24
17	12	24	e30	e26	67	e66	36	14	17	8.8	74	23
18	11	25	30	e27	74	e64	34	13	15	9.3	57	23
19	11	23	28	e27	80	e62	33	13	14	8.3	64	22
20	12	22	28	e28	83	e62	31	13	13	7.8	46	23
21	14	22	28	e29	85	e62	31	12	13	8.5	37	23
22	16	22	28	e30	86	e60	30	12	12	8.0	32	22
23	16	21	28	e34	79	e58	28	11	11	7.7	33	21
24	16	e22	e28	35	77	e58	27	11	10	12	39	21
25	16	e22	e28	37	74	e56	27	12	9.3	8.4	67	19
26	17	e21	e28	30	72	e54	27	12	8.9	7.1	76	18
27	19	e21	e27	30	72	e54	27	14	31	6.1	70	17
28	19	e21	27	31	72	e52	27	15	23	5.3	57	16
29	16	21	27	32	70	e52	27	15	15	4.9	49	16
30	11	e20	27	33	---	e52	28	15	12	4.0	43	16
31	9.6	---	26	33	---	e50	---	16	---	3.1	40	---
TOTAL	322.2	646.7	848	926	1586	1951	1093	515	522.2	250.9	2974.8	765
MEAN	10.4	21.6	27.4	29.9	54.7	62.9	36.4	16.6	17.4	8.09	96.0	25.5
MAX	19	40	35	37	86	73	50	27	31	12	851	42
MIN	4.0	8.7	20	26	33	50	27	11	8.9	3.1	2.7	16
AC-FT	639	1280	1680	1840	3150	3870	2170	1020	1040	498	5900	1520

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1992, BY WATER YEAR (WY)

MEAN	17.7	22.8	21.5	24.4	41.6	55.5	61.3	78.2	80.4	64.0	38.5	26.3
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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1938 - 1992

ANNUAL TOTAL	7800.70	12400.8	
ANNUAL MEAN	21.4	33.9	44.3
HIGHEST ANNUAL MEAN			121
LOWEST ANNUAL MEAN			9.79
HIGHEST DAILY MEAN	135	Jun 8	6220 Aug 16 1958
LOWEST DAILY MEAN	.60	Jul 20	.00 Most years
ANNUAL SEVEN-DAY MINIMUM	1.2	Jul 15	.00 Aug 1 1938
INSTANTANEOUS PEAK FLOW			1900 Aug 13
INSTANTANEOUS PEAK STAGE			6.51 Aug 13
ANNUAL RUNOFF (AC-FT)	15470	24600	32120
10 PERCENT EXCEEDS	35	66	93
50 PERCENT EXCEEDS	21	25	20
90 PERCENT EXCEEDS	3.8	8.3	.00

e Estimated

* May have been higher during flood of June 24, 1945; site and datum then in use.

KANSAS RIVER BASIN

06828500 REPUBLICAN RIVER AT STRATTON, NE

LOCATION.--Lat 40°08'28", long 101°13'42", in SW1/4NW1/4 sec.13, T.2 N., R.35 W., Hitchcock County, Hydrologic Unit 10250004, on right bank at downstream side of county bridge, 0.5 mi south of Stratton, 0.2 mi downstream from Muddy Creek, 10 mi upstream from Trenton Dam, 19 mi downstream from South Fork Republican River, and at mile 387.

DRAINAGE AREA.--8,450 mi², approximately, of which about 3,800 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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	51	95	123	192	163	150	82	44	62	19	140
2	5.4	65	e92	106	201	153	147	73	47	64	14	125
3	4.9	88	e90	90	199	140	144	70	47	52	34	115
4	4.9	85	e98	102	195	180	141	66	47	43	51	104
5	6.5	e80	e118	109	163	212	138	60	53	39	40	95
6	8.5	e80	e140	104	162	217	132	53	66	29	30	91
7	10	e82	e190	125	155	211	127	55	61	23	21	85
8	15	e90	127	150	152	205	128	55	72	17	14	75
9	15	e98	103	e140	142	206	128	48	86	14	10	73
10	17	86	102	e140	133	196	129	44	102	12	4.6	67
11	18	83	103	e150	127	199	131	37	92	8.4	3.5	63
12	19	85	143	e150	134	201	124	33	85	8.2	7.8	65
13	19	87	153	e140	143	207	121	32	80	18	635	61
14	22	88	142	e130	159	196	125	38	89	20	628	59
15	28	88	127	e125	172	188	120	38	91	16	196	56
16	30	99	122	e120	178	186	113	30	82	15	119	48
17	29	131	119	e120	182	172	120	23	75	15	92	42
18	31	138	117	e130	201	159	118	22	62	14	100	38
19	34	142	119	e140	195	153	115	23	53	13	86	37
20	37	133	118	e140	190	152	110	19	52	13	85	36
21	37	124	112	e130	186	151	107	17	53	15	78	34
22	38	119	113	e130	188	147	104	18	48	14	70	34
23	40	114	114	e130	199	151	103	18	41	12	63	32
24	42	91	114	e140	197	150	98	16	38	91	84	29
25	44	84	116	e150	184	153	95	18	33	96	180	27
26	45	87	106	e145	183	151	95	18	29	59	232	28
27	47	96	106	e140	174	149	94	26	67	44	279	30
28	50	98	108	e140	167	152	92	33	572	35	230	27
29	50	98	105	e150	164	154	89	35	169	46	168	26
30	36	93	105	e170	---	154	89	34	82	36	141	27
31	25	---	103	179	---	149	---	40	---	25	141	---
TOTAL	812.3	2883	3620	4138	5017	5357	3527	1174	2518	968.6	3855.9	1769
MEAN	26.2	96.1	117	133	173	173	118	37.9	83.9	31.2	124	59.0
MAX	50	142	190	179	201	217	150	82	572	96	635	140
MIN	4.1	51	90	90	127	140	89	16	29	8.2	3.5	26
AC-FT	1610	5720	7180	8210	9950	10630	7000	2330	4990	1920	7650	3510

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1992, BY WATER YEAR (WY)

	MEAN	50.9	93.4	93.1	105	151	189	180	190	158	98.6	74.2	57.7
	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	26.9	.000	.000	.000
	(WY)	1977	1979	1979	1979	1978	1989	1972	1992	1976	1954	1952	1952

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1950 - 1992

ANNUAL TOTAL	30032.05	35639.8	
ANNUAL MEAN	82.3	97.4	119
MEDIAN OF ANNUAL MEANS			106
HIGHEST ANNUAL MEAN			304
LOWEST ANNUAL MEAN			61.1
HIGHEST DAILY MEAN	528 Jun 9	635 Aug 13	8180 Aug 1 1962
LOWEST DAILY MEAN	.00 Jul 20	3.5 Aug 11	.00 Jun 18 1952
ANNUAL SEVEN-DAY MINIMUM	.00 Aug 29	6.3 Oct 1	.00 Jun 18 1952
INSTANTANEOUS PEAK FLOW (STAGE)		1690(8.38) Aug 13	26800 Jul 31 1962
INSTANTANEOUS PEAK STAGE		*8.93 Jan 10	9.34 Jul 31 1962
ANNUAL RUNOFF (AC-FT)	59570	70690	86090
10 PERCENT EXCEEDS	141	179	230
50 PERCENT EXCEEDS	88	92	90
90 PERCENT EXCEEDS	4.9	18	.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 SE1/4NE1/4 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 National Geodetic Vertical Datum of 1929. 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, 83,020 acre-ft June 24-25, elevation, 2,745.56 ft; minimum contents, 36,780 acre-ft Oct. 17-19 elevation, 2,732.03 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 1991 TO SEPTEMBER 1992
DAILY OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37240	37560	42590	49390	56550	65760	75860	81200	80990	82850	63910	64740
2	37180	37560	42680	49580	56860	66090	76100	81240	81110	82810	63440	64810
3	37130	37560	42680	49740	57240	66420	76330	81240	81150	81940	63440	64770
4	37130	37560	42890	49810	57580	67010	76570	81240	81240	81150	63440	64810
5	37070	37610	43000	50090	57880	67570	76770	81280	81280	80370	63440	64840
6	37020	37830	43240	50350	58190	67940	77050	81320	81440	79600	63370	64810
7	37020	37960	43500	50890	58360	68320	77250	81320	81530	78820	63370	64770
8	36990	38180	43740	51090	58670	68690	77450	81360	81610	78020	63330	64700
9	36990	38450	43860	51310	58940	69180	77690	81440	82020	77250	63190	64450
10	36990	38670	44130	51410	59220	69530	77940	81490	82110	76370	63080	64340
11	36970	38920	44370	51700	59430	69870	78020	81490	82440	75500	62910	64160
12	36970	38970	44760	51990	59670	70250	78300	81440	82480	74590	62620	64160
13	36910	39190	45030	52150	59980	70590	78420	81440	82520	73650	62410	64160
14	36890	39250	45360	52350	60330	70970	78740	81490	82770	72790	62830	64270
15	36890	39440	45670	52410	60610	71320	78860	81490	82850	72010	62940	64410
16	36890	39720	45850	52580	60960	71630	79150	81490	82850	71360	62760	64410
17	36780	40000	45970	52640	61340	71860	79270	81490	82890	70510	62760	64450
18	36780	40190	46250	52740	61660	72210	79520	81440	82890	69710	62760	64450
19	36780	40390	46490	52940	62050	72520	79600	81320	82940	68920	62760	64450
20	36810	40640	46620	53030	62300	72870	79720	81240	82940	68170	62760	64450
21	36830	40870	46890	53330	62660	73180	79920	81240	82980	67380	62800	64410
22	36860	40950	47170	53560	63010	73380	79960	81150	82980	66720	62800	64410
23	36940	41210	47300	53690	63550	73610	80130	81110	82980	65900	62760	64450
24	36990	41300	47550	53920	63910	73920	80330	81030	83020	66270	62870	64380
25	36990	41500	47790	54190	64270	74160	80370	80950	83020	66270	63410	64380
26	37050	41720	47920	54490	64630	74390	80450	80820	82980	66020	63620	64340
27	37070	41810	48170	54750	64950	74710	80450	80740	82980	65830	63910	64270
28	37320	42040	48320	55120	65280	74910	80740	80740	82980	65390	64130	64230
29	37320	42300	48510	55420	65570	75180	80820	80740	82940	65100	64380	64200
30	37320	42390	48790	55820	---	75460	81070	80740	82940	64740	64410	64200
31	37530	---	49080	56190	---	75580	---	80860	---	64310	64450	---
MEAN	37020	39720	45680	52540	60880	71260	78760	81210	82390	72270	63260	64460
MAX	37530	42390	49080	56190	65570	75580	81070	81490	83020	82850	64450	64840
MIN	36780	37560	42590	49390	56550	65760	75860	80740	80990	64310	62410	64160
(*)	2732.31	2734.05	2736.25	2738.43	2741.11	2743.73	2745.09	2745.04	2745.54	2740.76	2740.80	2740.73
(**)	+290	+4860	+6690	+7110	+9380	+10010	+5490	-210	+2080	-18630	+140	-250
CAL	YR 1991	MEAN	49040	MAX	72240	MIN	36780	(**)	+9110			
WTR	YR 1992	MEAN	62420	MAX	83020	MIN	36780	(**)	+26960			

(*) Elevation, in feet, at end of month.

(**) Change in contents, in acre-feet.

KANSAS RIVER BASIN

06829500 REPUBLICAN RIVER AT TRENTON, NE

LOCATION.--Lat 40°10'00", long 101°02'40", in SE1/4 sec.4, T.2 N., R.33 W., Hitchcock County, Hydrologic Unit 10250004, on left bank 300 ft upstream from Elm Creek, 0.9 mi downstream from centerline of spillway of Trenton Dam, 1.5 mi southwest of Trenton, and at mile 376.

DRAINAGE AREA.--8,620 mi², approximately, of which about 3,940 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1946 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 2,671.06 ft above National Geodetic Vertical Datum of 1929. See WSP 2119 for history of changes prior to Oct. 1, 1959.

REMARKS.--Records fair except for periods of estimated record and discharges below 1.0 cfs, which are poor. Natural flow affected by irrigation development above station, since July 6, 1950, by storage in Bonny Reservoir (station 06826000), since 1953 by storage in Swanson Lake (station 06829000), and since June 1957 by Meeker-Driftwood Canal which diverts directly from Swanson Lake for irrigation of about 16,400 acres.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.36	.69	.53	.80	.70	.70	.67	.61	.91	162	54	1.5
2	.38	.43	.50	.80	.70	.70	.65	.62	.91	197	54	1.0
3	.35	.46	.54	.80	.76	.70	.66	.64	.91	196	46	.87
4	.39	.56	.62	.80	.80	.70	.63	.62	1.1	195	3.5	.92
5	.39	.64	.63	.80	.80	.70	.65	.61	.91	194	2.2	.96
6	.39	.71	.70	.80	.80	.70	.66	.65	.91	169	1.7	.86
7	.39	.53	.70	.80	.80	.70	.61	.70	.91	150	2.4	.80
8	.38	.62	.70	.74	.80	.73	.61	.62	.94	149	1.4	.88
9	.36	.73	.70	.69	.80	.80	.65	.61	1.3	147	1.4	1.0
10	.36	.70	.70	.70	.80	.76	.61	.63	4.6	145	1.3	.97
11	.39	.74	.70	.70	.80	.70	.61	.70	2.5	144	1.4	.94
12	.39	.76	.79	.70	.80	.70	.65	.73	1.4	143	1.5	1.0
13	.41	.65	.70	.70	.80	.73	.70	.75	1.3	142	1.5	1.1
14	.45	.61	.70	.69	.80	.76	.70	2.4	1.3	141	1.5	1.1
15	.54	.57	.70	.75	.80	.80	.70	.78	1.4	140	1.2	1.1
16	.53	.74	.70	.76	.80	.80	.70	.70	1.7	139	1.2	.97
17	.59	.76	.70	.70	.80	.80	.66	.70	1.3	139	1.4	.92
18	.53	.61	.70	.70	.78	.77	.61	.70	1.0	139	1.2	1.0
19	.71	.57	.70	.72	.78	.70	.61	.80	1.1	137	.91	1.0
20	.72	.55	.70	.70	.79	.70	.61	.80	1.2	136	.95	1.1
21	.74	.57	.70	.70	.80	.70	.61	1.0	1.3	136	.98	3.4
22	.75	.51	.70	.70	.76	.70	.61	1.5	1.2	135	1.3	.94
23	.72	.49	.70	.70	.70	.70	.61	.78	1.2	134	1.0	.81
24	.70	.49	.70	.70	.73	.70	.68	.80	1.5	110	1.4	.75
25	.70	.57	.70	.70	.80	.70	.70	.80	1.5	65	2.9	.70
26	.88	.57	.70	.70	.80	.70	.65	.80	43	60	1.2	.70
27	.95	.49	.70	.70	.80	.70	.61	.88	116	57	1.0	.70
28	1.1	.51	.70	.70	.80	.70	.61	.91	117	56	.93	.61
29	.69	.51	.73	.70	.70	.70	.61	.89	118	56	.91	.65
30	.63	.47	.80	.70	---	.70	.87	.80	117	55	.91	.77
31	.59	---	.80	.70	---	.70	---	.86	---	54	.91	---
TOTAL	17.46	17.81	21.34	22.55	22.60	22.35	19.51	25.39	545.30	4022	194.10	30.02
MEAN	.56	.59	.69	.73	.78	.72	.65	.82	18.2	130	6.26	1.00
MAX	1.1	.76	.80	.80	.80	.80	.87	2.4	118	197	54	3.4
MIN	.35	.43	.50	.69	.70	.70	.61	.61	.91	54	.91	.61
AC-FT	35	35	42	45	45	44	39	50	1080	7980	385	60

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1992, BY WATER YEAR (WY)

	MEAN	11.2	9.57	11.7	16.0	27.8	36.8	55.5	76.8	78.6	134	110	24.6
MAX	263	187	162	155	239	254	343	631	615	524	527	204	
(WY)	1966	1966	1959	1959	1958	1958	1958	1957	1957	1962	1962	1958	
MIN	.000	.000	.50	.44	.51	.55	.48	.60	.91	36.0	.78	.46	
(WY)	1954	1954	1987	1979	1979	1979	1991	1991	1982	1979	1981	1979	

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1954 - 1992
(SINCE STORAGE IN BONNY LAKE)

ANNUAL TOTAL	6464.47	4960.43	49.6
ANNUAL MEAN	17.7	13.6	170
HIGHEST ANNUAL MEAN			8.46
LOWEST ANNUAL MEAN			1958
HIGHEST DAILY MEAN	196 Jun 30	197 Jul 2	3440 May 24 1957
LOWEST DAILY MEAN	.19 Apr 14	.35 Oct 3	.00 1947 - 50,
			1952 - 54
ANNUAL SEVEN-DAY MINIMUM	.24 Apr 13	.38 Oct 1	.00 Oct 1 1953
INSTANTANEOUS PEAK FLOW		200 Jul 1	16800 Jun 16 1948
INSTANTANEOUS PEAK STAGE		4.27 Jul 1	5.64 Jun 16 1948
ANNUAL RUNOFF (AC-FT)	12820	9840	35950
10 PERCENT EXCEEDS	94	54	157
50 PERCENT EXCEEDS	.69	.75	1.4
90 PERCENT EXCEEDS	.41	.57	.65

KANSAS RIVER BASIN

06831500 FRENCHMAN CREEK NEAR IMPERIAL, NE

LOCATION.--Lat 40°25'45", long 101°37'25", in SW1/4NW1/4 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.--880 mi², approximately, of which about 720 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 National Geodetic Vertical Datum of 1929, 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	20	18	19	24	22	23	19	18	17	15	22
2	14	19	20	19	24	22	22	19	18	20	14	23
3	13	18	20	19	24	22	22	19	17	20	21	21
4	14	19	20	19	24	24	22	20	19	18	34	20
5	15	19	20	19	23	27	21	20	19	17	80	19
6	15	20	19	19	23	26	21	19	18	17	72	19
7	15	19	19	19	22	26	21	18	18	17	42	18
8	15	19	19	19	22	26	21	19	21	16	32	17
9	15	19	19	19	22	30	21	19	21	16	25	17
10	15	18	19	19	22	30	22	19	20	15	22	17
11	15	19	19	19	22	29	22	19	19	15	20	17
12	15	19	22	19	22	29	22	19	19	18	20	17
13	15	19	21	19	22	28	23	20	19	18	19	17
14	16	19	20	19	22	26	23	20	20	17	18	17
15	16	19	20	17	22	25	23	18	19	15	18	16
16	16	19	20	19	22	25	23	17	19	15	18	16
17	16	22	19	20	23	24	23	17	18	16	19	16
18	16	22	19	20	23	23	23	17	17	15	20	17
19	16	21	19	20	22	24	23	16	17	14	19	16
20	16	20	19	20	22	23	23	16	17	14	18	16
21	16	20	19	20	22	23	23	16	17	14	17	15
22	16	19	19	20	22	23	28	17	18	16	16	14
23	16	18	20	20	23	23	30	17	18	15	17	14
24	17	19	20	21	24	23	27	16	17	23	24	13
25	17	20	20	21	23	23	20	16	17	26	38	13
26	17	20	19	21	23	23	19	16	17	21	40	14
27	17	19	19	22	23	22	18	16	22	18	30	14
28	19	19	19	22	22	23	19	18	23	16	25	13
29	20	20	19	22	22	24	19	18	21	15	23	13
30	19	18	19	23	---	23	19	17	18	15	21	14
31	20	---	19	24	---	22	---	17	---	15	21	---
TOTAL	495	581	603	618	656	763	666	554	561	524	818	495
MEAN	16.0	19.4	19.5	19.9	22.6	24.6	22.2	17.9	18.7	16.9	26.4	16.5
MAX	20	22	22	24	24	30	30	20	23	26	80	23
MIN	13	18	18	17	22	22	18	16	17	14	14	13
AC-FT	982	1150	1200	1230	1300	1510	1320	1100	1110	1040	1620	982

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1992, BY WATER YEAR (WY)

MEAN	50.2	56.0	60.1	62.9	62.7	61.2	55.9	58.0	60.3	51.0	46.3	48.5
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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1941 - 1992

ANNUAL TOTAL	7206.9	7334	
ANNUAL MEAN	19.7	20.0	55.9
HIGHEST ANNUAL MEAN			87.1 1960
LOWEST ANNUAL MEAN			19.7 1991
HIGHEST DAILY MEAN	54 May 3	80 Aug 5	1820 Mar 22 1960
LOWEST DAILY MEAN	8.9 Aug 28	13 Oct 1, 3 Sep 24-25, 28-29	*4.8 Mar 12 1977
ANNUAL SEVEN-DAY MINIMUM	9.1 Aug 27	13 Sep 23	9.1 Aug 27 1991
INSTANTANEOUS PEAK FLOW		91 Aug 5	2340 Mar 22 1960
INSTANTANEOUS PEAK STAGE		1.87 Aug 5	8.43 Mar 22 1960
ANNUAL RUNOFF (AC-FT)	14290	14550	40500
10 PERCENT EXCEEDS	26	24	83
50 PERCENT EXCEEDS	20	19	57
90 PERCENT EXCEEDS	13	15	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 National Geodetic Vertical Datum of 1929. 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, 23,840 acre-ft July 2, elevation, 3,097.76 ft; minimum, 13,780 acre-ft Oct. 1, elevation, 3,087.60 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 1991 TO SEPTEMBER 1992
DAILY OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13840	14770	16210	17680	19170	20590	21970	22840	23130	23790	17980	16660
2	13860	14810	16250	17750	19240	20630	22000	22850	23160	23790	17820	16720
3	13860	14830	16270	17780	19290	20690	22060	22870	23240	23680	17710	16770
4	13850	14900	16350	17850	19320	20790	22100	22870	23260	23480	17680	16800
5	13890	14980	16370	17870	19400	20870	22160	22880	23280	23200	17690	16840
6	13920	15030	16430	17920	19440	20930	22160	22890	23310	22940	17790	16860
7	13980	15080	16480	17990	19460	20970	22190	22900	23380	22680	17860	16850
8	14020	15140	16510	18040	19520	21070	22210	22950	23270	22330	17880	16900
9	14040	15180	16560	18090	19600	21100	22220	22980	23390	22020	17870	16910
10	14090	15240	16590	18140	19610	21170	22290	22950	23420	21660	17750	16930
11	14130	15290	16700	18180	19640	21230	22280	22980	23450	21390	17560	16970
12	14170	15330	16740	18230	19690	21300	22280	22970	23480	21170	17290	17060
13	14180	15380	16790	18270	19740	21360	22320	23050	23520	20990	16910	17070
14	14190	15410	16830	18320	19800	21400	22400	23050	23550	20830	16490	17090
15	14230	15450	16850	18370	19840	21430	22410	23100	23590	20600	16140	17130
16	14280	15530	16920	18420	19910	21490	22440	23150	23600	20370	15730	17150
17	14290	15610	16950	18450	19970	21510	22510	23130	23570	20150	15420	17170
18	14270	15660	16990	18500	20010	21520	22520	23110	23600	19920	15420	17150
19	14300	15700	17060	18550	20080	21550	22500	23120	23560	19640	15490	17140
20	14320	15740	17090	18590	20100	21620	22510	23120	23550	19350	15570	17210
21	14370	15800	17130	18630	20140	21620	22550	23110	23590	19110	15610	17230
22	14430	15810	17190	18660	20210	21670	22590	23040	23620	18920	15640	17230
23	14420	15860	17250	18700	20280	21720	22610	23050	23660	18840	15860	17260
24	14430	15890	17280	18730	20330	21730	22640	23080	23680	18720	16070	17280
25	14470	15950	17330	18760	20380	21780	22660	23050	23690	18540	16170	17260
26	14510	15990	17360	18800	20450	21810	22670	23020	23700	18460	16260	17270
27	14550	16030	17410	18860	20480	21800	22720	23020	23750	18410	16350	17320
28	14610	16070	17470	18930	20510	21860	22770	23030	23820	18310	16420	17300
29	14620	16150	17520	19000	20560	21880	22800	23050	23810	18230	16460	17320
30	14680	16150	17560	19070	---	21910	22850	23090	23820	18120	16510	17350
31	14750	---	17640	19120	---	21930	---	23090	---	18060	16520	---
MEAN	14240	15490	16910	18400	19870	21380	22410	23010	23510	20570	16710	17070
MAX	14750	16150	17640	19120	20560	21930	22850	23150	23820	23790	17980	17350
MIN	13840	14770	16210	17680	19170	20590	21970	22840	23130	18060	15420	16660
(*)	3088.76	3090.35	3091.94	3093.43	3094.82	3096.08	3096.90	3097.11	3097.74	3092.37	3090.76	3091.64
(**)	+960	+1400	+1490	+1480	+1440	+1370	+920	+240	+730	-5760	-1540	+830
CAL	YR 1991	MEAN	17890	MAX	24280	MIN	12280	(**)	+1230			
WTR	YR 1992	MEAN	19130	MAX	25110	MIN	13840	(**)	+3560			

(*) Elevation, in feet, at end of month.

(**) Change in contents, in acre-feet.

06832500 FRENCHMAN CREEK NEAR ENDERS, NE

LOCATION.--Lat 40°25'05", long 101°30'35", in NW1/4NW1/4 sec.10, T.5 N., R.37 W., Chase County, Hydrologic Unit 10250005, on left bank 0.2 mi downstream from Enders Dam, 2.5 mi southeast of Enders, and at mile 74.5.

DRAINAGE AREA.--950 mi², approximately, of which about 790 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--February 1946 to current year. Published as Frenchman River near Enders October 1965 to September 1972.

REVISED RECORDS.--WSP 2119: 1956, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,026.22 ft above National Geodetic Vertical Datum of 1929. Prior to June 14, 1948, at site 800 ft upstream at datum 6.03 ft higher. June 14, 1948, to Sept. 14, 1972, at present site at datum 5.00 ft higher.

REMARKS.--Records fair except those below 5.0 ft³/s, which are poor. Flow regulated by Enders Reservoir (station 06832000)

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.33	.22	.53	.31	.43	.27	.25	.38	.41	4.5	67	.53
2	.29	.22	.37	.31	.45	.29	.25	6.9	.37	4.8	90	.54
3	.29	.20	.24	.27	.45	.29	.26	.47	.39	82	98	.54
4	.29	.20	.23	.27	.29	.30	.27	.44	.38	116	44	.56
5	.27	.20	.23	.27	.29	.28	.26	.40	.37	145	36	.56
6	.27	.20	.23	.26	.29	.29	.28	.44	.37	145	32	.47
7	.28	.20	.23	.27	.30	.27	.29	.53	.40	151	18	.41
8	.92	.22	.23	.27	.31	.28	.29	.50	1.4	170	29	.44
9	6.9	.27	.23	.25	.29	.31	.29	.45	2.4	182	52	.45
10	.16	.27	.24	.26	.26	.31	.30	.47	2.9	181	70	.43
11	.16	.37	.25	.27	.25	.31	.29	.53	2.6	179	109	.36
12	.17	.37	.26	.27	.25	.31	.29	.51	2.4	140	147	.33
13	.18	.35	.27	.27	.25	.29	.30	.51	2.5	118	191	.34
14	.18	.23	.27	.25	.25	.30	.31	.48	2.9	105	228	.35
15	.21	.27	.27	.25	.25	.31	.31	.50	2.8	113	218	.36
16	.21	.30	.28	.26	.25	.31	.31	.50	2.6	119	219	.33
17	.22	.33	.29	.29	.29	.30	.32	.45	3.6	126	190	.33
18	.32	.33	.26	.31	.29	.29	.31	.40	4.2	135	26	.32
19	.75	.34	.25	.33	.26	.29	.31	.44	3.9	148	1.5	.31
20	.62	.21	.43	.33	.25	.30	.31	.45	4.3	147	.90	.29
21	.82	.20	.45	.33	.25	.31	.30	.45	4.3	136	.65	.26
22	1.1	.29	.45	.32	.25	.29	.30	.44	4.5	122	.68	.26
23	.33	.36	.38	.29	.25	.29	.29	.45	4.4	112	1.2	.27
24	.24	.37	.31	.30	.26	.29	.29	.41	4.7	117	.82	.28
25	.22	.37	.31	.31	.27	.27	.29	.44	4.6	110	.63	.28
26	.24	.37	.35	.31	.27	.27	.28	.43	4.8	64	.46	.28
27	.25	.56	.32	.31	.27	.27	.29	.41	5.4	60	.45	.26
28	.36	.71	.33	.36	.27	.27	.31	.40	5.0	61	.46	.25
29	.37	.59	.29	.42	.28	.27	.31	.42	5.0	62	.50	.24
30	.27	.56	.29	.45	---	.29	.34	.52	4.8	61	.50	.22
31	.22	---	.31	.45	---	.29	---	.37	---	56	.46	---
TOTAL	17.44	9.68	9.38	9.42	8.32	9.01	8.80	20.49	88.69	3472.3	1873.21	10.85
MEAN	.56	.32	.30	.30	.29	.29	.29	.66	2.96	112	60.4	.36
MAX	6.9	.71	.53	.45	.45	.31	.34	6.9	5.4	182	228	.56
MIN	.16	.20	.23	.25	.25	.27	.25	.37	.37	4.5	.45	.22
AC-FT	35	19	19	19	17	18	17	41	176	6890	3720	22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEAR 1946 - 1992, BY WATER YEAR (WY)

	MEAN	23.5	17.2	16.6	18.7	22.0	27.4	31.3	36.3	54.1	185	162	48.7
	MAX	98.2	109	111	101	126	189	153	111	217	385	334	194
	(WY)	1950	1949	1949	1949	1952	1960	1960	1949	1967	1968	1965	1962
	MIN	.000	.000	.000	.000	.000	.000	.000	.002	1.21	15.5	6.07	.000
	(WY)	1974	1973	1973	1976	1980	1981	1979	1979	1982	1951	1990	1976

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1946 - 1992

ANNUAL TOTAL	6819.79	5537.59	54.0
ANNUAL MEAN	18.7	15.1	102
HIGHEST ANNUAL MEAN			1949
LOWEST ANNUAL MEAN			15.1
HIGHEST DAILY MEAN	284	228	538
LOWEST DAILY MEAN	.16	.16	.00
	Jul 4	Aug 14	Mar 25
	Mar 24	Oct 10	1960
ANNUAL SEVEN-DAY MINIMUM	.16	.18	.00
INSTANTANEOUS PEAK FLOW (STAGE)		238	763
INSTANTANEOUS PEAK STAGE		8.28	*11.65
ANNUAL RUNOFF (AC-FT)	13530	10980	39120
10 PERCENT EXCEEDS	90	61	145
50 PERCENT EXCEEDS	.30	.32	8.8
90 PERCENT EXCEEDS	.21	.25	.00

* Backwater from downstream tributary.

KANSAS RIVER BASIN

06834000 FRENCHMAN CREEK AT PALISADE, NE

LOCATION.--Lat 40°21'12", long 101°07'35", in SW1/4SE1/4 sec.36, T.5 N., R.34 W., Hayes County, Hydrologic Unit 10250005, on right bank at upstream side of bridge on U.S. Highway 6, 0.7 mi west of Palisade, 1.5 mi upstream from Stinking Water Creek, and at mile 30.2.

DRAINAGE AREA.--1,110 mi², approximately, of which about 950 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 National Geodetic Vertical Datum of 1929. 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).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	e18	e27	e25	30	29	27	25	22	15	77	43
2	14	e18	e27	e25	30	29	27	24	21	17	73	42
3	14	e18	e27	e25	30	29	27	24	20	17	194	39
4	15	e18	e27	e25	29	30	26	25	21	19	340	37
5	16	e19	e28	e25	28	30	26	24	22	56	109	36
6	17	e19	e31	e25	29	30	25	23	21	103	86	35
7	17	e20	29	e25	29	30	25	23	20	116	109	35
8	17	e21	28	e26	29	30	25	23	21	119	72	33
9	17	e22	27	e26	30	31	25	22	23	138	56	32
10	17	e24	27	e26	29	31	25	21	28	154	67	32
11	18	e26	27	e26	28	30	25	21	26	161	74	31
12	17	e27	e27	e26	28	30	25	20	23	186	96	30
13	17	28	e27	e26	26	29	25	20	21	164	131	29
14	17	28	e27	e25	26	29	26	21	21	134	161	28
15	17	27	e27	e25	26	28	26	22	20	120	197	25
16	17	28	e28	e25	26	28	25	20	20	120	199	27
17	17	30	e28	e25	27	28	25	19	19	126	202	26
18	17	30	e28	e25	27	28	25	18	17	132	194	25
19	18	28	e28	e26	27	29	26	18	17	135	121	24
20	19	28	28	e26	27	29	26	18	17	150	71	24
21	19	28	28	e26	27	28	26	17	17	151	59	24
22	19	28	28	e27	27	28	26	17	19	152	52	23
23	19	28	27	e28	28	28	26	17	16	140	47	22
24	19	e28	e28	e28	28	28	26	16	15	157	78	21
25	19	e28	e28	e29	28	28	26	17	15	143	225	21
26	20	28	e28	31	28	28	26	17	14	135	96	21
27	20	28	e28	30	28	27	26	19	17	106	63	21
28	e19	28	28	29	29	28	26	20	19	91	55	21
29	e19	28	27	30	29	28	25	20	18	86	49	21
30	e18	e27	27	30	---	28	26	20	16	99	44	21
31	e18	---	28	30	---	28	---	21	---	84	42	---
TOTAL	541	756	858	826	813	894	771	632	586	3526	3439	849
MEAN	17.5	25.2	27.7	26.6	28.0	28.8	25.7	20.4	19.5	114	111	28.3
MAX	20	30	31	31	30	31	27	25	28	186	340	43
MIN	14	18	27	25	26	27	25	16	14	15	42	21
AC-FT	1070	1500	1700	1640	1610	1770	1530	1250	1160	6990	6820	1680

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1992, BY WATER YEAR (WY)

MEAN	42.6	37.2	37.2	39.3	45.4	51.1	50.4	57.2	75.4	193	184	76.5
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	24.3	26.7	21.6	20.4	19.5	67.0	38.5	8.32
(WY)	1991	1990	1990	1979	1987	1991	1972	1992	1992	1951	1990	1990

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1950 - 1992

ANNUAL TOTAL	13806.5	14491	
ANNUAL MEAN	37.8	39.6	74.8
HIGHEST ANNUAL MEAN			115
LOWEST ANNUAL MEAN			37.8
HIGHEST DAILY MEAN	215	340	2090
LOWEST DAILY MEAN	6.0	14	5.4
ANNUAL SEVEN-DAY MINIMUM	6.7	15	5.8
INSTANTANEOUS PEAK FLOW		645	5560
INSTANTANEOUS PEAK STAGE		7.74	*8.79
ANNUAL RUNOFF (AC-FT)	27390	28740	54210
10 PERCENT EXCEEDS	93	96	176
50 PERCENT EXCEEDS	27	27	40
90 PERCENT EXCEEDS	13	18	23

e Estimated

* Site and datum then in use.

REMARKS.--Records good except for periods of estimated record, which are poor. Natural flow affected by irrigation development above station.

ANNUAL TOTAL	7921.8	9702			
ANNUAL MEAN	21.7	26.5			37.3
HIGHEST ANNUAL MEAN					57.2
LOWEST ANNUAL MEAN					21.5
HIGHEST DAILY MEAN	50	May 5	292	Aug 5	1640
LOWEST DAILY MEAN	8.3	Aug 27	12	Oct 1	4.9
ANNUAL SEVEN-DAY MINIMUM	8.5	Aug 26	13	Oct 1	6.2
INSTANTANEOUS PEAK FLOW			356	Aug 5	3030
INSTANTANEOUS PEAK STAGE			7.82	Aug 5	11.30
ANNUAL RUNOFF (AC-FT)	15710		19240		27040
10 PERCENT EXCEEDS	31		32		53
50 PERCENT EXCEEDS	24		24		34
90 PERCENT EXCEEDS	11		17		18

KANSAS RIVER BASIN

06835500 FRENCHMAN CREEK AT CULBERTSON, NE

LOCATION.--Lat 40°14'05", long 100°52'40", in SW1/4SE1/4 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 (revised) upstream from mouth.

DRAINAGE AREA.--2,770 mi², approximately, of which about 1,470 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 National Geodetic Vertical Datum of 1929. See WSP 1919 for history of changes prior to Nov. 2, 1950.

REMARKS.--Records good except for periods Aug. 3-4 and 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 Culberts Canal, 20,800 acres.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	27	49	59	70	71	66	26	20	11	17	111
2	22	32	47	59	74	70	66	25	20	10	16	108
3	23	e36	45	56	75	70	67	24	20	9.4	282	104
4	23	e39	51	56	73	75	67	24	22	9.1	202	101
5	24	e41	58	58	72	79	67	24	20	8.4	226	98
6	24	e42	57	59	71	81	66	23	19	9.5	272	95
7	25	e43	57	62	69	82	65	23	17	12	192	94
8	27	e44	56	63	70	81	60	23	15	13	160	92
9	28	e46	55	61	68	82	43	22	18	10	119	84
10	28	e48	55	56	67	79	40	22	18	11	80	80
11	29	e50	55	60	67	80	38	22	20	10	79	76
12	29	e50	60	e60	67	81	43	22	17	74	66	74
13	29	e50	61	e60	68	79	40	21	14	60	65	73
14	31	e50	60	e59	68	77	36	23	13	34	68	65
15	30	50	58	54	69	74	33	22	12	22	65	62
16	31	50	57	43	70	72	30	21	11	18	65	63
17	31	e51	56	55	72	70	35	20	10	18	68	62
18	31	e51	55	e59	71	68	36	20	9.7	18	68	61
19	31	e51	57	e61	70	69	35	20	9.7	18	61	58
20	31	e51	56	e61	71	69	35	20	9.7	17	52	59
21	33	e51	57	e61	70	69	30	20	12	18	47	59
22	34	e51	57	e61	70	68	28	20	15	15	39	55
23	34	51	57	62	71	68	28	19	18	15	36	54
24	35	51	57	64	74	68	27	19	15	118	31	52
25	32	51	55	66	74	68	27	19	17	68	311	51
26	35	e51	55	67	76	68	26	19	14	39	396	50
27	e35	e51	56	67	75	67	26	20	11	40	295	49
28	e35	e51	57	66	73	67	26	19	14	35	171	48
29	e35	e51	57	67	72	67	26	19	13	28	146	47
30	34	51	57	69	---	66	26	19	12	20	119	47
31	e32	---	57	70	---	67	---	19	---	21	114	---
TOTAL	922	1412	1727	1881	2057	2252	1238	659	456.1	809.4	3928	2132
MEAN	29.7	47.1	55.7	60.7	70.9	72.6	41.3	21.3	15.2	26.1	127	71.1
MAX	35	51	61	70	76	82	67	26	22	118	396	111
MIN	21	27	45	43	67	66	26	19	9.7	8.4	16	47
AC-FT	1830	2800	3430	3730	4080	4470	2460	1310	905	1610	7790	4230

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 1992, BY WATER YEAR (WY)

MEAN	78.7	97.1	103	104	125	136	107	93.0	113	60.9	39.7	61.2
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	15.2	2.90	2.25	1.70
(WY)	1937	1940	1984	1979	1989	1991	1972	1986	1992	1990	1986	1990

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1935 - 1992

ANNUAL TOTAL	13189.60	19473.5	
ANNUAL MEAN	36.1	53.2	91.6
HIGHEST ANNUAL MEAN			165 1960
LOWEST ANNUAL MEAN			35.7 1991
HIGHEST DAILY MEAN	77 May 6	396 Aug 26	5500 May 31 1935
LOWEST DAILY MEAN	.50 Sep 6	8.4 Jul 5	.00 Aug 7 1980
ANNUAL SEVEN-DAY MINIMUM	.57 Sep 4	9.9 Jun 30	.26 Aug 3 1980
INSTANTANEOUS PEAK FLOW		1400 Aug 3	e15000 May 31 1935
INSTANTANEOUS PEAK STAGE		8.68 Aug 3	*14.80 May 31 1935
ANNUAL RUNOFF (AC-FT)	26160	38630	66350
10 PERCENT EXCEEDS	64	78	172
50 PERCENT EXCEEDS	32	51	78
90 PERCENT EXCEEDS	4.3	18	23

e Estimated.

* From floodmark.

06836500 DRIFTWOOD CREEK NEAR MCCOOK, NE

LOCATION (REVISED).--Lat 40°08'45", long 100°40'22", in SW1/4SE1/4 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.--360 mi², approximately, of which about 350 mi² contributes directly to surface runoff.

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

REVISED RECORDS.--WSP 1210: 1950.

GAGE (REVISED).--Water-stage recorder. Datum of gage is 2,502.78 ft above National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992

DAY	MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	e4.6	e4.8	5.2	5.2	5.6	5.0	4.8	3.4	2.6	12	8.9
2	3.0	e4.8	e4.8	5.5	5.3	5.7	6.2	4.5	3.4	2.7	8.8	8.5
3	3.2	e4.6	5.1	5.0	5.5	5.6	6.1	4.6	3.3	3.1	132	6.8
4	3.5	e4.5	4.9	4.7	5.8	6.8	5.6	4.7	3.7	22	31	7.2
5	3.9	e5.0	4.5	4.8	5.6	7.8	5.4	4.5	3.6	21	61	8.6
6	4.2	e5.6	4.5	4.8	5.3	7.7	5.1	4.5	3.3	11	30	7.9
7	4.5	e5.2	4.6	5.4	5.2	7.0	5.5	4.4	3.2	6.5	57	8.7
8	4.4	e4.9	4.5	e5.8	5.2	6.6	5.8	4.7	3.2	5.7	45	9.5
9	4.3	e4.8	4.5	e5.6	5.2	6.8	5.8	4.6	4.1	6.7	18	10
10	4.0	5.1	4.4	5.3	5.4	6.7	5.5	4.4	5.4	9.7	11	9.9
11	4.1	4.9	4.4	5.2	5.2	6.7	5.4	4.3	3.5	13	9.5	8.9
12	4.1	4.8	6.3	5.4	5.1	6.7	5.5	4.3	3.4	14	10	8.6
13	4.3	4.6	6.0	5.4	5.1	6.5	5.3	4.1	3.4	17	11	5.6
14	4.6	4.6	4.8	e4.9	5.3	6.1	5.4	4.5	3.4	10	12	5.0
15	4.7	4.5	4.6	e4.6	5.3	6.1	5.4	4.5	3.4	5.9	14	4.9
16	4.9	4.6	4.7	e4.5	5.1	5.9	5.3	4.2	3.6	6.7	37	4.8
17	4.8	5.8	4.7	e4.7	5.4	5.9	5.2	4.0	3.5	7.5	246	4.5
18	4.6	5.5	4.5	4.8	5.6	5.9	5.2	3.9	3.2	6.6	100	4.3
19	4.5	4.8	4.5	4.7	5.3	5.9	5.2	3.9	3.0	5.6	30	4.4
20	4.5	4.6	4.7	4.6	5.3	6.1	5.2	3.8	3.3	6.4	14	4.5
21	4.6	4.5	4.8	4.7	5.2	5.8	5.3	3.7	3.1	7.9	11	4.5
22	4.5	4.6	4.9	4.7	5.3	5.5	5.3	3.4	3.0	8.1	9.3	4.3
23	4.6	4.6	4.8	4.6	5.4	5.5	5.5	3.4	2.8	7.0	9.4	4.4
24	4.4	4.5	4.6	5.0	6.6	5.1	5.4	3.5	3.4	43	9.8	4.2
25	4.3	4.6	4.7	5.9	6.1	5.0	5.0	3.4	7.5	50	30	4.3
26	4.5	4.8	4.6	5.9	5.7	4.9	4.8	3.3	7.6	14	22	4.4
27	4.5	4.9	4.5	5.9	5.6	4.8	5.1	3.4	8.2	6.3	17	4.3
28	5.0	4.7	4.7	5.8	5.7	4.9	5.3	3.7	8.9	5.7	11	4.2
29	5.4	4.8	4.8	5.4	5.7	5.4	5.1	3.2	4.1	8.1	8.6	4.4
30	5.0	5.0	4.7	5.4	---	5.2	4.9	3.1	3.0	35	8.8	4.5
31	e4.8	---	4.6	5.4	---	5.0	---	3.2	---	30	8.6	---
TOTAL	134.8	144.8	147.5	159.6	157.7	185.2	160.8	124.5	121.9	398.8	1034.8	185.0
MEAN	4.35	4.83	4.76	5.15	5.44	5.97	5.36	4.02	4.06	12.9	33.4	6.17
MAX	5.4	5.8	6.3	5.9	6.6	7.8	6.2	4.8	8.9	50	246	10
MIN	3.0	4.5	4.4	4.5	5.1	4.8	4.8	3.1	2.8	2.6	8.6	4.2
AC-FT	267	287	293	317	313	367	319	247	242	791	2050	367

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1992, BY WATER YEAR (WY)

MEAN	7.50	3.41	3.37	3.34	5.83	8.24	4.12	10.4	19.4	21.5	17.7	14.5
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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1946- 1992

ANNUAL TOTAL	2292.2	2955.4	
ANNUAL MEAN	6.28	8.07	9.99
MEDIAN OF ANNUAL MEANS			8.2
HIGHEST ANNUAL MEAN			35.0
LOWEST ANNUAL MEAN			1.12
HIGHEST DAILY MEAN	94 Jun 9	246 Aug 17	3950 Aug 7 1950
LOWEST DAILY MEAN	2.6 Sep 8	2.6 Jul 1	.00 1946-50,52-56
ANNUAL SEVEN-DAY MINIMUM	2.8 Sep 15	3.1 Jun 18	.00 Aug 12 1946
INSTANTANEOUS PEAK FLOW		326 Aug 17	4740 Aug 7 1950
INSTANTANEOUS PEAK STAGE		11.54 Aug 17	25.43 Aug 7 1950
ANNUAL RUNOFF (AC-FT)	4550	5860	7240
10 PERCENT EXCEEDS	9.8	9.9	11
EXCEEDS	4.9	5.1	4.7
90 PERCENT EXCEEDS	3.5	3.6	.20

KANSAS RIVER BASIN

06837000 REPUBLICAN RIVER AT MCCOOK, NE

LOCATION.--Lat 40°11'15", long 100°37'05", in SW1/4NE1/4 sec.32, T.3 N., R.29 W., Red Willow County, Hydrologic Unit 10250004, on left bank at downstream side of bridge on U.S. Highway 83 at south edge of McCook, 2.5 mi downstream from Driftwood Creek, 10.5 mi upstream from Red Willow Creek, and at mile 348.

DRAINAGE AREA.--12,310 mi², approximately, of which about 6,260 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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992

MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	51	75	82	87	95	112	54	41	104	114	151
2	14	58	e70	89	88	93	106	51	41	133	99	146
3	15	50	e90	87	93	89	106	47	41	165	434	138
4	16	52	87	86	93	106	106	46	54	181	746	132
5	18	66	94	85	91	133	108	44	43	201	410	127
6	19	72	98	87	90	134	126	44	42	185	380	119
7	19	66	90	90	89	117	132	47	41	177	304	116
8	19	e70	83	98	92	115	138	46	39	159	292	118
9	20	e72	78	87	93	122	125	45	45	151	206	115
10	22	e72	76	86	91	114	103	42	53	146	140	110
11	22	71	75	88	93	115	82	40	43	152	123	104
12	23	66	97	95	101	113	79	38	41	164	117	102
13	24	66	89	95	91	108	79	43	37	220	104	100
14	26	62	84	86	93	106	74	64	32	186	106	94
15	28	60	83	50	92	105	70	45	28	169	109	87
16	30	61	81	67	90	104	68	40	29	158	118	88
17	30	71	79	78	96	104	69	39	25	162	536	86
18	31	67	77	85	93	114	98	38	23	158	406	84
19	35	66	80	85	92	132	117	38	21	155	168	79
20	35	66	79	86	94	145	122	37	21	153	120	79
21	36	67	77	89	92	133	109	37	21	161	100	78
22	39	69	74	89	92	146	102	37	21	159	89	75
23	40	69	75	91	95	107	96	35	22	152	82	72
24	40	68	76	91	101	106	101	34	22	260	85	69
25	42	69	74	91	98	105	76	35	29	323	294	68
26	43	70	73	88	96	105	64	33	31	165	513	68
27	43	68	75	85	97	106	67	39	30	120	431	68
28	49	68	76	84	96	108	55	40	76	113	264	67
29	54	74	69	83	95	107	57	38	99	111	187	67
30	54	89	67	84	---	100	59	37	102	128	163	68
31	30	---	69	86	---	106	---	38	---	152	151	---
TOTAL	930	1996	2470	2653	2704	3493	2806	1291	1193	5123	7391	2875
MEAN	30.0	66.5	79.7	85.6	93.2	113	93.5	41.6	39.8	165	238	95.8
MAX	54	89	98	98	101	146	138	64	102	323	746	151
MIN	14	50	67	50	87	89	55	33	21	104	82	67
AC-FT	1840	3960	4900	5260	5360	6930	5570	2560	2370	10160	14660	5700

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 1992, BY WATER YEAR (WY)

MEAN	104	117	114	117	161	195	177	195	209	231	187	104
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	64.9	59.7	82.2	88.0	70.6	22.6	39.8	104	66.1	6.03
(WY)	1992	1991	1991	1979	1981	1991	1989	1956	1992	1980	1978	1991

SUMMARY STATISTICS	FOR 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1955 - 1992	
ANNUAL TOTAL	26099.59		34925		159	
ANNUAL MEAN	71.5		95.4		383	
HIGHEST ANNUAL MEAN					70.1	
LOWEST ANNUAL MEAN					5020	
HIGHEST DAILY MEAN	197	Jul 24	746	Aug 4	Mar 21 1960	
LOWEST DAILY MEAN	.99	Sep 9	14	Oct 1	.99 Sep 9 1991	
					*00	
					1.3 Sep 3 1991	
ANNUAL SEVEN-DAY MINIMUM	1.3	Sep 3	16	Oct 1	5890	
INSTANTANEOUS PEAK FLOW			1090	Aug 5	Mar 21 1960	
INSTANTANEOUS PEAK STAGE			6.50	Aug 5	9.14 Mar 21 1960	
ANNUAL RUNOFF (AC-FT)	51770		69270		115400	
10 PERCENT EXCEEDS	103		152		292	
50 PERCENT EXCEEDS	74		86		114	
90 PERCENT EXCEEDS	14		35		60	

e Estimated.

* No flow several days in July and August.

06837300 RED WILLOW CREEK ABOVE HUGH BUTLER LAKE, NE

LOCATION (REVISED).--Lat 40°24'06", long 100°46'48", in NE1/4SE1/4 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.--600 mi², approximately, of which about 200 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 (revised) above National Geodetic Vertical Datum of 1929. 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 good except for period of estimated record, which is poor. Natural flow affected by pump irrigation development above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.7	e18	e22	22	27	26	20	15	20	41	17	32
2	8.8	e19	e20	23	27	24	20	15	20	36	16	26
3	9.0	18	20	23	27	23	20	15	21	32	19	22
4	9.5	e19	22	23	26	24	19	15	21	28	17	19
5	10	e20	21	22	26	26	19	14	21	24	25	17
6	11	22	19	22	25	30	19	14	20	20	21	16
7	11	19	19	24	24	36	18	14	19	19	36	15
8	11	e20	19	28	23	42	18	13	19	18	122	14
9	11	e21	19	e25	22	38	18	13	19	17	54	14
10	12	22	20	e24	22	39	18	13	21	16	28	14
11	12	22	19	e25	21	37	18	13	23	16	24	14
12	12	22	21	26	21	35	17	13	22	19	21	13
13	12	22	23	25	22	34	17	14	21	17	19	13
14	13	21	23	e27	22	33	18	16	20	21	18	13
15	13	21	24	27	22	31	18	26	19	23	17	13
16	13	20	25	19	23	29	18	30	19	22	16	12
17	14	22	23	e24	27	27	18	25	20	20	16	12
18	14	24	e23	e22	28	24	18	22	18	18	25	12
19	14	25	20	e22	28	23	17	20	19	16	25	12
20	14	26	19	e22	28	24	17	21	19	16	20	12
21	14	26	19	22	28	24	17	21	19	15	20	12
22	14	24	19	21	27	24	17	19	19	16	19	12
23	15	22	19	22	27	24	17	18	19	19	19	12
24	15	22	20	20	28	24	16	16	18	23	20	11
25	15	19	e20	20	28	23	16	15	22	22	55	12
26	15	19	e19	21	29	22	16	15	33	44	85	12
27	15	18	19	22	29	21	16	16	34	27	68	12
28	e16	19	19	22	29	21	16	18	36	23	62	12
29	e17	19	19	23	28	21	16	18	31	23	63	12
30	e18	20	21	23	---	21	16	18	38	21	80	12
31	17	---	21	25	---	21	---	18	---	19	50	---
TOTAL	404.0	631	636	716	744	851	528	533	670	691	1097	434
MEAN	13.0	21.0	20.5	23.1	25.7	27.5	17.6	17.2	22.3	22.3	35.4	14.5
MAX	18	26	25	28	29	42	20	30	38	44	122	32
MIN	8.7	18	19	19	21	21	16	13	18	15	16	11
AC-FT	801	1250	1260	1420	1480	1690	1050	1060	1330	1370	2180	861

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1992, BY WATER YEAR (WY)

MEAN	20.2	24.3	22.6	22.2	30.3	36.5	33.0	31.6	33.5	21.7	19.3	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	14.2	6.61	6.50	6.91
(WY)	1992	1990	1990	1982	1981	1991	1992	1989	1988	1990	1991	1990

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1961 - 1992

ANNUAL TOTAL	6652.9	7935.0	
ANNUAL MEAN	18.2	21.7	26.0
HIGHEST ANNUAL MEAN			43.4
LOWEST ANNUAL MEAN			16.8
HIGHEST DAILY MEAN	68 May 6	122 Aug 8	734 Jun 30 1962
LOWEST DAILY MEAN	4.1 Aug 28	8.7 Oct 1	3.1 Jul 12 1990
ANNUAL SEVEN-DAY MINIMUM	5.1 Aug 25	9.7 Oct 1	4.0 Jul 10 1990
INSTANTANEOUS PEAK FLOW		161 Aug 8	4020 Jun 16 1972
INSTANTANEOUS PEAK STAGE		2.48 Aug 8	*13.27 Jun 16 1972
ANNUAL RUNOFF (AC-FT)	13200	15740	18870
10 PERCENT EXCEEDS	27	28	39
50 PERCENT EXCEEDS	19	20	22
90 PERCENT EXCEEDS	7.1	13	11

e Estimated.

* Site and datum then in use.

KANSAS RIVER BASIN
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 National Geodetic Vertical Datum of 1929. 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, 26,080 acre-ft June 16, elevation, 2,573.64 ft; minimum, 19,050 acre-ft Oct. 6, elevation, 2,567.43 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 1991 TO SEPTEMBER 1992
DAILY OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19080	19380	20430	21520	22660	23890	25150	25590	25540	25960	24500	25160
2	19090	19370	20470	21560	22700	23930	25160	25550	25590	25930	24390	25120
3	19080	19380	20480	21610	22760	23950	25210	25550	25610	25910	24370	25070
4	19070	19420	20530	21660	22790	24080	25230	25540	25690	25920	24390	24990
5	19070	19490	20550	21680	22830	24140	25270	25530	25720	25890	24390	24920
6	19050	19530	20600	21720	22870	24190	25280	25510	25700	25840	24500	24830
7	19070	19530	20640	21900	22900	24250	25280	25530	25720	25920	24770	24700
8	19100	19590	20660	21880	22920	24380	25290	25540	25720	25850	25050	24560
9	19120	19650	20690	21910	22950	24410	25290	25530	25900	25770	25170	24460
10	19130	19680	20720	21950	22990	24470	25330	25530	25920	25700	25170	24370
11	19140	19740	20780	22000	23030	24550	25300	25530	25950	25650	25150	24350
12	19150	19780	20860	22050	23060	24610	25270	25500	25970	25620	25110	24370
13	19160	19810	20900	22080	23090	24650	25300	25510	26000	25560	25060	24390
14	19130	19860	20920	22140	23150	24690	25360	25510	26030	25500	24970	24400
15	19140	19870	20950	22100	23170	24750	25410	25530	26060	25400	24870	24400
16	19170	19990	21000	22120	23270	24790	25410	25560	26070	25270	24820	24410
17	19180	20020	21030	22160	23340	24800	25410	25580	26060	25160	24730	24430
18	19140	20070	21050	22190	23350	24830	25450	25550	26050	25050	24630	24370
19	19130	20120	21080	22210	23380	24870	25460	25590	26050	24930	24590	24320
20	19150	20160	21120	22250	23430	24890	25430	25590	26030	24810	24550	24330
21	19170	20220	21150	22270	23470	24910	25410	25600	26020	24700	24490	24330
22	19200	20240	21190	22300	23510	24920	25430	25560	26050	24670	24410	24310
23	19200	20230	21210	22340	23630	24940	25460	25530	26050	24590	24390	24290
24	19180	20250	21230	22380	23640	24990	25450	25510	25970	24750	24310	24270
25	19190	20290	21250	22380	23680	25000	25450	25490	25920	24740	24510	24270
26	19210	20330	21280	22420	23730	25030	25460	25450	25860	24770	24670	24250
27	19240	20360	21300	22450	23780	25030	25460	25460	25960	24750	24800	24230
28	19340	20370	21340	22500	23820	25100	25500	25480	25970	24750	24910	24220
29	19300	20460	21370	22530	23870	25110	25540	25480	25970	24740	24980	24210
30	19300	20430	21390	22560	---	25120	25590	25500	25960	24640	25100	24220
31	19380	---	21470	22610	---	25150	---	25540	---	24530	25160	---
MEAN	19160	19920	20960	22110	23230	24660	25370	25530	25900	25270	24740	24480
MAX	19380	20460	21470	22610	23870	25150	25590	25600	26070	25960	25170	25160
MIN	19050	19370	20430	21520	22660	23890	25150	25450	25540	24530	24310	24210
(*)	2567.75	2568.75	2569.70	2570.72	2571.81	2572.88	2573.24	2573.20	2573.54	2572.37	2572.89	2572.11
(**)	+300	+1050	+1040	+1140	+1260	+1280	+440	-50	+420	-1430	+630	-940
CAL	YR 1991	MEAN	22930	MAX	28550	MIN	19040	(**)	-500			
WTR	YR 1992	MEAN	23440	MAX	26070	MIN	19050	(**)	+5140			

(*) Elevation, in feet, at end of month.

(**) Change in contents, in acre-feet.

06837500 RED WILLOW CREEK NEAR MCCOOK, NE

LOCATION.--Lat 40°20'50", long 100°38'35", in SW1/4NW1/4 sec.6, T.4 N., R.29 W., Red Willow County, Hydrologic Unit 10250007, on left bank 45 ft downstream from bridge on U.S. Highway 83, 3 mi downstream from Red Willow Dam, 10 mi north of McCook, and at mile 17.2.

DRAINAGE AREA.--740 mi², approximately, of which about 320 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1940 to September 1947. Annual maximums, water years 1958-60. October 1960 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 2119: Drainage area.

GAGE.--Water-stage recorder, concrete control since Dec. 23, 1965. Datum of gage is 2,485.97 ft above National Geodetic Vertical Datum of 1929. October 1940 to September 1947, water-stage recorder at site 45 ft upstream at datum 9.55 ft higher. Nov. 22, 1957, to Sept. 30, 1960, crest-stage gage, Oct. 1, 1960, to Apr. 5, 1961, nonrecording gage, and Apr. 6, 1961, to Sept. 26, 1974, water-stage recorder at site 45 ft upstream, present datum.

REMARKS.--Records good except for period of estimated record, which is poor. Natural flow affected by irrigation development above station and, since Sept. 5, 1961, by storage in Hugh Butler Lake (station 06837390).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	3.1	e3.1	4.2	4.0	4.0	3.7	3.8	3.7	29	54	54
2	3.2	2.9	e3.0	4.0	3.9	3.9	3.8	3.8	3.6	32	56	52
3	3.2	3.0	e3.1	3.9	4.0	3.6	3.7	3.7	3.8	30	57	51
4	3.2	3.0	e3.2	3.9	3.9	4.3	3.6	3.8	3.6	27	45	53
5	3.4	3.3	e3.2	4.0	3.9	3.8	3.6	3.5	3.0	27	37	53
6	3.2	3.1	e3.3	3.8	3.9	3.9	3.4	3.5	3.4	28	31	55
7	3.4	2.9	e3.3	4.2	3.8	3.7	3.4	3.5	3.5	35	32	70
8	3.4	2.9	e3.4	4.0	3.7	3.9	3.4	3.5	3.5	41	30	72
9	3.3	3.0	e3.4	3.8	3.9	4.2	3.4	3.5	4.2	38	30	65
10	3.3	2.9	e3.4	3.8	3.7	3.9	3.5	3.6	3.8	36	29	57
11	3.3	3.0	e3.4	3.9	3.8	3.9	3.4	3.6	3.7	36	29	13
12	3.2	2.9	e3.5	3.9	3.9	3.8	3.4	3.4	3.7	38	28	4.3
13	3.2	2.9	3.7	3.9	3.9	3.9	3.5	3.3	3.7	43	37	3.9
14	3.2	2.8	3.5	4.1	4.0	3.9	3.5	3.6	3.7	50	59	3.7
15	3.3	2.8	3.5	4.0	4.0	3.9	3.6	3.4	3.6	57	59	3.5
16	3.1	3.1	3.5	4.1	4.1	3.9	3.7	3.4	3.6	69	66	3.3
17	2.8	3.3	3.6	4.0	4.3	3.9	3.4	3.3	3.4	69	88	3.2
18	2.8	3.0	3.5	4.1	4.0	3.8	3.6	3.5	3.3	69	69	3.1
19	2.8	2.9	3.6	4.0	4.2	3.8	3.6	3.4	3.3	69	50	3.4
20	2.8	e2.9	3.6	4.1	4.0	3.8	3.6	3.3	3.3	61	44	3.4
21	3.0	e2.9	3.6	4.0	4.0	3.7	3.7	3.2	3.5	47	46	3.3
22	4.6	e3.0	3.7	4.0	4.1	3.7	3.6	3.1	3.6	44	45	3.4
23	3.2	e3.0	3.6	4.0	4.2	3.7	3.6	3.4	28	43	47	3.3
24	3.0	e2.9	3.6	4.1	4.1	3.7	3.6	3.3	48	38	56	3.1
25	2.8	e3.0	3.6	4.1	3.9	3.6	3.6	3.5	26	28	45	3.1
26	2.8	e3.1	3.6	4.1	3.9	3.7	3.6	3.4	26	28	31	3.1
27	3.1	e3.1	3.6	4.0	4.1	3.7	3.5	3.6	27	28	30	3.1
28	3.5	e3.0	3.7	4.1	4.1	4.1	3.6	3.4	27	28	30	3.0
29	3.0	e3.0	3.9	4.0	4.1	3.9	3.6	3.4	27	32	30	3.2
30	3.0	e3.1	3.9	3.9	---	3.7	4.1	3.5	26	40	30	3.4
31	3.2	---	3.9	4.0	---	3.7	---	3.5	---	51	35	---
TOTAL	98.6	89.8	108.5	124.0	115.4	119.0	107.3	107.7	313.5	1291	1355	658.8
MEAN	3.18	2.99	3.50	4.00	3.98	3.84	3.58	3.47	10.4	41.6	43.7	22.0
MAX	4.6	3.3	3.9	4.2	4.3	4.3	4.1	3.8	48	69	88	72
MIN	2.8	2.8	3.0	3.8	3.7	3.6	3.4	3.1	3.0	27	28	3.0
AC-FT	196	178	215	246	229	236	213	214	622	2560	2690	1310

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1992, BY WATER YEAR (WY)

	5.75	3.87	4.27	4.84	5.56	5.48	6.63	10.3	33.1	72.3	66.3	16.6
MEAN	5.75	3.87	4.27	4.84	5.56	5.48	6.63	10.3	33.1	72.3	66.3	16.6
MAX	19.8	4.77	10.0	15.5	29.8	26.9	37.2	30.2	98.9	116	147	43.3
(WY)	1969	1973	1962	1962	1968	1968	1970	1969	1967	1974	1978	1983
MIN	2.86	1.54	2.61	2.82	1.61	2.12	1.93	2.38	3.03	4.09	5.25	2.72
(WY)	1963	1962	1963	1963	1962	1962	1962	1962	1962	1962	1962	1963

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1962 - 1992
(SINCE STORAGE IN HUGH BUTLER LK)

ANNUAL TOTAL	6053.1	4488.6	19.7
ANNUAL MEAN	16.6	12.3	34.1
HIGHEST ANNUAL MEAN			4.73
LOWEST ANNUAL MEAN			1978
HIGHEST DAILY MEAN	194 Aug 19	88 Aug 17	338 Jul 26 1967
LOWEST DAILY MEAN	2.8 Oct 17	2.8 Oct 17	1.1 Sep 3 1963
.60ANNUAL SEVEN-DAY MINIMUM	2.9 Nov 9	2.9 Nov 9	1.2 Nov 28 1961
INSTANTANEOUS PEAK FLOW		92 Aug 17	30000 Jun 22 1947
INSTANTANEOUS PEAK STAGE		9.57 Aug 17	31.95 Jun 22 1947
ANNUAL RUNOFF (AC-FT)	12010	8900	14300
10 PERCENT EXCEEDS	65	44	66
50 PERCENT EXCEEDS	3.6	3.7	4.4
90 PERCENT EXCEEDS	3.0	3.1	3.4

KANSAS RIVER BASIN

06838000 RED WILLOW CREEK NEAR RED WILLOW, NE

LOCATION.--Lat 40°14'10", long 100°30'00", in NE1/4NE1/4 sec.17, T.3 N., R.28 W., Red Willow County, Hydrologic Unit 10250007, on left bank near downstream side of bridge on U.S. Highways 6 and 34, 0.8 mi north of Red Willow and 2.1 mi (revised) upstream from mouth.

DRAINAGE AREA.--830 mi², approximately, of which about 410 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 National Geodetic Vertical Datum of 1929. 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 present site and datum, and Aug. 3, 1974, to June 27, 1980, on right bank at 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	e5.2	e6.2	9.3	7.3	8.1	7.5	7.1	5.4	.07	2.2	e5.0
2	4.4	e5.0	e5.8	8.5	7.4	7.9	7.6	6.3	5.6	1.1	2.7	e4.5
3	4.2	e5.2	e5.8	e8.2	7.7	7.7	7.9	6.2	5.2	4.7	11	e3.4
4	4.3	e5.8	e6.8	7.9	7.5	9.2	7.8	6.3	5.8	6.5	18	5.0
5	4.7	e7.0	e7.0	8.0	7.2	9.3	7.8	6.5	4.5	5.5	78	4.3
6	5.1	e6.8	e7.4	7.8	7.3	8.1	7.6	6.5	3.8	4.7	19	3.9
7	5.7	e6.0	e8.0	9.4	7.2	7.8	7.5	6.6	4.0	3.5	106	6.1
8	5.7	e6.2	e7.8	9.1	7.1	7.8	7.6	6.6	4.3	8.4	54	12
9	5.5	e6.6	e7.4	e8.8	7.6	8.5	7.5	6.4	6.3	8.6	20	9.6
10	5.8	e7.0	e7.0	e8.0	7.3	8.0	7.7	6.2	7.1	7.6	19	6.3
11	5.4	e6.8	6.8	e8.2	6.7	7.5	7.4	6.7	5.9	6.9	19	9.7
12	5.6	e6.8	9.2	8.8	e7.8	7.5	7.1	6.4	6.0	11	17	8.8
13	5.7	6.6	8.0	7.7	7.6	7.6	7.3	6.3	6.0	6.7	11	7.2
14	6.1	6.5	7.2	e9.2	7.6	7.6	7.6	7.4	6.0	3.0	17	6.5
15	7.1	6.0	e7.8	8.5	7.7	7.6	7.7	7.1	6.0	1.8	16	6.2
16	7.1	6.1	e8.4	e8.6	7.6	7.6	7.6	6.5	6.2	7.1	17	6.1
17	6.7	8.6	8.0	e8.4	8.2	7.4	7.5	6.1	5.5	7.5	21	5.9
18	5.7	6.9	e7.8	e9.0	7.6	7.5	7.1	6.2	5.2	4.7	18	5.4
19	6.2	6.3	e8.0	10	7.5	8.0	7.1	6.3	5.4	5.2	14	5.6
20	6.5	5.9	7.9	11	7.8	7.8	6.7	5.6	5.4	11	11	6.0
21	6.6	6.2	7.7	10	7.7	7.6	6.9	5.6	5.5	11	8.7	5.9
22	6.4	6.2	8.1	10	7.8	7.4	6.9	5.4	6.0	8.7	6.1	5.7
23	8.1	5.8	8.4	9.0	8.1	7.6	7.1	5.4	4.9	6.8	5.4	5.6
24	6.2	e6.0	e8.2	8.9	8.8	7.8	7.0	5.4	3.0	23	6.0	5.2
25	6.1	6.3	e8.2	8.1	8.0	7.7	6.8	5.6	.06	13	15	5.1
26	6.0	6.4	e8.0	7.2	7.9	7.7	7.0	5.5	.23	12	7.6	5.3
27	6.5	6.4	e8.2	7.1	7.9	7.7	7.0	5.8	1.5	11	8.5	5.5
28	e7.2	6.2	8.3	7.1	8.0	8.4	7.2	6.3	1.4	9.7	8.6	5.2
29	e7.4	6.5	8.4	7.3	8.1	9.7	7.1	5.6	2.5	5.3	8.1	13
30	e6.0	e6.4	8.2	7.2	---	7.8	6.8	4.8	2.2	7.4	8.0	7.4
31	e5.4	---	8.0	7.2	---	7.6	---	4.8	---	7.3	7.4	---
TOTAL	183.4	189.7	238.0	263.5	222.0	245.5	219.4	189.5	136.89	230.77	580.3	191.4
MEAN	5.92	6.32	7.68	8.50	7.66	7.92	7.31	6.11	4.56	7.44	18.7	6.38
MAX	8.1	8.6	9.2	11	8.8	9.7	7.9	7.4	7.1	23	106	13
MIN	4.0	5.0	5.8	7.1	6.7	7.4	6.7	4.8	.06	.07	2.2	3.4
AC-FT	364	376	472	523	440	487	435	376	272	458	1150	380

e Estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1992, BY WATER YEAR (WY)

MEAN	8.67	8.50	8.81	9.66	11.6	11.4	12.0	12.3	22.5	21.5	23.2	11.4
MAX	18.8	10.9	12.1	16.9	32.9	30.6	41.5	36.6	124	59.9	92.4	29.0
(WY)	1970	1968	1966	1968	1968	1968	1970	1973	1967	1967	1978	1978
MIN	3.84	4.98	5.95	5.46	7.66	7.55	4.98	2.87	4.56	7.44	4.02	3.22
(WY)	1978	1978	1984	1979	1992	1991	1978	1978	1992	1992	1963	1991

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1963 - 1992

ANNUAL TOTAL	3335.8	2890.36	
ANNUAL MEAN	9.14	7.90	13.5
HIGHEST ANNUAL MEAN			25.5
LOWEST ANNUAL MEAN			7.90
HIGHEST DAILY MEAN	90	Aug 7	555
LOWEST DAILY MEAN	1.8	Jul 14	.02
ANNUAL SEVEN-DAY MINIMUM	2.7	Sep 3	.93
INSTANTANEOUS PEAK FLOW			30000
INSTANTANEOUS PEAK STAGE			18.36
ANNUAL RUNOFF (AC-FT)	6620	5730	9760
10 PERCENT EXCEEDS	11	9.5	22
50 PERCENT EXCEEDS	7.5	7.1	9.5
90 PERCENT EXCEEDS	4.0	5.1	6.0

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.

GAGE.--Water-stage recorder. Concrete control since November 1950. Datum of gage is 2,380.94 ft above National Geodetic Vertical Datum of 1929 (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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	41	45	48	49	52	47	44	42	39	27	47
2	27	e36	e44	48	49	52	47	42	44	39	26	46
3	27	e34	e40	49	49	51	47	41	45	39	25	46
4	29	e34	e43	48	49	53	47	40	45	38	34	42
5	29	e48	e46	48	49	59	47	40	44	36	199	40
6	30	e45	e50	48	49	69	46	39	44	35	93	39
7	30	e40	45	e47	48	70	47	39	38	35	285	38
8	32	e41	45	e49	47	65	46	39	33	40	141	37
9	32	e45	45	e50	46	62	46	38	36	29	113	37
10	32	47	45	e48	47	63	46	37	40	27	76	36
11	32	47	45	54	47	60	46	37	42	30	51	35
12	32	47	48	51	47	58	45	37	42	34	45	34
13	32	46	51	50	46	56	45	36	41	37	40	34
14	31	45	52	49	48	55	46	42	41	36	35	34
15	32	44	49	e46	49	53	47	42	41	36	39	33
16	33	44	48	e44	50	52	47	40	43	33	40	33
17	34	47	45	e54	52	51	47	39	43	36	51	32
18	34	51	45	e52	58	50	48	40	41	38	40	32
19	34	51	44	e52	56	49	47	42	45	33	38	31
20	34	48	43	e49	55	50	46	46	39	32	37	32
21	35	47	44	48	52	53	45	44	41	28	35	32
22	36	46	45	45	51	52	45	40	42	32	32	32
23	36	46	45	45	51	51	45	38	41	38	29	31
24	37	43	45	45	53	50	44	36	39	40	29	31
25	36	42	46	45	58	49	44	36	38	43	62	31
26	37	43	44	46	57	49	43	36	39	47	90	31
27	37	42	43	47	55	48	43	38	45	42	94	31
28	39	43	43	47	54	48	43	39	49	38	83	31
29	40	44	43	47	52	49	44	41	48	35	67	32
30	44	45	44	48	---	49	44	41	44	37	55	33
31	36	---	45	48	---	49	---	41	---	34	49	---
TOTAL	1035	1322	1405	1495	1473	1677	1370	1230	1255	1116	2060	1053
MEAN	33.4	44.1	45.3	48.2	50.8	54.1	45.7	39.7	41.8	36.0	66.5	35.1
MAX	44	51	52	54	58	70	48	46	49	47	285	47
MIN	26	34	40	44	46	48	43	36	33	27	25	31
AC-FT	2050	2620	2790	2970	2920	3330	2720	2440	2490	2210	4090	2090

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1992, BY WATER YEAR (WY)

	MEAN	46.3	52.7	53.0	53.6	71.0	75.8	65.5	80.6	94.1	66.5	45.8	40.9
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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1950 - 1992

ANNUAL TOTAL	16417	16491	62.0
ANNUAL MEAN	45.0	45.1	56.0
MEDIAN OF ANNUAL MEANS			127
HIGHEST ANNUAL MEAN			43.3
LOWEST ANNUAL MEAN			5900
HIGHEST DAILY MEAN	469 May 23	285 Aug 7	Jun 11 1969
LOWEST DAILY MEAN	13 Sep 1	25 Aug 3	9.1 Aug 9 1980
ANNUAL SEVEN-DAY MINIMUM	14 Aug 31	28 Oct 1	11 Aug 5 1980
INSTANTANEOUS PEAK FLOW		602 Aug 7	11600 Jun 21 1967
INSTANTANEOUS PEAK STAGE		10.30 Aug 7	*20.05 Jun 21 1967
ANNUAL RUNOFF (AC-FT)	32560	32710	44880
10 PERCENT EXCEEDS	58	52	73
50 PERCENT EXCEEDS	45	44	52
90 PERCENT EXCEEDS	21	32	30

e Estimated.

* From floodmark.

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 National Geodetic Vertical Datum of 1929. 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, 34,610 acre-ft June 22, elevation, 2,365.49 ft; minimum, 13,230 acre-ft Oct. 1, elevation, 2,348.57 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 1991 TO SEPTEMBER 1992
DAILY OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13270	14960	17550	20360	23220	25980	28920	31320	32820	34000	29610	29730
2	13280	14980	17600	20440	23320	26080	29000	31250	32940	33760	29280	29820
3	13300	15040	17660	20530	23430	26150	29170	31350	33060	33680	28980	29840
4	13320	15100	17760	20650	23490	26330	29260	31390	33200	33640	28900	29810
5	13370	15220	17860	20720	23580	26430	29340	31400	33280	33510	29480	29820
6	13420	15310	17960	20800	23690	26560	29430	31440	33300	33350	29870	29820
7	13510	15380	18060	21080	23750	26700	29470	31530	33350	33140	30580	29710
8	13580	15480	18140	21100	23810	26920	29540	31620	33370	32900	30910	29470
9	13640	15610	18220	21260	23940	26950	29590	31630	33590	32680	31240	29310
10	13690	15670	18320	21350	24000	27050	29710	31680	33700	32410	31300	29180
11	13760	15770	18420	21490	24080	27150	29700	31760	33760	32340	31300	29170
12	13810	15880	18580	21590	24170	27250	29710	31760	33850	32150	31190	29280
13	13860	15970	18680	21650	24290	27380	29820	31830	33940	31980	30980	29360
14	13870	16070	18760	21780	24390	27450	30000	31890	34020	31880	30710	29370
15	13930	16120	18870	21760	24480	27540	30030	31980	34120	31630	30480	29420
16	14020	16270	18970	21820	24610	27660	30100	32060	34230	31300	30230	29500
17	14080	16360	19030	21890	24720	27690	30150	32030	34250	31070	29980	29590
18	14090	16460	19100	21980	24780	27780	30250	32060	34320	30840	29950	29430
19	14120	16550	19220	22080	24900	27860	30350	32180	34430	30570	29860	29420
20	14190	16640	19290	22180	24980	27960	30350	32270	34390	30210	29670	29510
21	14270	16760	19390	22260	25070	28040	30390	32300	34480	30060	29500	29540
22	14360	16830	19500	22350	25180	28090	30500	32250	34610	30100	29290	29560
23	14370	16880	19540	22440	25320	28210	30620	32280	34460	30140	29120	29610
24	14420	16970	19620	22540	25370	28300	30630	32320	34320	30370	28660	29640
25	14470	17050	19710	22600	25460	28390	30700	32340	34280	30350	28690	29650
26	14540	17140	19790	22690	25590	28450	30760	32340	34140	30350	28890	29620
27	14620	17220	19860	22770	25680	28500	30840	32390	34230	30390	29180	29680
28	14720	17290	19950	22860	25770	28660	30940	32470	34250	30370	29370	29670
29	14750	17420	20050	22940	25870	28720	31070	32610	34250	30250	29470	29710
30	14820	17500	20130	23050	---	28780	31220	32700	34180	30040	29540	29790
31	14940	---	20280	23130	---	28870	---	32750	---	29790	29620	---
MEAN	14010	16200	18900	21810	24520	27540	30050	31970	33900	31590	29870	29570
MAX	14940	17500	20280	23130	25870	28870	31220	32750	34610	34000	31300	29840
MIN	13270	14960	17550	20360	23220	25980	28920	31250	32820	29790	28660	29170
(*)	2350.47	2353.06	2355.56	2357.90	2359.97	2362.04	2363.52	2364.43	2365.25	2362.63	2362.52	2362.63
(**)	+1680	+2560	+2780	+2850	+2740	+3000	+2350	+1530	+1430	-4390	-170	+170
CAL	YR 1991	MEAN	23170	MAX	37600	MIN	13240	(**)	-90			
WTR	YR 1992	MEAN	25820	MAX	34610	MIN	13270	(**)	+16530			

(*) Elevation, in feet, at end of month.

(**) Change in contents, in acre-feet.

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.--880 mi², approximately, of which about 640 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 National Geodetic Vertical Datum of 1929 (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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	.41	.35	.42	.39	.44	.41	.49	.33	84	126	.80
2	19	.37	.34	.39	.40	.46	.43	.51	.24	115	150	.66
3	.24	.37	.35	.37	.42	.43	.41	.57	.31	83	168	19
4	.29	.38	.36	.37	.39	.59	.44	.53	.27	81	85	38
5	.29	.35	.37	.38	.40	.48	.42	.53	.24	90	.64	29
6	.29	.34	.38	.38	.40	.49	.44	.53	.21	85	.64	29
7	.28	.32	.39	.48	.40	.47	.48	.54	.22	133	.66	55
8	.28	.32	.39	.38	.40	.49	.47	.53	.24	133	.50	111
9	.33	.32	.40	.36	.38	.50	.47	.48	.48	123	.47	104
10	.39	.30	.38	.36	.35	.41	.50	.46	.25	123	8.5	80
11	.42	.34	.38	.37	.41	.42	.51	.47	.25	117	28	3.2
12	.46	.34	.46	.40	.40	.41	.47	.44	.24	111	67	.42
13	.50	.35	.35	.39	.40	.43	.41	.44	.25	112	106	.36
14	.52	.35	.35	.40	.42	.45	.41	.43	.29	94	125	.50
15	.57	.35	.35	.37	.42	.46	.44	.33	.31	131	137	.53
16	.54	.39	.34	.40	.40	.45	.46	.32	.27	151	143	.53
17	.56	.42	.35	.40	.40	.46	.46	.31	.25	143	150	.57
18	.59	.32	.34	.40	.42	.50	.47	.34	.28	143	61	.57
19	.64	.31	.36	.40	.40	.53	.47	.33	.37	161	84	.69
20	.65	.34	.35	.40	.40	.41	.45	.31	.35	163	119	.67
21	.65	.35	.35	.42	.45	.42	.46	.27	.35	86	94	.63
22	.67	.38	.36	.40	.38	.42	.47	.27	28	46	94	.65
23	.76	.35	.35	.40	.42	.46	.52	.27	123	31	121	.59
24	.79	.35	.35	.43	.46	.46	.53	.27	89	31	160	.55
25	.80	.41	.35	.40	.51	.47	.52	.28	60	30	77	.50
26	.82	.34	.35	.38	.49	.47	.52	.24	51	30	.62	.58
27	.64	.34	.35	.38	.51	.54	.53	.34	51	30	.56	.55
28	.64	.38	.37	.38	.47	.56	.50	.28	51	29	.53	.53
29	.59	.42	.40	.36	.45	.50	.45	.27	59	76	.55	.54
30	.62	.40	.37	.35	---	.46	.47	.26	60	106	.68	.49
31	.56	---	.40	.37	---	.41	---	.26	---	117	.73	---
TOTAL	59.38	10.71	11.34	12.09	12.14	14.45	13.99	11.90	578.00	2988	2110.08	480.11
MEAN	1.92	.36	.37	.39	.42	.47	.47	.38	19.3	96.4	68.1	16.0
MAX	25	.42	.46	.48	.51	.59	.53	.57	123	163	168	111
MIN	.24	.30	.34	.35	.35	.41	.41	.24	.21	29	.47	.36
AC-FT	118	21	22	24	24	29	28	24	1150	5930	4190	952

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1992, BY WATER YEAR (WY)

	MEAN	10.4	13.0	16.2	18.9	28.8	44.9	42.6	55.9	108	183	137	29.3
MAX	74.8	81.7	98.4	69.7	115	337	185	280	464	431	256	235	
(WY)	1958	1967	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1950 - 1992

ANNUAL TOTAL	14805.61	6302.19	
ANNUAL MEAN	40.6	17.2	58.8
HIGHEST ANNUAL MEAN			119
LOWEST ANNUAL MEAN			17.2
HIGHEST DAILY MEAN	373 Aug 19	168 Aug 3	1290 Mar 23 1960
LOWEST DAILY MEAN	.17 Feb 15	.21 Jun 6	.00 Sep 11 1990
ANNUAL SEVEN-DAY MINIMUM	.19 Jan 31	.25 Jun 2	.04 Sep 7 1990
INSTANTANEOUS PEAK FLOW		239 Jul 19	1300 Mar 23 1960
INSTANTANEOUS PEAK STAGE		2.53 Jul 19	5.97 Mar 23 1960
ANNUAL RUNOFF (AC-FT)	29370	12500	42590
10 PERCENT EXCEEDS	196	85	171
50 PERCENT EXCEEDS	.48	.45	26
90 PERCENT EXCEEDS	.29	.32	.54

06843500 REPUBLICAN RIVER AT CAMBRIDGE, NE

LOCATION.--Lat 40°17'05", long 100°08'35", in NW1/4SE1/4 sec.28, T.4 N., R.25 W., Furnas County, Hydrologic Unit 10250004, on left bank 400 ft south of U.S. Highways 6 and 34, 0.5 mi downstream from Medicine Creek, 1 mi east of Cambridge, 1.3 mi upstream from Cambridge diversion dam, and at mile 315.

DRAINAGE AREA.--14,520 mi², approximately, of which about 7,810 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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	18	e50	117	114	129	114	63	45	109	252	179
2	23	23	e50	121	117	128	118	60	47	195	231	169
3	18	24	e50	119	122	127	116	59	46	188	298	153
4	7.0	28	e52	118	123	137	114	57	48	172	405	165
5	4.0	34	e58	118	119	157	110	56	47	236	877	151
6	2.9	50	e70	119	122	158	110	54	47	248	594	147
7	2.4	63	e80	e110	123	156	113	54	43	270	465	154
8	2.1	63	e80	e100	125	150	115	53	42	309	453	185
9	1.8	85	e78	e90	123	159	115	53	60	269	338	204
10	1.7	89	e78	e90	118	162	111	52	68	266	238	171
11	1.5	83	e80	e92	115	159	100	52	62	257	218	131
12	1.5	81	e86	e100	117	157	91	51	49	252	212	136
13	1.5	77	e90	e90	133	155	87	49	48	257	253	124
14	1.7	72	e90	e80	124	150	89	51	49	268	237	111
15	2.0	69	e90	e80	127	145	88	62	47	232	234	103
16	2.2	73	e98	e90	126	139	85	50	45	263	216	96
17	2.4	89	111	e100	124	137	81	46	42	238	255	92
18	3.9	91	108	e100	127	139	78	44	38	229	497	87
19	5.6	86	109	e100	126	142	78	42	38	213	373	88
20	7.5	88	109	e110	126	141	81	40	39	297	293	88
21	9.7	90	108	e120	125	138	81	39	38	202	195	89
22	12	91	109	e130	128	130	81	40	36	173	170	88
23	15	90	110	e140	129	122	77	39	123	142	164	85
24	17	92	109	e130	133	119	78	38	138	173	213	81
25	19	e70	109	123	138	116	75	38	90	252	243	79
26	21	e72	106	118	132	117	74	37	73	329	252	79
27	24	e80	107	113	130	120	70	40	80	208	439	78
28	27	e80	107	112	128	128	74	43	81	175	388	76
29	30	e64	106	111	128	135	69	43	89	158	267	76
30	32	e54	105	111	---	126	67	41	123	213	215	80
31	30	---	106	113	---	116	---	41	---	210	192	---
TOTAL	352.4	2069	2799	3365	3622	4294	2740	1487	1821	7003	9677	3545
MEAN	11.4	69.0	90.3	109	125	139	91.3	48.0	60.7	226	312	118
MAX	32	92	111	140	138	162	118	63	138	329	877	204
MIN	1.5	18	50	80	114	116	67	37	36	109	164	76
AC-FT	699	4100	5550	6670	7180	8520	5430	2950	3610	13890	19190	7030

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1992, BY WATER YEAR (WY)

MEAN	124	159	155	163	253	311	281	337	379	382	308	164
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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1950 - 1992

ANNUAL TOTAL	40734.4		42774.4		
ANNUAL MEAN	112		117		251
HIGHEST ANNUAL MEAN					686
LOWEST ANNUAL MEAN					110
HIGHEST DAILY MEAN	365	Aug 20	877	Aug 5	8610
LOWEST DAILY MEAN	1.5	Oct 11	1.5	Oct 11	.07
ANNUAL SEVEN-DAY MINIMUM	1.7	Oct 9	1.7	Oct 9	.11
INSTANTANEOUS PEAK FLOW			1060	Aug 5	160000
INSTANTANEOUS PEAK STAGE			6.14	Aug 5	*16.7
ANNUAL RUNOFF (AC-FT)	80800		84840		182000
10 PERCENT EXCEEDS	237		233		439
50 PERCENT EXCEEDS	106		104		171
90 PERCENT EXCEEDS	23		35		76

e Estimated.

* From floodmark.

KANSAS RIVER BASIN

205

06844000 MUDDY CREEK AT ARAPAHOE, NE

LOCATION.--Lat 40°18'20", long 99°54'40", in NW1/4NW1/4 sec.22, T.4 N., R.23 W., Furnas County, Hydrologic Unit 10250009, on left bank 10 ft upstream from bridge on U.S. Highways 6 and 34, 0.2 mi west of Arapahoe, and 2.3 mi (revised) upstream from mouth.

DRAINAGE AREA.--246 mi².

PERIOD OF RECORD.--December 1950 to September 1972, and October 1977 to current year.

REVISED RECORDS.--WSP 2119: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,143.92 ft, above National Geodetic Vertical Datum of 1929. December 1950 to Jan. 11, 1951, nonrecording gage, and Jan. 12, 1951, to Sept. 30, 1972, recording gage at site on left bank 20 ft downstream from bridge at present datum.

REMARKS.--Records good except for periods of estimated record, which are poor. Natural flow affected by irrigation development above station and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	e5.4	e5.8	6.4	6.3	5.8	6.4	5.6	6.5	4.9	5.0	5.7
2	4.0	e5.4	e5.8	6.6	6.2	5.8	6.2	5.6	6.2	5.1	4.5	6.2
3	4.0	5.7	e6.0	6.5	6.2	6.0	6.3	5.6	e6.1	5.2	4.2	5.8
4	4.0	e5.8	e6.2	6.4	6.6	6.5	6.3	5.6	6.0	5.1	4.6	5.3
5	4.0	e6.0	6.1	6.4	6.5	7.6	6.3	5.6	6.0	5.0	5.3	5.3
6	4.2	e6.2	6.0	6.2	6.3	9.9	6.3	5.6	6.0	5.1	5.6	5.2
7	4.3	e6.0	6.2	6.4	6.2	8.3	6.4	5.6	5.8	6.7	7.5	5.2
8	4.4	e5.8	6.4	7.2	6.1	7.3	6.5	5.5	5.7	5.0	3.7	5.2
9	4.5	5.9	6.4	e6.8	5.9	7.1	6.8	5.3	3.0	4.8	1.6	5.6
10	4.6	6.0	6.1	e6.7	6.1	7.1	6.8	5.3	1.1	2.1	9.0	5.3
11	4.5	6.2	6.4	e7.0	6.1	6.9	6.7	5.3	7.3	1.0	7.5	5.0
12	4.1	6.2	7.1	7.5	5.7	6.8	6.5	5.6	6.6	7.8	6.7	4.8
13	4.2	6.0	7.4	6.8	6.7	6.7	6.5	5.6	5.8	1.3	6.0	5.3
14	4.3	6.0	6.8	e7.0	6.5	6.6	6.5	5.6	5.6	6.7	5.6	5.3
15	4.4	6.0	e6.4	e7.2	6.5	6.5	6.6	5.6	5.3	5.2	5.3	5.3
16	5.0	6.0	e6.4	7.2	6.6	6.4	6.8	5.5	5.6	5.0	4.9	5.4
17	4.9	6.6	6.4	7.0	6.6	6.4	6.8	5.0	5.3	4.5	4.8	5.3
18	4.4	6.8	e6.2	6.4	6.6	6.2	6.8	5.6	5.1	4.3	5.5	5.1
19	4.4	6.8	6.4	e6.4	6.6	6.4	6.8	5.6	5.0	4.6	5.5	4.9
20	4.8	6.8	6.4	e6.6	6.5	6.7	6.5	5.5	5.2	5.4	5.0	4.9
21	5.0	6.4	5.9	e6.4	6.3	6.7	6.4	5.3	5.1	1.2	4.1	4.9
22	5.0	6.2	6.4	6.3	6.1	6.5	6.3	5.5	5.3	7.6	4.8	5.2
23	5.3	6.1	6.2	e6.2	6.0	6.4	6.3	5.5	5.5	5.8	6.3	5.1
24	5.3	6.0	6.0	6.1	6.2	6.2	6.0	5.6	5.3	4.6	5.9	4.9
25	5.3	6.0	e6.2	6.1	6.3	6.2	5.8	5.4	5.4	3.3	9.2	4.9
26	5.3	6.0	e6.2	6.0	6.3	6.2	5.8	5.4	5.2	1.9	7.5	4.9
27	5.3	6.0	6.3	6.4	6.2	6.2	5.8	6.0	5.5	1.1	6.8	4.9
28	5.5	6.0	6.3	6.4	6.1	6.4	5.5	6.0	5.3	7.6	7.3	4.9
29	5.6	6.1	6.2	6.4	5.9	6.8	5.5	6.0	5.3	6.0	6.8	5.0
30	5.6	e6.0	6.2	6.4	---	6.7	5.3	5.8	5.0	6.1	6.3	4.9
31	e5.6	---	6.2	6.4	---	6.6	---	6.3	---	5.3	5.8	---
TOTAL	146.0	182.4	195.0	203.8	182.2	207.9	189.5	173.0	199.0	346.0	226.3	155.7
MEAN	4.71	6.08	6.29	6.57	6.28	6.71	6.32	5.58	6.63	11.2	7.30	5.19
MAX	5.6	6.8	7.4	7.5	6.7	9.9	6.8	6.3	3.0	5.8	3.7	6.2
MIN	4.0	5.4	5.8	6.0	5.7	5.8	5.3	5.0	5.0	4.3	4.1	4.8
AC-FT	290	362	387	404	361	412	376	343	395	686	449	309

e Estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1992, BY WATER YEAR (WY)

MEAN	6.65	6.68	6.49	6.38	13.0	14.3	9.66	28.0	34.7	19.8	17.4	12.1
MAX	19.4	10.2	9.24	8.96	73.5	130	40.6	228	179	105	83.6	117
(WY)	1966	1970	1966	1988	1966	1960	1957	1986	1957	1951	1962	1969
MIN	1.35	3.67	3.55	3.36	5.06	5.96	4.25	5.58	3.52	2.31	3.08	.93
(WY)	1954	1957	1957	1957	1978	1957	1955	1992	1952	1953	1955	1953

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1951 - 72,
1978 - 92

ANNUAL TOTAL	2824.9			2406.8
ANNUAL MEAN	7.74	6.58	13.9	
MEDIAN OF ANNUAL MEANS	10.0			
HIGHEST ANNUAL MEAN				34.5 1962
LOWEST ANNUAL MEAN				5.53 1956
HIGHEST DAILY MEAN	192 Jun 2		58 Jul 23	4570 May 9 1986
LOWEST DAILY MEAN	2.8 Jul 22		4.0 Oct 2	.00 Aug 26 1953
ANNUAL SEVEN-DAY MINIMUM	3.3 Jul 16		4.1 Oct 1	.00 Aug 26 1953
INSTANTANEOUS PEAK FLOW			126 Jul 23	10800 May 8 1986
INSTANTANEOUS PEAK STAGE			6.75 Jul 23	28.90 May 8 1986
ANNUAL RUNOFF (AC-FT)	5600		4770	10100
10 PERCENT EXCEEDS	7.8		7.0	12
50 PERCENT EXCEEDS	6.3		6.0	7.0
90 PERCENT EXCEEDS	4.2		4.9	4.2

KANSAS RIVER BASIN
06844210 TURKEY CREEK AT EDISON, NE

LOCATION.--Lat 40°16'15", long 99°44'00", in the center of sec.31, T.4 N., R.21 W., Furnas County, Hydrologic Unit 10250009, on left bank 10 ft downstream from bridge on State Highway 136, 2 mi east of Edison and 2.7 mi (revised) upstream from mouth.

DRAINAGE AREA.--74.9 mi².

PERIOD OF RECORD.--October 1977 to current year.

REVISED RECORDS.--WDR NE-81-1: 1978-80(M). WDR NE-89-1: 1981(M).

GAGE.--Water-stage recorder. Elevation of gage is 2,090 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for periods of estimated record, which are poor. Natural flow affected by pump irrigation development above station and by return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	4.4	6.0	7.9	7.9	7.7	9.0	9.1	8.0	6.9	5.9	3.5
2	2.9	7.0	3.7	8.2	7.9	7.8	9.0	8.5	8.9	7.6	6.0	4.0
3	2.9	7.7	5.5	8.1	7.9	8.0	9.1	8.2	8.8	7.8	7.0	4.1
4	3.0	5.9	6.2	7.9	7.9	9.4	9.3	8.2	8.7	7.4	5.9	4.2
5	3.1	6.5	7.2	7.9	7.9	11	9.3	8.2	8.9	7.1	5.6	4.4
6	3.1	7.4	7.8	7.9	7.9	10	9.3	8.2	8.5	7.2	4.9	3.8
7	3.4	7.0	7.9	8.4	7.9	9.6	9.3	8.0	8.4	6.6	6.1	3.8
8	3.9	4.8	7.9	9.5	7.9	9.4	9.3	7.9	8.2	6.5	6.3	4.3
9	4.2	6.5	7.7	6.9	7.9	10	9.3	7.9	9.2	5.4	5.8	4.8
10	4.4	7.6	6.9	7.6	8.4	10	9.4	7.9	9.7	5.2	5.4	4.5
11	4.4	7.4	7.1	8.4	6.6	8.8	9.5	7.7	9.1	4.8	4.2	3.2
12	4.3	7.1	7.9	10	7.6	8.7	9.3	7.6	8.7	5.0	4.0	3.4
13	4.5	6.8	8.9	8.1	9.6	8.7	9.0	7.0	8.5	5.3	4.3	3.3
14	4.5	6.8	7.9	6.3	8.5	8.5	9.2	6.9	8.6	6.2	3.8	3.4
15	5.0	6.8	5.3	9.8	8.5	8.5	9.6	7.4	8.7	5.4	4.0	2.9
16	5.5	6.5	5.5	4.5	8.5	8.5	9.6	7.4	8.7	4.6	3.9	3.3
17	5.3	6.6	7.3	8.4	8.5	8.5	9.6	6.7	8.7	4.6	4.1	3.3
18	5.1	7.0	6.2	10	8.5	8.6	9.6	6.7	8.4	4.2	5.0	4.3
19	5.1	6.7	7.7	9.3	7.9	9.1	9.6	6.7	8.2	4.5	4.7	6.5
20	5.2	6.2	8.0	9.0	7.7	9.6	9.6	6.7	8.3	13	2.1	3.6
21	5.5	6.0	7.8	8.9	7.7	9.5	9.6	6.8	8.5	8.3	1.2	3.4
22	5.9	6.1	7.3	8.9	7.7	9.3	9.3	7.4	8.5	19	.99	3.4
23	6.0	6.2	7.3	8.7	7.7	8.8	9.3	7.4	8.3	73	2.1	3.5
24	6.0	5.2	7.8	8.4	7.8	8.7	9.3	7.4	8.0	14	2.8	3.5
25	5.8	6.7	5.0	8.4	7.9	8.9	9.3	7.4	7.6	11	3.8	3.7
26	5.8	6.5	6.5	8.4	7.7	9.2	9.1	7.5	7.4	8.9	6.0	3.9
27	5.8	6.5	9.3	7.9	7.7	9.0	9.0	7.8	7.4	7.9	4.1	4.2
28	6.4	6.5	8.2	8.2	7.7	9.1	9.2	8.1	7.4	7.1	3.5	4.1
29	6.9	6.1	7.9	8.1	7.7	9.8	9.5	8.2	7.7	6.6	3.4	4.1
30	6.4	5.3	7.9	8.2	---	9.5	9.5	7.9	7.1	7.0	3.4	4.1
31	3.4	---	7.8	7.9	---	9.0	---	7.9	---	6.2	3.4	---
TOTAL	146.7	193.8	221.4	256.1	231.0	281.2	280.0	236.7	251.1	294.3	133.69	116.5
MEAN	4.73	6.46	7.14	8.26	7.97	9.07	9.33	7.64	8.37	9.49	4.31	3.88
MAX	6.9	7.7	9.3	10	9.6	11	9.6	9.1	9.7	73	7.0	6.5
MIN	2.9	4.4	3.7	4.5	6.6	7.7	9.0	6.7	7.1	4.2	.99	2.9
AC-FT	291	384	439	508	458	558	555	469	498	584	265	231

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1992 BY WATER YEAR (WY)

	4.41	5.08	5.37	5.71	8.55	8.48	8.67	10.0	11.4	10.3	6.56	3.51
MEAN	4.41	5.08	5.37	5.71	8.55	8.48	8.67	10.0	11.4	10.3	6.56	3.51
MAX	9.02	8.04	8.56	8.66	18.3	11.0	11.6	21.4	28.9	18.7	20.2	8.01
(WY)	1986	1988	1989	1988	1988	1988	1979	1990	1989	1981	1990	1985
MIN	1.33	2.35	2.28	1.31	3.41	4.78	5.36	5.05	3.91	2.79	1.34	1.03
(WY)	1979	1979	1979	1979	1978	1981	1981	1981	1978	1978	1991	1978

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1978- 1992

ANNUAL TOTAL	2564.44	2642.49	
ANNUAL MEAN	7.03	7.22	7.34
HIGHEST ANNUAL MEAN			10.2 1988
LOWEST ANNUAL MEAN			3.86 1978
HIGHEST DAILY MEAN	66 May 24	73 Jul 23	330 Jun 29 1987
LOWEST DAILY MEAN	.01 Sep 6	.99 Aug 22	.01 Sep 6 1991
ANNUAL SEVEN-DAY MINIMUM	.42 Aug 24	2.5 Aug 19	.42 Aug 24 1991
INSTANTANEOUS PEAK FLOW		127 Jul 23	795 Jun 25 1989
INSTANTANEOUS PEAK STAGE		6.03 Jul 23	*12.91 Jun 25 1989
ANNUAL RUNOFF (AC-FT)	5090	5240	5310
10 PERCENT EXCEEDS	11	9.3	10
50 PERCENT EXCEEDS	7.1	7.6	6.0
90 PERCENT EXCEEDS	1.4	3.9	2.6

* From floodmark.

06844500 REPUBLICAN RIVER NEAR ORLEANS, NE

LOCATION.--Lat 40°07'53", long 99°30'08", in NE1/4NE1/4 sec.19, T.2 N., R.19 W., Harlan County, Hydrologic Unit 10250009, on right bank 18 ft downstream from bridge on State Highway 89, 200 ft downstream from Burlington Northern Inc. bridge, 2 mi west of Orleans, 2.8 mi upstream from Sappa Creek, 23 mi upstream from Harlan County Dam, and at mile 262.

DRAINAGE AREA.--15,640 mi², approximately, of which about 8,910 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 National Geodetic Vertical Datum of 1929. Prior to June 2, 1948, nonrecording gage at present site and datum.

REMARKS.--Records good except for periods of estimated discharge, which are poor. Natural flow affected by irrigation development above station and regulation by upstream reservoirs.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.12	e58	102	145	160	178	115	54	39	68	187
2	.00	.43	e58	104	147	160	173	106	65	39	51	152
3	.00	2.2	e58	110	147	159	170	96	70	37	56	113
4	.00	2.1	e60	116	147	168	169	91	70	47	62	94
5	.00	1.4	e70	118	149	184	168	87	68	47	81	79
6	.00	.46	e80	111	151	188	165	81	87	35	103	78
7	.00	.31	e88	117	149	199	166	76	76	39	451	78
8	.00	4.4	e90	e110	147	198	164	72	68	46	360	71
9	.00	12	e90	e100	150	201	161	69	63	36	356	57
10	.00	23	e100	e100	148	196	161	66	117	30	355	45
11	.00	77	e105	e110	145	197	159	66	174	29	266	58
12	.00	112	e100	e120	144	196	152	61	115	35	202	52
13	.00	97	e104	e110	148	193	149	59	101	42	143	68
14	.00	69	e110	e100	152	190	146	60	89	48	100	100
15	.00	62	e116	e90	163	186	144	62	87	30	88	104
16	.00	60	123	102	157	185	142	62	86	23	76	98
17	.00	71	119	e125	156	180	142	66	81	18	66	92
18	.00	78	121	e120	156	176	142	61	74	19	62	85
19	.00	84	109	e130	158	179	142	55	71	26	56	82
20	.00	83	108	e140	161	178	140	52	65	109	133	89
21	.00	77	112	e150	159	178	137	48	62	110	144	85
22	.00	72	115	163	159	176	133	45	66	103	105	81
23	.00	70	96	168	159	173	132	44	62	177	64	80
24	.00	73	98	164	158	172	130	41	57	190	41	76
25	.00	71	104	159	156	169	126	41	56	163	44	71
26	.00	70	105	148	159	168	125	41	95	133	74	71
27	.00	68	105	154	163	166	123	41	83	163	114	72
28	.00	e68	98	153	163	171	122	45	69	200	154	68
29	.00	e68	96	151	161	172	120	47	63	152	273	68
30	.00	e62	93	148	---	183	122	48	47	112	269	70
31	.00	---	92	144	---	185	---	49	---	77	215	---
TOTAL	0.00	1538.42	2981	3937	4457	5586	4403	1953	2341	2354	4632	2524
MEAN	.000	51.3	96.2	127	154	180	147	63.0	78.0	75.9	149	84.1
MAX	.00	112	123	168	163	201	178	115	174	200	451	187
MIN	.00	.12	58	90	144	159	120	41	47	18	41	45
AC-FT	.00	3050	5910	7810	8840	11080	8730	3870	4640	4670	9190	5010

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1992, BY WATER YEAR (WY)

MEAN	129	172	173	174	310	390	347	423	518	267	182	152
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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1948 - 1992

ANNUAL TOTAL	28879.40	36706.42	
ANNUAL MEAN	79.1	100	269
HIGHEST ANNUAL MEAN			746
LOWEST ANNUAL MEAN			78.4
HIGHEST DAILY MEAN	357 Jun 3	451 Aug 7	18400 Jun 22 1948
LOWEST DAILY MEAN	.00 Aug 31	.00 Oct 1	.00 Sep 15 1952
SEVEN-DAY MINIMUM	.00 Sep 12	.00 Oct 1	.00 Sep 15 1952
INSTANTANEOUS PEAK FLOW (STAGE)		538 Aug 7	40600 (11.25) Jun 22 1948
INSTANTANEOUS PEAK STAGE		4.35 Aug 7	*12.60 Mar 22 1960
ANNUAL RUNOFF (AC-FT)	57280	72810	194900
10 PERCENT EXCEEDS	163	173	510
50 PERCENT EXCEEDS	71	95	166
90 PERCENT EXCEEDS	.00	1.9	44

e Estimated.

* Backwater from ice.

KANSAS RIVER BASIN
06844500 REPUBLICAN RIVER NEAR ORLEANS, NE--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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- LINTY LAB (MG/L AS CaCO ₃) (90410)
NOV	22...	79	722	8.5	4.0	704	12.1	44	17	265
DEC	16...	120	675	7.5	0.0	708	13.1	46	15	260
JAN	16...	102	783	--	0.0	705	13.4	33	11	208
MAR	05...	182	548	8.5	13.0	699	11.5	43	14	247
APR	02...	173	755	8.6	11.0	710	11.2	50	15	280
JUN	10...	88	593	7.8	22.0	627	9.0	43	16	227
JUL	16...	23	591	8.1	25.0	698	13.8	41	18	228
SEP	14...	105	773	8.6	25.0	707	9.3	48	19	272

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)
NOV	86	27	0.70	35	1.58	0.020	1.60	0.020	0.090	0.080
DEC	80	29	0.70	39	1.98	0.020	2.00	0.020	0.140	0.120
JAN	100	34	0.80	45	2.58	0.020	2.60	0.060	0.150	0.140
MAR	78	29	0.70	31	1.49	0.010	1.50	0.020	0.090	0.060
APR	99	32	0.90	36	1.79	0.010	1.80	0.030	0.080	0.080
JUN	83	29	0.60	27	0.480	0.020	0.500	<0.010	0.090	0.090
JUL	82	24	0.70	35	--	<0.010	<0.050	0.030	0.020	0.020
SEP	90	24	0.60	38	1.28	0.020	1.30	0.020	0.120	0.120

DATE	TIME	BORON, DISSOLVED (μG/L AS B) (01020)	IRON, DISSOLVED (μG/L AS FE) (01046)	MANGANESE, DISSOLVED (μG/L AS MN) (01056)
NOV	22...	130	150	5
DEC	16...	130	12	4
JAN	16...	150	6	9
MAR	05...	130	6	7
APR	02...	150	5	7
JUN	10...	150	<3	19
JUL	16...	140	4	11
SEP	14...	160	<3	8

KANSAS RIVER BASIN
06846500 BEAVER CREEK AT CEDAR BLUFFS, KS

209

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 fair.

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/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 5	0100	*497	*8.96	No peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
2	.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
3	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
4	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	4.6	.00
5	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	66	.00
6	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	5.2	.00
7	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	6.1	.00
8	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	e26	.00
9	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	e4.8	.00
10	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	e2.3	.00
11	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	e1.1	.00
12	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	e.46	.00
13	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	e.03	.00
14	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00
20	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00
26	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	e.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00
28	.00	e.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00
29	.00	e.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00
30	e.00	e.00	.00	.00	---	.00	.00	.00	.00	e.00	.00	.00
31	e.00	---	.00	.00	---	.00	---	.01	---	e.00	.00	---
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	3.76	.000
MAX	.00	.00	.00	.00	.00	.00	.00	.01	.00	.01	66	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.02	.00	.02	231	.00

e Estimated

KANSAS RIVER BASIN
06846500 BEAVER CREEK AT CEDAR BLUFFS, KS --Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946- 1992, BY WATER YEAR (WY)

MEAN	10.0	3.06	2.59	2.20	3.98	13.0	7.53	26.4	42.6	32.4	15.0	17.6
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 1991 CALENDAR YEAR		FOR 1992 WATER YEAR		WATER YEARS 1946 - 1992	
ANNUAL MEAN			.32		14.8	
HIGHEST ANNUAL MEAN					106	1951
LOWEST ANNUAL MEAN					.00	1991
HIGHEST DAILY MEAN			66	Aug 5	4560	Jun 11 1960
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Sep 3 1946
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Sep 23 1947
INSTANTANEOUS PEAK FLOW			497	Aug 5	7940	Jun 11 1960
INSTANTANEOUS PEAK STAGE			8.96	Aug 5	18.71	Jun 11 1960
INSTANTANEOUS LOW FLOW			.00	Oct 1	.00	most years
ANNUAL RUNOFF (AC-FT)			231		10700	
10 PERCENT EXCEEDS	.00		.00		25	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

LOCATION.--Lat 40°07'12", long 99°53'35", in SW1/4SW1/4 sec.23, T.2 N., R.23 W., Furnas 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 (revised).

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 National Geodetic Vertical Datum, 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.07	.67	.29	.34	.32	.21	.26	.36	.31	.17	.14	.12
2	.09	.65	.29	.30	.35	.27	.26	.24	.31	.19	.18	.14
3	.10	.57	.28	.27	.35	.29	.27	.20	.30	.19	.17	.12
4	.11	.56	.26	.27	.35	.32	.26	.20	.31	.19	.15	.11
5	.14	.64	.27	.29	.35	.33	.24	.20	.27	.17	.16	.11
6	.16	.73	.27	.28	.35	.32	.25	.20	.28	.14	.24	.12
7	.19	.62	.25	.40	.35	.30	.26	.19	.28	.15	.65	.11
8	.21	.61	.24	.44	.33	.31	.27	.19	.30	.14	.18	.11
9	.24	.66	.24	.34	.33	.30	.29	.19	.36	.15	6.6	.09
10	.26	.67	.23	.32	.33	.29	.29	.21	.45	.15	1.9	.09
11	.28	.67	.23	.32	.32	.29	.30	.25	.37	.12	.61	.09
12	.29	.64	.40	.35	.32	.29	.29	.26	.31	.13	.30	.09
13	.30	.56	.30	.34	.32	.29	.29	.26	.32	.12	.23	.09
14	.31	.54	.25	.32	.33	.29	.32	.25	.33	.13	.21	.09
15	.34	.48	.24	.29	.34	.29	.31	.20	.35	.11	.17	.09
16	.35	.50	.24	.30	.32	.27	.30	.19	.36	.09	.16	.09
17	.34	.65	.23	.34	.33	.29	.26	.37	.37	.09	.17	.09
18	.30	.54	.23	.33	.31	.26	.28	.55	.36	.08	.18	.12
19	.32	.55	.28	.33	.37	.27	.28	.49	.58	.08	.16	.13
20	.32	.50	.29	.33	.38	.29	.25	.47	.50	.13	.16	.13
21	.35	.48	.26	.32	.38	.31	.24	.25	.31	.14	.16	.16
22	.35	.46	.18	.30	.36	.28	.25	.27	.29	.16	.15	.19
23	.35	.45	.14	.30	.35	.27	.26	.38	.27	.20	.12	.19
24	.32	.42	.10	.32	.38	.29	.25	.32	.24	.39	.11	.12
25	.36	.40	.08	.32	.38	.28	.22	.24	.23	.46	.24	.10
26	.49	.38	.13	.32	.39	.28	.25	.25	.27	.23	.22	.18
27	.64	.38	.43	.32	.38	.25	.24	.21	.24	.17	.19	.20
28	.72	.36	.28	.32	.38	.26	.26	.23	.23	.19	.15	.15
29	.60	.34	.26	.32	.36	.26	.31	.31	.24	.16	.11	.15
30	.55	.36	.23	.32	---	.26	.34	.30	.22	.20	.10	.21
31	.57	---	.25	.32	---	.28	---	.30	---	.18	.10	---
.TOTAL	10.02	16.04	7.65	9.98	10.11	8.79	8.15	8.53	9.56	5.20	96.54	3.78
MEAN	.32	.53	.25	.32	.35	.28	.27	.28	.32	.17	3.11	.13
MAX	.72	.73	.43	.44	.39	.33	.34	.55	.58	.46	.65	.21
MIN	.07	.34	.08	.27	.31	.21	.22	.19	.22	.08	.10	.09
AC-FT	20	32	15	20	20	17	16	17	19	10	191	7.5

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1992, BY WATER YEAR (WY)

MEAN	14.7	4.44	4.30	3.50	6.57	12.2	13.2	25.4	69.5	46.6	23.6	18.9
MAX	400	66.1	47.8	37.8	52.0	222	87.3	226	350	450	166	430
(WY)	1947	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	1979	1979	1956	1956	1956	1955	1978	1955	1955

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1938 - 1992

ANNUAL TOTAL	116.72		194.35		
ANNUAL MEAN	.32		.53		20.3
HIGHEST ANNUAL MEAN					116 1951
LOWEST ANNUAL MEAN					.25 1990
HIGHEST DAILY MEAN	4.0	May 30	65	Aug 7	5130 Jun 14 1983
LOWEST DAILY MEAN	.03	Jul 18	.07	Oct 1	.00 Many years
ANNUAL SEVEN-DAY MINIMUM	.04	Aug 27	.09	Sep 9	.00 Jul 19 1940
INSTANTANEOUS PEAK FLOW			109	Aug 7	9510 Jun 14 1983
INSTANTANEOUS PEAK STAGE			5.92	Aug 7	15.68 Jun 14 1983
ANNUAL RUNOFF (AC-FT)	232		385		14690
10 PERCENT EXCEEDS	.55		.47		38
50 PERCENT EXCEEDS	.30		.28		1.2
90 PERCENT EXCEEDS	.09		.12		.11

KANSAS RIVER BASIN

06847500 SAPPA CREEK NEAR STAMFORD, NE

LOCATION.--Lat 40°7'53", long 99°33'15", in NW1/4NW1/4 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 (revised) upstream from mouth.

DRAINAGE AREA.--3,741 mi², approximately, of which about 3,280 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 National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Natural flow affected by irrigation development above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.0
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.4
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.8
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.95
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.31
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.4	.04
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	130	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	295	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.90	.00	264	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.08	.00	159	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	119	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	86	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	53	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	32	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	20	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	14	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	9.3	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	5.3	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.0	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.9	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.4	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.34	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.45	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.16	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1197.36	6.51
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.033	.000	38.6	.22
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.90	.00	295	2.4
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	2.0	.00	2370	13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1992, BY WATER YEAR (WY)

MEAN	44.3	12.2	9.24	7.59	18.2	33.4	23.3	59.5	164	97.3	58.7	43.8
MAX	965	145	96.2	71.5	182	486	164	522	878	891	544	708
(WY)	1947	1947	1966	1966	1966	1960	1960	1949	1947	1951	1950	1951
MIN	.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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1946 - 1992

ANNUAL TOTAL	357.96	1204.87	
ANNUAL MEAN	.98	3.29	47.8
MEDIAN OF ANNUAL MEANS			18.0
HIGHEST ANNUAL MEAN			229
LOWEST ANNUAL MEAN			.59
HIGHEST DAILY MEAN	108	295	16600
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
INSTANTANEOUS PEAK FLOW		299	43400
INSTANTANEOUS PEAK STAGE		8.63	*22.13
ANNUAL RUNOFF (AC-FT)	710	2390	34630
10 PERCENT EXCEEDS	.04	.00	88
50 PERCENT EXCEEDS	.00	.00	4.6
90 PERCENT EXCEEDS	.00	.00	.00

* From floodmark.

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., Fairliss County, Hydrologic Unit 10250015, on left bank at downstream side of bridge on U.S. Highway 383, 1.0 mi south of Kansas-Nebraska State line, 2.5 mi west of Woodruff, and at mile 26.5.

DRAINAGE AREA.--1,007 mi²

PERIOD OF RECORD.--October 1928 to September 1932, October 1944 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 2,016.20 ft above sea level. See WSP 1919 for history of changes prior to Oct. 7, 1955.

REMARKS.--Records fair. 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 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.55	.03
2	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.59	.00
3	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.79	.00
4	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.67	.00
5	.00	.00	.00	.00	.00	.00	e.00	.00	.01	.00	22	.00
6	.00	.00	.00	.00	.00	.00	e.00	.00	23	.00	14	.00
7	.00	.00	.00	.08	.00	.00	.00	.00	232	.00	863	.00
8	.00	.00	.00	.07	.00	.00	.00	.00	48	.00	975	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	23	.02	389	.00
10	.00	.00	.00	.03	.00	.00	.00	.00	14	39	41	.00
11	.00	.00	.00	.02	.00	.00	.00	.00	24	25	19	.00
12	.00	.00	.03	.05	.00	.00	.00	.00	29	10	12	.00
13	.00	.00	.00	.05	.00	.00	.00	.00	15	2.4	6.1	.00
14	.00	.00	.00	.00	.03	.00	.00	.00	7.1	1.0	3.5	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	2.6	.33	2.1	.00
16	.00	.03	.00	.00	.00	.00	.00	.00	1.0	.17	1.3	.00
17	.00	.03	.00	.00	.00	.00	.00	.00	.43	.08	.99	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.24	.01	.55	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.31	.04	.31	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.62	.23	.22	.01
21	.00	.00	.00	.00	.00	.00	.00	.00	.30	.19	.14	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.16	.15	.04	.00
23	.00	.00	.00	.00	.00	.35	.00	.00	.09	.08	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.01	.25	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	61	.05	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	100	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.01	34	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	15	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.6	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.90	.00	.00
31	.00	---	.03	.00	---	.00	---	.00	---	.44	.01	---
MEAN	.000	.002	.002	.010	.001	.011	.000	.000	14.0	9.48	75.9	.001
MAX	.00	.03	.03	.08	.03	.35	.00	.00	232	100	975	.03
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.1	.1	.6	.06	.7	.00	.00	835	583	4670	.08

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATERYEARS 1929 - 1992, BY WATER YEAR (WY)

	MEAN	21.6	6.10	4.68	4.56	16.6	16.8	9.76	45.0	97.1	67.3	35.5	25.4
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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1929 - 1992

ANNUAL MEAN	.051	8.38	28.5
HIGHEST ANNUAL MEAN			208
LOWEST ANNUAL MEAN			.051
HIGHEST DAILY MEAN	12 May 27	975 Aug 8	9700 Jun 23 1947
LOWEST DAILY MEAN	.00 Jan 1	.00 Oct 1	.00 Oct 29 1945
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Oct 1	.00 Oct 5 1948
INSTANTANEOUS PEAK FLOW		1170 Aug 8	15000 Jun 23 1947
INSTANTANEOUS PEAK STAGE		15.85 Aug 8	21.04 Jun 23 1947
INSTANTANEOUS LOW FLOW		.00 Oct 1	.00 most years
ANNUAL RUNOFF (AC-FT)	37	6090	20610
10 PERCENT EXCEEDS	.00	.71	30
50 PERCENT EXCEEDS	.00	.00	3.5
90 PERCENT EXCEEDS	.00	.00	.00

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 National Geodetic Vertical Datum of 1929.

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, 178,000 acre-ft June 22, elevation, 1,933.70 ft; minimum, 129,900 acre-ft Oct. 27, 28, 30, elevation, 1,928.21 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 1991 TO SEPTEMBER 1992
DAILY OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132800	130600	132400	138300	146300	154700	167100	172400	173600	173500	167800	161600
2	132500	130400	132400	139000	146700	154800	167500	172600	174100	172100	167600	161200
3	132300	130200	132400	139000	147000	155200	167800	172600	174200	170700	167100	160600
4	132200	130100	132400	139000	147200	156200	167800	172700	174400	169200	166400	160000
5	132100	130100	132500	139600	147400	156800	168400	172600	174700	167600	167300	160300
6	132100	130100	132500	139900	147700	157200	168600	172600	174700	167100	167200	160200
7	132000	130100	132700	140700	147800	157400	169000	172300	174600	166500	168000	160600
8	131900	130100	132800	141200	148000	158200	168900	172400	174600	165800	169700	160400
9	131900	130100	132800	141200	148200	158900	169200	172200	175300	165400	171800	160400
10	131900	130100	132900	141200	148400	159100	169600	173000	176200	164500	173900	160400
11	131700	130100	133400	141500	148900	159500	169700	173300	176600	163800	174500	160100
12	131700	130200	134000	141900	149300	159800	169700	173200	176800	163800	174400	160200
13	131500	130200	134300	142400	149400	160000	170100	173300	176900	164300	174000	160200
14	131300	130400	134400	142600	150200	160200	170500	173400	177100	164300	173500	160200
15	131300	130500	134500	142600	150400	160600	170800	173500	177100	164300	172800	160500
16	131300	130600	134700	142600	150800	161100	170800	173800	177300	164300	172100	160400
17	131000	130700	134900	142600	151600	161400	170900	173900	177200	164000	171300	160600
18	130700	130900	134900	142700	151800	162300	171200	173900	177200	163400	170700	160400
19	130700	131000	135000	142900	151800	163100	171500	173700	177400	162900	169800	160300
20	130700	131100	135300	143000	152000	163600	171700	173700	177300	163200	169000	160600
21	130700	131300	135300	143400	152500	164300	171400	173600	177300	163100	168200	160800
22	130400	131400	135300	143800	152600	164600	171300	173700	178000	164700	167200	160700
23	130400	131400	135300	143900	153000	164800	171900	173400	177900	164700	166100	160600
24	130300	131400	135300	144200	153200	165000	171900	173400	177700	166100	165000	160100
25	130100	131400	136300	144300	153500	165300	172100	173300	177900	166600	164800	160500
26	130100	131500	136300	144700	153800	165600	172100	173100	177500	167200	164100	160600
27	129900	131600	136800	145000	153900	165900	172000	173100	177000	167400	163600	160400
28	130500	131700	137000	145100	154300	166100	172100	173100	176700	167700	163000	160400
29	130100	132200	137200	145600	154700	166500	172200	173100	175900	168300	162500	160500
30	129900	132300	137500	146000	---	166700	172300	173000	174800	168300	162300	160400
31	130400	---	138200	146100	---	167000	---	173100	---	168300	161800	---
MEAN	131200	130800	134600	142500	150400	161400	170300	173100	176300	166200	168300	160500
MAX	132800	132300	138200	146100	154700	167000	172300	173900	178000	173500	174500	161600
MIN	129900	130100	132400	138300	146300	154700	167100	172200	173600	162900	161800	160000
(*)	1928.28	1928.52	1929.26	1930.21	1931.20	1932.54	1933.10	1933.19	1933.36	1932.68	1931.98	1931.83
(**)	-2400	+1900	+5900	+7900	+8600	+12300	+5300	+800	+1700	-6500	-6500	-1400
CAL	YR 1991	MEAN	168300	MAX	215400	MIN	129900	(**)	-36800			
WTR	YR 1992	MEAN	155400	MAX	178000	MIN	129900	(**)	+27600			

(*) Elevation, in feet, at end of month.

(**) Change in contents, in acre-feet.

KANSAS RIVER BASIN

215

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.--20,760 mi², approximately, of which about 13,550 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 National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark).

REMARKS.--Records fair except for period of estimated record, which is poor. Flow completely regulated by Harlan County Lake (station 06849000) and partially regulated by six upstream reservoirs.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	1.8	2.4	9.5	1.8	1.9	2.8	2.0	3.3	523	122	137
2	3.1	1.7	2.0	5.5	2.1	1.9	2.8	1.9	3.8	541	153	143
3	3.0	1.8	1.8	3.6	2.8	2.0	2.6	3.9	3.4	541	169	147
4	2.5	1.8	1.9	3.9	1.9	8.7	2.6	2.2	3.2	560	e250	91
5	2.0	2.2	2.2	3.7	1.8	5.0	2.3	1.0	6.7	372	e175	3.8
6	2.1	2.4	2.4	3.0	1.8	5.5	2.1	1.1	9.9	203	e125	2.1
7	2.7	2.1	2.4	5.5	1.8	17	2.6	1.1	5.5	199	e150	1.8
8	1.9	1.9	2.4	4.4	2.0	3.6	2.5	1.2	9.1	356	e100	1.6
9	2.8	1.9	2.1	2.5	2.4	5.7	2.4	1.1	18	237	e100	1.7
10	3.9	2.0	2.0	2.4	3.8	3.0	2.3	2.4	55	202	e150	1.8
11	4.6	2.5	2.0	2.4	2.1	2.5	2.3	5.2	9.8	182	e175	1.9
12	5.2	2.8	4.7	2.5	2.8	2.4	2.1	1.6	2.5	107	e175	2.2
13	6.0	2.2	2.2	2.7	3.8	2.1	2.0	1.3	1.5	12	210	2.0
14	6.8	1.8	1.8	2.4	7.6	2.4	2.0	1.8	1.8	16	179	2.0
15	10	2.4	1.9	1.7	11	2.0	2.0	3.0	1.8	3.0	161	2.1
16	12	2.6	2.1	2.2	4.1	2.0	2.1	3.3	1.9	46	155	2.3
17	13	3.3	2.2	2.4	4.3	2.0	2.4	3.3	1.7	110	160	2.6
18	16	3.1	2.0	2.4	4.8	6.7	2.8	3.3	1.5	144	166	2.6
19	12	2.9	2.3	2.0	3.6	8.6	2.8	3.3	3.9	145	171	2.4
20	16	3.2	2.1	2.2	3.2	7.6	2.4	3.3	4.6	85	175	3.0
21	11	5.6	1.9	2.4	2.8	11	2.4	3.3	5.2	3.4	180	2.8
22	9.2	3.2	2.0	2.4	2.2	14	2.8	3.3	25	181	194	2.7
23	10	2.7	2.2	2.1	1.3	7.6	3.3	3.3	20	22	212	2.8
24	5.0	2.4	1.8	2.1	1.9	3.8	2.8	3.3	66	63	231	3.1
25	8.6	2.4	1.9	2.0	2.0	6.6	3.8	3.3	120	235	193	3.3
26	3.9	2.6	2.2	2.0	1.8	1.6	3.8	3.3	121	33	150	3.8
27	3.4	1.9	3.1	1.9	1.6	3.3	3.8	3.3	209	7.9	149	3.8
28	7.4	2.9	6.6	2.0	1.9	3.8	3.3	3.3	316	3.8	142	5.1
29	4.6	2.3	7.0	1.9	1.8	3.8	2.8	3.3	360	33	134	4.7
30	1.8	2.5	5.9	2.0	---	5.8	2.3	3.3	432	92	128	5.6
31	1.8	---	8.4	2.0	---	3.8	---	3.3	---	106	133	---
TOTAL	195.6	74.9	87.9	89.7	86.8	157.7	79.0	83.6	1823.1	5364.1	5067	591.6
MEAN	6.31	2.50	2.84	2.89	2.99	5.09	2.63	2.70	60.8	173	163	19.7
MAX	16	5.6	8.4	9.5	11	17	3.8	5.2	432	560	250	147
MIN	1.8	1.7	1.8	1.7	1.3	1.6	2.0	1.0	1.5	3.0	100	1.6
AC-FT	388	149	174	178	172	313	157	166	3620	10640	10050	1170

e Estimated.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 1992, BY WATER YEAR (WY)

	MEAN	98.9	56.2	50.2	58.2	128	135	211	223	393	771	426	106
MAX	2044	971	481	535	680	941	2400	2069	1763	2761	1726	809	
(WY)	1966	1966	1966	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	22.7	173	91.0	2.95	
(WY)	1990	1992	1977	1991	1977	1991	1992	1992	1982	1992	1981	1991	

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEAR 1953 - 1992

ANNUAL TOTAL	25010.59	13701.0	
ANNUAL MEAN	68.5	37.4	225
HIGHEST ANNUAL MEAN			690
LOWEST ANNUAL MEAN			37.4
HIGHEST DAILY MEAN	552	560	4210
LOWEST DAILY MEAN	.60	1.0	.60
ANNUAL SEVEN-DAY MINIMUM	.87	1.4	.87
INSTANTANEOUS PEAK FLOW		618	4320
INSTANTANEOUS PEAK STAGE		3.04	8.65
ANNUAL RUNOFF (AC-FT)	49610	27180	162800
10 PERCENT EXCEEDS	345	151	644
50 PERCENT EXCEEDS	3.1	3.1	14
90 PERCENT EXCEEDS	1.8	1.8	4.7

KANSAS RIVER BASIN

06851000 CENTER CREEK AT FRANKLIN, NE

LOCATION.--Lat 40°06'12", long 98°58'45", in NW1/4NE1/4 sec.35, T.2 N., R.15 W., Franklin County, Hydrologic Unit 10250016, on right bank at downstream side of bridge on State Highway 136, 1 mi northwest of Franklin and 3.4 mi (revised) upstream from mouth.

DRAINAGE AREA.--177 mi² approximately, of which about 56 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--April 1948 to September 1956. Annual maximums and occasional low-flow measurements, water years 1961-68. October 1968 to September 1975, October 1977 to current year.

REVISED RECORDS.--WSP 2119: 1963(M), 1965(M), drainage area. WRD NE-83: 1981-82(P).

GAGE.--Water-stage recorder. Datum of gage is 1,858.34 ft above National Geodetic Vertical Datum of 1929 (Bureau of Reclamation bench mark). Prior to Dec. 19, 1952, nonrecording gage at site 1.5 mi downstream at datum 30.27 ft lower and Dec. 19, 1952, to Sept. 30, 1956, at present site at datum 0.84 ft higher. Sept. 7, 1961, to Sept. 30, 1968, crest-stage gage and Oct. 1, 1968, to Sept. 30, 1975, recording gage at present site and datum.

REMARKS.--Records poor. Two small diversions above station for irrigation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	5.7	6.8	7.0	6.4	6.3	7.3	5.7	6.2	e3.5	5.8	4.2
2	5.2	5.7	6.8	6.6	6.5	6.3	6.8	5.7	7.3	e3.5	8.4	4.6
3	5.0	5.8	6.9	6.5	6.5	6.3	6.6	5.9	6.4	e3.7	6.6	5.0
4	4.9	5.9	6.7	6.5	6.3	7.2	7.0	5.9	6.2	e4.0	5.9	5.0
5	4.9	6.2	6.7	6.7	6.3	7.1	7.2	6.0	6.1	e3.5	7.6	5.1
6	5.0	6.1	6.8	6.6	6.5	7.0	7.1	5.8	6.1	e3.1	7.0	5.2
7	5.2	5.9	6.8	6.8	6.3	6.7	7.0	5.6	5.9	e2.9	7.9	6.2
8	5.1	6.2	6.6	6.5	6.3	6.8	7.1	5.8	6.0	e3.3	7.6	9.6
9	5.0	6.5	6.4	6.4	6.4	7.5	7.5	5.7	6.3	e3.2	7.4	10
10	5.0	6.5	6.3	6.4	6.3	6.8	7.4	5.6	9.3	e4.6	8.0	9.8
11	5.2	6.4	6.2	6.5	6.2	6.7	6.9	5.6	5.6	13	7.5	7.6
12	5.3	6.4	7.3	6.7	6.3	6.8	6.8	4.9	4.7	7.4	6.0	6.1
13	5.4	6.5	6.6	6.5	6.5	6.9	6.8	5.1	4.4	5.0	6.7	5.7
14	5.3	6.5	6.2	6.5	6.8	6.8	7.0	5.4	8.6	e3.5	7.2	5.8
15	5.3	6.3	6.2	e6.4	6.8	6.9	6.6	5.3	5.3	e3.2	6.4	6.0
16	5.4	6.5	6.1	6.4	6.7	7.0	6.5	6.5	4.9	e3.1	6.0	6.2
17	5.5	6.7	6.2	6.2	6.9	6.8	6.1	6.1	4.4	e3.1	5.1	6.4
18	5.3	6.7	6.0	6.3	6.8	7.8	6.3	5.3	4.3	e3.1	5.9	6.1
19	5.2	6.8	6.1	6.5	6.8	7.5	6.1	5.2	4.2	3.9	4.9	6.2
20	5.2	6.9	6.0	6.5	6.8	7.4	5.9	5.1	4.2	22	4.8	6.3
21	5.5	6.9	6.0	6.6	6.7	7.4	5.7	5.3	4.2	18	4.7	6.2
22	5.5	6.7	6.2	6.6	6.6	6.9	5.6	5.3	4.4	234	4.7	6.2
23	5.5	6.9	5.9	6.6	6.4	6.9	5.5	5.1	4.2	117	5.0	6.0
24	5.3	6.8	5.9	6.7	6.3	7.2	5.6	5.1	4.3	31	5.1	6.0
25	5.4	6.7	5.8	6.7	6.1	7.3	5.4	5.5	4.0	52	7.3	6.1
26	5.6	6.6	5.9	6.6	6.0	7.4	5.4	5.2	e4.0	10	6.6	6.2
27	5.7	6.7	5.9	6.4	6.2	7.3	5.3	5.2	e4.0	6.1	6.0	6.3
28	5.6	7.0	5.9	6.6	6.3	7.7	5.5	5.4	e4.1	6.0	5.4	6.0
29	5.3	7.0	5.9	6.5	6.1	7.5	5.5	5.5	e3.9	6.2	4.9	6.3
30	5.3	6.9	5.8	6.4	---	7.2	5.7	5.5	e3.6	6.2	5.0	6.4
31	5.7	---	6.3	6.5	---	7.1	---	5.5	---	6.1	5.1	---
TOTAL	164.0	194.4	195.2	202.7	187.1	218.5	191.2	170.8	157.1	595.2	192.5	188.8
MEAN	5.29	6.48	6.30	6.54	6.45	7.05	6.37	5.51	5.24	19.2	6.21	6.29
MAX	5.7	7.0	7.3	7.0	6.9	7.8	7.5	6.5	9.3	234	8.4	10
MIN	4.9	5.7	5.8	6.2	6.0	6.3	5.3	4.9	3.6	2.9	4.7	4.2
AC-FT	325	386	387	402	371	433	379	339	312	1180	382	374

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 1992, BY WATER YEAR (WY)

	MEAN	6.63	6.45	6.12	6.29	7.47	9.18	8.19	11.7	8.06	9.85	6.88	7.85
MAX	16.8	9.26	8.04	8.53	14.8	37.1	27.3	40.4	38.2	44.8	33.6	48.0	
(WY)	1974	1986	1956	1984	1982	1979	1984	1979	1975	1951	1979	1950	
MIN	3.09	3.10	3.42	2.10	3.65	4.75	4.26	3.83	1.27	1.70	1.42	1.31	
(WY)	1949	1953	1952	1949	1950	1950	1948	1948	1952	1950	1950	1948	

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1948-56
1968-75, 1978-92

ANNUAL TOTAL	2494.8	2657.5	
ANNUAL MEAN	6.84	7.26	7.98
HIGHEST ANNUAL MEAN			16.3 1979
LOWEST ANNUAL MEAN			5.06 1952
HIGHEST DAILY MEAN	109 May 30	234 Jul 22	839 Sep 20 1950
LOWEST DAILY MEAN	2.6 Jul 16	2.9 Jul 7	.00 Aug 29 1948
ANNUAL SEVEN-DAY MINIMUM	3.1 Jul 11	3.4 Jul 3	.07 Sep 12 1948
INSTANTANEOUS PEAK FLOW		367 Jul 22	3150 Sep 20 1950
INSTANTANEOUS PEAK STAGE		3.87 Jul 22	*6.80 Sep 20 1950
ANNUAL RUNOFF (AC-FT)	4950	5270	5780
10 PERCENT EXCEEDS	7.3	7.3	8.8
50 PERCENT EXCEEDS	6.2	6.2	6.3
90 PERCENT EXCEEDS	4.2	4.8	3.6

e Estimated.

* From floodmark, site and datum then in use.

KANSAS RIVER BASIN
06851500 THOMPSON CREEK AT RIVERTON, NE

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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 (revised) upstream from mouth.

DRAINAGE AREA.--279 mi², of which about 190 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 National Geodetic Vertical Datum of 1929. 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 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	e19	e19	22	19	19	20	19	64	17	20	18
2	14	e19	e18	20	19	20	20	18	46	17	20	17
3	15	e20	e18	20	19	20	21	18	24	17	22	16
4	15	e21	e19	20	18	25	21	17	22	16	20	16
5	15	22	20	20	19	24	21	17	21	15	67	16
6	16	23	21	20	19	25	21	17	22	15	23	16
7	17	e22	20	21	18	24	22	17	20	15	24	20
8	17	e21	19	22	18	22	21	17	19	17	22	16
9	15	24	19	21	19	25	21	18	48	19	23	15
10	16	23	17	21	19	23	20	27	36	16	23	15
11	16	23	18	21	17	22	20	36	25	108	23	14
12	16	23	21	21	17	22	19	19	20	1510	21	15
13	16	21	18	21	17	21	20	17	19	252	20	15
14	16	20	18	21	18	21	21	17	112	59	21	15
15	17	19	18	e20	18	21	21	16	36	28	20	15
16	17	19	17	e20	18	22	20	17	23	22	18	16
17	17	19	17	22	19	22	19	17	20	21	18	16
18	15	18	16	21	19	23	20	16	20	20	17	15
19	16	18	17	23	19	23	19	16	20	26	17	15
20	18	17	17	22	19	22	19	16	19	111	18	17
21	18	18	17	22	18	22	19	16	18	33	18	15
22	19	19	17	23	19	21	19	16	19	827	17	15
23	19	18	18	23	19	21	19	16	18	422	17	15
24	18	18	17	23	19	21	19	16	16	215	16	15
25	18	18	17	24	18	21	18	16	16	366	31	15
26	19	18	17	22	18	21	18	16	16	128	19	17
27	20	19	17	21	19	20	18	16	17	50	18	16
28	22	19	17	20	19	22	18	16	16	32	19	16
29	20	20	17	20	19	22	18	16	16	24	18	16
30	e20	20	17	20	---	21	18	16	16	25	17	17
31	e20	---	18	20	---	21	---	17	---	20	17	---
TOTAL	531	598	556	657	536	679	590	549	804	4463	664	475
MEAN	17.1	19.9	17.9	21.2	18.5	21.9	19.7	17.7	26.8	144	21.4	15.8
MAX	22	24	21	24	19	25	22	36	112	1510	67	20
MIN	14	17	16	20	17	19	18	16	16	15	16	14
AC-FT	1050	1190	1100	1300	1060	1350	1170	1090	1590	8850	1320	942

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 1992, BY WATER YEAR (WY)

MEAN	22.3	21.9	21.3	21.8	25.4	31.4	29.0	45.8	41.1	45.1	30.1	27.6
MAX	41.7	28.0	25.7	28.6	47.0	99.5	102	147	135	144	127	129
(WY)	1974	1952	1954	1984	1982	1969	1984	1985	1982	1992	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1948-56,
1969-75, 1978-92

ANNUAL TOTAL	9381	11102	
ANNUAL MEAN	25.7	30.3	30.6
HIGHEST ANNUAL MEAN			48.3
LOWEST ANNUAL MEAN			21.3
HIGHEST DAILY MEAN	629 Jun 5	1510 Jul 12	3230 Jul 9 1950
LOWEST DAILY MEAN	11 Aug 31	14 Oct 1	8.1 Dec 19 1951
ANNUAL SEVEN-DAY MINIMUM	11 Sep 4	15 Sep 9	9.5 Dec 18 1951
INSTANTANEOUS PEAK FLOW		4440 Jul 12	12200 Jul 9 1950
INSTANTANEOUS PEAK STAGE		12.09 Jul 12	13.22 Jul 9 1950
ANNUAL RUNOFF (AC-FT)	18610	22020	22140
10 PERCENT EXCEEDS	24	24	30
50 PERCENT EXCEEDS	19	19	22
90 PERCENT EXCEEDS	13	16	16

REMARKS.--Record fair except for periods of high flow July 12-13, 22, which are poor. Natural flow affected by pump irrigation development above station.

* From floodmark.

KANSAS RIVER BASIN

219

06852500 COURTLAND CANAL AT NEBRASKA-KANSAS STATE LINE

LOCATION.--Lat 40°00'15", long 98°07'55", in SW1/4SE1/4 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 National Geodetic Vertical Datum of 1929.

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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	14	e76	99	81	80	98	83	68	164	76	50
2	28	37	e66	111	81	80	97	77	85	221	83	51
3	26	40	e60	102	82	79	97	72	119	265	88	49
4	29	41	e50	93	80	85	97	69	49	289	96	43
5	31	49	64	94	76	101	98	66	57	266	93	9.2
6	35	62	85	88	77	103	98	64	124	147	81	4.0
7	38	49	95	89	76	103	98	63	75	84	87	.80
8	41	51	78	96	73	98	98	61	49	85	84	.00
9	41	59	71	65	75	101	98	60	31	71	85	.00
10	39	76	69	e64	80	95	97	58	22	79	81	.00
11	38	89	69	e90	77	99	96	69	93	85	81	.00
12	37	90	84	113	69	98	91	84	146	86	98	.00
13	38	106	90	96	80	94	89	83	127	65	111	.00
14	37	83	e80	77	88	91	91	70	116	53	96	.00
15	37	77	e76	e25	96	88	94	66	71	48	69	.00
16	40	70	e76	30	94	53	92	40	86	56	67	.00
17	42	74	e70	71	95	.72	95	7.9	92	87	67	.00
18	41	74	e58	75	94	.00	95	13	65	87	59	.00
19	40	74	e64	77	91	.00	95	61	64	87	62	.00
20	41	69	e72	91	89	149	89	53	59	86	74	.00
21	45	67	e70	95	85	139	85	53	58	57	87	.00
22	48	69	e78	120	83	99	87	52	46	84	102	.00
23	48	66	e78	58	86	95	89	52	29	63	115	.00
24	48	e59	e70	121	86	95	90	53	28	23	123	.00
25	46	e69	e72	86	82	93	86	54	23	33	99	.00
26	48	68	80	83	81	87	84	56	35	83	54	.00
27	50	68	78	82	84	85	83	55	25	78	59	.00
28	53	69	75	80	83	94	84	56	51	69	56	.00
29	50	72	76	81	80	116	86	57	79	73	53	.00
30	52	87	76	82	---	99	85	56	103	73	52	.00
31	32	---	76	81	---	99	---	56	---	72	50	---
TOTAL	1247	1978	2282	2615	2404	2698.72	2762	1819.9	2075	3119	2488	207.00
MEAN	40.2	65.9	73.6	84.4	82.9	87.1	92.1	58.7	69.2	101	80.3	6.90
MAX	53	106	95	121	96	149	98	84	146	289	123	51
MIN	26	14	50	25	69	.00	83	7.9	22	23	50	.00
AC-FT	2470	3920	4530	5190	4770	5350	5480	3610	4120	6190	4930	411

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 1992, BY WATER YEAR (WY)

MEAN	31.0	11.4	3.18	2.22	2.99	7.35	12.6	54.8	107	357	283	61.3
MAX	464	212	73.6	84.4	82.9	87.1	97.8	237	362	627	570	170
(WY)	1958	1967	1992	1992	1992	1992	1991	1958	1988	1976	1976	1976
MIN	.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	1955	1992	1977

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1955 - 1992

ANNUAL TOTAL	29265.00	25695.62	78.6
ANNUAL MEAN	80.2	70.2	138
HIGHEST ANNUAL MEAN			19.5
LOWEST ANNUAL MEAN			731
HIGHEST DAILY MEAN	347 Jul 1	289 Jul 4	Oct 22 1957
LOWEST DAILY MEAN	.00 Jan 1	.00 Mar 18	*.00 Oct 1 1954
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Sep 8	.00 Oct 1 1954
INSTANTANEOUS PEAK FLOW		308 Jul 5	781 Sep 2 1973
INSTANTANEOUS PEAK STAGE		2.87 Jul 5	5.05 Sep 2 1973
ANNUAL RUNOFF (AC-FT)	58050	50970	56970
10 PERCENT EXCEEDS	200	98	284
50 PERCENT EXCEEDS	72	75	.00
90 PERCENT EXCEEDS	.00	25	.00

e Estimated.

* No flow for many days each year.

LOCATION.--Lat 40°03'49", long 98°19'53", in NE1/4SE1/4 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.

REVISED RECORDS.--WSP 2119: Drainage area.

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).

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.74	e2.2	e2.7	3.9	4.1	3.6	21	5.3	5.7	19	76	117
2	.69	e2.1	e2.5	4.2	4.1	3.7	15	4.6	6.3	39	60	117
3	.70	e2.0	e2.6	4.5	3.6	3.8	13	3.3	5.4	57	54	125
4	.65	e1.9	e2.5	4.1	3.6	4.4	11	3.3	4.4	70	61	175
5	.63	e2.1	e2.6	4.3	e3.7	4.9	8.4	3.7	3.8	95	151	232
6	.67	e2.0	e2.8	4.4	e3.8	5.1	7.3	3.1	3.7	302	199	182
7	.73	e2.1	3.0	4.7	e3.8	5.3	6.3	3.7	3.3	164	292	133
8	.80	e2.1	3.0	4.6	e3.8	4.6	6.1	3.9	3.3	37	489	127
9	.81	e2.1	3.2	4.3	e3.8	4.7	6.1	3.8	51	41	398	114
10	.69	e2.2	3.5	4.3	3.8	4.7	6.1	3.8	60	243	218	104
11	.73	e2.3	3.0	4.3	3.8	5.0	5.8	5.4	79	154	156	99
12	.75	e2.3	3.6	4.3	3.7	5.1	5.6	4.9	7.4	3240	138	90
13	.82	e2.4	3.9	4.3	3.8	5.1	5.6	3.9	5.2	3890	101	86
14	.96	e2.4	3.6	e3.7	3.8	5.1	5.5	3.8	5.7	1160	124	82
15	.93	e2.5	3.4	e3.6	3.8	5.1	5.2	3.5	6.5	518	163	79
16	.99	2.6	3.3	e3.5	3.8	9.3	5.2	35	15	260	150	76
17	1.3	2.7	3.1	e3.8	3.7	48	5.3	60	5.1	142	161	71
18	1.4	2.9	3.3	e3.8	4.0	54	5.3	36	4.0	58	144	67
19	1.3	2.8	3.8	e3.8	4.5	54	5.3	5.4	3.8	39	130	64
20	1.3	2.7	3.8	e4.0	4.1	29	4.9	4.4	3.7	334	101	71
21	1.4	2.5	3.1	4.4	3.8	15	4.9	3.9	3.5	369	76	74
22	1.5	2.5	3.0	4.5	3.8	11	6.3	3.5	3.4	1390	70	76
23	1.5	e2.3	3.0	3.9	3.9	9.9	5.7	3.4	3.4	2340	56	69
24	1.5	e2.1	3.0	3.9	3.9	8.7	5.3	3.4	3.2	910	61	63
25	1.6	e2.1	3.0	3.9	3.8	8.0	4.9	3.9	2.4	745	141	61
26	1.6	e2.5	3.0	3.8	3.9	7.7	4.9	4.4	2.5	1200	282	75
27	1.7	2.8	3.1	3.8	3.9	7.5	4.9	3.9	2.1	477	209	70
28	1.9	3.1	3.1	4.1	4.0	8.1	5.0	3.9	29	283	180	64
29	1.9	3.1	3.1	4.2	3.7	255	4.9	3.5	5.3	207	158	62
30	2.1	3.0	3.1	4.5	---	70	4.9	3.3	7.9	163	128	63
31	2.5	---	3.3	4.1	---	33	---	3.8	---	101	125	---
TOTAL	36.79	72.4	97.0	127.5	111.8	698.4	205.7	241.7	345.0	19047	4852	2888
MEAN	1.19	2.41	3.13	4.11	3.86	22.5	6.86	7.80	11.5	614	157	96.3
MAX	2.5	3.1	3.9	4.7	4.5	255	21	60	79	3890	489	232
MIN	.63	1.9	2.5	3.5	3.6	3.6	4.9	3.1	2.1	19	54	61
AC-FT	73	144	192	253	222	1390	408	479	684	37780	9620	5730

MEAN	184	161	151	156	268	314	372	422	520	512	237	285
MAX	2073	1223	622	588	948	1077	2484	2511	3619	4298	1712	3602
(WY)	1966	1966	1966	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

WATER YEARS 1950 - 1992

ANNUAL TOTAL	18238.98	28723.29		
ANNUAL MEAN	50.0	78.5		297
HIGHEST ANNUAL MEAN				1495
LOWEST ANNUAL MEAN				52.1
HIGHEST DAILY MEAN	995 May 31	3890 Jul 13	20900 Jun 16 1957	1951
LOWEST DAILY MEAN	.63 Oct 5	.63 Oct 5	.10 May 26 1964	1991
ANNUAL SEVEN-DAY MINIMUM	.69 Oct 1	.69 Oct 1	.62 Oct 25 1976	
INSTANTANEOUS PEAK FLOW		6080 Jul 13	29200 Jun 16 1957	
INSTANTANEOUS PEAK STAGE		13.38 Jul 13	*20.73 Jun 16 1957	
ANNUAL RUNOFF (AC-FT)	36180	56970	215300	
10 PERCENT EXCEEDS	116	152	668	
50 PERCENT EXCEEDS	6.8	4.4	116	
90 PERCENT EXCEEDS	1.4	2.1	21	

* Site and datum then in use.

KANSAS RIVER BASIN

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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 highway bridge, 1.2 mi southwest of Hardy 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/s, based on records for upstream stations.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	e22	e19	40	25	e25	152	31	e43	11	e273	179
2	11	e20	e18	39	25	e24	130	28	e42	9.9	e249	183
3	11	e17	e18	39	24	e29	116	27	e41	17	e237	185
4	16	e17	18	37	23	e32	102	27	e32	19	e239	179
5	17	e17	25	38	25	e36	83	25	e29	327	e245	277
6	17	e17	29	36	24	e35	72	23	e29	179	e286	293
7	17	e17	28	35	24	e33	66	22	e23	170	328	227
8	16	e18	26	36	24	e33	60	22	e29	252	385	178
9	16	e19	24	e36	25	e32	55	22	34	160	549	172
10	15	e20	24	33	25	e31	52	22	43	128	402	155
11	15	e23	24	e30	26	e31	47	24	108	184	277	143
12	15	e25	33	e26	28	e31	43	24	113	1330	236	133
13	15	28	35	e26	28	e30	42	23	93	5010	210	127
14	15	26	30	e27	29	e29	44	25	49	4870	243	121
15	16	23	26	28	31	e28	42	23	50	1220	231	119
16	16	25	25	43	31	e27	39	22	139	634	230	117
17	16	28	26	40	31	e29	39	22	147	402	212	115
18	16	27	23	39	31	e30	41	67	85	305	211	108
19	17	25	26	e36	30	e31	44	90	47	330	198	97
20	17	24	30	34	29	e35	38	48	38	448	183	108
21	18	24	27	35	29	e39	41	32	32	588	175	113
22	18	e23	26	33	33	e39	42	29	30	1460	154	113
23	18	e22	34	31	28	38	52	27	26	2400	143	112
24	18	e22	31	46	27	35	47	26	30	2030	129	98
25	21	e24	28	36	27	32	40	29	21	1980	135	90
26	21	26	27	30	25	30	35	29	11	1380	194	105
27	21	25	26	28	25	29	34	27	5.1	1190	313	105
28	21	24	26	28	24	35	37	27	5.2	604	263	92
29	23	e20	26	28	e26	899	35	26	7.8	471	228	82
30	25	e20	26	26	---	414	33	23	13	e389	205	81
31	24	---	27	26	---	215	---	26	---	e327	184	---
MEAN	17.2	22.3	26.2	33.7	27.0	77.9	56.8	29.6	46.5	930	243	140
MAX	25	28	35	46	33	899	152	90	147	5010	549	293
MIN	11	17	18	26	23	24	33	22	5.1	9.9	129	81
AC-FT	1060	1320	1610	2070	1550	4790	3380	1820	2770	57170	14970	8340

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1992, BY WATER YEAR (WY)

MEAN	262	196	183	185	311	404	457	477	530	488	312	311
MAX	1970	1304	668	636	968	1079	2415	2523	2031	2795	1800	1455
(WY)	1966	1966	1966	1966	1966	1963	1960	1960	1960	1962	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1958 - 1992

ANNUAL MEAN	69.1	139	343
HIGHEST ANNUAL MEAN			800
LOWEST ANNUAL MEAN			72.5
HIGHEST DAILY MEAN	770 Jun 1	5010 Jul 13	15000 Oct 1 1983
LOWEST DAILY MEAN	4.8 Aug 3	5.1 Jun 27	4.8 Aug 3 1991
ANNUAL SEVEN-DAY MINIMUM	12 Sep 27	9.0 Jun 26	9.0 Jun 26 1992
INSTANTANEOUS PEAK FLOW		6530 Jul 14	225000 Jun 2 1935
INSTANTANEOUS PEAK STAGE		11.19 Jul 14	19.40 Jun 2 1935
INSTANTANEOUS LOW FLOW		3.6 Jun 28	.00 Aug 9 1934
ANNUAL RUNOFF (AC-FT)	50050	100900	248600
10 PERCENT EXCEEDS	144	246	740
50 PERCENT EXCEEDS	35	31	167
90 PERCENT EXCEEDS	15	18	62

KANSAS RIVER BASIN
06879900 BIG BLUE RIVER AT SURPRISE, NE

LOCATION.--Lat 41°06'05", long 97°18'35", in NW1/4NW1/4 sec.15, T.13 N., R.1 E., Butler County, Hydrologic Unit 10270201, on left bank 50 ft downstream from bridge on county road at south edge of Surprise, and at mile 258.

DRAINAGE AREA.--345 mi².

PERIOD OF RECORD.--April 1964 to current year. Prior to October 1965, published as North Branch Big Blue River at Surprise.

GAGE.--Water-stage recorder and concrete broad-crested weir control. Elevation of gage is 1,522.84 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except for periods of estimated record and those below 5 ft³/s which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.95	e.20	e.40	4.4	3.4	2.8	3.9	5.3	9.0	7.2	125	9.3
2	1.1	e.20	e.30	6.5	3.5	2.1	3.7	6.5	10	16	48	9.0
3	1.0	e.16	e.20	6.2	3.3	2.4	3.6	6.9	12	8.6	95	8.6
4	.87	e.10	e.20	3.3	2.9	5.1	3.5	4.8	11	69	100	8.0
5	1.5	e.30	e.60	4.6	2.7	4.0	2.9	3.6	12	274	83	13
6	1.9	e.22	e.80	3.8	2.9	3.7	3.0	4.4	94	156	51	8.6
7	2.1	e.30	.89	4.5	2.6	4.0	4.8	3.1	177	381	392	25
8	1.5	e.40	.89	3.6	2.9	4.4	3.1	2.4	198	95	474	26
9	.97	e.50	1.2	4.1	2.8	3.4	2.8	2.4	99	27	255	32
10	1.0	.73	1.1	3.8	3.0	4.9	3.0	2.2	43	12	163	29
11	1.4	.58	1.1	5.7	2.2	4.5	2.9	1.8	25	143	80	31
12	1.3	.63	4.8	4.3	2.1	3.3	2.4	1.8	16	126	65	22
13	.83	.84	16	4.3	2.1	2.7	2.4	1.6	8.2	290	125	17
14	1.1	1.1	8.1	2.9	2.0	2.0	2.8	1.6	6.6	59	266	16
15	1.1	1.1	7.7	e1.6	2.0	2.1	2.8	1.6	34	47	39	11
16	1.1	1.1	3.5	e2.4	3.6	1.7	2.8	130	199	41	22	3.4
17	1.0	1.1	2.2	e2.4	3.0	1.6	2.8	170	265	27	16	3.2
18	.68	1.1	1.8	e2.2	3.0	2.4	3.2	144	298	18	25	6.8
19	.58	1.4	1.4	e2.2	3.0	2.5	4.5	100	182	19	17	20
20	.58	1.5	1.6	e2.3	3.0	2.5	4.7	53	59	19	9.8	5.1
21	.52	1.2	1.7	e2.5	2.9	2.8	5.6	108	30	16	8.5	4.4
22	.44	.89	2.2	e2.5	2.6	2.2	5.7	82	20	68	13	3.3
23	.35	.81	12	e3.2	2.1	2.3	5.7	18	13	40	16	4.0
24	.20	.59	8.7	3.4	2.2	2.1	5.7	9.4	8.9	34	27	4.2
25	.10	.43	6.4	3.4	3.2	1.9	6.0	6.4	6.3	161	45	3.3
26	.06	.44	3.5	3.4	3.9	1.9	7.0	5.9	4.8	170	59	4.9
27	.03	.44	2.7	3.4	4.4	1.9	4.0	4.1	4.3	67	36	4.6
28	.21	.44	2.7	3.4	2.6	2.4	4.1	3.2	4.4	30	25	6.3
29	.32	.97	2.7	3.4	2.8	3.0	5.1	4.5	4.3	94	19	6.1
30	.25	e.60	2.8	3.4	---	6.2	5.1	5.6	2.9	1000	13	5.7
31	e.20	---	2.8	3.4	---	5.2	---	6.8	---	440	10	---
TOTAL	25.24	20.37	102.98	110.5	82.7	94.0	119.6	900.9	1856.7	3954.8	2722.3	350.8
MEAN	.81	.68	3.32	3.56	2.85	3.03	3.99	29.1	61.9	128	87.8	11.7
MAX	2.1	1.5	16	6.5	4.4	6.2	7.0	170	298	1000	474	32
MIN	.03	.10	.20	1.6	2.0	1.6	2.4	1.6	2.9	7.2	8.5	3.2
AC-FT	50	40	204	219	164	186	237	1790	3680	7840	5400	696

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1992, BY WATER YEAR (WY)

	9.43	1.85	1.04	5.26	26.9	50.3	19.1	34.7	95.9	54.5	24.3	24.7
MEAN	9.43	1.85	1.04	5.26	26.9	50.3	19.1	34.7	95.9	54.5	24.3	24.7
MAX	78.0	12.1	5.27	103	173	295	120	145	926	246	150	210
(WY)	1974	1974	1988	1973	1971	1978	1984	1965	1967	1986	1987	1977
MIN	.000	.000	.000	.000	.000	.000	.010	.077	.001	.000	.91	.002
(WY)	1972	1965	1965	1965	1972	1972	1972	1980	1981	1981	1973	1971

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1965 - 1992

ANNUAL TOTAL	21944.12	10340.89	
ANNUAL MEAN	60.1	28.3	28.9
MEDIAN OF ANNUAL MEANS			27.0
HIGHEST ANNUAL MEAN			78.9
LOWEST ANNUAL MEAN			.62
HIGHEST DAILY MEAN	2550	1000	3900
LOWEST DAILY MEAN	.03	.03	*.00
ANNUAL SEVEN-DAY MINIMUM	.17	.17	.00
INSTANTANEOUS PEAK FLOW		1150	10700
INSTANTANEOUS PEAK STAGE		6.40	11.52
ANNUAL RUNOFF (AC-FT)	43530	20510	20970
10 PERCENT EXCEEDS	41	81	32
50 PERCENT EXCEEDS	3.0	3.6	1.6
90 PERCENT EXCEEDS	.56	.71	.00

e Estimated.

* No flow for many days in most years.

06880000 LINCOLN CREEK NEAR SEWARD, NE

LOCATION.--Lat 40°54'57", long 97°08'43", in NW1/4NE1/4 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 (revised) upstream from mouth.

DRAINAGE AREA.--446 mi².

PERIOD OF RECORD.--October 1953 to September 1973, March 1974 to current year. 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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	e8.6	e13	17	18	18	19	18	21	20	619	28
2	9.5	e8.4	e12	19	18	18	19	17	21	21	135	28
3	9.0	e8.2	e11	18	18	18	19	17	20	21	e80	26
4	9.1	e8.0	e10	17	18	18	19	17	20	18	e48	25
5	9.5	e8.8	e11	16	17	20	18	16	42	55	e64	33
6	9.9	e9.2	e11	17	17	20	19	16	490	54	e84	32
7	9.5	e8.4	e11	16	17	19	19	16	247	232	e230	25
8	10	e9.6	e11	16	18	19	19	16	141	126	e370	24
9	10	e10	12	16	e16	28	18	16	118	68	e270	24
10	9.6	e12	e13	e15	e16	23	19	16	102	49	e180	24
11	9.8	e13	15	e15	18	20	18	15	118	36	120	24
12	9.7	12	e16	e16	18	19	18	15	67	149	80	23
13	9.7	19	e17	17	18	19	18	15	39	437	75	24
14	9.8	17	17	e14	18	19	18	15	37	620	436	24
15	9.8	16	e16	e11	19	23	18	15	65	421	108	24
16	10	15	e16	e12	19	23	18	37	44	185	52	24
17	10	15	16	e13	19	21	18	90	83	75	50	24
18	9.5	16	e17	e12	19	21	18	177	60	54	51	24
19	9.5	15	e16	e14	19	21	18	239	191	38	97	23
20	9.7	15	e16	e15	19	20	18	207	262	54	90	23
21	9.9	15	e17	e15	18	20	19	156	199	35	62	23
22	9.9	15	17	e16	18	19	19	157	84	116	47	22
23	9.9	15	e17	e16	18	19	19	84	44	257	38	22
24	9.6	e14	e17	16	18	19	19	37	33	83	33	21
25	9.7	e14	17	16	18	19	18	29	28	339	35	22
26	10	e15	16	e15	18	18	18	27	25	317	36	22
27	10	15	16	16	18	18	18	24	23	100	33	22
28	10	15	16	16	18	19	18	22	21	73	29	21
29	e9.6	e15	16	16	18	19	18	21	19	51	28	21
30	e9.4	e14	16	17	---	19	18	21	18	980	28	22
31	e8.8	---	16	18	---	19	---	20	---	1210	27	---
TOTAL	299.4	391.2	458	483	521	615	552	1588	2682	6294	3635	724
MEAN	9.66	13.0	14.8	15.6	18.0	19.8	18.4	51.2	89.4	203	117	24.1
MAX	10	19	17	19	19	28	19	239	490	1210	619	33
MIN	8.8	8.0	10	11	16	18	18	15	18	18	27	21
AC-FT	594	776	908	958	1030	1220	1090	3150	5320	12480	7210	1440

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1992, BY WATER YEAR (WY)

	MEAN	24.8	13.7	12.1	17.4	46.0	86.2	45.6	54.4	145	82.5	52.0	46.7
MAX	177	63.1	33.6	156	224	464	297	278	1007	538	316	443	
(WY)	1966	1984	1988	1973	1984	1969	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1954 - 1992

ANNUAL TOTAL	19735.9	18242.6	
ANNUAL MEAN	54.1	49.8	52.9
HIGHEST ANNUAL MEAN			135
LOWEST ANNUAL MEAN			9.65
HIGHEST DAILY MEAN	1650	1210	6320
LOWEST DAILY MEAN	8.0	8.0	1.3
ANNUAL SEVEN-DAY MINIMUM	8.5	8.5	2.3
INSTANTANEOUS PEAK FLOW		1230	10100
INSTANTANEOUS PEAK STAGE		14.78	20.53
ANNUAL RUNOFF (AC-FT)	39150	36180	38320
10 PERCENT EXCEEDS	79	101	73
50 PERCENT EXCEEDS	23	18	14
90 PERCENT EXCEEDS	9.5	10	6.6

KANSAS RIVER BASIN

06880500 BIG BLUE RIVER AT SEWARD, NE

LOCATION.--Lat 40°54'10", long 97°06'40", in SE1/4SW1/4 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.--1,099 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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

U DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	22	31	43	41	39	54	63	42	25	1590	82
2	13	e22	e25	46	38	39	52	59	42	28	586	80
3	13	e21	e23	47	39	38	50	57	41	99	289	109
4	12	e19	e25	57	38	38	49	54	37	136	199	81
5	12	e23	29	56	37	41	47	51	48	122	261	88
6	13	e22	28	54	38	43	44	49	659	762	262	152
7	14	e21	28	52	37	47	44	47	422	1160	711	111
8	17	e23	28	52	37	57	45	48	438	1100	1250	94
9	19	e25	28	53	35	76	44	46	487	782	987	131
10	19	27	29	45	36	104	45	44	334	324	725	99
11	18	27	30	51	37	78	45	42	257	145	438	82
12	18	28	43	47	37	60	45	40	159	361	307	78
13	18	30	48	47	37	54	44	39	101	1470	229	71
14	22	30	58	42	37	49	44	36	74	2100	714	69
15	20	28	58	e36	38	54	46	37	93	1960	711	78
16	21	27	55	e38	39	53	43	74	76	659	416	96
17	21	27	48	e40	39	48	43	590	104	214	342	68
18	21	28	29	e41	43	49	44	631	504	163	234	61
19	18	28	31	42	46	48	46	432	663	124	220	55
20	e18	28	35	49	51	46	47	354	709	126	205	53
21	e19	28	31	51	49	45	51	253	412	101	165	59
22	e20	27	31	47	46	46	54	207	189	148	133	61
23	20	e24	47	45	45	44	58	210	114	431	111	54
24	22	e23	47	40	44	43	63	146	79	297	97	50
25	22	e22	61	44	42	41	80	97	64	464	100	48
26	22	23	65	40	42	40	101	74	53	790	105	49
27	22	26	56	40	42	40	95	61	45	528	137	49
28	24	25	48	41	42	40	81	54	39	268	156	46
29	28	27	43	40	40	40	70	48	33	180	131	46
30	23	33	42	41	---	41	68	46	27	1640	108	47
31	23	---	40	41	---	46	---	41	---	2050	94	---
TOTAL	584	764	1220	1408	1172	1527	1642	4030	6345	18757	12013	2247
MEAN	18.8	25.5	39.4	45.4	40.4	49.3	54.7	130	211	605	388	74.9
MAX	28	33	65	57	51	104	101	631	709	2100	1590	152
MIN	12	19	23	36	35	38	43	36	27	25	94	46
AC-FT	1160	1520	2420	2790	2320	3030	3260	7990	12590	37200	23830	4460

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1992, BY WATER YEAR (WY)

	MEAN	66.9	33.5	27.4	36.8	115	237	131	159	380	191	107	103
	MAX	455	168	102	359	630	1198	808	672	2991	1348	652	813
	(WY)	1974	1974	1987	1973	1983	1969	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1954 - 1992

ANNUAL TOTAL	58777	51709	134
ANNUAL MEAN	161	141	338
HIGHEST ANNUAL MEAN			14.1
LOWEST ANNUAL MEAN			1984
HIGHEST DAILY MEAN	4500	2100	13400
LOWEST DAILY MEAN	11	12	.00
ANNUAL SEVEN-DAY MINIMUM	12	13	.83
INSTANTANEOUS PEAK FLOW (STAGE)		2260	15300 (22.34)
INSTANTANEOUS PEAK STAGE		14.29	*22.83
ANNUAL RUNOFF (AC-FT)	116600	102600	96930
10 PERCENT EXCEEDS	239	356	210
50 PERCENT EXCEEDS	40	47	29
90 PERCENT EXCEEDS	20	23	11

e Estimated.

* From stage readings during 1957 flood, gage height at downstream site and datum approximately 25.66 ft.

06880800 WEST FORK BIG BLUE RIVER NEAR DORCHESTER, NE
(National water-quality assessment station)

LOCATION.--Lat 40°43'52", long 97°10'38", in SW1/4SW1/4 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 (revised) upstream from mouth.

DRAINAGE AREA.--1,206 mi².

WATER-DISCHARGE RECORDS

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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	e46	e52	57	50	55	66	62	72	59	581	94
2	32	e45	e50	61	49	55	66	60	76	54	410	90
3	33	e35	e48	64	50	55	66	57	77	55	791	82
4	34	e28	e42	65	50	55	66	57	71	65	744	77
5	34	e35	e46	64	51	59	65	57	134	97	423	124
6	35	e33	e49	63	51	61	63	56	383	151	580	85
7	36	e31	52	62	51	61	60	57	247	148	1020	76
8	36	e36	51	62	51	60	60	57	318	234	1250	71
9	36	e40	51	62	51	59	60	57	410	176	1450	71
10	36	e45	50	60	51	60	61	57	335	150	1000	71
11	36	e55	48	56	52	73	61	56	248	118	365	69
12	36	51	56	57	54	65	61	56	157	159	258	66
13	36	51	61	60	55	63	60	56	122	640	234	70
14	36	53	64	60	55	63	60	55	126	1340	402	66
15	36	58	61	e42	55	64	59	55	276	1320	215	67
16	36	58	56	e53	57	67	62	130	276	621	243	64
17	37	58	55	e43	57	63	63	451	284	375	390	62
18	37	60	e56	e44	57	70	63	548	326	244	363	58
19	37	62	e58	e45	58	75	64	442	289	201	254	58
20	38	62	59	e47	58	80	64	446	193	159	187	59
21	39	62	61	e48	58	74	64	301	154	135	151	59
22	40	60	60	49	56	70	65	190	122	282	129	58
23	41	57	62	49	56	69	65	156	118	288	113	53
24	41	56	63	49	56	69	64	109	97	390	102	51
25	41	55	61	46	60	69	64	95	98	1690	106	52
26	41	55	58	49	62	69	61	84	76	4020	124	53
27	42	55	57	49	62	64	60	77	80	3960	124	55
28	44	55	56	47	59	65	62	73	67	2220	105	54
29	47	56	55	48	56	65	62	69	62	1320	103	51
30	45	e54	55	49	---	65	62	67	61	2160	101	55
31	46	---	55	49	---	67	---	62	---	1580	104	---
TOTAL	1175	1507	1708	1659	1588	2009	1879	4155	5355	24411	12422	2021
MEAN	37.9	50.2	55.1	53.5	54.8	64.8	62.6	134	178	787	401	67.4
MAX	47	62	64	65	62	80	66	548	410	4020	1450	124
MIN	31	28	42	42	49	55	59	55	61	54	101	51
AC-FT	2330	2990	3390	3290	3150	3980	3730	8240	10620	48420	24640	4010

e - Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1992, BY WATER YEAR(WY)

MEAN	123	71.0	61.2	72.4	152	295	185	262	349	309	181	153
MAX	812	176	92.9	377	671	1440	887	1147	1749	1395	476	855
(WY)	1974	1974	1987	1973	1984	1979	1984	1984	1967	1986	1990	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1958 - 1992

ANNUAL TOTAL	63724	59889	
ANNUAL MEAN	175	164	184
HIGHEST ANNUAL MEAN			441
LOWEST ANNUAL MEAN			54.4
HIGHEST DAILY MEAN	5500 Jun 4	4020 Jul 26	10400 Mar 30 1960
LOWEST DAILY MEAN	28 Nov 4	28 Nov 4	12 Dec 31 1976
ANNUAL SEVEN-DAY MINIMUM	30 Sep 25	34 Oct 1	17 Jul 11 1976
INSTANTANEOUS PEAK FLOW		4580 Jul 26	11800 Jul 1 1986
INSTANTANEOUS PEAK STAGE		17.40 Jul 26	22.62 Jul 1 1986
ANNUAL RUNOFF (AC-FT)	126400	118800	133400
10 PERCENT EXCEEDS	207	306	307
50 PERCENT EXCEEDS	72	61	78
90 PERCENT EXCEEDS	37	43	44

KANSAS RIVER BASIN
06880800 WEST FORK BIG BLUE RIVER NEAR DORCHESTER, NE--Continued
WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963-70, 1973 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: May 1988 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.-

SEDIMENT CONCENTRATIONS: Maximum daily, 9,760 mg/L June 15, 1990; minimum daily, 4 mg/L Nov. 3, 1989.

SEDIMENT LOADS: Maximum daily, 22,100 tons July 22, 1990; minimum daily, 0.68 tons Nov. 3, Dec. 23, 1989.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily, 9,760 mg/L June 15; minimum daily, 4 mg/L Nov. 3.

SEDIMENT LOADS: Maximum daily, 22,100 tons July 22; minimum daily, 0.68 tons Nov. 3, Dec. 23.

WATER-QUALITY DATA WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	DISCHARGE, INST. (FT ³ /S) (00061)	TEMPER- ATURE WATER (°C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SED. SUSP. SEDIMENT, DISCHARGE, SUS- PENDED (T/DAY) (80155)	SIEVE DIAM. % FINER THAN .062 MM (70331)
FEB 20...	1000	58	3.5	38	6.0	82
MAR 19...	1015	75	11.0	93	19	95
APR 10...	0945	61	10.0	160	26	100
MAY 13...	0830	55	14.0	201	30	99
JUN 09...	0930	393	--	4070	4320	100
JUL 08...	0830	186	--	1160	583	100
AUG 11...	0935	328	--	754	668	100
SEP 23...	0945	53	19.0	85	12	99

KANSAS RIVER BASIN

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06880800 WEST FORK BIG BLUE RIVER NEAR DORCHESTER, NE--Continued

WATER QUALITY RECORDS

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCENTRATION (MG/L)	LOAD (TONS/ DAY)
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	150	13	e20	2.5	e28	3.9	30	4.6	32	4.3	134	20
2	130	11	e10	1.2	18	2.4	82	14	60	7.9	80	12
3	100	8.9	e8	.76	e14	1.8	56	9.7	98	13	101	15
4	68	6.2	e8	.60	e13	1.5	30	5.3	40	5.4	101	15
5	80	7.3	e10	.94	e12	1.5	28	4.8	10	1.4	78	12
6	80	7.6	e10	.89	e12	1.6	28	4.8	10	1.4	70	12
7	58	5.6	e8	.67	12	1.7	30	5.0	72	9.9	314	52
8	90	8.7	e10	.97	20	2.8	e34	5.7	28	3.9	146	24
9	85	8.3	e12	1.3	22	3.0	40	6.7	12	1.7	108	17
10	68	6.6	e12	1.5	18	2.4	30	4.9	10	1.4	108	17
11	90	8.7	e14	2.1	20	2.6	20	3.0	e10	1.4	52	10
12	72	7.0	e14	1.9	40	6.0	19	2.9	e12	1.7	34	6.0
13	272	26	17	2.3	25	4.1	24	3.9	15	2.2	48	8.2
14	290	28	15	2.1	18	3.1	18	2.9	e18	2.7	56	9.5
15	100	9.7	14	2.2	23	3.8	e12	1.4	28	4.2	50	8.6
16	380	37	14	2.2	20	3.0	e11	1.6	32	4.9	88	16
17	160	16	16	2.5	14	2.1	e10	1.2	36	5.5	46	7.8
18	47	4.7	110	18	13	2.0	e10	1.2	e34	5.2	e20	3.8
19	58	5.8	310	52	40	6.3	e10	1.2	28	4.4	132	27
20	42	4.3	50	8.4	20	3.2	e100	13	30	4.7	134	29
21	38	4.0	13	2.2	11	1.8	e105	14	135	21	e70	14
22	48	5.2	e10	1.6	28	4.5	80	11	67	10	130	25
23	48	5.3	9	1.4	30	5.0	38	5.0	42	6.4	110	20
24	34	3.8	e8	1.2	20	3.4	14	1.9	36	5.4	132	25
25	48	5.3	8	1.2	14	2.3	9	1.1	24	3.9	180	34
26	76	8.4	8	1.2	12	1.9	10	1.3	30	5.0	130	24
27	104	12	10	1.5	e13	2.0	9	1.2	50	8.4	111	19
28	128	15	35	5.2	17	2.6	11	1.4	63	10	125	22
29	58	7.4	45	6.8	16	2.4	18	2.3	386	58	143	25
30	72	8.7	37	5.4	11	1.6	30	4.0	---	---	140	25
31	e50	6.2	---	---	12	1.8	27	3.6	---	---	143	26
TOTAL	---	311.7	---	132.73	---	88.1	---	144.6	---	215.3	---	580.9

KANSAS RIVER BASIN
06880800 WEST FORK BIG BLUE RIVER NEAR DORCHESTER, NE--Continued

WATER QUALITY RECORDS

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY) WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DAY	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	180	32	208	35	330	64	300	48	1080	1690	132	34
2	210	37	580	94	380	78	200	29	1000	1110	134	33
3	203	36	358	55	400	83	350	52	1880	4020	50	11
4	200	36	243	37	380	73	440	77	1300	2610	e94	20
5	210	37	375	58	750	271	700	183	850	971	655	219
6	160	27	600	91	2800	2900	1100	448	1850	2900	180	41
7	148	24	366	56	2560	1710	1050	420	1880	5180	88	18
8	237	38	262	40	3550	3050	2200	1390	1420	4790	60	12
9	260	42	198	30	4600	5090	1300	618	1180	4620	72	14
10	160	26	244	38	2750	2490	950	385	980	2650	66	13
11	146	24	253	38	1880	1260	800	255	750	739	72	13
12	e162	27	210	32	1660	704	1000	429	530	369	85	15
13	130	21	290	44	1200	395	2600	4490	e1780	1120	83	16
14	148	24	325	48	1000	340	2820	10200	900	977	77	14
15	188	30	255	38	2300	1710	1780	6340	400	232	e72	13
16	180	30	1210	425	1700	1270	1340	2250	580	381	72	12
17	e150	26	7350	8950	2600	1990	1100	1110	1340	1410	105	18
18	108	18	4500	6660	3100	2730	760	501	1100	1080	147	23
19	140	24	3100	3700	2630	2050	1800	977	820	562	105	16
20	e171	30	2480	2990	2190	1140	930	399	600	303	90	14
21	e160	28	1900	1540	1650	686	780	284	422	172	110	18
22	172	30	2200	1130	1180	389	2420	1840	332	116	e115	18
23	230	40	2400	1010	900	287	1820	1420	280	85	90	13
24	e296	51	1550	456	670	175	1400	1470	265	73	90	12
25	168	29	1250	321	450	119	3480	15900	345	99	80	11
26	228	38	850	193	400	82	1400	15200	232	78	95	14
27	218	35	420	87	350	76	930	9940	240	80	85	13
28	258	43	e350	69	400	72	960	5750	195	55	70	10
29	232	39	600	112	400	67	1300	4630	142	39	72	9.9
30	222	37	530	96	250	41	1880	11000	122	33	59	8.8
31	---	---	e300	50	---	---	1200	5120	111	31	---	---
TOTAL	---	959	---	28523	---	31392	---	103155	---	38575	---	696.7

YEAR 204774.03

e Estimated

KANSAS RIVER BASIN

229

06881000 BIG BLUE RIVER NEAR CRETE, NE

LOCATION.--Lat 40°35'47", long 96°57'33", in SW1/4SE1/4 sec.3, T.7 N., R.4 E., Saline County, Hydrologic Unit 10270202, on right bank near downstream side of county road bridge, 1.8 mi south of Missouri Pacific Railroad station in Crete, 3.3 mi downstream from Walnut Creek, 3.6 mi upstream from Squaw Creek, and at mile 167.

DRAINAGE AREA.--2,716 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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	e62	102	129	109	120	143	133	161	125	4010	236
2	63	e56	e92	130	108	120	141	129	163	115	e3000	370
3	62	e72	e84	138	107	119	142	123	158	106	e2100	271
4	62	e78	e80	143	107	121	142	118	155	110	e1700	235
5	63	e82	e94	142	107	128	139	115	156	272	e1600	294
6	63	e78	e110	144	106	134	133	111	902	541	e1200	479
7	64	e78	115	140	105	143	131	108	1320	1120	e1100	369
8	63	e82	112	138	105	151	128	107	755	1560	e1300	236
9	65	e88	105	136	103	152	127	106	830	1390	e2100	219
10	66	e92	106	131	101	155	128	106	901	960	2350	217
11	67	97	101	131	102	197	128	108	676	535	1360	206
12	66	103	117	123	103	194	125	107	508	396	773	189
13	66	107	131	e118	105	174	123	104	357	1910	593	184
14	65	105	147	e110	106	158	121	101	261	3470	816	185
15	66	104	141	e100	110	153	121	102	235	3920	1170	182
16	67	106	129	e110	111	148	123	116	671	3340	903	208
17	68	109	143	e110	116	152	123	340	741	1340	671	206
18	69	110	115	e110	119	166	125	1140	660	685	717	196
19	68	109	104	e110	121	169	127	1110	869	630	584	175
20	68	107	154	115	125	166	128	892	961	567	466	170
21	69	107	117	116	126	167	138	808	903	376	399	167
22	71	106	134	130	127	154	135	561	597	486	345	164
23	72	107	130	122	124	145	141	444	374	789	305	166
24	73	100	132	114	123	143	141	397	265	1180	278	164
25	75	99	151	119	125	138	150	306	221	2510	273	159
26	76	98	138	110	126	137	153	237	195	3650	281	159
27	76	101	142	113	127	136	158	206	178	4760	289	156
28	82	99	136	113	125	143	155	190	159	4640	282	155
29	82	102	131	110	122	149	146	176	148	2290	283	161
30	82	107	125	110	---	143	139	164	139	3480	256	154
31	e72	---	120	109	---	142	---	155	---	5750	241	---
TOTAL	2134	2851	3738	3774	3301	4617	4054	8920	14619	53003	31745	6432
MEAN	68.8	95.0	121	122	114	149	135	288	487	1710	1024	214
MAX	82	110	154	144	127	197	158	1140	1320	5750	4010	479
MIN	62	56	80	100	101	119	121	101	139	106	241	154
AC-FT	4230	5650	7410	7490	6550	9160	8040	17690	29000	105100	62970	12760

STATISTICS OF MONTHLY MEAN DATA FOR WATERYEARS 1954 - 1992, BY WATER YEAR (WY)

MEAN	243	137	115	134	311	673	419	513	921	631	331	322
MAX	1864	439	239	865	1576	3804	2257	2339	5808	4739	1048	2065
(WY)	1974	1974	1987	1973	1984	1979	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1954 - 1992

ANNUAL TOTAL	138538	139188	
ANNUAL MEAN	380	380	396
HIGHEST ANNUAL MEAN			1030
LOWEST ANNUAL MEAN			96.6
HIGHEST DAILY MEAN	8290	5750	21400
LOWEST DAILY MEAN	56	56	6.0
ANNUAL SEVEN-DAY MINIMUM	63	63	11
INSTANTANEOUS PEAK FLOW (STAGE)		5880	27600 (28.74)
INSTANTANEOUS PEAK STAGE		21.91	*29.86
ANNUAL RUNOFF (AC-FT)	274800	276100	286800
10 PERCENT EXCEEDS	769	901	723
50 PERCENT EXCEEDS	143	137	139
90 PERCENT EXCEEDS	69	82	74

e Estimated.

* From floodmark.

KANSAS RIVER BASIN
06881200 TURKEY CREEK NEAR WILBER, NE

LOCATION.--Lat 40°28'48", long 97°00'43", in NE1/4NE1/4 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.--460 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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.04	.30	e.20	1.2	1.9	3.0	4.0	4.7	3.1	7.9	100	10
2	e.04	e.19	e.19	1.1	2.1	3.2	3.6	4.2	3.8	5.1	161	367
3	e.04	e.17	e.18	.93	1.6	3.1	3.5	3.8	4.0	5.9	249	114
4	e.04	e.16	e.16	.65	1.6	4.0	3.5	3.5	6.6	7.3	420	104
5	e.04	e.20	e.15	1.3	1.4	3.1	3.3	3.2	7.3	11	185	63
6	e.04	e.19	e.17	2.9	1.5	4.0	3.5	2.9	12	19	133	52
7	e.04	e.19	e.18	2.9	1.4	3.8	3.9	2.8	145	22	428	38
8	e.05	e.21	e.18	1.9	1.4	4.2	3.8	3.0	86	14	518	30
9	.07	e.22	e.18	e1.7	1.2	3.9	3.6	3.8	630	55	332	17
10	.09	.24	e.19	e1.6	1.3	3.2	3.6	3.6	98	43	149	13
11	.10	.30	.20	e1.6	1.4	2.6	3.7	3.6	103	78	93	12
12	.12	.35	.60	e1.6	1.5	2.3	3.1	3.5	50	265	65	10
13	.11	.27	.36	e1.5	1.8	2.5	3.1	3.1	28	925	56	8.7
14	.12	.30	.27	e1.3	2.4	2.5	3.5	3.3	22	1190	94	7.6
15	.13	.37	.26	e.80	2.2	2.9	3.5	3.9	20	1190	69	7.9
16	.14	.19	.23	e.82	2.6	3.0	3.1	3.7	16	988	42	8.0
17	.15	.21	.26	e.90	3.3	3.1	3.9	3.3	240	392	37	38
18	.14	.21	.35	e.86	2.5	2.8	3.7	4.2	348	186	35	15
19	.14	.18	.43	e.88	2.7	2.9	3.9	3.9	125	191	50	8.5
20	.14	.17	.66	e1.0	2.5	3.9	3.9	3.6	58	132	33	7.1
21	.16	.26	.41	1.6	2.5	7.8	3.9	3.6	37	62	26	6.4
22	.17	.21	.45	2.1	2.8	5.1	4.5	3.2	31	174	22	6.1
23	.17	e.20	.64	2.4	2.4	4.0	4.8	2.5	23	322	19	5.9
24	.16	e.19	.46	2.0	2.1	3.5	5.0	2.3	17	281	16	4.9
25	.16	e.18	.36	1.9	2.0	3.2	4.8	3.3	14	2280	16	4.5
26	.16	e.19	.43	2.1	2.2	2.9	4.8	3.1	12	2200	17	5.0
27	.17	.20	.39	1.5	2.6	2.9	4.2	2.9	10	2280	23	4.9
28	.18	e.20	.42	1.8	2.7	3.9	4.1	2.7	7.5	1540	15	5.0
29	.17	e.20	.47	2.5	2.7	5.0	4.4	2.8	6.3	399	15	4.7
30	.17	e.20	.52	2.7	---	4.1	4.4	3.1	6.6	222	14	4.1
31	.24	---	.60	1.8	---	4.2	---	3.2	---	139	12	---
TOTAL	3.69	6.65	10.55	49.84	60.3	110.6	116.6	104.3	2170.2	15626.2	3444	982.3
MEAN	.12	.22	.34	1.61	2.08	3.57	3.89	3.36	72.3	504	111	32.7
MAX	.24	.37	.66	2.9	3.3	7.8	5.0	4.7	630	2280	518	367
MIN	.04	.16	.15	.65	1.2	2.3	3.1	2.3	3.1	5.1	12	4.1
AC-FT	7.3	13	21	99	120	219	231	207	4300	30990	6830	1950

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1992, BY WATER YEAR (WY)

MEAN	80.0	18.1	12.5	20.9	62.1	189	115	128	247	120	45.2	56.8
MAX	929	97.6	41.7	165	487	1148	677	632	1972	871	245	377
(WY)	1974	1974	1987	1973	1984	1979	1984	1982	1984	1986	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1960 - 1992

ANNUAL TOTAL	7117.18	22685.23	
ANNUAL MEAN	19.5	62.0	91.2
MEDIAN OF ANNUAL MEANS			62.0
HIGHEST ANNUAL MEAN			370
LOWEST ANNUAL MEAN			14.3
HIGHEST DAILY MEAN	1130 Jun 3	2280 Jul 25	13100 Jun 13 1984
LOWEST DAILY MEAN	.01 Aug 16	.04 Oct 1	.00 Sep 20 1976
ANNUAL SEVEN-DAY MINIMUM	.02 Aug 16	.04 Oct 1	.02 Aug 16 1991
INSTANTANEOUS PEAK FLOW		2870 Jul 25	33000 Jun 13 1984
INSTANTANEOUS PEAK STAGE		15.14 Jul 25	*21.43 Jun 13 1984
ANNUAL RUNOFF (AC-FT)	14120	45000	66050
10 PERCENT EXCEEDS	16	103	122
50 PERCENT EXCEEDS	3.1	3.2	15
90 PERCENT EXCEEDS	.04	.18	3.5

e Estimated.

* From floodmark.

06881500 BIG BLUE RIVER AT BEATRICE, NE

LOCATION.--Lat 40°15'22", long 96°44'47", in SW1/4NW1/4 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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	e88	133	178	163	166	201	198	222	166	5750	398
2	78	e84	132	178	163	165	193	189	225	160	5320	583
3	79	e80	122	178	163	163	190	185	223	136	3060	1070
4	98	e90	e88	178	162	164	187	184	216	121	2020	681
5	86	e98	e100	207	160	181	187	177	236	132	1980	499
6	85	e110	e120	207	160	181	187	172	1590	331	1520	447
7	84	e105	e140	207	160	176	193	169	1270	574	1230	607
8	83	e100	163	207	159	173	185	168	1710	1120	1780	583
9	84	e110	150	e190	157	178	180	168	1410	1600	2820	421
10	85	e120	142	e170	157	180	178	167	1890	1620	3020	348
11	87	136	136	e170	157	178	176	191	1340	1260	2640	331
12	88	133	157	e175	157	190	174	182	1030	1640	1710	320
13	87	132	160	e170	155	219	172	175	703	3850	1120	297
14	85	132	161	e130	156	215	172	175	505	5330	1030	277
15	84	132	166	e120	157	191	172	172	372	5660	1100	268
16	83	133	175	e120	157	183	265	167	503	5280	1440	270
17	86	146	170	e115	159	183	202	646	910	4530	1190	578
18	85	148	e150	e120	162	200	184	438	1230	2230	921	514
19	85	139	e130	e130	163	211	194	1030	1250	1230	925	354
20	85	135	e140	e150	168	216	185	1370	1090	1080	825	283
21	88	132	e150	e160	172	209	192	1100	1150	897	681	251
22	92	134	e160	204	172	201	194	1000	1090	690	596	235
23	93	135	177	189	171	198	327	755	779	1060	529	221
24	94	135	184	190	172	186	315	533	527	1490	476	217
25	94	131	183	176	172	179	230	487	375	9820	438	216
26	94	126	183	172	170	176	211	402	297	10800	421	219
27	95	129	187	172	169	171	211	324	251	11000	415	210
28	119	132	181	162	169	173	213	273	221	8760	430	200
29	109	145	181	166	169	374	214	244	203	7220	421	194
30	e100	143	180	164	---	419	209	225	177	4340	411	194
31	e94	---	174	163	---	234	---	210	---	4800	395	---
TOTAL	2768.0	3693	4775	5218	4731	6233	6093	11876	22995	98927	46614	11286
MEAN	89.3	123	154	168	163	201	203	383	766	3191	1504	376
MAX	119	148	187	207	172	419	327	1370	1890	11000	5750	1070
MIN	78	80	88	115	155	163	172	167	177	121	395	194
AC-FT	5490	7330	9470	10350	9380	12360	12090	23560	45610	196200	92460	22390

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1992, BY WATER YEAR (WY)

	MEAN	483	242	203	198	557	1412	918	1028	1596	1316	634	609
MAX	4022	739	539	386	2546	8306	4323	3977	7838	5997	1504	3033	
(WY)	1987	1987	1987	1987	1984	1979	1984	1984	1984	1986	1992	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1975 - 1992

ANNUAL TOTAL	158058.0	225209.0	
ANNUAL MEAN	433	615	767
HIGHEST ANNUAL MEAN			1981
LOWEST ANNUAL MEAN			184
HIGHEST DAILY MEAN	7120	11000	44400
LOWEST DAILY MEAN	78	78	20
ANNUAL SEVEN-DAY MINIMUM	81	84	32
INSTANTANEOUS PEAK FLOW		11400	55100
INSTANTANEOUS PEAK STAGE		18.22	31.27
ANNUAL RUNOFF (AC-FT)	313500	446700	555800
10 PERCENT EXCEEDS	863	1260	1520
50 PERCENT EXCEEDS	196	183	244
90 PERCENT EXCEEDS	88	100	109

KANSAS RIVER BASIN

06882000 BIG BLUE RIVER AT BARNESTON, NE

(National stream-quality accounting network station)

(National water-quality assessment station)

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.

WATER-DISCHARGE RECORDS

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 National Geodetic Vertical Datum of 1929. 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 fair 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	e98.0	162	185	176	179	324	255	243	206	6140	916
2	87	e92.0	151	195	176	176	268	234	258	201	6060	3330
3	81	e86.0	142	193	174	173	250	215	253	182	4200	1810
4	110	e96.0	99	191	170	176	233	211	245	172	2620	1230
5	106	e110	97	253	170	199	222	201	233	312	2500	800
6	91	e120	136	262	169	236	219	192	3090	292	2040	641
7	88	e120	177	224	172	219	222	190	2200	525	1480	2210
8	97	116	187	220	e166	197	212	191	2160	1000	e2500	1790
9	98	128	166	200	162	205	201	192	1750	1520	e3100	978
10	93	158	160	190	166	183	197	192	2210	1770	e3500	621
11	99	161	153	182	162	180	194	202	2580	1450	e3100	475
12	98	160	169	186	162	184	178	218	2000	2780	e2700	427
13	100	162	174	185	163	223	178	190	1180	4870	e2000	397
14	96	164	170	183	171	234	182	185	768	5410	e1400	358
15	86	170	173	e140	174	215	184	179	518	5570	e1300	340
16	84	163	180	e130	168	204	227	177	522	5070	e1700	338
17	89	181	183	e120	178	207	247	416	723	4720	e1500	401
18	86	201	171	e140	211	1520	202	662	1270	2840	e1100	852
19	80	187	147	155	216	999	211	666	1410	1470	982	502
20	84	170	176	166	191	603	204	1390	1130	1450	949	366
21	90	161	179	177	184	487	217	1180	1190	1070	805	305
22	98	159	198	235	183	359	218	1080	1200	1090	704	267
23	104	159	211	295	183	312	1610	928	953	1060	613	250
24	98	152	217	228	185	279	971	697	651	1500	538	246
25	95	145	201	208	179	250	548	619	480	18200	513	244
26	101	144	190	183	174	228	384	537	372	15400	482	270
27	105	144	197	185	175	205	313	430	309	13600	463	248
28	137	144	188	171	175	209	293	342	272	10300	485	233
29	132	146	183	177	171	732	280	286	256	8150	475	222
30	106	207	184	177	---	851	256	250	224	8310	447	218
31	e100	---	176	174	---	488	---	229	---	5820	490	---
TOTAL	3000	4404.0	5297	5910	5106	10912	9445	12936	30650	126310	56886	21285
MEAN	96.8	147	171	191	176	352	315	417	1022	4075	1835	709
MAX	137	207	217	295	216	1520	1610	1390	3090	18200	6140	3330
MIN	80	86	97	120	162	173	178	177	224	172	447	218
AC-FT	5950	8740	10510	11720	10130	21640	18730	25660	60790	250500	112800	42220

e Estimated

KANSAS RIVER BASIN
06882000 BIG BLUE RIVER AT BARNESTON, NE--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967-69, October 1980 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1966 to September 1969.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 29.0 °C on several days in summer periods; minimum, 0.0°C on many days during winter periods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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 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)
NOV	22...	155	791	8.3	6.0	735	18	8.9	K23	K67	250
JAN	08...	223	738	8.2	4.0	723	21	11.5	K100	1300	220
MAR	10...	182	785	8.8	10.0	738	35	8.4	K570	640	260
MAY	13...	190	766	8.5	20.0	734	43	9.5	250	K13	260
JUL	08...	956	588	8.1	26.5	728	150	7.7	K770	880	180
SEP	22...	265	528	8.1	19.0	740	56	8.0	280	120	170

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- 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	8	75	15	63	2	8.5	242	0	295	75
JAN	27	66	14	56	2	8.5	195	0	238	82
MAR	24	77	16	66	2	7.5	235	12	262	79
MAY	24	74	18	60	2	9.0	236	2	283	89
JUL	11	54	11	44	1	11	170	0	207	49
SEP	21	51	11	35	1	9.9	152	0	185	49

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 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)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
NOV	58	0.30	23	460	479	0.63	193	2.91	2.92	0.080
JAN	50	0.30	17	430	427	0.58	259	3.03	3.05	0.050
MAR	57	0.30	2.9	452	454	0.61	222	1.10	1.04	0.060
MAY	54	0.30	5.5	461	456	0.63	236	0.600	0.590	0.090
JUL	44	0.20	18	340	345	0.46	878	2.17	2.18	0.020
SEP	32	0.20	14	325	299	0.44	233	0.930	0.960	0.040

KANSAS RIVER BASIN
06882000 BIG BLUE RIVER AT BARNESTON, NE--Continued

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WATER QUALITY RECORDS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	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 22...	3.00	3.00	0.440	0.500	0.76	1.2	4.2	0.800	0.630	0.640
JAN 08...	3.10	3.10	0.350	0.340	1.1	1.4	4.5	0.840	0.670	0.620
MAR 10...	1.20	1.10	0.200	0.210	1.3	1.5	2.7	0.730	0.440	0.380
MAY 13...	0.690	0.680	0.050	0.090	0.75	0.80	1.5	0.440	0.320	0.290
JUL 08...	2.20	2.20	0.030	0.040	1.3	1.3	3.5	0.760	0.510	0.440
SEP 22...	1.00	1.00	0.170	0.160	1.1	1.3	2.3	0.650	0.440	0.410

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 22...	1100	<10	140	<3	7	22	150
MAR 10...	1120	<10	120	<3	<3	23	220
MAY 13...	1125	20	150	<3	3	22	150
JUL 08...	1115	10	150	<3	7	13	3

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 22...	<10	3	3	<1.0	390	<6
MAR 10...	<10	2	4	<1.0	390	7
MAY 13...	<10	4	3	<1.0	430	9
JUL 08...	<10	3	3	<1.0	280	11

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 22...	1100	155	6.0	43	18	77
JAN 08...	1100	223	4.0	44	26	98
MAR 10...	1120	182	10.0	109	54	100
MAY 13...	1125	190	20.0	79	41	96
JUL 08...	1115	956	26.5	357	921	100
SEP 22...	1030	265	19.0	117	84	100

KANSAS RIVER BASIN

06883000 LITTLE BLUE RIVER NEAR DEWEESE, NE

LOCATION.--Lat 40°19'58", long 98°04'00", in SW1/4NW1/4 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 41.5.

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 National Geodetic Vertical Datum of 1929. 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 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	e31	48	58	56	55	58	60	54	21	147	39
2	25	e31	e43	59	55	55	58	59	56	20	131	39
3	24	e28	e42	56	55	56	59	57	54	20	116	39
4	24	e26	e42	55	54	60	60	58	51	19	139	36
5	25	e27	e40	56	54	64	60	57	48	15	351	36
6	26	e32	e42	57	55	63	60	54	49	14	178	35
7	27	e30	e45	57	54	59	62	54	47	17	135	35
8	29	e31	46	57	54	59	61	53	47	16	119	34
9	28	e34	45	e56	54	62	61	53	48	17	109	33
10	29	e38	45	e54	55	58	61	52	399	20	102	33
11	29	e40	46	e56	54	56	62	53	239	29	94	33
12	27	e42	54	57	54	57	59	52	123	1450	99	33
13	28	e44	51	57	54	56	59	49	123	2790	152	33
14	26	45	48	56	55	56	61	50	102	1300	202	34
15	27	44	46	e54	56	56	63	49	93	592	105	35
16	29	42	47	e47	57	56	62	48	89	306	76	36
17	30	44	48	e46	57	57	61	56	95	175	68	37
18	28	44	48	e54	57	59	61	50	70	126	63	37
19	29	44	49	e54	56	61	61	50	56	116	63	36
20	31	42	49	e56	56	59	60	49	50	181	63	39
21	31	43	49	56	55	59	59	47	45	148	62	39
22	32	e43	49	56	55	58	60	47	43	817	58	39
23	32	e42	51	54	56	58	59	47	42	1250	56	39
24	32	e42	50	54	56	59	59	46	40	776	53	40
25	33	e40	50	54	54	59	57	47	38	3070	54	41
26	33	e43	50	54	54	58	56	46	37	1480	59	45
27	35	44	50	54	55	58	57	44	33	757	63	42
28	35	44	51	54	56	60	58	45	31	454	56	41
29	e32	48	51	54	55	62	59	45	28	292	46	42
30	e31	50	51	55	---	60	60	45	24	265	41	44
31	e31	---	52	55	---	60	---	45	---	175	39	---
TOTAL	903	1178	1478	1702	1598	1815	1793	1567	2254	16728	3099	1124
MEAN	29.1	39.3	47.7	54.9	55.1	58.5	59.8	50.5	75.1	540	100	37.5
MAX	35	50	54	59	57	64	63	60	399	3070	351	45
MIN	24	26	40	46	54	55	56	44	24	14	39	33
AC-FT	1790	2340	2930	3380	3170	3600	3560	3110	4470	33180	6150	2230

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954- 1992, BY WATER YEAR (WY)

MEAN	80.7	62.3	62.4	68.6	93.7	177	136	264	273	199	149	141
MAX	347	88.3	102	207	245	935	762	1348	1145	748	883	911
(WY)	1966	1970	1986	1984	1982	1969	1984	1965	1957	1989	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1954 - 1992

ANNUAL TOTAL	30940.7		35239		143	
ANNUAL MEAN	84.8		96.3		126	
MEDIAN OF ANNUAL MEANS					329	
HIGHEST ANNUAL MEAN					64.0	
LOWEST ANNUAL MEAN					1969	
HIGHEST DAILY MEAN	1970	May 31	3070	Jul 25	14300	Sep 1 1969
LOWEST DAILY MEAN	4.5	Sep 5	14	Jul 6	3.2	Aug 11 1988
ANNUAL SEVEN-DAY MINIMUM	4.8	Sep 4	17	Jul 3	4.2	Aug 31 1988
INSTANTANEOUS PEAK FLOW			4550	Jul 25	25100	Aug 31 1969
INSTANTANEOUS PEAK STAGE			9.17	Jul 25	0000	
ANNUAL RUNOFF (AC-FT)	61370		69900		103300	
10 PERCENT EXCEEDS	80		103		190	
50 PERCENT EXCEEDS	50		54		69	
90 PERCENT EXCEEDS	13		31		42	

KANSAS RIVER BASIN

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06883570 LITTLE BLUE RIVER NEAR ALEXANDRIA, NE

LOCATION.--Lat 40°12'25", long 97°23'18", in SE1/4SE1/4 sec.23, T.3 N., R.1 W., Thayer County, Hydrologic Unit 10270206, on left bank 10 ft upstream from bridge on State Highway 53, 2.7 mi south of Alexandria, 9.8 mi downstream from Dry Creek, 5.7 mi upstream from Big Sandy Creek, and at mile 81.0.

DRAINAGE AREA.--1,557 mi².

PERIOD OF RECORD.--July 1959 to September 1972 (published as "near Gilead"), April 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,359.29 ft above National Geodetic Vertical Datum of 1929. July 1959 to Sept. 30, 1972, at site 2.3 mi upstream at datum 12.0 ft higher. Apr. 23, 1974 to Aug. 7, 1984, at site 750 ft upstream at same datum.

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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	e31	e54	71	58	65	134	69	63	51	916	100
2	5.0	e32	e47	74	58	64	93	66	81	48	825	100
3	5.7	e31	e46	75	58	65	78	60	79	39	751	93
4	9.6	e24	e43	70	57	71	72	59	74	32	680	91
5	11	e27	e47	72	56	79	70	58	74	324	3820	95
6	12	e38	e50	72	58	83	68	53	224	134	2610	88
7	12	e29	e58	73	58	87	72	54	95	57	934	87
8	13	e33	e64	71	58	85	71	53	69	38	601	95
9	14	e35	68	e60	62	78	68	52	67	31	433	134
10	15	e40	58	e46	62	73	67	51	66	27	342	96
11	16	e44	55	e50	61	74	67	58	293	70	297	83
12	17	e47	78	e64	62	71	64	52	723	3740	267	81
13	18	e50	76	75	62	71	64	51	330	6600	250	80
14	18	e64	70	e58	67	69	67	50	196	6100	385	77
15	19	78	59	e44	69	68	68	48	169	2450	673	78
16	19	61	57	e44	73	67	71	47	218	1080	358	77
17	20	57	e56	e58	76	66	69	60	236	537	267	81
18	22	56	e54	e64	76	75	70	119	368	227	182	78
19	22	54	e52	e66	76	83	80	90	211	236	151	76
20	22	51	e60	e64	75	81	75	64	126	506	140	75
21	23	49	64	e86	69	80	73	57	100	471	135	77
22	25	51	63	87	69	73	74	52	86	1290	130	77
23	26	52	82	76	69	71	88	48	79	2540	123	77
24	25	49	69	67	68	70	86	47	75	1820	120	75
25	26	51	64	65	67	68	75	48	71	23300	128	76
26	26	54	62	60	66	66	70	47	69	13200	121	81
27	29	57	59	57	66	65	68	46	66	4000	118	82
28	31	54	60	57	66	75	68	46	64	2030	115	76
29	31	59	59	57	66	196	69	46	60	1510	113	76
30	e30	71	59	58	---	307	70	44	56	1290	105	76
31	e29	---	59	58	---	307	---	45	---	1090	100	---
TOTAL	596.7	1429	1852	1999	1888	2853	2229	1740	4488	74868	16190	2538
MEAN	19.2	47.6	59.7	64.5	65.1	92.0	74.3	56.1	150	2415	522	84.6
MAX	31	78	82	87	76	307	134	119	723	23300	3820	134
MIN	5.0	24	43	44	56	64	64	44	56	27	100	75
AC-FT	1180	2830	3670	3970	3740	5660	4420	3450	8900	148500	32110	5030

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1992, BY WATER YEAR (WY)

	MEAN	156	97.5	87.5	99.1	172	354	249	387	463	345	239	224
MAX	878	163	143	312	525	1517	1150	1334	1643	2415	2095	1211	
(WY)	1987	1987	1982	1984	1982	1987	1987	1965	1967	1992	1985	1969	
MIN	19.2	47.6	54.8	53.9	65.1	74.6	74.3	56.1	55.1	30.1	23.0	7.39	
(WY)	1992	1992	1981	1981	1992	1981	1992	1992	1988	1970	1991	1991	

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1960 - 1992

ANNUAL TOTAL	45785.4	112670.7	
ANNUAL MEAN	125	308	243
HIGHEST ANNUAL MEAN			482
LOWEST ANNUAL MEAN			104
HIGHEST DAILY MEAN	2470	23300	23300
LOWEST DAILY MEAN	4.6	5.0	2.9
ANNUAL SEVEN-DAY MINIMUM	5.2	8.7	5.2
INSTANTANEOUS PEAK FLOW (STAGE)		32600	32600
INSTANTANEOUS PEAK STAGE		21.07	21.07
ANNUAL RUNOFF (AC-FT)	90820	223500	175700
10 PERCENT EXCEEDS	140	307	369
50 PERCENT EXCEEDS	64	68	102
90 PERCENT EXCEEDS	12	31	55

KANSAS RIVER BASIN

06883940 BIG SANDY CREEK AT ALEXANDRIA, NE

LOCATION.--Lat 40°14'06", long 97°23'20", in SE1/4SE1/4 sec.11, T.3 N., R.1 W., Thayer County, Hydrologic Unit 10270206, on right bank 15 ft upstream from bridge on State Highway 53, 0.8 mi south of Alexandria, and at mile 7.9.

DRAINAGE AREA.--607 mi².

PERIOD OF RECORD.--October 1979 to current year.

REVISED RECORDS.--WRD NE-82-1: 1981(M).

GAGE.--Water stage recorder. Elevation of gage is 1,395 ft above National Geodetic Vertical Datum of 1929, from topographic map.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	e18	19	20	18	18	20	20	20	16	278	17
2	16	e18	19	20	18	18	20	20	20	38	583	49
3	16	e18	18	19	19	18	19	19	19	34	287	45
4	16	e17	18	20	19	19	19	19	19	25	149	31
5	16	e16	18	20	19	20	20	19	45	47	2040	40
6	16	e16	18	20	17	20	20	18	702	62	1340	42
7	16	e16	18	20	17	19	21	18	111	38	1010	29
8	16	e16	18	20	17	19	19	17	40	29	569	26
9	17	e16	18	20	17	19	18	17	53	22	317	27
10	17	17	18	19	17	19	18	17	57	21	225	29
11	17	18	18	19	17	19	18	18	75	115	168	29
12	17	18	22	19	17	19	18	17	64	1760	128	26
13	17	18	19	19	17	19	19	17	44	2770	100	26
14	17	18	19	19	17	19	19	17	35	1700	119	26
15	17	18	18	e18	18	18	19	16	28	967	241	25
16	17	18	18	e18	17	20	20	16	24	461	161	25
17	17	18	18	19	17	18	19	17	83	237	131	53
18	17	18	18	19	17	18	19	22	74	162	84	28
19	17	18	18	19	17	18	19	23	43	202	62	25
20	17	19	18	19	17	18	19	16	34	206	53	25
21	17	19	18	19	18	18	19	16	24	162	47	26
22	17	19	18	18	18	19	19	15	18	701	41	25
23	17	19	20	18	18	19	21	15	16	687	36	24
24	18	19	19	18	18	19	19	15	16	425	31	25
25	18	19	19	18	18	19	19	16	15	9030	48	25
26	18	19	19	18	18	19	19	16	14	4700	39	26
27	18	19	19	18	18	19	19	16	14	2440	41	26
28	19	19	19	18	18	20	19	16	14	1040	32	27
29	19	19	19	18	18	84	19	16	14	487	25	26
30	19	19	19	18	---	35	19	16	14	714	20	26
31	19	---	19	18	---	23	---	16	---	450	18	---
TOTAL	531	539	576	585	511	669	575	536	1749	29748	8423	879
MEAN	17.1	18.0	18.6	18.9	17.6	21.6	19.2	17.3	58.3	960	272	29.3
MAX	19	19	22	20	19	84	21	23	702	9030	2040	53
MIN	16	16	18	18	17	18	18	15	14	16	18	17
AC-FT	1050	1070	1140	1160	1010	1330	1140	1060	3470	59010	16710	1740

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1992, BY WATER YEAR (WY)

MEAN	88.1	31.5	27.1	33.8	67.8	95.3	107	109	247	208	120	89.9
MAX	375	70.4	47.6	143	259	726	393	358	1610	960	272	487
(WY)	1987	1980	1985	1984	1984	1987	1987	1982	1984	1992	1992	1983
MIN	17.1	18.0	18.6	18.9	17.6	18.3	18.3	17.3	20.6	30.1	39.1	15.9
(WY)	1992	1992	1992	1992	1992	1981	1981	1992	1981	1981	1991	1991

SUMMARY STATISTICS

FOR 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1980 - 1992

ANNUAL TOTAL	11554	45321	
ANNUAL MEAN	31.7	124	102
MEDIAN OF ANNUAL MEANS			87.1
HIGHEST ANNUAL MEAN			279
LOWEST ANNUAL MEAN			32.4
HIGHEST DAILY MEAN	307 Jun 2	9030 Jul 25	14100 Jun 13 1984
LOWEST DAILY MEAN	15 Sep 10	14 Jun 26-30	14 Jun 26-30 1992
ANNUAL SEVEN-DAY MINIMUM	15 Sep 7	14 Jun 24	14 Jun 24 1992
INSTANTANEOUS PEAK FLOW		15200 Jul 25	21900 Jun 13 1984
INSTANTANEOUS PEAK STAGE		15.98 Jul 25	16.71 Jun 13 1984
ANNUAL RUNOFF (AC-FT)	22920	89890	74010
10 PERCENT EXCEEDS	53	122	121
50 PERCENT EXCEEDS	21	19	28
90 PERCENT EXCEEDS	16	17	19

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 National Geodetic Vertical Datum of 1929. 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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	e47	e80	97	90	106	199	101	97	81	1130	165
2	31	e49	e66	100	90	105	148	101	121	107	1410	218
3	30	e40	e68	100	91	104	132	98	117	116	1260	408
4	39	e37	e56	97	91	105	123	98	105	88	806	217
5	36	e40	e56	101	92	108	117	98	108	88	4440	176
6	36	e44	e62	99	93	109	114	96	1480	328	4670	181
7	36	e43	e72	97	93	112	122	96	519	170	2080	171
8	39	e40	e90	e90	89	113	119	94	228	113	1200	153
9	41	e45	90	e80	91	112	114	94	284	97	752	160
10	40	e50	85	e70	92	106	116	97	170	95	590	179
11	41	e60	76	e70	94	108	114	105	243	119	492	149
12	41	e68	94	e76	95	108	109	102	541	4280	435	138
13	42	e80	97	e84	96	107	108	96	428	10500	385	133
14	43	81	91	e80	96	105	109	96	267	8840	462	127
15	43	85	84	e60	97	104	108	96	217	4490	651	122
16	44	89	78	e58	98	102	109	94	213	2020	543	121
17	45	90	77	e58	106	104	110	109	284	993	417	195
18	45	89	e66	e66	107	112	111	110	334	576	335	147
19	44	85	e60	e70	108	120	117	143	343	418	285	122
20	45	81	e80	e78	109	118	116	125	209	617	258	120
21	47	79	87	92	108	113	115	106	157	931	241	119
22	51	78	91	109	104	110	115	97	130	1170	227	117
23	52	83	108	102	103	106	123	89	116	2930	215	113
24	52	84	101	91	103	105	125	85	107	3250	206	110
25	52	78	89	91	103	105	114	85	105	33300	212	109
26	52	77	86	88	100	105	107	85	102	36400	228	122
27	54	81	85	90	104	101	107	82	98	12900	207	118
28	59	82	85	87	107	105	104	82	93	3800	195	113
29	58	85	85	88	106	361	106	81	89	2150	186	110
30	56	92	85	88	---	279	103	78	86	2210	176	110
31	e50	---	86	89	---	297	---	77	---	1630	167	---
TOTAL	1374	2062	2516	2646	2856	3955	3534	2996	7391	134807	24861	4543
MEAN	44.3	68.7	81.2	85.4	98.5	128	118	96.6	246	4349	802	151
MAX	59	92	108	109	109	361	199	143	1480	36400	4670	408
MIN	30	37	56	58	89	101	103	77	86	81	167	109
AC-FT	2730	4090	4990	5250	5660	7840	7010	5940	14660	267400	49310	9010

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 1992, BY WATER YEAR(WY)

MEAN	285	163	138	160	273	487	336	540	891	528	352	369
MAX	4406	653	282	594	1004	2821	2019	2419	4735	4349	2142	2189
(WY)	1974	1947	1914	1973	1948	1987	1987	1945	1951	1992	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1910-1992

ANNUAL TOTAL	61781	193541	
ANNUAL MEAN	169	529	
HIGHEST ANNUAL MEAN			380
LOWEST ANNUAL MEAN			1022
HIGHEST DAILY MEAN	2950	36400	107
LOWEST DAILY MEAN	22	30	14
ANNUAL SEVEN-DAY MINIMUM	24	34	24
INSTANTANEOUS PEAK FLOW		54000	54000
INSTANTANEOUS PEAK STAGE		24.33	24.33
ANNUAL RUNOFF (AC-FT)	122500	383900	275600
10 PERCENT EXCEEDS	204	443	576
50 PERCENT EXCEEDS	100	104	158
90 PERCENT EXCEEDS	36	52	90

KANSAS RIVER BASIN
06884025 LITTLE BLUE RIVER AT HOLLENBERG, KS

LOCATION.--Lat 39°58'48", long 97°00'16", NE1/4SW1/4 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 National Geodetic Vertical Datum of 1929.

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 1991 TO SEPTEMBER 1992
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	e49	e96	146	110	119	396	113	117	99	1590	730
2	26	e50	e90	159	112	118	267	110	177	101	1620	715
3	26	e45	e50	141	112	117	219	103	205	157	1770	807
4	47	e39	e32	132	110	120	194	100	158	121	1210	547
5	44	e43	e50	141	106	133	178	100	140	103	3110	346
6	41	e52	e84	143	108	139	168	99	1580	229	6750	282
7	40	e50	e100	135	106	137	167	96	1070	361	3330	726
8	39	e47	e110	135	103	139	170	95	460	185	1830	1530
9	39	e54	109	e120	105	134	161	93	325	135	1210	2230
10	39	e64	104	e100	109	124	158	89	329	119	962	1060
11	38	e70	97	e96	108	123	154	112	676	111	807	421
12	38	e82	132	e100	112	123	142	110	424	2490	685	324
13	38	e100	119	e104	114	126	139	104	650	9490	611	274
14	39	e114	106	e98	117	122	139	91	372	9900	700	244
15	40	111	109	e84	121	120	138	89	272	6620	886	223
16	43	113	e104	e76	119	117	143	85	246	3130	966	208
17	43	117	e92	e76	126	142	143	193	310	1770	726	1870
18	43	114	e86	e84	129	222	143	148	386	1200	708	4710
19	46	103	e80	e96	129	257	157	138	452	855	534	1630
20	46	92	e106	e108	129	242	153	155	357	923	433	429
21	47	88	123	e120	123	227	138	181	258	1160	386	344
22	48	90	118	e130	118	209	135	132	223	1190	351	313
23	50	93	151	e140	116	197	210	109	193	3210	322	285
24	52	90	143	130	116	190	167	94	170	3430	300	255
25	54	86	125	120	115	184	138	91	157	27400	291	230
26	55	86	114	117	116	180	122	93	146	39300	321	232
27	58	92	109	114	119	173	125	92	132	19600	302	222
28	65	96	106	109	122	177	119	91	122	5940	284	206
29	67	98	105	109	119	282	118	88	117	3070	263	192
30	e68	e104	104	108	---	473	116	84	106	2440	242	182
31	e58	---	106	106	---	409	---	84	---	2280	223	---
TOTAL	1403	2432	3160	3577	3349	5575	4917	3362	10330	147119	33723	21767
MEAN	45.3	81.1	102	115	115	180	164	108	344	4746	1088	726
MAX	68	117	151	159	129	473	396	193	1580	39300	6750	4710
MIN	26	39	32	76	103	117	116	84	106	99	223	182
AC-FT	2780	4820	6270	7090	6640	11060	9750	6670	20490	291800	66890	43170

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1992, BY WATER YEAR (WY)

	MEAN	344	189	168	178	334	807	617	696	946	851	578	420
MAX	2163	398	340	576	1009	3693	2379	2059	4373	4746	2572	1320	
(WY)	1987	1980	1987	1984	1982	1979	1987	1984	1984	1992	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 1991 CALENDAR YEAR

FOR 1992 WATER YEAR

WATER YEARS 1975 - 1992

ANNUAL TOTAL	68118	240714	
ANNUAL MEAN	187	658	512
HIGHEST ANNUAL MEAN			1079
LOWEST ANNUAL MEAN			195
HIGHEST DAILY MEAN	2860	39300	39300
LOWEST DAILY MEAN	26	26	26
ANNUAL SEVEN-DAY MINIMUM	27	36	27
INSTANTANEOUS PEAK FLOW		47800	47800
INSTANTANEOUS PEAK STAGE		21.21	21.21
ANNUAL RUNOFF (AC-FT)	135100	477500	370600
10 PERCENT EXCEEDS	270	963	845
50 PERCENT EXCEEDS	123	125	196
90 PERCENT EXCEEDS	39	54	100

DISCHARGE AT PARTIAL RECORD STATIONS AND MISCELLANEOUS SITES

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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 1992

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.	---	1962a 1977-91	11-19-91 05-08-92	.58 34
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.	---	1977-91	11-19-91 05-08-92	1.5 12
Cedar River Diversion	Loup River	Lat 41° 40' 53", long 98° 22' 00", in NW1/4 NW1/4 sec.28, T.20 N., R.9 W, Greeley County, downstream from Spalding Power Plant.	---	---	07-28-92	106
Cedar River	Loup River	Lat 41° 40' 53", long 98° 22' 12", in NE1/4 NE1/4 sec.29, T.20 N., R.9 W, Greeley County, downstream from Spalding Diversion Dam.	---	---	07-28-92	76
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.	21300	1963-67, 1970-78, 1980 1983, 1985 1989-91	11-15-91 04-01-92 09-02-92	37 52 166

* 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 1992

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							
0683820	Coon Creek at Indianola, NE	Lat 40° 14' 03", long 100° 25' 37", in NW1/4 NE1/4 sec.13, T.3 N., R.28 W., Red Willow County, at bridge on U.S.Highways 6 and 34, 0.5 mile west of Indianola.	a69	1961-92	08-06-92	6.27	400
0683850	Dry Creek at Bartley, NE	Lat 40° 15' 02", long 100° 19' 02", in SW1/4 SE1/4 sec.1, T.3 N., R.27 W., Red Willow County, at bridge on U.S. Highway 6 and 34, 0.5 mile west of Bartley.	a42	1961-92	08-06-92	9.60	60
0685000	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* 1954-61b 1962-77c 1978-89b, 1991-92	08-07-92	4.35	450
0688140	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, 1991-92	07-25-92	14.83	3600

* Operated as a continuous-record gaging station.

a Approximate.

b Discharge measurements published in table for miscellaneous sites.

c Discharge measurements published in table for low flow partial record sites.

LOW-FLOW INVESTIGATIONS
KANSAS RIVER BASIN

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Low-flow investigations made in the Big Blue and Little Blue River basins in Nebraska during water year 1991 to obtain data on ground-water/surface-water relationships which were not included in the 1991 water year report.

BIG BLUE RIVER BASIN

Location	Observation of zero flow or measured discharge in cubic feet per second September 25, 1991
Big Blue River 1.5 miles north of DeWitt in SW1/4NE1/4 sec. 12, T.5 N., R.4 E.	70
Clatonia Creek 1 mile northeast of DeWitt in NW1/4NW1/4 sec. 17, T.5 N., R.5 E.	0
Turkey Creek 1.5 miles west of DeWitt in SE1/4NW1/4 sec. 15, T.5 N., R.4 E.	2.5
Turkey Creek 0.5 miles south of DeWitt in SE1/4NW1/4 sec. 24, T.5 N., R.4 E.	3.0
Turkey Creek 1.5 miles southeast of DeWitt in NW1/4SW1/4 sec. 29, T.5 N., R.5 E.	3.3
Big Blue River 2.5 miles southeast of DeWitt in NW1/4NE1/4 sec. 33, T.5 N., R.5 E.	78
Soap Creek 3.5 miles southeast of DeWitt in SE1/4SW1/4 sec. 27, T.5 N., R.5 E.	0
Unnamed tributary to Big Blue River 1 mile north of Hoag in NW1/4NE1/4 sec. 10, T.4 N., R.5 E.	0
Snake Creek 2 miles northeast of Hoag in NW1/4NW1/4 sec. 1, T.4 N., R.5 E.	0
Big Blue River 1 mile east of Hoag in NE1/4NW1/4 sec. 13, T.4 N., R.5 E.	81
Cub Creek 2 miles south of Hoag in SW1/4SW1/4 sec. 24, T.4 N., R.5 E. ....	.04
Bottle Creek 1.5 miles northwest of Beatrice in NW1/4SW1/4 sec. 30, T.4 N., R.6 E.	0
Unnamed tributary to Big Blue River 0.5 miles northwest of Beatrice in SW1/4SW1/4 sec. 29, T.4 N., R.6 E.	0
Indian Creek at Beatrice in SE1/4SE1/4 sec. 28, T.4 N., R.6 E. ....	.27
Big Blue River at Beatrice in SW1/4NW1/4 sec. 3, T.3 N., R.6 E. (Gage)	85

LITTLE BLUE RIVER BASIN

Little Blue River 2.7 miles south of Alexandria in SE1/4SE1/4 sec. 23, T.3 N., R.1 W. (Gage)	4.8
Big Sandy Creek 0.8 miles south of Alexandria in SE1/4SE1/4 sec. 11, T.3 N., R.1 W. (Gage)	14
Big Sandy Creek 1.2 miles west of Powell in SE1/4SE1/4 sec. 16, T.3 N., R.1 E.	20
Little Blue River 1.2 miles southwest of Powell in SE1/4SE1/4 sec. 22, T.3 N., R.1 E.	24
Little Sandy Creek 2.0 miles east of Powell in NW1/4NE1/4 sec. 19, T.3 N., R.2 E. ....	.09
Whiskey Creek 2.1 miles northwest of Fairbury in SW1/4SE1/4 sec. 33, T.3 N., R.2 E.	0
Little Blue River 1.3 miles northwest of Fairbury in NW1/4NE1/4 sec. 9, T.2 N., R.2 E.	23
Trib. to Little Blue River 0.8 miles southwest of Fairbury in NE1/4SW1/4 sec. 22, T.2 N., R.2 E.	0
Little Blue River 0.8 miles south of Fairbury in NW1/4NE1/4 sec. 26, T.2 N., R.2 E. (Gage)	26
Brawner Creek 0.4 miles southeast of Fairbury in SE1/4NE1/4 sec. 23, T.2 N., R.2 E.	0
Rose Creek 4.0 miles southwest of Endicott in NW1/4NW1/4 sec. 12, T.1 N., R.2 E.	2.4
Smith Creek 0.2 miles northwest of Endicott in NW1/4SE1/4 sec. 5, T.1 N., R.3 E. ....	.02
Little Blue River 0.3 miles south of Endicott in SE1/4SW1/4 sec. 4, T.1 N., R.3 E.	25
Rock Creek 0.3 miles southeast of Endicott in SE1/4SE1/4 sec. 4, T.1 N., R.3 E. ....	.06
Coon Creek 2.6 miles northwest of Steele City in NW1/4NE1/4 sec. 15, T.1 N., R.3 E.	0
Little Blue River 0.5 miles south of Steele City in NW1/4NW1/4 sec. 30, T.1 N., R.4 E.	29
Little Blue River 0.6 miles west of Hollenberg in NE1/4SW1/4 sec. 8, T.1 S., R.4 E. (Gage)	26

LOW-FLOW INVESTIGATIONS

PLATTE RIVER BASIN

Wahoo Creek Basin

Discharge measurements were made during water year 1992 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.

Location	Discharge in cubic feet per second on indicated dates. -					
	10-28	11-27	12-30/31	1-29	2-24	3-23
Wahoo Creek at SW corner of NOP NW1/4 NW1/4 sec. 2, T.13 N., R.8 E.	24	27	35	32	33	4
Wahoo Cr below confluence with Silver Creek NE1/4 NW1/4 sec. 20, T.13 N., R.9 E.	36	40	45	45	47	47
Wahoo Creek at Ashland (Gage site 06804700) SE1/4 NE1/4 sec. 35, T.13 N., R.9 E.	41	40	48	44	42	54
Silver Creek near Ashland NW1/4 NE1/4 sec. 35, T.13 N., R.9 E.	1.1	1.1	1.4	1.4	1.6	1.5
Johnson Creek north of NOP SW1/4 SW1/4 sec. 5, T.14 N., R.9 E.	.04	.22	.11	.16	.11	ponded
Johnson Creek below dam outlet SW1/4 SE1/4 sec. 16, T.14 N., R.9 E.	0	0	0	0	0	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.	1.5	1.4	1.7	1.5	1.4	1.4
Clear Creek near Memphis NW1/4 NW1/4 sec. 14, T.13 N., R.9 E.	7.9	11	---	14	18	15

Location	Discharge in cubic feet per second on indicated dates. -			
	4-28	5-27	6-30	8-3
Wahoo Creek at SW corner of NOP NW1/4 NW1/4 sec. 2, T.13 N., R.8 E.	55	44	29	45
Wahoo Cr below confluence with Silver Creek NE1/4 NW1/4 sec. 20, T.13 N., R.9 E.	75	61	40	62
Wahoo Creek at Ashland (Gage site 06804700) SE1/4 NE1/4 sec. 35, T.13 N., R.9 E.	82	60	37	61
Silver Creek near Ashland NW1/4 NE1/4 sec. 35, T.13 N., R.9 E.	2.2	.81	.81	.98
Johnson Creek north of NOP SW1/4 SW1/4 sec. 5, T.14 N., R.9 E.	1.3	1.0	.67	.62
Johnson Creek below dam outlet SW1/4 SE1/4 sec. 16, T.14 N., R.9 E.	0	0	0	0
Johnson Creek near Memphis (1 mi above Clear Creek) (Gage site 06804900) NW1/4 NW1/4 sec. 35, T.14 N., R.9 E.	.9	1.1	.50	1.3
Clear Creek near Memphis NW1/4 NW1/4 sec. 14, T.13 N., R.9 E.	26	9.9	8.1	17

Remark Codes

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

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

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS
WATER DATA, WATER YEAR OCYOBBER 1991 TO SEPTEMBER 1992

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)
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06788495 DANE C AT ORD, NEBR. (LAT 41 36 31N LONG 098 56 36W)

NOV 1991	19...	1300	0.60	796	7.9	5.5	4	350	110	19	26
MAY 1992	08...	1420	34	152	8.9	18.0	25	56	18	2.6	5.8

06788990 MIRA C AT NORTH LOUP, NEBR. (LAT 41 29 54N LONG 098 46 46W)

NOV 1991	19...	1020	1.5	661	7.9	4.5	14	300	86	20	21
MAY 1992	08...	1125	12	247	8.1	18.5	40	100	31	5.4	8.3

DATE	SODIUM ADSORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	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, DISSOLVED (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)
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06788495 DANE C AT ORD, NEBR. (LAT 41 36 31N LONG 098 56 36W)

NOV 1991	19...	0.6	19	339	55	19	0.30	43	510	0.69	0.83
MAY 1992	08...	0.3	5.3	76	3.6	0.70	0.30	26	108	0.15	9.93

06788990 MIRA C AT NORTH LOUP, NEBR. (LAT 41 29 54N LONG 098 46 46W)

NOV 1991	19...	0.5	14	314	31	10	0.30	33	406	0.55	1.65
MAY 1992	08...	0.4	8.4	120	9.1	3.7	0.30	48	189	0.26	6.12

DATE	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)	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)
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06788495 DANE C AT ORD, NEBR. (LAT 41 36 31N LONG 098 56 36W)

NOV 1991	19...	2.94	0.060	3.00	0.670	0.400	0.390	90	40	190
MAY 1992	08...	--	<0.010	<0.050	0.050	0.070	0.040	20	31	15

06788990 MIRA C AT NORTH LOUP, NEBR. (LAT 41 29 54N LONG 098 46 46W)

NOV 1991	19...	0.320	0.010	0.330	0.040	0.280	0.280	70	12	310
MAY 1992	08...	0.420	0.020	0.440	0.080	0.170	0.140	50	9	98

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	SPECIFIC CON- DUCT- ANCE (μ S/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER ($^{\circ}$ C) (00010)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	COLI- FORM, FECAL, 0.7 μ M-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)	SODIUM, DIS- SOLVED (MG/L AS Na) (00930)	SODIUM ADSORP- TION RATIO (00931)
06610740 BIG PAPILLION CREEK AT 72ND STREET, OMAHA, NE. (LAT 41 12 32N LONG 096 01 26W)												
AUG 1992												
25...	1130	642	8.	--	52	--	--	280	76	23	27	0.7
411308096021400 NPDES - 82ND AND F STREETS, OMAHA, NE. (LAT 41 13 08N LONG 096 02 14W)												
MAY 1992												
22...	1800	282	7.	--	120	35000	K100000	36	12	1.4	7.5	0.5
JUL												
02...	0830	145	7.	17.0	120	K8700	11000	92	29	4.7	14	0.6
411515096055100 NPDES - 118TH AND JACKSON STREETS, OMAHA, NE. (LAT 41 15 15N LONG 096 05 51W)												
JUN 1992												
05...	2200	78	6.	19.0	42	K90000	97000	28	9.9	0.91	2.4	0.2
JUL												
02...	0855	160	7.	19.0	54	37000	42000	34	11	1.5	4.9	0.4
AUG												
25...	1100	--	8.	20.0	52	--	--	66	21	3.3	6.6	0.4
411525096015200 NPDES - 77TH AND DODGE STREETS, OMAHA, NE. (LAT 41 15 25N LONG 096 01 52W)												
JUN 1992												
05...	2200	113	7.	19.0	45	28000	13000	47	17	1.2	3.1	0.2
JUL												
02...	0900	167	7.	17.0	92	11000	16000	42	15	1.1	4.8	0.3
AUG												
25...	1050	130	8.	20.0	110	--	--	47	17	1.2	6.3	0.4
411528096045900 NPDES - OLD MILL AND 108TH STREET, OMAHA, NE. (LAT 41 15 28N LONG 096 04 59W)												
JUN 1992												
05...	2115	155	6.	--	31	K1500	4200	48	15	2.6	8.7	0.5
17...	0200	128	7.	19.0	47	24000	K100000	84	25	5.3	19	0.9
JUL												
02...	0815	115	8.	17.0	45	5600	12000	46	14	2.6	8.9	0.6
411607096051600 NPDES - 108TH AND LIONS HEAD APT., OMAHA, NE. (LAT 41 16 07N LONG 096 05 16W)												
JUN 1992												
17...	0125	137	7.	22.0	72	K63000	K110000	39	12	2.3	7.6	0.5
JUL												
02...	0800	520	7.	17.0	67	110000	90000	49	15	2.8	9.1	0.6
AUG												
25...	1100	166	8.	19.5	57	--	--	56	17	3.2	8.3	0.5

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	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)	SOLIDS, RESIDUE SUM OF AT 180° C DIS- SOLVED (MG/L) (70300)	SOLIDS, 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)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)
06610740 BIG PAPILLION CREEK AT 72ND STREET, OMAHA, NE. (LAT 41 12 32N LONG 096 01 26W)												
AUG 1992 25...	4.8	265	32	22	378	344	0.51	--	738	3.04	0.060	3.10
411308096021400 NPDES - 82ND AND F STREETS, OMAHA, NE. (LAT 41 13 08N LONG 096 02 14W)												
MAY 1992 22...	2.3	65	11	7.7	76	81	0.10	--	750	0.480	0.060	0.540
JUL 02...	5.3	130	37	20	166	188	0.23	--	449	0.700	0.200	0.900
411515096055100 NPDES - 118TH AND JACKSON STREETS, OMAHA, NE. (LAT 41 15 15N LONG 096 05 51W)												
JUN 1992 05...	1.9	37	3.6	2.3	48	43	0.06	--	58	0.380	0.030	0.410
JUL 02...	3.4	35	10	3.5	73	55	0.10	--	39	0.630	0.050	0.680
AUG 25...	3.3	65	9.6	4.6	97	87	0.13	--	37	0.560	0.050	0.610
411525096015200 NPDES - 77TH AND DODGE STREETS, OMAHA, NE. (LAT 41 15 25N LONG 096 01 52W)												
JUN 1992 05...	1.6	53	10	3.5	88	68	0.12	--	91	0.640	0.040	0.680
JUL 02...	2.6	69	12	3.1	64	80	0.09	--	188	1.05	0.150	1.20
AUG 25...	2.4	53	12	4.4	99	75	0.13	--	152	0.780	0.050	0.830
411528096045900 NPDES - OLD MILL AND 108TH STREET, OMAHA, NE. (LAT 41 15 28N LONG 096 04 59W)												
JUN 1992 05...	2.5	40	19	6.5	97	78	0.13	--	33	0.640	0.070	0.710
17...	6.3	55	51	11	188	151	0.26	--	53	0.590	0.050	0.640
JUL 02...	2.7	31	24	4.3	90	75	0.12	--	77	0.710	0.090	0.800
411607096051600 NPDES - 108TH AND LIONS HEAD APT., OMAHA, NE. (LAT 41 16 07N LONG 096 05 16W)												
JUN 1992 17...	5.7	37	16	6.7	88	72	0.12	--	190	0.930	0.050	0.980
JUL 02...	5.3	35	22	5.3	109	80	0.15	4.41	123	0.890	0.110	1.00
AUG 25...	5.5	48	20	4.5	107	87	0.15	--	170	0.610	0.040	0.650

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	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)	ARSENIC TOTAL (µG/L AS AS) (01002)	BERYL- LIUM, TOTAL RECOV- ERABLE (µG/L AS BE) (01012)	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)	LEAD, TOTAL RECOV- ERABLE (µG/L AS PB) (01051)
06610740 BIG PAPILLION CREEK AT 72ND STREET, OMAHA, NE. (LAT 41 12 32N LONG 096 01 26W)												
AUG 1992 25...	0.100	0.70	0.8	3.9	0.810	0.380	12	<10	<1	8	19	19
411308096021400 NPDES - 82ND AND F STREETS, OMAHA, NE. (LAT 41 13 08N LONG 096 02 14W)												
MAY 1992 22...	0.090	0.61	0.7	1.2	0.200	0.110	7	<10	2	17	30	93
JUL 02...	1.20	1.7	2.9	3.8	0.550	0.120	2	<10	2	9	24	51
411515096055100 NPDES - 118TH AND JACKSON STREETS, OMAHA, NE. (LAT 41 15 15N LONG 096 05 51W)												
JUN 1992 05...	0.250	0.55	0.8	1.2	0.120	0.110	<1	<10	<1	5	7	18
JUL 02...	0.510	1.3	1.8	2.5	0.350	0.240	3	<10	<1	3	7	15
AUG 25...	0.160	0.54	0.7	1.3	0.190	0.200	4	10	<1	<1	7	10
411525096015200 NPDES - 77TH AND DODGE STREETS, OMAHA, NE. (LAT 41 15 25N LONG 096 01 52W)												
JUN 1992 05...	0.190	0.41	0.6	1.3	0.090	0.080	2	<10	<1	5	8	20
JUL 02...	0.640	1.3	1.9	3.1	0.440	0.200	8	<10	<1	5	10	31
AUG 25...	0.370	0.83	1.2	2.0	0.210	0.190	3	<10	<1	6	12	22
411528096045900 NPDES - OLD MILL AND 108TH STREET, OMAHA, NE. (LAT 41 15 28N LONG 096 04 59W)												
JUN 1992 05...	0.330	0.47	0.8	1.5	0.140	0.130	<1	<10	<1	<1	5	3
17...	0.450	1.2	1.7	2.3	0.320	0.410	3	<10	<1	1	6	2
JUL 02...	0.640	0.86	1.5	2.3	0.260	0.180	2	<10	<1	3	7	7
411607096051600 NPDES - 108TH AND LIONS HEAD APT., OMAHA, NE. (LAT 41 16 07N LONG 096 05 16W)												
JUN 1992 17...	0.460	2.2	2.7	3.7	0.540	0.330	5	<10	<1	6	9	12
JUL 02...	0.530	1.7	2.2	3.2	0.520	0.380	3	<10	<1	3	9	9
AUG 25...	0.170	0.93	1.1	1.7	0.370	0.130	3	<10	<1	3	12	10

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	MERCURY TOTAL RECOV- ERABLE (µG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (µG/L AS NI) (01067)	SELE- NIUM, TOTAL RECOV- ERABLE (µG/L AS SE) (01147)	SILVER, TOTAL RECOV- ERABLE (µG/L AS AG) (01077)	THAL- LIUM, TOTAL RECOV- ERABLE (µG/L AS TL) (01059)	ZINC, TOTAL RECOV- ERABLE (µG/L AS ZN) (01092)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV- ERABLE GRAVI- METRIC (MG/L) (00556)	DI- BROMO- METHANE WATER WHOLE RECOVER (µG/L) (30217)	DI- CHLORO- BROMO- METHANE TOTAL (µG/L) (32101)	CARBON- TETRA- CHLO- RIDE TOTAL (µG/L) (32102)
06610740 BIG PAPILLION CREEK AT 72ND STREET, OMAHA, NE. (LAT 41 12 32N LONG 096 01 26W)												
AUG 1992 25...	<0.10	17		<1	<5	90	21	<0.010	<1	<0.2	<0.2	<0.2
411308096021400 NPDES - 82ND AND F STREETS, OMAHA, NE. (LAT 41 13 08N LONG 096 02 14W)												
MAY 1992 22...	<0.10	21	<	<1	<100	280	26	<0.010	4	<0.2	<0.2	<0.2
JUL 02...	<0.10	14	<	<1	<10	290	26	<0.010	1	<0.2	<0.2	<0.2
411515096055100 NPDES - 118TH AND JACKSON STREETS, OMAHA, NE. (LAT 41 15 15N LONG 096 05 51W)												
JUN 1992 05...	<0.10	4	<	<1	<5	60	0.6	<0.010	3	<0.2	<0.2	<0.2
JUL 02...	<0.10	3	<	<1	<5	60	13	<0.010	2	<0.2	<0.2	<0.2
AUG 25...	<0.10	3	<	<1	<5	70	15	<0.010	<1	<0.2	<0.2	<0.2
411525096015200 NPDES - 77TH AND DODGE STREETS, OMAHA, NE. (LAT 41 15 25N LONG 096 01 52W)												
JUN 1992 05...	<0.10	5	<	<1	<5	80	11	<0.010	1	<0.2	<0.2	<0.2
JUL 02...	<0.10	9	<	<1	<5	110	24	<0.010	2	<0.2	<0.2	<0.2
AUG 25...	<0.10	7	<	<1	<5	140	37	<0.010	2	<0.2	<0.2	<0.2
411528096045900 NPDES - OLD MILL AND 108TH STREET, OMAHA, NE. (LAT 41 15 28N LONG 096 04 59W)												
JUN 1992 05...	<0.10	2	<	<1	<5	50	5.7	<0.010	<1	<0.2	<0.2	<0.2
17...	<0.10	4	<	<1	<10	50	14	<0.010	<1	<0.2	0.2	<0.2
JUL 02...	<0.10	5	<	<1	<5	80	25	<0.010	<1	<0.2	<0.2	<0.2
411607096051600 NPDES - 108TH AND LIONS HEAD APT., OMAHA, NE. (LAT 41 16 07N LONG 096 05 16W)												
JUN 1992 17...	<0.10	10	<	<1	<10	60	19	<0.010	<1	<0.2	<0.2	<0.2
JUL 02...	<0.10	6	<	<1	<5	50	16	<0.010	<1	<0.2	0.2	<0.2
AUG 25...	<0.10	7	<	<1	<5	40	18	<0.010	<1	<0.2	<0.2	<0.2

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	1,2-DI- CHLORO- ETHANE TOTAL (μG/L (32103)	BROMO- FORM TOTAL (μG/L (32104)	CHLORO- DI- BROMO- METHANE TOTAL (μG/L (32105)	CHLORO- FORM TOTAL (μG/L (32106)	PHENOLS TOTAL (μG/L (32730)	TOLUENE TOTAL (μG/L (34010)	BENZENE TOTAL (μG/L (34030)	ACE- NAPHTH- YLENE TOTAL (μG/L (34200)	ACE- NAPHTH- ENE TOTAL (μG/L (34205)	ACRO- LEIN TOTAL (μG/L (34210)	ACRYLO- NITRILE TOTAL (μG/L (34215)	ANTHRA- CENE TOTAL (μG/L (34220)
06610740 BIG PAPILLION CREEK AT 72ND STREET, OMAHA, NE. (LAT 41 12 32N LONG 096 01 26W)												
AUG 1992 25...	<0.2	<0.2	<0.	<0.2	<1	0.3	<0.2	<5.0	<5.0	<20	<20	<5.0
411308096021400 NPDES - 82ND AND F STREETS, OMAHA, NE. (LAT 41 13 08N LONG 096 02 14W)												
MAY 1992 22...	<0.2	<0.2	<0.	<0.2	5	<0.2	<0.2	<5.0	<5.0	<20	<20	<5.0
JUL 02...	<0.2	<0.2	<0.	<0.2	4	<0.2	<0.2	<5.0	<5.0	<20	<20	<5.0
411515096055100 NPDES - 118TH AND JACKSON STREETS, OMAHA, NE. (LAT 41 15 15N LONG 096 05 51W)												
JUN 1992 05...	<0.2	<0.2	<0.	<0.2	4	<0.2	<0.2	<5.0	<5.0	<20	<20	<5.0
JUL 02...	<0.2	<0.2	<0.	<0.2	3	<0.2	<0.2	<5.0	<5.0	<20	<20	<5.0
AUG 25...	<0.2	<0.2	<0.	<0.2	4	<0.2	<0.2	<5.0	<5.0	<20	<20	<5.0
411525096015200 NPDES - 77TH AND DODGE STREETS, OMAHA, NE. (LAT 41 15 25N LONG 096 01 52W)												
JUN 1992 05...	<0.2	<0.2	<0.	<0.2	6	<0.2	<0.2	<5.0	<5.0	<20	<20	<5.0
JUL 02...	<0.2	<0.2	<0.	<0.2	9	<0.2	<0.2	<5.0	<5.0	<20	<20	<5.0
AUG 25...	<0.2	<0.2	<0.	<0.2	4	<0.2	<0.2	<5.0	<5.0	<20	<20	<5.0
411528096045900 NPDES - OLD MILL AND 108TH STREET, OMAHA, NE. (LAT 41 15 28N LONG 096 04 59W)												
JUN 1992 05...	<0.2	<0.2	<0.	<0.2	6	<0.2	<0.2	<5.0	<5.0	<20	<20	<5.0
JUN 17...	<0.2	<0.2	<0.	0.4	--	<0.2	<0.2	<5.0	<5.0	<20	<20	<5.0
JUL 02...	<0.2	<0.2	<0.	<0.2	2	<0.2	<0.2	<5.0	<5.0	<20	<20	<5.0
411607096051600 NPDES - 108TH AND LIONS HEAD APT., OMAHA, NE. (LAT 41 16 07N LONG 096 05 16W)												
JUN 1992 17...	<0.2	<0.2	<0.	<0.2	<1	0.9	<0.2	<5.0	<5.0	<20	<20	<5.0
JUL 02...	<0.2	<0.2	<0.	1.0	2	2.9	<0.2	<5.0	<5.0	<20	<20	<5.0
AUG 25...	<0.2	<0.2	<0.	0.2	3	0.4	<0.2	<5.0	<5.0	<20	<20	<5.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	BENZO B FLUOR- ANTHENE TOTAL (μG/L (34230)	BENZO K FLUOR- ANTHENE TOTAL (μG/L (34242)	BENZO- APYRENE TOTAL (μG/L (34247)	DELTA BENZENE HEXA- CHLOR- IDE TOTAL (μG/L (34259)	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)
06610740 BIG PAPILLION CREEK AT 72ND STREET, OMAHA, NE. (LAT 41 12 32N LONG 096 01 26W)												
AUG 1992 25...	<10.0	<10.0	<10.0	<0.09	<5.0	<5.0	<5.0	<5.0	<0.20	<0.2	<10.0	<5.0
411308096021400 NPDES - 82ND AND F STREETS, OMAHA, NE. (LAT 41 13 08N LONG 096 02 14W)												
MAY 1992 22...	<10.0	<10.0	<10.0	<0.09	<5.0	<5.0	<5.0	<5.0	<0.20	<0.2	<10.0	<5.0
JUL 02...	<10.0	<10.0	<10.0	<0.09	<5.0	<5.0	<5.0	<5.0	<0.20	<0.2	<10.0	<5.0
411515096055100 NPDES - 118TH AND JACKSON STREETS, OMAHA, NE. (LAT 41 15 15N LONG 096 05 51W)												
JUN 1992 05...	<10.0	<10.0	<10.0	--	<5.0	<5.0	<5.0	<5.0	<0.20	<0.2	<10.0	<5.0
JUL 02...	<10.0	<10.0	<10.0	<0.09	<5.0	<5.0	<5.0	<5.0	<0.20	<0.2	<10.0	<5.0
AUG 25...	<10.0	<10.0	<10.0	<0.09	<5.0	<5.0	<5.0	<5.0	<0.20	<0.2	<10.0	<5.0
411525096015200 NPDES - 77TH AND DODGE STREETS, OMAHA, NE. (LAT 41 15 25N LONG 096 01 52W)												
JUN 1992 05...	<10.0	<10.0	<10.0	<0.09	<5.0	<5.0	<5.0	<5.0	<0.20	<0.2	<10.0	<5.0
JUL 02...	<10.0	<10.0	<10.0	<0.09	<5.0	<5.0	<5.0	<5.0	<0.20	<0.2	<10.0	<5.0
AUG 25...	<10.0	<10.0	<10.0	<0.09	<5.0	<5.0	<5.0	<5.0	<0.20	<0.2	<10.0	<5.0
411528096045900 NPDES - OLD MILL AND 108TH STREET, OMAHA, NE. (LAT 41 15 28N LONG 096 04 59W)												
JUN 1992 05...	<10.0	<10.0	<10.0	<0.09	<5.0	<5.0	<5.0	<5.0	<0.20	<0.2	<10.0	<5.0
JUL 02...	<10.0	<10.0	<10.0	<0.09	<5.0	<5.0	<5.0	<5.0	<0.20	<0.2	<10.0	<5.0
AUG 25...	<10.0	<10.0	<10.0	<0.09	<5.0	<5.0	<5.0	<5.0	<0.20	<0.2	<10.0	<5.0
411607096051600 NPDES - 108TH AND LIONS HEAD APT., OMAHA, NE. (LAT 41 16 07N LONG 096 05 16W)												
JUN 1992 17...	<10.0	<10.0	<10.0	<0.09	<5.0	<5.0	<5.0	<5.0	<0.20	<0.2	<10.0	<5.0
JUL 02...	<10.0	<10.0	<10.0	<0.09	<5.0	<5.0	<5.0	<5.0	<0.20	<0.2	<10.0	<5.0
AUG 25...	<10.0	<10.0	<10.0	<0.09	<5.0	<5.0	<5.0	<5.0	<0.20	<0.2	<10.0	<5.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	DI-METHYL PHTHAL- ATE TOTAL (µG/L (34341)	ENDO- SULFAN SULFATE TOTAL (µG/L (34351)	ENDO- SULFAN BETA TOTAL (µG/L (34356)	ENDO- SULFAN-I WATER WHOLE REC (µG/L (34361)	ENDRIN ALDE- HYDE TOTAL (µG/L (34366)	ETHYL- BENZENE TOTAL (µG/L (34371)	FLUOR- ANTHENE TOTAL (µG/L (34376)	FLUOR- ENE TOTAL (µG/L (34381)	HEXA- CHLORO- CYCLO- PENT- ADIENE TOTAL (µG/L (34386)	HEXA- CHLORO- ETHANE TOTAL (µG/L (34396)	INDENO (1,2,3-CD) PYRENE TOTAL (µG/L (34403)	ISO- PHORONE TOTAL (µG/L (34408)
06610740 BIG PAPILLION CREEK AT 72ND STREET, OMAHA, NE. (LAT 41 12 32N LONG 096 01 26W)												
AUG 1992 25...	<5.0	<0.60	<0.0	<0.10	<0.20	<0.2	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0
411308096021400 NPDES - 82ND AND F STREETS, OMAHA, NE. (LAT 41 13 08N LONG 096 02 14W)												
MAY 1992 22...	<5.0	<0.60	<0.0	<0.10	<0.20	<0.2	7.0	<5.0	<5.0	<5.0	<10.0	<5.0
JUL 02...	<5.0	<0.60	<0.0	<0.10	<0.20	<0.2	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0
411515096055100 NPDES - 118TH AND JACKSON STREETS, OMAHA, NE. (LAT 41 15 15N LONG 096 05 51W)												
JUN 1992 05...	<5.0	--	--	--	--	<0.2	7.0	<5.0	<5.0	<5.0	<10.0	<5.0
JUL 02...	<5.0	<0.60	<0.0	<0.10	<0.20	<0.2	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0
AUG 25...	<5.0	<0.60	<0.0	<0.10	<0.20	<0.2	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0
411525096015200 NPDES - 77TH AND DODGE STREETS, OMAHA, NE. (LAT 41 15 25N LONG 096 01 52W)												
JUN 1992 05...	<5.0	<0.60	<0.0	<0.10	<0.20	<0.2	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0
JUL 02...	<5.0	<0.60	<0.0	<0.10	<0.20	<0.2	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0
AUG 25...	<5.0	<0.60	<0.0	<0.10	<0.20	<0.2	5.0	<5.0	<5.0	<5.0	<10.0	<5.0
411528096045900 NPDES - OLD MILL AND 108TH STREET, OMAHA, NE. (LAT 41 15 28N LONG 096 04 59W)												
JUN 1992 05...	<5.0	<0.60	<0.0	<0.10	<0.20	<0.2	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0
17...	<5.0	<0.60	<0.0	<0.10	<0.20	<0.2	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0
JUL 02...	<5.0	<0.60	<0.0	<0.10	<0.20	<0.2	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0
411607096051600 NPDES - 108TH AND LIONS HEAD APT., OMAHA, NE. (LAT 41 16 07N LONG 096 05 16W)												
JUN 1992 17...	<5.0	<0.60	<0.0	<0.10	<0.20	<0.2	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0
JUL 02...	<5.0	<0.60	<0.0	<0.10	<0.20	<0.2	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0
AUG 25...	<5.0	<0.60	<0.0	<0.10	<0.20	<0.2	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	METHYL- BROMIDE TOTAL (µG/L (34413)	METHYL- CHLO- RIDE TOTAL (µG/L (34418)	METHYL- ENE CHLO- RIDE TOTAL (µG/L (34423)	N-NITRO- SODI-N- PROPYL- AMINE TOTAL (µG/L (34428)	N-NITRO- SODI- PHENY- LAMINE TOTAL (µG/L (34433)	N-NITRO- SODI- METHY- LAMINE TOTAL (µG/L (34438)	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)
06610740 BIG PAPILLION CREEK AT 72ND STREET, OMAHA, NE. (LAT 41 12 32N LONG 096 01 26W)												
AUG 1992 25...	<0.2	<0.2	<0.	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0	<0.2	<0.2
411308096021400 NPDES - 82ND AND F STREETS, OMAHA, NE. (LAT 41 13 08N LONG 096 02 14W)												
MAY 1992 22...	<0.2	<0.2	<0.	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	6.0	<0.2	<0.2
JUL 02...	<0.2	<0.2	<0.	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0	<0.2	<0.2
411515096055100 NPDES - 118TH AND JACKSON STREETS, OMAHA, NE. (LAT 41 15 15N LONG 096 05 51W)												
JUN 1992 05...	<0.2	<0.2	<0.	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	6.0	<0.2	<0.2
JUL 02...	<0.2	<0.2	<0.	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0	<0.2	<0.2
AUG 25...	<0.2	<0.2	<0.	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0	<0.2	<0.2
411525096015200 NPDES - 77TH AND DODGE STREETS, OMAHA, NE. (LAT 41 15 25N LONG 096 01 52W)												
JUN 1992 05...	<0.2	<0.2	<0.	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0	<0.2	<0.2
JUL 02...	<0.2	<0.2	<0.	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0	<0.2	<0.2
AUG 25...	<0.2	<0.2	<0.	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0	<0.2	<0.2
411528096045900 NPDES - OLD MILL AND 108TH STREET, OMAHA, NE. (LAT 41 15 28N LONG 096 04 59W)												
JUN 1992 05...	<0.2	<0.2	<0.	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0	<0.2	<0.2
17...	<0.2	0.2	<0.	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0	<0.2	<0.2
JUL 02...	<0.2	<0.2	<0.	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0	<0.2	<0.2
411607096051600 NPDES - 108TH AND LIONS HEAD APT., OMAHA, NE. (LAT 41 16 07N LONG 096 05 16W)												
JUN 1992 17...	<0.2	<0.2	<0.	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0	<0.2	<0.2
JUL 02...	<0.2	<0.2	<0.	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0	<0.2	<0.2
AUG 25...	<0.2	<0.2	<0.	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0	<0.2	<0.2

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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DATE	1,1-DI- CHLORO- ETHANE TOTAL (µG/L (34496)	1,1-DI- CHLORO- ETHANE TOTAL (µG/L (34501)	1,1,1- TRI- CHLORO- ETHANE TOTAL (µG/L (34506)	1,1,2- TRI- CHLORO- ETHANE TOTAL (µG/L (34511)	1,1,2,2 TETRA- CHLORO- ETHANE TOTAL (µG/L (34516)	BENZO G 1,2,3,4- TETRACHLORO- BENZENE TOTAL (µG/L (34521)	BENZO A 1,2,3,4- TETRACHLORO- BENZENE TOTAL (µG/L (34526)	1,2-DI- CHLORO- BENZENE TOTAL (µG/L (34536)	1,2-DI- CHLORO- PROPANE TOTAL (µG/L (34541)	1,2,4- TRISUBSTITUTED BENZENE TOTAL (µG/L (34546)	TRI- CHLORO- BENZENE TOTAL (µG/L (34551)
06610740 BIG PAPILLION CREEK AT 72ND STREET, OMAHA, NE.	(LAT 41 12 32N LONG 096 01 26W)										
AUG 1992 25..	<0.2	<0.2	<0.2	<0.2	<0.2	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0
411308096021400 NPDES - 82ND AND F STREETS, OMAHA, NE.	(LAT 41 13 08N LONG 096 02 14W)										
MAY 1992 22..	<0.2	<0.2	<0.2	<0.2	<0.2	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0
JUL 02...	<0.2	<0.2	<0.2	<0.2	<0.2	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0
411515096055100 NPDES - 118TH AND JACKSON STREETS, OMAHA, NE.	(LAT 41 15 15N LONG 096 05 51W)										
JUN 1992 05...	<0.2	<0.2	<0.2	<0.2	<0.2	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0
JUL 02...	<0.2	<0.2	<0.2	<0.2	<0.2	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0
AUG 25..	<0.2	<0.2	<0.2	<0.2	<0.2	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0
411525096015200 NPDES - 77TH AND DODGE STREETS, OMAHA, NE.	(LAT 41 15 25N LONG 096 01 52W)										
JUN 1992 05..	<0.2	<0.2	<0.2	<0.2	<0.2	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0
JUL 02...	<0.2	<0.2	<0.2	<0.2	<0.2	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0
AUG 25...	<0.2	<0.2	<0.2	<0.2	<0.2	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0
411528096045900 NPDES - OLD MILL AND 108TH STREET, OMAHA, NE.	(LAT 41 15 28N LONG 096 04 59W)										
JUN 1992 05..	<0.2	<0.2	<0.2	<0.2	<0.2	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0
17...	<0.2	<0.2	<0.2	<0.2	<0.2	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0
JUL 02...	<0.2	<0.2	<0.2	<0.2	<0.2	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0
411607096051600 NPDES - 108TH AND LIONS HEAD APT., OMAHA, NE.	(LAT 41 16 07N LONG 096 05 16W)										
JUN 1992 17...	<0.2	<0.2	<0.2	<0.2	<0.2	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0
JUL 02...	<0.2	<0.2	<0.2	<0.2	<0.2	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0
AUG 25...	<0.2	<0.2	<0.2	<0.2	<0.2	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	1,2,5,6- DIBENZ- ANTHRA- CENE TOTAL (µG/L (34556)	1,3-DI- CHLORO- BENZENE TOTAL (µG/L (34566)	1,4-DI- CHLORO- BENZENE TOTAL (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)	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)
06610740 BIG PAPILLION CREEK AT 72ND STREET, OMAHA, NE. (LAT 41 12 32N LONG 096 01 26W)											
AUG 1992 25...	<10.	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0
411308096021400 NPDES - 82ND AND F STREETS, OMAHA, NE. (LAT 41 13 08N LONG 096 02 14W)											
MAY 1992 22...	<10.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0
JUL 02...	<10.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0
411515096055100 NPDES - 118TH AND JACKSON STREETS, OMAHA, NE. (LAT 41 15 15N LONG 096 05 51W)											
JUN 1992 05...	<10.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0
JUL 02...	<10.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0
AUG 25...	<10.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0
411525096015200 NPDES - 77TH AND DODGE STREETS, OMAHA, NE. (LAT 41 15 25N LONG 096 01 52W)											
JUN 1992 05...	<10.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0
JUL 02...	<10.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0
AUG 25...	<10.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0
411528096045900 NPDES - OLD MILL AND 108TH STREET, OMAHA, NE. (LAT 41 15 28N LONG 096 04 59W)											
JUN 1992 05...	<10.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0
JUL 02...	<10.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0
AUG 25...	<10.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0
411607096051600 NPDES - 108TH AND LIONS HEAD APT., OMAHA, NE. (LAT 41 16 07N LONG 096 05 16W)											
JUN 1992 17...	<10.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0
JUL 02...	<10.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0
AUG 25...	<10.0	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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DATE	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)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (µG/L (34668)	AROCLOR 1016 PCB TOTAL (µG/L (34671)	PHENOL (C6H-5OH) TOTAL (µG/L (34694)
06610740 BIG PAPILLION CREEK AT 72ND STREET, OMAHA, NE.	(LAT 41 12 32N LONG 096 01 26W)										
AUG 1992 25...	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0	<0.2	<0.1	<5.0
411308096021400 NPDES - 82ND AND F STREETS, OMAHA, NE.	(LAT 41 13 08N LONG 096 02 14W)										
MAY 1992 22...	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0	<0.2	<0.1	<5.0
JUL 02...	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0	<0.2	<0.1	<5.0
411515096055100 NPDES - 118TH AND JACKSON STREETS, OMAHA, NE.	(LAT 41 15 15N LONG 096 05 51W)										
JUN 1992 05...	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0	<0.2	--	<5.0
JUL 02...	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0	<0.2	<0.1	<5.0
AUG 25...	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0	<0.2	<0.1	<5.0
411525096015200 NPDES - 77TH AND DODGE STREETS, OMAHA, NE.	(LAT 41 15 25N LONG 096 01 52W)										
JUN 1992 05...	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0	<0.2	<0.1	<5.0
JUL 02...	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0	<0.2	<0.1	<5.0
AUG 25...	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0	<0.2	<0.1	<5.0
411528096045900 NPDES - OLD MILL AND 108TH STREET, OMAHA, NE.	(LAT 41 15 28N LONG 096 04 59W)										
JUN 1992 05... 17...	<20.0 <20.0	<20.0 <20.0	<5.0 <5.0	<20.0 <20.0	<5.0 <5.0	<5.0 <5.0	<30.0 <30.0	<30.0 <30.0	<0.2 <0.2	<0.1 <0.1	<5.0 <5.0
JUL 02...	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0	<0.2	<0.1	<5.0
411607096051600 NPDES - 108TH AND LIONS HEAD APT., OMAHA, NE.	(LAT 41 16 07N LONG 096 05 16W)										
JUN 1992 17...	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0	<0.2	<0.1	<5.0
JUL 02...	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0	<0.2	<0.1	<5.0
AUG 25...	<20.0	<20.0	<5.0	<20.0	<5.0	<5.0	<30.0	<30.0	<0.2	<0.1	<5.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	NAPHTH- ALENE TOTAL (µG/L (34696)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (µG/L (34699)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (µG/L (34704)	PENTA- CHLORO- PHENOL TOTAL (µG/L (39032)	CHLOR- DANE CIS WATER TOTAL (µG/L (39062)	CHLOR- DANE TRANS WATER TOTAL (µG/L (39065)	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)	TRI- CHLORO- ETHYL- ENE TOTAL (µG/L (39180)
06610740 BIG PAPILLION CREEK AT 72ND STREET, OMAHA, NE.						(LAT 41 12 32N LONG 096 01 26W)					
AUG 1992 25...	<5.0	<0.2	<0.2	<30.0	<0.10	<0.10	<5.0	<5.0	<40.0	<0.2	<0.2
411308096021400 NPDES - 82ND AND F STREETS, OMAHA, NE.						(LAT 41 13 08N LONG 096 02 14W)					
MAY 1992 22...	<5.0	<0.2	<0.2	<30.0	<0.10	<0.10	6.0	<5.0	<40.0	<0.2	<0.2
JUL 02...	<5.0	<0.2	<0.2	<30.0	<0.10	<0.10	<5.0	<5.0	<40.0	<0.2	<0.2
411515096055100 NPDES - 118TH AND JACKSON STREETS, OMAHA, NE.						(LAT 41 15 15N LONG 096 05 51W)					
JUN 1992 05...	<5.0	<0.2	<0.2	<30.0	--	--	<5.0	<5.0	<40.0	<0.2	<0.2
JUL 02...	<5.0	<0.2	<0.2	<30.0	<0.10	<0.10	<5.0	<5.0	<40.0	<0.2	<0.2
AUG 25...	<5.0	<0.2	<0.2	<30.0	<0.10	<0.10	7.0	<5.0	<40.0	<0.2	<0.2
411525096015200 NPDES - 77TH AND DODGE STREETS, OMAHA, NE.						(LAT 41 15 25N LONG 096 01 52W)					
JUN 1992 05...	<5.0	<0.2	<0.2	<30.0	<0.10	<0.10	<5.0	<5.0	<40.0	<0.2	<0.2
JUL 02...	<5.0	<0.2	<0.2	<30.0	<0.10	<0.10	<5.0	<5.0	<40.0	<0.2	<0.2
AUG 25...	<5.0	<0.2	<0.2	<30.0	<0.10	<0.10	6.0	<5.0	<40.0	<0.2	<0.2
411528096045900 NPDES - OLD MILL AND 108TH STREET, OMAHA, NE.						(LAT 41 15 28N LONG 096 04 59W)					
JUN 1992 05...	<5.0	<0.2	<0.2	<30.0	<0.10	<0.10	<5.0	<5.0	<40.0	<0.2	<0.2
17...	<5.0	<0.2	<0.2	<30.0	<0.10	<0.10	<5.0	<5.0	<40.0	<0.2	<0.2
JUL 02...	<5.0	<0.2	<0.2	<30.0	<0.10	<0.10	<5.0	<5.0	<40.0	<0.2	<0.2
411607096051600 NPDES - 108TH AND LIONS HEAD APT., OMAHA, NE.						(LAT 41 16 07N LONG 096 05 16W)					
JUN 1992 17...	<5.0	<0.2	<0.2	<30.0	<0.10	<0.10	<5.0	<5.0	<40.0	<0.2	<0.2
JUL 02...	<5.0	<0.2	<0.2	<30.0	<0.10	<0.10	<5.0	<5.0	<40.0	<0.2	<0.2
AUG 25...	<5.0	<0.2	<0.2	<30.0	<0.10	<0.10	<5.0	<5.0	<40.0	<0.2	<0.2

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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DATE	P,P' DDT, TOTAL (µG/L (39300)	P,P' DDD, TOTAL (µG/L (39310)	P,P' DDE, TOTAL (µG/L (39320)	ALDRIN, TOTAL (µG/L (39330)	ALPHA BHC TOTAL (µG/L (39337)	BETA BENZENE HEXA- CHLOR- IDE TOTAL (µG/L (39338)	LINDANE TOTAL (µG/L (39340)	CHLOR- DANE, TOTAL (µG/L (39350)	DI- ELDRIN TOTAL (µG/L (39380)	ENDRIN, TOTAL (µG/L (39390)	TOX- APHENE, TOTAL (µG/L (39400)
06610740 BIG PAPILLION CREEK AT 72ND STREET, OMAHA, NE.	(LAT 41 12 32N LONG 096 01 26W)										
AUG 1992 25...	<0.10	<0.10	<0.04	<0.040	<0.03	<0.03	<0.030	<0.1	<0.020	<0.060	<2
411308096021400 NPDES - 82ND AND F STREETS, OMAHA, NE.	(LAT 41 13 08N LONG 096 02 14W)										
MAY 1992 22...	<0.10	<0.10	<0.04	<0.040	<0.03	<0.03	<0.030	<0.1	<0.020	<0.060	<2
JUL 02...	<0.10	<0.10	<0.04	<0.040	<0.03	<0.03	<0.030	<0.1	<0.020	<0.060	<2
411515096055100 NPDES - 118TH AND JACKSON STREETS, OMAHA, NE.	(LAT 41 15 15N LONG 096 05 51W)										
JUN 1992 05... -- --	--	--	--	--	--	--	--	--	--	--	--
JUL 02...	<0.10	<0.10	<0.04	<0.040	<0.03	<0.03	<0.030	<0.1	<0.020	<0.060	<2
AUG 25...	<0.10	<0.10	<0.04	<0.040	<0.03	<0.03	<0.030	<0.1	<0.020	<0.060	<2
411525096015200 NPDES - 77TH AND DODGE STREETS, OMAHA, NE.	(LAT 41 15 25N LONG 096 01 52W)										
JUN 1992 05...	<0.10	<0.10	<0.04	<0.040	<0.03	<0.03	<0.030	<0.1	<0.020	<0.060	<2
JUL 02...	<0.10	<0.10	<0.04	<0.040	<0.03	<0.03	<0.030	0.1	<0.020	<0.060	<2
AUG 25...	<0.10	<0.10	<0.04	<0.040	<0.03	<0.03	<0.030	<0.1	<0.020	<0.060	<2
411528096045900 NPDES - OLD MILL AND 108TH STREET, OMAHA, NE.	(LAT 41 15 28N LONG 096 04 59W)										
JUN 1992 05... 17...	<0.10 <0.10	<0.10 <0.10	<0.04 <0.04	<0.040 <0.040	<0.03 <0.03	<0.03 <0.03	<0.030 <0.030	<0.1 <0.1	<0.020 <0.020	<0.060 <0.060	<2 <2
JUL 02...	<0.10	<0.10	<0.04	<0.040	<0.03	<0.03	<0.030	<0.1	<0.020	<0.060	<2
411607096051600 NPDES - 108TH AND LIONS HEAD APT., OMAHA, NE.	(LAT 41 16 07N LONG 096 05 16W)										
JUN 1992 17...	<0.10	<0.10	<0.04	<0.040	<0.03	<0.03	<0.030	<0.1	<0.020	<0.060	<2
JUL 02...	<0.10	<0.10	<0.04	<0.040	<0.03	<0.03	<0.030	<0.1	<0.020	<0.060	<2
AUG 25...	<0.10	<0.10	<0.04	<0.040	<0.03	<0.03	<0.030	<0.1	<0.020	<0.060	<2

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	HEPTA- CHLOR, TOTAL (μ G/L (39410))	HEPTA- CHLOR EPOXIDE TOTAL (μ G/L (39420))	AROCLOR 1221 PCB TOTAL (μ G/L (39488))	AROCLOR 1232 PCB TOTAL (μ G/L (39492))	AROCLOR 1242 PCB TOTAL (μ G/L (39496))	AROCLOR 1248 PCB TOTAL (μ G/L (39500))	AROCLOR 1254 PCB TOTAL (μ G/L (39504))	AROCLOR 1260 PCB TOTAL (μ G/L (39508))	HEXA- CHLORO- BENZENE TOTAL (μ G/L (39700))	HEXA- CHLORO- BUTA- DIENE TOTAL (μ G/L (39702))	CIS-1,2- DI- CHLORO- ETHENE WATER TOTAL (μ G/L (77093))
06610740 BIG PAPILLION CREEK AT 72ND STREET, OMAHA, NE. (LAT 41 12 32N LONG 096 01 26W)											
AUG 1992 25...	<0.030	<0.80	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2
411308096021400 NPDES - 82ND AND F STREETS, OMAHA, NE. (LAT 41 13 08N LONG 096 02 14W)											
MAY 1992 22...	<0.030	<0.80	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2
JUL 02...	<0.030	<0.80	<1.0	<0.1	<0.1	<0.1	0.2	<0.1	<5.0	<5.0	<0.2
411515096055100 NPDES - 118TH AND JACKSON STREETS, OMAHA, NE. (LAT 41 15 15N LONG 096 05 51W)											
JUN 1992 05... -- --	--	--	--	--	--	--	<5.0	<5.0	<0.2		
JUL 02...	<0.030	<0.80	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2
AUG 25...	<0.030	<0.80	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2
411525096015200 NPDES - 77TH AND DODGE STREETS, OMAHA, NE. (LAT 41 15 25N LONG 096 01 52W)											
JUN 1992 05...	<0.030	<0.80	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2
JUL 02...	<0.030	<0.80	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2
AUG 25...	<0.030	<0.80	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2
411528096045900 NPDES - OLD MILL AND 108TH STREET, OMAHA, NE. (LAT 41 15 28N LONG 096 04 59W)											
JUN 1992 05... 17...	<0.030 <0.030	<0.80 <0.80	<1.0 <1.0	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<5.0 <5.0	<5.0 <5.0	<0.2 <0.2
JUL 02...	<0.030	<0.80	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2
411607096051600 NPDES - 108TH AND LIONS HEAD APT., OMAHA, NE. (LAT 41 16 07N LONG 096 05 16W)											
JUN 1992 17...	<0.030	<0.80	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2
JUL 02...	<0.030	<0.80	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2
AUG 25...	<0.030	<0.80	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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DATE	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)	1,2,4- TRI- METHYL BENZENE WAT, WH REC (μG/L) (77222)	ISO- PROPYL- BENZENE WATER WHOLE REC (μG/L) (77223)	N- PROPYL- BENZENE WATER WHOLE REC (μG/L) (77224)	1,3,5-TRI- METHYL BENZENE WAT, WH REC (μG/L) (77226)	O- CHLORO- TOLUENE WATER WHOLE TOTAL (μG/L) (77275)	PARA- CHLORO- TOLUENE WATER, WHOLE, TOTAL (μG/L) (77277)	N- BUTYL- BENZENE WATER WHOLE REC (μG/L) (77342)
06610740 BIG PAPILLION CREEK AT 72ND STREET, OMAHA, NE. (LAT 41 12 32N LONG 096 01 26W)											
AUG 1992 25...	<0.2	<0.2	<0.2	<0.2	--	--	--	--	<0.2	<0.2	--
411308096021400 NPDES - 82ND AND F STREETS, OMAHA, NE. (LAT 41 13 08N LONG 096 02 14W)											
MAY 1992 22...	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.20
JUL 02...	<0.2	<0.2	<0.2	<0.2	--	--	--	--	<0.2	<0.2	--
411515096055100 NPDES - 118TH AND JACKSON STREETS, OMAHA, NE. (LAT 41 15 15N LONG 096 05 51W)											
JUN 1992 05...	<0.2	<0.2	<0.2	<0.2	--	--	--	--	<0.2	<0.2	--
JUL 02...	<0.2	<0.2	<0.2	<0.2	--	--	--	--	<0.2	<0.2	--
AUG 25...	<0.2	<0.2	<0.2	<0.2	--	--	--	--	<0.2	<0.2	--
411525096015200 NPDES - 77TH AND DODGE STREETS, OMAHA, NE. (LAT 41 15 25N LONG 096 01 52W)											
JUN 1992 05...	<0.2	<0.2	<0.2	<0.2	--	--	--	--	<0.2	<0.2	--
JUL 02...	<0.2	<0.2	<0.2	<0.2	--	--	--	--	<0.2	<0.2	--
AUG 25...	<0.2	<0.2	<0.2	<0.2	--	--	--	--	<0.2	<0.2	--
411528096045900 NPDES - OLD MILL AND 108TH STREET, OMAHA, NE. (LAT 41 15 28N LONG 096 04 59W)											
JUN 1992 05... 17...	<0.2 <0.2	<0.2 <0.2	<0.2 <0.2	<0.2 <0.2	-- <0.20	-- <0.20	-- <0.20	-- <0.20	<0.2 <0.2	<0.2 <0.2	-- <0.20
JUL 02...	<0.2	<0.2	<0.2	<0.2	--	--	--	--	<0.2	<0.2	--
411607096051600 NPDES - 108TH AND LIONS HEAD APT., OMAHA, NE. (LAT 41 16 07N LONG 096 05 16W)											
JUN 1992 17...	<0.2	<0.2	<0.2	<0.2	--	--	--	--	<0.2	<0.2	--
JUL 02...	<0.2	<0.2	<0.2	<0.2	--	--	--	--	<0.2	<0.2	--
AUG 25...	<0.2	<0.2	<0.2	<0.2	--	--	--	--	<0.2	<0.2	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	SEC BUTYL BENZENE WATER WHOLE REC (µG/L (77350)	TERT- BUTYL BENZENE WATER WHOLE REC (µG/L (77353)	P-ISO- PROPYL TOLUENE WATER WHOLE REC (µG/L (77356)	123-TRI- CHLORO- PROPANE WATER WHOLE TOTAL (µG/L (77443)	1,1,1,2 TETRA- ETHANE, WAT, WH TOTAL (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)	XYLENE TOTAL WATER WHOLE TOT 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)
06610740 BIG PAPIILLION CREEK AT 72ND STREET, OMAHA, NE.	(LAT 41 12 32N LONG 096 01 26W)										
AUG 1992 25...	--	--	--	<0.2	<0.2	--	<0.2	<0.2	<0.2	<1.0	<5.0
411308096021400 NPDES - 82ND AND F STREETS, OMAHA, NE.	(LAT 41 13 08N LONG 096 02 14W)										
MAY 1992 22...	<0.20	<0.20	<0.20	<0.2	<0.2	<0.20	<0.2	<0.2	<0.2	<1.0	<5.0
JUL 02...	--	--	--	<0.2	<0.2	--	<0.2	<0.2	<0.2	<1.0	<5.0
411515096055100 NPDES - 118TH AND JACKSON STREETS, OMAHA, NE.	(LAT 41 15 15N LONG 096 05 51W)										
JUN 1992 05...	--	--	--	<0.2	<0.2	--	<0.2	<0.2	<0.2	<1.0	<5.0
JUL	--	--	--	<0.2	<0.2	--	<0.2	0.2	<0.2	<1.0	<5.0
AUG 25...	--	--	--	<0.2	<0.2	--	<0.2	<0.2	<0.2	<1.0	<5.0
411525096015200 NPDES - 77TH AND DODGE STREETS, OMAHA, NE.	(LAT 41 15 25N LONG 096 01 52W)										
JUN 1992 05...	--	--	--	<0.2	<0.2	--	<0.2	<0.2	<0.2	<1.0	<5.0
JUL 02...	--	--	--	<0.2	<0.2	--	<0.2	<0.2	<0.2	<1.0	<5.0
AUG 25...	--	--	--	<0.2	<0.2	--	<0.2	<0.2	<0.2	<1.0	<5.0
411528096045900 NPDES - OLD MILL AND 108TH STREET, OMAHA, NE.	(LAT 41 15 28N LONG 096 04 59W)										
JUN 1992 05... 17...	-- <0.20	-- <0.20	-- <0.20	<0.2 <0.2	<0.2 <0.2	-- <0.20	<0.2 <0.2	<0.2 <0.2	<0.2 <0.2	<1.0 <1.0	<5.0 <5.0
JUL 02...	--	--	--	<0.2	<0.2	--	<0.2	<0.2	<0.2	<1.0	<5.0
411607096051600 NPDES - 108TH AND LIONS HEAD APT., OMAHA, NE.	(LAT 41 16 07N LONG 096 05 16W)										
JUN 1992 17...	--	--	--	<0.2	<0.2	--	<0.2	<0.2	<0.2	<1.0	<5.0
JUL 02...	--	--	--	<0.2	<0.2	--	<0.2	0.2	<0.2	<1.0	<5.0
AUG 25...	--	--	--	<0.2	<0.2	--	<0.2	<0.2	<0.2	<1.0	<5.0

GROUND-WATER LEVELS

ADAMS COUNTY

403403098244001. Local number 7N 10W 23AB.

LOCATION.--Lat 40°34'03", long 98°24'40", NW1/4NE1/4 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; and January 1951 to current year.

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 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	.....	.....	117.47	117.59	116.65	116.42	116.28	116.36	116.43	119.73	117.68	120.26
10	.....	.....	117.40	117.01	116.75	116.52	116.27	117.00	116.26	120.25	119.90	120.51
15	.....	.....	117.33	116.99	116.61	116.45	116.25	118.26	117.25	118.37	119.44	119.20
20	119.50	117.80	117.45	116.88	116.57	116.45	116.18	117.81	116.20	120.23	118.35	118.12
25	120.03	117.66	117.44	116.82	116.45	116.34	116.47	118.27	118.32	117.54	120.07	118.06
EOM	.....	118.87	117.46	116.72	116.47	116.32	117.84	116.42	120.85	117.47	118.11	118.82

WTR YEAR 1992 MAX 116.18 APR 20, 1992 MIN 120.85 JUN 30, 1992

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 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1	5.02	DEC 23	4.00	FEB 18	2.31	APR 13	3.45	JUN 11	4.19	AUG 3	4.59
NOV 6	4.47	JAN 22	2.43	MAR 13	2.54	MAY 12	3.89	JUL 10	3.95	SEP 15	3.90

GROUND-WATER LEVELS

BOONE COUNTY

413323098074501. Local number 18N 7W 4CA.

LOCATION.--Lat 41°33'23", long 98°07'45", NE1/4SW1/4 sec.4, T.18 N., R.7 W., Hydrologic Unit 10210010, at junction of State Highways 52 and 56 approximately 1 mi east of Cedar Rapids. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1 in, depth 22 ft, screened 20 to 22 ft.

DATUM.--Altitude of land-surface datum is 1,762 ft. Measuring point: Top of casing 2.90 ft above land-surface datum.

PERIOD OF RECORD.--November 1936 to October 1942; April 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.15 ft below land-surface datum, May 17, 1984; lowest, 15.17 ft below land-surface datum, Oct. 26, 1940.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1	11.80	APR 27	11.23								

BOX BUTTE COUNTY

420945102551501. Local number 25N 48W 4DDD.

LOCATION.--Lat 42°09'45", long 102°55'15", SE1/4 SE1/4 SE1/4 sec.4, T.25 N., R.48 W., Hydrologic Unit 10150003, approximately 3.6 mi south and 2.8 mi east of Berea. Owner: U.S. Geological Survey.

AQUIFER.--Marsland Formation of Miocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1.25 in, depth 204 ft, screened 190 to 193 ft.

DATUM.--Altitude of land-surface datum is 4,032.95 ft. Measuring point: Top of pipe 2.00 ft above land-surface datum.

REMARKS.--Water levels in vicinity of well are affected by large withdrawals of ground water for irrigation use. Casing was broken off below the land surface during the summer of 1986. Well was cleaned and repaired during the spring of 1988.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 63.14 ft below land-surface datum, Jan. 25, 1950; lowest, 103.91 ft below land-surface datum, Mar 23, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 20	104.25	MAR 23	103.91								

BROWN COUNTY

423307099494501. Local number 30N 21W 19CC.

LOCATION.--Lat 42°33'07", long 99°49'45", SW1/4SW1/4 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 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	34.69	34.53	34.47	34.51	34.60	34.70	34.78	34.87	35.05	34.99	34.94	34.79
10	34.64	34.53	34.47	34.54	34.63	34.74	34.79	34.90	35.04	35.00	34.95	34.82
15	34.60	34.53	34.49	34.59	34.63	34.74	34.84	34.97	35.01	35.04	34.93	34.75
20	34.58	34.51	34.51	34.57	34.67	34.74	34.82	35.01	35.02	35.05	34.92	34.76
25	34.55	34.49	34.49	34.59	34.70	34.74	34.85	35.04	34.98	34.98	34.97	34.89
EOM	34.55	34.51	34.51	34.60	34.71	34.77	34.83	35.04	34.94	34.92	34.88	34.95

WTR YEAR 1992 MAX 34.43 DEC 6 AND 7, 1991 MIN 35.07 JUN 3 AND JUL 19, 1992

BUFFALO COUNTY

404618098504401. Local number 9N 14W 1DC.

LOCATION.--Lat 40°46'18", long 98°50'44", SW1/4SE1/4 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 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	24.22	.....	23.73	23.63	23.61	23.50	23.40	23.22	23.00	24.00	24.82	25.00
10	24.15	.....	23.73	23.68	23.59	23.55	23.37	23.16	22.96	24.50	25.19	25.04
15	24.08	.....	23.74	23.70	23.58	23.52	23.34	23.13	22.91	24.10	25.45	24.96
20	.....	.....	23.70	23.63	23.57	23.50	23.31	23.11	22.92	24.66	25.65	24.89
25	.....	23.79	23.66	23.65	23.57	23.48	23.30	23.08	22.86	24.37	25.81	24.82
EOM	.....	23.82	23.65	23.60	23.55	23.45	23.24	23.04	22.94	24.10	25.21	24.75

WTR YEAR 1992 MAX 22.82 JUN 29, 1992 MIN 25.81 AUG 25, 1992

GROUND-WATER LEVELS

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 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	32.38	APR 2	30.88								

BUTLER COUNTY

411420097173002. Local number 15N 1E 27DD2.

LOCATION.--Lat 41°14'20", long 97°17'30", SE1/4SE1/4 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, 96.49 ft below land-surface datum, May 10, 1988; lowest, 174.50 ft below land-surface datum, Aug. 3, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992 LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	.....	106.55	.....	.....	102.47	102.02	101.60	102.71	.....	101.59	100.82	.....
10	111.77	105.93	.....	102.89	102.40	102.00	101.59	104.90	101.70	101.38	100.58	.....
15	110.36	.....	.....	102.84	102.20	102.00	101.59	110.40	101.51	101.14	.....	.....
20	109.26	.....	103.67	102.77	102.20	101.92	101.45	.....	101.38	101.20	.....	100.20
25	108.05	.....	103.47	102.59	102.23	.....	101.52	.....	101.28	101.05	.....	100.21
EOM	107.36	.....	103.29	102.54	102.13	101.73	101.49	.....	101.88	.....	.....	100.25

WTR YEAR 1992 MAX 100.25 SEP 30, 1992 MIN 111.77 OCT 10, 1991

GROUND-WATER LEVELS

267

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 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	110.26										

CHASE COUNTY

403235101395501. Local number 7N 38W 29CBB.

LOCATION.--Lat 40°32'35", long 101°39'55", NW1/4NW1/4SW1/4 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 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	95.95	95.41	95.16	94.93	94.54	94.13	93.80	94.52	94.20	94.34	96.01	96.80
10	95.85	95.48	95.14	95.02	94.50	94.26	93.74	94.20	94.09	95.00	97.45	96.82
15	95.71	95.52	95.14	95.00	94.43	94.08	93.69	94.08	93.95	95.50	96.54	96.76
20	95.61	95.49	95.15	94.74	94.32	94.06	93.70	94.82	95.08	96.57	96.93	96.75
25	95.66	95.25	95.02	94.81	94.29	94.05	93.70	94.47	94.36	95.41	96.52	96.81
EOM	95.51	95.43	95.00	94.62	94.24	93.92	94.32	94.15	94.12	96.46	96.20	96.57

WTR YEAR 1992 MAX 93.46 APR 18, 1992 MIN 97.52 SEP 18, 1992

GROUND-WATER LEVELS

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 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	2.20	FEB 18	1.70	AUG 25	1.80						

CLAY COUNTY

402940098154001. Local number 6N 8W 17BB.

LOCATION.--Lat 40°29'40", long 98°15'40", NW1/4NW1/4 sec.17, T.6 N., R.8 W., Hydrologic Unit 10270206, 0.7 mi south of Glenville. Owner: Willard W. Kissinger.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 18 in, depth 151 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,846 ft. Measuring point: Hole in turbine base at land-surface datum.

REMARKS.--Water levels affected by pumping during irrigation season.

PERIOD OF RECORD.--October 1952; June 1954 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 95.53 ft below land-surface datum, June 24, 1954; lowest, 109.75 ft below land-surface datum, Oct. 18, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 30	108.02	APR 15	106.67								

GROUND-WATER LEVELS

269

COLFAX COUNTY

412810097054501. Local number 17N 3E 4CC.

LOCATION.--Lat 41°28'10", long 97°05'45", SW1/4SW1/4 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 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 8	8.74	DEC 9	9.33	FEB 11	8.83	APR 14	8.15	JUN 9	9.10	AUG 11	7.88
NOV 13	9.57	JAN 13	9.72	MAR 13	8.27	MAY 14	9.45	aug 5	7.83	SEP 10	8.39

DAWES COUNTY

424100103243501. Local number 31N 52W 3DC.

LOCATION.--Lat 42°41'00", long 103°24'35", SW1/4SE1/4 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 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 20	20.77	MAR 25	20.50								

GROUND-WATER LEVELS

DAWSON COUNTY

404949099445701. Local number 10N 21W 18DDD.

LOCATION.--Lat 40°49'49", long 99°44'57", SE1/4SE1/4SE1/4 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, 6.71 ft below land-surface datum, Aug. 19, 1991; lowest, 21.50 ft below land-surface datum, July 16, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	9.42	10.25	.....	.....	9.66	9.96	9.27	.....	.....	10.21	10.31	8.84
10	9.50	10.40	.....	.....	9.77	9.87	9.36	.....	.....	10.22	10.36	8.94
15	9.59	10.51	.....	.....	9.82	9.46	.....	.....	.....	10.20	10.34	9.36
20	9.76	10.56	.....	.....	9.87	9.32	.....	.....	.....	10.23	.....	9.22
25	9.97	10.07	.....	9.64	9.93	9.28	.....	.....	10.00	9.93	.....	9.01
EOM	10.12	10.24	.....	9.63	9.96	9.28	.....	.....	10.14	10.00	8.62	9.33

WTR YEAR 1992 MAX 8.45 AUG 27, 1992 MIN 10.63 NOV 22 AND 23, 1991

DUNDY COUNTY

400155101521302. Local number 1N 40W 29BB2.

LOCATION.--Lat 40°01'55", long 101°52'13", NW1/4NW1/4 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. 12, 1976.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	19.75	18.77	18.26	17.92	17.63	17.37	17.09	17.29	17.82	18.10	18.98	18.57
10	19.59	18.69	18.20	17.89	17.59	17.34	17.06	17.44	17.71	18.36	19.14	18.47
15	19.31	18.58	18.15	17.85	17.54	17.28	17.03	17.54	17.61	18.56	18.87	18.37
20	19.21	18.49	18.09	17.79	17.49	17.23	16.99	17.67	17.56	18.72	19.19	18.86
25	19.05	18.41	18.03	17.75	17.45	17.19	16.98	18.01	17.50	18.42	19.06	18.75
EOM	18.90	18.33	17.97	17.69	17.42	17.14	16.95	18.07	17.77	18.71	18.72	19.17

WTR YEAR 1992 MAX 16.93 APR 30 AND MAY 1 1992 MIN 19.84 OCT 8, 1991

GROUND-WATER LEVELS

271

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 current year.

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 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	101.37	101.17	100.93	100.61	100.18	99.94	99.71	99.55	99.26	100.17	100.15	.....
10	101.32	101.17	100.82	100.62	100.33	100.06	99.65	99.49	99.25	100.24	100.18	.....
15	101.30	101.23	100.82	100.82	100.29	99.94	99.62	99.53	99.14	100.26	99.96	.....
20	101.17	101.02	100.80	100.48	100.21	99.80	99.57	99.44	99.16	99.93	99.94	99.88
25	101.24	100.91	100.68	100.40	100.03	99.85	99.60	99.42	99.48	100.03	100.10	100.02
EOM	101.07	.....	100.70	100.32	100.11	99.82	99.45	99.37	99.73	100.20	.....	100.17

WTR YEAR 1992 MAX 99.14 JUN 15 1992 MIN 101.37 OCT 5, 1991

FILLMORE COUNTY

403800097300701. Local number 8N 2W 26AD.

LOCATION.--Lat 40°38'00", long 97°30'07", SE1/4NE1/4 sec.26, T.8 N., R.2 W., Hydrologic Unit 10270203, 2.5 mi west on Route 6 from the principal street of Exeter, then 0.4 mi south. Owner: U.S. Geological Survey.

AQUIFER.--Loess of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in, depth 40 ft, perforated 25 to 40 ft.

DATUM.--Altitude of land-surface datum is 1,610 ft. Measuring point: Top of casing at land-surface datum.

REMARKS.--Perched aquifer, water levels affected by infiltration and deep percolation of applied irrigation water pumped from deeper aquifer.

PERIOD OF RECORD.--October 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.03 ft below land-surface datum, Mar. 24, 1987; lowest, 24.16 ft below land-surface datum, July 10, 1958.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	12.45	12.73	12.65	12.18	11.15	11.15	10.82	10.65	10.65	.....	4.46	6.42
10	12.50	12.79	12.70	11.92	11.12	11.23	10.79	10.59	10.09	9.55	5.05	6.75
15	12.55	12.74	12.67	11.63	11.10	11.23	10.75	10.66	.....	8.60	5.27	7.00
20	12.65	12.61	12.53	11.33	11.16	11.18	10.69	10.72	.....	8.37	5.56	7.26
25	12.65	12.68	12.43	11.22	11.23	11.05	10.69	10.71	.....	3.73	5.89	7.51
EOM	12.78	12.73	12.38	11.14	11.19	10.95	10.57	10.72	.....	.....	6.18	7.81

WTR YEAR 1992 MAX 3.73 JUL 25, 1992 MIN 12.81 NOV 8 AND 12, 1991

GROUND-WATER LEVELS

FURNAS COUNTY

401718099491001. Local number 4N 22W 29AD.

LOCATION.--Lat 40°17'18", long 99°49'10", SE1/4NE1/4 sec.29, T.4 N., R.22 W., Hydrologic Unit 10250009, 2 mi west and 0.5 mi north of Edison. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1.25 in, depth 23 ft, screened 21 to 23 ft.

DATUM.--Altitude of land-surface datum is 2,134 ft. Measuring point: Top of casing 1.00 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.60 ft below land surface datum, Aug. 22, 1978; lowest, 17.69 ft below land-surface datum, Feb. 8, 1946.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	12.70	MAR 2	13.3	JUN 11	12.9	AUG 13	9.8				

GARDEN COUNTY

414124102230101. Local number 20N 44W 22CB.

LOCATION.--Lat 41°41'24", long 102°23'01", NW1/4SW1/4 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 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 30	19.37	DEC 30	19.37	MAR 27	19.53						

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414718099083201. Local number 21N 16W 14CB.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

DATUM.--Altitude of land-surface datum is 2,174 ft. Measuring point: Hole in turbine base 2.00 ft above land-surface datum.

REMARKS.--Water levels affected by pumping during irrigation season.

PERIOD OF RECORD.--October 1950 to 1986.

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 1991 TO SEPTEMBER 1992

[illegible]

GOSPER COUNTY

403626099451401. Local number 7N 21W 6BC.

LOCATION.--Lat 40°36'26", long 99°45'14", SW1/4NW1/4 sec.2, T.7 N., R.21 W., Hydrologic Unit 10200101, 1 mi west and 2 mi north of Smithfield. Owner: Andy Larson Estate.

AQUIFER.--Ogallala Formation of Pliocene age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 4 in, depth 132 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 2,466.95 ft. Measuring point: Top of casing 0.40 ft above land-surface datum.

REMARKS.--Water levels in well affected by pumping from nearby irrigation wells and by infiltration and deep percolation from nearby irrigation canal.

PERIOD OF RECORD.--September 1934 to July 1940; January 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 40.67 ft below land-surface datum, Oct. 10, 1991; lowest, 117.80 ft below land-surface datum, Sept. 26, 1935.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

[illegible]

GROUND-WATER LEVELS

HALL COUNTY

405315098304302. Local number 11N 11W 25CC2.

LOCATION.--Lat 40°53'15", long 98°30'43", SW1/4SW1/4 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, 13.83 ft below land-surface datum, June 27, 1987; lowest, 25.98 ft below land-surface datum, Aug. 31, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	20.13	19.94	19.92	20.09	20.05	19.70	19.52	19.46	19.08	18.57	18.90	19.29
10	20.09	19.94	19.89	20.23	19.96	19.74	19.50	19.40	19.01	18.66	18.94	19.32
15	20.05	19.93	19.91	.....	19.86	19.66	19.65	19.37	18.81	18.72	18.97	19.21
20	20.04	19.90	19.88	.....	19.78	19.62	19.59	19.31	18.68	18.82	19.02	19.18
25	20.00	19.90	19.88	20.26	19.77	19.60	19.57	19.25	18.55	18.89	19.17	19.13
EOM	20.01	19.92	20.00	20.13	19.73	19.56	19.49	19.14	18.46	18.90	19.27	19.11

WTR YEAR 1992 MAX 18.41 JUL 2, 1992 MIN 20.26 JAN 13 AND 25, 1992

HAMILTON COUNTY

404836097584101 Local number 10N 6W 27ACAA.

LOCATION.--Lat 40°48'36", long 97°58'41", SE1/4NE1/4 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, 91.31 ft below land-surface datum, June 5, 1988; lowest, 107.40 ft below land-surface datum, Aug. 24, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	99.43	98.70	98.06	97.40	96.79	96.32	95.87	.....	95.15	96.52	96.89	.....
10	99.29	98.63	97.94	97.30	*96.84	96.35	95.84	95.45	95.11	97.18	96.80	.....
15	99.14	98.56	97.84	97.38	96.73	96.26	95.75	95.44	94.98	97.06	96.63	.....
20	99.01	98.36	97.73	97.13	96.62	96.11	95.68	95.34	95.00	96.93	96.47	97.12
25	98.94	98.21	97.59	97.22	96.64	96.12	95.64	95.31	94.93	97.05	96.53	97.10
EOM	98.73	98.33	97.51	96.95	96.48	96.01	.....	95.22	95.28	96.93	96.35	96.89

WTR YEAR 1992 MAX 94.93 JUN 25, 1992 MIN 99.61 OCT 1, 1991

* INDICATES HANDHELD MEASUREMENT

GROUND-WATER LEVELS

275

HAMILTON COUNTY

405514097573901. Local number 11N 6W 13CB.

LOCATION.--Lat 40°55'14", long 97°57'39", NW1/4SW1/4 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 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 21	101.05	APR 15	98.48								

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 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	95.03	93.89	93.59	93.26	93.09	92.81	92.68	92.90	92.50	100.93	94.05	97.47
10	95.37	93.89	93.59	93.36	93.06	92.98	92.64	92.94	92.49	101.69	93.42	95.12
15	95.29	93.90	93.58	93.41	93.01	92.88	92.64	92.67	92.42	99.84	100.81	94.83
20	95.17	93.88	93.51	93.17	93.00	92.88	92.64	92.81	92.92	95.86	101.23	93.78
25	95.27	93.73	93.39	93.26	93.03	92.82	92.75	92.73	93.30	93.70	98.82	93.70
EOM	94.15	93.79	93.37	93.10	92.97	92.79	92.64	92.57	97.78	94.47	103.79	93.70

WTR YEAR 1992 MAX 92.38 JUN 16, 1992 MIN 103.79 AUG 31, 1992

GROUND-WATER LEVELS

HARLAN COUNTY

400620099274001. Local number 2N 19W 28DD.

LOCATION.--Lat 40°06'20", long 99°27'40", SE1/4SE1/4 sec.28, T.2 N., R.19 W., Hydrologic Unit 10250009, 1.8 mi south of Orleans. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1 in, depth 22 ft, screened 20 to 22 ft.

DATUM.--Altitude of land-surface datum is 1,967.53 ft. Measuring point: Top of casing 1.20 ft above land-surface datum.

PERIOD OF RECORD.--May 1940 to October 1941; March 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.90 ft below land-surface datum, Feb. 15, 1966; lowest, 12.50 ft below land-surface datum, Aug. 5, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	11.20	MAR 2	9.8	JUN 11	9.7	AUG 31	9.1				

HOLT COUNTY

421605098203001. Local number 27N 9W 34DA.

LOCATION.--Lat 42°16'05", long 98°20'30", NE1/4SE1/4 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 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 3	8.80	JAN 7	8.00	MAR 4	7.77	MAY 6	8.87	AUG 5	7.57		
NOV 7	8.24	FEB 4	7.88	APR 7	7.40	JUN 3	8.05				

HOLT COUNTY

423148098300601. Local number 30N 10W 32DAA.

LOCATION.--Lat 42°31'48", long 98°30'06", NE1/4NE1/4SE1/4 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, 53.73 ft below land-surface datum, Sept. 17, 1982.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	50.94	51.15	51.26	51.29	51.25	51.17	51.09	51.01	51.10	51.07	51.31	51.56
10	50.98	51.18	51.28	51.30	51.25	51.17	51.08	51.02	51.09	51.11	51.35	51.58
15	51.01	51.20	51.29	51.31	51.22	51.16	51.07	51.06	51.06	51.15	51.37	51.58
20	51.05	51.21	51.30	51.28	51.22	51.15	51.05	51.10	51.05	51.21	51.41	---
25	51.09	51.23	51.29	51.29	51.21	51.13	51.04	51.09	51.02	51.27	51.47	---
EOM	51.12	51.26	51.30	51.26	51.20	51.12	51.02	51.11	51.03	51.29	51.52	---

WTR YEAR 1992 MAX 50.90 OCT 1, 1992 MIN 51.61 SEP 17, 1992

HOLT COUNTY

423730098560001. Local number 31N 14W 27DDD.

LOCATION.--Lat 42°37'30", long 98°56'00", SE1/4SE1/4SE1/4 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 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	41.62	41.05	40.66	40.35	40.09	39.84	39.60	39.39	39.29	38.92	39.64	40.11
10	41.52	40.97	40.61	40.31	40.04	39.82	39.57	39.52	39.22	38.89	39.67	39.92
15	41.41	40.90	40.56	40.28	40.00	39.78	39.53	39.62	39.15	38.98	39.96	39.83
20	41.32	40.84	40.51	40.22	39.96	39.74	39.48	39.56	39.09	39.30	40.28	39.86
25	41.23	40.78	40.46	40.18	39.93	39.70	39.44	39.47	39.01	39.33	40.40	39.72
EOM	41.13	40.71	40.40	40.13	39.89	39.65	39.37	39.38	38.94	39.24	40.29	39.70

WTR YEAR 1992 MAX 38.84 JUL 13, 1992 MIN 41.71 OCT 1, 1991

KEARNEY COUNTY

402625098594501. Local number 6N 15W 34DC.

LOCATION.--Lat 40°26'25", long 98°59'45", SW1/4SE1/4 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 current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 70.91 ft below land-surface datum, June 8, 1988; lowest, 119.43 ft below land-surface datum, Aug. 27, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	82.09	80.29	79.32	78.34	77.91	77.17	76.55	77.58	75.67	108.3	114.9	107.6
10	81.91	80.21	79.30	78.47	77.82	77.37	76.53	76.78	75.69	111.7	107.0	95.81
15	81.44	80.07	79.33	78.53	77.77	77.21	76.38	76.70	75.45	82.00	105.5	88.83
20	81.42	79.94	79.06	78.17	77.86	77.13	76.29	76.23	75.71	89.78	110.6	83.97
25	81.11	79.81	78.74	78.19	77.88	76.98	76.62	76.08	75.75	79.90	98.39	82.50
EOM	81.20	79.66	78.62	77.93	77.67	76.89	76.24	75.94	103.8	96.78	97.69	82.05

WTR YEAR 1992 MAX 75.28 JUN 16 AND 17, 1992 MIN 114.98 AUG 5, 1992

KEARNEY COUNTY

403354098553702. Local number 7N 14W 20BA2.

LOCATION.--Lat 40°33'54", long 98°55'37", NE1/4NW1/4 sec.20, T.7 N., R.14 W., Hydrologic Unit 10270206, 1.4 mi east and 4.5 mi north of intersection of U.S. Highway 6 and State Highway 10 in Minden. Owner: Gary Dornhoff.

AQUIFER.--Sand deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 16 in, depth 214 ft.

DATUM.--Altitude of land-surface datum is 2,150 ft. Measuring point: 0.30 ft above land-surface datum.

PERIOD OF RECORD.--October 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 56.27 ft below land-surface datum, Oct. 2, 1987; lowest, 59.06 ft below land surface datum, Oct. 24, 1983.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

[illegible]

GROUND-WATER LEVELS

279

KIMBALL COUNTY

411416103361101. Local number 15N 55W 26CCC.

LOCATION.--Lat 41°14'18", long 103°36'15", SW1/4SW1/4SW1/4 sec.26, T.15 N., R.55 W., Hydrologic Unit 10190016, east of intersection of U.S. Highway 30 and State Highway 71 in Kimball. Owner: Henry Meier.

AQUIFER.--Ogallala Formation of Pliocene age.

WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 24 in, depth 124 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 4,652.3 ft. Measuring point: Top of casing 0.00 ft above land-surface datum.

REMARKS.--Local well number formerly listed as 15N 55W 26CC. Replacement for 411600103393501, local number 15N 55W 17CC1, period of record January 1935 to November 1942; June 1950 to October 1975.

PERIOD OF RECORD.--January 1936 to October 1937; January 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.82 ft below land-surface datum, Jan. 2, 1936; lowest, 54.07 ft below land-surface datum, Oct. 18, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 13	53.96	MAR 20	52.05								

LANCASTER COUNTY

403929096401001. Local number 8N 7E 18DDB.

LOCATION.--Lat 40°39'29", long 96°40'10", NW1/4SE1/4SE1/4 sec.18, T.8 N., R.7 E., Hydrologic Unit 10200203, 0.6 mi west of Roca. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits, undifferentiated, of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in, depth 41 ft, perforated 36 to 41 ft.

DATUM.--Altitude of land-surface datum is 1,215 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

REMARKS.--Water level not measured during 1984 water year.

PERIOD OF RECORD.--June 1954 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.63 ft below land-surface datum, Aug. 25, 1954; lowest, 14.87 ft below land-surface datum, Oct. 18, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	14.87										

LANCASTER COUNTY

403833096385501. Local number 8N 7E 20DDA.

LOCATION.--Lat 40°38'33", long 96°38'55", NE1/4SE1/4SE1/4 sec.20, T.8 N., R.7 E., Hydrologic Unit 10200203, 0.5 mi east and 1.1 mi south of Roca. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits, undifferentiated, of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in, depth 33 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,243 ft. Measuring point: Top of casing 1.00 ft above land-surface datum.

REMARKS.--Water level not measured during 1984 water year.

PERIOD OF RECORD.--June 1954 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.16 ft below land-surface datum, Mar. 27, 1960; lowest, 12.28 ft below land-surface datum, Oct. 17, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

[illegible]

LANCASTER COUNTY

404730096440401. Local number 10N 6E 34CA.

LOCATION.--Lat 40°47'30", long 96°44'04", NE1/4SW1/4 sec.34, T.10 N., R.6 E., Hydrologic Unit 10200203, 0.3 mi west of intersection of Folsom and South Streets in Lincoln. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in, depth 36 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,149 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

PERIOD OF RECORD.--December 1951 to current year. Well plugged in 1992.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.21 ft below land-surface datum, Oct. 26, 1987; lowest, 18.53 ft below land-surface datum, Feb. 20, 1957.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

WATER		WATER		WATER		WATER		WATER		WATER	
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
WELL PLUGGED											

GROUND-WATER LEVELS

281

LANCASTER COUNTY

404706096413001. Local number 10N 6E 36CDD.

LOCATION.--Lat 40°47'06", long 96°41'30", SE1/4 SE1/4 SW1/4 sec.36, T.10 N., R.6 E., Hydrologic Unit 10200203, in Irvingdale Park on the north side of Van Dorn Street between 19th and 20th Streets in Lincoln. Owner: City of Lincoln.

AQUIFER.--Dakota Formation of Lower Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 16 in, depth 170 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,200 ft. Measuring point: Top of casing 1.00 ft above land-surface datum.

REMARKS.--Recorder removed in January 1983. Well measured in spring and fall thereafter.

PERIOD OF RECORD.--August 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 45.07 ft below land-surface datum, Oct. 26, 1987; lowest 71.19 ft below land-surface datum, Sept. 5, 1956.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 9	50.25	MAY 12	51.33								

MORRILL COUNTY

414058103054001. Local number 20N 50W 28BBC.

LOCATION.--Lat 41°40'58", long 103°05'40", SW1/4NW1/4NW1/4 sec.28, T.20 N., R.50 W., Hydrologic unit 10180009, 0.1 mi west of Northport. Owner: Fred Smith.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 1.25 in, depth 28 ft, screened 25 to 28 ft.

DATUM.--Altitude of land-surface datum is 3,675 ft. Measuring point: Top of casing 2.0 ft above land-surface datum.

REMARKS.--Replacement for well 414107103054501, local number 20N 50W 28BB with period of record September 1934 to November 1942; November 1944 to November 1980.

PERIOD OF RECORD.--October 1981 to current year.

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 LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	15.21	MAR 25	15.95								

GROUND-WATER LEVELS

NUCKOLLS COUNTY

400240098111301. Local number 1N 8W 23AB.

LOCATION.--Lat 40°02'40", long 98°11'13", NW1/4NE1/4 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, 1950.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 16	6.20	MAY 6	5.43								

PHELPS COUNTY

403123099261501. Local number 6N 19W 2AA.

LOCATION.--Lat 40°31'23", long 99°26'15", NE1/4NE1/4 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 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 14	42.40										

GROUND-WATER LEVELS

283

PLATTE COUNTY

412955097192001. Local number 18N 1E 28CD.

LOCATION.--Lat 41°29'55", long 97°19'20", SE1/4SW1/4 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 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 17	68.96										

SALINE COUNTY

403855097072501. Local number 8N 3E 19ADA.

LOCATION.--Lat 40°38'55", long 97°07'25", NE1/4SE1/4NE1/4 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 current year.

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 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	104.19	103.22	102.99	102.60	102.54	101.96	101.87	101.92	101.46	102.82	102.09	101.68
10	103.99	103.36	103.04	102.96	102.43	101.92	101.74	101.58	101.60	102.61	102.18	101.92
15	103.79	103.57	103.23	103.08	102.29	102.25	101.60	101.72	101.38	102.41	102.09	101.67
20	103.79	103.50	102.91	102.55	102.42	102.21	101.75	101.66	101.70	102.48	101.87	101.47
25	103.78	103.32	102.73	102.80	102.37	102.08	102.04	101.60	101.50	102.18	102.03	101.44
EOM	103.84	103.51	102.79	.....	102.26	102.03	101.51	101.64	101.62	102.40	101.91	101.58

WTR YEAR 1992 MAX 101.38 JUN 15, 1992 MIN 103.84 OCT 31, 1991

GROUND-WATER LEVELS

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 current year.

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, Sep 3 and 6, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	5.09	5.17	4.79	3.87	3.97	3.99	---	4.33	4.45	4.69	4.05	3.90
10	5.02	4.91	4.33	4.11	4.17	3.58	---	4.51	4.13	4.25	3.49	3.89
15	5.03	3.98	3.83	4.29	3.94	3.56	---	4.66	4.21	3.91	3.99	4.23
20	4.96	4.15	4.20	4.49	3.78	3.45	---	3.89	3.97	4.41	4.22	4.38
25	4.92	4.40	4.13	3.84	3.95	3.70	---	4.21	4.49	4.25	4.50	4.52
EOM	4.81	4.06	4.27	3.91	4.04	---	4.01	4.51	4.72	3.73	4.21	4.53

WTR YEAR 1992 MAX 2.85 JUL 13, 1992 MIN 5.25, NOV 7, 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, 0.68 ft below land-surface datum, June 18, 1990; lowest, 6.81 ft below land-surface datum, Sept. 9, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	---	5.62	5.46	4.43	3.95	3.83	3.84	4.41	4.30	4.43	3.99	3.63
10	---	5.12	3.90	4.57	4.22	3.33	3.79	4.42	3.97	3.97	3.09	3.48
15	5.09	3.72	3.90	5.24	3.85	3.37	3.90	4.60	3.92	3.92	3.79	3.89
20	5.04	4.09	5.10	4.73	3.73	3.35	3.99	3.69	3.65	4.38	4.02	4.11
25	4.93	4.44	4.92	3.88	3.83	3.63	3.88	4.18	4.24	4.06	4.38	4.24
EOM	4.70	4.30	4.89	3.92	3.86	3.37	4.06	4.48	4.52	3.53	3.85	4.36

WTR YEAR 1992 MAX 1.43 JUN 17, 1992 MIN 5.71, NOV 8, 1991

GROUND-WATER LEVELS

285

SAUNDERS COUNTY

410558096210601. Local number 13N 9E 13ADBA.

LOCATION.--Lat 41°05'58", long 96°21'06", NE1/4NW1/4SE1/4NE1/4 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, 10.53 ft below land-surface datum, Jun 17, 1991; lowest, 14.39 ft below land-surface datum, Oct 1, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	14.37	14.33	13.86	13.17	13.06	12.85	12.26	11.80	12.27	12.90	12.38	12.65
10	14.35	14.33	13.81	13.13	13.08	12.68	12.20	11.91	12.33	12.89	12.26	12.70
15	14.37	14.25	13.71	13.10	13.03	12.54	12.19	12.02	12.40	12.39	12.32	12.73
20	14.33	14.13	13.36	13.14	12.96	12.45	12.21	12.06	12.43	12.27	12.41	12.73
25	14.35	---	13.29	13.15	12.93	12.41	11.99	12.09	12.58	12.43	12.59	12.84
EOM	14.32	13.98	13.21	13.07	12.90	12.35	11.65	12.22	12.80	12.42	12.68	12.86

WTR YEAR 1992 MAX 11.63 APR 30, 1992 MIN 14.39 OCT 1, 1991

SAUNDERS COUNTY

410426096220401. Local number 13N 9E 24CC.

LOCATION.--Lat 41°04'26", long 96°22'04", SW1/4SW1/4 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 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	8.75	DEC 25	7.70	FEB 25	6.32	APR 25	5.80	JUN 25	6.12	AUG 25	5.96
NOV 25	8.62	JAN 25	6.94	MAR 25	5.81	MAY 25	5.67	JUL 25	5.45	SEP 25	6.37

GROUND-WATER LEVELS

SAUNDERS COUNTY

410428096211001. Local number 13N 9E 24DDCC.

LOCATION.--Lat 41°04'28", long 96°21'10", SW1/4SW1/4SE1/4SE1/4 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, 7.91 ft below land-surface datum, Jul 3, 1991; lowest, 18.61 ft below land-surface datum, Oct 15, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	15.49	16.78	13.78	11.29	10.15	9.70	9.76	9.64	9.66	10.13	10.27	9.71
10	15.64	16.24	14.01	11.00	10.10	9.55	10.05	9.58	9.63	10.49	9.95	9.97
15	18.61	15.97	13.51	10.81	10.01	9.60	10.11	9.91	9.71	10.03	9.86	9.86
20	18.22	15.26	13.18	10.69	9.89	10.03	9.86	9.96	9.60	10.11	9.90	9.72
25	18.22	14.47	12.29	10.44	9.84	9.94	9.68	9.46	9.79	10.10	9.72	10.21
EOM	17.85	14.04	11.66	10.25	9.81	9.87	9.61	9.59	10.07	10.23	9.86	10.31

WTR YEAR 1992 MAX 9.37 MAY 4, 1992 MIN 18.61 OCT 15 1991

SAUNDERS COUNTY

410334096211601. Local number 13N 9E 36ABAA.

LOCATION.--Lat 41°03'34", long 96°21'16", NE1/4NE1/4NW1/4NE1/4 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, 11.69 ft below land-surface datum, Apr 28, 1992; lowest, 21.40 ft below land-surface datum, Oct 30, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	20.94	21.33	20.07	17.90	15.49	14.07	13.39	12.38	14.25	17.16	15.52	15.64
10	21.04	21.28	19.71	17.58	15.33	13.67	13.40	12.75	14.49	16.15	15.40	15.90
15	21.14	21.17	19.36	17.44	14.98	13.61	13.43	12.88	14.58	14.24	15.37	15.92
20	21.23	20.95	19.13	16.96	14.65	13.54	13.51	13.34	14.85	14.83	15.31	15.89
25	21.32	20.62	18.75	16.79	14.45	13.59	12.07	13.73	15.05	15.08	15.55	16.13
EOM	21.35	20.39	18.30	15.98	14.31	13.54	11.80	14.06	16.02	15.39	15.61	16.23

WTR YEAR 1992 MAX 11.69 APR 28, 1992 MIN 21.40 OCT 30, 1991

SAUNDERS COUNTY

410527096203201. Local number 13N 10E 18CDBD.

LOCATION.--Lat 41°05'27", long 96°20'32", SE1/4NW1/4SE1/4SW1/4 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, 4.17 ft below land-surface datum, Jun 6 and 7, 1991; lowest, 10.93 ft below land-surface datum, Sep 10 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	9.39	---	---	---	---	6.46	6.39	6.79	6.48	7.46	6.64	6.38
10	9.16	---	---	---	6.93	6.15	6.54	6.90	6.12	7.00	6.12	6.51
15	---	---	---	---	6.89	5.92	6.18	7.15	6.72	6.47	6.26	6.66
20	---	---	---	---	6.84	5.81	6.55	6.32	6.04	7.17	6.77	6.87
25	---	---	---	---	6.71	6.61	5.99	6.25	6.86	6.80	7.13	6.98
EOM	---	---	---	---	6.68	6.70	6.75	6.72	7.39	6.57	6.51	6.85

WTR YEAR 1992 MAX 5.73 MAR 20, 1992 MIN 9.77 OCT 3, 1991

SAUNDERS COUNTY

410427096202501. Local number 13N 10E 19CDDD.

LOCATION.--Lat 41°04'27", long 96°20'25", SE1/4SE1/4SE1/4SW1/4 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, 8.98 ft below land-surface datum, Jun 7, 1991; lowest, 17.38 ft below land-surface datum, Oct 27, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	16.70	16.88	15.31	13.68	13.30	13.03	12.75	13.41	12.69	13.67	12.42	---
10	16.88	16.77	15.06	13.67	13.49	12.92	13.25	13.79	12.80	13.44	11.97	---
15	16.80	15.78	14.45	13.71	13.42	12.86	13.53	14.00	13.15	12.88	12.20	12.43
20	17.17	15.27	14.02	14.03	13.31	12.91	13.47	12.60	12.61	13.08	12.10	12.86
25	17.27	15.05	13.35	13.26	13.32	12.91	13.18	12.96	12.95	13.11	12.61	12.90
EOM	16.95	15.00	13.65	13.14	13.40	12.61	13.23	12.74	13.50	12.57	---	13.19

WTR YEAR 1992 MAX 11.87 AUG 12, 1992 MIN 17.38 OCT 27, 1991

GROUND-WATER LEVELS

SAUNDERS COUNTY

410340096202201. Local number 13N 10E 30CDDA.

LOCATION.--Lat 41°03'40", long 96°20'22", NE1/4SE1/4SE1/4SW1/4 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, 10.66 ft below land-surface datum, Mar 16, 1992; lowest, 26.00 ft below land-surface datum, Oct 11, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	25.92	20.23	14.60	---	12.05	10.77	11.63	13.52	16.90	20.85	16.87	19.30
10	25.99	18.91	14.29	---	11.36	10.75	11.67	14.64	17.65	21.00	16.75	19.02
15	---	17.98	14.05	---	11.02	10.74	11.57	15.96	18.02	19.97	16.91	---
20	---	17.02	13.60	---	10.96	11.58	11.37	16.29	18.07	17.94	17.28	---
25	24.56	16.04	---	---	11.57	12.26	11.06	16.12	18.96	16.90	18.41	---
EOM	22.31	15.29	---	11.74	10.99	11.52	11.87	16.09	19.96	17.08	18.84	17.92

WTR YEAR 1992 MAX 10.66 MAR 16, 1992 MIN 26.00 OCT 11, 1991

SAUNDERS COUNTY

410401096195201. Local number 13N 10E 30DAAB.

LOCATION.--Lat 41°04'01", long 96°19'52", NW1/4NE1/4NE1/4SE1/4 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, 5.77 ft below land-surface datum, Apr 4, 1991; lowest, 11.92 ft below land-surface datum, Sep 6, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	11.35	11.11	10.45	9.04	8.65	8.54	8.65	9.22	9.26	9.80	8.99	8.93
10	11.16	10.77	9.67	9.08	8.91	8.00	8.55	9.39	8.89	9.24	8.15	8.67
15	11.21	9.61	9.25	9.23	8.64	8.03	8.70	9.66	8.85	9.21	8.93	9.13
20	11.09	9.74	9.64	9.38	8.48	8.19	8.68	8.62	8.63	9.59	9.12	9.35
25	10.96	9.83	9.54	8.77	8.59	8.42	8.51	9.01	9.46	9.32	9.60	9.63
EOM	10.69	9.59	9.42	8.55	8.60	8.18	8.80	9.32	9.84	8.59	8.97	9.82

WTR YEAR 1992 MAX 6.71 JUN 17, 1992 MIN 11.47 OCT 1, 1991

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 5.0 ft 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, 10.23 ft below land-surface datum, Apr 15, 1992; lowest, 20.37 ft below land-surface datum, Oct 10, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	---	---	15.12	14.23	12.92	11.68	10.59	11.05	14.38	14.77	13.97	14.25
10	20.36	---	14.71	14.10	12.77	11.54	10.41	11.59	14.46	15.12	13.92	14.21
15	---	---	14.40	13.88	12.57	11.29	10.27	12.20	14.21	15.06	13.75	14.24
20	20.31	---	14.32	13.31	12.54	11.29	10.65	12.74	14.19	14.93	13.45	14.35
25	---	---	14.30	13.15	12.27	10.91	10.80	13.36	14.06	14.85	13.73	14.23
EOM	---	15.59	14.35	13.16	11.95	10.63	10.46	14.18	14.26	14.43	14.03	14.16

WTR YEAR 1992 MAX 10.23 APR 15, 1992 MIN 20.36 OCT 10, 1991

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, 4.41 ft below land-surface datum, Jun 6, 1991; lowest, 11.81 ft below land-surface datum, Oct 23, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	---	10.20	9.34	8.59	8.82	7.95	7.91	7.57	8.53	8.54	8.91	7.38
10	---	10.40	9.22	8.61	8.96	7.56	7.42	7.94	8.58	7.51	8.92	7.07
15	11.50	9.44	8.56	8.34	9.20	6.95	8.10	8.38	7.93	---	8.88	7.40
20	11.04	9.46	8.67	9.26	8.96	7.51	7.47	7.75	6.76	9.07	8.85	---
25	10.97	9.27	8.67	8.56	9.02	7.89	7.35	7.82	7.78	9.03	8.79	---
EOM	10.27	9.04	9.54	8.45	8.28	7.20	7.49	8.59	7.90	8.99	7.64	9.95

WTR YEAR 1992 MAX 5.92 JUN 18, 1992 MIN 11.81 OCT 23, 1991

GROUND-WATER LEVELS

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, 2.06 ft below land-surface datum, Jun 7, 1991; lowest, 13.97 ft below land-surface datum, Sep 7, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	13.40	9.25	8.78	8.86	9.10	7.69	6.82	7.05	9.46	7.77	7.72	6.84
10	13.00	9.38	8.97	8.61	8.94	6.95	6.70	7.53	8.27	7.85	6.33	6.24
15	12.05	9.14	8.38	7.71	9.25	5.83	6.83	8.25	7.93	---	6.65	6.99
20	11.42	9.03	8.78	8.53	9.70	7.08	6.86	7.58	6.38	---	7.42	6.59
25	10.76	8.73	9.09	8.63	8.48	6.47	6.97	7.64	7.06	---	8.07	7.15
EOM	9.76	8.38	9.43	7.97	8.06	6.34	6.84	9.84	7.69	6.47	7.00	6.83

WTR YEAR 1992 MAX 4.84 JUN 16 AND 17, 1992 MIN 13.40 OCT 5, 1991

SAUNDERS COUNTY

411005096281502. Local number 14N 8E 24ACD2.

LOCATION.--Lat 41°10'05", long 96°28'15", SE1/4SW1/4NE1/4 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 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	42.89	42.63	42.77	42.50	42.65	42.51	42.78	42.73	42.73	43.58	42.85	43.57
10	42.83	42.72	42.77	42.67	42.75	42.81	42.86	42.40	.....	42.73	43.01	42.84
15	42.69	42.72	43.08	42.87	42.49	42.86	42.70	42.55	42.85	42.82	.....	42.84
20	42.81	42.72	43.00	42.65	42.70	42.86	42.72	42.72	43.02	42.88	43.10	42.86
25	42.76	42.78	42.82	42.86	42.73	42.83	.....	42.71	43.10	42.85	43.33	42.93
EOM	42.80	42.91	43.86	42.65	42.70	42.99	42.89	.....	.....	42.98	.....	43.07

WTR YEAR 1992 MAX 42.40 MAY 10, 1992 MIN 43.57 SEP 5, 1992

GROUND-WATER LEVELS
SCOTTS BLUFF COUNTY

291

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, 27.32 ft below land-surface datum, July 10, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	26.10	26.05	26.20	26.44	.....	26.60	26.73	26.89	27.07	27.29	27.19	.....
10	26.07	26.07	26.25	.....	26.46	26.63	26.69	26.96	27.12	27.32	27.16	.....
15	26.07	26.08	26.29	.....	26.50	26.64	26.71	27.00	27.15	27.27	27.10	.....
20	26.05	26.10	26.31	.....	26.52	26.67	26.76	27.05	27.21	27.26	26.96	.....
25	26.05	26.13	26.39	.....	26.55	26.68	26.79	27.06	27.22	27.19	26.82	.....
EOM	26.05	26.15	26.40	.....	26.57	*26.75	26.84	27.07	27.25	27.17	26.64	26.60

WTR YEAR 1992 MAX 26.05 OCT 20 TO NOV 5, 1991 MIN 27.32 JUL 10, 1992

* INDICATES HAND MEASUREMENT

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, 44.48 ft below land-surface datum, Mar. 8, 1990.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	43.33	MAR 30	44.07								

GROUND-WATER LEVELS

SEWARD COUNTY

405406097115001. Local number 11N 2E 21DD.

LOCATION.--Lat 40°54'06", long 97°11'50", SE1/4SE1/4 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 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	82.72	81.98	81.41	80.80	80.64	80.20	80.06	80.30	80.20	82.08	80.90	80.30
10	82.57	81.75	81.25	80.85	80.55	80.33	79.79	80.05	80.22	81.73	80.75	80.35
15	82.30	81.58	81.37	80.94	80.29	80.32	79.81	80.63	80.15	81.36	80.84	80.04
20	82.46	81.56	81.26	80.83	80.45	80.27	79.57	80.97	80.00	81.30	80.64	80.04
25	82.05	81.61	80.97	80.74	80.53	80.11	79.74	80.78	80.18	81.25	80.53	80.06
EOM	82.30	81.42	79.58	80.67	80.33	.....	80.26	80.47	80.75	80.86	80.42	80.24

WTR YEAR 1992 MAX 79.57 APR 20, 1992 MIN 82.72 OCT 5, 1991

SHERIDAN COUNTY

423034102415001. Local number 29N 46W 10AA.

LOCATION.--Lat 42°30'34", long 102°41'50", NE1/4NE1/4 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 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	42.82	42.69	42.60	42.52	42.40	.....	42.40	42.44	43.20	42.86	44.01	43.98
10	42.79	42.67	42.57	42.51	42.41	.....	42.41	42.44	43.15	43.19	44.21	43.85
15	42.74	42.65	42.57	42.48	.....	.....	42.42	42.46	43.10	43.27	.....	43.70
20	42.73	42.63	42.57	42.48	.....	.....	42.41	42.67	43.03	43.57	44.49	43.60
25	42.71	42.61	42.57	42.36	.....	42.36	42.44	43.06	42.93	43.60	44.37	43.55
EOM	42.70	42.58	42.53	42.40	42.40	42.43	43.25	42.91	43.74	44.14	43.44

WTR YEAR 1992 MAX 42.36 MAR 25, 1992 MIN 44.49 AUG 20, 1992

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415845100334001. Local number 23N 28W 9DA.

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.

[illegible]

412955099123201. Local number 18N 16W 30CC.

LOCATION.--Lat 41°29'55", long 99°12'32", SW1/4SW1/4 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.

[illegible]

GROUND-WATER LEVELS

WEBSTER COUNTY

400423098314001. Local number 1N 11W 11AB.

LOCATION.--Lat 40°04'23", long 98°31'40", NW1/4NE1/4 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 1991 TO SEPTEMBER 1992

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 16	8.52	MAY 6	7.46								

YORK COUNTY

404618097482201. Local number 9N 4W 5CCC.

LOCATION.--Lat 40°46'18", long 97°48'22", SW1/4SW1/4SW1/4 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 current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 75.74 ft below land-surface datum, May 18, 1988; lowest, 87.52 ft below land-surface datum, Aug. 20, 1982.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	82.54	81.87	81.38	80.90	80.43	80.10	80.20	79.93	79.50	80.36	79.90	79.67
10	82.46	81.87	81.34	80.93	80.58	80.28	79.83	79.78	79.48	80.25	79.98	79.81
15	82.27	81.94	81.30	81.13	80.50	80.16	79.78	79.72	79.40	80.22	79.79	79.65
20	82.06	81.70	81.23	80.79	80.39	80.05	79.77	79.62	79.47	80.17	79.75	79.45
25	82.17	81.50	81.03	80.96	80.30	80.06	79.76	79.65	79.48	80.00	79.80	79.61
EOM	81.88	81.85	81.01	80.60	80.31	80.02	79.67	79.68	79.60	80.09	79.71	79.49

WTR YEAR 1992 MAX 79.40 JUN 15, 1992 MIN 82.54 OCT 5 91

GROUND-WATER LEVELS

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YORK COUNTY

405305097351503. Local number 11N 2W 31BA3.

LOCATION.--Lat 40°53'05", long 97°35'15", NE1/4NW1/4 sec.31, T.11 N., R.2 W., Hydrologic Unit 10270203, south edge of York County Fairgrounds on the north side of York. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in, depth 165 ft, perforated below water table.

DATUM.--Altitude of land-surface datum is 1,659 ft. Measuring point: Top of casing 1.6 ft above land-surface datum.

REMARKS.--Replacement for well 405305097351501, local number 11N 2W 31BA1, with period of record October 1957 to January 1969. Water levels in well affected by withdrawals from nearby municipal well and by withdrawals from nearby irrigation wells.

PERIOD OF RECORD.--May 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 83.00 ft below land-surface datum, Apr. 10, 1988; lowest, 120.81 ft below land-surface datum, July 15, 1974.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992
LOWEST WATER LEVEL FOR THE DAY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
05	89.31	87.85	87.27	86.70	86.57	86.19	86.14	87.13	85.95	92.77	86.59	.....
10	89.24	87.78	87.16	86.76	86.48	86.26	86.03	87.32	86.38	88.93	.....	.....
15	88.92	87.57	87.13	86.77	86.45	86.24	86.23	86.97	86.49	87.68	86.85	.....
20	88.75	87.52	86.99	86.77	86.43	86.13	86.02	86.52	86.41	87.66	86.93	.....
25	88.64	87.34	86.98	86.56	86.33	86.17	86.20	86.10	87.30	87.34	86.93	.....
EOM	88.34	87.47	86.78	86.51	86.21	86.30	86.49	86.21	92.22	.....	86.81	.....

WTR YEAR 1992 MAX 85.95 JUN 5, 1992 MIN 92.77 JUL 5, 1992

CHEMICAL ANALYSES OF GROUND WATER

(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 OGILL, 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 1991 TO SEPTEMBER 1992

STATION	NUMBER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	GEOLOGIC UNIT	DATE	TIME	DEPTH OF WELL, TOTAL (FEET) (72008)	
ADAMS COUNTY									
402727098261901	6N	10W28DA	1	40 27 27 N	098 26 19 W	112SDGV	08-26-92	1720	--
402753098391801	6N	12W27AB	1	40 27 53 N	098 39 18 W	112SDGV	08-26-92	1135	190.00
403710098395101	8N	12W34BC	1	40 37 10 N	098 39 51 W	110SDGV	08-26-92	0830	130.00
BUFFALO COUNTY									
404459098452101	9N	13W14CBAA	1	40 44 59 N	098 45 21 W	112SDGV	05-29-92	1400	25.00
						112SDGV	06-05-92	1000	25.00
						112SDGV	06-17-92	1100	25.00
						112SDGV	07-16-92	1135	25.00
						112SDGV	07-24-92	1130	25.00
						112SDGV	07-30-92	1115	25.00
						112SDGV	08-11-92	1100	25.00
						112SDGV	08-24-92	1400	25.00
BURT COUNTY									
414109096151101	20N	9E23DDAA	1	41 41 09 N	096 15 11 W	211DKOT	07-15-92	1335	133.00
414200096133801	20N	11E18CDBC	1	41 42 00 N	096 13 38 W	110QRNR	08-18-92	1035	168.00
414645096134301	21N	11E19BBCD	1	41 46 45 N	096 13 43 W	211DKOT	07-14-92	1340	172.00
414601096130001	21N	11E30A	1	41 46 01 N	096 13 00 W	110QRNR	08-17-92	1320	95.00
415710096115701	23N	11E20DBAB	1	41 57 10 N	096 11 57 W	112SDGV	07-21-92	1330	115.00
CLAY COUNTY									
402147097581001	5N	6W35BACA	1	40 21 47 N	097 58 10 W	112SDGV	08-25-92	1330	182.00
403123098031401	6N	7W 1AA	1	40 31 23 N	098 03 14 W	112SDGV	08-25-92	1715	--
403001098152903	6N	8W 8CB	3	40 30 01 N	098 15 29 W	112SDGV	08-27-92	0840	192.00
DAKOTA COUNTY									
421848096371801	27N	7E16CABD	1	42 18 48 N	096 37 18 W	211DKOT	07-21-92	1555	565.00
422033096274701	27N	8E1DAAA	1	42 20 33 N	096 27 47 W	112SDGV	07-21-92	1035	153.00
422524096250701	28N	9E4CDBC	1	42 25 24 N	096 25 07 W	112SDGV	07-15-92	0835	162.00
422301096262201	28N	9E20CBDD	1	42 23 01 N	096 26 22 W	110QRNR	08-17-92	1035	105.00
422758096243901	29N	9E28ABAB	1	42 27 52 N	096 24 41 W	211DKOT	07-21-92	0847	270.00
DOUGLAS COUNTY									
411258096205801	14N	9E1AADD	1	41 12 58 N	095 20 58 W	112SDGV	07-16-92	1530	65.00
411723096211601	15N	9E12ABAC	1	41 17 23 N	096 21 16 W	112SDGV	07-22-92	1300	58.00
411741096173301	15N	10E 4DDAA	1	41 17 41 N	096 17 33 W	112SDGV	08-17-92	1400	70.00
411656096200401	15N	10E 7DACB	1	41 16 56 N	096 20 04 W	112SDGV	08-20-92	1435	70.00
411620096164001	15N	10E15ACAD	1	41 16 20 N	096 16 40 W	112SDGV	08-17-92	1315	87.00
411507096154801	15N	10E23CADD	1	41 15 07 N	096 15 48 W	112SDGV	07-23-92	1240	50.00
411719096135501	15N	11E7BBDC	1	41 17 19 N	096 13 55 W	211DKOT	07-23-92	1137	238.00
412312096261601	16N	9E5BDCA	1	41 23 12 N	096 26 16 W	112SDGV	07-23-92	1045	91.00
412333096264801	16N	9E6AABA	1	41 23 33 N	096 26 48 W	112SDGV	07-23-92	1000	91.00
412230096214501	16N	9E12B	1	41 22 30 N	096 21 45 W	112SDGV	07-21-92	1130	39.00
411937096213701	16N	9E25CAAC	1	41 19 37 N	096 21 37 W	112SDGV	07-16-92	1330	82.00
412050096143101	16N	10E24ABCA	1	41 20 50 N	096 14 31 W	211DKOT	07-15-92	1600	325.00
411755096162801	16N	10E34DDDC	1	41 17 55 N	096 16 28 W	112SDGV	08-17-92	1445	55.00
412018096084501	16N	11E23DCBA	1	41 20 18 N	096 08 45 W	112SDGV	07-21-92	1400	56.00
411914096022401	16N	12E35BBAB	1	41 19 14 N	096 02 24 W	112SDGV	07-16-92	1120	141.00

CHEMICAL ANALYSES OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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DATE TIME	SPECIFIC CON- DUCT- ANCE (μ S/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER ($^{\circ}$ C) (00010)	OXYGEN, DISSOLVED (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 ADSORP- TION RATIO (00931)	POTAS- SIUM DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY LAB (MG/L AS CaCO ₃) (90410)
ADAMS COUNTY											
08-26-92	473	7.6	15.0	--	190	63	8.7	19	0.6	8.3	192
08-26-92	403	7.2	14.0	--	140	48	6.0	25	0.9	7.0	150
08-26-92	306	7.3	12.5	--	120	39	6.1	11	0.4	6.1	135
BUFFALO COUNTY											
05-29-92	--	6.8	14.5	--	600	180	36	100	2	12	154
06-05-92	1450	6.8	14.5	--	600	180	37	110	2	11	182
06-17-92	1320	6.5	12.0	--	570	170	35	110	2	10	175
07-16-92	1800	6.5	17.0	--	760	230	45	120	2	23	191
07-24-92	1680	6.7	13.5	--	700	210	42	120	2	17	177
07-30-92	--	6.7	13.5	--	610	180	39	110	2	14	171
08-11-92	--	6.6	22.0	--	720	220	41	120	2	20	206
08-24-92	1700	6.3	15.5	--	770	230	47	130	2	26	199
BURT COUNTY											
07-15-92	659	7.1	13.5	3.0	320	91	22	14	0.3	2.4	334
08-18-92	756	6.8	13.5	5.5	--	--	--	--	--	--	--
07-14-92	787	7.0	12.5	4.0	--	--	--	--	--	--	--
08-17-92	790	7.1	12.0	0.2	370	100	29	27	0.6	4.1	338
07-21-92	900	7.0	11.0	0.3	450	110	42	18	0.4	--	--
CLAY COUNTY											
08-25-92	592	6.7	14.0	--	240	77	11	22	0.6	6.6	209
08-25-92	791	6.7	13.0	--	320	110	11	41	1	8.5	281
08-27-92	345	7.6	13.0	--	140	45	6.2	14	0.5	5.8	148
DAKOTA COUNTY											
07-21-92	1780	7.1	15.0	0.4	650	200	35	140	2	22	221
07-21-92	1070	7.1	11.5	0.1	--	--	--	--	--	--	--
07-15-92	1330	7.0	11.5	0.1	600	160	47	57	1	8.9	443
08-17-92	1210	7.1	11.0	0.1	560	160	39	48	0.9	12	546
07-21-92	1570	7.0	12.0	0.4	700	200	49	84	1	12	382
DOUGLAS COUNTY											
07-16-92	560	7.5	13.5	0.7	200	60	11	35	1	8.3	174
07-22-92	614	7.3	13.0	6.0	230	72	13	34	1	8.9	208
08-17-92	733	7.3	12.5	1.3	320	99	17	25	0.6	7.8	232
08-20-92	570	6.9	12.0	2.9	230	73	12	27	0.8	7.5	212
08-17-92	725	6.9	12.5	2.8	330	100	19	20	0.5	7.7	120
07-23-92	563	7.4	15.5	3.0	230	64	17	23	0.7	7.9	242
07-23-92	684	6.9	12.0	4.3	310	92	20	20	0.5	6.4	317
07-23-92	548	7.5	12.5	2.5	--	--	--	--	--	--	--
07-23-92	511	7.4	12.5	2.4	180	54	9.8	33	1	9.3	165
07-21-92	417	6.3	15.0	7.1	--	--	--	--	--	--	--
07-16-92	505	7.4	23.5	3.5	--	--	--	--	--	--	--
07-15-92	861	7.1	16.0	4.3	380	110	26	39	0.9	3.8	361
08-17-92	606	6.9	13.0	6.6	260	82	14	7.6	0.2	8.9	232
07-21-92	739	6.9	13.0	3.3	350	96	26	17	0.4	1.8	312
07-16-92	720	7.1	13.0	0.4	--	--	--	--	--	--	--

CHEMICAL ANALYSES OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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 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)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L ASPO ₄) (00660)
ADAMS COUNTY											
08-26-92	35	12	0.30	39	316	0.43	<0.010	3.40	<0.010	0.230	0.71
08-26-92	27	9.1	0.40	33	276	0.38	<0.010	6.70	0.020	0.330	1.0
08-26-92	16	1.6	0.30	32	203	0.28	<0.010	2.00	0.030	0.190	0.58
BUFFALO COUNTY											
05-29-92	480	36	0.30	--	1040	1.42	<0.010	24.0	0.100	0.130	0.40
06-05-92	480	33	0.30	--	1070	1.45	<0.010	24.0	0.040	0.140	0.43
06-17-92	480	35	0.20	--	1060	1.44	<0.010	25.0	0.040	0.140	0.43
07-16-92	610	54	0.30	--	1350	1.83	<0.010	34.0	0.040	0.130	0.40
07-24-92	620	46	0.20	--	1320	1.80	<0.010	36.0	0.040	0.130	0.40
07-30-92	550	42	0.20	--	1180	1.61	<0.010	33.0	0.070	0.140	0.43
08-11-92	540	44	0.30	--	1280	1.74	<0.010	38.0	0.110	0.200	0.61
08-24-92	680	51	0.30	--	1460	1.99	<0.010	40.0	0.050	0.180	0.55
BURT COUNTY											
07-15-92	26	8.5	0.30	24	402	0.55	--	2.80	--	--	--
08-18-92	--	--	--	--	--	--	--	1.40	--	--	--
07-14-92	--	--	--	--	--	--	--	6.40	--	--	--
08-17-92	88	17	0.40	26	497	0.68	--	0.290	--	--	--
07-21-92	--	--	--	30	--	--	--	0.059	--	--	--
CLAY COUNTY											
08-25-92	42	22	0.30	30	370	0.50	<0.010	7.40	0.010	0.170	0.52
08-25-92	77	34	0.40	31	509	0.69	<0.010	6.10	<0.010	0.140	0.43
08-27-92	12	9.2	0.30	27	222	0.30	<0.010	2.90	<0.010	0.180	0.55
DAKOTA COUNTY											
07-21-92	590	100	1.8	9.1	1240	1.68	--	0.087	--	--	--
07-21-92	--	--	--	--	--	--	--	<0.050	--	--	--
07-15-92	200	20	0.30	24	791	1.08	--	<0.050	--	--	--
08-17-92	140	14	0.40	32	782	1.06	--	0.073	--	--	--
07-21-92	470	43	0.40	16	1110	1.51	--	<0.050	--	--	--
DOUGLAS COUNTY											
07-16-92	95	16	0.40	32	363	0.49	--	0.056	--	--	--
07-22-92	90	17	0.20	35	397	0.54	--	0.071	--	--	--
08-17-92	88	35	0.30	34	449	0.61	--	<0.050	--	--	--
08-20-92	70	15	0.30	29	366	0.50	--	0.480	--	--	--
08-17-92	71	14	0.40	35	342	0.46	--	0.055	--	--	--
07-23-92	34	19	0.40	31	344	0.47	--	<0.050	--	--	--
07-23-92	24	16	0.30	34	426	0.58	--	5.00	--	--	--
07-23-92	--	--	--	--	--	--	--	0.210	--	--	--
07-23-92	74	11	0.40	35	329	0.45	--	0.680	--	--	--
07-21-92	--	--	--	--	--	--	--	0.064	--	--	--
07-16-92	--	--	--	--	--	--	1.90	--	--	--	--
07-15-92	80	16	0.30	25	518	0.70	--	<0.050	--	--	--
08-17-92	26	19	0.20	33	348	0.47	--	0.160	--	--	--
07-21-92	39	16	0.30	26	454	0.62	--	9.90	--	--	--
07-16-92	--	--	--	--	--	--	--	<0.050	--	--	--

DATE	ARSENIC DIS- SOLVED (µ G/L AS AS) (01000)	BARIUM, DIS- SOLVED (µ G/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (µ G/L AS BE) (01010)	BORON, DIS- SOLVED (µ G/L AS B) (01020)	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)
ADAMS COUNTY											
08-26-92	--	--	--	40	--	--	--	--	4	--	--
08-26-92	--	--	--	40	--	--	--	--	9	--	--
08-26-92	--	--	--	30	--	--	--	--	6	--	--
BUFFALO COUNTY											
05-29-92	--	--	--	--	--	--	--	--	--	--	--
06-05-92	--	--	--	--	--	--	--	--	--	--	--
06-17-92	--	--	--	--	--	--	--	--	--	--	--
07-16-92	--	--	--	--	--	--	--	--	--	--	--
07-24-92	--	--	--	--	--	--	--	--	--	--	--
07-30-92	--	--	--	--	--	--	--	--	--	--	--
08-11-92	--	--	--	--	--	--	--	--	--	--	--
08-24-92	--	--	--	--	--	--	--	--	--	--	--
BURT COUNTY											
07-15-92	<1	230	0.8	60	<1.0	<5	<3	<10	4	<10	22
08-18-92	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--
08-17-92	1	220	<0.5	90	<1.0	<5	<3	<10	580	<10	37
07-21-92	--170	<0.5	--	<1.0	<5	6	<10	5900	<10	56	--
CLAY COUNTY											
08-25-92	--	--	--	30	--	--	--	--	<3	--	--
08-25-92	--	--	--	50	--	--	--	--	13	--	--
08-27-92	--	--	--	30	--	--	--	--	<3	--	--
DAKOTA COUNTY											
07-21-92	1	14	<0.5	490	<1.0	<5	<3	<10	160	<10	190
07-21-92	--	--	--	--	--	--	--	--	--	--	--
07-15-92	6	73	0.6	210	<1.0	<5	10	<10	5700	<10	80
08-17-92	13	63	<0.5	220	<1.0	<5	<3	<10	6100	<10	95
07-21-92	<1	20	<0.5	210	<1.0	<5	<3	<10	1300	<10	73
DOUGLAS COUNTY											
07-16-92	4	94	0.7	80	<1.0	<5	<3	<10	32	<10	18
07-22-92	3	240	<0.5	70	1.0	<5	<3	<10	100	<10	20
08-17-92	3	350	<0.5	160	<1.0	<5	<3	<10	2400	<10	26
08-20-92	3	420	<0.5	230	<1.0	<5	<3	<10	98	<10	19
08-17-92	2	190	<0.5	60	<1.0	<5	<3	<10	1100	<10	25
07-23-92	<1	280	<0.5	60	<1.0	<5	<3	<10	540	<10	20
07-23-92	2	210	<0.5	50	<1.0	<5	<3	<10	<3	<10	14
07-23-92	--	--	--	--	--	--	--	--	--	--	--
07-23-92	7	130	0.9	70	1.0	<5	<3	<10	6	<10	17
07-21-92	--	--	--	--	--	--	--	--	--	--	--
07-16-92	--	--	--	--	--	--	--	--	--	--	--
07-15-92	<1	58	0.7	120	<1.0	<5	<3	10	5	<10	33
08-17-92	4	530	<0.5	50	3.0	<5	<3	<10	14000	<10	24
07-21-92	1	290	<0.5	30	<1.0	<5	<3	<10	4	<10	13
07-16-92	--	--	--	--	--	--	--	--	--	--	--

DATE	MANGANESE, DIS-SOLVED (µG/L AS MN) (01056)	MOLYBDENUM, DIS-SOLVED (µG/L AS MO) (01060)	NICKEL, DIS-SOLVED (µG/L AS NI) (01065)	SELENIUM, DIS-SOLVED (µG/L AS SE) (01145)	SILVER, DIS-SOLVED (µG/L AS AG) (01075)	STRONTIUM, DIS-SOLVED (µG/L AS SR) (01080)	VANADIUM, DIS-SOLVED (µG/L AS V) (01085)	ZINC, DIS-SOLVED (µG/L AS ZN) (01090)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137) (03515)	ALPHA RADIO-WATER DISS AS TH-230 (PCI/L) (04126)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L) (09511)
ADAMS COUNTY											
08-26-92	2	--	--	--	--	--	--	--	--	--	--
08-26-92	4	--	--	--	--	--	--	--	--	--	--
08-26-92	<1	--	--	--	--	--	--	--	--	--	--
BUFFALO COUNTY											
05-29-92	--	--	--	--	--	--	--	--	--	--	--
06-05-92	--	--	--	--	--	--	--	--	--	--	--
06-17-92	--	--	--	--	--	--	--	--	--	--	--
07-16-92	--	--	--	--	--	--	--	--	--	--	--
07-24-92	--	--	--	--	--	--	--	--	--	--	--
07-30-92	--	--	--	--	--	--	--	--	--	--	--
08-11-92	--	--	--	--	--	--	--	--	--	--	--
08-24-92	--	--	--	--	--	--	--	--	--	--	--
BURT COUNTY											
07-15-92	2	<10	<10	4	<1.0	380	<6	7	5.4	4.0	0.28
08-18-92	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--
08-17-92	430	<10	<10	<1	<1.0	600	<6	5	6.1	3.5	0.32
07-21-92	270	<10	<10	--	<1.0	900	<6	6	5.6	2.2	0.71
CLAY COUNTY											
08-25-92	<1	--	--	--	--	--	--	--	--	--	--
08-25-92	26	--	--	--	--	--	--	--	--	--	--
08-27-92	<1	--	--	--	--	--	--	--	--	--	--
DAKOTA COUNTY											
07-21-92	77	<10	<10	<1	<1.0	4500	<6	19	41	16	3.9
07-21-92	--	--	--	--	--	--	--	--	--	--	--
07-15-92	610	10	<10	<1	<1.0	1700	<6	7	14	3.3	0.91
08-17-92	420	<10	<10	<1	<1.0	1800	<6	5	16	3.2	0.42
07-21-92	440	<10	<10	<1	<1.0	2100	<6	3	26	5.7	2.2
DOUGLAS COUNTY											
07-16-92	110	<10	<10	<1	<1.0	400	<6	15	15	6.2	0.26
07-22-92	1100	<10	<10	<1	<1.0	430	<6	7	13	4.0	0.42
08-17-92	740	<10	<10	<1	2.0	570	<6	6	13	3.4	0.56
08-20-92	1300	<10	<10	<1	<1.0	400	<6	<3	15	5.6	0.46
08-17-92	540	<10	<10	<1	<1.0	630	<6	4	14	5.1	0.57
07-23-92	1400	<10	<10	<1	2.0	380	<6	9	12	1.6	0.40
07-23-92	<1	<10	<10	5	<1.0	340	<6	6	12	5.7	0.27
07-23-92	--	--	--	--	--	--	--	--	--	--	--
07-23-92	110	<10	<10	1	<1.0	310	<6	7	16	6.4	0.49
07-21-92	--	--	--	--	--	--	--	--	--	--	--
07-16-92	--	--	--	--	--	--	--	--	--	--	--
07-15-92	200	<10	<10	<1	<1.0	610	<6	12	6.8	6.4	0.31
08-17-92	2300	<10	<10	<1	3.0	400	<6	220	13	4.6	0.50
07-21-92	27	<10	<10	4	<1.0	360	<6	47	6.1	5.5	0.15
07-16-92	--	--	--	--	--	--	--	--	--	--	--

[illegible]

DATE	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)	AMETRYN WATER, DISS, REC (µ G/L (38401)	PROP- AZINE WATER DISS REC (µ G/L (38535)	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)
ADAMS COUNTY										
08-26-92	--	--	--	--	--	--	--	--	--	--
08-26-92	--	--	--	--	--	--	--	--	--	--
08-26-92	--	--	--	--	--	--	--	--	--	--
BUFFALO COUNTY										
05-29-92	--	--	--	--	--	--	--	--	--	--
06-05-92	--	--	--	--	--	--	--	--	--	--
06-17-92	--	--	--	--	--	--	--	--	--	--
07-16-92	--	--	--	--	--	--	--	--	--	--
07-24-92	--	--	--	--	--	--	--	--	--	--
07-30-92	--	--	--	--	--	--	--	--	--	--
08-11-92	--	--	--	--	--	--	--	--	--	--
08-24-92	--	--	--	--	--	--	--	--	--	--
BURT COUNTY										
07-15-92	<0.05	<0.05	<0.05	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
08-18-92	0.21	<0.05	<0.05	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
07-14-92	--	--	--	--	--	--	--	--	--	--
08-17-92	--	--	--	--	--	--	--	--	--	--
07-21-92	--	--	--	--	--	--	--	--	--	--
CLAY COUNTY										
08-25-92	--	--	--	--	--	--	--	--	--	--
08-25-92	--	--	--	--	--	--	--	--	--	--
08-27-92	--	--	--	--	--	--	--	--	--	--
DAKOTA COUNTY										
07-21-92	--	--	--	--	--	--	--	--	--	--
07-21-92	--	--	--	--	--	--	--	--	--	--
07-15-92	--	--	--	--	--	--	--	--	--	--
08-17-92	--	--	--	--	--	--	--	--	--	--
07-21-92	--	--	--	--	--	--	--	--	--	--
DOUGLAS COUNTY										
07-16-92	<0.05	<0.05	0.11	<0.20	<0.05	<0.05	<0.05	0.27	<0.05	<0.05
07-22-92	<0.05	<0.05	<0.05	<0.20	<0.05	<0.05	<0.05	0.06	<0.05	<0.05
08-17-92	--	--	--	--	--	--	--	--	--	--
08-20-92	--	--	--	--	--	--	--	--	--	--
08-17-92	--	--	--	--	--	--	--	--	--	--
07-23-92	<0.05	<0.05	<0.05	<0.20	<0.05	<0.05	<0.05	0.09	<0.05	<0.05
07-23-92	--	--	--	--	--	--	--	--	--	--
07-23-92	<0.05	<0.05	0.10	<0.20	<0.05	<0.05	<0.05	0.32	<0.05	<0.05
07-23-92	<0.05	<0.05	0.11	<0.20	<0.05	<0.05	<0.05	0.32	<0.05	<0.05
07-21-92	--	--	--	--	--	--	--	--	--	--
07-16-92	<0.05	<0.05	<0.05	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
07-15-92	--	--	--	--	--	--	--	--	--	--
08-17-92	<0.05	<0.05	<0.05	<0.20	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
07-21-92	--	--	--	--	--	--	--	--	--	--
07-16-92	--	--	--	--	--	--	--	--	--	--

CHEMICAL ANALYSES OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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STATION	NUMBER	LOCAL IDENTIFIER		LATITUDE	LONGITUDE	GEOLOGIC UNIT	DATE	TIME	DEPTH OF WELL, TOTAL (FEET) (72008)
DOUGLAS COUNTY									
411855095551901	16N	13E35BDCB	1	41 18 55 N	095 55 19 W	112SDGV	07-16-92	1600	80.00
FILLMORE COUNTY									
402516097272001	5N	1W 8BA	1	40 25 16 N	097 27 20 W	112SDGV	08-25-92	0950	--
402507097433501	5N	4W12BC	1	40 25 07 N	097 43 35 W	112SDGV	08-25-92	1540	227.00
FRANKLIN COUNTY									
401801098433901	4N	13W24AD	1	40 18 01 N	098 43 39 W	112SDGV	08-26-92	1400	150.00
GREELEY COUNTY									
412813098420501	17N	12W 4DBCD	1	41 28 13 N	098 42 05 W	121OGLL	08-12-92	1320	159.00
412521098401901	17N	12W26BBAA	1	41 25 21 N	098 40 19 W	121OGLL	08-12-92	1155	110.00
413121098444101	18N	12W19BA	1	41 31 21 N	098 44 41 W	--	08-12-92	1600	262.00
HOWARD COUNTY									
411711098213201	15N	9W9BDCB	1	41 17 11 N	098 21 32 W	121OGLL	08-11-92	1400	165.00
411616098273301	15N	10W16DAAA	1	41 16 16 N	098 27 33 W	121OGLL	08-11-92	1445	110.00
411705098341701	15N	11W10CBA	1	41 17 05 N	098 34 17 W	121OGLL	08-12-92	0820	150.00
412249098371301	16N	11W 6CDDD	1	41 22 49 N	098 37 13 W	110SDGV	08-12-92	1040	80.00
411952098341001	16N	11W27BC	1	41 19 52 N	098 34 10 W	--	08-12-92	0930	90.00
411935098364801	16N	11W30DADA	1	41 19 35 N	098 36 48 W	121OGLL	08-12-92	1500	120.00
JEFFERSON COUNTY									
400422097195901	1N	1E8AA	1	40 04 22 N	097 19 59 W	112SDGV	08-27-92	1705	--
400223097011901	1N	4E19BD	1	40 02 23 N	097 01 19 W	211DKOT	08-28-92	1025	--
400751097122001	2N	2E21AB	1	40 07 51 N	097 12 20 W	112SDGV	08-28-92	0825	--
KEARNEY COUNTY									
403055098570001	6N	14W6CB	1	40 30 55 N	098 57 00 W	112SDGV	08-26-92	1015	--
NANCE COUNTY									
412152097581001	16N	6W14ABAC	1	41 21 52 N	097 58 10 W	121OGLL	08-11-92	1120	70.00
411923098061001	16N	7W27DCD	1	41 19 23 N	098 06 10 W	121OGLL	08-11-92	1205	80.00
411850098094701	16N	7W31DBBD	1	41 18 50 N	098 09 47 W	121OGLL	08-11-92	1240	210.00
NUCKOLLS COUNTY									
400101097503601	1N	5W26DDCC	1	40 01 01 N	097 50 36 W	112SDGV	11-12-91	1335	155.00
						112SDGV	01-17-92	1030	155.00
						112SDGV	03-17-92	1508	155.00
						112SDGV	05-19-92	1329	155.00
						112SDGV	07-09-92	1453	155.00

CHEMICAL ANALYSES OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	SPECIFIC CON- DUCT- ANCE (μ S/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER ($^{\circ}$ C) (00010)	OXYGEN DISSOLVED (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 ADSORP- TION RATIO (00931)	POTAS- SIUM DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY LAB (MG/L AS CaCO ₃) (90410)
DOUGLAS COUNTY												
07-16-92		1680	6.9	14.0	0.5	740	210	52	65	1	8.3	346
FILLMORE COUNTY												
08-25-92		889	7.1	17.0	--	420	130	24	28	0.6	9.8	338
08-25-92		444	7.7	13.0	--	160	53	7.9	24	0.8	5.3	166
FRANKLIN COUNTY												
08-26-92		562	7.6	14.0	--	260	85	12	15	0.4	7.5	242
GREELEY COUNTY												
08-12-92		695	7.3	16.0	--	340	110	15	13	0.3	9.3	307
08-12-92		612	7.4	14.0	--	280	94	12	14	0.4	7.9	250
08-12-92		758	7.3	13.0	--	370	120	16	15	0.3	8.4	336
HOWARD COUNTY												
08-11-92		577	--	14.5	--	280	93	12	9.9	0.3	6.9	308
08-11-92		549	--	13.0	--	280	91	12	8.3	0.2	5.6	280
08-12-92		617	7.5	13.0	--	300	98	14	14	0.4	7.6	292
08-12-92		620	7.4	13.0	--	320	110	12	8.2	0.2	6.0	303
08-12-92		660	7.5	13.0	--	330	110	14	14	0.3	8.8	324
08-12-92		631	7.3	13.0	--	300	100	13	9.8	0.2	6.4	296
JEFFERSON COUNTY												
08-27-92		655	7.4	11.0	--	270	94	9.0	27	0.7	2.3	287
08-28-92		400	7.1	16.0	--	130	41	7.5	27	1	2.5	117
08-28-92		492	7.5	12.0	--	200	68	7.9	20	0.6	3.6	179
KEARNEY COUNTY												
08-26-92		962	7.4	14.0	--	400	130	18	42	0.9	14	215
NANCE COUNTY												
08-11-92		829	7.4	16.0	--	400	130	19	14	0.3	8.9	324
08-11-92		612	7.4	16.0	--	300	93	16	9.8	0.2	8.0	303
08-11-92		566	7.5	13.0	--	280	93	12	7.4	0.2	4.7	291
NUCKOLLS COUNTY												
11-12-91		758	7.1	13.0	7.4	--	--	--	--	--	--	--
01-17-92		747	7.0	13.0	6.9	--	--	--	--	--	--	--
03-17-92		732	6.9	13.0	7.0	--	--	--	--	--	--	--
05-19-92		716	7.2	14.0	9.2	--	--	--	--	--	--	--
07-09-92		695	7.2	13.5	9.2	--	--	--	--	--	--	--

CHEMICAL ANALYSES OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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DATE	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00943)	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, 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)
DOUGLAS COUNTY											
07-16-92	160	210	0.20	32	965	1.31	--	--	<0.050	--	--
FILLMORE COUNTY											
08-25-92	150	7.9	0.40	44	604	0.82	--	<0.010	1.40	0.010	0.050
08-25-92	39	19	0.40	28	284	0.39	--	<0.010	1.70	0.010	0.120
FRANKLIN COUNTY											
08-26-92	46	12	0.30	44	379	0.52	--	<0.010	2.50	<0.010	0.260
GREELEY COUNTY											
08-12-92	62	5.7	0.30	54	456	0.62	--	<0.010	0.560	<0.010	0.110
08-12-92	33	5.9	0.20	60	421	0.57	--	<0.010	10.0	<0.010	0.060
08-12-92	31	17	0.20	55	501	0.68	--	<0.010	8.40	<0.010	0.060
HOWARD COUNTY											
08-11-92	12	5.4	0.20	60	408	0.56	--	<0.010	5.40	0.010	0.050
08-11-92	9.9	4.7	0.20	55	362	0.49	--	<0.010	1.70	0.010	0.020
08-12-92	28	6.3	0.30	59	422	0.57	4.39	0.010	4.40	<0.010	0.090
08-12-92	20	5.5	0.20	56	417	0.57	--	<0.010	4.00	0.010	0.030
08-12-92	27	7.5	0.30	56	441	0.60	--	<0.010	2.10	<0.010	0.020
08-12-92	17	4.2	0.20	58	415	0.56	--	<0.010	6.50	<0.010	0.080
JEFFERSON COUNTY											
08-27-92	19	22	0.20	40	415	0.56	--	<0.010	6.50	<0.010	0.110
08-28-92	43	18	0.20	28	265	0.36	--	<0.010	6.30	<0.010	0.050
08-28-92	32	16	0.40	33	330	0.45	--	<0.010	9.30	<0.010	0.190
KEARNEY COUNTY											
08-26-92	200	41	0.30	26	615	0.84	2.98	0.020	3.00	0.050	0.030
NANCE COUNTY											
08-11-92	110	9.7	0.70	51	557	0.76	--	<0.010	4.30	0.010	0.200
08-11-92	22	4.1	0.30	56	400	0.54	--	<0.010	1.90	<0.010	0.030
08-11-92	9.5	5.3	0.20	57	371	0.51	--	<0.010	1.70	0.010	0.060
NUCKOLLS COUNTY											
11-12-91	--	--	--	--	--	--	--	--	9.00	--	--
01-17-92	--	--	--	--	--	--	--	--	9.90	--	--
03-17-92	--	--	--	--	--	--	--	--	7.60	--	--
05-19-92	--	--	--	--	--	--	--	--	7.50	--	--
07-09-92	--	--	--	--	--	--	--	--	7.60	--	--

[illegible]

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[illegible]

[illegible]

CHEMICAL ANALYSES OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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STATION	NUMBER		LOCAL IDENTIFIER	LATITUDE	LONGITUDE	GEOLOGIC UNIT
NUCKOLLS COUNTY						
400101097503601	1N	5W26DDCC	1	40 01 01 N	097 50 36 W	112SDGV
400125097534601	1N	5W28CBBB	1	40 01 25 N	097 53 46 W	110SDGV 110SDGV 110SDGV 110SDGV
400101097553501	1N	5W30CDDC	1	40 01 01 N	097 55 35 W	110SDGV 110SDGV 112SDGV 112SDGV
400008097545301	1N	5W32CCC	1	40 00 08 N	097 54 53 W	112SDGV 112SDGV 112SDGV 110SDGV 110SDGV
400035097513201	1N	5W34ADDD	1	40 00 35 N	097 51 32 W	112SDGV 112SDGV 112SDGV 112SDGV 112SDGV
400009097503601	1N	5W35DDCC	1	40 00 09 N	097 50 36 W	112SDGV 112SDGV 112SDGV 112SDGV 112SDGV
400213098011601	1N	6W20CAAC	1	40 02 13 N	098 01 16 W	112SDGV 112SDGV 112SDGV 112SDGV 112SDGV
400127097574701	1N	6W26BDDD	1	40 01 27 N	097 57 47 W	112SDGV 112SDGV 112SDGV 112SDGV 112SDGV
400101098012901	1N	6W29CCDD	1	40 01 01 N	098 01 29 W	112SDGV 112SDGV 112SDGV 112SDGV 112SDGV
400101098012902	1N	6W29CCDD	2			112SDGV 112SDGV 112SDGV 112SDGV 112SDGV
400101098012903	1N	6W29CCDD	3			112SDGV 112SDGV 112SDGV 112SDGV 112SDGV

CHEMICAL ANALYSES OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	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)	NITROGEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)
NUCKOLLS COUNTY							
09-15-92	1820	155.00	673	7.1	13.5	10.9	7.50
11-12-91	1507	63.00	1070	6.7	13.5	5.6	24.0
01-17-92	1100	63.00	1060	6.6	13.0	5.1	23.0
03-17-92	1550	63.00	1060	6.6	13.5	4.8	24.0
05-20-92	0953	63.00	1070	6.5	13.5	7.5	22.0
07-09-92	1533	63.00	1060	6.8	13.0	7.3	22.0
09-15-92	1610	63.00	1060	6.8	13.5	8.4	22.0
11-12-91	1633	40.00	1140	7.1	13.0	5.2	6.50
01-16-92	1440	40.00	1150	7.3	12.5	5.2	7.00
03-17-92	1630	40.00	1150	7.1	12.5	3.8	6.50
05-20-92	1412	40.00	1170	7.0	13.5	7.1	6.60
07-10-92	0930	40.00	1170	7.1	13.5	6.2	6.90
09-15-92	1526	40.00	1050	7.4	15.5	7.1	6.90
11-12-91	1600	33.00	991	7.0	13.0	0.3	11.0
01-16-92	1422	33.00	1020	6.9	13.0	0.1	13.0
03-18-92	1500	33.00	1060	6.9	13.0	0.1	15.0
05-20-92	1124	33.00	1050	6.8	13.0	0.1	13.0
07-10-92	0857	33.00	1040	6.6	12.5	0.1	13.0
09-15-92	1448	33.00	929	7.0	13.0	0.2	8.00
11-12-91	1420	148.00	664	7.0	13.5	6.7	9.10
01-17-92	0850	148.00	657	7.0	13.0	6.1	9.40
03-17-92	1333	148.00	655	6.9	14.0	5.4	8.60
05-20-92	0911	148.00	663	6.8	14.0	8.8	8.80
07-09-92	1317	148.00	656	7.0	13.5	8.7	8.20
09-15-92	1730	148.00	652	7.1	13.5	9.8	8.20
11-12-91	1205	124.00	938	7.4	13.0	6.7	5.80
01-17-92	0930	124.00	939	7.5	12.5	6.8	6.20
03-17-92	1400	124.00	951	7.4	13.0	6.0	5.60
05-19-92	1120	124.00	928	7.2	15.5	7.6	6.00
07-09-92	1400	124.00	952	7.3	12.5	6.6	6.00
09-16-92	0800	124.00	940	7.3	13.0	7.2	6.10
11-13-91	1240	57.00	822	6.8	12.5	4.1	4.70
01-17-92	1230	57.00	750	6.7	12.5	4.3	5.20
03-18-92	1010	57.00	684	6.8	13.0	7.6	7.40
05-20-92	1622	57.00	656	6.6	13.5	7.2	9.30
07-09-92	1750	57.00	698	6.8	13.0	6.7	6.40
09-16-92	1515	57.00	769	6.7	13.0	6.1	4.70
11-13-91	0920	18.00	1260	6.2	13.5	2.6	3.20
01-16-92	1130	18.00	1160	6.7	12.5	3.1	2.20
03-17-92	1230	18.00	1150	7.1	11.5	2.2	2.20
05-20-92	1658	18.00	1140	7.0	14.0	5.1	2.40
07-09-92	1200	18.00	595	6.9	12.5	5.0	3.40
09-15-92	1230	18.00	1300	7.0	14.5	5.0	6.10
11-13-91	1140	38.00	776	7.1	12.5	4.6	10.0
01-17-92	1135	38.00	791	7.1	12.5	4.6	11.0
03-18-92	1250	38.00	787	7.0	13.0	6.3	9.60
05-19-92	1905	38.00	801	6.8	13.0	6.4	10.0
07-09-92	1635	38.00	807	7.2	12.5	6.7	11.0
09-16-92	1327	38.00	784	7.1	12.5	6.5	10.0
11-13-91	1155	38.00	782	7.1	12.5	4.2	9.20
01-17-92	1155	38.00	773	7.1	12.5	4.3	9.80
03-18-92	1308	38.00	774	7.1	13.0	6.0	8.90
05-19-92	1923	38.00	790	6.9	13.0	5.8	9.70
07-09-92	1653	38.00	785	7.2	13.0	6.2	10.0
09-16-92	1343	38.00	766	7.1	13.0	6.0	9.30
11-13-91	1209	33.00	826	7.1	12.5	4.8	11.0
01-17-92	1205	33.00	822	7.2	12.5	4.9	13.0
03-18-92	1329	33.00	818	7.1	13.0	6.8	11.0
05-19-92	1951	33.00	843	6.8	13.0	6.8	12.0
07-09-92	1711	33.00	840	7.2	12.5	7.1	13.0

CHEMICAL ANALYSES OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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STATION NUMBER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	GEOLOGIC UNIT	DATE	TIME	DEPTH OF WELL, TOTAL (FEET) (72008)	SPECIFIC CONDUCTANCE (μS/CM) (00095)
NUCKOLLS COUNTY								
400101098012903	1N 6W29CCDD 3	40 01 01 N	098 01 29 W	112SDGV	09-16-92	1400	33.00	812
400031098003401	1N 6W33CBBB 1	40 00 31 N	098 00 34 W	112SDGV	11-13-91	1110	20.00	904
				112SDGV	01-16-92	1710	20.00	880
				112SDGV	03-17-92	1800	20.00	880
				112SDGV	05-20-92	1251	20.00	896
				112SDGV	07-10-92	1307	20.00	886
400032097595901	1N 6W33DBBB 1	40 00 32 N	097 59 59 W	112SDGV	09-16-92	1249	20.00	877
				110SDGV	11-13-91	1035	28.00	824
				110SDGV	01-16-92	1630	28.00	803
				112SDGV	03-17-92	1715	28.00	797
				112SDGV	05-20-92	1208	28.00	798
400041097574301	1N 6W35ACBC 1	40 00 41 N	097 57 43 W	112SDGV	07-10-92	1449	28.00	776
				112SDGV	09-16-92	1210	28.00	754
				112SDGV	11-13-91	0814	36.00	842
				112SDGV	01-16-92	1235	36.00	846
				112SDGV	03-17-92	1123	36.00	861
				112SDGV	05-19-92	1555	36.00	901
				112SDGV	07-09-92	1045	36.00	953
400041097574302	1N 6W35ACBC2			112SDGV	09-15-92	1120	36.00	905
				112SDGV	11-13-91	0830	36.00	762
				112SDGV	01-16-92	1250	36.00	813
				112SDGV	03-17-92	1145	36.00	807
				112SDGV	05-19-92	1619	36.00	856
				112SDGV	07-09-92	1105	36.00	947
				112SDGV	09-15-92	1142	36.00	842
400041097574303	1N 6W35ACBC3			112SDGV	11-13-91	0844	24.00	1210
				112SDGV	01-16-92	1315	24.00	1140
				112SDGV	03-17-92	1205	24.00	1110
				112SDGV	05-19-92	1640	24.00	1160
				112SDGV	07-09-92	1125	24.00	1120
400045097560901	1N 6W36ADAB 1	40 00 45 N	097 56 09 W	112SDGV	09-15-92	1201	24.00	1150
				112SDGV	11-12-91	1718	45.00	844
				112SDGV	01-16-92	1525	45.00	827
				112SDGV	03-18-92	1415	45.00	828
				112SDGV	05-19-92	1727	45.00	834
				112SDGV	07-10-92	0815	45.00	814
400130098030501	1N 7W25ADC 1	40 01 30 N	098 03 05 W	112SDGV	09-15-92	1339	45.00	799
				112SDGV	11-13-91	1322	66.00	663
				112SDGV	01-16-92	1745	66.00	655
				112SDGV	03-18-92	0920	66.00	706
				112SDGV	05-20-92	1545	66.00	837
				112SDGV	07-10-92	1222	66.00	653
400019098040201	1N 7W35DDAA 1	40 00 19 N	098 04 02 W	112SDGV	09-16-92	1435	66.00	643
				112SDGV	11-13-91	1443	36.00	975
				112SDGV	01-17-92	1415	36.00	949
1				12SDGV	03-18-92	1100	36.00	984
1				12SDGV	05-20-92	1412	36.00	1010
				112SDGV	07-10-92	1110	36.00	989
400042098032001	1N 7W36ACBD 1	40 00 42 N	098 03 20 W	112SDGV	09-16-92	1553	36.00	978
				112SDGV	11-13-91	1408	32.00	1170
				112SDGV	01-17-92	1445	32.00	1110
1				112SDGV	03-18-92	1205	32.00	1090
				12SDGV	05-20-92	1453	32.00	1140
				112SDGV	07-10-92	1020	32.00	1100
				112SDGV	09-16-92	1105	32.00	1250
400843097522601	2N 5W15BBDB 1	40 08 43 N	097 52 26 W	112SDGV	08-27-92	1045	180.00	646
401458098035801	3N 7W 1CC 1	40 14 58 N	098 03 58 W	211NBRR	08-26-92	1615	163.00	616
401735098155201	4N 8W19DC 1	40 17 35 N	098 15 52 W	121OGLL	08-26-92	1515	205.00	558

CHEMICAL ANALYSES OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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) (00930)	SODIUM ADSORP- TION RATIO AS Na (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	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)
NUCKOLLS COUNTY												
09-16-92	7.1	13.0	6.7	--	--	--	--	--	--	--	--	--
11-13-91	7.0	14.0	4.8	--	--	--	--	--	--	--	--	--
01-16-92	6.9	13.0	4.8	--	--	--	--	--	--	--	--	--
03-17-92	6.8	12.5	2.8	--	--	--	--	--	--	--	--	--
05-20-92	6.9	13.0	6.5	--	--	--	--	--	--	--	--	--
07-10-92	6.9	13.0	6.7	--	--	--	--	--	--	--	--	--
09-16-92	6.9	14.0	6.6	--	--	--	--	--	--	--	--	--
11-13-91	7.0	13.0	1.8	--	--	--	--	--	--	--	--	--
01-16-92	6.9	13.0	1.6	--	--	--	--	--	--	--	--	--
03-17-92	6.6	13.5	0.9	--	--	--	--	--	--	--	--	--
05-20-92	6.7	13.5	1.2	--	--	--	--	--	--	--	--	--
07-10-92	6.8	12.5	0.8	--	--	--	--	--	--	--	--	--
09-16-92	6.8	12.5	0.7	--	--	--	--	--	--	--	--	--
11-13-91	6.8	13.5	1.4	--	--	--	--	--	--	--	--	--
01-16-92	7.0	13.5	1.4	--	--	--	--	--	--	--	--	--
03-17-92	6.8	14.0	2.2	--	--	--	--	--	--	--	--	--
05-19-92	6.7	13.5	2.3	--	--	--	--	--	--	--	--	--
07-09-92	6.8	13.0	2.3	--	--	--	--	--	--	--	--	--
09-15-92	7.1	13.0	2.3	--	--	--	--	--	--	--	--	--
11-13-91	6.6	13.5	2.2	--	--	--	--	--	--	--	--	--
01-16-92	6.8	13.0	2.5	--	--	--	--	--	--	--	--	--
03-17-92	6.9	15.5	3.2	--	--	--	--	--	--	--	--	--
05-19-92	6.7	14.0	3.8	--	--	--	--	--	--	--	--	--
07-09-92	6.9	13.5	4.5	--	--	--	--	--	--	--	--	--
09-15-92	7.1	13.5	5.8	--	--	--	--	--	--	--	--	--
11-13-91	6.7	14.0	2.2	--	--	--	--	--	--	--	--	--
01-16-92	7.1	14.0	1.8	--	--	--	--	--	--	--	--	--
03-17-92	7.1	14.0	2.2	--	--	--	--	--	--	--	--	--
05-19-92	6.9	13.5	3.0	--	--	--	--	--	--	--	--	--
07-09-92	7.2	12.5	2.9	--	--	--	--	--	--	--	--	--
09-15-92	7.1	13.0	3.2	--	--	--	--	--	--	--	--	--
11-12-91	6.8	12.5	2.3	--	--	--	--	--	--	--	--	--
01-16-92	6.7	12.5	2.3	--	--	--	--	--	--	--	--	--
03-18-92	6.7	13.0	3.2	--	--	--	--	--	--	--	--	--
05-19-92	6.6	13.5	3.2	--	--	--	--	--	--	--	--	--
07-10-92	6.5	12.5	3.5	--	--	--	--	--	--	--	--	--
09-15-92	6.9	13.0	4.1	--	--	--	--	--	--	--	--	--
11-13-91	7.1	14.0	6.0	--	--	--	--	--	--	--	--	--
01-16-92	7.0	13.5	5.4	--	--	--	--	--	--	--	--	--
03-18-92	7.0	14.0	7.1	--	--	--	--	--	--	--	--	--
05-20-92	7.0	14.0	7.1	--	--	--	--	--	--	--	--	--
07-10-92	6.9	14.0	7.5	--	--	--	--	--	--	--	--	--
09-16-92	7.0	14.0	7.7	--	--	--	--	--	--	--	--	--
11-13-91	7.2	14.0	0.3	--	--	--	--	--	--	--	--	--
01-17-92	7.2	13.5	0.2	--	--	--	--	--	--	--	--	--
03-18-92	7.1	13.5	0.5	--	--	--	--	--	--	--	--	--
05-20-92	7.0	13.5	0.2	--	--	--	--	--	--	--	--	--
07-10-92	7.1	13.5	0.4	--	--	--	--	--	--	--	--	--
09-16-92	7.0	13.5	0.2	--	--	--	--	--	--	--	--	--
11-13-91	7.0	14.5	0.4	--	--	--	--	--	--	--	--	--
01-17-92	7.0	14.5	0.5	--	--	--	--	--	--	--	--	--
03-18-92	7.0	14.5	0.4	--	--	--	--	--	--	--	--	--
05-20-92	7.0	15.0	0.3	--	--	--	--	--	--	--	--	--
07-10-92	6.8	14.0	0.4	--	--	--	--	--	--	--	--	--
09-16-92	7.0	14.5	0.2	--	--	--	--	--	--	--	--	--
08-27-92	7.6	14.0	--	280	91	12	21	0.5	3.8	228	24	44
08-26-92	7.8	14.0	--	270	89	12	19	0.5	3.2	209	29	34
08-26-92	7.8	15.0	--	260	80	14	15	0.4	4.7	207	22	27

CHEMICAL ANALYSES OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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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)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO ₄) (00660)	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)
NUCKOLLS COUNTY												
09-16-92	--	--	--	--	--	12.0	--	--	--	--	--	--
11-13-91	--	--	--	--	--	17.0	--	--	--	--	--	--
01-16-92	--	--	--	--	--	18.0	--	--	--	--	--	--
03-17-92	--	--	--	--	--	16.0	--	--	--	--	--	--
05-20-92	--	--	--	--	--	18.0	--	--	--	--	--	--
07-10-92	--	--	--	--	--	18.0	--	--	--	--	--	--
09-16-92	--	--	--	--	--	18.0	--	--	--	--	--	--
11-13-91	--	--	--	--	--	8.10	--	--	--	--	--	--
01-16-92	--	--	--	--	--	9.40	--	--	--	--	--	--
03-17-92	--	--	--	--	--	9.70	--	--	--	--	--	--
05-20-92	--	--	--	--	--	10.0	--	--	--	--	--	--
07-10-92	--	--	--	--	--	10.0	--	--	--	--	--	--
09-16-92	--	--	--	--	--	10.0	--	--	--	--	--	--
11-13-91	--	--	--	--	--	11.0	--	--	--	--	--	--
01-16-92	--	--	--	--	--	13.0	--	--	--	--	--	--
03-17-92	--	--	--	--	--	12.0	--	--	--	--	--	--
05-19-92	--	--	--	--	--	13.0	--	--	--	--	--	--
07-09-92	--	--	--	--	--	15.0	--	--	--	--	--	--
09-15-92	--	--	--	--	--	14.0	--	--	--	--	--	--
11-13-91	--	--	--	--	--	7.40	--	--	--	--	--	--
01-16-92	--	--	--	--	--	10.0	--	--	--	--	--	--
03-17-92	--	--	--	--	--	8.80	--	--	--	--	--	--
05-19-92	--	--	--	--	--	9.90	--	--	--	--	--	--
07-09-92	--	--	--	--	--	14.0	--	--	--	--	--	--
09-15-92	--	--	--	--	--	11.0	--	--	--	--	--	--
11-13-91	--	--	--	--	--	26.0	--	--	--	--	--	--
01-16-92	--	--	--	--	--	25.0	--	--	--	--	--	--
03-17-92	--	--	--	--	--	25.0	--	--	--	--	--	--
05-19-92	--	--	--	--	--	26.0	--	--	--	--	--	--
07-09-92	--	--	--	--	--	25.0	--	--	--	--	--	--
09-15-92	--	--	--	--	--	28.0	--	--	--	--	--	--
11-12-91	--	--	--	--	--	5.20	--	--	--	--	--	--
01-16-92	--	--	--	--	--	6.40	--	--	--	--	--	--
03-18-92	--	--	--	--	--	5.90	--	--	--	--	--	--
05-19-92	--	--	--	--	--	6.00	--	--	--	--	--	--
07-10-92	--	--	--	--	--	6.10	--	--	--	--	--	--
09-15-92	--	--	--	--	--	6.10	--	--	--	--	--	--
11-13-91	--	--	--	--	--	2.40	--	--	--	--	--	--
01-16-92	--	--	--	--	--	3.10	--	--	--	--	--	--
03-18-92	--	--	--	--	--	2.70	--	--	--	--	--	--
05-20-92	--	--	--	--	--	2.20	--	--	--	--	--	--
07-10-92	--	--	--	--	--	2.80	--	--	--	--	--	--
09-16-92	--	--	--	--	--	2.30	--	--	--	--	--	--
11-13-91	--	--	--	--	--	0.170	--	--	--	--	--	--
01-17-92	--	--	--	--	--	0.400	--	--	--	--	--	--
03-18-92	--	--	--	--	--	0.320	--	--	--	--	--	--
05-20-92	--	--	--	--	--	0.510	--	--	--	--	--	--
07-10-92	--	--	--	--	--	0.350	--	--	--	--	--	--
09-16-92	--	--	--	--	--	0.270	--	--	--	--	--	--
11-13-91	--	--	--	--	--	24.0	--	--	--	--	--	--
01-17-92	--	--	--	--	--	22.0	--	--	--	--	--	--
03-18-92	--	--	--	--	--	18.0	--	--	--	--	--	--
05-20-92	--	--	--	--	--	22.0	--	--	--	--	--	--
07-10-92	--	--	--	--	--	20.0	--	--	--	--	--	--
09-16-92	--	--	--	--	--	32.0	--	--	--	--	--	--
08-27-92	0.20	52	409	0.56	<0.010	5.40	<0.010	0.050	0.15	60	<3	<1
08-26-92	0.50	46	366	0.50	<0.010	1.80	<0.010	0.030	0.09	60	<3	<1
08-26-92	0.40	47	338	0.46	<0.010	0.810	<0.010	0.020	0.06	60	<3	<1

CHEMICAL ANALYSES OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

STATION NUMBER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	GEOLOGIC UNIT	DATE	TIME	DEPTH OF WELL, TOTAL (FEET) (72008)	SPECIFIC CONDUCTANCE (μS/CM) (00095)
SARPY COUNTY								
410525096081601	13N 10E14CDDA 1	41 05 25 N	096 08 16 W	112SDGV	07-30-92	1359	206.00	623
410535096174501	13N 10E16DACC 1	41 05 35 N	096 17 45 W	112SDGV	07-21-92	1700	84.00	579
410411096175701	13N 10E28ACBA 1	41 04 11 N	096 17 57 W	112SDGV	08-19-92	1350	43.00	706
410405096182101	13N 10E28BCDD 1	41 04 05 N	096 18 21 W	112SDGV	08-20-92	1040	52.00	736
410651096134801	13N 11E7BC 1	41 06 51 N	096 13 48 W	112SDGV	09-01-92	1100	198.00	795
410503096073801	13N 11E24ACBD 1	41 05 03 N	096 07 38 W	211DKOT	07-29-92	1415	195.00	513
410350096081001	13N 11E25CBCD 1	41 03 50 N	096 08 10 W	112SDGV	07-29-92	1327	66.00	532
410407096032701	13N 12E27BCDA 1	41 04 07 N	096 03 27 W	112SDGV	07-20-92	1300	74.00	575
410327096061801	13N 12E31ABDA 1	41 03 27 N	096 06 18 W	112SDGV	08-20-92	0850	68.00	561
410630095541301	13N 13E12CBDA 1	41 06 30 N	095 54 13 W	112SDGV	08-13-92	1140	125.00	1090
410343095580801	13N 13E29DDCA 1	41 03 43 N	095 58 08 W	112SDGV	07-14-92	1100	45.00	655
410337095593701	13N 13E30DCCC 1	41 03 37 N	095 59 37 W	112SDGV	07-14-92	1215	46.00	605
410332095594701	13N 13E31BAAC 1	41 03 32 N	095 59 47 W	112SDGV	07-14-92	1345	62.00	511
410334095595701	13N 13E31BABB 1	41 03 34 N	095 59 57 W	112SDGV	07-14-92	1445	52.00	504
410457095523501	13N 14E19 1	41 04 57 N	095 52 35 W	112SDGV	07-15-92	1350	97.00	1030
410325095525901	13N 14E31BACD 1	41 03 25 N	095 52 59 W	112SDGV	07-15-92	1100	126.00	659
411014096174101	14N 10E21ABDD 1	41 10 14 N	096 17 41 W	112SDGV	07-29-92	1122	61.00	710
410824096141901	14N 10E36ADCC 1	41 08 24 N	096 14 19 W	211DKOT	07-23-92	0945	315.00	620
411125096093001	14N 11E15AAAA 1	41 11 25 N	096 09 30 W	211DKOT	07-20-92	1530	235.00	519
410818096001201	14N 13E31CBBC 1	41 08 18 N	096 00 12 W	211DKOT	07-29-92	1515	134.00	445
SAUNDERS COUNTY								
410707096220601	13N 9E2DDDD 1	41 07 07 N	096 22 06 W	110QRNR	01-07-92	1315	130.00	749
				110QRNR	04-07-92	1340	130.00	687
				110QRNR	07-13-92	1245	130.00	605
410612096220601	13N 9E14AAAA 1	41 06 12 N	096 22 06 W	110QRNR	01-07-92	1230	98.00	888
				110QRNR	04-07-92	1300	98.00	876
410703096205301	13N 10E7BBBB 1	41 07 03 N	096 20 53 W	110QRNR	07-13-92	1200	98.00	886
				110QRNR	01-07-92	1415	96.00	487
				110QRNR	04-07-92	1405	96.00	479
410427096202501	13N 10E19CDDD 1	41 04 27 N	096 20 25 W	110QRNR	07-13-92	1315	96.00	620
				112SDGV	01-07-92	1140	--	422
				112SDGV	04-07-92	1215	--	569
				112SDGV	07-13-92	1115	--	485
410401096204001	13N 10E30CBAA 1	41 04 01 N	096 20 40 W	110SDGV	01-07-92	0920	69.00	533
				110SDGV	01-08-92	1020	69.00	550
				110SDGV	01-14-92	1015	69.00	601
410348095202101	13N 10E30DBCC 1	41 03 48 N	095 20 21 W	110SDGV	04-07-92	1045	69.00	687
410303096192901	13N 10E32CABC 1	41 03 03 N	096 19 29 W	--	07-16-92	1130	91.00	493
				112SDGV	01-07-92	1030	86.00	488
				112SDGV	04-07-92	1120	86.00	427
				112SDGV	07-13-92	1015	86.00	537
THAYER COUNTY								
400037097371201	1N 3W35AC 1	40 00 37 N	097 37 12 W	112SDGV	08-27-92	1150	190.00	374
401436097232401	3N 1W11AD 1	40 14 36 N	097 23 24 W	112SDGV	07-27-92	1600	--	331
401238097354601	3N 3W24DA 1	40 12 38 N	097 35 46 W	112SDGV	08-27-92	1400	--	523
401857097484801	4N 4W18BD 1	40 18 57 N	097 48 48 W	112SDGV	08-25-92	1430	--	312
THURSTON COUNTY								
420519096273202	24N 9E6BBAB 2	42 05 19 N	096 27 32 W	211DKOT	07-15-92	1035	300.00	719
420825096292401	25N 8E11DCCC 1	42 08 25 N	096 29 24 W	112SDGV	07-14-92	1133	155.00	826
420848096245101	25N 9E9DCCC 1	42 08 48 N	096 24 51 W	112PLSC	07-20-92	1110	100.00	683
420746096195701	25N 10E19ABDD 1	42 07 46 N	096 19 57 W	112SDGV	07-20-92	1430	93.00	875
421317096262401	26N 9E17CCAA 1	42 13 17 N	096 26 24 W	112PLSC	07-14-92	0840	37.00	1020

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 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 ASCL) (00940)
SARPY COUNTY												
07-30-92	7.6	17.0	0.2	--	--	--	--	--	--	--	--	--
07-21-92	7.4	12.5	0.6	260	79	14	23	0.6	5.8	202	59	12
08-19-92	7.4	12.5	4.1	310	96	18	25	0.6	7.6	263	110	12
08-20-92	7.1	11.5	0.1	320	97	18	28	0.7	8.4	255	120	13
09-01-92	6.5	12.5	8.5	280	76	21	25	0.7	4.0	213	18	6.3
07-29-92	7.0	13.0	5.8	--	--	--	--	--	--	--	--	--
07-29-92	7.3	22.0	6.3	240	68	17	21	0.6	3.5	277	9.6	6.0
07-20-92	7.5	12.0	1.0	240	66	19	25	0.7	6.7	205	75	21
08-20-92	7.2	12.0	5.1	270	77	18	17	0.5	3.0	284	24	1.1
08-13-92	7.0	13.5	0.2	550	150	41	25	0.5	6.2	479	55	0.80
07-14-92	7.4	12.5	--	--	--	--	--	--	--	--	--	--
07-14-92	7.6	13.0	2.9	--	--	--	--	--	--	--	--	--
07-14-92	7.9	23.5	1.1	170	47	12	35	1	11	163	55	29
07-14-92	7.8	22.0	0.5	170	50	12	29	1	11	157	60	24
07-15-92	7.4	15.0	8.1	--	--	--	--	--	--	--	--	--
07-15-92	7.6	11.5	1.1	180	52	12	59	2	8.6	179	79	54
07-29-92	7.0	12.0	0.6	350	100	25	17	0.4	5.0	367	31	3.2
07-23-92	7.0	13.0	6.0	280	84	16	25	0.7	4.1	306	27	5.6
07-20-92	7.4	13.0	6.2	250	76	14	16	0.4	4.1	272	11	5.2
07-29-92	7.0	13.0	8.9	210	56	16	20	0.6	2.2	245	4.6	3.7
SAUNDERS COUNTY												
01-07-92	7.2	13.0	0	210	56	18	72	2	11	231	150	18
04-07-92	7.1	12.5	0	200	54	16	63	2	8.9	209	120	19
07-13-92	7.2	10.0	0.8	200	60	13	45	1	7.9	192	97	19
01-07-92	7.2	12.0	0.1	260	77	15	82	2	11	220	180	55
04-07-92	7.1	12.0	0	240	74	14	83	2	11	216	160	48
07-13-92	7.2	9.5	1.0	250	78	14	83	2	10	223	160	47
01-07-92	7.3	12.5	0	190	59	11	24	0.8	5.9	165	81	12
04-07-92	7.2	12.0	0	180	57	10	23	0.7	6.0	160	73	13
07-13-92	7.2	10.0	0.8	260	79	14	31	0.8	7.6	197	100	18
01-07-92	7.9	15.0	1.2	160	46	11	23	0.8	7.7	149	54	11
04-07-92	7.9	7.0	5.8	210	60	14	35	1	6.9	158	100	19
07-13-92	7.8	10.5	1.4	160	46	10	30	1	8.6	149	79	19
01-07-92	7.5	13.5	0.1	--	--	--	--	--	--	--	--	--
01-08-92	7.2	13.5	0.2	--	--	--	--	--	--	--	--	--
01-14-92	7.3	14.0	0.4	--	--	--	--	--				

CHEMICAL ANALYSES OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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, 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)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO ₄) (00660)	ANTI- MONY, DIS- SOLVED (μG/L AS SB) (01095)	ARSENIC, DIS- SOLVED (μG/L AS AS) (01000)	BARIUM, DIS- SOLVED (μG/L AS BA) (01005)
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SARPY COUNTY

07-30-92	--	--	--	--	--	<0.050	--	--	--	--	--	--
07-21-92	0.30	37	353	0.48	--	<0.050	--	--	--	--	4	160
08-19-92	0.30	35	465	0.63	--	<0.050	--	--	--	--	6	250
08-20-92	0.40	34	477	0.65	--	<0.050	--	--	--	--	2	270
09-01-92	0.30	32	444	0.60	--	30.0	--	--	--	--	2	180
07-29-92	--	--	--	--	--	2.30	--	--	--	--	--	--
07-29-92	0.30	25	329	0.45	--	2.40	--	--	--	--	<1	160
07-20-92	0.30	23	362	0.49	--	0.210	--	--	--	--	3	150
08-20-92	0.30	30	348	0.47	--	1.50	--	--	--	--	2	240
08-13-92	0.30	32	610	0.83	--	<0.050	--	--	--	--	3	400
07-14-92	--	--	--	--	--	0.070	--	--	--	--	--	--
07-14-92	--	--	--	--	--	1.30	--	--	--	--	--	--
07-14-92	0.40	25	318	0.43	--	1.10	--	--	--	--	5	90
07-14-92	0.40	24	308	0.42	--	0.720	--	--	--	--	5	91
07-15-92	--	--	--	--	--	<0.050	--	--	--	--	--	--
07-15-92	0.40	25	399	0.54	--	<0.050	--	--	--	--	9	210
07-29-92	0.30	35	441	0.60	--	0.770	--	--	--	--	3	190
07-23-92	0.20	32	386	0.52	--	1.80	--	--	--	--	<1	99
07-20-92	0.30	30	324	0.44	--	0.800	--	--	--	--	2	170
07-29-92	0.20	24	278	0.38	--	0.850	--	--	--	--	<1	150

SAUNDERS COUNTY

01-07-92	0.70	33	501	0.68	--	--	--	--	--	<1	4	40
04-07-92	0.70	32	442	0.60	--	--	--	--	--	1	3	40
07-13-92	0.70	31	392	0.53	--	--	--	--	--	1	4	36
01-07-92	0.80	31	588	0.80	--	--	--	--	--	<1	6	52
04-07-92	0.70	30	555	0.75	--	--	--	--	--	2	6	56
07-13-92	0.70	31	562	0.76	--	--	--	--	--	2	6	56
01-07-92	0.30	31	324	0.44	--	--	--	--	--	<1	3	85
04-07-92	0.40	30	310	0.42	--	--	--	--	--	2	3	87
07-13-92	0.40	33	403	0.55	--	--	--	--	--	<1	3	120
01-07-92	0.40	29	272	0.37	--	--	--	--	--	3	9	66
04-07-92	0.30	26	357	0.48	--	--	--	--	--	2	6	86
07-13-92	0.50	33	316	0.43	--	--	--	--	--	2	6	73
01-07-92	--	--	--	--	--	--	--	--	--	--	--	--
01-08-92	--	--	--	--	--	--	--	--	--	--	--	--
01-14-92	--	--	--	--	--	--	--	--	--	--	--	--
04-07-92	--	--	--	--	--	--	--	--	--	--	--	--
07-16-92	--	--	--	--	--	--	--	--	--	--	--	--
01-07-92	0.50	29	318	0.43	--	--	--	--	--	3	5	85
04-07-92	0.40	30	277	0.38	--	--	--	--	--	3	7	79
07-13-92	0.30	30	330	0.45	--	--	--	--	--	2	7	98

THAYER COUNTY

08-27-92	0.20	32	244	0.33	<0.010	3.70	<0.010	0.140	0.43	--	--	--
07-27-92	0.30	29	219	0.30	<0.010	2.50	<0.010	0.190	0.58	--	--	--
08-27-92	0.20	33	338	0.46	<0.010	6.50	<0.010	0.150	0.46	--	--	--
08-25-92	0.20	39	212	0.29	<0.010	2.10	<0.010	0.200	0.61	--	--	--

THURSTON COUNTY

07-15-92	--	--	--	--	--	<0.050	--	--	--	--	--	--
07-14-92	--	--	--	--	--	<0.050	--	--	--	--	--	--
07-20-92	0.40	24	427	0.58	--	6.70	--	--	--	--	1	160
07-20-92	--	25	--	--	--	0.054	--	--	--	--	--	380
07-14-92	--	--	--	--	--	<0.050	--	--	--	--	--	--

DATE	BERYL- LIUM, DIS- SOLVED (µG/L AS BE) (01010)	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)	MERCURY DIS- SOLVED (µG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (µG/L AS MO) (01060)
SARPY COUNTY												
07-30-92	--	--	--	--	--	--	--	--	--	--	--	--
07-21-92	<0.5	50	2.0	△△△	△△	<10	690	<10	17	310	--	<10
08-19-92	<0.5	50	<1.0	△△	△△	<10	1500	<10	25	550	--	<10
08-20-92	<0.5	60	<1.0	△△△	△△	<10	3500	<10	25	1200	--	<10
09-01-92	<0.5	60	<1.0	△△△	△△	<10	8	<10	14	<1	--	<10
07-29-92	--	--	--	--	--	--	--	--	--	--	--	--
07-29-92	<0.5	730	<1.0	△△△	△△	210	△	<10	12	6	--	<10
07-20-92	<0.5	60	<1.0	△△△	△△	<10	11	<10	15	1100	--	<10
08-20-92	<0.5	60	<1.0	△△△	△△	<10	6	<10	17	11	--	<10
08-13-92	<0.5	130	2.0	△△	△△	<10	9400	<10	67	1100	--	<10
07-14-92	--	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--	--
07-14-92	0.8	70	<1.0	△△	△△	10	△	<10	17	2	--	<10
07-14-92	0.8	70	<1.0	△△	△△	<10	△	<10	16	11	--	<10
07-15-92	--	--	--	--	--	--	--	--	--	--	--	--
07-15-92	0.8	70	<1.0	△△△	△△	<10	180	<10	19	850	--	<10
07-29-92	<0.5	590	<1.0	△△△△	△△	<10	10	<10	19	130	--	<10
07-23-92	<0.5	50	<1.0	△△△	△△	<10	3	<10	17	<1	--	<10
07-20-92	<0.5	50	2.0	△△△	△△	20	5	<10	15	4	--	<10
07-29-92	<0.5	550	<1.0	△△	△△	40	△	<10	8	<1	--	<10
SAUNDERS COUNTY												
01-07-92	<0.5	150	<1.0	△△	△△	<10	2400	<10	47	320	<0.1	<10
04-07-92	<0.5	120	<1.0	△△△	△△	<10	2300	<10	45	300	<0.1	<10
07-13-92	<0.5	110	1.0	△△△	△△	<10	2600	<10	38	310	<0.1	<10
01-07-92	<0.5	240	<1.0	△△△△	△△	<10	2900	<10	64	250	<0.1	<10
04-07-92	<0.5	220	<1.0	△△△△	△△	<10	2900	<10	65	250	<0.1	<10
07-13-92	<0.5	220	<1.0	△△△△	△△	<10	2900	<10	65	240	<0.1	<10
01-07-92	<0.5	40	<1.0	△△△△	△△	<10	47	<10	20	590	<0.1	<10
04-07-92	<0.5	40	<1.0	△△△△	△△	<10	170	<10	19	590	<0.1	<10
07-13-92	<0.5	50	3.0	△△△△	△△	<10	460	<10	19	830	<0.1	<10
01-07-92	<0.5	50	<1.0	△△△△	△△	<10	8	<10	17	<1	<0.1	<10
04-07-92	<0.5	50	<1.0	△△	△△	<10	△	<10	19	<1	<0.1	<10
07-13-92	<0.5	80	<1.0	△△	△△	<10	9	<10	20	3	<0.1	<10
01-07-92	--	--	--	--	--	--	--	--	--	--	--	--
01-08-92	--	--	--	--	--	--	--	--	--	--	--	--
01-14-92	--	--	--	--	--	--	--	--	--	--	--	--
04-07-92	--	--	--	--	--	--	--	--	--	--	--	--
07-16-92	--	--	--	--	--	--	--	--	--	--	--	--
01-07-92	<0.5	60	<1.0	△△△	△△	10	9	<10	19	30	<0.1	<10
04-07-92	<0.5	70	<1.0	△△△	△△	<10	8	<10	19	38	<0.1	<10
07-13-92	<0.5	50	<1.0	△△△	△△	<10	5	<10	17	59	<0.1	<10
THAYER COUNTY												
08-27-92	--	30	--	--	--	--	△	--	--	<1	--	--
07-27-92	--	50	--	--	--	--	△△	--	--	<1	--	--
08-27-92	--	40	--	--	--	--	△△	--	--	<1	--	--
08-25-92	--	20	--	--	--	--	△	--	--	<1	--	--
THURSTON COUNTY												
07-15-92	--	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--	--
07-20-92	<0.5	50	<1.0	△△	<△	<10	△	<10	21	1	--	<10
07-20-92	<0.5	--	1.0	△△	6	<10	6100	<10	42	670	--	<10
07-14-92	--	--	--	--	--	--	--	--	--	--	--	--

DATE	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)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)	ALPHA RADIO- WATER DISS AS TH-230 (PCI/L) (04126)	RADIUM 226, DIS- SOLVED, AS RADON METHOD (PCI/L) (09511)	ALPHA, COUNT, 2 SIGMA WAT DIS AS NAT U (µG/L) (75986)	ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L) (75987)	BETA, 2 SIGMA WATER, DISS, AS SR90 /Y90 (PCI/L) (75988)
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SARPY COUNTY

07-30-92	--	--	--	--	--	--	--	--	--	--	--	--
07-21-92	<10	<1	<1.0	380	<6	7	8.2	1.0	0.52	1.7	1.2	1.2
08-19-92	<10	<1	<1.0	520	<6	8	12	2.4	0.44	2.6	2.0	1.7
08-20-92	<10	<1	1.0	530	<6	<3	13	3.0	0.46	2.9	2.1	1.8
09-01-92	<10	2	<1.0	300	<6	<3	6.1	2.6	0.94	1.5	1.2	1.1
07-29-92	--	--	--	--	--	--	--	--	--	--	--	--
07-29-92	<10	2	2.0	260	<6	460	5.7	4.4	0.26	2.8	2.0	1.0
07-20-92	<10	<1	<1.0	320	<6	6	10	5.0	0.20	3.2	2.3	1.4
08-20-92	<10	5	<1.0	290	<6	7	7.6	4.5	0.24	2.7	2.0	1.2
08-13-92	<10	<1	3.0	1400	<6	17	10	1.4	0.65	2.5	1.8	2.0
07-14-92	--	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--	--
07-14-92	<10	4	<1.0	310	9	6	14	6.8	0.07	3.3	2.5	1.7
07-14-92	<10	3	<1.0	320	<6	4	16	2.1	0.09	2.4	1.5	1.9
07-15-92	--	--	--	--	--	--	--	--	--	--	--	--
07-15-92	<10	<1	<1.0	340	<6	3	14	4.9	0.45	3.5	2.5	1.7
07-29-92	<10	1	1.0	390	<6	9	9.6	6.2	1.3	3.5	2.5	1.5
07-23-92	<10	5	1.0	370	<6	7	9.7	4.9	0.49	3.1	2.2	1.5
07-20-92	<10	2	<1.0	260	<6	15	7.6	3.1	0.28	2.4	1.6	1.2
07-29-92	<10	<1	<1.0	220	<6	48	4.3	1.6	0.18	1.5	1.1	0.85

SAUNDERS COUNTY

01-07-92	<10	1	1.0	520	<6	5	--	--	--	--	--	--
04-07-92	<10	<1	<1.0	530	<6	3	--	--	--	--	--	--
07-13-92	<10	<1	<1.0	510	<6	5	--	--	--	--	--	--
01-07-92	<10	<1	<1.0	910	<6	5	--	--	--	--	--	--
04-07-92	<10	<1	<1.0	920	<6	4	--	--	--	--	--	--
07-13-92	<10	<1	<1.0	900	<6	5	--	--	--	--	--	--
01-07-92	<10	<1	1.0	370	<6	3	--	--	--	--	--	--
04-07-92	<10	<1	1.0	370	<6	6	--	--	--	--	--	--
07-13-92	<10	<1	<1.0	470	<6	10	--	--	--	--	--	--
01-07-92	<10	<1	<1.0	320	9	12	--	--	--	--	--	--
04-07-92	<10	<1	<1.0	420	<6	3	--	--	--	--	--	--
07-13-92	<10	1	<1.0	300	9	9	--	--	--	--	--	--
01-07-92	--	--	--	--	--	--	--	--	--	--	--	--
01-08-92	--	--	--	--	--	--	--	--	--	--	--	--
01-14-92	--	--	--	--	--	--	--	--	--	--	--	--
04-07-92	--	--	--	--	--	--	--	--	--	--	--	--
07-16-92	--	--	--	--	--	--	--	--	--	--	--	--
01-07-92	<10	<1	1.0	370	7	9	--	--	--	--	--	--
04-07-92	<10	<1	<1.0	330	<6	5	--	--	--	--	--	--
07-13-92	<10	2	<1.0	420	<6	5	--	--	--	--	--	--

THAYER COUNTY

[illegible]

THURSTON COUNTY

[illegible]

[illegible]

DATE	CARBON- TETRA- CHLO- RIDE TOTAL (µG/L (32102)	1,2-DI- CHLORO- ETHANE TOTAL (µG/L (32103)	BROMO- FORM TOTAL (µG/L (32104)	CHLORO- DI- BROMO- METHANE TOTAL (µG/L (32105)	CHLORO- FORM TOTAL (µG/L (32106)	TOLUENE TOTAL (µG/L (34010)	BENZENE TOTAL (µG/L (34030)	ACE- NAPHTH- YLENE TOTAL (µG/L (34200)	ACE- NAPHTH- ENE TOTAL (µG/L (34205)	ANTHRA- CENE TOTAL (µG/L (34220)	BENZO B FLUOR- AN- THENE TOTAL (µG/L (34230)	BENZO K FLUOR- AN- THENE TOTAL (µG/L (34242)
SARPY COUNTY												
07-30-92	--	--	--	--	--	--	--	--	--	--	--	--
07-21-92	--	--	--	--	--	--	--	--	--	--	--	--
08-19-92	--	--	--	--	--	--	--	--	--	--	--	--
08-20-92	--	--	--	--	--	--	--	--	--	--	--	--
09-01-92	--	--	--	--	--	--	--	--	--	--	--	--
07-29-92	--	--	--	--	--	--	--	--	--	--	--	--
07-29-92	--	--	--	--	--	--	--	--	--	--	--	--
07-20-92	--	--	--	--	--	--	--	--	--	--	--	--
08-20-92	--	--	--	--	--	--	--	--	--	--	--	--
08-13-92	--	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--	--
07-15-92	--	--	--	--	--	--	--	--	--	--	--	--
07-15-92	--	--	--	--	--	--	--	--	--	--	--	--
07-29-92	--	--	--	--	--	--	--	--	--	--	--	--
07-23-92	--	--	--	--	--	--	--	--	--	--	--	--
07-20-92	--	--	--	--	--	--	--	--	--	--	--	--
07-29-92	--	--	--	--	--	--	--	--	--	--	--	--
SAUNDERS COUNTY												
01-07-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0	<10.0	<10.0
04-07-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0	<10.0	<10.0
07-13-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0	<10.0	<10.0
01-07-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0	<10.0	<10.0
04-07-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0	<10.0	<10.0
07-13-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0	<10.0	<10.0
01-07-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0	<10.0	<10.0
01-07-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0	<10.0	<10.0
04-07-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0	<10.0	<10.0
07-13-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0	<10.0	<10.0
01-07-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0	<10.0	<10.0
01-07-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0	<10.0	<10.0
04-07-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0	<10.0	<10.0
07-13-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0	<10.0	<10.0
01-07-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0	<10.0	<10.0
01-08-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	--	--	--	--	--
01-14-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	--	--	--	--	--
04-07-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	--	--	--	--	--
07-16-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	--	--	--	--	--
01-07-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0	<10.0	<10.0
04-07-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0	<10.0	<10.0
07-13-92	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0	<10.0	<10.0
THAYER COUNTY												
08-27-92	--	--	--	--	--	--	--	--	--	--	--	--
07-27-92	--	--	--	--	--	--	--	--	--	--	--	--
08-27-92	--	--	--	--	--	--	--	--	--	--	--	--
08-25-92	--	--	--	--	--	--	--	--	--	--	--	--
THURSTON COUNTY												
07-15-92	--	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--	--
07-20-92	--	--	--	--	--	--	--	--	--	--	--	--
07-20-92	--	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

[illegible]

SARPY COUNTY

[illegible]

SAUNDERS COUNTY

[illegible]

THAYER COUNTY

[illegible]

THURSTON COUNTY

[illegible]

DATE	FLUOR- ENE TOTAL (µG/L (34381)	HEXA- CHLORO- CYCLO- PENT- ADIENE TOTAL (µG/L (34386)	HEXA- CHLORO- ETHANE TOTAL (µG/L (34396)	INDENO (1,2,3- CD) PYRENE TOTAL (µG/L (34403)	ISO- PHORONE TOTAL (µG/L (34408)	METHYL- BROMIDE TOTAL (µG/L (34413)	METHYL- CHLO- RIDE TOTAL (µG/L (34418)	METHYL- ENE CHLO- RIDE TOTAL (µG/L (34423)	N-NITRO- SODI-N- PROPYL- AMINE TOTAL (µG/L (34428)	N-NITRO- SODI- PHENY- LAMINE TOTAL (µG/L (34433)	N-NITRO- SODI- METHY- LAMINE TOTAL (µG/L (34438)
SARPY COUNTY											
07-30-92	--	--	--	--	--	--	--	--	--	--	--
07-21-92	--	--	--	--	--	--	--	--	--	--	--
08-19-92	--	--	--	--	--	--	--	--	--	--	--
08-20-92	--	--	--	--	--	--	--	--	--	--	--
09-01-92	--	--	--	--	--	--	--	--	--	--	--
07-29-92	--	--	--	--	--	--	--	--	--	--	--
07-29-92	--	--	--	--	--	--	--	--	--	--	--
07-20-92	--	--	--	--	--	--	--	--	--	--	--
08-20-92	--	--	--	--	--	--	--	--	--	--	--
08-13-92	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--
07-15-92	--	--	--	--	--	--	--	--	--	--	--
07-15-92	--	--	--	--	--	--	--	--	--	--	--
07-29-92	--	--	--	--	--	--	--	--	--	--	--
07-23-92	--	--	--	--	--	--	--	--	--	--	--
07-20-92	--	--	--	--	--	--	--	--	--	--	--
07-29-92	--	--	--	--	--	--	--	--	--	--	--
SAUNDERS COUNTY											
01-07-92	<5.0	<5.0	<5.0	<10.0	<5.0	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0
04-07-92	<5.0	<5.0	<5.0	<10.0	<5.0	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0
07-13-92	<5.0	<5.0	<5.0	<10.0	<5.0	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0
01-07-92	<5.0	<5.0	<5.0	<10.0	<5.0	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0
04-07-92	<5.0	<5.0	<5.0	<10.0	<5.0	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0
07-13-92	<5.0	<5.0	<5.0	<10.0	<5.0	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0
01-07-92	<5.0	<5.0	<5.0	<10.0	<5.0	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0
01-07-92	<5.0	<5.0	<5.0	<10.0	<5.0	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0
04-07-92	<5.0	<5.0	<5.0	<10.0	<5.0	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0
07-13-92	<5.0	<5.0	<5.0	<10.0	<5.0	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0
01-07-92	<5.0	<5.0	<5.0	<10.0	<5.0	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0
01-07-92	<5.0	<5.0	<5.0	<10.0	<5.0	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0
01-07-92	<5.0	<5.0	<5.0	<10.0	<5.0	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0
01-08-92	--	--	--	--	--	<0.2	<0.2	<0.2	--	--	--
01-14-92	--	--	--	--	--	<0.2	<0.2	<0.2	--	--	--
04-07-92	--	--	--	--	--	<0.2	<0.2	<0.2	--	--	--
07-16-92	--	--	--	--	--	<0.2	<0.2	<0.2	--	--	--
01-07-92	<5.0	<5.0	<5.0	<10.0	<5.0	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0
04-07-92	<5.0	<5.0	<5.0	<10.0	<5.0	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0
07-13-92	<5.0	<5.0	<5.0	<10.0	<5.0	<0.2	<0.2	<0.2	<5.0	<5.0	<5.0
THAYER COUNTY											
08-27-92	--	--	--	--	--	--	--	--	--	--	--
07-27-92	--	--	--	--	--	--	--	--	--	--	--
08-27-92	--	--	--	--	--	--	--	--	--	--	--
08-25-92	--	--	--	--	--	--	--	--	--	--	--
THURSTON COUNTY											
07-15-92	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--
07-20-92	--	--	--	--	--	--	--	--	--	--	--
07-20-92	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--

[illegible]

SARPY COUNTY

[illegible]

SAUNDERS COUNTY

[illegible]

THAYER COUNTY

[illegible]

THURSTON COUNTY

[illegible]

DATE	BENZOGHI PERYL ENE1,2 BENZOP ERYLENE TOTAL (µG/L (34521)	BENZO A ANTHRAC ENE1,2- BENZANT HRACENE TOTAL (µG/L (34526)	1,2-DI- CHLORO- BENZENE TOTAL (µG/L (34536)	1,2-DI- CHLORO- PROPANE TOTAL (µG/L (34541)	1,2- TRANSDI CHLORO- ETHENE TOTAL (µG/L (34546)	1,2,4- TRI- CHLORO- BENZENE TOTAL (µG/L (34551)	1,2,5,6 -DIBENZ -ANTHRA -CENEP TOTAL (µG/L (34556)	1,3-DI- CHLORO- PROPENE TOTAL (µG/L (34561)	1,3-DI- CHLORO- BENZENE TOTAL (µG/L (34566)	1,4-DI- CHLORO- BENZENE TOTAL (µG/L (34571)	2- CHLORO- ETHYL- VINYL- ETHER TOTAL (µG/L (34576)
SARPY COUNTY											
07-30-92	--	--	--	--	--	--	--	--	--	--	--
07-21-92	--	--	--	--	--	--	--	--	--	--	--
08-19-92	--	--	--	--	--	--	--	--	--	--	--
08-20-92	--	--	--	--	--	--	--	--	--	--	--
09-01-92	--	--	--	--	--	--	--	--	--	--	--
07-29-92	--	--	--	--	--	--	--	--	--	--	--
07-29-92	--	--	--	--	--	--	--	--	--	--	--
07-20-92	--	--	--	--	--	--	--	--	--	--	--
08-20-92	--	--	--	--	--	--	--	--	--	--	--
08-13-92	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--
07-15-92	--	--	--	--	--	--	--	--	--	--	--
07-15-92	--	--	--	--	--	--	--	--	--	--	--
07-29-92	--	--	--	--	--	--	--	--	--	--	--
07-23-92	--	--	--	--	--	--	--	--	--	--	--
07-20-92	--	--	--	--	--	--	--	--	--	--	--
07-29-92	--	--	--	--	--	--	--	--	--	--	--
SAUNDERS COUNTY											
01-07-92	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0	<10.0	<0.20	<5.0	<5.0	<0.2
04-07-92	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0	<10.0	<0.20	<5.0	<5.0	<0.2
07-13-92	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0	<10.0	<0.20	<5.0	<5.0	<0.2
01-07-92	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0	<10.0	<0.20	<5.0	<5.0	<0.2
04-07-92	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0	<10.0	<0.20	<5.0	<5.0	<0.2
07-13-92	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0	<10.0	<0.20	<5.0	<5.0	<0.2
01-07-92	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0	<10.0	<0.20	<5.0	<5.0	<0.2
01-07-92	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0	<10.0	<0.20	<5.0	<5.0	<0.2
01-07-92	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0	<10.0	<0.20	<5.0	<5.0	<0.2
01-07-92	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0	<10.0	<0.20	<5.0	<5.0	<0.2
04-07-92	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0	<10.0	<0.20	<5.0	<5.0	<0.2
07-13-92	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0	<10.0	<0.20	<5.0	<5.0	<0.2
01-07-92	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0	<10.0	<0.20	<5.0	<5.0	<0.2
01-07-92	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0	<10.0	<0.20	<5.0	<5.0	<0.2
01-07-92	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0	<10.0	<0.20	<5.0	<5.0	<0.2
01-08-92	--	--	<0.2	<0.2	<0.2	--	--	<0.20	<0.2	<0.2	<0.2
01-14-92	--	--	<0.2	<0.2	<0.2	--	--	<0.20	<0.2	<0.2	<0.2
04-07-92	--	--	<0.2	<0.2	<0.2	--	--	<0.20	<0.2	<0.2	<0.2
07-16-92	--	--	<0.2	<0.2	<0.2	--	--	<0.20	<0.2	<0.2	<0.2
01-07-92	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0	<10.0	<0.20	<5.0	<5.0	<0.2
04-07-92	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0	<10.0	<0.20	<5.0	<5.0	<0.2
07-13-92	<10.0	<10.0	<5.0	<0.2	<0.2	<5.0	<10.0	<0.20	<5.0	<5.0	<0.2
THAYER COUNTY											
08-27-92	--	--	--	--	--	--	--	--	--	--	--
07-27-92	--	--	--	--	--	--	--	--	--	--	--
08-27-92	--	--	--	--	--	--	--	--	--	--	--
08-25-92	--	--	--	--	--	--	--	--	--	--	--
THURSTON COUNTY											
07-15-92	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--
07-20-92	--	--	--	--	--	--	--	--	--	--	--
07-20-92	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--

DATE	2-CHLORO-NAPH- THALENE TOTAL (µG/L (34581)	2-CHLORO-PHENOL TOTAL (µG/L (34586)	2-NITRO-PHENOL TOTAL (µG/L (34591)	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)
SARPY COUNTY											
07-30-92	--	--	--	--	--	--	--	--	--	--	--
07-21-92	--	--	--	--	--	--	--	--	--	--	--
08-19-92	--	--	--	--	--	--	--	--	--	--	--
08-20-92	--	--	--	--	--	--	--	--	--	--	--
09-01-92	--	--	--	--	--	--	--	--	--	--	--
07-29-92	--	--	--	--	--	--	--	--	--	--	--
07-29-92	--	--	--	--	--	--	--	--	--	--	--
07-20-92	--	--	--	--	--	--	--	--	--	--	--
08-20-92	--	--	--	--	--	--	--	--	--	--	--
08-13-92	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--
07-15-92	--	--	--	--	--	--	--	--	--	--	--
07-15-92	--	--	--	--	--	--	--	--	--	--	--
07-29-92	--	--	--	--	--	--	--	--	--	--	--
07-23-92	--	--	--	--	--	--	--	--	--	--	--
07-20-92	--	--	--	--	--	--	--	--	--	--	--
07-29-92	--	--	--	--	--	--	--	--	--	--	--
SAUNDERS COUNTY											
01-07-92	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0
04-07-92	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0
07-13-92	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0
01-07-92	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0
04-07-92	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0
07-13-92	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0
01-07-92	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0
01-07-92	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0
04-07-92	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0
07-13-92	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0
01-07-92	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0
04-07-92	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0
07-13-92	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0
01-07-92	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0
01-07-92	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0
01-07-92	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0
01-08-92	--	--	--	--	--	--	--	--	--	--	--
01-14-92	--	--	--	--	--	--	--	--	--	--	--
04-07-92	--	--	--	--	--	--	--	--	--	--	--
07-16-92	--	--	--	--	--	--	--	--	--	--	--
01-07-92	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0
04-07-92	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0
07-13-92	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<20.0
THAYER COUNTY											
08-27-92	--	--	--	--	--	--	--	--	--	--	--
07-27-92	--	--	--	--	--	--	--	--	--	--	--
08-27-92	--	--	--	--	--	--	--	--	--	--	--
08-25-92	--	--	--	--	--	--	--	--	--	--	--
THURSTON COUNTY											
07-15-92	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--
07-20-92	--	--	--	--	--	--	--	--	--	--	--
07-20-92	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--

DATE	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-ORTHOCRESOL TOTAL (µG/L (34657)	DI-CHLORO-FLUOROMETHANE TOTAL (µG/L (34668)	PHENOL (C6H5OH) TOTAL (µG/L (34694)	NAPHTH-ALENE TOTAL (µG/L (34696)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (µG/L (34699)	CIS-1,3-DI-CHLORO-PROPENE TOTAL (µG/L (34704)	AMETRYN WATER, DISS, REC. (µG/L (38401)	PROP-AZINE WATER DISS REC (µG/L (38535)
SARPY COUNTY											
07-30-92	--	--	--	--	--	--	--	--	--	--	--
07-21-92	--	--	--	--	--	--	--	--	--	<0.05	<0.05
08-19-92	--	--	--	--	--	--	--	--	--	--	--
08-20-92	--	--	--	--	--	--	--	--	--	--	--
09-01-92	--	--	--	--	--	--	--	--	--	<0.05	<0.05
07-29-92	--	--	--	--	--	--	--	--	--	--	--
07-29-92	--	--	--	--	--	--	--	--	--	--	--
07-20-92	--	--	--	--	--	--	--	--	--	<0.05	<0.05
08-20-92	--	--	--	--	--	--	--	--	--	--	--
08-13-92	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	<0.05	<0.05
07-14-92	--	--	--	--	--	--	--	--	--	<0.05	<0.05
07-14-92	--	--	--	--	--	--	--	--	--	<0.05	<0.05
07-14-92	--	--	--	--	--	--	--	--	--	<0.05	<0.05
07-15-92	--	--	--	--	--	--	--	--	--	--	--
07-15-92	--	--	--	--	--	--	--	--	--	<0.05	<0.05
07-29-92	--	--	--	--	--	--	--	--	--	<0.05	<0.05
07-23-92	--	--	--	--	--	--	--	--	--	--	--
07-20-92	--	--	--	--	--	--	--	--	--	--	--
07-29-92	--	--	--	--	--	--	--	--	--	--	--
SAUNDERS COUNTY											
01-07-92	<5.0	<5.0	<30.0	<30.0	<0.2	<5.0	<5.0	<0.2	<0.2	<0.05	<0.05
04-07-92	<5.0	<5.0	<30.0	<30.0	<0.2	<5.0	<5.0	<0.2	<0.2	--	--
07-13-92	<5.0	<5.0	<30.0	<30.0	<0.2	<5.0	<5.0	<0.2	<0.2	<0.05	<0.05
01-07-92	<5.0	<5.0	<30.0	<30.0	<0.2	<5.0	<5.0	<0.2	<0.2	<0.05	<0.05
04-07-92	<5.0	<5.0	<30.0	<30.0	<0.2	<5.0	<5.0	<0.2	<0.2	--	--
07-13-92	<5.0	<5.0	<30.0	<30.0	<0.2	<5.0	<5.0	<0.2	<0.2	<0.05	<0.05
01-07-92	<5.0	<5.0	<30.0	<30.0	<0.2	<5.0	<5.0	<0.2	<0.2	<0.05	<0.05
04-07-92	<5.0	<5.0	<30.0	<30.0	<0.2	<5.0	<5.0	<0.2	<0.2	<0.05	<0.05
07-13-92	<5.0	<5.0	<30.0	<30.0	<0.2	<5.0	<5.0	<0.2	<0.2	<0.05	<0.05
01-07-92	<5.0	<5.0	<30.0	<30.0	<0.2	<5.0	<5.0	<0.2	<0.2	<0.05	<0.05
04-07-92	<5.0	<5.0	<30.0	<30.0	<0.2	<5.0	<5.0	<0.2	<0.2	--	--
07-13-92	<5.0	<5.0	<30.0	<30.0	<0.2	<5.0	<5.0	<0.2	<0.2	<0.05	<0.05
01-07-92	<5.0	<5.0	<30.0	<30.0	<0.2	<5.0	<5.0	<0.2	<0.2	<0.05	<0.05
01-08-92	--	--	--	--	<0.2	--	--	<0.2	<0.2	--	--
01-14-92	--	--	--	--	<0.2	--	--	<0.2	<0.2	--	--
04-07-92	--	--	--	--	<0.2	--	--	<0.2	<0.2	--	--
07-16-92	--	--	--	--	<0.2	--	--	<0.2	<0.2	--	--
01-07-92	<5.0	<5.0	<30.0	<30.0	<0.2	<5.0	<5.0	<0.2	<0.2	<0.05	<0.05
04-07-92	<5.0	<5.0	<30.0	<30.0	<0.2	<5.0	<5.0	<0.2	<0.2	--	--
07-13-92	<5.0	<5.0	<30.0	<30.0	<0.2	<5.0	<5.0	<0.2	<0.2	<0.05	<0.05
THAYER COUNTY											
08-27-92	--	--	--	--	--	--	--	--	--	--	--
07-27-92	--	--	--	--	--	--	--	--	--	--	--
08-27-92	--	--	--	--	--	--	--	--	--	--	--
08-25-92	--	--	--	--	--	--	--	--	--	--	--
THURSTON COUNTY											
07-15-92	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--
07-20-92	--	--	--	--	--	--	--	--	--	--	--
07-20-92	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--

SAUNDERS COUNTY

THAYER COUNTY

THURSTON COUNTY[illegible]

DATE	2,4,5-T DIS- SOLVED (µG/L (39742)	SILVEX, DIS- SOLVED (µG/L (39762)	ALA- CHLOR, WATER, DISS, REC, (µG/L (46342)	STYRENE TOTAL (µG/L (77128)	1,2-DIBROMO ETHANE WATER TOTAL (µG/L (77651)	TNT TOTAL (µG/L (81360)	RDX TOTAL (µG/L (81364)	XYLENE TOTAL WATER TOT REC (µG/L (81551)	2,4-DP DISSOLV (µG/L (82356)	1,2-DI- PHENYL- HYDRA- ZINE WATER TOT.REC (µG/L (82626)	METRI- BUZIN WATER DISSOLV (µG/L (82630)
SARPY COUNTY											
07-30-92	--	--	--	--	--	--	--	--	--	--	--
07-21-92	--	--	<0.05	--	--	--	--	--	--	--	<0.05
08-19-92	--	--	--	--	--	--	--	--	--	--	--
08-20-92	--	--	--	--	--	--	--	--	--	--	--
09-01-92	--	--	<0.05	--	--	--	--	--	--	--	<0.05
07-29-92	--	--	--	--	--	--	--	--	--	--	--
07-29-92	--	--	--	--	--	--	--	--	--	--	--
07-20-92	--	--	0.05	--	--	--	--	--	--	--	<0.05
08-20-92	--	--	--	--	--	--	--	--	--	--	--
08-13-92	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	<0.05	--	--	--	--	--	--	--	<0.05
07-14-92	--	--	<0.05	--	--	--	--	--	--	--	<0.05
07-14-92	--	--	<0.05	--	--	--	--	--	--	--	0.07
07-14-92	--	--	<0.05	--	--	--	--	--	--	--	<0.05
07-15-92	--	--	--	--	--	--	--	--	--	--	--
07-15-92	--	--	<0.05	--	--	--	--	--	--	--	<0.05
07-29-92	--	--	<0.05	--	--	--	--	--	--	--	<0.05
07-23-92	--	--	--	--	--	--	--	--	--	--	--
07-20-92	--	--	--	--	--	--	--	--	--	--	--
07-29-92	--	--	--	--	--	--	--	--	--	--	--
SAUNDERS COUNTY											
01-07-92	--	--	<0.05	<0.2	<0.2	<2.0	<2.0	<0.2	--	<5.0	<0.05
04-07-92	--	--	--	<0.2	<0.2	--	--	<0.2	--	<5.0	--
07-13-92	--	--	<0.05	<0.2	<0.2	--	--	<0.2	--	<5.0	<0.05
01-07-92	<0.01	<0.01	<0.05	<0.2	<0.2	<2.0	<2.0	<0.2	<0.01	<5.0	<0.05
04-07-92	--	--	--	<0.2	<0.2	--	--	<0.2	--	<5.0	--
07-13-92	--	--	<0.05	<0.2	<0.2	--	--	<0.2	--	<5.0	<0.05
01-07-92	--	--	<0.05	<0.2	<0.2	<2.0	<2.0	<0.2	--	<5.0	<0.05
04-07-92	<0.01	<0.01	<0.05	<0.2	<0.2	--	--	<0.2	<0.01	<5.0	<0.05
07-13-92	--	--	<0.05	<0.2	<0.2	--	--	<0.2	--	<5.0	<0.05
01-07-92	--	--	<0.05	<0.2	<0.2	--	--	<0.2	--	<5.0	<0.05
04-07-92	--	--	--	<0.2	<0.2	--	--	<0.2	--	<5.0	--
07-13-92	--	--	<0.05	<0.2	<0.2	--	--	<0.2	--	<5.0	<0.05
01-07-92	--	--	--	<0.2	<0.2	--	--	<0.2	--	--	<0.05
01-08-92	--	--	--	<0.2	<0.2	--	--	<0.2	--	--	--
01-14-92	--	--	--	<0.2	<0.2	--	--	<0.2	--	--	--
04-07-92	--	--	--	<0.2	<0.2	--	--	<0.2	--	--	--
07-16-92	--	--	--	<0.2	<0.2	--	--	<0.2	--	--	--
01-07-92	--	--	<0.05	<0.2	<0.2	--	--	<0.2	--	<5.0	<0.05
04-07-92	<0.01	<0.01	--	<0.2	<0.2	--	--	<0.2	<0.01	<5.0	--
07-13-92	--	--	<0.05	<0.2	<0.2	--	--	<0.2	--	<5.0	<0.05
THAYER COUNTY											
08-27-92	--	--	--	--	--	--	--	--	--	--	--
07-27-92	--	--	--	--	--	--	--	--	--	--	--
08-27-92	--	--	--	--	--	--	--	--	--	--	--
08-25-92	--	--	--	--	--	--	--	--	--	--	--
THURSTON COUNTY											
07-15-92	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--
07-20-92	--	--	--	--	--	--	--	--	--	--	--
07-20-92	--	--	--	--	--	--	--	--	--	--	--
07-14-92	--	--	--	--	--	--	--	--	--	--	--

CHEMICAL ANALYSES OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

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STATION	NUMBER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	GEOLOGIC UNIT	DATE	TIME	DEPTH OF WELL, TOTAL (FEET) (72008)
THURSTON COUNTY								
421350096271301	26N	9E18ABCB	1	42 13 50 N	096 27 13 W	211DKOT	07-14-92	0953 325.00
VALLEY COUNTY								
412849098484801	17N	13W4ABAA	1	41 28 49 N	098 48 48 W	121OGLL	08-13-92	1020 300.00
412720098494901	17N	13W8DD	1	41 27 20 N	098 49 49 W	121OGLL	08-13-92	1320 287.00
412829098583901	17N	14W6BCD	1	41 28 29 N	098 58 39 W	112SDGV	08-13-92	0930 504.00
413053098541701	18N	14W22DADD	1	41 30 53 N	098 54 17 W	121OGLL	08-13-92	1130 195.00
413305099034201	18N	15W8AAB	1	41 33 05 N	099 03 42 W	121OGLL	08-13-92	1455 235.00
413639099050501	19N	15W18DCCD	1	41 36 39 N	099 05 05 W	112PLSC	08-13-92	1535 --
413654099092001	19N	16W16DADC	1	41 36 54 N	099 09 20 W	121OGLL	08-13-92	1720 215.00
413452099071301	19N	16W35ABAA	1	41 34 52 N	099 07 13 W	121OGLL	08-13-92	1620 160.00
WASHINGTON COUNTY								
412752096204101	17N	10E7BBAC	1	41 27 52 N	096 20 41 W	112SDGV	07-22-92	1030 164.00
412636096183201	17N	10E16CBBB	1	41 26 36 N	096 18 32 W	112SDGV	09-03-92	1100 316.00
412454096122601	17N	11E29CABA	1	41 24 54 N	096 12 26 W	112SDGV	08-13-92	1649 144.00
412629096053001	17N	12E17CACA	1	41 26 29 N	096 05 30 W	112SDGV	07-20-92	1100 330.00
412559096005601	17N	12E24BACC	1	41 25 59 N	096 00 56 W	110QRNR	08-19-92	0805 --
412735095570101	17N	13E9ACDA	1	41 27 35 N	095 57 01 W	112SDGV	08-13-92	1433 82.00
413240096213301	18N	9E12CAAC	1	41 32 40 N	096 21 33 W	211DKOT	07-30-92	1120 172.00
413053096205401	18N	9E24DADA	1	41 30 53 N	096 20 54 W	112SDGV	08-19-92	1045 131.00
414020096130601	20N	11E30DCAA	1	41 40 20 N	096 13 06 W	112SDGV	07-15-92	1510 63.00
WEBSTER COUNTY								
401906098354803	4N	11W18AA	3	40 19 06 N	098 35 48 W	112SDGV	08-26-92	1255 168.00

CHEMICAL ANALYSES OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	TIME	SPECIFIC CON- DUCT- ANCE (μ S/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER ($^{\circ}$ C) (00010)	OXYGEN. DISSOLVED (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 ADSORP- TION RATIO (00931)	POTAS- SIUM DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINTY LAB (MG/L AS CaCO ₃) (90410)
THURSTON COUNTY												
07-14-92		1800	7.1	12.0	0.1	680	210	36	130	2	21	230
VALLEY COUNTY												
08-13-92		704	7.3	14.0	--	340	110	16	17	0.4	9.3	336
08-13-92		585	7.2	15.0	--	290	96	11	8.1	0.2	6.6	286
08-13-92		472	7.7	15.0	--	240	81	8.5	5.2	0.1	7.4	247
08-13-92		618	7.3	13.0	--	310	100	14	7.9	0.2	7.0	280
08-13-92		835	7.5	15.0	--	420	140	18	12	0.3	11	302
08-13-92		602	7.8	14.0	--	300	99	14	7.2	0.2	7.3	289
08-13-92		580	7.4	14.0	--	290	93	14	7.8	0.2	6.5	266
08-13-92		1860	7.3	14.0	--	940	320	35	50	0.7	28	293
WASHINGTON COUNTY												
07-22-92		891	6.9	12.0	2.4	410	120	27	20	0.4	8.9	302
09-03-92		677	7.1	12.5	4.1	--	--	--	--	--	--	--
08-13-92		656	7.2	12.0	5.8	320	94	21	18	0.4	2.2	314
07-20-92		715	7.5	17.5	1.2	--	--	--	--	--	--	--
08-19-92		786	7.2	12.5	0.1	340	100	21	37	0.9	3.6	433
08-13-92		1400	7.1	12.0	0.2	660	180	51	56	0.9	6.8	647
07-30-92		741	7.7	13.5	0.2	--	--	--	--	--	--	--
08-19-92		958	7.4	12.5	3.1	--	--	--	--	--	--	--
07-15-92		671	7.2	13.0	3.9	320	91	23	17	0.4	4.0	327
WEBSTER COUNTY												
08-26-92		622	7.7	14.0	--	280	94	12	12	0.3	5.6	222

CHEMICAL ANALYSES OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00943)	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, 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)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L ASPO ₄) (00660)
THURSTON COUNTY											
07-14-92560	110	1.3	11	1220	1.66	--	<0.050	--	--	--	--
VALLEY COUNTY											
08-13-92	50	3.9	0.20	61	475	0.65	<0.010	1.40	<0.010	0.030	0.09
08-13-92	24	5.4	0.30	59	388	0.53	<0.010	1.40	0.010	0.030	0.09
08-13-92	8.3	2.5	0.20	58	324	0.44	<0.010	1.10	<0.010	0.050	0.15
08-13-92	46	5.8	0.20	54	409	0.56	<0.010	1.40	<0.010	0.010	0.03
08-13-92	120	10	0.20	56	567	0.77	<0.010	4.20	<0.010	0.060	0.18
08-13-92	38	5.1	0.20	60	406	0.55	<0.010	<0.050	0.130	0.090	0.28
08-13-92	24	9.8	0.30	58	393	0.53	<0.010	4.40	<0.010	0.030	0.09
08-13-92	480	30	0.30	49	1330	1.81	<0.010	37.0	0.020	0.070	0.21
WASHINGTON COUNTY											
07-22-92	77	18	0.40	28	557	0.76	--	17.0	--	--	--
09-03-92	--	--	--	--	--	--	--	0.200	--	--	--
08-13-92	17	1.9	0.20	24	406	0.55	--	8.80	--	--	--
07-20-92	--	--	--	--	--	--	--	<0.050	--	--	--
08-19-92	0.80	5.9	0.20	34	467	0.63	--	<0.050	--	--	--
08-13-92	110	11	0.20	30	845	1.15	--	<0.050	--	--	--
07-30-92	--	--	--	--	--	--	--	0.190	--	--	--
08-19-92	--	--	--	--	--	--	--	<0.050	--	--	--
07-15-92	36	8.8	0.40	23	403	0.55	--	<0.050	--	--	--
WEBSTER COUNTY											
08-26-92	32	32	0.30	43	386	0.52	<0.010	4.80	<0.010	0.120	0.37

CHEMICAL ANALYSES OF GROUND WATER
WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

DATE	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)	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)
THURSTON COUNTY											
07-14-92	1	21	0.6	370	<1.0	<5	6	<10	2200	<10	160
VALLEY COUNTY											
08-13-92	--	--	--	70	--	--	--	--	5	--	--
08-13-92	--	--	--	50	--	--	--	--	10	--	--
08-13-92	--	--	--	50	--	--	--	--	6	--	--
08-13-92	--	--	--	60	--	--	--	--	8	--	--
08-13-92	--	--	--	50	--	--	--	--	<3	--	--
08-13-92	--	--	--	50	--	--	--	--	52	--	--
08-13-92	--	--	--	40	--	--	--	--	<3	--	--
08-13-92	--	--	--	160	--	--	--	--	17	--	--
WASHINGTON COUNTY											
07-22-92	<1	180	<0.5	80	<1.0	<5	<3	<10	66	<10	38
09-03-92	--	--	--	--	--	--	--	--	--	--	--
08-13-92	1	150	<0.5	40	<1.0	<5	<3	<10	16	<10	18
07-20-92	--	--	--	--	--	--	--	--	--	--	--
08-19-92	<1	250	<0.5	220	<1.0	<5	<3	<10	2900	<10	21
08-13-92	4	350	<0.5	140	<1.0	<5	<3	<10	9000	<10	69
07-30-92	--	--	--	--	--	--	--	--	--	--	--
08-19-92	--	--	--	--	--	--	--	--	--	--	--
07-15-92	14	230	0.7	80	<1.0	<5	6	<10	1500	<10	21
WEBSTER COUNTY											
08-26-92	--	--	--	40	--	--	--	--	<3	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1991 TO SEPTEMBER 1992

[illegible]

[illegible]

DATE _____

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 (04041)	CYANA- ZINE, WATER, DISS, REC (μ G/L (38401)	AMETRYN WATER, DISS, REC, (μ G/L (38401)	PROP- AZINE WATER DISS REC (μ G/L (38535)	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, DISS, DISSOLV (μ G/L (82630)
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07-14-92

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08-13-92

08-13-92	--	--	--	--	--	--	--	--
08-13-92	--	--	--	--	--	--	--	--
08-13-92	--	--	--	--	--	--	--	--
08-13-92	--	--	--	--	--	--	--	--
08-13-92	--	--	--	--	--	--	--	--
08-13-92	--	--	--	--	--	--	--	--
08-13-92	--	--	--	--	--	--	--	--
08-13-92	--	--	--	--	--	--	--	--

07-22-92

[illegible]

08-26-92

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FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI).

Multiply inch-pound units	By	To obtain SI units
<i>Length</i>		
inches (in)	2.54×10^1	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^0	kilometers (km)
<i>Area</i>		
acres	4.047×10^3	square meters (m ²)
	4.047×10^{-1}	square hectometers (hm ²)
	4.047×10^{-3}	square kilometers (km ²)
square miles (mi ²)	2.590×10^0	square kilometers (km ²)
<i>Volume</i>		
gallons (gal)	3.785×10^0	liters (L)
	3.785×10^0	cubic decimeters (dm ³)
	3.785×10^{-3}	cubic meters (m ³)
million gallons	3.785×10^3	cubic meters (m ³)
	3.785×10^{-3}	cubic hectometers (hm ³)
cubic feet (ft ³)	2.832×10^1	cubic decimeters (dm ³)
	2.832×10^{-2}	cubic meters (m ³)
cfs-days	2.447×10^3	cubic meters (m ³)
	2.447×10^{-3}	cubic hectometers (hm ³)
acre-feet (acre-ft)	1.233×10^3	cubic meters (m ³)
	1.233×10^{-3}	cubic hectometers (hm ³)
	1.233×10^{-6}	cubic kilometers (km ³)
<i>Flow</i>		
cubic feet per second (ft ³ /s)	2.832×10^1	liters per second (L/s)
	2.832×10^1	cubic decimeters per second (dm ³ /s)
	2.832×10^{-2}	cubic meters per second (m ³ /s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm ³ /s)
	6.309×10^{-5}	cubic meters per second (m ³ /s)
million gallons per day	4.381×10^1	cubic decimeters per second (dm ³ /s)
	4.381×10^{-2}	cubic meters per second (m ³ /s)
<i>Mass</i>		
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons



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