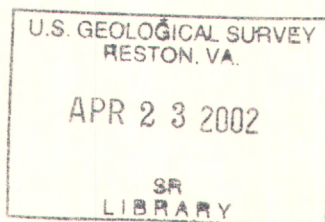
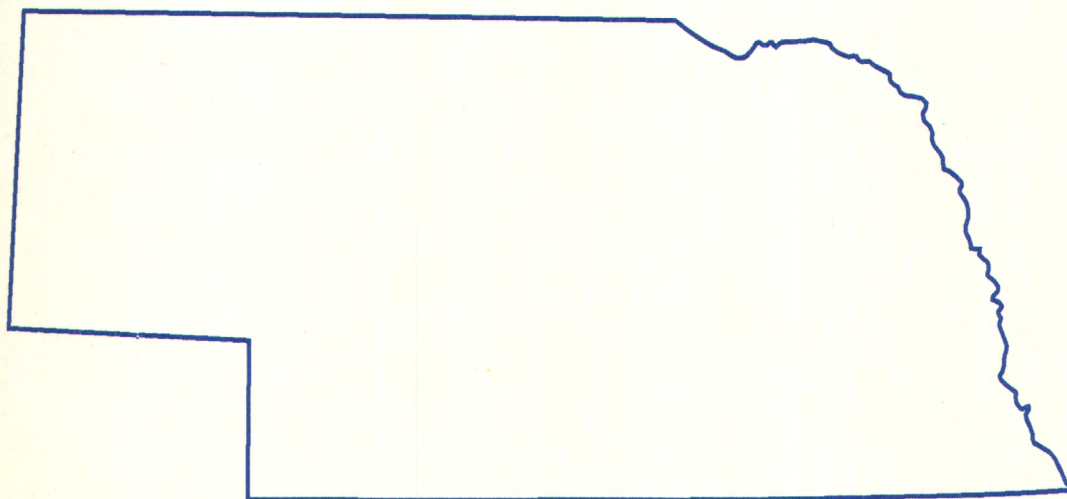
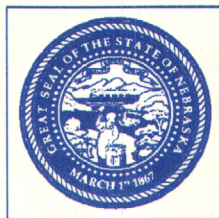


Water Resources Data Nebraska Water Year 2001

Water-Data Report NE-01-1



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



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

CALENDAR FOR WATER YEAR 2001

2000

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

2001

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

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

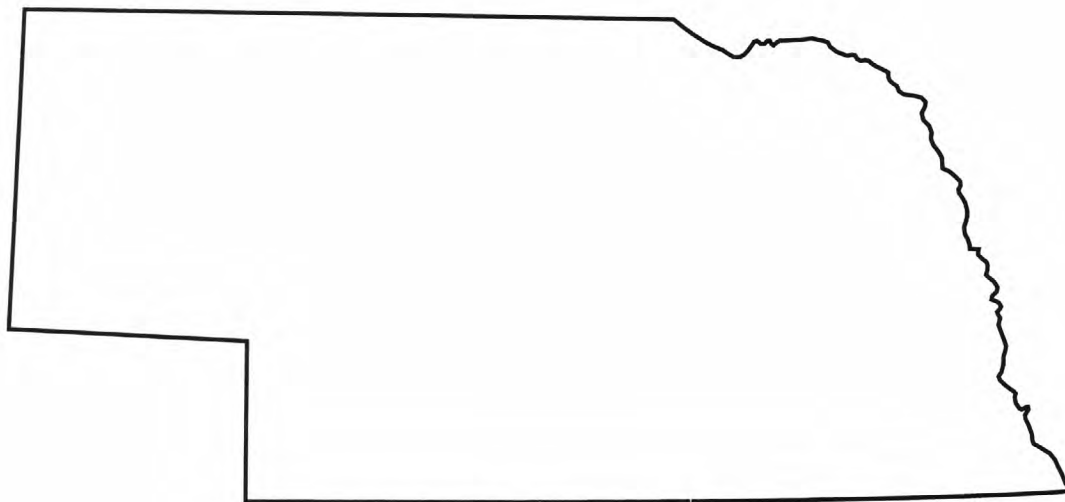
JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7				1	2	3	4							1
8	9	10	11	12	13	14	5	6	7	8	9	10	11	2	3	4	5	6	7	8
15	16	17	18	19	20	21	12	13	14	15	16	17	18	9	10	11	12	13	14	15
22	23	24	25	26	27	28	19	20	21	22	23	24	25	16	17	18	19	20	21	22
29	30	31			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

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

Water Resources Data Nebraska Water Year 2001

By D.E. Hitch, S.H. Hull, G.V. Steele, and M.J. Turner

Water-Data Report NE-01-1



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



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

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

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

PREFACE

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

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

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

P.J. Soenksen, J.S. Stanton, P.A. Bartz, J.D. Frankforter, V.L. McGuire, D.L. Rus, M.J. Griffin, K.E. Wilson, and S.K. Sebree of the District office.

V.C. Walczyk, T.P. Boyle, M.J. Andersen, and M.R. Pratt of the Lincoln field office.

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

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

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

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Water resources data for the 2001 water year for Nebraska consists of water-quality records for records of stage, discharge, and water quality of streams; stage and contents in lakes and reservoirs; and water levels and water quality in wells. This report contains discharge records for 98 streamflow-gaging stations, 45 partial-record or miscellaneous streamflow stations, (including 5 crest-stage gages); stage-only records for 3 streamflow stations; stage and contents for 7 lakes and reservoirs; water-quality records for 14 streamflow-gaging stations, 4 ungaged streamflow stations, and 97 wells; and water levels for 45 observation wells. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating Federal, State, and local agencies in Nebraska.

14. SUBJECT TERMS

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

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WATER RESOURCES DATA—NEBRASKA, 2001

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

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

	<i>Station number</i>	<i>Page</i>
MISSOURI RIVER BASIN		
PONCA CREEK BASIN		
Ponca Creek at Verdel (d) -----	4536	46
NIOBRARA RIVER BASIN		
Box Butte Reservoir near Hemingford (e) -----	4550	48
Merritt Reservoir near Burge (e) -----	4593	49
Niobrara River near Sparks (d c t) -----	4615	50
Long Pine Creek near Riverview (d c t) -----	4635	54
Keya Paha River at Wewela, SD (d) -----	4645	58
Niobrara River near Spencer (d) -----	4650	60
Niobrara River near Verdel (d) -----	4655	62
MISSOURI RIVER:		
Lewis and Clark Lake near Yankton, SD (e) -----	4670	66
Missouri River at Sioux City, IA (d) -----	4860	68
OMAHA CREEK BASIN		
Omaha Creek at Homer (d) -----	6010	70
Missouri River at Decatur (d) -----	6012	72
Missouri River at Omaha (d) -----	6100	74
PLATTE RIVER BASIN		
North Platte River (head of Platte River) at Wyoming-Nebraska State line (d) -----	6745	86
Lake McConaughy near Keystone (e) -----	6900	88
South Platte River:		
South Platte River at Julesburg, CO (d) -----	7640	90
South Platte River at Roscoe (d) -----	764880	92
Platte River:		
Plum Creek near Smithfield (d) -----	7675	94
Platte River near Overton (d c t) -----	7680	96
Spring Creek near Overton (d) -----	768020	100
Platte River Middle Channel at Cottonwood Ranch, near Elm Creek (d) -----	768035	102
Buffalo Creek near Overton (d) -----	7690	104
Elm Creek near Elm Creek (d) -----	769525	106
North Dry Creek 2 mi SW of Platte River Bridge S of Kearney (d) -----	770195	108
Platte River near Kearney (d) -----	7702	110
Fort Kearney Slough near Newark (d) -----	770240	112
Platte River near Newark (st) -----	770253	114
Platte River near Prosser (st) -----	770375	115
Platte River near Doniphan (st) -----	770470	116
Platte River near Grand Island (d) -----	7705	118
Warm Slough near Central City (d) -----	772775	120
Silver Creek at Mile 4 near Silver Creek (d) -----	772898	122
Prairie Creek near Silver Creek (d) -----	7735	124

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

	<i>Station number</i>	<i>Page</i>
MISSOURI RIVER BASIN--Continued		
PLATTE RIVER BASIN--Continued		
Platte River near Duncan (d) -----	7740	126
Middle Loup River (head of Loup River) at Dunning (d)-----	7755	130
Dismal River near Thedford (d c t s)-----	7759	132
South Loup River at St. Michael (d c t) -----	7840	138
Sherman Reservoir near Loup City (e) -----	7842	142
Middle Loup River at St. Paul (d c t)-----	7850	144
North Loup River at Taylor (d) -----	7860	148
Calamus Reservoir near Burwell (e)-----	7873	150
North Loup River near St. Paul (d c t) -----	7905	152
Loup River:		
Loup River Power Canal near Genoa (d) -----	7925	156
Loup River near Genoa (d) -----	7930	158
Beaver Creek at Genoa (d) -----	7940	160
Clear Creek 1.75 mi W of Polk County Line (d) -----	794650	164
Shell Creek near Columbus (d)-----	7955	166
Platte River at North Bend (d)-----	7960	168
Platte River near Leshara (d) -----	7965	170
Elkhorn River at Ewing (d) -----	7975	174
Elkhorn River at Norfolk (d) -----	7990	176
North Fork Elkhorn River near Pierce (d)-----	7991	178
Elkhorn River at Pilger (d)-----	799315	180
Elkhorn River at West Point (d)-----	799350	182
Logan Creek near Uehling (d) -----	7995	184
Maple Creek near Nickerson (d c t s) -----	8000	186
Elkhorn River at Waterloo (d)-----	8005	192
Platte River near Ashland (d)-----	8010	194
Olive Branch (head of Salt Creek) near Hallam (d c t)-----	801180	198
Salt Creek at Roca (d) -----	8030	202
Salt Creek at Pioneers Boulevard at Lincoln (d) -----	803080	204
Haines Branch at SW 56th St. at Lincoln (d) -----	803093	206
Middle Creek at SW 40th St at Lincoln (d) -----	803170	208
Oak Creek at Air Park Rd at Lincoln (d) -----	803486	210
Salt Creek at Lincoln (d)-----	8035	212
Little Salt Creek near Lincoln (d) -----	803510	214
Salt Creek at 70th St. at Lincoln (d)-----	803513	216
Stevens Creek near Lincoln (d)-----	803520	218
Rock Creek near Ceresco (d)-----	803530	220
Salt Creek at Greenwood (d) -----	803555	222
Wahoo Creek at Ithaca (d)-----	8040	224
Wahoo Creek at Ashland (d) -----	8047	226
Johnson Creek near Memphis (d) -----	8049	228
Platte River at Louisville (d c t s) -----	8055	230
WEeping WATER CREEK BASIN		
Weeping Water Creek at Union (d) -----	8065	238

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

	<i>Station number</i>	<i>Page</i>
MISSOURI RIVER BASIN--Continued		
MISSOURI RIVER:		
Missouri River at Nebraska City (d) -----	8070	240
LITTLE NEMAHA RIVER BASIN		
Little Nemaha River at Auburn (d) -----	8115	246
MISSOURI RIVER:		
Missouri River at Rulo (d)-----	8135	248
BIG NEMAHA RIVER BASIN		
Big Nemaha River:		
Turkey Creek near Seneca, KS (d)-----	8140	250
Big Nemaha River at Falls City (d) -----	8150	252
KANSAS RIVER BASIN		
Arikaree River (head of Kansas River) at Haigler (d) -----	8215	256
North Fork Republican River at Colorado-Nebraska State line (d)-----	8230	258
Republican River (continuation of Arikaree River):		
Buffalo Creek near Haigler (d) -----	8235	260
Rock Creek at Parks (d) -----	8240	262
South Fork Republican River near Benkelman (d) -----	8275	264
Republican River at Stratton (d)-----	8285	266
Enders Reservoir near Enders (e) -----	8320	268
Frenchman Creek at Palisade (d)-----	8340	270
Frenchman Creek at Culbertson (d) -----	8355	272
Driftwood Creek near McCook (d) -----	8365	274
Republican River at McCook (d)-----	8370	276
Red Willow Creek near Red Willow (d) -----	8380	278
Republican River at Cambridge (d)-----	8435	280
Republican River near Orleans (d c t) -----	8445	282
Sappa Creek:		
Sappa Creek near Beaver City (d) -----	8452	286
Beaver Creek at Cedar Bluffs, KS (d)-----	8465	288
Sappa Creek near Stamford (d)-----	8475	290
Prairie Dog Creek near Woodruff, KS (d) -----	8485	292
Republican River below Harlan County Dam (d) -----	8495	294
Courtland Canal at Nebraska-Kansas State line (d) -----	8525	296
Republican River at Guide Rock (d)-----	853020	298
Republican River near Hardy (d)-----	8535	300
Kansas River (continuation of Republican River):		
Big Blue River:		
West Fork Big Blue River near Dorchester (d) -----	8808	304
Big Blue River near Crete (d) -----	8810	306
Big Blue River at Barneston (d)-----	8820	308
Little Blue River near Deweese (d)-----	8830	310
Little Blue River near Fairbury (d) -----	8840	312
Little Blue River at Hollenberg, KS (d)-----	884025	314

WATER-RESOURCES DATA—NEBRASKA, 2001

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

Page

ADAMS COUNTY

Well 403403098244001	Local number	7N 10W 23AB-----	326
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BLAINE COUNTY

Well 414958100061501	Local number	22N 24W 33CA -----	326
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BOONE COUNTY

Well 413323098074501	Local number	18N 7W 4CA -----	326
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BUFFALO COUNTY

Well 404618098504401	Local number	9N 14W 1DC -----	327
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Well 404345098560001	Local number	9N 14W 19DD -----	327
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BUTLER COUNTY

Well 410612096592601	Local number	13N 4E 17ABA -----	328
----------------------	--------------	--------------------	-----

CHASE COUNTY

Well 403220101384001	Local number	7N 38W 28CC-----	328
----------------------	--------------	------------------	-----

Well 403235101395501	Local number	7N 38W 29CBB-----	328
----------------------	--------------	-------------------	-----

CHERRY COUNTY

Well 423205100321501	Local number	30N 28W 36AAA -----	329
----------------------	--------------	---------------------	-----

COLFAX COUNTY

Well 412810097054501	Local number	17N 3E 4CC -----	329
----------------------	--------------	------------------	-----

DAWSON COUNTY

Well 404949099445701	Local number	10N 21W 18DDD -----	329
----------------------	--------------	---------------------	-----

DUNDY COUNTY

Well 400155101521302	Local number	1N 40W 29BB2 -----	330
----------------------	--------------	--------------------	-----

FILLMORE COUNTY

Well 402504097432201	Local number	5N 4W 12BDC -----	330
----------------------	--------------	-------------------	-----

Well 403800097300701	Local number	8N 2W 26AD -----	331
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GARFIELD COUNTY

Well 414718099083201	Local number	21N 16W 14CB-----	331
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GROUND-WATER WELLS, BY COUNTY,
FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

				Page
GOSPER COUNTY				
Well 403626099451401	Local number	7N 21W 6BC -----		331
HALL COUNTY				
Well 405315098304302	Local number	11N 11W 25CC2 -----		332
HAMILTON COUNTY				
Well 404836097584101	Local number	10N 6W 27ACAA -----		332
Well 405514097573901	Local number	11N 6W 13CB-----		333
HARLAN COUNTY				
Well 400920099215501	Local number	2N 18W 9BCC -----		333
HOLT COUNTY				
Well 421605098203001	Local number	27N 9W 34DA -----		333
Well 423148098300601	Local number	30N 10W 32DAA -----		334
Well 423730098560001	Local number	31N 14W 27DDD -----		334
HOOKER COUNTY				
Well 420204101200502	Local number	24N 35W 23DC2-----		335
KEARNEY COUNTY				
Well 402625098594501	Local number	6N 15W 34DC -----		335
KIMBALL COUNTY				
Well 411416103361101	Local number	15N 55W 26CCC-----		336
LANCASTER COUNTY				
Well 403929096401001	Local number	8N 7E 18DDB -----		335
Well 403833096385501	Local number	8N 7E 20DDA -----		336
Well 404706096413001	Local number	10N 6E 36CDD -----		337
McPHERSON COUNTY				
Well 413130100531201	Local number	18N 31W 16DD -----		337
NUCKOLLS COUNTY				
Well 400240098111301	Local number	1N 8W 23AB -----		337

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

				Page
PHELPS COUNTY				
Well 403123099261501	Local number	6N 19W 2AA -----		338
PLATTE COUNTY				
Well 412955097192001	Local number	18N 1E 28CD -----		338
SALINE COUNTY				
Well 403855097072501	Local number	8N 3E 19ADA -----		338
SARPY COUNTY				
Well 410308096190701	Local number	13N 10E 32DBBA -----		339
SAUNDERS COUNTY				
Well 410558096210601	Local number	13N 9E 13ADBA -----		339
Well 410427096202501	Local number	13N 10E 19CDDD -----		340
Well 410340096202201	Local number	13N 10E 30CDDA -----		340
Well 410303096192901	Local number	13N 10E 32CABC -----		341
Well 411005096281502	Local number	14N 8E 24ACD2 -----		341
SCOTTS BLUFF COUNTY				
Well 415325103392801	Local number	22N 55W 11DDC -----		342
SEWARD COUNTY				
Well 405406097115001	Local number	11N 2E 21DD -----		342
VALLEY COUNTY				
Well 412955099123201	Local number	18N 16W 30CC -----		343
WEBSTER COUNTY				
Well 400423098314001	Local number	1N 11W 11AB -----		343
YORK COUNTY				
Well 405305097351503	Local number	11N 2W 31BA3 -----		343

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

DISCONTINUED SURFACE-WATER GAGING STATIONS

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

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

WATER RESOURCES DATA—NEBRASKA, 2001

DISCONTINUED SURFACE-WATER GAGING STATIONS--Continued

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

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

WATER RESOURCES DATA—NEBRASKA, 2001

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DISCONTINUED SURFACE-WATER GAGING STATIONS--Continued

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

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

DISCONTINUED SURFACE-WATER GAGING STATIONS--Continued

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

Station name	Station number	Drainage area (mi ²)	Period of record (water years)
Platte River Basin--Continued			
Lodgepole Creek at Ralton (d)	7635	3,307	
South Platte River at Big Springs (d)	7645	23,200	*1903
South Platte River at Paxton (d)	7650	24,000	1923-24, 1931-33, 1937-70
South Platte River at North Platte (d)	7655	24,300	1917-94
Fremont Slough near North Platte (d)	765710	--	1983-85
Platte River at Brady (d)	7660	56,200	1939-91
Platte River near Cozad (d)	7665	56,500	1938-91
Platte River near Lexington (d)	7670	57,300	1902-06, 1916-24
Buffalo Creek near Darr (d)	7685	63.0	1947-69
Elm Creek near Overton (d)	7695	31.0	1947-58
Platte River near Odessa (d)	7700	58,100	1938-91
Whisky Slough 1 mi E of Phelps-Kearney County Line (d)	770175	--	1996-98
North Dry Creek near Kearney (d)	770190	--	1969-71
Downstream Drain near Newark (d)	770255	--	1996-98
Platte River near Grand Island (South Channel) (d)	770478	--	1984-87
Wood River near Riverdale (d)	7710	379	1946-73
Wood River near Gibbon (d)	7715	526	1949-76, **1991-95
Wood River near Alda (d)	7720	599	1954-94
Dry Creek near Cairo (d)	7730	25	1949-53
Prairie Creek near Ovina (d)	773050	132	**1991-95, 1996-99
Silver Creek at Ovina (d)	773150	67.6	**1991-95
Middle Loup River near Mullen (d)	7745	1,120	1947-48
Middle Loup River near Seneca (d)	7750	1,140	1948-53
Dismal River near Gem (d)	7760	1,360	1947-53
Dismal River at Dunning (d)	7765	2,040	*1932, 1946-95
Middle Loup River near Milburn (d)	7770	3,690	1952-56, 1958, 1960-64
Middle Loup River at Walworth (d)	7775	4,650	1941-60
Middle Loup River at Sargent (d)	7780	4,480	1937-38, 1953-70
Middle Loup River near Comstock (d)	7785	4,960	*1937
Middle Loup River at Arcadia (d)	7790	5,040	1937-93
Middle Loup River at Loup City (d)	7795	4,860	1936-38, 1949-56
Middle Loup River at Rockville (d)	7800	5,310	1956-64, 1968-75
Boelus Power Canal near Boelus (d)	7805	--	1952-63
Middle Loup River at Boelus (d)	7810	--	1952-55
Middle Loup River at Boelus (combined flow)(d)	7815	--	1937-38

DISCONTINUED SURFACE-WATER GAGING STATIONS--Continued

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

Station name	Station number	Drainage area (mi ²)	Period of record (water years)
Platte River Basin--Continued			
South Loup River near Cumro (d)	7820	1,340	1946-53
South Loup River at Ravenna (d)	7825	1,660	1941-58, 1968-75
Mud Creek near Broken Bow (d)	7830	440	1949-53
Mud Creek near Sweetwater (d)	7835	707	1946-94
Oak Creek near Loup City (d)	7843	41.9	1952-60, 1961-64
Oak Creek near Dannebrog (d)	7845	122	1949-57
Turkey Creek near Dannebrog (d)	7848	66.2	1966-93
North Loup River at Brewster (d)	7855	1,890	1945-51
North Loup River at Burwell (d)	7865	2,510	1953-60
Calamus River near Harrop (d)	7870	693	1979-97
Calamus River near Burwell (d)	7875	994	1941-95
North Loup River near Burwell (d)	7880	--	1937-38, 1952-60
North Loup River at Ord (d)	7885	3,760	1952-94
Mira Creek near North Loup (d)	788988	65.8	1980-93
North Loup River at Scotia (d)	7890	3,960	1937-70
Davis Creek near Cotesfield (d)	7895	94.0	1949-58
North Loup River near Cotesfield (d)	7900	--	1950-56
Spring Creek at Cushing (d)	7910	164	1949-53
Cedar River near Spalding (d)	7915	752	1945-53, 1958-94
Spalding Power Canal at Spalding (d)	7917	--	1960-64
Cedar River at Primrose (d)	791750	870	1960-64
Cedar River at Belgrade (d)	7918	1,060	1960-65
Cedar River near Fullerton (d)	7920	1,220	1931-32, 1941-95
Fullerton Power Canal at Fullerton (d)	7921	--	1960-64
Beaver Creek at Loretto (d)	7935	311	1945-53, 1980-91
Loup River at Columbus (d)	7945	15,200	1895-1915, 1931, 1934-78
Shell Creek at Newman Grove (d)	7950	122	1949-67
Platte River near Fremont (d)	796450	--	1911-15
Elkhorn River near Atkinson (d)	796973	586	1983-91
Holt Creek near Emmet (d)	796978	--	1979-89
Elkhorn River at Emmet (d)	796985	--	1980-82
Elkhorn River at O'Neill (d)	7970	651	1931-32
South Fork Elkhorn River near Ewing (d)	7980	314	1948-53, 1961-72, 1978-91
Clearwater Creek near Clearwater (d)	7983	210	1962-64, 1978-91
Elkhorn River at Neligh (d)	7985	2,200	1931-93

DISCONTINUED SURFACE-WATER GAGING STATIONS--Continued

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

Station name	Station number	Drainage area (mi ²)	Period of record (water years)
Platte River Basin--Continued			
Elkhorn River at Meadow Grove (d)	7988	2,500	1960-65
Willow Creek near Foster (d)	799080	137	1976-93
Union Creek at Madison (d)	799230	174	1979-93
Pebble Creek at Scribner (d)	799385	204	1979-93
Logan Creek at Pender (d)	799450	731	1966-93
Salt Creek subwatershed No. 3 near Sprague(d)	8013	4.20	1955-59
Salt Creek subwatershed No. 1 near Roca (d)	8014	1.46	1955-61
Salt Creek subwatershed No. 12 near Roca (d)	8015	1.12	1954-61
Salt Creek subwatershed No. 34 near Roca (d)	8025	5.72	1954-61
Antelope Creek at 17th St., at Lincoln (d)	8034	12.1	1958-62
Oak Creek near Raymond (d)	803450	88.7	1963-67
Dee Creek at Greenwood (d)	803550	14.3	*1960
Cottonwood Creek above Czechland near Rescue	803920	--	
Cottonwood Creek tributary above Dam 6B near Prague	803935	--	1994-96
Silver Creek at Ithaca (d)	8045	80.0	1950-58
Salt Creek near Ashland (d)	8050	1,640	1948-67
Little Nemaha River Basin			
Little Nemaha River near Syracuse (d)	8105	218	1951-69
Brownell Creek subwatershed No. 1A near Syracuse (d)	8109	19	1955-69
Brownell Creek subwatershed No. 1 near Syracuse (d)	8110	.77	1955-69
Big Nemaha River Basin			
North Fork Big Nemaha River at Humboldt (d)	8145	548	1953-96
Muddy Creek at Verdon (d)	8155	186	1953-72
Kansas River Basin			
Pioneer Canal at CO-NE State Line (d)	8225	--	1950-51
Republican River at Benkelman (d)	8245	4,880	1947-94
Republican River at Max (d)	8280	7,740	1928-45
Muddy Creek at Stratton (d)	828490	157	1978
Swanson Lake near Trenton (e)	8290	8,620	1953-94
Republican River at Culbertson (d)	8300	8,450	1931-50
Frenchman Creek near Champion (d)	8305	700	1932-40
Frenchman Creek below Champion (d)	8310	721	1935-56
Frenchman Creek near Imperial (d)	8315	1,050	1941-94
Frenchman Creek near Enders (d)	8325	1,140	1947-93

DISCONTINUED SURFACE-WATER GAGING STATIONS--Continued

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

Station name	Station number	Drainage area (mi ²)	Period of record (water years)
Kansas River Basin--Continued			
Frenchman Creek near Hamlet (d)	8335	1,270	1929-56
Stinking Water Creek near Wauneta (d)	8345	1,330	1941-50
Stinking Water Creek near Palisade (d)	8350	1,500	1950-94
Blackwood Creek near Culbertson (d)	8360	320	1946-86
Red Willow Creek above Hugh Butler Lake (d)	8373	582	1961-94
Hugh Butler Lake near McCook (e)	837390	730	1961-94
Red Willow Creek near McCook (d)	8375	740	1941-47, 1961-93
Dry Creek near Bartley (d)	8385	5.24	1955-57
Medicine Creek at Maywood (d)	8390	231	1951-58
Brushy Creek near Maywood (d)	8395	95.3	1951-58
Fox Creek at Curtis (d)	8400	74.3	1952-58, 1978-91
Dry Creek near Curtis (d)	8405	20	1951-58
Medicine Creek above Harry Strunk Lake (d)	8410	770	1950-94
Mitchell Creek above Harry Strunk Lake (d)	8415	52.0	1950-74
Harry Strunk Lake near Cambridge (e)	8420	880	1949-94
Medicine Creek below Harry Strunk Lake (d)	8425	900	1950-94
Medicine Creek at Cambridge (d)	8430	909	1936-57
Muddy Creek at Arapahoe (d)	8440	246	1951-72, 1978-93
Turkey Creek at Edison (d)	844210	74.9	1978-93
Sappa Creek near Beaver City (d)	8452	1,480	1937-72
Beaver Creek near Beaver City (d)	8470	2,080	1937-94
Harlan County Lake near Republican City (e)	8490	20,750	1953-94
Turkey Creek at Naponee (d)	8500	129	1948-53
Cottonwood Creek near Bloomington (d)	8502	15.6	1948-56
Republican River near Bloomington (d)	8505	21,020	1929-57
Center Creek at Franklin (d)	8510	177	1948-56, 1978-93
Thompson Creek at Riverton (d)	8515	290	1948-56, 1969-75 1978-94
Elm Creek at Amboy (d)	8520	39.2	1948-54, 1978-93
Republican River near Guide Rock (d)	8530	22,040	1951-84
Beaver Creek near Rosemont (d)	8531	.75	1968-70
Big Blue River at Surprise (d)	8799	345	1964-93
Lincoln Creek near Seward (d)	8800	438	1954-73, 1974-94
Big Blue River at Seward (d)	8805	1,107	1954-94
Turkey Creek near Wilber (d)	8812	461	1960-94
Big Blue River at Beatrice (d)	8815	3,900	1911-15, 1975-94

WATER RESOURCES DATA—NEBRASKA, 2001

DISCONTINUED SURFACE-WATER GAGING STATIONS--Continued

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

Station name	Station number	Drainage area (mi ²)	Period of record (water years)
Little Blue River below Pawnee Creek, near Pauline (d)	8829	929	1963-68
Little Blue River at Angus (d)	8835	--	1950-53
Little Blue River near Alexandria (d)	883570	1,557	1960-72, 1975-92
Big Sandy Creek at Alexandria (d)	883940	607	1980-93

*Partial year only.

**Irrigation season only.

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

DISCONTINUED SURFACE-WATER CREST STAGE STATIONS

[mi², square mile; No., number;]

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

WATER RESOURCES DATA—NEBRASKA, 2001

DISCONTINUED SURFACE-WATER CREST STAGE STATIONS--Continued

[mi², square mile; No., number;]

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

DISCONTINUED SURFACE-WATER CREST STAGE STATIONS--Continued

[mi², square mile; No., number;]

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

DISCONTINUED SURFACE-WATER CREST STAGE STATIONS--Continued

[mi², square mile; No., number;]

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

DISCONTINUED SURFACE-WATER CREST STAGE STATIONS--Continued

[mi², square mile; No., number;]

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

DISCONTINUED SURFACE-WATER CREST STAGE STATIONS--Continued

[mi², square mile; No., number;]

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

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

DISCONTINUED SURFACE-WATER QUALITY STATIONS

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

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

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

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

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

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

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

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

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

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

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

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

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

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

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

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

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

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

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

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

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued
 [Type of record: c, chemical; m, microbiological; s, sediment; t, temperature]--Continued

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

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

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

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

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

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

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

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

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

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

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

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

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

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

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

Station name	Station number	Period of record (water years)	Type of record
Weeping Water Creek Basin			
Weeping Water Creek at Weeping Water	806460	1973-81	c m s t
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
***Enders Reservoir	8320	1952-57	c

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

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

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

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

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

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

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

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

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

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

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

Station name	Station number	Period of record (water years)	Type of record		
Kansas River Basin--Continued					
**Big Blue River at Barneston	8820	1967-68			
		1981-93	c	m	t
Plum Creek at Barneston	882050	*1968-69	c		
Big Blue Creek near Oketo, KS	8824	1961-64	c		
Sand Creek near Holstein	882550	*1969	c		
Cottonwood Creek near Roseland	882650	*1968-69	c		
Little Blue River below Pawnee Creek near Pauline	8829	*1965, *1968	c		
Pawnee Creek at Spring Ranch	882950	*1968-69	c		
**Little Blue River near Deweese	8830	1959-70, 1975-89	c	m	
		1979-81			t
		1953, 1955-61			s
Little Blue River above Oxbow Creek near Angus	8833	*1968	c		
Little Blue River at Angus	8835	1951-53			s
Elk Creek near Oak	883510	*1968-69	c		
Spring Creek at Hebron	883553	*1968-69	c		
Dry Creek near Hebron	883563	*1968-69	c		
Little Blue River near Alexandria (Gilead)	883570	*1968	c		
Big Sandy Creek near Davenport	883585	*1968-69	c		
Big Sandy Creek near Powell	883950	*1668-69	c		
Little Sandy Creek near Powell	883960	*1968-69	c		
Little Blue River at Fairbury	883995	*1968-69	c		
**Little Blue River near Fairbury	8840	1951-53, 1955-57			s
		1952-63, *1960-61,			
		*1968	c		
Rose Creek near Endicott	884010	*1968	c		
Little Blue River at Steele City	884020	*1968	c		
**** Little Blue River at Hollenberg, KS	884025	1972-90	c	s	t

*Less than 10 samples.

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

***Current reservoir stations.

****Station operated by Nebraska USGS.

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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 98 streamflow-gaging stations (continuous records), for 45 partial-record or miscellaneous streamflow stations, (including 5 crest-stage gages); (2) stage-only records for 3 streamflow stations; (3) stage and contents for 7 lakes and reservoirs; (4) water-quality records for 14 streamflow-gaging stations, 4 ungaged streamflow sites, and 97 wells; and (5) water-level records for 45 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 only contained data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that only contained data relating to water quality. Beginning with the 1975 water year, the report format was changed to present, in one volume, data on quantities of surface water, quality of surface and ground water, and ground-water levels.

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

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

COOPERATION

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

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

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

SUMMARY OF HYDROLOGIC CONDITIONS

Streamflow, chemical quality of streamflow, and ground-water levels are related to precipitation. The relation of these hydrologic characteristics to precipitation during water year 2001 at selected locations is discussed in this summary section.

Precipitation

Precipitation data from published reports of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service (NWS), and posted data from the National Climatic Data Center web site (accessed February 26, 2001), for the eight NWS divisions in Nebraska are listed in table 1. The locations of the NWS divisions in Nebraska are shown in figure 1. Precipitation for the normal period (1961-90) and NWS water year 2001, and departures from normal are shown for each quarter of the year to emphasize temporal as well as spatial variations of precipitation.

The precipitation totals for each division in Nebraska during water years 1999, 2000, and 2001 and normal precipitation (1961-90) are shown in figure 2. Precipitation for water year 2001 was significantly greater than for water year 2000, and similar to that for water year 1999, except for the Panhandle division, where the reverse was observed. Precipitation totals for each division for each month of water year 2001 and normal precipitation are shown in figure 3.

All divisions received greater-than-normal precipitation during the first quarter of and for the entire water year of 2001 (table 1). Departures from normal precipitation varied from 0.27 inches in the East Central division to 10.15 inches in the Southeast division during the 2001 water year. Except for the Southeast division, all divisions had precipitation within 20 percent of normal for the second and third quarters. The Southeast division had greater-than-normal precipitation for all quarters of the 2001 water year and more than 50 percent above-normal precipitation in the second and third quarters. Precipitation was more variable in the fourth quarter, with the three northern divisions at 25 percent or greater above normal and the three southern divisions at 10 to 25 percent.

Streamflow

Streamflow during water year 2001 compared to long-term records at representative streamflow-gaging stations is shown in figure 1. These representative stations have drainage areas within or mostly within the eight NWS division boundaries. The monthly mean flows for the current water year for each of these representative stations are compared to the monthly mean flows for the long-term record for each of these stations and to the precipitation data for the appropriate NWS

divisions. Although a station may lie outside a division boundary, the comparison of flow is made to the current year's precipitation within the division where most of the drainage area lies.

The individual graphs demonstrate the varied streamflow conditions in the State during water year 2001. For stations with significant streamflow regulation, 06803555 (Salt Creek at Greenwood) and 06843500 (Republican River at Cambridge), the period of record used for the long-term mean is from the completion of the last known storage structure or from the latest change in streamflow regulation upstream from the gage. For the following discussion, refer to figure 1 for streamflow data and to figure 3 for precipitation data unless noted otherwise.

Data for station 06454500, Niobrara River above Box Butte Reservoir, in the Panhandle division, was supplied by the Nebraska Department of Natural Resources. Streamflow was less than the long-term record after October although precipitation was slightly above normal overall. Streamflow recovered to near the long-term record during April and May and some recovery occurred during July and September because of above-normal precipitation in April, July, and September.

Station 06786000, North Loup River at Taylor, located in the southern part of the North Central division, receives runoff from the Sandhills in the west-central to south-central parts of the division. Precipitation in the North Central division was 5.06 inches greater than normal (table 1) for the water year and almost three times the normal for April. Streamflow was greater than the long-term record for every month of the water year and over 50 percent greater during April. Because of the Sandhills, infiltration is high, surface runoff is usually low, and streamflow remains relatively steady because a significant part of the streamflow is derived from ground-water discharge.

Station 06800500, Elkhorn River at Waterloo, is located in the East Central division of the State. Its drainage area includes the eastern part of the North Central division, as well as most of the Northeast division and part of the East Central division. Flow was close to the long-term mean from the beginning of the water year through February. Precipitation was 6.43 inches greater than normal (table 1). Most of the excess occurred in April, May, and July, and resulted in monthly discharges being $1\frac{1}{2}$ to $2\frac{1}{2}$ times their long-term mean. For the water year discharge was 31 percent above the long-term mean.

Station 06784000, South Loup River at St. Michael, is located near the southern edge of the Sandhills region in the Central division of the State. Flow generally follows the precipitation pattern of the entire division because the drainage area covers a significant part of the Central division. Flow was less than normal from October through February, but increased to

Table 1. Precipitation and departures from normal, water year 2001

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

National Weather Service division	Precipitation														
	First quarter (October-December)			Second quarter (January-March)			Third quarter (April-June)			Fourth quarter (July-September)			Totals (October-September)		
	Normal	Water year 2001	Departure (%)	Normal	Water year 2001	Departure (%)	Normal	Water year 2001	Departure (%)	Normal	Water year 2001	Departure (%)	Normal	Water year 2001	Departure (%)
Panhandle	1.80	2.36	0.56	1.77	1.49	-0.28	7.80	6.63	-1.17	5.39	6.79	1.40	16.76	17.27	0.51
North Central	2.59	3.95	1.36	2.34	2.39	0.05	9.03	10.76	1.73	7.68	9.60	1.92	21.64	26.70	5.06
Northeast	3.60	5.18	1.58	3.10	2.70	-0.40	10.48	12.08	1.60	8.66	12.31	3.65	25.84	32.27	6.43
Central	3.05	4.62	1.57	2.77	2.77	0.00	10.12	10.06	-0.06	8.48	8.06	-0.42	24.42	25.51	1.09
East Central	4.40	5.23	0.83	3.46	3.72	0.26	11.20	13.11	1.91	10.11	7.38	-2.73	29.17	29.44	0.27
Southwest	2.17	4.48	2.31	2.11	1.91	-0.20	8.58	7.46	-1.12	6.72	8.15	1.43	19.58	22.00	2.42
South Central	2.93	4.18	1.25	2.70	3.18	0.48	9.86	9.24	-0.62	8.85	10.57	1.72	24.34	27.17	2.83
Southeast	4.62	4.90	0.28	3.68	5.63	1.95	11.02	17.59	6.57	11.02	12.37	1.35	30.34	40.49	10.15

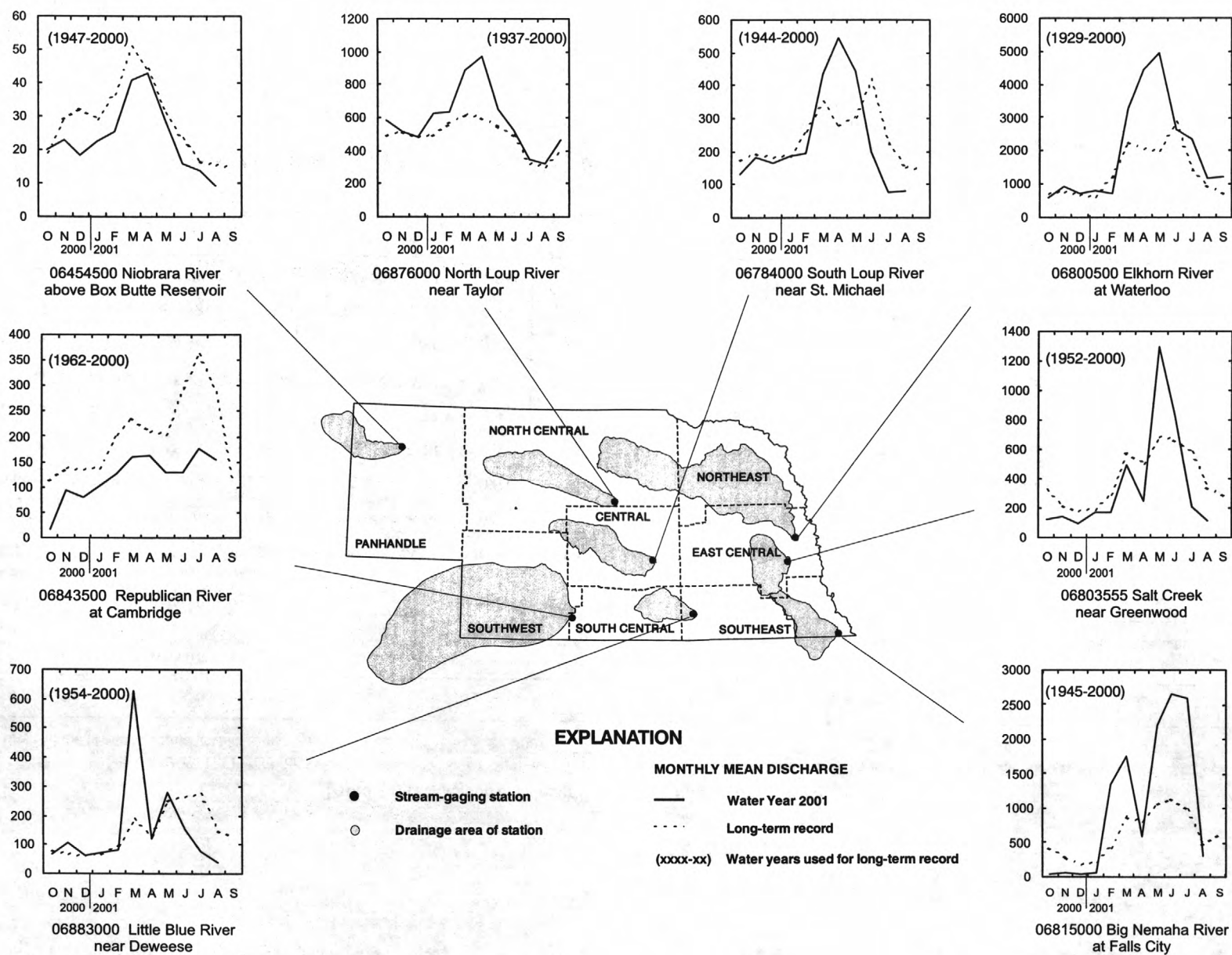


Figure 1. Streamflow data for water year 2001 and the long-term record. Refer to page 5 for precipitation graphs (fig. 3).

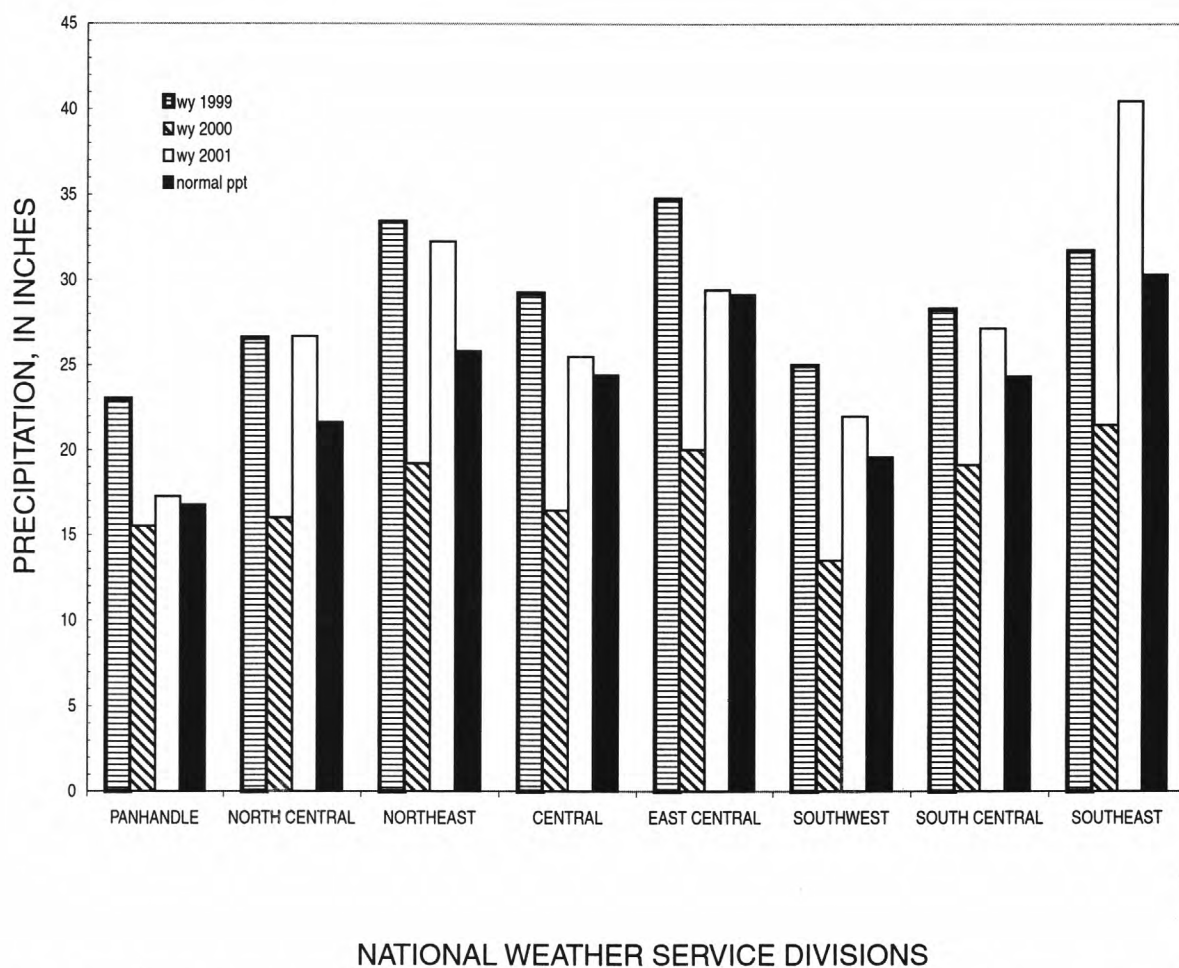


Figure 2. Precipitation for water years 1999, 2000, and 2001 and normal precipitation (1961-90) for the eight National Weather Service divisions in Nebraska.

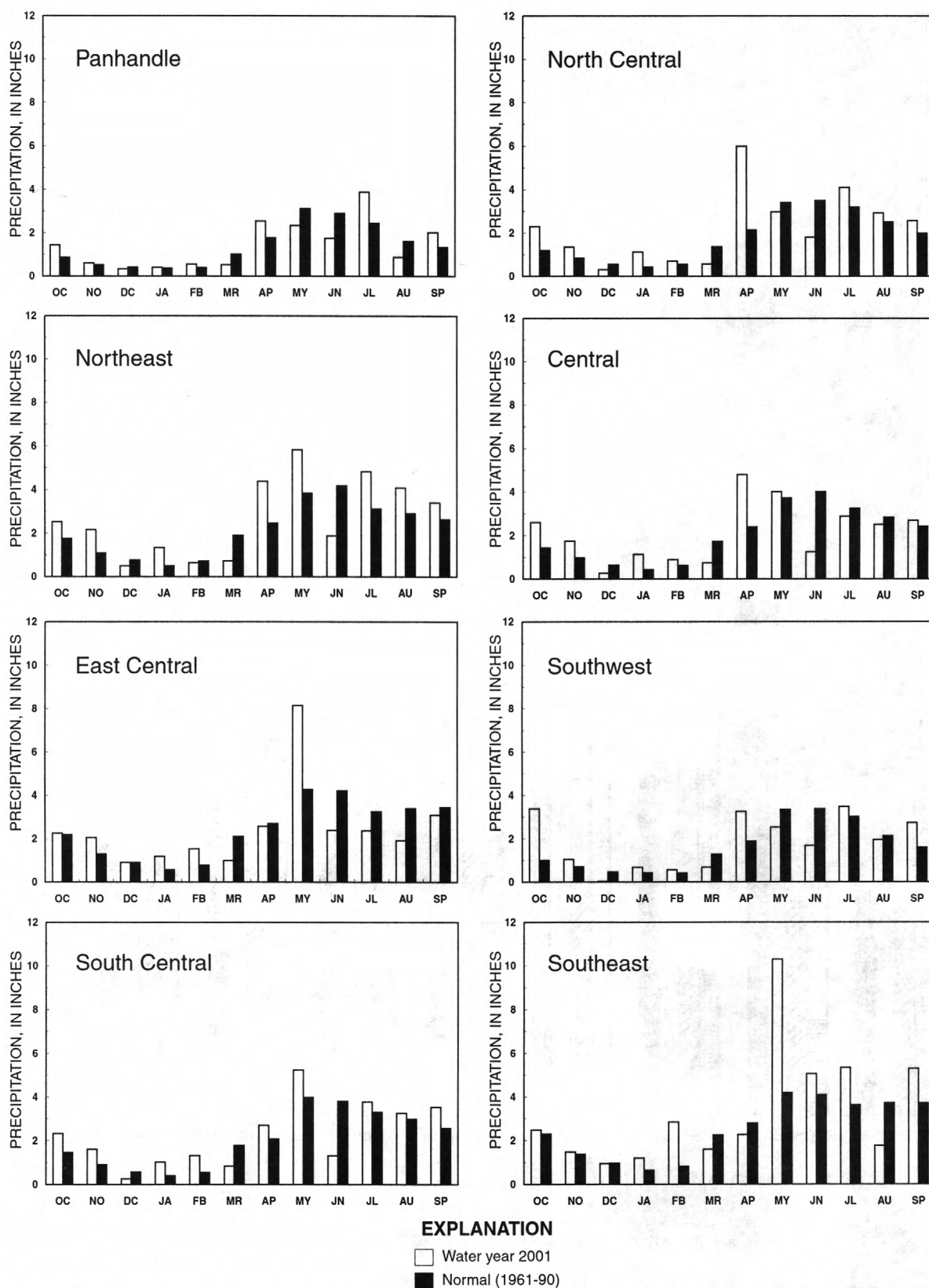


Figure 3. Monthly precipitation for water year 2001 and normal precipitation (1961-90) for each National Weather Service division in Nebraska.

greater than normal during the months of March through May. Because March precipitation was less than half the normal, its streamflow increase probably represented the warm-weather release of stored winter precipitation. April precipitation was twice the normal and resulted in nearly an identical streamflow increase compared to the long-term record. Flow was less than normal for the rest of the water year as a result of a large precipitation deficit in June and lesser deficits in July and August.

Station 06803555, Salt Creek at Greenwood, is located in and receives runoff almost entirely from the East Central division. Flow was less than the long-term mean for October, and was less for every month except May and June. Precipitation was almost identical to normal for the water year (table 1), but during May it was almost twice the normal. Discharge for May was over twice the long-term mean as a result.

Data for station 06843500, Republican River at Cambridge, was supplied by the Nebraska Department of Natural Resources. This station is located near the eastern edge of the Southwest division and has a drainage area encompassing most of the Southwest division as well as parts of northeastern Colorado and northwestern Kansas; only a little more than 50 percent of the area contributes to surface runoff. Monthly streamflow was less than the long-term record during the entire water year although precipitation was 2.42 inches greater than normal. Reduced streamflow may be because of the much larger deficit in precipitation for the previous year that resulted in streamflow much less than the long-term record coming into this water year. It may also be due to irrigation-induced depletion of ground water and reduction of baseflow to the stream.

Although station 06883000, Little Blue River near Deweese, is located in the Southeast division, this station receives runoff from areas mostly in the South Central division. Until March of the water year, flow was near the long-term mean. In March, the mean flow was more than three times the long-term mean, although precipitation was less than 50 percent of normal. Precipitation was more than 150 percent of normal for October and November, and more than 200 percent in January and February. This likely resulted in saturated conditions prior to freezing weather and significant amounts of stored precipitation that was released during March as temperatures increased above freezing. The mean for the year was practically identical to that for the long-term mean.

Station 06815000, Big Nemaha River at Falls City, located in the southeast part of the Southeast division, receives runoff from the eastern part of the division. Monthly streamflow at this gaging station was less than the long-term record for the first four months of the year. For six of the eight remaining months, streamflow was substantially higher than the long-term means, with the annual mean being 41 percent above that for the long-term record. This was due to precipitation for the year being over 25 percent higher and 10.15 inches above normal (table 1). In May, precipitation was about $2\frac{1}{2}$ times normal, and streamflow was over twice the long-term mean.

Water Quality

Water samples were collected to determine the water quality at various surface-water stations around the State. Parameters measured included specific conductance, pH, temperature (both water and air), barometric pressure, dissolved oxygen, sediment, bacteria, nutrients, and major ions.

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

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

Ground-Water Levels

Water-level changes during water year 2001 were determined from a statewide network of observation wells measured by 28 Federal, State, and local agencies. The network consists of approximately 3,000 wells measured annually, semiannually, or monthly and 70 wells equipped with continuous recorders. Because of the importance of ground water as a source for irrigation and municipal supplies, most observation wells in Nebraska are located in those areas where large quantities of ground water are withdrawn. Water-level fluctuations in selected observation wells for water years 2000 and 2001 are shown in figure 4. Data from 45 observation wells are included in this report; 19 of these wells are equipped with continuous recorders.

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

In water year 2000, total precipitation was less than normal in all divisions (fig. 2), providing less water available for recharge to the aquifers, but for water year 2001, precipitation

was more than normal for all divisions (table 1). Water level changes in the individual divisions are described next.

The hydrograph for the observation well in Scotts Bluff County (fig. 4) shows the influences of recharge from surface-water irrigation canals. Ground-water levels typically reach their highest levels in early to late spring (March through June) prior to ground-water withdrawals for irrigation. Exceptions to this can occur when leakage from surface-water irrigation canals, typically operating from May-June through September, recharge shallow aquifers. At the end of surface-water irrigation, infiltration of surface water slows or stops, and by late spring, ground-water levels return to pre-irrigation conditions. Because water levels in this well are affected by surface-water irrigation, annual comparisons are made from June to June (typically the lowest water levels during the year) rather than at the end of the water year. The lowest water level in June 2001 was slightly higher (0.13 foot) than the lowest water level in June 2000.

Water-level fluctuations for an observation well in Holt County (fig. 4) are generally representative of water-level fluctuations in wells in the North-Central division of the State. Except for December 2000 and March 2001, precipitation in the division was above normal from October through April. In December and March, precipitation was about one-half of normal. Water-level rises during the nonirrigation season (October to May) were insufficient until April, when rainfall of almost 4 inches above normal fell. Ground-water levels rose more than 2 feet from April into June. Less than normal precipitation during May and June and withdrawals of ground water for irrigation likely contributed to ground-water-level declines. In contrast, water levels in this well rose slightly in July and September. These rises likely are attributable to greater-than-normal precipitation that fell in the area from July through September. The precipitation also lessened the need for ground-water withdrawals for irrigation. The water level at the end of water year 2001 was 2.99 feet higher than at the end of water year 2000.

In the Central division in Nebraska, monthly total precipitation was above normal from October 2000 through May 2001, except during December and March when precipitation was below normal. The hydrograph for the Buffalo County well (fig. 4), which generally is representative of hydrographs for wells in this division, shows that precipitation through March was not substantial enough to recharge the aquifer much above the lowest water levels in water year 2000. However, monthly precipitation amounts in April 2001 were substantial and twice the normal. Therefore, water levels started to rise with increased recharge to the aquifer. Water levels continued to rise through the month of June when irrigation generally starts in this division. Monthly precipitation for June was one-third of normal, and July and August were slightly below normal. These months typically experience the largest ground-water withdrawals for irrigation. The hydrograph of the Buffalo County well shows the results of the ground-water withdrawals for irrigation as ground-water levels declined from July through the middle of September. The water level at the end

of water year 2001 was 0.44 foot higher than at the end of water year 2000.

The hydrograph for the observation well in Seward County (fig. 4) is generally representative of water-level fluctuations that occurred in the East Central division of the State during water years 2000 and 2001. From October 2000 to May 2001 monthly precipitation equaled or exceeded the normal monthly precipitation during all months except March and April. During March, precipitation was only one-half of normal. Although most months had above-normal precipitation, recharge to the aquifer from January through June was insufficient to raise water levels. In fact, the highest annual water level for this observation well occurred in January 2001. Typically, the highest water levels for observation wells in this area occur during March to May. Following the start-up of ground-water withdrawals for irrigation in June, ground-water levels began to decline. Water levels continued to decline through the early part of September. Water levels near the end of water year 2001 were 1.9 feet lower than levels at the end of water year 2000.

Water-level fluctuations shown for an observation well in Chase County (fig. 4) are representative of those that occurred in irrigated areas in the Southwest division of the State during water years 2000 and 2001. Water levels in this well did not recover back to the April 2000 levels during water year 2001. This likely resulted from the large depths to water of about 100 feet and inadequate recharge caused in part by insufficient precipitation from April through August 2000 and May and June 2001. Compared to normal, May and June were more than 4 inches less in 2000 and more than 2½ inches less in 2001. Such large depths to water can prevent or retard recharge by what little precipitation did fall in the area. The water level in this well near the end of water year 2001 was 2.75 feet lower than at the end of water year 2000.

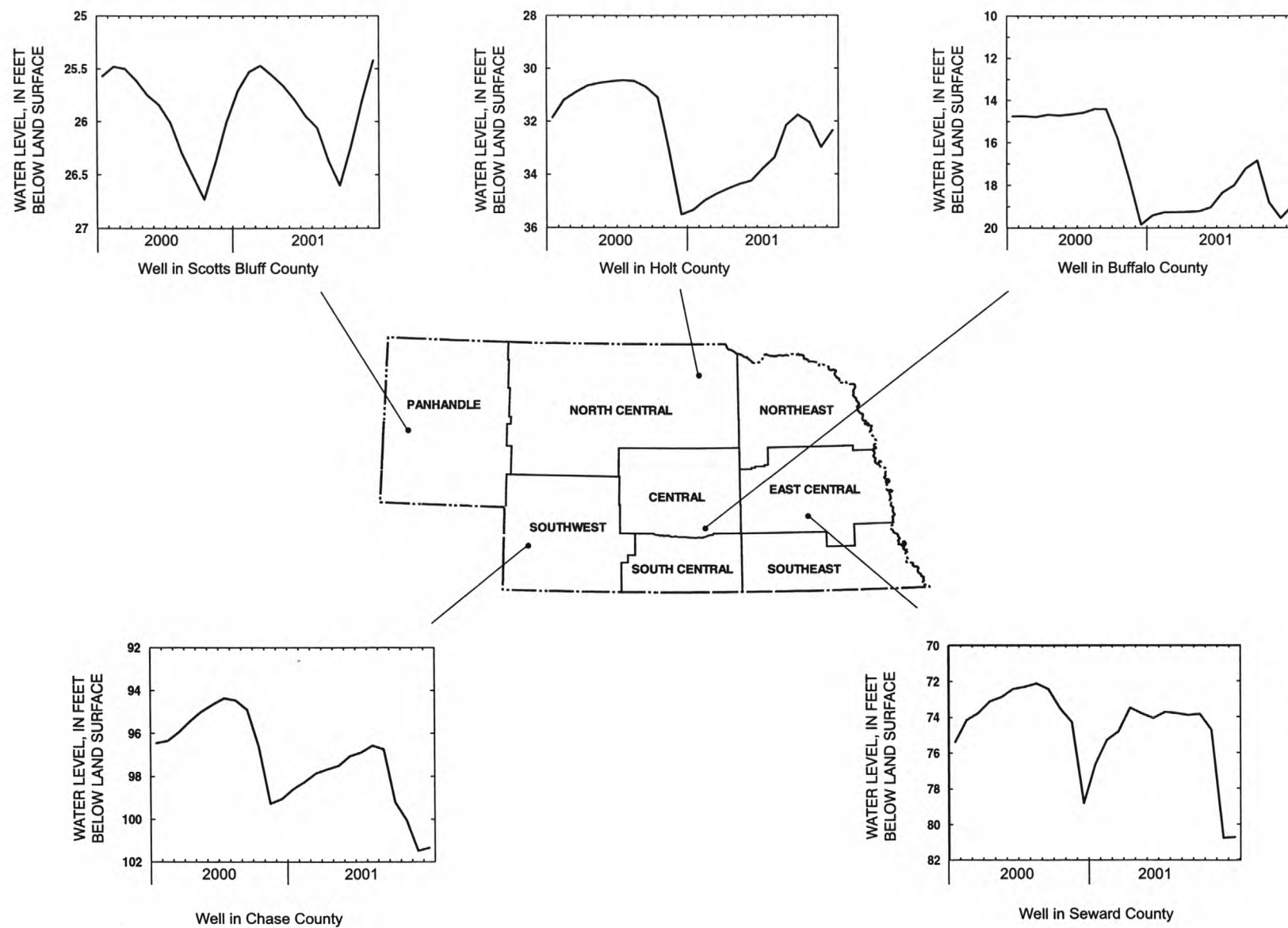


Figure 4. Water levels in selected observation wells, water years 2000 and 2001.

WATER USE

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

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

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

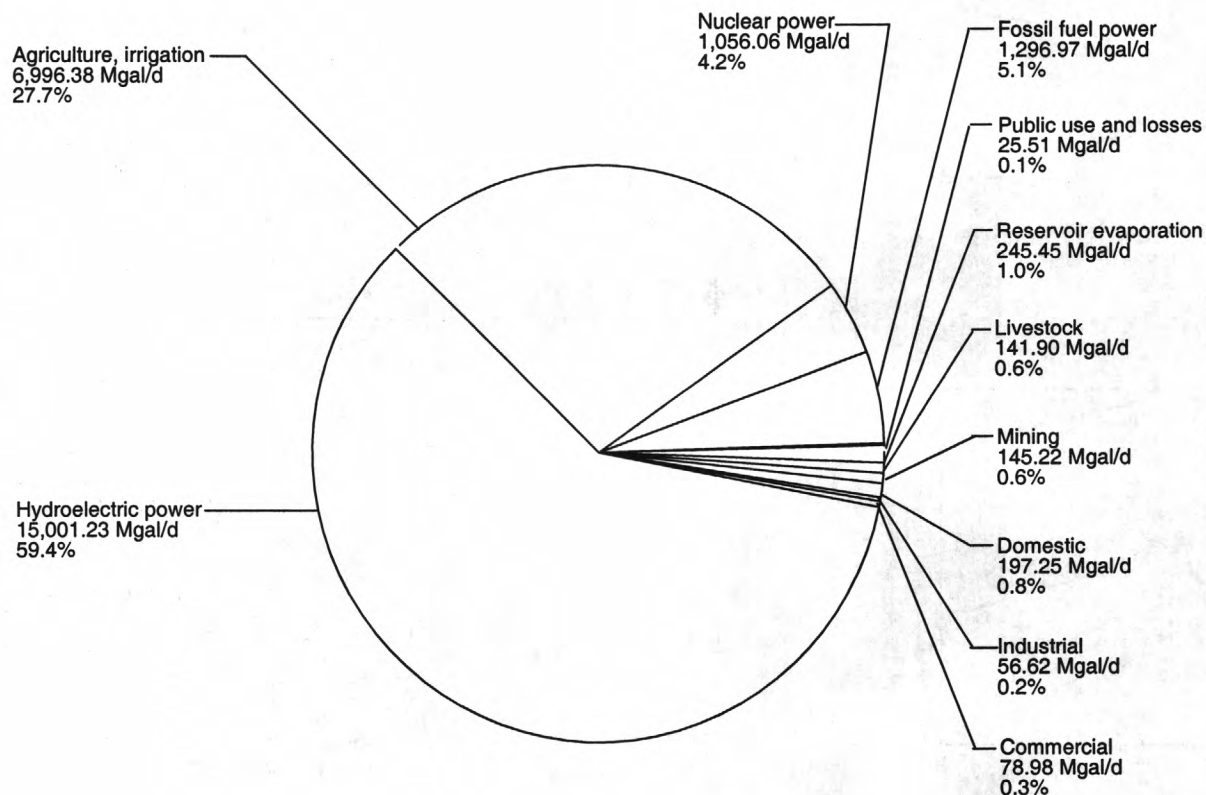


Figure 5. (a) Estimated total water use in Nebraska, 1995.

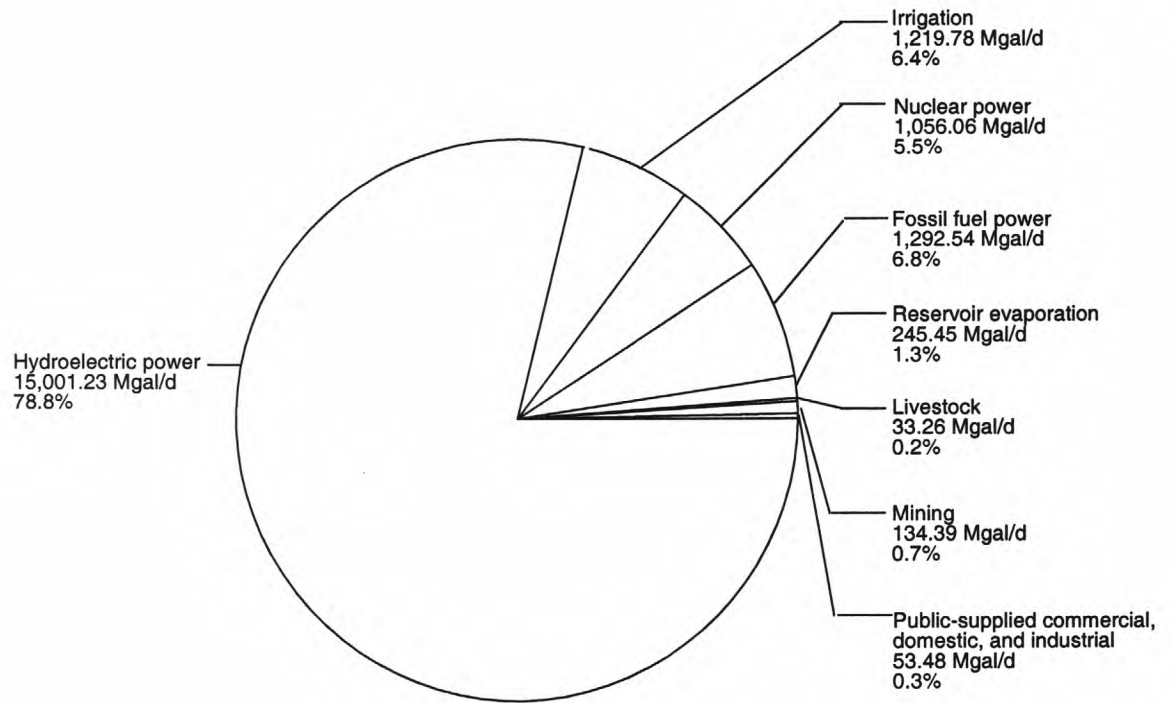


Figure 5. (b) Estimated total surface-water use in Nebraska, 1995.

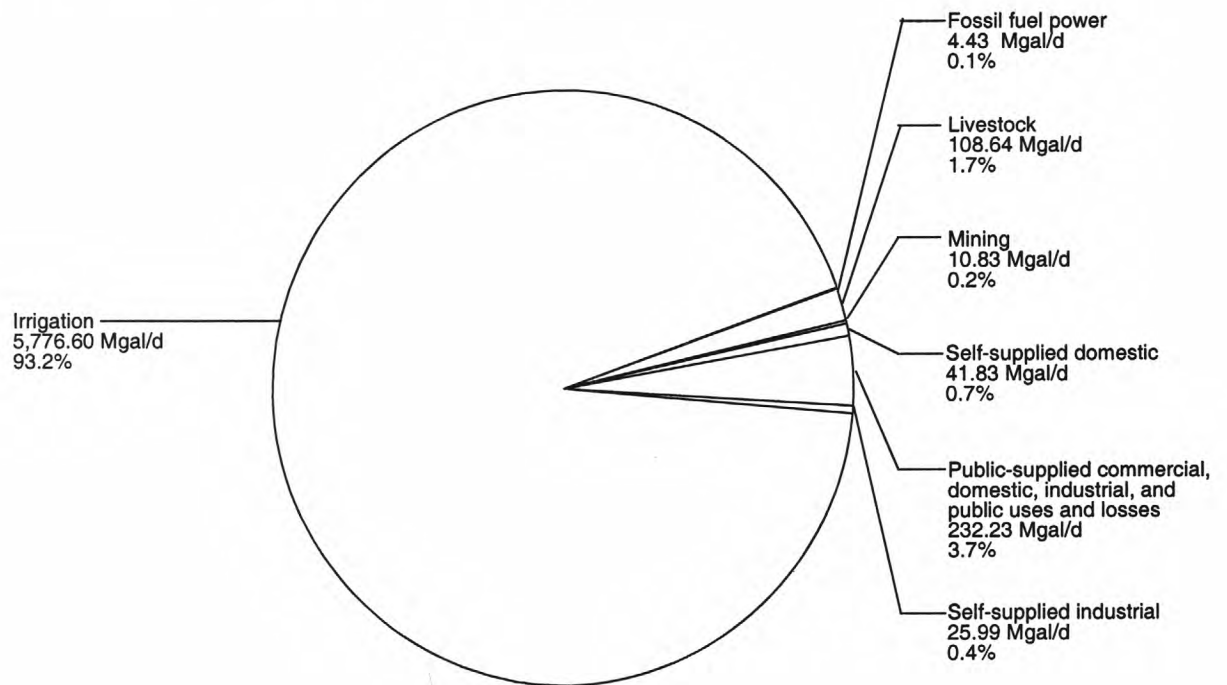


Figure 5. (c) Estimated total ground-water use in Nebraska, 1995.

SPECIAL NETWORKS AND PROGRAMS

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

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

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

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

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

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

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

EXPLANATION OF THE RECORDS

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

Station Identification Numbers

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

Downstream Order System

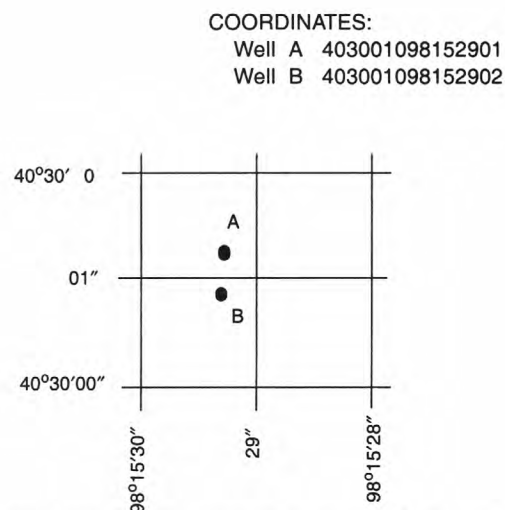
Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a mainstream station are listed before that station. A station on a tributary that enters between two mainstream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

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

Latitude-Longitude System

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

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



System for numbering wells (latitude and longitude)

Records of Stage and Water Discharge

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

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

Data Collection and Computation

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

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

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

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

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

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

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

Data Presentation

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

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

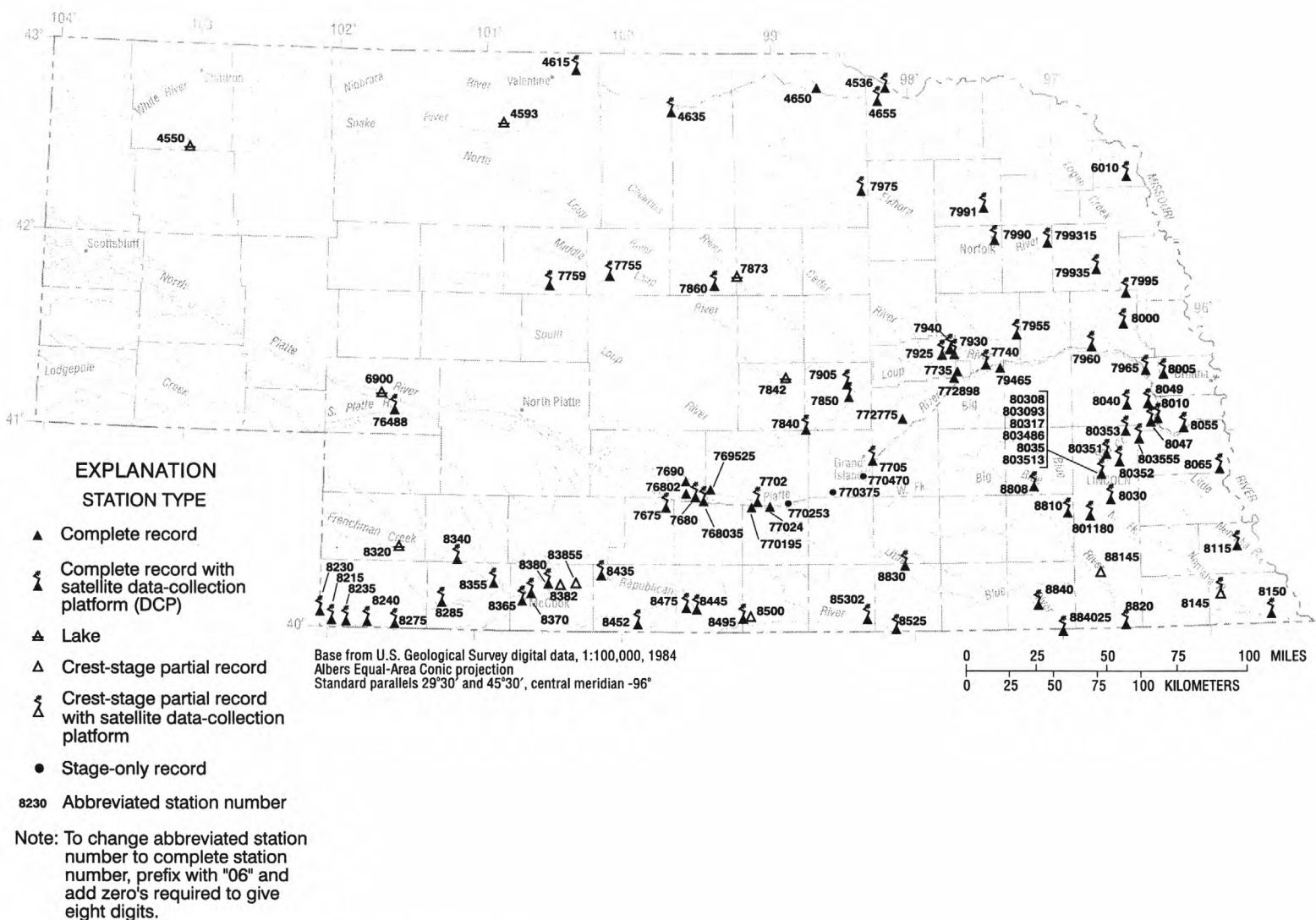


Figure 6. Location of active surface-water gaging stations.

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

Station Manuscript

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

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

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

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

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

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

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

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

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

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

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

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

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

Data Table of Daily Mean Values

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

Statistics of Monthly Mean Data

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

Summary Statistics

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Identifying Estimated Daily Discharge

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

Accuracy of the Records

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

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

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft³/s; to the nearest tenth between 1.0 and 10 ft³/s;

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

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

Other Records Available

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

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

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

Records of Surface-Water Quality

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

types of data and measurement frequencies.

Classification of Records

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

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

Arrangement of Records

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

Onsite Measurements and Sample Collection

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

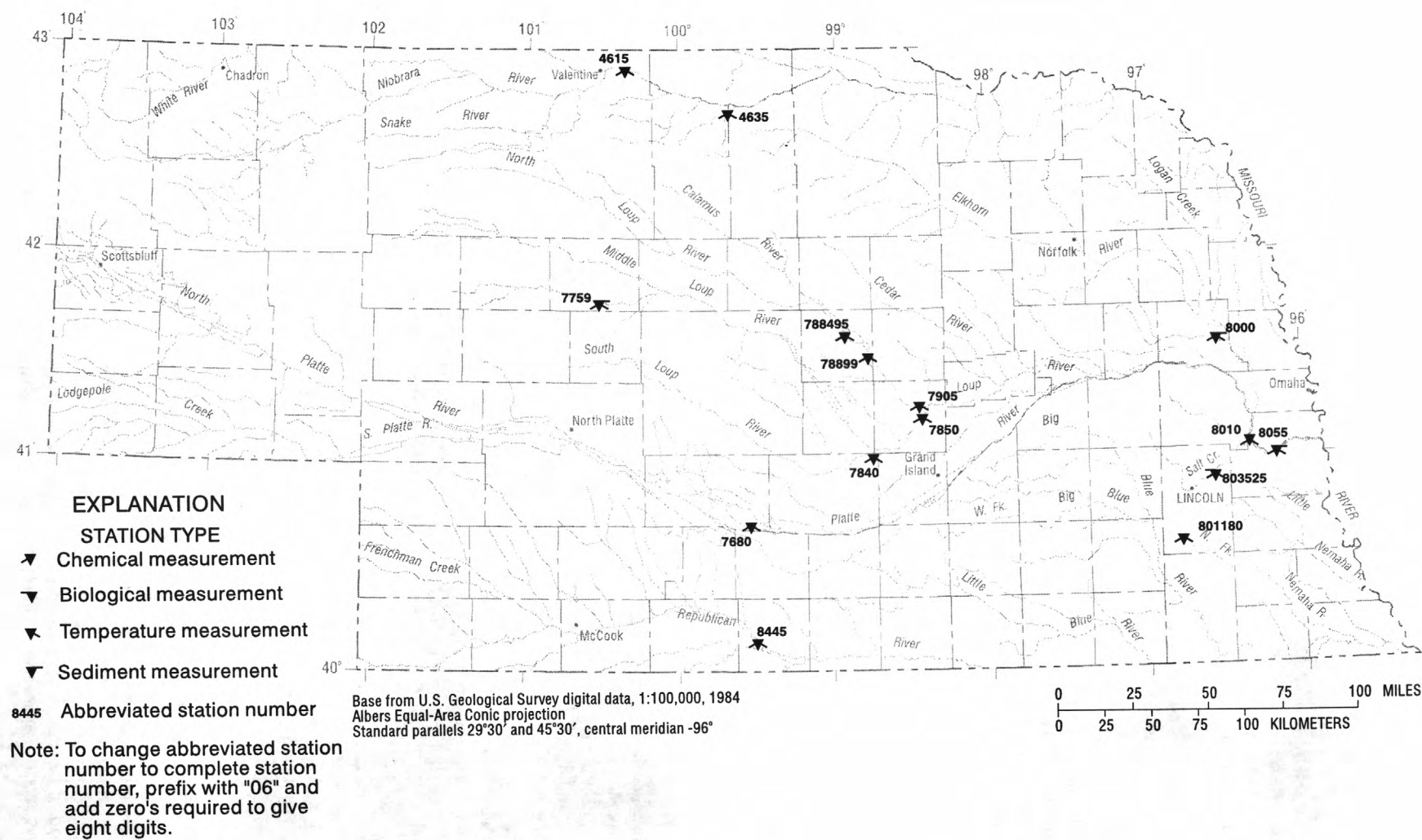


Figure 7. Location of active surface-water quality stations.

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

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

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

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

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

Water Temperature

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

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

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

Sediment

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

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

Laboratory Measurements

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

Data Presentation

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

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

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

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

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

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

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

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

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

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

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

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

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

Records of Ground-Water Levels

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

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

Data Collection and Computation

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

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

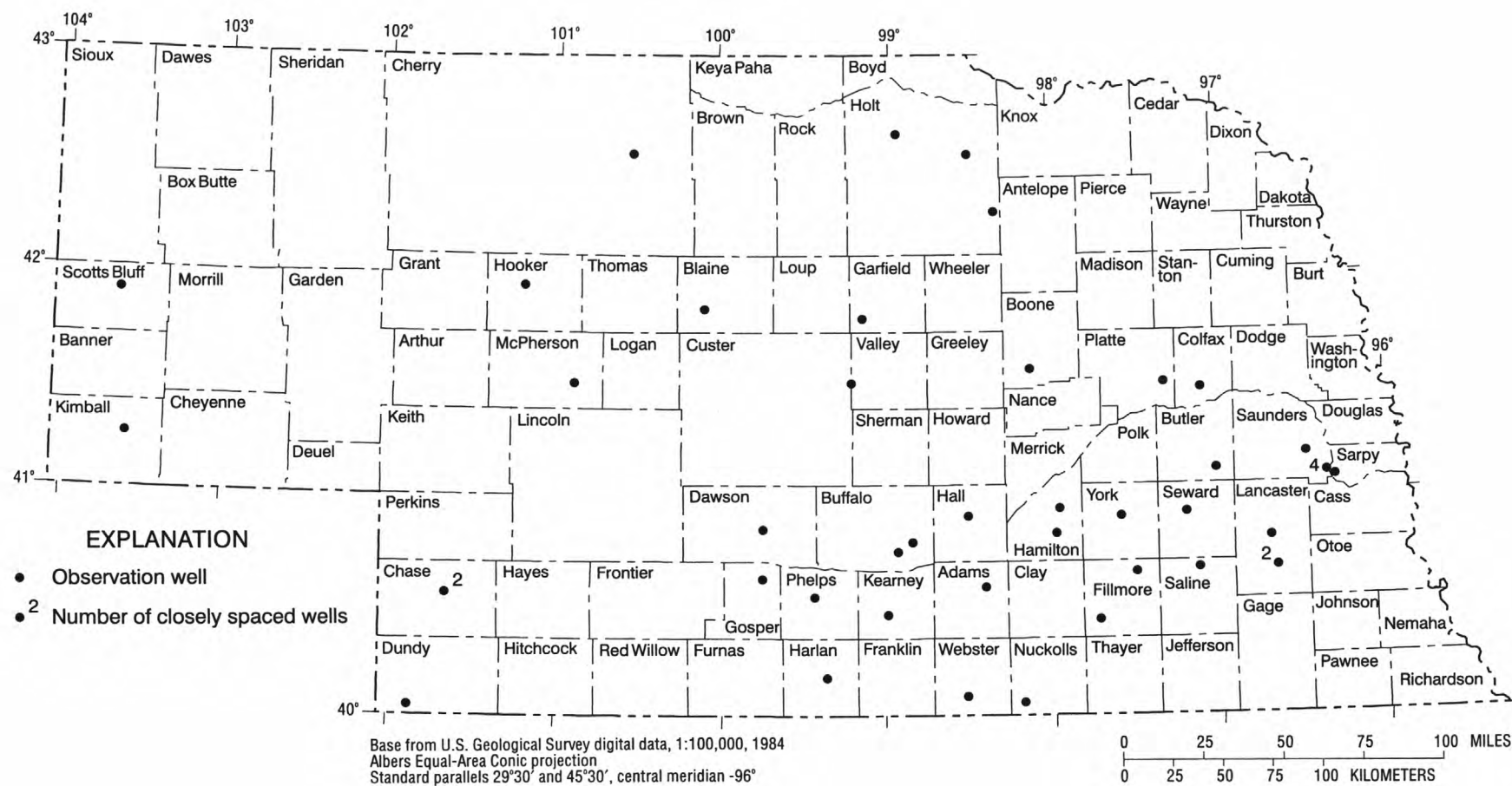


Figure 8. Location of selected observation wells.

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

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

Data Presentation

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

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

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

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

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

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

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

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

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

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

Records of Ground-Water Quality

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

Data Collection and Computation

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

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

Data Presentation

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

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

ACCESS TO USGS WATER DATA

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

<http://water.usgs.gov>

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

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

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

DEFINITION OF TERMS

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

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

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

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

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

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

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

Annual 7-day minimum is the lowest mean value for any 7-consecutive-day period in a year. Annual 7-day minimum values are reported herein for the calendar year and the water year (October 1 to September 30). Most low-flow frequency analyses use a climatic year (April 1-March 31), which tends to prevent the low-flow period from being artificially split between adjacent years. The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

Aroclor is the registered trademark for a group of polychlorinated biphenyls that were manufactured by the

Monsanto Company prior to 1976. Aroclors are assigned specific 4-digit reference numbers dependent upon molecular type and degree of substitution of the biphenyl ring hydrogen atoms by chlorine atoms. The first two digits of a numbered aroclor represent the molecular type and the last two digits represent the weight percent of the hydrogen substituted chlorine.

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

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

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

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

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

Bedload discharge (tons per day) is rate of sediment moving as bedload, reported as dry weight, that passes through a cross section in a given time. NOTE: Bedload discharge values in this report may include a component of the suspended-sediment discharge. A correction may be

necessary when computing the total sediment discharge by summing the bedload discharge and the suspended-sediment discharge. (See also “Bedload” and “Sediment”)

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

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

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

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

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

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

Bottom material (See “Bed material”)

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

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

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

pi is the ratio of the circumference to the diameter of a circle; pi = 3.14159...

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

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

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

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

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

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

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

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

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

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

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

Cubic foot per second (CFS, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point

in 1 second. It is equivalent to approximately 7.48 gallons per second or approximately 449 gallons per minute, or 0.02832 cubic meters per second. The term “second-feet” sometimes is used synonymously with “cubic feet per second” but is now obsolete.

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

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

Daily mean suspended-sediment concentration is the time-weighted concentration of suspended sediment passing a stream cross section during a 24-hour day. (See also “Daily mean suspended-sediment concentration,” “Sediment,” and “Suspended-sediment concentration”)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Estimated (E) value of a concentration is reported when an analyte is detected and all criteria for a positive result are met. If the concentration is less than the method detection limit (MDL), an 'E' code will be reported with the value. If the analyte is qualitatively identified as present, but the quantitative determination is substantially more uncertain, the National Water Quality Laboratory will identify the result with an 'E' code even though the measured value is

greater than the MDL. A value reported with an 'E' code should be used with caution. When no analyte is detected in a sample, the default reporting value is the MDL preceded by a less than sign (<).

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

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

Fecal coliform bacteria are present in the intestine or feces of warm-blooded 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. (See also "Bacteria")

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

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

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

Gage datum is a horizontal surface used as a zero point for measurement of stage or gage height. This surface usually is located slightly below the lowest point of the stream bottom such that the gage height is usually slightly larger than the maximum depth of water. Because the gage datum itself is not an actual physical object, the datum usually is defined by specifying the elevations of permanent reference marks such as bridge abutments and survey monuments, and the gage is set to agree with the reference

marks. Gage datum is a local datum that is maintained independently of any National geodetic datum. However, if the elevation of the gage datum relative to the National datum (North American Vertical Datum of 1988 or National Geodetic Vertical Datum of 1929) has been determined, then the gage readings can be converted to elevations above the National datum by adding the elevation of the gage datum to the gage reading.

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

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

Gaging station is a site on a stream, canal, lake, or reservoir where systematic observations of stage, discharge, or other hydrologic data are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

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

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

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

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

High tide is the maximum height reached by each rising tide. The high-high and low-high tides are the higher and lower of the two high tides, respectively, of each tidal day. See NOAA web site:

<http://www.co-ops.nos.noaa.gov/tideglos.html>

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

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

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

Horizontal datum (See “Datum”)

Hydrologic benchmark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a benchmark station may be used to separate effects of natural from human-induced changes in other basins that have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped benchmark basin.

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

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

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

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

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

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

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

$$I = I_0 e^{-\lambda L},$$

where I_0 is the source light intensity, I is the light intensity at length L (in meters) from the source, λ is the light-attenuation coefficient, and e is the base of the natural logarithm. The light attenuation coefficient is defined as

$$\lambda = -\frac{1}{L} \log_e \frac{I}{I_0}.$$

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

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

Low tide is the minimum height reached by each falling tide. The high-low and low-low tides are the higher and lower of the two low tides, respectively, of each tidal day. See NOAA web site:

<http://www.co-ops.nos.noaa.gov/tideglos.html>

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Minimum Reporting Level (MRL) is the smallest measured concentration of a constituent that may be reliably reported by using a given analytical method (Timme, 1995).

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

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

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

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

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

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

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

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

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

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

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

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. Organic mass is expressed in the same units as for ash mass and dry mass. (See also "Ash mass," "Biomass," and "Dry mass")

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (m^2), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

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

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

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

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

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

Classification	Size (mm)	Method of analysis
Clay	0.00024-0.004	Sedimentation
Silt	0.004 -0.062	Sedimentation
Sand	0.062-2.0	Sedimentation/sieve
Gravel	2.0-64.0	Sieve

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.

Peak flow (peak stage) is an instantaneous local maximum value in the continuous time series of streamflows or stages, preceded by a period of increasing values and followed by a period of decreasing values. Several peak values ordinarily occur in a year. The maximum peak value in a year is called the annual peak; peaks lower than the annual peak are called secondary peaks. Occasionally, the annual peak may not be the maximum value for the year; in such cases, the maximum value occurs at midnight at the beginning or end of the year, on the recession from or rise toward a higher peak in the adjoining year. If values are recorded at a discrete series of times, the peak recorded value may be taken as an approximation to the true peak, which may occur between the recording instants. If the values are recorded with finite precision, a sequence of equal recorded values may occur at the peak; in this case, the first value is taken as the peak.

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

Percent shading is determined by using a clinometer to estimate left and right bank shading. The values are added together and divided by 180 to determine percent shading relative to a horizontal surface.

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

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

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

pH of water is the negative logarithm of the hydrogen-ion activity. Solutions with pH less than 7 are termed "acidic," and solutions with a pH greater than 7 are termed "basic." Solutions with a pH of 7 are neutral. The presence and concentration of many dissolved chemical constituents found in water are, in part, influenced by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms are also influenced, in part, by the hydrogen-ion activity of water.

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

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

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

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

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

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

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

Primary productivity (oxygen method) is expressed as milligrams of oxygen per area per unit time [$\text{mg O}/(\text{m}^2/\text{time})$] for periphyton and macrophytes or per volume [$\text{mg O}/(\text{m}^3/\text{time})$] for phytoplankton. Oxygen method defines production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period. (See also "Primary productivity")

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

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

because different digestion procedures are likely to produce different analytical results. (See also "Bed material")

Recurrence interval, also referred to as return period, is the average time, usually expressed in years, between occurrences of hydrologic events of a specified type (such as exceedances of a specified high flow or non-exceedance of a specified low flow). The terms "return period" and "recurrence interval" do not imply regular cyclic occurrence. The actual times between occurrences vary randomly, with most of the times being less than the average and a few being substantially greater than the average. For example, the 100-year flood is the flow rate that is exceeded by the annual maximum peak flow at intervals whose average length is 100 years (that is, once in 100 years, on average); almost two-thirds of all exceedances of the 100-year flood occur less than 100 years after the previous exceedance, half occur less than 70 years after the previous exceedance, and about one-eighth occur more than 200 years after the previous exceedance. Similarly, the 7-day 10-year low flow ($7Q_{10}$) is the flow rate below which the annual minimum 7-day-mean flow dips at intervals whose average length is 10 years (that is, once in 10 years, on average); almost two-thirds of the non-exceedances of the $7Q_{10}$ occur less than 10 years after the previous non-exceedance, half occur less than 7 years after, and about one-eighth occur more than 20 years after the previous non-exceedance. The recurrence interval for annual events is the reciprocal of the annual probability of occurrence. Thus, the 100-year flood has a 1-percent chance of being exceeded by the maximum peak flow in any year, and there is a 10-percent chance in any year that the annual minimum 7-day-mean flow will be less than the $7Q_{10}$.

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

Return period (See "Recurrence interval")

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

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

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

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

Seven-day 10-year low flow (7Q10) is the discharge below which the annual 7-day minimum flow falls in 1 year out of 10 on the long-run average. The recurrence interval of the 7Q10 is 10 years; the chance that the annual 7-day minimum flow will be less than the 7Q10 is 10 percent in any given year. (See also “Recurrence interval” and “Annual 7-day minimum”)

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

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

Stable isotope ratio (per MILL/MIL) is a unit expressing the ratio of the abundance of two radioactive isotopes. Isotope ratios are used in hydrologic studies to determine the age or source of specific waters, to evaluate mixing of different waters, as an aid in determining reaction rates, and other chemical or hydrologic processes.

Stage (See “Gage height”)

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

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

Substrate is the physical surface upon which an organism lives.

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

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

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

Surficial bed material is the upper surface (0.1 to 0.2 ft) of the bed material such as that material which 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 operationally defined as the material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative suspended water-sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the “total” amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results. Determinations of “suspended, recoverable” constituents are made either by directly analyzing the suspended material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent. (See also “Suspended”)

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

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approxi-

mately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). The analytical technique uses the mass of all of the sediment and the net weight of the water-sediment mixture in a sample to compute the suspended-sediment concentration. (See also "Sediment" and "Suspended sediment")

Suspended-sediment discharge (tons/day) is the rate of sediment transport, as measured by dry mass or volume, that passes a cross section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft^3/s) x 0.0027. (See also "Sediment," "Suspended sediment," and "Suspended-sediment concentration")

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

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

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

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

Taxa richness is the total number of distinct species or groups and usually decreases with pollution. (See also "Percent Shading")

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the

organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata*, is the following:

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

Temperature preferences:

Cold – preferred water temperature for the species is less than 20 °C or spawning temperature preference less than 16 °C and native distribution is considered to be predominantly north of 45° N. latitude.

Warm – preferred water temperatures for the species is greater than 20 °C or spawning temperature preference greater than 16 °C and native distribution is considered to be predominantly south of 45° N. latitude.

Cool – intermediate between cold and warm water temperature preferences.

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

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

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

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

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

that the word “total” does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined at least 95 percent of the constituent in the sample.)

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

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

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

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

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

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

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

performing such analyses because different digestion procedures may produce different analytical results.

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

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

Trophic group:

Filter feeder – diet composed of suspended plant and/or animal material.

Herbivore – diet composed predominantly of plant material.

Invertivore – diet composed predominantly of invertebrates.

Omnivore – diet composed of at least 25-percent plant and 25-percent animal material.

Piscivore – diet composed predominantly of fish.

Turbidity is the reduction in the transparency of a solution due to the presence of suspended and some dissolved substances. The measurement technique records the collective optical properties of the solution that cause light to be scattered and attenuated rather than transmitted in straight lines; the higher the intensity of scattered or attenuated light, the higher the value of the turbidity. Turbidity is expressed in nephelometric turbidity units (NTU). Depending on the method used, the turbidity units as NTU can be defined as the intensity of light of a specified wavelength scattered or attenuated by suspended particles or absorbed at a method specified angle, usually 90 degrees, from the path of the incident light. Currently approved methods for the measurement of turbidity in the USGS include those that conform to EPA Method 180.1, ASTM D1889-00, and ISO 7027. Measurements of turbidity by these different methods and different instruments are unlikely to yield equivalent values. Consequently, the method of measurement and type of instrument used to derive turbidity records should be included in the “REMARKS” column of the Annual Data Report.

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

measured in UV absorption units per centimeter of path-length of UV light through a sample.

Vertical datum (See “Datum”)

Volatile organic compounds (VOCs) are organic compounds that can be isolated from the water phase of a sample by purging the water sample with inert gas, such as helium, and subsequently analyzed by gas chromatography. Many VOCs are human-made chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They are often components of fuels, solvents, hydraulic fluids, paint thinners, and dry cleaning agents commonly used in urban settings. VOC contamination of drinking-water supplies is a human health concern because many are toxic and are known or suspected human carcinogens (U.S. Environmental Protection Agency, 1996).

Water table is the level in the saturated zone at which the pressure is equal to the atmospheric pressure.

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

Water year in USGS reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 2001, is called the “2001 water year.”

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

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

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

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

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

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and 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. (See also “Plankton”)

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

The U.S.G.S. 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.G.S., Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be made in the form of a 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 mention the "U.S. Geological Survey Techniques of Water-Resources Investigations."

Book 1. Collection of Water Data by Direct Measurement

Section D. Water Quality

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

Book 2. Collection of Environmental Data

Section D. Surface Geophysical Methods

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

Section E. Subsurface Geophysical Methods

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

Section F. Drilling and Sampling Methods

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

Book 3. Applications of Hydraulics

Section A. Surface-Water Techniques

- 3-A1. *General field and office procedures for indirect discharge measurements*, by M.A. Benson and Tate Dalrymple: USGS–TWRI book 3, chap. A1. 1967. 30 p.
- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M.A. Benson: USGS–TWRI book 3, chap. A2. 1967. 12 p.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G.L. Bodhaine: USGS–TWRI book 3, chap. A3. 1968. 60 p.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H.F. Matthai: USGS–TWRI book 3, chap. A4. 1967. 44 p.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS–TWRI book 3, chap. A5. 1967. 29 p.

- 3-A6. *General procedure for gaging streams*, by R.W. Carter and Jacob Davidian: USGS-TWRI book 3, chap. A6. 1968. 13 p.
- 3-A7. *Stage measurement at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS-TWRI book 3, chap. A7. 1968. 28 p.
- 3-A8. *Discharge measurements at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS-TWRI book 3, chap. A8. 1969. 65 p.
- 3-A9. *Measurement of time of travel in streams by dye tracing*, by F.A. Kilpatrick and J.F. Wilson, Jr.: USGS-TWRI book 3, chap. A9. 1989. 27 p.
- 3-A10. *Discharge ratings at gaging stations*, by E.J. Kennedy: USGS-TWRI book 3, chap. A10. 1984. 59 p.
- 3-A11. *Measurement of discharge by the moving-boat method*, by G.F. Smoot and C.E. Novak: USGS-TWRI book 3, chap. A11. 1969. 22 p.
- 3-A12. *Fluorometric procedures for dye tracing*, Revised, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS-TWRI book 3, chap. A12. 1986. 34 p.
- 3-A13. *Computation of continuous records of streamflow*, by E.J. Kennedy: USGS-TWRI book 3, chap. A13. 1983. 53 p.
- 3-A14. *Use of flumes in measuring discharge*, by F.A. Kilpatrick and V.R. Schneider: USGS-TWRI book 3, chap. A14. 1983. 46 p.
- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS-TWRI book 3, chap. A15. 1984. 48 p.
- 3-A16. *Measurement of discharge using tracers*, by F.A. Kilpatrick and E.D. Cobb: USGS-TWRI book 3, chap. A16. 1985. 52 p.
- 3-A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS-TWRI book 3, chap. A17. 1985. 38 p.
- 3-A18. *Determination of stream reaeration coefficients by use of tracers*, by F.A. Kilpatrick, R.E. Rathbun, Nobuhiro Yotsukura, G.W. Parker, and L.L. DeLong: USGS-TWRI book 3, chap. A18. 1989. 52 p.
- 3-A19. *Levels at streamflow gaging stations*, by E.J. Kennedy: USGS-TWRI book 3, chap. A19. 1990. 31 p.
- 3-A20. *Simulation of soluble waste transport and buildup in surface waters using tracers*, by F.A. Kilpatrick: USGS-TWRI book 3, chap. A20. 1993. 38 p.
- 3-A21. *Stream-gaging cableways*, by C. Russell Wagner: USGS-TWRI book 3, chap. A21. 1995. 56 p.

Section B. Ground-Water Techniques

- 3-B1. *Aquifer-test design, observation, and data analysis*, by R.W. Stallman: USGS-TWRI book 3, chap. B1. 1971. 26 p.
- 3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G.D. Bennett: USGS-TWRI book 3, chap. B2. 1976. 172 p.
- 3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J.E. Reed: USGS-TWRI book 3, chap. B3. 1980. 106 p.
- 3-B4. *Regression modeling of ground-water flow*, by R.L. Cooley and R.L. Naff: USGS-TWRI book 3, chap. B4. 1990. 232 p.
- 3-B4. *Supplement 1. Regression modeling of ground-water flow --Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems*, by R.L. Cooley: USGS-TWRI book 3, chap. B4. 1993. 8 p.
- 3-B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems—An introduction*, by O.L. Franke, T.E. Reilly, and G.D. Bennett: USGS-TWRI book 3, chap. B5. 1987. 15 p.

- 3-B6. *The principle of superposition and its application in ground-water hydraulics*, by T.E. Reilly, O.L. Franke, and G.D. Bennett: USGS–TWRI book 3, chap. B6. 1987. 28 p.
- 3-B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow*, by E.J. Wexler: USGS–TWRI book 3, chap. B7. 1992. 190 p.
- 3-B8. *System and boundary conceptualization in ground-water flow simulation*, by T.E. Reilly: USGS–TWRI book 3, chap. B8. 2001. 29 p.

Section C. Sedimentation and Erosion Techniques

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

Book 4. Hydrologic Analysis and Interpretation

Section A. Statistical Analysis

- 4-A1. *Some statistical tools in hydrology*, by H.C. Riggs: USGS–TWRI book 4, chap. A1. 1968. 39 p.
- 4-A2. *Frequency curves*, by H.C. Riggs: USGS–TWRI book 4, chap. A2. 1968. 15 p.

Section B. Surface Water

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

Section D. Interrelated Phases of the Hydrologic Cycle

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

Book 5. Laboratory Analysis

Section A. Water Analysis

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

Section C. Sediment Analysis

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

Book 6. Modeling Techniques

Section A. Ground Water

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

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

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

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

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

Section B. Instruments for Measurement of Discharge

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

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

- 9-A1. *National Field Manual for the Collection of Water-Quality Data: Preparations for Water Sampling*, by F.D. Wilde, D.B. Radtke, Jacob Gibbs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A1. 1998. 47 p.
- 9-A2. *National Field Manual for the Collection of Water-Quality Data: Selection of Equipment for Water Sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibbs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A2. 1998. 94 p.
- 9-A3. *National Field Manual for the Collection of Water-Quality Data: Cleaning of Equipment for Water Sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibbs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A3. 1998. 75 p.

- 9-A4. *National Field Manual for the Collection of Water-Quality Data: Collection of Water Samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibbs, and R.T. Iwatsubo: USGS-TWRI book 9, chap. A4. 1999. 156 p.
- 9-A5. *National Field Manual for the Collection of Water-Quality Data: Processing of Water Samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibbs, and R.T. Iwatsubo: USGS-TWRI book 9, chap. A5. 1999, 149 p.
- 9-A6. *National Field Manual for the Collection of Water-Quality Data: Field Measurements*, edited by F.D. Wilde and D.B. Radtke: USGS-TWRI book 9, chap. A6. 1998. Variously paginated.
- 9-A7. *National Field Manual for the Collection of Water-Quality Data: Biological Indicators*, edited by D.N. Myers and F.D. Wilde: USGS-TWRI book 9, chap. A7. 1997 and 1999. Variously paginated.
- 9-A8. *National Field Manual for the Collection of Water-Quality Data: Bottom-material samples*, by D.B. Radtke: USGS-TWRI book 9, chap. A8. 1998. 48 p.
- 9-A9. *National Field Manual for the Collection of Water-Quality Data: Safety in Field Activities*, by S.L. Lane and R.G. Fay: USGS-TWRI book 9, chap. A9. 1998. 60 p.

REMARK CODES

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

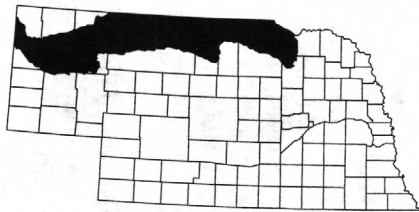
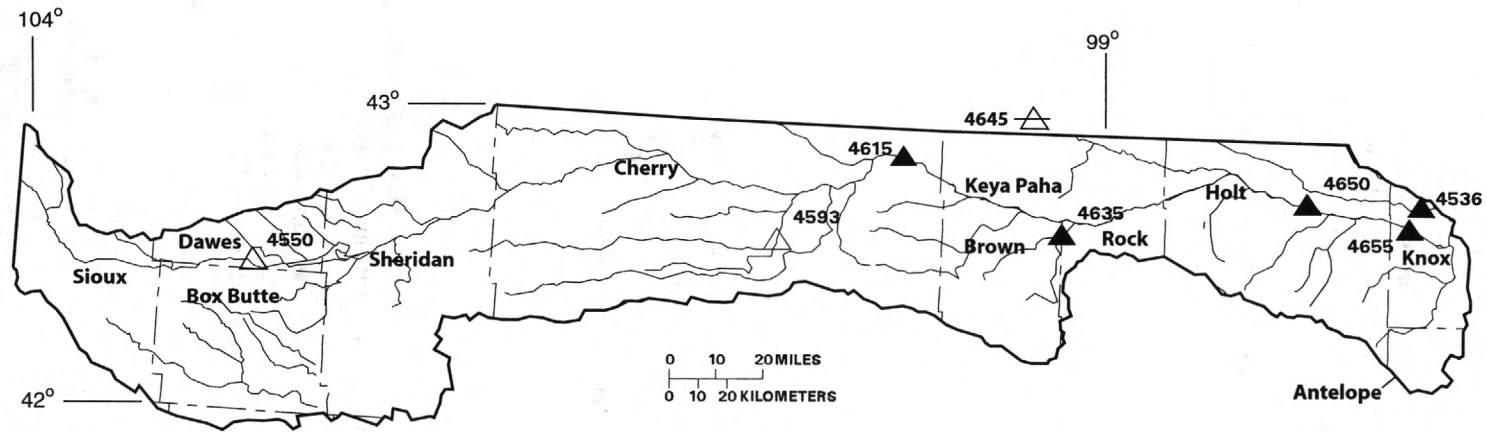
Printed Output	Remark
E	Estimated value
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
K	Results based on colony count outside the acceptance range (non-ideal colony count)
L	Biological organism count less than 0.5 percent (organism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

Dissolved Trace-Element Concentrations

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

Change in National Trends Network Procedures

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



EXPLANATION

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

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

*Station number	Station name	Page
	PONCA CREEK BASIN	
4536	Ponca Creek at Verdel	46
	NIOBRARA RIVER BASIN	
4550	Box Butte Reservoir near Hemingford	48
4593	Merritt Reservoir near Burge	49
4615	Niobrara River near Sparks	50
4635	Long Pine Creek near Riverview	54
4645	Keya Paha River at Wewela, SD	58
4650	Niobrara River near Spencer	60
4655	Niobrara River near Verdel	62

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

PONCA CREEK BASIN

06453600 PONCA CREEK AT VERDEL, NE

LOCATION.--Lat 42°48'38", long 098°10'32", in NE 1/4 NE 1/4 sec.30, T.33 N., R.7 W., Knox County, Hydrologic Unit 10150001, near right bank at right downstream end of bridge on State Highway 12, 0.6 mi east of Verdel and 3.8 mi upstream from mouth.

DRAINAGE AREA.--812 mi².

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

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

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	28	e16	e5.2	e11	e25	362	466	130	57	48	22
2	1.0	44	e16	e5.4	e10	e29	309	392	135	83	178	23
3	1.1	30	e15	e5.6	e8.4	e35	300	315	118	801	100	19
4	.18	22	e15	e7.0	e9.6	e38	310	275	107	657	65	18
5	.22	20	e15	e8.4	e12	e40	286	322	107	383	50	16
6	.00	17	e14	e9.6	e12	e44	268	839	110	342	42	16
7	1.4	14	e13	e9.8	e12	e50	588	1000	118	401	38	23
8	3.6	12	e14	e10	e13	e70	748	1140	176	373	34	26
9	5.0	9.1	e15	e9.4	e12	e100	697	985	285	236	32	30
10	5.8	13	e14	e9.4	e11	e180	569	754	197	169	30	27
11	5.6	15	e12	e11	e11	e240	571	533	145	133	31	24
12	7.4	e15	e8.0	e11	e13	e300	1840	401	117	114	31	21
13	7.7	e15	e6.4	e10	e15	e380	1260	327	105	200	30	24
14	8.7	e14	e6.0	e10	e17	e620	919	273	102	257	33	45
15	9.2	e15	e6.4	e10	e16	e2000	792	230	100	153	36	46
16	13	e15	e6.8	e9.4	e15	5790	625	194	96	114	32	58
17	13	e14	e6.6	e9.2	e17	3850	465	168	95	98	29	56
18	14	e14	e6.0	e8.8	e17	2260	353	148	92	86	27	48
19	15	e15	e6.2	e9.0	e17	1270	280	133	81	80	25	42
20	13	e14	e5.8	e7.6	e20	1470	239	127	76	74	24	37
21	12	e13	e6.2	e7.8	e22	2430	215	124	71	68	23	33
22	14	e14	e5.4	e8.1	e21	2110	822	111	66	65	23	31
23	19	e15	e4.8	e8.4	e21	1300	2890	101	62	75	23	28
24	18	e15	e5.0	e9.0	e24	640	2180	94	59	73	22	26
25	18	e16	e5.0	e9.0	e25	456	1460	91	53	63	22	26
26	18	e15	e5.0	e8.8	e27	381	1410	89	53	59	21	25
27	16	e15	e5.0	e9.4	e27	344	1230	89	59	57	22	24
28	17	e16	e5.0	e9.4	e26	300	851	85	59	53	22	23
29	21	e16	e5.6	e9.8	---	283	581	85	52	48	20	22
30	26	e15	e5.8	e11	---	293	479	96	60	44	26	21
31	23	---	e5.6	e11	---	372	---	117	---	42	25	---
TOTAL	326.90	505.1	275.6	277.5	462.0	27700	23899	10104	3086	5458	1164	880
MEAN	10.5	16.8	8.89	8.95	16.5	894	797	326	103	176	37.5	29.3
MAX	26	44	16	11	27	5790	2890	1140	285	801	178	58
MIN	.00	9.1	4.8	5.2	8.4	25	215	85	52	42	20	16
AC-FT	648	1000	547	550	916	54940	47400	20040	6120	10830	2310	1750

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2001, BY WATER YEAR (WY)

	MEAN	27.2	30.8	21.1	18.3	55.0	240	216	193	151	95.7	41.6	31.4
MAX	229	181	105	94.0	239	1333	818	1405	1237	742	327	251	
(WY)	1996	1999	1997	1997	1996	1960	1984	1995	1962	1993	1962	1996	
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	

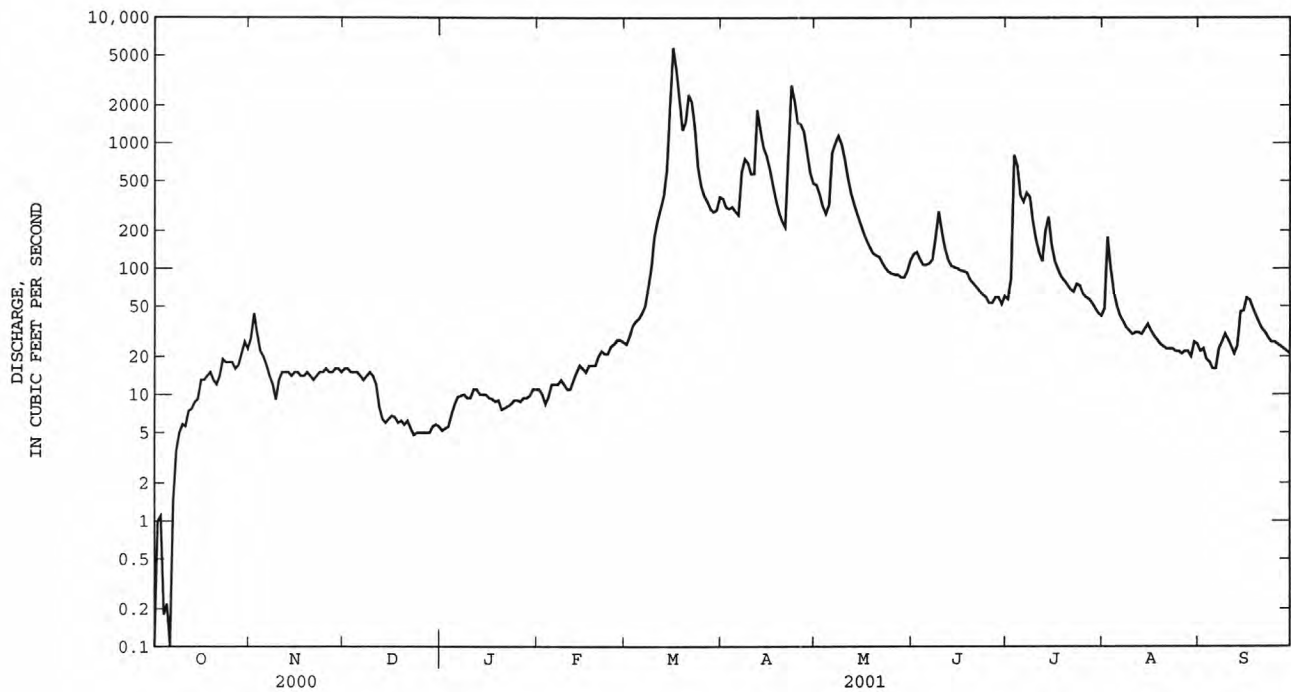
PONCA CREEK BASIN

47

06453600 PONCA CREEK AT VERDEL, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1958 - 2001
ANNUAL TOTAL	12170.09	74138.10	
ANNUAL MEAN	33.3	203	93.6
MEAN OF ANNUAL MEANS			65.6
HIGHEST ANNUAL MEAN			343 1962
LOWEST ANNUAL MEAN			3.75 1981
HIGHEST DAILY MEAN	211 May 20	5790 Mar 16	14800 Mar 28 1960
LOWEST DAILY MEAN	.00 Aug 11	.00 Oct 1	*.00 Oct 1 1957
ANNUAL SEVEN-DAY MINIMUM	.00 Aug 11	.56 Oct 1	.00 Oct 1 1957
MAXIMUM PEAK FLOW		7130 Mar 16	**15700 Mar 27 1960
MAXIMUM PEAK STAGE		14.36 Mar 15	***17.30 Mar 6 1993
ANNUAL RUNOFF (AC-FT)	24140	147100	67780
10 PERCENT EXCEEDS	75	547	202
50 PERCENT EXCEEDS	21	28	23
90 PERCENT EXCEEDS	.09	7.7	.20

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



06455000 BOX BUTTE RESERVOIR NEAR HEMINGFORD, NE

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

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

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

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

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

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

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

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 21,480 acre-ft June 14, elevation, 4,000.36 ft; minimum observed, 7,380 acre-ft Sept. 7, elevation, 3,986.34 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

	Date	*Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sep.	30.....	3,989.43	9,780	--
Oct.	31.....	3,990.98	11,150	+1,370
Nov.	30.....	3,992.30	12,390	+1,240
Dec.	31.....	3,993.30	13,360	+970
CAL YR 2000		--	--	-910
Jan.	31.....	3,994.42	14,510	+1,150
Feb.	28.....	3,995.53	15,690	+1,180
Mar.	31.....	3,997.61	18,050	+2,360
Apr.	30.....	3,999.52	20,400	+2,350
May	31.....	4,000.11	21,160	+760
June	30.....	4,000.14	21,190	+30
July	31.....	3,995.12	15,240	-5,950
Aug.	31.....	3,987.26	8,050	-7,190
Sept.	30.....	3,987.40	8,150	+100
WTR YR 2001		--	--	-1,630

*Elevations read on or near last day of month.

06459300 MERRITT RESERVOIR NEAR BURGE, NE

LOCATION.--Lat 42°38'06", long 100°52'18", in SW¹/₄ NW¹/₄ sec. 29, T. 31 N., R. 30 W., Cherry County, Hydrologic Unit 10150005, in control house of outlet works of Merritt Dam on the Snake River, 8.1 mi southwest of Surge 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-67-1: Drainage area.

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

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

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

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

EXTREMES FOR CURRENT YEAR.--Maximum contents observed 75,080 acre-ft April 28, elevation, 2,946.2 ft; minimum observed 34,770 acre-ft Sept. 7, elevation, 2,928.0 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

	Date	*Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sep.	30.....	2,929.3	36,840	--
Oct.	31.....	2,936.6	50,580	+13,740
Nov.	30.....	2,943.9	68,560	+17,980
Dec.	31.....	2,943.9	68,560	0
CAL YR 2000		--	--	-550
Jan.	31.....	2,944.0	68,830	+270
Feb.	28.....	2,944.1	69,110	+280
Mar.	31.....	2,944.2	69,390	+280
Apr.	30.....	2,946.1	74,780	+5,390
May	31.....	2,945.9	74,200	-580
June	30.....	2,945.4	72,770	-1,430
July	31.....	2,937.6	52,780	-19,990
Aug.	31.....	2,928.6	35,710	-17,070
Sept.	30.....	2,934.6	46,410	+10,700
WTR YR 2001		--	--	+9,570

*Elevations read on or near last day of month.

NIOBRARA RIVER BASIN

06461500 NIOBRARA RIVER NEAR SPARKS, NE

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

DRAINAGE AREA.--7150 mi².

WATER-DISCHARGE RECORDS

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

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

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

REMARKS.--Records good except for estimated daily discharges, which are 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	565	739	594	e760	861	900	1040	1300	793	645	580	471
2	581	728	e700	e760	879	908	1040	1300	767	620	579	468
3	591	711	e780	e780	958	908	1110	1280	813	603	578	464
4	619	685	853	e800	1010	918	1100	1270	871	606	568	459
5	644	657	847	e840	1010	953	1060	1360	958	613	559	451
6	612	649	e820	e860	1000	1020	1050	1410	922	604	527	443
7	585	662	812	e860	1010	1050	1290	1340	902	654	526	560
8	581	682	867	847	992	1100	1280	1310	949	678	542	496
9	583	680	839	894	970	1170	1220	1210	963	665	525	493
10	586	e680	843	878	946	1190	1200	1160	948	649	523	478
11	586	e680	765	873	923	1210	1150	1140	899	790	549	474
12	600	e660	605	873	909	1190	1170	1090	878	1770	551	475
13	613	e660	676	877	908	1240	1100	1070	875	962	557	473
14	614	e660	e660	892	908	1250	1100	1010	979	883	542	497
15	627	e680	e680	870	900	1290	1080	981	911	754	541	534
16	628	e680	e700	859	897	1300	1060	952	865	700	519	540
17	628	e660	e680	862	897	1290	1130	931	841	667	503	518
18	626	e620	e680	853	897	1270	1130	908	791	652	487	521
19	584	e620	e700	854	897	1210	1110	898	763	644	477	525
20	570	e640	e700	862	897	1200	1120	808	704	640	475	516
21	573	e620	e720	862	897	1220	1180	836	691	642	479	500
22	574	e620	e680	862	897	1220	1260	813	673	724	526	498
23	587	e620	e680	862	897	1230	1340	744	650	680	502	491
24	582	e620	e680	862	898	1190	1330	781	640	653	531	492
25	597	e620	e680	856	902	1160	1360	793	634	621	512	489
26	589	e620	e700	852	897	1140	1450	780	621	684	507	486
27	591	587	e720	850	905	1110	1460	768	603	735	491	490
28	596	609	e780	850	914	1140	1420	757	601	705	482	490
29	778	608	e800	853	---	1100	1370	769	613	651	483	493
30	758	580	e780	875	---	1030	1380	866	614	614	479	494
31	714	---	e780	875	---	1030	---	866	---	589	483	---
TOTAL	18962	19537	22801	26413	25876	35137	36090	31501	23732	22097	16183	14779
MEAN	612	651	736	852	924	1133	1203	1016	791	713	522	493
MAX	778	739	867	894	1010	1300	1460	1410	979	1770	580	560
MIN	565	580	594	760	861	900	1040	744	601	589	475	443
AC-FT	37610	38750	45230	52390	51330	69690	71580	62480	47070	43830	32100	29310

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2001, BY WATER YEAR (WY)

	MEAN	669	757	763	775	888	973	909	899	820	635	593	610
MAX	879	1092	950	1208	1403	1464	1214	1385	1470	1122	858	993	
(WY)	1966	1999	1986	1984	1984	1949	1958	1995	1967	1962	1951	1951	
MIN	481	484	448	525	631	584	615	612	506	383	417	426	
(WY)	1977	1977	1969	1969	1975	1976	1967	1969	1985	1974	1980	1980	

NIOBRARA RIVER BASIN

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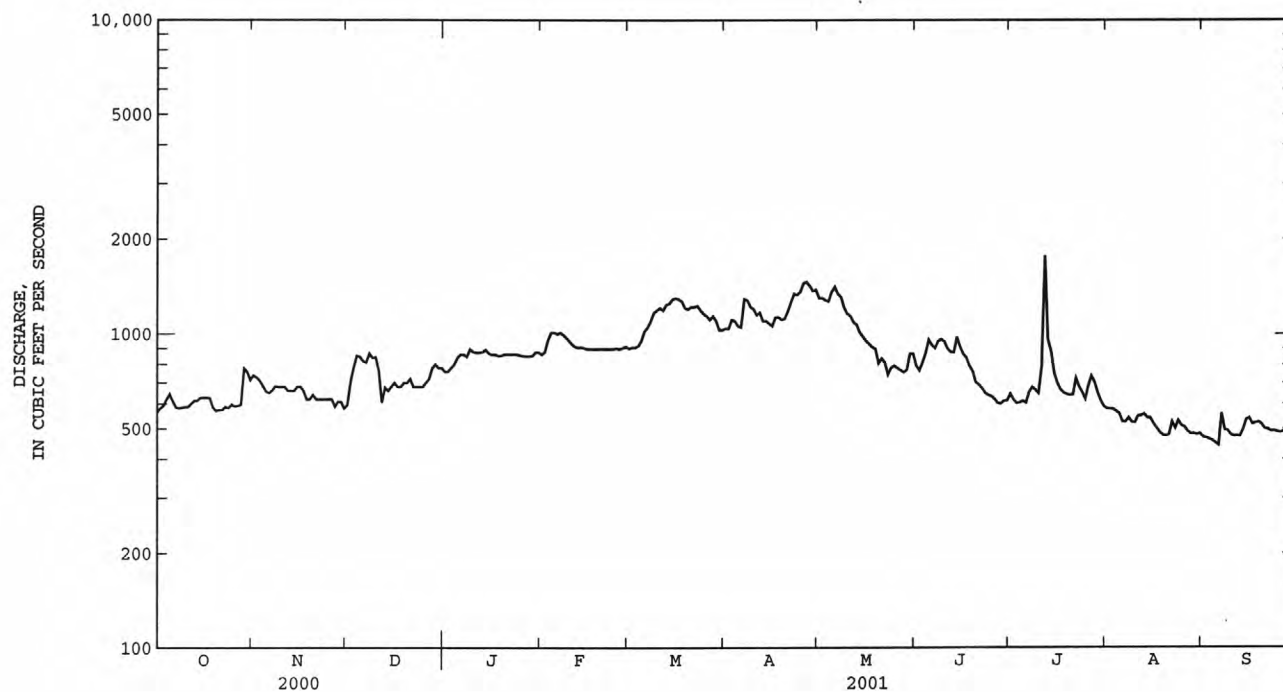
06461500 NIOBRARA RIVER NEAR SPARKS, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1946 - 2001	
ANNUAL TOTAL	291285		293108		774	
ANNUAL MEAN	796		803		911	1962
HIGHEST ANNUAL MEAN					598	1976
LOWEST ANNUAL MEAN					5000	Feb 5 1984
HIGHEST DAILY MEAN	1700	May 21	1770	Jul 12	100	Jan 10 1957
LOWEST DAILY MEAN	512	Aug 15	443	Sep 6	327	Dec 8 1949
ANNUAL SEVEN-DAY MINIMUM	523	Aug 12	463	Aug 31	*10200	Mar 5 1949
MAXIMUM PEAK FLOW			2920	Jul 12	**10.06	Feb 7 1973
MAXIMUM PEAK STAGE			5.47	Dec 17	560400	
ANNUAL RUNOFF (AC-FT)	577800		581400		1030	
10 PERCENT EXCEEDS	1100		1190		764	
50 PERCENT EXCEEDS	721		765		508	
90 PERCENT EXCEEDS	554		514			

e Estimated.

* From rating curve extended above 3,800 ft³/s, stage 6.73 ft.

** Ice jam.



NIOBRARA RIVER BASIN

06461500 NIOBRARA RIVER NEAR SPARKS, NE--Continued

WATER QUALITY RECORDS

Remark codes: <, less than; E, estimated value; M, presence verified, not quantified)

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1982 to September 1993.

WATER TEMPERATURES: October 1982 to September 1993.

EXTREMES FOR PERIOD OF DAILY RECORD.--

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM AD- SORP- TION RATIO (00931)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)
OCT 17...	1410	637	8.6	222	23.0	13.0	90	29.7	3.91	6.09	.4	8.7	16
MAR 06...	1440	1030	7.4	218	3.5	4.5	90	29.4	4.02	6.73	.4	8.0	15
APR 10...	1515	1190	7.7	207	13.5	12.0	110	35.1	4.96	7.65	.4	10.6	16
AUG 15...	0750	520	7.8	228	17.5	19.5	94	30.9	4.21	6.44	.4	9.1	16

DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
OCT 17...	110	1.6	.4	55.9	5.7	.25	311	181	<.041	.19	.68	.490	E.003
MAR 06...	101	1.6	.4	50.4	6.5	.23	475	171	<.041	.30	.90	.597	E.003
APR 10...	125	2.3	.4	45.3	6.8	.26	605	188	<.041	.47	.52	.051	<.006
AUG 15...	112	1.5	.3	57.8	5.5	.25	260	185	E.035	.18	.64	.463	E.004

DATE	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	BORON, DIS- SOLVED (UG/L AS B) (01020)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
OCT 17...	.144	E.045	.047	.111	.5	29	M	E2.1
MAR 06...	.343	.099	.112	.214	7.8	21	40	<3.2
APR 10...	--	.075	<.018	.203	4.8	33	30	4.0
AUG 15...	.218	.065	.071	.119	3.4	30	10	<3.0

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NIOBRARA RIVER BASIN

06463500 LONG PINE CREEK NEAR RIVERVIEW, NE

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

DRAINAGE AREA.--458 mi².

WATER-DISCHARGE RECORDS

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

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

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

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow includes return water from Ainsworth Irrigation District since 1965.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	170	170	160	158	164	168	156	191	213	221	263	201
2	170	161	160	161	162	169	154	188	201	217	249	189
3	178	156	163	166	173	171	181	181	203	212	235	188
4	175	156	163	167	172	177	202	176	208	205	218	184
5	171	159	160	168	171	174	201	259	219	219	209	186
6	167	156	161	168	172	173	188	612	224	210	207	192
7	167	154	165	169	174	173	379	541	201	217	214	274
8	167	154	169	169	168	186	609	338	189	219	201	219
9	167	154	173	167	158	e180	341	252	198	217	190	201
10	167	153	168	168	163	e176	253	221	202	210	187	193
11	168	157	162	167	165	e175	248	217	197	198	199	191
12	170	158	160	166	164	e172	392	225	181	214	211	185
13	166	157	165	170	164	e174	943	218	181	221	216	181
14	162	156	166	167	157	e171	485	212	210	223	229	187
15	166	158	161	166	162	e174	290	203	204	208	247	186
16	164	159	158	167	158	e178	223	200	195	211	240	183
17	161	155	e155	165	160	e181	195	205	192	224	230	176
18	160	159	156	166	165	186	187	204	193	230	217	182
19	160	160	156	160	167	182	184	208	180	221	214	173
20	159	157	e155	165	167	179	180	209	182	214	210	165
21	159	159	151	167	163	178	202	199	189	207	220	161
22	162	159	158	166	164	174	279	191	184	223	205	161
23	164	159	156	165	163	171	698	192	200	213	205	158
24	163	159	157	163	166	166	594	193	207	213	235	158
25	165	160	161	163	158	165	376	189	201	214	216	159
26	161	160	159	164	171	161	267	191	195	208	208	159
27	160	160	161	162	164	159	225	191	225	223	210	160
28	163	164	163	164	166	159	199	192	216	220	208	160
29	180	164	164	168	---	159	187	199	199	205	192	159
30	166	163	164	161	---	159	196	216	199	215	203	159
31	163	---	162	158	---	157	---	233	---	227	213	---
TOTAL	5141	4756	4992	5121	4621	5327	9214	7246	5988	6679	6701	5430
MEAN	166	159	161	165	165	172	307	234	200	215	216	181
MAX	180	170	173	170	174	186	943	612	225	230	263	274
MIN	159	153	151	158	157	157	154	176	180	198	187	158
AC-FT	10200	9430	9900	10160	9170	10570	18280	14370	11880	13250	13290	10770

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2001, BY WATER YEAR (WY)

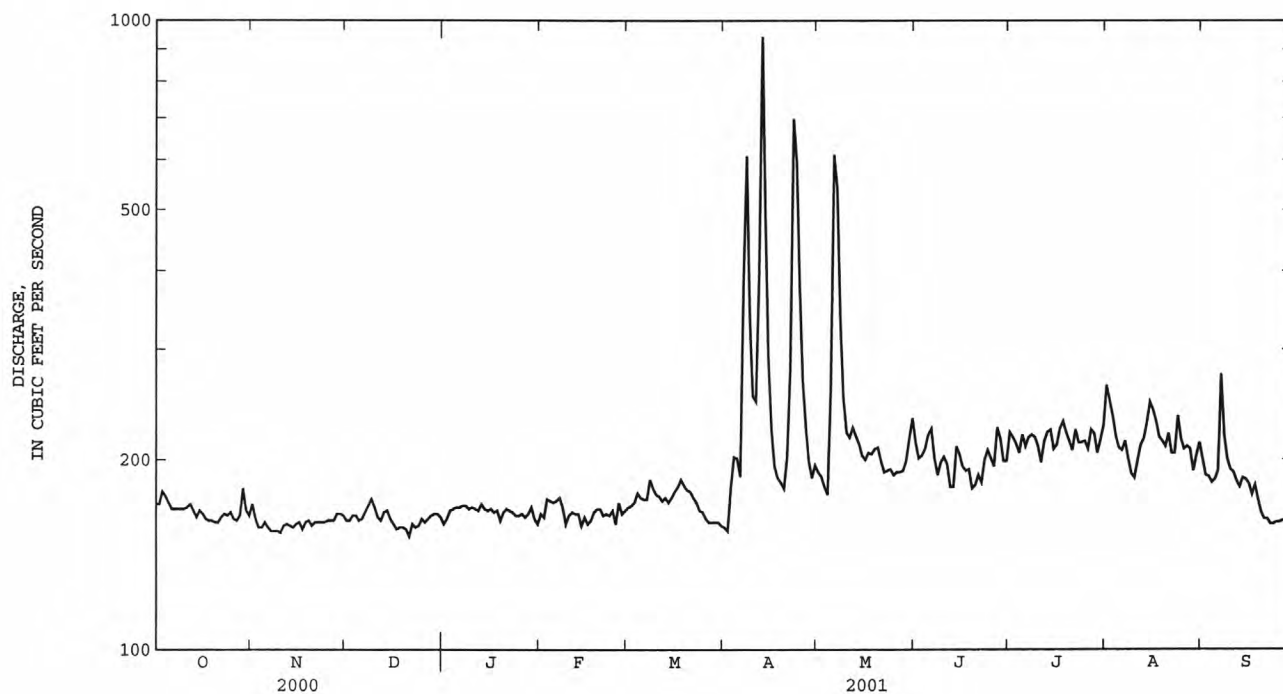
	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
MEAN	141	143	140	138	147	168	173	185	174	165	162	158
MAX	254	238	191	180	256	257	369	495	396	368	256	263
(WY)	1996	1999	1996	1995	1996	1987	1995	1995	1951	1962	1998	1986
MIN	100	101	102	103	96.5	106	114	103	105	99.0	92.9	88.1
(WY)	1949	1950	1969	1957	1951	1951	1950	1948	1948	1949	1948	1948

06463500 LONG PINE CREEK NEAR RIVERVIEW, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1948 - 2001	
ANNUAL TOTAL	65725		71216		158	
ANNUAL MEAN	180		195		231	
HIGHEST ANNUAL MEAN					111	
LOWEST ANNUAL MEAN					3050	
HIGHEST DAILY MEAN	467	Jul 28	943	Apr 13	44	Jul 1 1962
LOWEST DAILY MEAN	146	Apr 7	151	Dec 21	76	Jan 10 1963
ANNUAL SEVEN-DAY MINIMUM	152	Apr 6	155	Nov 4	9650	Jul 1 1962
MAXIMUM PEAK FLOW			1220	Apr 13	*15.68	Jul 1 1962
MAXIMUM PEAK STAGE			4.35	Apr 13		
ANNUAL RUNOFF (AC-FT)	130400		141300		114800	
10 PERCENT EXCEEDS	198		223		203	
50 PERCENT EXCEEDS	173		175		147	
90 PERCENT EXCEEDS	157		159		111	

e Estimated.

* 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 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	HARDNESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM ADSORPTION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)
OCT 18...	0840	157	8.3	200	3.5	9.0	78	25.2	3.57	5.68	.4	7.7	17
MAR 06...	0920	172	7.5	205	-1.5	5.0	83	26.8	3.79	6.43	.3	7.1	15
APR 10...	0945	256	7.5	180	7.5	10.0	86	27.4	4.23	6.99	.4	8.7	17
AUG 14...	1400	234	7.7	187	20.5	19.0	74	24.0	3.50	5.75	.4	7.4	17
DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CAC03) (90410)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SiO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	NITROGEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITROGEN, DIS-SOLVED (MG/L AS N) (00602)	NITROGEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)
OCT 18...	88	2.4	.3	58.3	4.5	.23	72.1	170	<.041	.16	--	2.3	--
MAR 06...	85	2.5	.3	52.7	5.0	.23	77.3	167	.052	.22	.07	2.6	2.35
APR 10...	93	3.6	.3	44.5	5.1	.22	114	164	E.035	.73	--	2.3	1.57
AUG 14...	84	2.2	.3	51.6	4.7	.21	99.0	157	E.026	.23	--	1.7	1.43
DATE	NITROGEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	PHOSPHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOSPHORUS, DIS-SOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOSPHORUS, TOTAL DIS-SOLVED (MG/L AS P) (00665)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	ALUMINUM, DIS-SOLVED (MG/L AS AL) (01106)	ANTIMONY, DIS-SOLVED (MG/L AS SB) (01095)	ARSENIC DIS-SOLVED (MG/L AS AS) (01000)
OCT 18...	--	2.12	--	E.005	--	.359	.118	.117	.158	.8	--	--	--
MAR 06...	10.4	2.36	.036	.011	.17	.466	.140	.152	.205	5.2	--	--	--
APR 10...	6.93	1.58	.036	.011	--	.498	.188	.163	.474	5.7	--	--	--
AUG 14...	6.34	1.44	.020	.006	--	.426	.136	.139	.250	3.2	24	.19	4.9
DATE	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYLLIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM, DIS-SOLVED (UG/L AS CD) (01025)	CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)
OCT 18...	--	--	27	--	--	--	--	M	--	<3.2	--	--	--
MAR 06...	--	--	24	--	--	--	--	20	--	4.1	--	--	--
APR 10...	--	--	22	--	--	--	--	80	--	7.4	--	--	--
AUG 14...	74.1	<.06	27	.05	<1.6	.07	1.6	20	.27	2.7	.6	<.06	<2.0

NIOBRARA RIVER BASIN

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06463500 LONG PINE CREEK NEAR RIVERVIEW, NE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
OCT 18...	--	--	--
MAR 06...	--	--	--
APR 10...	--	--	--
AUG 14...	<1.0	3	.53

06464500 KEYA PAHA RIVER AT WEWELA, SD

LOCATION.--Lat 43°01'44", long 99°46'49", in NW¹/₄ SW¹/₄ SE¹/₄ sec.24, T.95 N., R.76 W., Tripp County, Hydrologic Unit 10150006, on right bank at downstream side of bridge on U.S. Highway 183, 1.0 mi north of Wewela, 4.5 mi upstream from Holt Creek, and 11.5 mi downstream from Lost Creek.

DRAINAGE AREA.--1,070 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 and rest-stage gage. 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. Satellite data-collection platform at station. Water temperature and specific conductance measured during the year are compiled in the Miscellaneous Temperature Measurements and Field Determinations section.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	70	e70	e33	e28	e70	166	302	275	106	59	38
2	32	70	e68	e32	e28	e72	160	275	297	180	e67	35
3	35	72	e66	e32	e29	e75	166	248	260	187	e65	32
4	42	74	e64	e31	e30	e78	180	223	235	202	e73	30
5	47	74	e62	e32	e38	e80	193	315	253	187	e81	28
6	46	74	e60	e33	e50	e100	199	556	278	169	e68	27
7	44	64	e60	e34	e70	e120	419	616	287	152	e61	48
8	42	47	e65	e35	e100	e150	471	538	254	145	e54	46
9	41	68	e70	e36	e140	e200	439	438	219	144	e54	43
10	42	81	e65	e37	e110	e300	367	387	204	135	e47	42
11	42	85	e59	e38	e90	e400	324	330	189	120	e51	38
12	41	e79	e55	e40	e82	e420	488	281	175	112	e62	38
13	40	e73	e50	e40	e78	e430	671	252	166	110	e58	40
14	38	e69	e47	e43	e76	e450	584	225	164	109	e60	47
15	42	e64	e45	e45	e74	e900	422	205	175	105	46	61
16	44	e60	e42	e42	e72	e800	329	188	190	93	45	71
17	45	e57	e40	e39	e70	e700	271	174	175	99	42	72
18	46	e55	e39	e37	e70	e580	246	159	157	95	39	64
19	45	e55	e39	e33	e70	e450	226	148	138	84	40	76
20	43	e55	e38	e30	e70	361	209	140	125	82	42	75
21	46	e52	e37	e30	e71	300	232	132	117	77	37	73
22	e54	e50	e37	e30	e72	269	333	123	109	79	38	68
23	e58	e51	e38	e30	e74	249	576	118	101	84	37	73
24	e59	e52	e38	e30	e73	222	740	114	95	115	46	68
25	e58	e53	e38	e30	e72	206	820	108	84	148	47	63
26	e52	e53	e39	e30	e71	198	929	107	77	114	50	61
27	e56	e54	e39	e30	e70	188	770	104	71	99	48	60
28	e57	e55	e40	e30	e70	180	528	100	65	93	46	62
29	63	e56	e37	e30	---	177	390	99	61	89	41	60
30	65	e61	e35	e30	---	174	340	123	63	85	41	62
31	67	---	e34	e29	---	172	---	208	---	69	39	---
TOTAL	1463	1883	1516	1051	1948	9071	12188	7336	5059	3668	1584	1601
MEAN	47.2	62.8	48.9	33.9	69.6	293	406	237	169	118	51.1	53.4
MAX	67	85	70	45	140	900	929	616	297	202	81	76
MIN	31	47	34	29	28	70	160	99	61	69	37	27
AC-FT	2900	3730	3010	2080	3860	17990	24170	14550	10030	7280	3140	3180

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1940, 1948 - 2001, BY WATER YEAR (WY)

MEAN	41.1	47.3	37.6	32.8	76.5	179	168	148	109	66.7	37.4	31.7
MAX	141	204	108	135	546	598	605	754	512	607	178	89.2
(WY)	1996	1999	1999	1997	1997	1960	1952	1995	1962	1962	1998	1999
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

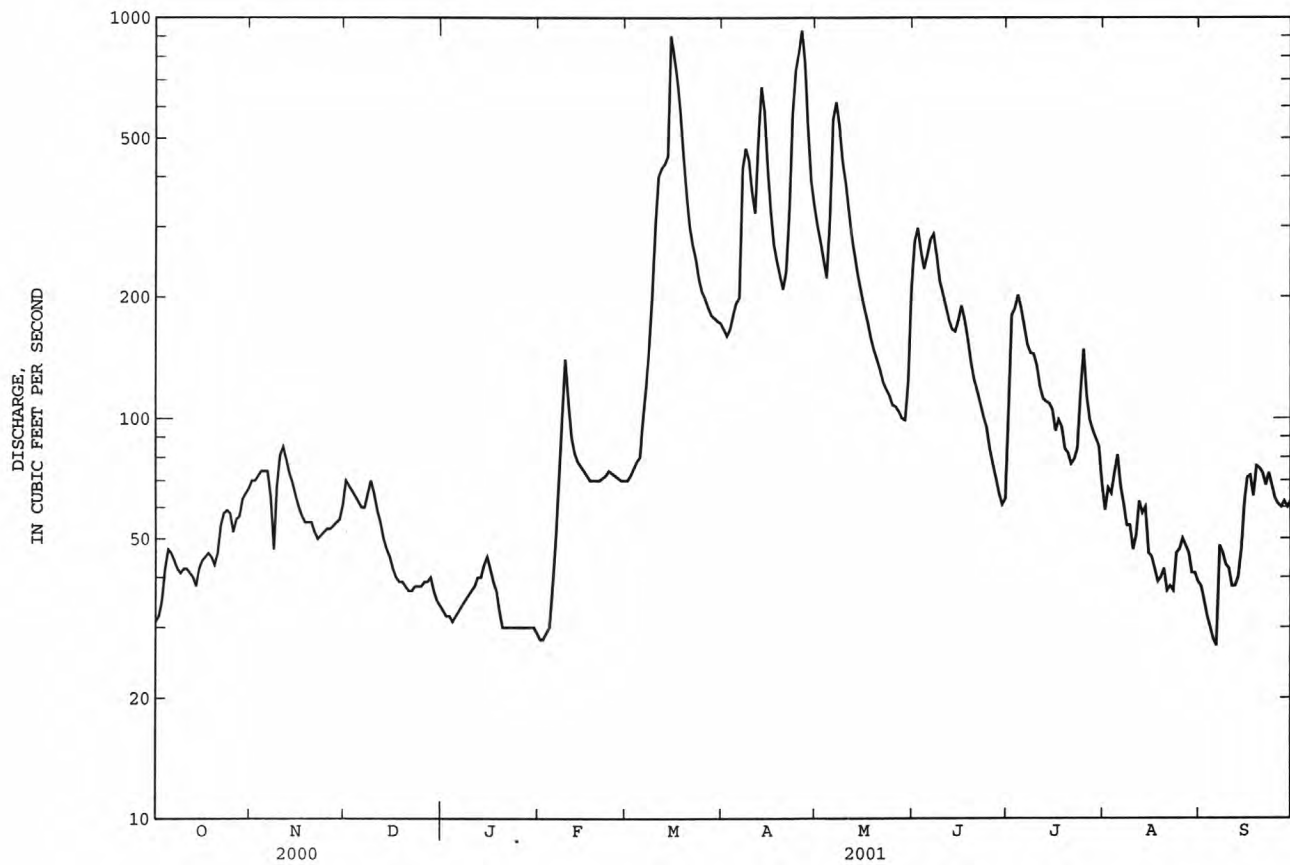
NIOBRARA RIVER BASIN

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06464500 KEYA PAHA RIVER AT WEWELA, SD--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1939-1940, 1948-2001	
ANNUAL TOTAL	33954		48368		81.2a	
ANNUAL MEAN	92.8		133		188	
HIGHEST ANNUAL MEAN					19.5	
LOWEST ANNUAL MEAN					4930	
HIGHEST DAILY MEAN	545	Jul 7	929	Apr 26	4930	Mar 30 1952
LOWEST DAILY MEAN	23	Aug 29	27	Sep 6	.00	Jan 10 1949b
ANNUAL SEVEN-DAY MINIMUM	24	Sep 13	29	Jan 28	.00	Jan 10 1949
MAXIMUM PEAK FLOW			1000	Mar 15	5430	Mar 31 1952c
MAXIMUM PEAK STAGE			6.75	Mar 15	13.50	Mar 25 1950d
ANNUAL RUNOFF (AC-FT)	67350		95940		58860	
10 PERCENT EXCEEDS	173		307		168	
50 PERCENT EXCEEDS	72		70		43	
90 PERCENT EXCEEDS	31		37		16	

- a Median of annual mean discharges, 70 ft³/s.
b Also Jan. 11 to Feb. 15, 1949, and Aug. 19 to Sept. 14, 1976.
c Gage height, 13.08 ft.
d Backwater from ice.
e Estimated.



NIOBRARA RIVER BASIN

06465000 NIOBRARA RIVER NEAR SPENCER, NE

LOCATION.--Lat 42°48'33", long 098°39'22", in SE 1/4 NW 1/4 sec.30, T.33 N., R.11 W., Boyd County, Hydrologic Unit 10150007, at Spencer power plant dam 5 mi southeast of Spencer.

DRAINAGE AREA.--11,070 mi².

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

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

GAGE.--Water-stage recorder and hourly log and power plant operation. Datum of gage is 1,473.67 ft above sea level. Elevation of taintor gate sill, 1,491.12 ft above sea level. Prior to December 1908, nonrecording gage on former highway bridge 275 ft downstream and Aug. 1, 1913, to Sept. 30, 1915, nonrecording gage at highway bridge 10 mi downstream at different datums. Aug. 1, 1927, to Sept. 30, 1936, and June 14, 1940, to Sept. 30, 1944, discharge computed as flow through power house 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 power house 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 power house and over dam.

REMARKS.--Records fair except for estimated daily discharges, which are poor. 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.--Power plant log furnished by Nebraska Public Power District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1120	1840	1480	1520	1620	1630	2080	2590	2060	1780	1340	1050
2	1180	1610	1450	1510	1620	1690	1970	2440	1870	2230	1450	1040
3	1190	2060	1370	1440	1580	1740	2150	2380	1770	1970	1250	1000
4	1630	1510	1440	1400	1590	1770	2290	2300	1970	1640	1190	991
5	1400	1880	1460	1470	1700	1800	2190	2960	2080	1430	1150	969
6	1410	1540	1480	1530	1730	1800	2120	5080	1930	1310	1080	947
7	1320	1910	1580	1650	1720	1860	3890	5290	2010	1390	1050	1290
8	1300	1740	1700	1650	1710	1930	4460	3980	1920	1500	1050	1570
9	1240	1790	1720	1660	1710	2040	3560	3170	1810	1460	993	1430
10	1100	1310	1540	1700	1620	2210	2930	2750	1800	1580	1030	1220
11	1150	1150	916	1680	1420	2360	3080	2470	1820	1550	1050	1130
12	1200	609	478	1640	1460	2380	4600	2330	1780	1690	1040	1100
13	1130	636	498	1670	1560	2620	4350	2080	1740	2280	1080	1200
14	1320	1000	604	1670	1620	3280	3980	1910	1930	1680	1130	1550
15	1340	1070	771	1620	1650	3660	3020	1900	2010	1520	1260	1500
16	1360	953	954	1620	1570	3860	3070	1890	1770	1500	1280	1520
17	1350	968	1100	1620	1520	3670	e2710	1890	1600	2670	1060	1470
18	1270	1170	1310	1600	1540	4210	e2640	1800	1510	1720	1040	1420
19	1270	1260	1220	1550	1500	4020	e2590	1750	1590	1440	964	1360
20	1260	1260	1210	1470	1620	4500	e2500	1800	1620	1320	943	1330
21	1230	1370	1300	1590	1630	3350	e2480	1790	1570	1250	901	1270
22	1220	1190	1280	1550	1680	e3670	e3570	1690	1410	1240	901	1210
23	1440	1270	1240	1590	1680	e4200	e8710	1680	1340	1340	869	1240
24	1320	1360	1050	1610	1690	e3070	e6250	1640	1220	1390	1180	e1270
25	1340	1440	1100	1610	1620	e3480	4290	1630	1200	1490	1360	e1520
26	1340	1480	1220	1610	1580	e3080	3740	1590	1190	1380	1270	e1460
27	1350	1490	1320	1600	1600	2110	3490	1540	1260	1330	1130	e1490
28	1370	1520	1470	1600	1670	2170	3160	1560	1220	1300	1070	e1370
29	1480	1530	1490	1580	---	2130	2700	1610	1120	1300	1070	e1490
30	1540	1480	1500	1560	---	2180	2770	1860	1200	1260	1100	e1430
31	1560	---	1550	1560	---	2200	---	2090	---	1250	1060	---
TOTAL	40730	41396	38801	49130	45210	84670	101340	71440	49320	48190	34341	38837
MEAN	1314	1380	1252	1585	1615	2731	3378	2305	1644	1555	1108	1295
MAX	1630	2060	1720	1700	1730	4500	8710	5290	2080	2670	1450	1570
MIN	1100	609	478	1400	1420	1630	1970	1540	1120	1240	869	947
AC-FT	80790	82110	76960	97450	89670	167900	201000	141700	97830	95580	68120	77030

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2001, BY WATER YEAR (WY)

	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
MEAN	1284	1349	1187	1241	1641	2244	1976	1888	1652	1170	1048	1124
MAX	1965	2333	1881	1860	3014	3941	3972	4649	3972	4156	2167	2143
(WY)	1996	1999	1994	1997	1997	1950	1995	1995	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

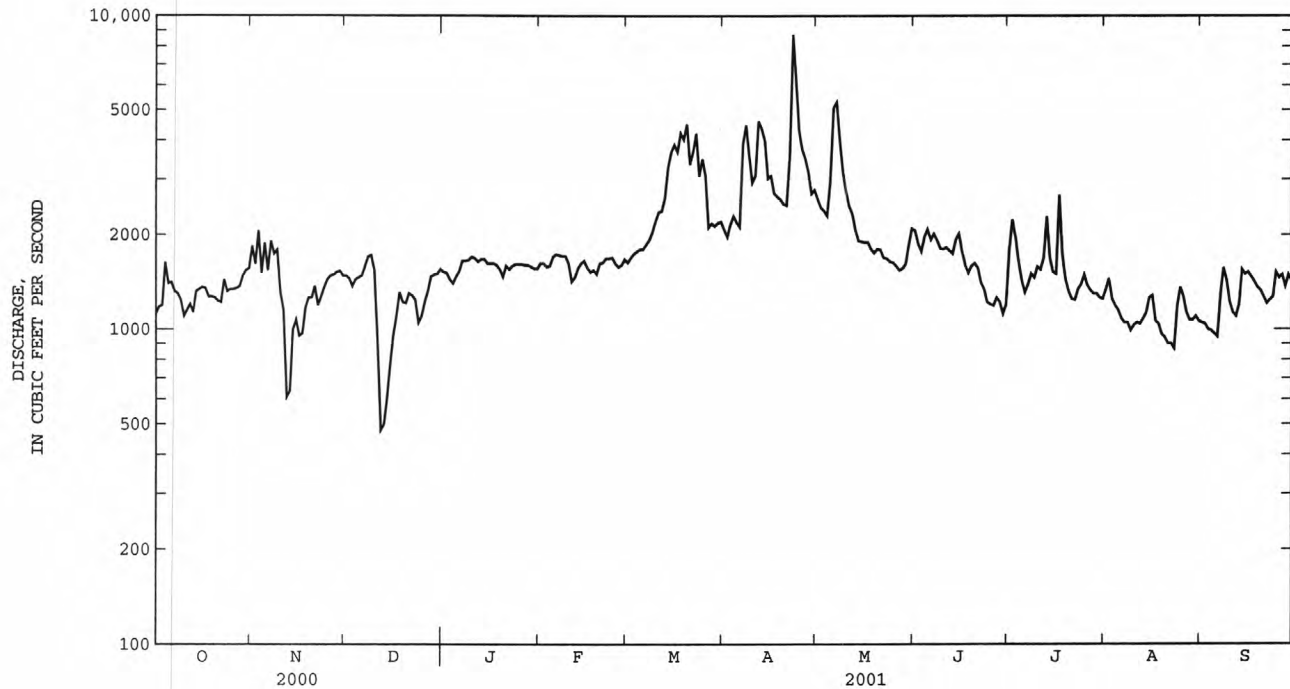
NIOBRARA RIVER BASIN

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06465000 NIOBRARA RIVER NEAR SPENCER, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1927 - 2001	
ANNUAL TOTAL	547133		643405		1484	
ANNUAL MEAN	1495		1763		2066	
HIGHEST ANNUAL MEAN					1096	
LOWEST ANNUAL MEAN					19000	
HIGHEST DAILY MEAN	3010	May 19	8710	Apr 23	5.0	Mar 27 1960
LOWEST DAILY MEAN	441	Jan 4	478	Dec 12	168	Nov 14 1940
ANNUAL SEVEN-DAY MINIMUM	760	Dec 11	760	Dec 11	27400	Dec 8 1932
MAXIMUM PEAK FLOW					12.16	Mar 12 1955
MAXIMUM PEAK STAGE					1075000	Mar 12 1955
ANNUAL RUNOFF (AC-FT)	1085000		1276000		2280	
10 PERCENT EXCEEDS	1960		2760		1320	
50 PERCENT EXCEEDS	1490		1550		782	
90 PERCENT EXCEEDS	980		1080			

e Estimated.



06465500 NIOBRARA RIVER NEAR VERDEL, NE

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

DRAINAGE AREA .--11,580 mi² .

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

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

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1360	2270	e1700	e1900	e1700	e1950	2620	3280	3090	2820	1860	1080
2	1410	2260	e1650	e1800	e1750	e2000	2460	2990	2450	3370	2050	1070
3	1560	2390	e1600	e1700	e1850	e2050	2800	3290	2210	3420	1710	1050
4	1610	2180	e1700	e1750	e2000	e2100	2970	3070	2330	2440	1560	1030
5	1460	2050	e1700	e1800	e2050	e2100	2940	3900	2820	1750	1420	1040
6	1320	2230	e1800	e1800	e2050	e2200	2740	4910	2720	1570	1290	1020
7	1350	1840	e1800	e1850	e2000	e2300	4700	6020	2720	1860	1220	1250
8	1400	1570	e1900	e1900	e1900	e2400	5970	e4600	2710	2110	1170	1610
9	1200	1920	e2000	e1900	e1900	e2500	5050	e4100	2340	1700	1120	1190
10	1250	1640	e1900	e1850	e1800	e2600	4420	e3800	2400	1930	1100	1140
11	1270	1560	e1500	e1800	e1700	e2800	4520	e3600	2530	2080	1090	1110
12	1330	1400	e900	e1750	e1800	e3000	5440	e3400	2540	2210	1080	1100
13	1430	1020	e800	e1750	e1900	e3300	4660	e3300	2210	2660	1070	1150
14	1480	1040	e900	e1750	e1900	e3800	4640	e3100	2320	2160	1140	1720
15	1570	1230	e1100	e1700	e1950	e4200	3540	e3000	2370	1710	1200	1300
16	1590	1150	e1300	e1700	e1900	e4600	3350	e2900	1920	1690	1250	1340
17	1530	1070	e1400	e1700	e1800	e4600	2970	e2850	1590	3270	1100	1350
18	1420	1250	e1600	e1700	e1800	e4900	3060	e2850	1490	2790	1050	1310
19	1290	1580	e1500	e1650	e1850	e4800	3060	2800	1560	2400	1030	1370
20	1190	1460	e1500	e1600	e1900	e5000	3100	e2850	1920	2310	1040	1490
21	1140	1570	e1600	e1550	e1950	e4200	3310	e2900	2520	2230	1050	1500
22	1380	e1500	e1550	e1500	e2000	e4000	4400	2830	2140	2340	1040	1620
23	1420	e1450	e1500	e1700	e2000	4830	7430	2720	2310	2900	1050	1550
24	1450	e1500	e1400	e1700	e2000	4750	6070	2730	2310	2590	1060	1530
25	1540	e1600	e1500	e1700	e1950	4920	4880	2760	2130	2500	1720	1280
26	1590	e1650	e1600	e1750	e1900	4680	3870	2760	2300	2220	1360	1490
27	1750	e1700	e1700	e1800	e1900	3750	3840	2760	2320	2060	1190	1640
28	2030	e1700	e1750	e1800	e1950	3350	3520	2860	2230	1950	1090	1650
29	1910	e1750	e1800	e1900	---	2940	3310	2940	2290	2000	1090	1950
30	2060	e1700	e1850	e1800	---	3170	3510	3100	2290	1760	1160	1680
31	1980	---	e1900	e1750	---	3050	---	3410	---	1880	1080	---
TOTAL	46270	49230	48400	54300	53150	106840	119150	102380	69080	70680	38440	40610
MEAN	1493	1641	1561	1752	1898	3446	3972	3303	2303	2280	1240	1354
MAX	2060	2390	2000	1900	2050	5000	7430	6020	3090	3420	2050	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2001, BY WATER YEAR (WY)

MEAN	1435	1538	1396	1450	1922	2600	2352	2212	1880	1419	1139	1260
MAX	2480	2762	2118	2148	3557	4425	4693	5290	4442	5370	2049	2094
(WY)	1996	1999	1997	1999	1997	1960	1995	1995	1962	1962	1962	1986
MIN	1009	943	787	706	941	1444	1282	1228	1044	551	644	704
(WY)	1977	1977	1969	1940	1939	1981	1939	1969	1976	1974	1971	1939

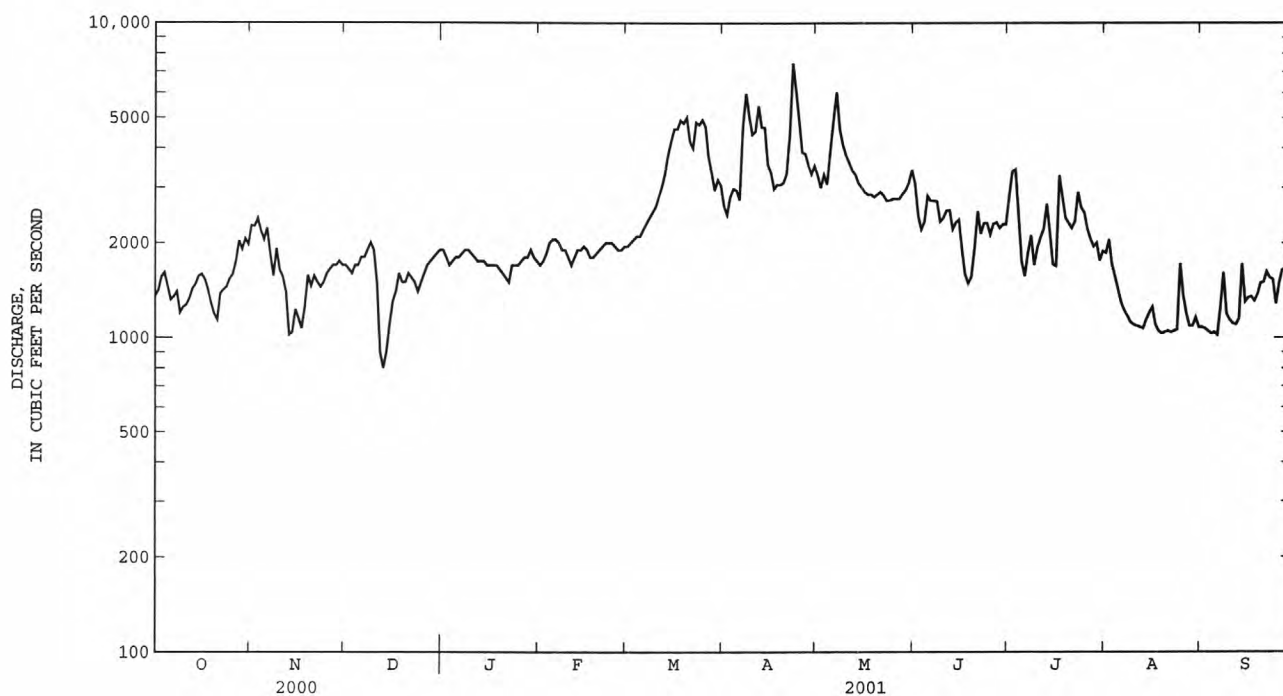
NIOBRARA RIVER BASIN

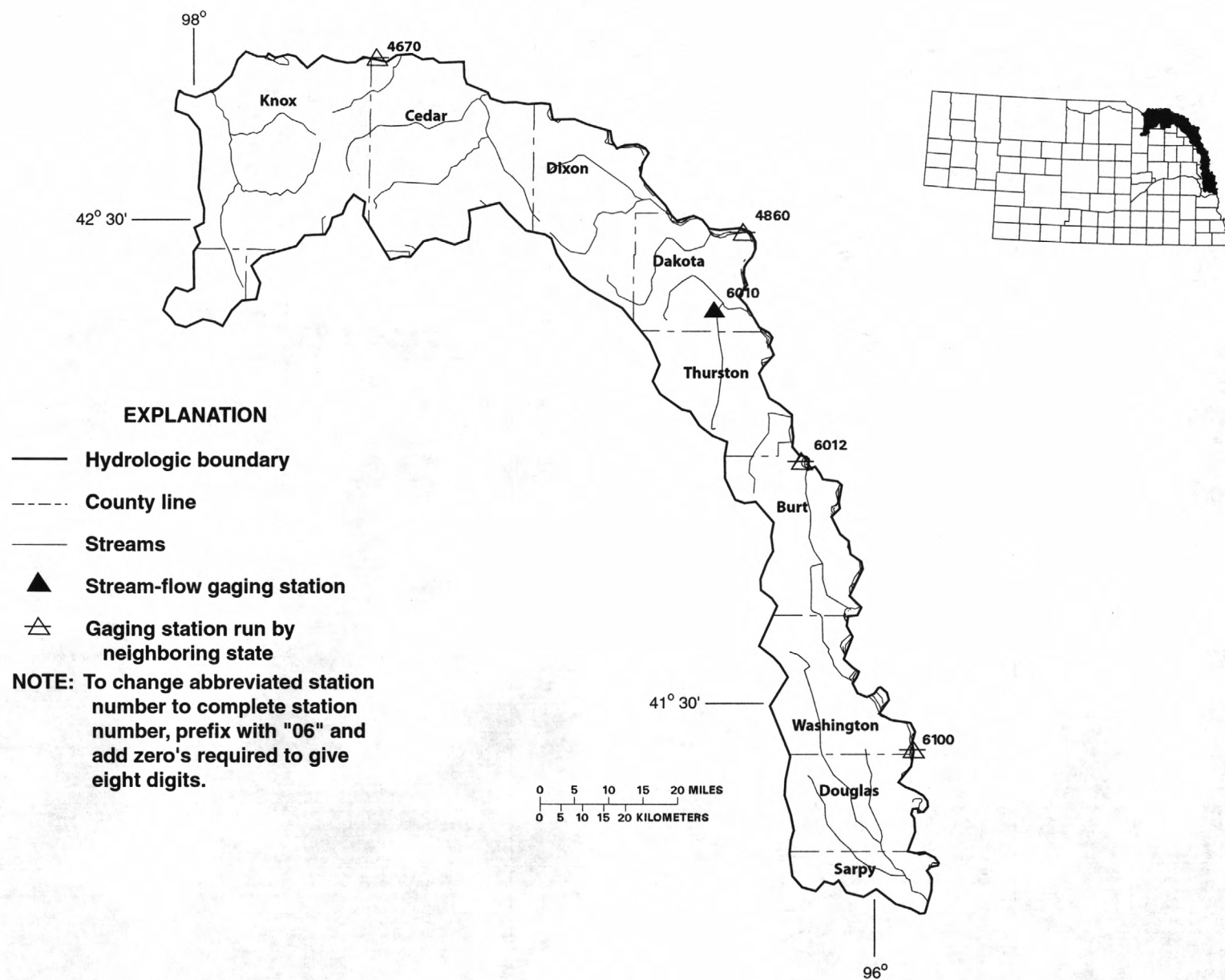
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06465500 NIOBRARA RIVER NEAR VERDEL, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1938 - 2001	
ANNUAL TOTAL	685869		798530		1724	
ANNUAL MEAN	1874		2188		2461	
HIGHEST ANNUAL MEAN					1269	
LOWEST ANNUAL MEAN					1962	
HIGHEST DAILY MEAN	4270	May 19	7430	Apr 23	25100	Mar 27 1960
LOWEST DAILY MEAN	750	Jan 5	800	Dec 13	104	Nov 30 1960
ANNUAL SEVEN-DAY MINIMUM	984	Aug 10	1050	Aug 18	210	Nov 27 1976
MAXIMUM PEAK FLOW			*8580	Apr 23	39000	Mar 27 1960
MAXIMUM PEAK STAGE			**8.20	Mar 20	**10.62	Mar 12 1966
ANNUAL RUNOFF (AC-FT)	1360000		1584000		1249000	
10 PERCENT EXCEEDS	2740		3530		2700	
50 PERCENT EXCEEDS	1800		1880		1520	
90 PERCENT EXCEEDS	1120		1160		898	

e Estimated.
 * Stage 4.70 ft.
 ** Backwater from ice.





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

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

MISSOURI RIVER MAIN STEM

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 above sea level. Prior to Dec. 9, 1955, recorder at temporary location on wall of intake structure unit 3.

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

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

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

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

EXTREMES FOR CURRENT YEAR.--Maximum contents, 424,000 acre-ft, Sept. 15; minimum contents, 334,000 acre-ft, Aug. 12.

MONTHEND ELEVATION AND CONTENTS AT 2400 HOURS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	1,207.00	384,000	--
Oct. 31	1,207.39	393,000	+9,000
Nov. 30	1,206.94	383,000	-10,000
Dec. 31	1,207.24	390,000	+7,000
CAL YR 2000	--	--	+10,000
Jan. 31	1,207.19	389,000	-1,000
Feb. 28	1,205.85	353,000	-36,000
Mar. 31	1,206.19	362,000	+9,000
Apr. 30	1,206.93	383,000	+21,000
May 31	1,206.20	362,000	-21,000
June 30	1,205.77	353,000	-9,000
July 31	1,205.44	351,000	-2,000
Aug. 31	1,206.47	369,000	+18,000
Sept. 30	1,207.49	398,000	+29,000
WTR YR 2001	--	--	+140,000

NOTE.--Lake frozen over Dec. 12 to Apr. 11.

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MISSOURI RIVER MAIN STEM

06486000 MISSOURI RIVER AT SIOUX CITY, IA

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

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

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder. Datum of gage is 1,056.98 ft above 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.--Records good except those for estimated daily discharges, which are poor. Flow regulated by upstream main-stem reservoirs. Fort Randall Dam was completed in July 1952, with storage beginning in December 1952. Gavins Point Dam was completed in July 1955, with storage beginning in December 1955. U.S. Army Corps of Engineers rain gage and satellite data collection platform at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35000	33400	17000	e17100	14500	14800	28500	50600	28300	28500	28700	28100
2	35200	32800	14900	e16800	14200	15200	29500	49300	27900	29200	29400	28600
3	35200	32600	14100	e17000	13800	15200	27800	46200	27600	29600	28400	28400
4	35500	32100	14200	e17300	16000	15200	26700	42600	27600	29400	28800	28100
5	35400	32500	13400	17000	16100	15400	28700	40300	28500	29400	28700	28500
6	35600	34000	13000	16700	15600	15200	31500	39100	29000	28300	27500	29500
7	35600	33500	14900	16500	15400	14300	34800	38600	28700	28600	27000	30100
8	35500	31600	14800	16300	14900	14200	37300	37700	28500	29200	27200	30500
9	35400	30700	14400	15900	14800	14100	33800	38300	28400	29400	27900	30400
10	35300	31100	14900	15300	12900	13600	32700	40300	29100	28900	28400	30100
11	35200	31200	11800	15500	14100	13900	34300	40800	28800	28300	28400	30000
12	35300	31600	e8300	15500	16200	13800	35700	39500	28600	27900	29000	30200
13	35300	31500	10600	15400	15900	13900	36400	37900	29100	27400	30200	30300
14	35300	31000	14500	15500	15700	14800	45100	36300	29900	27700	29800	31300
15	35100	32000	15600	15600	14500	18200	53500	34900	30400	27400	30400	31600
16	35100	33500	14700	15800	15100	20700	55900	33700	32100	27900	30100	31200
17	35500	33400	11400	15300	16600	20700	53400	32100	37800	28200	29300	30800
18	34700	33700	10500	14900	16900	22300	49200	30800	38100	27800	27900	28900
19	34500	34700	13100	14600	16500	24200	45700	29900	34800	27500	28100	28100
20	34600	33900	12800	12600	15200	27100	41400	29400	30900	27200	28000	28000
21	34700	33700	14600	13300	15100	35600	38600	30600	28500	27200	28200	27900
22	34800	34900	14600	14200	14600	36700	36500	30000	27200	27300	28800	28000
23	35000	34400	15500	14000	14500	30700	36900	30400	27900	28100	28700	27900
24	34600	34300	16700	14100	14500	27200	41700	31500	28300	28100	28700	27700
25	34000	32300	16800	13900	14500	24300	48600	30200	28200	28700	28800	27300
26	33900	29600	16900	13000	14000	24400	55100	28900	27800	31800	28700	27600
27	33700	25900	16900	13700	14900	24900	61500	28900	28500	33000	28600	28300
28	32900	21900	17100	13500	14800	25700	62000	28500	28600	33300	28600	28200
29	32800	18100	16800	15000	---	26500	57300	28800	28300	30600	28600	28100
30	33600	16900	16600	14600	---	26500	53000	29200	28100	29800	28800	28000
31	32900	---	e16800	13700	---	26300	---	29000	---	29600	28400	---
TOTAL	1077200	932800	448200	469600	421800	645600	1253100	1094300	885500	895300	888100	871700
MEAN	34750	31090	14460	15150	15060	20830	41770	35300	29520	28880	28650	29060
MAX	35600	34900	17100	17300	16900	36700	62000	50600	38100	33300	30400	31600
MIN	32800	16900	8300	12600	12900	13600	26700	28500	27200	27200	27000	27300
AC-FT	2137000	1850000	889000	931500	836600	1281000	2486000	2171000	1756000	1776000	1762000	1729000
CFSM	.11	.10	.05	.05	.05	.07	.13	.11	.09	.09	.09	.09
IN.	.13	.11	.05	.06	.05	.08	.15	.13	.10	.11	.11	.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2001, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1953	36300	69300	1998	14350	1962
1954	31390	71600	1998	6951	1962
1955	18970	39880	1998	8271	1962
1956	16160	27720	1987	7316	1964
1957	17310	31120	1997	6293	1963
1958	23370	47020	1997	9135	1957
1959	33510	88040	1997	17450	1957
1960	34070	78720	1997	23820	1962
1961	35720	66400	1997	23270	1960
1962	36290	65550	1997	26890	1958
1963	36620	65360	1997	24270	1993
1964	36830	66400	1997	25790	1962

MISSOURI RIVER MAIN STEM

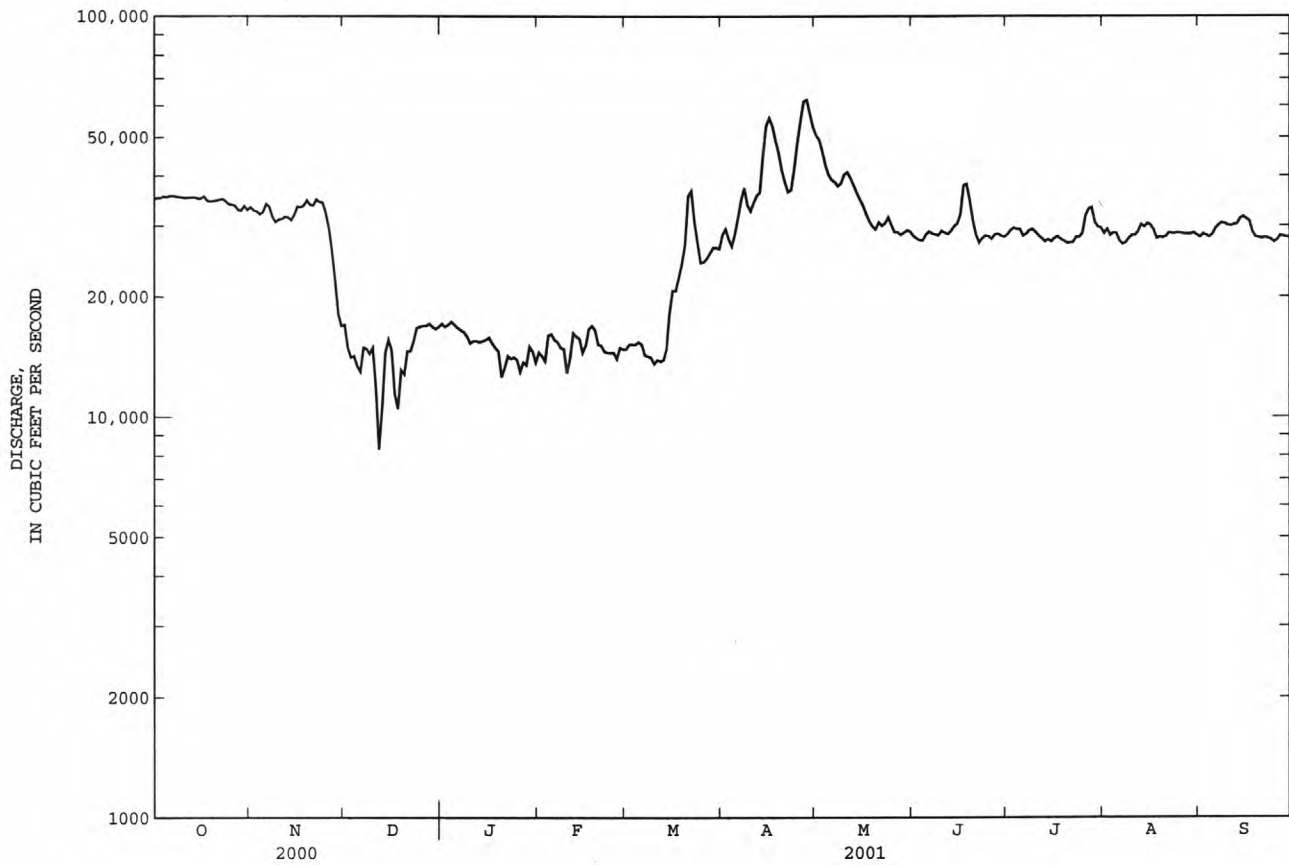
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06486000 MISSOURI RIVER AT SIOUX CITY, IA--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1953 - 2001 a	
ANNUAL TOTAL	10614200		9883200		29750	
ANNUAL MEAN	29000		27080		55890	
HIGHEST ANNUAL MEAN					19770	
LOWEST ANNUAL MEAN					19770	
HIGHEST DAILY MEAN	41000	May 18	62000	Apr 28	105000	Jun 25 1953
LOWEST DAILY MEAN	8300	Dec 12	8300	Dec 12	3000	Dec 11 1961
ANNUAL SEVEN-DAY MINIMUM	12200	Dec 12	12200	Dec 12	5430	Feb 22 1963
MAXIMUM PEAK FLOW			64100	Apr 27	101000	Apr 3 1960
MAXIMUM PEAK STAGE			22.36	Apr 28	30.65	Feb 19 1971
ANNUAL RUNOFF (AC-FT)	21050000		19600000		21560000	
ANNUAL RUNOFF (CFSM)	.092		.086		.095	
ANNUAL RUNOFF (INCHES)	1.26		1.17		1.29	
10 PERCENT EXCEEDS	36000		35900		46600	
50 PERCENT EXCEEDS	31800		28500		30200	
90 PERCENT EXCEEDS	17700		14500		11800	

a Post regulation.

e Estimated.



OMAHA CREEK BASIN

06601000 OMAHA CREEK AT HOMER, NE

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

DRAINAGE AREA.--174 mi².

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

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

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	38	30	e21	e24	51	72	107	104	64	40	34
2	19	29	34	e21	e23	51	68	121	92	72	43	37
3	20	25	30	e22	e22	66	71	135	89	97	55	34
4	21	24	30	e23	e24	102	71	139	89	71	46	32
5	22	25	26	e25	e25	110	68	269	108	63	41	31
6	21	43	35	e27	e26	89	77	225	93	61	38	31
7	21	43	31	e30	e27	72	119	156	88	61	37	44
8	22	34	34	e28	e26	95	86	137	85	127	36	39
9	22	29	32	e26	e24	94	75	127	81	93	35	35
10	23	27	26	e27	e23	81	75	118	83	67	34	33
11	24	28	e24	e29	e25	68	391	110	80	65	35	32
12	24	e26	e25	e28	e28	62	179	106	88	64	34	30
13	25	e24	e26	e27	e29	150	59	107	126	59	34	32
14	24	e25	e27	e27	e28	e3200	389	100	318	58	34	52
15	23	e25	e27	e26	e27	614	101	93	110	56	139	73
16	24	e24	e25	e24	e27	184	82	89	95	56	74	56
17	25	e23	e24	e24	e26	130	75	87	90	57	43	47
18	25	e24	e25	e24	e28	128	74	83	87	57	39	41
19	24	e25	e26	e24	e29	118	73	84	81	53	38	39
20	24	22	e27	e23	e28	114	71	110	81	51	38	37
21	24	35	e25	e22	e29	127	74	111	81	56	37	36
22	25	33	e21	e23	e30	103	79	94	78	51	37	45
23	28	35	e22	e24	e31	100	102	87	76	49	35	39
24	27	35	e20	e25	e30	88	79	86	74	51	36	35
25	26	36	e21	e24	e28	75	73	86	71	53	44	35
26	26	34	e22	e23	e27	68	70	83	69	49	38	36
27	25	32	e23	e24	e26	71	67	81	69	49	e35	35
28	23	34	e24	e23	e33	72	64	79	66	49	e34	35
29	25	32	e23	e25	---	71	60	79	64	46	e33	34
30	57	29	e22	e25	---	70	72	91	64	44	51	34
31	39	---	e21	e25	---	79	---	133	---	42	38	---
TOTAL	777	898	808	769	753	6503	3016	3513	2780	1891	1331	1153
MEAN	25.1	29.9	26.1	24.8	26.9	210	101	113	92.7	61.0	42.9	38.4
MAX	57	43	35	30	33	3200	391	269	318	127	139	73
MIN	19	22	20	21	22	51	59	79	64	42	33	30
AC-FT	1540	1780	1600	1530	1490	12900	5980	6970	5510	3750	2640	2290

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2001, BY WATER YEAR (WY)

MEAN	23.5	22.5	19.1	19.0	48.6	74.2	57.7	60.3	96.0	59.2	34.2	26.8
MAX	89.6	75.2	62.4	82.0	472	315	426	248	370	331	181	131
(WY)	1994	1994	1995	1973	1971	1993	1985	1984	1999	1996	1993	1993
MIN	1.17	2.36	2.46	1.99	1.49	6.33	4.14	4.04	7.60	4.34	2.55	.75
(WY)	1957	1956	1977	1957	1956	1956	1956	1981	1981	1976	1968	1948

OMAHA CREEK BASIN

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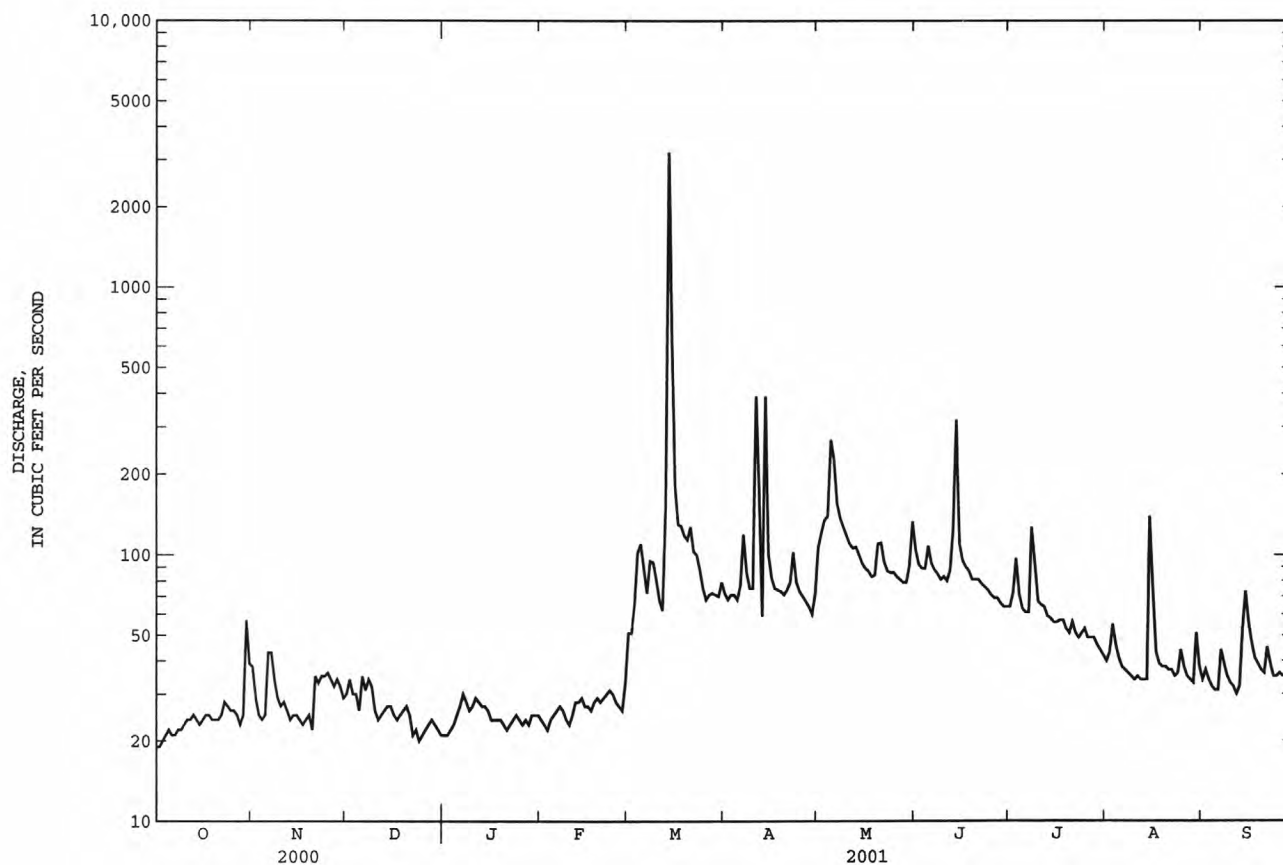
06601000 OMAHA CREEK AT HOMER, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1946 - 2001	
ANNUAL TOTAL	18519		24192		45.0	
ANNUAL MEAN	50.6		66.3		37.2	
MEDIAN OF ANNUAL MEANS					130	
HIGHEST ANNUAL MEAN					6.20	
LOWEST ANNUAL MEAN					1993	
HIGHEST DAILY MEAN	4140	Jun 25	3200	Mar 14	6840	Feb 18 1971
LOWEST DAILY MEAN	12	Sep 12	19	Oct 1	.10	Sep 16 1948
ANNUAL SEVEN-DAY MINIMUM	13	Sep 9	20	Oct 1	.16	Sep 8 1955
MAXIMUM PEAK FLOW			*7690	Mar 14	**21500	Jul 17 1996
MAXIMUM PEAK STAGE			11.31	Mar 14	28.47	Feb 19 1971
ANNUAL RUNOFF (AC-FT)	36730		47980		32610	
10 PERCENT EXCEEDS	49		105		83	
50 PERCENT EXCEEDS	33		38		19	
90 PERCENT EXCEEDS	20		24		4.4	

e Estimated.

* From rating curve extended above 1,100 ft³/s.

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



06601200 MISSOURI RIVER AT DECATUR, NE

LOCATION.--Lat 42°00'26", long 96°14'29", in 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 recorder. Datum of gage is 1.010.00 ft above sea level, supplementary adjustment of 1954.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34600	33700	17800	17600	14200	15200	28500	51900	30200	28900	29300	28400
2	35500	33200	17100	17300	e14700	15300	30400	51300	29800	29500	29300	28500
3	35600	33000	15000	17500	e14100	15500	29800	49000	30200	30200	29200	28800
4	35900	32600	14400	17800	14900	15500	27700	45800	29800	30000	28600	28600
5	36100	32500	14100	17700	16500	15500	27900	43400	30000	30100	29000	28600
6	36100	33600	13400	17200	16400	15500	30300	42200	30500	29300	28200	29500
7	36400	34400	14000	17400	16100	15100	33000	41000	30200	28800	27700	30200
8	36100	32900	15400	17400	15800	14600	36900	40000	29800	29500	27400	30700
9	35900	31400	15200	17100	15300	14700	35900	39400	29500	29600	28000	30700
10	35600	31400	15200	16500	14400	14500	32900	40700	29400	29300	28400	30600
11	35500	31700	15200	16400	13300	14300	34100	42400	29700	28800	28900	30500
12	35600	31900	11500	16600	15000	14300	36600	41400	29400	28500	29000	30500
13	35600	32400	10800	16400	16300	14400	36400	39600	29700	28100	30100	30500
14	35600	31900	13200	16300	15900	15500	40700	38200	30800	28100	30400	30800
15	35600	32300	15800	16200	15300	18200	51400	37000	31200	28000	30700	32100
16	35300	33700	16100	16000	14500	20000	56600	35800	31400	27800	30600	31300
17	35600	34500	14800	15900	15800	21200	55800	34500	36300	28500	30100	31200
18	35600	34300	12600	15300	16600	21900	51500	33100	39400	28400	28900	29700
19	34500	35000	13200	15100	17100	23500	46900	31900	36900	28100	28300	28400
20	34900	35300	14800	14300	16200	25800	42400	31500	33200	27700	28400	28200
21	34900	34200	15400	13200	15500	32100	39900	31500	30400	27600	28300	28100
22	35100	34900	16700	14400	15300	38600	37900	32000	28500	27500	28600	28100
23	35200	34800	16100	15100	15100	35900	36800	31300	28100	28100	28800	27900
24	35100	34300	17100	15200	15400	30100	39900	32100	28600	28500	28800	27700
25	34500	33000	17300	15000	15100	27400	46800	32000	28900	28300	28900	27600
26	34200	30600	17200	14300	15000	26000	52900	30400	28300	30100	28700	27400
27	34300	28100	17400	14200	14700	26600	58600	29700	28800	32600	28400	28100
28	33600	24700	17500	13900	15300	27000	62200	29900	29000	33600	28300	28400
29	33100	21500	17600	15000	---	27600	58800	29500	29200	31900	28200	28300
30	33900	18600	17200	15500	---	28200	54600	30100	29100	30100	28900	28200
31	33500	---	17300	14400	---	27600	---	30500	---	29600	28600	---
TOTAL	1089000	956400	476400	492200	429800	667600	1254100	1149100	915900	905100	895000	877600
MEAN	35130	31880	15370	15880	15350	21540	41800	37070	30530	29200	28870	29250
MAX	36400	35300	17800	17800	17100	38600	62200	51900	39400	33600	30700	32100
MIN	33100	18600	10800	13200	13300	14300	27700	29500	28100	27500	27400	27400
AC-FT	2160000	1897000	944900	976300	852500	1324000	2488000	2279000	1817000	1795000	1775000	1741000
CFSM	.11	.10	.05	.05	.05	.07	.13	.12	.10	.09	.09	.09
IN.	.13	.11	.06	.06	.05	.08	.15	.14	.11	.11	.11	.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2001, BY WATER YEAR (WY)

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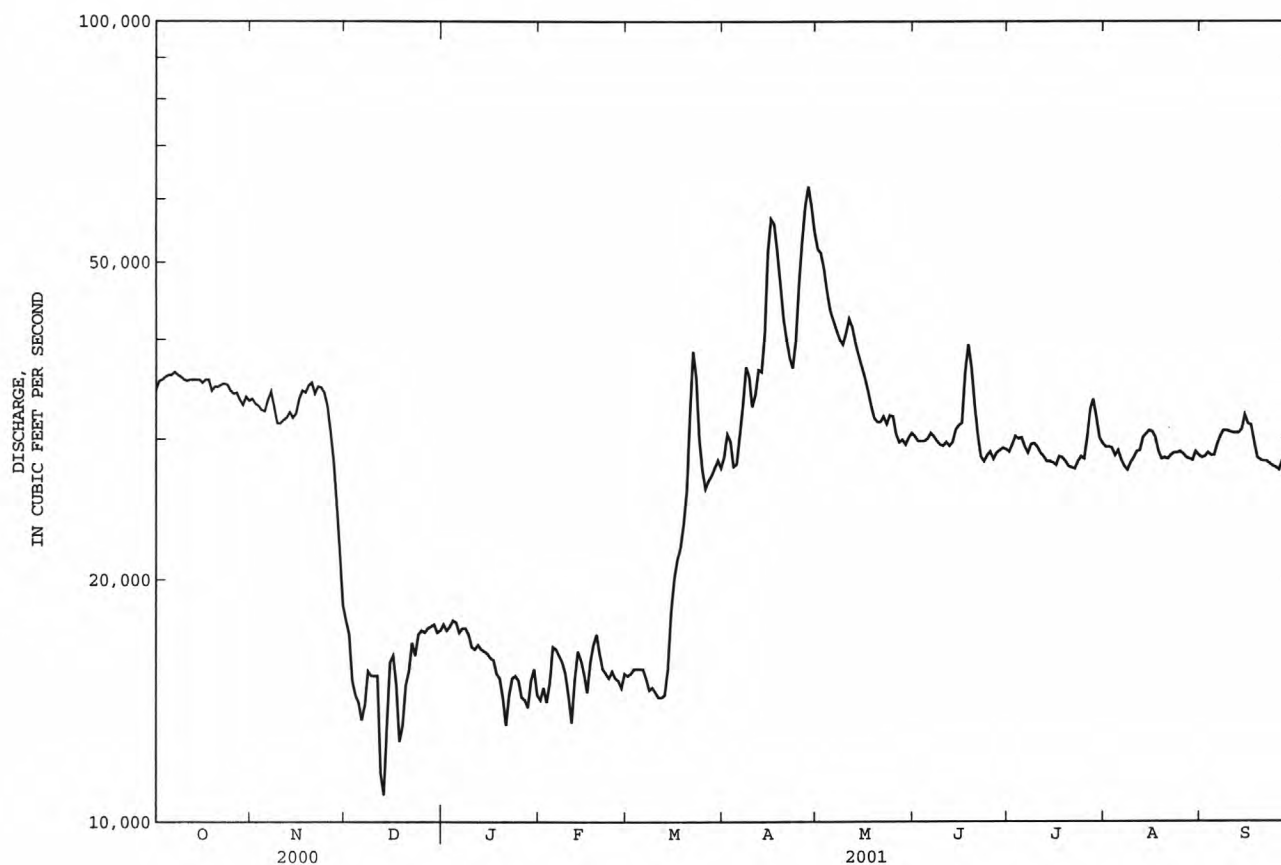
MISSOURI RIVER MAIN STEM

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06601200 MISSOURI RIVER AT DECATUR, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1988 - 2001	
ANNUAL TOTAL	10875600		10108200		32560	
ANNUAL MEAN	29710		27690		57440	
HIGHEST ANNUAL MEAN					21450	
LOWEST ANNUAL MEAN					99900	
HIGHEST DAILY MEAN	45900	Jun 26	62200	Apr 28	7130	Apr 15 1997
LOWEST DAILY MEAN	10800	Dec 13	10800	Dec 13	9660	Dec 22 1990
ANNUAL SEVEN-DAY MINIMUM	13500	Dec 12	13500	Dec 12	100000	Dec 12 1990
MAXIMUM PEAK FLOW			62800		32.31	
MAXIMUM PEAK STAGE			28.89		Jul 18 1996	
ANNUAL RUNOFF (AC-FT)	21570000		20050000		23590000	
ANNUAL RUNOFF (CFSM)	.094		.088		.10	
ANNUAL RUNOFF (INCHES)	1.28		1.19		1.40	
10 PERCENT EXCEEDS	36900		36700		54800	
50 PERCENT EXCEEDS	32500		28900		31000	
90 PERCENT EXCEEDS	18600		15000		14400	

e Estimated



MISSOURI RIVER MAIN STEM

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

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

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

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 761: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 948.24 ft above 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.--Records good except those for estimated daily discharges, which are poor. Flow regulated by upstream main-stem reservoirs. Fort Randall Dam was completed in July 1952, with storage beginning in December 1952. Gavins Point Dam was completed in July 1955, with storage beginning in December 1955. U.S. Army Corps of Engineers rain gage and satellite data collection platform at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35100	35500	20300	e18300	15300	15900	34800	60400	38000	32500	32300	30100
2	35900	35100	19400	18800	14800	15800	36700	61600	35900	32500	31700	29900
3	36400	34600	18900	18600	15100	16000	38800	66000	34400	33900	31600	30100
4	36500	34100	17200	18400	14500	16200	37200	63800	33800	34300	31700	30400
5	37100	33900	16600	18800	15000	16300	34700	61000	34200	33400	31100	29800
6	37400	34700	16400	18600	16600	16300	35500	62900	34500	33300	31100	29800
7	37300	35300	15900	18100	16700	16300	38700	57400	35000	32500	30200	30700
8	37500	35500	16100	18200	16400	16000	41700	53300	34500	32100	29400	31300
9	37200	33800	17400	18200	16100	15500	44500	50200	34400	33000	28800	31400
10	36700	32500	17300	17900	15700	15500	42500	50000	34800	33200	28900	31300
11	36200	32600	17100	17400	15200	15400	40900	50900	35000	32300	29100	31200
12	36000	32900	16800	17300	14200	15300	44900	50600	34900	31700	29200	30700
13	36000	32900	13900	17700	15200	15500	48800	48900	35000	31100	29000	30700
14	36000	33100	12500	17600	16600	16800	48300	46500	34600	30400	29600	30800
15	35900	32700	14100	17500	16400	20400	51800	44600	48200	30200	30700	31300
16	36000	33200	16800	17300	16000	25200	58500	43000	40500	30000	31200	32600
17	36000	34300	17500	17100	15200	26100	61300	41500	39200	29900	31500	32200
18	36100	35000	16600	16900	15900	26400	59900	39900	43800	30800	30600	31400
19	35900	35200	14500	16400	16900	27800	55500	38300	46100	30500	29700	29900
20	35100	35800	14300	15900	17200	31200	50600	38000	43500	30200	29400	29000
21	35500	35600	15900	15100	16800	37700	47100	38300	39900	30000	29600	29000
22	35700	35000	16600	14100	16100	44100	45500	38000	37700	29800	29400	29000
23	35900	35000	17400	14700	15900	42400	45100	38800	35500	29700	29800	29000
24	36200	34600	17400	15600	16100	38300	44700	38500	34500	30200	30000	28800
25	35900	34000	18200	15700	16000	34700	49000	38800	34200	30900	30000	28600
26	35300	31700	18700	15600	15900	33000	56000	38700	33800	30700	30200	28800
27	35300	29800	18600	15100	15700	33100	61500	37200	32900	33700	30200	28900
28	35400	27800	18500	14800	15400	33800	66900	36100	33000	36900	29900	29800
29	35300	25600	18600	14800	---	34300	68700	36000	33000	37200	29900	30300
30	35300	22900	18600	15300	---	35100	65100	36400	32700	34600	30100	30400
31	35900	---	e18300	16000	---	35100	---	38100	---	32900	30600	---
TOTAL	1118000	994700	526400	521800	442900	781500	1455200	1443700	1109200	994400	936500	907200
MEAN	36060	33160	16980	16830	15820	25210	48510	46570	36970	32080	30210	30240
MAX	37500	35800	20300	18800	17200	44100	68700	66000	48200	37200	32300	32600
MIN	35100	22900	12500	14100	14200	15300	34700	36000	32700	29700	28800	28600
AC-FT	2218000	1973000	1044000	1035000	878500	1550000	2886000	2864000	2200000	1972000	1858000	1799000
CFSM	.11	.10	.05	.05	.05	.08	.15	.14	.11	.10	.09	.09
IN.	.13	.11	.06	.06	.05	.09	.17	.17	.13	.11	.11	.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2001, BY WATER YEAR (WY)

	MEAN	38670	34280	21140	17790	19910	28160	39060	38840	42090	40670	39150	39110
MAX	74070	75040	44260	33250	40410	54660	93840	87620	76120	78560	68890	69770	
(WY)	1998	1998	1998	1987	1997	1997	1997	1997	1997	1993	1997	1997	
MIN	16920	8324	8296	8425	8162	10170	16480	26450	26890	27150	27280	28290	
(WY)	1962	1962	1962	1964	1963	1957	1957	1961	1961	1958	1958	1958	

MISSOURI RIVER MAIN STEM

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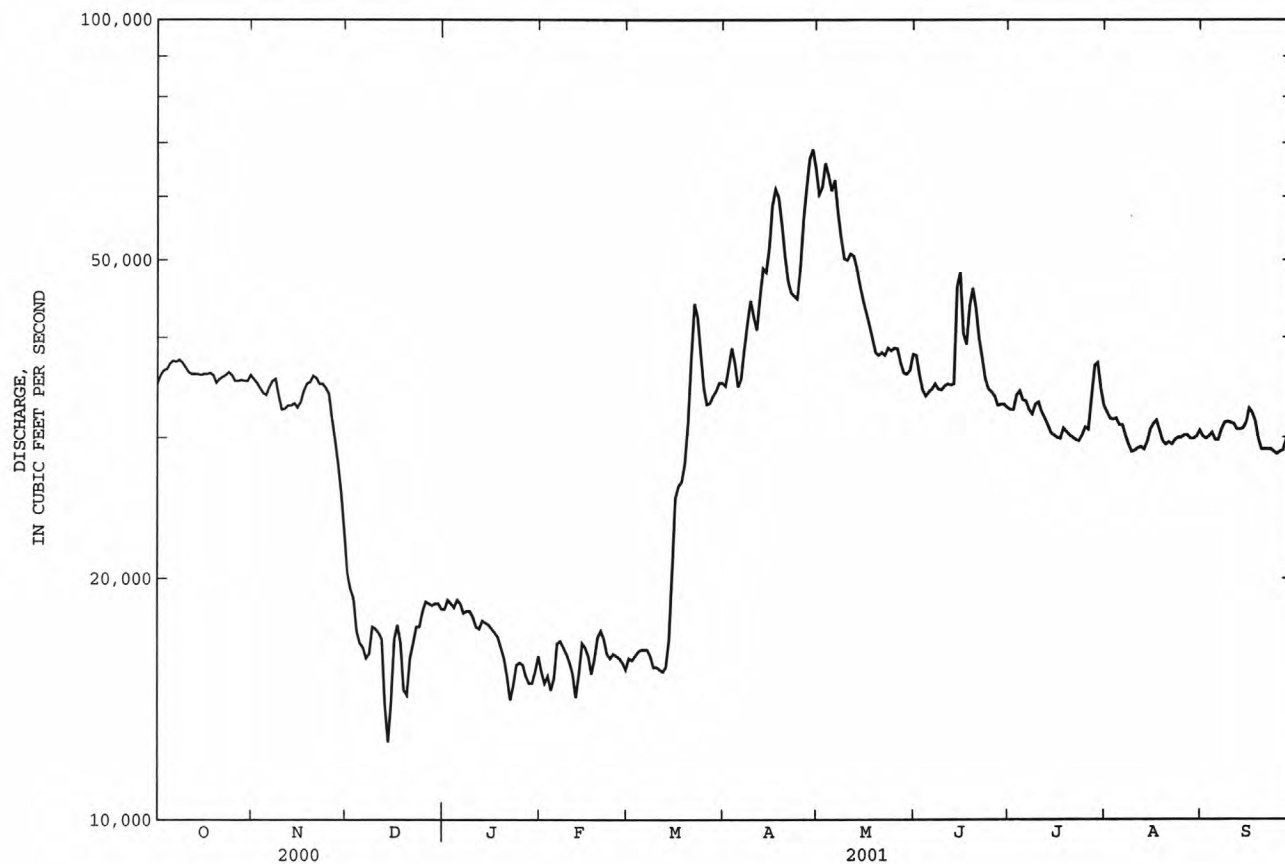
06610000 MISSOURI RIVER AT OMAHA, NE--Continued
(National stream-quality accounting network station)

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1953 - 2001a	
ANNUAL TOTAL	11700000		11231500		33280	
ANNUAL MEAN	31970		30770		62150	
HIGHEST ANNUAL MEAN					20490	
LOWEST ANNUAL MEAN					116000	
HIGHEST DAILY MEAN	52300	Jun 27	68700	Apr 29	2440	Apr 4 1960
LOWEST DAILY MEAN	12500	Dec 14	12500	Dec 14	4300	Dec 14 1961
ANNUAL SEVEN-DAY MINIMUM	15100	Dec 13	15100	Jan 22	120000	Nov 28 1955
MAXIMUM PEAK FLOW			69600	Apr 29	30.26	Apr 1 1960
MAXIMUM PEAK STAGE			23.52	May 3b	24110000	Jul 10 1993
ANNUAL RUNOFF (AC-FT)	23210000		22280000		.10	
ANNUAL RUNOFF (CFSM)	.099		.095		1.40	
ANNUAL RUNOFF (INCHES)	1.35		1.29			
10 PERCENT EXCEEDS	39900		44600		52800	
50 PERCENT EXCEEDS	34600		31500		32700	
90 PERCENT EXCEEDS	20900		15900		13700	

a Post regulation.

b Also May 4.

e Estimated.



MISSOURI RIVER MAIN STEM

06610000 MISSOURI RIVER AT OMAHA, NE--Continued
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WATER-QUALITY RECORDS

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

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

PERIOD OF DAILY RECORD.--

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

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

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

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

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

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

SEDIMENT CONCENTRATIONS: Maximum daily mean, 8,180 mg/L May 19, 1974; minimum daily mean, 71 mg/L Jan. 3, 1993.

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

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 852 microsiemens July 24; minimum daily, 701 microsiemens June 27.

WATER TEMPERATURES: Maximum daily, 28.5°C July 10, 17, and Aug. 11; minimum daily, 0.0°C Feb. 1.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,130 mg/L June 27; minimum daily mean, 92 mg/L Mar. 7.

SEDIMENT LOADS: Maximum daily, 302,000 tons June 27; minimum daily, 5,320 tons Mar. 7.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TEMPER- ATURE AIR (DEG C) (00020)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
OCT													
03...	1030	36100	815	8.5	17.5	14.5	22	9.1	99	735	250	59.2	25.3
NOV													
28...	1030	27500	863	8.4	1.5	3.5	8.5	13.5	100	735	280	67.0	26.2
JAN													
06...	1200	18700	899	8.4	.5	1.0	6.6	13.7	100	730	290	69.9	27.2
MAR													
01...	1130	16000	847	8.2	.5	-0.5	5.1	12.4	90	728	260	65.9	23.5
16...	1030	25600	672	8.2	2.5	1.0	200	10.4	79	739	220	56.4	19.4
APR													
10...	1100	42700	539	8.1	8.5	12.5	180	10.5	94	730	210	54.1	18.3
24...	1030	44500	642	8.2	11.0	9.0	130	8.8	82	743	260	63.8	23.9
MAY													
07...	1100	57700	677	8.2	15.5	16.0	92	7.7	80	740	270	67.4	25.3
22...	1100	37900	829	8.4	18.0	13.0	45	8.2	91	730	320	77.0	31.5
JUN													
05...	1100	34200	857	8.3	17.0	15.5	--	8.7	94	733	320	78.3	30.8
15...	1030	48400	663	8.0	21.5	26.0	--	5.8	68	734	240	60.0	21.1
JUL													
10...	1030	33300	837	8.3	27.0	24.0	--	6.5	85	735	300	72.8	28.9
AUG													
07...	1100	30300	856	8.5	30.0	27.5	--	6.8	93	741	300	73.5	28.4
21...	1030	--	866	8.6	24.0	23.5	--	8.0	100	730	260	63.9	24.7
SEP													
05...	1030	28800	859	8.6	25.0	23.5	--	8.1	102	739	270	65.2	25.8

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06610000 MISSOURI RIVER AT OMAHA, NE--Continued
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WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3 (39086)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3 (00452)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3 (00453)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
OCT 03...	79.1	2	5.54	140	2	167	229	11.8	.5	6.4	531	.72	.084
NOV 28...	76.7	2	5.05	150	.0	183	233	14.8	.4	6.8	561	.76	.381
JAN 06...	81.3	2	5.89	198	.0	242	233	15.8	.5	9.9	592	.81	.453
MAR 01...	63.2	2	5.66	196	.0	239	211	17.4	.5	10.6	570	.78	.684
MAR 16...	44.1	1	7.39	167	.0	204	141	13.3	.4	9.8	440	.60	1.07
APR 10...	21.2	.6	7.48	131	.0	160	107	10.8	.3	12.0	357	.49	2.56
APR 24...	29.7	.8	8.75	137	.0	168	145	14.0	.3	14.4	437	.59	2.70
MAY 07...	26.7	.7	8.51	156	.0	191	152	14.9	.3	13.7	455	.62	2.96
MAY 22...	44.4	1	8.64	188	0	228	202	18.7	.4	13.5	573	.78	2.23
JUN 05...	55.4	1	7.01	188	.0	229	214	18.3	.4	10.7	573	.78	2.19
JUN 15...	40.0	1	7.11	143	.0	175	153	12.7	.4	8.6	433	.59	1.78
JUL 10...	59.2	1	6.95	177	.0	215	211	14.2	.4	12.4	564	.77	1.70
AUG 07...	66.4	2	7.05	178	3	211	233	15.1	.4	12.2	594	.81	1.46
AUG 21...	70.9	2	7.01	166	6	191	250	15.2	.4	8.7	585	.80	.370
SEP 05...	77.9	2	6.74	159	4	187	250	14.7	.4	9.1	579	.79	E.206
DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)
OCT 03...	<.010	<.020	.55	.007	.007	.155	247	24100	19	2.5	3	43.0	<.06
NOV 28...	E.005	.078	.50	.014	.017	.139	218	16200	14	E1.2	--	--	--
JAN 06...	.010	.195	.60	.027	.030	.094	143	7220	18	2.0	--	--	--
MAR 01...	.009	.245	.73	.037	.043	.093	96	4150	33	2.0	--	--	--
MAR 16...	.027	.836	3.7	.074	.103	1.46	1260	87100	94	2.3	--	--	--
APR 10...	.050	.446	2.7	.123	.145	.928	896	103000	70	2.5	--	--	--
APR 24...	.042	.073	2.0	.183	.204	.769	675	81100	64	3.3	--	--	--
MAY 07...	.041	.084	1.8	.151	.175	.643	598	93200	70	3.3	--	--	--
MAY 22...	.021	.044	1.2	.120	.137	.389	328	33600	74	4.1	--	--	--
JUN 05...	.017	E.034	.90	.088	.103	.294	275	25400	55	3.1	--	--	--
JUN 15...	.059	.105	7.7	.100	.112	3.44	3850	503000	96	3.2	--	--	--
JUL 10...	.019	.049	1.1	.108	.116	.347	581	52200	36	3.6	--	--	--
AUG 07...	.013	E.024	.93	.084	.091	.263	221	18100	61	4.0	--	--	--
AUG 21...	.012	<.040	.97	.032	.039	.194	203	--	41	3.4	--	--	--
SEP 05...	E.009	<.040	.74	E.021	E.030	.161	.0	.00	.0	2.9	--	--	--

MISSOURI RIVER MAIN STEM

06610000 MISSOURI RIVER AT OMAHA, NE--Continued
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WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)
OCT 03...	E.04	<.8	.19	2.0	<10	<.08	57.0	<1.0	3.7	2.12	3.0	<1.0	585
NOV 28...	--	--	--	--	<10	--	54.9	--	--	--	E1.4	--	600
JAN 06...	--	--	--	--	<10	--	52.2	--	--	--	2.3	--	616
MAR 01...	--	--	--	--	<10	--	53.4	--	--	--	2.6	--	616
16...	--	--	--	--	M	--	36.8	--	--	--	2.6	--	432
APR 10...	--	--	--	--	M	--	20.7	--	--	--	3.5	--	307
24...	--	--	--	--	M	--	24.2	--	--	--	3.0	--	332
MAY 07...	--	--	--	--	M	--	25.1	--	--	--	3.6	--	357
22...	--	--	--	--	<10	--	39.9	--	--	--	3.3	--	439
JUN 05...	--	--	--	--	<10	--	35.4	--	--	--	2.9	--	509
15...	--	--	--	--	<10	--	31.2	--	--	--	3.3	--	355
JUL 10...	--	--	--	--	<10	--	50.6	--	--	--	3.6	--	519
AUG 07...	--	--	--	--	<10	--	47.1	--	--	--	4.6	--	556
21...	--	--	--	--	<10	--	52.2	--	--	--	4.8	--	579
SEP 05...	--	--	--	--	<10	--	53.2	--	--	--	4.2	--	571
DATE	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	PRO- METON, WATER, DISS, REC (UG/L) (04037)
OCT 03...	<10.0	<1	3.96	E.007	8.3	.20	3.1	1.6	.43	<.010	<.002	<.011	E.003
NOV 28...	<8.0	--	--	E.007	8.0	.32	3.3	1.7	--	<.010	<.002	<.011	E.004
JAN 06...	3.0	--	--	E.005	8.1	.45	3.6	1.0	--	<.010	<.002	<.011	E.002
MAR 01...	3.5	--	--	E.007	8.1	.53	3.4	.4	--	<.010	<.002	<.011	E.004
16...	3.4	--	--	E.012	7.6	1.4	8.3	23	--	<.010	<.002	<.011	<.015
APR 10...	3.0	--	--	E.025	7.7	1.3	6.0	17	--	<.010	<.002	E.003	<.015
24...	3.3	--	--	E.024	7.7	.78	6.2	14	--	<.010	<.002	<.011	E.002
MAY 07...	3.6	--	--	E.039	8.0	.70	6.3	E10	--	<.010	<.002	<.011	E.008
22...	5.9	--	--	E.026	8.1	.58	--	--	--	<.010	<.002	E.004	E.008
JUN 05...	3.2	--	--	E.025	8.2	.38	--	--	--	<.010	<.002	E.003	E.006
15...	4.3	--	--	E.059	7.9	.56	--	--	--	<.010	<.002	.014	E.006
JUL 10...	4.0	--	--	<.006	8.2	.40	4.4	6.0	--	<.010	<.002	E.003	E.005
AUG 07...	4.7	--	--	E.021	8.3	.38	4.1	5.0	--	<.010	<.002	<.011	E.004
21...	4.0	--	--	E.011	8.5	.30	4.4	4.5	--	<.010	<.002	<.011	E.005
SEP 05...	3.5	--	--	E.015	8.4	E.29	<.30	3.5	--	<.010	<.002	<.011	E.005

MISSOURI RIVER MAIN STEM

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06610000 MISSOURI RIVER AT OMAHA, NE--Continued
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WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	FONOFOS WATER DISS REC (UG/L) (04095)	ALKA- LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	P,P' DDE DISSOLV (UG/L) (34653)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	LINDANE DIS- SOLVED (UG/L) (39341)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	MALA- THION, DIS- SOLVED (UG/L) (39532)	PARA- THION, DIS- SOLVED (UG/L) (39542)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)
OCT 03...	<.018	<.003	167	<.005	<.003	<.005	<.004	<.005	E.006	<.027	<.007	<.005	.022
NOV 28...	<.018	<.003	184	<.005	<.003	<.005	<.004	<.005	E.002	<.027	<.007	<.005	.014
JAN 06...	<.018	<.003	209	<.005	<.003	<.005	<.004	<.005	E.003	<.027	<.007	<.005	.015
MAR 01...	E.005	<.003	210	<.005	<.003	<.005	<.004	<.005	E.005	<.027	<.007	<.005	.016
16...	<.018	<.003	177	<.005	<.003	<.005	<.004	<.005	.052	<.027	<.007	<.005	.033
APR 10...	E.013	<.003	141	<.005	<.003	<.005	<.004	<.005	.470	<.027	<.007	<.005	.059
24...	E.009	<.003	150	<.005	<.022	<.005	<.004	<.005	.351	<.027	<.007	<.005	.118
MAY 07...	E.011	<.003	166	<.005	<.003	<.005	<.004	<.005	.597	<.027	<.007	<.005	1.44
22...	E.008	<.003	202	<.005	<.003	<.005	<.004	<.005	.160	<.027	<.007	<.005	.344
JUN 05...	E.007	<.003	204	<.005	<.003	<.005	<.004	<.005	.100	<.027	<.007	E.001	.258
15...	E.014	<.003	153	<.005	<.003	.007	<.004	<.005	.976	<.027	<.007	<.005	4.38
JUL 10...	E.009	<.003	189	<.005	<.003	<.005	<.004	<.005	.054	<.027	<.007	E.001	.395
AUG 07...	<.018	<.003	183	<.005	<.003	<.005	<.004	<.005	.027	<.027	<.007	<.005	.125
21...	<.018	<.003	174	<.005	<.003	<.005	<.004	<.005	.021	<.027	<.007	<.005	.076
SEP 05...	<.018	<.003	168	<.005	<.003	<.005	<.004	<.005	.016	<.027	<.007	<.005	.092
DATE	ALA- CHLOR, WATER, DISS, REC (UG/L) (46342)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)
OCT 03...	<.002	.005	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006	E.003	<.002	<.016
NOV 28...	<.002	<.004	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006	<.002	<.002	<.016
JAN 06...	<.002	.011	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006	E.002	<.002	<.016
MAR 01...	<.002	.008	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006	E.004	<.002	E.001
16...	<.002	<.004	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006	<.002	<.002	<.016
APR 10...	<.002	.050	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006	<.002	<.002	<.016
24...	.007	.565	<.006	<.002	E.002	<.009	<.011	<.034	<.035	<.006	E.002	<.002	<.016
MAY 07...	.030	1.23	.012	<.002	E.005	<.009	<.011	<.034	<.035	<.006	.010	<.002	<.016
22...	E.007	E.176	.007	<.002	<.009	<.009	<.011	<.034	<.035	<.006	.009	<.002	<.016
JUN 05...	.005	.244	<.006	<.002	E.003	<.009	<.011	<.034	<.035	<.006	.003	<.002	E.006
15...	.014	.420	.021	<.002	.018	<.009	<.011	<.034	<.035	<.006	.003	<.002	<.016
JUL 10...	<.002	.050	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006	<.002	<.002	<.016
AUG 07...	<.002	.010	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006	<.002	<.002	<.016
21...	<.002	.008	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006	.008	<.002	<.016
SEP 05...	<.002	.014	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006	.005	<.002	<.016

MISSOURI RIVER MAIN STEM

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
OCT 03...	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.041	<.005	<.003	<.010
NOV 28...	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.041	<.005	<.003	<.010
JAN 06...	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.041	<.005	<.003	<.010
MAR 01...	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.041	<.005	<.003	<.010
MAR 16...	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.041	<.005	<.003	<.010
APR 10...	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	E.010	<.041	<.005	<.003	<.010
APR 24...	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.041	E.003	<.003	E.011
MAY 07...	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.041	<.005	<.003	<.010
MAY 22...	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.041	<.005	<.003	<.010
JUN 05...	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.041	<.005	<.003	<.010
JUN 15...	<.002	<.005	<.010	E.024	<.017	<.004	<.021	<.002	<.011	<.041	<.005	<.003	.051
JUL 10...	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.041	<.005	<.003	<.010
AUG 07...	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	<.041	<.005	<.003	<.010
AUG 21...	<.002	<.005	<.010	<.020	<.017	<.004	<.021	<.002	<.011	E.015	<.005	<.003	<.010
SEP 05...	<.002	<.005	<.010	<.020	<.017	E.003	<.021	<.002	<.011	<.041	<.005	<.003	<.010

DATE	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	DIAZ- INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (91065)	BORON, DIS- SOLVED (UG/L) AS B) (01020)
OCT 03...	<.007	<.023	<.050	<.006	806	112	106	125
NOV 28...	<.007	<.023	<.050	<.006	852	122	90	127
JAN 06...	<.007	<.023	<.050	<.006	886	91	78	134
MAR 01...	<.007	<.023	<.050	<.006	857	120	111	121
MAR 16...	<.007	<.023	<.050	<.006	656	122	97	96
APR 10...	<.007	<.023	<.050	<.006	538	100	82	58
APR 24...	<.007	<.023	<.050	<.006	649	99	97	63
MAY 07...	<.007	<.023	<.050	<.006	669	111	89	67
MAY 22...	<.007	<.023	<.050	<.006	831	89	73	105
JUN 05...	<.007	<.023	<.050	<.006	862	111	86	98
JUN 15...	<.007	<.023	<.050	<.006	654	115	94	86
JUL 10...	<.007	<.023	<.050	<.006	870	89	88	109
AUG 07...	<.007	<.023	<.050	<.006	828	104	94	122
AUG 21...	<.007	<.023	<.050	<.006	844	110	88	124
SEP 05...	<.007	<.023	<.050	<.006	851	101	92	123

MISSOURI RIVER MAIN STEM

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	NUMBER OF SAM- PLING POINTS (COUNT)	BED MAT. SIEVE DIAM. % FINER THAN (00063) (80164)	BED MAT. SIEVE DIAM. % FINER THAN (80165)	BED MAT. SIEVE DIAM. % FINER THAN (80166)	BED MAT. SIEVE DIAM. % FINER THAN (80167)	BED MAT. SIEVE DIAM. % FINER THAN (80168)	BED MAT. SIEVE DIAM. % FINER THAN (80169)	BED MAT. SIEVE DIAM. % FINER THAN (80170)	BED MAT. SIEVE DIAM. % FINER THAN (80171)
OCT										
03...	1030	3	--	.0	25	95	99	100	--	--
NOV										
07...	1420	3	--	.0	25	94	98	99	99	100
28...	1030	3	--	.0	16	82	97	99	99	100
JAN										
06...	1200	3	--	.0	28	96	99	100	--	--
MAR										
01...	1140	3	--	.0	23	90	99	99	100	--
APR										
10...	1100	3	.0	1	35	92	99	100	--	--
MAY										
04...	1030	3	.0	1	26	90	99	100	--	--
JUN										
01...	1105	3	--	.0	19	79	91	96	99	100
JUL										
10...	1030	3	.0	1	33	96	99	100	--	--
AUG										
07...	1100	3	.0	1	31	85	98	99	100	--
SEP										
07...	1015	3	.0	1	33	97	100	--	--	--

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	810	---	655	838	---	771	---
2	---	808	---	---	---	---	---	---	---	816	---	---
3	806	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	622	---	---	---	789
5	---	---	846	---	---	---	---	---	848	821	---	799
6	801	---	---	850	---	---	---	---	---	---	---	---
7	---	797	---	---	---	822	---	678	---	---	804	798
8	---	---	---	---	---	---	---	---	848	---	---	---
9	---	799	---	---	---	---	---	---	---	---	---	---
10	816	---	---	814	---	---	537	---	---	823	---	799
11	---	---	---	---	---	---	---	762	---	---	---	---
12	809	---	---	---	---	---	---	---	838	---	---	---
13	---	---	---	---	---	---	565	---	---	834	---	---
14	---	814	---	---	---	771	---	---	---	---	---	---
15	---	---	---	---	---	---	---	810	644	---	803	---
16	---	807	---	---	---	667	---	---	---	793	---	---
17	804	---	---	---	---	---	607	---	---	---	779	---
18	---	---	---	816	---	---	---	836	681	---	---	788
19	---	---	---	---	---	---	---	---	---	---	---	---
20	809	---	---	---	677	---	618	---	---	783	---	794
21	---	825	---	---	---	621	---	---	---	---	810	---
22	---	---	---	826	---	---	---	835	752	---	---	---
23	---	---	---	---	---	---	---	---	---	790	772	---
24	810	---	---	---	---	---	638	---	---	---	---	---
25	---	---	---	---	---	---	---	855	798	---	---	778
26	---	---	---	---	---	568	---	---	---	770	---	---
27	800	---	---	---	---	---	651	---	---	---	798	---
28	---	821	---	---	---	---	---	---	---	---	---	778
29	---	---	---	---	---	---	---	846	802	708	---	---
30	---	---	---	---	---	---	---	---	---	---	805	---
31	819	---	---	---	---	---	---	---	---	---	---	---
MAX	819	825	846	850	677	822	651	855	848	834	810	799
MIN	800	797	846	814	677	568	537	622	644	708	771	778

MISSOURI RIVER MAIN STEM

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

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	.5	---	17.5	17.0	---	28.5	---
2	---	15.0	---	---	---	---	---	---	---	26.0	---	---
3	17.5	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	25.0
5	---	---	2.0	---	---	---	---	---	17.0	26.0	---	25.0
6	16.0	---	---	.5	---	---	---	---	---	---	---	---
7	---	10.0	---	---	---	2.0	---	15.5	---	---	30.0	25.0
8	---	---	---	---	---	---	---	---	19.3	---	---	---
9	---	7.0	---	---	---	---	---	---	---	---	---	---
10	12.0	---	---	1.5	---	---	8.5	---	---	27.0	---	25.0
11	---	---	---	---	---	---	---	18.0	---	---	---	---
12	12.5	---	---	---	---	---	---	---	24.0	---	---	---
13	---	---	---	---	---	---	11.0	---	---	26.0	---	---
14	---	4.0	---	---	---	5.0	---	---	---	---	---	---
15	---	---	---	---	---	---	---	22.2	21.5	---	24.4	---
16	---	2.0	---	---	---	2.5	---	---	---	26.0	---	---
17	14.0	---	---	---	---	---	10.0	---	---	---	23.5	---
18	---	---	---	1.0	---	---	---	22.0	22.5	---	---	18.5
19	---	---	---	---	---	---	---	---	---	---	---	---
20	15.5	---	---	---	2.0	---	11.0	---	---	28.0	---	20.0
21	---	1.0	---	---	---	2.5	---	---	---	---	24.0	---
22	---	---	---	1.0	---	---	---	18.0	23.0	---	---	---
23	---	---	---	---	---	---	---	---	---	29.0	27.0	---
24	15.5	---	---	---	---	---	11.0	---	---	---	---	---
25	---	---	---	---	---	---	---	15.0	25.0	---	---	17.5
26	---	---	---	---	---	2.0	---	---	---	27.0	---	---
27	17.0	---	---	---	---	---	13.0	---	---	---	26.5	---
28	---	1.5	---	---	---	---	---	---	---	---	---	18.0
29	---	---	---	---	---	---	---	17.0	25.0	26.5	---	---
30	---	---	---	---	---	---	---	---	---	---	26.5	---
31	14.5	---	---	---	---	---	---	---	---	---	---	---
MAX	17.5	15.0	2.0	1.5	2.0	5.0	13.0	22.2	25.0	29.0	30.0	25.0
MIN	12.0	1.0	2.0	.5	2.0	.5	8.5	15.0	17.0	26.0	23.5	17.5

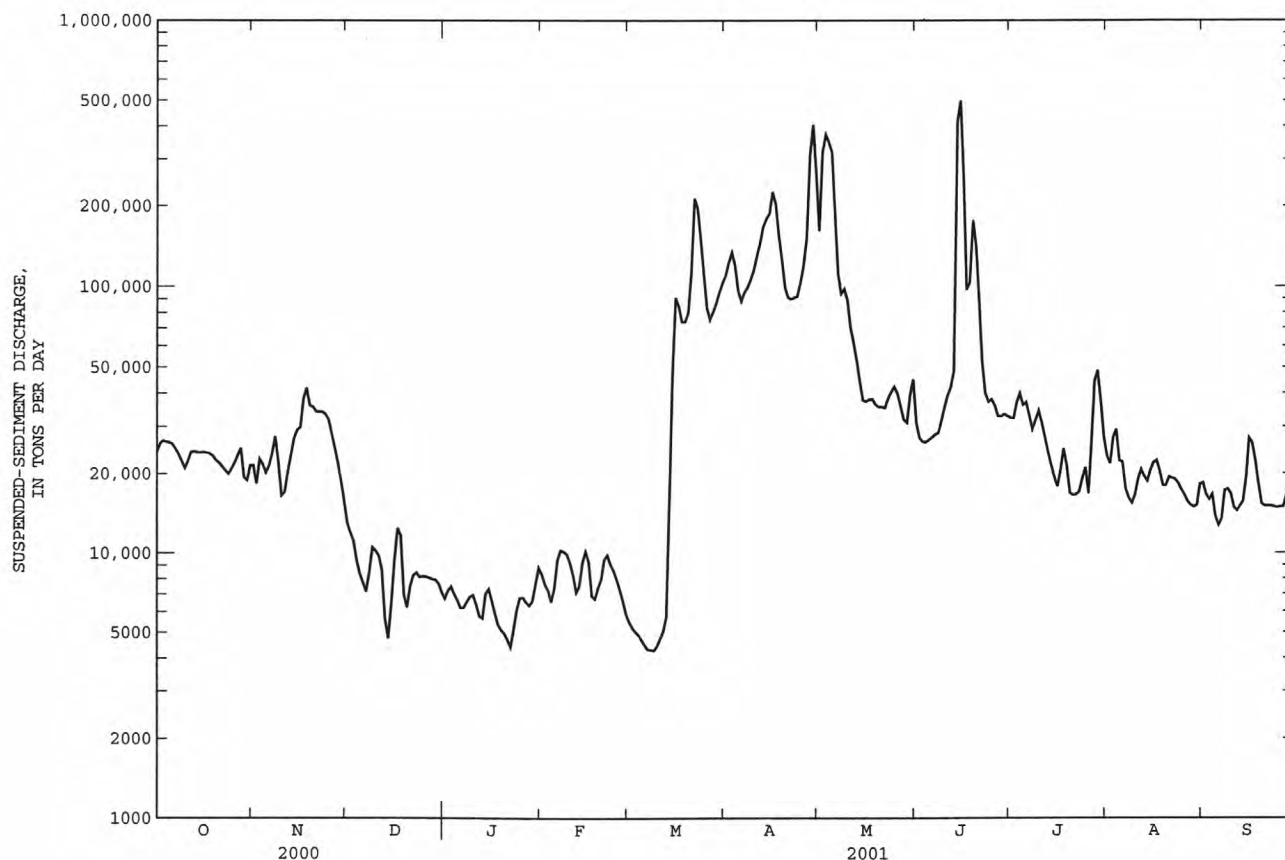
SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

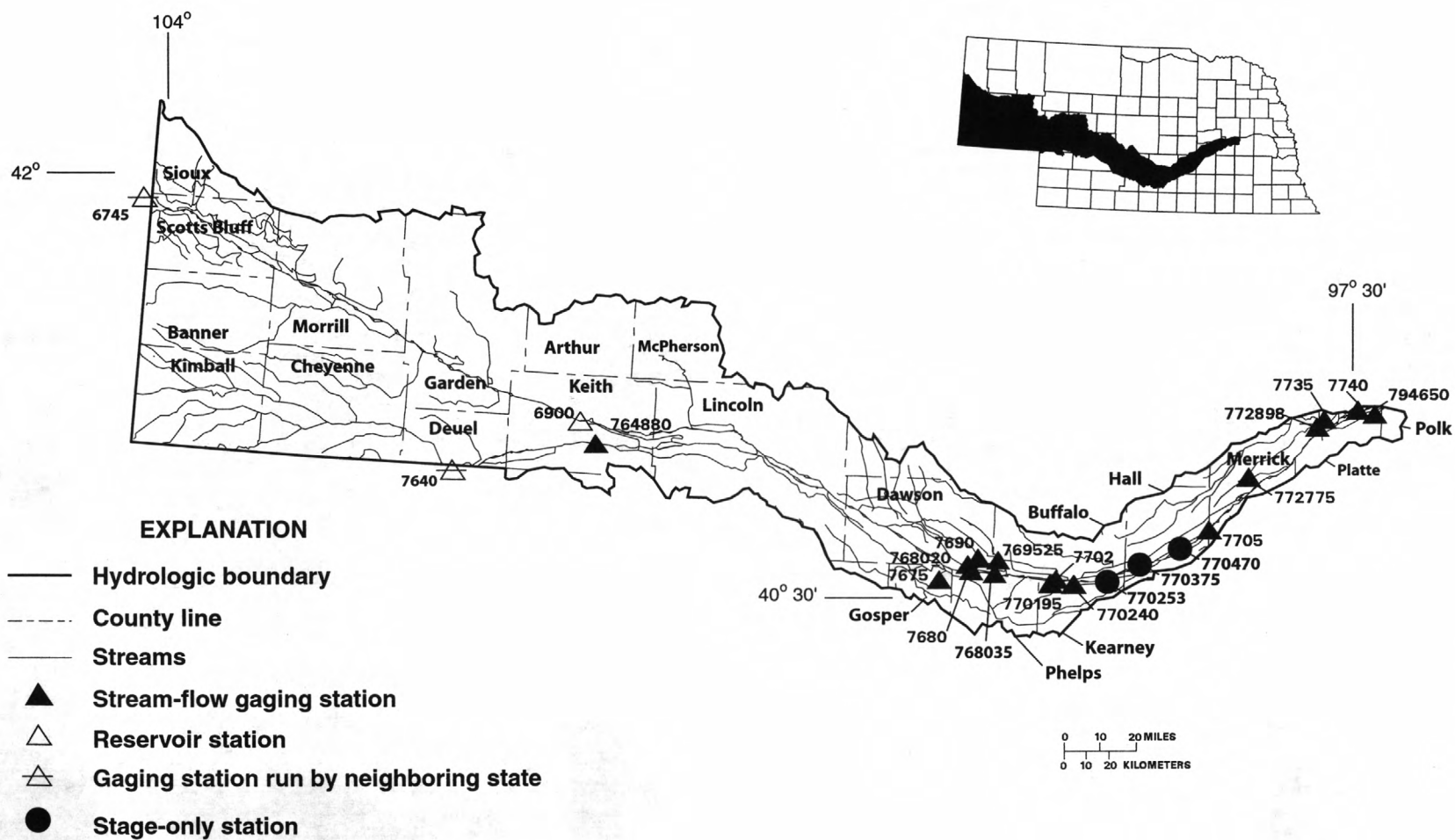
DAY	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	255	24200	224	21500	238	13000	136	6720	201	8290	127	5460
2	269	26000	193	18300	228	11900	142	7190	189	7580	121	5180
3	270	26600	242	22700	218	11100	148	7450	177	7210	116	5010
4	266	26300	235	21700	202	9380	141	6990	166	6510	111	4880
5	262	26200	221	20200	186	8330	131	6610	181	7350	106	4670
6	256	25800	228	21400	175	7710	123	6190	209	9370	102	4470
7	245	24700	251	23900	166	7140	127	6200	227	10200	98	4310
8	233	23600	289	27600	194	8450	133	6510	227	10100	100	4290
9	221	22200	240	22000	223	10500	138	6820	227	9880	102	4270
10	212	21000	188	16500	219	10200	143	6930	216	9160	106	4430
11	229	22400	194	17000	213	9790	135	6360	200	8220	114	4730
12	247	24100	229	20300	190	8640	123	5750	185	7080	122	5040
13	249	24200	264	23500	150	5640	118	5650	182	7480	136	5720
14	248	24100	305	27200	141	4740	147	7010	204	9160	349	15900
15	248	24000	330	29200	167	6400	155	7300	227	10100	840	47200
16	247	24100	332	29800	206	9350	141	6610	215	9260	1330	90900
17	247	24000	412	38200	263	12400	128	5910	168	6870	1200	84300
18	244	23800	442	41800	258	11600	117	5340	155	6690	1040	73800
19	241	23400	380	36000	177	6960	115	5100	162	7360	982	73800
20	237	22500	368	35600	161	6210	115	4940	170	7920	944	79600
21	230	22000	356	34200	174	7470	115	4680	208	9430	1090	113000
22	221	21300	361	34100	184	8230	116	4400	225	9790	1790	213000
23	212	20600	362	34100	179	8420	129	5130	211	9030	1710	196000
24	205	20000	357	33400	172	8110	144	6070	197	8550	1450	150000
25	215	20900	347	31900	166	8160	159	6750	183	7900	1190	111000
26	231	22000	329	28200	162	8130	161	6760	168	7240	937	83500
27	247	23500	310	24900	160	8050	159	6490	154	6540	844	75400
28	262	25000	291	21800	159	7960	158	6300	140	5830	880	80400
29	204	19400	273	18800	158	7910	164	6560	---	---	936	86700
30	198	18900	255	15800	153	7670	184	7600	---	---	1000	95200
31	221	21500	---	---	144	7120	202	8770	---	---	1090	103000
TOTAL	---	718300	---	791600	---	266670	---	197090	---	230100	---	1835160

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

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN CONC TRAT (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN TRATIO (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN TRATIO (MG/L)	LOAD (TONS/ DAY)	MEAN CONCE TRATI (MG/L)	LOAD (TONS/ DAY)	MEAN CONCE TRATI (MG/L)	LOAD (TONS/ DAY)	MEAN CONCE TRATI (MG/L)	LOAD (TONS/ DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1170	110000	987	161000	300	30800	367	32300	267	23300	227	18400
2	1240	123000	1900	319000	281	27200	367	32200	255	21800	206	16600
3	1280	134000	2080	371000	284	26300	402	36800	320	27300	196	15900
4	1200	120000	2020	347000	286	26200	431	39800	342	29300	202	16600
5	1030	96600	1940	318000	289	26700	401	36100	265	22300	170	13700
6	920	88200	1090	186000	292	27300	410	36900	262	22100	158	12700
7	909	95000	720	112000	296	28000	376	33000	213	17400	161	13400
8	883	99300	653	93800	304	28300	338	29300	203	16100	204	17200
9	883	106000	721	97700	338	31400	355	31700	198	15400	205	17400
10	1010	115000	660	89000	376	35300	383	34300	212	16500	198	16700
11	1170	130000	513	70500	413	39100	354	31000	242	19000	176	14800
12	1190	145000	451	61600	444	41900	320	27400	263	20700	173	14400
13	1270	167000	401	53000	511	48300	287	24100	250	19500	181	15000
14	1370	179000	352	44100	3080	415000	262	21500	233	18700	188	15600
15	1330	187000	311	37500	3800	498000	239	19400	249	20600	228	19300
16	1430	226000	320	37200	2300	253000	220	17800	261	22000	308	27100
17	1230	203000	337	37800	921	97200	255	20600	264	22400	299	26000
18	960	155000	352	37900	867	103000	298	24800	247	20400	264	22400
19	838	126000	350	36200	1410	176000	260	21400	224	18000	227	18300
20	727	99400	346	35500	1200	141000	206	16800	227	18000	195	15300
21	717	91200	342	35500	817	88200	203	16500	243	19400	191	15000
22	732	89800	343	35200	510	52100	206	16600	242	19200	191	15000
23	746	90800	364	38100	415	39800	212	17000	237	19000	192	15000
24	761	91800	387	40300	399	37100	235	19200	226	18300	192	14900
25	776	103000	402	42100	410	37800	253	21100	214	17300	192	14800
26	791	120000	380	39700	394	35900	201	16700	202	16500	192	14900
27	914	152000	353	35500	370	32800	284	26100	191	15600	191	14900
28	1720	311000	326	31800	366	32700	443	44200	187	15100	204	16400
29	2180	404000	319	31000	374	33300	483	48500	185	14900	264	21600
30	1500	265000	398	39200	371	32800	398	37300	185	15100	272	22300
31	---	---	435	44800	---	---	310	27500	220	18200	---	---
TOTAL	---	4423100	---	2959000	---	2522500	---	857900	---	599400	---	511600
YEAR		15912420										





PLATTE RIVER BASIN
NORTH-SOUTH-MIDDLE PLATTE

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*Station number	Station name	Page
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* NOTE: To change abbreviated station number to complete station number, prefix with "06" and add zeros required to give eight digits.

PLATTE RIVER BASIN

06674500 NORTH PLATTE RIVER AT WYOMING-NEBRASKA STATE LINE

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

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

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder. Sheet-piling control since Mar. 9, 1994. Datum of gage is 4,025 ft above sea level, from topographic map. Prior to Nov. 6, 1929, non-recording gage and Nov. 6, 1929, to Sept. 30, 1959, water-stage recorder at site 0.2 mi upstream at different datum. Oct. 7, 1959 to Feb. 22, 1972 water-stage recorder at site 0.2 mi upstream at different datum. Feb. 22, 1972 to Mar. 9, 1994, water-stage recorder at site 0.3 mi downstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, transbasin diversions, power development, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. Gering-Mitchell Canal diverts from right bank 0.5 mi upstream. U.S. Army Corps of Engineers data collection platform with satellite telemetry at station.

COOPERATION.--Seven discharge measurements provided by Wyoming State Engineer's Office. Ten discharge measurements provided by U.S. Bureau of Reclamation and four discharge measurements provided by Nebraska Department of Natural Resources.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	537	376	259	205	177	160	166	176	651	1400	1230	1020
2	454	374	250	205	179	164	166	208	700	1380	1270	960
3	407	360	250	205	178	170	167	256	735	1380	1310	898
4	379	354	248	205	175	170	165	281	784	1400	1350	883
5	361	348	245	205	176	170	165	308	776	1430	1380	814
6	344	341	243	205	175	170	165	331	670	1440	1390	763
7	343	348	243	205	177	173	169	310	616	1450	1410	751
8	339	324	243	204	e175	175	168	317	544	1420	1400	722
9	328	322	243	201	e170	175	168	331	407	1430	1400	684
10	336	317	e240	201	e175	180	165	351	330	2540	1370	655
11	349	315	e230	199	176	181	183	341	281	2410	1320	617
12	321	e310	e225	199	175	181	179	356	261	1840	1270	572
13	370	e305	e230	200	175	181	173	368	248	1670	1260	576
14	440	e300	235	197	175	181	168	374	231	1600	1260	579
15	429	299	230	194	e175	181	164	414	239	1600	1310	640
16	420	296	e225	194	170	179	159	595	221	1550	1330	650
17	410	294	e215	e190	169	176	159	663	238	1390	1320	651
18	400	e290	222	190	166	175	164	715	460	1270	1340	663
19	392	288	e220	190	165	174	177	677	715	1260	1310	615
20	386	286	218	190	164	172	173	673	792	1290	1270	953
21	377	281	e205	187	164	175	175	727	834	1340	1270	1090
22	379	279	e210	184	163	175	194	744	839	1400	1250	951
23	375	278	211	181	161	173	197	701	891	1390	1250	588
24	375	277	211	181	168	170	205	662	1010	1400	1250	481
25	376	272	211	181	164	170	197	611	1190	1430	1210	532
26	366	271	e205	180	161	170	186	568	1280	1540	1160	525
27	361	271	208	177	160	171	178	558	1390	1490	1150	525
28	358	271	209	178	160	170	175	603	1440	1480	1140	517
29	354	265	207	181	---	170	175	642	1400	1480	1120	510
30	349	265	205	181	---	170	175	666	1430	1430	1080	496
31	344	---	208	e180	---	168	---	666	---	1330	1040	---
TOTAL	11759	9177	7004	5975	4768	5370	5220	15193	21603	46860	39420	20881
MEAN	379	306	226	193	170	173	174	490	720	1512	1272	696
MAX	537	376	259	205	179	181	205	744	1440	2540	1410	1090
MIN	321	265	205	177	160	160	159	176	221	1260	1040	481
AC-FT	23320	18200	13890	11850	9460	10650	10350	30140	42850	92950	78190	41420

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2001, BY WATER YEAR (WY)

	505	420	371	329	334	505	662	1192	1681	1552	1269	863
MEAN	505	420	371	329	334	505	662	1192	1681	1552	1269	863
MAX	1666	1454	895	751	1063	4202	4407	7226	10360	7170	5751	4766
(WY)	1987	1987	1930	1930	1984	1974	1974	1971	1929	1983	1983	1983
MIN	150	174	191	166	148	141	141	43.9	49.1	611	154	230
(WY)	1957	1935	1991	1993	1993	1991	1991	1990	1992	1934	1934	1934

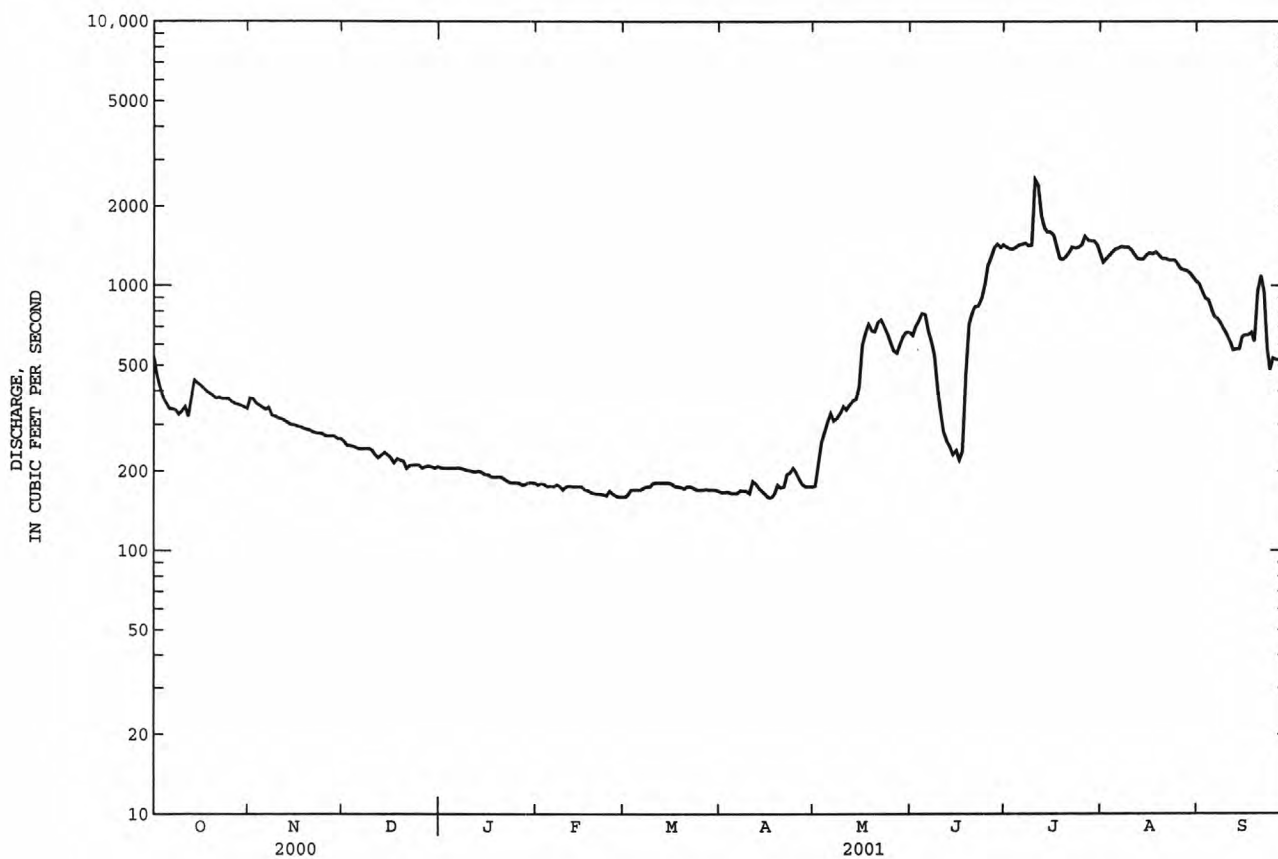
06674500 NORTH PLATTE RIVER AT WYOMING-NEBRASKA STATE LINE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1929 - 2001	
ANNUAL TOTAL	227858		193230		--	
ANNUAL MEAN	623		529		791	
HIGHEST ANNUAL MEAN	--		--		2863	1984
LOWEST ANNUAL MEAN	--		--		388	1992
HIGHEST DAILY MEAN	1810	May 25	2540	Jul 10	17600	Jun 2 1929
LOWEST DAILY MEAN	195	Apr 7	159	Apr 16	3.9	May 13 1992
ANNUAL SEVEN-DAY MINIMUM	200	Apr 1	162	Feb 23	4.4	Jun 20 1992
MAXIMUM PEAK FLOW	--		2860	Jul 10	*17900	Jun 2 1929
MAXIMUM PEAK STAGE	--		3.93	Jul 10	**7.04	Jun 2 1929
ANNUAL RUNOFF (AC-FT)	452000		383300		572900	
10 PERCENT EXCEEDS	1340		1360		1470	
50 PERCENT EXCEEDS	376		310		485	
90 PERCENT EXCEEDS	216		170		206	

* Maximum observed.

** Site and datum then in use.

e Estimated.



06690000 LAKE MCCONAUGHY NEAR KEYSTONE, NE

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

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

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

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

REMARKS.--Reservoir is formed by earthfill dam; storage began Feb. 9, 1941. Capacity, 1,900,600 acre-ft (capacity table: Mar. 1, 1987) 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 (capacity table, March 1946); minimum observed since reservoir filled to at least 25 percent capacity (April 1942), 383,600 acre-ft Oct. 17-19, 1956; elevation, 3,198.2 ft. (capacity table, March 1946).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 1,230,000 acre-ft June 9, elevation, 3,246.2 ft; minimum observed, 838,000 acre-ft Sept. 5, elevation, 3,228.1 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

Date	Elevation* (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	3,231.2	900,000	--
Oct. 31.....	3,234.1	960,000	+60,000
Nov. 30.....	3,236.4	1,009,000	+49,000
Dec. 31.....	3,237.6	1,034,000	+25,000
CAL YR 2000	--	--	-481,000
Jan. 31.....	3,239.5	1,076,000	+42,000
Feb. 28.....	3,241.1	1,112,000	+36,000
Mar. 31.....	3,242.9	1,153,000	+41,000
Apr. 30.....	3,245.0	1,202,000	+49,000
May 31.....	3,246.1	1,228,000	+26,000
June 30.....	3,243.3	1,162,000	-66,000
July 31.....	3,236.3	1,006,000	-156,000
Aug. 31.....	3,228.5	846,000	-160,000
Sept. 30.....	3,231.2	900,000	+54,000
WTR YR 2001	--	--	0

*Elevations read on or near last day of month.

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PLATTE RIVER BASIN

06764000 SOUTH PLATTE RIVER AT JULESBURG, CO

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

DRAINAGE AREA.--23,193 mi².

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

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

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

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	48	78	e300	e500	e559	165	328	132	25	94	40
2	111	44	75	e300	e500	e497	184	282	186	35	177	35
3	120	49	71	e350	e500	e607	230	259	155	32	128	29
4	113	37	82	e350	e500	e567	323	237	147	24	86	26
5	111	42	79	e350	e500	e445	378	277	154	30	98	29
6	114	46	76	e350	e500	301	387	252	135	32	61	35
7	136	48	79	e350	e500	287	401	224	171	28	48	49
8	141	80	78	e350	e500	271	405	1290	272	23	43	65
9	143	113	79	e350	e500	261	394	1910	434	24	39	49
10	144	106	78	e350	e500	229	367	1540	633	71	27	49
11	133	100	75	e350	e500	181	389	1170	641	57	24	66
12	125	99	126	e350	e500	155	449	1470	598	46	25	72
13	116	77	130	e350	e500	133	424	1300	499	38	21	78
14	109	e70	145	e350	e500	119	378	952	426	35	40	176
15	100	e70	e150	e350	e550	117	364	767	311	24	33	246
16	89	e70	e160	e400	e550	106	436	624	221	494	37	273
17	76	e70	e170	e400	e550	89	736	484	168	307	35	257
18	73	e70	e180	e400	e550	81	738	298	170	342	24	287
19	61	e70	e200	e400	e550	82	666	227	164	236	27	260
20	45	e70	e250	e400	e550	72	515	188	117	122	36	194
21	38	e100	e300	e450	e550	70	388	182	84	84	46	168
22	46	e120	e350	e450	e550	69	389	162	87	94	41	170
23	56	e150	e350	e450	e578	75	440	154	77	49	86	186
24	66	151	e350	e450	e511	100	396	123	50	136	122	190
25	61	130	e350	e450	e598	133	409	121	42	69	116	186
26	41	112	e350	e450	e642	144	378	115	38	61	101	234
27	35	104	e350	e450	e472	147	423	109	30	51	65	283
28	38	97	e350	e450	e460	164	523	100	24	37	62	191
29	66	85	e300	e450	---	170	500	116	10	40	58	152
30	47	83	e300	e450	---	159	418	114	13	93	56	134
31	45	---	e300	e450	---	121	---	115	---	94	53	---
TOTAL	2689	2511	6011	12100	14661	6511	12593	15490	6189	2833	1909	4209
MEAN	86.7	83.7	194	390	524	210	420	500	206	91.4	61.6	140
MAX	144	151	350	450	642	607	738	1910	641	494	177	287
MIN	35	37	71	300	460	69	165	100	10	23	21	26
AC-FT	5330	4980	11920	24000	29080	12910	24980	30720	12280	5620	3790	8350

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

	MEAN	MAX	(WY)	MIN	(WY)
1902	318	2427	1985	5.85	1904
1903	358	2358	1985	23.0	1911
1904	420	1371	1985	18.8	1912
1905	537	1571	1998	89.9	1965
1906	619	1864	1930	78.9	1935
1907	559	2200	1939	56.9	1904
1908	555	2808	1983	17.3	1904
1909	1074	9922	1980	24.1	1911
1910	1504	12200	1983	8.33	1910
1911	309	5059	1983	2.15	1903
1912	189	1882	1997	2.52	1902
1913	252	1964	1984	5.60	1903

PLATTE RIVER BASIN

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06764000 SOUTH PLATTE RIVER AT JULESBURG, CO--Continued

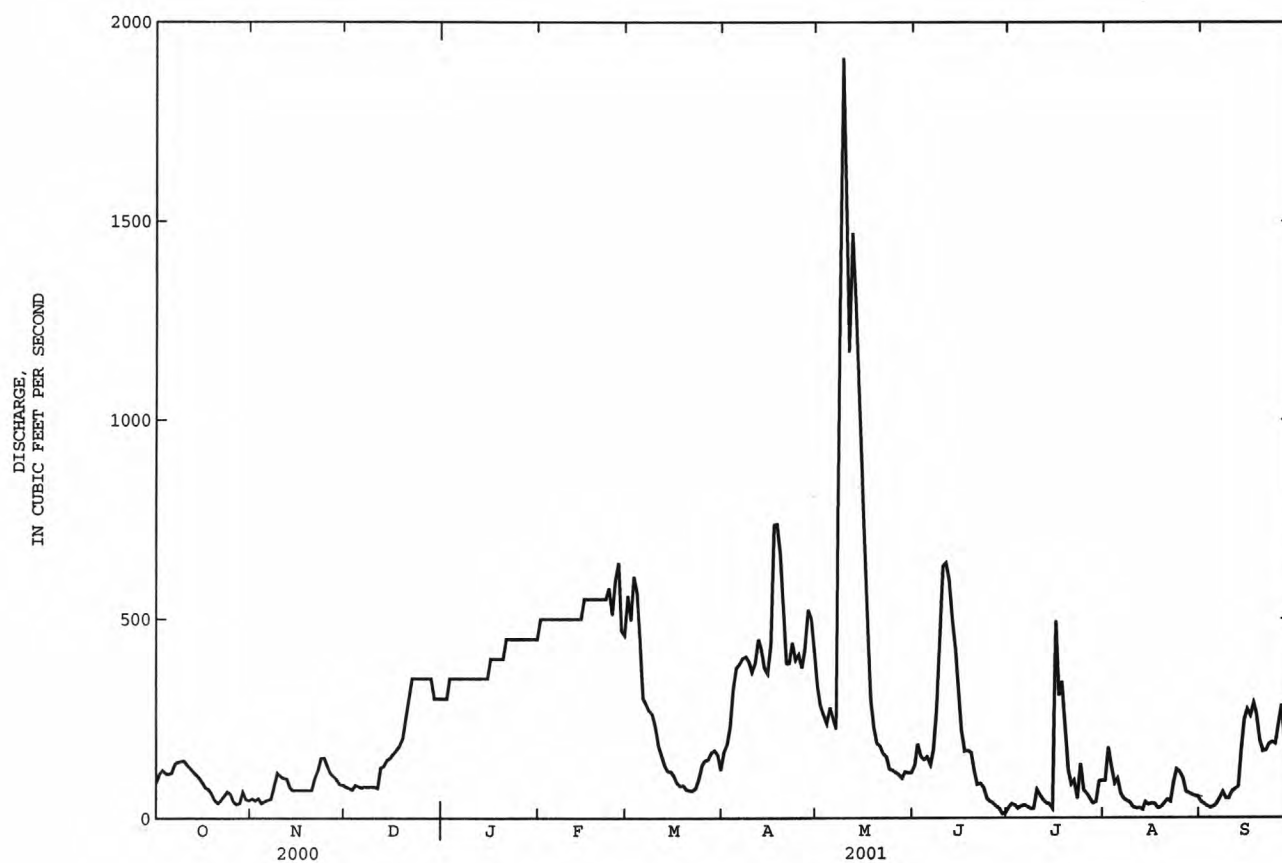
SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1902 - 2001	
ANNUAL TOTAL	139196		87706		561	
ANNUAL MEAN	380		240		2882	
HIGHEST ANNUAL MEAN					76.3	
LOWEST ANNUAL MEAN					30800	
HIGHEST DAILY MEAN	1470	Jan 1	1910	May 9		1983
LOWEST DAILY MEAN	12	Aug 13	10	Jun 29		1956
ANNUAL SEVEN-DAY MINIMUM	14	Aug 9	23	Jun 28		
MAXIMUM PEAK FLOW			3420	May 9		
MAXIMUM PEAK STAGE			**6.61	May 9		
ANNUAL RUNOFF (AC-FT)	276100		174000			
10 PERCENT EXCEEDS	1230		500			
50 PERCENT EXCEEDS	120		150			
90 PERCENT EXCEEDS	23		38			

e Estimated.

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

** Gage height recorded for channel #1.

*** 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 NW ¼ SW ¼ sec.4, T.13 N., R.37 W., Keith County, Hydrologic Unit 10190018, on left bank 20 ft downstream from bridge on Highway L-51B connecting Interstate 80 and U.S. Highway 30, 0.5 mi southeast of Roscoe and at mile 54.1.

DRAINAGE AREA.--23,900 mi².

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

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	97	109	e210	e240	e600	123	438	85	40	e20	5.1
2	103	77	90	e210	e240	e700	121	355	83	36	18	3.5
3	88	68	82	e220	e260	e600	156	332	173	26	30	2.2
4	63	65	69	e250	e280	e500	180	337	163	24	23	1.1
5	76	67	62	e300	e320	e480	246	373	145	21	17	4.8
6	89	57	68	e330	e340	e450	313	346	145	17	17	5.4
7	113	52	72	e350	e340	e400	374	270	133	17	12	.81
8	116	51	84	e350	e350	e370	346	239	143	15	9.6	2.8
9	129	49	76	e350	e250	368	372	1280	219	13	7.5	14
10	97	55	e60	e350	e200	334	372	2530	346	152	7.6	27
11	118	e60	e45	e350	e200	296	435	2210	599	e60	4.2	37
12	134	e50	e45	e350	e230	257	478	1800	667	e40	7.8	38
13	112	e48	e50	e300	e250	226	495	1290	642	e30	5.2	41
14	99	e45	e60	e270	e280	198	461	1050	592	e20	4.0	47
15	92	e50	e70	e250	e250	155	416	856	543	e20	5.4	68
16	95	e50	e70	e240	e300	136	399	933	442	e20	4.5	71
17	67	e50	e70	e230	e350	118	450	773	342	e150	4.8	157
18	66	e45	e80	e220	e370	114	777	553	247	e250	7.1	222
19	63	e50	e90	e230	e450	109	813	331	184	e150	9.3	228
20	57	e54	e90	e240	e450	104	752	246	168	e80	8.4	240
21	51	e56	e100	e250	e500	98	597	190	143	e60	6.2	201
22	55	e60	e110	e250	e500	89	519	172	108	e40	4.1	179
23	61	e70	e120	e250	e540	75	533	159	90	e30	7.9	171
24	70	e80	e110	e270	e540	67	529	138	81	e20	9.5	173
25	67	e84	e100	e280	e540	69	464	134	82	e30	24	168
26	61	e88	e90	e280	e500	90	441	130	61	e30	26	155
27	53	e90	e110	e280	e450	112	413	120	58	e40	22	171
28	58	e90	e170	e280	e500	121	445	105	49	e30	13	191
29	149	e96	e180	e300	---	130	535	130	51	e20	9.3	176
30	127	e100	e190	e280	---	138	518	133	46	e20	7.6	147
31	121	---	e200	e250	---	136	---	106	---	e20	7.1	---
TOTAL	2708	1954	2922	8570	10020	7640	13073	18059	6830	1521	359.1	2947.71
MEAN	87.4	65.1	94.3	276	358	246	436	583	228	49.1	11.6	98.3
MAX	149	100	200	350	540	700	813	2530	667	250	30	240
MIN	51	45	45	210	200	67	121	105	46	13	4.0	.81
AC-FT	5370	3880	5800	17000	19870	15150	25930	35820	13550	3020	712	5850

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2001, BY WATER YEAR (WY)

	MEAN	583	482	585	918	1092	835	866	1501	2753	758	367	560
MAX	2392	2183	1418	1867	2280	1519	2767	7044	13800	6081	1924	2189	
(WY)	1985	1985	2000	1998	1984	1987	1984	1983	1995	1995	1997	1996	
MIN	87.4	65.1	94.3	145	358	246	199	76.7	49.6	4.49	.48	.12	
(WY)	2001	2001	2001	1995	2001	2001	1989	1992	2000	2000	2000	1994	

PLATTE RIVER BASIN

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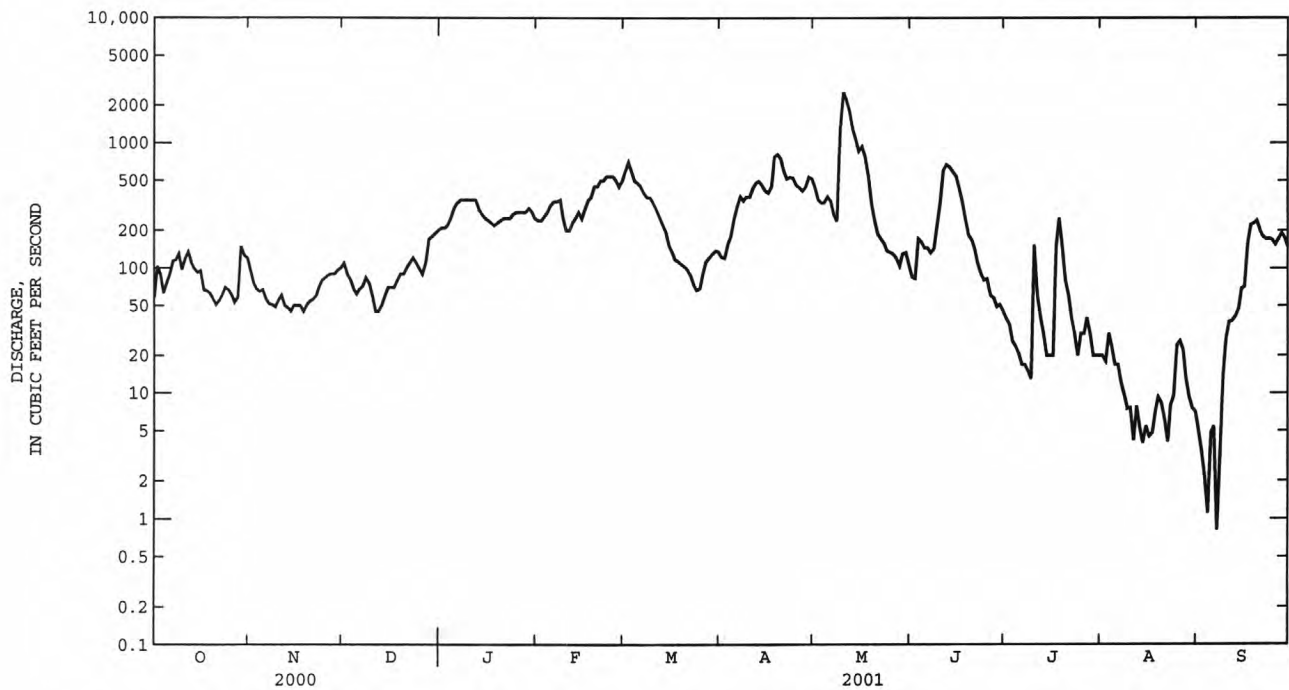
06764880 SOUTH PLATTE RIVER AT ROSCOE, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1983 - 2001
ANNUAL TOTAL	171437.64	76603.81	
ANNUAL MEAN	468	210	938
HIGHEST ANNUAL MEAN			2941
LOWEST ANNUAL MEAN			210
HIGHEST DAILY MEAN	2150 Jan 1	2530 May 10	18100 Jun 6 1995
LOWEST DAILY MEAN	.00 Jul 26	.81 Sep 7	.00 Sep 11 1994
ANNUAL SEVEN-DAY MINIMUM	.00 Aug 1	2.9 Sep 2	.00 Sep 11 1994
MAXIMUM PEAK FLOW		*2590 May 10	20100 Jun 6 1995
MAXIMUM PEAK STAGE		**6.96 Feb 10	11.29 Jun 6 1995
ANNUAL RUNOFF (AC-FT)	340000	151900	679700
10 PERCENT EXCEEDS	1580	486	1920
50 PERCENT EXCEEDS	94	121	419
90 PERCENT EXCEEDS	.03	17	40

e Estimated.

* Stage 6.41 ft.

** Backwater from ice.



PLATTE RIVER BASIN

06767500 PLUM CREEK NEAR SMITHFIELD, NE

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

DRAINAGE AREA.--224 mi².

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

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	20	19	e14	e17	22	21	21	23	13	13	13
2	11	19	20	e13	e17	28	21	20	21	13	14	12
3	11	23	19	e13	e23	32	21	19	24	13	15	13
4	11	20	19	e14	e27	52	20	23	30	13	14	14
5	11	18	19	e15	29	41	20	66	24	14	13	13
6	11	18	19	e16	33	33	20	64	23	14	13	12
7	11	18	19	e17	28	44	20	33	22	14	13	12
8	11	17	19	e17	22	67	24	28	21	13	12	14
9	11	17	19	e17	18	60	21	26	19	12	11	14
10	12	17	18	e17	25	51	20	24	19	13	11	14
11	12	14	e16	e17	20	45	21	23	19	12	11	13
12	12	e13	e15	e17	20	40	22	22	18	12	15	12
13	12	e15	e14	e17	20	35	22	21	18	13	14	12
14	12	e18	e15	e17	e18	32	21	21	18	14	21	12
15	12	e17	e15	e17	e17	29	21	20	17	13	77	13
16	12	e15	e14	e17	e18	26	20	19	18	12	25	14
17	12	e15	e14	e17	e18	23	19	19	17	13	13	14
18	12	e16	e15	e18	20	24	19	19	17	12	12	16
19	12	e18	e15	e19	23	24	18	33	17	11	11	21
20	13	e19	e15	e19	21	24	18	25	17	41	11	19
21	13	e19	e15	e19	19	25	18	21	17	15	12	15
22	13	e19	e14	e19	19	25	26	19	17	12	13	14
23	16	e19	e14	e19	21	24	27	19	17	12	18	14
24	18	e19	e14	e19	21	25	28	18	16	29	33	14
25	17	e19	e14	e19	22	23	64	18	16	31	24	14
26	17	19	e14	e18	19	21	29	18	16	14	14	14
27	16	18	e13	e18	15	21	24	18	16	15	13	14
28	16	18	e14	e18	23	21	22	19	15	15	12	14
29	40	18	e15	e18	---	21	21	19	15	13	12	14
30	39	18	e15	e18	---	21	21	21	15	13	12	14
31	22	---	e15	e18	---	21	---	26	---	12	12	---
TOTAL	459	533	495	531	593	980	689	762	562	466	514	418
MEAN	14.8	17.8	16.0	17.1	21.2	31.6	23.0	24.6	18.7	15.0	16.6	13.9
MAX	40	23	20	19	33	67	64	66	30	41	77	21
MIN	11	13	13	13	15	21	18	18	15	11	11	12
AC-FT	910	1060	982	1050	1180	1940	1370	1510	1110	924	1020	829

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2001, BY WATER YEAR (WY)

	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
MEAN	11.1	4.54	4.00	4.11	7.07	10.7	5.79	9.49	35.7	9.98	6.97	7.34
MAX	130	17.8	16.0	18.0	21.2	55.6	23.0	26.0	179	52.7	23.1	49.5
(WY)	1947	2001	2001	2000	2001	1948	2001	1996	1947	1948	1996	1969
MIN	.000	.000	.000	.000	.000	.000	.000	.055	.000	.000	.000	.000
(WY)	1948	1948	1947	1947	1951	1951	1948	1970	1952	1953	1947	1952

PLATTE RIVER BASIN

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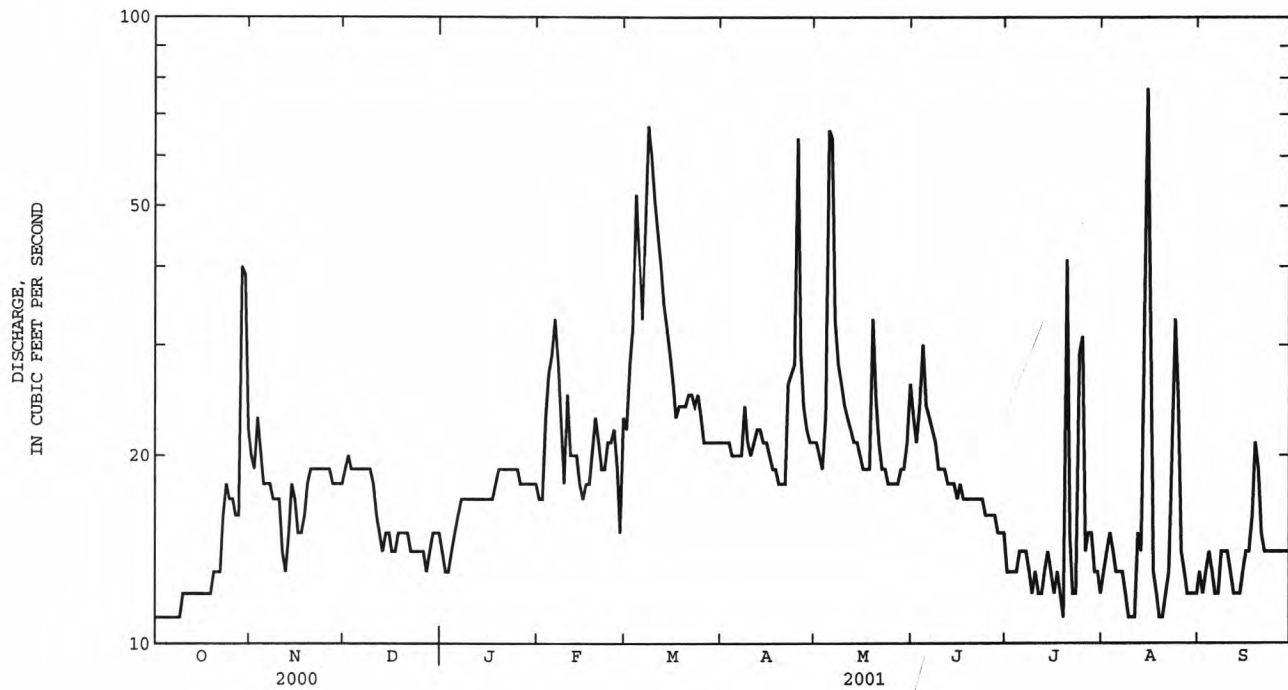
06767500 PLUM CREEK NEAR SMITHFIELD, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1946 - 2001 a
ANNUAL TOTAL	6498.4	7002	9.53
ANNUAL MEAN	17.8	19.2	27.4
HIGHEST ANNUAL MEAN			.099
LOWEST ANNUAL MEAN			1850
HIGHEST DAILY MEAN	134 Jul 4	77 Aug 15	1850 Jun 23 1947
LOWEST DAILY MEAN	9.4 Sep 18	11 Oct 1	.00 Jul 13 1946
ANNUAL SEVEN-DAY MINIMUM	9.8 Sep 14	11 Oct 1	.00 Jul 21 1946
MAXIMUM PEAK FLOW		114 Aug 15	2800 Jun 23 1947
MAXIMUM PEAK STAGE		6.65 Aug 15	23.41 Jun 23 1947
ANNUAL RUNOFF (AC-FT)	12890	13890	6900
10 PERCENT EXCEEDS	20	26	18
50 PERCENT EXCEEDS	18	18	.22
90 PERCENT EXCEEDS	12	12	.00

e Estimated.

a Water years 1947-53, 1969-75, 1997-2001.

* Site and datum then in use.



PLATTE RIVER BASIN

06768000 PLATTE RIVER NEAR OVERTON, NE

LOCATION.--Lat 40°40'57", long 99°32'27", in NE ¼ NW ¼ sec.12, T.8 N., R.20 W., Dawson County, Hydrologic Unit 10200101, on left bank 25 ft upstream from county highway bridge, 4 mi south of Overton, 4 mi downstream from Plum Creek and at mile 142.

DRAINAGE AREA.--56,300 mi², of which about 51,620 mi² contributes directly to surface runoff.

WATER-DISCHARGE RECORDS

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

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

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

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

EXTREMES OUTSIDE REGULATED PERIOD.-- Maximum discharge 37,600 ft³/s, June 5, 1935, gage height, 6.25 ft., south channel, datum then in use; no flow at times in 1919, 1922, 1925, 1927-28, 1930-41.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1080	1540	1680	e1000	1250	1310	1010	1390	612	497	662	455
2	961	1910	1710	1010	853	1660	959	1170	544	503	703	412
3	994	1680	1680	1010	1550	1680	980	855	561	418	627	381
4	886	1580	1660	1040	1650	1680	1020	483	705	454	573	350
5	805	1530	1530	1070	1470	1730	1160	1140	818	535	589	350
6	793	1490	659	1090	1320	1730	931	1410	695	532	586	441
7	898	1200	1030	1100	1240	1700	1130	1350	628	643	601	733
8	1000	1240	1130	1150	1120	1880	1090	1190	511	847	616	1010
9	1200	1230	917	1160	e940	1610	1260	1240	563	852	652	1050
10	1130	1010	e800	1250	e980	1620	1350	1760	545	733	705	1110
11	712	1000	e780	1470	1150	1610	1440	1560	562	741	761	1170
12	1000	937	e780	1390	1040	1640	1590	1660	536	766	746	1270
13	1070	656	e800	1440	1080	1640	1690	1670	494	834	744	899
14	1490	916	e860	1190	e900	1640	2080	1610	486	1000	851	838
15	1120	e1100	899	1210	e1100	1420	1970	1290	476	770	1370	887
16	863	e1300	e820	1270	799	1360	1820	1170	456	706	2080	835
17	789	e900	864	1060	741	1360	1620	1140	462	767	1790	968
18	1050	981	941	1170	1010	1370	1770	1120	372	688	1430	1130
19	926	1190	e900	e970	1180	1350	1190	715	498	666	1430	1200
20	920	1040	972	e1000	1490	1350	1510	542	382	994	1100	909
21	1000	1390	e920	1200	1060	1250	1470	407	321	1020	630	1720
22	1200	1410	951	1280	1060	1230	1500	330	325	1010	585	1740
23	1200	1310	945	1300	1290	1220	1860	284	363	966	599	1710
24	1020	889	e900	1340	1550	1200	2090	266	346	1190	667	1190
25	953	637	774	1250	1450	1190	1990	258	330	1490	911	1630
26	856	924	937	1180	1320	1220	1900	263	332	1380	1020	1750
27	898	973	968	970	883	1090	1830	257	336	1590	1310	1710
28	994	903	1030	1180	852	1240	1790	256	336	1390	1230	1660
29	1110	1420	1020	972	---	1100	1760	412	357	994	908	1700
30	1220	1650	1020	1150	---	1010	1330	561	379	877	762	1690
31	1180	---	e960	1180	---	1080	---	774	---	593	509	---
TOTAL	31318	35936	31837	36052	32328	44170	45090	28533	14331	26446	27747	32898
MEAN	1010	1198	1027	1163	1155	1425	1503	920	478	853	895	1097
MAX	1490	1910	1710	1470	1650	1880	2090	1760	818	1590	2080	1750
MIN	712	637	659	970	741	1010	931	256	321	418	509	350
AC-FT	62120	71280	63150	71510	64120	87610	89440	56600	28430	52460	55040	65250

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2001, BY WATER YEAR (WY)

	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953
MEAN	1419	1491	1592	1673	1958	2108	1942	2195	2464	1085	733	1226
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

PLATTE RIVER BASIN

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06768000 PLATTE RIVER NEAR OVERTON, NE--Continued

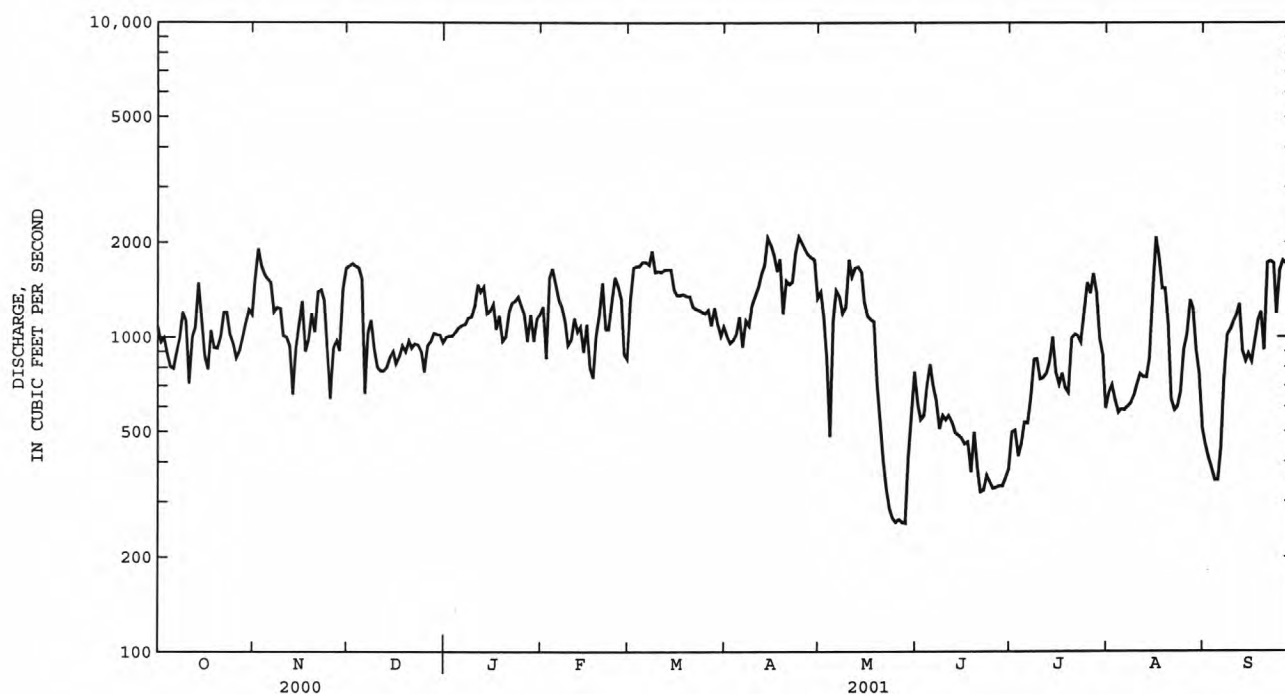
SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1942 - 2001 a	
ANNUAL TOTAL	575293		386686		1653	
ANNUAL MEAN	1572		1059		5835	1983
HIGHEST ANNUAL MEAN					558	1956
LOWEST ANNUAL MEAN					22300	Jun 22 1983
HIGHEST DAILY MEAN	3750	Jan 8	2090	Apr 24	2.0	Aug 31 1942
LOWEST DAILY MEAN	523	May 18	256	May 28	5.4	Aug 25 1942
ANNUAL SEVEN-DAY MINIMUM	600	Jul 12	273	May 22	*22900	Jun 28 1983
MAXIMUM PEAK FLOW			3160	Oct 21	**7.44	Jun 22 1983
MAXIMUM PEAK STAGE			3.10	Oct 21		
ANNUAL RUNOFF (AC-FT)	1141000		767000		1198000	
10 PERCENT EXCEEDS	2960		1660		3040	
50 PERCENT EXCEEDS	1220		1020		1200	
90 PERCENT EXCEEDS	668		498		293	

e Estimated.

a Since beginning of storage in Lake McConaughy.

* Stage 7.38 ft., current datum.

** Current datum.



PLATTE RIVER BASIN

06768000 PLATTE RIVER NEAR OVERTON, NE--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1958 to September 1996.

WATER TEMPERATURES: January 1958 to September 1996.

EXTREMES FOR PERIOD OF DAILY RECORD.--

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATURATION) (00301)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	
DEC 07...	1000	478	12.0	98	8.0	891	-4.0	3.0	12.6	73.6	223	30.5	.5	
APR 13...	0900	1000	10.0	96	8.6	852	10.5	9.5	13.3	65.8	225	26.4	.5	
JUN 21...	1200	280	9.9	123	8.5	990	22.0	22.0	14.1	85.4	191	39.0	.7	
AUG 14...	1400	850	7.8	107	8.6	816	28.0	26.5	14.4	78.6	190	27.0	.5	
DATE		SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)
DEC 07...	36.1	194	.050	.06	3.43	15.2	3.44	.020	.006	.905	.286	.295	4.8	
APR 13...	31.7	186	E.023	--	1.63	7.22	1.64	.032	.010	.216	.072	.070	1.1	
JUN 21...	24.1	249	<.040	--	1.75	7.74	1.78	.092	.028	.221	.072	.072	1.2	
AUG 14...	25.4	197	E.023	--	.902	3.99	.913	.036	.011	.129	E.042	.042	.9	
DATE		ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
DEC 07...	--	--	--	--	--	--	117	--	--	--	--	<10	--	7.4
APR 13...	--	--	--	--	--	--	110	--	--	--	--	<10	--	9.0
JUN 21...	--	--	--	--	--	--	143	--	--	--	--	<10	--	3.8
AUG 14...	99	.24	5.0	73.8	<.06	139	.11	<.8	.27	5.6	40	.20	25.1	
DATE						MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)			
DEC 07...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 13...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 21...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 14...	4.3	.76	E1.9	<1.0	10	19.4								

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PLATTE RIVER BASIN

06768020 SPRING CREEK NEAR OVERTON, NE

LOCATION.--Lat 40°42'26", long 099°33'34", in SE ¼ SE ¼, sec.35, T.9 N., R.20 W., Dawson County, Hydrologic Unit 10200101, on upstream side of county road bridge, 1.0 mi west and 2.5 mi south of Overton.

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

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	18	e6.2	e4.0	e11	e4.0	21	26	71	e72	86	92
2	1.3	60	e6.0	e4.5	e11	e4.0	20	25	70	e75	80	92
3	1.5	22	e6.0	e5.0	e11	e4.5	21	32	72	80	70	86
4	1.5	14	e6.0	e5.0	e11	e5.0	20	66	77	84	60	77
5	1.6	11	e6.0	e5.0	e11	e6.0	20	171	73	84	46	62
6	1.4	9.0	e6.0	e5.0	e11	e6.0	21	220	70	81	40	53
7	1.5	9.4	e5.8	e5.0	e11	e6.8	38	149	68	74	32	45
8	2.6	e9.0	e5.4	e5.2	e10	e8.0	41	114	68	70	32	40
9	2.7	e8.0	e4.5	e5.6	e10	e9.0	30	97	68	70	32	28
10	2.0	e7.6	e3.5	e6.0	e9.0	e10	34	91	65	69	37	17
11	1.9	e7.4	e3.0	e6.0	e8.0	e12	44	81	61	77	41	12
12	2.2	e7.4	e3.0	e6.0	e8.0	e20	45	76	e58	84	49	11
13	2.3	e7.4	e3.0	e6.0	e8.0	e25	41	74	e58	88	53	11
14	2.2	e7.2	e3.2	e5.8	e8.0	32	34	72	e57	97	59	11
15	2.1	e7.2	e3.3	e5.8	e8.0	31	31	70	e53	102	91	14
16	2.1	e7.0	e3.5	e5.8	e8.0	28	28	67	e60	107	103	14
17	2.5	e7.0	e3.8	e6.0	e8.0	27	26	64	e59	110	91	13
18	3.2	e6.2	e3.8	e6.0	e8.6	29	26	60	e56	105	87	15
19	2.0	e6.2	e3.8	e6.4	e8.0	30	28	58	e53	81	82	13
20	2.1	e6.4	e3.5	e7.0	e9.0	45	25	58	e68	83	75	13
21	1.9	e6.4	e3.5	e7.6	e9.0	43	26	56	e66	89	56	11
22	3.2	e6.4	e3.5	e7.6	e8.4	33	64	55	e63	97	49	11
23	4.1	e6.4	e3.8	e7.6	e8.0	37	122	53	e74	107	54	10
24	7.7	e6.4	e4.1	e8.0	e7.0	31	127	49	e76	120	90	10
25	5.8	e6.4	e4.5	e9.0	e6.0	27	54	45	e73	137	123	10
26	5.0	e6.4	e4.7	e10	e4.5	25	38	53	e67	123	141	9.9
27	4.5	e6.6	e4.5	e10	e4.0	24	33	61	e56	138	143	9.7
28	4.4	e6.6	e4.3	e10	e4.0	24	30	65	e54	135	131	9.5
29	40	e6.6	e4.3	e10	---	23	27	67	e62	118	119	9.1
30	44	e6.6	e4.0	e10	---	22	29	70	e67	110	102	8.9
31	17	---	e3.5	e10	---	22	---	71	---	95	94	---
TOTAL	178.0	302.2	134.0	210.9	238.5	653.3	1144	2316	1943	2962	2348	818.1
MEAN	5.74	10.1	4.32	6.80	8.52	21.1	38.1	74.7	64.8	95.5	75.7	27.3
MAX	44	60	6.2	10	11	45	127	220	77	138	143	92
MIN	1.3	6.2	3.0	4.0	4.0	4.0	20	25	53	69	32	8.9
AC-FT	353	599	266	418	473	1300	2270	4590	3850	5880	4660	1620

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000	2001
MEAN	16.0	16.9	13.0	13.0	15.2	17.4
MAX	26.8	24.7	20.6	21.4	25.1	22.2
(WY)	1997	1997	1997	1997	1997	2001
MIN	5.74	10.1	4.32	6.80	8.52	9.96
(WY)	2001	2001	2001	2001	2001	1999

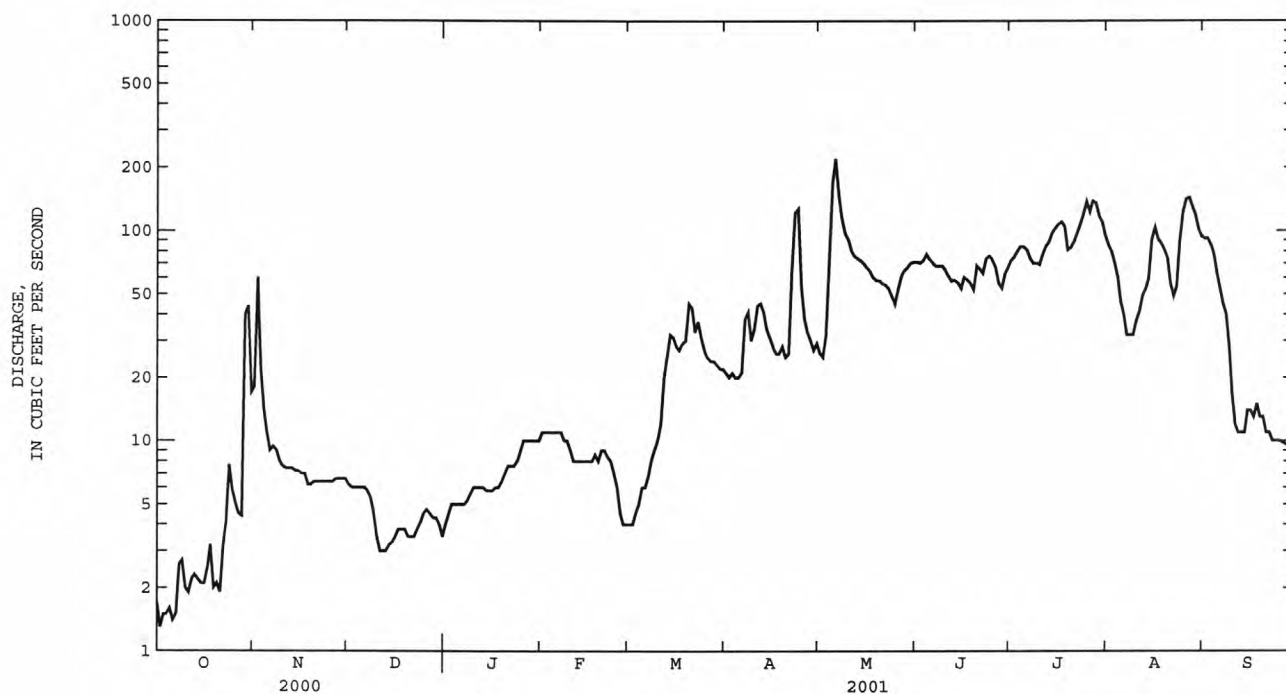
PLATTE RIVER BASIN

101

06768020 SPRING CREEK NEAR OVERTON, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1996 - 2001
ANNUAL TOTAL	8295.71	13248.0	
ANNUAL MEAN	22.7	36.3	35.7
HIGHEST ANNUAL MEAN			45.4
LOWEST ANNUAL MEAN			24.4
HIGHEST DAILY MEAN	108 Jul 5	220 May 6	431 Aug 19 1999
LOWEST DAILY MEAN	.78 Sep 18	1.3 Oct 2	.78 Sep 18 2000
ANNUAL SEVEN-DAY MINIMUM	1.2 Sep 13	1.5 Oct 1	1.2 Sep 13 2000
MAXIMUM PEAK FLOW		232 May 6	453 Aug 19 1999
MAXIMUM PEAK STAGE		6.24 May 6	7.62 Aug 19 1999
ANNUAL RUNOFF (AC-FT)	16450	26280	25860
10 PERCENT EXCEEDS	58	89	90
50 PERCENT EXCEEDS	15	20	22
90 PERCENT EXCEEDS	2.6	3.8	7.6

e Estimated.



PLATTE RIVER BASIN

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

LOCATION.--Lat 40°41'10", long 099°26'23", in SE $\frac{1}{4}$ SE $\frac{1}{4}$, sec.2, T.8 N., R.19 W., Dawson County, Hydrologic Unit 10200101, on left bank of island on middle channel, at Cottonwood Ranch, and 3.7 miles southwest of Elm Creek, NE

PERIOD OF RECORD.--May 2001 to September 2001.

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

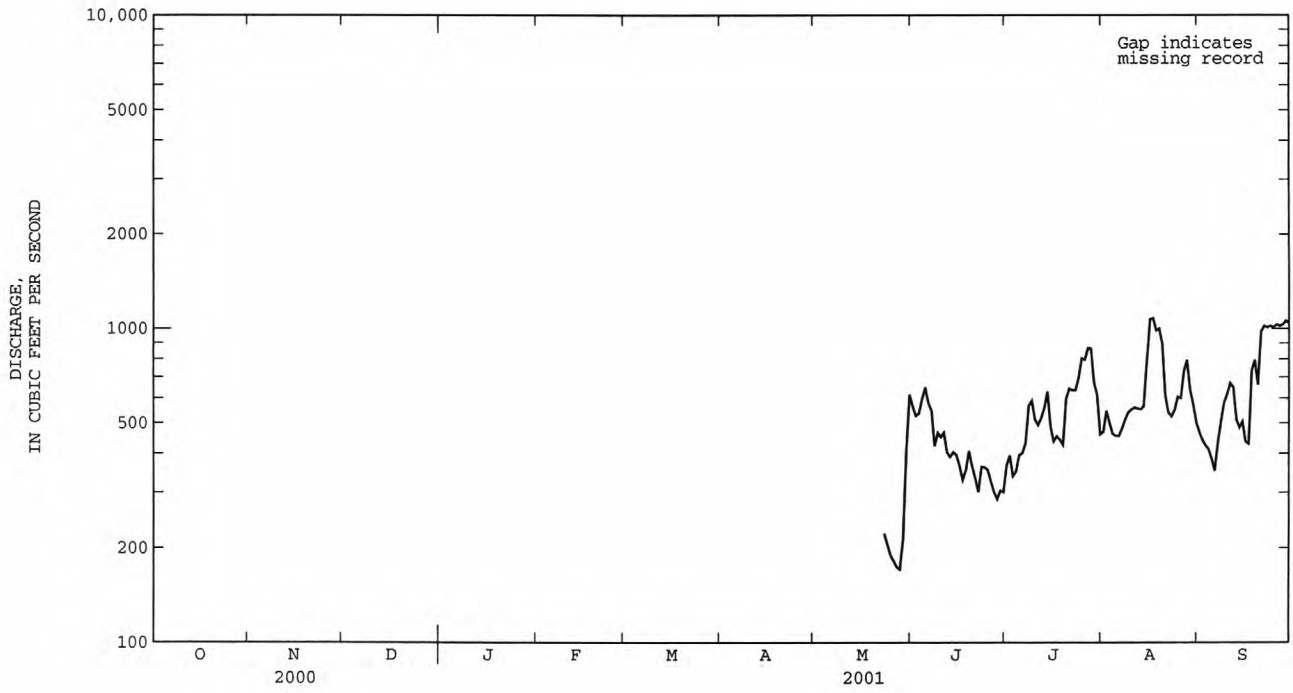
REMARKS.-- Records fair.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	566	367	468	468
2	---	---	---	---	---	---	---	---	528	394	547	441
3	---	---	---	---	---	---	---	---	537	338	501	424
4	---	---	---	---	---	---	---	---	597	350	462	412
5	---	---	---	---	---	---	---	---	649	395	455	385
6	---	---	---	---	---	---	---	---	580	401	454	352
7	---	---	---	---	---	---	---	---	547	430	480	432
8	---	---	---	---	---	---	---	---	422	568	512	506
9	---	---	---	---	---	---	---	---	465	589	540	581
10	---	---	---	---	---	---	---	---	451	513	552	618
11	---	---	---	---	---	---	---	---	466	493	560	669
12	---	---	---	---	---	---	---	---	404	519	557	650
13	---	---	---	---	---	---	---	---	390	558	553	512
14	---	---	---	---	---	---	---	---	404	630	565	484
15	---	---	---	---	---	---	---	---	396	487	780	505
16	---	---	---	---	---	---	---	---	365	437	1070	436
17	---	---	---	---	---	---	---	---	329	453	1080	429
18	---	---	---	---	---	---	---	---	353	442	986	734
19	---	---	---	---	---	---	---	---	407	426	1000	794
20	---	---	---	---	---	---	---	---	364	599	893	662
21	---	---	---	---	---	---	---	---	333	643	610	981
22	---	---	---	---	---	---	---	---	301	636	539	1020
23	---	---	---	---	---	---	---	---	222	362	525	1010
24	---	---	---	---	---	---	---	---	206	361	696	1020
25	---	---	---	---	---	---	---	---	190	354	803	1010
26	---	---	---	---	---	---	---	---	182	325	796	1030
27	---	---	---	---	---	---	---	---	174	301	866	1020
28	---	---	---	---	---	---	---	---	171	286	863	794
29	---	---	---	---	---	---	---	---	213	304	673	1060
30	---	---	---	---	---	---	---	---	406	301	614	574
31	---	---	---	---	---	---	---	---	616	---	460	503
TOTAL	---	---	---	---	---	---	---	---	2380	12448	17075	19685
MEAN	---	---	---	---	---	---	---	---	264	415	551	635
MAX	---	---	---	---	---	---	---	---	616	649	866	1080
MIN	---	---	---	---	---	---	---	---	171	286	338	454
AC-FT	---	---	---	---	---	---	---	---	4720	24690	33870	39050

PLATTE RIVER BASIN

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



PLATTE RIVER BASIN

06769000 BUFFALO CREEK NEAR OVERTON, NE

LOCATION.--Lat 40°44'04", long 99°30'20", in NE ¼ SE ¼, sec.20, T.9 N., R.19 W., Dawson County, Hydrologic Unit 10200101, on downstream side of State Highway 30 bridge, 1.7 mi east of Overton.

DRAINAGE AREA.--175 mi².

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

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	8.7	e.80	e.10	e.40	e1.2	8.1	11	59	65	100	77
2	.06	4.0	e.80	e.10	e.40	e1.3	8.6	9.3	60	71	90	76
3	.04	11	e.80	e.10	e.40	e1.4	8.4	10	61	59	78	58
4	e.00	11	e.70	e.10	e.40	e1.5	8.4	34	69	71	67	47
5	e.00	6.8	e.70	e.10	e.40	e2.0	8.3	88	68	57	54	44
6	e.00	3.6	e.60	e.20	e.40	e2.5	9.0	141	68	54	65	41
7	e.00	1.7	e.60	e.20	e.40	e3.0	9.9	137	64	49	67	44
8	e.00	e.90	e.50	e.20	e.40	e3.0	9.8	98	61	44	46	34
9	e.00	e.90	e.40	e.30	e.40	e2.8	12	80	58	36	39	20
10	e.00	e.80	e.30	e.30	e.50	e3.0	11	73	53	37	39	12
11	.00	e.90	e.30	e.30	e.50	e3.5	12	63	53	47	40	14
12	.00	e1.0	e.30	e.30	e.50	e4.5	10	54	50	48	56	19
13	.00	e1.1	e.30	e.20	e.50	e4.0	12	51	52	58	62	17
14	.00	e1.1	e.30	e.20	e.50	e4.0	12	52	50	55	67	14
15	.00	e1.1	e.30	e.20	e.50	e4.0	11	51	46	61	80	17
16	.00	e1.1	e.30	e.20	e.60	e4.5	9.5	50	56	56	90	16
17	.00	e1.2	e.30	e.20	e.70	e6.0	8.9	48	54	49	89	11
18	.00	e1.2	e.20	e.20	e.80	e10	8.9	49	44	45	79	12
19	.00	e1.2	e.20	e.30	e1.0	e13	9.1	39	42	39	73	13
20	.00	e1.2	e.20	e.30	e1.0	e14	9.1	35	64	37	72	11
21	.00	e1.2	e.20	e.30	e.80	e15	28	31	60	44	73	10
22	.00	e1.2	e.10	e.40	e.80	e15	45	29	58	55	60	9.5
23	.00	e1.1	e.10	e.40	e.80	e14	54	38	68	70	53	8.6
24	.00	e1.2	e.10	e.40	e.80	14	70	32	69	74	67	6.7
25	.00	e1.2	e.10	e.40	e.60	11	51	45	65	84	110	5.6
26	2.5	e1.2	e.10	e.40	e.60	10	19	52	49	110	119	8.8
27	2.8	e1.1	e.10	e.40	e.80	9.1	14	63	36	124	113	7.9
28	1.1	e1.1	e.10	e.40	e1.0	8.6	12	61	35	130	110	7.4
29	.81	e1.0	e.10	e.40	---	8.6	13	58	53	126	102	6.3
30	1.7	e.90	e.10	e.40	---	8.9	11	57	61	118	85	4.6
31	12	---	e.10	e.40	---	7.6	---	57	---	115	74	---
TOTAL	21.12	71.70	10.10	8.40	16.90	211.0	513.0	1696.3	1686	2088	2319	672.4
MEAN	.68	2.39	.33	.27	.60	6.81	17.1	54.7	56.2	67.4	74.8	22.4
MAX	12	11	.80	.40	1.0	15	70	141	69	130	119	77
MIN	.00	.80	.10	.10	.40	1.2	8.1	9.3	35	36	39	4.6
AC-FT	42	142	20	17	34	419	1020	3360	3340	4140	4600	1330

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2001, BY WATER YEAR (WY)

	10.4	4.30	3.37	2.79	3.81	4.97	5.05	24.5	49.3	51.0	60.3	34.8
MEAN	10.4	4.30	3.37	2.79	3.81	4.97	5.05	24.5	49.3	51.0	60.3	34.8
MAX	33.1	15.4	13.4	10.9	10.1	15.3	17.1	54.7	130	106	174	71.1
(WY)	1951	1998	1997	1998	2000	1952	2001	2001	1999	1951	1996	1950
MIN	.30	.000	.000	.000	.000	.000	.000	2.12	10.4	2.04	.000	.88
(WY)	1957	1955	1955	1954	1955	1956	1955	1958	1956	1954	1955	1955

PLATTE RIVER BASIN

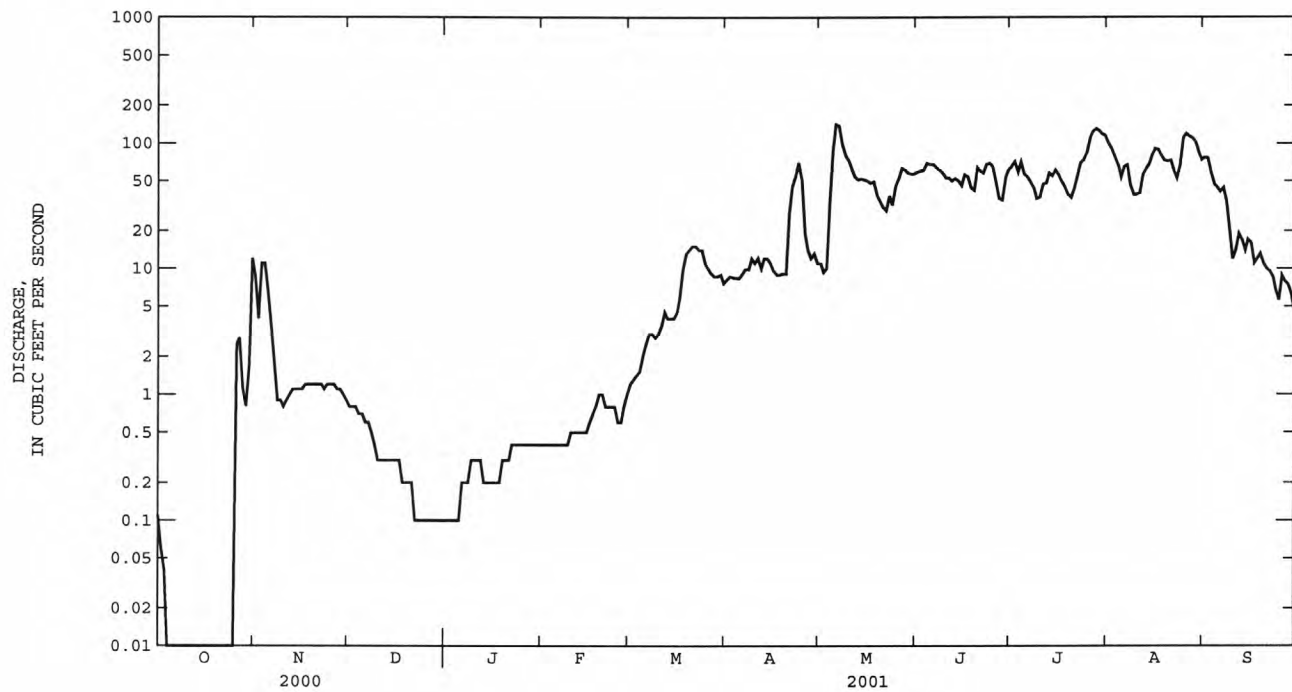
105

06769000 BUFFALO CREEK NEAR OVERTON, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1949 - 2001 a
ANNUAL TOTAL	8127.97	9313.92	19.9
ANNUAL MEAN	22.2	25.5	40.9
HIGHEST ANNUAL MEAN			3.07
LOWEST ANNUAL MEAN			1999
HIGHEST DAILY MEAN	110 May 27	141 May 6	472 Jun 12 1999
LOWEST DAILY MEAN	.00 Oct 4	.00 Oct 4	.00 Apr 26 1953
ANNUAL SEVEN-DAY MINIMUM	.00 Oct 4	.00 Oct 4	.00 Jul 16 1953
MAXIMUM PEAK FLOW			509 Jun 12 1999
MAXIMUM PEAK STAGE			10.79 Jun 12 1999
ANNUAL RUNOFF (AC-FT)	16120	18470	14450
10 PERCENT EXCEEDS	66	70	70
50 PERCENT EXCEEDS	5.0	8.9	5.5
90 PERCENT EXCEEDS	.20	.10	.00

e Estimated.

a Water years 1949-58, 1996-2001.



PLATTE RIVER BASIN

06769525 ELM CREEK NEAR ELM CREEK, NE

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

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

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

REMARKS.--Records fair.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	3.3	9.9	6.6	12
2	.00	.00	.00	.00	.00	.00	.00	.00	3.3	9.3	.84	12
3	.00	.00	.00	.00	.00	.00	.00	.00	3.8	6.6	.20	9.8
4	.00	.00	.00	.00	.00	.00	.00	.00	4.1	3.9	.01	8.2
5	.00	.00	.00	.00	.00	.00	.00	.76	4.6	1.7	.85	7.3
6	.00	.00	.00	.00	.00	.00	.00	.87	5.5	.04	1.7	8.0
7	.00	.00	.00	.00	.00	5.4	.00	.14	5.5	3.4	2.0	9.9
8	.00	.00	.00	.00	.00	67	.00	.01	5.5	5.3	.25	4.3
9	.00	.00	.00	.00	.00	125	.00	.03	5.3	4.3	.00	.44
10	.00	.00	.00	.00	.00	91	.00	.01	5.8	8.6	.61	.01
11	.00	.00	.00	.00	.00	33	.00	.00	5.8	10	.52	.00
12	.00	.00	.00	.00	.00	9.5	.00	.00	5.4	7.5	1.3	.00
13	.00	.00	.00	.00	.00	36	.00	.13	6.0	6.7	2.3	.00
14	.00	.00	.00	.00	.00	40	.00	.84	6.4	4.4	3.6	.00
15	.00	.00	.00	.00	.00	4.3	.00	.63	6.5	5.4	10	.15
16	.00	.00	.00	.00	.00	2.2	.00	.17	6.7	8.7	9.9	.03
17	.00	.00	.00	.00	.00	.01	.00	.32	6.5	6.4	9.2	.01
18	.00	.00	.00	.00	.00	.00	.00	.31	6.7	5.7	11	.89
19	.00	.00	.00	.00	.00	.00	.00	8.7	5.5	1.9	12	.70
20	.00	.00	.00	.00	.00	.29	.00	30	2.9	3.6	12	.15
21	.00	.00	.00	.00	.00	.30	.00	1.6	7.7	10	8.5	.00
22	.00	.00	.00	.00	.00	.01	21	1.2	2.0	10	3.0	.00
23	.00	.00	.00	.00	.00	.00	23	1.4	.07	11	.19	.00
24	.00	.00	.00	.00	.00	.00	.97	1.4	.73	11	3.9	.00
25	.00	.00	.00	.00	.00	.00	.01	1.7	.06	12	9.5	.00
26	.00	.00	.00	.00	.00	.00	.00	2.2	.10	11	9.5	.00
27	.00	.00	.00	.00	.00	.00	.00	1.8	.26	12	9.8	.00
28	.00	.00	.00	.00	.00	.00	.00	1.7	1.5	12	7.8	.00
29	.00	.00	.00	.00	.00	.00	.00	1.9	7.7	11	2.5	.00
30	.00	.00	.00	.00	.00	.00	.00	2.6	7.2	11	5.3	.00
31	.00	.00	.00	.00	.00	.00	.00	2.9	.00	9.1	10	.00
TOTAL	0.00	0.00	0.00	0.00	0.00	414.01	44.98	63.32	132.42	233.44	154.87	73.88
MEAN	.000	.000	.000	.000	.000	13.4	1.50	2.04	4.41	7.53	5.00	2.46
MAX	.00	.00	.00	.00	.00	125	23	30	7.7	12	12	12
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.06	.04	.00	.00
AC-FT	.00	.00	.00	.00	.00	821	89	126	263	463	307	147

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

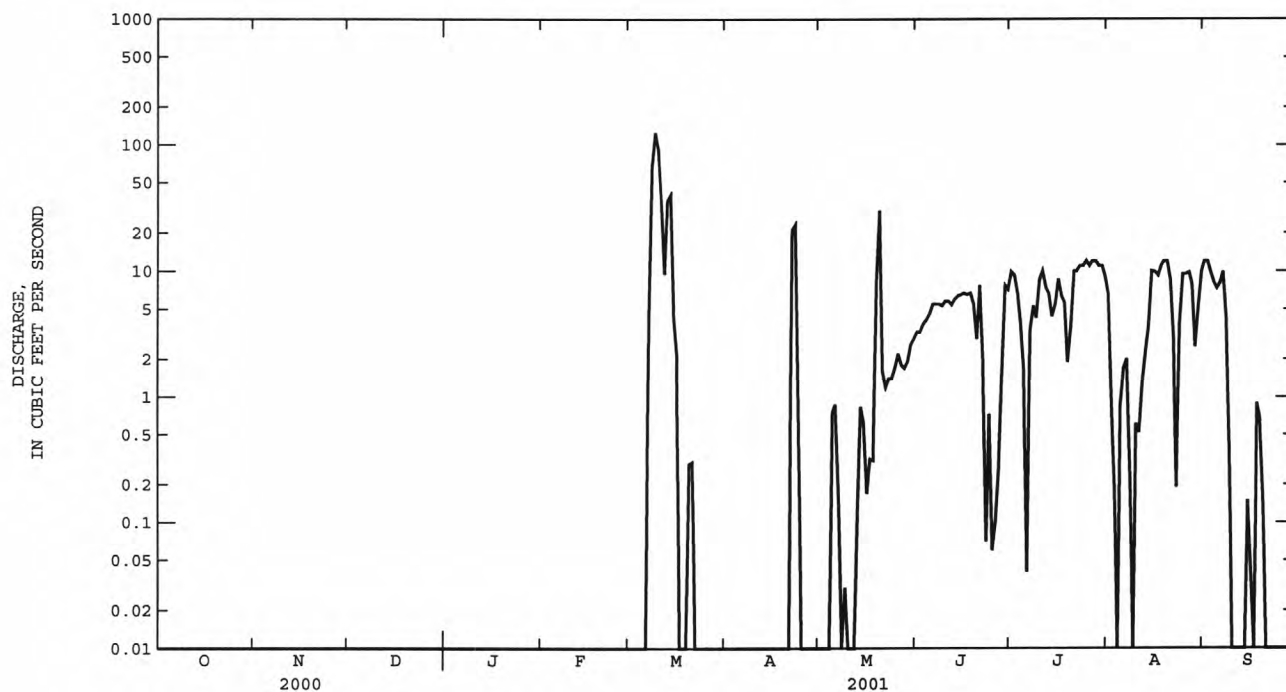
	1996	1997	1998	1999	2000	2001
MEAN	.000	.015	.000	.000	.000	3.03
MAX	.000	.073	.000	.000	.000	13.4
(WY)	1997	1997	1997	1997	1997	2001
MIN	.000	.000	.000	.000	.000	.000
(WY)	1997	1998	1997	1997	1997	1996

PLATTE RIVER BASIN

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06769525 ELM CREEK NEAR ELM CREEK, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1996 - 2001	
ANNUAL TOTAL	1190.71		1116.92		3.62	
ANNUAL MEAN	3.25		3.06		5.89	
HIGHEST ANNUAL MEAN					1.80	
LOWEST ANNUAL MEAN					188	
HIGHEST DAILY MEAN	97	Jul 11	125	Mar 9	Jun 11 1999	
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	Mar 21 1996	
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	Mar 21 1996	
MAXIMUM PEAK FLOW			151	Mar 9	317	
MAXIMUM PEAK STAGE			7.56	Mar 9	8.76	
ANNUAL RUNOFF (AC-FT)	2360		2220		2620	
10 PERCENT EXCEEDS	11		9.2		11	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	



PLATTE RIVER BASIN

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

LOCATION.--Lat 40°38'28", long 099°06'56", in SE $\frac{1}{4}$ SW $\frac{1}{4}$, sec.22, T.8 N., R.16 W., Kearney County, Hydrologic Unit 10200101, on downstream side of county road bridge, 1.1 mi south of Platte River bridge on Highway 44, and 1.6 mi west of Highway 44, and approximately 2 mi south of Kearney.

DRAINAGE AREA.--77.7 mi².

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

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	2.1	e4.2	e4.8	e6.4	e7.0	16	18	20	21	15	9.9
2	2.1	9.4	e4.3	e5.0	e6.6	e8.0	15	17	19	21	19	8.7
3	2.1	8.6	e4.4	e5.4	e6.8	e9.0	15	17	21	17	22	5.7
4	2.4	8.7	e4.5	e5.8	e6.8	e10	14	26	30	22	25	4.8
5	2.8	9.6	e4.5	e6.2	e6.8	e10	14	74	26	24	26	4.4
6	2.9	11	e4.5	e6.6	e6.2	e12	18	73	24	25	26	4.6
7	2.9	12	e4.6	e7.0	e5.2	e14	32	47	23	21	26	5.1
8	3.0	13	e4.7	e7.1	e4.5	e16	25	40	23	20	24	4.9
9	3.8	13	e4.7	e7.4	e4.5	e18	22	36	23	21	20	5.1
10	4.1	e10	e4.6	e7.4	e4.6	e20	21	33	22	23	18	4.4
11	4.2	e9.0	e4.0	e7.8	e5.0	e25	36	30	21	21	19	4.1
12	4.2	e8.0	e4.0	e8.0	e5.2	37	34	29	20	20	14	3.0
13	4.1	e7.0	e4.2	e8.0	e5.4	43	29	27	18	21	16	2.4
14	4.4	e6.0	e4.3	e7.8	e5.4	66	26	25	16	22	21	2.7
15	4.3	e5.4	e4.3	e7.4	e5.4	41	24	24	15	18	30	3.4
16	4.4	e5.2	e4.4	e7.0	e5.6	25	22	23	15	18	31	6.0
17	4.5	e5.0	e4.4	e6.6	e5.8	28	21	21	16	17	17	5.4
18	4.6	e4.8	e4.5	e7.0	e6.0	32	21	20	17	18	9.4	6.0
19	4.8	e4.8	e4.5	e7.4	e6.0	30	21	20	17	19	8.7	14
20	5.3	e4.6	e4.5	e7.4	e6.6	28	19	21	20	34	9.0	6.6
21	5.6	e4.6	e4.6	e7.4	e6.6	26	17	19	19	32	8.7	5.4
22	6.7	e4.4	e4.7	e7.4	e6.6	24	24	19	20	22	7.8	5.5
23	7.0	e4.4	e4.6	e7.4	e6.4	24	57	17	19	19	11	4.2
24	8.3	e4.4	e4.5	e7.4	e6.0	24	36	16	22	18	22	5.0
25	9.0	e4.2	e4.5	e7.4	e5.8	22	28	17	22	24	18	5.2
26	8.3	e4.2	e4.6	e7.2	e5.8	20	24	15	19	27	12	5.4
27	7.5	e4.0	e5.0	e6.8	e6.2	20	23	16	26	21	8.2	5.1
28	7.8	e4.0	e5.2	e6.4	e6.4	19	21	16	26	17	7.0	4.8
29	11	e4.0	e5.3	e6.0	---	17	19	16	24	14	6.5	4.7
30	11	e4.0	e5.0	e6.0	---	16	18	17	21	14	6.7	4.8
31	9.2	---	e4.9	e6.2	---	16	---	20	---	13	7.7	---
TOTAL	164.4	199.4	141.0	212.7	164.6	707.0	712	809	624	644	511.7	161.3
MEAN	5.30	6.65	4.55	6.86	5.88	22.8	23.7	26.1	20.8	20.8	16.5	5.38
MAX	11	13	5.3	8.0	6.8	66	57	74	30	34	31	14
MIN	2.1	2.1	4.0	4.8	4.5	7.0	14	15	15	13	6.5	2.4
AC-FT	326	396	280	422	326	1400	1410	1600	1240	1280	1010	320

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000	2001
MEAN	11.6	15.0	12.6	11.5	13.4	19.1
MAX	17.0	22.6	18.0	13.9	16.9	24.7
(WY)	1997	1998	1998	1998	1997	1998
MIN	5.30	6.65	4.55	6.86	5.88	15.3
(WY)	2001	2001	2001	2001	2001	2000

PLATTE RIVER BASIN

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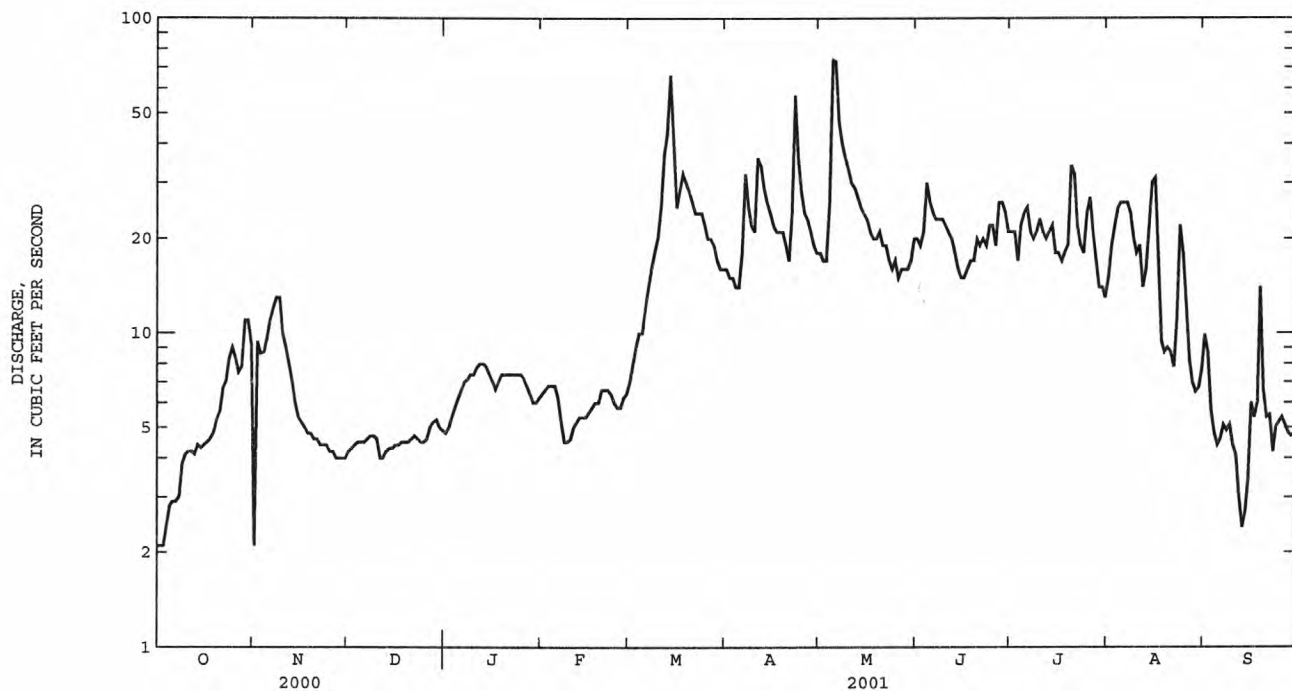
06770195 NORTH DRY CREEK 2 MI SW OF PLATTE RIVER BRIDGE SOUTH OF KEARNEY, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1996 - 2001	
ANNUAL TOTAL	5152.58		5051.1		19.1	
ANNUAL MEAN	14.1		13.8		24.7	
HIGHEST ANNUAL MEAN					13.8	
LOWEST ANNUAL MEAN					1998	
HIGHEST DAILY MEAN	470	Jul 5	74	May 5	470	Jul 5 2000
LOWEST DAILY MEAN	.35	Sep 13	2.1	Oct 1	.35	Sep 13 2000
ANNUAL SEVEN-DAY MINIMUM	.94	Sep 12	2.5	Oct 1	.94	Sep 12 2000
MAXIMUM PEAK FLOW			*98	May 5	862	Jul 5 2000
MAXIMUM PEAK STAGE			**4.86	Feb 6	6.68	Jul 5 2000
ANNUAL RUNOFF (AC-FT)	10220		10020		13850	
10 PERCENT EXCEEDS	20		26		34	
50 PERCENT EXCEEDS	12		9.4		16	
90 PERCENT EXCEEDS	3.9		4.4		7.0	

e Estimated.

* Stage 4.38 ft.

** Backwater from ice.



PLATTE RIVER BASIN

06770200 PLATTE RIVER NEAR KEARNEY, NE

LOCATION.--Lat 40°39'32", long 099°05'08", in SE ¼ SE ¼ sec.14, T.8 N., R.16 W., Kearney County, Hydrologic Unit 10200101, on right bank near downstream side of bridge on State Highway 44, 2 mi south of Kearney, and at mile 117.

DRAINAGE AREA.--57,260 mi², of which about 52,540 mi² contributes directly to surface runoff.

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

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

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	854	1320	1730	e1200	e1400	e1500	1080	1580	909	233	481	517
2	788	1660	1750	e1200	e1360	e1800	1030	1510	757	324	615	446
3	807	1800	1820	e1200	e1700	e1900	964	1400	809	390	533	381
4	804	1790	1780	e1240	e1800	e1900	947	1370	894	270	461	315
5	831	1820	1810	e1260	e1800	e1840	975	1650	979	286	399	276
6	753	1740	1470	e1300	e1800	1840	1160	2610	1030	292	372	225
7	760	1460	855	e1340	1570	1850	1130	2510	971	270	339	247
8	817	1340	1330	e1380	1370	1980	1250	2110	781	385	349	370
9	786	1360	1340	e1400	e1200	2090	1240	1860	790	558	371	527
10	858	1150	e1100	e1500	e1180	2460	1410	2380	732	676	418	544
11	863	e1000	e940	e1600	e1180	2050	1650	2350	702	537	504	605
12	557	e860	e920	e1700	e1220	1700	1710	2280	658	522	541	672
13	829	e900	e920	e1700	e1220	1780	1790	2200	662	558	570	759
14	1040	e1000	e960	e1700	e1180	2140	2170	2180	566	661	583	565
15	1140	e1200	e1000	e1470	e1140	2130	2370	1860	428	706	1040	721
16	923	1270	e1000	e1470	e1140	1810	2150	1580	383	493	1470	717
17	799	1310	e990	e1450	e1000	1760	1840	1400	469	440	1900	649
18	835	1330	e1000	e1350	e1000	1730	1840	1340	494	436	1590	787
19	839	1320	e980	e1300	e1200	1650	1820	1220	455	351	1480	953
20	751	1470	e1020	e1250	e1400	1620	1360	956	490	580	1440	1040
21	757	1500	e1100	e1300	e1450	1590	1630	647	270	802	932	936
22	803	1670	e1100	e1450	e1400	1330	2120	508	219	785	626	1440
23	877	1580	e1120	e1600	e1300	1380	2990	490	227	880	583	1490
24	984	1480	e1100	e1650	e1500	1290	3070	489	249	831	749	1480
25	969	960	e1050	e1600	e1700	1220	2880	466	222	1090	768	1070
26	961	906	e1000	e1500	e1700	1130	2690	466	189	1270	844	1530
27	879	1110	e1100	e1400	e1600	1080	2430	445	170	1350	928	1570
28	958	1210	e1180	e1330	e1020	897	2220	427	139	1500	1140	1570
29	1100	1210	e1200	e1340	---	1010	2070	423	170	1210	1070	1520
30	1170	1690	e1230	e1300	---	995	1730	762	152	947	866	1590
31	1180	---	e1220	e1400	---	1010	---	821	---	733	700	---
TOTAL	27272	40416	37115	43880	38530	50462	53716	42290	15966	20366	24662	25512
MEAN	880	1347	1197	1415	1376	1628	1791	1364	532	657	796	850
MAX	1180	1820	1820	1700	1800	2460	3070	2610	1030	1500	1900	1590
MIN	557	860	855	1200	1000	897	947	423	139	233	339	225
AC-FT	54090	80170	73620	87040	76420	100100	106500	83880	31670	40400	48920	50600

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2001, BY WATER YEAR (WY)

MEAN	1769	1828	1903	2146	2494	2590	2422	2604	3543	1892	1354	1918
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	1157	1132	724	289	315	123	288	230
(WY)	1992	1990	1990	1991	1995	1991	1989	1989	1992	1990	1991	1990

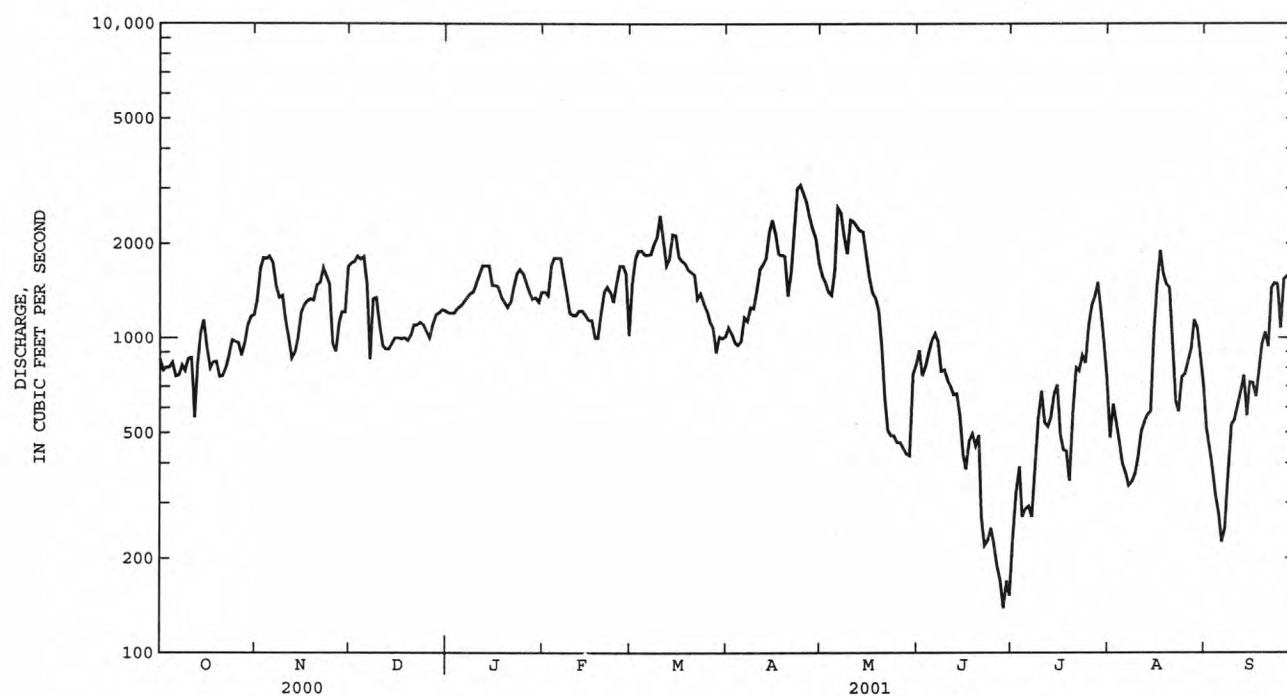
PLATTE RIVER BASIN

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06770200 PLATTE RIVER NEAR KEARNEY, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1983 - 2001	
ANNUAL TOTAL	605597		420187		2201	
ANNUAL MEAN	1655		1151		5418	
HIGHEST ANNUAL MEAN					797	
LOWEST ANNUAL MEAN					22300	
HIGHEST DAILY MEAN	3860	Feb 6	3070	Apr 24	3.0	Jun 29 1983
LOWEST DAILY MEAN	472	Sep 8	139	Jun 28	13	Sep 7 1990
ANNUAL SEVEN-DAY MINIMUM	551	Sep 16	182	Jun 25	***23700	Jun 29 1983
MAXIMUM PEAK FLOW			*3320	Apr 23	***8.62	Feb 24 1994
MAXIMUM PEAK STAGE			***4.76	Feb 3		
ANNUAL RUNOFF (AC-FT)	1201000		833400		1594000	
10 PERCENT EXCEEDS	3190		1820		4180	
50 PERCENT EXCEEDS	1340		1120		1660	
90 PERCENT EXCEEDS	641		438		468	

e Estimated.
 * Stage 4.13 ft.
 ** Stage 7.42 ft.
 *** Backwater from ice.



PLATTE RIVER BASIN

06770240 FORT KEARNEY SLOUGH NEAR NEWARK, NE

LOCATION.--Lat 40°38'28", long 98°59'22", in SE ¼ SE ¼ sec.22, T.8 N., R15 W., Kearney County, Hydrologic Unit 10200203, on downstream side of culvert on Highway L-5DA, 2.0 mi west of State Highway 10, and 1.1 mi west of Newark.

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

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.33	1.8	e2.0	1.7	2.8	7.6	6.7	7.0	.00	.05	.07
2	.00	.26	1.9	e1.9	2.1	2.7	7.2	5.6	6.3	.00	.08	.05
3	e.00	.32	2.2	e1.9	2.1	2.7	6.6	5.1	9.8	.18	.03	.00
4	e.00	.39	2.1	e1.9	2.0	2.5	6.4	9.4	11	.08	.01	.00
5	e.00	.59	2.2	e1.8	2.4	2.5	6.6	41	9.2	.00	.57	.00
6	e.00	.49	2.3	e1.9	2.3	2.7	7.7	27	8.4	.00	.27	.00
7	e.00	.45	2.6	e1.9	2.6	5.1	11	19	7.6	.00	.27	.00
8	e.00	.53	2.2	e1.8	2.5	7.9	9.7	16	7.2	.00	.00	.00
9	e.00	.62	2.5	1.8	3.0	8.1	8.8	15	7.2	.00	.00	.00
10	e.00	.61	2.2	2.1	3.5	8.2	8.7	13	7.2	.12	.00	.00
11	.00	.78	e2.1	2.0	2.2	7.1	11	11	6.8	.00	.33	.00
12	.00	1.5	e2.1	2.0	2.0	7.4	10	9.9	6.7	.00	.00	.00
13	.00	1.6	e2.1	2.1	2.2	7.6	9.6	9.7	6.6	.00	.00	.00
14	.00	2.1	e2.1	1.9	2.1	9.3	9.1	9.2	5.7	.00	.00	.00
15	.00	1.9	e2.2	1.8	2.1	11	8.2	8.7	5.5	.01	.97	.01
16	.00	.87	e2.1	1.8	1.8	12	7.0	8.0	5.3	.00	.00	.28
17	.00	1.1	e2.1	1.9	1.8	11	6.6	7.2	6.4	.00	.00	.00
18	.00	.92	e2.1	2.0	2.3	11	7.4	6.7	5.6	.00	.00	.37
19	.00	.90	e2.0	2.2	2.4	11	7.9	6.4	4.8	.00	.00	.56
20	.00	.84	e2.1	2.0	2.1	10	7.0	7.0	4.4	1.9	.00	.40
21	.00	1.0	e2.1	1.9	2.0	9.9	5.8	5.8	2.1	.05	.08	.56
22	.00	1.2	e2.0	2.1	2.3	9.6	6.7	5.4	1.7	.00	.11	.75
23	.00	1.2	e2.0	2.1	2.5	9.3	8.8	5.3	1.1	.04	.11	.75
24	.02	1.3	e2.0	2.0	3.1	9.1	8.2	4.9	1.3	.04	.25	.83
25	.00	1.4	e2.0	2.5	2.5	9.0	7.8	4.8	1.5	.00	.00	.95
26	.00	1.4	e2.1	2.3	2.2	8.6	7.7	4.9	1.1	.00	.00	1.0
27	.00	1.4	e2.1	2.0	4.6	8.7	7.3	4.8	.81	.00	.00	1.1
28	.03	1.6	e2.0	2.4	2.7	9.3	6.8	4.7	.72	.01	.00	.99
29	.13	1.6	e2.0	3.0	---	8.3	6.6	4.7	.18	.00	.00	.96
30	.11	2.0	e1.9	2.7	---	7.9	6.5	5.3	.01	.05	.92	1.0
31	.18	---	e2.0	1.9	---	7.2	---	6.9	---	.00	.32	---
TOTAL	0.47	31.20	65.2	63.6	67.1	239.5	236.3	299.1	149.22	2.48	4.37	10.63
MEAN	.015	1.04	2.10	2.05	2.40	7.73	7.88	9.65	4.97	.080	.14	.35
MAX	.18	2.1	2.6	3.0	4.6	12	11	41	11	1.9	.97	1.1
MIN	.00	.26	1.8	1.8	1.7	2.5	5.8	4.7	.01	.00	.00	.00
AC-FT	.9	62	129	126	133	475	469	593	296	4.9	8.7	21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

MEAN	3.49	5.76	5.31	4.60	5.45	7.35	9.45	10.5	11.1	5.38	4.05	1.71
MAX	6.60	11.5	8.26	6.95	8.53	10.1	19.4	17.5	20.4	14.3	11.0	5.26
(WY)	1997	1997	1998	1997	1997	1997	1998	1996	1996	1996	1996	1996
MIN	.015	1.04	2.10	2.05	2.40	5.25	5.53	4.24	4.97	.080	.14	.35
(WY)	2001	2001	2001	2001	2001	1999	2000	2000	2001	2001	2001	2001

PLATTE RIVER BASIN

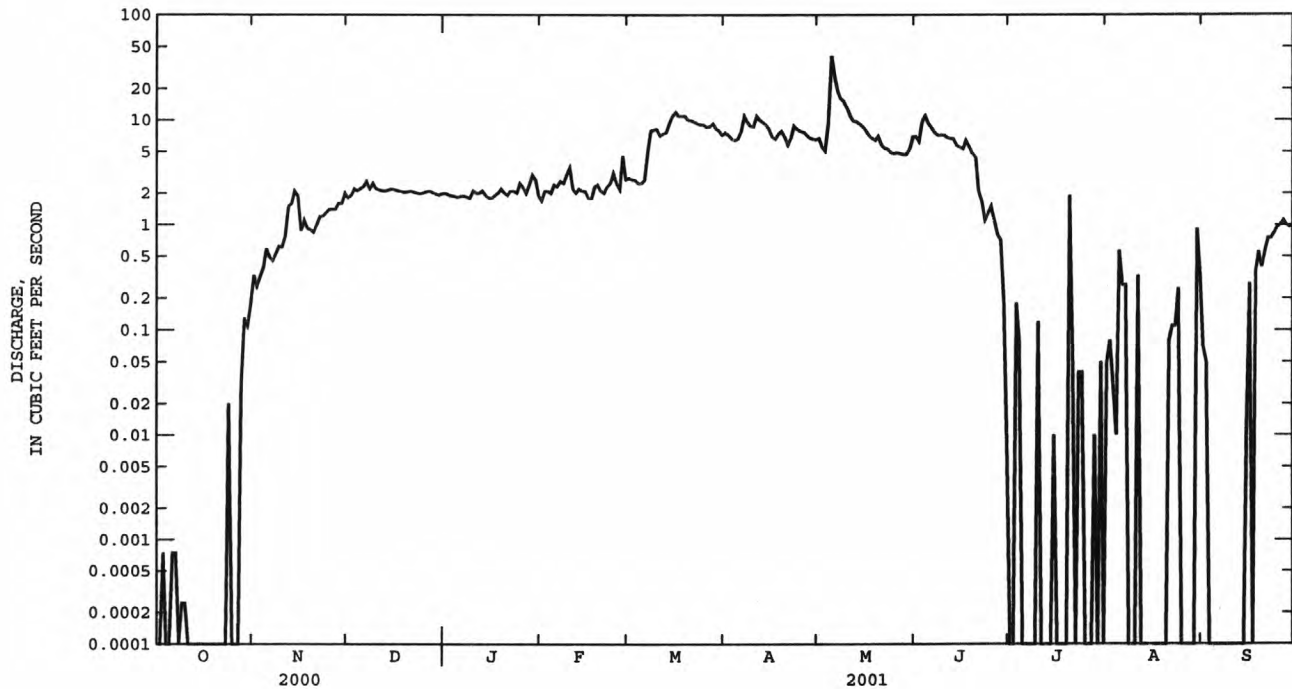
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06770240 FORT KEARNEY SLOUGH NEAR NEWARK, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1996 - 2001
ANNUAL TOTAL	1233.07	1169.17	
ANNUAL MEAN	3.37	3.20	5.63
HIGHEST ANNUAL MEAN			8.82 1998
LOWEST ANNUAL MEAN			3.20 2001
HIGHEST DAILY MEAN	71 Jun 20	41 May 5	80 Jun 16 1996
LOWEST DAILY MEAN	.00 Sep 12	.00 Oct 1	.00 Mar 26 1996
ANNUAL SEVEN-DAY MINIMUM	.00 Sep 12	.00 Oct 1	.00 Sep 12 2000
MAXIMUM PEAK FLOW		55 May 5	*140 Jun 16 1996
MAXIMUM PEAK STAGE		5.79 May 5	7.70 Jun 20 2000
ANNUAL RUNOFF (AC-FT)	2450	2320	4080
10 PERCENT EXCEEDS	5.5	8.7	12
50 PERCENT EXCEEDS	3.4	2.0	5.0
90 PERCENT EXCEEDS	.00	.00	.47

e Estimated.

* Stage 6.19 ft.



PLATTE RIVER BASIN

06770253 PLATTE RIVER NEAR NEWARK, NE

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

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

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

REMARKS.--Records good, except for October 1 to December 26 when record was unreliable or not obtained.

EXTREMES FOR CURRENT YEAR.--Maximum instantaneous gage height, 4.79 ft Feb. 8; minimum instantaneous gage height, 1.99 ft June 30, July 1, 4, 5, 7, and 8.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	3.13	3.60	4.05	2.76	2.94	2.70	2.02	2.41	2.37
2	---	---	---	3.18	3.73	4.03	2.73	2.97	2.55	2.10	2.49	2.26
3	---	---	---	3.33	3.85	4.21	2.69	2.95	2.64	2.16	2.50	2.21
4	---	---	---	3.36	3.83	4.34	2.72	2.94	2.68	2.04	2.47	2.20
5	---	---	---	3.42	3.76	4.16	2.74	3.04	2.76	2.02	2.43	2.18
6	---	---	---	3.48	3.54	3.95	2.83	3.22	2.78	2.06	2.43	2.16
7	---	---	---	3.52	3.35	3.75	2.83	3.25	2.72	2.01	2.41	2.16
8	---	---	---	3.57	3.63	3.40	2.79	3.19	2.65	2.06	2.42	2.18
9	---	---	---	3.56	4.33	3.25	2.76	3.13	2.60	2.27	2.41	2.30
10	---	---	---	3.56	4.16	3.38	2.81	3.21	2.55	2.43	2.43	2.37
11	---	---	---	3.52	4.10	3.35	2.90	3.27	2.53	2.35	2.48	2.42
12	---	---	---	3.54	4.43	3.03	2.99	3.19	2.53	2.32	2.52	2.48
13	---	---	---	3.38	4.65	3.01	3.07	3.17	2.50	2.32	2.54	2.55
14	---	---	---	3.39	4.35	3.16	3.15	3.17	2.39	2.34	2.53	2.42
15	---	---	---	3.32	4.09	3.24	3.18	3.13	2.33	2.45	2.75	2.53
16	---	---	---	3.38	4.07	3.08	3.14	3.02	2.32	2.36	2.89	2.56
17	---	---	---	3.36	3.71	3.05	3.14	2.97	2.38	2.30	3.14	2.52
18	---	---	---	3.37	3.80	3.12	3.18	3.01	2.40	2.28	3.04	2.60
19	---	---	---	3.41	3.85	3.00	3.23	2.98	2.35	2.27	2.95	2.69
20	---	---	---	3.52	3.92	2.91	3.07	2.80	2.40	2.42	2.94	2.69
21	---	---	---	3.62	3.82	2.92	3.08	2.60	2.29	2.49	2.72	2.55
22	---	---	---	3.52	3.63	2.85	3.14	2.51	2.23	2.50	2.46	2.88
23	---	---	---	3.50	3.72	2.88	3.34	2.37	2.20	2.62	2.40	2.93
24	---	---	---	3.48	3.79	2.89	3.41	2.29	2.22	2.58	2.53	2.96
25	---	---	---	3.49	3.72	2.90	3.41	2.27	2.21	2.69	2.47	2.77
26	---	---	---	3.45	4.24	2.85	3.38	2.23	2.14	2.87	2.58	2.92
27	---	---	---	3.49	3.75	2.81	3.29	2.23	2.09	2.92	2.63	2.97
28	---	---	3.16	3.54	3.80	2.65	3.14	2.24	2.05	2.97	2.73	2.98
29	---	---	3.17	3.52	---	2.69	3.08	2.27	2.05	2.82	2.75	2.95
30	---	---	3.15	3.39	---	2.70	2.96	2.47	2.02	2.63	2.63	2.96
31	---	---	3.14	3.56	---	2.72	---	2.62	---	2.53	2.53	---
MAX	---	---	3.17	3.62	4.65	4.34	3.41	3.27	2.78	2.97	3.14	2.98
MIN	---	---	3.14	3.13	3.35	2.65	2.69	2.23	2.02	2.01	2.40	2.16

PLATTE RIVER BASIN

115

06770375 PLATTE RIVER NEAR PROSSER, NE

LOCATION.--Lat 40°43'45", long 098°38'07", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.23, T.9 N., R. 12 W., Hall County, Hydrologic Unit 10200101, on right bank, at Platte River Whooping Crane Maintenance Trust, 0.4 mi north of Denman road. 3 mi west of Wood River road, and 3.5 mi northwest of Prosser.

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

GAGE.--Water-stage recorder. Elevation of gage is 1,975 ft above sea level.

REMARKS.--Records good.

EXTREMES FOR CURRENT YEAR.--Maximum instantaneous gage height, 4.48 ft Mar. 3; minimum instantaneous gage height, 1.99 ft June 29, 30.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.39	2.70	3.07	3.49	3.80	3.98	2.56	2.74	2.42	2.06	2.45	2.28
2	2.43	2.75	3.10	3.48	3.80	4.05	2.57	2.73	2.35	2.10	2.35	2.24
3	2.41	2.92	3.12	3.53	3.87	4.35	2.52	2.73	2.37	2.18	2.39	2.20
4	2.41	2.91	3.13	3.58	4.20	4.36	2.52	2.76	2.44	2.20	2.32	2.14
5	2.43	2.91	3.11	3.61	4.20	4.32	2.53	2.91	2.48	2.22	2.29	2.12
6	2.37	2.96	3.09	3.66	4.14	4.25	2.55	3.10	2.48	2.19	2.26	2.11
7	2.41	2.95	2.78	3.71	3.98	3.97	2.65	3.21	2.45	2.15	2.23	2.13
8	2.44	2.81	2.50	3.74	3.77	3.80	2.62	3.01	2.44	2.14	2.21	2.18
9	2.46	2.79	2.58	3.83	3.35	3.85	2.64	2.83	2.38	2.23	2.22	2.26
10	2.48	2.79	2.63	3.83	3.22	3.79	2.65	2.83	2.41	2.34	2.24	2.27
11	2.45	2.76	2.40	3.86	3.49	3.43	2.87	2.98	2.37	2.33	2.25	2.31
12	2.44	3.63	2.85	3.88	3.66	3.49	2.84	2.91	2.36	2.31	2.27	2.39
13	2.38	3.55	3.06	3.84	3.86	2.86	2.87	2.93	2.29	2.31	2.28	2.42
14	2.52	3.57	3.26	3.82	3.79	2.92	2.93	2.91	2.33	2.30	2.28	2.44
15	2.61	3.46	3.22	3.75	3.57	3.03	3.10	2.91	2.35	2.32	2.50	2.53
16	2.53	3.48	3.28	3.78	3.60	2.86	3.06	2.81	2.33	2.30	2.61	2.57
17	2.45	3.30	3.27	3.76	3.59	2.78	2.96	2.77	2.28	2.23	2.83	2.51
18	2.45	3.23	3.27	3.69	3.71	2.77	2.89	2.75	2.26	2.23	2.89	2.52
19	2.51	3.23	3.27	3.60	3.78	2.75	2.90	2.75	2.30	2.24	2.75	2.62
20	2.46	3.19	3.28	3.54	3.93	2.72	2.71	2.65	2.32	2.33	2.72	2.64
21	2.42	3.23	3.29	3.65	3.97	2.74	2.73	2.58	2.31	2.36	2.72	2.58
22	2.50	3.39	3.27	3.80	3.85	2.73	2.84	2.43	2.24	2.40	2.53	2.64
23	2.55	3.53	3.29	3.79	3.90	2.67	3.16	2.38	2.19	2.48	2.43	2.76
24	2.63	3.62	3.35	3.80	4.00	2.68	3.23	2.29	2.18	2.47	2.51	2.79
25	2.56	3.59	3.39	3.78	4.01	2.62	3.25	2.21	2.15	2.46	2.43	2.75
26	2.53	3.27	3.41	3.75	3.98	2.61	3.20	2.13	2.13	2.60	2.39	2.67
27	2.52	3.20	3.44	3.68	3.85	2.65	3.14	2.09	2.10	2.75	2.40	2.83
28	2.52	3.11	3.41	3.67	3.58	2.59	3.05	2.10	2.09	2.76	2.49	2.89
29	2.60	2.92	3.45	3.79	---	2.58	2.93	2.10	2.04	2.75	2.51	2.91
30	2.63	2.85	3.46	3.80	---	2.59	2.88	2.26	2.04	2.60	2.47	2.91
31	2.66	---	3.46	3.75	---	2.59	---	2.37	---	2.53	2.38	---
MAX	2.66	3.63	3.46	3.88	4.20	4.36	3.25	3.21	2.48	2.76	2.89	2.91
MIN	2.37	2.70	2.40	3.48	3.22	2.58	2.52	2.09	2.04	2.06	2.21	2.11

PLATTE RIVER BASIN

06770470 PLATTE RIVER NEAR DONIPHAN, NE

LOCATION.--Lat 40°47'18", long 098°26'17", in SE ¼ SE ¼ sec.33, T.10 N., R.10 W., Hall County, Hydrologic Unit 10200101, on left bank, at Platte River Whooping Crane Maintenance Trust, 3.2 mi west of U.S. Highway 281, and 3 mi northwest of Doniphan.

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

GAGE.--Water-stage recorder. Datum of gage is 1899.80 ft above sea level.

REMARKS.--Records good.

EXTREMES FOR CURRENT YEAR.--Maximum instantaneous gage height, 4.21 ft Mar. 13; minimum instantaneous gage height, 1.99 ft June 29, 30, and July 1.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.23	2.56	2.63	3.31	3.53	3.48	2.48	2.62	2.41	2.01	2.45	2.34
2	2.26	2.52	2.53	3.28	3.50	3.60	2.50	2.59	2.43	2.03	2.29	2.28
3	2.27	2.59	2.73	3.30	3.52	3.79	2.50	2.65	2.44	2.09	2.28	2.25
4	2.29	2.65	2.68	3.34	3.71	3.85	2.50	2.77	2.46	2.12	2.24	2.24
5	2.31	2.65	2.66	3.40	3.83	3.83	2.52	2.93	2.47	2.14	2.23	2.22
6	2.31	2.72	2.72	3.41	3.78	3.80	2.55	2.88	2.51	2.09	2.21	2.17
7	2.32	2.69	2.60	3.45	3.78	3.73	2.64	3.02	2.54	2.07	2.18	2.19
8	2.32	2.65	2.45	3.43	3.74	3.59	2.58	2.98	2.50	2.04	2.17	2.17
9	2.34	2.60	2.53	3.41	3.57	3.63	2.59	2.88	2.44	2.06	2.16	2.20
10	2.34	2.58	2.46	3.41	3.22	3.58	2.54	2.83	2.39	2.18	2.18	2.24
11	2.37	2.57	2.42	3.37	3.38	3.74	2.74	2.92	2.35	2.27	2.21	2.25
12	2.37	2.41	2.36	3.35	3.43	3.61	2.74	2.87	2.31	2.26	2.20	2.28
13	2.26	2.40	2.66	3.39	3.54	3.58	2.74	2.89	2.31	2.23	2.22	2.33
14	2.33	2.51	2.87	3.45	3.59	3.17	2.73	2.88	2.32	2.23	2.24	2.37
15	2.42	2.42	3.11	3.35	3.46	3.06	2.81	2.84	2.32	2.27	2.37	2.44
16	2.48	2.50	3.04	3.30	3.39	2.95	2.82	2.75	2.31	2.32	2.50	2.53
17	2.42	2.59	3.02	3.28	3.41	2.80	2.74	2.66	2.32	2.25	2.63	2.51
18	2.36	2.53	3.00	3.25	3.44	2.72	2.71	2.61	2.33	2.22	2.78	2.44
19	2.34	2.54	3.05	3.20	3.48	2.68	2.73	2.63	2.33	2.22	2.76	2.49
20	2.36	2.87	3.09	3.12	3.52	2.66	2.68	2.62	2.31	2.23	2.76	2.54
21	2.34	2.75	3.13	3.15	3.53	2.65	2.56	2.53	2.31	2.32	2.75	2.57
22	2.36	2.71	3.13	3.28	3.49	2.64	2.66	2.41	2.24	2.34	2.66	2.52
23	2.36	2.76	3.14	3.34	3.51	2.58	2.85	2.34	2.20	2.40	2.55	2.66
24	2.38	2.85	3.16	3.39	3.62	2.58	2.93	2.30	2.15	2.51	2.54	2.65
25	2.43	2.82	3.18	3.36	3.62	2.56	2.94	2.28	2.13	2.51	2.54	2.65
26	2.38	2.72	3.22	3.48	3.64	2.54	2.88	2.25	2.10	2.57	2.49	2.50
27	2.39	2.56	3.24	3.43	3.62	2.51	2.82	2.24	2.09	2.69	2.44	2.65
28	2.39	2.48	3.28	3.39	3.37	2.47	2.79	2.25	2.05	2.66	2.42	2.69
29	2.45	2.48	3.30	3.52	---	2.43	2.76	2.22	2.02	2.71	2.48	2.70
30	2.51	2.43	3.31	3.58	---	2.47	2.71	2.28	1.99	2.64	2.52	2.70
31	2.52	---	3.31	3.50	---	2.48	---	2.38	---	2.56	2.42	---
MAX	2.52	2.87	3.31	3.58	3.83	3.85	2.94	3.02	2.54	2.71	2.78	2.70
MIN	2.23	2.40	2.36	3.12	3.22	2.43	2.48	2.22	1.99	2.01	2.16	2.17

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PLATTE RIVER BASIN

06770500 PLATTE RIVER NEAR GRAND ISLAND, NE

LOCATION.--Lat 40°52'28", long 098°16'54", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ 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.--57,650 mi², of which about 52,940 mi² contributes directly to surface runoff.

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

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

GAGE.--Water-stage recorder. Datum of gage is 1,831.90 ft above sea level (Nebraska Department of Highway's benchmark). Prior to Oct. 23, 1933, nonrecording gage at bridge 68 ft downstream, and Oct. 23, to Aug. 19, 1980, water-stage recorder at site 90 ft downstream, all at same datum. Data collection platform at station.

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

EXTREMES OUTSIDE OF REGULATED PERIODS.--Maximum discharge, 30,000 ft³/s June 6, 1935, gage height 5.99 ft, from rating curve extended above 18,000 ft³/s; no flow at times during 1934-41.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	697	1410	e1230	e856	e1540	e1480	1410	1820	901	330	940	763
2	761	1420	e1430	e909	e1540	e1950	1430	1650	973	321	716	624
3	826	1590	e1440	e915	e1650	e2120	1410	1700	982	326	610	507
4	794	1830	e1610	e1020	e1840	e2520	1310	1980	1050	365	593	444
5	896	1850	e1510	e1150	e2120	e2280	1250	2740	1090	402	505	422
6	888	1950	e1400	e1220	e2080	e2160	1230	2670	1100	416	469	401
7	826	1750	e1510	e1330	e1920	e2180	1400	3070	1130	394	459	461
8	811	1660	e1140	e1440	e1740	e2260	1430	2860	1040	389	434	429
9	855	1480	e1130	e1510	e1400	e2340	1390	2380	913	384	422	455
10	856	1470	e809	e1580	e1020	e2240	1370	2150	801	450	398	527
11	910	1360	e755	e1640	e1010	e1940	1880	2310	769	561	407	588
12	906	832	e652	e1710	e1280	e1840	1970	2290	719	541	458	575
13	734	e907	e532	e1850	e1450	e1730	1980	2140	701	524	486	618
14	773	e951	e592	e1800	e1680	e2320	1970	2020	664	510	517	718
15	938	e948	e668	e1770	e1590	e2510	2080	1940	654	507	820	1030
16	1240	e1080	e731	e1750	e1430	e2530	2240	1770	613	585	1080	1160
17	1030	e1090	e709	e1740	e1480	2200	2130	1590	601	544	1270	1110
18	875	e1140	e704	e1670	e1480	2070	1940	1470	575	468	1730	903
19	868	e1130	e734	e1600	e1600	2040	1880	1480	574	447	1700	979
20	998	e1080	e802	e1410	e1660	1960	1880	1490	567	445	1520	1130
21	844	e1080	e861	e1340	e1770	1960	1510	1180	563	541	1460	1180
22	917	e1170	e853	e1530	e1780	1930	1710	966	512	583	1220	1060
23	977	e1310	e817	e1770	e1670	1750	2230	893	496	711	861	1610
24	1050	e1420	e819	e1680	e1870	1660	2840	817	471	957	826	1840
25	1250	e1390	e861	e1660	e1960	1600	2790	748	460	977	897	1920
26	1100	e1180	e902	e1630	e1920	1520	2550	679	442	1060	854	1570
27	1020	e966	e944	e1600	e1930	1470	2370	708	428	1470	871	1740
28	1000	e1020	e993	e1490	e1500	1400	2240	731	401	1520	878	2010
29	1120	e1000	e1020	e1630	---	1290	2080	716	373	1550	981	1950
30	1230	e997	e998	e1730	---	1360	1960	791	338	1430	1130	1880
31	1260	---	e929	e1600	---	1350	---	861	---	1100	978	---
TOTAL	29250	38461	30085	46530	45910	59960	55860	50610	20901	20808	26490	30604
MEAN	944	1282	970	1501	1640	1934	1862	1633	697	671	855	1020
MAX	1260	1950	1610	1850	2120	2530	2840	3070	1130	1550	1730	2010
MIN	697	832	532	856	1010	1290	1230	679	338	321	398	401
AC-FT	58020	76290	59670	92290	91060	118900	110800	100400	41460	41270	52540	60700

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2001, BY WATER YEAR (WY)

	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953
MEAN	1311	1407	1421	1530	2044	2411	2088	2296	2540	1199	628	985
MAX	6970	5250	4607	4955	7065	7051	9906	12190	17000	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

PLATTE RIVER BASIN

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06770500 PLATTE RIVER NEAR GRAND ISLAND, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1942 - 2001 a	
ANNUAL TOTAL	606581		455469		1651	
ANNUAL MEAN	1657		1248		1248	
MEDIAN OF ANNUAL MEANS					5380	
HIGHEST ANNUAL MEAN					414	
LOWEST ANNUAL MEAN					1983	
HIGHEST DAILY MEAN	3740	Feb 24	3070	May 7	23500	Jun 30 1983
LOWEST DAILY MEAN	373	Sep 19	321	Jul 2	*,00	Oct 1 1941
ANNUAL SEVEN-DAY MINIMUM	428	Sep 15	351	Jun 28	*,00	Oct 1 1941
MAXIMUM PEAK FLOW			**3390	May 7	***23900	Jun 30 1983
MAXIMUM PEAK STAGE			****4.04	Mar 4	****6.16	Mar 27 1960
ANNUAL RUNOFF (AC-FT)	1203000		903400		1196000	
10 PERCENT EXCEEDS	3010		2010		3270	
50 PERCENT EXCEEDS	1410		1140		1190	
90 PERCENT EXCEEDS	533		506		150	

e Estimated.

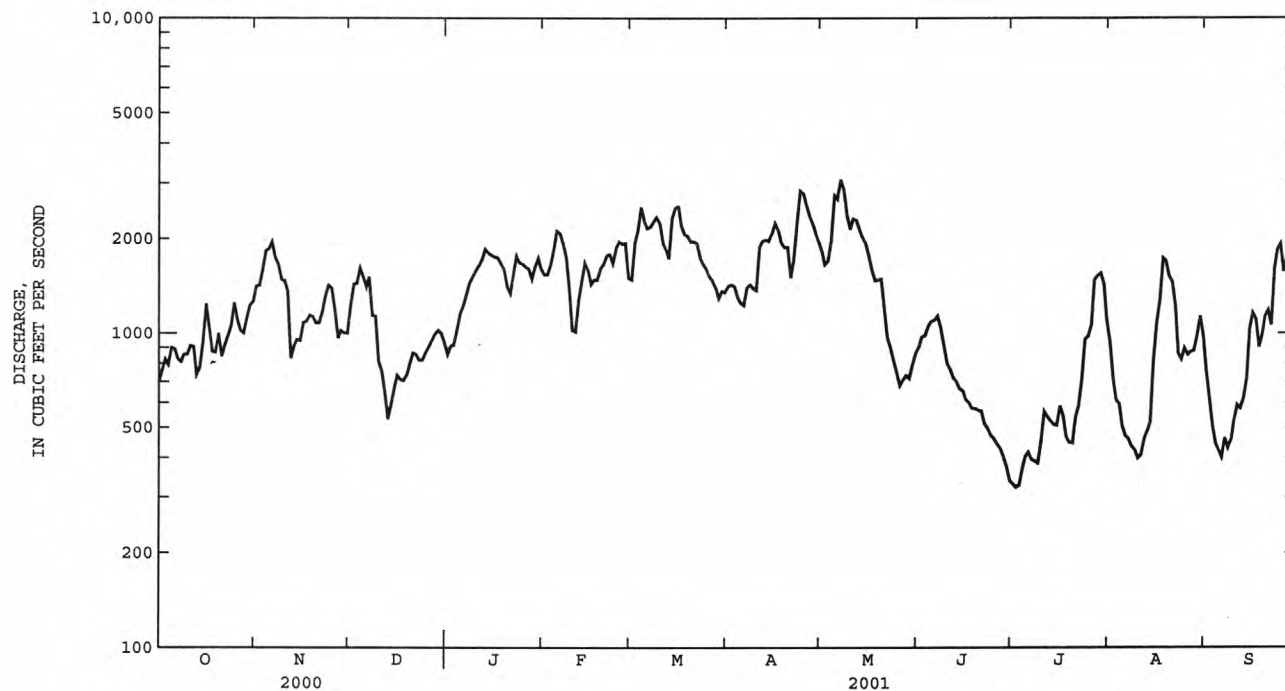
a Since beginning of storage in Lake McConaughy.

* No flow at times in many years.

** Stage 2.78 ft.

*** Stage 5.97 ft.

**** Backwater from ice.



PLATTE RIVER BASIN

06772775 WARM SLOUGH NEAR CENTRAL CITY, NE

LOCATION.--Lat 41°05'27", long 098°04'39", in SW ¼ SW ¼ sec.13, T.11 N., R.7 W., Merrick County, Hydrologic Unit 10200103, on downstream side of county road bridge, 4 mi southwest of Central City.

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

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

GAGE.--Water-stage recorder. Elevation of gage is 1,718 ft above sea level.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	5.5	e9.8	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	3.9	e5.7	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	3.7	e5.7	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	8.4	e5.3	.04	.00	.00
5	.00	.00	.00	.01	.00	.00	.00	67	e6.8	.00	.00	.00
6	.00	.00	.00	.01	.00	.00	.00	240	e7.9	.00	.00	.00
7	.00	.00	.00	.01	.00	.00	.00	e220	e7.5	.00	.00	.00
8	.00	.00	.00	.01	.00	.00	.00	e180	e4.2	.00	.00	.00
9	.00	.00	.00	.01	.00	.00	.00	e163	e4.7	.00	.00	.00
10	.00	.00	.00	.01	.00	.00	.00	e113	e4.6	.00	.00	.00
11	.00	.00	.00	.01	.00	.00	.84	e63	e4.6	4.3	.00	.00
12	.00	.00	.00	.00	.00	.00	27	e32	e5.3	.02	.00	.00
13	.00	.00	.00	.00	.00	.00	43	e13	e5.3	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	46	e7.2	e5.2	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	27	e6.0	3.9	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	12	e4.6	3.3	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	7.4	e4.9	2.9	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	6.6	e4.2	2.8	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	5.4	e4.6	3.1	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	4.1	e6.8	2.7	.01	.00	.00
21	.00	.00	.00	.00	.00	.00	3.4	e9.0	3.1	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	3.7	e5.7	3.1	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	13	e4.9	2.6	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	41	e4.6	1.8	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	66	e4.6	.71	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	47	e4.4	.65	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	26	e4.2	.19	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	16	e4.2	.31	.00	.00	.00
29	.00	.00	.00	.00	---	.00	10	e4.6	.01	.00	.00	.00
30	.00	.00	.00	.00	---	.00	7.1	e4.9	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	e8.7	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.07	0.00	0.00	412.54	1210.6	113.77	4.37	0.00	0.00
MEAN	.000	.000	.000	.002	.000	.000	13.8	39.1	3.79	.14	.000	.000
MAX	.00	.00	.00	.01	.00	.00	66	240	9.8	4.3	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	3.7	.00	.00	.00	.00
AC-FT	.00	.00	.00	.1	.00	.00	818	2400	226	8.7	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000	2001
MEAN	3.90	6.93	4.69	3.62	5.52	8.89
MAX	19.4	23.1	14.4	9.50	14.0	23.2
(WY)	1998	1998	1998	1998	1998	1998
MIN	.000	.000	.000	.002	.000	.000
(WY)	1997	2000	2001	2001	2001	1996

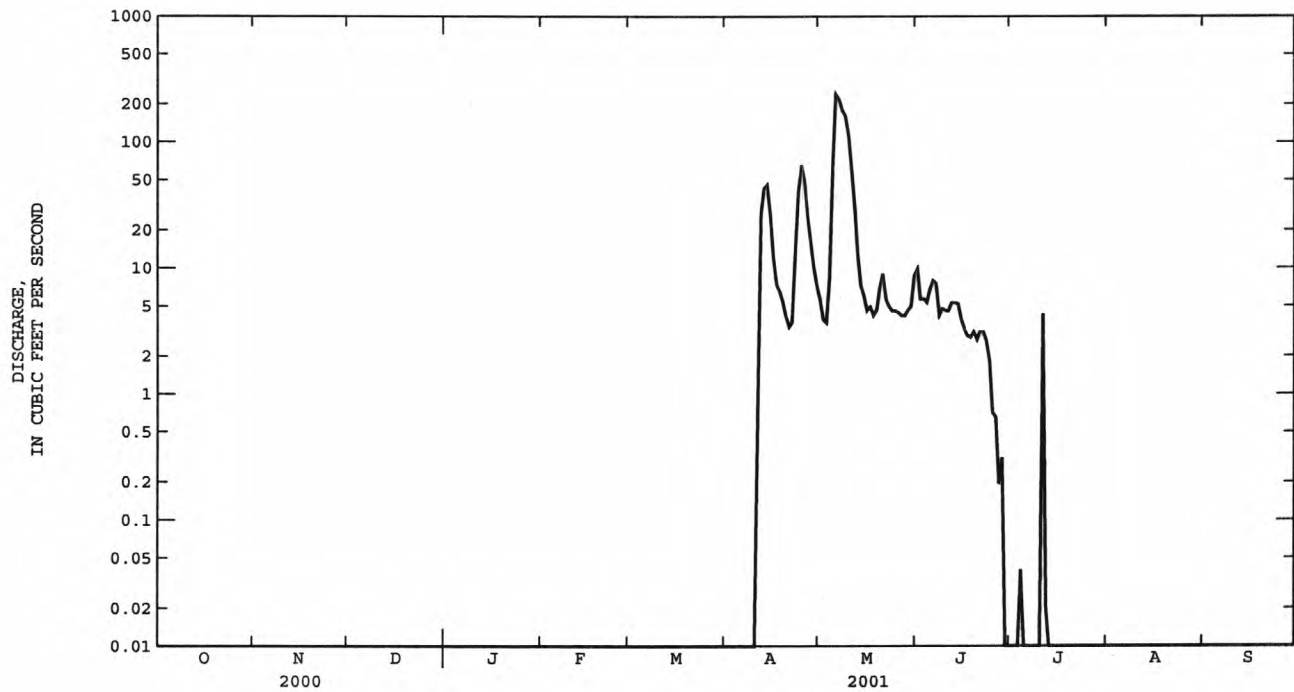
PLATTE RIVER BASIN

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06772775 WARM SLOUGH NEAR CENTRAL CITY, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1996 - 2001
ANNUAL TOTAL	431.32	1741.35	
ANNUAL MEAN	1.18	4.77	9.48
HIGHEST ANNUAL MEAN			23.1 1998
LOWEST ANNUAL MEAN			1.22 2000
HIGHEST DAILY MEAN	6.2 Mar 25	240 May 6	413 Apr 8 1998
LOWEST DAILY MEAN	.00 Jun 12	.00 Oct 1	.00 Apr 1 1996
ANNUAL SEVEN-DAY MINIMUM	.00 Jun 22	.00 Oct 1	.00 Apr 1 1996
MAXIMUM PEAK FLOW		253 May 6	443 Apr 8 1998
MAXIMUM PEAK STAGE		6.88 May 6	8.04 Apr 8 1998
ANNUAL RUNOFF (AC-FT)	856	3450	6870
10 PERCENT EXCEEDS	4.2	5.7	22
50 PERCENT EXCEEDS	.00	.00	2.2
90 PERCENT EXCEEDS	.00	.00	.00

e Estimated.



PLATTE RIVER BASIN

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

LOCATION.--Lat 41°17'51", long 097°42'50", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.6, T.15 N., R.3 W., Merrick County, Hydrologic Unit 10200103, on downstream side of county road bridge, 3 mi southwest of Silver Creek, and at mile 4.0.

DRAINAGE AREA.--160 mi², approximately.

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

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

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	e.20	4.9	8.7	42	5.0	e.00	.00
2	.00	.00	.00	.00	.00	e.20	4.8	8.6	35	5.2	e.00	.00
3	.00	.00	.00	.00	.00	e.40	5.4	10	34	5.3	e.00	.00
4	.00	.00	.00	.00	.00	e.40	5.3	20	33	5.0	e.00	.00
5	.00	.00	.00	.00	.00	e.50	5.4	121	37	e3.8	e.00	.00
6	.00	.00	.00	.00	.00	e.60	6.1	176	35	e3.6	e.00	.00
7	.00	.00	.00	.00	.00	e.70	7.3	115	31	e3.4	e.00	.00
8	.00	.00	.00	.00	.00	e.70	6.1	84	27	e3.0	e.00	.00
9	.00	.00	.00	.00	.00	e.80	5.9	68	25	e2.8	e.00	.00
10	.00	.00	.00	.00	.00	e.90	5.9	65	23	e2.8	e.00	.00
11	.00	.00	.00	.00	.00	e1.0	31	55	22	e2.8	e.00	.00
12	.00	.00	.00	.00	.00	e1.5	45	48	20	e3.4	e.00	.00
13	.00	.00	.00	.00	.00	e2.0	29	43	20	5.5	e.00	.00
14	.00	.00	.00	.00	.00	e5.0	23	39	25	e3.0	e.00	.00
15	.00	.00	.00	.00	.00	14	20	34	20	e1.8	e.00	.00
16	.00	.00	.00	.00	.00	8.8	16	31	18	e1.4	e.00	.00
17	.00	.00	.00	.00	.00	7.4	15	27	18	e1.0	e.00	.00
18	.00	.00	.00	.00	.00	7.0	14	24	17	e1.0	e.00	.00
19	.00	.00	.00	.00	.00	6.8	14	27	16	e.80	e.00	.00
20	.00	.00	.00	.00	.00	6.5	14	45	16	e.80	e.00	.00
21	.00	.00	.00	.00	.00	6.1	14	40	16	e.80	e.00	.00
22	.00	.00	.00	.00	.00	6.0	14	32	13	e.60	e.00	.00
23	.00	.00	.00	.00	.00	5.7	17	27	8.6	e.40	e.00	.00
24	.00	.00	.00	.00	.00	5.6	14	24	6.5	e.40	e.00	.00
25	.00	.00	.00	.00	.00	5.2	13	22	5.6	e.40	e.00	.00
26	.00	.00	.00	.00	.00	5.0	12	21	8.8	e.20	e.00	.00
27	.00	.00	.00	.00	.00	5.1	11	21	8.1	e.20	e.00	.00
28	.00	.00	.00	.00	.00	5.0	10	20	5.2	e.00	e.00	.00
29	.00	.00	.00	.00	---	4.8	9.3	19	3.9	e.00	e.00	.00
30	.00	.00	.00	.00	---	4.6	8.9	28	4.2	e.00	.00	.00
31	.00	---	.00	.00	---	5.0	---	42	---	e.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	123.50	401.3	1345.3	593.9	64.40	0.00	0.00
MEAN	.000	.000	.000	.000	.000	3.98	13.4	43.4	19.8	2.08	.000	.000
MAX	.00	.00	.00	.00	.00	14	45	176	42	5.5	.00	.00
MIN	.00	.00	.00	.00	.00	.20	4.8	8.6	3.9	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	245	796	2670	1180	128	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000	2001
MEAN	3.85	15.3	9.63	8.59	12.9	24.8
MAX	6.44	31.0	16.6	14.6	21.4	68.1
(WY)	1997	1997	1997	1999	1999	1998
MIN	.000	.000	.000	.000	.000	3.98
(WY)	2001	2001	2001	2001	2001	2001

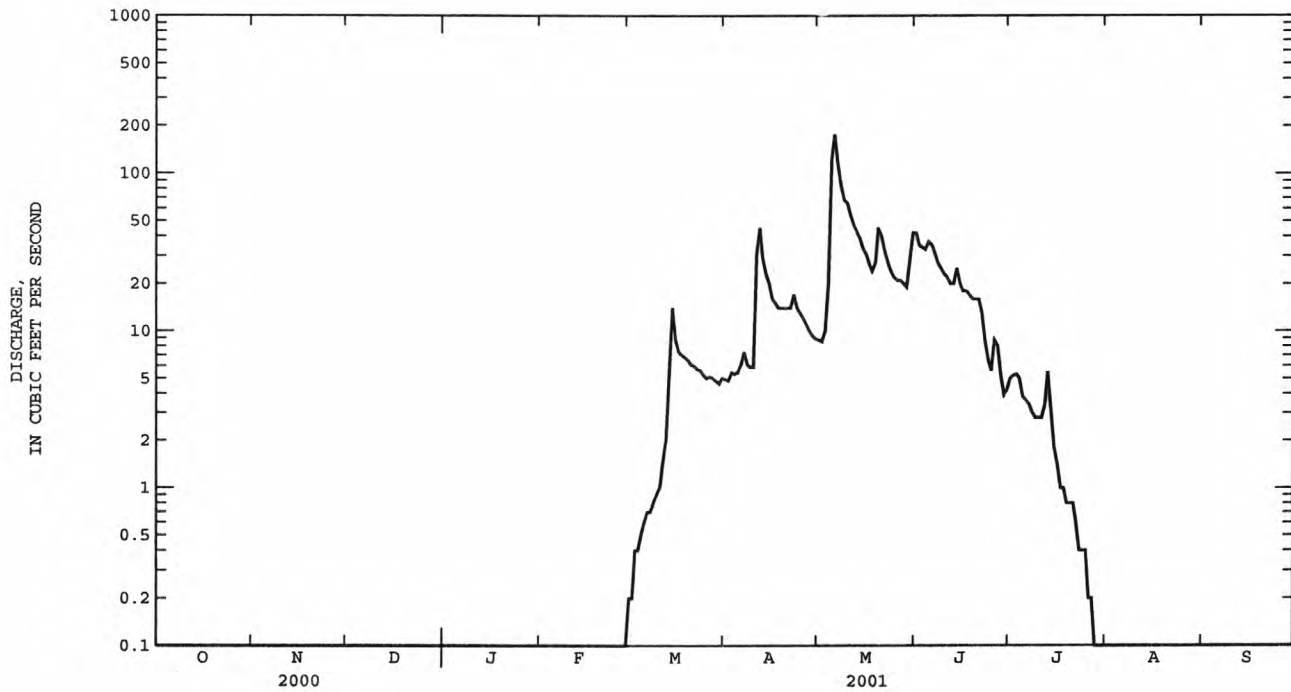
PLATTE RIVER BASIN

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

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1996 - 2001
ANNUAL TOTAL	1020.09	2528.40	
ANNUAL MEAN	2.79	6.93	26.1
HIGHEST ANNUAL MEAN			55.5 1999
LOWEST ANNUAL MEAN			3.48 2000
HIGHEST DAILY MEAN	9.2 Feb 25	176 May 6	2100 Jun 1 1999
LOWEST DAILY MEAN	.00 Jun 30	.00 Oct 1	.00 Aug 27 1997
ANNUAL SEVEN-DAY MINIMUM	.00 Jul 21	.00 Oct 1	.00 Aug 27 1997
MAXIMUM PEAK FLOW		220 May 5	3070 Jun 1 1999
MAXIMUM PEAK STAGE		6.07 May 5	9.11 Jun 1 1999
ANNUAL RUNOFF (AC-FT)	2020	5020	18910
10 PERCENT EXCEEDS	7.9	23	48
50 PERCENT EXCEEDS	.12	.00	8.0
90 PERCENT EXCEEDS	.00	.00	.00

e Estimated.



PLATTE RIVER BASIN

06773500 PRAIRIE CREEK NEAR SILVER CREEK, NE

LOCATION (REVISED).--Lat 41°19'43", long 097°40'30", in NW ¼ SW ¼ sec.28, T.16 N., R.3 W., Merrick County, Hydrologic Unit 10200103, on the downstream side of bridge on Nebraska Highway 34, 2 mi northwest of Silver Creek.

DRAINAGE AREA.--492 mi².

PERIOD OF RECORD.--August 1949 to September 1953. October 1996 to current year.

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

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.31	e1.6	e.00	e.50	e.00	16	34	44	13	1.3	.02
2	.00	.00	e1.6	e.00	e.50	e.20	16	30	44	15	1.2	.00
3	.00	.00	e1.7	e.00	e.40	e.40	19	32	47	13	.81	.00
4	.00	.10	e1.4	e.00	e.50	e.60	18	51	48	9.8	.86	.03
5	.00	.60	e1.7	e.20	e.60	e.60	17	244	52	8.7	.90	.05
6	.00	7.7	e1.7	e.20	e.70	e1.0	17	402	49	8.1	.86	.00
7	.00	5.8	e1.6	e.40	e.80	e1.5	20	491	46	8.5	1.2	.20
8	.00	4.7	e1.4	e.40	e.50	e2.0	20	499	44	7.3	.71	.17
9	.00	2.9	e1.2	e.60	e.40	e4.0	25	302	41	7.8	.77	.09
10	.00	1.5	e.30	e.60	e.20	e6.0	25	197	38	6.5	.60	.00
11	.00	1.0	e.00	e.80	e.00	e6.0	106	145	35	5.6	.51	.00
12	.00	e.90	e.00	e.80	e.00	e8.0	156	117	33	12	.57	.00
13	.00	e.80	e.00	e.60	e.00	e10	211	105	31	26	.51	.00
14	.00	e.90	e.00	e.60	e.00	e12	156	88	33	18	.95	.09
15	.00	e1.0	e.00	e.60	e.00	e18	108	76	27	10	1.5	17
16	.00	e1.0	e.00	e.60	e.00	e24	75	66	25	9.5	.95	33
17	.00	e1.1	e.00	e.60	e.00	e28	58	56	24	6.5	1.0	3.5
18	.00	e1.2	e.00	e.50	e.00	e34	47	48	23	5.1	.87	.77
19	.00	e1.2	e.00	e.40	e.20	e40	41	46	22	4.3	.63	.38
20	.00	e1.1	e.00	e.40	e.00	e42	36	50	23	3.9	.59	.41
21	.00	e1.1	e.00	e.40	e.00	43	35	45	23	2.9	.62	.55
22	.00	e1.2	e.00	e.50	e.00	38	35	42	23	2.7	.55	.67
23	.00	e1.3	e.00	e.50	e.20	34	40	37	21	2.6	.51	.86
24	.00	e1.4	e.00	e.60	e.00	30	71	34	21	4.1	.56	1.0
25	.00	e1.6	e.00	e.70	e.00	27	144	34	19	3.9	.07	1.2
26	.00	e1.7	e.00	e.60	e.00	23	133	33	16	3.2	.00	1.2
27	.00	e1.9	e.00	e.60	e.00	21	102	31	16	3.2	.36	1.1
28	.00	e1.5	e.00	e.50	e.00	19	72	30	13	2.9	.37	1.6
29	.50	e1.5	e.00	e.50	---	17	51	27	12	2.0	.47	1.4
30	.68	e1.5	e.00	e.50	---	16	40	36	13	1.7	.49	1.3
31	.31	---	e.00	e.50	---	18	---	44	---	1.0	.12	---
TOTAL	1.49	48.51	14.20	14.20	5.50	524.30	1910	3472	906	228.8	21.41	66.59
MEAN	.048	1.62	.46	.46	.20	16.9	63.7	112	30.2	7.38	.69	2.22
MAX	.68	7.7	1.7	.80	.80	43	211	499	52	26	1.5	33
MIN	.00	.00	.00	.00	.00	.00	16	27	12	1.0	.00	.00
AC-FT	3.0	96	28	28	11	1040	3790	6890	1800	454	42	132

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000	2001
MEAN	24.4	38.9	19.5	19.5	24.4	45.1
MAX	90.0	80.8	36.9	29.7	38.6	133
(WY)	1998	1998	1998	1998	1998	1998
MIN	.048	1.62	.46	.46	.20	15.0
(WY)	2001	2001	2001	2001	2000	2000

PLATTE RIVER BASIN

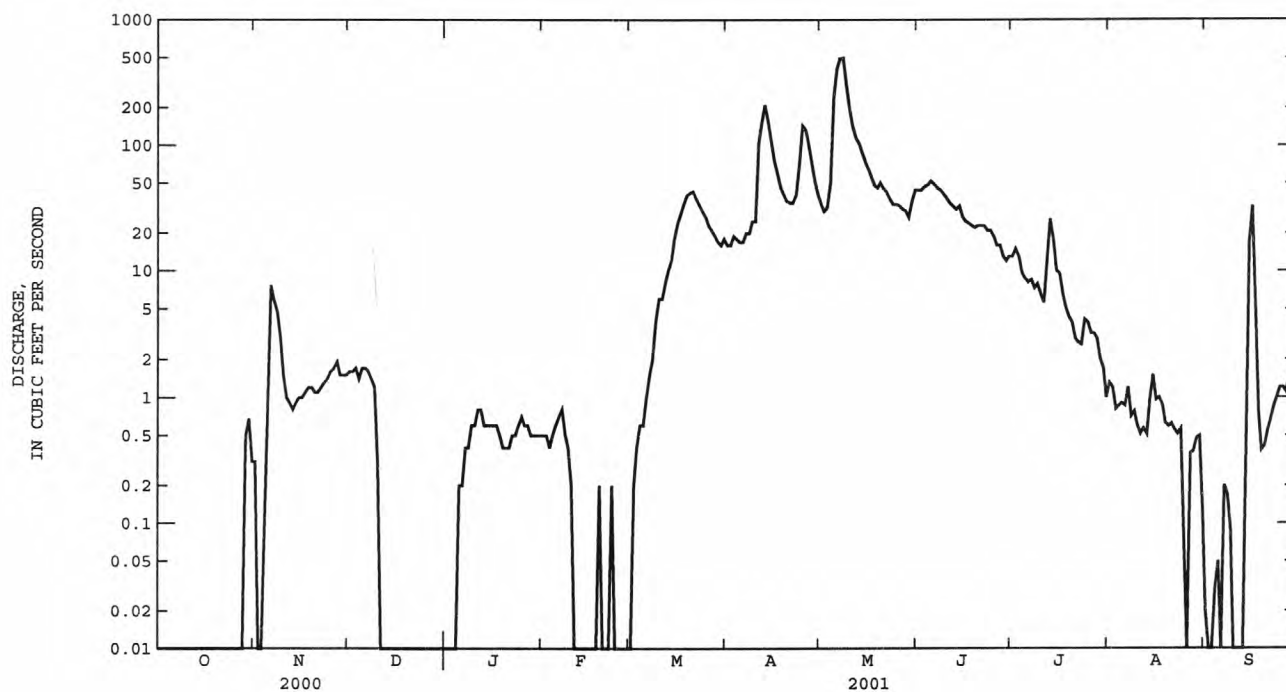
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06773500 PRAIRIE CREEK NEAR SILVER CREEK, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1996 - 2001	
ANNUAL TOTAL	2817.37		7213.00		56.8	
ANNUAL MEAN	7.70		19.8		113	
HIGHEST ANNUAL MEAN					10.5	
LOWEST ANNUAL MEAN					1590	
HIGHEST DAILY MEAN	31	Jan 20	499	May 8	Apr 10 1998	
LOWEST DAILY MEAN	.00	Jul 27	*.00	Oct 1	Jul 27 2000	
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 7	.00	Oct 1	Aug 7 2000	
MAXIMUM PEAK FLOW			555	May 8	1640	
MAXIMUM PEAK STAGE			6.58	May 8	9.29	
ANNUAL RUNOFF (AC-FT)	5590		14310		41110	
10 PERCENT EXCEEDS	22		45		114	
50 PERCENT EXCEEDS	1.7		1.2		23	
90 PERCENT EXCEEDS	.00		.00		.50	

e Estimated.

* No flow for many days each year.



PLATTE RIVER BASIN

06774000 PLATTE RIVER NEAR DUNCAN, NE

LOCATION.--Lat 41°22'04", long 97°29'40", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.12, T.16 N., R.2 W., Platte County, Hydrologic Unit 10200103, on left bank near northwest corner of county bridge, 1.5 mi south of Duncan, and 15.3 mi upstream from Loup River, and at mile 114.

DRAINAGE AREA.--59,300 mi², of which about 54,630 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--June 1895 to December 1909 (irrigation seasons only 1885-1900). July 1910 to December 1911 (gage heights and discharge measurements only), April 1912 to September 1915, June 1928 to current year. Published as "near Columbus" 1895-1915.

REVISED RECORDS.--WSP 956: 1935. WSP 1390: 1897, 1899-1901, 1903-05, 1929-32, 1935(M), 1936. WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 1,476.82 ft above sea level. June 1895 to December 1909, April 1912 to September 1915, and June to October 1928, nonrecording gage at site 7 mi downstream at different datums. Oct. 25, 1928, to Feb. 20, 1935, nonrecording gage, and Feb. 20, 1935 to Mar. 21, 1984, recording gage both at present site at 2.00 ft higher datum. Mar. 22, 1984, to Mar. 4, 1987, at site 300 ft downstream at present datum. Data collection platform at station.

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

EXTREMES PRIOR TO REGULATION.--Maximum discharge, 44,100 ft³/s June 23, 1905, gage height 6.50 ft, site and datum than in use. No flow at times in 1896, 1902, 1904-05, 1910-11, 1913-14, 1928, all at site downstream, 1931, 1933-41.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	498	1180	2760	e960	e1800	e1900	1910	2380	1280	248	1150	998
2	564	1150	2860	e980	e1750	e2200	1790	2410	1240	283	834	785
3	543	1290	3760	e1100	e1850	e2400	1860	2470	1310	204	634	649
4	597	1430	3780	e1200	e2100	e2700	1890	3040	1420	155	499	520
5	664	2070	4130	e1300	e2250	e2700	1840	4970	1490	125	462	441
6	690	3180	4400	e1450	e2300	e2600	1870	6020	1690	131	429	373
7	728	2680	3790	e1600	e2250	e2500	1830	5190	1680	140	375	500
8	729	2150	3620	e1650	e2200	e2600	1960	5160	1630	187	280	518
9	734	1960	2980	e1700	e2000	e2500	2210	4700	1550	165	204	504
10	767	1570	1320	e1800	e1800	e2450	2050	4060	1330	163	177	450
11	800	1560	e980	e1900	e1450	e2500	3110	3480	1090	204	156	467
12	774	1220	e800	e2000	e1600	e2500	3550	3300	1000	578	167	497
13	770	905	e640	e2000	e1700	e2900	3700	3410	954	533	214	538
14	744	502	e700	e2000	e1750	e4000	3470	3080	1090	491	311	705
15	579	751	e760	e2000	e1700	e4400	3210	3000	959	459	500	1040
16	702	1150	e820	e1950	e1700	e5800	3100	2960	897	449	632	1160
17	871	1050	e800	e1950	e1250	7070	3440	2820	779	453	765	1270
18	976	989	e780	e1850	e1650	3330	3370	2540	642	523	947	1240
19	836	1180	e820	e1800	e1200	2660	3030	2430	608	460	1180	1130
20	730	2670	e800	e1700	e1850	2560	2820	2580	687	404	1550	974
21	754	3590	e900	e1600	e1950	2430	2820	2550	712	368	1420	1060
22	823	3270	e920	e1800	e2050	2450	2580	2100	641	353	1320	1160
23	797	3370	e940	e1900	e1950	2430	2640	1690	610	556	1270	1120
24	840	3530	e900	e1800	e2100	2220	3150	1390	498	626	1030	1070
25	890	3840	e960	e1800	e2150	2130	3790	1160	428	705	854	1380
26	891	3890	e1000	e1800	e2100	2090	4010	960	347	815	831	1480
27	938	3800	e1060	e1750	e2000	2030	4030	846	321	845	801	1500
28	913	2970	e1080	e1750	e1800	1930	3620	787	289	992	778	1280
29	1130	2440	e1100	e1850	---	1910	3150	734	264	1420	788	1450
30	1140	2910	e1080	e1900	---	1820	2700	956	226	1380	808	1520
31	1150	---	e1020	e1850	---	1880	---	1250	---	1410	972	---
TOTAL	24562	64247	52260	52690	52250	85590	84500	84423	27662	15825	22338	27779
MEAN	792	2142	1686	1700	1866	2761	2817	2723	922	510	721	926
MAX	1150	3890	4400	2000	2300	7070	4030	6020	1690	1420	1550	1520
MIN	498	502	640	960	1200	1820	1790	734	226	125	156	373
AC-FT	48720	127400	103700	104500	103600	169800	167600	167500	54870	31390	44310	55100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2001, BY WATER YEAR (WY)

	MEAN	1398	1571	1520	1580	2328	2957	2551	2656	2932	1456	671	983
MAX	6673	5617	5107	5603	8795	9531	13410	15450	18320	12590	6135	6785	
(WY)	1974	1985	1985	1984	1984	1984	1984	1984	1983	1983	1983	1983	
MIN	.000	.000	15.7	44.5	269	820	574	150	11.3	.000	.000	.000	
(WY)	1957	1957	1942	1942	1942	1957	1967	1955	1956	1956	1956	1956	

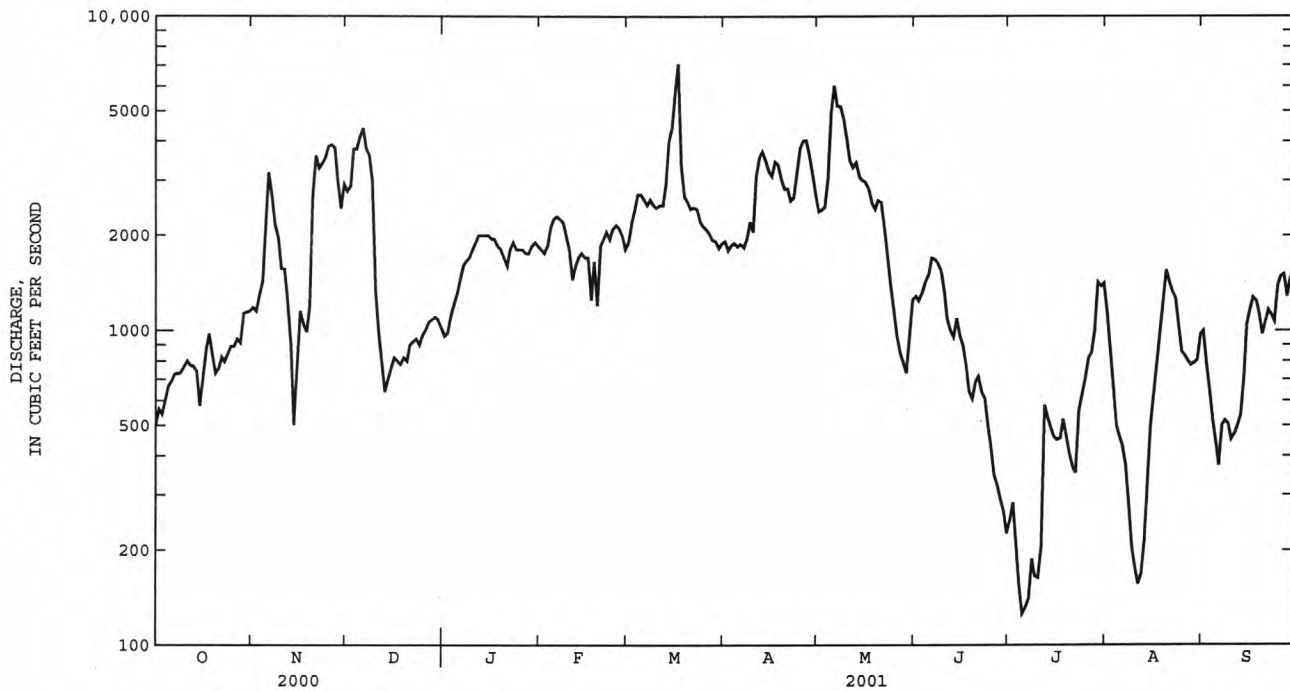
PLATTE RIVER BASIN

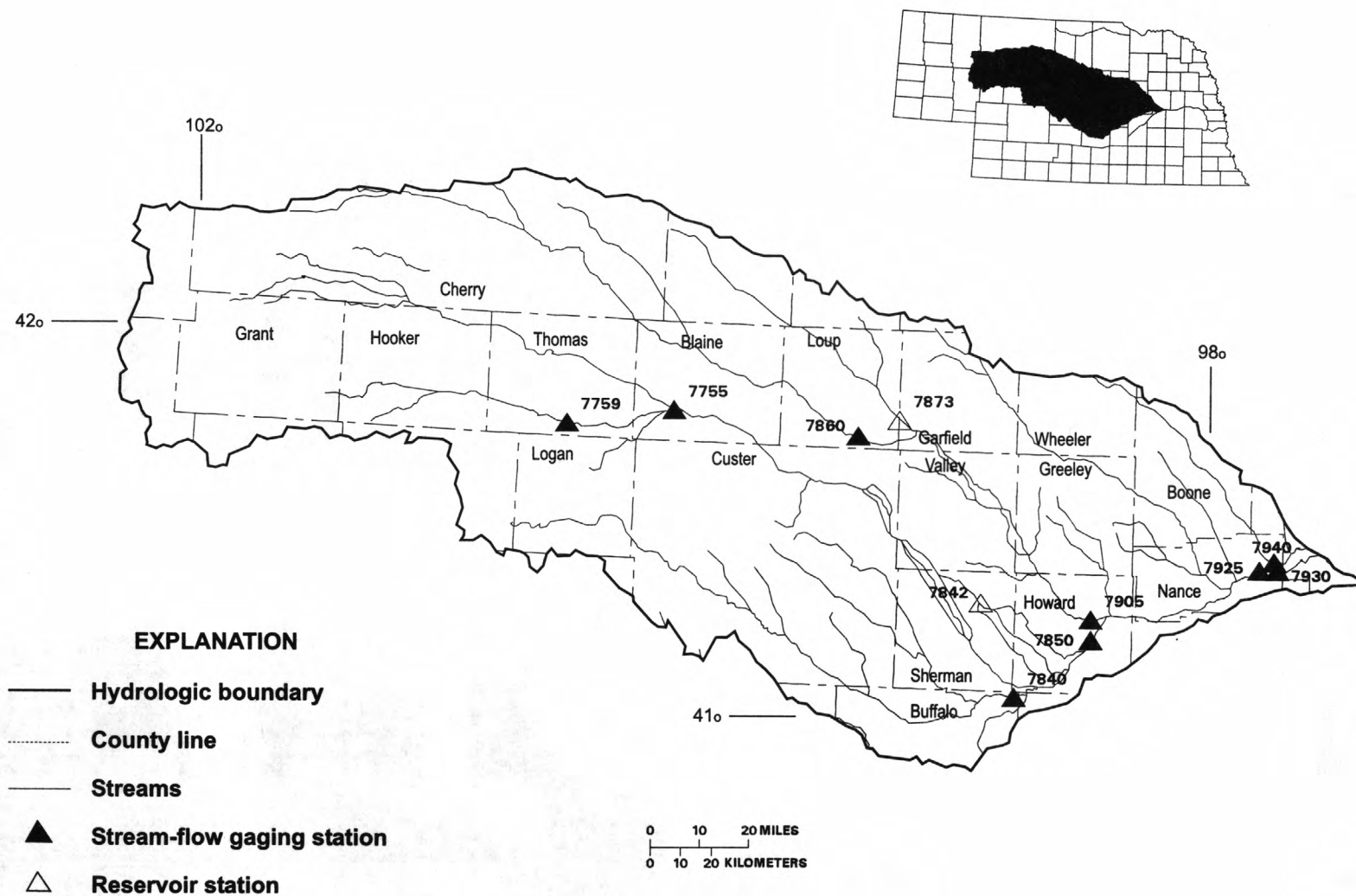
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06774000 PLATTE RIVER NEAR DUNCAN, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1942 - 2001	
ANNUAL TOTAL	676614		594126		1879	
ANNUAL MEAN	1849		1628		1432	
MEDIAN OF ANNUAL MEANS					6652	
HIGHEST ANNUAL MEAN					494	
LOWEST ANNUAL MEAN					23800	
HIGHEST DAILY MEAN	4740	Feb 25	7070	Mar 17		Jul 1 1983
LOWEST DAILY MEAN	209	Aug 17	125	Jul 5	.00	Jan 4 1942
ANNUAL SEVEN-DAY MINIMUM	283	Aug 13	152	Jul 4	.00	Oct 1 1943
MAXIMUM PEAK FLOW			*7770	Mar 17	**25400	Mar 28 1960
MAXIMUM PEAK STAGE			***5.94	Mar 15	***7.86	Mar 11 1993
ANNUAL RUNOFF (AC-FT)	1342000		1178000		1361000	
10 PERCENT EXCEEDS	3580		3230		3970	
50 PERCENT EXCEEDS	1640		1320		1300	
90 PERCENT EXCEEDS	447		461		110	

e Estimated.
 * Stage 5.53 ft.
 ** Stage 6.36 ft.
 *** Backwater from ice.





PLATTE RIVER BASIN
LOUP RIVER BASIN

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*Station number	Station name	Page
7755	Middle Loup River at Dunning.....	130
7759	Dismal River near Thedford.....	132
7840	South Loup River at St. Michael.....	138
7842	Sherman Reservoir near Loup City.....	142
7850	Middle Loup River at St. Paul.....	144
7860	North Loup River at Taylor.....	148
7873	Calamus Reservoir near Burwell.....	150
7905	North Loup River near St. Paul.....	152
7925	Loup River Power Canal near Genoa.....	156
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7940	Beaver Creek at Genoa.....	160

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

PLATTE RIVER BASIN

06775500 MIDDLE LOUP RIVER AT DUNNING, NE

LOCATION.--Lat 41°49'50", long 100°06'20", in NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.33, T.22 N., R.24 W., Blaine County, Hydrologic Unit 10210001, on left bank near upstream end of bridge on State Highway 2 at north edge of Dunning, 1.0 mi upstream from Dismal River, and at mile 204.

DRAINAGE AREA.--1,830 mi², of which about 79 mi² contributes directly to surface runoff.

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

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

GAGE.--Water-stage recorder. Datum of gage is 2,604.14 ft above sea level. Prior to Sept. 12, 1946, nonrecording gage, and Sept. 12, 1946, to Sept. 30, 1962, water-stage recorder at site 0.2 mi upstream at datum 3.03 ft higher. Oct. 1, 1962, to May 15, 1989, at present site, and May 15, 1989, to Mar. 20, 1990, at site 0.2 mi upstream, both at datum 3.00 ft higher. Data collection platform at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	484	590	471	e460	514	550	526	574	512	484	497	443
2	478	538	484	e470	532	550	542	563	482	482	497	443
3	480	526	497	e480	537	564	563	540	513	477	487	447
4	487	514	480	e500	550	574	535	535	525	470	467	445
5	486	527	488	e520	555	560	540	560	497	521	449	437
6	465	526	488	554	583	569	553	577	482	483	442	438
7	463	501	493	526	597	578	656	545	502	469	439	504
8	451	491	493	517	569	592	603	542	484	494	431	549
9	447	484	484	528	501	606	583	538	473	482	426	491
10	453	480	497	529	501	605	589	533	472	528	426	465
11	469	497	463	522	523	570	646	523	468	575	424	457
12	476	484	446	519	506	578	589	518	464	562	437	455
13	478	484	e420	539	519	571	587	512	476	531	459	455
14	471	459	e430	517	546	577	569	498	475	503	460	493
15	479	484	e450	500	523	581	568	497	453	496	479	493
16	474	480	e450	496	532	533	538	474	445	497	447	485
17	476	493	e440	502	564	550	498	470	449	490	445	475
18	474	463	e440	495	555	551	505	456	448	483	437	477
19	471	476	e450	497	546	551	529	459	463	474	428	471
20	473	480	e450	501	574	567	527	467	476	455	429	464
21	471	476	e470	501	560	562	541	447	463	452	445	458
22	507	484	e450	519	546	573	581	432	459	450	440	465
23	518	493	e450	541	564	563	556	442	463	445	479	465
24	512	488	e450	537	546	537	572	447	458	443	539	448
25	517	506	e450	523	519	529	570	460	453	438	481	446
26	520	506	e460	532	537	497	599	469	451	444	467	450
27	512	519	e470	537	555	504	649	483	453	459	453	460
28	532	514	e480	532	541	503	640	489	447	480	447	463
29	607	497	e490	588	---	534	607	503	456	535	445	461
30	592	493	e480	569	---	543	615	526	508	541	453	459
31	570	---	e470	528	---	527	---	508	---	522	447	---
TOTAL	15293	14953	14434	16079	15195	17249	17176	15587	14170	15165	14102	13962
MEAN	493	498	466	519	543	556	573	503	472	489	455	465
MAX	607	590	497	588	597	606	656	577	525	575	539	549
MIN	447	459	420	460	501	497	498	432	445	438	424	437
AC-FT	30330	29660	28630	31890	30140	34210	34070	30920	28110	30080	27970	27690

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2001, BY WATER YEAR (WY)

	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
MEAN	412	421	416	412	432	457	458	446	422	399	399	402
MAX	519	517	509	519	543	556	573	590	545	491	490	504
(WY)	1997	1992	1994	2001	2001	2001	2001	1995	1995	1999	1998	1996
MIN	346	364	336	322	365	359	334	353	342	324	341	330
(WY)	1951	1948	1950	1949	1994	1968	1951	1948	1948	1970	1947	1955

PLATTE RIVER BASIN

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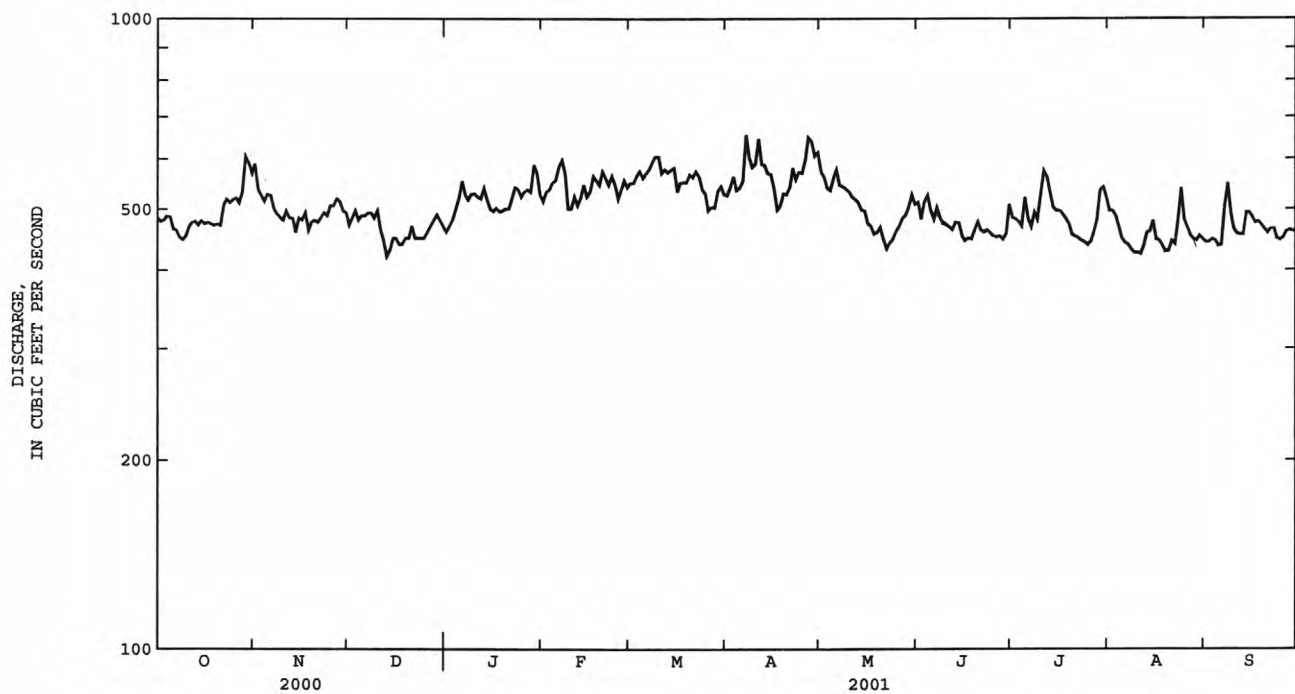
06775500 MIDDLE LOUP RIVER AT DUNNING, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1946 - 2001	
ANNUAL TOTAL	178520		183365		423	
ANNUAL MEAN	488		502		502	
HIGHEST ANNUAL MEAN					365	
LOWEST ANNUAL MEAN					778	
HIGHEST DAILY MEAN	640	May 18	656	Apr 7	231	Apr 20 1971
LOWEST DAILY MEAN	412	Aug 30	420	Dec 13	100	Dec 5 1950
ANNUAL SEVEN-DAY MINIMUM	416	Aug 25	432	Aug 6	231	Jan 1 1949
MAXIMUM PEAK FLOW			777	Apr 11	*2480	Mar 25 1996
MAXIMUM PEAK STAGE			6.61	Dec 17	**7.02	Mar 31 1949
ANNUAL RUNOFF (AC-FT)	354100		363700		306500	
10 PERCENT EXCEEDS	540		570		503	
50 PERCENT EXCEEDS	482		494		417	
90 PERCENT EXCEEDS	436		447		351	

e Estimated.

* Caused by ice jam release upstream, stage 6.15 ft.

** Backwater from ice.



PLATTE RIVER BASIN

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

LOCATION.--Lat 41°46'45", long 100°31'30", in SE ¼ NW ¼ sec.23, T.21 N., R.28 W., Thomas County, Hydrologic Unit 10210002, on right bank 1,400 ft downstream from bridge on U.S. Highway 83, 2 mi upstream from boundary of Nebraska National Forest (Bessey Division), 14 mi south of Thedford, and at mile 32.9.

DRAINAGE AREA.--966 mi², approximately, of which about 30 mi² contributes directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1966 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 2,800.13 ft above sea level. Data collection platform at station.

REMARKS.--Records fair.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	229	242	223	214	210	226	237	243	214	234	223	210
2	230	229	223	213	218	229	239	236	208	220	221	211
3	229	226	221	224	220	229	243	228	214	220	222	214
4	226	225	220	221	217	231	240	228	214	219	218	213
5	226	229	221	224	220	231	237	245	213	227	218	216
6	225	225	224	221	221	233	245	253	214	230	216	214
7	225	225	223	221	224	236	264	237	211	224	219	232
8	225	225	223	221	217	237	260	236	214	236	216	237
9	225	225	223	222	215	235	251	233	212	231	212	227
10	225	225	223	224	218	240	245	231	210	242	212	219
11	225	224	214	222	222	236	257	229	207	253	212	218
12	227	224	215	223	221	233	262	226	211	247	217	219
13	228	225	218	224	221	239	257	227	207	229	220	217
14	227	225	219	222	217	241	260	224	209	228	220	227
15	225	224	225	216	217	245	255	226	205	229	224	235
16	226	223	214	214	221	242	244	223	203	230	220	226
17	226	223	213	216	217	242	236	219	206	233	215	222
18	226	224	214	216	221	243	236	214	209	232	214	222
19	226	224	214	210	224	240	238	218	209	230	214	231
20	225	225	222	216	222	249	238	217	210	228	213	223
21	226	224	219	216	222	246	237	210	211	225	217	219
22	234	224	216	214	221	247	247	209	209	230	218	215
23	236	225	222	218	223	245	249	211	214	231	224	216
24	231	225	216	221	223	241	250	211	216	227	227	211
25	230	224	216	217	222	232	257	207	214	228	220	211
26	227	225	221	218	222	231	261	213	215	226	217	213
27	225	225	210	212	222	236	261	211	213	229	214	214
28	230	225	222	220	220	232	257	208	214	228	213	214
29	275	224	223	222	---	240	247	212	223	225	214	215
30	271	222	219	222	---	233	249	221	238	223	218	214
31	239	---	214	215	---	226	---	219	---	224	212	---
TOTAL	7150	6760	6790	6779	6158	7346	7459	6925	6367	7118	6740	6575
MEAN	231	225	219	219	220	237	249	223	212	230	217	219
MAX	275	242	225	224	224	249	264	253	238	253	227	237
MIN	225	222	210	210	210	226	236	207	203	219	212	210
AC-FT	14180	13410	13470	13450	12210	14570	14790	13740	12630	14120	13370	13040

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2001, BY WATER YEAR (WY)

	201	205	202	202	204	209	211	209	202	201	198	199
MEAN	201	205	202	202	204	209	211	209	202	201	198	199
MAX	235	237	231	230	251	239	254	246	242	245	234	237
(WY)	1998	1999	2000	1985	1997	1997	1995	1995	2000	1999	1998	1997
MIN	181	183	170	175	185	188	191	183	179	172	176	179
(WY)	1974	1970	1979	1972	1968	1971	1985	1967	1975	1980	1974	1974

PLATTE RIVER BASIN

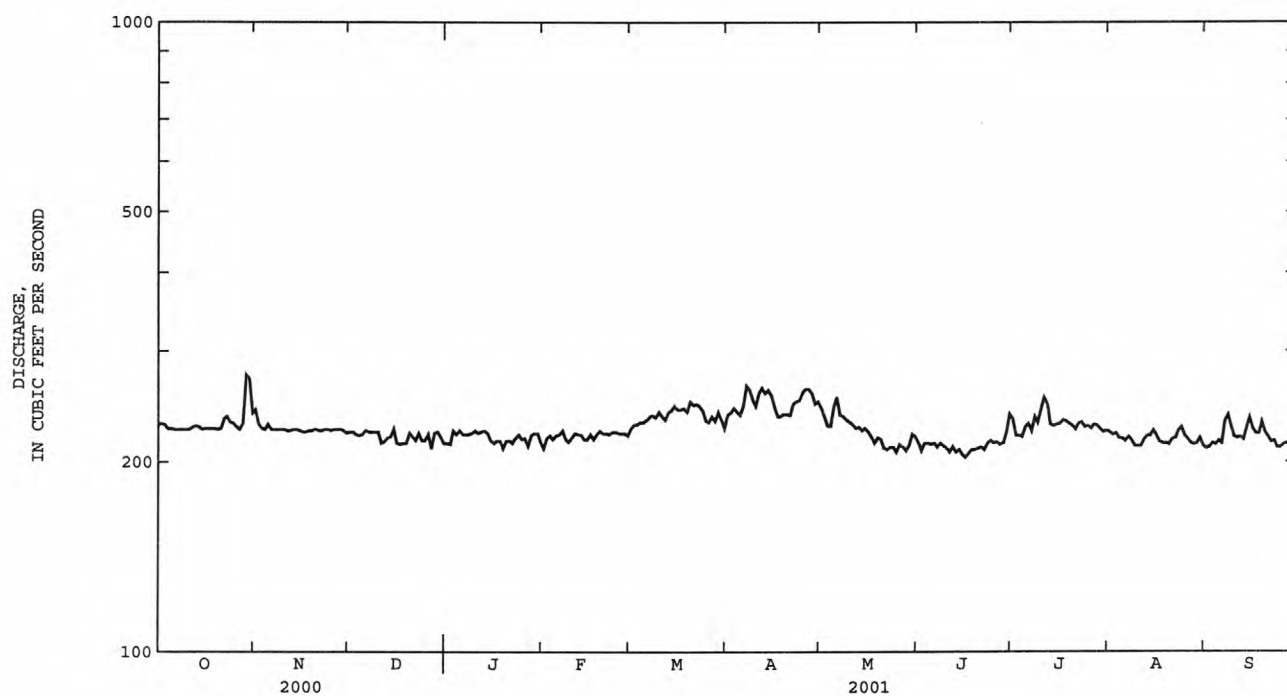
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06775900 DISMAL RIVER NEAR THEDFORD, NE--Continued
(Hydrologic bench-mark station)

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1967 - 2001	
ANNUAL TOTAL	84221		82167		204	
ANNUAL MEAN	230		225		231	2000
HIGHEST ANNUAL MEAN					188	1970
LOWEST ANNUAL MEAN					463	Aug 23 1983
HIGHEST DAILY MEAN	290	Jun 30	275	Oct 29	125	Feb 3 1989
LOWEST DAILY MEAN	210	Dec 27	203	Jun 16	153	Dec 29 1982
ANNUAL SEVEN-DAY MINIMUM	216	Dec 16	207	Jun 11	*1160	Aug 23 1983
MAXIMUM PEAK FLOW			310	Oct 29	**5.10	Dec 18 1983
MAXIMUM PEAK STAGE			1.16	Oct 29		
ANNUAL RUNOFF (AC-FT)	167100		163000		147500	
10 PERCENT EXCEEDS	240		242		229	
50 PERCENT EXCEEDS	229		223		201	
90 PERCENT EXCEEDS	222		213		182	

* Stage 3.83 ft.

** Backwater from ice.



PLATTE RIVER BASIN

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

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM AD- SORP- TION RATIO (00931)
OCT 19...	1400	225	9.2	98	8.1	176	21.0	13.5	68	21.8	3.22	4.89	.4
DEC 21...	1300	230	11.6	90	8.4	167	-6.0	1.0	68	22.0	3.24	4.90	.3
MAR 01...	1100	225	11.1	--	8.0	177	7.0	8.0	70	22.6	3.36	4.96	.4
MAR 22...	1500	227	7.8	80	8.3	177	8.0	12.0	66	21.2	3.22	4.85	.4
APR 10...	1100	225	9.1	93	8.2	191	12.0	11.5	74	23.6	3.60	5.26	.4
MAY 10...	1400	233	11.0	127	8.3	184	20.0	17.0	73	23.0	3.71	5.07	.4
JUN 06...	1200	229	8.3	94	8.2	171	20.5	16.5	68	21.8	3.39	5.09	.5
JUL 12...	1100	230	9.5	113	8.0	166	22.0	19.0	67	21.6	3.30	4.69	.4
AUG 09...	1200	227	7.9	--	8.2	175	25.0	20.0	69	22.1	3.37	4.61	.4
SEP 13...	1200	214	8.7	98	8.2	175	18.0	16.0	66	21.0	3.25	5.00	.3

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)
OCT 19...	6.7	16	--	--	--	1.1	.3	54.0	5.7	--	--	154	--
DEC 21...	6.5	16	76	92	.0	1.2	.3	53.2	5.8	.21	96.3	155	146
MAR 01...	6.8	16	75	92	.0	1.3	.3	55.2	6.0	.21	92.3	152	149
MAR 22...	7.0	17	79	96	.0	1.4	.3	50.4	6.5	.21	93.2	152	145
APR 10...	8.0	18	80	98	.0	1.8	.3	51.9	5.9	.23	101	167	151
MAY 10...	7.9	18	78	94	--	1.5	.5	55.7	5.7	.21	95.6	152	152
JUN 06...	9.2	21	75	92	--	1.4	.3	57.6	5.5	.20	92.7	150	152
JUL 12...	6.9	17	72	86	--	1.2	.3	54.9	5.9	.21	97.5	157	143
AUG 09...	6.7	16	75	90	0	1.2	.3	56.4	5.9	.20	91.9	150	147
SEP 13...	6.4	16	74	89	0	1.2	.3	54.7	6.1	.21	87.8	152	144

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN, NITRATE SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
OCT 19...	<.041	<.10	<.08	--	--	--	.523	--	<.006	--	.377	.140	.123
DEC 21...	<.041	<.10	.27	--	.663	2.93	.671	.026	.008	.94	.417	.152	.136
MAR 01...	<.041	E.07	<.08	--	--	--	.582	--	E.003	--	.411	.140	.134
MAR 22...	<.041	.11	.33	.62	--	--	.511	--	<.006	.84	.399	.139	.130
APR 10...	<.041	.14	.47	.61	--	--	.470	--	<.006	.94	.377	.138	.123
MAY 10...	<.041	.14	.40	.58	--	--	.440	--	<.006	.84	.399	.142	.130
JUN 06...	<.040	E.08	.23	--	--	--	.529	--	E.005	.76	.405	.145	.132
JUL 12...	<.040	E.10	.35	--	--	--	.426	--	E.005	.77	.423	.154	.138
AUG 09...	E.033	<.10	.23	--	--	--	.384	--	E.003	.62	.356	.127	.116
SEP 13...	<.040	E.07	.20	--	--	--	.380	--	E.003	.58	.350	.131	.114

PLATTE RIVER BASIN

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)
OCT 19...	.205	20	E1.9	<.002	<.004	<.002	<.005	E.001	<.010	<.002	<.041	<.020	<.005
DEC 21...	.248	M	E2.0	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	<.005
MAR 01...	.196	<10	<3.2	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	<.005
MAR 22...	.246	<10	<3.2	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	<.005
APR 10...	.242	<10	<3.2	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	<.005
MAY 10...	.235	<10	<3.0	<.002	<.004	<.002	<.005	E.004	<.010	<.002	<.041	<.020	<.005
JUN 06...	.186	<10	<3.0	<.002	<.004	<.002	<.005	E.004	<.010	<.002	<.041	<.020	<.005
JUL 12...	.244	<10	<3.0	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	<.005
AUG 09...	.183	<10	<3.0	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	<.005
SEP 13...	.173	<10	E1.9	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	<.005
DATE	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)
OCT 19...	<.018	<.003	<.006	<.005	<.005	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027
DEC 21...	<.018	<.003	<.006	<.005	<.005	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027
MAR 01...	<.018	<.003	<.006	<.020	<.005	<.021	<.200	<.009	<.005	<.003	<.004	<.035	<.027
MAR 22...	<.018	<.003	<.006	<.005	<.005	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027
APR 10...	<.018	<.003	<.006	<.005	<.005	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027
MAY 10...	<.018	<.003	<.006	<.005	<.005	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027
JUN 06...	<.018	<.003	E.002	<.005	<.005	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027
JUL 12...	<.018	<.003	<.006	<.005	<.005	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027
AUG 09...	<.018	<.003	<.006	<.005	<.005	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027
SEP 13...	<.018	<.003	<.006	<.005	<.005	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027
DATE	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BENZIN WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P, P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)
OCT 19...	<.050	<.006	<.013	<.006	<.002	<.010	<.003	<.007	<.002	<.010	<.006	<.011	<.015
DEC 21...	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.015
MAR 01...	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.015
MAR 22...	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.015
APR 10...	<.050	<.006	<.013	<.006	<.002	<.020	<.003	<.007	<.002	<.010	<.006	<.011	<.015
MAY 10...	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.015
JUN 06...	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.015
JUL 12...	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.015
AUG 09...	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.015
SEP 13...	<.050	<.006	<.013	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.015

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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LOCATION.--Lat 41°01'53", long 098°44'25", in NW ¼ NW ¼ 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.

WATER-DISCHARGE RECORDS

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

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

MEAN	174	193	182	185	260	352	282	305	415	220	150	149
MAX	619	276	275	281	543	1747	549	562	2741	1121	482	370
(WY)	1947	1999	1994	1973	1966	1978	1984	1951	1947	1993	1962	1949
MIN	87.5	129	116	96.5	138	201	171	176	126	26.5	21.3	51.0
(WY)	1957	1927	1956	1972	1989	1981	1992	1975	1981	1980	1955	1956

PLATTE RIVER BASIN

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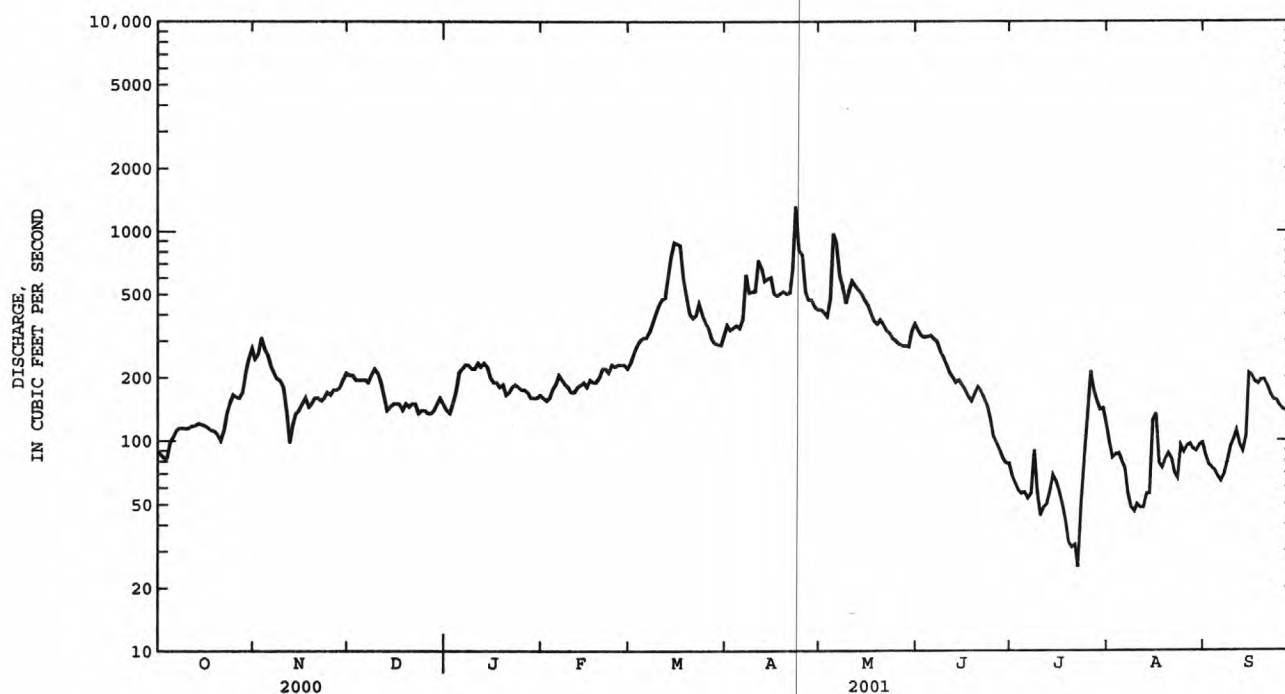
06784000 SOUTH LOUP RIVER AT ST. MICHAEL, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1944 - 2001	
ANNUAL TOTAL	63067		84020		239	
ANNUAL MEAN	172		230		483	
HIGHEST ANNUAL MEAN					161	
LOWEST ANNUAL MEAN					1955	
HIGHEST DAILY MEAN	525	Jul 4	1320	Apr 23	28000	Jun 23 1947
LOWEST DAILY MEAN	32	Aug 17	25	Jul 22	.00	Aug 5 1980
ANNUAL SEVEN-DAY MINIMUM	35	Sep 9	37	Jul 17	.65	Aug 4 1980
MAXIMUM PEAK FLOW			1580	Apr 23	*50000	Jun 22 1947
MAXIMUM PEAK STAGE			**6.74	Mar 10	12.00	Jun 22 1947
ANNUAL RUNOFF (AC-FT)	125100		166700		172800	
10 PERCENT EXCEEDS	269		481		341	
50 PERCENT EXCEEDS	170		180		193	
90 PERCENT EXCEEDS	67		73		103	

e Estimated.

* Estimated. Maximum computed discharge 27,500 ft³/s, June 24, 1968, gage height 11.00 ft.

** Backwater from ice.



PLATTE RIVER BASIN

06784000 SOUTH LOUP RIVER AT ST. MICHAEL, NE--Continued

WATER-QUALITY 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, 19300 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 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PER-CENT SATURATION)	PH WATER WHOLE FIELD (STANDARD UNITS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CAC03)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SODIUM AD-SORP-TION RATIO
		(00061)	(00300)	(00301)	(00400)	(00095)	(00020)	(00010)	(00900)	(00915)	(00925)	(00935)	(00931)
OCT 11...	0900	117	11.6	103	8.6	407	10.0	7.0	--	--	--	--	--
DEC 06...	1450	195	14.1	106	8.5	454	4.0	.5	--	--	--	--	--
JAN 03...	0940	169	9.1	68	8.2	468	3.5	.5	--	--	--	--	--
FEB 13...	1010	184	12.5	93	7.4	491	.00	.5	--	--	--	--	--
MAR 28...	0830	289	11.6	99	7.8	447	8.0	5.0	200	64.0	9.93	10.3	.4
MAY 07...	1030	682	8.9	94	7.8	448	18.0	14.5	--	--	--	--	--
JUN 21...	0925	179	9.8	111	8.2	425	19.5	18.0	--	--	--	--	--
JUL 31...	0850	125	9.1	123	8.2	339	30.5	26.5	140	42.3	7.69	9.95	.4
SEP 11...	1050	118	10.3	119	8.0	379	22.5	18.5	--	--	--	--	--

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06784000 SOUTH LOUP RIVER AT ST. MICHAEL, NE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)
OCT 11...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 13...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 28...	4.37	.996	.029	.009	.767	.257	.250	6.3	--	--	--	--	--
MAY 07...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 31...	--	E.041	--	<.006	.147	E.052	.048	1.9	22	.36	11.4	142	E.05
SEP 11...	--	--	--	--	--	--	--	--	--	--	--	--	--

DATE	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
OCT 11...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 13...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 28...	41	--	--	--	--	10	--	14.8	--	--	--	--	--
MAY 07...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 31...	53	.16	<.8	.20	1.6	10	.48	3.3	3.0	<.06	2.4	<1.0	5
SEP 11...	--	--	--	--	--	--	--	--	--	--	--	--	--

URANIUM
NATURAL
DIS-
SOLVED
(UG/L
AS U)
(22703)

DATE	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
OCT 11...	--
DEC 06...	--
JAN 03...	--
FEB 13...	--
MAR 28...	--
MAY 07...	--
JUN 21...	--
JUL 31...	3.61
SEP 11...	--

PLATTE RIVER BASIN

06784200 SHERMAN RESERVOIR NEAR LOUP CITY, NE

LOCATION.--Lat 41°18'10", long 98°52'45", in SW¹/₄ NW¹/₄ sec. 1, T. 15 N., R. 14 W., Sherman County, Hydrologic Unit 10210003, in control house of outlet works of Sherman Dam, 5 mi northeast of Loup City.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Mercury-column pressure gage read once daily. Datum of gage is sea level.

R

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, 70,230 acre-ft June 4, elevation, 2,162.7 ft; minimum observed, 33,100 acre-ft Sept. 1, elevation, 2,146.7 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

Date	Elevation* (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sep 30.....	2,155.3	50,820	--
Oct. 31.....	2,157.3	55,670	+4,850
Nov. 30.....	2,156.8	54,430	-1,240
Dec. 31.....	2,156.3	53,210	-1,220
CAL YR 2000	--	--	+970
Jan. 31.....	2,156.0	52,480	-730
Feb. 28.....	2,155.6	51,530	-950
Mar. 31.....	2,155.5	51,290	-240
Apr. 30.....	2,157.5	56,170	+4,880
May 31.....	2,162.2	68,790	+12,620
June 30.....	2,161.2	65,960	-2,830
July 31.....	2,154.4	48,730	-17,230
Aug. 31.....	2,146.9	33,460	-15,270
Sept. 30.....	2,154.6	49,190	+15,730
WTR YR 2001	--	--	-1,630

*Elevations read on or near last day of month.

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06785000 MIDDLE LOUP RIVER AT ST. PAUL, NE

LOCATION.--Lat 41°12'13", long 098°26'46", in SE ¼ NW ¼ NE ¼ sec.10, T.14 N., R.10 W., Howard County, Hydrologic Unit 10210003, on left bank at St. Paul, 50 ft upstream from bridge on U.S. Highway 281, 6 mi upstream from confluence with North Loup River, and at mile 74.0.

DRAINAGE AREA.--8,075 mi², of which about 3,130 mi² contributes directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1894 to September 1915, August 1928 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1036: 1943. WSP 1390: 1896, 1903, 1928(M), 1944. WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,776.61 ft above sea level. See WSP 1918 for history of changes prior to June 5, 1957. June 5, 1957, to Mar. 16, 1978, water-stage recorder on left bank approximately 410 ft upstream at same datum. Mar. 17 to May 31, 1978, nonrecording gage on railroad bridge immediately upstream at same datum. Data collection platform at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	954	1730	1720	e880	e1300	e1420	2040	1520	1210	324	490	475
2	959	2000	1690	e917	e1300	e1450	1650	1590	1180	308	449	396
3	945	e1750	1600	e940	e1200	e1550	1640	1660	1130	410	489	389
4	913	e1840	1630	e1000	e1200	e1600	1990	1810	1140	368	402	387
5	1030	e1620	1520	e1140	e1300	e1600	1850	2870	1180	413	421	376
6	1030	e1480	1480	e1300	e1350	e1700	1530	3520	1350	447	401	304
7	1060	e1290	1350	e1450	e1350	e1800	2050	2730	1300	306	449	332
8	886	1070	1480	e1500	e1350	e2000	2700	2110	1280	328	366	350
9	726	1060	1140	e1450	e1300	e2200	2040	1780	1260	394	327	494
10	786	807	e1100	e1400	e1140	e2300	2030	1600	1230	386	309	786
11	1230	760	e800	e1450	e1100	e2600	2580	1480	1200	472	343	856
12	1410	966	e740	e1500	e1120	e2900	3110	1210	1210	608	398	648
13	1350	757	e700	e1500	e1200	e3300	3120	1000	1010	1460	457	567
14	1500	e780	e780	e1500	e1250	e4000	2330	1070	949	1020	542	582
15	1540	e800	e820	e1450	e1140	6230	2180	1020	957	909	759	1020
16	1450	e800	e940	e1300	e1100	4130	2220	1070	988	842	1000	1660
17	1360	e900	e840	e1300	e1140	3450	2160	1060	923	721	958	1570
18	1450	e780	e880	e1250	e1140	2930	1580	1090	765	557	924	1310
19	1430	e840	e900	e1250	e1180	2600	1250	1280	733	413	802	1100
20	1290	e920	e880	e1250	e1250	2410	1520	1420	688	415	678	1080
21	1300	e880	e940	e1160	e1300	2360	1710	1370	666	406	603	1050
22	1260	e900	e860	e1220	e1250	2680	1720	1280	669	396	536	954
23	1460	e940	e860	e1300	e1200	2640	1740	1000	708	579	490	893
24	1570	e1000	e860	e1350	e1300	2180	1700	969	667	534	534	914
25	1620	e1060	e880	e1350	e1300	2000	1700	994	569	674	575	920
26	1530	e1180	e880	e1250	e1300	2080	1700	904	509	832	553	887
27	1590	e1300	e900	e1250	e1350	2110	1700	880	461	782	654	859
28	1710	e1450	e940	e1250	e1400	2030	1700	841	363	630	546	854
29	1730	1620	e960	e1300	---	2110	1700	843	360	614	527	841
30	2200	1510	e920	e1350	---	1960	1580	1040	630	490	582	823
31	1720	---	e920	e1350	---	2050	---	1240	---	444	547	---
TOTAL	40989	34790	32910	39857	34810	76370	58520	44251	27285	17482	17111	23677
MEAN	1322	1160	1062	1286	1243	2464	1951	1427	910	564	552	789
MAX	2200	2000	1720	1500	1400	6230	3120	3520	1350	1460	1000	1660
MIN	726	757	700	880	1100	1420	1250	841	360	306	309	304
AC-FT	81300	69010	65280	79060	69050	151500	116100	87770	54120	34680	33940	46960

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2001, BY WATER YEAR (WY)

MEAN	1171	1299	1158	1179	1544	1777	1364	1158	1185	657	576	765
MAX	2444	1922	1836	1844	2478	4022	2291	2476	3253	3642	1171	1790
(WY)	1993	1999	1971	1990	1984	1978	1984	1995	1967	1993	1992	1985
MIN	404	771	686	770	969	1181	767	519	395	124	174	240
(WY)	1964	1965	1969	1972	1979	1970	1981	1975	1972	1980	1980	1980

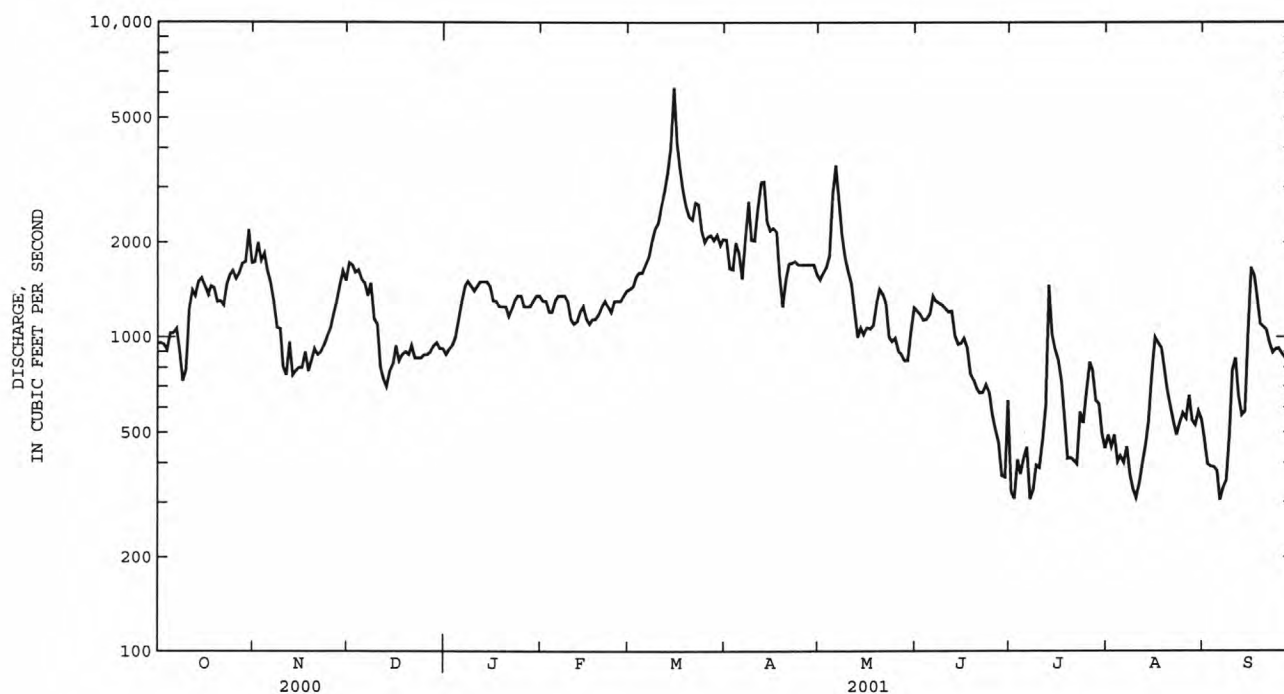
PLATTE RIVER BASIN

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

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1963 - 2001	
ANNUAL TOTAL	371703		448052		1150	
ANNUAL MEAN	1016		1228		1832	
HIGHEST ANNUAL MEAN					831	
LOWEST ANNUAL MEAN					21800	
HIGHEST DAILY MEAN	2550	Jul 5	6230	Mar 15	Jun 12 1984	
LOWEST DAILY MEAN	202	Jul 1	304	Sep 6	Aug 9 1980	
ANNUAL SEVEN-DAY MINIMUM	251	Jun 27	362	Sep 2	Aug 4 1980	
MAXIMUM PEAK FLOW			*9100	Mar 15	72000	
MAXIMUM PEAK STAGE			**6.20	Mar 14	12.69	
ANNUAL RUNOFF (AC-FT)	737300		888700		833000	
10 PERCENT EXCEEDS	1630		2030		1860	
50 PERCENT EXCEEDS	942		1140		1090	
90 PERCENT EXCEEDS	448		468		370	

e Estimated.
 * Stage 4.55 ft.
 ** Backwater from ice.



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 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATURATION) (00301)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM ADSORPTION RATIO (00931)
OCT 10...	0940	873	12.5	109	8.6	278	10.5	6.5	--	--	--	--	--
DEC 07...	0950	1400	13.7	103	8.5	287	9.0	.5	--	--	--	--	--
JAN 02...	1030	917	15.4	113	8.6	305	-3.5	.5	--	--	--	--	--
MAR 01...	1010	1420	12.2	92	7.4	314	-1.0	.5	--	--	--	--	--
27...	1105	1980	12.2	100	7.6	299	7.0	4.0	130	40.3	6.35	7.86	.4
MAY 09...	0915	1890	9.1	104	7.9	347	23.0	18.0	--	--	--	--	--
JUN 20...	0940	660	9.9	116	8.2	313	22.0	20.0	--	--	--	--	--
JUL 30...	0840	480	8.0	105	7.7	312	28.0	25.5	130	40.6	6.81	9.01	.4
SEP 10...	1000	845	9.4	104	7.8	275	19.0	17.0	--	--	--	--	--

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PLATTE RIVER BASIN

06786000 NORTH LOUP RIVER AT TAYLOR, NE

LOCATION.--Lat 41°46'37", long 099°22'45", in NE ¼ SE ¼ sec.22, T.21 N., R.18 W., Loup County, Hydrologic Unit 10210006, on left bank 25 ft downstream from bridge on U.S. Highway 183, 0.4 mi north of Taylor and at mile 80.6.

DRAINAGE AREA.--2,350 mi², of which about 186 mi² contributes directly to surface runoff.

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

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

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	531	899	e540	e490	e600	e780	701	863	633	509	259	223
2	531	755	e540	e490	e600	e839	721	774	578	417	327	218
3	541	654	e520	e520	e560	e900	735	666	607	369	285	237
4	551	555	e520	e556	e580	e980	742	671	597	366	256	269
5	583	571	e540	e580	e600	e1150	746	891	711	353	215	257
6	541	544	e520	e660	e600	1300	723	1140	720	386	191	254
7	511	442	e540	e700	e620	1160	1430	1060	689	500	193	359
8	501	348	e560	e740	e600	1100	1710	879	652	455	187	509
9	501	356	e540	e720	e580	1030	1140	851	622	373	184	589
10	501	404	e540	e680	e560	1040	928	819	587	369	186	558
11	501	468	e470	e700	e540	1020	999	767	593	485	189	550
12	501	460	e450	e700	e560	963	1120	741	571	674	242	513
13	551	e450	e440	e700	e580	854	1350	726	574	582	311	496
14	551	e470	e450	e680	e600	969	1070	690	628	459	395	619
15	511	e493	e460	e660	e580	994	972	588	580	404	638	662
16	511	e490	e450	e640	e580	891	760	649	497	334	537	666
17	521	e500	e440	e640	e600	876	667	533	468	263	456	628
18	521	e470	e450	e620	e620	883	658	405	462	260	407	578
19	521	e480	e450	e620	e640	949	666	480	452	238	370	557
20	521	e500	e450	e600	e660	892	741	533	495	222	356	545
21	531	e490	e460	e560	e700	840	776	525	538	224	386	512
22	594	e500	e450	e580	e700	788	930	461	507	225	373	492
23	672	e500	e440	e600	e720	778	1090	414	473	231	365	459
24	672	e520	e440	e620	e740	701	1220	409	415	292	480	425
25	649	e520	e450	e620	e740	719	1270	431	366	286	536	418
26	615	e520	e450	e600	e760	687	1210	447	373	272	404	421
27	594	e520	e460	e600	e760	672	1160	471	392	288	309	451
28	626	e540	e480	e600	e760	658	1040	470	358	269	251	461
29	860	e560	e520	e600	---	658	897	504	321	259	217	455
30	890	e560	e500	e620	---	745	942	577	341	237	231	452
31	805	---	e500	e620	---	734	---	656	---	241	256	---
TOTAL	18010	15539	15020	19316	17740	27550	29114	20091	15800	10842	9992	13833
MEAN	581	518	485	623	634	889	970	648	527	350	322	461
MAX	890	899	560	740	760	1300	1710	1140	720	674	638	666
MIN	501	348	440	490	540	658	658	405	321	222	184	218
AC-FT	35720	30820	29790	38310	35190	54650	57750	39850	31340	21510	19820	27440

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2001, BY WATER YEAR (WY)

	MEAN	487	515	485	492	565	626	606	549	488	323	394
MAX	706	730	669	738	863	896	970	1128	870	716	527	665
(WY)	1984	1987	1994	1941	1984	1993	2001	1995	1995	1962	1992	1951
MIN	295	373	365	331	402	454	404	300	284	119	143	200
(WY)	1941	1976	1979	1937	1939	1995	1940	1940	1940	1974	1969	1940

PLATTE RIVER BASIN

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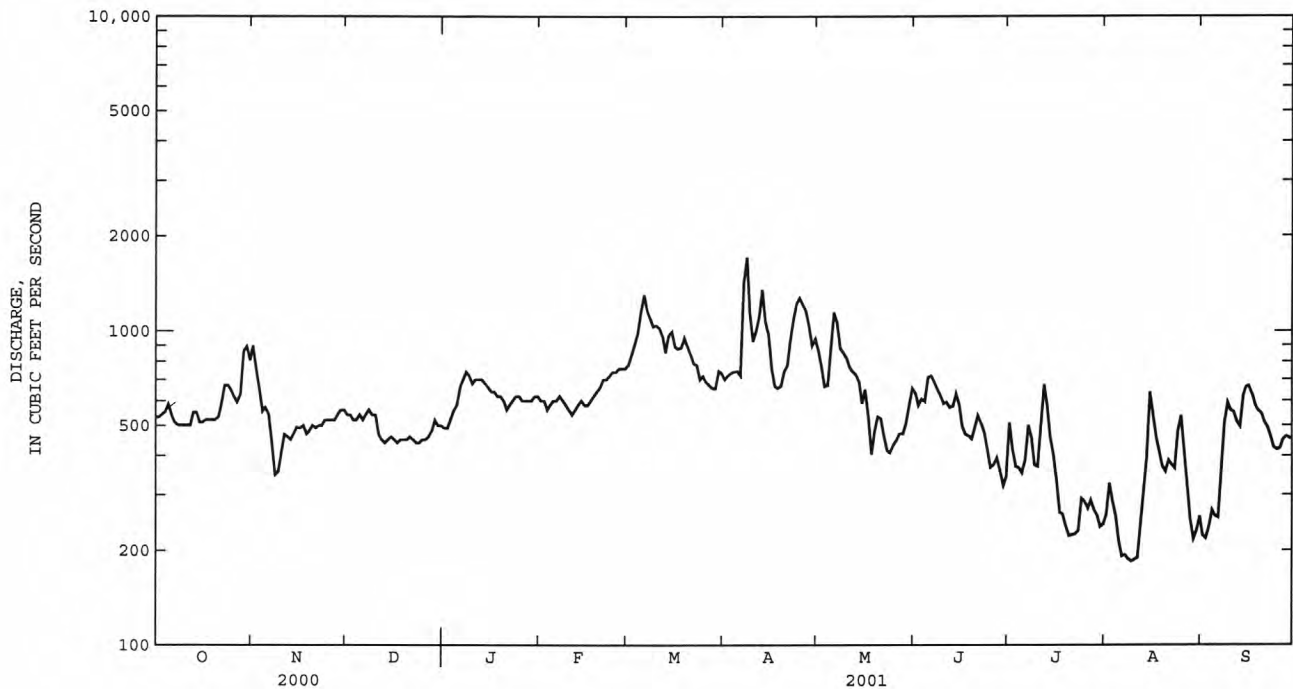
06786000 NORTH LOUP RIVER AT TAYLOR, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1937 - 2001	
ANNUAL TOTAL	189753		212847		485	
ANNUAL MEAN	518		583		644	
HIGHEST ANNUAL MEAN					354	
LOWEST ANNUAL MEAN					2690	
HIGHEST DAILY MEAN	899	Nov 1	1710	Apr 8	45	May 28 1995
LOWEST DAILY MEAN	214	Aug 15	184	Aug 9	74	Jul 26 1941
ANNUAL SEVEN-DAY MINIMUM	224	Aug 10	192	Aug 5	74	Jul 11 1981
MAXIMUM PEAK FLOW					*3480	
MAXIMUM PEAK STAGE					**9.50	
ANNUAL RUNOFF (AC-FT)	376400		422200		351700	
10 PERCENT EXCEEDS	670		891		688	
50 PERCENT EXCEEDS	521		550		480	
90 PERCENT EXCEEDS	311		302		270	

e Estimated.

* Stage 5.59 ft.

** From floodmark, ice jam.



PLATTE RIVER BASIN

06787300 CALAMUS RESERVOIR NEAR BURWELL, NE

LOCATION.--Lat 41°49'38", long 99°13'11", in SW¹/₄ SW¹/₄ sec.31, T.22 N., R.16W., Garfield County, Hydrologic Unit 10210008, near right bank in control house of outlet works of Calamus Dam on Calamus River, 4 mi upstream from mouth, 5.5 mi northwest of Burwell.

DRAINAGE AREA.--1,050 mi², approximately, of which about 110 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--November 1985 to current year.

GAGE.--Fluid gage with continuous recorder. Datum of gage is sea level.

REMARKS.--Reservoir is formed by earthfill dam; storage began Oct. 1, 1985. Usable capacity, 102,750 acre-ft between elevations 2213.3 ft, bottom of conservation pool, and 2244.0 ft, top of inlet structure; inactive capacity, 23,830 acre-ft between elevations 2185.0 ft, sill of outlet gate, and 2213.3 ft. Dead storage 817 acre-ft below elevation 2185.0 ft. Figures given herein represent total contents. Water is used for irrigation of North Loup project of Bureau of Reclamation.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 131,540 acre-ft June 18, 2001, elevation, 2,244.80 ft; minimum observed since appreciable storage was attained, 51,830 acre-ft Sept. 30, 1999, elevation 2,224.87 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 131,540 acre-ft June 18, elevation, 2,244.80 ft; minimum observed, 58,940 acre-ft Oct. 22, elevation, 2,227.22 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

	Date	Elevation* (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sep	30.....	2,228.09	61,720	--
Oct.	31.....	2,227.36	59,380	-2,340
Nov.	30.....	2,233.00	78,870	+19,490
Dec.	31.....	2,237.81	98,210	+19,340
CAL YR 2000		--	--	+14,260
Jan.	31.....	2,242.07	117,760	+19,550
Feb.	28.....	2,242.72	120,950	+3,190
Mar.	31.....	2,242.78	121,250	+300
Apr.	30.....	2,244.00	127,400	+6,150
May	31.....	2,244.32	129,050	+1,650
June	30.....	2,244.11	127,960	-1,090
July	31.....	2,237.98	98,950	-29,010
Aug.	31.....	2,232.39	76,600	-22,350
Sept.	30.....	2,230.10	68,430	-8,170
WTR YR 2001		--	--	+6,710

*Elevations read on or near last day of month.

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PLATTE RIVER BASIN

06790500 NORTH LOUP RIVER NEAR ST. PAUL, NE

LOCATION.--Lat 41°15'48", long 098°26'56", in NW ¼ NW ¼ NE ¼ sec.22, T.15 N., R.10 W., Howard County, Hydrologic Unit 10210007, on right bank 310 ft downstream from bridge on U.S. Highway 281, 3 mi north of St. Paul, and 2.9 mi upstream from confluence with Middle Loup River.

DRAINAGE AREA.--4,302 mi², of which about 1,240 mi² contributes directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1894 to September 1915, August 1928 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 976: 1942. WSP 1390: 1896. WDR NE-75-1: 1974. WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,759.29 ft, adjusted, above sea level. See WSP 1918 for history of changes prior to Oct. 1, 1954. Data collection platform at station.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow affected by diversions and ground-water withdrawals for irrigation and return flow from irrigated areas.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1080	1550	1550	e720	e920	e1080	1710	1860	929	630	629	869
2	1110	1520	1440	e660	e920	e1100	1730	1910	985	877	658	937
3	1120	1420	1240	e700	e900	e1200	1880	1730	1000	991	669	888
4	1140	1270	1100	e780	e900	e1200	1980	1800	1010	961	721	772
5	1180	890	1130	e860	e920	e1250	1890	2780	1010	912	696	710
6	1150	884	1170	e940	e920	e1250	1900	3450	1040	858	684	660
7	1110	891	1160	e960	e920	e1300	2320	3010	1120	797	683	849
8	1100	879	1410	e960	e920	e1400	2720	2500	1120	781	649	1030
9	1090	775	1400	e960	e900	e1450	2800	2120	995	981	622	1150
10	1060	689	e1340	e940	e860	e1500	2760	2050	942	933	624	1340
11	1060	782	e900	e940	e840	e1500	3350	1930	904	1100	636	1160
12	1050	e760	e700	e940	e860	e1500	3130	1750	826	986	692	1060
13	1100	e700	e660	e940	e880	e1600	2900	1540	785	983	803	993
14	1120	e700	e680	e940	e900	e2500	2760	1360	762	1100	830	1060
15	1090	e680	e700	e920	e880	4280	2600	1280	633	1010	1430	1460
16	1080	e700	e740	e880	e860	2550	2430	1160	579	955	2620	1770
17	1080	e760	e700	e880	e880	2310	2200	954	505	866	1890	1470
18	1110	e700	e720	e860	e880	2140	2050	869	468	723	1480	1520
19	1150	e740	e740	e860	e900	2040	1950	715	468	677	1360	1370
20	1180	e840	e720	e860	e920	1960	1960	654	717	682	1220	1380
21	1170	e820	e760	e820	e920	1940	1940	685	786	685	1110	1350
22	1230	e820	e720	e880	e900	1990	2480	727	788	651	1090	1360
23	1310	e860	e720	e880	e920	2020	3990	722	767	613	1060	1370
24	1330	e920	e720	e900	e920	2010	2710	644	702	627	1040	1350
25	1320	e980	e740	e920	e920	1800	2130	633	698	750	1070	1280
26	1270	e1100	e740	e880	e940	1630	1640	625	610	721	1120	1300
27	1270	e1240	e760	e900	e980	1530	1580	612	568	750	1050	1290
28	1280	e1450	e780	e900	e1050	1540	2080	601	535	751	935	1270
29	1420	1640	e800	e920	---	1530	1960	632	517	720	852	1230
30	1550	1570	e760	e940	---	1500	1920	757	530	693	831	1220
31	1440	---	e740	e940	---	1680	---	904	---	619	875	---
TOTAL	36750	29530	28440	27380	25430	54280	69450	42964	23299	25383	30629	35468
MEAN	1185	984	917	883	908	1751	2315	1386	777	819	988	1182
MAX	1550	1640	1550	960	1050	4280	3990	3450	1120	1100	2620	1770
MIN	1050	680	660	660	840	1080	1580	601	468	613	622	660
AC-FT	72890	58570	56410	54310	50440	107700	137800	85220	46210	50350	60750	70350

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2001, BY WATER YEAR (WY)

	MEAN	896	928	874	882	1118	1268	1124	1065	1050	714	684	830
MAX	1224	1330	1385	1703	1861	2589	2315	1743	2516	2471	1812	1384	
(WY)	1996	1999	1998	1998	1998	1936	2001	1995	1947	1993	1966	1965	
MIN	568	647	433	517	603	787	702	576	606	199	221	326	
(WY)	1940	1938	1930	1940	1942	1934	1946	1943	1934	1974	1941	1940	

PLATTE RIVER BASIN

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

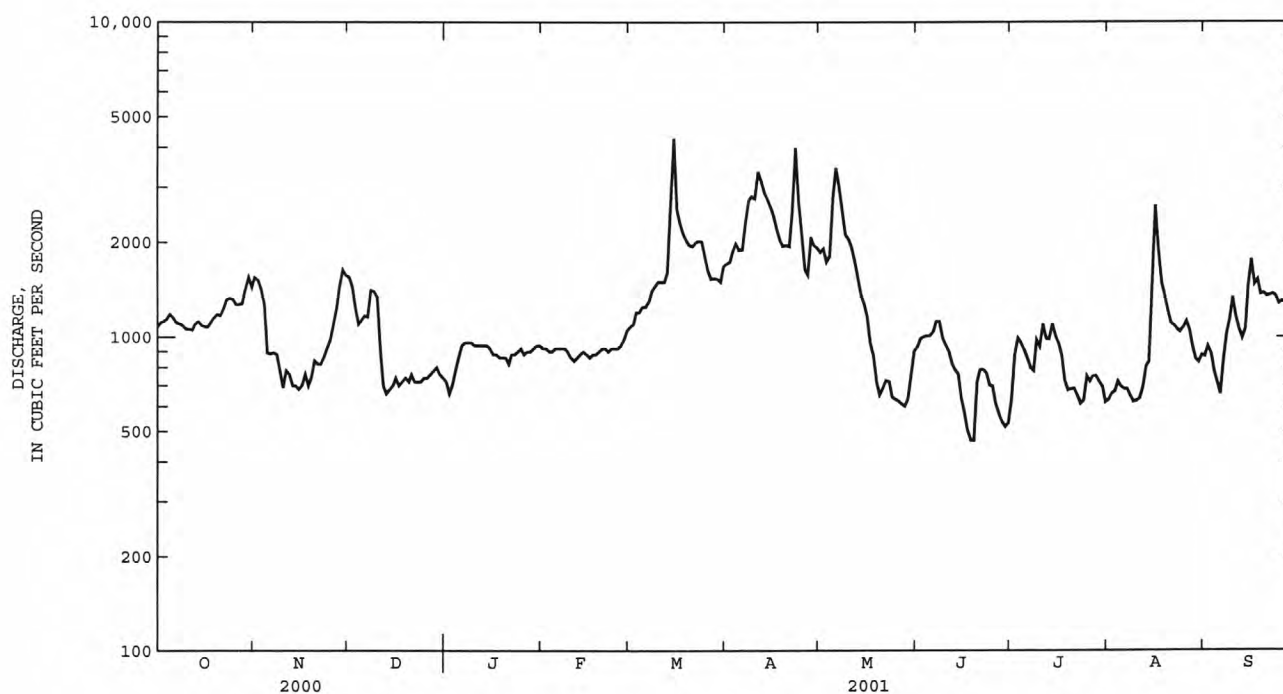
SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1928 - 2001	
ANNUAL TOTAL	329054		429003		951	
ANNUAL MEAN	899		1175		1223	1993
HIGHEST ANNUAL MEAN					668	1940
LOWEST ANNUAL MEAN					21300	Jun 22 1947
HIGHEST DAILY MEAN	2760	Jul 28	4280	Mar 15	85	Aug 8 1941
LOWEST DAILY MEAN	263	Jun 30	468	Jun 18	98	Aug 6 1941
ANNUAL SEVEN-DAY MINIMUM	356	Jun 25	584	Jun 25	90000	Jun 6 1896
MAXIMUM PEAK FLOW			*6030	Mar 15	***14.90	Jun 6 1896
MAXIMUM PEAK STAGE			**6.12	Mar 14		
ANNUAL RUNOFF (AC-FT)	652700		850900		689200	
10 PERCENT EXCEEDS	1170		1960		1380	
50 PERCENT EXCEEDS	878		960		894	
90 PERCENT EXCEEDS	624		683		511	

e Estimated.

* Stage 4.78 ft.

** Backwater from ice.

*** From floodmark, datum then in use.



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 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM AD- SORP- TION RATIO (00931)
OCT 10...	1300	1040	11.1	104	8.3	223	17.5	9.5	--	--	--	--	--
DEC 07...	1310	1130	14.2	107	8.3	276	10.0	.5	--	--	--	--	--
JAN 02...	1520	586	14.1	104	8.7	277	-1.0	.5	--	--	--	--	--
FEB 28...	1055	1050	12.7	94	7.4	252	-2.5	.5	--	--	--	--	--
MAR 26...	1130	1670	12.1	98	7.6	252	-1.5	4.0	100	31.9	5.30	7.25	.3
MAY 09...	1330	2130	8.4	104	7.8	250	31.5	22.0	--	--	--	--	--
JUN 20...	1330	728	9.9	122	8.5	266	21.5	22.5	--	--	--	--	--
JUL 30...	1240	698	9.4	136	8.9	242	34.0	31.0	100	31.8	5.11	7.80	.4
SEP 10...	1340	1430	9.7	118	8.2	227	27.5	21.5	--	--	--	--	--

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WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

[illegible]

PLATTE RIVER BASIN

06792500 LOUP RIVER POWER CANAL NEAR GENOA, NE

LOCATION.--Lat 41°25'03", long 097°47'37", in NE ¼ NE ¼ sec.32, T.17 N., R.4 W., Nance County, Hydrologic Unit 10210009, at skimming weir on downstream end of settling basin on left bank, 2 mi downstream from point of diversion and 3.5 mi southwest of Genoa.

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

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1860	2660	777	1950	1970	982	2310	2870	2270	1300	1160	1460
2	1900	2670	237	1930	2030	972	2300	2830	2240	1250	1150	1430
3	1920	2700	139	1850	2000	957	2720	2880	2230	1530	1120	1470
4	1950	2780	519	1840	1990	962	2730	2810	2240	1660	1080	1400
5	2020	2590	126	1870	2000	967	2630	2740	2280	1570	1070	1240
6	2080	2670	502	1920	2030	985	2650	2730	2200	1370	1070	1310
7	2130	2670	1040	1950	2030	988	2710	2740	2510	1440	1010	1410
8	2180	2630	874	2010	2040	1000	2840	2770	2650	1290	959	1620
9	2150	2670	508	2060	1970	1070	2770	2870	2520	1240	967	1820
10	2040	2380	83	1770	1990	869	2890	2820	2330	1440	920	1910
11	1800	1100	43	1770	2060	827	2840	2810	2120	1530	927	2120
12	1130	240	33	1770	1960	899	2820	2800	2110	1810	1000	2080
13	1050	111	178	1930	2020	887	2860	2870	2030	1730	1120	1890
14	1050	79	607	2090	2020	728	2820	2840	1970	1870	1240	1860
15	1060	129	829	2120	2060	666	2970	2630	1780	1920	1480	2400
16	1120	166	1010	2090	2070	945	2940	2430	1760	1890	2130	2820
17	1570	92	1140	1780	2020	1010	2420	2590	1720	1540	2660	2750
18	2200	150	1280	1980	2020	988	2130	2610	1610	1560	2500	2420
19	2270	247	1450	1950	2060	870	2000	2450	1450	1300	2200	2300
20	2140	117	1700	1940	2030	1050	2120	2430	1360	1190	1980	2310
21	2180	147	1730	1960	1360	1020	2620	2230	1650	1190	1780	2350
22	2200	169	1630	1980	995	1080	2660	2130	1560	1170	1600	2250
23	2300	445	1760	2050	1000	1180	2150	2140	1660	1150	1430	2200
24	2350	453	1850	2030	1010	1170	1990	1850	1580	1110	1560	2170
25	2260	635	1930	2020	1010	1160	2020	1710	1340	1110	1610	2150
26	2310	544	1810	2070	979	1120	2050	1700	1410	1330	1710	2100
27	1530	720	1740	2100	952	1130	2430	1630	1330	1480	1850	2000
28	2400	1080	1820	2090	961	1380	2820	1610	1220	1500	1900	2000
29	2290	789	1840	2060	---	2120	2660	1570	1120	1390	1660	1970
30	2330	194	1870	1980	---	2130	2720	1750	1080	1360	1510	1980
31	2350	---	1920	2060	---	2190	---	2160	---	1230	1460	---
TOTAL	60120	34027	32975	60970	48637	34302	76590	75000	55330	44450	45813	59190
MEAN	1939	1134	1064	1967	1737	1107	2553	2419	1844	1434	1478	1973
MAX	2400	2780	1930	2120	2070	2190	2970	2880	2650	1920	2660	2820
MIN	1050	79	33	1770	952	666	1990	1570	1080	1110	920	1240
AC-FT	119200	67490	65410	120900	96470	68040	151900	148800	109700	88170	90870	117400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2001, BY WATER YEAR (WY)

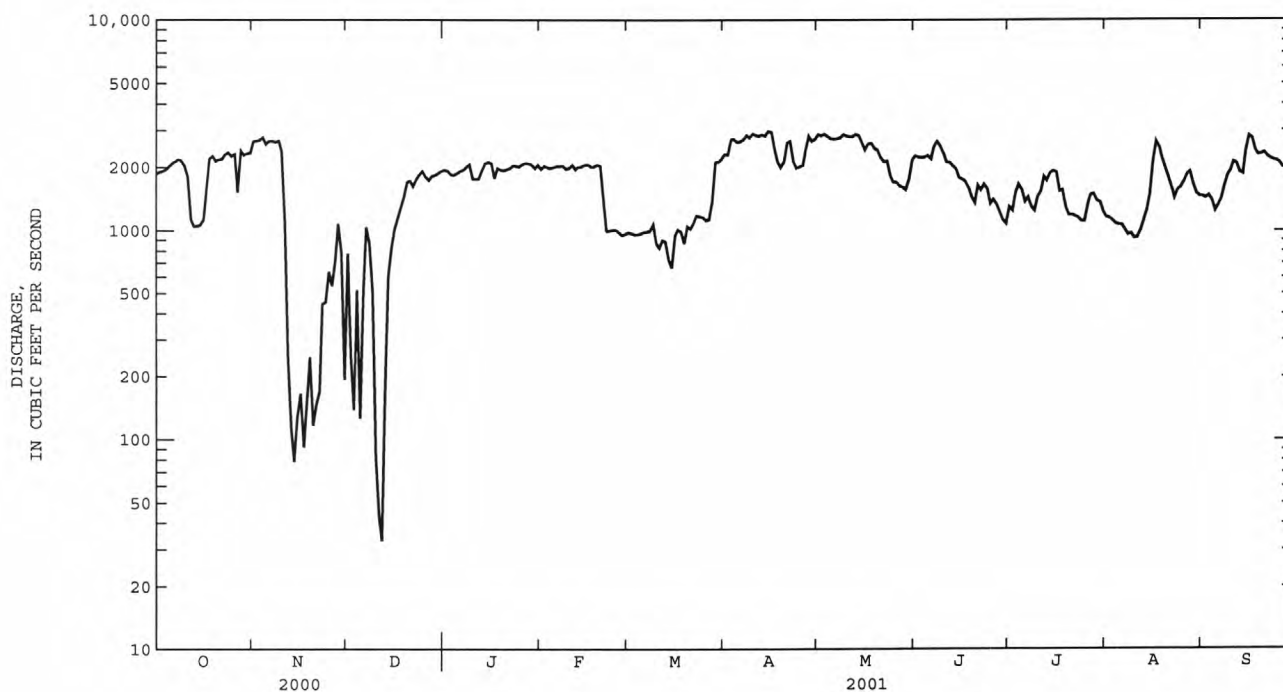
	1942	1842	993	1175	1532	1831	2143	2002	1941	1386	1256	1573
MEAN	1942	1842	993	1175	1532	1831	2143	2002	1941	1386	1256	1573
MAX	2730	2811	1886	2194	2375	2673	2778	2767	2944	2706	2382	2640
(WY)	1987	1999	1982	1983	1987	1990	1977	1957	1962	1962	1996	1951
MIN	544	508	155	129	438	506	537	378	534	309	417	526
(WY)	1938	1939	1975	1985	1958	1939	1939	1984	1938	1980	1971	1998

PLATTE RIVER BASIN

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06792500 LOUP RIVER POWER CANAL NEAR GENOA, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1938 - 2001	
ANNUAL TOTAL	533499		627404		1633	
ANNUAL MEAN	1458		1719		2006	
HIGHEST ANNUAL MEAN					585	
LOWEST ANNUAL MEAN					1999	
HIGHEST DAILY MEAN	2820	Jul 29	2970	Apr 15	3560	Nov 3 1994
LOWEST DAILY MEAN	29	Feb 14	33	Dec 12	.00	Aug 16 1966
ANNUAL SEVEN-DAY MINIMUM	69	Jan 25	138	Nov 12	11	Dec 3 1978
ANNUAL RUNOFF (AC-FT)	1058000		1244000		1183000	
10 PERCENT EXCEEDS	2290		2660		2590	
50 PERCENT EXCEEDS	1600		1850		1740	
90 PERCENT EXCEEDS	201		872		522	



PLATTE RIVER BASIN

06793000 LOUP RIVER NEAR GENOA, NE

LOCATION.--Lat 41°25'05", long 97°43'25", in SW ¼ NE ¼ sec.25, T.17 N., R.4 W., Nance County, Hydrologic Unit 10210009, on right bank 12 ft downstream from bridge on State Highway 39, 2 mi south of Genoa, 3 mi upstream from Beaver Creek, 6 mi downstream from diversion dam of Loup River Public Power District and at mile 26.8.

DRAINAGE AREA.--14,320 mi², of which about 5,620 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--August 1928 to June 1932, October 1943 to current year (October 1953 to April 1955, monthly discharge only).

REVISED RECORDS.--WDR NE-94-1: Drainage area. WDR NE-99-1: 1993 (maximum stage).

NOTE: The maximum stage for the 1993 water year had been revised in 1994 and is listed in the peak flow file, but the change was never actually shown in the 1994 water year report. The stage was changed from 11.01 ft July 24, 1993, to 12.69 ft Mar.8, 1993, affected by backwater from ice.

GAGE.--Water-stage recorder. Datum of gage is 1,540.13 ft above sea level. Aug. 17, 1928, to June 30, 1932, nonrecording gage at present site at datum 1.49 ft higher. Oct. 1, 1943, to Sept. 16, 1974, (Apr. 26 to Dec. 22, 1949, wire-weight gage only), at present site and datum. Sept. 17, 1974, to Nov. 21, 1977, at site 300 ft upstream at present datum. Data collection platform at station.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. Records do not include flow of Loup River power canal (station 06792500), which diverts at point 6 mi upstream and returns to Platte River below mouth of Loup River; diversion began Dec. 2, 1936.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	895	1360	e200	e300	e1600	1830	619	95	105	33	128
2	40	962	1870	e200	e200	e1650	1320	620	58	144	28	119
3	26	1150	3050	e200	e180	e1700	635	1470	58	67	37	135
4	29	684	2430	e250	e260	e1700	1340	1840	56	44	110	135
5	28	413	2680	e250	e250	e1750	1630	4070	54	40	53	161
6	22	594	2620	e350	e250	e1800	862	7720	49	174	58	247
7	35	496	2210	e380	e300	e1850	1700	4980	159	45	46	283
8	e48	398	2380	e480	e260	e1900	3180	3210	57	40	80	358
9	26	213	e2700	e580	e240	e1950	2760	2590	36	70	51	296
10	58	473	e3100	e800	e250	e2000	2310	2000	34	247	46	296
11	99	915	e3000	e800	e350	e2200	3800	1910	121	120	45	510
12	670	1470	e3000	e900	e400	e2500	6370	1570	68	329	57	152
13	1030	1210	e2800	e900	e400	e3000	4070	632	66	104	53	190
14	1110	1140	e1200	e700	e450	e3400	2930	325	71	651	51	165
15	1270	1110	e1000	e600	e450	e5000	2410	216	124	178	115	653
16	1330	1630	e600	e500	e400	e10000	2460	e135	62	96	52	744
17	852	2440	e500	e600	e360	e12000	2190	e130	55	160	524	2200
18	21	1630	e450	e540	e380	e9600	1660	e76	52	64	50	1340
19	8.6	1590	e400	e160	e350	11300	1260	e78	57	69	29	1250
20	41	1690	e350	e240	e400	7020	1000	e104	184	79	19	381
21	15	1300	e350	e280	e700	4170	463	e130	91	71	18	136
22	25	1450	e420	e180	e1400	3640	1380	e80	165	57	17	75
23	24	1520	e350	e220	e1600	3610	9560	69	57	46	110	58
24	133	1750	e300	e300	e1600	3660	6190	59	49	40	31	63
25	426	1650	e300	e340	e1500	2980	3060	63	185	43	29	25
26	324	2210	e350	e300	e1400	2710	2980	65	57	114	26	32
27	1390	2330	e400	e320	e1500	2710	1630	60	52	38	41	50
28	218	1810	e350	e320	e1500	2520	1550	54	55	25	21	20
29	524	2100	e300	e300	---	1640	1350	55	61	22	20	23
30	1010	2660	e250	e260	---	1730	813	85	64	25	43	21
31	2030	---	e200	e270	---	1730	---	129	---	37	75	---
TOTAL	12911.6	39883	41270	12720	17630	115020	74693	35144	2352	3344	1968	10246
MEAN	417	1329	1331	410	630	3710	2490	1134	78.4	108	63.5	342
MAX	2030	2660	3100	900	1600	12000	9560	7720	185	651	524	2200
MIN	8.6	213	200	160	180	1600	463	54	34	22	17	20
AC-FT	25610	79110	81860	25230	34970	228100	148200	69710	4670	6630	3900	20320

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2001, BY WATER YEAR (WY)

	MEAN	154	446	1064	961	1369	1689	705	637	898	367	253	236
MAX	1084	1650	2533	2632	4762	5650	3745	4777	7365	6214	4253	2055	
(WY)	1999	1992	1998	1990	1997	1978	1984	1984	1947	1993	1966	1998	
MIN	3.76	41.1	177	67.5	72.4	95.0	18.5	8.18	7.54	.17	1.15	.000	
(WY)	1977	1953	1956	1982	1955	1981	1981	1963	1981	1963	1970	1956	

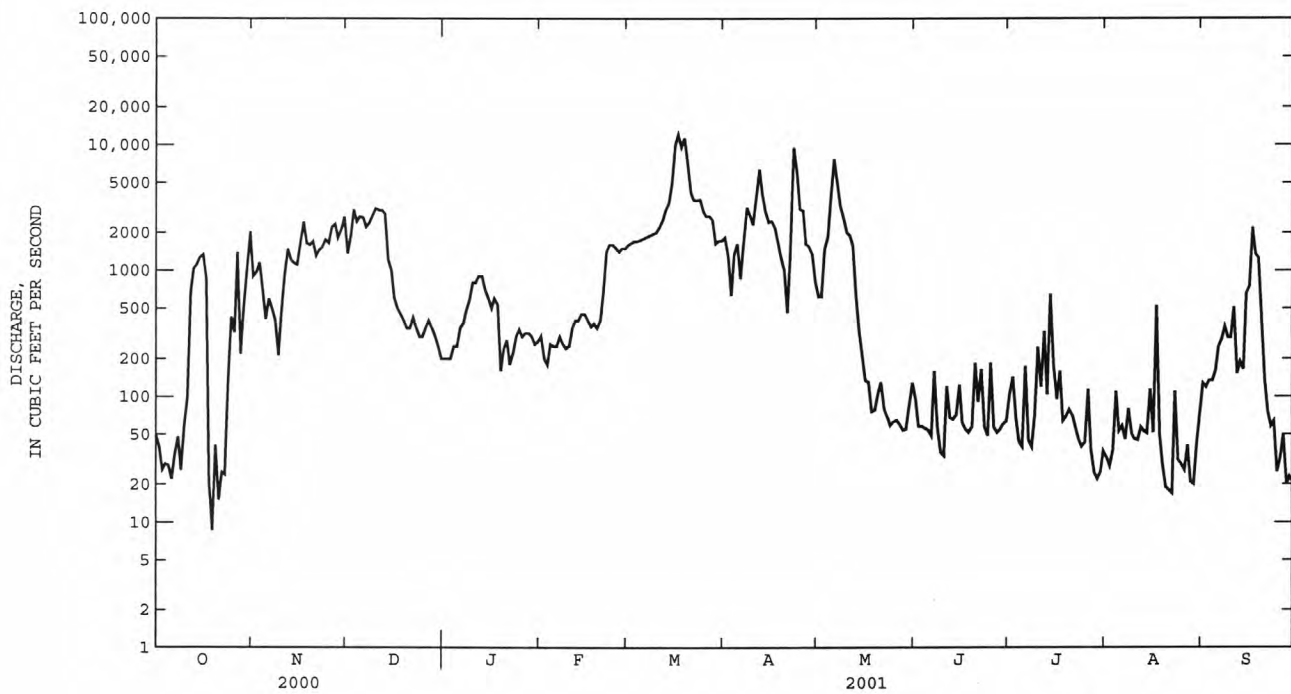
PLATTE RIVER BASIN

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06793000 LOUP RIVER NEAR GENOA, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1944 - 2001	
ANNUAL TOTAL	244511.2		367181.6		729	
ANNUAL MEAN	668		1006		1993	
HIGHEST ANNUAL MEAN					182	
LOWEST ANNUAL MEAN					70800	
HIGHEST DAILY MEAN	3100	Dec 10	12000	Mar 17	Aug 13 1966	
LOWEST DAILY MEAN	8.6	Jul 14	8.6	Oct 19	Aug 20 1956	
ANNUAL SEVEN-DAY MINIMUM	23	Jul 10	30	Jul 28	Aug 20 1956	
MAXIMUM PEAK FLOW			*14600	Apr 23	Aug 13 1966	
MAXIMUM PEAK STAGE			**9.12	Mar 15	Aug 13 1966	
ANNUAL RUNOFF (AC-FT)	485000		728300		527800	
10 PERCENT EXCEEDS	1990		2670		2100	
50 PERCENT EXCEEDS	254		329		122	
90 PERCENT EXCEEDS	33		40		13	

e Estimated.
 * Stage 8.22 ft.
 ** Backwater from ice.



LOCATION.--Lat 41°26'32", long 097°44'11", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.14, T.17 N., R.4 W., Nance County, Hydrologic Unit 10210009, on left bank in city park at southwest corner of Genoa, 0.2 mi downstream from Union Pacific Railroad bridge, 0.2 mi upstream from bridge on State Highway 39, and 4.0 mi upstream from mouth.

PERIOD OF RECORD.--October 1940 to current year.

REVISED RECORDS.--WSP 1310: 1942 (M). WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,542.13 ft above sea level. October 1940 to Nov. 5, 1942, nonrecording gage and Nov. 6, 1942, to Nov. 1, 1955, water-stage recorder, at site 0.4 mi upstream at datum 4.62 ft higher. Data collection platform at station.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow affected slightly by ground-water and surface-water withdrawals for irrigation.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	177	e84	e66	e78	e82	156	175	152	66	29	34
2	46	129	e82	e78	e94	e84	161	171	157	83	23	39
3	44	114	e76	e82	e102	e84	165	195	141	166	37	42
4	48	98	e80	e90	e92	e84	159	219	126	188	30	39
5	52	96	e90	e90	e88	e88	160	407	128	124	19	34
6	50	164	e102	e94	e90	e94	165	516	125	88	13	28
7	53	117	e88	e82	e78	e110	205	630	131	78	9.7	35
8	54	99	e74	e88	e68	e130	203	654	128	65	6.5	44
9	54	91	e60	e100	e60	e150	263	491	120	55	5.1	69
10	57	84	e46	e84	e74	e180	252	382	115	64	5.6	64
11	59	90	e60	e84	e84	e230	319	315	109	72	2.5	62
12	58	80	e52	e92	e76	e290	347	265	103	66	3.0	55
13	57	e88	e68	e86	e62	329	388	231	101	63	18	51
14	57	e80	e64	e86	e62	986	384	208	102	49	27	72
15	57	e74	e58	e86	e62	1010	335	191	95	44	43	246
16	55	e84	e60	e80	e66	440	268	173	99	43	107	727
17	56	e92	e58	e70	e74	362	214	159	98	46	197	416
18	56	e74	e64	e60	e84	310	188	147	94	59	147	265
19	58	e74	e52	e64	e80	283	173	141	90	65	107	201
20	56	e74	e46	e70	e72	268	162	143	85	46	75	167
21	57	e78	e54	e70	e82	270	154	139	85	36	63	146
22	56	e78	e58	e76	e82	270	156	131	87	37	52	130
23	61	e84	e58	e66	e82	253	298	123	90	30	44	117
24	68	e84	e58	e62	e80	230	492	114	87	42	40	108
25	77	e84	e58	e62	e76	213	543	111	80	44	48	101
26	69	e94	e64	e60	e64	191	431	109	73	45	44	98
27	69	e86	e68	e68	e70	176	323	107	70	41	40	94
28	65	e80	e60	e90	e80	166	264	102	66	37	36	94
29	79	e80	e52	e90	---	160	222	97	75	32	25	91
30	134	e90	e50	e80	---	161	194	113	65	33	24	89
31	213	---	e54	e76	---	158	---	128	---	25	27	---
TOTAL	2017	2817	1998	2432	2162	7842	7744	7087	3077	1932	1347.4	3758
MEAN	65.1	93.9	64.5	78.5	77.2	253	258	229	103	62.3	43.5	125
MAX	213	177	102	100	102	1010	543	654	157	188	197	727
MIN	42	74	46	60	60	82	154	97	65	25	2.5	28
AC-FT	4000	5590	3960	4820	4290	15550	15360	14060	6100	3830	2670	7450

MEAN	81.4	88.5	84.9	84.0	135	199	170	177	232	141	93.8	81.7
MAX	184	173	150	197	537	688	519	432	808	1248	601	216
(WY)	1987	1983	1973	1973	1971	1993	1984	1984	1967	1950	1966	1993
MIN	43.4	47.6	42.2	48.0	57.4	78.0	74.2	67.3	64.0	12.9	8.72	29.8
(WY)	1981	1941	1977	1957	1979	1981	1981	1981	1980	1980	1976	1976

PLATTE RIVER BASIN

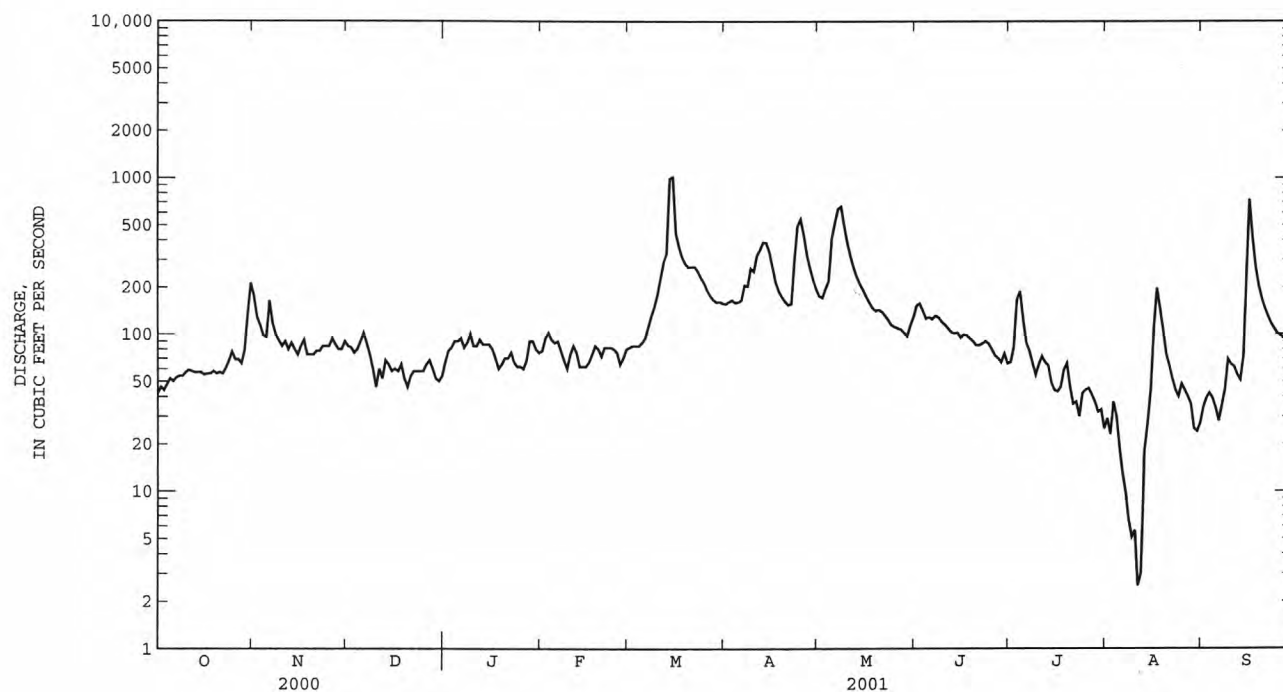
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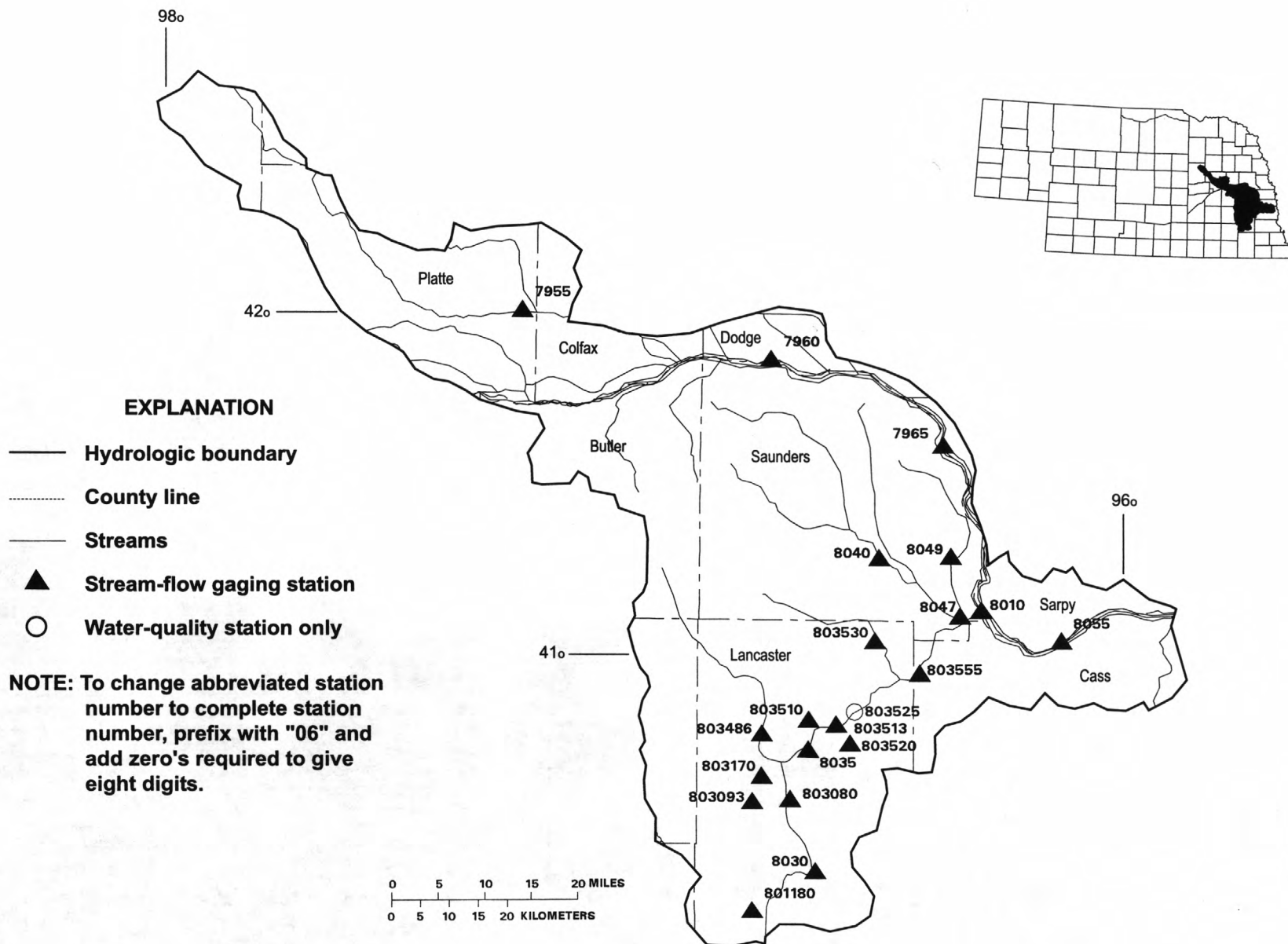
06794000 BEAVER CREEK AT GENOA, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1941 - 2001	
ANNUAL TOTAL	37173.8		44213.4		131	
ANNUAL MEAN	102		121		268	
HIGHEST ANNUAL MEAN					70.9	
LOWEST ANNUAL MEAN					1993	
HIGHEST DAILY MEAN	882	Jul 6	1010	Mar 15	10000	Jul 19 1950
LOWEST DAILY MEAN	8.4	Aug 17	2.5	Aug 11	.41	Jul 25 1974
ANNUAL SEVEN-DAY MINIMUM	13	Aug 12	6.5	Aug 6	.90	Jul 24 1974
MAXIMUM PEAK FLOW			1280	Mar 15	21200	Jul 19 1950
MAXIMUM PEAK STAGE			9.68	Mar 15	*18.70	Jul 19 1950
ANNUAL RUNOFF (AC-FT)	73730		87700		94540	
10 PERCENT EXCEEDS	162		252		211	
50 PERCENT EXCEEDS	92		84		90	
90 PERCENT EXCEEDS	40		42		49	

e Estimated.

* Site and datum then in use.





PLATTE RIVER BASIN
LOWER PLATTTE RIVER BASIN

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*Station number	Station name	Page
794650	Clear Creek 1.75 mi W of Polk County Line.....	164
7955	Shell Creek near Columbus.....	166
7960	Platte River at North Bend.....	168
7965	Platte River near Leshara.....	170
	(Elkhorn River Basin stations).....	172-193
8010	Platte River near Ashland.....	194
801180	Olive Branch near Hallam.....	198
8030	Salt Creek at Roca.....	202
803080	Salt Creek at Pioneers Blvd at Lincoln.....	204
803093	Haines Branch at SW 56th St. at Lincoln.....	206
803170	Middle Creek at SW 40th St. at Lincoln.....	208
803486	Oak Creek at Air Park Rd. at Lincoln.....	210
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803513	Salt Creek at 70th St. at Lincoln.....	216
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8047	Wahoo Creek at Ashland.....	226
8049	Johnson Creek near Memphis.....	228
8055	Platte River at Louisville.....	230

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

PLATTE RIVER BASIN

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

LOCATION.--Lat 41°21'07", long 097°24'11", in SE ¼ SW ¼, sec.14, T.16 N., R.1 W., Polk County, Hydrologic Unit 10200103, on right bank of the upstream side of bridge, 1.75 mi west of Polk County line. (NOTE: Refer to map on page 74.)

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

GAGE.--Water-stage recorder.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	6.2	8.2	9.1	e14	11	18	17	40	15	2.9	1.1
2	4.8	5.6	8.3	11	e15	11	19	18	38	15	2.8	1.2
3	4.8	5.6	8.6	12	e15	12	20	22	36	14	2.4	1.3
4	4.7	5.8	8.5	13	e15	14	20	30	35	13	2.2	1.4
5	5.0	7.2	8.3	13	e14	14	20	98	36	12	2.3	1.4
6	5.1	12	8.8	13	e14	16	18	381	35	12	2.3	1.5
7	4.3	7.3	10	13	e14	17	20	385	33	11	2.2	1.8
8	4.3	6.6	9.4	13	e14	17	19	227	32	10	2.0	1.7
9	4.4	6.7	10	13	e13	21	19	129	30	9.9	1.9	1.8
10	4.3	6.5	9.6	13	e12	27	18	85	29	9.3	1.9	1.8
11	4.4	6.7	e7.4	14	e12	24	31	66	27	9.2	1.9	1.8
12	6.2	7.5	9.5	13	e12	21	54	55	25	8.8	2.0	1.9
13	5.3	7.3	10	13	e12	23	61	49	24	8.2	1.8	1.9
14	4.9	6.6	10	13	e11	25	46	44	25	7.4	1.9	2.3
15	4.8	6.7	10	13	e11	27	38	39	23	7.0	2.1	2.8
16	4.6	6.3	10	9.0	e11	27	33	36	22	7.0	1.9	2.5
17	4.8	5.8	9.9	e9.0	e12	25	30	34	22	6.8	1.9	2.4
18	4.7	6.2	8.6	e9.0	e13	24	28	33	21	6.7	1.8	2.5
19	4.9	6.7	9.5	e9.4	e13	23	27	32	20	6.4	1.9	2.5
20	4.7	6.3	9.8	e9.8	e12	23	26	36	20	5.7	1.7	2.6
21	4.8	6.7	9.4	e10	e12	22	25	36	20	5.3	1.6	2.6
22	5.2	6.8	e9.0	e10	e11	22	25	34	19	5.0	1.5	3.0
23	5.3	7.0	e8.0	e10	e10	21	26	32	19	5.6	1.4	2.8
24	5.7	7.1	e8.0	e11	e10	20	25	31	18	5.1	1.5	2.9
25	5.7	7.2	8.7	e12	e10	20	24	30	17	4.8	1.6	2.9
26	5.7	7.5	9.4	e12	e11	19	23	29	17	4.8	1.5	3.0
27	5.6	7.6	9.6	e13	e11	19	22	28	17	4.8	1.3	3.1
28	5.7	7.8	9.7	e14	11	19	20	27	16	4.5	1.2	3.2
29	6.8	8.0	8.8	e14	---	18	19	26	15	3.9	1.2	3.3
30	6.7	7.8	e9.0	e14	---	18	18	32	15	3.5	1.1	3.5
31	6.2	---	9.1	e14	---	19	---	38	---	3.0	.93	---
TOTAL	159.2	209.1	283.1	369.3	345	619	792	2159	746	244.7	56.63	68.5
MEAN	5.14	6.97	9.13	11.9	12.3	20.0	26.4	69.6	24.9	7.89	1.83	2.28
MAX	6.8	12	10	14	15	27	61	385	40	15	2.9	3.5
MIN	4.3	5.6	7.4	9.0	10	11	18	17	15	3.0	.93	1.1
AC-FT	316	415	562	733	684	1230	1570	4280	1480	485	112	136

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000	2001
MEAN	10.1	17.0	17.3	15.5	18.8	23.5
MAX	13.2	26.0	25.0	20.1	24.1	33.5
(WY)	1997	1997	1997	1999	1999	1999
MIN	5.14	6.97	9.13	11.9	12.3	18.0
(WY)	2001	2001	2001	2001	2001	1996

PLATTE RIVER BASIN

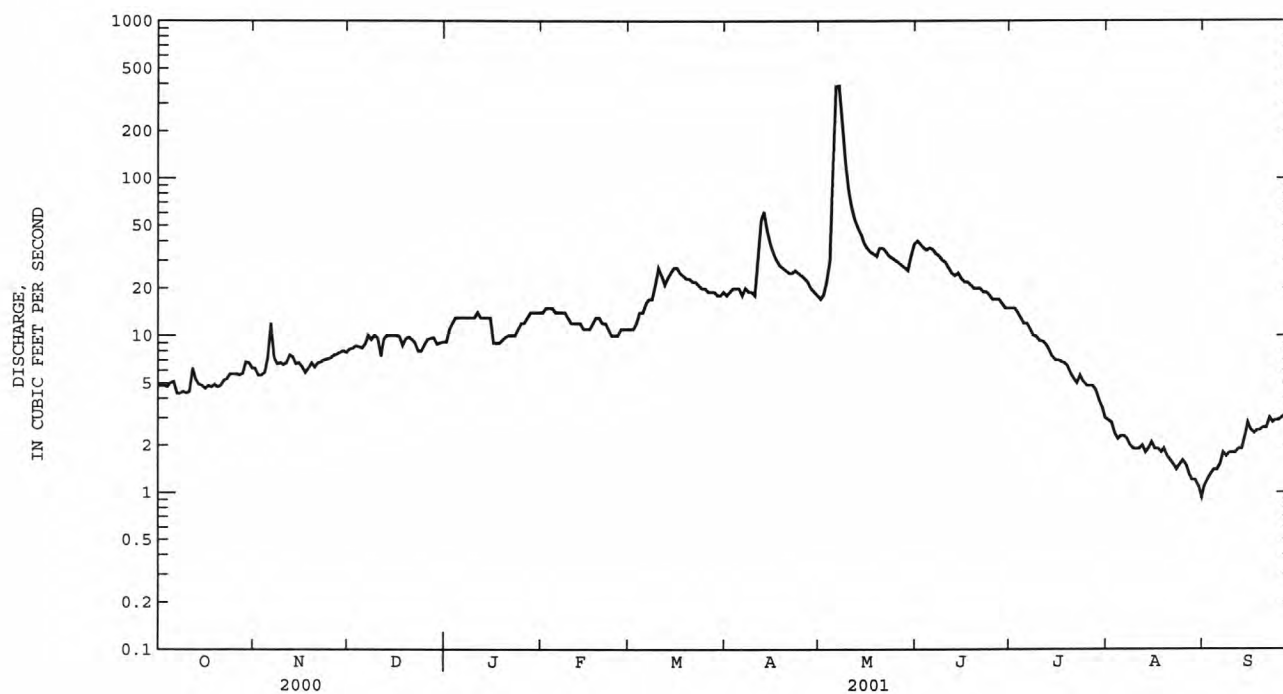
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06794650 CLEAR CREEK 1.75 MILE WEST OF POLK COUNTY LINE, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1996 - 2001	
ANNUAL TOTAL	4260.9		6051.53			
ANNUAL MEAN	11.6		16.6		26.3	
HIGHEST ANNUAL MEAN					50.3 1999	
LOWEST ANNUAL MEAN					13.2 2000	
HIGHEST DAILY MEAN	25	Apr 26	385	May 7	1160	Jun 2 1999
LOWEST DAILY MEAN	2.6	Aug 17	.93	Aug 31	.93	Aug 31 2001
ANNUAL SEVEN-DAY MINIMUM	2.8	Aug 12	1.1	Aug 27	1.1	Aug 27 2001
MAXIMUM PEAK FLOW			429	May 6	1360	Jun 2 1999
MAXIMUM PEAK STAGE			7.40	May 6	*8.65	Jun 2 1999
ANNUAL RUNOFF (AC-FT)	8450		12000		19090	
10 PERCENT EXCEEDS	19		30		41	
50 PERCENT EXCEEDS	12		10		17	
90 PERCENT EXCEEDS	3.8		2.1		4.8	

e Estimated.

* From floodmark.



PLATTE RIVER BASIN

06795500 SHELL CREEK NEAR COLUMBUS, NE

LOCATION.--Lat 41°31'33", long 097°16'55", in NE ¼, NW ¼, sec.23, T.18 N., R.1 E., Platte County, Hydrologic Unit 10200201, on right bank 10 ft upstream from county road bridge, 1 mi upstream from Loseke Creek, 7 mi northeast of Columbus, and at mile 32.2.

DRAINAGE AREA.--294 mi².

PERIOD OF RECORD.--August 1947 to September 1975, October 1977 to current year.

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

GAGE.--Water-stage recorder. Elevation of gage is 1,435 ft above sea level. Data collection platform at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	25	24	e15	e25	e43	41	35	55	23	12	8.7
2	10	21	24	e14	e26	e45	38	38	46	24	13	8.5
3	11	19	24	e16	e28	e56	39	81	42	24	13	7.3
4	11	17	e23	e18	e29	e70	41	101	40	25	13	7.1
5	12	19	e22	e18	e30	e96	41	409	41	25	13	6.5
6	12	25	e20	e15	e26	e125	40	738	56	23	11	6.5
7	12	130	e20	e13	e26	e170	44	372	42	25	11	7.3
8	13	46	e20	e13	e27	230	58	134	38	24	11	8.9
9	13	28	e19	e17	e26	313	51	91	37	23	10	8.7
10	13	23	e18	e20	e23	408	39	76	35	23	9.0	7.6
11	13	22	e17	e22	e24	407	189	64	34	22	10	6.7
12	13	23	e16	e25	e25	336	275	57	33	21	11	6.0
13	15	26	e15	e24	e27	287	115	52	33	21	11	5.7
14	14	31	e14	e25	e28	1190	73	50	34	20	11	5.9
15	14	25	e13	e21	e29	1080	56	52	47	19	13	12
16	14	26	e12	e21	e24	631	49	47	32	18	32	518
17	13	23	e11	e25	e35	176	46	44	31	19	48	283
18	14	22	e11	e24	e32	98	42	42	30	210	23	44
19	15	24	e11	e21	e31	79	40	40	30	207	12	23
20	16	24	e15	e26	e35	70	40	40	29	42	10	16
21	16	24	e14	e25	e40	69	39	44	29	25	9.1	13
22	16	23	e18	e23	e37	72	41	41	29	21	9.4	13
23	16	27	e15	e23	e35	58	69	39	28	16	9.5	11
24	17	25	e16	e23	e37	51	78	37	28	14	10	10
25	18	24	e15	e20	e38	45	65	37	26	19	12	9.5
26	20	26	e15	e18	e40	42	48	36	25	21	14	9.2
27	19	25	e16	e15	e40	40	44	36	24	32	9.9	9.1
28	17	25	e14	e18	e40	40	40	35	23	17	9.2	9.0
29	19	26	e13	e19	---	40	37	34	22	15	9.6	8.4
30	24	25	e15	e21	---	39	36	38	21	14	9.9	8.0
31	36	---	e15	e23	---	40	---	53	---	13	8.6	---
TOTAL	476	849	515	621	863	6446	1854	2993	1020	1045	408.2	1097.6
MEAN	15.4	28.3	16.6	20.0	30.8	208	61.8	96.5	34.0	33.7	13.2	36.6
MAX	36	130	24	26	40	1190	275	738	56	210	48	518
MIN	10	17	11	13	23	39	36	34	21	13	8.6	5.7
AC-FT	944	1680	1020	1230	1710	12790	3680	5940	2020	2070	810	2180

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2001, BY WATER YEAR (WY)

	MEAN	18.0	17.9	15.6	19.1	51.6	96.8	43.3	69.2	125	66.4	38.8	24.5
MAX	74.6	62.9	42.2	84.7	322	469	210	552	702	515	202	195	
(WY)	1983	1999	1994	1973	1971	1993	1984	1982	1990	1993	1951	1989	
MIN	2.90	5.21	5.38	6.03	3.00	13.1	8.14	8.59	9.25	3.77	3.03	3.23	
(WY)	1959	1959	1981	1957	1950	1981	1981	1981	1980	1974	1955	1980	

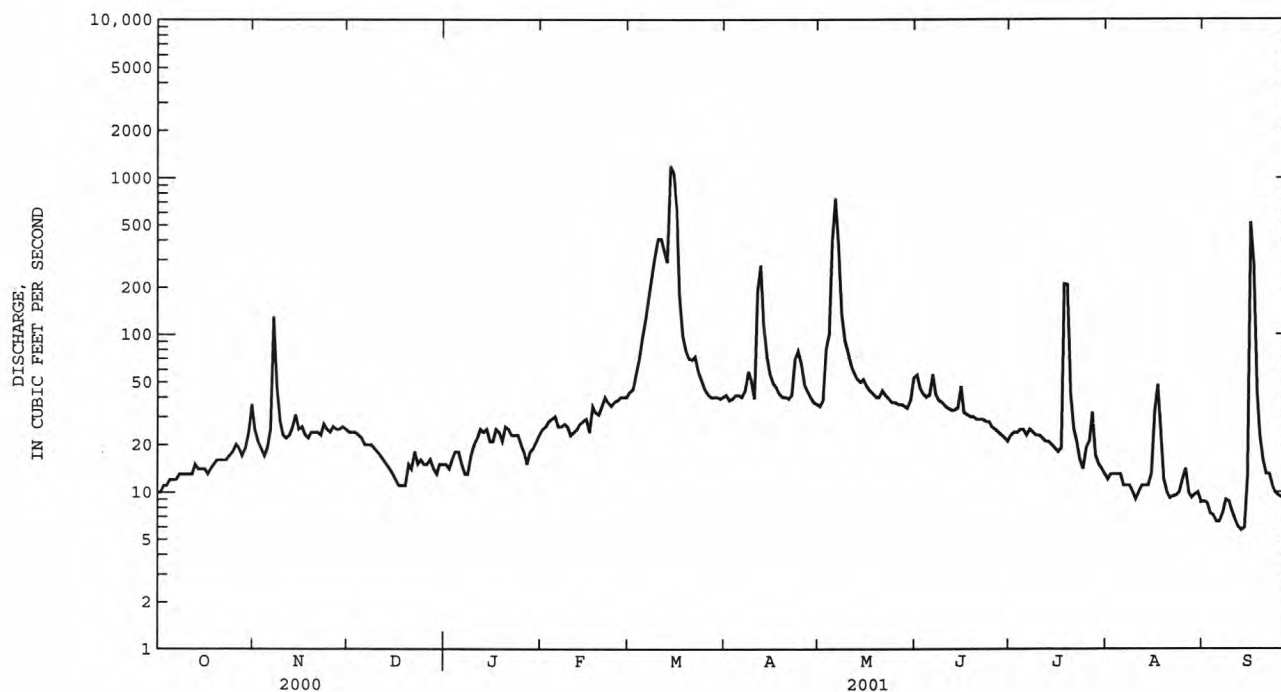
PLATTE RIVER BASIN

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06795500 SHELL CREEK NEAR COLUMBUS, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1948 - 2001	
ANNUAL TOTAL	14399.0		18187.8		48.7	
ANNUAL MEAN	39.3		49.8		136	
HIGHEST ANNUAL MEAN					13.6	
LOWEST ANNUAL MEAN					4900	
HIGHEST DAILY MEAN	1290	Jul 8	1190	Mar 14		1993
LOWEST DAILY MEAN	3.4	Sep 13	5.7	Sep 13		1980
ANNUAL SEVEN-DAY MINIMUM	4.9	Sep 8	7.1	Sep 8		1990
MAXIMUM PEAK FLOW			1670	Mar 14		1954
MAXIMUM PEAK STAGE			13.11	Mar 14		1990
ANNUAL RUNOFF (AC-FT)	28560		36080			1990
10 PERCENT EXCEEDS	42		69			
50 PERCENT EXCEEDS	26		24			
90 PERCENT EXCEEDS	11		11			

e Estimated.



PLATTE RIVER BASIN

06796000 PLATTE RIVER AT NORTH BEND, NE

LOCATION.--Lat 41°27'10", long 096°45'50", in SE ¼ sec. 7., T. 17 N., R. 6 E., Douglas County, Hydrologic Unit 10200202, on left bank 80 ft upstream from bridge on State Highway 79, 1 mi south of North Bend, 5 mi downstream from Shell Creek, and at mile 73.0.

DRAINAGE AREA.--70,400 mi², of which about 57,800 mi² contributes directly to surface runoff.

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

GAGE.--Water-stage recorder. Datum of gage is 1,262.32 ft above sea level. Prior to Sept. 12, 1951, nonrecording gage and Sept. 12, 1951 to Sept. 30, 1970 water-stage recorder, at present site at datum 2.00 ft higher. Data collection platform at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2600	6910	3750	e2500	e3700	e3000	6120	6540	4210	1700	2050	1990
2	2200	5520	3860	e2500	e3600	e3200	6300	6040	4350	1490	2370	2320
3	2860	4600	3380	e2500	e3600	e3300	6130	6420	4120	2610	1320	1910
4	2350	6420	3850	e2500	e3700	e3400	6470	7540	3940	2470	1470	2220
5	2710	4960	3430	e2600	e3800	e3500	6950	10700	4250	1890	1630	1810
6	2850	6560	3070	e2700	e3800	e3600	7160	16700	4150	2160	1080	1710
7	2970	5990	4060	e2700	e3700	e3700	6470	18400	4210	2060	1200	1810
8	3180	5880	4840	e2900	e3500	e3800	7110	13800	4270	1600	1170	2010
9	2750	5340	4120	e3000	e3400	e3900	8560	12500	4230	1420	813	2190
10	3200	4310	e2200	e3100	e3300	e4100	7990	10900	3770	2180	1210	2230
11	2650	3680	e1200	e3200	e3200	e4300	8890	9490	3380	1360	1090	2370
12	2530	2680	e1040	e3400	e3200	e4500	12200	8400	3350	2010	827	2520
13	2290	3850	e1000	e3600	e3200	e4900	11200	8070	2910	2500	829	2640
14	3060	2810	e1100	e3700	e3300	e6200	10500	7090	4250	2220	1410	2450
15	3250	2390	e1300	e3800	e3500	e18000	8890	5870	3190	2370	1500	2920
16	3190	2540	e1700	e3700	e3600	e17000	8950	5500	2640	2960	2200	4540
17	3210	2610	e1850	e3700	e3500	15500	7990	5580	2510	2280	2570	5490
18	3500	3100	e2000	e3600	e3500	10500	7580	4460	2640	2100	3510	5740
19	4200	3480	e2250	e3500	e3500	8470	6700	4610	2370	2700	3540	4450
20	3210	3340	e2450	e3500	e3400	7400	6040	4980	2180	1840	3210	3960
21	3030	3550	e2600	e3600	e3400	6950	5200	4960	2430	1180	3190	3690
22	3250	3910	e2700	e3600	e3300	6680	6320	4200	2270	1750	2600	3480
23	3170	3720	e2800	e3700	e3300	6870	7360	4050	2430	1430	2420	3650
24	3470	3580	e2700	e3600	e3200	6840	14400	3690	2540	1570	2520	3020
25	3790	4660	e2700	e3500	e3200	6650	10100	3190	2130	1610	1960	3130
26	4970	4420	e2700	e3500	e3200	6210	9120	3660	2110	1460	2100	3150
27	4680	4310	e2600	e3500	e3200	5950	9310	3090	2120	2080	1950	3680
28	3310	4910	e2600	e3500	e3100	6000	6380	2830	2130	2630	2080	3400
29	5090	4080	e2600	e3600	---	6010	7680	2900	1390	2620	2100	3490
30	5020	3680	e2600	e3600	---	6000	6850	3100	1550	2620	2050	3380
31	5190	---	e2600	e3700	---	5930	---	3920	---	2210	1970	---
TOTAL	103730	127790	81650	102100	95900	202360	240920	213180	92020	63080	59939	91350
MEAN	3346	4260	2634	3294	3425	6528	8031	6877	3067	2035	1934	3045
MAX	5190	6910	4840	3800	3800	18000	14400	18400	4350	2960	3540	5740
MIN	2200	2390	1000	2500	3100	3000	5200	2830	1390	1180	813	1710
AC-FT	205700	253500	162000	202500	190200	401400	477900	422800	182500	125100	118900	181200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2001, BY WATER YEAR (WY)

	MEAN	3847	4212	3627	3503	5374	7459	6160	6010	6701	3751	2549	3109
MAX	10130	9462	8581	7361	11850	16870	19400	21770	25340	17070	8021	9022	
(WY)	1974	1985	1985	1984	1984	1993	1984	1984	1983	1993	1983	1986	
MIN	1624	1938	1413	1206	2689	3685	2881	1952	1932	381	442	936	
(WY)	1980	1956	1956	1957	1979	1957	1967	1955	1981	1974	1955	1955	

PLATTE RIVER BASIN

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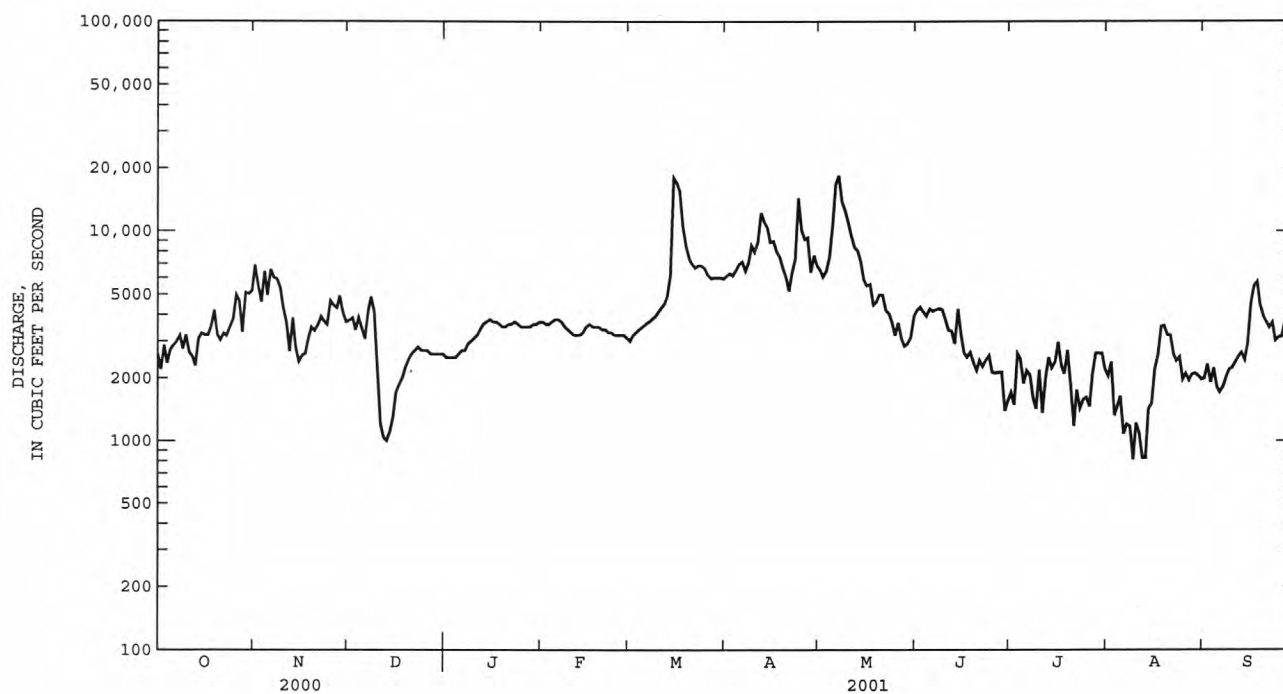
06796000 PLATTE RIVER AT NORTH BEND, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1949 - 2001	
ANNUAL TOTAL	1426193		1474019		4674	
ANNUAL MEAN	3897		4038		2168	1984
HIGHEST ANNUAL MEAN					10070	1956
LOWEST ANNUAL MEAN					2168	1956
HIGHEST DAILY MEAN	7660	Feb 26	18400	May 7	82300	Mar 10 1993
LOWEST DAILY MEAN	599	Aug 16	813	Aug 9	36	Jul 29 1974
ANNUAL SEVEN-DAY MINIMUM	1000	Aug 13	1020	Aug 7	146	Jul 24 1974
MAXIMUM PEAK FLOW			19400	May 7	*112000	Mar 29 1960
MAXIMUM PEAK STAGE			7.75	Mar 15	**15.55	Mar 19 1978
ANNUAL RUNOFF (AC-FT)	2829000		2924000		3386000	
10 PERCENT EXCEEDS	5980		6950		8420	
50 PERCENT EXCEEDS	3970		3400		3800	
90 PERCENT EXCEEDS	1860		1850		1450	

e Estimated.

* Stage 10.04 ft.

** Ice jam.



PLATTE RIVER BASIN

06796500 PLATTE RIVER NEAR LESHARA, NE

LOCATION.--Lat 41°19'12", long 096°24'14", in NW ¼ sec.34, T.16 N., R.9 E., Douglas County, Hydrologic Unit 10200202, on left bank 250 ft downstream from bridge on Nebraska Highway 64, 1.0 mi southeast of Leshara, NE.

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

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2500	4830	3690	e2700	e3900	e3500	5830	7270	4480	1400	2800	2360
2	2600	5520	4030	e2700	e3900	e3600	6250	7020	5280	1420	2630	2470
3	e2360	4540	3600	e2700	e3900	e3700	6250	6880	5040	2170	2500	2620
4	e2320	4740	3610	e2800	e4000	e3800	6170	7700	4900	2030	2020	2290
5	2520	4780	3640	e2800	e4100	e3900	6710	10900	5410	1670	1800	1990
6	2580	5150	2550	e2900	e4100	e4000	7000	16900	5370	1740	1780	2010
7	2470	5650	3250	e3000	e4000	e4100	7070	19200	5400	1470	1170	1670
8	2300	4670	4080	e3200	e3900	e4200	7090	15300	5260	1610	1390	1980
9	e2660	4640	3780	e3400	e3800	e4300	7560	14100	5120	1370	1160	2080
10	e2430	4100	4130	e3500	e3700	e4500	9380	12500	5180	1480	913	2300
11	2630	3470	1890	e3900	e3800	e4800	8100	10800	5270	1530	1180	2280
12	2530	2050	e1100	e4000	e3900	e5400	12100	9610	4910	1530	1010	2320
13	2200	e2350	e1050	e4200	e3900	e6000	13000	8570	4160	2070	776	2810
14	2480	e2900	e1200	e4200	e3800	e7000	12600	8680	7120	2480	870	2610
15	2890	e2150	e1600	e4100	e3800	e9000	11300	7640	5400	2250	1440	3100
16	2920	e1900	e1900	e4100	e3800	e18000	10300	6100	4540	3030	1710	3760
17	3020	e1900	e2200	e4100	e3800	e16000	10100	6440	4190	3010	2220	4870
18	3180	e2300	e2500	e4000	e3800	e15000	9880	6050	4360	2550	3240	5710
19	3670	2950	e2700	e4000	e3700	e12000	9430	5740	3590	2400	3830	5150
20	3640	e2700	e2900	e4000	e3800	e10000	8740	5530	2940	2540	3810	4620
21	2950	2300	e3000	e4100	e3700	8730	8090	6810	3170	1940	3910	4170
22	3040	2990	e3100	e4200	e3700	8460	7990	5690	2870	1370	3820	4010
23	3220	3070	e3100	e4100	e3700	8420	8020	4890	3090	1790	3230	3930
24	3280	3240	e3100	e4000	e3600	8150	15100	4970	2610	1560	3490	3700
25	3390	3400	e3000	e3900	e3600	7930	12700	4350	2750	1660	2670	3570
26	3810	4840	e2900	e3800	e3600	7170	11300	4400	2470	1690	3010	3880
27	3970	4700	e2900	e3800	e3500	6730	11500	4170	2370	1940	2350	3700
28	2760	4960	e2900	e3900	e3500	6500	10000	3590	2360	2790	2460	3860
29	3990	4460	e2900	e4000	---	6180	8970	3450	1850	2730	2620	3610
30	4270	3660	e2800	e4000	---	6070	8760	3370	1520	2860	2950	3500
31	4410	---	e2800	e4000	---	6140	---	4840	---	2890	2580	---
TOTAL	92990	110910	87900	114100	106300	223280	277290	243460	122980	62970	71339	96930
MEAN	3000	3697	2835	3681	3796	7203	9243	7854	4099	2031	2301	3231
MAX	4410	5650	4130	4200	4100	18000	15100	19200	7120	3030	3910	5710
MIN	2200	1900	1050	2700	3500	3500	5830	3370	1520	1370	776	1670
AC-FT	184400	220000	174300	226300	210800	442900	550000	482900	243900	124900	141500	192300
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2001, BY WATER YEAR (WY)												
MEAN	5248	5803	5283	5074	6949	6810	7891	7688	9493	5228	4182	4155
MAX	6733	7784	6762	7552	10040	7960	11300	10650	17460	10540	7163	6793
(WY)	1998	1998	1998	1998	1997	1998	1998	1995	1995	1995	1996	1996
MIN	3000	3697	2835	3413	3796	5823	5379	4436	3285	2031	1665	2043
(WY)	2001	2001	2001	1996	2001	1996	2000	2000	2000	2001	2000	2000

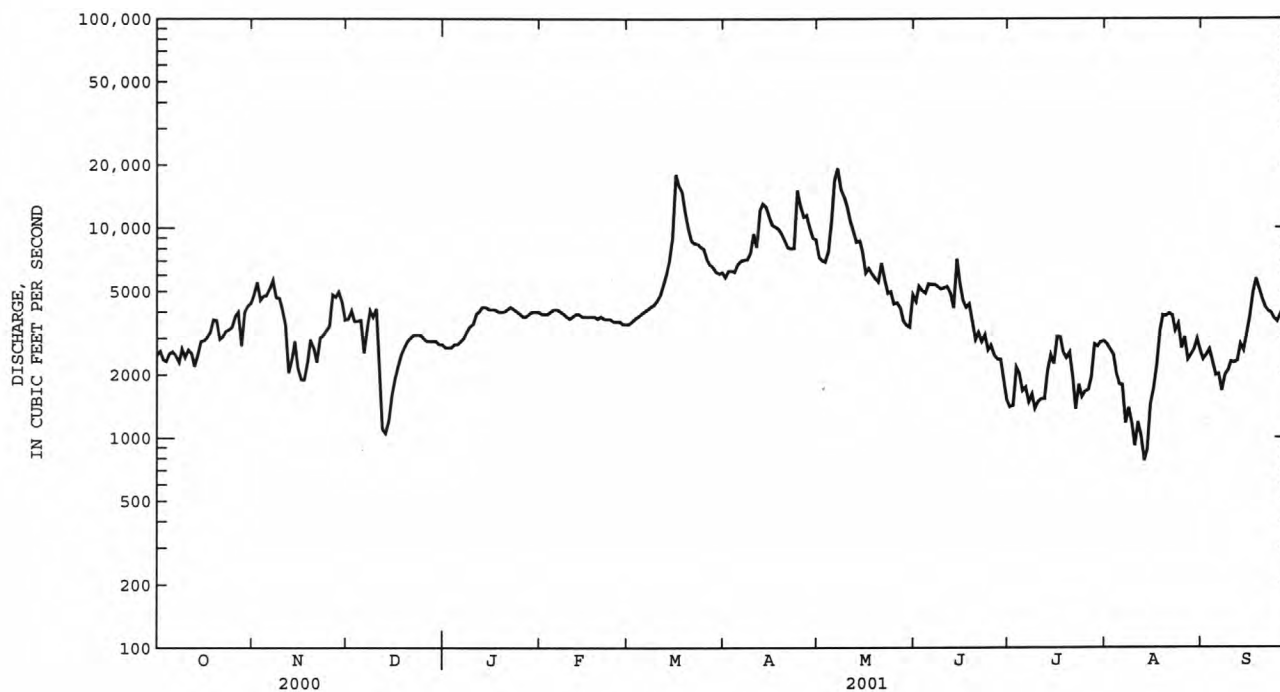
PLATTE RIVER BASIN

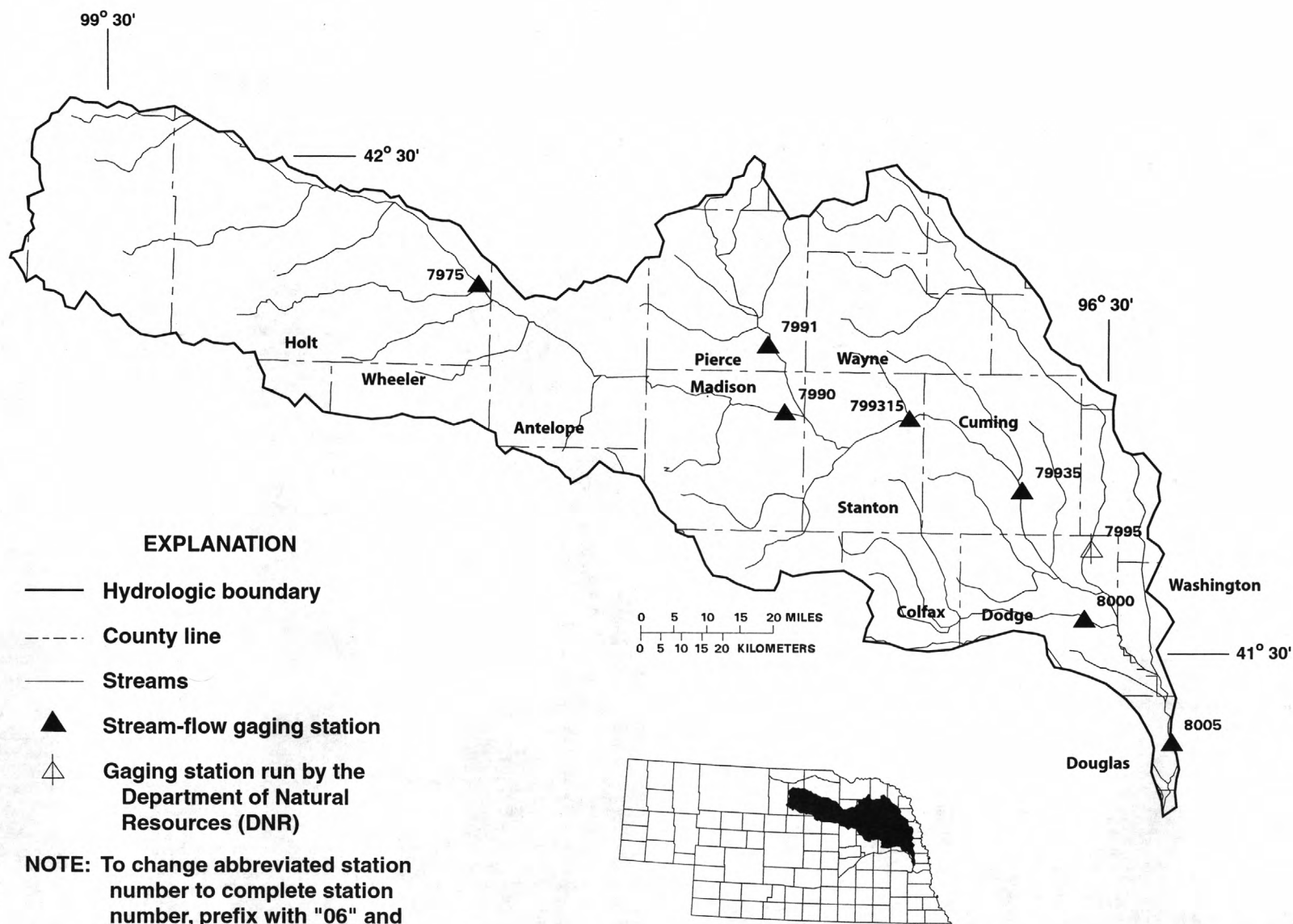
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06796500 PLATTE RIVER NEAR LESHARA, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1994 - 2001	
ANNUAL TOTAL	1450843		1610449		6156	
ANNUAL MEAN	3964		4412		7444	1999
HIGHEST ANNUAL MEAN					4412	2001
LOWEST ANNUAL MEAN					29600	Jun 28 1999
HIGHEST DAILY MEAN	8050	Feb 26	19200	May 7	599	Aug 19 2000
LOWEST DAILY MEAN	599	Aug 19	776	Aug 13	824	Aug 14 2000
ANNUAL SEVEN-DAY MINIMUM	824	Aug 14	1040	Aug 8	32600	Jun 2 1999
MAXIMUM PEAK FLOW			21800	May 7	11.84	Feb 9 1996
MAXIMUM PEAK STAGE			6.52	May 7		
ANNUAL RUNOFF (AC-FT)	2878000		3194000		4459000	
10 PERCENT EXCEEDS	6410		8260		9800	
50 PERCENT EXCEEDS	3800		3700		5600	
90 PERCENT EXCEEDS	1740		1900		2540	

e Estimated.





PLATTE RIVER BASIN
ELKHORN RIVER BASIN

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*Station number	Station name	Page
7975	Elkhorn River at Ewing.....	174
7990	Elkhorn River at Norfolk.....	176
7991	North Fork Elkhorn near Pierce.....	178
799315	Elkhorn River at Pilger.....	180
799350	Elkhorn River at West Point.....	182
7995	Logan Creek near Uehling.....	184
8000	Maple Creek near Nickerson.....	186
8005	Elkhorn River at Waterloo.....	192

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

PLATTE RIVER BASIN

06797500 ELKHORN RIVER AT EWING, NE

LOCATION.--Lat 42°16'07", long 098°20'22", in NE ¼ SW ¼ sec.35, T.27 N., R.9 W., Holt County, Hydrologic Unit 10220001, on left bank 10 ft downstream from bridge on State Highway L-45B, 0.8 mi north of Ewing, 1.5 mi upstream from South Fork Elkhorn River, and at mile 199.

DRAINAGE AREA.--1,400 mi², approximately, of which about 740 mi² contributes directly to surface runoff.

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

GAGE.--Water-stage recorder. Datum of gage is 1,836.24 ft above sea level, levels by Nebraska Department of Roads. From August 1, 1947 to October 22, 1952 at site 300 ft downstream at same datum. From October 23, 1952 to Sept. 30, 1996 at site 800 ft downstream at same datum. Data collection platform at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	77	e70	e38	e52	e54	318	767	320	89	54	45
2	16	80	e70	e38	e52	e58	311	747	276	114	56	43
3	16	84	e70	e38	e49	e60	309	704	238	174	59	43
4	18	85	e72	e39	e52	e60	312	620	213	174	56	41
5	19	83	e72	e40	e56	e62	326	1080	208	164	54	41
6	19	83	e70	e40	e56	e62	348	1980	204	148	48	40
7	20	79	e68	e41	e54	e70	529	2440	196	135	44	44
8	20	72	e70	e41	e54	e90	1190	2770	190	134	42	43
9	20	65	e70	e40	e54	e130	1550	2480	179	124	40	43
10	21	e64	e68	e40	e52	e200	1720	2000	175	113	39	43
11	21	e64	e64	e45	e50	e300	1660	1630	163	109	38	42
12	21	e64	e56	e50	e52	e370	1830	1390	149	108	37	41
13	22	e62	e50	e50	e54	e450	1720	1060	139	105	37	45
14	22	e62	e50	e52	e56	558	1880	777	141	99	50	67
15	23	e64	e50	e52	e54	687	1840	587	142	91	75	78
16	24	e64	e52	e50	e52	800	1460	455	140	94	64	86
17	25	e62	e52	e50	e54	884	1210	398	133	109	57	85
18	26	e62	e50	e50	e54	761	1020	344	126	98	53	82
19	27	e64	e50	e52	e54	712	828	301	116	91	51	77
20	27	e64	e48	e50	e56	672	666	275	109	86	49	74
21	27	e62	e50	e48	e56	639	570	251	108	81	49	69
22	30	e64	e49	e50	e54	535	716	228	106	79	48	67
23	42	e64	e44	e50	e54	497	2260	208	101	81	48	65
24	44	e64	e44	e52	e56	483	3890	192	93	92	47	62
25	46	e68	e44	e52	e56	453	4200	177	87	81	51	61
26	44	e68	e44	e50	e56	414	3020	162	86	73	59	60
27	44	e68	e44	e52	e56	381	2120	150	82	71	54	60
28	43	e70	e45	e52	e54	356	1580	141	79	69	49	59
29	53	e70	e45	e52	---	339	1210	134	76	64	46	57
30	70	e68	e45	e54	---	330	905	177	83	60	46	57
31	70	---	e43	e54	---	325	---	285	---	56	46	---
TOTAL	936	2070	1719	1462	1509	11792	41498	24910	4458	3166	1546	1720
MEAN	30.2	69.0	55.5	47.2	53.9	380	1383	804	149	102	49.9	57.3
MAX	70	85	72	54	56	884	4200	2770	320	174	75	86
MIN	16	62	43	38	49	54	309	134	76	56	37	40
AC-FT	1860	4110	3410	2900	2990	23390	82310	49410	8840	6280	3070	3410

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2001, BY WATER YEAR (WY)

	MEAN	89.1	94.6	81.1	70.9	141	357	509	421	317	166	76.7	77.8
MAX	671	443	250	226	1172	2144	2081	2243	2690	1993	444	882	
(WY)	1952	1999	1952	1995	1952	1987	1987	1995	1962	1993	1993	1986	
MIN	19.4	27.0	27.3	19.4	26.0	61.1	59.7	51.8	45.8	19.5	12.0	9.33	
(WY)	1976	1977	1956	1977	1975	1981	1981	1981	1976	1976	1976	1975	

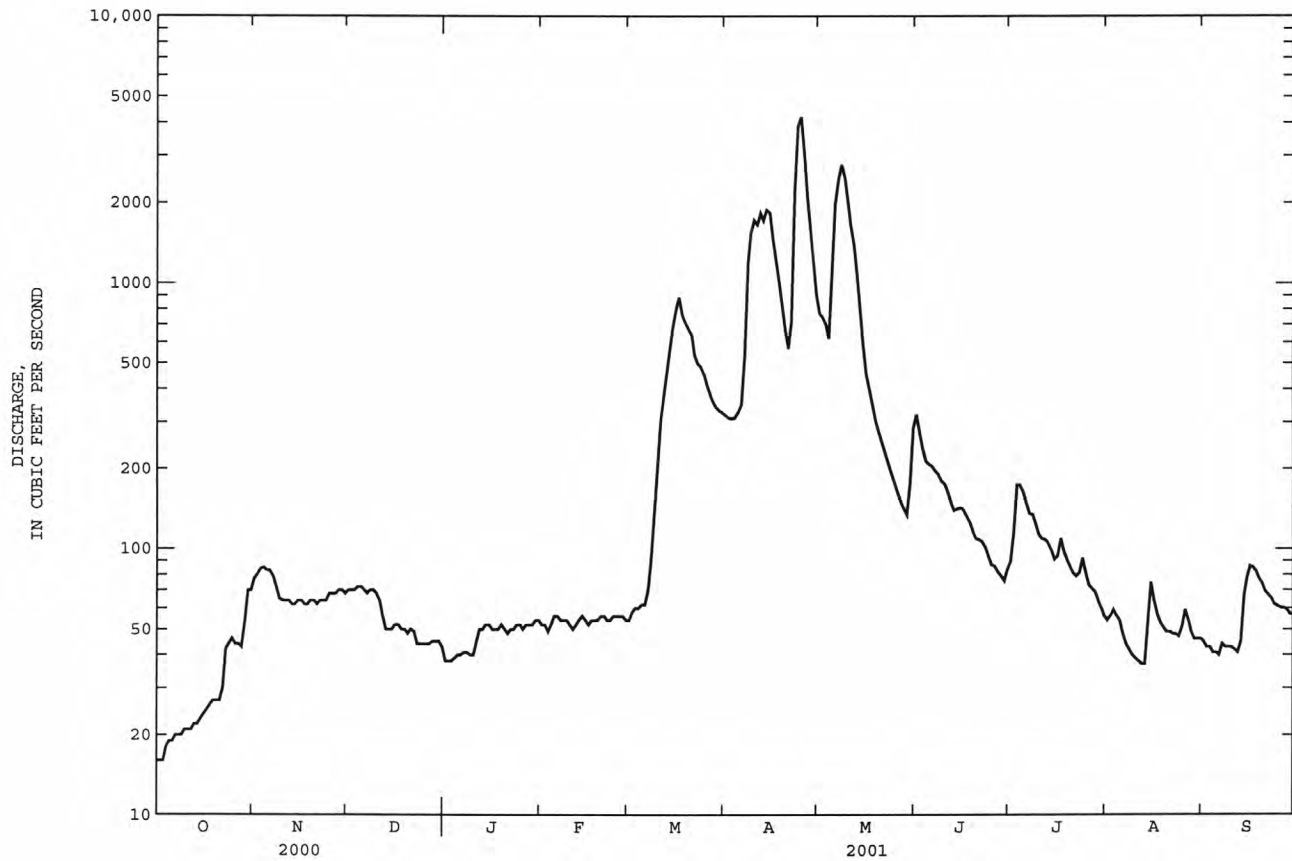
PLATTE RIVER BASIN

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06797500 ELKHORN RIVER AT EWING, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1947 - 2001	
ANNUAL TOTAL	23825.6		96786		200	
ANNUAL MEAN	65.1		265		142	
MEDIAN OF ANNUAL MEANS					543	
HIGHEST ANNUAL MEAN					42.8	
LOWEST ANNUAL MEAN					1995	
HIGHEST DAILY MEAN	243	May 28	4200	Apr 25	8480	May 30 1995
LOWEST DAILY MEAN	5.5	Sep 18	16	Oct 1	5.2	Sep 6 1976
ANNUAL SEVEN-DAY MINIMUM	6.0	Sep 15	18	Oct 1	6.0	Sep 15 2000
MAXIMUM PEAK FLOW			4680	Apr 25	9050	May 29 1995
MAXIMUM PEAK STAGE			8.27	Apr 25	11.09	May 29 1995
ANNUAL RUNOFF (AC-FT)	47260		192000		145000	
10 PERCENT EXCEEDS	110		714		424	
50 PERCENT EXCEEDS	66		64		79	
90 PERCENT EXCEEDS	13		41		31	

e Estimated.



PLATTE RIVER BASIN

06799000 ELKHORN RIVER AT NORFOLK, NE

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

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

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

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

GAGE.--Water-stage recorder. Datum of gage is 1,500.95 ft above sea level. See WSP 1918 for history of changes prior to Aug. 30, 1958. Aug. 30, 1958, to July 27, 1978, water-stage recorder at site 3.2 mi upstream at datum 19.88 ft higher and July 28, 1978 to Mar. 18, 1987, present site at datum 4.00 ft higher. Mar. 19, 1987, to Mar. 31, 1995, present site at datum 2.00 ft higher. Data collection platform at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	134	377	405	e170	e330	e540	997	1800	684	332	237	219
2	138	333	404	e180	e330	e540	995	1840	698	451	230	217
3	143	325	392	e180	e330	e560	1010	1820	660	516	221	209
4	142	318	382	e190	e400	e600	1030	1780	621	676	255	199
5	146	351	358	e200	e450	e620	1050	1980	631	595	239	193
6	146	660	335	e220	e500	e620	1140	2540	618	518	216	189
7	150	467	378	e240	e500	e620	1340	3030	606	481	201	204
8	156	380	412	e260	e500	e640	1570	3220	590	475	184	218
9	160	351	411	e250	e490	e680	2250	2970	566	459	174	225
10	164	321	419	e250	e470	e720	2410	2490	526	442	163	213
11	164	330	164	e270	e460	e800	2630	2000	516	412	157	204
12	163	317	e160	e300	e480	e860	2880	1720	508	388	155	196
13	167	328	e165	e290	e490	e900	3020	1460	488	373	155	189
14	165	297	e175	e290	e500	e1200	2940	1280	466	352	175	231
15	164	293	e175	e290	e480	2240	2910	1240	448	331	403	730
16	169	334	e180	e290	e500	1420	2630	1240	453	313	696	747
17	171	337	e170	e280	e490	1220	2260	1110	434	407	576	494
18	171	362	e175	e270	e490	1470	2010	985	419	931	384	412
19	176	367	e175	e260	e500	1380	1750	906	396	524	313	368
20	170	353	e175	e260	e520	1350	1490	859	387	399	283	343
21	174	346	e180	e250	e520	1330	1280	796	381	352	272	320
22	184	345	e165	e260	e500	1200	1240	736	370	318	261	306
23	202	363	e175	e260	e540	1160	2230	694	362	293	254	291
24	214	375	e170	e270	e540	1180	3570	638	341	289	256	279
25	236	402	e170	e270	e540	1130	4400	598	323	289	246	273
26	230	395	e175	e260	e540	1110	4420	565	338	292	243	268
27	225	404	e179	e270	e540	1080	3400	540	338	279	239	265
28	227	408	e180	e270	e520	1050	2690	511	345	268	237	266
29	278	407	e185	e280	---	1000	2300	488	326	256	231	265
30	355	400	e185	e310	---	979	2010	517	312	240	232	260
31	376	---	e180	e340	---	1010	---	628	---	227	226	---
TOTAL	5860	11046	7554	7980	13450	31209	65852	42981	14151	12478	8114	8793
MEAN	189	368	244	257	480	1007	2195	1386	472	403	262	293
MAX	376	660	419	340	540	2240	4420	3220	698	931	696	747
MIN	134	293	160	170	330	540	995	488	312	227	155	189
AC-FT	11620	21910	14980	15830	26680	61900	130600	85250	28070	24750	16090	17440

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2001, BY WATER YEAR (WY)

	MEAN	321	338	304	292	496	893	1061	900	924	490	316	276
MAX	1418	985	609	624	1862	3819	3715	4615	4673	3663	1398	1444	
(WY)	1952	1999	1996	1983	1952	1987	1984	1995	1962	1993	1951	1986	
MIN	125	163	151	146	129	298	254	228	201	99.1	61.9	87.3	
(WY)	1981	1979	1977	1977	1978	1981	1981	1981	1989	1980	1976	1956	

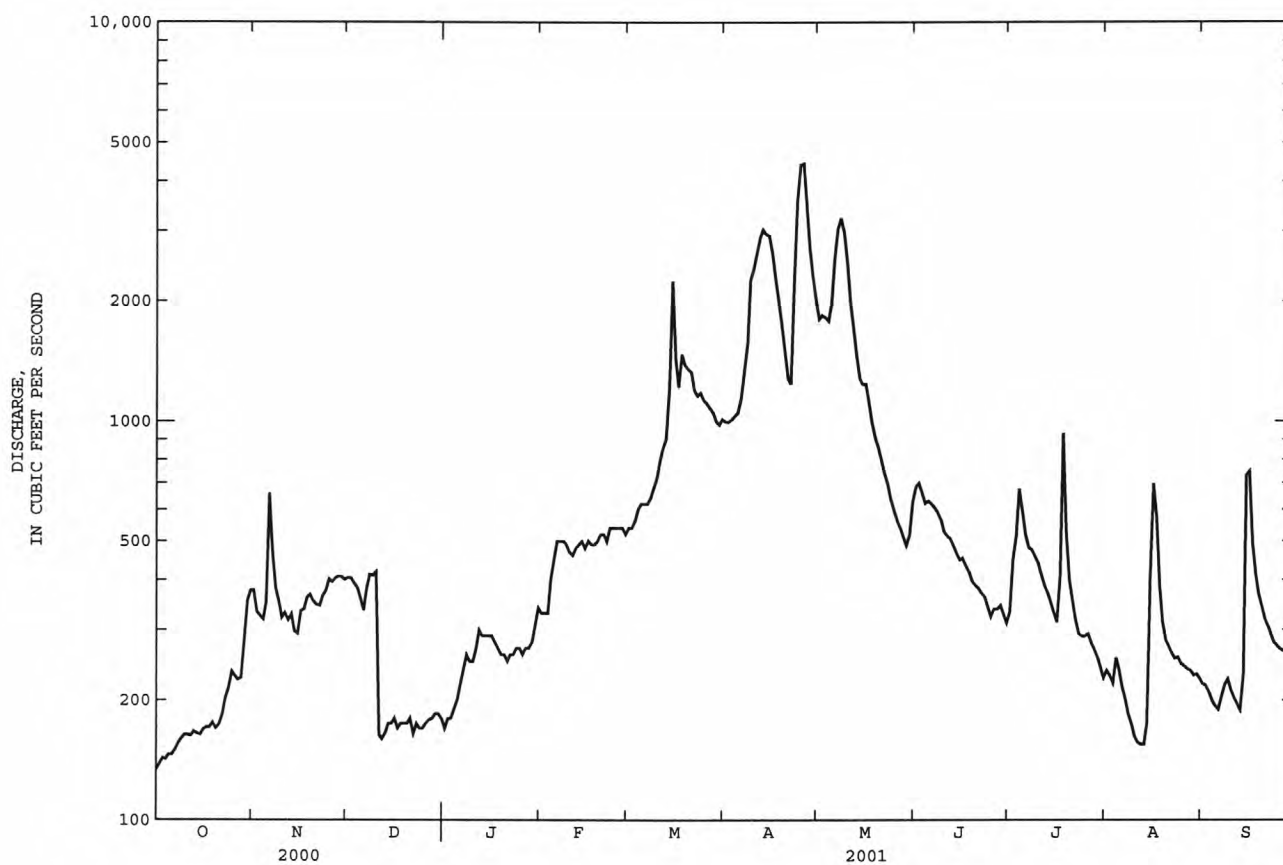
PLATTE RIVER BASIN

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06799000 ELKHORN RIVER AT NORFOLK, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1946 - 2001	
ANNUAL TOTAL	119583		229468		550	
ANNUAL MEAN	327		629		454	
MEDIAN OF ANNUAL MEANS					1355	
HIGHEST ANNUAL MEAN					224	
LOWEST ANNUAL MEAN					1995	
HIGHEST DAILY MEAN	2060	Jul 6	4420	Apr 26	17500	May 31 1995
LOWEST DAILY MEAN	72	Sep 15	134	Oct 1	33	Aug 3 1980
ANNUAL SEVEN-DAY MINIMUM	78	Sep 14	143	Oct 1	40	Aug 24 1976
MAXIMUM PEAK FLOW			4680	Apr 26	*16900	Jun 14 1967
MAXIMUM PEAK STAGE			7.43	Apr 26	**15.63	Mar 11 1949
ANNUAL RUNOFF (AC-FT)	237200		455100		398600	
10 PERCENT EXCEEDS	470		1440		1080	
50 PERCENT EXCEEDS	338		370		319	
90 PERCENT EXCEEDS	122		175		165	

e Estimated.
 * Stage 13.05 ft.
 ** Backwater from ice.



PLATTE RIVER BASIN

06799100 NORTH FORK ELKHORN RIVER NEAR PIERCE, NE

LOCATION--Lat 42°08'57", long 097°28'41", in NW ¼ sec.18, T.25 N., R.1 W., Pierce County, Hydrologic Unit 10220002, on right bank 4 ft downstream and 25 ft from end of bridge, 4.5 mi southeast of Pierce, and at mile 20.8.

DRAINAGE AREA --701 mi², of which 671 mi² contributes directly to surface runoff.

PERIOD OF RECORD--August 1960 to current year.

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

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	39	42	e30	e34	e41	169	180	158	46	44	39
2	19	34	42	e30	e39	e41	158	192	147	94	42	37
3	20	32	e39	e30	45	e42	152	215	129	383	73	36
4	22	31	e39	e33	43	e44	159	224	120	464	79	33
5	21	32	e35	e38	48	e44	160	318	118	310	77	31
6	21	54	e39	e42	49	e43	156	710	117	189	54	28
7	21	57	e42	e46	47	e43	189	855	112	169	40	35
8	21	e44	e41	51	47	e43	230	541	103	163	34	39
9	22	e38	e37	47	e44	e44	203	407	97	252	29	37
10	23	e34	e33	47	e42	e44	173	369	107	203	26	34
11	23	e35	e29	48	e42	e47	256	309	112	162	24	32
12	23	e32	e27	49	e44	e50	516	255	112	152	23	30
13	23	e24	e28	e43	e44	59	468	234	106	124	24	31
14	23	e25	e31	e42	e44	107	345	216	101	99	24	46
15	24	e26	e32	e40	e42	897	282	191	95	85	201	73
16	25	e27	e31	e39	e43	1660	234	172	90	75	327	88
17	25	e29	e31	e39	e42	1200	200	161	83	136	178	88
18	25	e33	e31	e38	e42	732	182	155	80	121	142	77
19	25	e37	e31	e38	e44	580	173	150	74	104	105	67
20	27	e37	e32	e38	e45	555	165	200	71	96	103	62
21	26	e39	e31	e37	e44	541	168	237	69	88	99	57
22	27	41	e29	e38	e42	346	278	254	66	83	94	53
23	29	40	e30	e39	e43	268	615	172	62	73	88	51
24	29	39	e29	e39	e43	275	820	152	58	70	80	49
25	30	38	e29	e39	e43	233	441	147	51	85	77	48
26	30	39	e30	e38	e43	196	369	142	49	76	64	47
27	29	39	e30	e38	e42	181	351	136	59	68	55	46
28	29	40	e31	e37	e40	172	276	133	52	63	49	44
29	34	43	e32	e36	---	166	221	129	48	56	45	43
30	45	43	e31	e35	---	161	194	131	45	51	50	42
31	42	---	e30	e34	---	166	---	142	---	46	43	---
TOTAL	803	1101	1024	1218	1210	9021	8303	7829	2691	4186	2393	1423
MEAN	25.9	36.7	33.0	39.3	43.2	291	277	253	89.7	135	77.2	47.4
MAX	45	57	42	51	49	1660	820	855	158	464	327	88
MIN	19	24	27	30	34	41	152	129	45	46	23	28
AC-FT	1590	2180	2030	2420	2400	17890	16470	15530	5340	8300	4750	2820

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2001, BY WATER YEAR (WY)

	MEAN	53.7	60.4	52.0	48.5	116	207	195	165	186	101	56.2	47.4
MAX	241	233	141	111	834	1120	1004	663	799	834	226	191	
(WY)	1996	1999	1996	1973	1971	1962	1984	1995	1967	1993	1996	1992	
MIN	13.5	14.7	14.6	15.6	24.2	30.3	28.7	27.7	21.8	11.7	7.41	9.53	
(WY)	1992	1992	1992	1992	1978	1990	1990	1981	1989	1989	1990	1990	

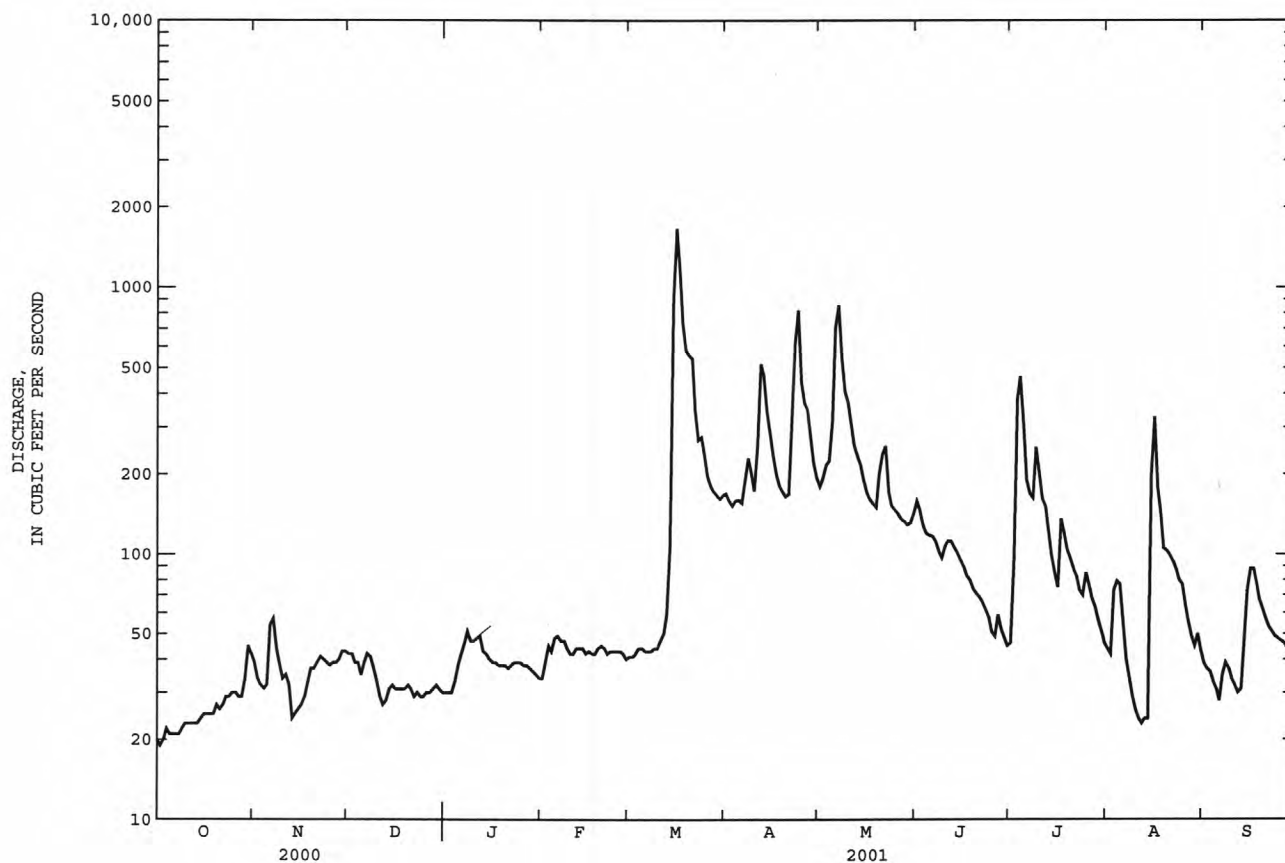
PLATTE RIVER BASIN

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06799100 NORTH FORK ELKHORN RIVER NEAR PIERCE, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1960 - 2001	
ANNUAL TOTAL	21680		41202		107	
ANNUAL MEAN	59.2		113		84.3	
MEDIAN OF ANNUAL MEANS					287	
HIGHEST ANNUAL MEAN					21.5	
LOWEST ANNUAL MEAN					10400	
HIGHEST DAILY MEAN	518	May 19	1660	Mar 16	2.7	Mar 28 1962
LOWEST DAILY MEAN	10	Aug 16	19	Oct 2	3.7	Jul 29 1989
ANNUAL SEVEN-DAY MINIMUM	12	Aug 12	21	Oct 1	15200	Aug 15 1990
MAXIMUM PEAK FLOW			1740	Mar 16	15.10	Feb 19 1971
MAXIMUM PEAK STAGE			10.62	Mar 16	77420	Feb 19 1971
ANNUAL RUNOFF (AC-FT)	43000		81720		206	
10 PERCENT EXCEEDS	111		243		48	
50 PERCENT EXCEEDS	44		46		22	
90 PERCENT EXCEEDS	17		29			

e Estimated.



PLATTE RIVER BASIN

06799315 ELKHORN RIVER AT PILGER, NE

LOCATION--Lat 41°59'42", long 097°03'29", in NE ¼ SW ¼ sec.2, T.23 N., R.3 E., Stanton County, Hydrologic Unit 10220003, on right bank near the downstream wingwall of the bridge on State Highway 15, 0.8 miles south of Pilger.

DRAINAGE AREA --4,360 mi², approximately, of which about 3,360 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--June to September 2001.

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

REMARKS.--Records good.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	475	405	369
2	---	---	---	---	---	---	---	---	---	959	418	358
3	---	---	---	---	---	---	---	---	---	914	401	347
4	---	---	---	---	---	---	---	---	---	2030	480	338
5	---	---	---	---	---	---	---	---	---	1910	471	330
6	---	---	---	---	---	---	---	---	---	1400	415	317
7	---	---	---	---	---	---	---	---	---	860	376	333
8	---	---	---	---	---	---	---	---	---	758	342	359
9	---	---	---	---	---	---	---	---	---	729	312	377
10	---	---	---	---	---	---	---	---	---	798	305	389
11	---	---	---	---	---	---	---	---	---	793	299	372
12	---	---	---	---	---	---	---	---	---	652	295	349
13	---	---	---	---	---	---	---	---	---	587	296	336
14	---	---	---	---	---	---	---	---	---	536	319	392
15	---	---	---	---	---	---	---	---	---	485	1360	1460
16	---	---	---	---	---	---	---	---	---	442	1880	2450
17	---	---	---	---	---	---	---	---	---	554	1820	1810
18	---	---	---	---	---	---	---	---	---	1780	1050	1070
19	---	---	---	---	---	---	---	---	---	1850	702	821
20	---	---	---	---	---	---	---	---	---	858	559	737
21	---	---	---	---	---	---	---	---	---	596	530	691
22	---	---	---	---	---	---	---	---	---	510	518	651
23	---	---	---	---	---	---	---	---	---	466	495	622
24	---	---	---	---	---	---	---	---	---	495	487	589
25	---	---	---	---	---	---	---	---	---	511	483	561
26	---	---	---	---	---	---	---	---	---	505	459	533
27	---	---	---	---	---	---	---	---	---	508	443	552
28	---	---	---	---	---	---	---	---	---	489	425	554
29	---	---	---	---	---	---	---	---	---	457	416	544
30	---	---	---	---	---	---	---	---	482	432	393	537
31	---	---	---	---	---	---	---	---	---	410	383	---
TOTAL	---	---	---	---	---	---	---	---	482	24749	17537	19148
MEAN	---	---	---	---	---	---	---	---	482	798	566	638
MAX	---	---	---	---	---	---	---	---	482	2030	1880	2450
MIN	---	---	---	---	---	---	---	---	482	410	295	317
AC-FT	---	---	---	---	---	---	---	---	956	49090	34780	37980

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

MEAN	---	---	---	---	---	---	---	---	---	798	566	638
MAX	---	---	---	---	---	---	---	---	---	798	566	638
(WY)	---	---	---	---	---	---	---	---	---	2001	2001	2001
MIN	---	---	---	---	---	---	---	---	---	798	566	638
(WY)	---	---	---	---	---	---	---	---	---	2001	2001	2001

PLATTE RIVER BASIN

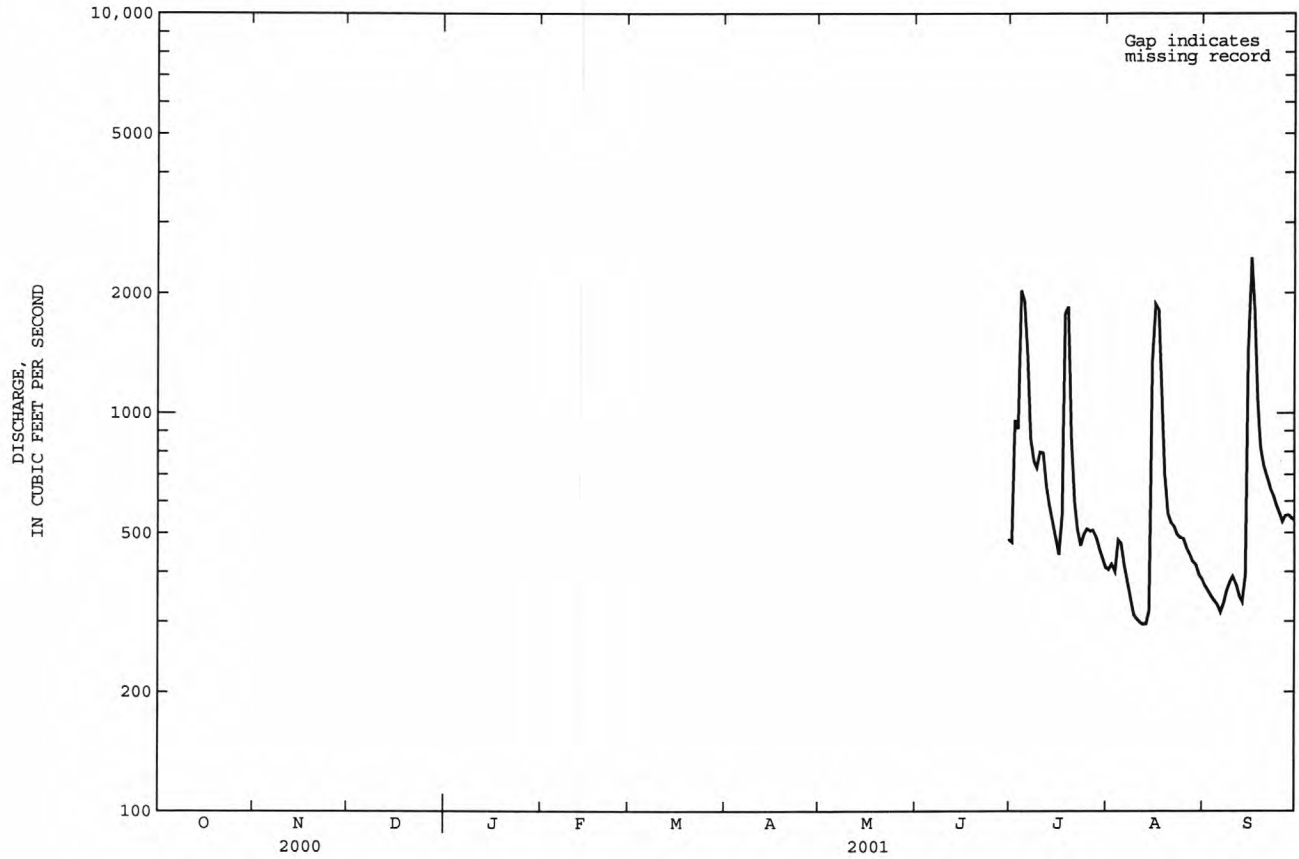
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06799315 ELKHORN RIVER AT PILGER, NE--Continued

SUMMARY STATISTICS

FOR 2001 WATER YEAR

HIGHEST DAILY MEAN	2450	Sep 16
LOWEST DAILY MEAN	295	Aug 12
ANNUAL SEVEN-DAY MINIMUM	310	Aug 8
MAXIMUM PEAK FLOW	6660	Sep 15
MAXIMUM PEAK STAGE	10.32	Sep 15
10 PERCENT EXCEEDS	1440	
50 PERCENT EXCEEDS	495	
90 PERCENT EXCEEDS	334	



PLATTE RIVER BASIN

06799350 ELKHORN RIVER AT WEST POINT, NE

LOCATION.--Lat 41°50'22", long 096°43'38", in SW ¼ NW ¼ sec.34, T.22 N., R.6 E., Cuming County, Hydrologic Unit 10220003, on right bank near right downstream wingwall of bridge on State Highway 32, 1 mi west of West Point, and at mile 79.8.

DRAINAGE AREA.--4,680 mi², approximately, of which about 4,100 mi² contributes directly to surface runoff, revised.

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

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	221	651	724	e290	e470	e450	1210	2020	1260	503	396	363
2	211	565	739	e290	e460	e500	1210	2240	1280	1250	394	341
3	212	471	826	e300	e460	e500	1280	2780	1250	2410	467	323
4	218	437	735	e310	e450	e520	1310	2900	1190	2000	397	309
5	246	440	761	e330	e430	e520	1320	4600	1240	3570	502	298
6	247	609	663	e350	e440	e540	1500	6440	1170	2300	451	281
7	237	1200	656	e370	e470	e580	1730	7060	1110	1450	392	330
8	239	887	e600	e390	e480	e620	1710	6260	1050	1080	340	316
9	246	618	e540	e390	e470	e700	2510	5920	964	1050	296	329
10	251	500	e500	e400	e460	e1000	3210	5150	940	901	261	342
11	251	456	e400	e400	e450	e1250	4680	3840	996	1110	247	327
12	256	e440	e300	e410	e420	e2000	4970	2330	924	918	224	303
13	255	e420	e260	e410	e460	e3000	4670	1650	1010	764	205	294
14	249	e400	e270	e410	e470	e3800	4350	1420	3070	718	231	356
15	245	e400	e280	e400	e490	e5000	4060	1330	1240	662	1290	551
16	244	e410	e290	e400	e500	e4600	3650	1340	974	627	2900	3820
17	248	e420	e290	e390	e520	e3500	2930	1190	893	750	3100	2270
18	243	e430	e300	e390	e520	3390	2600	1130	813	1280	2080	1450
19	240	e440	e300	e380	e540	3170	2160	1040	724	3270	1190	975
20	230	e460	e300	e370	e540	2970	1980	1180	700	1940	834	790
21	227	505	e310	e350	e520	2780	2060	1020	679	952	686	681
22	229	539	e300	e330	e520	2590	1940	898	639	716	659	636
23	254	659	e300	e320	e500	2210	2730	915	621	611	604	579
24	273	728	e290	e310	e500	2000	5060	901	600	575	560	531
25	305	713	e310	e310	e500	2000	6390	806	564	629	554	502
26	339	723	e320	e320	e490	1760	6900	722	838	585	515	494
27	336	779	e340	e330	e480	1530	5950	713	1160	586	462	485
28	319	750	e360	e350	e470	1370	4300	695	620	568	423	486
29	356	777	e330	e390	---	1300	3240	663	550	515	407	466
30	572	742	e310	e440	---	1230	2280	783	525	483	404	471
31	641	---	e300	e450	---	1240	---	1120	---	432	365	---
TOTAL	8640	17569	13204	11280	13480	58620	93890	71056	29594	35205	21836	19699
MEAN	279	586	426	364	481	1891	3130	2292	986	1136	704	657
MAX	641	1200	826	450	540	5000	6900	7060	3070	3570	3100	3820
MIN	211	400	260	290	420	450	1210	663	525	432	205	281
AC-FT	17140	34850	26190	22370	26740	116300	186200	140900	58700	69830	43310	39070

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2001, BY WATER YEAR (WY)

	553	638	583	544	1049	1833	1890	1652	1594	1044	625	493
MEAN	553	638	583	544	1049	1833	1890	1652	1594	1044	625	493
MAX	1606	1802	1314	1106	2744	5256	6171	5618	3844	6945	1994	1646
(WY)	1987	1999	1994	1995	1983	1987	1984	1995	1993	1993	1993	1986
MIN	174	241	203	168	201	411	378	325	339	154	90.0	137
(WY)	1977	1979	1977	1977	1979	1981	1981	1981	1976	1976	1976	1976

PLATTE RIVER BASIN

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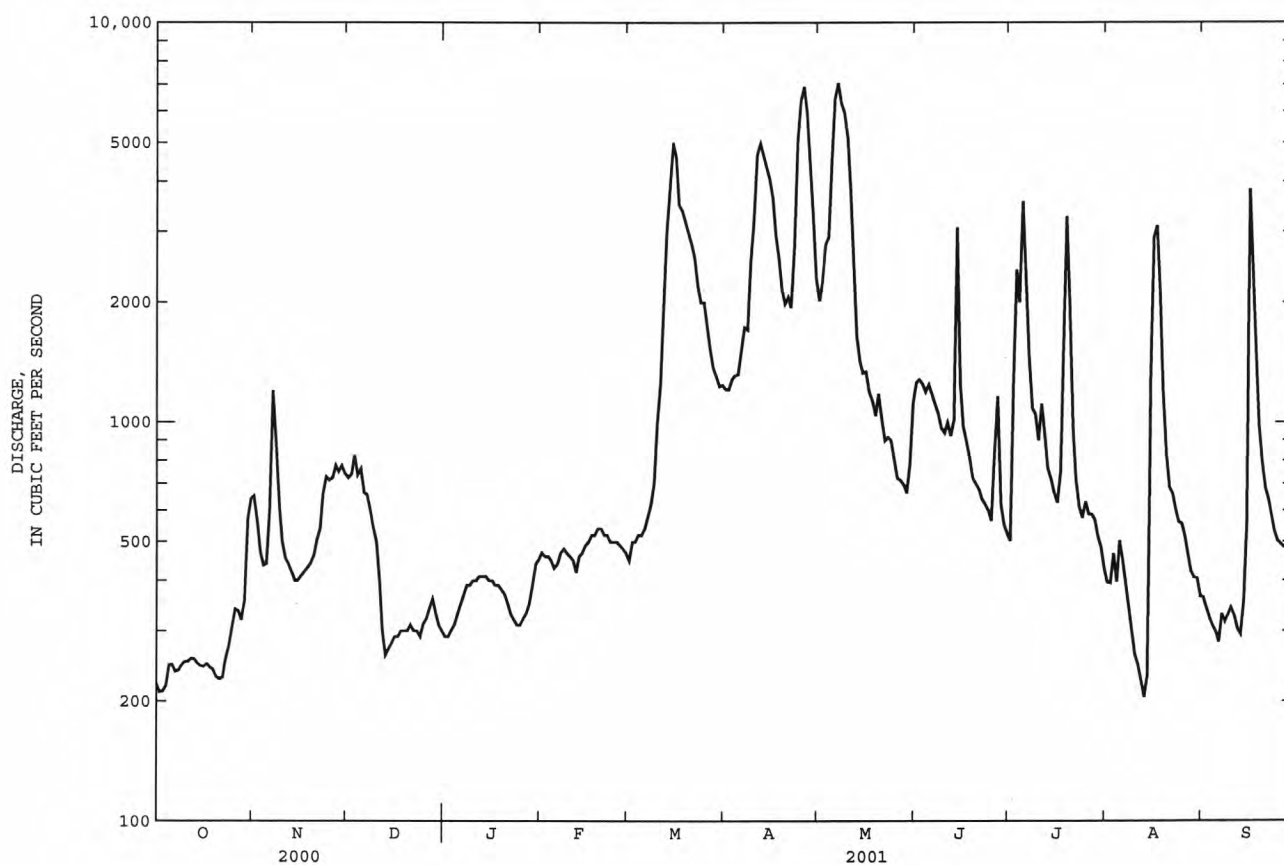
06799350 ELKHORN RIVER AT WEST POINT, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1973 - 2001	
ANNUAL TOTAL	248253		394073		1040	
ANNUAL MEAN	678		1080		899	
MEDIAN OF ANNUAL MEANS					2253	
HIGHEST ANNUAL MEAN					332	
LOWEST ANNUAL MEAN					26000	
HIGHEST DAILY MEAN	8770	Jul 7	7060	May 7	41	Mar 9 1993
LOWEST DAILY MEAN	151	Sep 18	205	Aug 13	45	Aug 31 1976
ANNUAL SEVEN-DAY MINIMUM	158	Sep 12	227	Oct 1	33000	Jun 25 1969
MAXIMUM PEAK FLOW			7670	May 7	**18.60	Mar 9 1993
MAXIMUM PEAK STAGE			*17.23	Mar 16	753600	
ANNUAL RUNOFF (AC-FT)	492400		781600		2120	
10 PERCENT EXCEEDS	1030		2830		607	
50 PERCENT EXCEEDS	576		560		235	
90 PERCENT EXCEEDS	230		290			

e Estimated.

* Backwater from ice.

** From floodmark, ice jam.



PLATTE RIVER BASIN

06799500 LOGAN CREEK NEAR UEHLING. NE

LOCATION.--Lat 41°42'46", long 096°31'18", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.9, T.20 N., R.8 E., Dodge County, Hydrologic Unit 10220004, near left bank on upstream side of bridge on county road, 2 mi southwest of Uehling and 8.8 mi upstream from mouth.

DRAINAGE AREA.--1,015 mi².

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

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

GAGE.--Water-stage recorder. Datum of gage is 1,208.73 ft above sea level. See WSP 1918 for history of changes prior to July 15, 1963. July 16, 1963 to Mar. 27, 1989, near right bank on downstream side of bridge at present site and datum. Mar. 28, 1989 to Mar. 22, 1990, 250 ft upstream on left bank at same datum. Data collection platform at station.

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

COOPERATION.--Records provided by Nebraska Department of Natural Resources and reviewed by the U.S. Geological Survey.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	159	e130	e110	e160	e150	325	301	552	278	213	177
2	98	199	e130	e110	e150	e150	319	494	487	793	204	175
3	97	143	e125	e114	e150	e155	305	629	450	2130	224	172
4	99	134	e135	e125	e160	e155	304	756	405	2670	347	167
5	107	130	e130	e135	e155	e160	302	1630	500	844	233	165
6	104	155	e118	e140	e160	e165	318	1760	430	528	210	162
7	102	e140	e112	e145	e160	e170	374	1340	404	449	194	184
8	103	e125	e140	e135	e155	e175	441	981	379	409	185	185
9	104	e145	e130	e140	e150	e180	395	769	363	539	177	176
10	106	e150	e140	e145	e150	e185	332	1050	403	781	170	171
11	105	e155	e120	e154	e145	e190	741	635	358	480	167	166
12	106	e150	e110	e180	e140	e192	1210	558	413	392	162	161
13	106	e144	e110	e200	e138	e200	840	525	579	357	161	157
14	104	135	e120	e220	e140	e500	523	503	852	333	163	175
15	103	130	e130	e210	e140	e1000	446	468	726	314	250	229
16	104	e120	e130	e200	e135	2600	400	435	441	303	716	290
17	106	e110	e125	e195	e135	1420	361	411	386	300	548	272
18	106	e110	e120	e190	e140	1050	340	392	364	551	274	229
19	107	e120	e125	e185	e150	934	330	379	346	376	236	211
20	105	e125	e130	e160	e150	800	321	428	332	303	220	201
21	103	e110	e135	e150	e155	854	314	596	327	287	210	192
22	105	e110	e130	e155	e150	647	372	496	316	278	205	200
23	109	e116	e130	e160	e155	483	445	434	307	268	200	198
24	114	e116	e125	e160	e160	441	710	407	297	258	191	184
25	115	e135	e122	e155	e165	404	479	397	289	272	192	180
26	116	e130	e120	e150	e170	351	391	383	280	337	189	178
27	112	e130	e116	e155	e175	326	357	370	468	266	189	178
28	109	e140	e113	e150	e160	333	334	359	466	255	185	176
29	117	e140	e125	e150	---	319	320	349	310	243	182	172
30	145	e135	e120	e155	---	309	298	400	289	231	189	171
31	173	---	e120	e155	---	315	---	595	---	219	186	---
TOTAL	3388	4041	3866	4888	4253	15313	12947	19230	12519	16044	7172	5654
MEAN	109	135	125	158	152	494	432	620	417	518	231	188
MAX	173	199	140	220	175	2600	1210	1760	852	2670	716	290
MIN	97	110	110	110	135	150	298	301	280	219	161	157
AC-FT	6720	8020	7670	9700	8440	30370	25680	38140	24830	31820	14230	11210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2001, BY WATER YEAR (WY)

MEAN	121	115	99.7	110	266	410	291	322	502	265	169	129
MAX	499	453	337	583	2177	2388	1742	1417	2766	1843	1056	613
(WY)	1993	1999	1994	1973	1971	1962	1984	1984	1984	1993	1951	1993
MIN	32.8	38.2	31.9	34.1	38.1	57.4	42.8	39.9	56.6	17.3	15.0	31.6
(WY)	1944	1949	1944	1957	1979	1943	1957	1943	1976	1976	1976	1943

PLATTE RIVER BASIN

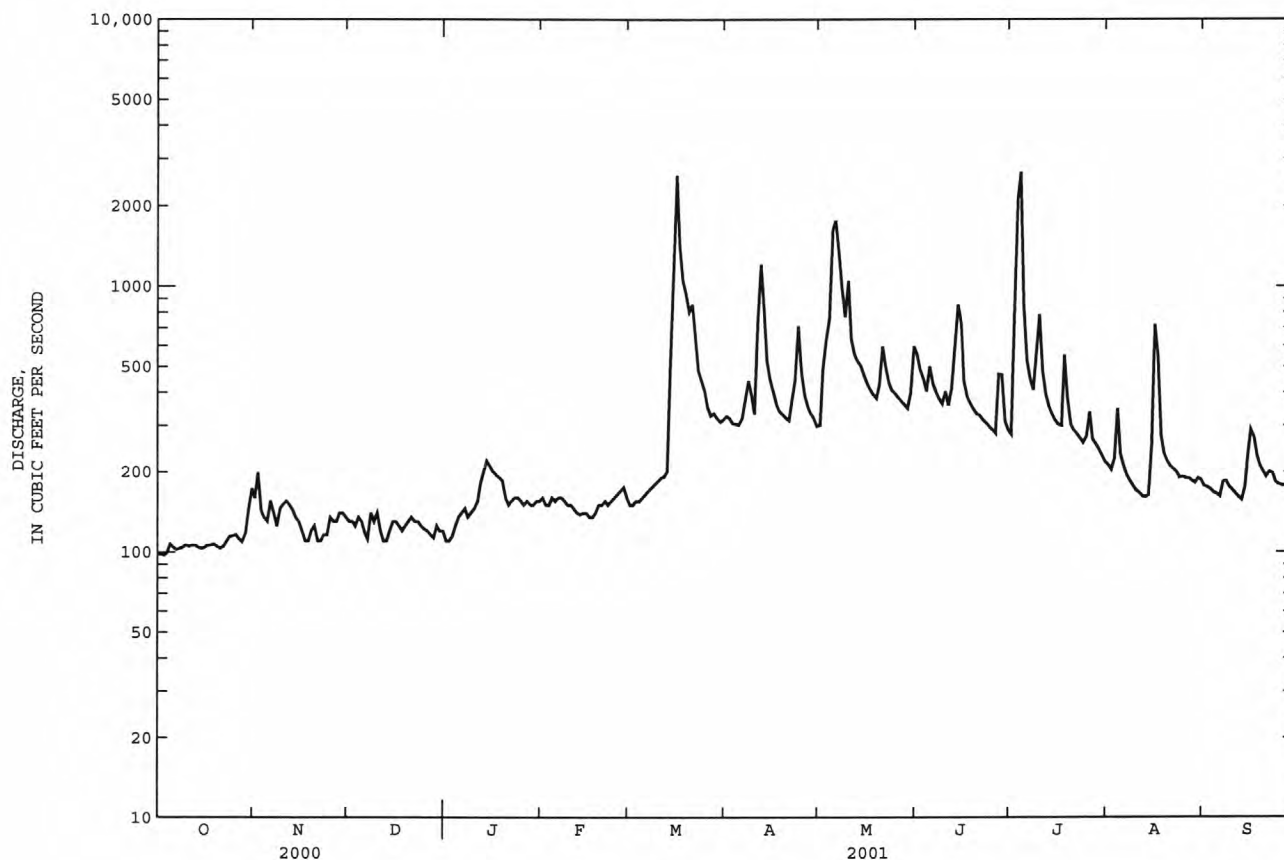
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06799500 LOGAN CREEK NEAR UEHLING, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1942 - 2001	
ANNUAL TOTAL	73121		109315		233	
ANNUAL MEAN	200		299		194	
MEDIAN OF ANNUAL MEANS					710	
HIGHEST ANNUAL MEAN					66.4	
LOWEST ANNUAL MEAN					20100	
HIGHEST DAILY MEAN	2990	Jun 26	2670	Jul 4	6.1	Jul 26 1976
LOWEST DAILY MEAN	87	Aug 16	97	Oct 3	8.8	Jul 12 1976
ANNUAL SEVEN-DAY MINIMUM	91	Aug 14	101	Oct 1	*25200	Feb 20 1971
MAXIMUM PEAK FLOW			3680	Jul 4	20.86	Feb 20 1997
MAXIMUM PEAK STAGE			17.43	Mar 15	168600	
ANNUAL RUNOFF (AC-FT)	145000		216800		419	
10 PERCENT EXCEEDS	270		543		101	
50 PERCENT EXCEEDS	178		185		45	
90 PERCENT EXCEEDS	102		114			

e Estimated.

* Stage 20.15 ft, from floodmark.



PLATTE RIVER BASIN

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

LOCATION.--Lat 41°33'39", long 096°32'27", in SW ¼ NW ¼ sec.4, T.18 N., R.8 E., Dodge County, Hydrologic Unit 10220003, on right bank 8 ft downstream from county road bridge 2 mi upstream from U.S. Highways 77 and 275, 5 mi northwest of Nickerson, and 4 mi upstream from mouth.

DRAINAGE AREA.--369 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1951 to current year.

REVISED RECORDS.--WSP 1630: 1957-58. WDR NE-98: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,211.62 ft above sea level. Prior to July 28, 1960, nonrecording gage at highway bridge, July 28, 1960 to July 28, 1987, water-stage recorder 180 ft upstream from highway bridge and July 29, 1987 to July 23, 1991 water-stage recorder 30 ft downstream from highway bridge. All at/near U.S. Highway 77 bridge, 2 mi downstream from present gage, at datum 17.06 ft lower. Data collection platform at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	53	43	e17	e29	48	114	73	228	69	47	31
2	21	45	39	e20	e29	43	103	82	150	75	45	30
3	21	44	37	e24	30	42	106	278	128	126	44	31
4	22	41	37	e25	28	46	114	259	129	166	41	32
5	26	43	30	e25	30	165	107	938	148	96	45	30
6	26	59	32	e25	32	271	102	901	175	73	42	29
7	26	94	45	e25	34	205	128	429	131	66	39	33
8	25	67	43	e26	37	163	132	285	115	66	38	39
9	24	55	40	28	e30	267	103	258	106	65	36	38
10	24	47	28	31	e27	300	95	766	155	64	35	36
11	24	51	e20	38	e25	222	324	236	103	64	33	33
12	23	51	e18	41	e25	140	591	199	96	64	32	30
13	25	42	e17	47	e25	222	202	179	100	62	32	28
14	24	40	e16	46	e24	1010	150	167	388	59	33	33
15	24	43	e16	41	e24	897	132	148	174	56	47	713
16	25	47	e16	39	e24	378	109	136	109	79	134	352
17	27	41	e15	38	e24	252	97	127	101	129	89	96
18	28	44	e14	37	e23	198	93	117	96	521	52	67
19	32	47	e16	e35	e22	174	96	112	95	109	44	52
20	32	34	e16	e34	e25	164	95	131	90	67	41	46
21	34	41	e16	33	e27	188	92	264	88	61	39	44
22	36	42	e16	34	e25	185	93	142	88	58	37	47
23	37	40	e15	30	e23	178	102	121	84	54	37	54
24	39	40	e15	31	e24	162	122	120	81	57	38	39
25	40	41	e16	e25	e27	131	97	115	79	64	42	37
26	39	42	e16	e25	e30	111	88	107	76	76	50	36
27	36	42	e17	e27	e35	102	84	102	81	60	39	36
28	37	44	e18	28	e40	108	79	100	77	57	34	37
29	41	44	e16	29	---	110	74	98	73	57	31	36
30	63	44	e16	29	---	104	72	114	70	54	36	36
31	82	---	e15	29	---	110	---	205	---	51	32	---
TOTAL	983	1408	714	962	778	6696	3896	7309	3614	2725	1364	2181
MEAN	31.7	46.9	23.0	31.0	27.8	216	130	236	120	87.9	44.0	72.7
MAX	82	94	45	47	40	1010	591	938	388	521	134	713
MIN	20	34	14	17	22	42	72	73	70	51	31	28
AC-FT	1950	2790	1420	1910	1540	13280	7730	14500	7170	5410	2710	4330

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2001, BY WATER YEAR (WY)

	MEAN	37.3	29.7	23.4	24.0	70.9	135	95.6	119	219	103	69.6	47.3
MAX	323	158	102	82.8	446	674	590	642	1252	1023	762	383	
(WY)	1983	1999	1999	1999	1971	1962	1984	1984	1960	1993	1996	1965	
MIN	.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	

PLATTE RIVER BASIN

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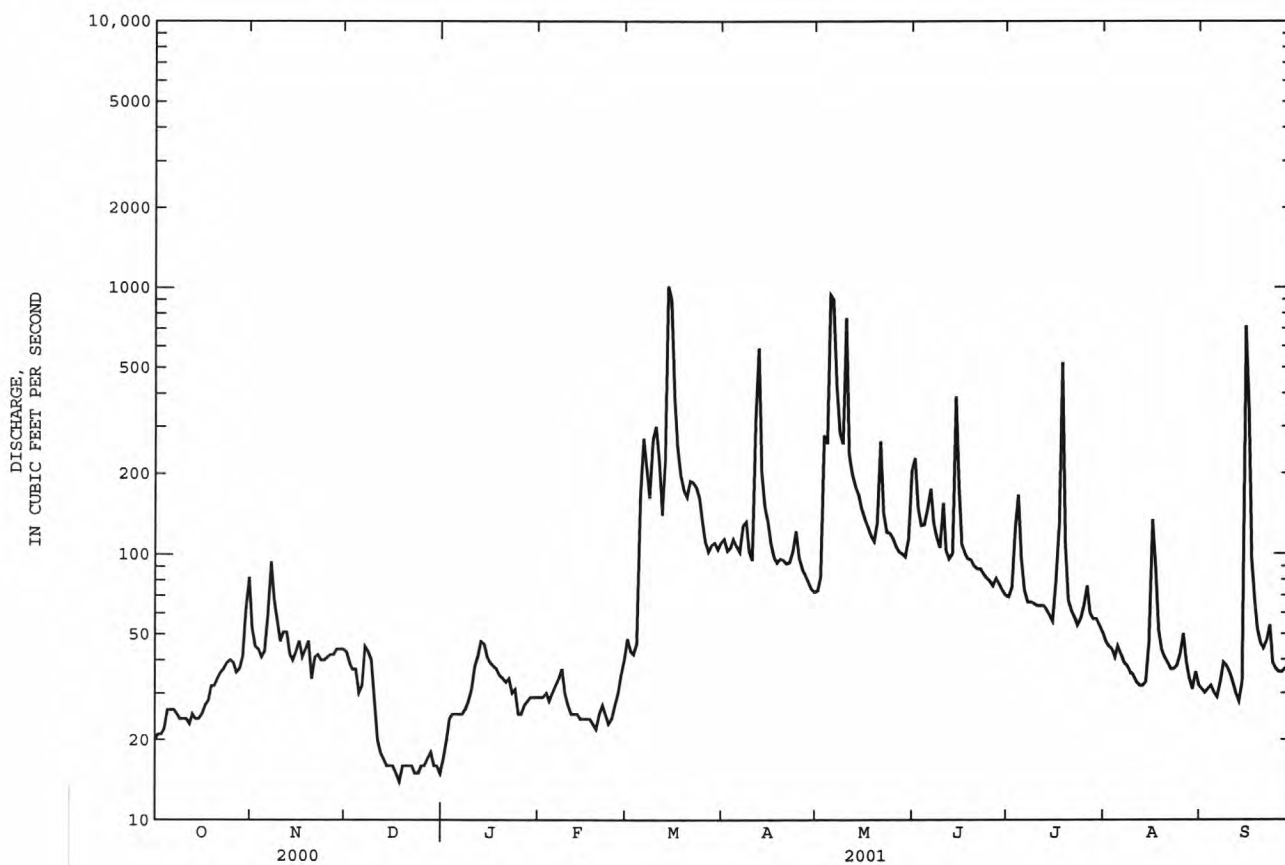
06800000 MAPLE CREEK NEAR NICKERSON, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1952 - 2001	
ANNUAL TOTAL	25392		32630		81.1	
ANNUAL MEAN	69.4		89.4		67.1	
MEDIAN OF ANNUAL MEANS					264	
HIGHEST ANNUAL MEAN					5.19	
LOWEST ANNUAL MEAN					10400	
HIGHEST DAILY MEAN	4300	Jul 6	1010	Mar 14	10400	Aug 6 1996
LOWEST DAILY MEAN	14	Dec 18	14	Dec 18	.10	Jan 15 1956
ANNUAL SEVEN-DAY MINIMUM	15	Dec 17	15	Dec 17	.19	Sep 17 1981
MAXIMUM PEAK FLOW			1870	Mar 14	*13700	Aug 6 1996
MAXIMUM PEAK STAGE			8.55	Mar 14	**17.65	Jun 17 1984
ANNUAL RUNOFF (AC-FT)	50370		64720		58750	
10 PERCENT EXCEEDS	77		174		133	
50 PERCENT EXCEEDS	44		45		24	
90 PERCENT EXCEEDS	22		24		1.4	

e Estimated.

* Stage 17.33 ft.

** Site and datum then in use.



PLATTE RIVER BASIN

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

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1993-95, 1996 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	
OCT														
10...	1100	23	11.8	101	7.5	638	10.5	6.5	15	270	71.7	23.3	7.06	
NOV														
06...	1230	42	10.6	90	8.2	775	2.5	6.5	13	310	84.3	24.6	15.4	
DEC														
14...	1200	52	9.3	67	7.5	825	-5.0	.00	17	380	105	28.5	8.26	
JAN														
08...	1200	28	11.8	88	7.3	754	4.0	1.5	12	330	92.1	24.7	7.17	
FEB														
06...	1100	50	12.3	92	7.7	521	-2.0	1.5	10	340	95.0	24.8	6.90	
MAR														
14...	1130	1360	10.4	80	7.0	346	13.5	2.0	--	130	35.2	9.28	12.9	
APR														
11...	1130	134	7.0	75	8.0	668	15.0	14.5	10	300	82.5	22.7	8.67	
MAY														
14...	1145	166	8.4	102	8.3	797	28.0	22.0	33	370	101	28.3	9.11	
JUN														
13...	1100	95	5.2	67	8.2	738	28.5	25.0	26	350	95.8	26.7	8.29	
JUL														
09...	1000	66	7.5	99	8.4	624	27.0	27.5	13	320	89.0	24.8	9.36	
AUG														
06...	1120	44	8.8	119	8.5	629	33.0	29.0	33	280	73.0	23.6	10.2	
SEP														
11...	1100	38	9.0	106	8.3	587	21.0	21.0	7	280	72.5	24.5	8.82	
DATE		SODIUM AD- SORP- TION RATIO (00931)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
OCT														
10...	.7	26.4	17	260	317	.0	9.2	.3	14.5	52.8	.52	23.7	382	
NOV														
06...	1.0	40.4	21	298	364	.0	33.2	.3	19.0	61.2	.66	55.0	485	
DEC														
14...	.7	31.4	15	362	442	.0	10.8	.4	22.0	62.4	.73	75.4	537	
JAN														
08...	.7	28.4	15	320	390	.0	11.0	.3	21.7	52.0	.64	35.4	468	
FEB														
06...	.7	28.2	15	329	402	.0	10.8	.3	20.9	51.4	.66	65.5	485	
MAR														
14...	.4	9.4	13	133	162	.0	6.0	.2	8.9	18.3	.31	845	230	
APR														
11...	.6	25.2	15	289	334	9	9.5	.3	12.2	53.2	.57	152	419	
MAY														
14...	.8	34.1	16	335	389	10	16.6	.4	17.8	58.9	.73	241	538	
JUN														
13...	.7	29.8	15	324	380	7	9.3	.5	20.1	54.6	.66	125	486	
JUL														
09...	.7	28.4	16	311	365	7	9.3	.4	19.8	53.9	.67	87.3	490	
AUG														
06...	.7	27.1	17	259	300	.0	9.7	.3	17.9	51.9	.55	47.8	402	
SEP														
11...	.7	26.9	17	280	335	--	10.4	.3	16.3	51.8	.55	41.5	404	

PLATTE RIVER BASIN

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)
OCT 10...	379	<.041	.26	.38	--	4.1	3.87	17.1	3.89	.082	.025	--	--
NOV 06...	474	.290	1.2	1.8	.37	4.4	3.18	14.1	3.23	.164	.050	.92	1.5
DEC 14...	513	.129	.45	.50	.17	6.3	5.83	25.8	5.85	.082	.025	.32	.37
JAN 08...	457	.355	.84	.93	.46	6.7	5.82	25.8	5.87	.168	.051	.48	.57
FEB 06...	462	.378	1.4	1.6	.49	6.9	5.44	24.1	5.49	.168	.051	1.0	1.2
MAR 14...	192	1.61	3.5	20	2.07	5.2	1.66	7.35	1.73	.217	.066	1.8	18
APR 11...	403	.045	.55	1.8	.06	3.8	3.23	14.3	3.29	.195	.059	.50	1.7
MAY 14...	482	E.021	.54	1.8	--	3.6	3.00	13.3	3.08	.260	.079	--	--
JUN 13...	468	<.040	.35	1.1	--	6.7	6.34	28.1	6.37	.095	.029	--	--
JUL 09...	447	<.080	.47	1.0	--	6.0	5.46	24.2	5.49	.112	.034	--	--
AUG 06...	379	E.021	.42	.87	--	4.2	3.76	16.6	3.79	.108	.033	--	--
SEP 11...	395	<.040	.41	.55	--	4.4	3.94	17.5	3.98	.131	.040	--	--
DATE	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)
OCT 10...	4.3	.307	.119	.100	.153	<10	165	<.002	<.004	<.002	<.005	.034	<.010
NOV 06...	5.1	1.56	.589	.510	.792	<10	132	<.002	<.007	<.002	<.005	.033	<.010
DEC 14...	6.4	.803	.287	.262	.320	<10	272	<.002	<.004	<.002	<.005	.024	<.010
JAN 08...	6.8	.831	.280	.271	.330	<10	300	<.002	<.004	<.002	<.005	.032	<.010
FEB 06...	7.1	.813	.287	.265	.393	<10	234	<.002	<.004	<.002	<.005	.020	<.010
MAR 14...	22	1.18	.480	.386	8.00	20	826	<.002	<.030	<.002	<.005	.104	<.010
APR 11...	5.1	.752	.280	.245	.811	<10	26.3	<.002	.013	.006	<.005	.028	<.010
MAY 14...	4.9	1.10	.359	.359	.903	<10	10.0	<.002	.458	.042	<.005	1.21	<.010
JUN 13...	7.5	1.03	.320	.335	.546	<10	17.1	<.002	.075	.006	<.005	.493	<.010
JUL 09...	6.5	1.19	.368	.387	.541	<10	20.9	<.002	.040	<.002	<.005	.291	<.010
AUG 06...	4.7	.644	.228	.210	.311	<10	22.7	<.002	.026	<.002	<.005	.087	<.010
SEP 11...	4.5	.702	.238	.229	.280	<10	44.1	<.002	.096	.102	<.005	.180	<.010

PLATTE RIVER BASIN

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)
OCT 10...	<.002	<.041	<.020	<.005	<.018	<.003	E.030	<.005	<.005	<.021	<.002	<.009	<.005
NOV 06...	<.002	<.041	<.020	<.005	<.018	<.003	E.020	<.005	<.005	<.021	<.002	<.009	<.005
DEC 14...	<.002	<.041	<.020	<.005	E.005	<.003	E.015	<.005	<.005	<.021	<.002	<.009	<.005
JAN 08...	<.002	<.041	<.020	<.005	<.018	<.003	E.021	<.005	<.005	<.021	<.002	<.009	<.005
FEB 06...	<.002	<.041	<.020	<.005	<.018	<.003	E.013	<.005	<.005	<.021	<.002	<.009	<.005
MAR 14...	<.002	<.041	<.020	<.005	<.018	<.003	E.021	<.005	<.005	<.021	<.002	<.009	<.005
APR 11...	<.002	<.041	<.020	<.005	<.018	<.003	E.012	<.005	<.005	<.021	<.002	<.009	<.005
MAY 14...	<.002	<.041	<.020	<.007	<.018	<.003	E.040	<.005	<.010	<.021	<.002	<.009	<.005
JUN 13...	<.002	<.041	<.020	<.005	<.018	<.003	E.034	<.005	<.005	<.021	<.002	<.009	<.005
JUL 09...	<.002	<.041	<.020	<.005	.019	<.003	E.040	<.005	<.005	<.021	<.002	<.009	<.005
AUG 06...	<.002	<.041	<.020	<.005	<.018	<.003	E.027	<.005	<.005	<.021	<.002	<.009	<.005
SEP 11...	<.002	<.041	<.020	<.005	<.018	<.003	E.018	<.005	<.005	<.021	<.002	<.009	<.005
DATE	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P, P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)
OCT 10...	<.003	<.004	<.035	E.005	<.050	<.006	E.007	<.006	<.002	<.007	<.003	<.007	<.002
NOV 06...	<.003	<.004	<.035	<.027	<.050	<.006	E.009	<.006	<.002	<.007	<.003	<.007	<.002
DEC 14...	<.003	<.004	<.035	<.027	<.050	<.006	E.006	<.006	<.002	<.007	<.003	<.007	<.002
JAN 08...	<.003	<.004	<.035	<.027	<.050	<.006	.013	<.006	<.002	<.007	<.003	<.007	<.002
FEB 06...	<.003	<.004	<.035	<.027	<.050	<.006	E.003	<.006	<.002	<.007	<.003	<.007	<.002
MAR 14...	<.003	<.030	<.035	<.027	<.050	<.006	.142	<.006	<.002	<.007	<.003	<.007	<.002
APR 11...	<.003	<.004	<.035	<.027	<.050	<.006	.017	<.006	<.002	<.007	<.003	<.007	<.002
MAY 14...	<.003	<.004	<.035	<.027	<.050	<.006	.252	.014	<.002	<.007	E.001	<.007	<.002
JUN 13...	<.003	<.004	<.035	<.027	<.050	<.006	.205	<.006	<.002	<.007	<.003	<.007	<.002
JUL 09...	<.003	<.004	<.035	<.027	<.050	<.006	.041	<.006	<.002	<.007	<.003	<.007	<.002
AUG 06...	<.003	<.004	<.035	<.027	<.050	<.006	.018	<.006	<.002	<.007	<.003	<.007	<.002
SEP 11...	<.003	<.004	<.035	<.027	<.050	<.006	.029	<.006	<.002	<.007	<.003	<.007	<.002

PLATTE RIVER BASIN

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)
OCT 10...	<.010	<.006	<.011	E.004	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005
NOV 06...	<.010	<.006	<.011	E.011	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005
DEC 14...	<.010	<.006	<.011	E.002	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005
JAN 08...	<.010	<.006	<.011	E.003	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005
FEB 06...	<.010	<.006	<.011	<.015	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005
MAR 14...	<.010	<.006	<.011	<.015	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005
APR 11...	.018	<.006	<.011	.019	<.004	<.010	<.011	<.023	E.005	<.016	<.034	<.017	<.005
MAY 14...	.015	<.006	<.011	E.010	<.004	<.010	<.011	<.023	E.008	<.016	<.034	<.017	<.005
JUN 13...	<.010	<.006	<.011	E.006	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005
JUL 09...	<.010	<.006	<.011	E.005	<.004	<.010	<.011	<.023	E.003	<.016	<.034	<.017	<.005
AUG 06...	<.010	<.006	<.011	E.006	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005
SEP 11...	<.010	<.006	<.011	E.004	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005
					TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)		SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)			
OCT 10...					<.002	<.009	41	128	7.9				
NOV 06...					<.002	<.009	83	95	11				
DEC 14...					<.002	<.009	76	210	29				
JAN 08...					<.002	<.009	--	--					
FEB 06...					<.002	<.009	39	188	25				
MAR 14...					<.002	<.009	79	8840	32500				
APR 11...					<.002	<.009	91	683	247				
MAY 14...					<.002	E.008	93	620	278				
JUN 13...					<.002	E.006	90	263	67				
JUL 09...					<.002	<.009	79	225	40				
AUG 06...					<.002	<.009	85	54	6.4				
SEP 11...					<.002	<.009	75	36	3.7				

PLATTE RIVER BASIN

06800500 ELKHORN RIVER AT WATERLOO, NE

LOCATION.--Lat 41°17'37", long 096°17'00", in SW $\frac{1}{4}$ sec.3, T.15 N., R.10 E., Douglas County, Hydrologic Unit 10220003, on right bank at Nebraska Highway 64 bridge at north edge of Waterloo, 3.5 mi downstream from Rawhide Creek, and at mile 13.8.

DRAINAGE AREA.--6,900 mi², approximately, of which about 5,870 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--April 1899 to November 1903, May 1911 to September 1915, August 1928 to current year. Published as "at Arlington" 1899-1903, July 1913 to September 1915. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1390: 1914 (M), 1915, 1936, 1943 (M). WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,104.73 ft above sea level. Oct. 1, 1960, to July 27, 1978, at datum 2.00 ft higher. See WSP 1918 for history of changes prior to Oct. 1, 1960. July 28, 1978 to Nov. 17, 1993, at site 800 ft downstream at present datum. Data collection platform at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	419	1090	1020	e600	e760	e760	2520	3580	4630	1340	1070	876
2	413	995	981	e580	e740	e780	2520	3680	3320	2080	1030	854
3	418	981	932	e560	e740	e820	2380	5500	2880	8300	1000	856
4	418	883	926	e540	e740	e860	2330	5460	2640	6930	1020	839
5	444	844	920	e580	e720	e920	2290	9130	2850	4220	1200	823
6	464	983	e800	e640	e700	e1000	2260	12000	2950	3870	1040	807
7	475	1100	e780	e700	e680	e1080	2490	10400	2520	2910	1040	824
8	474	1310	e740	e760	e700	e1200	2940	9270	2270	2310	977	925
9	480	1350	e700	e860	e700	e1400	2980	8430	2120	1890	925	990
10	494	1100	e600	e940	e720	e1900	4060	12000	2490	1950	877	869
11	512	985	e640	e1000	e720	e2450	5950	7570	2720	2280	850	843
12	525	943	e660	e1000	e720	e2800	8830	5560	2010	1870	832	831
13	539	915	e660	e1000	e740	e3400	6890	4880	2040	1790	822	814
14	544	867	e660	e1000	e740	6410	6180	4210	7740	1550	802	803
15	548	830	e640	e980	e720	7850	5580	3810	6450	1420	873	937
16	553	812	e640	e980	e720	9320	5480	3610	3760	1380	1300	3150
17	563	812	e640	e960	e720	8230	4860	3440	2800	1460	3420	4780
18	573	810	e640	e940	e720	7130	3980	3300	2330	3080	2700	2950
19	579	845	e620	e880	e720	4760	3540	3130	2090	2930	2070	1590
20	577	836	e620	e820	e720	4140	3200	3180	1890	2960	1490	1320
21	578	809	e600	e760	e740	4090	2950	4230	1740	2780	1260	1180
22	585	733	e600	e680	e740	3970	2930	3470	1670	1910	1120	1090
23	602	771	e600	e740	e740	3700	3720	2900	1600	1540	1050	1070
24	626	833	e600	e760	e740	3390	5680	2730	1520	1380	1010	1030
25	650	915	e620	e720	e740	3130	6480	2540	1470	1340	993	961
26	678	937	e620	e680	e740	2880	7280	2500	1420	1320	1000	927
27	697	935	e620	e700	e760	2650	7520	2390	1400	1410	982	914
28	714	974	e620	e720	e760	2540	6540	2280	2130	1290	937	924
29	746	1010	e600	e760	---	2490	5280	2180	1820	1250	896	911
30	822	1010	e620	e760	---	2500	4330	2250	1420	1190	911	895
31	910	---	e620	e760	---	2500	---	4100	---	1130	914	---
TOTAL	17620	28218	21539	24360	20400	101050	133970	153710	78690	73060	36411	36583
MEAN	568	941	695	786	729	3260	4466	4958	2623	2357	1175	1219
MAX	910	1350	1020	1000	760	9320	8830	12000	7740	8300	3420	4780
MIN	413	733	600	540	680	760	2260	2180	1400	1130	802	803
AC-FT	34950	55970	42720	48320	40460	200400	265700	304900	156100	144900	72220	72560

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2001, BY WATER YEAR (WY)

	MEAN	726	755	655	618	1196	2282	2085	2070	2843	1458	964	737
MAX	2780	2792	1803	1650	6439	8082	10450	7565	11950	11470	4755	2705	
(WY)	1987	1999	1994	1973	1971	1993	1984	1995	1984	1993	1951	1951	
MIN	150	240	150	180	256	489	512	327	405	173	117	87.8	
(WY)	1940	1940	1930	1977	1940	1981	1981	1934	1933	1936	1976	1939	

PLATTE RIVER BASIN

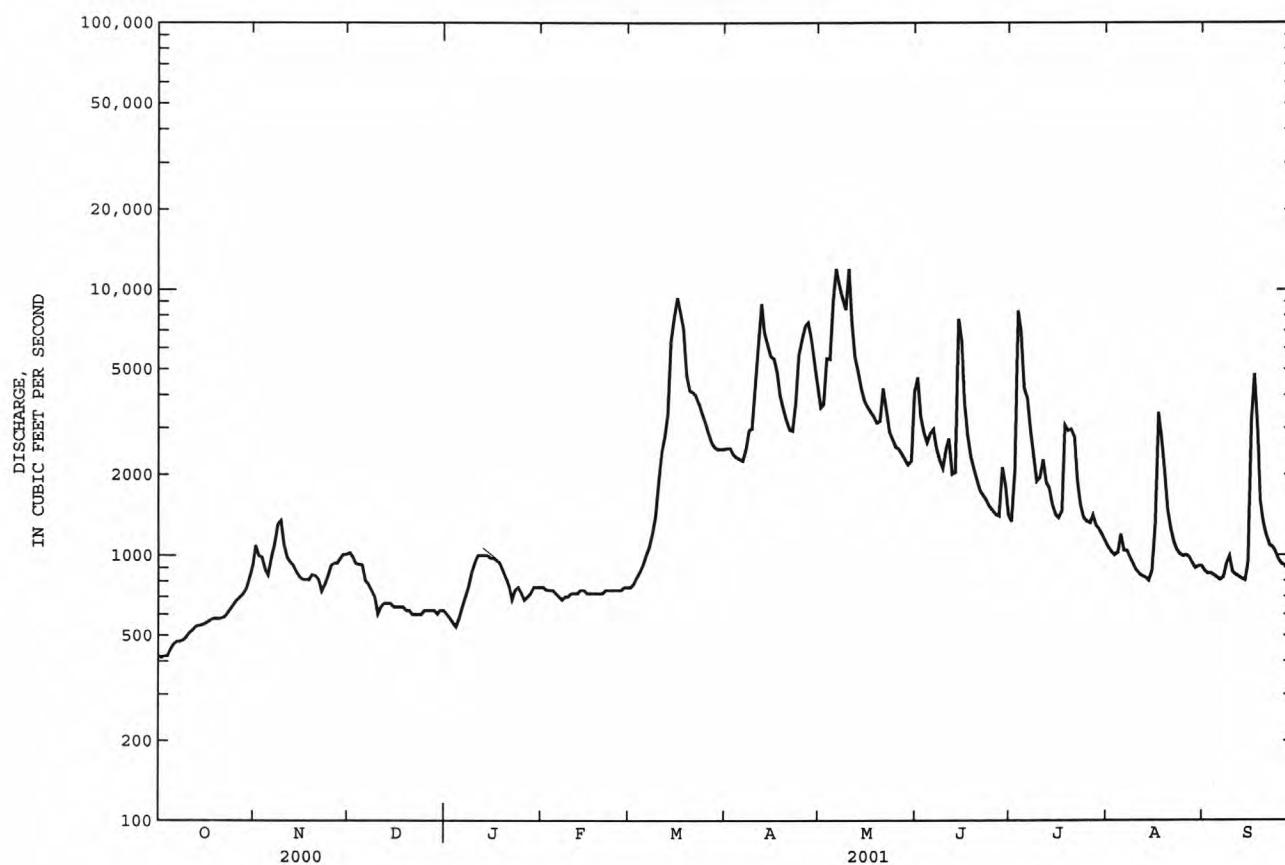
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06800500 ELKHORN RIVER AT WATERLOO, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1929 - 2001	
ANNUAL TOTAL	466803		725611		1364	
ANNUAL MEAN	1275		1988		1096	
MEDIAN OF ANNUAL MEANS					3870	
HIGHEST ANNUAL MEAN					417	
LOWEST ANNUAL MEAN					93800	
HIGHEST DAILY MEAN	11000	Jul 7	12000	May 6	Jun 12 1944	
LOWEST DAILY MEAN	371	Sep 19	413	Oct 2	Sep 16 1939	
ANNUAL SEVEN-DAY MINIMUM	380	Sep 15	436	Oct 1	Sep 15 1939	
MAXIMUM PEAK FLOW			15400	May 10	Jun 12 1944	
MAXIMUM PEAK STAGE			9.41	May 10	*16.60	
ANNUAL RUNOFF (AC-FT)	925900		1439000		988400	
10 PERCENT EXCEEDS	1680		4450		2760	
50 PERCENT EXCEEDS	1100		1000		732	
90 PERCENT EXCEEDS	493		620		301	

e Estimated.

* From floodmark, site and datum then in use.



PLATTE RIVER BASIN

06801000 PLATTE RIVER NEAR ASHLAND, NE

LOCATION.--Lat 41°03'44", long 096°19'28", in SE ¼ SW ¼ sec.29, T.13 N., R.10 E., Sarpy County, Hydrologic Unit 10200202, on left bank upstream side and 35 ft northeast of Highway 6 bridge, 3 mi northeast of Ashland, 2 mi upstream from Salt Creek, and at mile 27.9.

DRAINAGE AREA.--84,200 mi² from state base maps, scale 1:1,000,000.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1928 to May 1953, July 1988 to current year.

REVISED RECORDS.--WDR NE-94-1: 1993 (M).

GAGE.--Water-stage recorder. Datum of gage is 1,040.00 ft above sea level. Prior to Oct. 1, 1929, chain gage at former highway bridge ½ 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 ½ mi upstream at datum 14.79 ft higher. June 17, 1948 to May 11, 1953 ½ mi downstream on Highway 6 bridge at datum 12.51 ft higher. Data collection platform at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2410	6180	5320	e3300	e4800	e4400	6220	9740	7470	3480	3520	3070
2	2580	6790	5380	e3200	e4700	e4800	6370	9410	7120	3130	3390	2910
3	2510	6100	5270	e3400	e4600	e5000	6360	12100	6850	6840	3180	3000
4	2810	5980	4760	e3700	e4800	e5200	6150	13700	6610	8640	2710	2780
5	2590	6370	5130	e3900	e5000	e5400	6390	20200	6630	6140	2700	2820
6	2920	7040	4380	e4100	e5200	e5600	7510	29700	7180	5000	2970	2530
7	3060	7850	3550	e4300	e5000	e5800	7980	32200	6760	4780	2560	2690
8	3100	7520	5060	e4500	e4800	e6000	7450	28100	6460	4230	2340	2760
9	3230	7480	5490	e4700	e4600	e6200	7630	25000	6390	3700	2280	2860
10	3070	6720	5040	e5000	e4500	e6400	9960	27800	6390	3510	1800	2880
11	3480	6020	1970	e5200	e4600	e6800	11000	20000	6700	3850	1960	3100
12	3060	5250	1110	e5200	e4700	e7200	19000	15400	5590	3350	1930	3030
13	3040	4190	1090	e5200	e4700	e8000	20400	13200	5320	3560	1590	3140
14	2770	5150	e1700	e5000	e4600	e9000	18700	11900	8640	3620	1490	3470
15	3500	3950	e2200	e5000	e4500	e13000	15900	9970	11100	3470	2250	3520
16	3680	3410	e2700	e4900	e4400	e30000	13500	8340	7660	3210	2380	4520
17	3650	3380	e3000	e4800	e4400	26600	13600	7980	6140	3930	3530	7210
18	3740	3360	e3300	e4800	e4500	20500	12000	7520	5500	3670	4290	6650
19	4020	3920	e3400	e4800	e4600	15400	10700	6440	5280	4360	4780	6360
20	4670	4220	e3600	e4900	e4500	12700	9170	6770	5050	5390	4650	5640
21	4010	3870	e3600	e4900	e4600	11100	8010	8150	4600	5590	4340	5300
22	3760	3760	e3500	e5000	e4600	10600	7170	7790	4710	4500	4220	5030
23	4010	4400	e3500	e4800	e4600	9880	8840	6320	4470	4570	3820	4830
24	4060	4320	e3500	e4700	e4600	9630	14000	5910	4530	3970	3690	4830
25	4350	4540	e3500	e4600	e4500	9040	19000	5360	4170	3710	3820	4410
26	4660	5070	e3600	e4600	e4400	8190	17600	4840	4200	3570	3250	4360
27	5050	5620	e3500	e4600	e4200	7470	17600	4910	4090	3440	3460	4390
28	4860	5840	e3600	e4800	e4300	6930	15500	4290	4230	3690	3140	4750
29	4210	6340	e3500	e5000	---	6710	11400	4020	4510	3900	3200	4610
30	5790	5650	e3500	e5000	---	6310	11600	4210	3440	3780	3380	4560
31	5670	---	e3400	e4900	---	6310	---	5780	---	3620	3280	---
TOTAL	114320	160290	112150	142800	129300	296170	346710	377050	177790	132200	95900	122010
MEAN	3688	5343	3618	4606	4618	9554	11560	12160	5926	4265	3094	4067
MAX	5790	7850	5490	5200	5200	30000	20400	32200	11100	8640	4780	7210
MIN	2410	3360	1090	3200	4200	4400	6150	4020	3440	3130	1490	2530
AC-FT	226800	317900	222400	283200	256500	587500	687700	747900	352600	262200	190200	242000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2001, BY WATER YEAR (WY)												
MEAN	5505	6149	5476	5150	7158	9721	9098	9248	11620	8095	5329	4921
MAX	8325	9403	8778	9022	11390	23190	15470	19330	23270	31980	10730	9825
(WY)	1998	1999	1998	1998	1997	1993	1998	1995	1995	1993	1996	1993
MIN	2433	3620	2879	2939	4618	5233	4618	2969	2928	2448	1288	1533
(WY)	1992	1989	1990	1991	2001	1991	1989	1989	1989	1991	1991	1991

PLATTE RIVER BASIN

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06801000 PLATTE RIVER NEAR ASHLAND, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1989 - 2001	
ANNUAL TOTAL	1850901		2206690		*7283	
ANNUAL MEAN	5057		6046		11820	1993
HIGHEST ANNUAL MEAN					4612	1989
LOWEST ANNUAL MEAN					110000	Mar 10 1993
HIGHEST DAILY MEAN	18200	Jul 7	32200	May 7	662	Sep 2 1991
LOWEST DAILY MEAN	971	Aug 20	1090	Dec 13	701	Aug 29 1991
ANNUAL SEVEN-DAY MINIMUM	1290	Aug 15	1900	Aug 9	***130000	Mar 10 1993
MAXIMUM PEAK FLOW			**34200	May 7	*****23.05	Feb 20 1997
MAXIMUM PEAK STAGE			****21.39	Mar 15	5276000	
ANNUAL RUNOFF (AC-FT)	3671000		4377000		12000	
10 PERCENT EXCEEDS	8190		10600		6090	
50 PERCENT EXCEEDS	4680		4700		2720	
90 PERCENT EXCEEDS	2150		3020			

e Estimated.

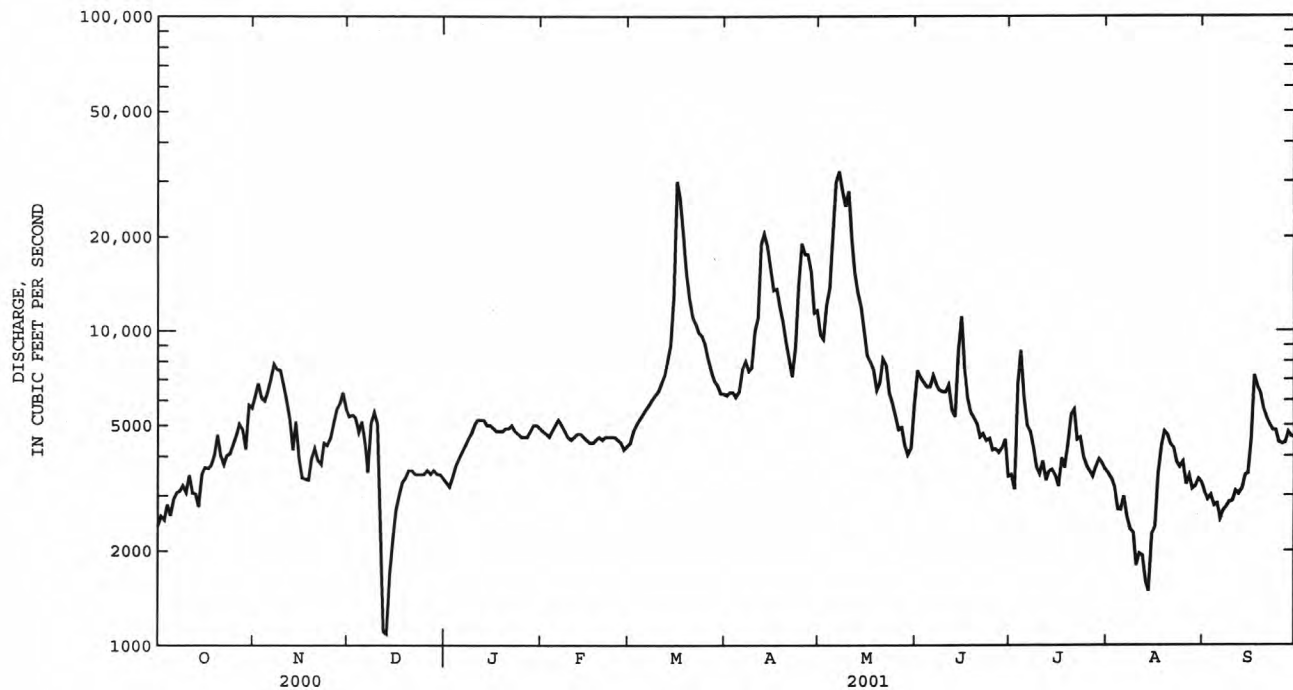
* Average discharge for water years 1942-52, 5,961 ft³/s.

** Stage 18.67 ft.

*** Estimated; discharge includes overbank flow, stage 19.23 ft., backwater from ice.

**** Backwater from ice.

***** Ice jam.



06801000 PLATTE RIVER NR ASHLAND, NE--Continued

WATER-QUALITY RECORDS
(Ashland Well Field Study)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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PLATTE RIVER BASIN

06801180 OLIVE BRANCH NEAR HALLAM, NE

LOCATION.--Lat 40°35'44", long 096°47'42", in NE ¼ NW ¼ sec.7, T.7 N., R.6 E., Lancaster County, Hydrologic Unit 10200203, on right bank, 4.75 mi west of U.S. Highway 77 on West Panama Road, south of Lincoln, and at mile 3.5.

DRAINAGE AREA.--37.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1997 to current year.

GAGE.--Water-stage recorder, water temperature, and specific conductance sensors. Datum of gage is 1,273.75 ft above sea level. Data collection platform at station.

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

COOPERATION.--Station operated in cooperation with the Nebraska Public Power District.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.82	1.5	1.6	e.16	e1.8	e3.2	1.5	.85	68	2.6	1.2	.85
2	.82	.85	1.5	e.17	e1.9	e3.4	1.5	.88	42	2.6	1.1	.76
3	.82	.41	1.3	e.17	e2.2	5.4	3.4	159	53	2.3	1.2	.73
4	.82	.41	1.5	e.37	e2.8	15	2.3	141	33	2.1	1.0	.68
5	.82	.51	1.4	e1.0	e3.3	e17	1.9	403	60	2.1	1.0	.65
6	.82	1.2	1.4	1.7	e3.6	e26	1.9	75	34	2.1	.95	.65
7	.82	.78	1.2	2.2	e3.4	e20	1.6	36	26	2.0	.99	1.3
8	.82	.78	.16	2.4	e3.3	e22	3.2	29	21	2.1	.96	3.7
9	.82	.67	.14	2.1	e3.0	e32	13	17	17	2.1	.96	1.0
10	.82	.63	.13	3.1	e2.7	e28	3.2	12	14	2.0	.94	.80
11	.85	.86	e.09	6.8	e3.0	e20	21	7.2	12	90	.95	.71
12	.91	.78	e.10	4.8	e3.2	e18	6.6	10	10	18	1.0	.72
13	.91	.60	.12	e4.5	e3.1	e38	3.2	5.2	8.6	8.6	1.1	.72
14	.91	.56	e.15	e3.9	e2.9	e36	2.6	3.7	184	5.5	1.1	.80
15	.91	.62	.17	e3.4	e2.7	e30	2.4	2.7	54	4.0	1.8	2.1
16	.86	.66	.10	e3.2	e2.8	13	1.8	2.0	35	5.6	1.5	1.8
17	.91	.49	e.12	e3.2	e3.0	12	1.6	1.9	19	3.5	1.3	3.4
18	.91	.58	e.13	e2.9	e3.1	11	1.6	13	12	2.7	1.3	1.8
19	.91	.79	e.13	e2.6	e3.3	11	1.5	13	11	2.8	1.1	1.1
20	.91	.97	e.16	e2.7	e3.5	9.0	1.5	537	15	2.6	1.0	1.1
21	.91	.90	e.15	e3.0	e3.6	9.1	1.4	284	27	2.2	1.1	1.1
22	.91	1.3	e.14	e3.3	e3.5	11	1.5	149	13	2.0	1.1	1.1
23	.93	1.5	e.14	e3.7	e3.4	8.7	16	102	10	1.7	1.0	5.6
24	1.0	1.2	e.13	e3.4	e3.4	6.6	2.1	51	8.0	1.6	1.3	1.6
25	.81	1.4	e.13	e2.9	e3.4	5.6	1.4	30	6.7	1.9	1.2	1.1
26	.76	1.6	e.14	e2.4	e3.3	4.4	1.2	21	5.9	1.9	1.1	1.1
27	.80	1.5	e.16	e2.2	e3.3	4.3	1.0	17	5.2	2.5	1.0	1.0
28	.81	1.7	e.15	e2.2	e3.2	3.8	.92	14	4.6	5.1	.94	.95
29	.90	1.7	e.15	e2.2	---	3.3	.79	12	4.1	2.6	.84	.76
30	e1.3	1.3	e.15	e2.1	---	2.6	.83	206	3.5	1.8	.80	.68
31	4.4	---	e.15	e2.0	---	1.9	---	146	---	1.4	.83	---
TOTAL	30.72	28.75	13.19	80.77	85.7	431.3	104.44	2501.43	816.6	190.0	33.66	40.36
MEAN	.99	.96	.43	2.61	3.06	13.9	3.48	80.7	27.2	6.13	1.09	1.35
MAX	4.4	1.7	1.6	6.8	3.6	38	21	537	184	90	1.8	5.6
MIN	.76	.41	.09	.16	1.8	1.9	.79	.85	3.5	1.4	.80	.65
AC-FT	61	57	26	160	170	855	207	4960	1620	377	67	80

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2001, BY WATER YEAR (WY)

	1997	1998	1999	2000	2001
MEAN	5.87	12.5	3.62	2.57	6.31
MAX	17.2	35.6	6.37	4.21	18.1
(WY)	1999	1999	1999	1998	1998
MIN	.98	.96	.43	.96	1.07
(WY)	2000	2001	2001	2000	2000

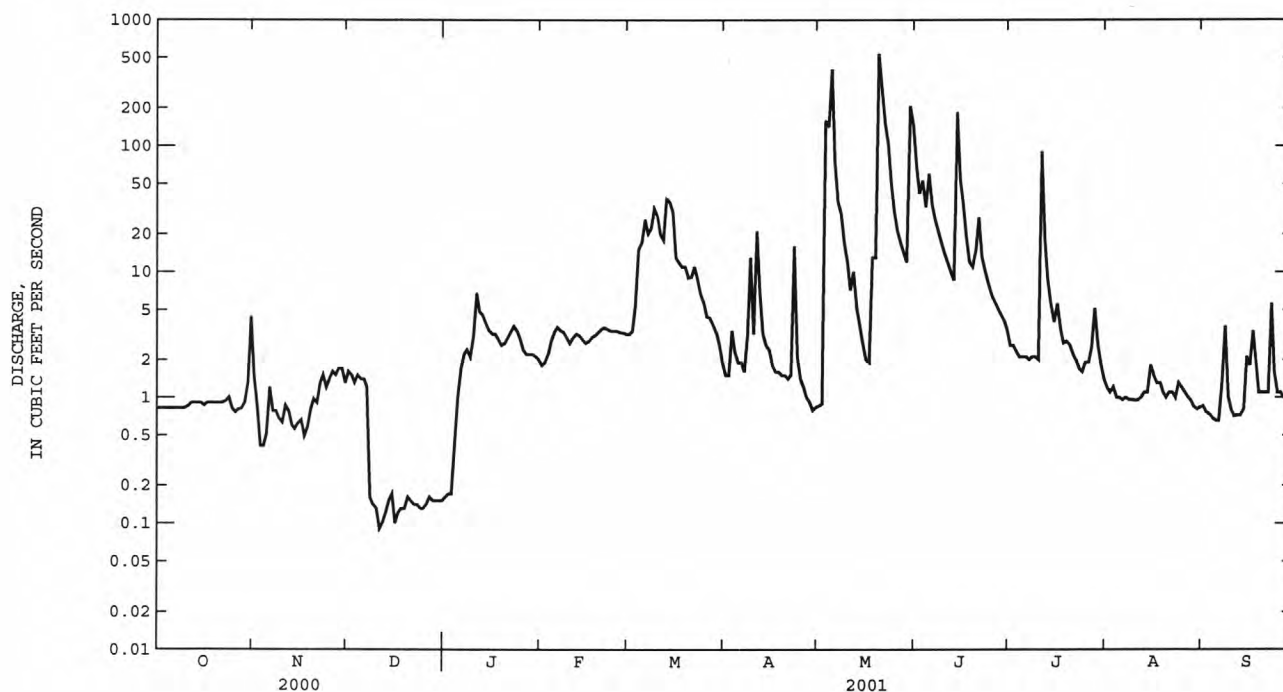
PLATTE RIVER BASIN

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06801180 OLIVE BRANCH NEAR HALLAM, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1997 - 2001
ANNUAL TOTAL		4356.92	
ANNUAL MEAN		11.9	12.2
HIGHEST ANNUAL MEAN			13.4 1998
LOWEST ANNUAL MEAN			11.3 1999
HIGHEST DAILY MEAN	74 Jun 25	537 May 20	537 May 20 2001
LOWEST DAILY MEAN	.06 Jun 22	.09 Dec 11	.06 Jun 22 2000
ANNUAL SEVEN-DAY MINIMUM	.12 Dec 11	.12 Dec 11	.12 Dec 11 2000
MAXIMUM PEAK FLOW		1880 May 20	1880 May 20 2001
MAXIMUM PEAK STAGE		13.90 May 20	13.90 May 20 2001
ANNUAL RUNOFF (AC-FT)		8640	8850
10 PERCENT EXCEEDS	1.5	20	17
50 PERCENT EXCEEDS	.91	1.9	2.7
90 PERCENT EXCEEDS	.22	.63	.80

e Estimated.



06801180 OLIVE BRANCH NEAR HALLAM, NE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1997 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1997 to current year.

WATER TEMPERATURES: May 1997 to current year

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.7	19.4	15.8	8.5	5.5	4.6	4.0	1.5	3.2	1.4	3.9	1.4
2	19.7	19.3	9.7	6.7	6.2	4.5	3.9	2.3	3.9	1.2	5.2	1.6
3	19.4	18.2	8.4	5.3	5.6	3.7	4.9	2.9	5.3	3.0	5.0	.9
4	18.7	17.4	9.4	5.9	6.4	4.0	5.5	2.8	5.2	2.7	3.2	.2
5	17.4	16.0	10.1	6.9	4.8	3.7	5.2	3.1	5.7	2.6	1.3	.0
6	16.0	14.4	9.5	4.0	6.1	4.2	5.1	3.0	5.2	2.1	.7	.0
7	14.4	13.8	4.6	2.7	7.4	4.6	4.7	3.1	3.9	2.7	3.6	.6
8	15.1	13.4	4.9	2.7	6.3	4.8	4.7	2.7	3.3	.0	3.6	-.1
9	14.9	14.4	4.5	1.8	6.8	4.7	5.0	2.7	1.6	-.1	2.8	-.1
10	15.0	14.7	4.9	1.9	5.0	.9	5.0	2.8	3.8	1.1	1.2	.2
11	15.1	14.9	3.8	2.9	2.2	.6	3.4	1.9	4.2	1.9	1.6	.7
12	15.3	14.9	4.0	1.7	4.0	2.1	4.8	1.9	5.0	2.5	3.6	.5
13	16.3	15.3	4.1	1.2	4.4	3.2	3.5	2.6	4.7	2.7	6.8	.5
14	18.9	16.3	4.8	1.7	4.4	2.2	3.0	2.1	2.7	.8	8.0	3.8
15	18.8	17.4	5.0	2.2	4.5	2.7	4.1	2.1	4.6	1.9	7.4	3.4
16	18.1	17.3	3.2	1.9	4.2	.9	4.1	2.6	3.8	1.1	8.4	2.5
17	18.3	18.0	4.9	1.8	4.3	1.2	4.9	2.9	5.2	1.8	9.5	3.4
18	18.3	18.0	5.0	2.6	3.6	.4	5.0	2.6	5.1	2.1	8.3	4.2
19	18.3	18.2	4.9	2.9	3.6	.8	3.4	1.1	6.2	2.9	8.8	5.6
20	18.4	18.3	4.0	1.9	4.7	1.4	5.2	2.3	4.5	2.1	12.3	4.8
21	18.4	18.4	5.9	2.5	2.5	.9	5.5	3.0	3.5	1.9	8.8	7.1
22	18.5	18.4	6.0	2.7	3.8	1.4	6.1	2.5	6.1	2.3	13.0	6.5
23	18.7	18.5	5.9	2.9	3.5	1.8	5.6	3.0	3.7	2.3	9.9	5.2
24	14.9	14.7	6.3	2.9	3.8	1.8	4.8	2.2	3.4	-.1	9.2	3.2
25	15.7	14.9	5.8	3.7	3.8	2.6	4.7	1.9	1.0	-.1	8.2	3.3
26	15.6	14.7	6.1	3.6	3.9	2.1	3.5	2.1	1.0	-.3	9.5	2.3
27	15.6	14.0	6.7	3.7	4.1	2.0	5.0	1.8	.9	.1	9.0	4.6
28	14.6	13.5	7.4	4.9	4.7	.9	5.0	2.9	3.2	.7	10.9	5.9
29	14.6	13.6	6.1	4.3	3.6	1.0	3.8	3.2	---	---	11.6	6.5
30	14.8	13.5	5.8	3.9	4.3	2.5	4.1	2.2	---	---	13.0	7.9
31	16.1	13.9	---	---	3.6	1.9	5.1	2.3	---	---	11.7	7.1
MONTH	19.7	13.4	15.8	1.2	7.4	.4	6.1	1.1	6.2	-.3	13.0	-.1
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.6	6.0	22.7	14.5	17.9	15.0	22.5	18.9	27.5	20.4	21.2	14.8
2	13.3	6.4	18.3	13.2	18.3	15.3	25.2	17.1	27.3	20.8	22.4	15.4
3	11.0	7.6	13.2	10.6	18.6	15.4	26.8	19.4	27.5	20.8	22.8	16.1
4	10.3	7.8	14.9	12.5	16.0	14.6	26.4	19.6	26.9	20.6	22.9	16.1
5	11.4	9.5	18.2	14.6	16.1	14.4	26.3	19.9	26.9	20.3	21.1	15.7
6	14.2	9.9	17.5	15.0	17.1	15.8	26.8	19.4	26.9	20.4	21.2	16.7
7	18.1	11.0	17.5	13.8	19.6	16.6	27.2	20.3	26.2	19.9	19.1	16.7
8	18.1	10.2	17.6	14.3	21.5	17.8	25.8	21.1	26.0	18.9	20.2	16.4
9	17.1	11.6	20.3	14.9	23.2	20.1	25.9	20.8	24.6	19.4	19.4	14.1
10	13.7	11.8	21.3	16.6	24.8	20.2	26.5	20.4	20.4	17.0	20.1	13.1
11	14.8	11.8	20.2	16.2	26.2	21.7	24.0	19.0	22.9	15.8	19.3	13.2
12	15.3	8.8	19.7	15.9	26.3	22.0	24.0	22.0	20.6	16.6	21.0	13.9
13	15.0	9.3	22.4	15.5	25.2	21.5	24.4	19.9	23.2	16.1	20.8	14.9
14	15.9	9.7	23.5	17.7	23.2	19.3	24.7	19.6	20.6	16.5	16.8	14.8
15	16.3	9.1	24.2	18.3	22.8	20.2	22.0	19.3	20.9	17.4	15.1	14.4
16	12.5	8.0	24.5	18.6	23.8	20.6	26.3	19.0	22.6	16.5	15.9	14.6
17	14.3	5.8	21.0	17.8	23.6	21.4	28.3	21.3	23.1	16.2	19.6	15.3
18	15.5	7.0	20.5	18.2	24.5	20.1	25.2	21.6	22.5	16.7	16.8	15.0
19	15.9	9.6	22.2	18.1	23.0	17.5	24.0	20.4	22.2	14.8	19.1	13.4
20	18.4	11.9	21.2	16.9	17.7	16.5	27.1	20.6	21.4	15.6	20.3	14.6
21	20.5	12.8	17.1	16.2	20.3	16.8	28.2	20.7	23.9	16.6	19.3	13.4
22	16.5	13.6	16.8	15.5	21.5	17.2	28.3	21.3	23.0	17.6	17.7	14.5
23	15.6	11.6	15.9	14.5	23.3	17.9	26.3	21.5	23.9	17.5	16.0	13.5
24	17.0	9.6	14.5	13.4	25.4	20.0	24.8	21.0	20.3	17.7	16.5	11.7
25	20.3	10.8	15.6	12.9	25.2	20.2	22.6	19.8	21.9	16.7	16.4	10.4
26	21.7	12.5	16.8	13.3	23.0	20.2	21.3	19.4	23.1	16.1	16.8	10.6
27	22.5	14.0	17.8	14.0	25.6	19.7	24.9	19.2	23.4	16.6	17.6	11.5
28	21.4	14.2	20.9	15.4	26.0	20.3	25.6	20.2	23.6	16.9	17.8	12.1
29	20.6	13.7	19.2	16.7	26.1	20.3	27.1	20.1	23.8	17.2	17.2	11.9
30	19.5	14.2	16.7	15.3	26.6	20.7	28.3	21.3	20.2	16.7	17.6	11.7
31	---	---	16.2	14.6	---	---	27.7	21.3	21.7	14.4	---	---
MONTH	22.5	5.8	24.5	10.6	26.6	14.4	28.3	17.1	27.5	14.4	22.9	10.4
YEAR	28.3	-.3										

PLATTE RIVER BASIN

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06801180 OLIVE BRANCH NEAR HALLAM, NE--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	935	656	874	824	766	616	650	827	327	730	687	665
2	993	---	876	825	790	653	651	738	349	766	698	667
3	1040	660	880	800	759	645	615	455	349	793	705	670
4	1040	667	870	784	735	508	616	419	367	800	709	668
5	994	669	869	783	721	335	654	243	365	799	711	669
6	952	651	871	807	713	322	651	299	383	797	711	672
7	886	673	841	763	715	420	655	327	415	795	707	651
8	756	679	825	779	706	398	624	336	436	791	705	584
9	725	692	823	756	718	301	428	368	458	789	704	611
10	723	707	829	720	712	336	563	401	477	789	698	640
11	755	713	869	679	727	459	449	440	498	587	696	651
12	745	713	856	700	727	392	511	395	513	509	691	654
13	863	734	839	692	716	304	607	440	528	525	690	652
14	942	736	829	691	729	363	690	468	429	565	686	646
15	958	738	820	718	744	437	694	486	410	608	663	596
16	941	750	830	710	777	539	699	501	432	623	665	589
17	911	779	845	712	786	609	710	510	463	644	674	575
18	857	785	822	719	776	645	705	382	501	673	672	579
19	810	787	851	743	753	665	697	341	526	689	672	608
20	814	805	824	779	750	684	723	280	531	707	675	624
21	824	824	813	759	762	689	728	245	494	724	675	627
22	830	828	813	736	757	648	730	249	514	734	676	629
23	859	832	805	783	743	663	640	262	549	738	677	552
24	969	839	793	802	565	681	775	275	582	738	665	558
25	1060	841	792	813	341	681	823	304	607	732	663	588
26	1150	846	798	789	380	680	846	338	627	728	664	591
27	1200	854	784	800	465	680	904	363	646	717	667	592
28	1210	859	799	792	548	675	868	389	668	693	666	587
29	1120	871	825	777	---	666	858	408	687	611	667	581
30	922	882	822	767	---	654	859	333	707	644	665	583
31	680	---	824	766	---	641	---	289	---	670	665	---
MEAN	918	761	833	760	692	548	687	391	495	700	683	619
MAX	1210	882	880	825	790	689	904	827	707	800	711	672
MIN	680	651	784	679	341	301	428	243	327	509	663	552

PLATTE RIVER BASIN

06803000 SALT CREEK AT ROCA, NE

LOCATION.--Lat 40°39'29", long 096°39'55", in NW ¼, SW ¼ sec.17, T.8 N., R.7 E., Lancaster County, Hydrologic Unit 10200203, on left bank 15 ft downstream from highway bridge at west edge of Roca, and at mile 54.2.

DRAINAGE AREA.--167 mi².

PERIOD OF RECORD.--May 1951 to current year.

REVISED RECORDS.--WDR NE-71: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,192.50 ft above sea level, Kansas City supplementary adjustment of 1943. Prior to May 16, 1956, nonrecording gage at present site and datum. Data collection platform at station.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. Flood flow affected by several detention dams.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	14	11	e9.0	e7.4	e35	28	25	628	29	21	9.8
2	5.9	12	11	e10	e8.4	28	27	25	383	25	20	9.6
3	5.3	9.8	10	e11	e8.8	33	36	638	327	25	30	10
4	5.1	10	11	e13	e9.0	142	41	293	318	22	25	9.0
5	6.4	11	9.8	14	e10	483	34	2490	348	21	21	8.4
6	7.4	16	9.8	14	e9.6	449	33	950	304	20	19	8.0
7	6.1	13	11	14	e9.4	107	32	441	180	19	18	9.2
8	6.0	11	11	14	e9.0	105	30	266	122	19	16	16
9	6.7	11	11	14	e7.4	205	103	232	102	18	19	12
10	6.4	11	e8.4	14	e8.0	155	63	145	89	18	16	9.1
11	6.6	11	e6.6	17	e9.0	75	359	114	79	228	14	8.2
12	6.8	12	e6.8	20	e9.0	346	161	104	70	150	13	8.0
13	7.3	10	e7.0	19	e9.0	423	80	89	61	65	13	8.2
14	13	11	e7.0	20	e8.2	230	59	77	940	46	12	8.1
15	11	11	e7.0	18	e9.0	127	51	75	434	36	13	11
16	8.2	11	e7.0	15	e8.0	80	41	65	209	36	13	12
17	7.0	10	e7.0	14	e9.0	62	34	56	127	35	12	13
18	7.5	10	e7.2	14	e10	53	34	46	84	41	12	12
19	6.9	11	e7.2	12	e10	46	34	51	70	37	12	10
20	6.1	12	e7.0	11	e10	43	32	1110	70	33	12	9.8
21	7.3	e11	e7.4	13	e9.0	41	31	2210	106	30	12	8.7
22	7.4	11	e7.6	11	e10	55	31	734	74	27	12	8.4
23	8.4	11	e7.6	12	e11	49	46	422	59	25	11	9.3
24	9.1	10	e7.4	12	e21	40	35	257	50	23	11	12
25	9.5	11	e7.4	9.9	e27	34	29	165	43	24	11	9.2
26	9.7	10	e7.6	e10	e38	32	28	112	38	21	11	8.4
27	9.0	10	e8.0	e10	e50	31	27	93	35	21	11	8.3
28	9.6	11	e8.2	e10	e40	30	27	81	33	100	10	8.0
29	13	11	e8.2	e9.8	---	29	25	70	32	38	10	8.0
30	16	11	e8.2	e9.6	---	29	24	1070	30	26	9.8	8.0
31	12	---	e9.4	e9.0	---	30	---	1520	---	24	9.9	---
TOTAL	252.7	334.8	260.8	403.3	384.2	3627	1615	14026	5445	1282	449.7	289.7
MEAN	8.15	11.2	8.41	13.0	13.7	117	53.8	452	182	41.4	14.5	9.66
MAX	16	16	11	20	50	483	359	2490	940	228	30	16
MIN	5.1	9.8	6.6	9.0	7.4	28	24	25	30	18	9.8	8.0
AC-FT	501	664	517	800	762	7190	3200	27820	10800	2540	892	575

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2001, BY WATER YEAR (WY)

	40.3	21.2	16.5	18.8	37.7	86.9	69.1	99.4	92.3	80.3	31.0	23.2
MEAN	40.3	21.2	16.5	18.8	37.7	86.9	69.1	99.4	92.3	80.3	31.0	23.2
MAX	617	167	108	140	180	641	356	587	666	789	496	220
(WY)	1974	1999	1987	1973	1958	1979	1987	1995	1984	1993	1954	1989
MIN	1.36	3.11	3.19	3.25	5.37	5.59	5.23	5.23	2.98	2.19	1.18	1.66
(WY)	1956	1956	1965	1954	1956	1956	1956	1955	1981	1955	1955	1991

PLATTE RIVER BASIN

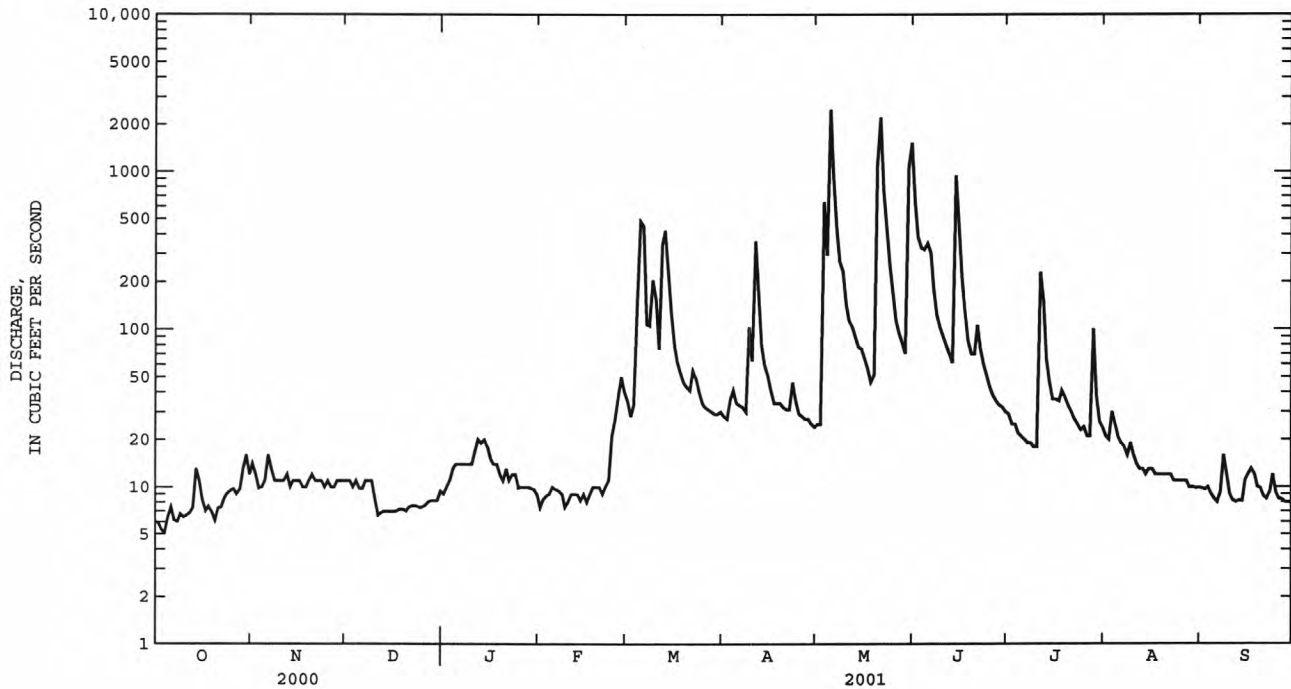
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06803000 SALT CREEK AT ROCA, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1952 - 2001	
ANNUAL TOTAL	5426.1		28370.2		51.5	
ANNUAL MEAN	14.8		77.7		41.1	
MEDIAN OF ANNUAL MEANS					200	
HIGHEST ANNUAL MEAN					6.15	
LOWEST ANNUAL MEAN					6070	
HIGHEST DAILY MEAN	532	Jun 26	2490	May 5		Jul 14 1952
LOWEST DAILY MEAN	2.9	Sep 18	5.1	Oct 4	.20	Jul 23 1955
ANNUAL SEVEN-DAY MINIMUM	3.6	Sep 13	6.0	Oct 1	.61	Sep 6 1955
MAXIMUM PEAK FLOW			3300	May 21	16700	Jul 10 1958
MAXIMUM PEAK STAGE			17.04	May 21*	22.70	Jul 10 1958
ANNUAL RUNOFF (AC-FT)	10760		56270		37290	
10 PERCENT EXCEEDS	19		147		80	
50 PERCENT EXCEEDS	11		14		11	
90 PERCENT EXCEEDS	6.0		7.6		4.0	

e Estimated.

* Also occurred May 20.



PLATTE RIVER BASIN

06803080 SALT CREEK AT PIONEERS BOULEVARD AT LINCOLN, NE

LOCATION.--Lat 40°46'13", long 096°43'05", in SW ¼ SW ¼, sec.2, T.9 N., R.6 E., Lancaster County, Hydrologic Unit 10200203, on left bank downstream from bridge.

DRAINAGE AREA.--220 mi².

PERIOD OF RECORD.--August 1994 to current year. Published as "above Beal Slough", August-September 1994.

GAGE.--Water-stage recorder. Elevation of gage is 1,140 ft above sea level. Data collection platform at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	19	14	e9.0	e8.6	50	43	26	881	35	27	5.8
2	7.0	16	11	e10	e7.6	42	39	27	596	34	24	4.8
3	7.1	13	9.5	e11	e8.4	81	95	878	484	32	26	4.6
4	7.1	12	12	e13	e9.0	159	102	723	510	29	31	4.8
5	13	12	11	e14	e9.8	308	56	2350	477	25	26	3.8
6	8.1	39	14	e14	e10	341	50	1540	500	23	23	3.8
7	8.7	25	11	e15	e9.8	187	48	707	340	21	20	62
8	7.9	16	e11	15	e9.4	131	62	489	256	19	18	42
9	7.7	13	e10	15	e8.6	230	209	430	194	19	16	13
10	8.5	12	e9.6	15	e7.6	221	121	324	204	18	22	8.3
11	8.6	12	e8.2	20	e8.8	145	362	245	131	46	16	5.4
12	8.7	13	e7.8	20	e9.0	266	326	182	104	299	14	4.0
13	19	12	e7.8	25	e9.0	484	110	149	83	78	12	3.6
14	16	12	e8.0	25	e8.8	334	76	111	1090	42	9.9	4.0
15	17	12	e8.0	23	e8.4	204	64	101	721	37	17	31
16	12	14	e8.0	18	e9.0	117	56	92	358	36	11	11
17	9.7	9.2	e8.0	16	e8.2	80	50	83	254	35	11	12
18	8.3	13	e8.0	15	e9.0	67	46	72	177	35	9.1	8.8
19	8.8	13	e8.0	25	e10	60	45	71	208	42	8.3	8.8
20	8.0	9.3	e8.0	11	e10	57	45	755	174	35	6.9	6.3
21	7.5	11	e8.0	10	e9.2	56	44	2220	288	34	6.9	5.3
22	11	10	e8.0	13	e9.6	66	53	1040	166	32	6.8	91
23	11	11	e8.0	12	e11	71	49	655	99	29	6.6	143
24	16	10	e8.2	13	e45	59	53	481	73	26	8.0	18
25	13	12	e8.2	14	e90	51	39	388	56	27	7.3	18
26	13	11	e8.2	10	e150	47	36	295	45	29	7.3	13
27	12	11	e8.2	e10	e88	45	34	229	41	31	7.5	10
28	14	14	e8.2	e10	e54	44	30	181	40	96	6.0	9.8
29	57	11	e8.4	e10	---	43	27	148	38	64	5.5	8.7
30	29	9.2	e8.6	e10	---	43	26	888	37	35	6.2	9.2
31	17	---	e8.8	e9.4	---	45	---	1800	---	32	5.8	---
TOTAL	398.9	406.7	283.7	450.4	635.8	4134	2396	17680	8625	1375	422.1	573.8
MEAN	12.9	13.6	9.15	14.5	22.7	133	79.9	570	288	44.4	13.6	19.1
MAX	57	39	14	25	150	484	362	2350	1090	299	31	143
MIN	7.0	9.2	7.8	9.0	7.6	42	26	26	37	18	5.5	3.6
AC-FT	791	807	563	893	1260	8200	4750	35070	17110	2730	837	1140

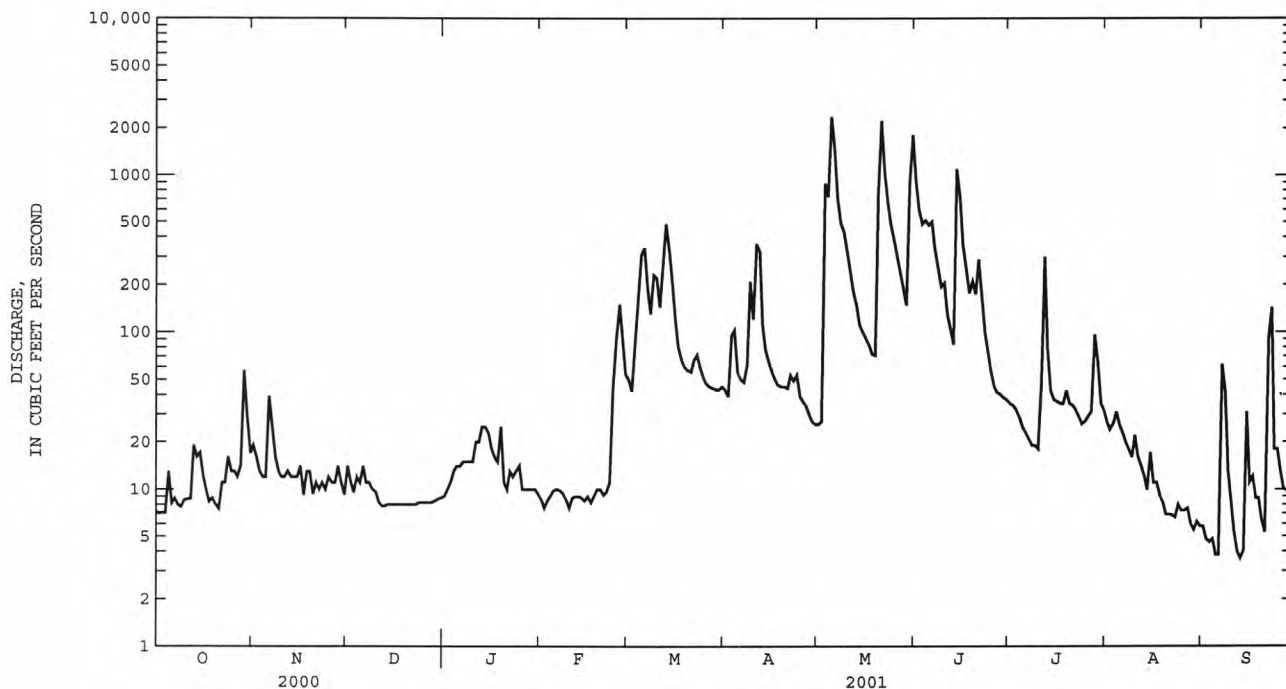
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2001, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	29.7	69.5	37.0	29.2	57.5	80.0	116	332
MAX	83.8	172	97.1	49.5	194	202	272	689
(WY)	1999	1999	1998	1995	1998	1998	1995	2001
MIN	11.0	13.6	9.15	14.5	16.5	16.2	22.1	17.1
(WY)	1996	2001	2001	2001	1996	1996	1996	2000

06803080 SALT CREEK AT PIONEERS BOULEVARD AT LINCOLN, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1994 - 2001	
ANNUAL TOTAL	7923.5		37381.4		88.9	
ANNUAL MEAN	21.6		102		124	
HIGHEST ANNUAL MEAN					23.5	
LOWEST ANNUAL MEAN					1998	
HIGHEST DAILY MEAN	619	Jun 26	2350	May 5	3380	May 9 1996
LOWEST DAILY MEAN	5.4	Sep 19	3.6	Sep 13	3.6	Sep 13 2001
ANNUAL SEVEN-DAY MINIMUM	6.3	Sep 13	4.8	Aug 31	4.8	Aug 31 2001
MAXIMUM PEAK FLOW			2830	May 5	6360	Jul 20 1996
MAXIMUM PEAK STAGE			14.36	May 5	22.92	Jul 20 1996
ANNUAL RUNOFF (AC-FT)	15720		74150		64370	
10 PERCENT EXCEEDS	28		260		177	
50 PERCENT EXCEEDS	15		18		30	
90 PERCENT EXCEEDS	8.0		8.0		11	

e Estimated.



PLATTE RIVER BASIN

06803093 HAINES BRANCH AT SW 56th ST. AT LINCOLN, NE

LOCATION.--Lat 40°45'59", long 96°47'48", in SE ¼ NE ¼, sec.12, T.9 N., R.5 E., Lancaster County, Hydrologic Unit 10200203, on right upstream bank.

DRAINAGE AREA.--60 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 1,170 ft above sea level. Data collection platform at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.61	e1.8	e1.6	e1.5	e2.3	e6.1	4.7	6.8	90	9.0	3.3	1.4
2	.90	e1.6	e1.6	e1.4	e2.4	8.4	4.6	7.4	56	8.9	2.8	.95
3	.46	e1.5	e1.5	e1.3	e2.5	e24	16	151	46	8.2	2.5	.87
4	.24	e1.4	e1.6	e1.4	e2.6	e29	20	106	42	7.0	2.5	.68
5	1.0	e1.6	e1.6	e1.5	e2.6	e42	12	577	47	5.7	2.5	.71
6	1.1	e1.7	e1.6	e1.6	e2.7	e37	9.8	168	42	5.1	2.4	1.1
7	.97	e1.7	e1.5	e1.6	e2.7	13	9.1	91	32	4.6	2.2	2.3
8	.73	e1.6	e1.6	e1.6	e2.6	24	6.8	62	24	4.3	2.1	4.7
9	.71	e1.6	e1.5	e1.7	e2.3	25	6.3	47	20	4.2	2.0	2.3
10	.84	e1.6	e1.4	e1.8	e2.2	9.2	6.1	35	26	4.0	1.8	2.0
11	1.0	e1.6	e1.2	e1.9	e2.2	11	9.3	26	17	32	1.8	4.7
12	1.6	e1.7	e1.1	e2.0	e2.2	12	10	20	13	21	1.8	4.1
13	1.3	e1.8	e1.2	e2.0	e2.3	17	6.1	16	11	11	1.8	4.2
14	1.1	e1.7	e1.4	e2.0	e2.3	17	5.6	13	732	7.8	1.8	5.0
15	1.1	e1.6	e1.4	e2.1	e2.3	14	5.5	11	175	6.5	3.7	6.4
16	1.4	e1.5	e1.4	e2.1	e2.2	9.5	5.1	8.9	107	8.0	2.7	5.9
17	1.0	e1.5	e1.5	e2.1	e2.2	7.7	4.5	7.5	77	6.6	2.3	5.8
18	.93	e1.4	e1.5	e2.1	e2.2	6.9	4.2	6.2	51	4.9	2.1	5.3
19	e.94	e1.4	e1.5	e2.1	e2.3	6.7	4.4	6.0	44	5.4	1.9	5.2
20	e1.0	e1.3	e1.5	e1.8	e2.3	6.1	4.7	119	40	5.2	1.7	4.8
21	e1.0	e1.4	e1.5	e1.9	e2.3	6.1	4.7	72	47	4.6	1.7	4.4
22	e1.2	e1.4	e1.5	e2.1	e2.3	8.0	11	29	30	4.0	1.5	4.7
23	e1.2	e1.4	e1.5	e2.2	e2.3	7.6	e11	17	24	3.8	1.4	5.3
24	e1.4	e1.4	e1.5	e2.3	e2.3	7.4	10	13	e20	3.8	1.8	5.0
25	e1.6	e1.5	e1.4	e2.3	e2.3	6.0	8.0	11	e17	4.1	1.8	4.4
26	e1.6	e1.5	e1.5	e2.3	e2.3	5.3	7.6	9.4	e14	4.4	1.7	4.3
27	e1.7	e1.5	e1.5	e2.5	e2.4	5.1	6.7	8.3	12	5.5	1.7	3.9
28	e1.7	e1.5	e1.5	e2.4	e2.7	5.0	6.7	7.3	11	203	1.5	e4.4
29	e1.8	e1.6	e1.5	e2.4	---	4.7	6.4	6.9	9.9	8.0	1.4	e4.4
30	e1.8	e1.6	e1.5	e2.4	---	4.8	6.5	214	9.6	6.0	1.6	e4.4
31	e1.8	---	e1.5	e2.3	---	5.1	---	216	---	4.4	1.7	---
TOTAL	35.73	46.4	45.6	60.7	66.3	390.7	233.4	2088.7	1886.5	421.0	63.5	113.61
MEAN	1.15	1.55	1.47	1.96	2.37	12.6	7.78	67.4	62.9	13.6	2.05	3.79
MAX	1.8	1.8	1.6	2.5	2.7	42	20	577	732	203	3.7	6.4
MIN	.24	1.3	1.1	1.3	2.2	4.7	4.2	6.0	9.6	3.8	1.4	.68
AC-FT	71	92	90	120	132	775	463	4140	3740	835	126	225

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2001, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	3.79	9.42	5.39	5.34	9.55	12.0	16.9	53.7
MAX	12.2	34.8	10.9	9.65	25.6	31.9	37.4	139
(WY)	1999	1999	1999	1999	1998	1998	1995	1998
MIN	1.15	1.55	1.47	1.96	2.37	3.23	3.91	2.30
(WY)	2001	2001	2001	2001	2001	1996	2000	2000

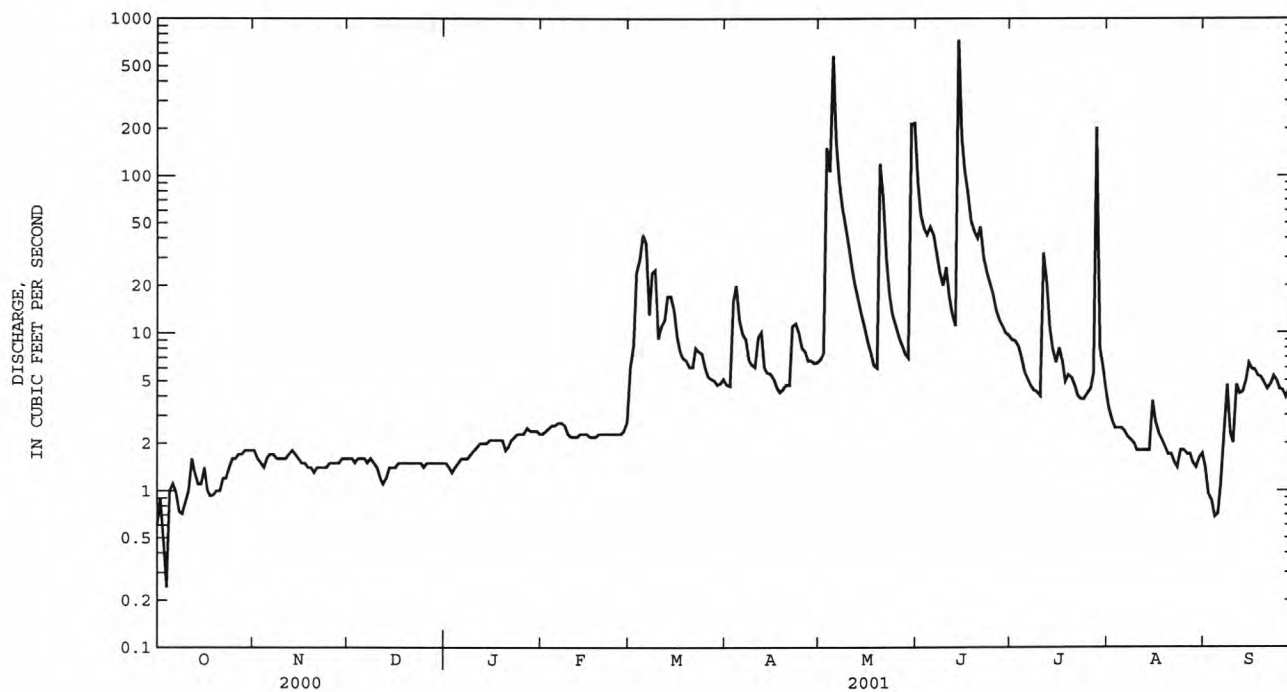
PLATTE RIVER BASIN

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06803093 HAINES BRANCH AT SW 56th ST. AT LINCOLN, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1994 - 2001
ANNUAL TOTAL	1396.48	5452.14	
ANNUAL MEAN	3.82	14.9	14.5
HIGHEST ANNUAL MEAN			22.2
LOWEST ANNUAL MEAN			4.17
HIGHEST DAILY MEAN	149 Jul 4	732 Jun 14	786 May 8 1995
LOWEST DAILY MEAN	.04 Sep 19	.24 Oct 4	.04 Sep 19 2000
ANNUAL SEVEN-DAY MINIMUM	.09 Sep 7	.74 Oct 3	.09 Sep 7 2000
MAXIMUM PEAK FLOW		1970 Jun 14	1970 Jun 14 2001
MAXIMUM PEAK STAGE		12.89 Jun 14	12.89 Jun 14 2001
ANNUAL RUNOFF (AC-FT)	2770	10810	10510
10 PERCENT EXCEEDS	5.1	25	28
50 PERCENT EXCEEDS	1.8	2.6	5.2
90 PERCENT EXCEEDS	.57	1.4	1.5

e Estimated.



PLATTE RIVER BASIN

06803170 MIDDLE CREEK AT SW 40th ST. AT LINCOLN, NE

LOCATION.--Lat 40°48'20", long 96°46'39", in NW ¼ SW ¼, sec.29, T.10 N., R.6 E., Lancaster County, Hydrologic Unit 10200203, on right downstream side of bridge.

DRAINAGE AREA.--94 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 1,144.45 ft above sea level. Data collection platform at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	2.5	2.8	e2.1	e2.5	8.9	8.2	5.9	35	8.4	2.9	2.9
2	4.6	2.1	2.7	e2.2	e2.5	16	7.9	6.1	24	7.8	2.9	2.8
3	4.7	2.0	2.7	e2.3	2.5	84	7.9	164	22	7.2	2.9	2.8
4	4.8	2.1	2.7	e2.4	2.5	88	8.0	49	22	6.7	2.8	2.8
5	5.2	2.3	2.6	e2.5	e2.4	43	8.1	453	23	6.2	2.8	2.8
6	4.8	3.2	2.6	2.5	e2.3	17	8.1	84	21	5.6	2.8	2.9
7	2.4	2.7	2.7	2.5	e2.4	14	8.4	41	18	5.1	2.7	3.9
8	1.6	2.4	2.7	2.5	e2.4	10	7.7	31	16	5.0	2.6	5.9
9	1.6	2.3	2.7	2.5	e2.3	9.7	7.5	25	14	5.0	2.6	3.6
10	1.6	2.3	e2.5	2.5	e2.2	9.8	7.3	21	28	4.6	2.7	3.0
11	1.6	2.3	e2.2	2.9	e2.3	8.1	8.8	18	18	5.9	2.8	3.3
12	1.7	2.5	e2.3	2.9	e2.5	9.2	9.9	15	12	6.9	2.7	3.6
13	1.9	2.4	e2.4	2.8	2.7	12	8.2	14	11	4.8	2.8	3.4
14	1.8	2.4	e2.5	3.2	e2.3	11	7.6	12	1240	4.3	2.8	3.6
15	1.8	2.5	e2.7	2.9	e2.2	10	7.4	10	190	4.1	4.0	4.9
16	1.8	2.5	e2.8	2.4	e2.1	9.1	7.3	9.5	109	4.8	3.4	4.3
17	1.8	2.4	e2.6	2.3	2.1	8.0	7.3	9.2	70	4.6	3.1	4.1
18	1.8	2.4	e2.4	2.3	1.9	7.5	6.1	8.0	54	4.4	3.1	3.8
19	1.9	2.4	e2.2	e2.1	2.0	7.3	4.9	7.5	47	4.6	2.8	3.8
20	2.0	2.5	e2.5	e2.2	2.2	7.3	4.9	68	43	4.6	2.8	3.8
21	2.0	2.4	e2.7	2.2	e2.1	7.5	5.1	22	42	4.4	2.9	3.7
22	2.2	2.4	e2.4	2.2	2.1	8.8	6.7	11	29	4.0	2.8	4.3
23	2.3	2.5	e2.4	2.3	2.6	9.2	9.8	9.3	25	3.7	2.9	16
24	2.5	2.5	e2.2	e2.3	e30	9.2	7.2	8.4	21	3.6	2.9	4.8
25	2.6	2.5	e2.1	e2.4	e50	8.4	7.4	7.5	17	3.4	3.0	9.2
26	2.3	2.6	e2.3	2.4	41	7.8	6.9	7.0	15	3.5	2.9	9.1
27	2.1	2.5	e2.4	e2.3	29	7.4	6.5	6.5	13	3.8	3.0	9.2
28	2.5	2.7	e2.5	2.3	15	7.3	6.3	6.2	11	3.8	3.0	9.0
29	3.0	2.7	e2.8	2.5	---	7.4	5.8	6.1	10	3.5	3.0	9.1
30	2.7	2.6	e2.4	2.5	---	7.7	5.8	136	9.0	3.2	3.0	9.2
31	2.4	---	e2.3	2.5	---	8.7	---	151	---	3.1	3.0	---
TOTAL	80.6	73.6	77.8	75.9	218.1	479.3	219.0	1422.2	2209.0	150.6	90.4	155.6
MEAN	2.60	2.45	2.51	2.45	7.79	15.5	7.30	45.9	73.6	4.86	2.92	5.19
MAX	5.2	3.2	2.8	3.2	50	88	9.9	453	1240	8.4	4.0	16
MIN	1.6	2.0	2.1	2.1	1.9	7.3	4.9	5.9	9.0	3.1	2.6	2.8
AC-FT	160	146	154	151	433	951	434	2820	4380	299	179	309
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2001, BY WATER YEAR (WY)												
MEAN	7.00	8.81	7.44	7.07	9.52	12.5	16.4	67.6	58.4	19.0	7.45	8.10
MAX	13.0	17.7	19.8	9.86	14.3	23.1	37.4	136	151	56.7	17.0	16.4
(WY)	1997	1999	1998	2000	1998	1998	1998	1995	1998	1999	1998	1996
MIN	2.60	2.45	2.51	2.45	4.63	3.40	1.98	4.50	7.31	4.86	2.35	2.23
(WY)	2001	2001	2001	2001	2000	1996	1996	2000	2000	2001	2000	2000

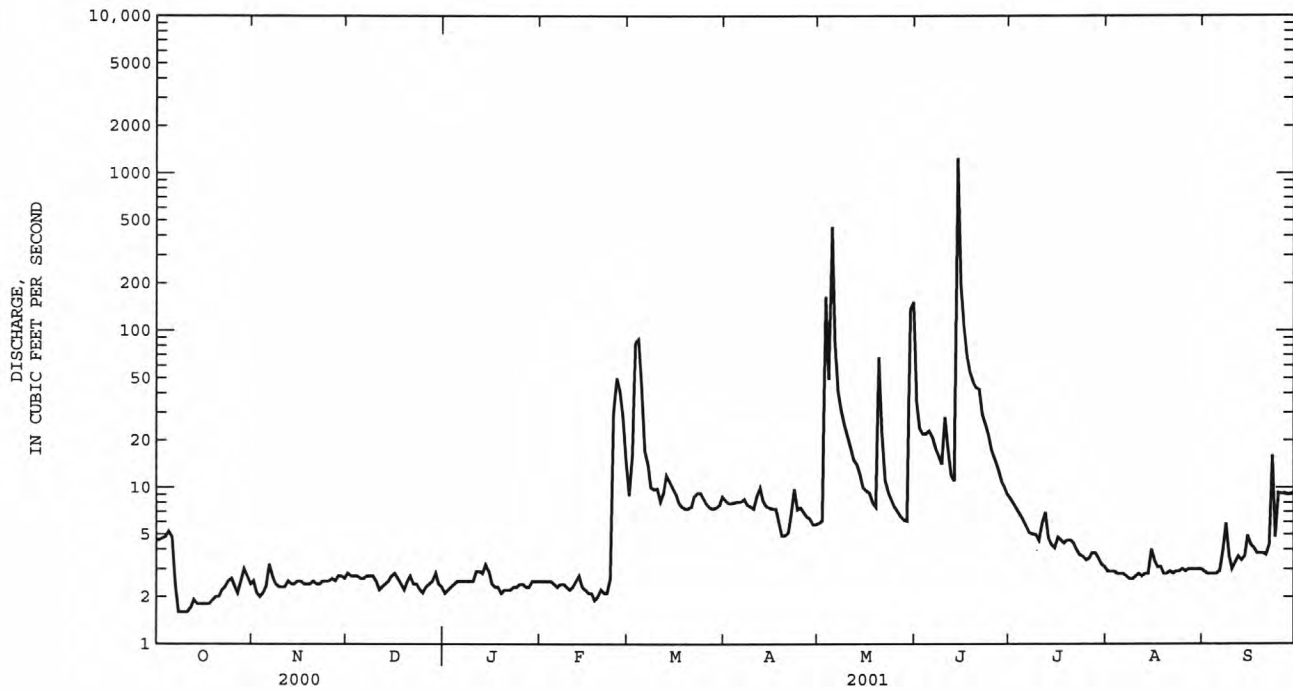
PLATTE RIVER BASIN

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06803170 MIDDLE CREEK AT SW 40th ST. AT LINCOLN, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1994 - 2001	
ANNUAL TOTAL	1750.8		5252.1		19.1	
ANNUAL MEAN	4.78		14.4		32.6	
HIGHEST ANNUAL MEAN					5.42	
LOWEST ANNUAL MEAN					1840	
HIGHEST DAILY MEAN	118	Jul 4	1240	Jun 14	1840	Jun 14 1998
LOWEST DAILY MEAN	1.6	Sep 14	1.6	Oct 8	.92	Aug 29 1995
ANNUAL SEVEN-DAY MINIMUM	1.7	Oct 8	1.7	Oct 8	1.2	Apr 21 1996
MAXIMUM PEAK FLOW			3200	Jun 14	4030	Jun 14 1998
MAXIMUM PEAK STAGE			15.47	Jun 14	16.25	Jun 14 1998
ANNUAL RUNOFF (AC-FT)	3470		10420		13870	
10 PERCENT EXCEEDS	5.2		21		34	
50 PERCENT EXCEEDS	3.3		3.5		6.8	
90 PERCENT EXCEEDS	2.0		2.2		2.8	

e Estimated.



PLATTE RIVER BASIN

06803486 OAK CREEK AT AIR PARK ROAD AT LINCOLN, NE

LOCATION.--Lat 40°51'20", long 96°46'46", in NE ¼ NE ¼, sec.7, T.10 N., R.6 E., Lancaster County, Hydrologic Unit 10200203, on left bank at downstream of bridge on Air Park Road immediately west of NW 42nd Street in West Lincoln Industrial Park.

DRAINAGE AREA.--240 mi².

PERIOD OF RECORD.--October 1999 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,142.86 ft above sea level. Nebraska Department of Natural Resources operated gage May 1987 to March 25, 1999 at present site and March 26, 1999 to March 14, 2000 at temporary site 1.0 mi downstream, both at same datum. Data collection platform at station.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 8,730 ft³/s, July 24, 1993, gage height 22.66 ft; minimum daily discharge, 2.6 ft³/s July 24, 1990, during period of gage operation by Nebraska Department of Natural Resources.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	16	14	e12	26	54	28	25	125	42	13	15
2	3.8	13	14	e11	41	49	27	e27	81	37	12	13
3	4.1	15	e14	e10	26	114	31	e110	72	37	11	11
4	3.5	14	e13	e11	24	147	34	85	70	37	11	11
5	6.3	11	e12	e12	24	110	33	441	73	35	9.9	11
6	6.1	17	13	e13	27	61	33	202	73	32	9.9	9.5
7	e7.0	19	12	e18	26	45	34	92	70	29	9.1	19
8	e8.0	16	11	e21	30	35	36	77	68	27	9.2	22
9	e9.0	13	e11	e22	50	37	32	68	71	26	8.9	16
10	10	12	e11	24	51	38	30	63	83	26	8.3	13
11	10	11	e10	23	46	36	31	58	79	27	7.7	11
12	11	12	e10	25	42	38	35	54	78	27	9.7	9.4
13	12	13	e10	22	36	48	34	50	76	25	11	8.1
14	13	11	e11	24	29	45	30	48	978	22	11	8.4
15	11	11	e10	e25	25	41	29	46	293	21	18	14
16	11	12	e11	20	23	40	29	43	172	24	17	13
17	11	16	e12	18	24	39	30	40	146	22	18	19
18	11	13	e12	24	28	38	29	38	134	19	14	14
19	11	13	e12	29	27	37	28	35	126	23	14	11
20	10	13	e11	37	24	37	26	62	118	20	12	10
21	9.6	17	e11	27	25	37	26	88	110	20	10	9.4
22	12	15	e10	27	22	37	37	56	101	20	10	35
23	13	13	e11	24	26	33	34	45	91	19	11	40
24	14	15	e11	25	245	27	31	41	84	17	12	e10
25	16	14	e11	46	e370	25	27	35	77	18	12	9.6
26	15	14	e12	32	e150	23	26	31	71	17	14	11
27	14	14	e11	35	99	23	25	28	65	17	12	12
28	16	16	e12	27	107	25	24	27	58	15	14	9.8
29	17	15	e12	26	---	26	24	27	50	15	14	10
30	17	13	e13	22	---	26	24	149	45	16	16	9.4
31	17	---	e12	19	---	26	---	383	---	14	15	---
TOTAL	332.7	417	360	711	1673	1397	897	2574	3738	746	374.7	414.6
MEAN	10.7	13.9	11.6	22.9	59.8	45.1	29.9	83.0	125	24.1	12.1	13.8
MAX	17	19	14	46	370	147	37	441	978	42	18	40
MIN	3.3	11	10	10	22	23	24	25	45	14	7.7	8.1
AC-FT	660	827	714	1410	3320	2770	1780	5110	7410	1480	743	822

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2001, BY WATER YEAR (WY)

	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
MEAN	29.5	42.8	19.3	33.0	40.5	33.6	26.9	53.0	79.1	25.3	13.2	10.5
MAX	48.3	71.6	26.9	43.1	59.8	45.1	29.9	83.0	125	26.5	14.3	13.8
(WY)	2000	2000	2000	2000	2001	2001	2001	2001	2001	2000	2000	2001
MIN	10.7	13.9	11.6	22.9	21.9	22.2	23.9	23.0	33.7	24.1	12.1	7.27
(WY)	2001	2001	2001	2001	2000	2000	2000	2000	2000	2001	2001	2000

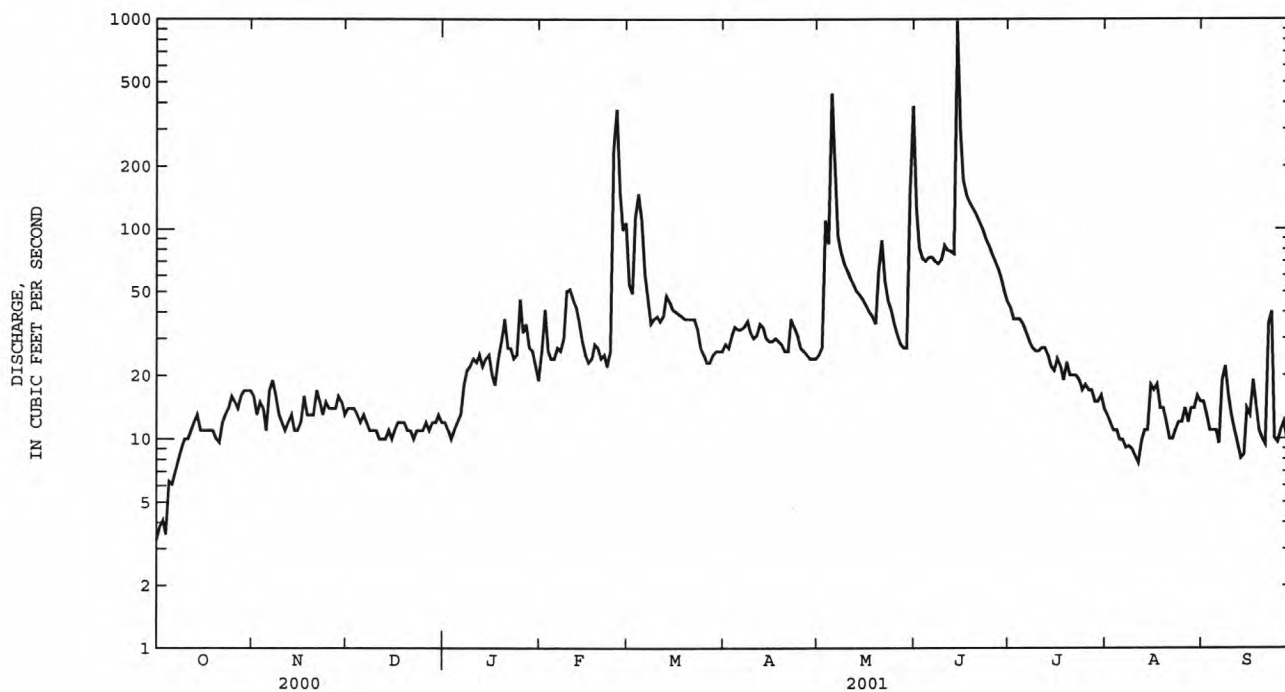
PLATTE RIVER BASIN

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06803486 OAK CREEK AT AIR PARK ROAD AT LINCOLN, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 2000 - 2001	
ANNUAL TOTAL	7693.6		13635.0			
ANNUAL MEAN	21.0		37.4			
HIGHEST ANNUAL MEAN					33.8	2001
LOWEST ANNUAL MEAN					30.2	2000
HIGHEST DAILY MEAN	371	Jun 26	978	Jun 14	978	Jun 14 2001
LOWEST DAILY MEAN	3.3	Oct 1	3.3	Oct 1	3.3	Oct 1 2000
ANNUAL SEVEN-DAY MINIMUM	4.7	Sep 29	4.9	Oct 1	4.7	Sep 29 2000
MAXIMUM PEAK FLOW			1870	Jun 14	1870	Jun 14 2001
MAXIMUM PEAK STAGE			9.21	Jun 14	9.21	Jun 14 2001
ANNUAL RUNOFF (AC-FT)	15260		27050		24480	
10 PERCENT EXCEEDS	33		73		70	
50 PERCENT EXCEEDS	17		23		24	
90 PERCENT EXCEEDS	7.6		10		10	

e Estimated.



LOCATION.--Lat 40°50'49", long 096°40'54", in NW ¼ SW ¼ 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.

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

GAGE.--Water-stage recorder. Datum of gage is 1,113.90 ft above sea level. Prior to July 27, 1979, water-stage recorder for stages above 6.2 ft on downstream side of bridge pier, 135 ft upstream at same datum, and nonrecording gage read twice daily. Data collection platform at station.

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2001, BY WATER YEAR (WY)

MEAN	172	117	96.5	105	171	332	282	410	504	339	185	174
MAX	1621	442	349	350	577	1972	1383	1693	3061	3205	704	1075
(WY)	1974	1999	1987	1974	1958	1987	1987	1996	1951	1993	1987	1989
MIN	35.2	36.3	30.6	33.6	39.9	45.5	52.6	49.9	58.8	48.8	44.6	47.0
(WY)	1956	1956	1957	1957	1957	1957	1956	1955	1958	1955	1955	1953

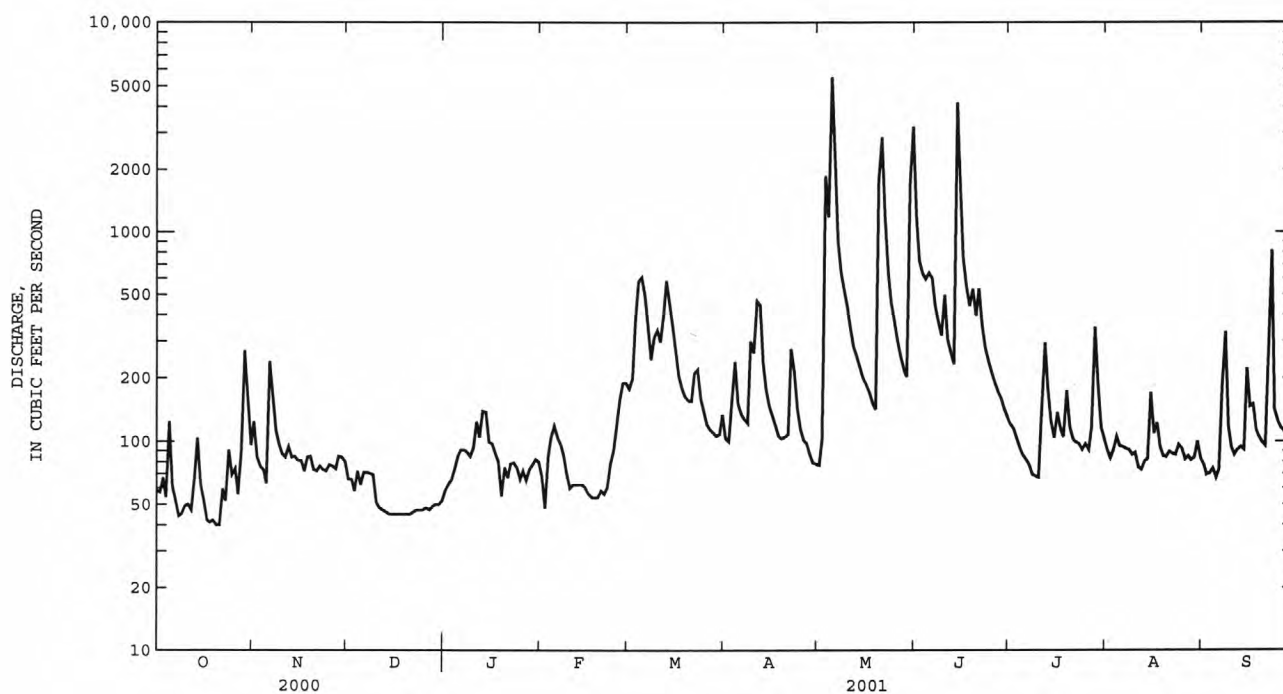
PLATTE RIVER BASIN

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06803500 SALT CREEK AT LINCOLN, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1950 - 2001	
ANNUAL TOTAL	41518		82149		241	
ANNUAL MEAN	113		225		211	
MEDIAN OF ANNUAL MEANS					721	
HIGHEST ANNUAL MEAN					81.4	
LOWEST ANNUAL MEAN					22100	
HIGHEST DAILY MEAN	1440	Jun 26	5490	May 5	21	Jun 2 1951
LOWEST DAILY MEAN	40	Oct 20	40	Oct 20	26	Jul 10 1977
ANNUAL SEVEN-DAY MINIMUM	45	Dec 14	45	Dec 14	26	May 19 1956
MAXIMUM PEAK FLOW			7710	Jun 14	28400	Jul 24 1993
MAXIMUM PEAK STAGE			12.72	Jun 14	26.52	Jul 24 1993
ANNUAL RUNOFF (AC-FT)	82350		162900		174500	
10 PERCENT EXCEEDS	151		443		397	
50 PERCENT EXCEEDS	97		97		98	
90 PERCENT EXCEEDS	55		53		51	

e Estimated.



LOCATION.--Lat 40°53'36", long 96°40'52", in NW ¼, SW ¼, 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.

PERIOD OF RECORD.--January 1969 to current year.

REVISED RECORDS.--WDR NE-77-1: 1969-73 (M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	4.8	2.6	e2.0	e2.6	4.2	7.8	2.7	35	3.8	2.0	5.8
2	3.7	3.7	2.7	e1.9	e2.4	17	7.0	2.2	16	4.2	2.0	5.5
3	4.0	2.7	3.5	e1.9	e2.3	72	12	115	13	4.2	2.5	5.6
4	4.3	3.3	4.4	e2.0	e2.5	71	10	60	12	4.1	2.7	5.8
5	5.9	4.0	3.6	e2.2	e2.8	39	7.6	288	20	3.8	2.4	6.9
6	5.7	12	3.2	e2.5	e3.0	18	8.3	57	14	3.6	2.2	8.4
7	4.5	8.3	2.9	e2.7	e2.9	8.6	8.0	20	9.5	3.5	2.1	e9.4
8	4.1	4.6	2.7	e3.0	e2.9	8.5	5.4	11	7.0	3.8	2.0	e7.0
9	4.0	41	2.4	e4.0	e3.0	9.5	4.8	8.0	5.7	3.8	2.0	e5.0
10	4.0	23	3.4	5.9	e2.9	9.4	4.7	5.8	6.7	3.5	1.8	e4.5
11	4.0	10	e2.2	11	e2.9	e13	8.9	4.1	6.5	4.2	1.8	e4.0
12	4.6	10	e1.9	9.2	e2.8	25	9.8	3.0	5.7	4.4	2.0	e3.6
13	6.1	9.3	e2.0	7.9	e2.9	32	5.3	2.6	5.6	4.0	1.6	e3.2
14	4.7	9.7	e2.1	13	e2.9	20	4.0	2.2	155	3.7	1.9	e3.1
15	4.2	10	e2.0	7.4	e3.0	15	3.0	1.8	26	3.2	3.8	e3.0
16	4.1	9.8	e2.2	5.7	e3.0	8.9	2.1	1.6	10	3.7	3.2	e3.1
17	4.3	5.3	e2.1	5.0	e3.1	7.5	1.8	1.5	7.0	3.4	2.2	e3.1
18	4.4	3.7	e2.1	4.9	e3.1	7.1	2.0	1.2	6.4	3.2	2.0	e3.0
19	4.6	3.8	e2.2	e4.6	e3.0	6.5	2.2	1.3	6.5	4.3	1.8	e3.1
20	4.2	5.2	e2.1	e4.0	e3.0	6.4	2.1	75	7.0	4.1	1.8	e3.1
21	3.5	2.4	e2.1	3.4	e3.1	6.8	2.1	49	6.8	3.3	1.8	e3.0
22	3.4	2.5	e1.9	e3.3	e3.0	7.8	7.1	8.9	5.6	3.0	1.9	e3.2
23	3.0	2.1	e2.0	e2.7	e3.0	8.2	45	4.4	4.7	2.6	2.0	e9.0
24	3.4	2.4	e2.0	e2.5	e10	7.1	7.9	3.5	4.6	2.9	2.7	e3.2
25	4.3	2.7	e2.1	e2.4	e20	5.9	4.7	3.3	4.6	3.2	2.7	e3.2
26	3.9	2.2	e2.1	e2.5	e40	5.3	3.3	3.1	3.6	3.3	3.0	e3.2
27	3.8	1.8	e2.0	e2.5	e18	5.4	2.9	2.4	3.7	3.6	3.1	e3.3
28	3.2	2.3	e2.0	e2.4	e9.0	5.5	2.5	2.3	4.0	3.5	3.3	e3.2
29	9.4	4.1	e2.1	e2.3	---	6.0	2.2	2.3	4.0	2.7	3.5	e3.3
30	9.7	2.6	e2.2	e2.4	---	6.3	2.2	122	3.8	2.4	5.5	e3.3
31	3.7	---	e2.1	e2.4	---	8.5	---	180	---	2.2	6.1	---
TOTAL	140.9	209.3	74.9	129.6	163.1	471.4	196.7	1045.2	420.0	109.2	79.4	134.1
MEAN	4.55	6.98	2.42	4.18	5.83	15.2	6.56	33.7	14.0	3.52	2.56	4.47
MAX	9.7	41	4.4	13	40	72	45	288	155	4.4	6.1	9.4
MIN	3.0	1.8	1.9	1.9	2.3	4.2	1.8	1.2	3.6	2.2	1.6	3.0
AC-FT	279	415	149	257	324	935	390	2070	833	217	157	262

MEAN	9.96	7.60	6.49	7.14	11.9	25.0	16.9	23.3	24.6	26.2	11.4	9.94
MAX	87.5	20.5	16.8	25.3	42.3	134	68.6	85.3	180	379	110	87.2
(WY)	1987	1973	1987	1973	1971	1979	1987	1996	1984	1993	1987	1989
MIN	2.13	2.32	1.69	2.28	3.10	3.57	3.86	3.54	2.42	1.60	1.74	.96
(WY)	1977	1977	1977	1977	1972	1972	1970	1989	1981	1970	1976	1971

PLATTE RIVER BASIN

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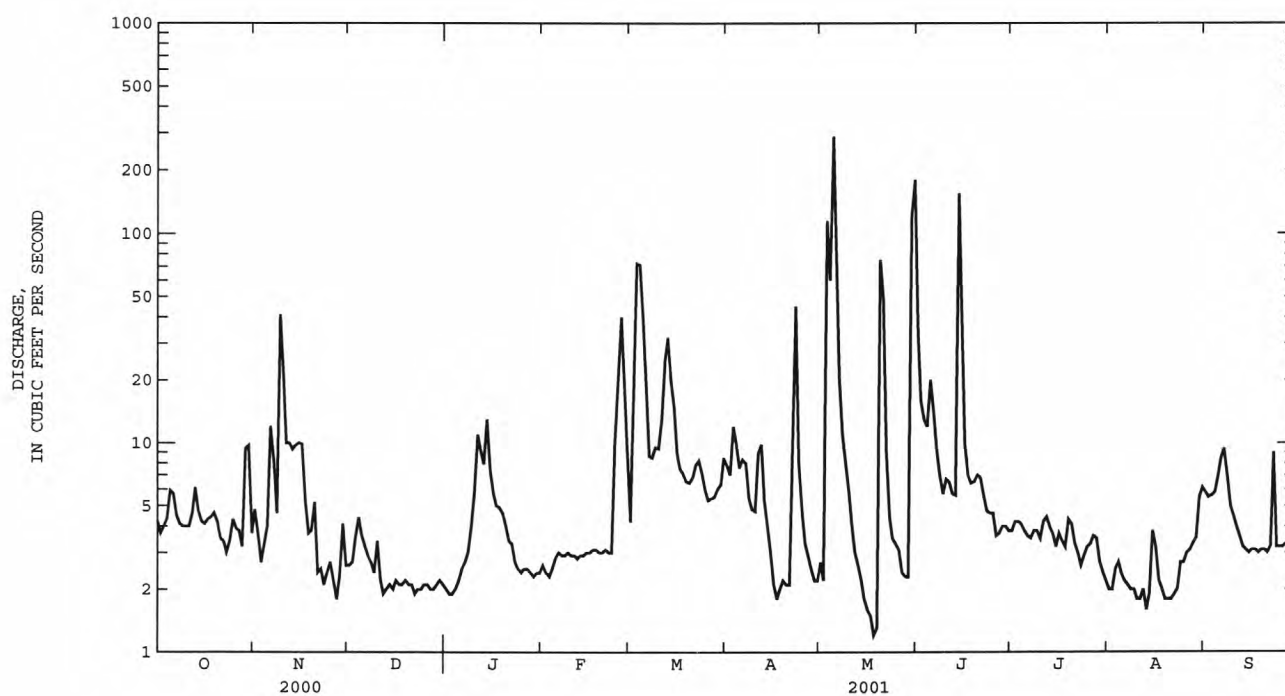
06803510 LITTLE SALT CREEK NEAR LINCOLN, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1969 - 2001	
ANNUAL TOTAL	2043.0		3173.8		15.1	
ANNUAL MEAN	5.58		8.70		12.3	
MEDIAN OF ANNUAL MEANS					51.7	
HIGHEST ANNUAL MEAN					3.59	
LOWEST ANNUAL MEAN					5020	
HIGHEST DAILY MEAN	100	Jun 26	288	May 5	5020	Jul 24 1993
LOWEST DAILY MEAN	1.3	Jun 5	1.2	May 18	.20	Sep 29 1969
ANNUAL SEVEN-DAY MINIMUM	1.5	Jun 3	1.7	May 13	.28	Sep 28 1969
MAXIMUM PEAK FLOW			*394	May 5	8480	Jul 24 1993
MAXIMUM PEAK STAGE			**6.29	Feb 24	20.58	Jul 24 1993
ANNUAL RUNOFF (AC-FT)	4050		6300		10970	
10 PERCENT EXCEEDS	8.7		11		19	
50 PERCENT EXCEEDS	4.2		3.7		5.7	
90 PERCENT EXCEEDS	2.1		2.1		2.3	

e Estimated.

* Stage 6.28 ft.

** Backwater from ice.



PLATTE RIVER BASIN

06803513 SALT CREEK AT 70th STREET AT LINCOLN, NE

LOCATION.--Lat 40°53'10", long 096°37'26", in SW ¼ SW ¼ sec. 27, T.11 N., R.7 W., Lancaster County, Hydrologic Unit 10200203, on left bank downstream from bridge.

DRAINAGE AREA.--753 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 1,095.85 ft above sea level. Data collection platform at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	166	87	80	86	182	164	133	1440	191	135	61
2	79	121	88	86	78	203	159	156	898	184	129	54
3	78	112	85	80	95	391	198	2070	808	168	125	52
4	79	107	86	84	113	618	277	1360	724	153	128	53
5	138	107	86	95	122	612	207	5140	814	139	119	49
6	93	289	82	99	116	478	194	2730	738	132	116	53
7	88	183	83	101	108	341	189	1140	556	126	114	280
8	84	134	83	102	e90	251	186	828	459	119	112	462
9	83	121	83	97	e78	299	316	686	400	116	103	105
10	85	114	74	103	e80	326	317	582	630	117	102	79
11	85	110	e70	131	e80	300	506	472	390	191	90	70
12	84	115	e66	116	e80	417	501	402	337	383	85	70
13	88	109	e64	139	e78	572	287	366	307	272	91	69
14	126	108	e62	151	e74	463	224	332	4100	209	92	71
15	91	103	e62	109	e72	351	195	302	1870	183	208	303
16	88	103	e62	108	e70	274	179	286	936	220	115	141
17	85	97	e62	100	e70	229	172	265	712	186	137	142
18	83	101	e62	e78	e70	203	163	243	576	172	95	89
19	83	99	e62	91	e72	191	157	224	751	268	84	79
20	83	98	e62	99	e76	186	152	1820	535	185	82	72
21	83	93	e62	83	88	181	159	2880	711	165	85	65
22	99	97	e62	86	95	247	285	1410	485	156	83	272
23	96	91	e64	87	103	250	352	784	392	163	81	1320
24	127	87	e64	85	e110	197	196	580	343	146	96	160
25	112	89	e66	81	e130	179	169	478	312	152	84	128
26	113	89	e68	89	e150	166	152	395	283	145	73	116
27	94	88	e68	79	e170	161	148	336	259	189	73	110
28	118	89	e68	88	e183	156	140	296	243	461	70	100
29	324	92	e70	89	---	156	131	272	223	250	68	96
30	228	90	e70	92	---	170	132	2120	205	168	87	91
31	136	---	e70	92	---	192	---	3570	---	151	66	---
TOTAL	3312	3402	2203	3000	2737	8942	6607	32658	21437	5860	3128	4812
MEAN	107	113	71.1	96.8	97.8	288	220	1053	715	189	101	160
MAX	324	289	88	151	183	618	506	5140	4100	461	208	1320
MIN	78	87	62	78	70	156	131	133	205	116	66	49
AC-FT	6570	6750	4370	5950	5430	17740	13100	64780	42520	11620	6200	9540

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2001, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
MEAN	148	221	137	140	190	236	325	855	650	332	180	159
MAX	307	471	220	162	327	455	621	1644	1199	628	367	279
(WY)	1999	1999	1998	1998	1998	1998	1998	1995	1998	1999	1996	1996
MIN	96.4	99.3	71.1	96.8	97.8	120	126	122	207	189	101	82.1
(WY)	1996	1996	2001	2001	2001	2000	2000	2000	2000	2001	2001	2000

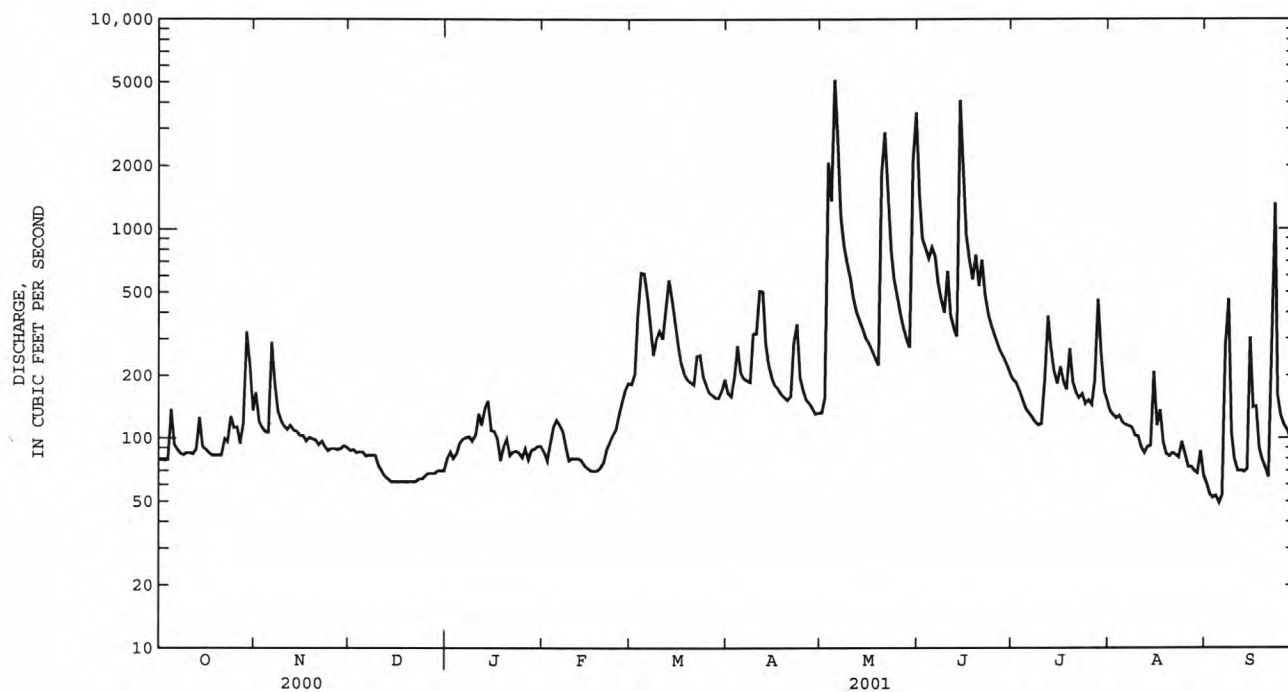
PLATTE RIVER BASIN

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06803513 SALT CREEK AT 70th STREET AT LINCOLN, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1994 - 2001	
ANNUAL TOTAL	47322		98098		298	
ANNUAL MEAN	129		269		400	1998
HIGHEST ANNUAL MEAN					137	2000
LOWEST ANNUAL MEAN					10200	Jun 14 1998
HIGHEST DAILY MEAN	1460	Jun 26	5140	May 5	49	Sep 5 2001
LOWEST DAILY MEAN	62	Dec 14	49	Sep 5	55	Aug 31 2001
ANNUAL SEVEN-DAY MINIMUM	62	Dec 14	55	Aug 31	15800	Jun 14 1998
MAXIMUM PEAK FLOW			6920	Jun 14	23.65	Jun 14 1998
MAXIMUM PEAK STAGE			15.54	Jun 14		
ANNUAL RUNOFF (AC-FT)	93860		194600		215800	
10 PERCENT EXCEEDS	165		503		525	
50 PERCENT EXCEEDS	109		122		159	
90 PERCENT EXCEEDS	74		70		92	

e Estimated.



PLATTE RIVER BASIN

06803520 STEVENS CREEK NEAR LINCOLN, NE

LOCATION.--Lat 40°51'25", long 96°35'42", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.11, T.10 N., R.7 E., Lancaster County, Hydrologic Unit 10200203, on left bank 10 ft upstream, 20 ft west from county road bridge on Havelock Avenue, 1.6 mi east of 70th Street at east edge of Lincoln, and at mile 3.2.

DRAINAGE AREA.--47.8 mi².

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,123.57 ft above sea level. Oct. 1968 to Aug. 14, 1997 at present site and datum 2.0 ft higher. Data collection platform at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.61	2.3	2.1	e1.6	e3.2	13	9.6	7.0	55	6.3	1.9	1.1
2	.64	2.5	2.1	e1.5	e3.0	14	8.8	7.1	35	6.4	1.8	1.1
3	.56	1.5	2.2	e1.8	e8.0	44	8.7	129	23	6.2	1.7	1.0
4	.54	1.4	2.3	e2.2	e4.0	113	9.2	111	23	5.9	1.5	.97
5	.83	1.4	2.3	e2.7	e3.7	111	9.3	936	33	5.5	1.5	1.0
6	.84	13	2.3	e2.6	e4.3	75	9.1	122	27	5.1	1.4	1.1
7	.71	7.0	2.5	e2.8	e4.0	26	8.3	48	20	4.7	1.3	2.6
8	.65	2.6	2.5	e2.9	e3.8	26	7.1	26	17	4.4	1.3	5.2
9	.69	2.0	2.5	e2.9	e3.7	39	52	28	14	4.3	1.1	2.4
10	.68	1.9	2.3	e2.9	e4.2	32	17	20	30	4.2	.97	1.6
11	.70	2.0	e2.1	e3.1	e4.0	e32	75	16	17	4.3	.97	1.5
12	.76	2.0	e1.5	e3.5	e4.0	125	54	13	12	4.4	.89	1.4
13	.80	1.9	e1.7	e3.7	e3.9	111	19	13	10	3.9	.92	1.5
14	1.4	1.9	e1.6	e3.7	e3.5	70	14	11	135	3.6	.98	1.5
15	1.0	1.9	e1.7	e4.0	e3.5	45	12	10	27	3.4	1.5	3.1
16	.75	1.8	e1.7	e3.9	e3.4	24	9.6	9.3	15	3.4	1.2	2.4
17	.70	1.8	e1.7	e2.4	e3.4	19	8.6	8.7	11	3.4	1.1	2.8
18	.73	1.9	e1.8	e3.6	e3.4	17	8.4	8.0	9.6	3.1	1.1	2.3
19	.75	1.9	e1.8	e3.8	e3.4	14	8.6	8.1	25	3.7	.98	2.3
20	.72	1.9	e1.9	e3.5	e3.6	13	9.0	45	24	3.8	.96	2.3
21	.75	1.9	e1.7	e3.2	e3.6	12	8.8	79	58	3.1	.98	2.1
22	.76	1.9	e1.5	e3.2	e3.7	15	10	23	18	2.9	.96	9.8
23	.87	2.0	e1.6	e3.2	e3.8	17	15	16	12	2.7	.94	37
24	1.1	2.1	e1.6	e3.1	e4.0	16	10	13	10	2.4	1.1	6.2
25	1.0	2.1	e1.7	e3.2	e100	12	8.7	12	9.2	2.4	1.3	3.7
26	1.1	2.2	e1.6	e3.2	e70	9.9	8.2	11	8.1	2.5	1.1	2.8
27	.94	2.2	e1.7	e3.2	21	10	7.8	9.5	7.8	2.9	1.1	2.4
28	1.0	2.0	e1.8	e3.0	19	9.3	7.4	9.0	7.2	3.7	1.0	2.3
29	11	2.0	e1.8	e3.2	---	9.3	6.7	8.2	6.8	2.8	1.0	2.1
30	7.0	2.1	e1.7	e3.2	---	9.6	6.5	193	6.5	2.5	1.1	2.0
31	1.9	---	e1.7	e3.2	---	9.8	---	212	---	2.2	1.0	---
TOTAL	42.48	75.1	59.0	94.0	303.1	1092.9	446.4	2161.9	706.2	120.1	36.65	109.57
MEAN	1.37	2.50	1.90	3.03	10.8	35.3	14.9	69.7	23.5	3.87	1.18	3.65
MAX	11	13	2.5	4.0	100	125	75	936	135	6.4	1.9	37
MIN	.54	1.4	1.5	1.5	3.0	9.3	6.5	7.0	6.5	2.2	.89	.97
AC-FT	84	149	117	186	601	2170	885	4290	1400	238	73	217

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2001, BY WATER YEAR (WY)

MEAN	13.5	6.94	6.36	7.13	13.3	31.0	25.8	39.5	32.2	31.9	11.4	16.2
MAX	151	29.9	30.7	34.9	59.9	192	118	239	228	402	89.6	260
(WY)	1974	1997	1987	1974	1983	1979	1987	1995	1984	1993	1982	1989
MIN	.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

PLATTE RIVER BASIN

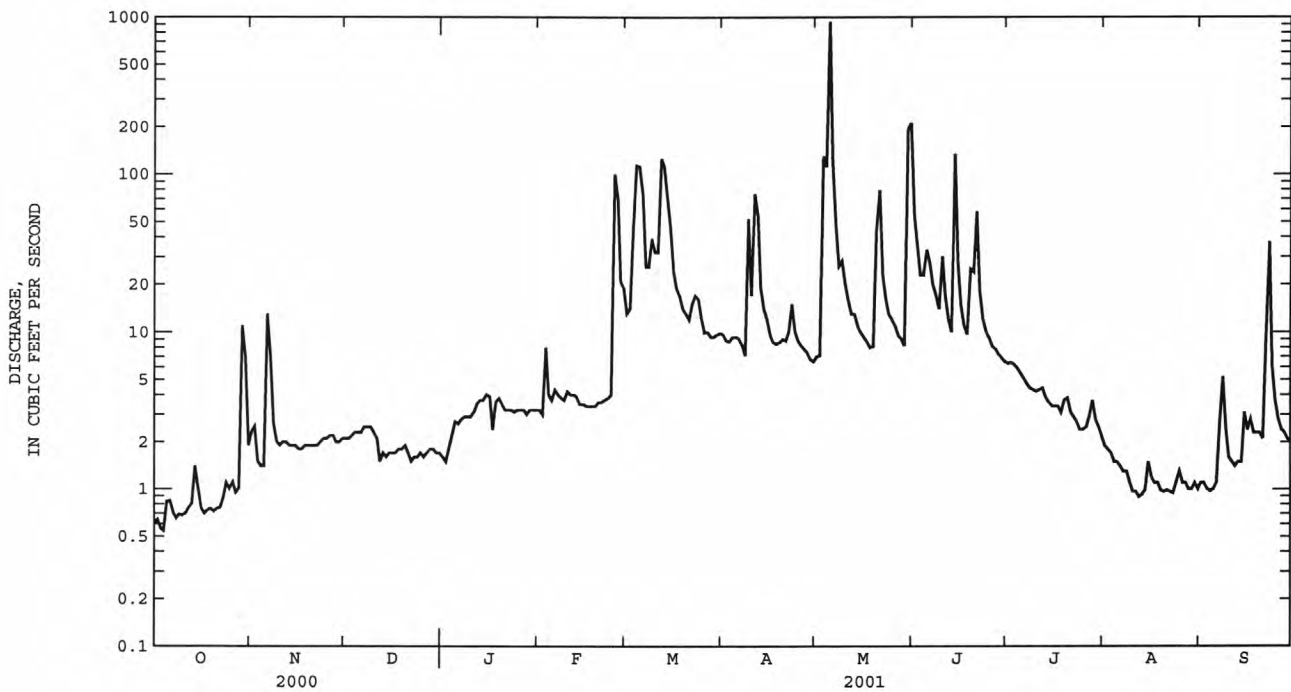
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06803520 STEVENS CREEK NEAR LINCOLN, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1969 - 2001
ANNUAL TOTAL	1557.60	5247.40	
ANNUAL MEAN	4.26	14.4	19.6
MEDIAN OF ANNUAL MEANS			17.5
HIGHEST ANNUAL MEAN			69.3
LOWEST ANNUAL MEAN			1.84
HIGHEST DAILY MEAN	275 Jun 26	936 May 5	4810 Sep 8 1989
LOWEST DAILY MEAN	.54 Oct 4	.54 Oct 4	.00 Jul 31 1977
ANNUAL SEVEN-DAY MINIMUM	.61 Sep 28	.68 Oct 1	.00 Jul 29 1977
MAXIMUM PEAK FLOW		1350 May 5	*12900 Sep 8 1989
MAXIMUM PEAK STAGE		11.21 May 5	19.57 Jun 13 1984
ANNUAL RUNOFF (AC-FT)	3090	10410	14230
10 PERCENT EXCEEDS	5.0	26	25
50 PERCENT EXCEEDS	2.5	3.4	4.1
90 PERCENT EXCEEDS	.79	1.0	.88

e Estimated.

* Stage 19.42 ft.



PLATTE RIVER BASIN

06803530 ROCK CREEK NEAR CERESCO, NE

LOCATION.--Lat 41°00'56", long 096°32'39", in NE ¼ NE ¼ sec.17, T.12 N., R.8 E., Lancaster County, Hydrologic Unit 10200203, on right bank 20 ft downstream from bridge on east-west county road, 5.7 mi southeast of Ceresco, and at mile 7.6.

DRAINAGE AREA.--120 mi².

PERIOD OF RECORD.--April 1970 to current year.

REVISED RECORDS.--WDR NE-76-1: 1975(M). WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,109.18 ft above sea level. Apr. 1970 to Feb. 6, 1980 at present site and datum 6.0 ft higher; Feb 7, 1980 to July 13, 1981 at present site and datum 3.0 ft higher; July 14, 1981 to Feb. 29, 1984 on left bank 30 ft downstream from bridge at datum 3.0 ft higher; Mar. 1, 1984 to May 28, 1984 wire weight gage only, at datum 3.0 ft higher; May 28, 1984 to Apr. 4, 1997 at datum 3.0 ft higher. Data collection platform at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	8.9	8.3	e6.0	e10	54	22	19	173	16	9.5	6.7
2	4.8	7.4	8.3	e5.8	e9.8	52	22	18	102	15	9.4	6.9
3	5.1	6.6	8.6	e5.8	e9.4	121	21	134	86	19	9.3	7.1
4	3.8	6.7	9.4	e6.0	e10	164	22	67	80	16	9.2	6.8
5	3.7	7.3	9.5	e6.4	e12	118	21	493	87	13	8.6	6.5
6	3.7	12	9.3	e7.0	e17	75	21	134	82	12	8.7	6.5
7	2.5	9.4	11	e7.8	e16	56	21	46	72	12	8.4	7.8
8	2.8	6.8	9.6	e8.6	e16	51	19	34	64	12	8.1	10
9	2.7	6.3	9.4	e8.6	e16	52	17	31	59	12	8.4	7.2
10	3.2	6.4	7.3	e8.8	e17	50	16	28	56	12	7.4	5.8
11	3.9	6.4	6.0	e9.4	e18	48	20	25	53	12	7.2	5.8
12	5.1	6.7	e5.8	e10	e21	64	22	24	50	12	7.7	5.9
13	5.8	6.0	e5.6	e11	e26	96	18	25	47	11	7.8	5.8
14	5.3	6.5	e6.0	e11	e28	77	17	25	287	11	7.6	5.0
15	4.6	6.5	e6.2	e12	e27	57	17	24	92	11	8.8	5.4
16	4.6	7.5	e6.0	e12	e27	45	15	24	52	11	9.5	6.2
17	5.5	6.3	e6.2	e11	e28	40	15	23	43	11	8.3	7.1
18	6.2	6.9	e6.4	11	e27	37	15	22	41	11	8.0	5.7
19	5.2	6.9	e6.6	9.1	e27	35	17	22	35	11	7.9	5.9
20	5.2	9.0	e6.4	e8.8	e28	35	17	36	35	11	8.0	5.8
21	5.3	6.9	e6.2	e8.4	e30	35	17	72	34	11	8.4	5.5
22	6.0	6.6	e5.8	e8.0	e36	35	18	34	31	10	8.3	5.6
23	8.0	8.1	e6.2	e8.4	e46	32	47	30	29	10	7.4	5.0
24	7.8	8.3	e6.2	e9.2	e66	29	24	32	28	11	7.8	4.8
25	9.0	7.9	e6.4	e8.8	e220	27	21	37	26	9.6	7.8	4.8
26	10	8.0	e6.2	e8.8	146	26	20	42	23	9.7	7.6	5.3
27	8.6	8.8	e6.4	e9.0	92	25	20	46	22	11	7.8	5.5
28	8.2	8.4	e6.6	e9.6	71	25	19	51	21	11	7.6	5.7
29	11	8.6	e6.4	e10	---	24	19	55	19	10	7.6	5.4
30	15	8.0	e6.4	e9.8	---	24	18	194	18	10	7.4	5.4
31	9.5	---	e6.2	e10	---	24	---	694	---	10	7.4	---
TOTAL	187.7	226.1	220.9	276.1	1097.2	1633	598	2541	1847	364.3	252.9	182.9
MEAN	6.05	7.54	7.13	8.91	39.2	52.7	19.9	82.0	61.6	11.8	8.16	6.10
MAX	15	12	11	12	220	164	47	694	287	19	9.5	10
MIN	2.5	6.0	5.6	5.8	9.4	24	15	18	18	9.6	7.2	4.8
AC-FT	372	448	438	548	2180	3240	1190	5040	3660	723	502	363

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2001, BY WATER YEAR (WY)

	MEAN	MAX	MIN	WY	MEAN	MAX	MIN	WY	MEAN	MAX	MIN	WY
1971	22.6	191	3.85	1977	16.6	45.5	5.23	1977	14.5	44.8	5.26	1977
1972	33.1	116	7.92	1979	56.6	260	8.41	1972	42.3	236	10.2	1976
1973	63.3	237	7.40	1979	116	260	7.40	1971	236	237	5.34	1976
1974	1987	1978	1985	1973	1983	1979	1984	1996	1998	1993	1987	1989
1975	1987	1978	1985	1973	1983	1979	1984	1996	1998	1993	1987	1989
1976	1987	1978	1985	1973	1983	1979	1984	1996	1998	1993	1987	1989
1977	1987	1978	1985	1973	1983	1979	1984	1996	1998	1993	1987	1989
1978	1987	1978	1985	1973	1983	1979	1984	1996	1998	1993	1987	1989
1979	1987	1978	1985	1973	1983	1979	1984	1996	1998	1993	1987	1989
1980	1987	1978	1985	1973	1983	1979	1984	1996	1998	1993	1987	1989
1981	1987	1978	1985	1973	1983	1979	1984	1996	1998	1993	1987	1989
1982	1987	1978	1985	1973	1983	1979	1984	1996	1998	1993	1987	1989
1983	1987	1978	1985	1973	1983	1979	1984	1996	1998	1993	1987	1989
1984	1987	1978	1985	1973	1983	1979	1984	1996	1998	1993	1987	1989
1985	1987	1978	1985	1973	1983	1979	1984	1996	1998	1993	1987	1989
1986	1987	1978	1985	1973	1983	1979	1984	1996	1998	1993	1987	1989
1987	1987	1978	1985	1973	1983	1979	1984	1996	1998	1993	1987	1989
1988	1987	1978	1985	1973	1983	1979	1984	1996	1998	1993	1987	1989
1989	1987	1978	1985	1973	1983	1979	1984	1996	1998	1993	1987	1989
1990	1987	1978	1985	1973	1983	1979	1984	1996	1998	1993	1987	1989
1991	1987	1978	1985	1973	1983	1979	1984	1996	1998	1993	1987	1989
1992	1987	1978	1985	1973	1983	1979	1984	1996	1998	1993	1987	1989
1993	1987	1978	1985	1973	1983	1979	1984	1996	1998	1993	1987	1989
1994	1987	1978	1985	1973	1983	1979	1984	1996	1998	1993	1987	1989
1995	1987	1978	1985	1973	1983	1979	1984	1996	1998	1993	1987	1989
1996	1987	1978	1985	1973	1983	1979	1984	1996	1998	1993	1987	1989
1997	1987	1978	1985	1973	1983	1979	1984	1996	1998	1993	1987	1989
1998	1987	1978	1985	1973	1983	1979	1984	1996	1998	1993	1987	1989
1999	1987	1978	1985	1973	1983	1979	1984	1996	1998	1993	1987	1989
2000	1987	1978	1985	1973	1983	1979	1984	1996	1998	1993	1987	1989
2001	1987	1978	1985	1973	1983	1979	1984	1996	1998	1993	1987	1989

PLATTE RIVER BASIN

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06803530 ROCK CREEK NEAR CERESCO, NE--Continued

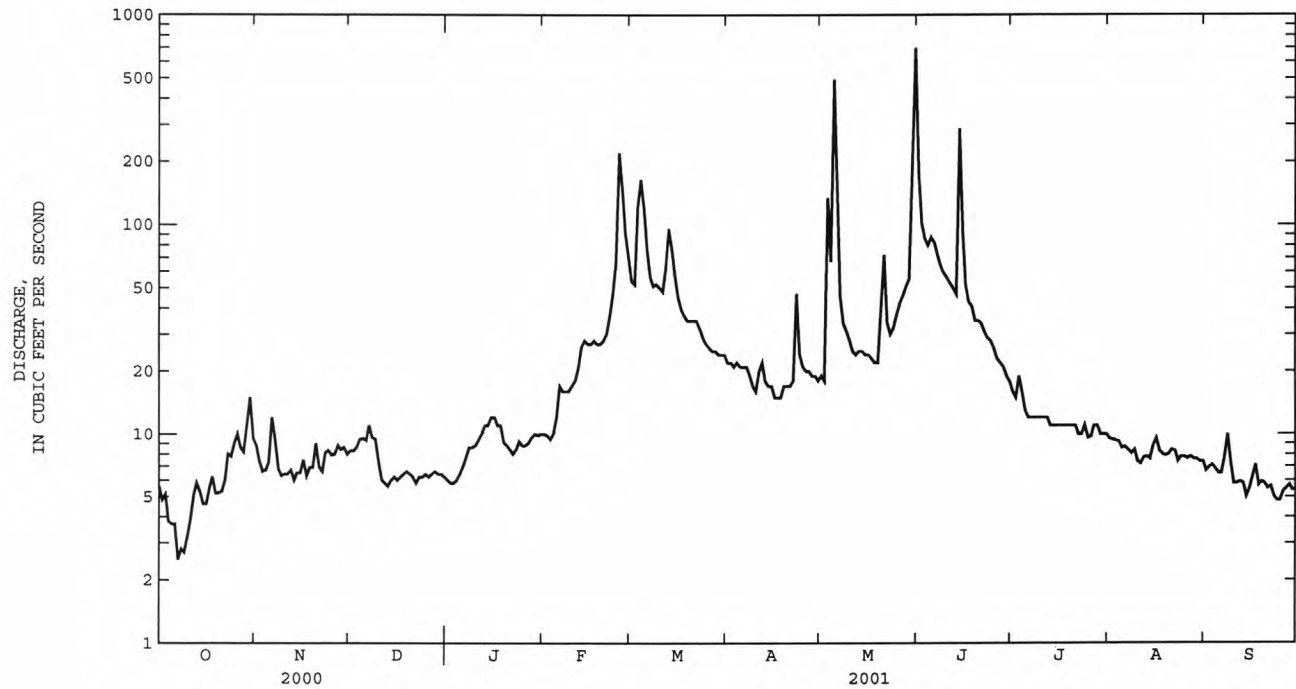
SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1971 - 2001
ANNUAL TOTAL	4806.2	9427.1	
ANNUAL MEAN	13.1	25.8	38.5
MEDIAN OF ANNUAL MEANS			30.6
HIGHEST ANNUAL MEAN			123 1987
LOWEST ANNUAL MEAN			8.68 1976
HIGHEST DAILY MEAN	170 Jun 26	694 May 31	11400 Aug 25 1987
LOWEST DAILY MEAN	2.5 Oct 7	2.5 Oct 7	.25 Jul 13 1976
ANNUAL SEVEN-DAY MINIMUM	3.2 Oct 4	3.2 Oct 4	1.1 Jul 11 1976
MAXIMUM PEAK FLOW		*1040 May 31	**23300 Aug 25 1987
MAXIMUM PEAK STAGE		***9.96 Feb 24	20.50 May 22 1998
ANNUAL RUNOFF (AC-FT)	9530	18700	27880
10 PERCENT EXCEEDS	20	52	46
50 PERCENT EXCEEDS	13	10	13
90 PERCENT EXCEEDS	5.2	5.8	6.0

e Estimated.

* Stage 8.88 ft.

** Includes road overflow; stage 19.60 ft, from floodmark.

*** Backwater from ice.



PLATTE RIVER BASIN

06803555 SALT CREEK AT GREENWOOD, NE

LOCATION.--Lat 40°57'56", long 096°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-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,068.14 ft above sea level. Prior to Nov. 5, 1964, nonrecording gage at same site and datum. Data collection platform at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	204	109	e120	129	348	185	135	2000	252	154	87
2	94	160	109	e120	240	313	171	139	1090	246	144	86
3	94	129	106	e120	370	725	191	2160	883	241	130	85
4	93	122	108	e124	249	1530	305	1850	804	203	127	87
5	143	124	110	e135	187	1380	238	7380	894	179	123	85
6	132	340	109	e145	197	877	207	4000	861	170	115	84
7	99	289	116	e150	174	590	198	1440	670	163	110	143
8	93	180	109	e150	160	407	177	937	540	156	108	689
9	92	149	108	e150	e140	452	341	777	459	149	100	181
10	95	138	102	e140	e124	518	315	664	640	145	97	125
11	94	129	e98	e160	e124	391	586	534	480	170	95	106
12	94	140	e94	179	e122	993	737	447	383	337	84	102
13	93	133	e92	162	e120	1250	395	402	346	308	90	103
14	145	133	e90	241	e120	872	271	370	4560	210	94	102
15	108	126	e90	171	e116	621	227	324	2730	177	182	301
16	102	127	e90	157	e110	429	198	310	1080	194	170	192
17	94	118	e90	141	e110	338	182	293	769	188	138	194
18	89	121	e90	e120	e110	291	172	273	620	173	123	142
19	91	125	e90	128	e116	268	166	256	756	250	94	124
20	93	115	e92	315	e130	248	167	1340	613	234	93	115
21	91	109	e94	393	e140	242	175	3450	791	180	94	108
22	96	117	e96	313	160	306	180	1810	573	175	92	105
23	122	115	e96	237	172	301	554	857	454	186	89	1730
24	110	110	e98	123	e190	275	245	623	401	168	105	254
25	157	113	e98	109	e230	218	202	514	358	166	108	174
26	133	114	e100	129	e270	195	170	426	323	171	91	161
27	114	114	e100	214	e300	183	157	359	304	202	91	150
28	111	115	e102	140	e330	177	144	318	293	480	90	139
29	232	115	e104	127	---	175	132	294	281	337	90	130
30	485	109	e104	134	---	183	129	1940	251	218	100	126
31	185	---	e106	133	---	209	---	5580	---	181	102	---
TOTAL	3868	4233	3100	5180	4940	15305	7517	40202	25207	6609	3423	6210
MEAN	125	141	100	167	176	494	251	1297	840	213	110	207
MAX	485	340	116	393	370	1530	737	7380	4560	480	182	1730
MIN	89	109	90	109	110	175	129	135	251	145	84	84
AC-FT	7670	8400	6150	10270	9800	30360	14910	79740	50000	13110	6790	12320

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2001, BY WATER YEAR (WY)

	MEAN	252	177	147	160	266	512	414	600	719	525	313	258
MAX	2681	638	465	520	952	3481	2023	2383	4101	5461	1748	1534	
(WY)	1974	1999	1987	1974	1983	1979	1984	1996	1984	1993	1987	1989	
MIN	36.4	35.1	37.3	26.2	40.6	51.3	58.1	54.7	65.6	55.6	42.8	52.9	
(WY)	1956	1956	1956	1957	1957	1957	1956	1955	1958	1955	1955	1953	

PLATTE RIVER BASIN

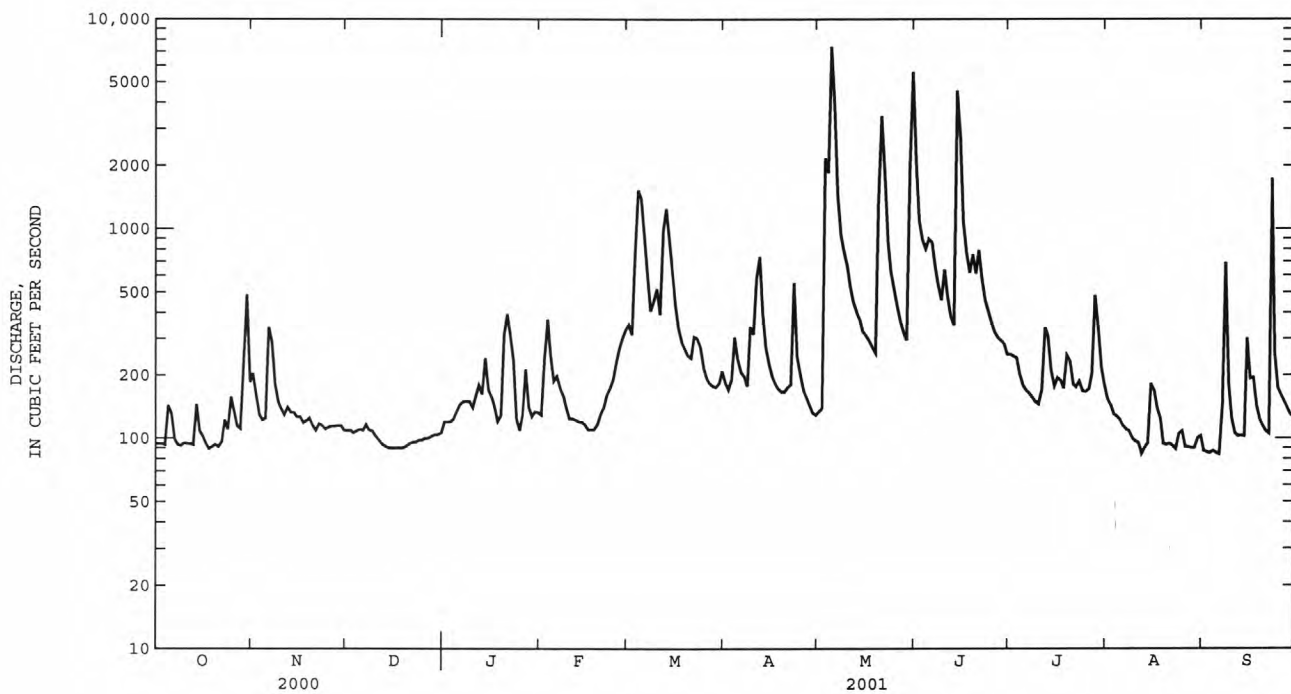
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06803555 SALT CREEK AT GREENWOOD, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1952 - 2001	
ANNUAL TOTAL	67304		125794		361	
ANNUAL MEAN	184		345		291	
MEDIAN OF ANNUAL MEANS					1054	
HIGHEST ANNUAL MEAN					107	
LOWEST ANNUAL MEAN					1987	
HIGHEST DAILY MEAN	3600	Jun 26	7380	May 5	37100	Jun 13 1984
LOWEST DAILY MEAN	87	Sep 12	84	Aug 12	14	Jan 10 1957
ANNUAL SEVEN-DAY MINIMUM	90	Sep 10	88	Aug 31	17	Jan 10 1957
MAXIMUM PEAK FLOW			10400	May 5	*46800	Jun 13 1984
MAXIMUM PEAK STAGE			12.64	May 5	26.57	Jul 24 1993
ANNUAL RUNOFF (AC-FT)	133500		249500		261300	
10 PERCENT EXCEEDS	286		666		588	
50 PERCENT EXCEEDS	155		161		148	
90 PERCENT EXCEEDS	96		94		72	

e Estimated.

* Stage 26.50 ft.



PLATTE RIVER BASIN

06804000 WAHOO CREEK AT ITHACA, NE

LOCATION.--Lat 41°08'40", long 096°32'10", in NW ¼ NW ¼ sec.33, T.14 N., R.8 E., Saunders County, Hydrologic Unit 10200203, on right bank 16 ft downstream from bridge on State Highway 63, 0.5 mi south of Ithaca, and at mile 20.3.

DRAINAGE AREA.--273 mi², of which 268 mi² contributes directly to surface runoff.

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

REVISED RECORDS.--WDR NE-78-1: 1977(P). WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,110.48 ft above sea level. Prior to Oct. 27, 1959, nonrecording gages at same site and datum. Oct. 28, 1959 to Feb. 22, 1961 nonrecording gage at site 1.5 mi upstream at datum 8.21 ft higher. Data collection platform at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	34	34	e28	e35	82	60	43	188	54	35	27
2	24	31	34	e29	e36	56	55	43	e110	54	34	25
3	24	30	32	e30	e38	104	55	85	e100	62	36	23
4	24	29	33	e30	e38	501	58	97	92	86	35	23
5	27	31	33	e30	e40	449	57	544	92	56	34	24
6	27	47	34	e32	e40	248	57	384	93	52	34	24
7	27	51	36	e33	e40	151	55	145	82	51	33	27
8	27	37	35	e34	e40	109	54	116	77	49	32	32
9	28	33	35	e35	e40	163	50	106	72	48	33	31
10	29	32	31	e37	e40	167	52	98	80	47	31	26
11	29	32	e30	41	e40	102	62	88	83	48	32	24
12	29	34	e30	43	e40	89	79	82	69	50	32	24
13	30	32	e30	44	e40	251	61	79	65	48	31	24
14	31	32	e30	44	e44	401	54	77	1800	45	32	25
15	31	32	e29	40	e42	207	51	73	419	45	41	28
16	31	34	e28	39	e42	105	48	70	143	45	39	33
17	30	30	e27	38	e42	83	46	67	117	45	30	31
18	30	33	e28	37	e42	75	46	62	100	44	25	28
19	30	34	e29	e35	39	72	47	62	86	45	24	26
20	31	30	e30	e35	37	70	47	86	82	44	25	26
21	31	35	e30	e35	35	72	46	176	79	42	25	25
22	33	35	e30	e35	37	69	49	109	73	42	25	25
23	34	33	e30	e35	37	68	78	83	69	46	25	26
24	33	32	e30	e35	142	63	53	78	68	56	32	25
25	33	33	e30	e35	694	58	48	75	65	42	34	25
26	34	33	e30	e35	229	55	45	72	61	38	26	26
27	32	33	e30	e35	95	55	44	68	60	39	24	25
28	31	35	e32	e35	116	55	43	65	59	40	24	25
29	36	34	e34	e36	---	56	42	63	57	39	24	25
30	43	34	e30	e36	---	55	41	90	56	37	27	25
31	37	---	e29	e36	---	58	---	329	---	35	66	---
TOTAL	940	1015	963	1102	2180	4149	1583	3615	4597	1474	980	783
MEAN	30.3	33.8	31.1	35.5	77.9	134	52.8	117	153	47.5	31.6	26.1
MAX	43	51	36	44	694	501	79	544	1800	86	66	33
MIN	24	29	27	28	35	55	41	43	56	35	24	23
AC-FT	1860	2010	1910	2190	4320	8230	3140	7170	9120	2920	1940	1550

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2001, BY WATER YEAR (WY)

	MEAN	50.7	40.5	35.6	39.4	73.3	121	89.5	121	226	88.9	95.6	69.9
MAX	343	110	96.3	125	276	518	430	401	1051	728	640	663	
(WY)	1987	1987	1985	1983	1983	1979	1978	1984	1963	1993	1959	1965	
MIN	8.39	11.3	10.1	10.7	13.2	16.6	19.6	16.3	18.6	10.6	9.27	6.95	
(WY)	1956	1956	1977	1957	1957	1957	1956	1955	1976	1956	1956	1956	

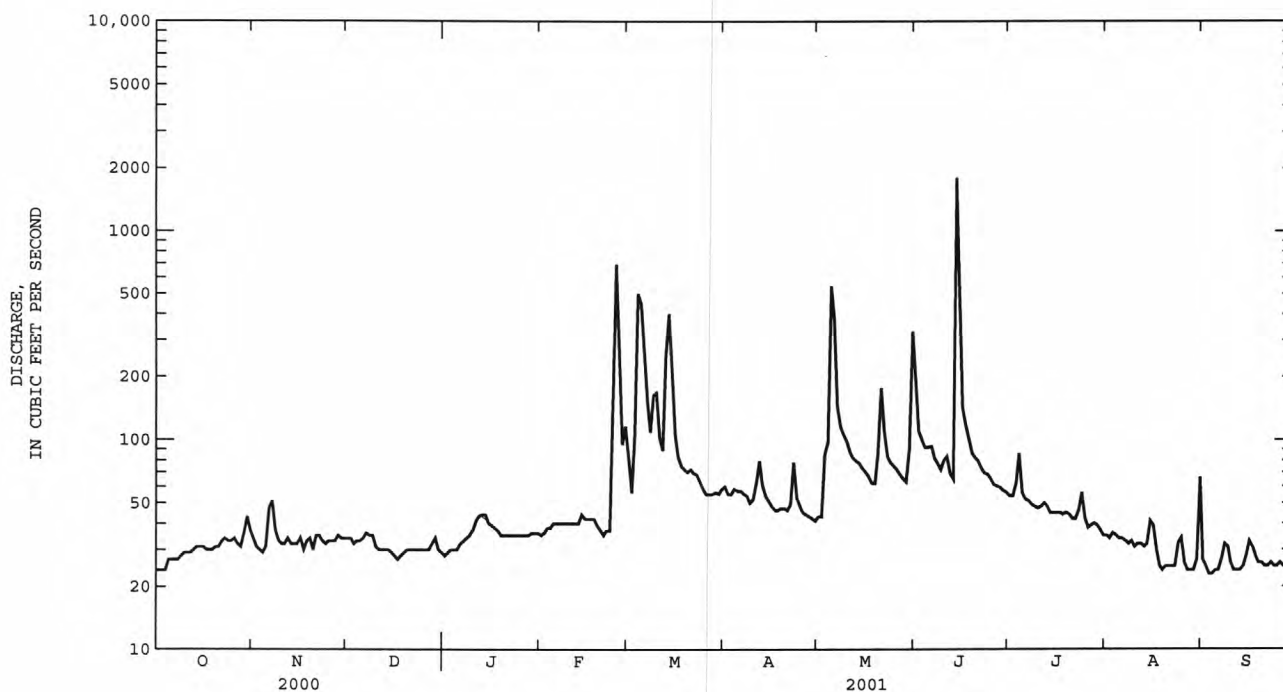
PLATTE RIVER BASIN

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06804000 WAHOO CREEK AT ITHACA, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1950 - 2001	
ANNUAL TOTAL	18179		23381		87.5	
ANNUAL MEAN	49.7		64.1		77.1	
MEDIAN OF ANNUAL MEANS					207	
HIGHEST ANNUAL MEAN					15.3	
LOWEST ANNUAL MEAN					22100	
HIGHEST DAILY MEAN	808	Jun 26	1800	Jun 14	3.3	Jun 24 1963
LOWEST DAILY MEAN	22	Sep 12	23	Sep 3	4.4	Oct 12 1955
ANNUAL SEVEN-DAY MINIMUM	23	Sep 10	25	Sep 1	77400	Jun 24 1963
MAXIMUM PEAK FLOW			3570	Jun 14	22.93	Jun 24 1963
MAXIMUM PEAK STAGE			18.95	Jun 14	63380	
ANNUAL RUNOFF (AC-FT)	36060		46380		114	
10 PERCENT EXCEEDS	64		94		36	
50 PERCENT EXCEEDS	44		38		18	
90 PERCENT EXCEEDS	27		27			

e Estimated.



PLATTE RIVER BASIN

06804700 WAHOO CREEK AT ASHLAND, NE

LOCATION.--Lat 41°03'13", long 096°22'04", in SE ¼ NE ¼ sec.35, T.13 N., R.9 E., Saunders County, Hydrologic Unit 10200203, at right upstream side of bridge near end of guard rail on State Highway 63, 1 mi north of Ashland, and at mile 2.6.

DRAINAGE AREA.--416 mi².

PERIOD OF RECORD.--September 1990 to current year.

REVISED RECORDS.--WDR NE-99-1: Datum.

GAGE.--Water-stage recorder. Datum of gage is 1,048.77 ft above sea level.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	e48	e48	e36	e50	e170	98	69	354	86	48	72
2	44	e46	e47	e37	e52	e160	94	70	194	84	49	45
3	44	e45	e47	e38	e54	e170	90	170	159	88	47	42
4	44	e44	50	e39	e56	560	90	204	147	140	46	41
5	47	e44	52	e40	e56	700	89	1370	153	96	40	40
6	47	e56	56	e42	e58	465	87	993	153	81	39	40
7	44	e78	55	e43	e58	318	86	295	142	76	39	46
8	48	e68	53	e44	e58	257	83	192	132	75	37	62
9	49	e52	53	e45	e54	281	79	161	123	75	37	55
10	49	e50	e50	e47	e52	288	74	146	121	72	34	51
11	48	e49	e42	e48	e50	258	e90	132	143	70	34	43
12	49	e50	e35	e49	e50	223	e160	118	118	71	35	41
13	48	e52	e35	e49	e52	435	e120	111	108	71	37	40
14	49	e50	e35	e50	e54	663	e90	107	898	68	35	40
15	49	e50	e37	e49	e50	402	e84	100	1310	67	43	43
16	48	e50	e36	e49	e49	272	e80	95	244	66	54	49
17	48	e52	e35	e49	e49	194	e78	91	167	68	48	58
18	47	e50	e35	e48	e50	170	e78	86	142	67	42	53
19	47	e54	e35	e46	e50	156	e78	84	131	63	39	46
20	46	e50	e36	e45	e52	149	e80	112	126	66	39	43
21	47	e52	e36	e44	e54	146	e78	247	123	65	38	42
22	48	e52	e35	e45	e58	143	e90	212	114	63	39	41
23	49	e50	e35	e45	e70	133	e160	122	107	61	38	42
24	51	e49	e35	e45	e130	125	e100	110	103	71	42	42
25	e52	e48	e35	e46	e350	115	e78	106	98	66	62	41
26	e52	e48	e35	e46	e300	117	e74	103	93	52	53	40
27	e52	e48	e35	e46	e190	102	72	98	91	51	45	40
28	e52	e48	e36	e46	e170	100	71	96	91	51	38	41
29	e47	e48	e38	e48	---	98	68	93	89	51	37	40
30	e64	e50	e37	e50	---	96	67	122	88	49	38	40
31	e50	---	e35	e50	---	97	---	603	---	48	71	---
TOTAL	1504	1531	1264	1404	2376	7563	2666	6618	6062	2178	1323	1359
MEAN	48.5	51.0	40.8	45.3	84.9	244	88.9	213	202	70.3	42.7	45.3
MAX	64	78	56	50	350	700	160	1370	1310	140	71	72
MIN	44	44	35	36	49	96	67	69	88	48	34	40
AC-FT	2980	3040	2510	2780	4710	15000	5290	13130	12020	4320	2620	2700

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2001, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	57.6	69.3	60.8	63.6	96.2	156	124	206	376	229	107	63.5
MAX	98.2	125	85.9	91.5	199	580	247	552	1031	1032	341	150
(WY)	1994	1999	1999	1995	1997	1993	1999	1995	1991	1993	1998	1993
MIN	36.0	42.5	40.1	40.4	42.8	57.3	64.4	67.5	55.9	69.8	39.1	28.0
(WY)	1992	1991	1993	1993	1992	1992	1992	1997	1992	1997	1997	1990

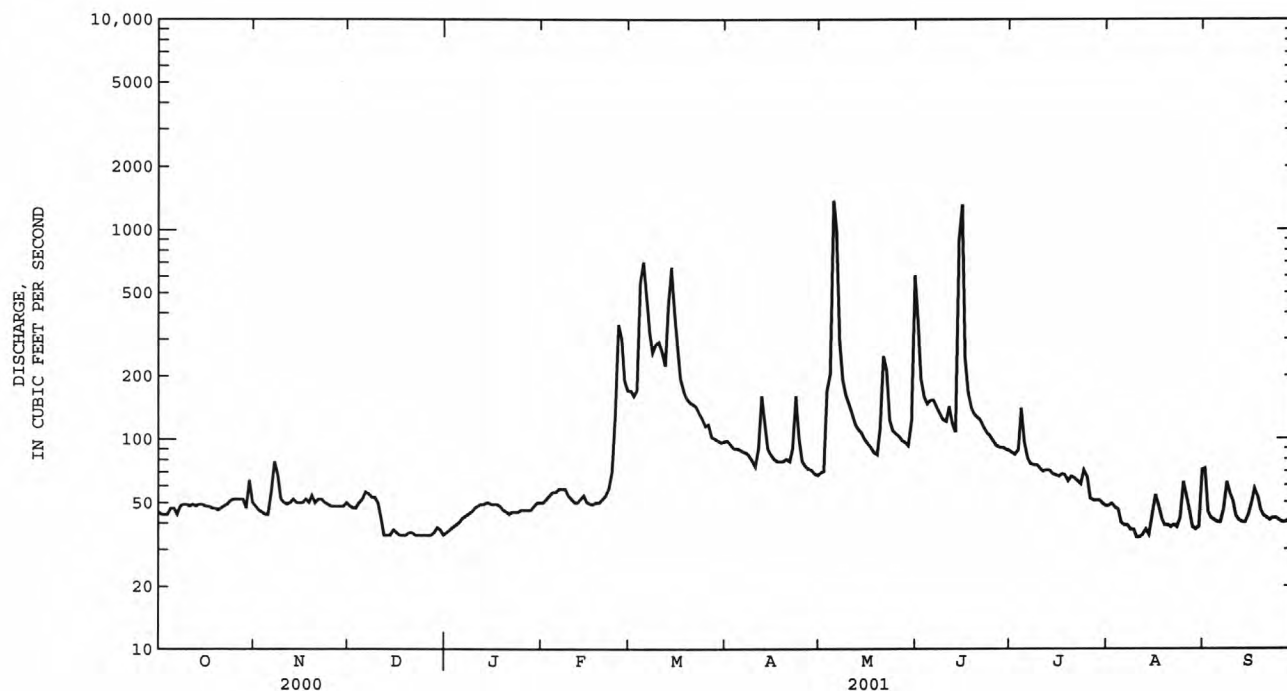
PLATTE RIVER BASIN

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06804700 WAHOO CREEK AT ASHLAND, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1990 - 2001	
ANNUAL TOTAL	28653		35848		134	
ANNUAL MEAN	78.3		98.2		223	
HIGHEST ANNUAL MEAN					63.9	
LOWEST ANNUAL MEAN					1993	
HIGHEST DAILY MEAN	1000	Jun 27	1370	May 5	7000	Jun 15 1991
LOWEST DAILY MEAN	35	Dec 12	34	Aug 10	21	Sep 16 1990
ANNUAL SEVEN-DAY MINIMUM	35	Dec 21	35	Dec 21	24	Sep 11 1990
MAXIMUM PEAK FLOW			2880	Jun 15	7000	Jun 15 1991
MAXIMUM PEAK STAGE			15.78	Jun 15	20.50	Jun 15 1991
ANNUAL RUNOFF (AC-FT)	56830		71100		97340	
10 PERCENT EXCEEDS	96		163		187	
50 PERCENT EXCEEDS	68		52		73	
90 PERCENT EXCEEDS	46		39		41	

e Estimated.



PLATTE RIVER BASIN

06804900 JOHNSON CREEK NEAR MEMPHIS, NE

LOCATION.--Lat 41°08'48", long 096°23'12", in NW ¼, NW ¼, sec.35, T.14 N., R.9 E., Saunders County, Hydrologic Unit 10200203, on left downstream bank on Saunders County road No. 37, 3.5 mi north and 2 mi east of Memphis, and at mile 0.9.

DRAINAGE AREA.--21.5 mi².

PERIOD OF RECORD.--September 1990 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,070.00 ft above sea level. Data collection platform at station, June 14, 2001.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	1.2	1.5	e1.0	e.90	e.92	2.6	1.9	4.4	2.6	.92	.97
2	1.9	1.1	1.5	e1.1	e.84	e.96	2.6	1.9	3.5	2.3	.91	.93
3	2.3	.96	1.6	e1.3	e1.0	e1.1	2.6	4.3	2.9	2.5	.88	.93
4	2.5	1.0	1.6	e1.4	e1.1	e2.0	2.5	8.5	2.8	1.8	.82	.90
5	2.6	1.1	1.6	e1.4	e1.2	e5.0	2.5	55	3.2	1.5	.78	.92
6	2.5	1.6	1.6	1.6	e1.1	e1.0	2.4	28	3.1	1.6	.69	1.0
7	2.4	1.2	1.5	1.6	e1.1	14	2.5	14	2.8	1.7	.70	1.9
8	2.3	1.1	1.5	1.6	e1.0	11	2.4	9.0	2.5	1.8	.70	4.4
9	2.1	1.1	e1.4	1.6	e.96	12	2.5	8.4	2.4	1.8	.68	1.4
10	2.0	1.1	e1.2	1.6	e.90	11	2.6	4.3	2.4	2.0	.64	1.3
11	2.0	1.1	e1.1	1.6	e.96	9.6	3.3	3.4	2.4	2.2	.67	1.1
12	1.9	1.2	e1.0	1.6	e.98	16	3.0	3.0	2.3	2.1	.70	1.1
13	1.8	1.2	e1.1	1.7	e1.0	39	2.7	2.8	2.3	2.0	.68	1.0
14	1.8	1.2	e1.1	1.8	e.96	24	2.4	2.7	2.8	1.9	.61	1.1
15	1.8	1.3	e1.2	1.7	e.90	13	2.3	2.6	2.5	1.8	1.6	1.2
16	1.8	1.3	e1.3	1.6	e.94	8.2	2.1	2.5	2.5	1.9	1.0	1.4
17	1.8	1.3	e1.4	1.5	e.94	4.8	2.0	2.4	2.6	2.0	.78	1.2
18	1.7	1.3	e1.3	1.1	e.98	3.8	2.0	2.3	2.6	2.1	.70	1.2
19	1.5	1.3	e1.3	1.1	e.96	3.5	2.1	2.3	2.7	2.1	.67	1.2
20	1.3	1.2	e1.4	1.1	e.94	3.3	2.0	8.2	2.8	2.1	.65	1.1
21	1.1	1.3	e1.5	1.0	e.92	3.1	2.1	4.4	2.8	2.0	.70	.96
22	1.1	1.3	e1.4	1.1	e.98	3.0	2.2	3.2	2.8	1.9	.72	1.1
23	1.3	1.4	e1.2	1.0	e.98	3.0	2.2	3.0	2.8	1.8	.70	.95
24	1.3	1.4	e1.2	1.0	e.96	2.9	2.0	2.8	2.9	1.6	1.4	.87
25	1.3	1.4	e1.2	1.0	e.96	2.7	2.0	2.6	2.9	1.5	1.3	.85
26	1.2	1.4	e1.2	1.0	e.92	2.6	2.0	2.5	3.0	1.5	.99	.84
27	1.2	1.4	e1.4	.97	e.88	2.6	1.9	2.4	3.2	1.8	.95	.87
28	1.2	1.4	e1.3	.96	e.86	2.5	2.0	2.2	3.2	1.6	.90	.86
29	1.3	1.5	e1.3	.99	---	2.5	1.9	2.2	3.2	1.4	.82	.87
30	1.3	1.5	e1.2	.99	---	2.5	1.9	4.1	2.8	1.2	1.2	.88
31	1.2	---	e1.1	.88	---	2.8	---	8.1	---	1.0	1.1	---
TOTAL	53.5	37.86	41.2	39.89	27.12	223.38	69.3	205.0	85.1	57.1	26.56	35.30
MEAN	1.73	1.26	1.33	1.29	.97	7.21	2.31	6.61	2.84	1.84	.86	1.18
MAX	2.6	1.6	1.6	1.8	1.2	39	3.3	55	4.4	2.6	1.6	4.4
MIN	1.1	.96	1.0	.88	.84	.92	1.9	1.9	2.3	1.0	.61	.84
AC-FT	106	75	82	79	54	443	137	407	169	113	53	70

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2001, BY WATER YEAR (WY)

MEAN	1.66	1.79	1.81	1.71	2.28	4.39	2.91	3.44	10.4	5.22	2.78	2.21
MAX	2.56	3.04	3.82	2.24	5.20	17.8	7.67	6.61	26.9	26.1	11.1	5.11
(WY)	1994	1998	1998	1998	1998	1993	1999	2001	1991	1993	1998	1999
MIN	1.02	1.22	1.33	1.29	.97	1.54	1.21	1.42	2.15	1.21	.84	.72
(WY)	1993	1991	2001	2001	2001	1992	2000	1997	1992	1991	1991	1992

PLATTE RIVER BASIN

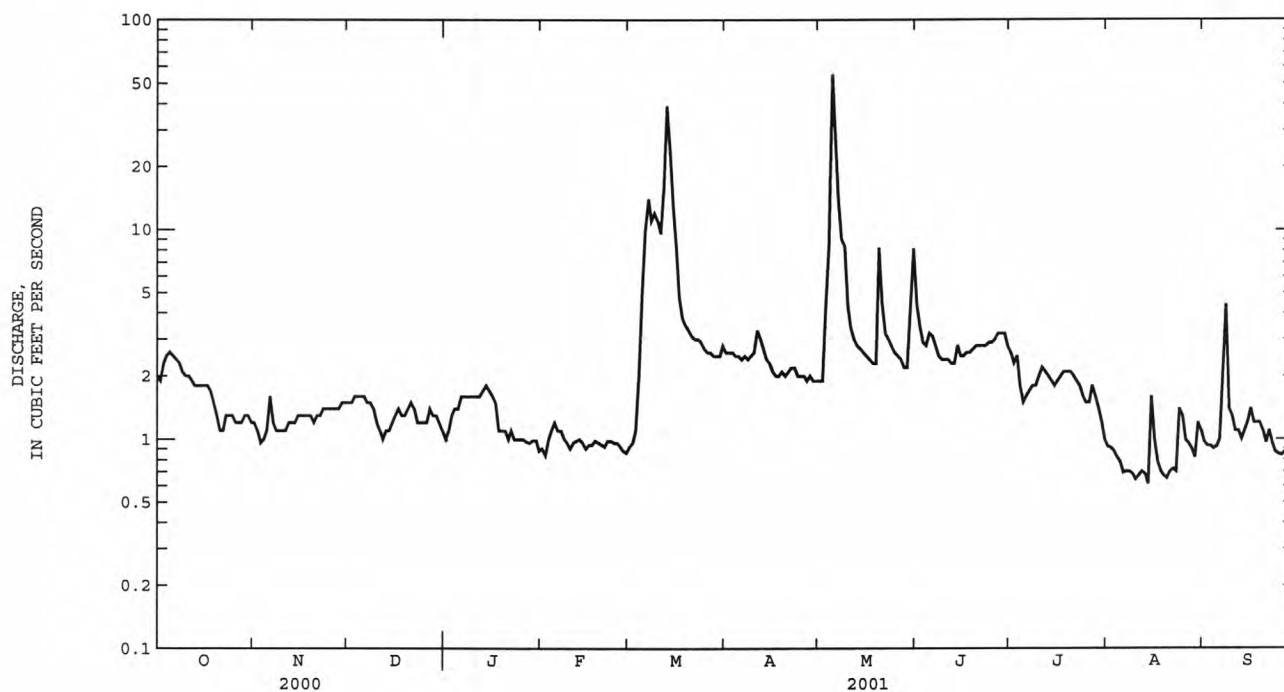
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06804900 JOHNSON CREEK NEAR MEMPHIS, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1991 - 2001
ANNUAL TOTAL	734.89	901.31	
ANNUAL MEAN	2.01	2.47	3.36
HIGHEST ANNUAL MEAN			6.79 1993
LOWEST ANNUAL MEAN			1.75 1992
HIGHEST DAILY MEAN	40 Jun 26	55 May 5	240 Jul 23 1993
LOWEST DAILY MEAN	.88 May 2	.61 Aug 14	.36 Jul 22 1995
ANNUAL SEVEN-DAY MINIMUM	1.0 Apr 23	.67 Aug 8	.60 Sep 9 1999
MAXIMUM PEAK FLOW		70 May 5	*269 Jun 14 1991
MAXIMUM PEAK STAGE		7.20 May 5	10.49 Jun 1 1994
ANNUAL RUNOFF (AC-FT)	1460	1790	2440
10 PERCENT EXCEEDS	2.6	3.2	3.8
50 PERCENT EXCEEDS	1.6	1.5	1.8
90 PERCENT EXCEEDS	1.1	.91	1.1

e Estimated.

* Stage 10.25 ft.



PLATTE RIVER BASIN

06805500 PLATTE RIVER AT LOUISVILLE, NE
(National Stream-Quality Accounting Network, NASQAN, station)
(National Water-Quality Assessment, NAWQA, station)

LOCATION.--Lat 41°00'55", long 096°09'28", in NW ¼ NW ¼ sec.14, T.12 N., R.11 E., Sarpy County, Hydrologic Unit 10200202, on the left bank at the upstream side of bridge on Nebraska Highway 50, 1 mi north of Louisville, and at mile 16.5.

DRAINAGE AREA.--85,370 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-97-1: Drainage area; 1995.

GAGE.--Water-stage recorder. Datum of gage is 1,007.10 ft above sea level. Dec. 5, 1961 to Sept. 30, 1973 at site 7 mi upstream at datum 31.43 ft higher. Data collection platform at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2890	6520	5630	e4300	e6200	e6000	8710	11400	11600	3530	3420	3300
2	2850	7080	5640	e4300	e6000	e6400	8760	10600	9530	3390	3460	3080
3	2930	6930	5670	e4200	e5800	e6800	8980	13400	8710	5410	3430	3180
4	2910	6450	5170	e4800	e6200	e7000	8640	16000	8340	9040	3040	3170
5	2920	6760	5460	e5200	e6200	e7400	8810	25900	8100	6690	2830	2980
6	3260	7750	5260	e5400	e6200	e7600	9200	31500	8740	5130	2790	2750
7	3330	8350	4240	e5600	e6000	e7800	9170	32000	8130	5130	2600	3090
8	3330	8150	5420	e5000	e5600	e8000	8960	26900	7710	4420	2170	3540
9	3320	7800	e3800	e6200	e5600	e8400	9870	23700	7310	4160	2280	3350
10	3500	7260	e3600	e6400	e5400	e9000	11900	24700	7110	3930	2000	3250
11	3540	6530	e3400	e6400	e5600	e9400	13200	21300	7510	4250	1850	3420
12	3410	5990	e3400	e6600	e5800	e10000	19400	17100	6680	4140	2010	3330
13	3480	4800	e3800	e6600	e6000	e13000	21000	14800	6110	4360	1820	3360
14	3280	5700	e4000	e6400	e5800	e17500	19400	13300	9620	4490	1650	3760
15	3800	4900	e4300	e6400	e5600	33400	17900	11700	17600	4440	2070	3780
16	4030	4510	e4500	e6200	e5600	39700	16000	10500	9570	4210	2450	4740
17	4000	4190	e4700	e6200	e5800	28000	15900	9780	7400	5220	3110	7560
18	4060	4170	e4800	e6000	e6000	25700	13700	9290	6330	4710	4270	8070
19	4210	4530	e4800	e5800	e6000	20200	12700	8400	5920	5370	4810	7950
20	4730	5000	e4700	e5600	e5800	17200	11500	9030	5830	5380	4760	6770
21	4520	4720	e4500	e5800	e5800	15100	10400	13400	5230	5060	4380	6150
22	4090	4520	e4500	e5800	e6200	14200	9700	12500	5340	4320	4300	5690
23	4400	5000	e4600	e6000	e6000	13500	11100	9570	4730	3730	3970	6730
24	4540	4990	e4700	e5600	e6000	12900	13900	8460	4830	3680	3700	5690
25	4730	5140	e4600	e5600	e6000	11900	22100	7970	4380	3460	3980	4960
26	4880	5300	e4500	e6200	e5600	11000	19700	7140	4290	3390	3220	4770
27	5330	6080	e4500	e6400	e5400	10000	19200	6970	4100	3310	3670	4860
28	5500	5930	e4500	e6400	e5600	9360	17600	6340	4030	3710	3130	4900
29	4450	6430	e4400	e6400	---	9150	13300	5770	4470	4320	3230	4890
30	6880	6110	e4400	e6400	---	8680	13000	6310	3630	3840	3400	4650
31	6240	---	e4400	e6200	---	8730	---	12600	---	3640	3600	---
TOTAL	125340	177590	141890	181400	163800	413020	403700	438330	212880	139860	97400	137720
MEAN	4043	5920	4577	5852	5850	13320	13460	14140	7096	4512	3142	4591
MAX	6880	8350	5670	6600	6200	39700	22100	32000	17600	9040	4810	8070
MIN	2850	4170	3400	4200	5400	6000	8640	5770	3630	3310	1650	2750
AC-FT	248600	352200	281400	359800	324900	819200	800700	869400	422200	277400	193200	273200
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2001, BY WATER YEAR (WY)												
MEAN	5194	5562	4933	4836	7608	11250	10080	9958	11410	6387	4196	4343
MAX	15630	10580	10910	10810	17270	27010	34250	35350	39430	43440	13890	12870
(WY)	1987	1987	1985	1998	1984	1993	1984	1984	1984	1993	1993	1993
MIN	1604	2234	1456	1822	3237	4898	3701	2548	2493	978	519	975
(WY)	1957	1956	1956	1957	1955	1957	1967	1955	1981	1974	1955	1955

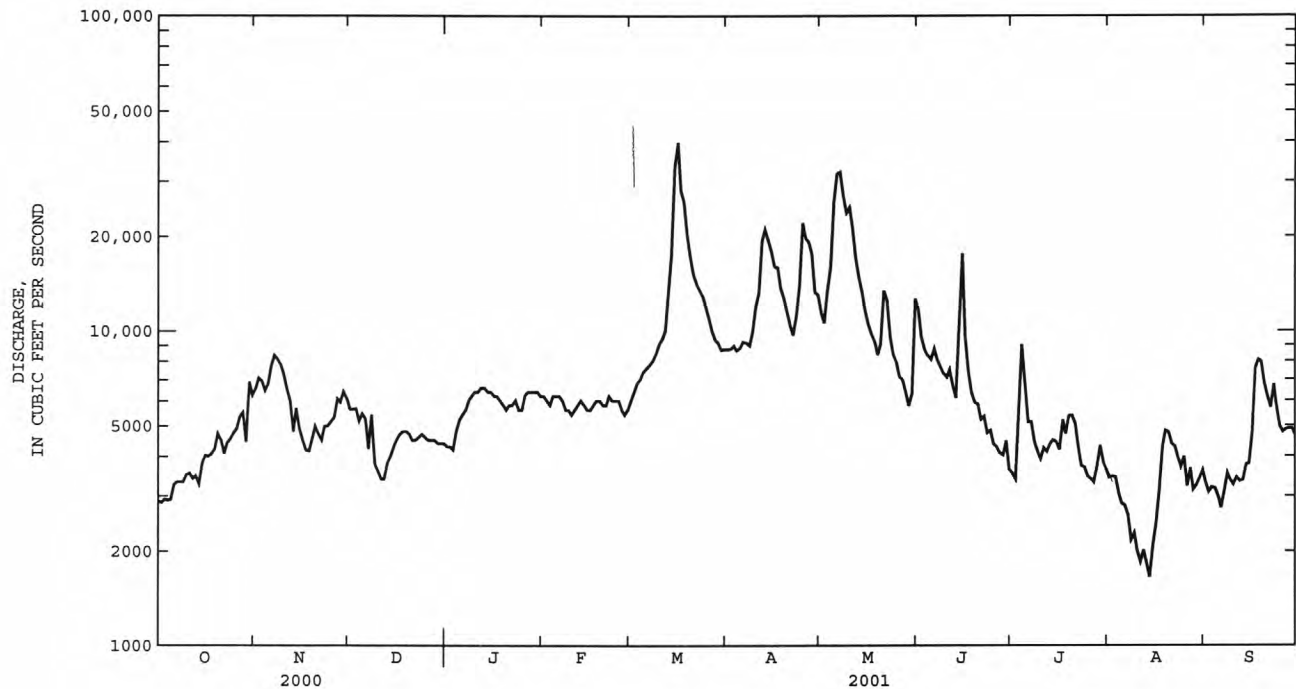
PLATTE RIVER BASIN

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06805500 PLATTE RIVER AT LOUISVILLE, NE--Continued
(National Stream-Quality Accounting Network, NASQAN, station)
(National Water-Quality Assessment, NAWQA, station)

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1953 - 2001	
ANNUAL TOTAL	2173050		2632930		7159	
ANNUAL MEAN	5937		7214		16210	
HIGHEST ANNUAL MEAN					2885	
LOWEST ANNUAL MEAN					138000	
HIGHEST DAILY MEAN	19000	Jul 7	39700	Mar 16	131	Jul 25 1993
LOWEST DAILY MEAN	1610	Aug 18	1650	Aug 14	159	Sep 3 1976
ANNUAL SEVEN-DAY MINIMUM	1950	Aug 15	1950	Aug 9	159	Aug 29 1976
MAXIMUM PEAK FLOW			49800	Mar 16	*160000	Jul 25 1993
MAXIMUM PEAK STAGE			7.91	Mar 16	12.45	Mar 30 1960
ANNUAL RUNOFF (AC-FT)	4310000		5222000		5186000	
10 PERCENT EXCEEDS	8880		13300		13000	
50 PERCENT EXCEEDS	5840		5640		5380	
90 PERCENT EXCEEDS	2610		3330		2050	

e Estimated.
* Stage 11.90 ft.



PLATTE RIVER BASIN

06805500 PLATTE RIVER AT LOUISVILLE, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1974 to September 1981.

WATER TEMPERATURES: November 1974 to September 1981.

SUSPENDED SEDIMENT DISCHARGE: October 1971 to September 1981.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 3,450 microsiemens Sept. 1, 1976; minimum daily, 254 microsiemens Aug. 7, 1981.

WATER TEMPERATURES: Maximum, 36.0°C July 24, 1977, Aug. 19, 1979; minimum 0.0°C on many days during winter periods.

SEDIMENT CONCENTRATIONS: Maximum daily, 11,600 mg/L May 19, 1974; minimum daily, 60 mg/L July 19, 1976.

SEDIMENT LOADS: Maximum daily, 1,180,000 tons Mar. 21, 1978; minimum daily, 64 tons July 19, 1976.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	
OCT														
12...	1030	3420	11.0	105	8.1	503	17.0	11.5	6	180	50.3	13.7	7.98	
NOV														
08...	1200	9700	12.6	98	8.1	475	-2.0	3.0	11	160	46.7	11.6	9.11	
DEC														
13...	1230	9460	13.1	94	7.9	984	-8.0	.00	37	240	67.8	17.0	10.4	
JAN														
11...	1030	13300	12.1	86	7.7	421	6.0	.00	32	200	59.0	13.7	8.94	
FEB														
15...	1100	12700	12.3	87	7.7	447	-3.0	-0.1	17	200	57.6	13.5	8.25	
MAR														
15...	1100	24400	10.5	--	6.6	--	3.5	1.0	22	140	41.3	9.66	10.2	
APR														
25...	1230	22200	9.3	94	7.6	484	20.0	14.5	23	180	50.9	11.7	10.1	
MAY														
16...	1145	11200	6.9	83	8.7	625	30.0	22.5	36	210	60.0	13.9	11.6	
JUN														
11...	0945	7490	4.7	59	8.2	616	28.5	24.5	13	180	49.7	14.1	8.50	
JUL														
12...	0955	4100	6.1	70	8.6	805	24.0	20.5	17	220	63.6	15.8	8.89	
AUG														
08...	1100	2220	8.3	112	9.0	829	32.0	28.5	20	180	45.5	16.3	10.1	
SEP														
19...	1030	8420	6.7		8.1	--	16.0	16.5	3	120	32.9	9.25	8.35	
DATE		SODIUM AD- SORP- TION RATIO (00931)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
OCT														
12...	2	59.0	40	176	200	7	55.9	.4	30.7	63.5	.53	3580	388	
NOV														
08...	1	38.8	32	153	187	.0	27.6	.4	26.7	71.5	.47	9060	346	
DEC														
13...	2	87.4	43	203	247	.0	85.6	.5	39.6	111	.79	14800	580	
JAN														
11...	2	65.1	40	172	210	.0	58.9	.3	36.9	88.2	.62	16300	453	
FEB														
15...	.9	30.6	24	182	222	.0	14.1	.3	35.1	68.2	.49	12400	363	
MAR														
15...	.8	21.1	23	121	147	.0	11.9	.3	20.5	49.0	.37	17800	270	
APR														
25...	1.0	29.4	25	153	186	--	18.9	.4	27.9	51.7	.44	19500	326	
MAY														
16...	1	49.2	33	172	178	15	35.8	.4	18.7	87.4	.57	12600	417	
JUN														
11...	2	49.2	36	169	198	4	42.9	.4	19.5	69.4	.52	7700	381	
JUL														
12...	2	72.7	40	206	240	6	84.3	.4	25.2	72.8	.70	5710	516	
AUG														
08...	3	92.3	51	162	172	12	105	.4	24.7	82.7	.66	2900	483	
SEP														
19...	1	26.9	31	119	143	--	22.1	.3	20.5	47.2	.35	5930	261	

PLATTE RIVER BASIN

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06805500 PLATTE RIVER AT LOUISVILLE, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)
OCT 12...	392	.075	.25	1.2	.10	1.3	1.07	4.73	1.09	.072	.022	.17	1.1
NOV 08...	331	.119	.56	1.8	.15	1.8	1.16	5.13	1.20	.145	.044	.44	1.7
DEC 13...	551	.209	.52	.60	.27	2.5	2.00	8.84	2.02	.069	.021	.32	.39
JAN 11...	443	.172	.37	.49	.22	2.0	1.66	7.33	1.68	.062	.019	.20	.32
FEB 15...	346	.224	.43	.56	.29	2.3	1.86	8.25	1.88	.059	.018	.21	.34
MAR 15...	244	.656	1.5	5.1	.84	2.9	1.37	6.08	1.41	.115	.035	.82	4.4
APR 25...	300	.057	.70	4.0	.07	2.2	1.49	6.60	1.51	.072	.022	.64	4.0
MAY 16...	384	<.041	.52	2.4	--	1.5	.935	4.14	.952	.056	.017	--	--
JUN 11...	361	<.040	.31	1.1	--	1.5	1.21	5.37	1.24	.082	.025	--	--
JUL 12...	479	<.040	.35	1.5	--	2.7	2.31	10.2	2.33	.069	.021	--	--
AUG 08...	474	E.027	.36	1.6	--	.41	.034	.151	.058	.079	.024	--	--
SEP 19...	244	.110	.55	3.4	.14	1.7	1.12	4.95	1.16	.135	.041	.44	3.3
DATE	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)
OCT 12...	2.3	.518	.181	.169	.347	<10	4.5	<.002	<.004	<.002	<.005	.047	<.010
NOV 08...	3.0	.678	.250	.221	.616	<10	4.5	<.002	.011	<.002	<.005	.052	<.010
DEC 13...	2.6	.816	.275	.266	.318	<10	10.3	<.002	<.004	<.002	<.005	.084	<.010
JAN 11...	2.2	.696	.250	.227	.278	<10	8.5	<.002	<.004	<.002	<.005	.047	<.010
FEB 15...	2.4	.739	.234	.241	.302	<10	22.0	--	--	--	--	--	--
MAR 15...	6.5	.877	.337	.286	2.06	M	62.8	<.002	<.010	<.009	<.005	.075	<.010
APR 25...	5.5	.791	.293	.258	1.50	<10	<3.2	<.002	.180	.020	<.005	.376	<.010
MAY 16...	3.3	.432	.165	.141	.606	<10	E2.0	<.002	.156	.033	<.005	1.59	<.010
JUN 11...	2.4	.282	.115	.092	.558	<10	<3.0	<.002	.109	<.002	<.005	.785	<.010
JUL 12...	3.9	.926	.323	.302	.636	<10	<3.0	<.002	.044	.005	<.005	.387	<.010
AUG 08...	1.7	.282	.106	.092	.390	<10	<3.0	<.002	.009	.004	<.005	.162	<.010
SEP 19...	4.5	.524	.194	.171	1.09	<10	<3.0	<.002	.033	<.010	<.005	.113	<.010

PLATTE RIVER BASIN

06805500 PLATTE RIVER AT LOUISVILLE, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)
OCT 12...	<.002	<.041	<.020	<.005	<.018	<.003	E.028	<.005	<.005	<.021	E.003	<.009	<.005
NOV 08...	<.002	<.041	<.020	<.005	E.004	<.003	E.021	<.005	<.005	<.021	<.002	<.009	<.005
DEC 13...	<.002	<.041	<.020	<.005	<.018	<.003	E.046	<.005	<.005	<.021	<.002	<.009	<.005
JAN 11...	<.002	<.041	<.020	<.005	<.018	<.003	E.028	<.005	<.005	<.021	<.002	<.009	<.005
FEB 15...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 15...	<.002	<.041	<.020	<.005	<.018	<.003	E.031	<.005	<.005	<.021	<.002	<.009	<.005
APR 25...	<.002	<.041	<.020	<.005	E.007	<.003	E.024	<.005	<.005	<.021	<.002	<.009	<.005
MAY 16...	<.002	<.041	<.020	<.005	E.010	<.003	E.068	<.005	<.005	<.021	<.002	<.009	<.005
JUN 11...	<.002	E.002	<.020	<.005	<.018	<.003	E.096	.015	<.005	<.021	<.002	<.009	<.005
JUL 12...	<.002	<.041	<.020	<.005	E.008	<.003	<.006	E.003	<.005	<.021	<.002	<.009	<.005
AUG 08...	<.002	<.041	<.020	<.005	<.018	<.003	<.006	E.002	<.005	<.021	<.002	<.009	<.005
SEP 19...	<.002	<.041	<.020	<.005	<.018	<.003	E.022	<.005	<.005	<.021	<.002	<.009	<.005
DATE	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)
OCT 12...	<.003	<.004	<.035	<.027	<.050	<.006	E.005	<.006	<.002	<.007	<.003	<.007	<.002
NOV 08...	<.003	<.004	<.035	<.027	<.050	<.006	.018	<.006	<.002	<.007	<.003	<.007	<.002
DEC 13...	<.003	<.004	<.035	<.027	<.050	<.006	E.006	<.006	<.002	<.007	<.003	<.007	<.002
JAN 11...	<.003	<.004	<.035	<.027	<.050	<.006	E.005	<.006	<.002	<.007	<.003	<.007	<.002
FEB 15...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 15...	<.003	<.004	<.035	<.027	<.050	<.006	.079	<.006	<.002	<.007	<.003	<.007	<.002
APR 25...	<.003	<.004	<.035	<.027	<.050	<.006	.124	.007	<.002	<.007	<.003	<.007	<.002
MAY 16...	<.003	<.004	<.035	<.027	<.050	<.006	.433	<.006	<.002	<.007	<.003	<.007	<.002
JUN 11...	<.003	<.004	<.035	<.027	<.050	<.006	.256	.008	<.002	<.007	<.003	<.007	<.002
JUL 12...	<.003	<.004	<.035	<.027	<.050	<.006	.155	<.006	<.002	<.007	<.003	<.007	<.002
AUG 08...	<.003	<.004	<.035	<.027	<.050	<.006	.045	<.006	<.002	<.007	<.003	<.007	<.002
SEP 19...	<.003	<.004	<.035	<.027	<.050	<.006	.097	<.006	<.002	<.007	<.003	<.007	<.002

PLATTE RIVER BASIN

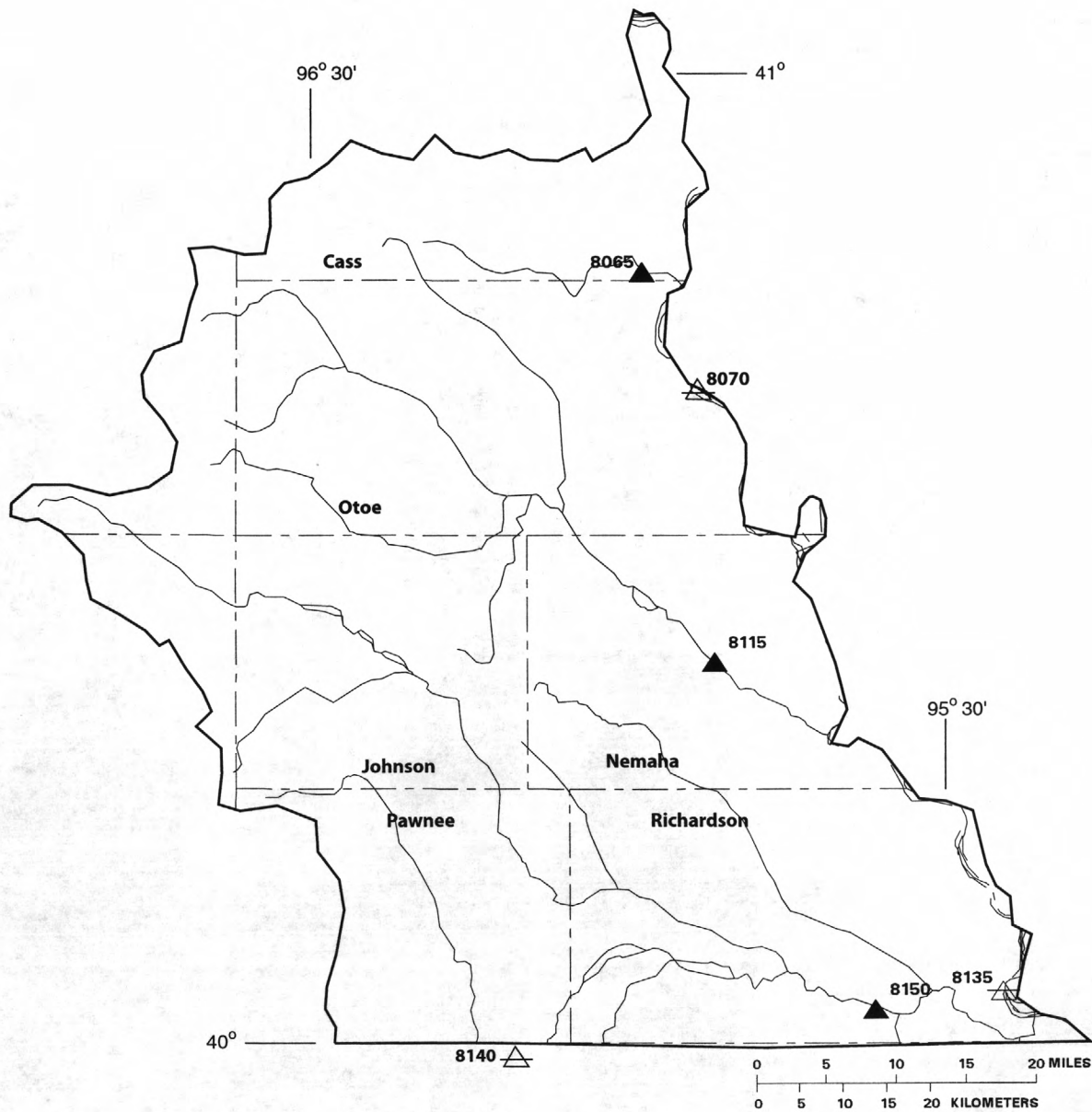
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06805500 PLATTE RIVER AT LOUISVILLE, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TER- BUTHYL- AZINE, WATER, DISS, REC (UG/L) (04022)
OCT 12...	<.010	<.006	<.011	E.005	<.004	<.010	<.011	<.023	E.002	<.016	<.034	<.017	E.047
NOV 08...	<.010	<.006	<.011	E.006	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	--
DEC 13...	<.010	<.006	<.011	E.008	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	E.005
JAN 11...	<.010	<.006	<.011	E.003	<.004	<.010	<.011	<.023	<.011	E.004	<.034	<.017	--
FEB 15...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 15...	<.010	<.006	<.011	<.015	<.004	<.010	<.011	<.023	E.003	<.016	<.034	<.017	--
APR 25...	<.010	<.006	<.011	E.006	<.004	<.010	<.011	<.023	E.002	<.016	<.034	<.017	E.023
MAY 16...	<.010	<.006	<.011	E.006	<.004	<.010	<.011	<.023	.021	E.006	<.034	<.017	E.036
JUN 11...	<.010	<.006	<.011	.027	<.004	<.010	<.011	<.023	E.011	E.008	<.034	<.017	E.041
JUL 12...	<.010	<.006	<.011	E.009	<.004	<.010	<.011	<.023	E.004	<.016	<.034	<.017	E.059
AUG 08...	<.010	<.006	<.011	.017	<.004	<.010	<.011	<.023	E.007	<.016	<.034	<.017	E.027
SEP 19...	<.010	<.006	<.011	<.015	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	--

DATE	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
OCT 12...	<.005	<.002	<.009	34	421	3890
NOV 08...	<.005	<.002	<.009	14	2800	73300
DEC 13...	<.005	<.002	<.009	--	--	--
JAN 11...	<.005	<.002	<.009	--	--	--
FEB 15...	--	--	--	--	--	--
MAR 15...	<.005	<.002	<.009	48	3120	206000
APR 25...	<.005	<.002	<.009	34	46	2780
MAY 16...	<.005	<.002	<.009	41	875	26500
JUN 11...	<.005	<.002	<.009	22	1100	22200
JUL 12...	<.005	<.002	<.009	73	403	4460
AUG 08...	<.005	<.002	<.009	83	117	701
SEP 19...	<.005	<.002	<.009	73	778	17700



EXPLANATION

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

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

*Station number	Station name	Page
	WEeping WATER CREEK BASIN	
8065	Weeping Water Creek at Union.....	238
	MISSOURI RIVER MAIN STEM	
8070	Missouri River at Nebraska City.....	240
	LITTLE NEMAHA RIVER BASIN	
8115	Little Nemaha River at Auburn.....	246
	MISSOURI RIVER MAIN STEM	
8135	Missouri River at Rulo.....	248
	BIG NEMAHA RIVER BASIN	
8140	Turkey Creek near Seneca, KS.....	250
8150	Big Nemaha River at Falls City.....	252

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

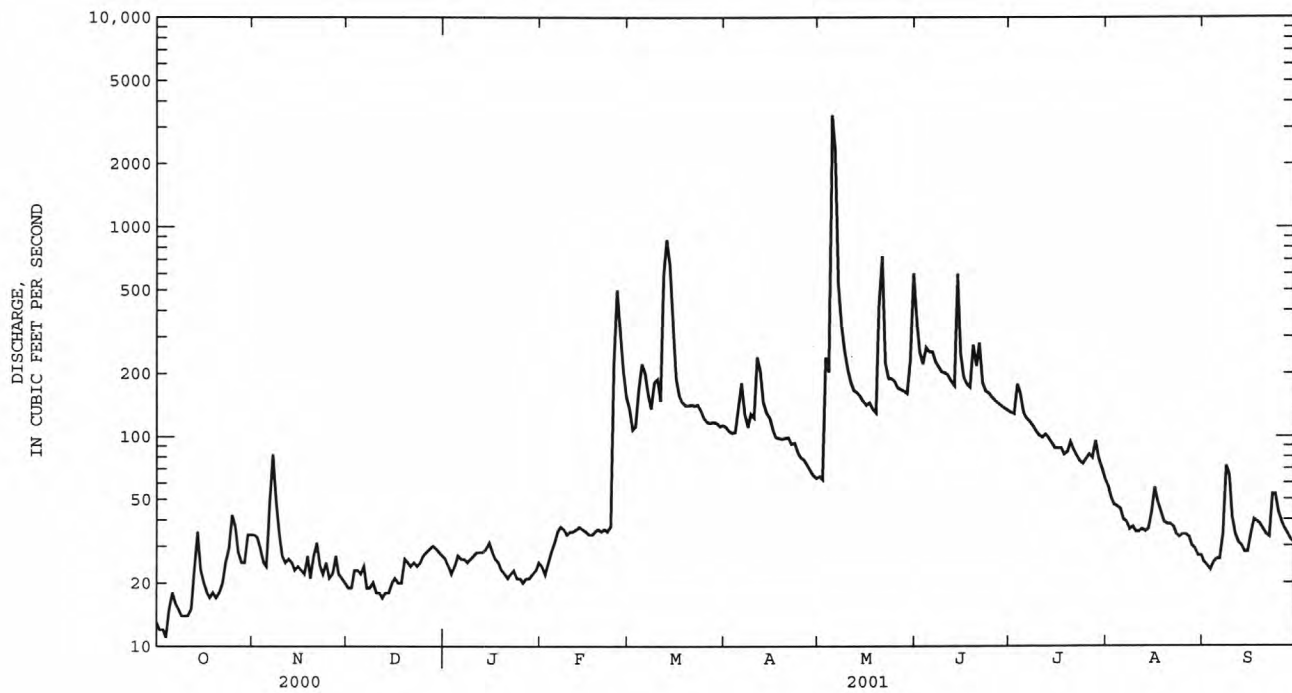
WEeping WATER CREEK BASIN

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06806500 WEeping WATER CREEK AT UNION, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1951 - 2001	
ANNUAL TOTAL	21017		39238		105	
ANNUAL MEAN	57.4		108		75.9	
MEDIAN OF ANNUAL MEANS					433	
HIGHEST ANNUAL MEAN					19.9	
LOWEST ANNUAL MEAN					34000	
HIGHEST DAILY MEAN	3440	Jun 24	3430	May 5	Jul 23 1993	
LOWEST DAILY MEAN	11	Jun 11	11	Oct 4	Sep 10 1955	
ANNUAL SEVEN-DAY MINIMUM	13	Sep 28	14	Oct 1	Sep 9 1955	
MAXIMUM PEAK FLOW			5760	May 5	65100	
MAXIMUM PEAK STAGE			20.95	May 5	30.97	
ANNUAL RUNOFF (AC-FT)	41690		77830		75870	
10 PERCENT EXCEEDS	55		203		173	
50 PERCENT EXCEEDS	33		39		40	
90 PERCENT EXCEEDS	17		21		9.6	

e Estimated.



MISSOURI RIVER MAIN STEM

06807000 MISSOURI RIVER AT NEBRASKA CITY, NE

LOCATION.--Lat 40°40'55", long 95°50'48", in NW¼, NE¼, sec.9, T.8 N., R.14 E., Otoe County, Hydrologic Unit 10240001, on right bank 1.0 mi upstream from Highway 2 Bridge at Nebraska City, and at mile 562.6.

DRAINAGE AREA.--410,000 mi², approximately. The 3,959 mi² in Great Divide basin are not included.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1929 to current year. Gage-height records collected in this vicinity from August 1878 to December 1899 are contained in reports of Missouri River Commission.

REVISED RECORDS.--WSP 761: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 905.36 ft above sea level, supplementary adjustment of 1954. See WSP 1918 or 1919 for history of changes prior to Apr. 1, 1963.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 414,000 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37400	41200	28400	20700	21500	21900	43400	72800	50900	37600	36700	33400
2	37700	41000	26800	20600	20000	22300	43500	70100	47300	37400	36100	32600
3	38800	41400	26500	21000	19300	22400	45800	76800	45400	39600	35400	32200
4	39000	40700	25100	21200	19700	23900	46200	79100	44300	43600	35700	32600
5	39700	40600	22800	21700	18800	25800	44900	85500	44300	42300	34500	32500
6	40000	42600	22800	22200	20800	26300	45100	95500	44500	39600	34300	32100
7	40300	43600	21800	22300	22800	26000	47300	87700	44300	38500	34000	32400
8	40300	43200	19800	22000	22600	26200	49600	81000	43500	37700	32800	35400
9	40300	41800	21900	22600	22300	26600	52600	74000	42200	37300	31900	34700
10	40400	40300	24000	23100	21700	27200	54100	71500	42200	37500	31700	34200
11	39800	38900	21500	23100	21400	27800	55200	72100	43100	37000	31700	33800
12	39800	38600	17400	23100	20700	30300	57800	67100	42900	37000	31800	33800
13	39400	38100	e16000	23500	20000	33800	60000	64300	41400	35800	32000	33600
14	39600	37700	e14000	24400	21600	36100	66400	61200	45700	35800	31800	33700
15	39000	38000	e13300	24200	22100	43200	67500	57800	64700	35400	33600	34400
16	39300	37200	13500	23700	21200	58100	71600	55000	55200	35200	35000	36000
17	39300	37300	16900	23600	20100	50700	75300	52800	49700	34900	34600	38100
18	39300	37800	17800	23300	19600	50000	75900	51300	49500	36600	35200	40100
19	39600	38200	16200	23000	21600	47100	73200	50100	52000	36500	35000	38900
20	39200	39100	e15000	21900	23100	47700	68500	50100	51400	36200	34800	36900
21	39400	39400	14700	21300	23000	49400	63500	56100	48700	36200	34600	35900
22	39400	38500	17200	20600	21900	57400	60300	53900	46400	35500	34200	35500
23	39800	38700	18300	20000	21000	59800	58600	50700	43900	34500	34200	35400
24	40400	39100	19700	21100	22100	56000	58500	49100	41800	34500	34200	35500
25	40700	38800	19600	21600	27900	50700	64900	48600	41000	34900	34100	33900
26	40100	38200	20900	21600	27800	46200	69100	47600	40400	35000	34200	33100
27	40000	36500	21500	21100	24500	43400	73200	46400	39500	35400	33600	32900
28	40100	34800	21200	20300	22100	43000	77200	45000	38700	38900	33700	32800
29	39800	33200	21100	20400	---	43200	78100	43900	39000	40500	33000	33500
30	40000	31200	21300	20500	---	43500	75800	44200	38900	40200	33000	33400
31	40900	---	21200	21500	---	44000	---	49600	---	37600	33500	---
TOTAL	1228800	1165700	618200	681200	611200	1210000	1829100	1910900	1362800	1154700	1050900	1033300
MEAN	39640	38860	19940	21970	21830	39030	60970	61640	45430	37250	33900	34440
MAX	40900	43600	28400	24400	27900	59800	78100	95500	64700	43600	36700	40100
MIN	37400	31200	13300	20000	18800	21900	43400	43900	38700	34500	31700	32100
AC-FT	2437000	2312000	1226000	1351000	1212000	2400000	3628000	3790000	2703000	2290000	2084000	2050000
CFSM	.10	.09	.05	.05	.05	.10	.15	.15	.11	.09	.08	.08
IN.	.11	.11	.06	.06	.06	.11	.17	.17	.12	.10	.10	.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2001, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1953	42980	76760	1998	22420	1962
1954	39090	79410	1998	14380	1962
1955	25640	52410	1987	10510	1956
1956	21520	39970	1987	10160	1957
1957	26640	48630	1983	12780	1957
1958	38130	66730	1983	15310	1957
1959	48110	98960	1997	21850	1957
1960	47950	90280	1997	32470	1955
1961	52530	117500	1984	33530	1958
1962	46600	116700	1993	32760	1961
1963	42840	71540	1996	29870	1955
1964	42710	73410	1997	32560	1958

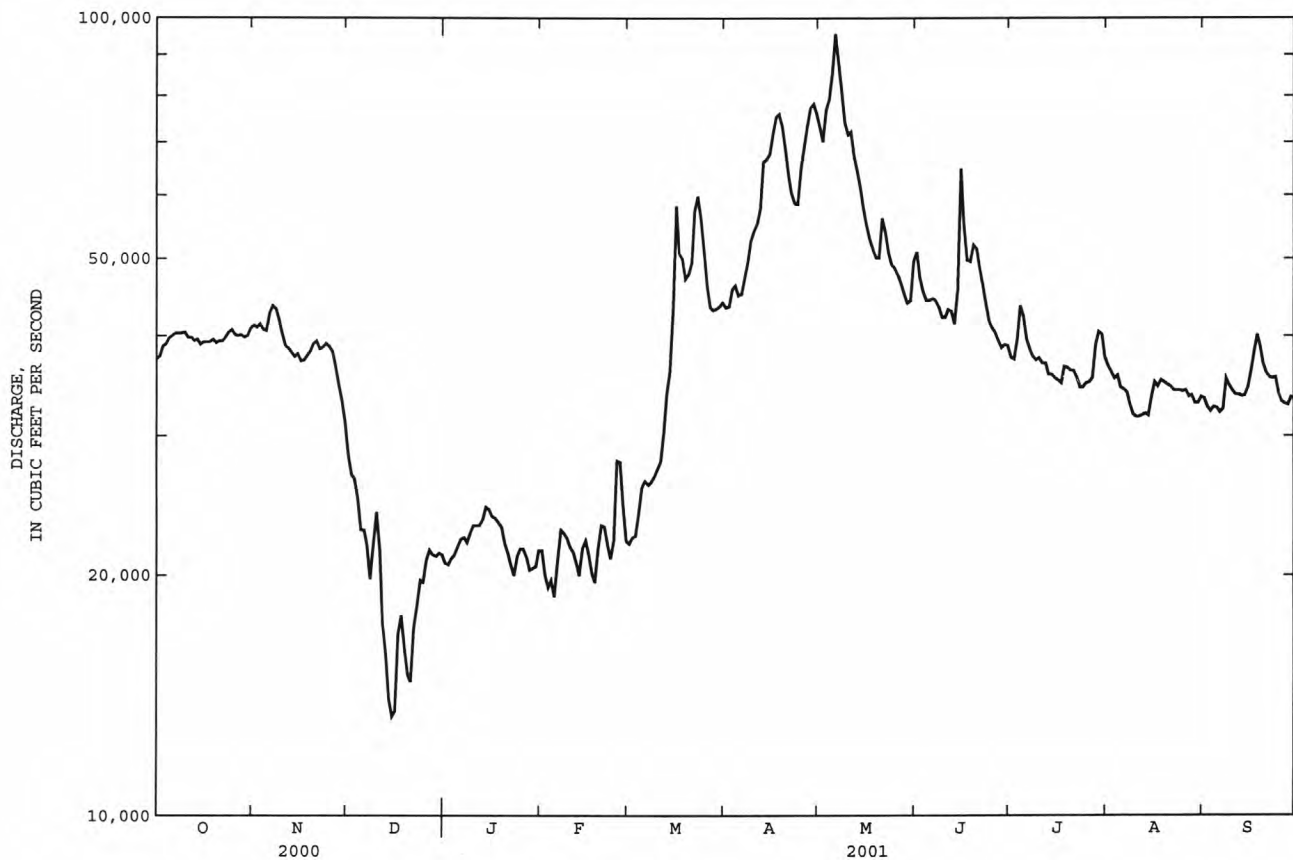
MISSOURI RIVER MAIN STEM

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06807000 MISSOURI RIVER AT NEBRASKA CITY, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1953 - 2001a	
ANNUAL TOTAL	13133900		13856800		39590	
ANNUAL MEAN	35880		37960		66450	
HIGHEST ANNUAL MEAN					25370	
LOWEST ANNUAL MEAN					188000	
HIGHEST DAILY MEAN	65600	Jun 27	95500	May 6	188000	Jul 25 1993
LOWEST DAILY MEAN	13300	Dec 15	13300	Dec 15	4320	Jan 11 1957
ANNUAL SEVEN-DAY MINIMUM	15200	Dec 14	15200	Dec 14	5590	Nov 29 1955
MAXIMUM PEAK FLOW			99400	May 6	196000	Jul 23 1993
MAXIMUM PEAK STAGE			19.61	May 6	27.19	Jul 23 1993
ANNUAL RUNOFF (AC-FT)	26050000		27480000		28680000	
ANNUAL RUNOFF (CFSM)	.088		.093		.097	
ANNUAL RUNOFF (INCHES)	1.19		1.26		1.31	
10 PERCENT EXCEEDS	43200		57800		62000	
50 PERCENT EXCEEDS	37400		37000		37400	
90 PERCENT EXCEEDS	26800		21100		17800	

a Post regulation.
e Estimated.



MISSOURI RIVER MAIN STEM

06807000 MISSOURI RIVER AT NEBRASKA CITY, NE--Continued

WATER-QUALITY RECORDS

LOCATION.--Water quality samples were collected from Highway 2 bridge, 2.0 miles downstream of gage.

PERIOD OF RECORD.--May 1951 to current year. Daily sediment loads August 1957 to September 1971 in reports of U.S. Army Corps of Engineers.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1951 to December 1977, October 1991 to current year.

WATER TEMPERATURES: May 1951 to December 1977, October 1991 to current year.

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

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 994 microsiemens Dec. 17, 1962; minimum daily, 273 microsiemens June 17, 1964.

WATER TEMPERATURES: Maximum daily, 31.0°C July 26, 1977, and July 25, 1997; minimum daily, 0.0°C on many days during winter periods.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 8,420 mg/L Aug. 7, 1996; minimum daily mean, 115 mg/L Jan. 3, 1993.

SEDIMENT LOADS: Maximum daily, 3,120,000 tons June 24, 1996; minimum daily, 4,050 tons Jan. 17, 1972.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 863 microsiemens Jan. 31; minimum daily, 664 microsiemens June 27.

WATER TEMPERATURES: Maximum daily, 29.0°C July 10, 13; minimum daily, 0.0°C Jan. 31.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,770 mg/L June 27; minimum daily, 152 mg/L Aug. 31.

SEDIMENT LOADS: Maximum daily, 313,000 tons June 27; minimum daily, 14,500 tons Aug. 31.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	NUMBER OF SAM- PLING POINTS (COUNT)	BED MAT. SIEVE DIAM. % FINER THAN (00063)	BED MAT. SIEVE DIAM. % FINER THAN (80164)	BED MAT. SIEVE DIAM. % FINER THAN (80165)	BED MAT. SIEVE DIAM. % FINER THAN (80166)	BED MAT. SIEVE DIAM. % FINER THAN (80167)	BED MAT. SIEVE DIAM. % FINER THAN (80168)	BED MAT. SIEVE DIAM. % FINER THAN (80169)	BED MAT. SIEVE DIAM. % FINER THAN (80170)	BED MAT. SIEVE DIAM. % FINER THAN (80171)	BED MAT. SIEVE DIAM. % FINER THAN (80172)
OCT												
02...	1135	3	.0	1	30	62	84	95	99	100	--	
NOV												
07...	1100	3	--	.0	14	39	66	90	98	100	--	
DEC												
07...	1430	3	--	.0	13	47	76	91	97	99	100	
JAN												
16...	1510	3	--	.0	17	62	77	89	96	100	--	
MAR												
06...	1535	3	--	.0	12	37	64	81	96	100	--	
APR												
13...	0945	3	--	.0	24	67	82	93	99	100	--	
MAY												
04...	0900	3	.0	1	17	64	73	89	98	100	--	
JUN												
01...	0935	3	--	.0	17	52	68	81	95	100	--	
JUL												
13...	0955	3	--	.0	17	52	64	86	98	100	--	
AUG												
08...	1505	3	--	.0	12	58	72	81	94	99	100	
SEP												
05...	1500	3	--	.0	18	57	82	93	98	100	--	

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	625	745	---	---	---
2	821	773	---	---	---	---	632	---	---	---	769	---
3	---	---	---	---	---	---	---	---	---	811	---	---
4	---	---	---	---	---	---	---	639	---	---	---	---
5	---	---	---	---	---	---	---	---	---	771	---	---
6	819	---	---	---	835	713	---	574	811	---	---	---
7	---	761	833	---	---	---	---	---	---	---	---	798
8	---	---	---	---	---	---	---	---	816	---	797	---
9	---	774	---	---	---	---	---	---	---	---	---	---
10	813	---	---	858	---	---	---	---	---	844	---	789
11	---	---	---	---	---	---	---	674	---	---	---	---
12	822	---	---	---	---	---	---	---	797	---	---	---
13	---	---	---	---	---	672	570	---	---	835	---	---
14	---	820	---	---	---	---	---	---	---	---	802	---
15	---	---	---	---	---	---	---	767	---	---	---	---
16	---	814	---	810	---	---	---	---	---	---	---	---
17	817	---	---	---	---	---	619	---	---	---	---	---
18	---	---	---	---	---	---	---	801	693	778	---	717
19	---	---	---	---	---	---	---	---	---	---	---	---
20	812	---	---	---	---	578	620	---	---	770	---	711
21	---	---	---	---	803	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	827	---	---	---	778	742	784	---	---
24	816	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	631	807	---	---	---	---
26	---	---	---	---	717	572	---	---	795	776	---	744
27	807	---	---	---	---	---	639	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	774
29	---	823	---	---	---	---	---	812	800	747	762	---
30	---	---	---	---	---	---	---	---	---	---	804	---
31	822	---	---	---	---	---	---	---	---	---	---	---
MAX	822	823	833	858	835	713	639	812	816	844	804	798
MIN	807	761	833	810	717	572	570	574	693	747	762	711

[illegible]

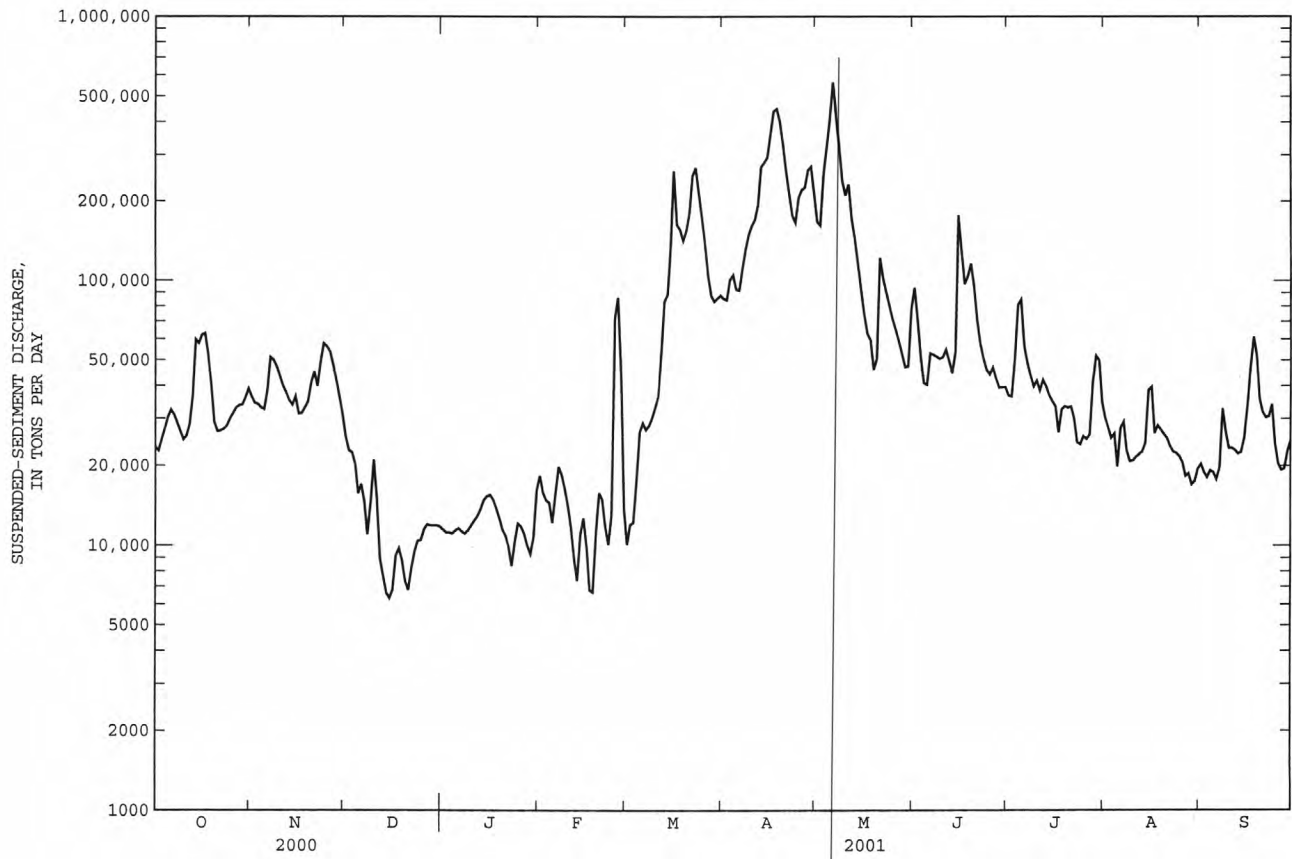
06807000 MISSOURI RIVER AT NEBRASKA CITY, NE.--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

	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)
DAY												
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	232	23400	326	36300	334	25700	205	11500	316	18300	171	10100
2	223	22700	309	34300	316	22800	201	11200	292	15800	199	12000
3	239	25100	304	34000	313	22400	197	11200	283	14800	201	12200
4	261	27500	300	33000	298	20300	194	11100	272	14500	270	17500
5	283	30300	297	32500	254	15700	194	11400	240	12200	385	26800
6	299	32300	332	38300	276	17000	193	11600	279	15700	408	28900
7	285	31000	434	51100	247	14600	187	11300	322	19800	390	27300
8	266	28900	428	49900	205	11000	186	11100	301	18400	400	28300
9	247	26900	417	47100	244	14500	187	11400	271	16300	421	30300
10	230	25000	399	43400	323	21000	190	11900	241	14100	452	33200
11	240	25800	380	39900	254	14900	198	12400	203	11700	489	36700
12	265	28500	360	37600	190	8920	207	12900	160	8920	656	53900
13	343	36500	341	35100	178	7690	217	13700	136	7380	910	83400
14	556	59500	332	33800	175	6620	226	14800	188	11000	911	88800
15	549	57700	355	36400	176	6320	235	15300	212	12700	1130	136000
16	584	62000	312	31300	186	6800	242	15500	172	9880	1650	260000
17	592	62900	312	31400	200	9160	233	14900	124	6780	1190	163000
18	492	52100	323	33000	203	9750	219	13800	126	6660	1160	156000
19	379	40500	338	34800	200	8770	205	12700	190	11100	1120	142000
20	274	29100	389	41100	181	7330	193	11500	253	15800	1200	154000
21	253	26900	423	45000	171	6780	189	10900	240	14900	1340	179000
22	254	27000	383	39800	177	8210	178	9880	198	11800	1610	250000
23	255	27400	470	49200	192	9510	156	8390	177	10100	1660	268000
24	258	28100	546	57600	196	10400	180	10300	214	13000	1430	216000
25	272	29900	535	56100	198	10500	207	12100	955	72300	1270	174000
26	289	31300	521	53700	204	11500	202	11800	1150	86300	1110	138000
27	305	32900	486	47800	207	12000	195	11100	660	44000	887	104000
28	311	33600	445	41900	209	11900	183	10000	230	13800	756	87700
29	314	33800	405	36300	208	11900	169	9290	---	---	715	83400
30	333	36000	369	31100	207	11900	194	10700	---	---	730	85700
31	353	38900	---	---	207	11800	279	16200	---	---	740	87900
TOTAL	---	1073500	---	1212800	---	387660	---	371860	---	528020	---	3174100

DAY	MEAN CONC TRAT (MG/ DAY)	LOAD (TONS/ DAY)	MEAN CONCEN TRATIO (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN TRATIO (MG/L)	LOAD (TONS/ DAY)	MEAN CONCE TRATI (MG/L)	LOAD (TONS/ DAY)	MEAN CONCE TRATI (MG/L)	LOAD (TONS/ DAY)	MEAN CONCE TRATI (MG/L)	LOAD (TONS/ DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	728	85400	848	167000	686	94200	363	36800	304	30200	225	20300
2	719	84500	857	162000	552	70700	361	36500	285	27800	215	18900
3	817	101000	1210	251000	412	50600	468	50500	266	25500	208	18100
4	840	105000	1500	320000	342	40900	686	80900	274	26400	219	19200
5	766	92800	1750	408000	337	40400	740	84700	214	19900	216	18900
6	754	91900	2190	566000	441	53000	527	56300	300	27700	205	17800
7	871	111000	1780	423000	438	52400	468	48700	318	29200	224	19600
8	976	131000	1470	323000	440	51600	430	43800	258	22800	343	32800
9	1050	149000	1200	239000	443	50600	395	39800	242	20800	288	27000
10	1110	161000	1090	211000	450	51300	412	41800	243	20900	252	23300
11	1140	170000	1190	232000	470	54700	385	38500	252	21600	255	23300
12	1230	193000	946	171000	429	49700	422	42100	257	22100	251	22900
13	1510	270000	830	144000	398	44700	411	39800	261	22600	245	22200
14	1570	281000	698	115000	427	53600	382	36900	283	24300	248	22500
15	1610	294000	589	92000	1000	177000	367	35000	422	38600	273	25400
16	1850	359000	501	74400	873	131000	353	33500	417	39600	342	33300
17	2160	439000	441	62900	723	97100	283	26700	284	26500	459	47300
18	2190	449000	430	59500	775	104000	330	32600	297	28300	564	61100
19	2030	402000	341	46100	824	116000	339	33500	289	27300	494	51900
20	1770	328000	371	50600	683	94900	338	33100	280	26300	358	35700
21	1510	260000	803	122000	535	70500	341	33400	272	25400	328	31800
22	1310	213000	703	102000	460	57600	313	30000	256	23700	317	30400
23	1120	176000	660	90400	427	50600	263	24500	245	22600	320	30600
24	1050	166000	606	80400	407	45900	258	24100	242	22300	354	34000
25	1180	207000	546	71600	400	44200	274	25800	236	21700	266	24400
26	1180	221000	507	65300	429	46800	267	25200	223	20600	228	20400
27	1140	226000	471	59000	400	42700	273	26200	202	18300	217	19300
28	1260	263000	434	52800	377	39400	394	41500	205	18700	221	19500
29	1280	271000	397	47100	376	39500	474	51900	191	17000	250	22600
30	1050	215000	397	47400	376	39500	461	50000	197	17500	275	24800
31	---	---	582	78200	---	---	342	34700	215	19500	---	---
TOTAL	---	6515600	---	4933700	---	1955100	---	1238800	---	755700	---	819300
YEAR	22966140											

06807000 MISSOURI RIVER AT NEBRASKA CITY, NE.--Continued



LITTLE NEMAHIA RIVER BASIN

06811500 LITTLE NEMAHIA RIVER AT AUBURN, NE

LOCATION.--Lat 40°23'33", long 095°48'46", in NE ¼ NW ¼ sec.23, T.5 N., R.14 E., Nemaha County, Hydrologic Unit 10240006, on left bank at downstream side of bridge on U.S. Highway 136, 1 mi downstream from Longs Creek and Willow Creek, 1 mi east of Auburn, and at mile 10.4.

DRAINAGE AREA.--792 mi².

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

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

GAGE.--Water-stage recorder. Datum of gage is 889.87 ft above sea level. See WSP 2119 for history of changes prior to July 24, 1967. Data collection platform at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	89	61	e40	e40	954	275	135	3140	148	165	80
2	32	74	62	e46	e42	797	248	127	1880	143	151	79
3	31	61	48	e54	e46	320	232	220	1320	143	153	78
4	31	56	65	e68	e48	488	265	851	2010	166	154	76
5	39	55	49	e80	e50	1160	320	23400	3970	136	144	74
6	46	95	49	e86	e49	1290	550	10700	2220	119	131	93
7	44	169	78	e90	e47	1060	437	3770	1160	92	123	207
8	41	118	68	e92	e45	733	300	2580	800	75	120	243
9	41	82	60	e92	e54	1210	618	2840	616	69	118	162
10	41	69	52	e94	e66	1470	535	1990	507	66	101	110
11	42	64	38	e94	e74	1150	1290	1460	510	67	104	93
12	42	67	e33	e92	e82	4650	1660	914	329	80	99	85
13	42	61	e34	e80	e80	4340	681	800	238	67	97	81
14	45	60	e34	e74	e76	3240	460	678	5390	55	96	79
15	55	59	e40	e66	e74	1760	444	572	2820	51	102	95
16	48	59	e46	e60	e66	962	360	492	1220	48	102	105
17	44	47	e52	e56	e56	664	287	461	771	44	102	130
18	42	54	e46	e52	e54	544	254	471	627	39	e98	121
19	42	71	e46	e48	e64	475	239	373	677	2220	e98	113
20	42	49	e50	e44	e80	431	229	3780	1470	1270	e100	99
21	44	51	e52	e50	e78	413	220	7370	2580	404	100	91
22	46	55	e48	e60	e72	535	219	2090	1160	333	97	90
23	54	65	e48	e56	e68	556	213	1100	e500	211	94	86
24	58	62	e49	e52	e64	469	193	781	e360	125	104	93
25	64	70	e49	e50	e64	377	179	643	e270	578	101	95
26	68	66	e48	e50	e68	323	167	552	e230	537	94	87
27	56	61	e48	e50	e100	296	159	463	e190	289	92	83
28	50	77	e47	e50	e300	283	149	371	e180	361	90	81
29	52	64	e45	e49	---	269	141	348	e160	324	86	79
30	65	56	e43	e49	---	264	136	5810	156	220	84	78
31	85	---	e41	e48	---	274	---	7920	---	191	81	---
TOTAL	1465	2086	1529	1972	2007	31757	11460	84062	37461	8671	3381	3066
MEAN	47.3	69.5	49.3	63.6	71.7	1024	382	2712	1249	280	109	102
MAX	85	169	78	94	300	4650	1660	23400	5390	2220	165	243
MIN	31	47	33	40	40	264	136	127	156	39	81	74
AC-FT	2910	4140	3030	3910	3980	62990	22730	166700	74300	17200	6710	6080

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2001, BY WATER YEAR (WY)

	MEAN	219	135	114	117	227	456	372	608	561	593	224	238
MAX	2003	493	509	562	747	2870	1589	2949	3524	9419	1256	1546	
(WY)	1974	1999	1987	1974	1993	1979	1984	1996	1951	1993	1982	1977	
MIN	25.4	25.7	23.4	19.7	28.4	49.1	30.6	29.9	14.9	16.2	14.0	26.6	
(WY)	1992	1956	1957	1957	1956	1957	1956	1956	1977	1977	1955	1991	

LITTLE NEMAHA RIVER BASIN

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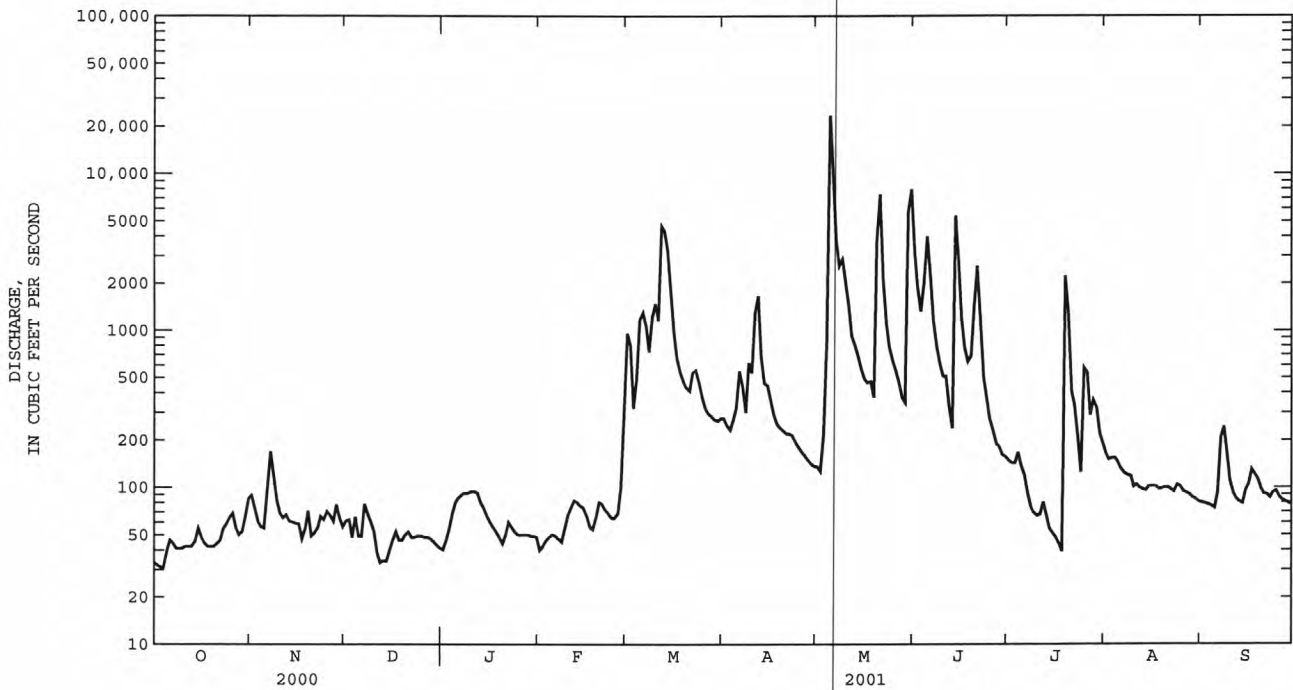
06811500 LITTLE NEMAHA RIVER AT AUBURN, NE--Continued

SUMMARY STATISTICS

	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1950 - 2001	
ANNUAL TOTAL	53319		188917		323	
ANNUAL MEAN	146		518		279	
MEDIAN OF ANNUAL MEANS					1389	
HIGHEST ANNUAL MEAN					64.4	1993
LOWEST ANNUAL MEAN					1389	1981
HIGHEST DAILY MEAN	9100	Jun 26	23400	May 5	70400	Jul 24 1993
LOWEST DAILY MEAN	26	Jun 8	31	Oct 3	.87	Jul 6 1977
ANNUAL SEVEN-DAY MINIMUM	28	Jun 4	37	Oct 1	1.1	Jul 3 1977
MAXIMUM PEAK FLOW			73600	May 5	164000	May 9 1950
MAXIMUM PEAK STAGE			25.72	May 5	*27.65	May 9 1950
ANNUAL RUNOFF (AC-FT)	105800		374700		233800	
10 PERCENT EXCEEDS	124		1160		479	
50 PERCENT EXCEEDS	68		94		101	
90 PERCENT EXCEEDS	38		46		35	

e Estimated.

* From floodmark.



MISSOURI RIVER MAIN STEM

06813500 MISSOURI RIVER AT RULO, NE

LOCATION.--Lat 40°03'13", long 95°25'19", in NW¼ NW¼ sec.17, T.1 N., R.18 E., Richardson County, Hydrologic Unit 10240005, on right bank at downstream side of bridge on U.S. Highway 159 at Rulo, 3.2 mi upstream from Big Nemaha River, and at mile 498.0.

DRAINAGE AREA.--414,900 mi², approximately. The 3,959 mi² in Great Divide basin are not included.

PERIOD OF RECORD.--October 1949 to current year in reports of U.S. Geological Survey. Gage- height record collected at site 80 ft upstream January 1886 to December 1899 published in reports of Missouri River Commission; September 1929 to September 1950 in files of Kansas City office of U.S. Army Corps of Engineers.

GAGE.--Water-stage recorder. Datum of gage is 837.23 ft above sea level. Oct. 1949 to Sept. 12, 1950, nonrecording gage at site 80 ft upstream and Sept. 13, 1950 to Apr. 19, 1983, recording gage on downstream end of middle pier, all at same datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 358,000 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38400	42200	e30000	22700	22700	26200	46000	75800	64900	40900	38600	33500
2	38400	42100	28200	22400	22600	25800	45500	71800	59500	39900	38000	33300
3	38800	42100	27000	22300	21500	25500	46300	72300	54200	39800	37300	32800
4	39300	42200	26800	22500	21100	25600	48500	76400	65000	42800	36600	32900
5	39300	41900	25200	22600	21300	28200	47200	88300	62000	44800	36600	33300
6	39900	43000	23300	22800	20700	30700	46900	103000	58000	42400	35300	33200
7	40200	45300	23200	23000	22500	30700	47000	93100	56600	40500	35100	33100
8	40400	45400	22300	22800	24200	29600	49200	83900	52700	40000	34500	36100
9	40500	44300	21300	22600	24400	30300	51700	77800	49300	39200	33300	37700
10	40300	42600	23100	22800	23600	31900	55000	72900	47400	39400	32700	35700
11	40300	41100	24300	23100	22900	32900	57600	76600	49100	39700	32400	35000
12	39800	40100	21600	23000	22500	46900	64500	73100	48200	42300	32200	34600
13	39800	39600	18600	23200	21800	48000	67900	69500	46500	41400	32300	34400
14	40100	38800	e17200	23800	21400	51900	69900	67300	61800	38500	32300	34500
15	40000	39200	e16500	24300	22500	52400	68500	65100	77200	37500	32500	35800
16	40000	38600	e15000	24200	22900	70300	71000	61500	74800	37000	34600	37800
17	40200	38500	16000	24100	22000	63300	74500	58600	60500	36500	35000	45100
18	40100	38900	18700	24000	20900	57800	76300	56000	55400	36600	34800	43500
19	40000	39100	19300	23800	20600	56300	75700	53800	57200	47900	35300	41300
20	39900	39500	e18400	23500	22100	53500	72300	52800	61400	46500	35000	39200
21	39800	40400	e16500	22500	23300	54400	66600	68900	68900	39900	34800	37200
22	40000	40500	17000	22100	23200	61000	62000	66700	57100	38300	34700	36600
23	39900	40000	18600	21400	22200	69900	59400	60800	51200	37100	34300	36800
24	40500	40300	19800	21100	31200	66300	59100	55400	47000	35900	34400	37200
25	41000	39900	20800	22000	48700	59700	61300	53400	45100	36800	34300	36000
26	40800	39500	20900	22600	41300	53000	70600	52300	44000	37600	34200	34300
27	40400	37800	21900	22500	35300	48500	73100	51000	43300	36800	34000	33600
28	40600	36300	22300	22000	28600	46100	76100	49500	42100	46800	33600	33800
29	40900	34700	22400	21600	---	45500	78600	48100	41500	46100	33300	34100
30	40700	e32500	22400	21600	---	45500	77700	51400	41600	43000	32800	34900
31	41700	---	22600	21900	---	45800	---	64600	---	40700	33000	---
TOTAL	1242000	1206400	661200	704800	698000	1413500	1866000	2071700	1643500	1252600	1067800	1077300
MEAN	40060	40210	21330	22740	24930	45600	62200	66830	54780	40410	34450	35910
MAX	41700	45400	30000	24300	48700	70300	78600	103000	77200	47900	38600	45100
MIN	38400	32500	15000	21100	20600	25500	45500	48100	41500	35900	32200	32800
AC-FT	2464000	2393000	1311000	1398000	1384000	2804000	3701000	4109000	3260000	2485000	2118000	2137000
CFSM	.10	.10	.05	.05	.06	.11	.15	.16	.13	.10	.08	.09
IN.	.11	.11	.06	.06	.06	.13	.17	.19	.15	.11	.10	.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2001, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1953	44970	80050	1998	25580	1962
1954	41190	83880	1998	17000	1962
1955	27380	57380	1998	9953	1956
1956	22850	42280	1973	10800	1957
1957	28680	53140	1997	13220	1957
1958	41470	79590	1979	15380	1957
1959	51710	106100	1997	21820	1957
1960	52220	97280	1997	33790	1956
1961	57140	130600	1984	33710	1956
1962	51160	164800	1993	33860	1963
1963	45120	78730	1996	29820	1955
1964	45290	76410	1997	34140	1991

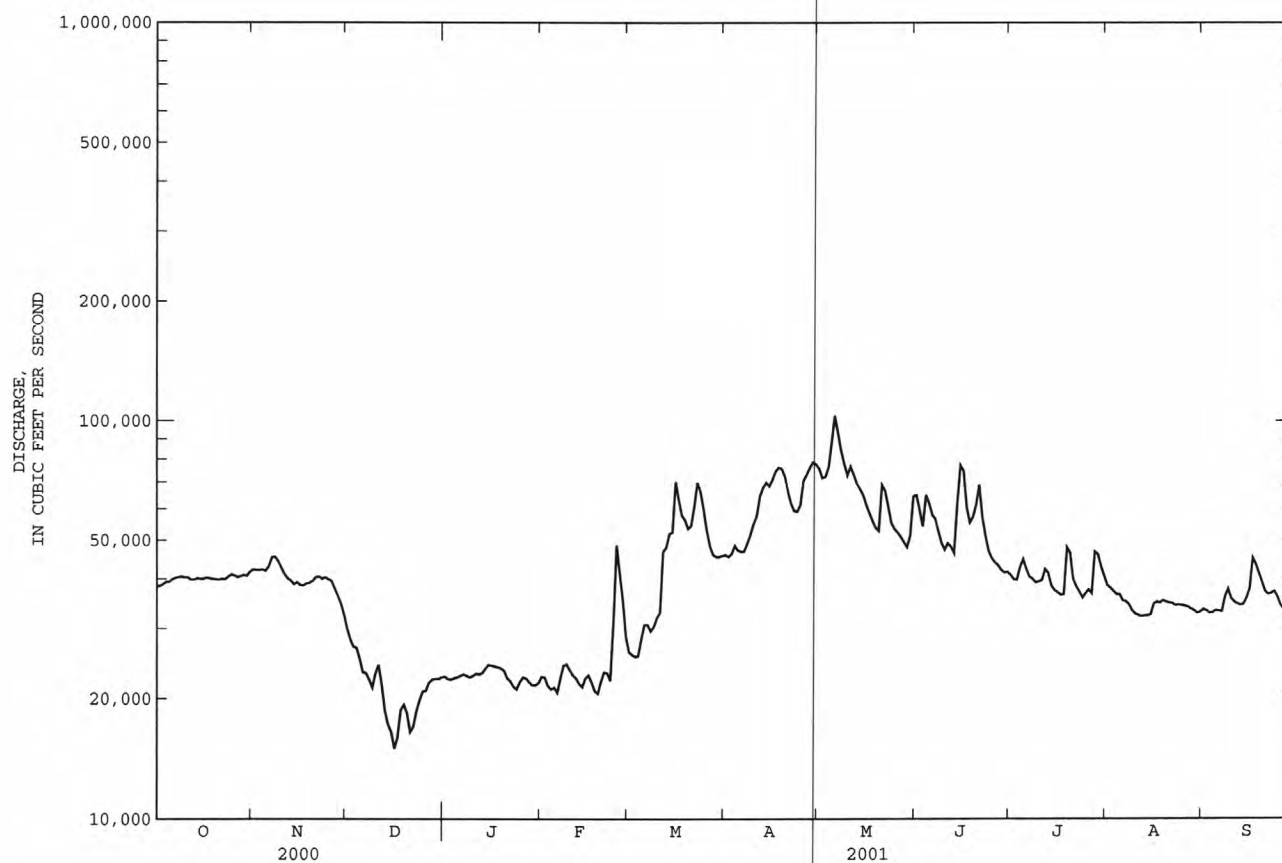
MISSOURI RIVER MAIN STEM

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06813500 MISSOURI RIVER AT RULO, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1953 - 2001a	
ANNUAL TOTAL	13764800		14904800		42470	
ANNUAL MEAN	37610		40840		71880	
HIGHEST ANNUAL MEAN					26340	
LOWEST ANNUAL MEAN					289000	
HIGHEST DAILY MEAN	70000	Jun 26	103000	May 6	26340	1957
LOWEST DAILY MEAN	15000	Dec 16	15000	Dec 16	4420	Jul 24 1993
ANNUAL SEVEN-DAY MINIMUM	17200	Dec 15	17200	Dec 15	5560	Jan 13 1957
MAXIMUM PEAK FLOW			108000	May 6	307000	Nov 30 1955
MAXIMUM PEAK STAGE			21.44	May 6	25.37	Jul 24 1993
ANNUAL RUNOFF (AC-FT)	27300000		29560000		30760000	
ANNUAL RUNOFF (CFSM)	.091		.098		.10	
ANNUAL RUNOFF (INCHES)	1.23		1.34		1.39	
10 PERCENT EXCEEDS	45200		65600		67000	
50 PERCENT EXCEEDS	39100		39300		39000	
90 PERCENT EXCEEDS	28600		22300		18800	

a Post regulation.
e Estimated.



BIG NEMAHA RIVER BASIN

06814000 TURKEY CREEK NEAR SENECA, KS

LOCATION.--Lat 39°56'52", long 96°06'30", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.20, T.1 S., R.12 E., Nemaha County, Hydrologic Unit 10240007, on left bank at downstream side of county highway bridge, 2.0 mi downstream from Clear Creek, 5.0 mi upstream from Big Nemaha River, and 8.0 mi northwest of Seneca.

DRAINAGE AREA.--276 mi².

PERIOD OF RECORD.--October 1948 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 1,037.53 ft above sea level. Prior to Oct. 19, 1956, water-stage recorder (occasional operation only) and nonrecording gage on former channel 400 ft south of present site at present datum. Oct. 19, 1956, to June 15, 1957, nonrecording gage at highway bridge 1.2 mi upstream at different datum. June 16, 1957, to Mar. 27, 1958, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemeter at station.

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)
Feb 24	1515	5,760	19.29	Jul 12	1415	4,370	16.73
Mar 12	0615	5,650	19.09	Jul 28	0915	5,840	19.43
May 6	0515	4,600	17.17	Sep 15	1615	3,640	15.25
Jun 4	0715	6,920	21.23	Sep 17	1530	*9,400	*22.68
Jun 5	2315	4,820	17.60				

Minimum discharge, 0.01 ft³/s, Feb. 14, gage height, 2.21 ft.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.23	23	2.4	e.75	e2.5	153	113	13	371	13	111	8.2
2	.30	9.9	2.6	e1.0	e2.4	157	72	11	435	12	87	7.5
3	.19	3.9	2.7	e1.7	e3.4	136	53	45	410	11	75	6.9
4	.15	2.4	2.4	e1.9	e4.4	205	44	170	5050	9.6	66	6.1
5	.18	1.8	3.7	e2.1	e4.4	474	93	2830	2960	7.0	59	5.4
6	1.1	9.1	2.4	e2.2	e4.4	472	209	2970	3150	5.6	52	6.4
7	.66	17	2.6	e2.2	e4.4	320	94	521	674	4.8	45	63
8	.33	8.5	2.5	e2.3	e4.0	218	56	260	373	4.0	41	959
9	.44	5.2	2.5	e2.6	e1.9	466	37	185	253	2.9	36	108
10	.42	3.5	2.0	e2.8	e1.4	635	36	151	188	57	30	43
11	.40	3.1	e2.0	e3.0	e3.6	1060	992	128	147	838	27	23
12	.32	3.4	e1.9	e3.0	e6.0	3990	557	94	114	2430	26	15
13	.46	3.4	e1.8	e3.0	e6.6	1390	198	74	91	391	26	12
14	.94	2.9	e1.6	e3.0	e4.0	1010	131	56	664	158	22	9.8
15	3.2	2.8	e1.5	e3.0	e2.4	576	363	41	348	94	25	1290
16	1.2	2.8	e1.5	e3.0	e2.0	351	168	32	147	62	29	1130
17	.55	2.4	e1.4	e2.4	e3.0	242	101	25	101	41	31	6850
18	.34	2.3	e1.3	e2.0	e4.0	178	81	20	77	26	39	669
19	.28	2.3	e1.3	e1.5	e4.7	142	70	17	89	1400	25	374
20	.40	3.0	e1.2	e1.6	e5.2	120	61	16	256	628	18	206
21	.45	2.0	e1.0	e1.7	e8.0	106	86	67	187	193	15	132
22	.50	2.0	e1.0	e1.8	e20	113	80	51	135	105	13	111
23	2.2	2.2	e1.2	e2.0	78	126	50	23	84	63	38	1330
24	.81	2.7	e1.1	e1.8	3910	97	32	16	58	38	138	214
25	1.5	2.6	e1.4	e1.8	2450	79	25	14	39	137	67	111
26	2.4	2.7	e1.1	e1.8	790	60	22	12	27	162	32	83
27	1.1	3.1	e1.2	e2.2	319	53	19	9.6	23	702	19	75
28	1.5	2.8	e1.5	e3.7	133	49	16	8.0	19	3830	15	70
29	8.0	2.5	e1.2	e4.1	---	46	13	15	17	521	12	65
30	4.4	2.6	e1.0	e3.8	---	103	12	921	15	242	9.9	63
31	3.1	---	e.80	e3.5	---	125	---	1630	---	158	9.0	---
MEAN	1.23	4.60	1.74	2.36	278	427	129	336	550	398	39.9	468
MAX	8.0	23	3.7	4.1	3910	3990	992	2970	5050	3830	138	6850
MIN	.15	1.8	.80	.75	1.4	46	12	8.0	15	2.9	9.0	5.4
AC-FT	75	274	107	145	15440	26290	7700	20680	32730	24490	2460	27860

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2001, BY WATER YEAR (WY)

	MEAN	83.6	49.3	33.6	40.6	94.8	210	180	229	245	209	81.8	136
MAX	1050	419	206	310	372	1297	1079	1354	2067	3193	914	1057	
(WY)	1974	1999	1974	1962	1982	1979	1984	1995	1951	1993	1954	1958	
MIN	.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	

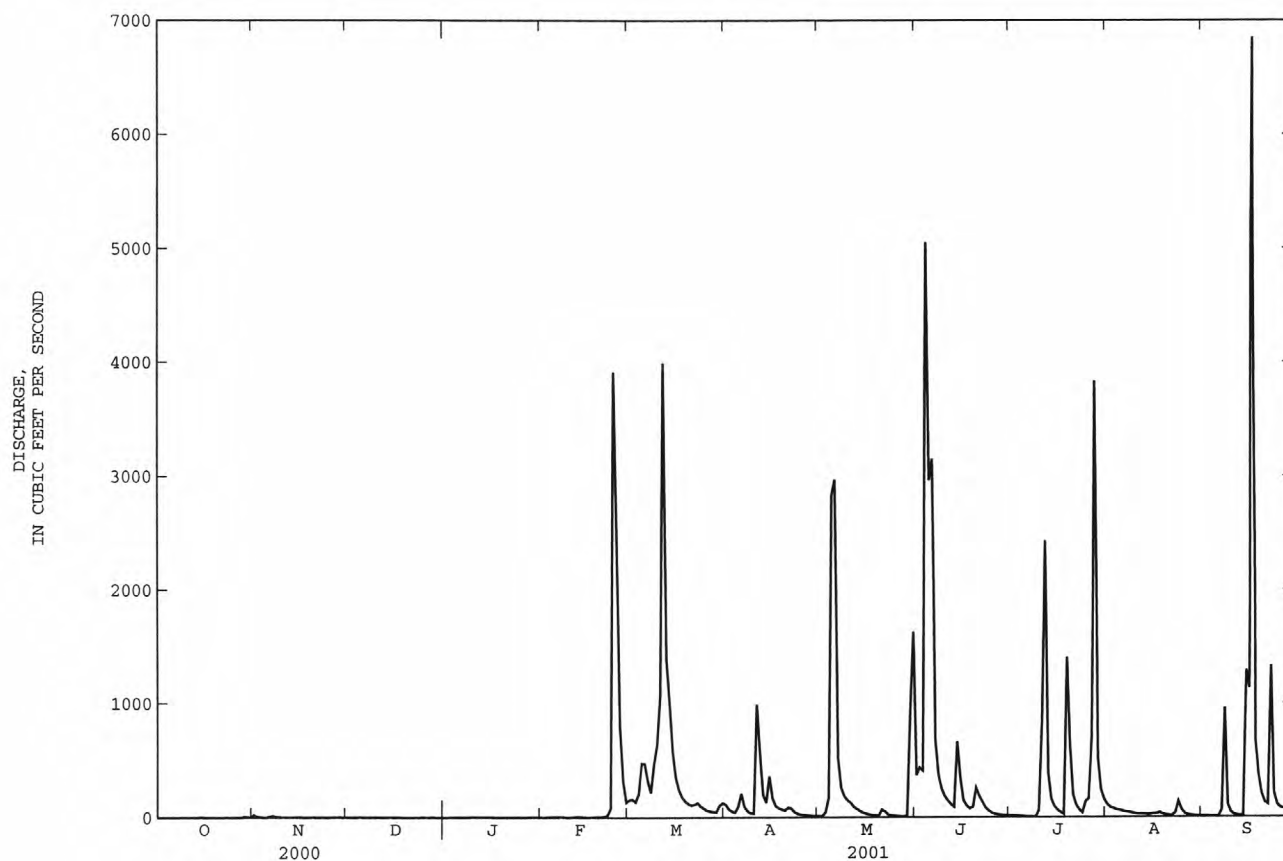
BIG NEMAHA RIVER BASIN

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06814000 TURKEY CREEK NEAR SENECA, KS--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1949 - 2001
ANNUAL MEAN	20.8	219	131
HIGHEST ANNUAL MEAN			547
LOWEST ANNUAL MEAN			3.24
HIGHEST DAILY MEAN	2240 Jul 4	6850 Sep 17	16700 Oct 11 1973
LOWEST DAILY MEAN	.15 Oct 4	.15 Oct 4	.00 Jul 28 1956
ANNUAL SEVEN-DAY MINIMUM	.24 Sep 29	.40 Oct 1	.00 Aug 21 1956
MAXIMUM PEAK FLOW		9400 Sep 17	21400 Oct 11 1973
MAXIMUM PEAK STAGE		22.68 Sep 17	24.77 Oct 11 1973
INSTANTANEOUS LOW FLOW		.12 Oct 4	.00 Jul 28 1956
ANNUAL RUNOFF (AC-FT)	15120	158200	95010
10 PERCENT EXCEEDS	18	468	213
50 PERCENT EXCEEDS	4.9	18	22
90 PERCENT EXCEEDS	.51	1.3	2.1

e Estimated



BIG NEMAHA RIVER BASIN

06815000 BIG NEMAHA RIVER AT FALLS CITY, NE

LOCATION.--Lat 40°02'08", long 95°35'45", in NE ¼ SE ¼ sec.22, T.1 N., R.16 E., Richardson County, Hydrologic Unit 10240008, on right bank near upstream side of bridge on U.S. Highway 73, 1 mi south of Falls City and 14.5 mi upstream from mouth.

DRAINAGE AREA.--1,339 mi².

PERIOD OF RECORD.--March 1944 to current year. Prior to October 1967, published as Nemaha River at Falls City.

REVISED RECORDS.--WSP 1086: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 858.24 ft above sea level. Prior to Oct. 16, 1952, nonrecording gage and Oct. 17, 1952 to Aug. 24, 1982 water-stage recorder for stages above 6.1 ft at site 150 ft downstream at datum 3.0 ft higher. Aug. 25, 1982 to Sept. 30, 1997 at present site, at datum 3.0 ft higher. Data collection platform at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	e96	34	e48	e43	1720	367	175	e2900	295	700	140
2	28	e90	41	e47	e46	1370	318	169	2120	277	582	136
3	28	76	104	e46	e47	659	280	184	1730	256	502	136
4	27	62	63	e45	e50	649	254	501	e13500	249	450	133
5	36	53	50	e45	e60	1500	252	6750	e14500	251	419	130
6	35	76	111	e46	e94	2110	447	12900	e17500	248	383	166
7	34	138	80	e46	e80	1610	493	5220	e1160	226	354	188
8	32	114	47	e48	e84	1230	322	2870	e840	224	334	1190
9	34	e92	42	e56	e74	1740	254	2520	e820	236	315	1100
10	39	e84	e35	e60	e80	2490	647	1910	e820	245	293	390
11	36	e76	e38	e68	e82	2640	2500	1550	e800	e1650	278	243
12	38	e58	e40	e74	e90	13600	3730	1310	716	e7600	268	183
13	41	e60	e37	e80	e88	6550	1400	1090	616	e2900	257	153
14	47	63	e37	e86	e90	4240	803	1070	e6200	1620	247	131
15	57	52	e38	e84	e100	2500	798	1120	e3800	938	244	2150
16	48	46	e40	e82	e98	1810	799	983	1760	638	246	3560
17	46	61	e43	e74	e104	1220	529	930	977	504	264	15700
18	47	68	e50	e64	e118	925	406	902	699	455	264	5300
19	42	44	e49	e58	e140	733	356	867	588	e13500	237	1800
20	38	54	e48	e48	e145	614	331	985	715	e7400	213	1080
21	36	83	e47	e46	e155	537	325	3870	1420	e3000	198	742
22	41	85	e46	e44	185	522	371	2680	1540	e1450	188	593
23	43	59	e45	e45	192	566	334	1860	922	e960	195	2130
24	47	70	e46	e46	e12500	517	288	1290	605	e800	245	1430
25	50	59	e47	e50	e14500	415	248	1150	478	e800	554	676
26	e49	48	e48	e52	e4300	350	227	1110	401	e960	429	502
27	e52	52	e48	e52	e2400	304	212	1030	350	e760	234	427
28	e58	43	e50	e54	e1850	288	198	951	323	e12800	188	375
29	e60	44	e50	e52	---	279	181	965	296	e16400	170	333
30	e60	52	e52	e50	---	321	178	3110	284	e1060	156	301
31	61	---	e54	e44	---	348	---	e6200	---	e1350	147	---
TOTAL	1320	2058	1560	1740	37795	54357	17848	68222	79380	80052	9554	41518
MEAN	42.6	68.6	50.3	56.1	1350	1753	595	2201	2646	2582	308	1384
MAX	61	138	111	86	14500	13600	3730	12900	17500	16400	700	15700
MIN	27	43	34	44	43	279	178	169	284	224	147	130
AC-FT	2620	4080	3090	3450	74970	107800	35400	135300	157500	158800	18950	82350

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2001, BY WATER YEAR (WY)

	MEAN	MAX	MIN	(WY)
1944	415	5229	1974	1957
1945	272	1851	1999	1957
1946	186	1036	1974	1957
1947	227	1446	1974	1957
1948	453	2998	1949	1957
1949	898	5819	1979	1956
1950	815	4462	1984	1956
1951	1083	6166	1995	1989
1952	1167	7816	1951	1981
1953	1015	15690	1993	1977
1954	472	3898	1954	1991
1955	643	3408	1958	1956
1956			16.6	
1957			19.9	
1958			24.1	
1959			19.9	
1960			42.2	
1961			42.5	
1962			32.3	
1963			44.5	
1964			46.4	
1965			20.7	
1966			29.8	
1967			19.1	

BIG NEMAHA RIVER BASIN

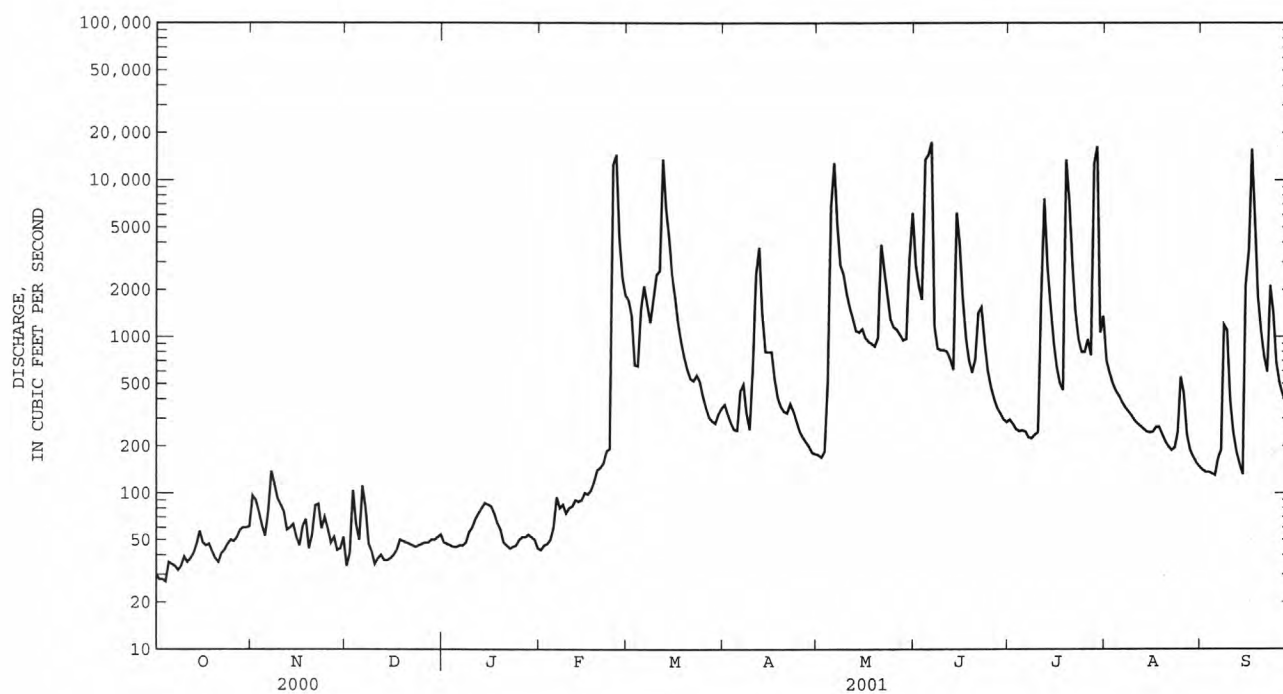
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06815000 BIG NEMAHA RIVER AT FALLS CITY, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1944 - 2001	
ANNUAL TOTAL	51908		395404		635	
ANNUAL MEAN	142		1083		530	
MEDIAN OF ANNUAL MEANS					2559	
HIGHEST ANNUAL MEAN					86.7	
LOWEST ANNUAL MEAN					57600	
HIGHEST DAILY MEAN	6770	Jul 5	17500	Jun 6	3.0	Oct 11 1973
LOWEST DAILY MEAN	19	Sep 12	27	Oct 4	4.0	Jul 9 1977
ANNUAL SEVEN-DAY MINIMUM	19	Sep 12	31	Oct 1	71600	Jul 4 1977
MAXIMUM PEAK FLOW			39900	Jul 28	*31.40	Oct 11 1973
MAXIMUM PEAK STAGE			28.54	Jul 28	459800	Oct 11 1973
ANNUAL RUNOFF (AC-FT)	103000		784300		1090	
10 PERCENT EXCEEDS	144		2440		162	
50 PERCENT EXCEEDS	76		247		45	
90 PERCENT EXCEEDS	28		45			

e Estimated.

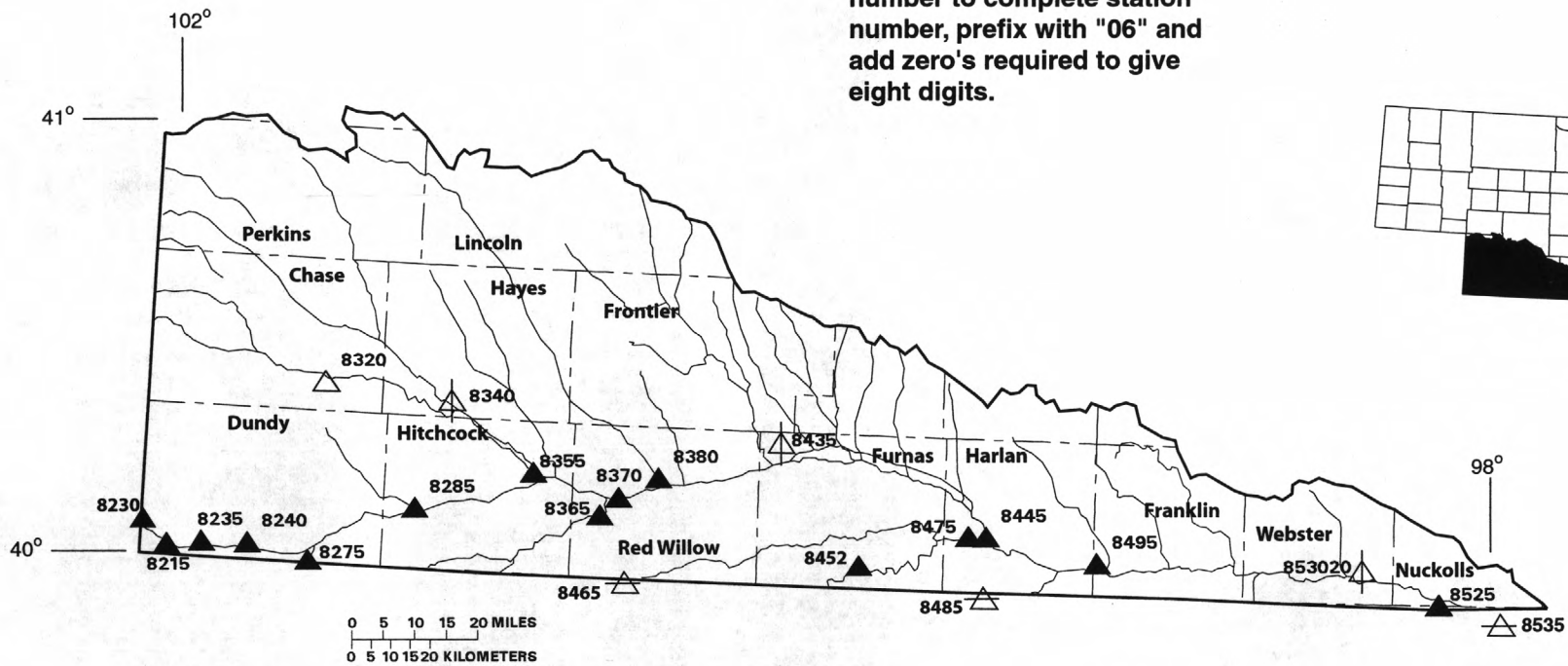
* Datum then in use.



EXPLANATION

- | | |
|------------------------------|---|
| — Hydrologic boundary | △ Reservoir station |
| - - - County line | △ Gaging station run by neighboring state |
| — Streams | △ Gaging station run by the Department of Natural Resources |
| ▲ Stream-flow gaging station | |

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



KANSAS RIVER BASIN
REPUBLICAN RIVER BASIN

KANSAS RIVER BASIN
REPUBLICAN RIVER BASIN

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*Station number	Station name	Page
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8240	Rock Creek at Parks.....	262
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* NOTE: To change abbreviated station number to complete station number,
prefix with "06" and add zeros required to give eight digits.

KANSAS RIVER BASIN

06821500 ARIKAREE RIVER AT HAIGLER, NE

LOCATION.--Lat 40°01'45", long 101°58'10", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.29, T.1 N., R.41 W., Dundy County, Hydrologic Unit 10250001, on right bank at downstream side of bridge on U.S. Highway 34, 1.3 mi upstream from Burlington Northern Inc. bridge, 1.9 mi upstream from confluence with North Fork Republican River, 2 mi northwest of Haigler, and 3.2 mi downstream from Kansas-Nebraska state line.

DRAINAGE AREA.--1,700 mi², of which about 1,020 mi² contributes directly to surface runoff.

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

REVISED RECORDS.--WSP 1919: 1951, 1954, 1956, 1960. WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 3,250.98 ft above sea level. See WSP 1919 for history of changes prior to Sept. 29, 1964. Sept. 29, 1964 to Apr. 25, 1982 on left bank 57 ft downstream from bridge at present datum. Data collection platform at station.

REMARKS.--Record fair except for estimated daily discharges, which are poor. Natural flow affected by ground-water withdrawal 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	27	e.60	e.60	e.80	e1.1	.50	8.7	.21	.00	.24	.00
2	5.0	26	e.60	e.60	e.80	e1.1	.51	3.8	1.0	.00	.04	.00
3	3.6	26	e.60	e.60	e.80	e1.1	.55	5.2	1.7	.00	.00	.00
4	2.6	26	e.60	e.60	e.80	e1.1	.59	6.1	2.1	.00	.01	.00
5	3.4	25	e.60	e.60	e.80	e1.1	.65	15	1.9	.00	.00	.00
6	5.1	25	e.60	e.60	e.80	e1.1	.68	13	1.6	.00	.00	.00
7	5.8	26	e.60	e.60	e.80	e1.1	.65	6.6	2.7	.00	.00	.00
8	7.3	27	e.60	e.60	e.70	e1.2	.63	3.3	1.6	.00	.00	.00
9	4.6	27	e.60	e.60	e.70	e1.2	.54	2.5	.74	.00	.00	.00
10	4.5	26	e.60	e.60	e.60	e1.2	.60	2.1	.25	.00	.00	.00
11	3.4	24	e.50	e.70	e.70	e1.2	1.2	2.3	.31	.00	.00	.00
12	4.8	e18	e.50	e.70	e.70	e1.2	.92	2.0	1.2	.36	.00	.00
13	7.2	e4.0	e.50	e.70	e.80	e1.1	.65	2.1	1.7	.00	.00	.00
14	3.7	e1.0	e.50	e.70	e1.0	e1.1	.57	1.6	3.8	1.9	.00	.00
15	2.5	e.70	e.50	e.70	e1.0	e1.1	.56	1.3	2.0	1.1	.00	.00
16	2.3	e.50	e.50	e.70	e1.1	e1.0	.50	1.3	1.1	1.7	.00	.00
17	2.2	e.50	e.50	e.60	e1.1	e1.0	.43	1.7	.53	2.8	.00	.03
18	3.9	e.60	e.50	e.60	e1.1	.92	.49	1.1	.20	1.3	.00	.18
19	7.6	e.60	e.50	e.60	e1.1	.70	.51	1.3	.03	.18	.00	.04
20	4.6	e.60	e.50	e.60	e1.1	.57	.48	.86	.00	.12	.00	.09
21	6.0	e.60	e.50	e.70	e1.1	.46	.59	.82	.00	.03	.00	.07
22	11	e.60	e.50	e.70	e1.1	.48	1.4	.80	.00	.00	.00	.04
23	14	e.60	e.50	e.70	e1.1	.53	1.3	2.5	.00	.00	.00	.08
24	16	e.60	e.50	e.70	e1.1	.49	1.0	1.3	.32	.00	.00	.23
25	16	e.60	e.50	e.70	e1.1	.53	.82	1.2	.06	.78	.00	.40
26	14	e.60	e.50	e.70	e1.1	.52	.65	.57	.00	1.1	.00	.38
27	13	e.60	e.50	e.70	e1.1	.55	.48	.53	.00	3.7	.00	.63
28	15	e.60	e.50	e.70	e1.1	.57	.33	.35	.00	1.7	.00	.14
29	29	e.60	e.60	e.80	---	.52	12	2.7	.00	.83	.00	.11
30	26	e.60	e.60	e.80	---	.51	12	.47	.00	.01	.00	.10
31	26	---	e.60	e.80	---	.48	---	.10	---	.01	.00	---
TOTAL	274.8	317.50	16.80	20.60	26.10	26.83	42.78	93.20	25.05	17.62	0.29	2.52
MEAN	8.86	10.6	.54	.66	.93	.87	1.43	3.01	.83	.57	.009	.084
MAX	29	27	.60	.80	1.1	1.2	12	15	3.8	3.7	.24	.63
MIN	2.2	.50	.50	.60	.60	.46	.33	.10	.00	.00	.00	.00
AC-FT	545	630	33	41	52	53	85	185	50	35	.6	5.0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2001, BY WATER YEAR (WY)

MEAN	9.78	8.06	6.38	7.56	15.4	27.6	22.8	40.0	39.3	19.4	18.3	15.0
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	.31	.40	.46	.87	1.43	3.01	.11	.044	.000	.084
(WY)	1984	1983	1999	1999	1999	2001	2001	2001	2000	1997	1952	2001

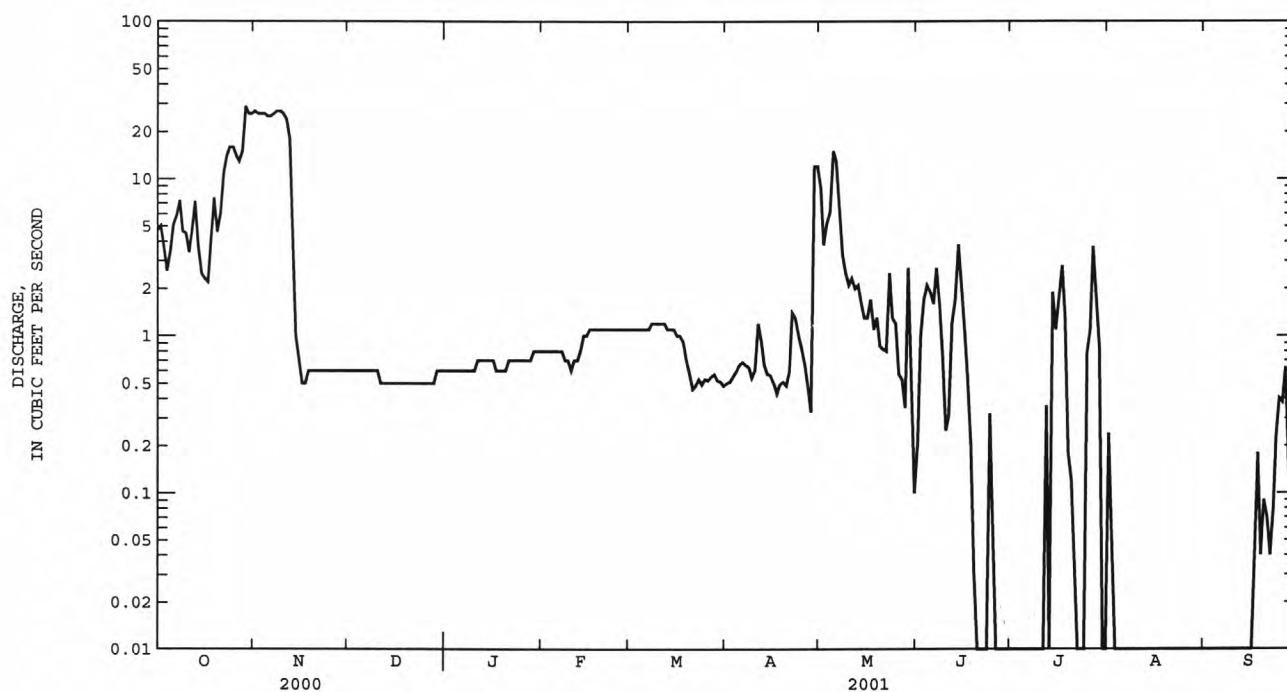
KANSAS RIVER BASIN

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06821500 ARIKAREE RIVER AT HAIGLER, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1932 - 2001
ANNUAL TOTAL	1829.59	864.09	19.1
ANNUAL MEAN	5.00	2.37	14.9
MEDIAN OF ANNUAL MEANS			127
HIGHEST ANNUAL MEAN			2.37
LOWEST ANNUAL MEAN			17000
HIGHEST DAILY MEAN	56 Mar 8	29 Oct 29	May 31 1935
LOWEST DAILY MEAN	.00 Jun 13	.00 Jun 20	Jul 21 1932
ANNUAL SEVEN-DAY MINIMUM	.00 Jun 13	.00 Jun 26	Jul 30 1934
MAXIMUM PEAK FLOW		39 Oct 29	50000 May 31 1935
MAXIMUM PEAK STAGE		5.16 May 29	11.20 May 31 1935
ANNUAL RUNOFF (AC-FT)	3630	1710	13830
10 PERCENT EXCEEDS	12	5.0	30
50 PERCENT EXCEEDS	3.2	.60	8.4
90 PERCENT EXCEEDS	.00	.00	.64

e Estimated.
 * Stage 5.10 ft.
 ** Backwater from weeds.
 *** 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 SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.10, T.1 N., R.42 W., Dundy County, Nebraska, Hydrologic Unit 10250002, on right bank 100 ft east of Colorado-Nebraska State line, 9.5 mi upstream from confluence with Arikaree River, and at mile 448.

DRAINAGE AREA.--2,370 mi², of which about 174 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1930 to current year. Prior to October 1932, published as North Fork of Arikaree River at Colorado-Nebraska State line. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1240: 1947(M). WSP 1390: 1934. WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Steel piling control since January 1965. Datum of gage is 3,336.09 ft above sea level. Prior to Oct. 17, 1934, nonrecording gage at present site and datum. Data Collection platform at station.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow affected by diversion in Haigler Canal for irrigation of about 2,700 acres in Colorado and Nebraska.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	42	42	e48	e45	49	40	17	31	5.7	5.3	6.6
2	20	45	44	e47	e43	53	42	14	28	7.4	4.6	6.5
3	18	39	47	e47	e44	54	43	11	26	6.0	3.2	6.3
4	16	39	47	e49	e45	53	41	10	31	7.6	1.7	6.3
5	15	38	46	e49	e45	50	41	14	34	14	1.5	6.0
6	14	39	43	e48	e46	50	42	14	21	9.5	3.5	6.3
7	14	40	41	e47	e45	51	46	11	22	8.3	3.7	7.1
8	13	37	42	e47	e45	51	49	9.7	21	5.5	3.4	8.6
9	13	30	42	e45	e45	51	47	9.0	20	5.0	3.9	9.0
10	13	24	e45	e45	e45	51	46	8.4	16	7.4	5.7	8.0
11	13	18	e44	e45	e47	53	47	8.1	17	5.8	6.5	6.7
12	13	e35	e42	e45	e49	53	54	7.3	14	14	7.1	6.0
13	16	e34	e43	e46	49	54	56	7.5	11	17	6.7	6.0
14	25	e32	e47	e47	48	53	56	11	11	10	7.4	6.0
15	25	e30	e54	e47	47	53	56	9.8	12	8.4	6.0	5.8
16	25	e32	e52	e47	47	53	53	7.1	8.7	8.8	6.9	8.3
17	27	e34	e52	e45	47	51	49	6.6	6.7	7.6	6.6	11
18	22	e36	e54	e46	47	48	46	6.5	6.8	6.7	6.7	17
19	21	e38	e54	e47	47	49	49	6.3	5.5	6.4	5.4	16
20	21	e40	e56	e47	47	47	52	7.3	5.2	6.8	5.4	15
21	24	e45	e50	e48	46	46	47	8.8	5.9	7.3	4.7	13
22	24	45	e47	e52	46	46	44	8.9	5.6	6.0	4.3	13
23	39	45	e54	e50	46	46	41	8.2	4.9	4.8	6.7	13
24	37	45	e50	e50	45	47	43	9.3	4.9	5.9	5.9	13
25	34	44	e50	e50	44	47	43	8.6	5.2	5.4	5.5	14
26	34	42	e52	e48	44	47	41	6.9	4.9	5.2	5.8	14
27	34	42	e50	e48	48	47	39	7.1	4.6	11	5.4	12
28	34	45	e48	e50	48	46	35	5.8	4.9	9.3	4.7	12
29	50	45	e50	e50	---	42	29	8.8	4.7	6.2	4.1	12
30	48	44	e50	e50	---	38	23	33	5.4	6.0	3.7	14
31	41	---	e52	e50	---	40	---	32	---	6.2	4.4	---
TOTAL	765	1144	1490	1480	1290	1519	1340	333.0	398.9	241.2	156.4	298.5
MEAN	24.7	38.1	48.1	47.7	46.1	49.0	44.7	10.7	13.3	7.78	5.05	9.95
MAX	50	45	56	52	49	54	56	33	34	17	7.4	17
MIN	13	18	41	45	43	38	23	5.8	4.6	4.8	1.5	5.8
AC-FT	1520	2270	2960	2940	2560	3010	2660	661	791	478	310	592

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2001, BY WATER YEAR (WY)

	MEAN	36.5	56.2	59.9	59.6	61.5	64.1	56.6	40.5	34.0	18.3	18.4	25.6
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	39.7	39.4	42.3	43.6	21.3	7.24	6.18	5.36	4.12	5.78	
(WY)	1979	1989	1998	1979	1998	1998	1999	2000	2000	1978	1940	1978	

06823000 NORTH FORK REPUBLICAN RIVER AT COLORADO-NEBRASKA STATE LINE--Continued

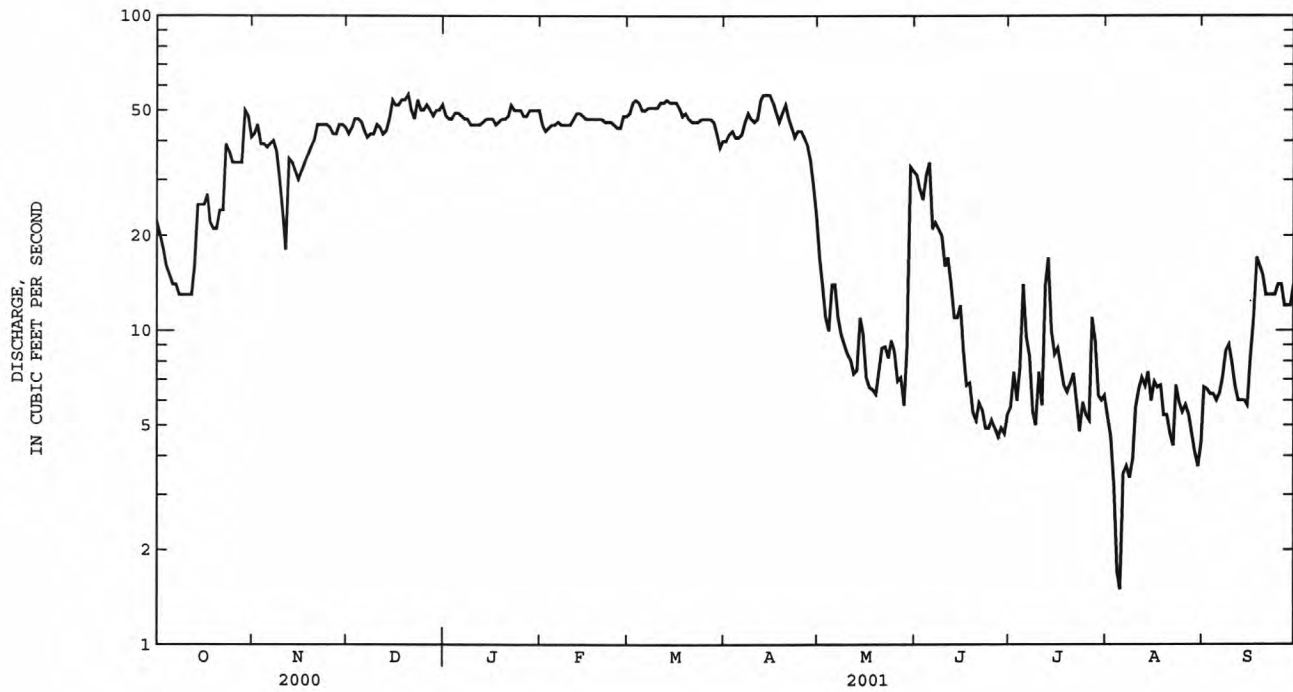
SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1935 - 2001	
ANNUAL TOTAL	9795.9		10456.0		44.0	
ANNUAL MEAN	26.8		28.6		65.3	
HIGHEST ANNUAL MEAN					27.1	
LOWEST ANNUAL MEAN					1951	
HIGHEST DAILY MEAN	72	Mar 8	56	Dec 20	761	May 15 1951
LOWEST DAILY MEAN	2.6	Jul 15	1.5	Aug 5	1.5	Sep 12 1999
ANNUAL SEVEN-DAY MINIMUM	3.0	Jul 11	3.0	Aug 3	2.3	Aug 5 1940
MAXIMUM PEAK FLOW			*57	Oct 29**	2110	Apr 28 1947
MAXIMUM PEAK STAGE			***2.86	Dec 18	5.92	Apr 28 1947
ANNUAL RUNOFF (AC-FT)	19430		20740		31910	
10 PERCENT EXCEEDS	50		50		72	
50 PERCENT EXCEEDS	25		34		49	
90 PERCENT EXCEEDS	5.4		5.7		8.6	

e Estimated.

* Stage 0.99 ft.

** Also occurred April 13, 15.

*** Backwater from ice.



KANSAS RIVER BASIN

06823500 BUFFALO CREEK NEAR HAIGLER, NE

LOCATION.--Lat 40°02'22", long 101°51'57", in SE ¼ NW ¼ sec.20, T.1 N., R.40 W., Dundy County, Hydrologic Unit 10250002, on upstream side of bridge, 0.4 mi upstream from mouth, and 4 mi northeast of Haigler.

DRAINAGE AREA.--172 mi², of which about 8.6 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1940 to current year.

REVISED RECORDS.--WSP 2119: 1948-50(M), 1957(M). WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,189.00 ft above sea level. Prior to Sept. 19, 1980, at site 0.5 mi upstream at datum 15.57 ft higher. Sept. 18, 1980 to June 4, 1996 on left bank 15 ft upstream from county highway bridge at datum 0.10 ft lower. June 4, 1996 to Nov. 7, 1996 135 ft downstream from county highway bridge, at datum 0.10 ft lower. Data collection platform at station, Sept. 24, 2001.

REMARKS.--Records poor. Natural flow affected by diversion about 1 mi upstream for irrigation of 880 acres.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.47	7.8	e4.4	e5.8	e6.8	e4.4	4.3	5.3	5.2	.00	.90	.00
2	.79	7.4	e4.4	e6.4	e7.0	e4.6	4.3	4.5	4.8	.00	2.6	.00
3	1.0	7.1	e4.6	e6.6	e8.4	e5.4	4.7	e6.3	4.4	.02	.65	.00
4	.81	7.1	e4.8	e6.8	e9.2	e5.6	5.1	e6.3	4.8	.00	.04	.00
5	1.8	7.1	e4.8	e7.0	e9.6	5.7	5.3	e9.8	4.7	.01	.00	.00
6	1.8	6.8	e4.8	e7.0	e10	5.5	4.9	7.0	4.2	.01	.00	.00
7	2.3	6.2	e4.6	e7.0	e10	5.3	4.6	5.8	4.1	.00	.00	1.1
8	4.4	6.4	e4.4	e6.8	e10	5.2	4.3	5.5	4.6	.00	.00	2.6
9	4.3	6.2	e4.2	e6.8	e10	5.1	4.1	5.6	4.4	.00	.00	3.4
10	4.4	6.3	e3.8	e6.8	e10	5.1	4.1	5.4	4.3	.00	.00	2.7
11	4.6	6.8	e3.8	e7.0	e10	5.3	4.8	5.5	4.0	.00	.00	2.2
12	4.7	6.8	e4.4	e7.0	e10	5.5	5.4	5.9	4.0	.00	.00	2.3
13	4.7	6.6	e4.8	e7.0	e9.4	5.2	4.9	5.4	2.1	.00	.00	2.3
14	5.0	e5.0	e5.4	e6.6	e8.6	4.8	4.5	5.0	.08	.00	.00	2.2
15	5.2	e4.6	e5.4	e6.6	e8.0	4.5	4.3	4.7	.00	.03	.60	2.5
16	5.6	e4.6	e5.4	e6.6	e7.4	4.6	4.3	4.2	2.9	2.7	1.5	3.3
17	5.5	e4.6	e5.4	e6.4	e6.6	4.6	4.3	3.9	3.0	2.8	1.7	3.3
18	4.5	e4.6	e5.4	e6.2	e6.0	4.6	4.2	4.1	2.8	2.8	.00	3.7
19	2.4	e4.6	e5.4	e6.4	e5.6	4.6	4.2	4.2	2.4	1.5	.00	4.9
20	2.7	e4.8	e5.4	e6.4	e5.4	4.8	4.1	4.1	2.7	.01	.00	4.1
21	3.1	e4.8	e5.4	e6.4	e5.2	4.9	4.8	4.0	2.8	.00	.00	3.3
22	4.0	e4.8	e5.4	e6.4	e5.0	4.8	5.3	3.7	1.2	.00	.00	3.1
23	5.6	e4.8	e5.2	e6.4	e4.6	4.7	5.8	3.4	.05	.00	6.1	3.0
24	6.3	e4.6	e5.2	e6.6	e4.6	4.6	5.5	3.7	.05	.00	21	3.0
25	5.9	e4.6	e5.4	e6.8	e4.2	4.6	5.3	4.0	.03	.00	8.3	4.2
26	5.8	e4.8	e5.8	e6.8	e4.0	4.6	5.1	4.1	.02	.02	5.2	4.2
27	5.9	e4.6	e5.8	e6.8	e3.8	4.6	5.0	4.3	.00	.02	3.9	2.6
28	6.4	e4.6	e5.6	e6.8	e4.0	4.8	4.8	4.3	.00	.00	2.8	1.4
29	8.3	e4.6	e5.2	e6.8	---	4.7	4.7	6.5	.01	.01	1.3	1.3
30	9.4	e4.4	e5.2	e6.8	---	4.6	5.6	8.1	.02	.00	.00	1.4
31	8.3	---	e5.4	e6.8	---	4.5	---	6.0	---	1.0	.00	---
TOTAL	135.97	168.0	155.2	206.6	203.4	151.8	142.6	160.6	73.66	10.93	56.59	68.10
MEAN	4.39	5.60	5.01	6.66	7.26	4.90	4.75	5.18	2.46	.35	1.83	2.27
MAX	9.4	7.8	5.8	7.0	10	5.7	5.8	9.8	5.2	2.8	21	4.9
MIN	.47	4.4	3.8	5.8	3.8	4.4	4.1	3.4	.00	.00	.00	.00
AC-FT	270	333	308	410	403	301	283	319	146	22	112	135

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2001, BY WATER YEAR (WY)

	6.72	7.85	8.01	8.27	8.84	9.11	8.97	7.72	5.53	2.63	2.46	4.19
MEAN	6.72	7.85	8.01	8.27	8.84	9.11	8.97	7.72	5.53	2.63	2.46	4.19
MAX	12.6	12.1	13.7	12.7	12.9	14.3	14.2	12.5	13.2	11.0	19.7	15.2
(WY)	1943	1947	1946	1942	1960	1952	1944	1944	1962	1948	1950	1951
MIN	2.84	1.95	3.15	2.68	.89	2.72	3.72	2.11	.000	.000	.000	.23
(WY)	1965	2000	1999	1998	1998	1998	2000	1965	1994	1997	2000	1998

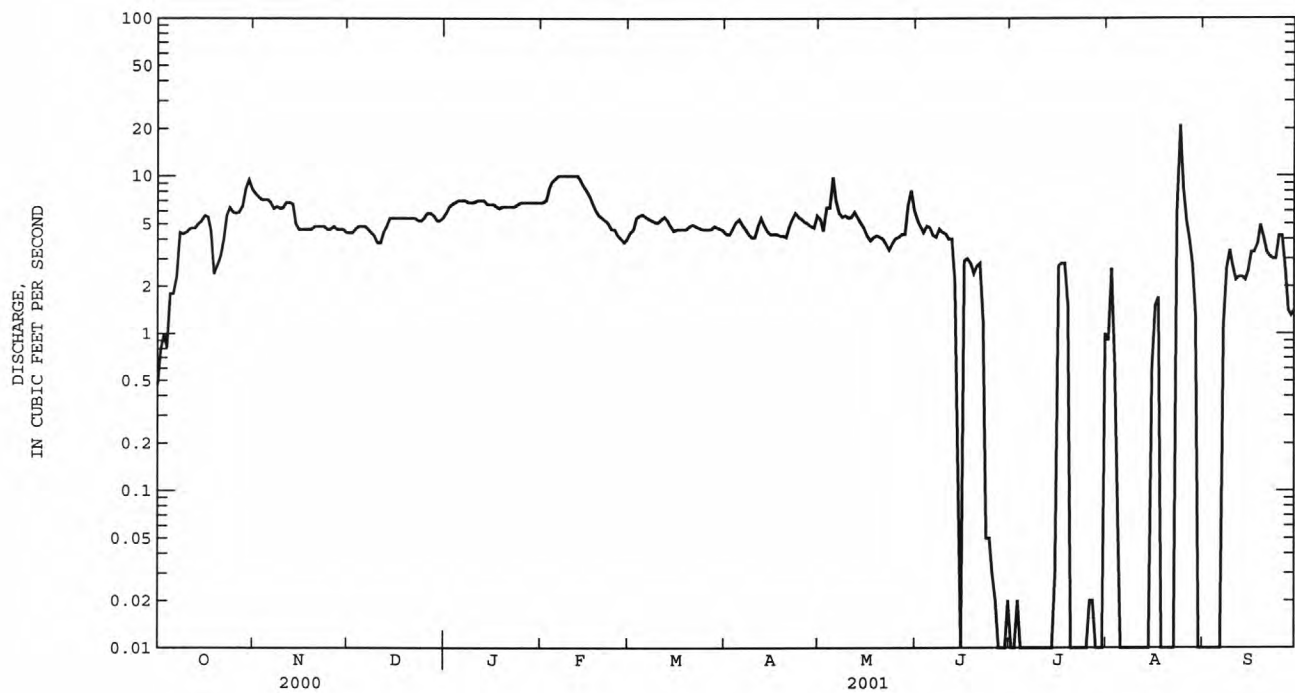
KANSAS RIVER BASIN

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06823500 BUFFALO CREEK NEAR HAIGLER, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1941 - 2001
ANNUAL TOTAL	1136.57	1533.45	
ANNUAL MEAN	3.11	4.20	6.68
HIGHEST ANNUAL MEAN			10.9 1951
LOWEST ANNUAL MEAN			2.51 1998
HIGHEST DAILY MEAN	11 Apr 30	21 Aug 24	90 Aug 11 1950
LOWEST DAILY MEAN	.00 Jun 11	.00 Jun 15	.00 Aug 3 1955
ANNUAL SEVEN-DAY MINIMUM	.00 Jun 11	.00 Jul 7	.00 Aug 14 1973
MAXIMUM PEAK FLOW		35 Aug 24	*140 Jun 27 1948
MAXIMUM PEAK STAGE		2.00 Aug 24	**5.93 Jan 3 1976
ANNUAL RUNOFF (AC-FT)	2250	3040	4840
10 PERCENT EXCEEDS	5.6	6.8	11
50 PERCENT EXCEEDS	3.8	4.6	7.3
90 PERCENT EXCEEDS	.00	.00	.21

e Estimated.
 * Stage 4.37 ft.
 ** Backwater from ice.



KANSAS RIVER BASIN

06824000 ROCK CREEK AT PARKS, NE

LOCATION.--Lat 40°02'30", long 101°43'40", in SW ¼ NE ¼ sec.21, T.1 N., R.39 W., Dundy County, Hydrologic Unit 10250002, on right bank at west edge of Parks, 100 ft downstream from county road bridge and 0.5 mi upstream from mouth.

DRAINAGE AREA.--23.6 mi², of which about 20 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1940 to current year.

REVISED RECORDS.--WSP 1630: 1951(M). WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,093.35 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor. One diversion about 2 mi above station for irrigation of 215 acres; flow regulated at times by reservoir at State fish hatchery 7 mi upstream.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	11	8.8	e7.8	8.2	10	11	7.7	7.0	5.0	5.1	7.6
2	5.7	10	9.1	7.8	8.1	10	10	6.5	6.5	6.0	5.1	6.6
3	6.1	10	9.3	7.9	8.0	10	9.5	4.9	7.4	7.4	5.1	6.3
4	6.4	9.6	9.0	8.9	8.1	10	9.4	6.3	8.9	7.4	4.8	6.2
5	7.1	9.1	8.8	9.2	8.2	10	9.8	9.7	7.9	7.0	4.6	5.9
6	8.0	8.7	8.9	9.2	8.4	10	4.3	8.2	7.2	6.0	4.6	5.7
7	8.1	8.2	9.2	9.1	8.2	10	3.9	7.7	7.4	4.9	4.6	6.3
8	9.6	8.0	9.0	9.1	e8.0	10	3.3	8.7	7.7	3.3	4.6	7.8
9	8.7	8.1	9.3	8.7	e9.0	10	3.0	8.1	7.3	3.3	4.5	8.2
10	8.5	8.3	8.9	8.5	e10	10	3.0	9.6	6.9	3.3	4.8	7.1
11	8.3	8.1	e6.8	8.7	e12	9.9	4.3	11	6.6	3.4	5.0	6.7
12	8.0	e7.6	e6.8	8.7	e12	9.8	7.6	9.8	6.7	3.9	5.0	6.5
13	8.0	e8.0	e6.8	9.5	e11	9.6	8.2	9.9	6.6	4.1	5.6	6.4
14	7.9	e9.0	e7.2	9.5	e11	9.6	8.2	9.6	7.0	4.1	5.6	6.2
15	7.9	10	e7.4	8.9	e10	9.4	8.5	9.1	7.0	4.8	5.4	6.4
16	7.9	10	e7.4	9.5	e9.8	9.4	8.3	9.3	7.0	4.4	5.4	7.1
17	7.9	10	e7.2	9.2	e9.2	9.4	8.0	9.1	5.9	4.0	5.3	7.3
18	8.1	9.1	e7.2	7.9	9.0	9.3	7.8	8.6	4.3	3.7	5.3	7.8
19	7.8	8.9	e7.6	8.0	9.5	10	8.3	8.1	4.1	3.7	5.3	8.2
20	5.3	8.6	e7.6	8.3	10	16	8.9	7.5	4.6	4.1	5.3	7.6
21	5.7	8.8	e7.4	7.9	10	12	9.7	7.2	5.1	6.1	5.1	7.1
22	8.1	8.7	e7.2	7.9	10	26	11	6.8	5.3	5.8	5.1	6.7
23	9.3	8.7	e7.4	7.9	11	16	11	7.0	5.3	5.6	5.3	6.6
24	8.7	8.7	e7.4	8.0	11	13	9.6	6.8	4.4	5.7	5.7	6.4
25	9.9	8.6	e7.2	8.2	11	11	9.3	5.2	4.1	5.9	5.8	6.2
26	10	8.6	e7.2	8.5	e10	10	9.1	5.1	4.4	6.0	5.8	6.0
27	9.5	8.5	e7.4	8.4	e10	9.8	8.9	5.4	3.9	7.4	5.5	6.2
28	13	8.4	e7.8	8.5	e10	9.4	8.7	5.3	3.9	7.1	5.2	6.3
29	20	8.6	e8.4	8.7	---	9.3	8.1	8.9	4.2	6.2	4.8	6.3
30	14	8.6	e8.2	8.8	---	8.9	8.3	8.2	4.3	5.7	4.9	6.2
31	11	---	e8.2	8.5	---	8.7	---	7.2	---	5.2	5.4	---
TOTAL	270.3	266.5	246.1	265.7	270.7	336.5	239.0	242.5	178.9	160.5	159.6	201.9
MEAN	8.72	8.88	7.94	8.57	9.67	10.9	7.97	7.82	5.96	5.18	5.15	6.73
MAX	20	11	9.3	9.5	12	26	11	11	8.9	7.4	5.8	8.2
MIN	5.3	7.6	6.8	7.8	8.0	8.7	3.0	4.9	3.9	3.3	4.5	5.7
AC-FT	536	529	488	527	537	667	474	481	355	318	317	400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2001, BY WATER YEAR (WY)

	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952
MEAN	12.4	13.2	13.1	13.2	13.5	13.6	13.5	13.5	12.9	11.7	11.3	11.6
MAX	16.2	19.7	17.1	17.9	17.5	18.1	18.1	19.0	19.0	30.3	17.7	18.8
(WY)	1966	1943	1941	1942	1949	1949	1949	1969	1965	1965	1950	1951
MIN	7.56	6.53	7.93	8.24	7.68	7.49	7.97	5.90	5.96	5.18	5.15	6.09
(WY)	1993	2000	1999	1999	1999	1999	2001	2000	2001	2001	2001	2000

KANSAS RIVER BASIN

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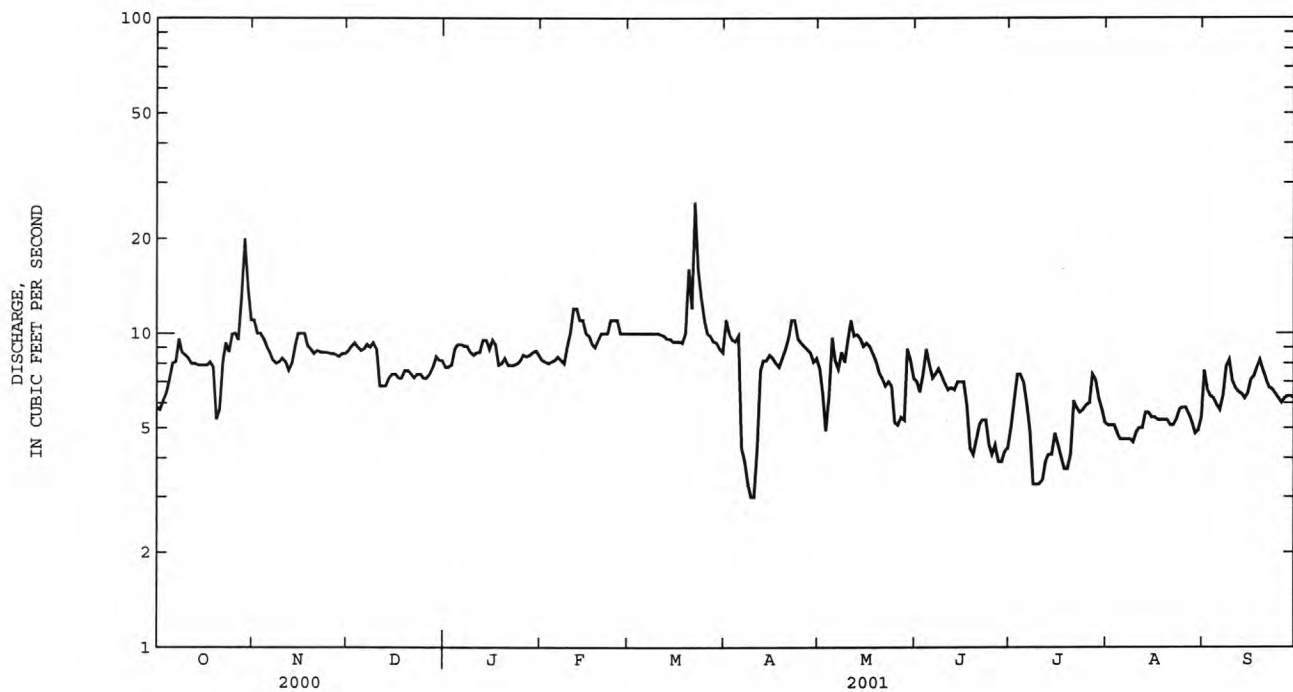
06824000 ROCK CREEK AT PARKS, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1941 - 2001	
ANNUAL TOTAL	2827.6		2838.2		12.8	
ANNUAL MEAN	7.73		7.78		15.8	
HIGHEST ANNUAL MEAN					7.57	
LOWEST ANNUAL MEAN					111	
HIGHEST DAILY MEAN	20	Oct 29	26	Mar 22	Jul 6 1965	
LOWEST DAILY MEAN	2.7	Jul 15	3.0	Apr 9	2.6 Nov 19 1975	
ANNUAL SEVEN-DAY MINIMUM	3.4	Jul 11	3.6	Jul 8	3.1 Feb 17 1943	
MAXIMUM PEAK FLOW			*39	Mar 22	493 Jul 5 1965	
MAXIMUM PEAK STAGE			**2.78	Dec 21	6.00 Jul 5 1965	
ANNUAL RUNOFF (AC-FT)	5610		5630		9260	
10 PERCENT EXCEEDS	9.9		10		16	
50 PERCENT EXCEEDS	8.1		8.0		13	
90 PERCENT EXCEEDS	5.1		4.8		9.0	

e Estimated.

* Stage 2.32 ft.

** Backwater from ice; also occurred on Dec. 22.



KANSAS RIVER BASIN

06827500 SOUTH FORK REPUBLICAN RIVER NEAR BENKELMAN, NE

LOCATION (REVISED).--Lat 40°00'34", long 101°32'32", in NE ¼, SW ¼, sec.31, T.1 N., R.37 W., Dundy County, Hydrologic Unit 10250003, on right bank at downstream side of bridge on State Highway 61, 1 mi downstream from Kansas-Nebraska State line, 2.5 mi southwest of Benkelman, and 3.4 mi upstream from mouth.

DRAINAGE AREA.--2,740 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. WDR NE-97: 1995 (M).

GAGE.--Water-stage recorder. Datum of gage is 2,989.91 ft above sea level. Prior to Dec. 10, 1947, nonrecording gages at several sites within 3.5 mi of present site at various datums. Dec.10, 1947 to Sept. 28, 1966 water-stage recorder 170 ft upstream at datum 3.00 ft higher and Sept. 29, 1966 to Mar. 7, 1968 at site 300 ft upstream at datum 3.00 ft higher. Mar. 8, 1968 to May 29, 1991 at site 300 ft upstream at datum 1.0 ft higher. May 30, 1991 to Sept. 30, 1998 at present site at datum 1.0 ft higher. Data collection platform at station.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow affected by irrigation development above station, and since July 6, 1950, by storage in Bonny Reservoir.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	e7.0	e9.4	16	10	8.1	.00	.00	.00
2	.00	.00	.00	.00	e6.2	e11	15	9.7	7.4	.00	.00	.00
3	.00	.00	.00	.00	e6.2	e15	15	9.4	6.4	.00	.00	.00
4	.00	.00	.00	.00	e8.0	e15	15	10	6.4	.00	.00	.00
5	.00	.00	.00	.00	e9.2	15	15	16	6.1	.00	.00	.00
6	.00	.00	.00	.00	e9.0	15	16	18	5.3	.00	.00	.00
7	.00	.00	.00	.00	e8.8	15	16	17	4.7	.00	.00	.00
8	.00	.00	.00	.00	e8.4	15	15	16	4.8	.00	.00	.00
9	.00	.00	.00	.00	e7.0	15	15	14	4.0	.00	.00	.00
10	.00	.00	.00	.00	e6.0	16	14	14	3.2	.00	.00	.00
11	.00	.00	.00	.00	e6.4	16	15	12	2.6	.00	.00	.00
12	.00	.00	.00	.00	e6.4	17	15	11	2.1	.00	.00	.00
13	.00	.00	.00	e.05	e7.6	17	14	11	1.6	.00	.00	.00
14	.00	.00	.00	e.15	e7.0	17	14	10	1.2	.00	.00	.00
15	.00	.00	.00	e.30	e6.2	17	14	10	.80	.00	.00	.00
16	.00	.00	.00	e.45	e6.2	16	13	9.5	.49	.00	.00	.00
17	.00	.00	.00	e.80	e6.2	16	12	8.6	.34	.00	.00	.00
18	.00	.00	.00	e1.5	e7.0	16	13	7.8	.22	.00	.00	.00
19	.00	.00	.00	e2.5	e7.6	17	13	7.2	.09	.00	.00	.00
20	.00	.00	.00	e4.3	e7.2	17	12	6.8	.04	.00	.00	.00
21	.00	.00	.00	e6.4	e7.4	17	13	6.3	.01	.00	.00	.00
22	.00	.00	.00	e7.6	e8.0	17	14	6.1	.00	.00	.00	.00
23	.00	.00	.00	e7.4	e8.2	17	15	5.7	.00	.00	.00	.00
24	.00	.00	.00	e8.4	e8.2	15	14	4.9	.00	.00	.00	.00
25	.00	.00	.00	e8.4	e8.0	15	13	4.7	.00	.00	.00	.00
26	.00	.00	.00	e8.2	e8.0	16	13	4.7	.00	.00	.00	.00
27	.00	.00	.00	e8.0	e8.0	16	12	4.7	.00	.00	.00	.00
28	.00	.00	.00	e8.0	e8.4	16	12	4.3	.00	.00	.00	.00
29	.00	.00	.00	e8.6	---	16	11	6.6	.00	.00	.00	.00
30	.00	.00	.00	e9.0	---	16	11	7.4	.00	.00	.00	.00
31	.00	---	.00	e8.6	---	16	---	7.7	---	.00	.00	---
TOTAL	0.00	0.00	0.00	98.65	207.8	484.4	415	291.1	65.89	0.00	0.00	0.00
MEAN	.0000	.0000	.0000	3.18	7.42	15.6	13.8	9.39	2.20	.0000	.0000	.0000
MAX	.00	.00	.00	9.0	9.2	17	16	18	8.1	.00	.00	.00
MIN	.00	.00	.00	.00	6.0	9.4	11	4.3	.00	.00	.00	.00
AC-FT	.00	.00	.00	196	412	961	823	577	131	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2001, BY WATER YEAR (WY)

	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
MEAN	16.2	21.3	20.4	23.0	39.0	51.2	56.3	70.6	71.5	56.5	33.8	23.8
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	15.6	12.1	6.57	.077	.000	.000	.000
(WY)	1940	1953	1953	1977	1978	2001	1956	1979	1956	1943	1940	1939

KANSAS RIVER BASIN

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06827500 SOUTH FORK REPUBLICAN RIVER NEAR BENKELMAN, NE--Continued

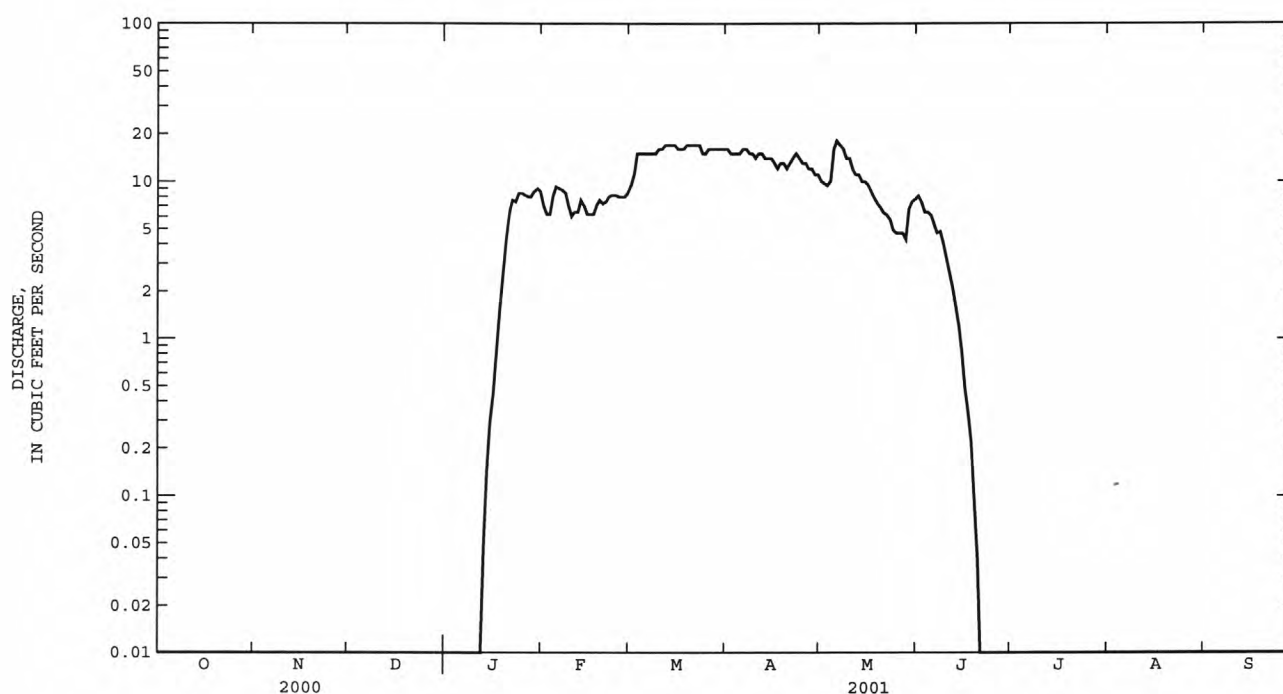
SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1938 - 2001
ANNUAL TOTAL	2448.88	1562.84	
ANNUAL MEAN	6.69	4.28	40.3
HIGHEST ANNUAL MEAN			121 1951
LOWEST ANNUAL MEAN			4.28 2001
HIGHEST DAILY MEAN	25 Mar 26	18 May 6	6220 Aug 16 1958
LOWEST DAILY MEAN	.00 Jun 13	.00 Oct 1	.00 Jul 3 1938
ANNUAL SEVEN-DAY MINIMUM	.00 Jun 13	.00 Oct 1	.00 Aug 1 1938
MAXIMUM PEAK FLOW		19 May 6	19600 Aug 16 1958
MAXIMUM PEAK STAGE		2.21 Feb 17	***8.70 Aug 16 1958
ANNUAL RUNOFF (AC-FT)	4860	3100	29180
10 PERCENT EXCEEDS	19	15	85
50 PERCENT EXCEEDS	.00	.00	19
90 PERCENT EXCEEDS	.00	.00	.00

e Estimated.

* Stage 1.69 ft.

** Backwater from ice.

*** 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 SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.13, T.2 N., R.35 W., Hitchcock County, Hydrologic Unit 10250004, on right bank at downstream side of county bridge, 0.5 mi south of Stratton, 0.2 mi downstream from Muddy Creek, 10 mi upstream from Trenton Dam, 19 mi downstream from South Fork Republican River, and at mile 387.

DRAINAGE AREA.--8,200 mi², approximately, of which about 3,690 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--July 1950 to current year.

REVISED RECORDS.--WDR NE-73: 1968-71(M), 1972. WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 2,775.49 ft above sea level. Prior to Aug. 1, 1967, at site 0.3 mi downstream at present datum. Data collection platform at station.

REMARKS.--Records fair except for estimated daily discharges, 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	93	e23	e25	e68	e62	71	62	32	.00	.00	.00
2	.00	58	e23	e32	e78	e60	77	59	32	.00	.00	.00
3	.00	16	e27	e38	e80	e62	75	53	31	.00	.00	.00
4	.00	8.4	e27	e43	e96	e62	72	65	33	.00	.00	.00
5	.00	8.6	e27	e46	e94	e62	74	94	33	.00	.00	.00
6	.00	11	e31	e48	e88	e64	82	97	31	.00	.00	.00
7	.00	11	e31	e49	e84	e62	90	88	30	.00	.00	.00
8	.00	13	e25	e48	e76	e62	81	78	28	.00	.00	.00
9	.00	13	e20	e45	e72	e62	67	66	23	.00	.00	.00
10	.00	14	e17	e43	e74	e64	61	47	21	.00	.00	.00
11	.00	e15	e18	e47	e78	e66	59	35	19	.00	.00	.00
12	.00	e15	e20	e58	e78	e68	61	33	16	.00	.00	.00
13	.00	e15	e23	e66	e80	e74	74	35	12	.00	.00	.00
14	.00	e18	e24	e68	e78	e86	84	34	12	.00	.00	.00
15	.00	e18	e26	e64	e76	e94	85	35	8.6	.00	.00	.00
16	.00	e18	e27	e64	e80	80	77	34	5.7	.00	.00	.00
17	.00	e20	e29	e68	e80	73	68	29	3.9	.00	.00	.00
18	.00	e24	e30	e72	e76	70	73	26	2.0	.00	.00	.00
19	.00	e27	e30	e74	e70	73	84	26	.40	.00	.00	.00
20	.00	e29	e29	e78	e66	87	84	22	.37	.00	.00	.00
21	.00	e29	e27	e84	e66	94	80	14	.22	.00	.00	.00
22	.00	e29	e24	e80	e66	95	81	13	.08	.00	.00	.00
23	.00	e27	e22	e78	e66	86	83	11	.01	.00	.00	.00
24	.00	e28	e21	e76	e62	78	83	10	.00	.00	.00	.00
25	.00	e28	e23	e74	e54	72	85	9.6	.00	.00	.00	.00
26	.00	e28	e27	e68	e54	71	90	9.4	.00	.00	.00	.00
27	.00	e29	e32	e66	e58	68	90	9.3	.00	70	.00	.00
28	.00	e28	e28	e66	e62	70	84	7.7	.00	21	.00	.00
29	59	e29	e25	e66	---	73	77	20	.00	.53	.00	.00
30	45	e26	e23	e66	---	73	68	20	.00	.00	.00	.00
31	18	---	e22	e66	---	69	---	21	---	.00	.00	---
TOTAL	122.00	726.0	781	1866	2060	2242	2320	1163.0	374.28	91.53	0.00	0.00
MEAN	3.94	24.2	25.2	60.2	73.6	72.3	77.3	37.5	12.5	2.95	.000	.000
MAX	59	93	32	84	96	95	90	97	33	70	.00	.00
MIN	.00	8.4	17	25	54	60	59	7.7	.00	.00	.00	.00
AC-FT	242	1440	1550	3700	4090	4450	4600	2310	742	182	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2001, BY WATER YEAR (WY)

	MEAN	47.6	88.4	88.9	99.5	142	177	167	171	140	85.9	63.9	51.3
MAX	285	218	157	159	225	788	388	766	572	759	479	1005	
(WY)	1966	1970	1966	1974	1963	1960	1980	1957	1951	1962	1950	1951	
MIN	.000	9.52	25.2	22.8	51.6	72.3	75.6	22.7	.000	.000	.000	.000	
(WY)	1977	1979	2001	1979	1995	2001	1972	2000	2000	1954	1952	1952	

KANSAS RIVER BASIN

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06828500 REPUBLICAN RIVER AT STRATTON, NE--Continued

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

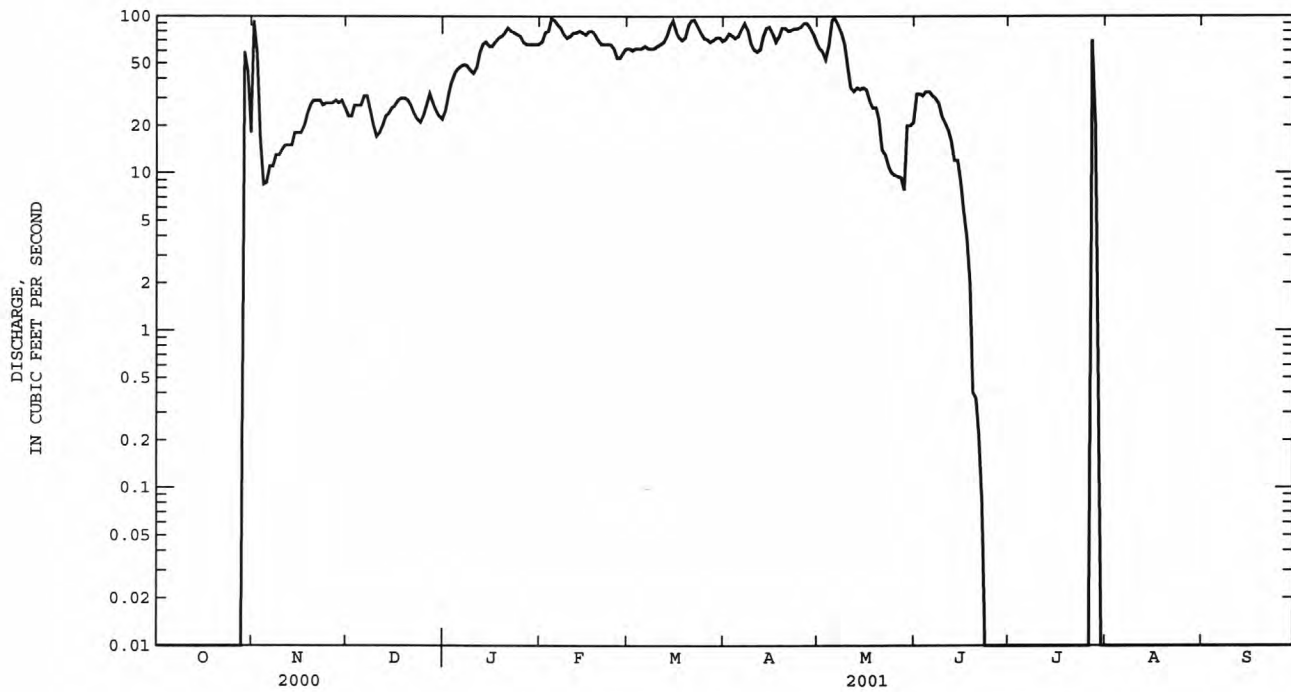
WATER YEARS 1950 - 2001

ANNUAL TOTAL	11848.70	11745.81	109	
ANNUAL MEAN	32.4	32.2	97.8	
MEDIAN OF ANNUAL MEANS			304	1951
HIGHEST ANNUAL MEAN			32.2	2001
LOWEST ANNUAL MEAN			8180	Aug 1 1962
HIGHEST DAILY MEAN	146	97		
LOWEST DAILY MEAN	.00	.00	.00	Jun 18 1952
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00	Jun 18 1952
MAXIMUM PEAK FLOW		*214	26800	Jul 31 1962
MAXIMUM PEAK STAGE		**7.64	9.34	Jul 31 1962
ANNUAL RUNOFF (AC-FT)	23500	23300	79080	
10 PERCENT EXCEEDS	97	79	215	
50 PERCENT EXCEEDS	18	24	82	
90 PERCENT EXCEEDS	.00	.00	.00	

e Estimated.

* Stage 7.47 ft.

** Backwater from ice.



KANSAS RIVER BASIN

06832000 ENDERS RESERVOIR NEAR ENDERS, NE

LOCATION.--Lat 40°25'05", long 101°30'55", in NE $\frac{1}{4}$ sec.9, T.5 N., R.37 W., Chase County, Hydrologic Unit 10250005, near right bank in control house at outlet tube of Enders Dam on Frenchman Creek, 2.2 mi southeast of Enders.

DRAINAGE AREA.--950 mi², approximately, of which about 790 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1950 to current year.

REVISED RECORDS.--WSP 2119: Drainage area.

GAGE.--Water-stage recorder: Electronic data-logger. Datum of gage is sea level. Prior to Sept. 3, 1960, mercury-column pressure gage at same datum.

REMARKS.--Reservoir is formed by earthfill dam; storage began Oct. 23, 1950. Capacity, 36,010 acre-ft between elevations 3,080.0 ft, sill of outlet gates, and 3,112.3 ft, top of storage pool. Top of flood-control pool at elevation 3,127.0 ft, capacity, 74,520 acre-ft. Top of superstorage flood-control pool at elevation 3,129.5 ft, capacity, 80,730 acre-ft. Dead storage, 8,470 acre-ft. Figures given herein represent total contents. Water used for irrigation in Frenchman-Cambridge irrigation project.

COOPERATION.--Capacity table furnished by Bureau of Reclamation (Effective Jan. 1, 1999).

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 55,330 acre-ft Mar. 25, 1960, elevation, 3,118.20 ft; minimum since operation of reservoir began, 8,870 acre-ft Aug. 28, 1978, elevation, 3,080.67 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 17,850 acre-ft June 13, elevation, 3,093.63 ft; minimum, 8,990 acre-ft July 29, elevation, 3,082.47 ft.

Capacity table (elevation, in feet, and
contents, in acre-feet)

3,080	7,516	3,090	14,510
3,085	10,670	3,100	25,000

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10100	11300	12270	13110	14270	15160	16020	16990	17520	17510	9119	9407
2	10110	11320	12300	13140	14280	15210	16040	17000	17520	17320	9119	9426
3	10120	11370	12330	13180	14340	15240	16060	17030	17560	17120	9132	9420
4	10160	11390	12370	13190	14350	15250	16100	17100	17620	16930	9151	9426
5	10200	11460	12420	13230	14400	15300	16150	17210	17640	16710	9170	9433
6	10220	11470	12420	13260	14410	15320	16260	17220	17660	16460	9202	9446
7	10240	11480	12460	13280	14470	15350	16210	17260	17690	16150	9189	9478
8	10260	11510	12510	13310	14470	15390	16260	17280	17710	15690	9202	9531
9	10280	11540	12560	13360	14510	15390	16280	17320	17740	15200	9215	9557
10	10170	11560	12560	13400	14560	15460	16360	17330	17750	14760	9221	9557
11	10210	11630	12570	13440	14590	15480	16530	17350	17750	14390	9221	9570
12	10250	11660	12550	13550	14610	15520	16530	17350	17760	14010	9234	9589
13	10270	11680	12550	13620	14650	15550	16550	17360	17740	13670	9227	9608
14	10290	11710	12570	13640	14680	15590	16590	17380	17730	13370	9240	9608
15	10320	11750	12590	13660	14720	15620	16580	17390	17730	13060	9246	9647
16	10350	11790	12610	13710	14740	15650	16610	17400	17730	12740	9240	9674
17	10370	11810	12620	13750	14740	15670	16640	17410	17700	12430	9253	9707
18	10390	11840	12650	13760	14800	15710	16680	17420	17690	12120	9253	9787
19	10430	11870	12670	13800	14800	15720	16700	17420	17700	11850	9259	9827
20	10460	11910	12720	13840	14840	15730	16740	17420	17700	11610	9272	9833
21	10490	11930	12760	13860	14850	15750	16740	17400	17690	11340	9291	9847
22	10640	11970	12760	13900	14890	15790	16890	17410	17670	11020	9329	9873
23	10680	12010	12790	13930	14950	15820	16860	17400	17680	10690	9336	9880
24	10740	12060	12840	13970	15000	15840	16880	17390	17660	10380	9349	9886
25	10780	12090	12880	14020	15010	15860	16900	17390	17670	10050	9375	9900
26	10810	12120	12900	14040	15020	15890	16930	17390	17630	9827	9388	9926
27	10860	12170	12940	14070	15100	15930	16950	17410	17610	9505	9388	9933
28	11050	12180	12980	14110	15110	15950	16930	17400	17620	9195	9375	9946
29	11110	12230	13020	14170	---	15960	16960	17490	17620	8999	9381	9966
30	11170	12210	13040	14190	---	16010	16980	17500	17590	9036	9368	9973
31	11270	---	13080	14210	---	16020	---	17520	---	9075	9388	---
MEAN	10480	11770	12650	13670	14680	15620	16560	17330	17670	12970	9262	9689
MAX	11270	12230	13080	14210	15110	16020	16980	17520	17760	17510	9388	9973
MIN	10100	11300	12270	13110	14270	15160	16020	16990	17520	8999	9119	9407

(*) 3085.84 3087.12 3088.24 3089.64 3090.70 3091.71 3092.74 3093.30 3093.37 3082.60 3083.09 3083.98
 (**) +1210 +940 +870 +1030 +900 +910 +960 +540 +70 -8515 +263 +585

CAL YR 2000 MAX 23910 MIN 8974 (**) -6080
 CAL YR 2001 MAX 17760 MIN 8999 (**) -237

(*) Elevation, in feet, at end of month.

(**) Change in contents, in acre-feet.

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KANSAS RIVER BASIN

06834000 FRENCHMAN CREEK AT PALISADE, NE

LOCATION.--Lat 40°21'07", long 101°07'24", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.36, T.5 N., R.34 W., Hayes County, Hydrologic Unit 10250005, on right bank at upstream side of bridge on U.S. Highway 6, 0.7 mi west of Palisade, 1.5 mi upstream from Stinking Water Creek, and at mile 30.2.

DRAINAGE AREA.--1,300 mi², approximately, of which about 1,110 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1894 to October 1896, June 1950 to current year. Published as Frenchman River at Palisade, October 1894 to October 1896 and October 1965 to September 1972.

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

GAGE.--Water-stage recorder. Datum of gage is 2,743.49 ft above sea level. October 1894 to October 1896, nonrecording gage at railroad bridge 0.4 mi downstream at different datum; June 1950 to Feb. 7, 1977 recording gage at site 2,000 ft upstream at datum 4.0 ft higher.

REMARKS.--Records good except for periods of estimated record, which are poor. Natural flow affected by irrigation development above station and, since Oct. 23, 1950, by storage in Enders Reservoir (station 06832000).

COOPERATION.--Records provided by Nebraska Department of Natural Resources and reviewed by the Geological Survey.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	77	26	25	29	27	27	31	22	5.9	48	3.5
2	12	40	27	23	29	28	26	29	21	5.2	39	3.9
3	12	31	27	26	29	29	27	28	22	12	35	3.3
4	12	29	27	30	26	36	28	30	23	50	30	2.7
5	13	28	25	34	27	32	27	35	23	60	26	2.4
6	13	28	27	37	27	30	29	36	22	65	22	2.1
7	14	27	24	40	26	28	30	31	21	77	20	2.7
8	14	26	24	39	25	27	29	29	20	84	18	5.7
9	15	26	24	39	26	27	27	28	19	146	16	7.7
10	15	25	23	40	27	26	27	28	18	177	14	7.4
11	16	24	22	36	29	26	29	28	17	177	13	7.2
12	16	23	23	40	30	25	33	27	16	173	12	7.3
13	16	22	24	29	31	25	33	27	15	161	12	7.4
14	16	21	25	29	29	26	29	26	15	152	11	7.5
15	16	22	26	29	27	25	29	27	14	154	11	7.9
16	16	23	25	28	30	25	29	26	13	151	11	9.8
17	16	24	25	26	29	26	29	25	13	146	10	12
18	16	25	26	27	31	26	29	24	12	145	9.7	13
19	16	26	27	28	30	26	28	24	12	147	8.8	16
20	16	27	28	29	27	26	29	23	12	141	8.2	15
21	16	28	27	30	27	26	30	23	12	129	7.5	13
22	18	29	26	31	29	26	33	23	12	128	7.2	12
23	19	30	25	27	26	26	46	22	11	148	7.0	12
24	20	29	24	26	26	25	33	21	9.6	158	7.3	12
25	19	28	23	27	24	25	31	20	9.0	163	7.1	13
26	19	27	25	27	26	25	31	20	8.0	164	6.8	13
27	18	25	27	29	25	26	32	21	7.0	197	6.1	13
28	20	25	29	28	26	28	30	21	6.9	182	5.3	13
29	275	25	31	27	---	28	29	23	6.6	173	4.5	13
30	61	26	29	27	---	27	32	24	6.4	151	3.9	13
31	37	---	27	27	---	26	---	23	---	73	3.8	---
TOTAL	815	846	798	940	773	834	901	803	438.5	3895.1	441.2	271.5
MEAN	26.3	28.2	25.7	30.3	27.6	26.9	30.0	25.9	14.6	126	14.2	9.05
MAX	275	77	31	40	31	36	46	36	23	197	48	16
MIN	12	21	22	23	24	25	26	20	6.4	5.2	3.8	2.1
AC-FT	1620	1680	1580	1860	1530	1650	1790	1590	870	7730	875	539

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2001, BY WATER YEAR (WY)

	MEAN	39.3	35.2	35.2	37.1	42.2	47.1	46.6	52.1	70.4	182	168	67.1
MAX	120	88.9	97.4	102	147	247	198	151	270	340	367	232	
(WY)	1963	1959	1959	1953	1952	1960	1960	1957	1967	1968	1962	1962	
MIN	16.5	23.1	21.6	19.3	23.9	25.8	21.6	19.1	14.6	67.0	14.2	8.32	
(WY)	1991	1990	1990	1979	1993	1999	1972	2000	2001	1951	2001	1990	

KANSAS RIVER BASIN

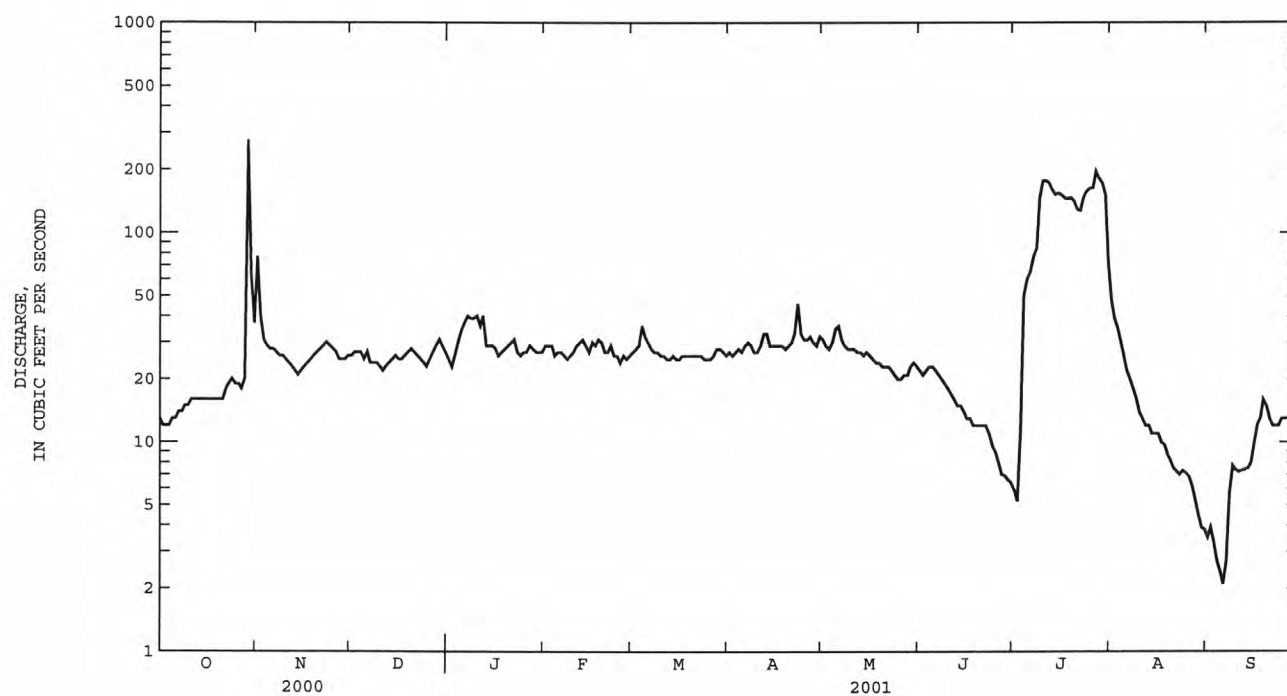
271

06834000 FRENCHMAN CREEK AT PALISADE, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1950 - 2001 a
ANNUAL TOTAL	13942.8	11756.3	
ANNUAL MEAN	38.1	32.2	69.1
HIGHEST ANNUAL MEAN			115 1960
LOWEST ANNUAL MEAN			32.2 2001
HIGHEST DAILY MEAN	275 Oct 29	275 Oct 29	2090 Jun 17 1956
LOWEST DAILY MEAN	6.0 Sep 18	2.1 Sep 6	2.1 Sep 6 2001
ANNUAL SEVEN-DAY MINIMUM	6.2 Sep 13	2.9 Sep 1	2.9 Sep 1 2001
MAXIMUM PEAK FLOW		548 Oct 29	5560 Jun 17 1956
MAXIMUM PEAK STAGE		7.17 Oct 29	*8.79 Jun 17 1956
ANNUAL RUNOFF (AC-FT)	27660	23320	50060
10 PERCENT EXCEEDS	115	40	160
50 PERCENT EXCEEDS	26	26	37
90 PERCENT EXCEEDS	12	9.4	23

a Since beginning of storage in Enders Reservoir.

* Site and datum then in use.



KANSAS RIVER BASIN

06835500 FRENCHMAN CREEK AT CULBERTSON, NE

LOCATION.--Lat 40°14'05", long 100°52'40", in SW ¼ SE ¼ sec. 12, T.3 N., R.32 W., Hitchcock County, Hydrologic Unit 10250005, on right bank 8 ft upstream from bridge on U.S. Highways 6 and 34, 2 mi west of Culbertson, and 4.0 mi upstream from mouth.

DRAINAGE AREA.--2,990 mi², of which about 1,590 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--June 1913 to September 1915 (gage heights and discharge measurements only), October 1930 to current year. Published as Frenchman River at Culbertson October 1965 to September 1972. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1390: 1931, 1933, 1934(M), 1938(M). WDR NE-84-1: 1979, 1982(M). WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,583.44 ft above sea level. See WSP 1919 for history of changes prior to Nov. 2, 1950. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow affected by irrigation development above station and, since Oct. 23, 1950, by storage in Enders Reservoir (station 06832000). Principal diversion is by Culbertson Canal, 20,800 acres.

EXTREME FOR TOTAL PERIOD OF RECORD.--Maximum discharge, 15,000 ft³/s (estimated), May 31, 1935, gage height 14.80 ft, from floodmark.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	86	47	53	55	63	60	23	14	4.5	1.8	.33
2	.09	107	46	46	54	62	60	21	13	4.0	1.5	.33
3	.11	73	46	41	56	65	60	15	15	3.7	1.3	.35
4	.13	66	47	48	57	73	60	16	14	3.3	1.0	.28
5	.17	56	47	51	58	74	60	23	14	2.7	.84	.25
6	.41	52	47	50	59	71	61	25	14	2.1	.73	.25
7	.77	48	48	52	60	69	66	27	14	1.7	.67	.35
8	1.2	46	48	54	59	68	64	29	15	1.7	2.2	.42
9	1.6	46	49	53	53	67	62	29	15	1.7	2.4	.34
10	2.0	45	48	51	50	66	58	27	15	2.0	1.6	.31
11	2.6	46	37	53	53	65	54	26	15	1.7	.69	.31
12	3.0	42	39	57	60	66	56	25	14	1.4	.64	.31
13	3.2	e40	e40	58	64	65	64	24	14	22	.45	.31
14	3.6	e39	e41	59	61	65	68	23	14	7.8	4.1	.36
15	6.7	e39	43	58	58	65	68	20	14	2.6	1.7	.59
16	11	e39	44	60	58	64	53	19	13	3.2	.82	.84
17	12	e40	e45	54	58	63	37	18	12	2.5	.94	1.3
18	12	40	44	55	58	62	31	18	9.7	1.5	.98	1.2
19	12	45	e43	59	60	62	29	18	8.2	2.1	.82	1.4
20	12	49	43	55	60	62	26	18	8.1	1.7	.98	3.2
21	13	48	e42	56	59	62	23	17	8.0	2.9	1.0	4.1
22	14	49	e40	62	59	62	23	15	8.0	1.7	.95	3.9
23	13	49	37	57	60	62	20	14	7.7	1.3	.72	4.1
24	11	52	e40	55	59	61	26	14	6.4	2.4	.47	2.3
25	13	49	e42	55	59	61	22	14	5.8	2.1	.35	2.6
26	13	53	42	55	59	61	22	15	5.9	2.5	.32	2.8
27	14	49	43	54	57	61	24	15	5.5	4.5	.37	3.1
28	17	49	43	55	51	62	27	15	5.1	9.5	.41	3.1
29	39	48	48	56	---	63	26	15	4.9	9.0	.63	4.9
30	172	47	49	58	---	62	21	15	5.5	4.5	.34	5.0
31	126	---	42	57	---	60	---	15	---	3.5	.35	---
TOTAL	529.70	1537	1360	1687	1614	1994	1331	608	327.8	117.8	32.07	48.93
MEAN	17.1	51.2	43.9	54.4	57.6	64.3	44.4	19.6	10.9	3.80	1.03	1.63
MAX	172	107	49	62	64	74	68	29	15	22	4.1	5.0
MIN	.09	39	37	41	50	60	20	14	4.9	1.3	.32	.25
AC-FT	1050	3050	2700	3350	3200	3960	2640	1210	650	234	64	97

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2001, BY WATER YEAR (WY)

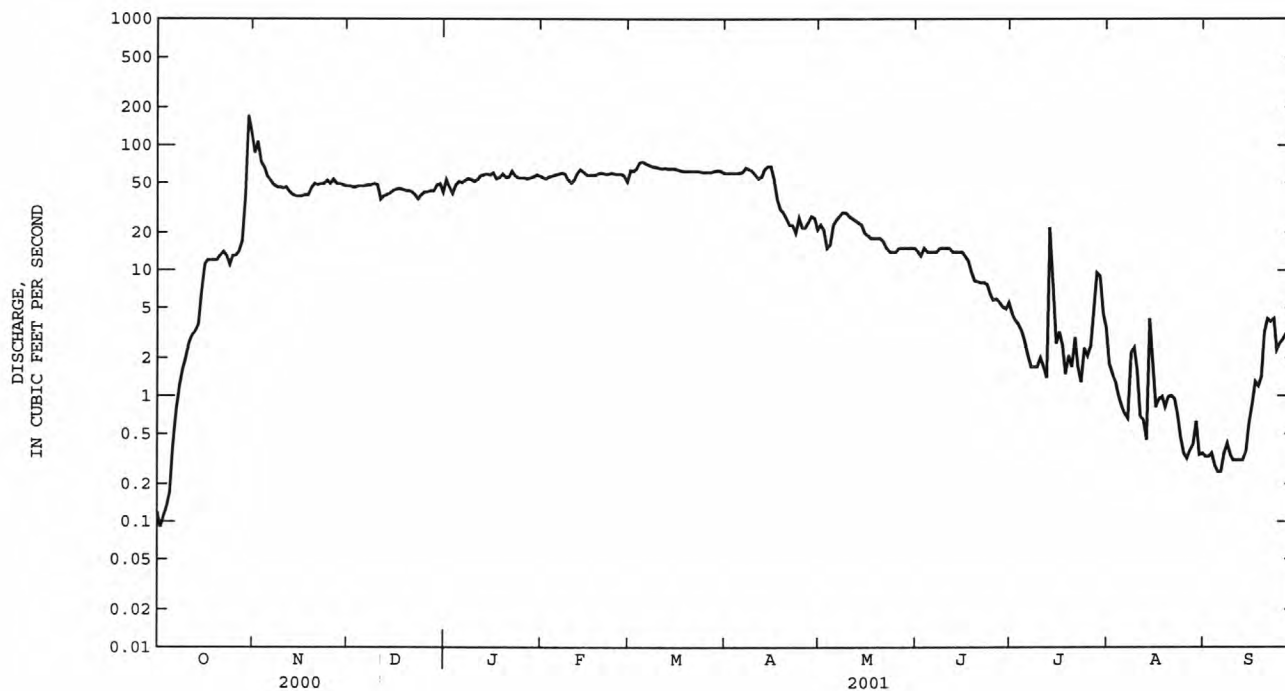
	MEAN	70.5	81.5	80.2	80.9	98.4	111	78.4	64.7	76.3	48.1	37.5	55.9
	MAX	172	146	162	182	210	543	290	222	351	269	258	245
	(WY)	1963	1963	1959	1953	1952	1960	1960	1952	1967	1962	1962	1951
	MIN	17.1	46.8	43.9	42.9	57.1	58.0	28.9	18.0	4.57	1.09	.16	.035
	(WY)	2001	1991	2001	1996	1996	1999	1999	1986	2000	2000	2000	2000

06835500 FRENCHMAN CREEK AT CULBERTSON, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1951 - 2001 a	
ANNUAL TOTAL	10833.73		11187.30		73.4	
ANNUAL MEAN	29.6		30.7		165	
HIGHEST ANNUAL MEAN					30.7	
LOWEST ANNUAL MEAN					1960	
HIGHEST DAILY MEAN	172	Oct 30	172	Oct 30	3060	Jun 18 1956
LOWEST DAILY MEAN	.00	Jul 26	.09	Oct 2	.00	Aug 7 1980
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 18	.26	Oct 1	.00	Aug 18 2000
MAXIMUM PEAK FLOW					5260	Jun 17 1951
MAXIMUM PEAK STAGE					10.43	Jun 17 1951
ANNUAL RUNOFF (AC-FT)	21490		22190		53210	
10 PERCENT EXCEEDS	64		62		129	
50 PERCENT EXCEEDS	25		25		63	
90 PERCENT EXCEEDS	.00		.80		17	

e Estimated.

a Since start of storage in Enders Reservoir.



KANSAS RIVER BASIN

06836500 DRIFTWOOD CREEK NEAR MCCOOK, NE

LOCATION.--Lat 40°08'45", long 100°40'22", in SW ¼ SE ¼ sec.11, T.2 N., R.30 W., Red Willow County, Hydrologic Unit 10250004, on right bank downstream from county road bridge, 5.8 mi upstream from mouth, and 3.5 mi southwest of McCook.

DRAINAGE AREA.--361 mi², of which about 351 mi² contributes directly to surface runoff.

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

REVISED RECORDS.--WSP 1210: 1950. WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,502.78 ft above sea level. Prior to Oct. 12, 1962, at site 1.5 mi downstream in old channel at datum 9.00 ft lower, Oct. 12, 1962 to Apr. 11, 1963 at site 1.8 mi downstream at datum 12.75 ft lower, Apr. 12, 1963 to Apr. 22, 1982 at site 1.3 mi downstream at datum 9.00 ft lower, and Apr. 22, 1982 to May 29, 1992 at site 3.2 mi downstream at datum 17.55 ft lower. Data collection platform at station.

REMARKS.--Records fair. Natural flow affected by waste from Meeker-Driftwood Canal and by irrigation development above station.

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

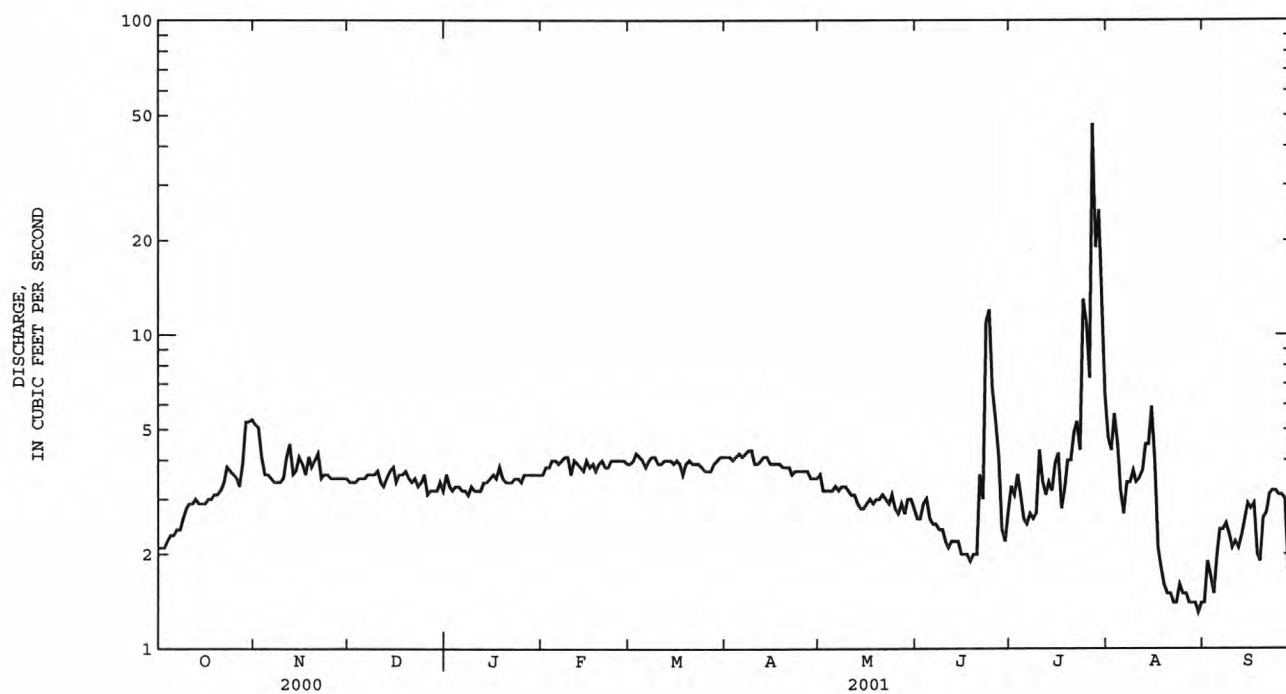
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	5.2	3.4	3.6	3.6	3.9	4.1	3.6	2.6	3.3	4.7	1.4
2	2.1	5.1	3.4	3.3	3.8	4.0	4.1	3.2	2.6	3.1	4.3	1.9
3	2.1	4.1	3.4	3.2	3.8	4.2	4.0	3.2	2.9	3.6	5.6	1.7
4	2.2	3.6	3.5	3.3	4.0	4.1	4.1	3.2	3.0	3.1	4.5	1.5
5	2.3	3.6	3.5	3.3	4.0	4.0	4.2	3.2	2.6	2.6	3.2	2.0
6	2.3	3.5	3.5	3.2	3.9	3.8	4.1	3.3	2.5	2.5	2.7	2.4
7	2.4	3.4	3.6	3.2	4.0	4.0	4.2	3.2	2.5	2.7	3.4	2.4
8	2.4	3.4	3.6	3.1	4.1	4.1	4.3	3.3	2.4	2.6	3.4	2.5
9	2.6	3.4	3.6	3.3	4.1	4.1	4.3	3.3	2.4	2.7	3.7	2.3
10	2.8	3.5	3.7	3.2	3.6	3.9	3.9	3.2	2.2	4.3	3.4	2.1
11	2.9	4.1	3.4	3.2	4.0	3.9	3.9	3.1	2.1	3.4	3.5	2.2
12	2.9	4.5	3.3	3.2	3.9	4.0	4.0	3.1	2.2	3.1	3.7	2.1
13	3.0	3.6	3.5	3.4	3.8	4.0	4.1	2.9	2.2	3.4	4.5	2.3
14	2.9	3.7	3.7	3.4	3.7	4.0	4.1	2.8	2.2	3.2	4.5	2.6
15	2.9	4.1	3.8	3.5	4.0	3.9	3.9	2.8	2.0	3.9	5.9	2.9
16	2.9	3.9	3.4	3.6	3.8	4.0	3.9	2.9	2.0	4.2	3.9	2.8
17	3.0	3.6	3.6	3.5	3.9	3.9	3.9	3.0	2.0	2.8	2.1	2.9
18	3.0	4.1	3.6	3.8	3.7	3.6	3.9	2.9	1.9	3.2	1.8	2.0
19	3.1	3.8	3.7	3.5	3.9	3.9	3.8	3.0	2.0	4.0	1.6	1.9
20	3.1	4.0	3.5	3.4	4.0	4.0	3.8	3.0	2.0	4.0	1.5	2.6
21	3.2	4.2	3.4	3.4	3.8	3.9	3.8	3.1	3.6	4.9	1.5	2.7
22	3.4	3.5	3.5	3.4	3.8	3.9	3.6	3.0	3.0	5.3	1.4	3.1
23	3.8	3.6	3.3	3.5	4.0	3.9	3.7	2.9	11	4.3	1.4	3.2
24	3.7	3.6	3.4	3.5	4.0	3.8	3.7	3.1	12	13	1.6	3.2
25	3.6	3.5	3.6	3.4	4.0	3.7	3.7	2.8	6.8	11	1.5	3.1
26	3.5	3.5	3.1	3.6	4.0	3.7	3.7	2.7	5.4	7.3	1.5	3.1
27	3.3	3.5	3.2	3.6	4.0	3.7	3.7	2.9	4.1	47	1.4	3.0
28	3.9	3.5	3.2	3.6	3.9	3.9	3.5	2.7	2.4	19	1.4	1.8
29	5.3	3.5	3.2	3.6	---	4.0	3.5	3.0	2.2	25	1.4	1.8
30	5.3	3.5	3.4	3.6	---	4.1	3.5	3.0	2.7	12	1.3	2.2
31	5.4	---	3.2	3.6	---	4.1	---	2.8	---	6.5	1.4	---
TOTAL	97.4	114.1	107.2	106.0	109.1	122.0	117.0	94.2	99.5	221.0	87.7	71.7
MEAN	3.14	3.80	3.46	3.42	3.90	3.94	3.90	3.04	3.32	7.13	2.83	2.39
MAX	5.4	5.2	3.8	3.8	4.1	4.2	4.3	3.6	12	47	5.9	3.2
MIN	2.1	3.4	3.1	3.1	3.6	3.6	3.5	2.7	1.9	2.5	1.3	1.4
AC-FT	193	226	213	210	216	242	232	187	197	438	174	142

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2001, BY WATER YEAR (WY)

	MEAN	7.07	3.70	3.60	3.57	5.71	7.80	4.27	9.60	17.5	19.8	16.4	13.2
MAX	137	7.71	7.44	7.96	31.4	209	13.3	112	85.8	100	156	302	
(WY)	1947	1998	1974	1974	1960	1960	1977	1957	1947	1956	1950	1951	
MIN	.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	

06836500 DRIFTWOOD CREEK NEAR MCCOOK, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1946 - 2001
ANNUAL TOTAL	1447.2	1346.9	
ANNUAL MEAN	3.95	3.69	9.39
MEDIAN OF ANNUAL MEANS			7.56
HIGHEST ANNUAL MEAN			35.0
LOWEST ANNUAL MEAN			1.12
HIGHEST DAILY MEAN	7.2 Jul 25	47 Jul 27	3950 Aug 7 1950
LOWEST DAILY MEAN	1.9 Sep 17	1.3 Aug 30	.00 Apr 25 1946
ANNUAL SEVEN-DAY MINIMUM	2.0 Sep 13	1.4 Aug 26	.00 Jun 12 1946
MAXIMUM PEAK FLOW		70 Jul 27	4740 Aug 7 1950
MAXIMUM PEAK STAGE		5.81 Jul 27	25.43 Aug 7 1950
ANNUAL RUNOFF (AC-FT)	2870	2670	6800
10 PERCENT EXCEEDS	5.4	4.1	11
50 PERCENT EXCEEDS	4.0	3.5	4.7
90 PERCENT EXCEEDS	2.5	2.2	.30



KANSAS RIVER BASIN

06837000 REPUBLICAN RIVER AT MCCOOK, NE

LOCATION.--Lat 40°11'15", long 100°37'05", in SW ¼ NE ¼ sec.32, T.3 N., R.29 W., Red Willow County, Hydrologic Unit 10250004, on left bank at downstream side of bridge on U.S. Highway 83 at south edge of McCook, 2.5 mi downstream from Driftwood Creek, 10.5 mi upstream from Red Willow Creek, and at mile 348.

DRAINAGE AREA.--12,240 mi², of which about 6,220 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1930 to June 1932, October 1954 to current year. Monthly discharge only for some periods, published in WSP 1310.

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

GAGE.--Water-stage recorder. Datum of gage is 2,456.37 ft above sea level. October 1930 to June 1932, nonrecording gage on former highway bridge 300 ft upstream at different datum, and October 1954 to Mar. 13, 1959 on highway bridge 25 ft upstream at present datum. Mar. 13, 1959 to Mar. 29, 1988 at present site and datum. Mar. 29, 1988 to Oct. 31, 1989 200 ft downstream at present datum. Data collection platform at station.

REMARKS.--Records 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	109	e60	e52	e45	e70	89	60	37	28	23	.00
2	1.1	97	e60	e60	e52	e64	89	59	33	28	20	.00
3	1.0	80	e60	e62	e56	e62	81	51	36	29	18	.00
4	.65	69	e60	e62	e60	e66	73	76	37	28	16	.00
5	.41	69	e60	e60	e60	e70	75	139	37	26	11	.00
6	.00	57	e60	e54	e56	e72	79	111	36	26	9.0	.00
7	.56	53	e60	e52	e45	e74	105	80	36	26	3.4	.00
8	.59	53	e54	e52	e42	e78	97	70	35	25	1.9	.00
9	1.9	51	e45	e54	e47	e84	95	67	36	23	.05	.00
10	3.0	49	e41	e56	e54	e90	83	66	35	24	.00	.00
11	4.0	e42	e40	e60	e60	90	79	63	34	25	.00	.00
12	5.5	e42	e43	e54	e68	91	79	60	33	27	.00	.58
13	5.3	e45	e45	e47	e86	100	84	59	32	28	.00	1.6
14	4.5	e44	e49	e48	e80	101	88	57	27	37	1.9	2.9
15	4.3	e47	e47	e46	e74	95	92	57	25	36	6.0	2.0
16	4.0	e41	e49	e45	e72	92	75	55	25	34	5.7	1.9
17	7.4	e41	e49	e45	e72	93	67	51	27	32	.76	3.2
18	11	e47	e47	e45	e70	91	60	48	26	30	.00	4.3
19	13	e50	e48	e50	e66	96	61	47	19	30	.00	3.2
20	13	e50	e44	e54	e68	100	58	46	16	29	.00	3.5
21	14	e54	e45	e56	e68	100	56	39	14	29	.13	2.9
22	17	e58	e48	e60	e70	99	58	38	16	33	.55	3.6
23	17	e54	e47	e58	e70	95	57	35	22	29	.11	1.5
24	19	e54	e48	e56	e70	88	56	33	25	42	.43	.50
25	19	e58	e50	e54	e70	85	56	32	24	33	1.0	1.6
26	20	e62	e54	e58	e72	84	56	34	17	24	2.1	3.8
27	21	e64	e54	e60	e72	81	58	35	16	82	.45	6.9
28	26	e62	e50	e62	e72	87	59	36	22	62	.02	7.4
29	53	e62	e47	e52	---	91	62	37	24	48	.00	5.4
30	73	e60	e45	e47	---	91	66	39	28	38	.00	4.1
31	147	---	e45	e43	---	86	---	38	---	26	.00	---
TOTAL	508.41	1724	1554	1664	1797	2666	2193	1718	830	1017	121.50	60.88
MEAN	16.4	57.5	50.1	53.7	64.2	86.0	73.1	55.4	27.7	32.8	3.92	2.03
MAX	147	109	60	62	86	101	105	139	37	82	23	7.4
MIN	.00	41	40	43	42	62	56	32	14	23	.00	.00
AC-FT	1010	3420	3080	3300	3560	5290	4350	3410	1650	2020	241	121

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2001, BY WATER YEAR (WY)

MEAN	97.0	110	106	110	147	176	158	171	185	210	170	96.5
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	16.4	57.5	50.1	53.7	64.2	77.3	56.4	22.6	27.7	32.8	3.92	2.03
(WY)	2001	2001	2001	2001	2001	1996	2000	1956	2001	2001	2001	2001

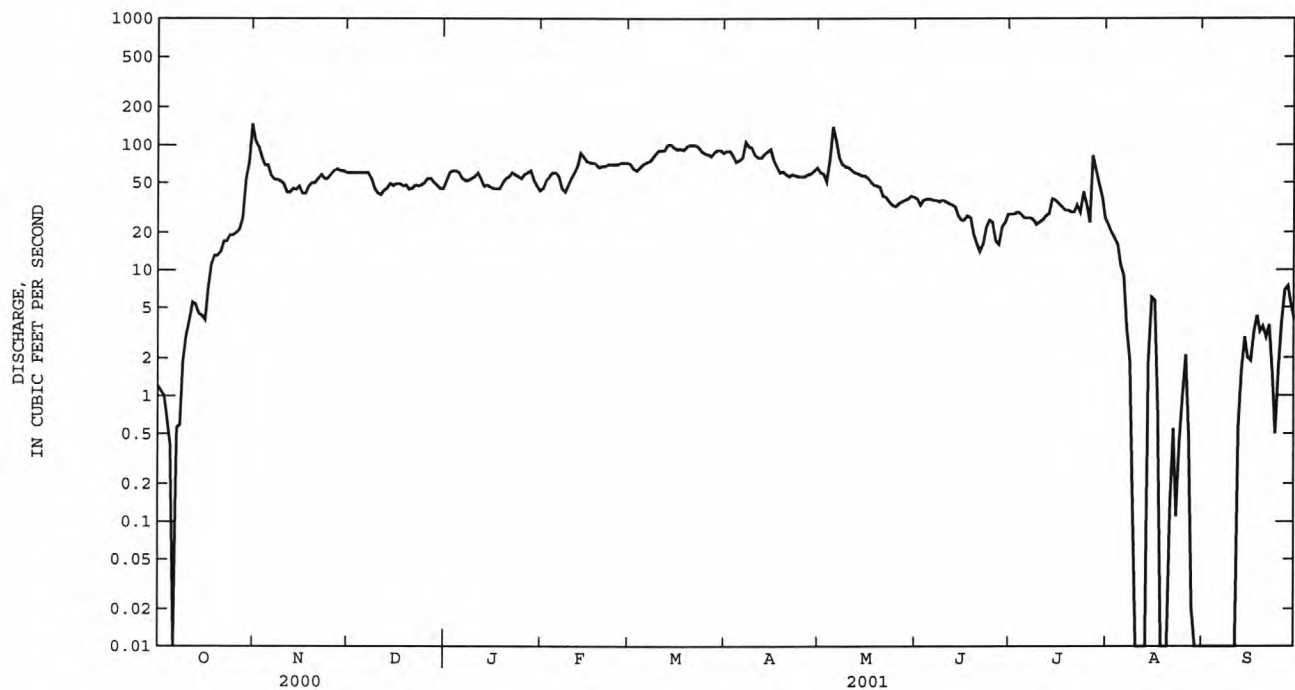
KANSAS RIVER BASIN

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06837000 REPUBLICAN RIVER AT MCCOOK, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1955 - 2001
ANNUAL TOTAL	19455.28	15853.79	
ANNUAL MEAN	53.2	43.4	145
HIGHEST ANNUAL MEAN			383
LOWEST ANNUAL MEAN			43.4
HIGHEST DAILY MEAN	147 Oct 31	147 Oct 31	5020 Mar 21 1960
LOWEST DAILY MEAN	.00 Sep 24	.00 Oct 6	.00 Sep 24 2000
ANNUAL SEVEN-DAY MINIMUM	.62 Oct 2	.00 Aug 29	.00 Aug 29 2001
MAXIMUM PEAK FLOW		162 Oct 31	5890 Mar 21 1960
MAXIMUM PEAK STAGE		4.40 Oct 31	9.14 Mar 21 1960
ANNUAL RUNOFF (AC-FT)	38590	31450	104900
10 PERCENT EXCEEDS	87	83	256
50 PERCENT EXCEEDS	56	47	106
90 PERCENT EXCEEDS	4.9	.90	54

e Estimated.



KANSAS RIVER BASIN

06838000 RED WILLOW CREEK NEAR RED WILLOW, NE

LOCATION.--Lat 40°14'10", long 100°30'00", in NE ¼ NE ¼ sec.17, T.3 N., R.28 W., Red Willow County, Hydrologic Unit 10250007, on left bank near downstream side of bridge on U.S. Highways 6 and 34, 0.8 mi north of Red Willow and 2.1 mi upstream from mouth.

DRAINAGE AREA.--820 mi², of which about 405 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--September 1939 to current year.

REVISED RECORDS.--WSP 1510: 1945 (M). WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,398.64 ft above sea level. Prior to May 26, 1945, nonrecording gage at bridge 1.2 mi upstream at datum 11.16 ft higher; May 26, 1945 to Aug. 2, 1974 water-stage recorder at left downstream side of bridge, present datum; Aug. 3, 1974 to June 27, 1980 on right bank at downstream side of bridge, present datum; and June 28, 1980 to May 19, 1992 at left downstream side of bridge, present datum. Data collection platform at station.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow affected by irrigation development above station, since Sept. 5, 1961, by storage in Hugh Butler Lake (station 06837390), and since June 1963 by Red Willow Canal which diverts 4.5 mi above station for irrigation of about 4,150 acres.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	15	10	e7.0	e7.4	e8.8	10	11	10	29	45	2.9
2	6.4	9.8	10	e7.4	e6.4	e9.0	8.6	11	10	31	62	16
3	6.5	9.7	10	e8.6	e8.4	e9.4	9.3	11	12	42	72	7.2
4	6.1	9.7	10	e9.8	e10	e9.4	9.3	13	11	54	75	5.8
5	6.4	9.4	10	e9.6	e10	e9.0	8.3	23	10	55	76	4.0
6	6.5	9.2	11	e9.8	e9.2	8.9	8.6	11	10	23	90	3.8
7	6.7	8.9	11	e9.4	e9.2	11	11	10	10	9.9	100	4.0
8	6.5	9.0	11	e8.4	e9.6	11	10	10	9.8	14	105	4.4
9	6.8	9.3	11	e8.0	e7.4	11	9.7	10	9.9	35	113	4.4
10	7.0	9.3	e10	e8.6	e6.2	10	10	10	9.8	49	108	3.6
11	7.0	e8.0	e7.0	e9.4	e7.4	11	9.7	10	9.7	61	104	3.5
12	6.7	e6.6	e6.0	e8.8	e7.8	11	9.5	9.7	9.4	65	113	3.6
13	6.7	e7.0	e6.4	e9.4	e8.6	11	9.3	9.8	9.2	72	139	3.9
14	7.0	e6.8	e7.2	e8.0	e7.6	11	9.3	9.9	9.6	61	133	3.9
15	7.2	e7.0	e7.8	e7.2	e6.8	12	9.3	10	9.3	56	74	4.9
16	7.2	e6.4	e7.8	e7.2	e6.8	12	9.3	10	9.3	49	10	4.4
17	7.2	e5.8	e7.4	e6.6	e6.8	12	9.3	10	21	35	7.3	4.6
18	7.3	e7.0	e8.0	e7.2	e8.4	11	9.3	10	58	25	6.7	4.7
19	7.4	e7.8	e8.0	e6.8	e11	14	9.4	10	35	40	6.6	4.2
20	7.9	e7.8	e7.6	e6.6	e10	11	9.5	10	25	42	6.3	4.1
21	8.3	e8.0	e7.8	e8.2	e9.6	11	9.7	10	81	45	5.9	4.0
22	9.4	e8.6	e6.8	e8.2	e9.6	11	11	10	87	46	5.1	4.7
23	10	e8.4	e7.4	e9.4	e9.8	11	12	10	65	52	5.1	4.1
24	9.5	e8.4	e7.8	e9.2	e9.4	9.7	10	10	57	80	6.4	10
25	10	e9.4	e7.2	e9.0	e9.0	7.3	10	10	80	73	4.6	7.6
26	9.5	e9.6	e7.4	e8.6	e8.0	8.9	10	10	68	42	4.4	7.8
27	9.4	e10	e7.8	e8.6	e7.2	8.6	11	10	71	34	4.3	7.8
28	10	11	e8.4	e9.4	e8.2	11	10	10	72	17	4.1	7.9
29	14	10	e8.4	e9.8	---	12	10	10	57	10	3.9	7.0
30	10	10	e7.8	e10	---	11	11	10	43	17	3.8	7.1
31	10	---	e7.4	e8.4	---	11	---	9.8	---	33	3.2	---
TOTAL	247.1	262.9	261.4	262.6	235.8	326.0	293.4	329.2	979.0	1296.9	1496.7	165.9
MEAN	7.97	8.76	8.43	8.47	8.42	10.5	9.78	10.6	32.6	41.8	48.3	5.53
MAX	14	15	11	10	11	14	12	23	87	80	139	16
MIN	6.1	5.8	6.0	6.6	6.2	7.3	8.3	9.7	9.2	9.9	3.2	2.9
AC-FT	490	521	518	521	468	647	582	653	1940	2570	2970	329

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2001, BY WATER YEAR (WY)

MEAN	8.55	8.59	8.77	9.53	11.0	11.6	11.4	12.0	21.4	21.6	22.3	10.5
MAX	18.8	13.6	12.1	21.1	32.9	35.5	41.5	36.6	124	59.9	92.4	29.0
(WY)	1970	1997	1966	1962	1968	1994	1970	1973	1967	1967	1978	1978
MIN	3.84	4.98	5.93	4.15	7.15	7.28	4.98	2.87	4.56	6.46	4.02	3.22
(WY)	1978	1978	1999	1999	1962	1996	1978	1978	1992	1999	1963	1991

KANSAS RIVER BASIN

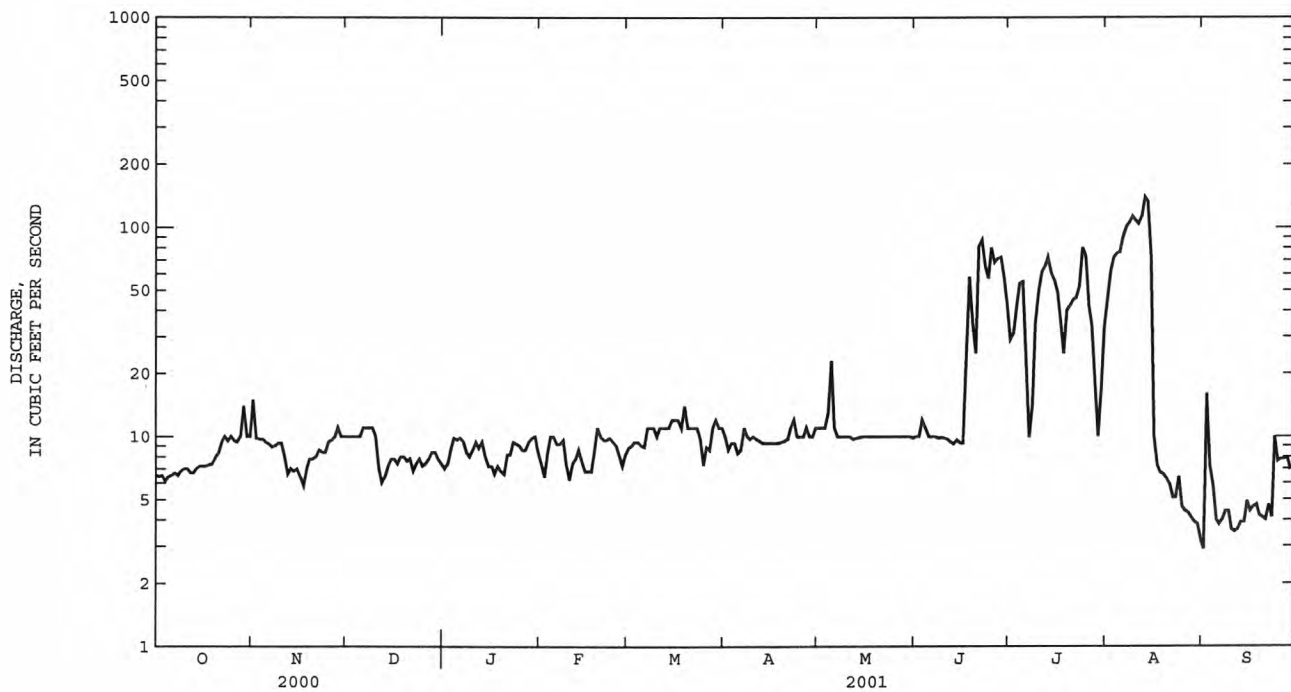
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06838000 RED WILLOW CREEK NEAR RED WILLOW, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1962 - 2001 a	
ANNUAL TOTAL	4670.25		6156.9		13.1	
ANNUAL MEAN	12.8		16.9		25.5	1967
HIGHEST ANNUAL MEAN					7.90	1992
LOWEST ANNUAL MEAN					668	Jul 18 1962
HIGHEST DAILY MEAN	497	Jul 22	139	Aug 13	.00	Sep 2 1995
LOWEST DAILY MEAN	.07	Jun 22	2.9	Sep 1	.29	Dec 31 1998
ANNUAL SEVEN-DAY MINIMUM	3.5	Jun 19	3.8	Aug 26	30000	Jun 22 1947
MAXIMUM PEAK FLOW			141	Aug 14	18.36	Jun 22 1947
MAXIMUM PEAK STAGE			4.00	Aug 14	9510	
ANNUAL RUNOFF (AC-FT)	9260		12210		21	
10 PERCENT EXCEEDS	15		47		9.3	
50 PERCENT EXCEEDS	8.5		9.5		5.8	
90 PERCENT EXCEEDS	4.7		6.4			

e Estimated.

a Since beginning of storage in Hugh Butler Lake.



LOCATION.--Lat 40°17'05", long 100°08'35", in NW ¼ SE ¼ 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.

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

GAGE.--Water-stage recorder. Datum of gage is 2,239.07 ft above sea level. Prior to July 13, 1948, nonrecording gage at site 150 ft upstream at same datum and July 13, 1948 to Sept. 25, 1950 at present site and datum.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 160,000 ft³/s June 22, 1947, gage height 16.7 ft, from floodmarks.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1826, 17.6 ft May 31 to June 1, 1935, information from local resident, discharge, about 280,000 ft³/s.

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2001, BY WATER YEAR (WY)

MEAN	120	153	148	155	238	293	258	301	343	363	294	153
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	71.1	44.4	103	111	91.3	48.0	60.7	160	98.9	.89
(WY)	1992	1991	1996	1979	1996	1991	1992	1992	1992	1952	1952	2000

KANSAS RIVER BASIN

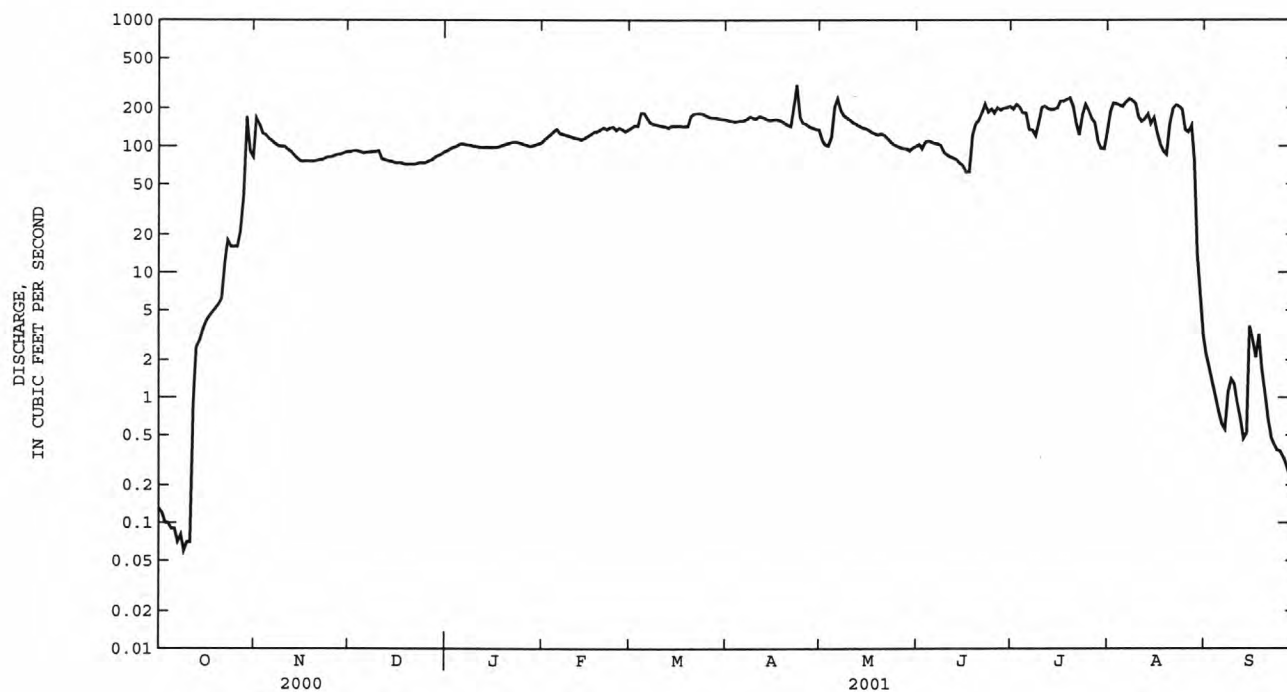
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06843500 REPUBLICAN RIVER AT CAMBRIDGE, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1950 - 2001 a	
ANNUAL TOTAL	42633.06		40633.36		235	
ANNUAL MEAN	116		111		686	
HIGHEST ANNUAL MEAN					110	
LOWEST ANNUAL MEAN					1991	
HIGHEST DAILY MEAN	509	Jul 23	307	Apr 23	8610	Mar 22 1960
LOWEST DAILY MEAN	.06	Oct 9	.06	Oct 9	.06	Oct 9 2000
ANNUAL SEVEN-DAY MINIMUM	.08	Oct 5	.08	Oct 5	.08	Oct 5 2000
MAXIMUM PEAK FLOW			552	Apr 23	*11000	Sep 4 1951
MAXIMUM PEAK STAGE			5.12	Apr 23	9.35	Mar 22 1960
ANNUAL RUNOFF (AC-FT)	84560		80600		170300	
10 PERCENT EXCEEDS	206		195		408	
50 PERCENT EXCEEDS	104		110		165	
90 PERCENT EXCEEDS	.84		1.7		75	

a Since beginning of storage in Harry Strunk Lake (Medicine Creek).

* Stage 7.02 ft.



KANSAS RIVER BASIN

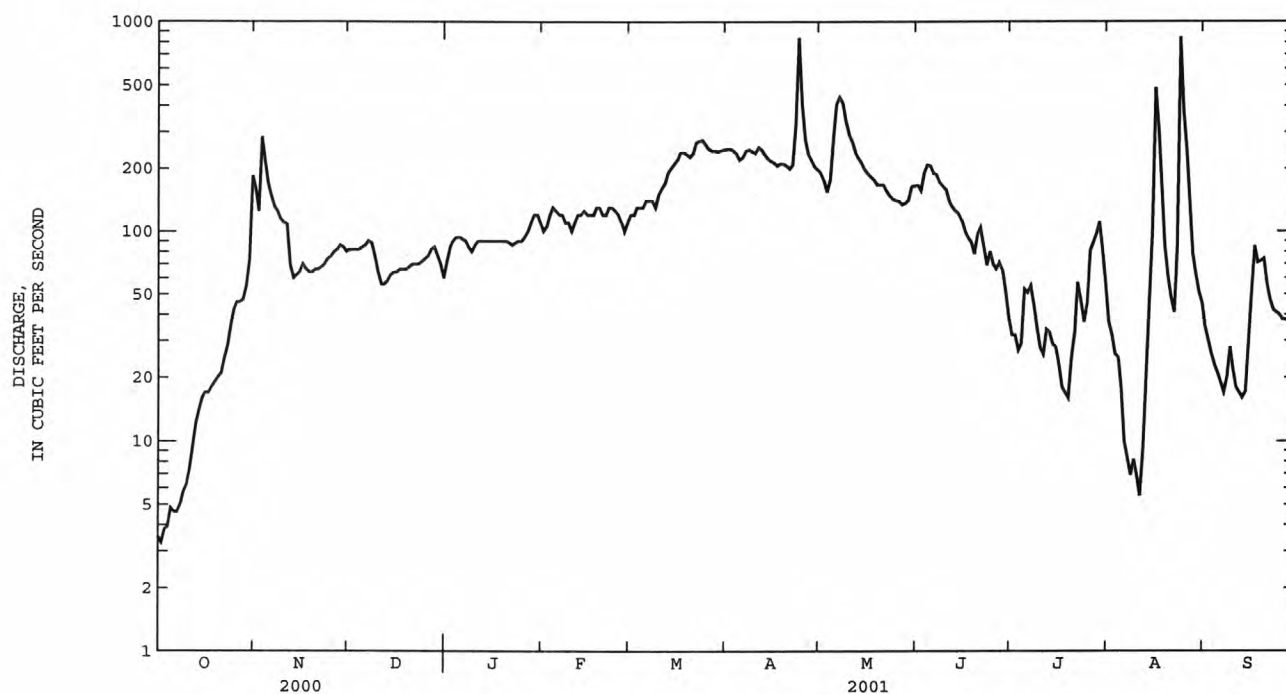
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06844500 REPUBLICAN RIVER NEAR ORLEANS, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1948 - 2001
ANNUAL TOTAL	37076.75	42137.2	254
ANNUAL MEAN	101	115	746
HIGHEST ANNUAL MEAN			78.4
LOWEST ANNUAL MEAN			1951
HIGHEST DAILY MEAN	340 Jul 5	846 Aug 24	18400 Jun 22 1948
LOWEST DAILY MEAN	.01 Sep 15	3.3 Oct 2	.00 Sep 15 1952
ANNUAL SEVEN-DAY MINIMUM	.06 Sep 13	4.1 Oct 1	.00 Sep 15 1952
MAXIMUM PEAK FLOW		1250 Apr 24	40600 Jun 22 1948
MAXIMUM PEAK STAGE		5.42 Apr 24	*12.95 Mar 8 1993
ANNUAL RUNOFF (AC-FT)	73540	83580	184000
10 PERCENT EXCEEDS	217	239	473
50 PERCENT EXCEEDS	78	90	160
90 PERCENT EXCEEDS	5.5	20	45

e Estimated.

* Backwater from ice.



KANSAS RIVER BASIN

06844500 REPUBLICAN RIVER NEAR ORLEANS, NE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969-94, October 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CAC03) (90410)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	
DEC 07...	1230	158	12.9	96	8.4	748	9.0	.5	15.1	43.6	280	24.8	.7	
APR 13...	1300	252	14.0	141	8.6	700	15.0	12.5	15.7	39.8	272	22.5	.7	
JUN 21...	1500	100	7.5	97	8.5	670	28.0	25.0	17.0	35.0	255	20.1	.7	
AUG 14...	1200	30	10.0	131	8.7	508	25.0	24.5	15.8	21.4	195	15.3	.4	
DATE		SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)
DEC 07...	46.6	87.1	.133	.17	2.51	11.1	2.52	.039	.012	.521	.161	.170	2.1	
APR 13...	33.2	76.2	<.041	--	--	--	1.32	--	E.005	.360	.131	.117	1.3	
JUN 21...	37.5	69.0	<.040	--	.730	3.23	.746	.053	.016	.267	.077	.087	1.5	
AUG 14...	31.6	50.5	E.021	--	.562	2.49	.616	.177	.054	.350	.120	.114	.7	
DATE		ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
DEC 07...	--	--	--	--	--	--	123	--	--	--	--	M	--	4.5
APR 13...	--	--	--	--	--	--	119	--	--	--	--	<10	--	4.8
JUN 21...	--	--	--	--	--	--	113	--	--	--	--	10	--	4.2
AUG 14...	11	.28	8.8	147	<.06	97	<.04	<.8	.35	3.7	<10	<.08	12.6	
DATE						MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)			
DEC 07...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 13...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 21...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 14...	4.8	.58	E1.8	<1.0	3	6.32								

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KANSAS RIVER BASIN

06845200 SAPPA CREEK NEAR BEAVER CITY, NE

LOCATION.--Lat 40°02'45", long 99°53'24", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 14, T.1 N., R.23 W., Furnas County, Hydrologic Unit 10250011, on left downstream side of bridge on U.S. Highway 283, 3 mi north of the Kansas-Nebraska State line, and 7 mi southwest of Beaver City.

DRAINAGE AREA.--(REVISED) 1,481 mi², of which an unknown portion is noncontributing.

PERIOD OF RECORD.--October 1936 to September 1972. July to September 2001. Monthly estimates only, October 1936 to April 1937, published in WSP 1310.

REVISED RECORDS.--WSP 1310: 1937 (M) 1939-42 (M) 1947 (M) 1949 (M) WSP 2119: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,157.63 ft above sea level. October 1936 to September 1945 at datum 0.44 ft lower. From September 1945 to September 1972 at site 200 ft downstream at datum 3.00 ft lower. Data collection platform at station.

REMARKS.--Records fair. Diversions above station for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,500 ft³/s June 23, 1966 (gage height, 20.85 ft), from rating curve extended above 4,900 ft³/s; no flow at times in many years.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	2.6	2.5	.66
2	---	---	---	---	---	---	---	---	---	2.6	2.1	.57
3	---	---	---	---	---	---	---	---	---	2.8	1.8	.48
4	---	---	---	---	---	---	---	---	---	2.9	1.4	.35
5	---	---	---	---	---	---	---	---	---	3.1	1.3	.30
6	---	---	---	---	---	---	---	---	---	3.3	1.3	.29
7	---	---	---	---	---	---	---	---	---	3.1	1.2	.38
8	---	---	---	---	---	---	---	---	---	2.9	1.1	.71
9	---	---	---	---	---	---	---	---	---	2.6	.96	.85
10	---	---	---	---	---	---	---	---	---	2.3	.83	.83
11	---	---	---	---	---	---	---	---	---	1.8	.64	1.1
12	---	---	---	---	---	---	---	---	---	2.0	.52	.77
13	---	---	---	---	---	---	---	---	---	1.8	.52	e.66
14	---	---	---	---	---	---	---	---	---	2.0	.53	.55
15	---	---	---	---	---	---	---	---	---	2.2	.89	1.3
16	---	---	---	---	---	---	---	---	---	4.2	.76	1.4
17	---	---	---	---	---	---	---	---	---	3.0	.70	1.4
18	---	---	---	---	---	---	---	---	---	2.5	.96	2.2
19	---	---	---	---	---	---	---	---	---	2.7	.94	2.8
20	---	---	---	---	---	---	---	---	---	2.7	.86	4.2
21	---	---	---	---	---	---	---	---	---	3.4	.65	5.1
22	---	---	---	---	---	---	---	---	---	4.9	1.1	7.2
23	---	---	---	---	---	---	---	---	---	3.7	1.2	5.2
24	---	---	---	---	---	---	---	---	---	2.8	1.4	3.1
25	---	---	---	---	---	---	---	---	---	2.9	1.3	2.9
26	---	---	---	---	---	---	---	---	---	4.2	1.3	1.9
27	---	---	---	---	---	---	---	---	---	3.5	3.4	1.5
28	---	---	---	---	---	---	---	---	---	2.6	1.9	1.6
29	---	---	---	---	---	---	---	---	---	2.9	1.4	1.4
30	---	---	---	---	---	---	---	---	---	2.5	.84	1.2
31	---	---	---	---	---	---	---	---	---	2.8	.73	---
TOTAL	---	---	---	---	---	---	---	---	---	89.3	37.03	52.90
MEAN	---	---	---	---	---	---	---	---	---	2.88	1.19	1.76
MAX	---	---	---	---	---	---	---	---	---	4.9	3.4	7.2
MIN	---	---	---	---	---	---	---	---	---	1.8	.52	.29
AC-FT	---	---	---	---	---	---	---	---	---	177	73	105

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2001, BY WATER YEAR (WY)

	26.9	6.86	5.40	5.04	11.9	22.4	16.0	41.2	132	97.6	49.0	38.4
MEAN	26.9	6.86	5.40	5.04	11.9	22.4	16.0	41.2	132	97.6	49.0	38.4
MAX	454	63.8	35.5	22.5	84.7	359	102	221	557	632	271	277
(WY)	1947	1947	1947	1966	1949	1960	1942	1949	1941	1944	1950	1951
MIN	.000	.000	.000	.000	.000	.010	.017	.39	2.92	.76	.21	.000
(WY)	1939	1939	1939	1940	1957	1957	1956	1956	1955	1970	1955	1939

06845200 SAPPA CREEK NEAR BEAVER CITY, NE--Continued

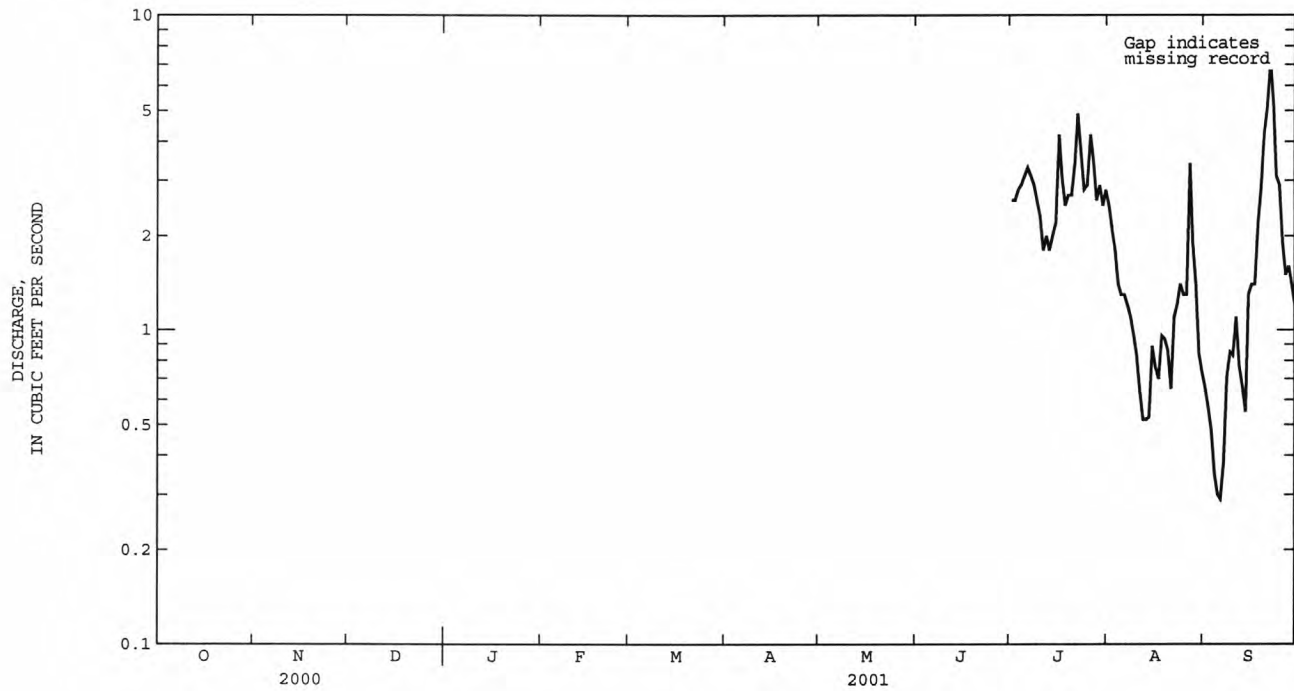
SUMMARY STATISTICS

FOR 2001 WATER YEAR

WATER YEARS 1938 - 1972

ANNUAL MEAN			38.2	
HIGHEST ANNUAL MEAN			107	1941
LOWEST ANNUAL MEAN			2.62	1955
HIGHEST DAILY MEAN	7.2	Sep 22	4700	Jun 24 1966
LOWEST DAILY MEAN	.29	Sep 6	.00	Oct 31 1937
ANNUAL SEVEN-DAY MINIMUM	.43	Sep 1	.00	Aug 20 1938
MAXIMUM PEAK FLOW	8.8	Sep 22	9500	Jun 23 1966
MAXIMUM PEAK STAGE	1.13	Sep 22	20.85	Jun 23 1966
ANNUAL RUNOFF (AC-FT)			27700	
10 PERCENT EXCEEDS	3.5		60	
50 PERCENT EXCEEDS	1.5		5.0	
90 PERCENT EXCEEDS	.56		.00	

e Estimated



KANSAS RIVER BASIN

06846500 BEAVER CREEK AT CEDAR BLUFFS, KS

LOCATION.--Lat 39°59'06", long 100°33'35", in NW ¼ NE ¼ sec.10, T.1 S., R.29 W., Decatur County, Hydrologic Unit 10250014, on right bank at downstream side of bridge on U.S. Highway 83, 0.2 mi north of Cedar Bluffs, 1.0 mi south of Kansas-Nebraska State line, and at mile 107.4.

DRAINAGE AREA.--1,618 mi², of which 294 mi² is probably noncontributing.

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

REVISED RECORDS.--WSP 1510: 1947, 1950-51.

GAGE.--Water-stage recorder. Datum of gage is 2,520.33 ft above 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 fair except those for estimated daily discharges, which are poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in July 1944 reached a stage of 18.16 ft, from floodmark.

EXTREMES 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)
Feb 27	0015	*823	*11.05	No other peak greater than base discharge.			

Minimum discharge, 0.00 ft³/s, on many days, gage height, 2.53 ft.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.78	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	e.02	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	e.65	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	e5.0	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	e3.0	.00	.91	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	e2.0	.00	.01	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	e1.8	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	1.3	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.20	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	5.9
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.87
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	17
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.72
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.72
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.31
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03
22	.00	.00	.00	.00	.00	.00	12	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	e.03	.00	.00	.00	.00	.77	.00	.00
25	.00	.00	.00	.00	e1.0	.00	.00	.00	.00	.59	.00	.00
26	.00	.00	.00	.00	e.03	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00
28	.01	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00
29	6.2	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.01	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	5.3	---	.00	.00	---	.00	---	.00	---	.00	.00	---
MEAN	.37	.026	.000	.000	.038	.45	.40	.030	.000	.044	.000	.85
MAX	6.2	.78	.00	.00	1.0	5.0	12	.91	.00	.77	.00	17
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	23	1.5	.00	.00	2.1	28	24	1.8	.00	2.7	.00	51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2001, BY WATER YEAR (WY)

	MEAN	8.67	2.86	2.45	2.14	3.76	11.5	7.06	23.0	37.9	29.1	15.2	15.7
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	.000
(WY)	1954	1955	1955	1955	1956	1955	1955	1955	1979	1980	1955	1953	

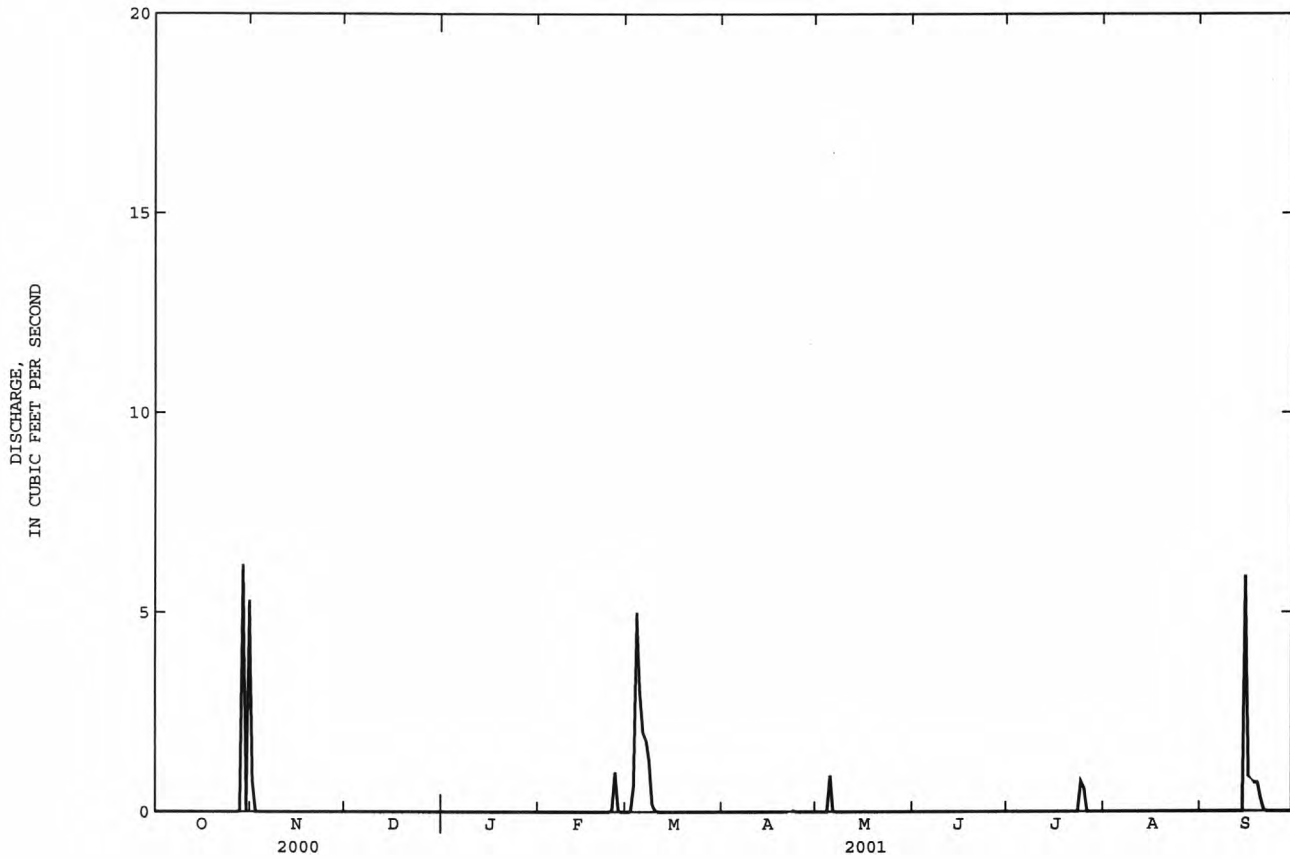
KANSAS RIVER BASIN

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06846500 BEAVER CREEK AT CEDAR BLUFFS, KS--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1946 - 2001
ANNUAL MEAN	.47	.18	13.3
HIGHEST ANNUAL MEAN			106
LOWEST ANNUAL MEAN			.000
HIGHEST DAILY MEAN	6.2 Oct 29	17 Sep 17	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
MAXIMUM PEAK FLOW		127 Sep 17	127 Sep 17 2001
MAXIMUM PEAK STAGE		5.95 Sep 17	18.71 Jun 11 1960
INSTANTANEOUS LOW FLOW		.00 Oct 1	.00 most years
ANNUAL RUNOFF (AC-FT)	342	133	9670
10 PERCENT EXCEEDS	2.0	.00	22
50 PERCENT EXCEEDS	.00	.00	.01
90 PERCENT EXCEEDS	.00	.00	.00

e Estimated



KANSAS RIVER BASIN

06847500 SAPPAL CREEK NEAR STAMFORD, NE

LOCATION.--Lat 40°07'53", long 099°33'15", in NW ¼ NW ¼ sec. 23, T.2 N., R.20 W., Harlan County, Hydrologic Unit 10250011, on left bank 40 ft south of Burlington Northern Inc. track, 500 ft downstream from bridge on county highway, 2 mi east of Stamford, and 6.5 mi upstream from mouth.

DRAINAGE AREA.--3,840 mi², of which about 3,370 mi² contributes directly to surface runoff.

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

REVISED RECORDS.--WSP 1919: 1960. WDR NE-71-1: Calendar year totals. WRD NE-82-1: 1979(M). WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,981.31 ft above sea level. Data collection platform at station.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow affected by irrigation development above station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.82	e1.5	e2.3	e1.9	e3.3	22	43	16	.63	.18	.41
2	.00	.92	e1.5	e2.3	e1.9	e3.3	22	28	18	.63	.22	.21
3	.00	e1.1	e1.5	e2.3	e1.8	e3.6	21	20	24	.42	.28	.05
4	.00	e1.2	e1.5	e2.3	e1.9	e4.5	21	20	25	.56	.31	.04
5	.02	e1.5	e1.6	e2.3	e2.0	e7.0	21	34	22	1.8	.35	.02
6	.00	e1.5	e1.6	e2.3	e2.0	e10	22	39	31	1.1	.26	.04
7	.00	e1.5	e1.6	e2.2	e2.2	e14	24	76	64	.48	.15	.07
8	.03	e1.6	e1.6	e2.2	e2.2	e28	22	58	68	.58	.08	.14
9	.08	e1.6	e1.6	e2.2	e2.1	e40	23	43	67	.73	.05	.11
10	.15	e1.6	e1.6	e2.2	e2.1	e50	23	38	56	.56	.03	.06
11	.16	e1.5	e1.5	e2.2	e2.3	e52	28	34	36	.57	.02	.07
12	.19	e1.5	e1.5	e2.2	e2.3	e52	29	39	31	.39	.08	.07
13	.20	e1.5	e1.5	e2.2	e2.4	e52	27	39	23	.41	.44	.07
14	.17	e1.5	e1.6	e2.1	e2.4	e56	28	32	18	.44	.24	.25
15	.17	e1.5	e1.6	e2.1	e2.4	e60	24	26	15	.43	.37	65
16	.18	e1.5	e1.7	e2.1	e2.1	e64	20	20	12	.31	.32	22
17	.19	e1.5	e1.8	e2.2	e2.2	e72	19	18	12	.26	.23	25
18	.19	e1.5	e1.8	e2.2	e2.5	43	19	16	11	.28	.12	9.7
19	.19	e1.6	e1.8	e2.1	e2.5	39	19	15	8.7	.31	.06	2.8
20	.20	e1.6	e1.7	e1.9	e2.5	37	18	15	5.4	.29	.07	2.2
21	.22	e1.7	e1.7	e1.9	e2.5	39	17	15	4.1	.27	.06	1.3
22	.25	e1.7	e1.9	e1.9	e2.5	41	17	14	4.2	.34	.07	1.1
23	.24	e1.8	e2.0	e2.1	e2.5	36	17	13	4.1	.33	.15	1.1
24	.29	e1.8	e2.1	e2.2	e2.5	34	17	12	4.1	.88	.11	1.6
25	.30	e1.8	e2.3	e2.2	e2.5	30	18	11	3.5	1.2	.02	2.3
26	.23	e1.8	e2.3	e2.2	e2.4	29	18	11	2.4	.97	.04	3.2
27	.33	e1.8	e2.4	e2.0	e2.4	28	18	11	2.0	2.6	.05	2.5
28	.26	e1.7	e2.4	e1.9	e2.4	26	21	10	1.7	3.7	.05	1.8
29	.30	e1.6	e2.4	e1.8	---	24	60	11	1.6	1.8	.05	1.2
30	.35	e1.6	e2.4	e1.7	---	23	57	16	1.1	1.3	.04	1.2
31	.42	---	e2.3	e1.8	---	22	---	16	---	.80	.11	---
TOTAL	5.31	45.84	56.3	65.6	63.4	1022.7	712	793	591.9	25.37	4.61	145.61
MEAN	.17	1.53	1.82	2.12	2.26	33.0	23.7	25.6	19.7	.82	.15	4.85
MAX	.42	1.8	2.4	2.3	2.5	72	60	76	68	3.7	.44	65
MIN	.00	.82	1.5	1.7	1.8	3.3	17	10	1.1	.26	.02	.02
AC-FT	11	91	112	130	126	2030	1410	1570	1170	50	9.1	289

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2001, BY WATER YEAR (WY)

	MEAN	39.3	12.9	10.7	9.25	19.1	34.8	24.8	56.4	146	88.3	56.8	40.2
	MAX	965	145	96.2	71.5	182	486	164	522	878	891	544	708
	(WY)	1947	1947	1966	1966	1966	1960	1960	1949	1947	1951	1950	1951
	MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	(WY)	1954	1955	1955	1955	1956	1956	1956	1956	1981	1977	1955	1959

KANSAS RIVER BASIN

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06847500 SAPPA CREEK NEAR STAMFORD, NE--Continued

SUMMARY STATISTICS

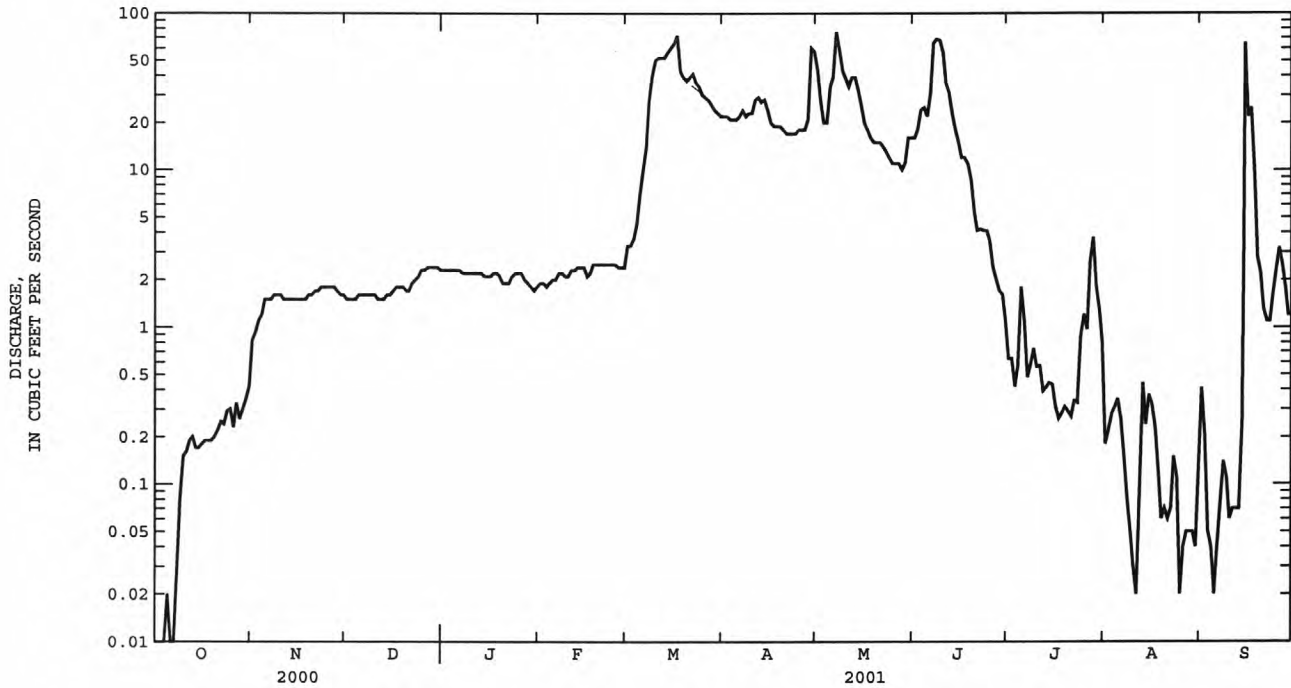
FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1946 - 2001

ANNUAL TOTAL	4633.50	3531.64	
ANNUAL MEAN	12.7	9.68	45.0
MEDIAN OF ANNUAL MEANS			20.4
HIGHEST ANNUAL MEAN			229
LOWEST ANNUAL MEAN			.59
HIGHEST DAILY MEAN	202 Jul 24	76 May 7	16600 Jun 24 1966
LOWEST DAILY MEAN	.00 Aug 23	.00 Oct 1	.00 Sep 12 1953
ANNUAL SEVEN-DAY MINIMUM	.00 Aug 28	.00 Oct 1	.00 Sep 12 1953
MAXIMUM PEAK FLOW		*122 Sep 15	43400 Jun 24 1966
MAXIMUM PEAK STAGE		**7.62 Mar 10	***22.13 Jun 24 1966
ANNUAL RUNOFF (AC-FT)	9190	7010	32600
10 PERCENT EXCEEDS	30	31	80
50 PERCENT EXCEEDS	4.1	2.0	6.9
90 PERCENT EXCEEDS	.00	.12	.00

e Estimated.
 * Stage 5.86 ft.
 ** Backwater from ice.
 *** From floodmark.



KANSAS RIVER BASIN

06848500 PRAIRIE DOG CREEK NEAR WOODRUFF, KS

LOCATION.--Lat 39°59'09", long 099°28'39", in NW ¼, NW ¼, sec.9, T.1 S., R.19 W., Phillips County, Hydrologic Unit 10250015, on left bank at downstream side of bridge on U.S. Highway 383, 1.0 mi south of Kansas-Nebraska State line, 2.5 mi west of Woodruff, and at mile 26.5.

DRAINAGE AREA.--1,007 mi².

PERIOD OF RECORD.--October 1928 to September 1932, October 1944 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 2,016.20 ft above sea level. See WSP 1919 for history of changes prior to Oct. 7, 1955.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow regulated to some extent since 1964 by Keith Sebelius Lake (station 06847950), 48.4 mi upstream, and by irrigation development upstream from station. Satellite telemeter at station. Satellite telemeter station.

COOPERATION.--Records provided by Geological Survey, Kansas District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,810 ft³/s, July 5, gage height, 17.61 ft; minimum discharge, 0.72 ft³/s, Oct. 19, gage height, 2.80 ft.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.94	4.7	5.5	e6.2	e5.8	e42	e8.7	11	20	3.5	5.2	3.9
2	.86	5.2	5.5	e5.5	e5.8	e35	e8.6	11	12	3.4	4.6	3.2
3	3.6	6.1	5.6	e5.8	e6.2	e29	e8.5	11	16	4.1	4.3	3.5
4	2.7	5.3	5.5	e6.2	e7.2	e24	e8.5	36	15	3.4	4.3	3.6
5	.93	4.8	5.6	e6.5	e8.6	e30	9.0	87	12	569	4.2	3.3
6	.82	5.2	5.6	e6.6	e9.3	e45	33	50	11	52	4.2	3.2
7	.84	4.8	5.6	e6.8	e10	116	45	51	9.7	17	4.2	3.3
8	.91	4.6	5.7	e7.0	e12	185	22	39	9.0	9.7	4.0	3.2
9	.91	4.7	e5.4	e6.7	e9.6	162	14	24	8.7	5.8	4.7	3.2
10	.89	4.6	e5.0	e6.6	e9.4	88	13	16	9.2	6.3	6.9	3.1
11	.82	5.9	e5.0	e7.0	e9.2	44	26	13	12	7.5	5.7	3.2
12	1.2	5.6	e5.1	e6.4	e9.1	37	19	13	9.6	7.7	5.4	3.0
13	1.3	e5.3	e5.4	e6.2	e9.1	e30	15	12	7.3	9.6	5.2	2.7
14	.94	e5.2	e5.5	e6.0	e9.2	e26	14	11	6.7	4.6	4.2	2.7
15	.91	e5.2	e5.6	e5.8	e9.2	23	13	11	6.3	6.2	3.5	5.3
16	2.0	e5.2	e5.8	e5.6	e9.2	23	12	10	6.0	8.3	3.0	10
17	1.3	e5.2	6.1	e5.5	e8.6	17	12	10	5.9	6.4	2.9	5.3
18	1.2	e5.3	6.8	e5.4	e8.0	12	11	9.8	5.8	5.9	3.0	11
19	.87	e5.3	7.3	e5.4	e9.6	11	11	9.6	5.3	7.5	2.7	7.3
20	3.3	5.4	7.0	e5.4	e11	10	12	9.6	5.6	11	2.3	7.6
21	2.4	5.3	7.1	e5.7	e12	10	12	10	5.6	10	2.6	3.8
22	1.8	5.5	6.5	e6.0	e12	10	12	11	5.6	6.4	4.0	2.8
23	1.8	5.5	e6.0	e6.2	e13	10	13	9.9	5.7	7.3	15	2.5
24	2.1	5.5	e5.8	e6.3	e17	9.8	12	8.9	5.6	4.1	45	2.3
25	3.3	5.6	e5.4	e6.4	e28	10	11	8.6	4.6	119	24	2.2
26	5.2	5.7	e5.3	e6.4	e50	11	11	8.7	4.6	51	13	2.3
27	8.9	5.6	e5.2	e6.2	e48	12	11	8.6	4.3	135	9.7	2.3
28	6.2	5.6	e5.2	e6.0	e46	11	11	8.8	4.2	43	8.3	2.3
29	5.6	5.6	e5.8	e6.0	---	11	11	9.5	4.0	18	6.7	2.3
30	6.1	5.5	e6.8	e5.9	---	e9.4	11	28	3.9	8.6	5.7	2.3
31	5.2	---	e7.0	e5.8	---	e8.9	---	27	---	6.5	5.0	---
MEAN	2.45	5.30	5.83	6.11	14.4	35.6	14.3	18.8	8.04	37.3	7.21	3.89
MAX	8.9	6.1	7.3	7.0	50	185	45	87	20	569	45	11
MIN	.82	4.6	5.0	5.4	5.8	8.9	8.5	8.6	3.9	3.4	2.3	2.2
AC-FT	150	315	358	376	798	2190	854	1160	478	2300	443	231

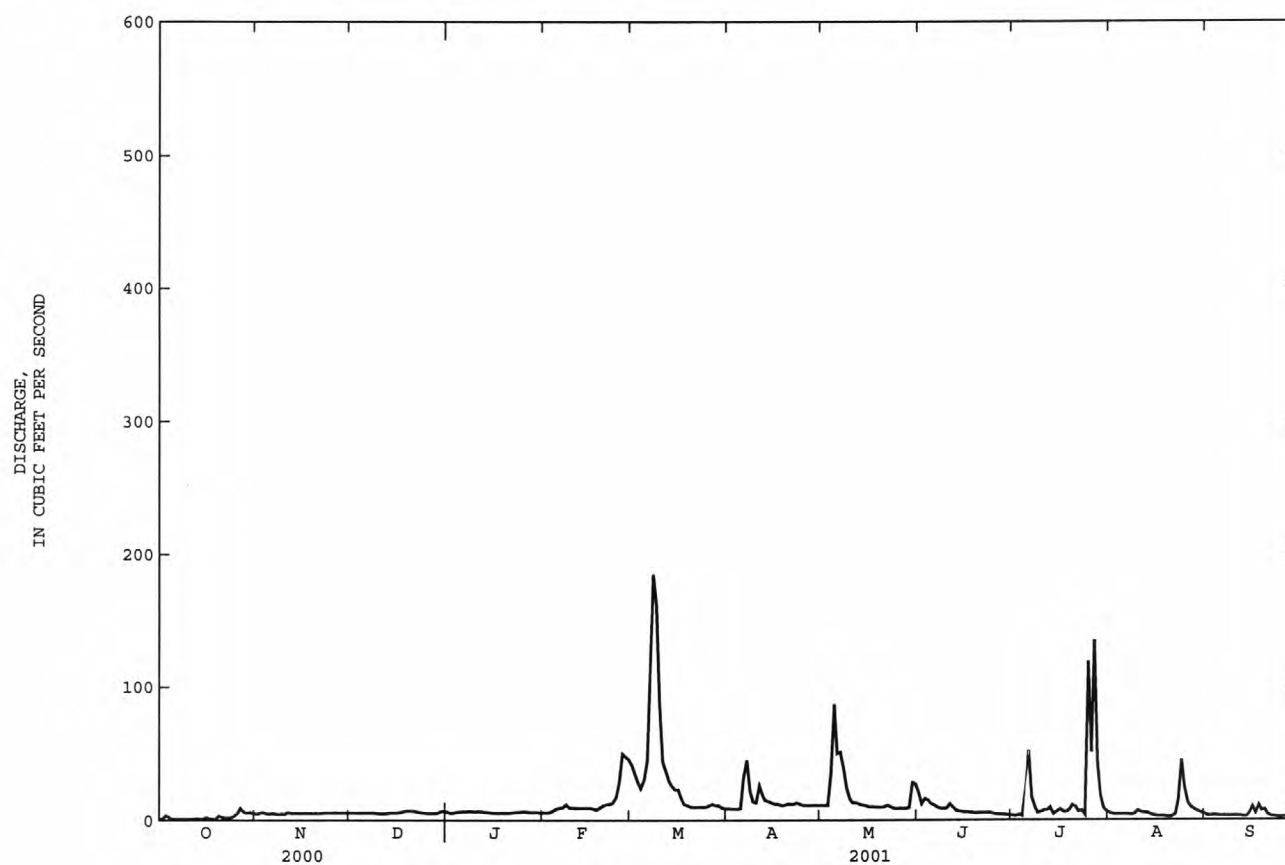
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2001, BY WATER YEAR (WY)

	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
MEAN	19.3	6.56	5.43	5.44	16.1	17.8	10.3	43.1	86.8	62.3	34.7	23.1
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

06848500 PRAIRIE DOG CREEK NEAR WOODRUFF, KS--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1929 - 2001
ANNUAL MEAN	10.2	13.3	26.9
HIGHEST ANNUAL MEAN			208
LOWEST ANNUAL MEAN			.051
HIGHEST DAILY MEAN	426 Jul 23	569 Jul 5	9700 Jun 23 1947
LOWEST DAILY MEAN	.27 Sep 26	.82 Oct 6	.00 Oct 29 1945
ANNUAL SEVEN-DAY MINIMUM	.36 Sep 20	.87 Oct 5	.00 Oct 5 1948
MAXIMUM PEAK FLOW		1810 Jul 5	15000 Jun 23 1947
MAXIMUM PEAK STAGE		17.61 Jul 5	21.04 Jun 23 1947
INSTANTANEOUS LOW FLOW		.72 Oct 19	.00 most years
ANNUAL RUNOFF (AC-FT)	7410	9650	19480
10 PERCENT EXCEEDS	15	24	28
50 PERCENT EXCEEDS	6.0	6.3	4.4
90 PERCENT EXCEEDS	.88	2.9	.00

e Estimated

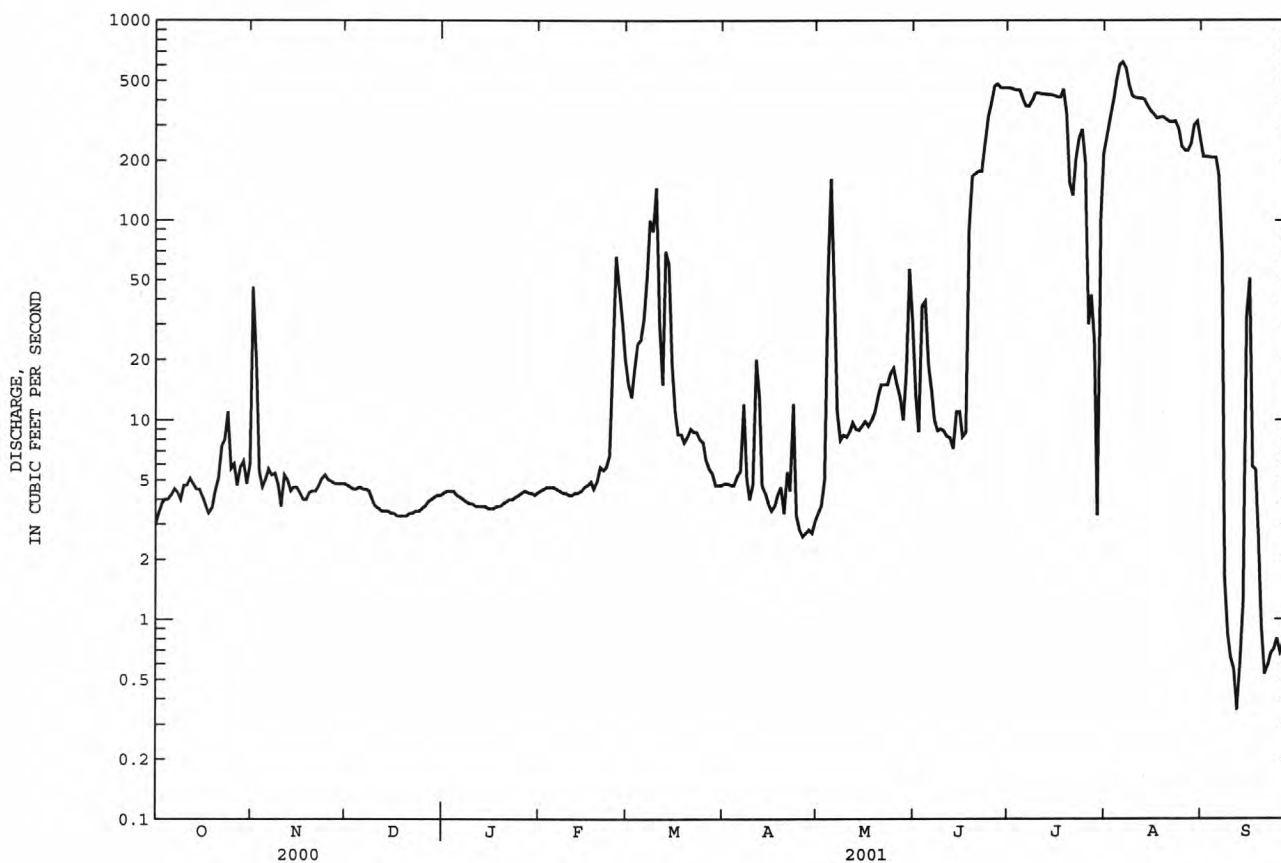


06849500 REPUBLICAN RIVER BELOW HARLAN COUNTY DAM, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1953 - 2001	
ANNUAL TOTAL	61305.6		29104.50		220	
ANNUAL MEAN	168		79.7		690	
HIGHEST ANNUAL MEAN					37.4	
LOWEST ANNUAL MEAN					4210	
HIGHEST DAILY MEAN	1170	Jul 18	621	Aug 6		Nov 2 1965
LOWEST DAILY MEAN	2.1	Sep 16	.35	Sep 12	.29	Jun 3 1996
ANNUAL SEVEN-DAY MINIMUM	2.3	Sep 12	.67	Sep 21	.38	Jun 1 1996
MAXIMUM PEAK FLOW			*628	Aug 6	4320	Jun 25 1957
MAXIMUM PEAK STAGE			*2.93	Aug 6	8.65	Jun 25 1957
ANNUAL RUNOFF (AC-FT)	121600		57730		159400	
10 PERCENT EXCEEDS	599		362		644	
50 PERCENT EXCEEDS	10		5.5		14	
90 PERCENT EXCEEDS	3.4		3.4		4.3	

e Estimated.

* Also occurred on Aug. 7.



LOCATION.--Lat 40°00'15", long 098°07'55", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.32, T.1 N., R.7 W., Nuckolls County, Nebraska, Hydrologic Unit 10250016, on left bank 0.2 mi upstream from Nebraska-Kansas State line and 3.5 mi southwest of Superior, NE.

GAGE.--Water-stage recorder and concrete Parshall flume. Datum of gage is 1,612.46 ft above sea level. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor. Canal diverts from Republican River at Courtland diversion dam in sec.7, T.1 N., R.9 W. Water is used for irrigation in Nebraska and Kansas; figures published herein represent that portion which flows into Kansas.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	83	e75	e75	70	.00	.00	.00	.00	320	152	225
2	49	77	e75	e75	71	.00	.00	.00	.00	324	209	227
3	47	78	e75	e75	72	.00	.00	.00	.00	328	221	226
4	46	93	e75	e75	72	.00	.00	.00	.00	333	232	226
5	47	86	e75	e75	72	.00	.00	.00	.00	337	244	226
6	49	e90	e75	e75	27	.00	.00	.00	.00	299	300	195
7	50	e90	e75	e75	.00	.00	.00	.00	.00	269	325	181
8	49	e90	e75	e75	.00	.00	.00	.00	.00	267	338	180
9	48	e90	e75	e75	.00	.00	.00	.00	.00	268	313	164
10	48	e75	e75	76	.00	.00	.00	.00	.00	294	276	107
11	51	e75	e75	76	.00	.00	.00	.00	.00	310	264	111
12	59	e75	e75	77	.00	.00	.00	.00	.00	309	266	117
13	60	e75	e75	78	.00	.00	.00	.00	.00	309	267	128
14	60	e75	e75	81	.00	.00	.00	.00	18	308	269	156
15	60	e75	e75	81	.00	.00	.00	.00	41	304	269	127
16	59	e75	e75	84	.00	.00	.00	.00	42	302	243	154
17	59	e75	e75	78	.00	.00	.00	.00	43	299	231	199
18	59	e75	e75	e75	.00	.00	.00	.00	72	283	236	196
19	60	e75	e75	e75	.00	.00	.00	.00	85	304	244	168
20	59	e75	e75	e75	.00	.00	.00	.00	97	284	253	146
21	59	e75	e75	e75	.00	.00	.00	.00	166	209	251	126
22	62	e75	e75	e75	.00	.00	.00	.00	191	176	252	113
23	72	e75	e75	e75	.00	.00	.00	.00	186	203	236	104
24	74	e75	e75	e75	.00	.00	.00	.00	182	267	233	98
25	81	e75	e75	75	.00	.00	.00	.00	203	316	239	97
26	85	e75	e75	72	.00	.00	.00	.00	243	312	235	96
27	79	e75	e75	72	.00	.00	.00	.00	286	224	215	95
28	76	e75	e75	72	.00	.00	.00	.00	317	76	188	92
29	84	e75	e75	72	---	.00	.00	.00	320	70	153	89
30	88	e75	e75	71	---	.00	.00	.00	319	68	171	86
31	86	---	e75	71	---	.00	---	.00	---	94	210	---
TOTAL	1917	2352	2325	2336	384.00	0.00	0.00	0.00	2811.00	8066	7535	4455
MEAN	61.8	78.4	75.0	75.4	13.7	.0000	.0000	.0000	93.7	260	243	148
MAX	88	93	75	84	72	.00	.00	.00	320	337	338	227
MIN	46	75	75	71	.00	.00	.00	.00	.00	68	152	86
AC-FT	3800	4670	4610	4630	762	.00	.00	.00	5580	16000	14950	8840

MEAN	28.8	10.9	4.17	4.77	4.03	9.93	13.0	51.1	116	349	280	66.5
MAX	464	212	75.0	84.4	82.9	187	109	237	362	627	570	205
(WY)	1958	1967	2001	1992	1992	2000	2000	1958	1988	1976	1976	1995
MIN	.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

KANSAS RIVER BASIN

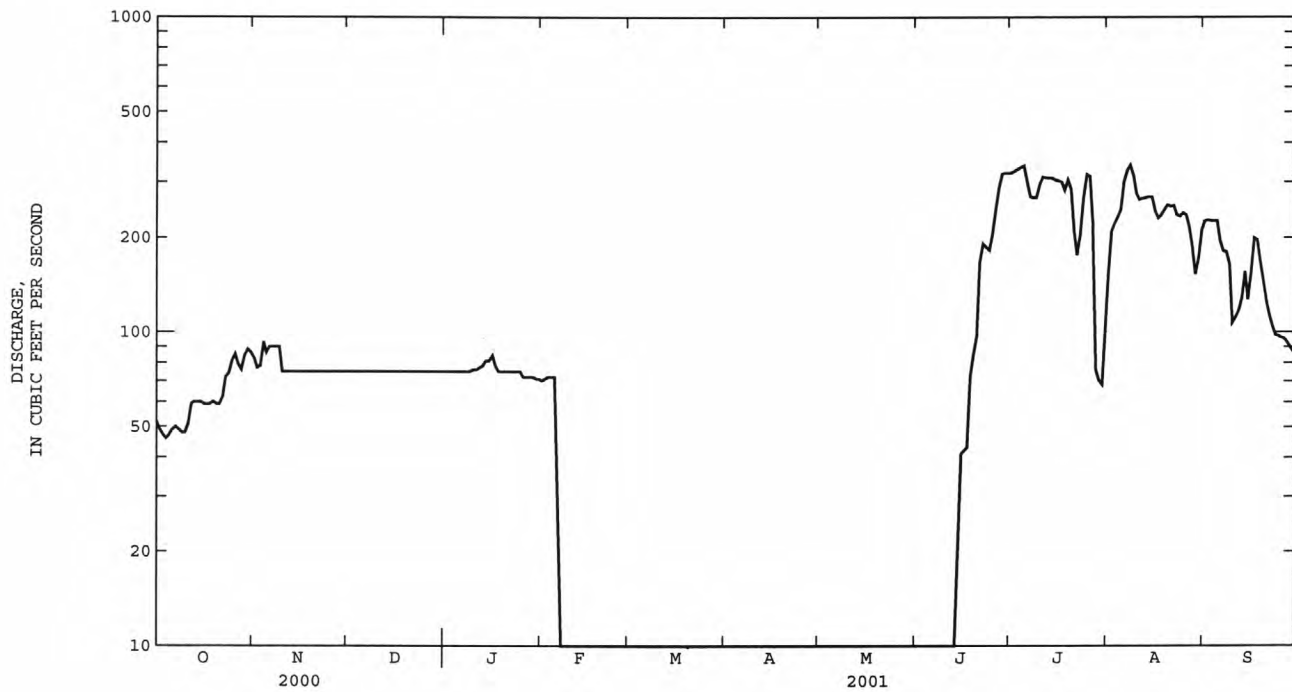
297

06852500 COURTLAND CANAL AT NEBRASKA-KANSAS STATE LINE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1955 - 2001	
ANNUAL TOTAL	56018.82		32181.00		79.1	
ANNUAL MEAN	153		88.2		138	
HIGHEST ANNUAL MEAN					19.5	
LOWEST ANNUAL MEAN					731	
HIGHEST DAILY MEAN	530	Jul 22	338	Aug 8	Oct 22 1957	
LOWEST DAILY MEAN	.00	Jan 1	.00	Feb 7	* .00 Oct 1 1954	
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Feb 7	.00 Oct 1 1954	
MAXIMUM PEAK FLOW			351	Jul 5	781 Sep 2 1973	
MAXIMUM PEAK STAGE			3.11	Jul 5	5.05 Sep 2 1973	
ANNUAL RUNOFF (AC-FT)	111100		63830		57280	
10 PERCENT EXCEEDS	427		265		293	
50 PERCENT EXCEEDS	75		75		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

e Estimated.

* No flow for many days each year.



KANSAS RIVER BASIN

06853020 REPUBLICAN RIVER AT GUIDE ROCK, NE

LOCATION.--Lat 40°03'49", long 98°19'53", in NE ¼ SE ¼ sec.9, T.1 N., R.9 W., Webster County, Hydrologic Unit 10250016, on left downstream bank at Nebraska State Highway 78 bridge, 0.2 mi downstream from Minnie Creek and 0.5 mi south of Guide Rock. Station is 3.1 river miles downstream from station 06853000, Republican River near Guide Rock, previous site, and at mile 176.

DRAINAGE AREA.--22,100 mi², approximately, of which about 14,610 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--August 1950 to current year. August 1950 to September 1984 published as Republican River near Guide Rock (06853000).

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

GAGE.--Water-stage recorder. Datum of gage is 1,616.15 ft above sea level, levels by U.S. Corps of Engineers. Prior to Oct. 1, 1959, at datum 12.98 ft higher, and Oct. 1, 1959 to Nov. 28, 1984, at datum 7.98 ft higher, both at site 3.1 miles upstream. Data collection platform at station

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow affected by irrigation development above station, by regulation of upstream reservoirs, and since Nov. 14, 1952, by storage in Harlan County Lake (station 06849000).

COOPERATION.--Records provided by Nebraska Department of Natural Resources and reviewed by the U.S. Geological Survey.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	2.7	3.9	e5.0	60	e175	176	134	531	34	87	70
2	1.2	2.4	3.8	e5.0	e50	e195	174	132	373	41	50	49
3	1.2	2.4	3.9	e5.0	e54	e220	169	148	431	40	23	44
4	1.2	2.5	3.8	e6.0	e66	280	167	e900	697	36	25	37
5	1.4	2.9	3.8	e6.4	e80	256	169	e2150	472	58	32	23
6	1.2	31	3.8	6.5	e125	289	172	e1850	378	81	82	39
7	1.3	8.6	3.9	6.4	157	324	186	e1000	324	43	103	74
8	1.4	6.4	3.8	6.2	155	569	190	e740	293	27	101	64
9	1.5	5.7	3.9	6.6	e72	1260	179	e540	281	23	69	35
10	1.6	5.4	e4.2	5.8	e78	2240	170	565	253	40	33	25
11	1.6	e5.0	e3.8	5.8	e100	1510	218	394	197	33	41	11
12	1.7	e4.8	e3.0	5.8	e120	697	249	302	159	25	61	8.1
13	1.7	e4.0	e3.2	6.1	e150	1240	245	273	123	40	83	6.9
14	1.8	e4.4	e3.4	5.9	e165	2140	205	244	113	30	89	6.1
15	1.8	e4.6	e4.0	6.0	e130	1200	186	225	79	26	83	9.0
16	2.0	e4.8	e4.2	5.2	e125	638	175	213	62	27	75	9.5
17	1.5	e4.8	e5.0	e5.0	e110	436	164	215	55	23	59	9.4
18	1.5	e4.8	e5.2	e5.2	e105	359	161	201	52	15	39	8.3
19	1.5	e4.8	e4.8	e5.0	e110	315	160	189	43	63	44	6.2
20	1.6	4.9	e5.0	e5.0	e110	287	160	215	59	251	63	5.1
21	1.7	e4.8	e4.8	e5.2	e115	274	158	217	80	277	58	4.7
22	2.3	e4.8	e3.0	e5.2	e120	249	156	195	40	121	34	4.8
23	2.5	4.9	e3.2	5.2	e125	243	183	180	28	65	31	4.6
24	2.7	4.6	e4.0	e30	e135	244	164	172	27	99	110	4.4
25	2.5	4.3	e4.0	e39	e160	228	156	167	28	361	230	4.2
26	2.3	4.3	e5.0	e48	e195	213	149	162	24	446	103	4.1
27	2.0	4.2	e5.6	e50	e185	204	147	160	88	834	63	4.0
28	2.8	4.2	e7.0	e54	e175	199	145	156	98	611	45	3.9
29	3.5	4.2	e7.4	e56	---	194	141	162	56	431	29	3.8
30	2.6	4.0	e6.6	e58	---	188	137	978	37	243	32	3.6
31	2.8	---	e6.0	e58	---	185	---	1220	---	166	76	---
TOTAL	57.7	161.2	137.0	522.5	3332	17051	5211	14399	5481	4610	2053	581.7
MEAN	1.86	5.37	4.42	16.9	119	550	174	464	183	149	66.2	19.4
MAX	3.5	31	7.4	58	195	2240	249	2150	697	834	230	74
MIN	1.2	2.4	3.0	5.0	50	175	137	132	24	15	23	3.6
AC-FT	114	320	272	1040	6610	33820	10340	28560	10870	9140	4070	1150

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2001, BY WATER YEAR (WY)

	204	183	159	153	249	316	365	413	473	514	241	277
MEAN	204	183	159	153	249	316	365	413	473	514	241	277
MAX	2073	1245	819	588	948	1077	2484	2511	3619	4298	1712	3602
(WY)	1966	1994	1994	1952	1952	1952	1960	1960	1951	1951	1962	1951
MIN	1.19	2.41	3.13	4.11	3.86	22.5	6.86	7.04	11.5	23.3	33.8	1.97
(WY)	1992	1992	1992	1992	1992	1992	1992	1989	1992	1970	1971	1991

KANSAS RIVER BASIN

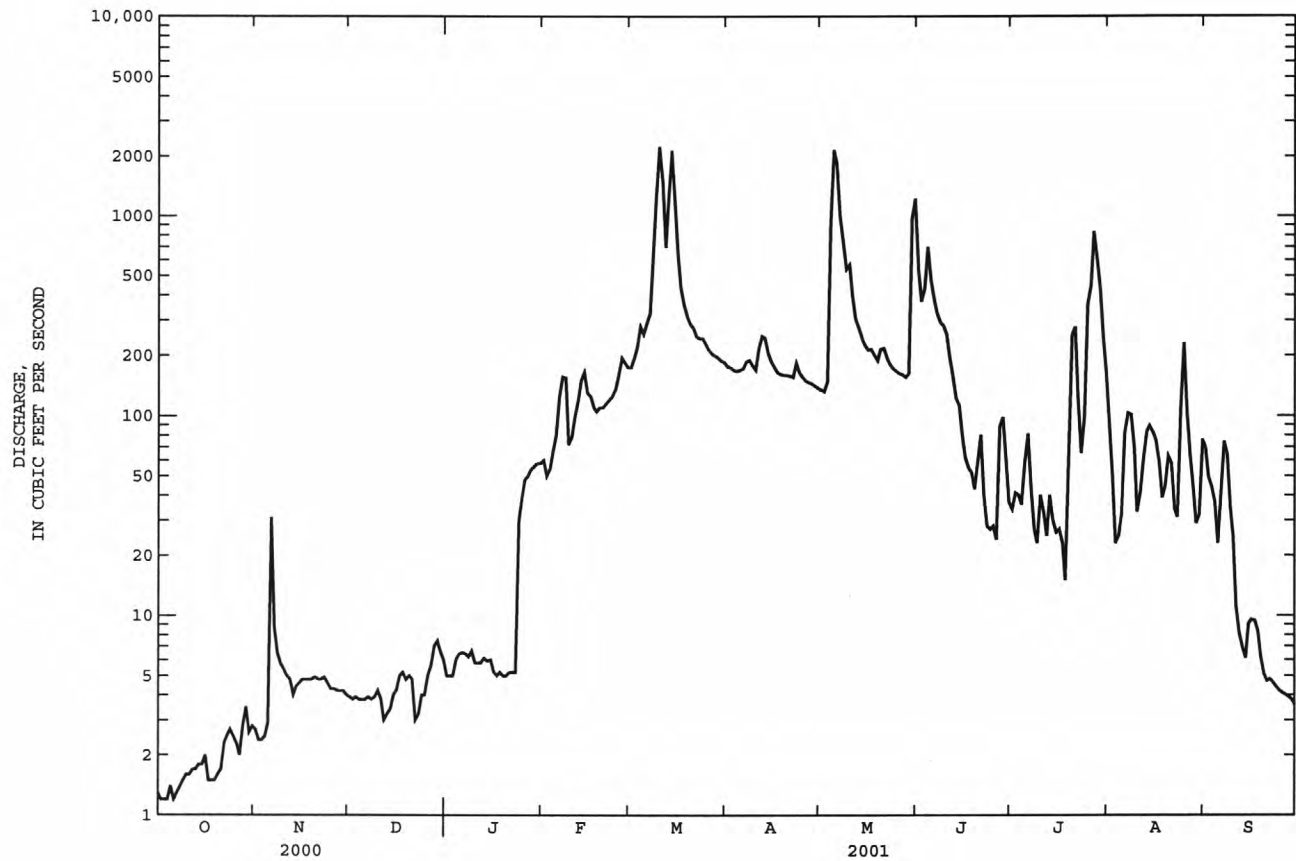
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06853020 REPUBLICAN RIVER AT GUIDE ROCK, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1950 - 2001	
ANNUAL TOTAL	33320.9		53597.1		295	
ANNUAL MEAN	91.0		147		1495	1951
HIGHEST ANNUAL MEAN					52.1	1991
LOWEST ANNUAL MEAN					20900	Jun 16 1957
HIGHEST DAILY MEAN	4800	Jul 5	2240	Mar 10	.10	May 26 1964
LOWEST DAILY MEAN	1.2	Oct 2	1.2	Oct 2	.62	Oct 25 1976
ANNUAL SEVEN-DAY MINIMUM	1.3	Sep 30	1.3	Oct 1	29200	Jun 16 1957
MAXIMUM PEAK FLOW			2560	Mar 10	*20.73	Jun 16 1957
MAXIMUM PEAK STAGE			9.89	Mar 10	213500	
ANNUAL RUNOFF (AC-FT)	66090		106300		680	
10 PERCENT EXCEEDS	146		297		118	
50 PERCENT EXCEEDS	31		50		21	
90 PERCENT EXCEEDS	1.5		3.0			

e Estimated.

* Site and datum then in use.



KANSAS RIVER BASIN

06853500 REPUBLICAN RIVER NEAR HARDY, NE

LOCATION.--Lat 39°59'33", long 97°55'53", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.1, T.1 S., R.6 W., in Kansas, Republic County, Hydrologic Unit 10250016, on right bank at upstream side of county highway bridge, 1.2 mi southwest of Hardy, NE, and at mile 141.2.

DRAINAGE AREA.--22,401 mi², of which about 7,500 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--June 1904 to September 1915 (no winter records), April 1931 to current year. Prior to May 1932, published as "at Bostwick." Records for June 1896 to November 1903 published as "near Superior" in 18th to 22nd Ann. Repts., inclusive, Pt. 4, and WSP 75, 84, and 99, have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 806: Drainage area. WSP 1006: 1941. WSP 1340: 1905(M), 1907-09, 1912, 1914-15, 1931. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 1,501.46 ft above 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). Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stages since at least 1895, that of June 2, 1935, and 17.00 ft June 24, 1947, discharge, 100,000 ft³/s, based on records for upstream stations.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,190 ft³/s, May 5, gage height, 9.12 ft; minimum discharge, 16 ft³/s, Dec. 10, gage height, 1.86 ft.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	34	34	e22	e92	e45	248	155	1120	113	267	173
2	23	33	34	e20	e84	e47	241	154	710	109	184	160
3	23	32	34	e25	e78	e48	244	253	828	114	141	133
4	22	32	35	e31	e82	e48	232	1440	1160	105	108	98
5	26	33	35	e35	e84	e46	228	3830	1080	179	95	83
6	25	44	35	e35	e72	e46	228	3450	824	195	97	73
7	25	75	35	e36	e56	e48	231	1580	629	159	128	76
8	26	58	34	e37	e40	e60	236	966	523	142	145	118
9	27	46	34	e39	e33	405	239	790	465	97	159	117
10	28	41	29	e40	e34	1410	226	851	432	86	139	95
11	28	40	e20	e39	e37	1550	246	851	393	96	128	70
12	28	57	e20	e41	e39	757	291	546	312	88	129	55
13	28	55	e21	e41	e39	621	300	435	269	83	132	49
14	27	62	e20	e39	e34	e2750	288	389	404	87	140	46
15	27	71	e22	e38	e31	2290	248	348	405	96	164	437
16	28	45	e19	e37	e31	1180	224	324	229	112	159	284
17	27	37	e18	e35	e36	758	209	378	201	120	150	154
18	27	38	e20	e31	e42	e567	200	317	183	99	174	130
19	28	42	e19	e28	e46	e464	198	295	153	235	156	114
20	27	39	e19	e28	e50	394	197	929	137	254	146	88
21	28	36	e15	e29	e55	360	193	998	138	291	140	74
22	30	39	e15	e30	e56	340	189	470	157	300	130	69
23	30	38	e20	e33	e55	321	187	373	129	189	107	95
24	33	36	e21	e38	e51	316	202	328	123	144	113	81
25	35	35	e22	e44	e48	308	189	298	114	389	166	70
26	33	35	e18	e46	e45	289	180	267	110	645	273	64
27	31	35	e19	e49	e42	273	174	260	125	1590	194	60
28	36	35	e21	e58	e43	265	168	266	151	1370	131	56
29	40	34	e20	e74	---	261	161	247	182	730	102	53
30	35	34	e22	e84	---	258	156	663	145	521	96	51
31	34	---	e23	e100	---	253	---	1890	---	336	171	---
MEAN	28.6	42.4	24.3	40.7	51.2	541	218	785	394	293	147	108
MAX	40	75	35	100	92	2750	300	3830	1160	1590	273	437
MIN	22	32	15	20	31	45	156	154	110	83	95	46
AC-FT	1760	2520	1490	2500	2850	33280	13000	48280	23470	18000	9050	6400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2001, BY WATER YEAR (WY)

MEAN	278	229	199	190	299	420	445	492	495	520	316	318
MAX	1970	1308	928	636	968	1584	2415	2523	2031	3210	1800	1455
(WY)	1966	1994	1994	1966	1966	1993	1960	1960	1960	1993	1962	1973
MIN	17.2	22.3	24.3	33.7	27.0	66.5	39.1	29.6	46.5	54.3	58.7	15.3
(WY)	1992	1992	2001	1992	1992	1991	1991	1992	1992	1991	1991	1991

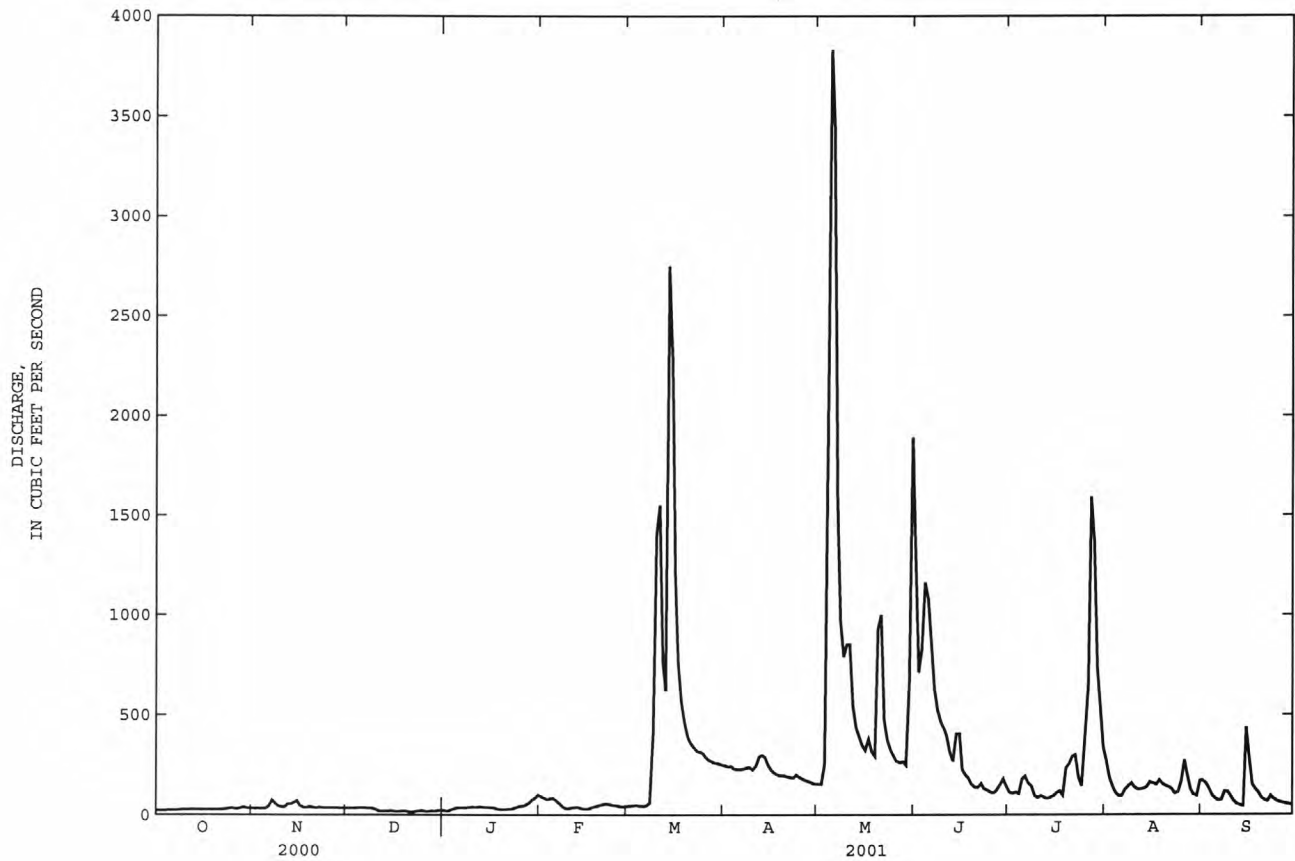
KANSAS RIVER BASIN

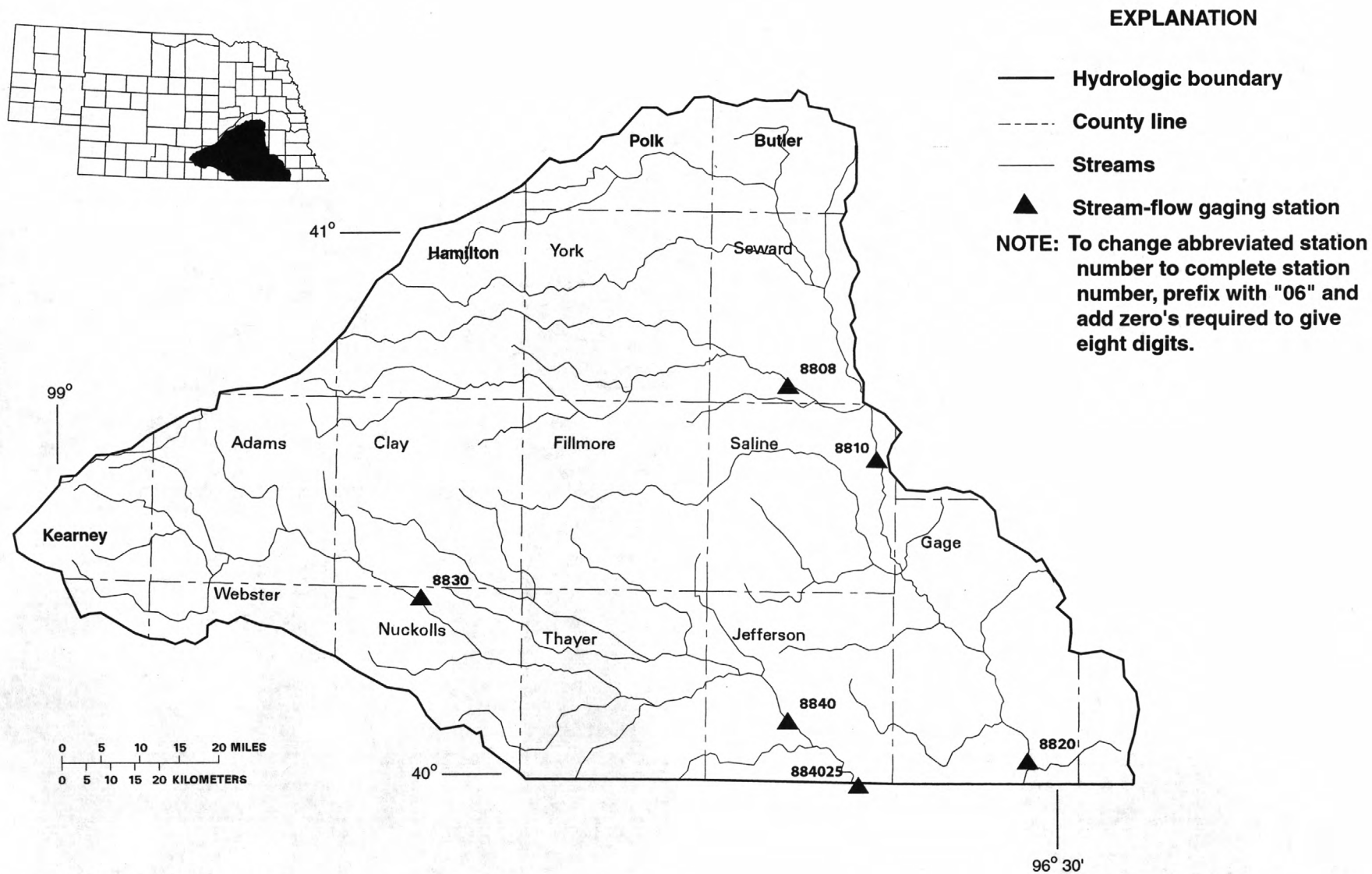
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06853500 REPUBLICAN RIVER NEAR HARDY, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1958 - 2001	
ANNUAL MEAN	130		225		350	
HIGHEST ANNUAL MEAN					800	
LOWEST ANNUAL MEAN					72.5	
HIGHEST DAILY MEAN	3890	Jul 5	3830	May 5	15000	Oct 1 1983
LOWEST DAILY MEAN	15	Dec 21	15	Dec 21	4.8	Aug 3 1991
ANNUAL SEVEN-DAY MINIMUM	18	Dec 16	18	Dec 16	9.0	Jun 26 1992
MAXIMUM PEAK FLOW			4190	May 5	225000	Jun 2 1935
MAXIMUM PEAK STAGE			9.12	May 5	19.40	Jun 2 1935
INSTANTANEOUS LOW FLOW			16	Dec 10	.00	Aug 9 1934
ANNUAL RUNOFF (AC-FT)	94700		162600		253800	
10 PERCENT EXCEEDS	200		467		781	
50 PERCENT EXCEEDS	72		96		170	
90 PERCENT EXCEEDS	25		27		63	

e Estimated.





KANSAS RIVER BASIN
BLUE RIVER BASIN

303

*Station number	Station name	Page
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BIG BLUE RIVER BASIN

8808	West Fork Big Blue River near Dorchester.....	304
8810	Big Blue River near Crete.....	306
8820	Big Blue River at Barneston.....	308

LITTLE BLUE RIVER BASIN

8830	Little Blue River near Deweese.....	310
8840	Little Blue River near Fairbury.....	312
884025	Little Blue River at Hollenberg, KS.....	314

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

KANSAS RIVER BASIN

06880800 WEST FORK BIG BLUE RIVER NEAR DORCHESTER, NE

LOCATION.--Lat 40°43'52", long 097°10'38", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.23, T.9 N., R.2 E., Seward County, Hydrologic Unit 10270203, on right bank 60 ft downstream from bridge on county road, 6.2 mi northwest of Dorchester, and 22.8 mi upstream from mouth.

DRAINAGE AREA.--1,192 mi².

PERIOD OF RECORD.--August 1958 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 1,403.48 ft above sea level. Prior to Apr. 14, 1970, on bridge pier 60 ft upstream at same datum. Data collection platform at station.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Some diversion by pumping for irrigation above station. Natural flow of stream affected by ground-water withdrawals for irrigation and return flow from irrigated areas.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	105	99	e82	100	225	145	101	200	134	92	87
2	74	95	100	e87	111	234	142	101	182	134	90	82
3	72	90	100	e91	121	266	137	122	164	140	92	78
4	73	90	99	e92	110	550	137	147	163	135	91	77
5	79	92	99	e94	e105	799	133	543	166	139	90	77
6	80	100	99	e98	e98	708	132	826	157	134	84	78
7	80	139	99	e98	e100	629	131	1150	147	129	85	78
8	79	233	100	e100	e107	566	126	914	141	123	85	86
9	78	247	99	e100	e112	744	123	557	141	123	91	98
10	78	269	e96	e95	e115	886	122	378	136	122	95	85
11	79	190	e90	e99	e104	926	133	288	133	286	96	79
12	82	138	e84	e106	e111	924	144	222	130	174	95	78
13	79	118	e74	e105	e106	931	165	202	128	143	92	79
14	79	109	e80	e95	e108	831	141	191	1480	137	87	79
15	79	111	e83	e97	e115	688	134	176	1520	136	91	93
16	78	107	e83	e100	e124	596	135	161	1110	142	98	107
17	78	103	e88	104	e120	506	131	150	593	135	104	156
18	80	107	e88	101	e117	379	121	143	367	132	93	251
19	79	103	e81	e100	e130	286	117	138	225	127	85	381
20	80	101	e82	e98	147	241	116	149	187	126	79	403
21	81	103	e81	e95	119	219	116	144	178	128	82	319
22	83	101	e75	e93	122	206	115	149	167	124	81	330
23	85	102	e79	e93	122	190	112	144	160	126	80	284
24	86	102	e81	e96	175	172	109	136	151	125	87	e314
25	91	99	e81	e97	257	161	107	131	146	116	90	347
26	89	99	e80	102	265	161	105	128	142	114	90	290
27	90	99	e82	e104	230	153	108	125	140	121	84	197
28	92	99	e87	e100	191	150	122	123	137	119	82	151
29	101	98	e82	e100	---	150	110	122	134	115	82	129
30	108	99	e78	105	---	151	103	161	134	111	89	115
31	110	---	e77	101	---	149	---	207	---	97	86	---
TOTAL	2574	3648	2706	3028	3742	13777	3772	8229	8959	4147	2748	5008
MEAN	83.0	122	87.3	97.7	134	444	126	265	299	134	88.6	167
MAX	110	269	100	106	265	931	165	1150	1520	286	104	403
MIN	72	90	74	82	98	149	103	101	128	97	79	77
AC-FT	5110	7240	5370	6010	7420	27330	7480	16320	17770	8230	5450	9930

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2001, BY WATER YEAR (WY)

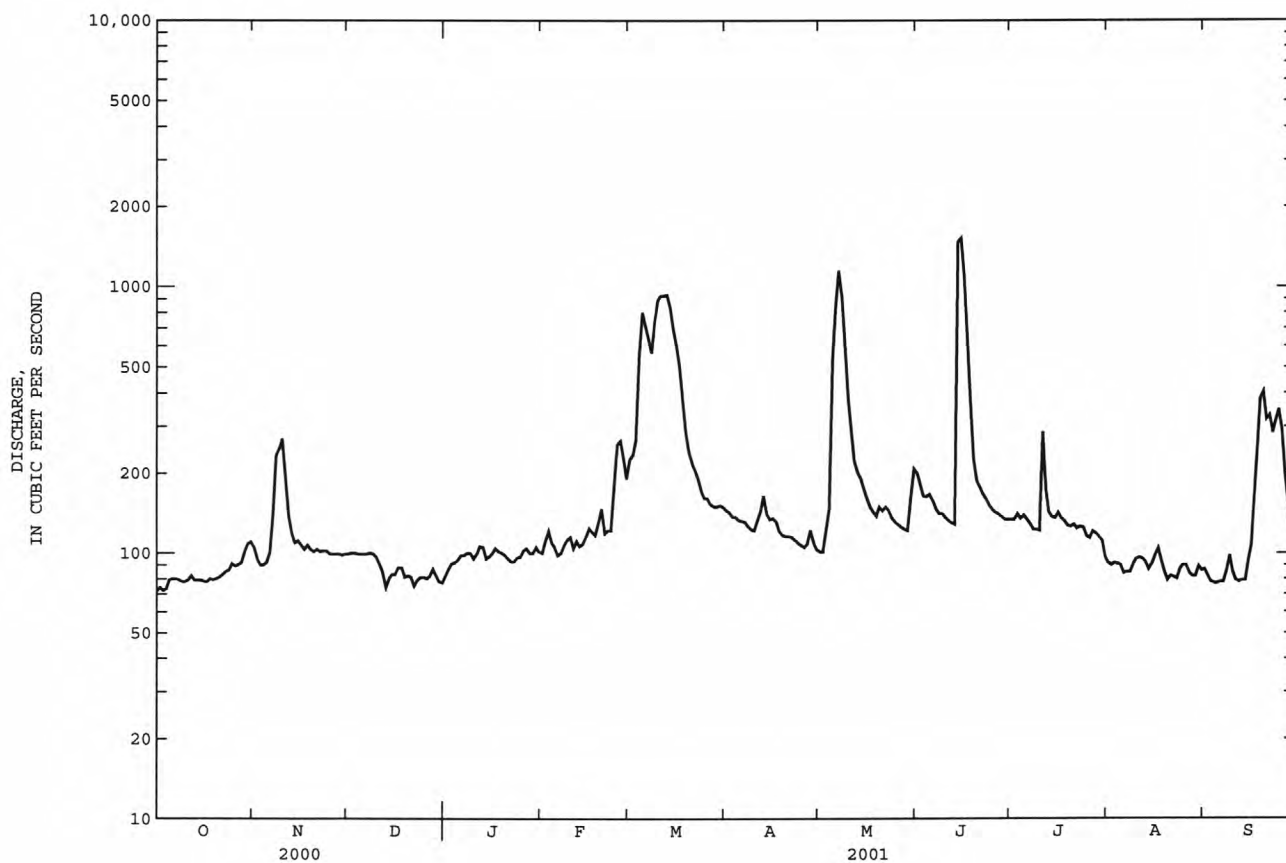
	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
MEAN	118	82.5	69.9	74.6	143	309	174	265	363	333	191	154
MAX	812	224	202	377	671	1762	887	1147	1749	1395	480	855
(WY)	1974	1997	1998	1973	1984	1993	1984	1984	1967	1986	1993	1989
MIN	35.7	33.6	26.4	25.4	40.1	41.6	50.0	60.4	43.1	46.7	34.8	33.1
(WY)	1982	1981	1977	1977	1979	1981	1981	1989	1981	1980	1976	1976

06880800 WEST FORK BIG BLUE RIVER NEAR DORCHESTER, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1958 - 2001	
ANNUAL TOTAL	62309		62338		190	
ANNUAL MEAN	170		171		441	1984
HIGHEST ANNUAL MEAN					54.4	1976
LOWEST ANNUAL MEAN					11100	Mar 11 1993
HIGHEST DAILY MEAN	3840	Jul 5	1520	Jun 15	12	Dec 31 1976
LOWEST DAILY MEAN	70	Sep 19	72	Oct 1	17	Jul 11 1976
ANNUAL SEVEN-DAY MINIMUM	72	Sep 13	76	Oct 1	*12400	Mar 11 1993
MAXIMUM PEAK FLOW			2140		22.62	Jul 1 1986
MAXIMUM PEAK STAGE			12.27		137400	
ANNUAL RUNOFF (AC-FT)	123600		123600		317	
10 PERCENT EXCEEDS	204		285		85	
50 PERCENT EXCEEDS	110		111		47	
90 PERCENT EXCEEDS	79		80			

e Estimated.

* Stage 21.71 ft.



KANSAS RIVER BASIN

06881000 BIG BLUE RIVER NEAR CRETE, NE

LOCATION.--Lat 40°35'47", long 096°57'33", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.3, T.7 N., R.4 E., Saline County, Hydrologic Unit 10270202, on right bank near downstream side of county road bridge, 1.8 mi south of Missouri Pacific Railroad station in Crete, 3.3 mi downstream from Walnut Creek, 3.6 mi upstream from Squaw Creek, and at mile 167.

DRAINAGE AREA.--2,710 mi².

PERIOD OF RECORD.--March 1945 to current year. Prior to Oct. 1, 1953, discharge published only for stages above 12.0 ft because of variable backwater from dam downstream until 1952 and diurnal fluctuation from powerplant upstream in 1952-53.

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

GAGE.--Water-stage recorder. Datum of gage is 1,311.7 ft above sea level. Prior to Jan. 20, 1954, nonrecording gage and Jan. 21, 1954 to Mar. 27, 1986, recording gage on right bank at downstream side of county road bridge at present datum. Mar. 28, 1986 to May 11, 1988 at temporary location, on right bank 250 ft downstream from bridge at present datum. Data collection platform at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	121	185	183	e155	186	e350	289	206	548	254	160	146
2	119	176	177	e155	e165	450	283	204	442	249	144	143
3	119	165	176	e150	e135	500	312	420	410	245	132	136
4	118	157	176	e155	e145	881	319	443	363	240	124	131
5	125	155	171	166	e150	1610	277	1510	353	234	119	130
6	125	167	168	174	e165	1990	267	1650	335	236	124	131
7	126	166	187	180	e180	1760	261	1690	313	226	119	150
8	124	205	185	183	e195	1610	254	1770	298	213	110	190
9	124	312	180	187	e225	1550	249	1300	284	202	108	160
10	123	338	167	185	e270	1800	243	847	280	202	107	167
11	123	357	e160	191	e300	1890	253	597	285	864	109	155
12	126	277	e150	197	e250	1700	254	482	285	671	109	146
13	130	221	e160	206	e235	1560	278	399	332	347	111	145
14	129	205	e165	210	e215	1480	319	362	3800	317	113	144
15	126	188	e165	220	e200	1490	320	337	4670	320	124	160
16	126	197	e170	204	e185	1320	296	314	2710	313	126	164
17	124	165	e170	199	e180	1090	278	289	1290	294	133	185
18	124	189	e170	199	e180	834	263	268	752	306	141	218
19	126	201	e175	e170	e175	676	247	256	548	283	133	310
20	125	165	e175	e150	e175	558	239	333	439	258	133	427
21	124	196	e175	e135	e180	498	236	339	426	243	127	444
22	127	184	e170	e140	e175	463	240	285	366	231	121	375
23	129	182	e170	e145	e175	432	244	276	338	214	121	343
24	135	182	e170	e150	e185	402	231	279	315	212	120	478
25	140	184	e165	e155	e185	374	226	285	297	218	122	574
26	148	177	e165	e150	e190	345	222	266	286	200	125	406
27	149	175	e165	e150	e220	328	220	251	278	196	135	354
28	153	182	e160	e145	e280	314	218	244	271	216	128	280
29	154	178	e160	e140	---	305	226	241	266	199	130	238
30	168	173	e160	e150	---	296	214	362	259	191	135	214
31	177	---	e160	187	---	295	---	527	---	183	142	---
TOTAL	4087	6004	5250	5283	5501	29151	7778	17032	21839	8577	3885	7244
MEAN	132	200	169	170	196	940	259	549	728	277	125	241
MAX	177	357	187	220	300	1990	320	1770	4670	864	160	574
MIN	118	155	150	135	135	295	214	204	259	183	107	130
AC-FT	8110	11910	10410	10480	10910	57820	15430	33780	43320	17010	7710	14370

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2001, BY WATER YEAR (WY)

	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
MEAN	237	159	134	144	308	698	405	562	933	679	342	315
MAX	1864	439	390	865	1576	3968	2257	2339	5808	4739	1048	2065
(WY)	1974	1974	1998	1973	1984	1993	1984	1984	1967	1986	1987	1989
MIN	46.5	41.1	60.3	52.2	66.8	86.3	92.2	84.5	70.7	48.6	28.4	51.2
(WY)	1957	1957	1977	1978	1977	1977	1967	1967	1981	1970	1955	1976

KANSAS RIVER BASIN

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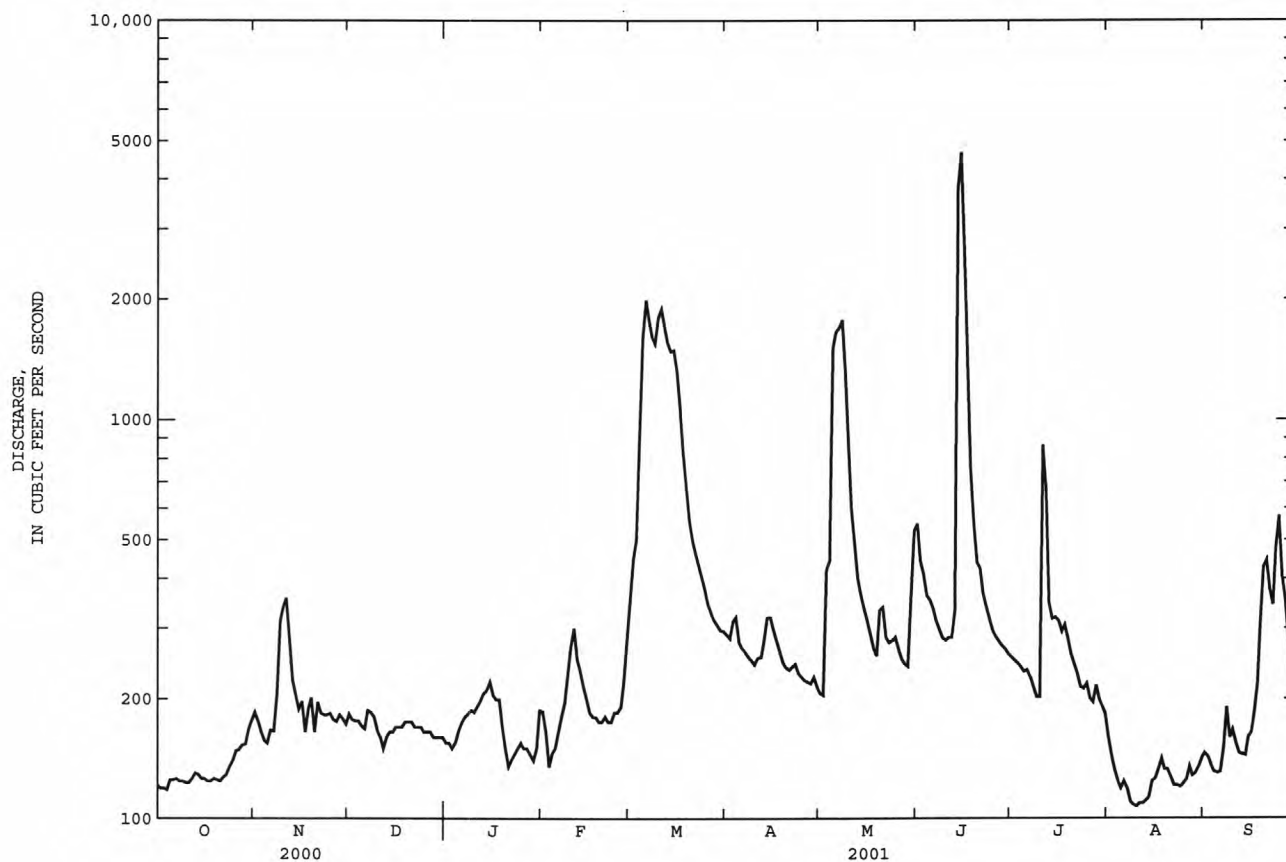
06881000 BIG BLUE RIVER NEAR CRETE, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1954 - 2001	
ANNUAL TOTAL	105662		121631		410	
ANNUAL MEAN	289		333		1030	1984
HIGHEST ANNUAL MEAN					96.6	1976
LOWEST ANNUAL MEAN					21400	Jun 19 1957
HIGHEST DAILY MEAN	4560	Jul 6	4670	Jun 15	6.0	Aug 1 1980
LOWEST DAILY MEAN	118	Jun 18	107	Aug 10	11	Jul 12 1976
ANNUAL SEVEN-DAY MINIMUM	120	Sep 13	110	Aug 8	*27600	Jul 10 1950
MAXIMUM PEAK FLOW			5530	Jun 14	**29.86	Jul 3 1986
MAXIMUM PEAK STAGE			21.48	Jun 14		
ANNUAL RUNOFF (AC-FT)	209600		241300		297000	
10 PERCENT EXCEEDS	323		499		744	
50 PERCENT EXCEEDS	218		200		162	
90 PERCENT EXCEEDS	126		126		79	

e Estimated.

* Stage 28.74 ft.

** From floodmark.



KANSAS RIVER BASIN

06882000 BIG BLUE RIVER AT BARNESTON, NE

LOCATION.--Lat 40°02'40", long 096°35'12", in NE ¼ NW ¼ sec.24, T.1 N., R.7 E., Gage County, Hydrologic Unit 10270205, on right bank at right downstream end of bridge on State Highway 8, 0.6 mi southwest of Barneston, 1.3 mi upstream from Plum Creek, and 4.3 mi upstream from Nebraska-Kansas State line.

DRAINAGE AREA.--4,447 mi², of which about 4,370 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--May 1932 to current year.

REVISED RECORDS.--WSP 896: 1932, 1935. WSP 1919: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,162.2 ft above sea level. Prior to June 9, 1941, water-stage recorder at site 0.3 mi downstream at datum 1.56 ft higher. June 9 to Nov. 17, 1941, nonrecording gage and Nov. 18, 1941 to Sept. 30, 1979, water-stage recorder at site 0.7 mi upstream at datum 2.0 ft higher. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor. Low flow regulated by dam at unused powerplant 0.7 mi upstream. No large tributaries between station and Nebraska-Kansas State line. Some pump diversions for irrigation above station. Natural flow of stream affected by ground-water withdrawals for irrigation and return flow from irrigated areas.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	159	248	265	e245	e310	1350	804	389	4150	521	576	205
2	159	247	263	e250	e310	1160	780	372	2540	502	496	211
3	158	236	278	e270	e290	956	759	559	2270	481	413	218
4	155	226	272	e280	e290	943	743	1200	5150	457	355	206
5	170	225	261	e290	e300	1090	786	7460	8810	440	322	195
6	169	249	256	e290	e310	1910	779	10500	6600	411	308	195
7	162	231	282	e280	e320	2620	723	8010	3200	395	266	205
8	158	220	276	e280	e330	2560	668	5210	1960	383	229	362
9	162	215	e270	e290	e320	3490	1460	3570	1330	370	220	509
10	164	249	e270	e290	e290	4770	1390	2660	1030	366	219	534
11	166	349	e250	e300	e370	4750	1370	1830	849	389	209	312
12	168	399	e220	e310	e430	7970	1940	1350	721	1980	211	269
13	167	394	e240	e310	e450	8740	1140	1100	677	1660	293	239
14	176	324	e240	e300	e460	7780	905	967	5710	960	305	211
15	184	276	e245	e300	e470	5580	1020	823	10700	688	261	1640
16	179	263	e240	e290	e480	3550	891	724	11700	657	268	1960
17	173	223	e245	e280	e490	2480	759	660	10200	952	314	13200
18	166	220	e245	e270	e510	1790	676	603	5890	603	472	6090
19	164	249	e240	e250	e520	1360	634	571	3950	1280	315	3180
20	160	248	e240	e260	e540	1120	601	3310	3300	1250	282	2060
21	160	271	e235	e270	e600	988	573	9650	2310	776	266	1440
22	171	294	e235	e270	e660	905	537	6770	1680	614	252	1140
23	175	242	e235	e280	810	837	532	2920	1210	526	266	2130
24	184	270	e230	e280	2690	778	618	1610	991	481	432	1560
25	207	277	e230	e290	3580	725	547	1120	840	1010	342	1010
26	211	271	e230	e290	2790	674	482	861	734	996	280	953
27	204	267	e235	e300	2380	672	447	718	662	1020	257	876
28	207	262	e235	e310	1470	678	418	626	615	6090	237	795
29	215	258	e235	e310	---	757	398	570	577	2370	229	698
30	230	263	e240	e320	---	843	388	2080	546	1060	216	531
31	226	---	e240	e320	---	841	---	7530	---	714	209	---
TOTAL	5509	7966	7678	8875	22770	74667	23768	86323	100902	30402	9320	43134
MEAN	178	266	248	286	813	2409	792	2785	3363	981	301	1438
MAX	230	399	282	320	3580	8740	1940	10500	11700	6090	576	13200
MIN	155	215	220	245	290	672	388	372	546	366	209	195
AC-FT	10930	15800	15230	17600	45160	148100	47140	171200	200100	60300	18490	85560

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 2001, BY WATER YEAR (WY)

	MEAN	548	312	241	290	651	1384	872	1286	2087	1363	708	716
MAX	7451	1526	851	1596	2876	10560	5280	5207	10460	12270	5227	3420	
(WY)	1974	1999	1998	1973	1984	1979	1984	1995	1951	1993	1954	1989	
MIN	61.5	77.5	87.4	67.6	116	137	132	96.0	69.3	30.7	21.1	50.6	
(WY)	1941	1937	1977	1937	1940	1968	1934	1934	1934	1934	1934	1939	

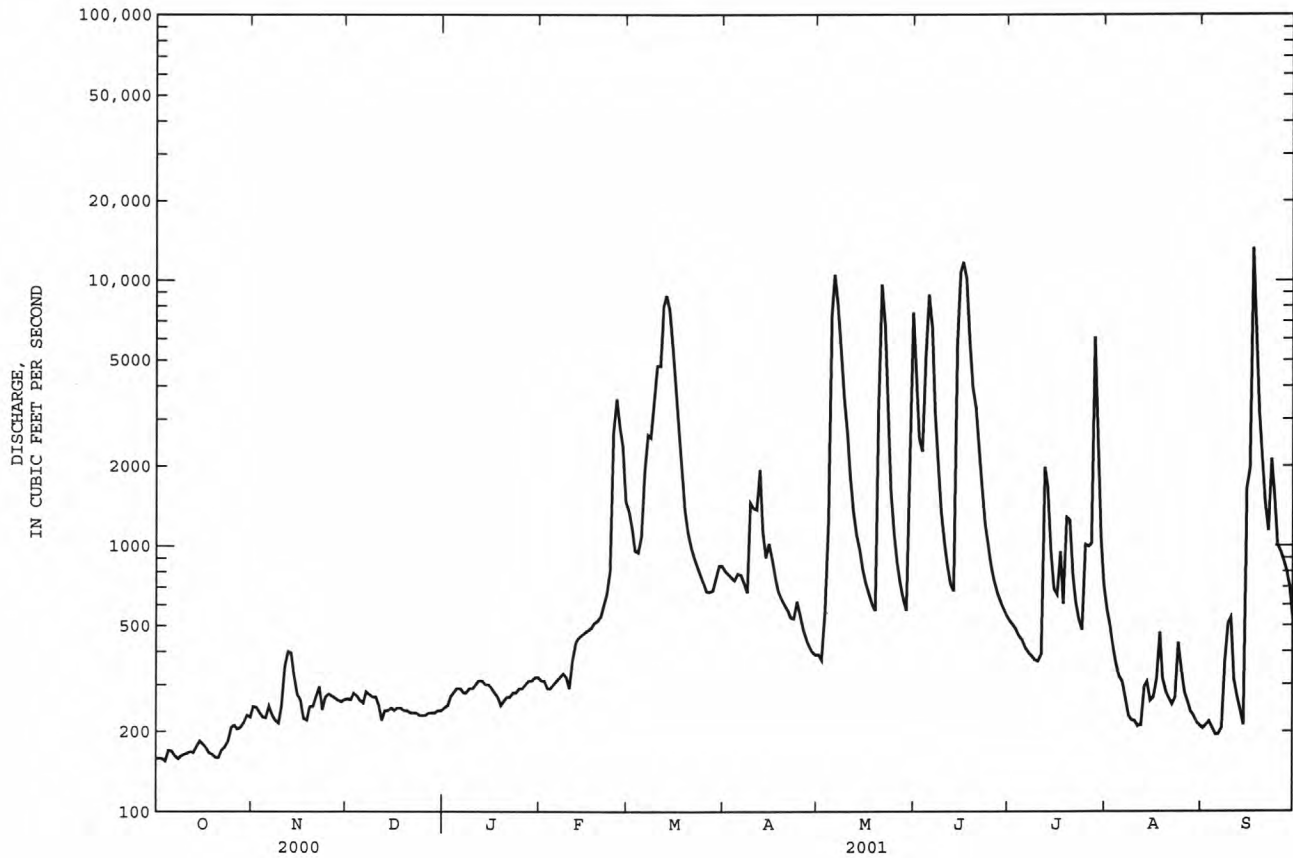
KANSAS RIVER BASIN

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06882000 BIG BLUE RIVER AT BARNESTON, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1933 - 2001	
ANNUAL TOTAL	151549		421314		872	
ANNUAL MEAN	414		1154		2781	
HIGHEST ANNUAL MEAN					115	
LOWEST ANNUAL MEAN					1993	
HIGHEST DAILY MEAN	6270	Jul 4	13200	Sep 17	50000	Jun 9 1941
LOWEST DAILY MEAN	89	Aug 17	155	Oct 4	1.0	Nov 30 1945
ANNUAL SEVEN-DAY MINIMUM	104	Aug 12	162	Oct 2	15	Aug 3 1934
MAXIMUM PEAK FLOW			15800	Sep 17	57700	Jun 9 1941
MAXIMUM PEAK STAGE			18.12	Sep 17	34.30	Jun 9 1941
ANNUAL RUNOFF (AC-FT)	300600		835700		631600	
10 PERCENT EXCEEDS	444		2730		1800	
50 PERCENT EXCEEDS	289		413		281	
90 PERCENT EXCEEDS	164		211		104	

e Estimated.



KANSAS RIVER BASIN

06883000 LITTLE BLUE RIVER NEAR DEWEESE, NE

LOCATION.--Lat 40°19'58", long 98°04'00", in SW ¼ NW ¼ sec.12, T.4 N., R.7 W., Nuckolls County, Hydrologic Unit 10270206, on right bank 10 ft downstream from bridge on State Highway 14, 1 mi upstream from Walnut Creek, 3.2 mi southeast of Deweese, 6 mi northwest of Angus, and at mile 122.57.

DRAINAGE AREA.--984 mi².

PERIOD OF RECORD.--February 1953 to September 1972, October 1974 to current year.

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

GAGE.--Water-stage recorder and peak-stage indicator gage. Datum of gage is 1,632.67 ft above sea level. 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. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow affected by irrigation development above station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	71	73	e54	70	e110	100	104	308	80	46	143
2	55	67	71	e56	e58	e120	98	103	198	76	36	102
3	55	64	72	e56	e54	154	96	116	207	73	34	65
4	55	64	73	e58	76	166	114	251	269	69	36	45
5	62	98	72	e60	77	178	131	1930	323	64	33	40
6	58	498	72	e64	97	173	144	1300	228	59	34	38
7	57	362	74	e70	107	214	141	661	171	67	39	42
8	57	245	72	78	92	474	104	392	147	62	34	46
9	59	135	73	73	e86	1420	106	294	137	57	35	43
10	61	103	66	74	e76	2750	99	243	126	89	34	41
11	62	90	e64	79	e90	1930	138	202	120	106	28	40
12	63	86	e54	76	e100	1020	273	181	115	79	26	40
13	64	83	e56	82	e104	1810	217	184	113	70	24	42
14	64	80	e58	84	80	3360	155	182	245	62	20	43
15	64	78	e58	79	88	1880	127	175	189	57	34	55
16	65	77	e56	77	76	970	107	173	149	54	47	115
17	65	76	e56	74	73	495	94	162	145	52	48	163
18	65	73	e58	74	79	334	92	146	162	60	54	139
19	66	73	e58	66	73	272	94	127	133	70	42	114
20	67	72	e56	e62	71	221	97	138	126	114	28	102
21	67	74	e56	e66	68	184	100	126	124	118	21	93
22	74	74	e54	e70	70	158	100	110	120	80	16	77
23	78	74	e56	77	74	144	121	107	116	78	16	64
24	75	74	e58	76	e74	e140	102	103	114	64	46	52
25	78	74	e56	75	e72	e135	108	104	110	64	51	51
26	74	74	e56	79	e78	e130	106	110	106	66	45	51
27	71	73	e58	75	e82	120	107	107	102	78	41	53
28	78	74	e58	75	e98	114	108	105	96	115	28	54
29	82	71	e60	79	---	110	104	107	89	120	20	54
30	76	72	e56	82	---	106	104	260	85	103	40	53
31	74	---	e56	74	---	104	---	349	---	69	183	---
TOTAL	2046	3229	1916	2224	2243	19496	3587	8652	4673	2375	1219	2060
MEAN	66.0	108	61.8	71.7	80.1	629	120	279	156	76.6	39.3	68.7
MAX	82	498	74	84	107	3360	273	1930	323	120	183	163
MIN	55	64	54	54	54	104	92	103	85	52	16	38
AC-FT	4060	6400	3800	4410	4450	38670	7110	17160	9270	4710	2420	4090

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2001, BY WATER YEAR (WY)

	MEAN	81.5	69.5	64.9	68.7	94.6	198	130	250	265	272	150	130
MAX	347	193	115	207	245	1140	762	1348	1145	2655	883	911	
(WY)	1966	1997	1998	1984	1982	1993	1984	1965	1957	1993	1985	1969	
MIN	29.1	39.3	41.7	44.6	46.7	56.5	59.3	50.5	36.0	15.6	14.0	10.7	
(WY)	1992	1992	1981	1978	1981	1981	1972	1992	1988	1970	1991	1991	

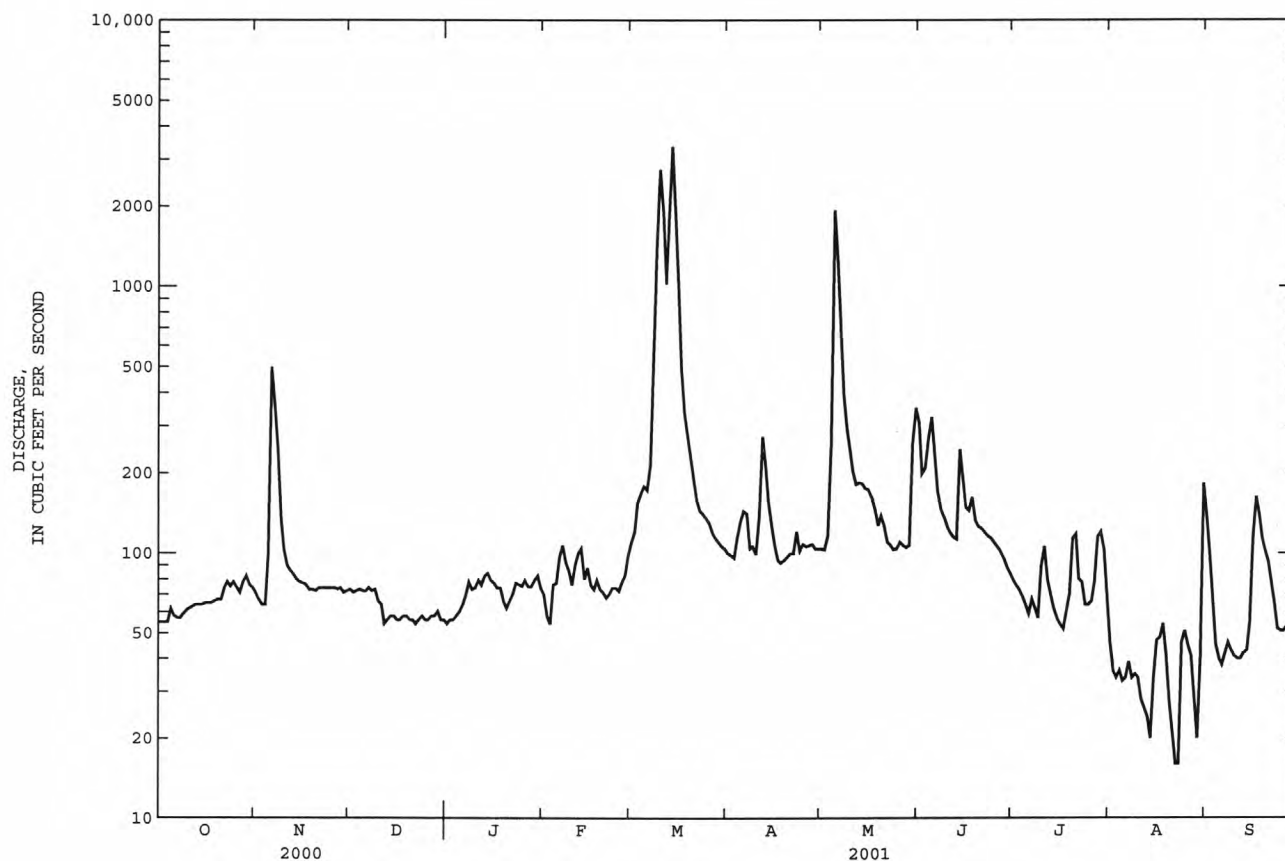
KANSAS RIVER BASIN

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06883000 LITTLE BLUE RIVER NEAR DEWEESE, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1954 - 2001	
ANNUAL TOTAL	73742		53720		148	
ANNUAL MEAN	201		147		127	
MEDIAN OF ANNUAL MEANS					464	1993
HIGHEST ANNUAL MEAN					64.0	1976
LOWEST ANNUAL MEAN					14300	Sep 1 1969
HIGHEST DAILY MEAN	10500	Jul 5	3360	Mar 14	3.2	Aug 11 1988
LOWEST DAILY MEAN	19	Aug 18	16	Aug 22	4.2	Aug 31 1988
ANNUAL SEVEN-DAY MINIMUM	20	Aug 25	29	Aug 8	25100	Aug 31 1969
MAXIMUM PEAK FLOW			3790	Mar 14	18.57	Aug 31 1969
MAXIMUM PEAK STAGE			7.40	Mar 14	107400	
ANNUAL RUNOFF (AC-FT)	146300		106600		194	
10 PERCENT EXCEEDS	200		193		71	
50 PERCENT EXCEEDS	80		77		44	
90 PERCENT EXCEEDS	40		46			

e Estimated.



KANSAS RIVER BASIN

06884000 LITTLE BLUE RIVER NEAR FAIRBURY, NE

LOCATION.--Lat 40°06'54", long 097°10'13", in NW ¼ NE ¼ sec.26, T.2 N., R.2 E., Jefferson County, Hydrologic Unit 10270207, at right downstream wingwall of bridge on State Highway 15, 0.8 mi south of Fairbury, 5.2 mi upstream from Rose Creek, and at mile 62.0.

DRAINAGE AREA.--2,350 mi².

PERIOD OF RECORD.--May 1908 to September 1915, October 1928 to September 1956 (published as "near Endicott"), October 1956 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1086: 1941(M). WSP 1390: 1908(M), 1912, 1915, 1935, 1939, 1945(M). WSP 1510: 1947 (calendar year figures only). WSP 1919: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,277.19 ft above sea level. May 23, 1908 to Sept. 30, 1915 nonrecording gage at present site at different datum. Apr. 26, 1929 to Sept. 24, 1957 nonrecording gage or water-stage recorder at site 3.5 mi downstream at various datums. Sept. 25, 1957 to Aug. 20, 1991 water-stage recorder at present site at datum 5.0 ft higher. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	133	127	e78	e100	e240	234	193	1300	e230	300	154
2	74	126	126	e80	e96	e280	220	193	846	e225	254	127
3	75	124	123	e80	e88	e300	222	448	752	e220	228	143
4	75	123	122	e80	e84	e310	220	1290	1170	e225	214	120
5	85	126	121	e84	e92	e320	218	9690	1570	e260	206	103
6	79	134	123	e86	e110	e330	221	7990	1570	e310	197	87
7	78	143	128	e90	e120	e350	224	4060	960	e500	186	92
8	82	394	129	e110	e122	444	221	2000	679	302	180	399
9	83	337	125	e120	e122	1520	371	1600	498	261	172	202
10	84	268	117	e125	e112	4120	226	1420	e420	248	162	116
11	85	209	e110	e125	e135	4520	283	964	e340	236	156	94
12	88	190	e80	e125	e145	3080	258	775	e340	253	155	86
13	103	160	e66	e122	e155	4140	262	608	e700	271	156	82
14	102	165	e74	e122	e155	6770	349	504	e7000	259	150	80
15	97	165	e76	e120	e160	6780	322	445	5280	258	145	290
16	97	158	e76	e120	e155	3730	280	403	1860	241	143	205
17	98	149	e78	e122	e150	1950	253	375	963	233	142	1610
18	100	148	e78	e122	e145	1220	235	349	2400	242	153	678
19	102	155	e76	e118	e135	882	228	337	1510	241	148	422
20	102	143	e76	e112	e130	699	227	830	1170	288	139	320
21	102	138	e74	e106	e120	576	227	3150	742	337	125	242
22	106	151	e74	e96	e108	501	240	1370	547	275	114	402
23	107	157	e74	e100	e98	452	235	741	463	259	97	349
24	114	151	e72	e106	e96	411	218	485	428	244	132	314
25	121	138	e74	e110	e100	365	222	392	398	274	138	264
26	122	136	e74	e108	e108	331	218	342	394	461	119	205
27	115	133	e76	e104	e120	306	216	307	359	598	110	169
28	119	131	e76	e96	e190	291	209	287	340	1720	101	159
29	131	129	e78	e90	---	276	203	280	332	1010	90	151
30	136	127	e78	e92	---	260	198	817	e250	503	82	134
31	133	---	e78	e100	---	243	---	1270	---	373	145	---
TOTAL	3070	4941	2859	3249	3451	45997	7260	43915	35581	11357	4839	7799
MEAN	99.0	165	92.2	105	123	1484	242	1417	1186	366	156	260
MAX	136	394	129	125	190	6780	371	9690	7000	1720	300	1610
MIN	74	123	66	78	84	240	198	193	250	220	82	80
AC-FT	6090	9800	5670	6440	6850	91240	14400	87110	70570	22530	9600	15470

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 2001, BY WATER YEAR (WY)

	MEAN	273	177	141	157	267	506	330	564	870	598	353	351
MAX	4406	886	282	594	1004	2821	2019	2419	4735	6413	2142	2189	
(WY)	1974	1997	1914	1973	1948	1987	1987	1945	1951	1993	1985	1973	
MIN	44.3	68.7	74.7	75.0	93.3	103	99.8	96.6	78.1	55.4	48.3	28.7	
(WY)	1992	1992	1981	1930	1981	1981	1981	1992	1934	1934	1936	1991	

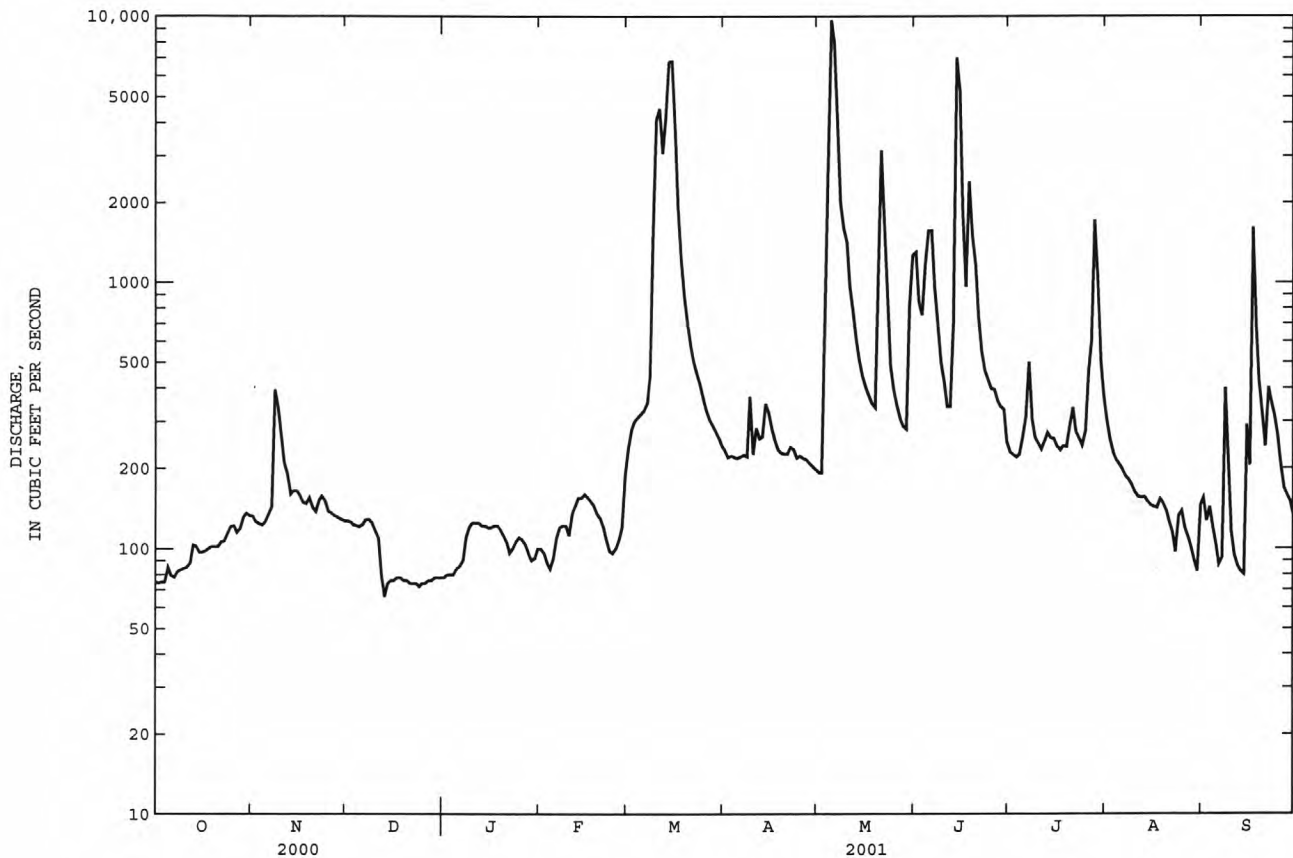
KANSAS RIVER BASIN

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06884000 LITTLE BLUE RIVER NEAR FAIRBURY, NE--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1910 - 2001	
ANNUAL TOTAL	95338		174318		386	
ANNUAL MEAN	260		478		342	
MEDIAN OF ANNUAL MEANS					1239	
HIGHEST ANNUAL MEAN					107	
LOWEST ANNUAL MEAN					1940	
HIGHEST DAILY MEAN	9680	Jul 7	9690	May 5	36400	Jul 26 1992
LOWEST DAILY MEAN	66	Dec 13	66	Dec 13	14	Nov 22 1929
ANNUAL SEVEN-DAY MINIMUM	74	Sep 5	74	Dec 20	24	Sep 14 1991
MAXIMUM PEAK FLOW			17000	Jun 14	54000	Jul 25 1992
MAXIMUM PEAK STAGE			19.34	Jun 14	24.33	Jul 25 1992
ANNUAL RUNOFF (AC-FT)	189100		345800		279500	
10 PERCENT EXCEEDS	381		913		584	
50 PERCENT EXCEEDS	135		169		160	
90 PERCENT EXCEEDS	78		84		92	

e Estimated.



KANSAS RIVER BASIN

06884025 LITTLE BLUE RIVER AT HOLLENBERG, KS

LOCATION.--Lat 39°58'48", long 097°00'16", NE ¼ SW ¼ sec.8, T.1 S., R.4 E., Washington County, Hydrologic Unit 10270207, on right bank 2 ft downstream from bridge on county road, 0.6 mi west of Hollenberg, 1.75 mi downstream from Nebraska-Kansas State line, and at mile 43.1.

DRAINAGE AREA.--2,752 mi².

PERIOD OF RECORD.--March 1973 to February 1974 (discharge measurements only), March 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,216.10 ft above sea level. Data collection platform at station.

REMARKS.--Records good except for estimated daily discharges, which are poor. Discharge measurements made prior to 1974 water year are published in table of miscellaneous sites in WDR NE-73.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	149	131	e84	e88	e200	327	206	1470	309	466	186
2	80	135	128	e86	e86	e240	315	204	1030	297	380	152
3	80	127	129	e94	e80	e280	295	334	893	289	313	152
4	80	126	130	e102	e100	e330	301	1230	1440	290	266	144
5	94	127	126	e110	e120	e400	292	9310	3080	337	235	129
6	97	133	128	e114	e130	e480	289	9960	2920	373	221	121
7	92	138	133	e118	e135	e600	287	5250	1880	638	210	219
8	91	238	131	e120	e135	991	273	2460	996	475	196	406
9	92	373	131	e122	e140	1340	402	1400	666	347	186	498
10	92	286	124	e125	e140	4000	330	1620	534	309	173	226
11	96	222	e90	e125	e140	5050	445	964	468	282	168	142
12	96	193	e70	e125	e140	3850	408	802	439	282	163	116
13	97	172	e76	e122	e145	4360	345	672	401	295	156	102
14	112	158	e80	e122	e145	6960	392	526	7850	304	155	94
15	104	154	e82	e122	e145	7960	473	446	9320	281	152	173
16	103	161	e84	e118	e150	4670	374	395	4050	313	148	345
17	101	143	e86	e114	e150	2370	315	356	1660	264	148	1260
18	103	151	e86	e108	e150	1390	288	326	2170	264	151	1120
19	103	151	e84	e98	e155	965	269	307	2250	338	160	603
20	105	147	e84	e90	e155	770	264	925	1510	300	153	439
21	107	132	e84	e100	e155	646	263	3170	1070	616	140	365
22	113	142	e82	e102	e160	559	260	1950	724	508	128	624
23	116	155	e82	e104	e165	505	378	884	563	356	182	755
24	125	157	e80	e102	e165	465	294	535	491	314	172	372
25	130	146	e80	e102	e170	435	256	408	438	502	162	390
26	135	141	e78	e100	e175	405	249	351	401	471	151	336
27	132	135	e78	e98	e180	381	235	322	377	1720	133	257
28	130	134	e80	e98	e190	368	226	305	353	2480	130	209
29	147	131	e80	e98	---	353	214	297	333	2780	116	188
30	142	129	e80	e96	---	351	210	769	321	1020	108	163
31	143	---	e82	e92	---	344	---	1650	---	571	104	---
TOTAL	3320	4886	2999	3311	3989	52018	9269	48334	50098	17925	5726	10286
MEAN	107	163	96.7	107	142	1678	309	1559	1670	578	185	343
MAX	147	373	133	125	190	7960	473	9960	9320	2780	466	1260
MIN	80	126	70	84	80	200	210	204	321	264	104	94
AC-FT	6590	9690	5950	6570	7910	103200	18390	95870	99370	35550	11360	20400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2001, BY WATER YEAR (WY)

	MEAN	314	251	185	178	336	833	560	804	968	1081	536	376
MAX	2163	1113	424	576	1059	3816	2379	2302	4373	9014	2572	1320	
(WY)	1987	1997	1993	1984	1993	1993	1987	1995	1984	1993	1985	1977	
MIN	45.3	81.1	96.7	98.5	115	118	125	108	151	111	72.5	32.0	
(WY)	1992	1992	2001	1977	1992	1981	1981	1992	1981	1991	1991	1991	

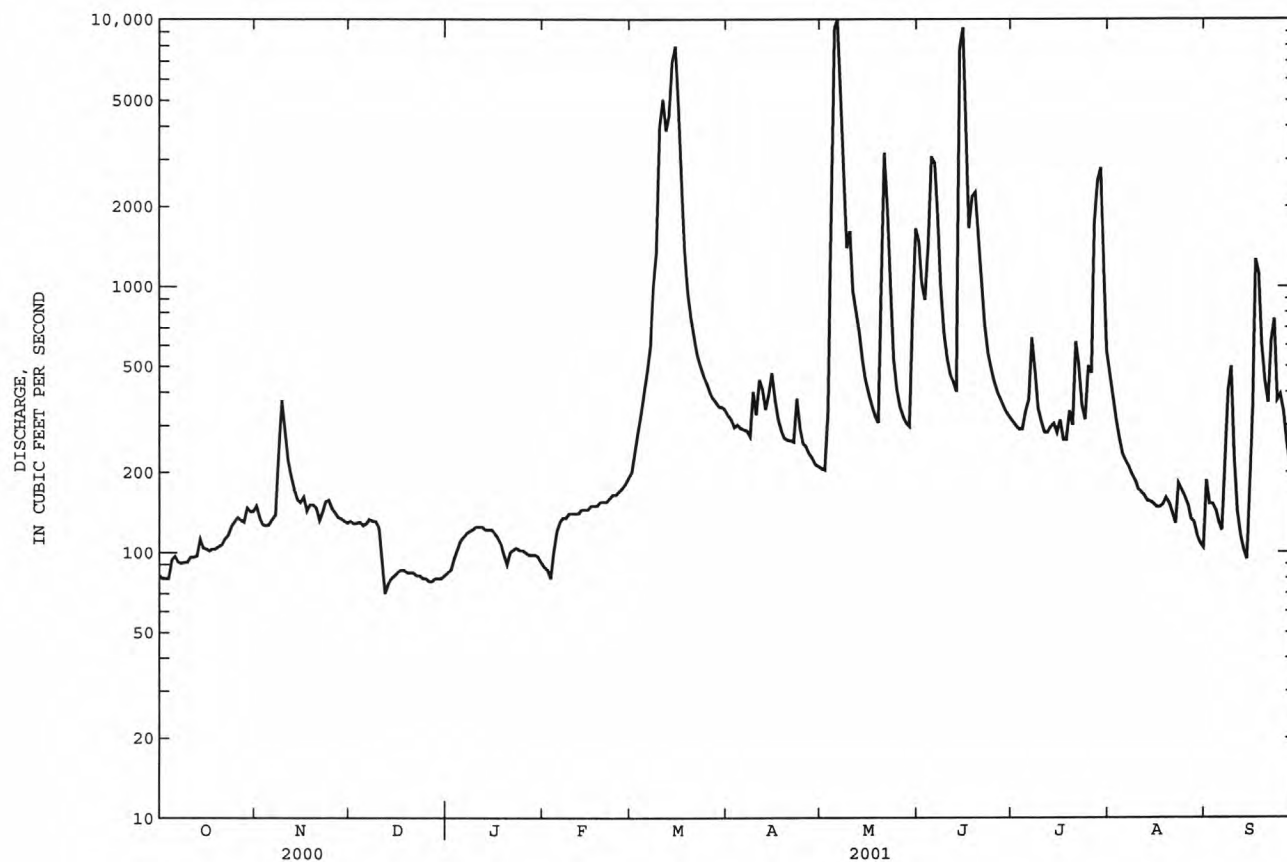
KANSAS RIVER BASIN

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06884025 LITTLE BLUE RIVER AT HOLLENBERG, KS--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1975 - 2001	
ANNUAL TOTAL	107549		212161		537	
ANNUAL MEAN	294		581		461	
MEDIAN OF ANNUAL MEANS					1891	
HIGHEST ANNUAL MEAN					195	
LOWEST ANNUAL MEAN					39300	
HIGHEST DAILY MEAN	9180	Jul 7	9960	May 6	1991	1991
LOWEST DAILY MEAN	69	Sep 6	70	Dec 12	26	Oct 1 1991
ANNUAL SEVEN-DAY MINIMUM	77	Sep 13	79	Dec 24	27	Sep 27 1991
MAXIMUM PEAK FLOW			12800	May 5	47800	Jul 26 1992
MAXIMUM PEAK STAGE			13.00	May 5	21.21	Jul 26 1992
ANNUAL RUNOFF (AC-FT)	213300		420800		388800	
10 PERCENT EXCEEDS	413		1160		892	
50 PERCENT EXCEEDS	162		193		211	
90 PERCENT EXCEEDS	84		93		108	

e Estimated.



Discharge at Partial-Record Stations and Miscellaneous Sites

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 2001

[mi², square mile; ft, foot; ft³/s, cubic feet per second]

Station number	Station name	Location	Drainage area (mi ²)	Period of record	Date	Annual maximum	
						Gage height (ft)	Dis-charge (ft ³ /s)
Big Nemaha River Basin							
06814500	North Fork Big Nemaha River, at Humboldt, NE	Lat 40° 09' 25", long 095° 56' 40", in NW ¹ / ₄ NE ¹ / ₄ sec. 10, T. 2N., R. 13 E., Richardson County, on right bank on bridge on State Highway 105 at south edge of Humboldt	548	*1952-96 1997-2001	05-06-01	13.62	9,090
Kansas River Basin							
06838200	Coon Creek at Indianola, NE	Lat 40° 14' 03", long 100° 25' 37", in NW ¹ / ₄ NE ¹ / ₄ sec.13, T.3 N., R.28 W., Red Willow County, at bridge on U.S. Highways 6 and 34, 0.5 mile west of Indianola	69	1961-2001	05-30-01	4.74	^e 100
06838550	Dry Creek at Bartley, NE	Lat 40° 15' 02", long 100° 19' 02", in SW ¹ / ₄ SE ¹ / ₄ sec.1, T.3 N., R.27 W., Red Willow County, at bridge on U.S. Highway 6 and 34, 0.5 mile west of Bartley	42	1961-2001	05-30-01	9.32	^e 20
06850000	Turkey Creek at Naponee, NE	Lat 40° 04' 34", long 099° 08' 17", in SW ¹ / ₄ SW ¹ / ₄ sec.4, T.1 N., R.16 W., Franklin County, on downstream side of county bridge at east side of Naponee	129	*1948-53 ^a 1954-61 ^b 1962-77 ^a 1978-89 1991-2001	05-30-01	5.73	^e 800
06881450	Indian Creek at Beatrice, NE	Lat 40° 17' 08", long 096° 44' 47", in SE ¹ / ₄ NE ¹ / ₄ sec. 28, T.4 N., R.6 E., Gage County, at bridge on U.S. Higway 77 at north edge of Beatrice	74.7	1960-89, 1991-2001	05-05-01	12.15	2,000

* Operated as a continuous-record gaging station.

^a Discharge measurements published in table for miscellaneous sites.^b Discharge measurements published in table for low flow partial record sites.^c Estimate.

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 2001

[mi², square miles; ft³/s, cubic feet per second; lat, latitude; long, longitude; sec., section; mi, mile; Nebr., Nebraska]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Dis-charge (ft ³ /s)
Platte River Basin						
*Dane Creek (06788495)	North Loup River	Lat 41°36'31", long 098°56'36", in NE ¹ / ₄ NE ¹ / ₄ sec.20, T.19 N., R.14 W., Valley County, at bridge on State Highway 11 at northwest edge of Ord	--	1962 1977-2000	11-20-00 05-14-01 06-11-01	0.94 2.41 15.4
*Mira Creek (06788990)	North Loup River	Lat 41°29'54", long 098°46'46", in SE ¹ / ₄ SW ¹ / ₄ sec.26, T.18 N., R.13 W., Valley County, at bridge on State Highway 11 at west edge of North Loup	--	1977-2000	11-20-00 05-14-01 06-11-01	2.34 16.0 5.84
*Salt Creek (06803525)	Platte River	Lat 40°54'18", long 096°35'09", in NW ¹ / ₄ SW ¹ / ₄ sec.24, T.11 N., R.7 E., Lancaster County, at bridge 0.5 mi north of Interstate Highway 80 and 3 mi southwest of Waverly	815	2000	03-09-01	326
**North Platte River near Scottsbluff (06680100)	Platte River	Lat 41°51'45", long 103°43'23", in NW ¹ / ₄ SE ¹ / ₄ sec.20, T.22N., R.55W., Scotts Bluff County, at bridge on State Highway 29 and 3 mi west of Scottsbluff	--	--	05-21-01 06-25-01 09-20-01	465 300 1800

* Additional data published in "Miscellaneous Surface-Water Quality Data section.

** Additional data published in "Miscellaneous Surface- and Ground-Water Quality Data section.

Low-Flow Investigations

Platte River Basin

Discharge measurements were made during water year 2001 at numerous locations within the Wahoo Creek Basin in Saunders County, Nebraska, near the Nebraska Ordnance Plant (NOP) to determine ground-water/surface-water relations.

Wahoo Creek Basin

Location	Discharge (cubic feet per second)	
	08-20-01	09-26-01
Wahoo Creek at SW corner of NOP NW ¹ / ₄ NW ¹ / ₄ sec.2, T.13 N., R.8 E.	31.6	34.0
Wahoo Cr below confluence with Silver Creek NE ¹ / ₄ NW ¹ / ₄ sec. 20, T.13 N., R.9 E.	39.7	35.5
Wahoo Creek at Ashland (Gage site 06804700) SE ¹ / ₄ NE ¹ / ₄ sec. 35, T.13 N., R.9 E.	38.9	39.7
Silver Creek near Ithaca SW ¹ / ₄ NW ¹ / ₄ sec. 35, T.14 N, R. 8 E.	6.48	5.48
Silver Creek near Ashland NW ¹ / ₄ NE ¹ / ₄ sec. 35, T.13 N., R.9 E.	.32	.26
Johnson Creek north of NOP SW ¹ / ₄ SW ¹ / ₄ sec. 5, T.14 N., R.9 E.	.32	.05
Johnson Creek below dam outlet SW ¹ / ₄ SE ¹ / ₄ sec. 16, T.14 N., R.9 E.	0	0
Johnson Creek near Memphis (1 mi above Clear Creek) (Gage site 06804900) NW ¹ / ₄ NW ¹ / ₄ 4 sec. 35, T.14 N., R.9 E.	.67	.89
Clear Creek near Memphis NW ¹ / ₄ NW ¹ / ₄ sec. 14, T.13 N., R.9 E.	6.66	8.42
Clear Creek near Ashland NE ¹ / ₄ NE ¹ / ₄ sec. 35, T.13 N., R. 9 E.	7.75	9.08

Kansas River Basin

Low-flow investigations made in the Big Blue and Little Blue River Basins in Nebraska during water year 2001 to obtain data on ground-water/surface-water relations.

Location	Observation of zero flow or measured discharge (ft ³ /s)
Big Blue River Basin	
	October 11, 2000
Big Blue River 1.5 miles north of DeWitt in SW ¹ / ₄ NE ¹ / ₄ sec. 12, T.5 N., R.4 E.	138
Clatonia Creek 1 mile northeast of DeWitt in NW ¹ / ₄ NW ¹ / ₄ sec. 17, T.5 N., R.5 E.	.22
Turkey Creek 1.5 miles west of DeWitt in SE ¹ / ₄ NW ¹ / ₄ sec. 15, T.5 N., R.4 E	14.0
Turkey Creek 0.5 miles south of DeWitt in SE ¹ / ₄ NW ¹ / ₄ sec. 24, T.5 N., R.4 E.	14.0
Turkey Creek 1.5 miles southeast of DeWitt in NW ¹ / ₄ SW ¹ / ₄ sec. 29, T.5 N., R.5 E	14.7
Big Blue River 2.5 miles southeast of DeWitt in NW ¹ / ₄ NE ¹ / ₄ sec. 33, T.5 N., R.5 E	154
Soap Creek 3.5 miles southeast of DeWitt in SE ¹ / ₄ SW ¹ / ₄ sec. 27, T.5 N., R.5 E.	.06
Unnamed tributary to Big Blue River 1 mile north of Hoag in NW ¹ / ₄ NE ¹ / ₄ sec. 10, T.4 N., R.5 E	0
Snake Creek 2 miles northeast of Hoag in NW ¹ / ₄ NW ¹ / ₄ sec. 1, T.4 N., R.5 E	0
Big Blue River 1 mile east of Hoag in NE ¹ / ₄ NW ¹ / ₄ sec. 13, T.4 N., R.5 E.	159
Cub Creek 2 miles south of Hoag in SW ¹ / ₄ SW ¹ / ₄ sec. 24, T.4 N., R.5 E	.21
Bottle Creek 1.5 miles northwest of Beatrice in NW ¹ / ₄ SW ¹ / ₄ sec. 30, T.4 N., R.6 E	0
Unnamed tributary to Big Blue River 0.5 miles northwest of Beatrice in SW ¹ / ₄ SW ¹ / ₄ sec. 29, T.4 N., R.6 E.	.29
Indian Creek at Beatrice in SE ¹ / ₄ SE ¹ / ₄ sec. 28, T.4 N., R.6 E	.90
Big Blue River at Beatrice in SW ¹ / ₄ NW ¹ / ₄ sec. 3, T.3 N., R.6 E. (Gage site 06881500)	163
Little Blue River Basin	
	October 12, 2000
Little Blue River 2.7 miles south of Alexandria in SE ¹ / ₄ SE ¹ / ₄ sec. 23, T.3 N., R.1 W.	64.2
Big Sandy Creek 0.8 miles south of Alexandria in SE ¹ / ₄ SE ¹ / ₄ sec. 11, T.3 N., R.1 W.	19.8
Big Sandy Creek 1.2 miles west of Powell in SE ¹ / ₄ SE ¹ / ₄ sec. 16, T.3 N., R.1 E	23.0
Little Blue River 1.2 miles southwest of Powell in SE ¹ / ₄ SE ¹ / ₄ sec. 22, T.3 N., R.1 E	85.9
Little Sandy Creek 2.0 miles east of Powell in NW ¹ / ₄ NE ¹ / ₄ sec. 19, T.3 N., R.2 E.	.55
Whiskey Creek 2.1 miles northwest of Fairbury in SW ¹ / ₄ SE ¹ / ₄ sec. 33, T.3 N., R.2 E	.06
Little Blue River 1.3 miles northwest of Fairbury in NW ¹ / ₄ NE ¹ / ₄ sec. 9, T.2 N., R.2 E.	79.0
Unnamed tributary to Little Blue River 0.8 miles southwest of Fairbury in NE ¹ / ₄ SW ¹ / ₄ sec. 22, T.2 N., R.2 E.	0
Little Blue River 0.8 miles south of Fairbury in NW ¹ / ₄ NE ¹ / ₄ sec. 26, T.2 N., R.2 E. (Gage site 06884000)	86.3
Brawner Creek 0.4 miles southeast of Fairbury in SE ¹ / ₄ NE ¹ / ₄ sec. 23, T.2 N., R.2 E.	0
Rose Creek 4.0 miles southwest of Endicott in NW ¹ / ₄ NW ¹ / ₄ sec. 12, T.1 N., R.2 E.	4.70
Smith Creek 0.2 miles northwest of Endicott in NW ¹ / ₄ SE ¹ / ₄ sec. 5, T.1 N., R.3 E.	.93
Little Blue River 0.3 miles south of Endicott in SE ¹ / ₄ SW ¹ / ₄ sec. 4, T.1 N., R.3 E.	96.2
Rock Creek 0.3 miles southeast of Endicott in SE ¹ / ₄ SE ¹ / ₄ sec. 4, T.1 N., R.3 E	.05
Coon Creek 2.6 miles northwest of Steele City in NW ¹ / ₄ NE ¹ / ₄ sec. 15, T.1 N., R.3 E	0
Little Blue River 0.5 miles south of Steele City in NW ¹ / ₄ NW ¹ / ₄ sec. 30, T.1 N., R.4 E.	95.8
Little Blue River 0.6 miles west of Hollenberg in NE ¹ / ₄ SW ¹ / ₄ sec. 8, T.1 S., R.4 E. (Gage site 06884025)	99.0

MISCELLANEOUS SURFACE-WATER QUALITY DATA

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM AD- SORP- TION RATIO (00931)
06788495 DANE C AT ORD, NEBR. (LAT 41 36 31N LONG 098 56 36W)													
NOV 2000 20...	0835	.94	--	--	8.3	874	-10.0	.5	400	121	23.8	24.8	.5
JUN 2001 11...	0740	15	--	--	7.4	272	23.5	25.0	110	33.1	6.01	8.73	.4
06788990 MIRA C AT NORTH LOUP, NEBR. (LAT 41 29 54N LONG 098 46 46W)													
NOV 2000 20...	1110	2.3	--	--	8.0	803	-4.5	.5	330	96.6	22.1	17.8	.6
JUN 2001 11...	0950	5.8	--	--	7.7	736	29.5	23.5	300	83.5	22.3	28.9	.8
06803525 SALT CR BL STEVENS CR NR WAVERLY NEBR (LAT 40 54 18N LONG 096 35 09W)													
OCT 2000 11...	1200	E79	10.9	106	7.8	6240	16.0	11.5	320	82.9	27.3	17.2	34
NOV 07...	1130	E175	9.2	79	7.9	2980	.5	6.5	190	51.2	14.5	11.0	15
DEC 12...	1200	E183	7.6	56	7.9	7700	-10.5	.00	370	94.8	31.9	16.7	34
JAN 2001 10...	1330	E100	10.9	92	8.0	5600	8.5	5.5	360	95.8	28.5	14.1	24
FEB 07...	1200	E104	12.9	103	7.3	4940	.00	3.5	360	97.2	28.1	14.0	23
MAR 09...	1300	E309	11.8	93	7.3	2430	4.0	3.5	210	58.3	16.0	11.3	12
APR 10...	1130	E275	7.7	78	7.5	2940	11.5	13.0	280	75.4	21.5	10.0	12
MAY 17...	1130	E278	8.3	103	7.3	3460	24.0	23.0	300	81.1	23.5	12.1	16
JUN 14...	1230	E7130	7.7	89	7.9	452	24.0	20.0	63	18.3	4.20	7.94	3
JUL 10...	1100	E167	7.8	99	7.6	4990	28.0	24.5	330	83.2	28.5	13.8	25
AUG 07...	1230	E107	12.7	176	8.2	6180	29.0	29.5	320	80.9	27.8	16.2	29
SEP 10...	1030	E70	6.6	73	7.8	4620	14.0	17.5	290	77.0	24.9	14.4	26

MISCELLANEOUS SURFACE-WATER QUALITY DATA--Continued

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)
06788495 DANE C AT ORD, NEBR. (LAT 41 36 31N LONG 098 56 36W)													
NOV 2000 20...	24.0	11	354	15.9	.3	44.9	95.8	.79	1.48	582	2.87	--	3.70
JUN 2001 11...	9.0	14	112	2.2	.4	49.6	20.8	.27	8.34	200	.123	--	.16
06788990 MIRA C AT NORTH LOUP, NEBR. (LAT 41 29 54N LONG 098 46 46W)													
NOV 2000 20...	26.4	14	348	10.4	.3	36.3	59.0	.65	3.04	482	.309	--	.40
JUN 2001 11...	30.1	16	304	16.4	.3	21.9	69.5	.63	7.26	461	.079	--	.10
06803525 SALT CR BL STEVENS CR NR WAVERLY NEBR (LAT 40 54 18N LONG 096 35 09W)													
OCT 2000 11...	1410	90	253	1910	.9	23.9	339	5.43	--	4000	10.6	12	13.6
NOV 07...	464	83	151	655	.5	17.0	133	1.98	--	1460	6.77	8.3	8.71
DEC 12...	1520	89	267	2290	.8	29.0	370	6.16	--	4530	10.8	11	13.9
JAN 2001 10...	1050	86	271	1480	.7	27.0	268	4.28	--	3140	4.76	6.0	6.13
FEB 07...	982	85	262	1240	.7	23.6	232	3.82	--	2810	6.74	8.0	8.68
MAR 09...	413	80	178	576	.4	16.4	125	1.82	--	1340	2.00	3.5	2.57
APR 10...	475	78	228	677	.5	15.6	151	2.14	--	1570	1.13	3.2	1.45
MAY 17...	626	81	256	928	.6	19.3	182	2.78	--	2040	.303	1.4	.39
JUN 14...	58.9	64	73	71.2	.4	9.6	23.3	.33	--	245	.289	9.3	.37
JUL 10...	1040	87	260	1520	.7	19.0	264	4.28	--	3150	.899	2.3	1.16
AUG 07...	1190	88	256	1660	.7	18.2	293	4.71	--	3460	2.75	4.3	3.54
SEP 10...	1030	88	233	1470	.7	22.3	275	4.19	--	3080	.235	3.8	.30

MISCELLANEOUS SURFACE-WATER QUALITY DATA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS, TOTAL (MG/L AS P) (00665)	CARBON DIOXIDE, DIS- SOLVED (MG/L AS CO2) (00405)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
06788495 DANE C AT ORD, NEBR. (LAT 41 36 31N LONG 098 56 36W)													
NOV 2000													
20...	2.85	12.6	2.89	.145	.044	--	--	1.66	.640	.541	--	3.4	--
JUN 2001													
11...	.533	2.36	.593	.197	.060	--	--	.604	.233	.197	--	8.6	--
06788990 MIRA C AT NORTH LOUP, NEBR. (LAT 41 29 54N LONG 098 46 46W)													
NOV 2000													
20...	.281	1.24	.288	.023	.007	--	--	1.51	.584	.491	--	6.7	--
JUN 2001													
11...	.499	2.21	.620	.398	.121	--	--	2.08	.750	.677	--	12	--
06803525 SALT CR BL STEVENS CR NR WAVERLY NEBR (LAT 40 54 18N LONG 096 35 09W)													
OCT 2000													
11...	1.41	6.25	2.11	2.30	.699	1.3	14	8.01	--	2.61	3.04	8.7	10
NOV													
07...	1.11	4.90	1.41	1.00	.305	1.5	9.7	2.78	--	.907	1.26	3.9	11
DEC													
12...	1.12	4.94	1.72	1.98	.603	.56	13	1.86	--	.605	1.07	6.2	13
JAN 2001													
10...	2.66	11.8	3.19	1.74	.531	1.3	9.2	2.31	--	.752	.975	5.0	8.0
FEB													
07...	3.28	14.5	3.71	1.40	.426	1.2	12	4.08	--	1.33	1.55	24	9.5
MAR													
09...	2.02	8.96	2.14	.375	.114	1.5	5.6	1.51	--	.492	.776	18	15
APR													
10...	1.86	8.25	2.11	.824	.251	2.1	5.3	.995	--	.324	.741	13	1.1
MAY													
17...	2.67	11.8	2.94	.884	.269	1.1	4.3	1.37	--	.447	.562	23	8.9
JUN													
14...	1.48	6.54	1.54	.223	.068	9.0	11	.420	--	.137	3.09	1.6	44
JUL													
10...	3.95	17.5	4.71	2.48	.754	1.4	7.0	1.51	--	.493	.666	13	9.6
AUG													
07...	2.77	12.2	3.55	2.57	.782	1.6	7.9	3.30	--	1.07	1.26	3.2	11
SEP													
10...	2.59	11.5	3.47	2.91	.885	3.6	7.3	1.57	--	.512	.676	7.0	11

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

[illegible]

[illegible]

MISCELLANEOUS SURFACE-WATER QUALITY DATA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
06788495 DANE C AT ORD, NEBR. (LAT 41 36 31N LONG 098 56 36W)							
NOV 2000							
20...	--	--	--	--	--	--	--
JUN 2001							
11...	<2.0	--	<1.0	--	8	--	1.58
06788990 MIRA C AT NORTH LOUP, NEBR. (LAT 41 29 54N LONG 098 46 46W)							
NOV 2000							
20...	--	--	--	--	--	--	--
JUN 2001							
11...	<2.0	--	<1.0	--	6	--	3.74
06803525 SALT CR BL STEVENS CR NR WAVERLY NEBR (LAT 40 54 18N LONG 096 35 09W)							
OCT 2000							
11...	--	--	--	--	--	--	--
NOV							
07...	--	<2.6	--	<.43	--	E28	--
DEC							
12...	--	--	--	--	--	--	--
JAN 2001							
10...	--	--	--	--	--	--	--
FEB							
07...	--	<2.6	--	<.43	--	<93	--
MAR							
09...	--	--	--	--	--	--	--
APR							
10...	--	--	--	--	--	--	--
MAY							
17...	--	<5.0	--	<.90	--	E24	--
JUN							
14...	--	--	--	--	--	--	--
JUL							
10...	--	--	--	--	--	--	--
AUG							
07...	--	E1.6	--	<.40	--	<31	--
SEP							
10...	--	--	--	--	--	--	--

GROUND-WATER LEVELS

ADAMS COUNTY

403403098244001. Local number 7N 10W 23AB.

LOCATION.--Lat 40°34'03", long 098°24'40", NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.23, T.7 N., R.10 W., Hydrologic Unit 10270206, 0.5 mi west of the west junction of Routes 281 and 6, in the south part of Hastings. Owner: Henry Fricke.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled unused irrigation water-table well, diameter 8 in., depth 155 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,927 ft. Measuring point: Top of casing 1.0 ft above land-surface datum.

REMARKS.--Large amounts of ground water are pumped from municipal and industrial wells located east and northeast of the well and from irrigation wells in other directions.

PERIOD OF RECORD.--August 1934 to October 1938; August 1948 to December 1950; January 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 99.95 ft below land-surface datum, Jan. 22, Mar.14, 1935; lowest, 128.82 ft below land-surface datum, July 10, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	111.44	DEC 15	110.35	FEB 07	109.89	APR 10	109.44	JUN 06	109.23	AUG 09	113.08
NOV 09	110.83	JAN 08	110.33	MAR 07	109.96	30	109.32	JUL 10	110.30		
WATER YEAR 2001		HIGHEST	109.23	JUN 06, 2001		LOWEST	113.08	AUG 09, 2001			

BLAINE COUNTY

414958100061501. Local number 22N 24W 33CA.

LOCATION.--Lat 41°49'58", long 100°06'15", NE $\frac{1}{4}$ SW $\frac{1}{4}$ 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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL
MAY 10	2.17

BOONE COUNTY

413323098074501. Local number 18N 7W 4CA.

LOCATION.--Lat 41°33'23", long 098°07'45", NE $\frac{1}{4}$ SW $\frac{1}{4}$ 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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL
MAY 09	10.39

GROUND-WATER LEVELS

BUFFALO COUNTY

404618098504401. Local number 9N 14W 1DC.

LOCATION.--Lat 40°46'18", long 098°50'44", SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.1, T.9 N., R.14 W., Hydrologic Unit 10200102, 1.3 mi north of the intersection of Route 30 and the North-South range-line road on the east side of Gibbon, then 0.5 mi west on section-line road. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in., depth 38 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 2,060.43 ft. Measuring point: Top of casing 0.80 ft above land-surface datum.

REMARKS.--Water levels in well are affected by pumpage from nearby irrigation wells.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.17 ft below land-surface datum, July 13, 1999; lowest, 29.22 ft below land-surface datum, Aug. 10, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum daily water-level depth below land surface, 19.97 ft, Aug. 12; minimum daily water-level depth below land surface, 16.68 ft, June 28.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.49	19.25	19.31	19.20	19.19	18.88	18.32	17.90	17.13	17.78	19.28	19.49
10	19.37	19.37	19.31	19.20	19.20	18.48	18.32	17.74	16.97	18.51	19.41	19.57
15	19.36	19.32	19.23	19.25	19.10	18.39	18.32	17.57	16.93	18.64	19.39	19.40
20	19.32	19.39	19.28	19.22	19.15	18.37	18.12	17.48	16.86	19.39	19.52	19.12
25	19.29	19.26	19.33	19.23	19.10	18.42	18.14	17.39	16.75	19.10	19.66	19.07
EOM	19.30	19.31	19.26	19.23	19.12	18.38	18.03	17.26	16.86	18.85	19.56	18.98

404345098560001. Local number 9N 14W 19DD.

LOCATION.--Lat 40°43'45", long 098°56'10", SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 19, T.9 N., R.14 W., Hydrologic Unit 10200102, 4.7 mi west-southwest of Gibbon on U.S. Highway 30. Owner: Robert D. Lewis.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 24 in., depth 54 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 2,103.75 ft. Measuring point: Hole in pump base 0.33 ft above land-surface datum.

REMARKS.--Water levels in well are affected by pumping of well and of nearby wells for irrigation supplies.

PERIOD OF RECORD.--October 1930 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 22.55 ft below land-surface datum, June 9, 1931; lowest, 35.20 ft below land-surface datum, Aug. 30, 1974.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL
APR 17	26.12

GROUND-WATER LEVELS

BUTLER COUNTY

410612096592601. Local number 13N 4E 17ABA.

LOCATION.--Lat 41°06'12", long 096°59'26", NE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.17, T.13 N., R. 4 E., Hydrologic Unit 10200203, approximately 2.5 mi east and 2.0 mi north of Dwight. Owner: Lower Platte South and Upper Big Blue NRDs.

AQUIFER.--Sand and gravel Pleistocene Age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in., depth 437 ft, casing perforated 377 to 437 ft.

DATUM.--Altitude of land-surface datum is 1,605 ft. Measuring point: Top of casing 1.5 ft above land-surface datum.

PERIOD OF RECORD.--July 1979 to May 2001.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 148.78 ft below land-surface datum, May 5, 1987; lowest, 252.26 ft below land-surface datum, Aug. 12, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 210.73 ft, May 14, 15, 16; minimum water-level depth below land surface, 155.13 ft, May 9, 10, 12, 13, 14.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	170.35	167.78	164.91	162.18	159.97	158.26	156.80	155.43	---	---	---	---
10	170.05	167.29	164.41	161.78	159.67	157.97	156.58	155.23	---	---	---	---
15	169.75	166.79	163.90	161.38	159.37	157.68	156.35	---	---	---	---	---
20	169.35	166.30	163.40	161.07	159.06	157.59	156.03	---	---	---	---	---
25	168.96	165.81	163.09	160.77	158.76	157.40	155.93	---	---	---	---	---
EOM	168.27	165.42	162.59	160.27	158.66	157.01	155.73	---	---	---	---	---

CHASE COUNTY

403220101384001. Local number 7N 38W 28CC.

LOCATION.--Lat 40°32'20", long 101°38'40", SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.28, T.7 N., R.38 W., Hydrologic Unit 10250005, about 0.5 mi north of Imperial. Owner: Roy Hust.

AQUIFER.--Ogallala Formation of Pliocene age.

WELL CHARACTERISTICS.--Drilled unused observation water-table well, diameter 18 in., depth 143 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 3,284.6 ft. Measuring point: Top of casing 0.30 ft above land-surface datum.

REMARKS.--Recording gage was installed on this well from December 1948 to December 1963. Water levels in well are affected by irrigation pumpage in area.

PERIOD OF RECORD.--December 1944; December 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 72.82 ft below land-surface datum, June 29, 1964; lowest measured, 110.26 ft below land-surface datum, Oct. 15, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE WATER
 LEVEL
APR 26 109.88

403235101395501. Local number 7N 38W 29CBB.

LOCATION.--Lat 40°32'35", long 101°39'55", NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.29, T.7 N., R.38 W., Hydrologic Unit 10250005, 0.5 mi north and 1 mi west of Imperial on U.S. Highway 6, then 0.5 mi north on gravel road. Owner: U.S. Geological Survey.

AQUIFER.--Ogallala Formation of Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 5.50 in., depth 230 ft, perforated 190 to 230 ft.

DATUM.--Altitude of land-surface datum is 3,290.30 ft. Measuring point: Top of casing 0.50 ft above land-surface datum.

REMARKS.--Water levels in well are affected by irrigation pumpage in area.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 55.87 ft below land-surface datum, July 4, 1964; lowest, 98.30 ft below land-surface datum, July 31, Aug. 1, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 101.84 ft, Aug. 30; minimum water-level depth below land surface, 96.26 ft, May 5.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	98.69	98.04	98.01	97.57	97.29	97.22	96.89	96.41	96.69	99.55	101.26	---
10	98.39	98.25	97.93	97.49	97.38	97.02	96.77	96.57	96.53	100.04	101.30	---
15	98.54	98.08	97.81	97.62	97.26	97.10	96.75	96.66	96.91	100.10	101.52	---
20	98.42	98.16	97.78	97.47	97.27	96.96	96.56	96.50	97.81	100.63	101.51	---
25	98.27	98.03	97.79	97.47	97.28	96.99	96.67	97.42	98.75	100.67	101.38	---
EOM	98.30	97.94	97.67	97.53	97.24	96.92	96.59	96.82	99.30	100.82	101.75	---

CHERRY COUNTY

423205100321501. Local number 30N 28W 36AAA.

LOCATION.--Lat 42°32'05", long 100°32'15", NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 36, T.30 N., R.28 W., Hydrologic Unit 10150004, 8 mi south of the intersection of U.S. Highway 83 and State Highway 483, south of Valentine. Owner: U.S. Geological Survey.

AQUIFER.--Sand deposits of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation water-table well, diameter 1.25 in., depth 12.25 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 2,897.26 ft. Measuring point: Top of casing 3.00 ft above land-surface datum.

REMARKS.--Water levels affected by evapotranspiration.

PERIOD OF RECORD.--October 1961 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, +0.30 ft above land-surface datum, Feb. 6, 1985. Lowest, 1.99 ft below land-surface datum, Oct. 4, 1976.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL
MAY 01	1.23

COLFAX COUNTY

412810097054501. Local number 17N 3E 4CC.

LOCATION.--Lat 41°28'10", long 097°05'45", SW $\frac{1}{4}$ SW $\frac{1}{4}$, sec. 4, T.17 N., R.3 E., Hydrologic Unit 10200201, 2 mi west and 1 mi north of intersection of U.S. Highway 30 and State Highway 15 in Schuyler. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Driven observation water-table well, diameter 1.25 in., depth 16 ft, screened 14 to 16 ft.

DATUM.--Altitude of land-surface datum is 1,370.58 ft. Measuring point: Top of casing 1.00 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.70 ft below land-surface datum, May. 9, 1995; lowest, 10.68 ft below land-surface datum, Oct. 29, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	8.36	APR 25	6.26

DAWSON COUNTY

404949099445701. Local number 10N 21W 18DDD.

LOCATION.--Lat 40°49'49", long 099°44'57", SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 18, T. 10 N., R. 21 W., Hydrologic Unit 10200101, 3.5 mi north of the intersection of Route 21 and U.S. Highway 30 in Lexington. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 120 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 2,420.58 ft. Measuring point: Top of casing 0.50 ft above land-surface datum.

REMARKS.--Water levels in well affected by pumpage from nearby irrigation wells and by seepage from irrigation canals.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.20 ft below land-surface datum, July 24-25, 1993; lowest, 21.50 ft below land-surface datum, July 16, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily water-level depth below land surface, 13.03 ft, July 12; minimum daily water-level depth below land surface, 8.49 ft, Aug. 28-29.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.84	11.11	11.37	11.56	11.78	11.90	10.83	10.14	9.02	11.81	10.05	8.76
10	10.82	11.19	11.42	11.59	11.82	11.32	---	9.26	8.91	12.98	11.82	8.95
15	10.91	11.22	11.42	11.65	11.86	11.23	---	9.17	8.92	12.75	9.78	9.20
20	11.02	11.28	11.47	11.68	11.90	11.15	10.57	9.22	8.93	12.11	10.05	9.36
25	11.06	11.28	11.52	11.70	11.93	11.03	10.45	9.26	9.19	10.18	8.63	9.56
EOM	11.09	11.34	11.55	11.73	11.93	10.91	10.28	9.20	11.74	9.30	9.28	9.79

GROUND-WATER LEVELS

DUNDY COUNTY

400155101521302. Local number 1N 40W 29BB2.

LOCATION.--Lat 40°01'55", long 101°52'13", NW ¼ NW ¼ sec.29, T.1 N., R.40 W., Hydrologic Unit 10250002, 3.5 mi east of Haigler on U.S. Highway 34 and 0.5 mi north. Well is within 0.5 mi of Republican River. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits, undifferentiated, of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 48.8 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 3,205 ft. Measuring point: South side of casing 1.6 ft above land-surface datum.

REMARKS.--Replacement for well 400155101521301, local number 1N 40W 29BB1 with period of record from May 1946 to June 1975. Water levels in well are affected by pumping from nearby irrigation wells, evapotranspiration, and changes in stage of Republican River.

PERIOD OF RECORD.--October 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.41 ft below land-surface datum, June 21, 1984; lowest, 31.43 ft below land-surface datum, Aug. 20, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 31.43 ft, Aug. 20; minimum water-level depth below land surface, 18.74 ft, Apr. 22.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	19.82	19.44	19.18	18.91	19.18	20.25	26.97	28.65	24.15
10	---	---	---	19.73	19.38	19.12	18.87	18.92	22.43	28.34	29.03	23.09
15	---	---	20.16	19.70	19.36	19.12	18.88	19.44	19.92	27.63	29.27	22.56
20	---	---	20.10	19.63	19.30	19.04	18.83	19.17	21.05	27.58	31.43	22.22
25	---	---	20.00	19.55	19.28	19.01	18.81	19.18	25.66	27.39	---	21.95
EOM	---	---	19.89	19.52	19.21	18.99	18.95	19.10	24.63	26.66	---	21.74

FILLMORE COUNTY

402504097432201. Local number 5N 4W 12BDC.

LOCATION.--Lat 40°25'04", long 097°43'22", SW ¼ SE ¼ NW ¼ sec.12, T. 5 N., R. 4 W., Hydrologic Unit 10270206, one-half block south of fire station on principal north-south street in Shickley. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 5 in., depth 260.0 ft, perforated 100 to 260 ft.

DATUM.--Altitude of land-surface datum is 1651 ft. Measuring point: Top of casing 2.45 ft above land-surface datum.

REMARKS.--Replacement for 402450097434001, local number 5N 4W 12BC, period of record October 1956 to September 1977. Water levels in well affected by pumping from nearby municipal and irrigation wells.

PERIOD OF RECORD.--June 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 90.53 ft below land-surface datum, May 4, 1999; lowest, 101.45 ft (corrected) below land-surface datum, Sept. 15, 1991 (corrected).

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 08	94.36	JAN 04	93.05	MAR 05	92.57	MAY 02	91.77	JUL 03	91.74		
DEC 08	94.01	FEB 06	92.93	APR 04	92.02	JUN 06	91.38	AUG 07	93.98		
WATER YEAR 2001		HIGHEST	91.38	JUN 06, 2001		LOWEST	94.36	NOV 08, 2000			

GROUND-WATER LEVELS

FILLMORE COUNTY--Continued

403800097300701. Local number 8N 2W 26AD.

LOCATION.--Lat 40°38'00", long 097°30'07", SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.26, T.8 N., R.2 W., Hydrologic Unit 10270203, 2.5 mi west on Route 6 from the principal street of Exeter, then 0.4 mi south. Owner: U.S. Geological Survey.

AQUIFER.--Loess of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in., depth 40 ft, perforated 25 to 40 ft.

DATUM.--Altitude of land-surface datum is 1,610 ft. Measuring point: Top of casing at land-surface datum.

REMARKS.--Perched aquifer, water levels affected by infiltration and deep percolation of applied irrigation water pumped from deeper aquifer.

PERIOD OF RECORD.--October 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.03 ft below land-surface datum, Mar. 24, 1987; lowest, 24.16 ft below land-surface datum, July 10, 1958.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	10.97	DEC 08	11.21	FEB 06	11.24	APR 09	9.08	JUN 06	3.19	AUG 08	7.95
NOV 09	10.96	JAN 04	11.23	MAR 05	10.02		8.78	JUL 09	5.05		
WATER YEAR 2001		HIGHEST	3.19	JUN 06, 2001	LOWEST	11.24	FEB 06, 2001				

GARFIELD COUNTY

414718099083201. Local number 21N 16W 14CB.

LOCATION.--Lat 41°47'18", long 099°08'32", NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.14, T.21 N., R.16 W., Hydrologic Unit 10210007, 5 mi east and 1 mi north of Burwell. Owner: Frank Smolik.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 18 in., depth 154 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 2,174 ft. Measuring point: Hole in turbine base 2.00 ft above land-surface datum.

REMARKS.--Water levels affected by pumping during irrigation season.

PERIOD OF RECORD.--October 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.07 ft below land-surface datum, Oct. 13, 1983; lowest, 24.92 ft below land-surface datum, Oct. 28, 1959.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL
MAY 01	23.50

GOSPER COUNTY

403626099451401. Local number 7N 21W 6BC.

LOCATION.--Lat 40°36'26", long 099°45'14", SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 6, T.7 N., R.21 W., Hydrologic Unit 10200101, 1 mi west and 2 mi north of Smithfield. Owner: Andy Larson Estate.

AQUIFER.--Ogallala Formation of Pliocene age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 4 in., depth 132 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 2,466.95 ft. Measuring point: Top of casing 0.40 ft above land-surface datum.

REMARKS.--Water levels in well affected by pumping from nearby irrigation wells and by infiltration and deep percolation from nearby irrigation canal.

PERIOD OF RECORD.--September 1934 to July 1940; January 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.92 ft below land-surface datum, May 10, 2000; lowest, 117.80 ft below land-surface datum, Sept. 26, 1935.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL
MAY 03	30.97

GROUND-WATER LEVELS

HALL COUNTY

405315098304302. Local number 11N 11W 25CC2.

LOCATION.--Lat 40°53'15", long 098°30'43", SW $\frac{1}{4}$ SW $\frac{1}{4}$ 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 25°CC, period of record October 1946 to November 1977. Water levels in wells affected by pumping from nearby wells during irrigation season.

PERIOD OF RECORD.-- April 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.12 ft below land-surface datum, June 27, 29, 1999; lowest, 25.98 ft below land-surface datum, Aug. 31, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily water-level depth below land surface, 16.70 ft, Sept. 28-30; minimum daily water-level depth below land surface, 14.04 ft, June 13.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	15.12	15.29	15.36	15.42	15.50	14.80	14.66	14.12	14.35	15.69	16.51
10	---	15.22	15.30	15.36	15.45	15.40	14.82	14.50	14.07	14.50	15.84	16.60
15	---	15.21	15.31	15.40	15.46	15.05	14.82	14.35	14.09	14.73	16.05	16.65
20	---	15.28	15.34	15.39	15.47	14.85	14.71	14.27	14.11	15.06	16.18	16.66
25	15.09	15.24	15.38	15.43	15.48	14.82	14.76	14.21	14.07	15.38	16.27	16.69
EOM	15.14	15.27	15.38	15.42	15.50	14.80	14.67	14.14	14.17	15.57	16.42	16.70

HAMILTON COUNTY

404836097584101 Local number 10N 6W 27ACAA.

LOCATION.--Lat 40°48'36", long 097°58'41", NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.27, T.10 N., R.6 W., Hydrologic Unit 10270203, 4.0 mi south of junction of Route 14 and U.S. Highway 34 in Aurora, then 1.0 mi east and 0.3 mi south. 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, 82.31 ft below land-surface datum, June 5, 2000; lowest, 107.40 ft below land-surface datum, Aug. 24, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	87.91*	DEC 05	86.48	FEB 05	85.47	APR 05	84.81	JUN 15	84.32	AUG 15	90.45
05	87.98	07	86.40*	10	85.51	10	84.86	20	84.28	20	90.25
10	87.71	10	86.45	15	85.38	15	84.90	25	84.18	25	91.35
15	87.61	15	86.18	20	85.42	20	84.77	30	84.84	31	91.45
20	87.44	20	86.26	25	85.46	25	84.72	JUL 02	84.70*	SEP 05	91.24
25	87.23	25	86.15	28	85.33	30	84.57	05	85.27	10	90.95
31	87.10	31	86.00	MAR 05	85.25	MAY 05	84.49	10	85.75	15	90.62
NOV 02	87.15*	JAN 03	85.85*	06	85.15*	10	84.50	15	86.38	20	90.38
05	86.93	05	85.89	10	85.14	15	84.40	20	87.16	25	90.07
10	86.98	10	85.74	15	85.14	20	84.38	25	87.92	30	89.80
15	86.78	15	85.80	20	85.02	25	84.43	31	88.79		
20	86.82	20	85.68	25	85.00	31	84.40	AUG 05	89.46		
25	86.60	25	85.64	31	84.97	JUN 05	84.34	06	89.51*		
30	86.55	31	85.63	APR 02	84.82*	10	84.26	10	90.15		

WATER YEAR 2001 HIGHEST 84.18 JUN 25, 2001 LOWEST 91.45 AUG 31, 2001

* Manual tape measurement.

GROUND-WATER LEVELS

HAMILTON COUNTY--Continued

405514097573901. Local number 11N 6W 13CB.

LOCATION.--Lat 40°55'14", long 097°57'39", NW $\frac{1}{4}$ SW $\frac{1}{4}$ 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, 89.30 ft below land-surface datum, May 15, 1995; lowest, 117.18 ft below land-surface datum, Nov. 15, 1976.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL
APR 30	94.72

HARLAN COUNTY

400920099215501. Local number 2N 18W 9BCC.

LOCATION.--Lat 40°09'20", long 099°21'55", SW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ 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 March 2001.

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.

EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 95.27 ft, Oct. 21; minimum water-level depth below land surface, 89.41 ft, Mar. 14.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	91.01	90.40	90.29	89.97	89.86	89.72	---	---	---	---	---	---
10	90.70	90.53	90.24	89.95	89.89	89.52	---	---	---	---	---	---
15	91.01	90.38	90.12	90.02	89.73	---	---	---	---	---	---	---
20	95.22	90.46	90.12	89.96	89.80	---	---	---	---	---	---	---
25	90.72	90.27	90.17	89.92	89.81	---	---	---	---	---	---	---
EOM	90.58	90.34	90.04	89.94	89.73	---	---	---	---	---	---	---

HOLT COUNTY

421605098203001. Local number 27N 9W 34DA.

LOCATION.--Lat 42°16'05", long 098°20'30", NE $\frac{1}{4}$ SE $\frac{1}{4}$ 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 LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL
MAY 29	8.02

GROUND-WATER LEVELS

HOLT COUNTY--Continued

423148098300601. Local number 30N 10W 32DAA.

LOCATION.--Lat 42°31'48", long 098°30'06", NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.32, T.30 N., R.10 W., Hydrologic Unit 10150007, 2 mi east on paved road from O'Neill, then 2 mi north, 4 mi east, 2 mi north, 2 mi east, and 0.5 mi north. Owner: William J. Murphy.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in., depth 85 ft, perforated 25.5 to 85 ft.

DATUM.--Altitude of land-surface datum is 1,952 ft. Measuring point: Top of casing 1.00 ft above land-surface datum.

REMARKS.--Water levels in this well affected by withdrawals by nearby irrigation wells completed in this aquifer and withdrawals from a deeper aquifer which has resulted in water movement from the upper aquifer to the deeper aquifer.

PERIOD OF RECORD.--October 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 35.41 ft below land-surface datum, Oct. 21, 1966; lowest, 53.72 ft below land-surface datum, Sept. 15, 20, 25, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 44.29 ft, Sept. 13; minimum water-level depth below land surface, 43.09 ft, June 24.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	43.94	44.12	44.07	44.05	44.04	43.83	43.63	43.32	43.27	43.61	44.15
10	---	44.06	44.13	44.05	44.07	43.98	43.83	43.57	43.27	43.27	43.71	44.25
15	---	44.05	44.06	44.09	44.05	43.98	43.82	43.48	43.20	43.32	43.81	44.28
20	43.95	44.10	44.10	44.07	44.07	43.92	43.73	43.46	43.17	43.41	43.85	44.27
25	43.93	44.06	44.14	44.09	44.04	43.93	43.75	43.42	43.11	43.47	43.96	44.25
EOM	43.99	44.10	44.11	44.07	44.05	43.87	43.67	43.37	43.20	43.51	44.06	44.24

423730098560001. Local number 31N 14W 27DDD.

LOCATION.--Lat 42°37'30", long 098°56'00", SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.27, T.31 N., R.14 W., Hydrologic Unit 10150007, 6 mi north from Atkinson on Route 11, then 2 mi east. 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, 28.72 ft below land-surface datum, July 3, 1995; lowest, 43.30 ft below land-surface datum, Sept. 10, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 35.33 ft, Oct. 1; minimum water-level depth below land surface, 31.54 ft, June 22.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	35.28	34.94	34.72	34.50	34.35	34.21	33.76	33.10	31.98	31.80	32.21	33.13
10	35.22	34.89	34.69	34.48	34.32	34.17	33.74	32.77	31.82	31.76	32.55	33.08
15	35.15	34.86	34.64	34.45	34.29	34.09	33.70	32.49	31.66	31.66	32.78	32.89
20	35.09	34.82	34.61	34.43	34.28	33.90	33.64	32.35	31.57	31.59	32.87	32.69
25	35.05	34.78	34.59	34.41	34.24	33.85	33.58	32.27	31.68	31.77	33.03	32.52
EOM	34.98	34.75	34.54	34.37	34.27	33.78	33.40	32.16	31.78	32.06	33.01	32.37

GROUND-WATER LEVELS

HOOKER COUNTY

420204101200502. Local number 24N 35W 23DC2.

LOCATION.--Lat 42°02'04", long 101°20'05", SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.23, T.24 N., R.35 W., Hydrologic Unit 10210001, Approximately 5.2 mi west of Hecla on the south side of State Highway 2. Owner: U.S. Geological Survey.

AQUIFER.--Fine sand of Pleistocene age.

WELL CHARACTERISTICS.--Driven observation water-table well, diameter 2 in., depth 18 ft, perforated 15 to 18 ft.

DATUM.--Altitude of land-surface datum is 3,437 ft. Measuring point: Top of casing 1.90 ft above land-surface datum.

REMARKS.--Starting in December 1998, recorder instrument set to and read as depth below measuring point.

PERIOD OF RECORD.--December 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.64 ft below land-surface datum, April 29, 30, 2001; lowest, 6.33 ft below land-surface datum, August 30, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 7.19 ft, Oct. 4, 5; minimum water-level depth below land surface, 3.64 ft, Apr. 29, 30.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.19	5.54	5.57	5.85	5.64	5.49	4.73	3.96	4.69	5.26	5.27	---
10	6.59	5.62	5.55	5.74	5.52	5.33	4.36	---	4.74	4.75	5.54	---
15	6.32	5.62	5.53	5.68	5.56	5.18	4.08	4.34	4.93	4.36	5.52	---
20	6.18	5.69	5.64	5.71	5.56	5.02	4.33	4.48	5.08	4.70	5.83	---
25	5.98	5.62	5.77	5.69	5.52	4.92	3.73	4.59	5.24	4.88	5.79	---
EOM	5.54	5.57	5.82	5.64	5.56	4.83	3.64	4.69	5.31	5.06	5.79	---

KEARNEY COUNTY

402625098594501. Local number 6N 15W 34DC.

LOCATION.--Lat 40°26'16", long 098°59'40", SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.34, T.6 N., R.15 W., Hydrologic Unit 10270206, 4.5 mi south and 2.5 mi west of the junction of Route 10 and U.S. Highway 34 near Minden. Owner: Conservation and Survey Division, University of Nebraska-Lincoln.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 210 ft, cased with steel, perforated 190 to 210 ft.

DATUM.--Altitude of land-surface datum is 2,181 ft. Measuring point: Top of casing 1.00 ft above land-surface datum.

REMARKS.--Replacement for 402615099000001, local number 5N 15W 3BA1, period of record August 1947 to September 1967. Water levels in well affected by seepage losses from nearby canals and by pumping of nearby wells during irrigation season.

PERIOD OF RECORD.--October 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 62.35 ft below land-surface datum, May 9, 2001; lowest, 119.05 ft below land-surface datum, July 25, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL
MAY 09	62.35

GROUND-WATER LEVELS

KIMBALL COUNTY

411416103361101. Local number 15N 55W 26CCC.

LOCATION.--Lat 41°14'10", long 103°36'19", SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.26, T.15 N., R.55 W., Hydrologic Unit 10190016, east of intersection of U.S. Highway 30 and State Highway 71 in Kimball. Owner: Henry Meier.

AQUIFER.--Ogallala Formation of Pliocene age.

WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 24 in., depth 124 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 4,658.3 ft. Measuring point: Top of casing 0.00 ft above land-surface datum.

REMARKS.--Local well number formerly listed as 15N 55W 26°CC. Replacement for 411600103393501, local number 15N 55W 17CC1, period of record January 1935 to November 1942; June 1950 to October 1975.

PERIOD OF RECORD.--January 1936 to October 1937; January 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 37.48 ft below land-surface datum, May 1, 2001; lowest, 54.86 ft below land-surface datum, Nov. 4, 1996.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 28	52.72	MAY 01	37.48

LANCASTER COUNTY

403929096401001. Local number 8N 7E 18DDB.

LOCATION.--Lat 40°39'29", long 096°40'10", NW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.18, T.8 N., R.7 E., Hydrologic Unit 10200203, 0.6 mi west of Roca. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits, undifferentiated, of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in., depth 41 ft, perforated 36 to 41 ft.

DATUM.--Altitude of land-surface datum is 1,215 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

REMARKS.--Water level not measured during 1984 water year.

PERIOD OF RECORD.--June 1954 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.63 ft below land-surface datum, Aug. 25, 1954; lowest, 14.87 ft below land-surface datum, Oct. 18, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL
APR 24	9.28

403833096385501. Local number 8N 7E 20DDA.

LOCATION.--Lat 40°38'33", long 096°38'55", NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.20, T.8 N., R.7 E., Hydrologic Unit 10200203, 0.5 mi east and 1.1 mi south of Roca. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits, undifferentiated, of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in., depth 32.5 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,243 ft. Measuring point: Top of casing 1.00 ft above land-surface datum.

REMARKS.--Water level not measured during 1984 water year.

PERIOD OF RECORD.--June 1954 to current year.

REVISED RECORDS.--WDR NE-97: Highest water level above land-surface datum.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, +0.16 ft above land-surface datum, Mar. 27, 1960; lowest, 12.28 ft below land-surface datum, Oct. 17, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL
APR 24	4.48

GROUND-WATER LEVELS

LANCASTER COUNTY--Continued

404706096413001. Local number 10N 6E 36CDD.

LOCATION.--Lat 40°47'06", long 096°41'30", SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.36, T.10 N., R.6 E., Hydrologic Unit 10200203, in Irvingdale Park on the north side of Van Dorn Street between 19th and 20th Streets in Lincoln. Owner: City of Lincoln.

AQUIFER.--Dakota Formation of Lower Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 16 in., depth 170 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,200 ft. Measuring point: Top of casing 1.60 ft above land-surface datum.

REMARKS.--Recorder removed in January 1983. Well measured in spring and fall thereafter.

PERIOD OF RECORD.--August 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 45.07 ft below land-surface datum, Oct. 26, 1987; lowest 71.19 ft below land-surface datum, Sept. 5, 1956.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	46.93	MAY 09	46.82

MC PHERSON COUNTY

413130100531201. Local number 18N 31W 16DD.

LOCATION.--Lat 41°31'30", long 100°53'18", SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.16, T.18 N., R.31 W., Hydrologic Unit 10210004, Approximately 4.0 mi east and 2.0 mi south of Tryon. Owner: U.S. Geological Survey.

AQUIFER.--Fine sand of Pleistocene age.

WELL CHARACTERISTICS.--Observation water-table well, diameter 2 in., depth 120 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 3,219.6 ft. Measuring point: Top of casing 0.30 ft above land-surface datum.

PERIOD OF RECORD.--November 1934 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 104.67 ft below land-surface datum, May 10, 2001; lowest, 112.25 ft below land-surface datum, November 14, 1986.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20	104.89	NOV 20	104.79	JAN 12	104.78	FEB 22	104.75	MAY 10	104.67
WATER YEAR 2001		HIGHEST	104.67	MAY 10, 2001		LOWEST	104.89	OCT 20, 2000	

NUCKOLLS COUNTY

400240098111301. Local number 1N 8W 23AB.

LOCATION.--Lat 40°02'40", long 098°11'13", NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.23, T.1 N., R.8 W., Hydrologic Unit 10250016, 0.5 mi south and 0.5 mi west of Bostwick. Owner: U.S. Geological Survey.

AQUIFER.--Loess of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in., depth 18 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,598.15 ft. Measuring point: Top of casing 1.50 ft above land-surface datum.

PERIOD OF RECORD.--April 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.02 ft below land-surface datum, July 29, 1951; lowest, 7.91 ft below land-surface datum, July 8-9, 1950.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL
MAY 07	0.41

GROUND-WATER LEVELS

PHELPS COUNTY

403123099261501. Local number 6N 19W 2AA.

LOCATION.--Lat 40°31'28", long 099°26'13", NE ¼ NE ¼ sec.2, T.6 N., R.19 W., Hydrologic Unit 10200101, 10 mi east of Bertrand. Owner: Central Nebraska Public Power and Irrigation District.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1 in., depth 151 ft, screened 149 to 151 ft.

DATUM.--Altitude of land-surface datum is 2,359.1 ft. Measuring point: Top of casing 1.00 ft above land-surface datum.

REMARKS.--Water levels in well affected by seepage losses from nearby irrigation canal.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 31.59 ft below land-surface datum, Oct. 15, 1996; lowest, 123.70 ft below land-surface datum, Mar. 9, 1945.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL
MAY 03	35.48

PLATTE COUNTY

412955097192001. Local number 18N 1E 28CD.

LOCATION.--Lat 41°29'55", long 097°19'20", SE ¼ SW ¼ sec.28, T.18 N., R.1 E., Hydrologic Unit 10200201, 3 mi south and 8.5 mi east of Platte Center. Owner: Loup River Public Power District.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2 in., depth 99 ft, screened 97 to 99 ft.

DATUM.--Altitude of land-surface datum is 1,511.8 ft. Measuring point: Top of casing 3.50 ft above land-surface datum.

PERIOD OF RECORD.--November 1935 to August 1940; March 1942 to November 1953; November 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 57.30 ft (corrected) below land-surface datum, Mar. 27, Apr.24, 1940; lowest, 69.81 ft (corrected) below land-surface datum, Oct. 9, 1958.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL
MAY 08	62.22

SALINE COUNTY

403855097072501. Local number 8N 3E 19ADA.

LOCATION.--Lat 40°38'55", long 097°07'25", NE ¼ SE ¼ NE ¼ sec.19, T.8 N., R.3 E., Hydrologic Unit 10270202, west edge of Dorchester, on west side of Route 15 between U.S. Highway and Route 33. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 5 in., depth 151 ft, perforated 142 to 151 ft.

DATUM.--Altitude of land-surface datum is 1,496 ft. Measuring point: Top of casing at land-surface datum.

REMARKS.--Water levels in well affected by pumping of nearby wells during irrigation season.

PERIOD OF RECORD.--October 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 93.26 ft below land-surface datum, May 4, 1999; lowest, 107.15 ft below land-surface datum, Aug. 05, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 09	97.66	JAN 04	96.34	MAR 05	96.47	APR 30	95.50	JUL 09	97.83		
DEC 08	97.34	FEB 06	96.47	APR 09	95.82	JUN 06	95.54	AUG 08	99.25		
WATER YEAR 2001		HIGHEST	95.50	APR 30, 2001		LOWEST	99.25	AUG 08, 2001			

GROUND-WATER LEVELS

SARPY COUNTY

410308096190701. Local number 13N 10E 32DBBA.

LOCATION.--Lat 41°03'08", long 096°19'07", NE ¼ NW ¼ NW ¼ SE ¼ sec.32, T.13N., R.10 E., Hydrologic Unit 10200202, 0.5 mi south of northern end of Platte River Island 2.5 mi northeast of Ashland and approximately 1 mi south of U.S. Highway 6 and Linoma Beach Road. Owner: City of Lincoln, NE.

AQUIFER.--Alluvial sand and gravel deposits of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 83 ft, screened 43 to 83 ft., casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1056.4 ft. Measuring point: Top of casing 4.40 ft above land-surface datum.

REMARKS.--Water levels in well affected by Platte River stages. GOES system installed 1992.

PERIOD OF RECORD.--August 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, +2.13 ft above land-surface datum, July 25, 1993; lowest, 7.70 ft below land-surface datum, Nov. 4-5, 1993.

EXTREMES FOR CURRENT YEAR.--Maximum daily water-level depth below land surface, 6.91 ft, July 1; minimum daily water-level depth below land surface, 0.83 ft, Mar. 15.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.59	3.65	3.90	2.66	2.44	1.95	3.55	2.19	4.05	5.15	4.59	4.63
10	4.38	3.67	4.03	2.55	2.15	1.37	3.42	1.65	3.62	4.53	4.96	4.53
15	4.32	4.08	4.48	2.29	2.40	.83	2.60	3.15	3.50	4.42	4.97	4.50
20	4.08	3.98	2.91	2.47	2.26	2.82	3.27	3.23	4.43	4.18	4.10	4.01
25	4.15	3.94	2.66	2.54	1.95	3.24	2.34	3.72	3.69	4.56	4.33	4.31
EOM	3.81	3.90	2.73	2.51	1.94	3.47	3.08	4.26	6.34	4.47	4.41	4.35

SAUNDERS COUNTY

410558096210601. Local number 13N 9E 13ADBA.

LOCATION.--Lat 41°05'58", long 096°21'06", NE ¼ NW ¼ SE ¼ NE ¼ sec.13, T.13 N., R.9E., Hydrologic Unit 10200202, approximately 3.75 mi north and 0.85 mi east of Ashland. Owner: City of Lincoln.

AQUIFER.--Alluvial sand and gravel deposits of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in., depth 91 ft, screened 80 to 91 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,075 ft. Measuring point: Top of casing 4.40 ft above land-surface datum.

REMARKS.--Well drilled June 1990. Starting in April 1991, recorder instrument set to read depth below measuring point.

PERIOD OF RECORD.--August 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.77 ft below land-surface datum, Mar 13, 1993; lowest, 14.39 ft below land-surface datum, Oct. 1, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 13.84 ft, Oct. 20, 21; minimum water-level depth below land surface, 11.60 ft, May 7.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.78	13.18	12.91	12.61	---	12.15	12.28	11.96	11.83	12.65	13.47	13.29
10	13.80	12.95	12.87	12.56	11.95	12.18	12.35	11.79	11.95	12.88	13.59	13.10
15	13.81	12.88	12.75	12.37	11.88	12.06	12.23	12.04	12.10	12.94	13.65	13.09
20	13.84	12.86	12.70	---	11.98	11.86	12.19	12.15	12.23	13.05	13.48	12.98
25	13.77	12.89	12.70	---	12.02	12.03	12.21	12.08	12.38	13.23	13.41	12.89
EOM	13.36	12.92	12.65	---	12.09	12.19	12.26	12.01	12.51	13.31	13.32	12.99

GROUND-WATER LEVELS

SAUNDERS COUNTY--Continued

410427096202501. Local number 13N 10E 19CDDD.

LOCATION.--Lat 41°04'27", long 096°20'25", SE ¼ SE ¼ SE ¼ SW ¼ sec.19, T.13 N., R.10E., Hydrologic Unit 10200202, 2 mi north and 1.4 mi east of Ashland. Located on Nebraska National Guard camp approximately 400 ft from right bank of Platte River. Owner: City of Lincoln.

AQUIFER.--Alluvial sand and gravel deposits of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in., depth 56 ft., screened 45 to 56 ft., casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,065 ft. Measuring point: Top of casing 4.0 ft above land-surface datum.

REMARKS.--Water levels affected by Platte River stage. Starting in April 1991, recorder instrument set to read depth below measuring point. GOES system installed in September 1992.

PERIOD OF RECORD.--August 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, +0.18 ft above land-surface datum, July 10, 1993; lowest, 17.38 ft below land-surface datum, Oct. 27, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum daily water-level depth below land surface, 11.01 ft, Sept. 4; minimum daily water-level depth below land surface, 5.21 ft, Mar. 16.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.48	9.07	8.51	7.63	7.34	6.86	7.93	7.75	8.09	8.91	10.68	11.00
10	10.45	8.53	8.52	7.50	7.18	6.49	8.37	6.87	8.12	9.36	10.72	10.61
15	10.12	8.62	8.84	7.24	7.36	5.95	9.11	7.86	8.05	9.85	10.79	10.43
20	9.88	8.59	8.35	7.37	7.31	6.64	9.37	8.03	8.48	9.87	10.30	9.99
25	9.70	8.51	7.95	7.45	6.98	7.25	8.95	8.15	8.77	10.44	10.46	10.10
EOM	9.45	8.45	7.78	7.42	6.92	7.56	8.43	8.46	9.23	10.24	10.66	9.89

410340096202201. Local number 13N 10E 30CDDA.

LOCATION.--Lat 41°03'40", long 096°20'22", NE ¼ SE ¼ SE ¼ SW ¼ sec.30, T.13 N., R.10E., Hydrologic Unit 10200202, 1.1 mi north and 1.5 mi east of Ashland on Lincoln north well field by Nebraska National Guard Camp. Owner: City of Lincoln.

AQUIFER.--Alluvial sand and gravel deposits of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in., depth 70 ft., screened 55 to 70 ft., casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,059 ft. Measuring point: Top of casing 6.6 ft above land-surface datum (changed from 4.10 ft on 04-25-94).

REMARKS.--Water levels in area affected by nearby pumping of municipal wells. Starting in April 1991, recorder instrument set to read depth below measuring point. GOES system installed in August 1994.

PERIOD OF RECORD.--August 1990 to current year.

REVISED RECORDS.--WDR NE-96: Water levels for 1995 water year,

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, +4.13 ft above land-surface datum, July 24, 1993; lowest, 26.00 ft below land-surface datum, Oct. 11, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 20.26 ft, Sept. 6; minimum water-level depth below land surface, 4.41 ft, Mar. 22.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	11.89	9.66	6.74	6.47	5.70	6.17	7.59	7.72	11.39	16.38	20.08
10	17.31	10.27	8.99	6.73	6.06	5.51	6.04	6.67	7.94	13.55	17.63	19.32
15	---	8.95	8.66	6.80	5.70	5.06	7.80	6.38	8.40	13.95	18.28	19.20
20	17.02	9.00	8.45	6.54	6.20	4.60	9.54	7.47	7.95	14.58	---	17.47
25	14.77	8.63	7.60	6.56	6.09	4.58	10.13	6.58	7.61	14.41	---	15.76
EOM	13.29	9.42	6.96	6.76	5.66	5.53	9.37	7.80	9.95	15.05	---	14.59

GROUND-WATER LEVELS

SAUNDERS COUNTY--Continued

410303096192901. Local number 13N 10E 32CABC.

LOCATION.--Lat 41°03'03", long 096°19'29", SW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.32, T.13 N., R.10E., Hydrologic Unit 10200202, 2.0 mi north and 0.6 mi south of Ashland. One-sixth mile south of highway 6 gate for Willow Point Community Housing. Northern end of Willow Point lake, approximately 400 feet from right bank of Platte River. Owner: City of Lincoln.

AQUIFER.--Alluvial sand and gravel deposits of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in., depth 86 ft., screened 51 to 86 ft., casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,056 ft. Measuring point: Top of casing 3.60 ft above land-surface datum.

REMARKS.--Water levels affected by nearby pumping of municipal wells and Platte River stage. Starting in April 1991, recorder instrument set to read depth below measuring point. GOES unit installed in September 1992.

PERIOD OF RECORD.--December 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.18 ft below land-surface datum, July 25, 1993; lowest, 11.81 ft below land-surface datum, Oct 23, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 8.48 ft, Nov. 20; minimum water-level depth below land surface, 3.88 ft, Mar. 14.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.54	7.59	6.66	6.34	5.32	4.96	6.56	4.65	6.11	6.56	7.66	7.53
10	7.23	7.66	6.65	6.68	5.15	4.56	6.06	4.10	6.12	7.11	8.44	7.72
15	7.18	7.69	6.86	5.40	5.35	3.93	5.19	4.87	5.91	7.35	8.18	7.31
20	7.97	8.48	6.36	5.42	5.87	5.52	5.55	5.59	6.22	6.84	7.36	6.57
25	7.04	7.08	6.77	5.48	4.98	5.31	5.50	5.73	6.47	7.52	7.37	6.70
EOM	6.50	7.42	5.86	5.27	4.97	5.80	5.55	6.01	6.84	7.39	7.36	7.32

411005096281502. Local number 14N 8E 24ACD2.

LOCATION.--Lat 41°10'05", long 096°28'15", SE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.24, T.14 N., R.8 E., Hydrologic Unit 10200203, 4 mi south from the intersection of Routes 92 and 692 near Mead, then 0.65 mi east and 0.4 mi south to the south end of load line 2 of the Mead Field Station. 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, 39.22 ft below land-surface datum, Mar. 31, 1988; lowest, 46.98 ft below land-surface datum, Sept. 25, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	41.87	JAN 03	41.74	MAR 06	41.32	MAY 10	40.98	JUL 09	40.88		
NOV 02	41.93	FEB 07	41.55	APR 11	40.97	JUN 11	40.87	AUG 01	41.36		
WATER YEAR 2001		HIGHEST	40.87	JUN 11, 2001		LOWEST	41.93	NOV 02, 2000			

GROUND-WATER LEVELS

SCOTTS BLUFF COUNTY

415325103392801. Local number 22N 55W 11DDC.

LOCATION.--Lat 41°53'25", long 103°39'28", SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.11, T.22 N., R.55 W., Hydrologic Unit 10180009, 0.5 mi north of the west intersection of Routes 71 and 26 in Scottsbluff, then 0.8 mi east. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits, undifferentiated, of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 32 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 3,953 ft. Measuring point: Top of casing 0.00 ft above land-surface datum.

REMARKS.--Recorder removed in January 1984. Well measured monthly until recorder reinstalled January 1985.

PERIOD OF RECORD.--August 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 21.27 ft below land-surface datum, Sept. 9, 1986; lowest, 28.08 ft below land-surface datum, May 31, 1994.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05	25.77	NOV 30	25.47	JAN 25	25.64	MAR 25	25.92	MAY 15	26.14	JUL 11	26.45*
10	25.72	DEC 05	25.47	31	25.66	31	25.95	20	26.20	15	26.41
15	25.67	10	25.48	FEB 05	25.67	APR 02	25.97*	25	26.26	20	26.32
20	25.63	15	25.48	10	25.69	05	25.97	31	26.37	25	26.31
25	25.60	20	25.50	15	25.71	10	25.98	JUN 05	26.42	31	26.23
31	25.53	25	25.53	20	25.75	15	25.99	10	26.43	AUG 05	26.18
NOV 05	25.50	31	25.56	25	25.76	20	26.02	15	26.46	06	26.17*
10	25.47	JAN 05	25.58	28	25.79	25	26.03	20	26.53		
15	25.46	09	25.58*	MAR 05	25.81	30	26.06	25	26.58		
20	25.45	10	25.58	10	25.81	MAY 04	26.07*	30	26.60		
22	25.45*	15	25.61	15	25.83	05	26.07	JUL 05	26.58		
25	25.45	20	25.63	20	25.86	10	26.10	10	26.46		

WATER YEAR 2001 HIGHEST 25.45 NOV 22, 2000 NOV 25, 2000 LOWEST 26.60 JUN 30, 2001

* Manual tape measurement.

SEWARD COUNTY

405406097115001. Local number 11N 2E 21DD.

LOCATION.--Lat 40°54'06", long 097°11'50", SE $\frac{1}{4}$ SE $\frac{1}{4}$ 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, 72.02 ft below land-surface datum, May 10, 2000; lowest, 90.17 ft below land-surface datum, Aug. 5, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	76.26*	NOV 20	74.97	JAN 25	73.94	MAR 20	73.87	MAY 08	73.72*	JUL 02	74.35*
05	76.24	25	74.94	31	73.78	25	73.89	10	73.69	05	74.71
10	76.24	30	74.80	FEB 05	73.97	31	73.70	15	73.72	AUG 06	79.94*
15	75.79	DEC 05	74.83	10	74.02	APR 02	73.64*	20	73.79	10	80.74
20	75.61	08	74.68*	15	74.01	05	73.64	25	73.87	SEP 05	81.04
25	75.53	31	73.46	20	74.05	10	73.57	31	73.87	10	80.70
31	75.27	JAN 03	73.40*	25	73.86	15	73.72	JUN 05	73.86		
NOV 02	75.16*	05	73.27	28	74.04	20	73.81	10	73.90		
05	75.19	10	73.52	MAR 05	73.92	25	73.77	15	73.73		
10	75.02	15	73.65	10	73.88	30	73.77	20	73.84		
15	75.04	20	73.77	15	73.66	MAY 05	73.70	25	73.81		

WATER YEAR 2001 HIGHEST 73.27 JAN 05, 2001 LOWEST 81.04 SEP 05, 2001

* Manual tape measurement.

GROUND-WATER LEVELS

VALLEY COUNTY

412955099123201. Local number 18N 16W 30CC.

LOCATION.--Lat 41°29'55", long 099°12'32", SW $\frac{1}{4}$ SW $\frac{1}{4}$, sec.30, T.18 N., R.16 W., Hydrologic Unit 10210003, 4 mi west and 5 mi north of Arcadia. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 0.75 in., depth 14 ft, screened from 12 to 14 ft.

DATUM.--Altitude of land-surface datum is 2,217.61 ft. Measuring point: Top of casing 2.00 ft above land-surface datum.

REMARKS.--Water levels in well affected by evapotranspiration.

PERIOD OF RECORD.--August 1949 to June 1956; June 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.25 ft below land-surface datum, May 3, 1983; lowest, 5.90 ft below land-surface datum, Mar. 1, 1973.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL
MAY 07	0.72

WEBSTER COUNTY

400423098314001. Local number 1N 11W 11AB.

LOCATION.--Lat 40°04'23", long 098°31'40", NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.11, T.1 N., R.11 W., Hydrologic Unit 10250016, 1 mi south and 0.25 mi west of intersection of U.S. Highways 136 and 281 in Red Cloud. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in., depth 16.9 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,686 ft. Measuring point: Top of casing 1.7 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.74 ft (corrected) below land-surface datum, July 11-12, 1951; lowest, 9.96 ft (corrected) below land-surface datum, Apr. 5, 1957.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL
MAY 04	3.22

YORK COUNTY

405305097351503. Local number 11N 2W 31BA3.

LOCATION.--Lat 40°53'05", long 097°35'15", NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.31, T.11 N., R.2 W., Hydrologic Unit 10270203, south edge of York County Fairgrounds on the north side of York. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in., depth 165 ft, perforated below water table.

DATUM.--Altitude of land-surface datum is 1,659 ft. Measuring point: Top of casing 1.6 ft above land-surface datum.

REMARKS.--Replacement for well 405305097351501, local number 11N 2W 31BA1, with period of record October 1957 to January 1969. Water levels in well affected by withdrawals from nearby municipal well and by withdrawals from nearby irrigation wells.

PERIOD OF RECORD.--May 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 78.96 ft below land-surface datum, Mar. 1, 1999; lowest, 120.81 ft below land-surface datum, July 15, 1974.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	84.16	DEC 07	81.54	FEB 06	81.59	APR 02	81.15	JUN 05	81.32	AUG 06	97.45
NOV 02	81.69	JAN 03	81.04	MAR 06	81.48	MAY 08	81.65	JUL 02	87.42		
WATER YEAR 2001		HIGHEST	81.04	JAN 03, 2001		LOWEST	97.45	AUG 06, 2001			

CHEMICAL ANALYSES OF GROUND WATER

PAPIO-MISSOURI STUDY
WATER-QUALITY MONITORING

(Local identifier: indicates location by township, range, and section. Geologic unit: 110QRNR, Quaternary system deposits, undifferentiated; 112PLSC, Pleistocene series deposits; 112SDGV, Pleistocene sand and gravel deposits. Remark codes: <, less than; E, estimated value)

COUNTIES.--Burt, Dakota, Douglas, Sarpy, Thurston, and Washington

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

STATION	NUMBER	LOCAL IDENT- I- FIER	LAT- I- TUDE	LONG- I- TUDE	GEO- LOGIC UNIT	HYDRO- LOGIC UNIT CODE	DATE	TIME	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)
BURT COUNTY										
414413096105401	20N 11E 4ACBA1		41 44 13 N	096 10 54 W	110QRNR	10230001	07-31-01	1200	101	1020
414256096071601	20N 11E12DBDD1		41 42 56 N	096 07 16 W	110QRNR	10230001	07-26-01	1050	104	1015
414200096133801	20N 11E18CDBC1		41 42 00 N	096 13 38 W	110QRNR	10230001	07-24-01	1245	168.00	1050.00
414020096130601	20N 11E30DCAA1		41 40 20 N	096 13 06 W	112SDGV	10230001	07-17-01	1000	63.00	1052.00
414820096082301	21N 11E11DBBD1		41 48 20 N	096 08 23 W	110QRNR	10230001	07-23-01	1340	122	1035
414601096130001	21N 11E30A 1		41 46 01 N	096 13 00 W	110QRNR	10230001	07-26-01	1415	95.00	1030.00
415052096085401	22N 11E26CDAC1		41 50 52 N	096 08 54 W	--	10230001	07-24-01	1515	110	1035
415924096130901	23N 11E 6DCDD1		41 59 24 N	096 13 09 W	110QRNR	10230001	07-23-01	1535	--	1250
DAKOTA COUNTY										
421640096221401	27N 9E26DCDD1		42 16 40 N	096 22 14 W	110QRNR	10220003	07-16-01	1445	103	1072
422524096332801	28N 7E 1DBDD1		42 25 24 N	096 33 28 W	110QRNR	10170101	07-17-01	0815	130	1102
422524096250701	28N 9E 4CDBC1		42 25 24 N	096 25 07 W	112SDGV	10230001	07-17-01	1035	162.00	1095.00
422301096262201	28N 9E20CBDD1		42 23 01 N	096 26 22 W	110QRNR	10230001	07-18-01	1020	105.00	1080.00
DOUGLAS COUNTY										
412259095564601	16N 13E 3CBCC1		41 22 59 N	095 56 46 W	110SDGV	10230006	07-23-01	1230	--	1170
411855095551901	16N 13E35BDCB1		41 18 55 N	095 55 19 W	112SDGV	10230006	07-20-01	1000	80.00	979.00
SARPY COUNTY										
410730095525401	13N 14E 6CAC1		41 07 30 N	095 52 54 W	112SDGV	10230006	07-18-01	1900	90	960
410457095523501	13N 14E19 1		41 04 57 N	095 52 49 W	112SDGV	10230006	07-16-01	0930	97.00	960.00
THURSTON COUNTY										
420746096195701	25N 10E19ABDD1		42 07 46 N	096 19 57 W	112SDGV	10230001	07-25-01	1455	93.00	1070.00
WASHINGTON COUNTY										
412559096005601	17N 12E24BACC1		41 25 59 N	096 00 56 W	110QRNR	10230006	07-23-01	1015	--	1100.00
412716095584201	17N 13E 8CCAA		41 27 16 N	095 58 42 W	--	10230006	07-23-01	1100	--	944
413959096074901	20N 11E36ABBB1		41 39 59 N	096 07 49 W	--	10230001	07-24-01	0930	--	1015

CHEMICAL ANALYSES OF GROUND WATER

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PAPIO-MISSOURI STUDY--Continued
WATER-QUALITY MONITORING

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	AMETRYN WATER, DISS, REC, (UG/L) (38401)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BRO- MACIL, WATER, DISS, REC (UG/L) (04029)	BUTA- CHLOR, WATER, DISS, REC (UG/L) (04026)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BOXIN, WATER, DISS, REC (UG/L) (04027)
BURT COUNTY													
07-31-01	.7	7.1	944	12.5	.117	<.050	<.050	<.05	<.050	<.05	<.05	<.050	<.05
07-26-01	.2	7.1	1220	12.0	E.035	<.050	<.050	<.05	<.050	<.05	<.05	<.050	<.05
07-24-01	E8.3	7.2	1380	12.0	E.026	--	--	--	--	--	--	--	--
07-17-01	3.9	7.2	540	12.0	<.050	--	--	--	--	--	--	--	--
07-23-01	.2	7.2	855	12.0	E.038	<.050	<.050	<.05	<.050	<.05	<.05	<.050	<.05
07-26-01	.2	7.1	743	11.5	2.26	<.050	<.050	<.05	<.050	<.05	<.05	<.050	<.05
07-24-01	E7.8	8.0	810	19.0	E.036	<.050	<.050	<.05	<.050	<.05	<.05	<.050	<.05
07-23-01	.2	7.1	798	11.5	E.032	--	--	--	--	--	--	--	--
DAKOTA COUNTY													
07-16-01	.2	7.2	1100	11.5	<.050	--	--	--	--	--	--	--	--
07-17-01	.2	7.2	1170	11.5	<.050	--	--	--	--	--	--	--	--
07-17-01	.3	7.1	1380	12.0	<.050	--	--	--	--	--	--	--	--
07-18-01	.2	7.1	1300	11.5	<.050	--	--	--	--	--	--	--	--
DOUGLAS COUNTY													
07-23-01	4.6	7.2	523	15.0	2.70	--	--	--	--	--	--	--	--
07-20-01	.1	6.7	923	14.0	<.050	--	--	--	--	--	--	--	--
SARPY COUNTY													
07-18-01	.4	7.3	610	13.0	<.050	--	--	--	--	--	--	--	--
07-16-01	E7.0	7.4	778	15.0	E.036	--	--	--	--	--	--	--	--
THURSTON COUNTY													
07-25-01	4.3	7.3	928	11.5	.116	--	--	--	--	--	--	--	--
WASHINGTON COUNTY													
07-23-01	E10	7.4	596	15.0	E.043	--	--	--	--	--	--	--	--
07-23-01	4.1	7.3	560	13.0	E.040	--	--	--	--	--	--	--	--
07-24-01	2.7	7.1	1100	12.0	<.050	--	--	--	--	--	--	--	--

CHEMICAL ANALYSES OF GROUND WATER

PAPIO-MISSOURI STUDY--Continued
WATER-QUALITY MONITORING

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

[illegible]

CHEMICAL ANALYSES OF GROUND WATER

PAPIO-MISSOURI STUDY--Continued
WATER-QUALITY MONITORING

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SIMA- TRYN, WATER, DISS, REC (UG/L) (04030)	TER- BACIL, WATER, DISS, REC (UG/L) (04032)	TRI- FLUR- ALIN, WATER, DISS, REC (UG/L) (04023)	VERNO- LATE, WATER, DISS, REC (UG/L) (04034)
BURT COUNTY				
07-31-01	<.05	<.05	<.05	<.05
07-26-01	<.05	<.05	<.05	<.05
07-24-01	--	--	--	--
07-17-01	--	--	--	--
07-23-01	<.05	<.05	<.05	<.05
07-26-01	<.05	<.05	<.05	<.05
07-24-01	<.05	<.05	<.05	<.05
07-23-01	--	--	--	--
DAKOTA COUNTY				
07-16-01	--	--	--	--
07-17-01	--	--	--	--
07-17-01	--	--	--	--
07-18-01	--	--	--	--
DOUGLAS COUNTY				
07-23-01	--	--	--	--
07-20-01	--	--	--	--
SARPY COUNTY				
07-18-01	--	--	--	--
07-16-01	--	--	--	--
THURSTON COUNTY				
07-25-01	--	--	--	--
WASHINGTON COUNTY				
07-23-01	--	--	--	--
07-23-01	--	--	--	--
07-24-01	--	--	--	--

CHEMICAL ANALYSES OF GROUND WATER

PAPIO-MISSOURI STUDY
WATER QUALITY FROM WELL NESTS

(Local identifier: indicates location by township, range, and section. Geologic unit: 112SDGV, Pleistocene sand and gravel deposits; 211DKOT, Upper Cretaceous Dakota Formation deposits. Remark codes: <, less than; E, estimated value; M, presence verified, not quantified)

COUNTIES.--Burt, Dakota, Douglas, Sarpy, Thurston, and Washington

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

STATION	NUMBER	LOCAL IDENT- I- FIER	LAT- I- TUDE	LONG- I- TUDE	GEO- LOGIC UNIT	HYDRO- LOGIC UNIT CODE	DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DEPTH OF WELL, TOTAL (FEET) (72008)
BURT COUNTY										
414700096134901	21N 11E19BBBC1		41 47 00 N	096 13 49 W	211DKOT	10230001	10-31-00	1500	43.09	171
			41 47 00 N	096 13 49 W	211DKOT	10230001	12-20-00	1600	42.60	171
			41 47 00 N	096 13 49 W	211DKOT	10230001	02-21-01	1645	41.98	171
			41 47 00 N	096 13 49 W	211DKOT	10230001	04-19-01	1720	45.03	171
			41 47 00 N	096 13 49 W	211DKOT	10230001	06-21-01	1600	44.85	171
			41 47 00 N	096 13 49 W	211DKOT	10230001	08-22-01	1630	48.53	171
414700096134902	21N 11E19BBBC2		41 47 00 N	096 13 49 W	211DKOT	10230001	10-31-00	1530	51.02	139
			41 47 00 N	096 13 49 W	211DKOT	10230001	12-20-00	1630	49.88	139
			41 47 00 N	096 13 49 W	211DKOT	10230001	02-21-01	1715	48.82	139
			41 47 00 N	096 13 49 W	211DKOT	10230001	04-19-01	1750	44.73	139
			41 47 00 N	096 13 49 W	211DKOT	10230001	06-21-01	1630	44.61	139
			41 47 00 N	096 13 49 W	211DKOT	10230001	08-22-01	1700	47.81	139
414700096134903	21N 11E19BBBC3		41 47 00 N	096 13 49 W	211DKOT	10230001	10-31-00	1545	36.39	80
			41 47 00 N	096 13 49 W	211DKOT	10230001	12-20-00	1650	35.82	80
			41 47 00 N	096 13 49 W	211DKOT	10230001	02-21-01	1730	34.99	80
			41 47 00 N	096 13 49 W	211DKOT	10230001	04-19-01	1810	38.43	80
			41 47 00 N	096 13 49 W	211DKOT	10230001	06-21-01	1645	38.16	80
			41 47 00 N	096 13 49 W	211DKOT	10230001	08-22-01	1710	38.98	80
DAKOTA COUNTY										
422035096281901	27N 8E 1ACCC1		42 20 35 N	096 28 19 W	112SDGV	10230001	10-31-00	1200	21.86	129
			42 20 35 N	096 28 19 W	112SDGV	10230001	12-20-00	1300	20.89	129
			42 20 35 N	096 28 19 W	112SDGV	10230001	04-19-01	1430	22.07	129
			42 20 35 N	096 28 19 W	112SDGV	10230001	06-21-01	1300	21.94	129
			42 20 35 N	096 28 19 W	112SDGV	10230001	08-22-01	1400	22.83	129
422035096281902	27N 8E 1ACCC2		42 20 35 N	096 28 19 W	112SDGV	10230001	10-31-00	1230	21.58	93
			42 20 35 N	096 28 19 W	112SDGV	10230001	12-20-00	1320	20.70	93
			42 20 35 N	096 28 19 W	112SDGV	10230001	02-21-01	1400	19.58	93
			42 20 35 N	096 28 19 W	112SDGV	10230001	04-19-01	1450	22.13	93
			42 20 35 N	096 28 19 W	112SDGV	10230001	06-21-01	1320	22.01	93
			42 20 35 N	096 28 19 W	112SDGV	10230001	08-22-01	1420	22.81	93
422035096281903	27N 8E 1ACCC3		42 20 35 N	096 28 19 W	112SDGV	10230001	10-31-00	1245	21.18	53
			42 20 35 N	096 28 19 W	112SDGV	10230001	12-20-00	1340	20.40	53
			42 20 35 N	096 28 19 W	112SDGV	10230001	02-21-01	1415	19.36	53
			42 20 35 N	096 28 19 W	112SDGV	10230001	04-19-01	1500	21.89	53
			42 20 35 N	096 28 19 W	112SDGV	10230001	06-21-01	1330	21.72	53
			42 20 35 N	096 28 19 W	112SDGV	10230001	08-22-01	1430	22.58	53
DOUGLAS COUNTY										
411231096193203	14N 10E 5CBDB3		41 12 31 N	096 19 32 W	112SDGV	10220003	10-30-00	1430	8.02	22
			41 12 31 N	096 19 32 W	112SDGV	10220003	12-22-00	1245	7.12	22
			41 12 31 N	096 19 32 W	112SDGV	10220003	02-20-01	1545	6.66	22
			41 12 31 N	096 19 32 W	112SDGV	10220003	04-18-01	1530	5.25	22
			41 12 31 N	096 19 32 W	112SDGV	10220003	06-20-01	1400	5.10	22
			41 12 31 N	096 19 32 W	112SDGV	10220003	08-21-01	1500	6.04	22
411231096193201	14N 10E 5CBDD1		41 12 31 N	096 19 32 W	112SDGV	10220003	10-30-00	1350	8.78	98
			41 12 31 N	096 19 32 W	112SDGV	10220003	12-22-00	1200	7.58	98
			41 12 31 N	096 19 32 W	112SDGV	10220003	02-20-01	1500	6.90	98
			41 12 31 N	096 19 32 W	112SDGV	10220003	04-18-01	1450	5.38	98
			41 12 31 N	096 19 32 W	112SDGV	10220003	06-20-01	1330	5.25	98
			41 12 31 N	096 19 32 W	112SDGV	10220003	08-21-01	1430	5.28	98

CHEMICAL ANALYSES OF GROUND WATER

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PAPIO-MISSOURI STUDY--Continued
WATER QUALITY FROM WELL NESTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM AD- SORP- TION RATIO (00931)
BURT COUNTY													
10-31-00	1135	728	.8	7	7.0	1090	--	12.5	490	142	32.0	10.4	1
12-20-00	1135	728	.1	0	6.9	1140	--	12.0	--	--	--	--	--
02-21-01	1135	741	.1	0	6.9	1140	--	12.0	--	--	--	--	--
04-19-01	1135	720	.1	1	7.1	1150	20.0	12.0	--	--	--	--	--
06-21-01	1135	735	1.1	--	7.0	--	--	12.5	--	--	--	--	--
08-22-01	1135	732	.4	--	7.1	--	--	12.5	--	--	--	--	--
10-31-00	1135	728	.5	5	7.0	985	--	12.5	460	130	32.0	7.95	1
12-20-00	1135	728	.1	1	7.0	1050	--	12.0	--	--	--	--	--
02-21-01	1135	741	.1	0	6.9	1040	--	12.0	--	--	--	--	--
04-19-01	1135	720	.1	1	7.1	1070	20.0	12.0	--	--	--	--	--
06-21-01	1135	735	.1	--	6.9	--	--	12.5	--	--	--	--	--
08-22-01	1135	732	.6	--	7.0	--	--	12.5	--	--	--	--	--
10-31-00	1135	728	7.4	73	7.2	868	--	12.5	450	122	35.9	2.62	.4
12-20-00	1135	728	6.9	67	7.1	984	--	12.0	--	--	--	--	--
02-21-01	1135	741	6.0	58	7.1	988	--	12.0	--	--	--	--	--
04-19-01	1135	720	9.2	92	7.3	938	20.0	12.5	--	--	--	--	--
06-21-01	1135	735	9.1	--	7.0	--	--	12.5	--	--	--	--	--
08-22-01	1135	732	1.4	--	7.2	--	--	12.5	--	--	--	--	--
DAKOTA COUNTY													
10-31-00	1092	729	M	0	7.1	1140	--	12.0	510	146	34.2	11.1	1
12-20-00	1092	728	.1	0	7.1	1150	--	11.5	--	--	--	--	--
04-19-01	1092	720	.1	1	7.2	1170	20.0	12.0	--	--	--	--	--
06-21-01	1092	734	.2	--	6.8	--	--	12.0	--	--	--	--	--
08-22-01	1092	730	.1	--	7.1	--	--	12.0	--	--	--	--	--
10-31-00	1092	729	.1	0	7.1	888	--	11.5	440	124	32.8	8.69	.6
12-20-00	1092	728	.1	1	7.1	898	--	11.0	--	--	--	--	--
02-21-01	1092	742	.1	0	7.1	898	--	11.5	--	--	--	--	--
04-19-01	1092	720	.1	1	7.2	928	20.0	11.5	--	--	--	--	--
06-21-01	1092	734	.2	--	7.0	--	--	12.0	--	--	--	--	--
08-22-01	1092	730	.2	--	7.1	--	--	12.0	--	--	--	--	--
10-31-00	1092	729	2.4	23	7.1	1000	--	11.5	540	159	33.9	5.73	.4
12-20-00	1092	728	2.0	19	7.0	945	--	11.0	--	--	--	--	--
02-21-01	1092	742	2.1	19	7.0	946	--	11.0	--	--	--	--	--
04-19-01	1092	720	1.6	16	7.1	1140	20.0	11.5	--	--	--	--	--
06-21-01	1092	734	1.5	--	7.0	--	--	12.0	--	--	--	--	--
08-22-01	1092	730	1.1	--	7.1	--	--	12.0	--	--	--	--	--
DOUGLAS COUNTY													
10-30-00	1107	728	.3	3	6.8	512	6.8	14.5	230	73.1	10.8	13.8	.3
12-22-00	1107	730	.3	3	7.1	510	--	13.0	--	--	--	--	--
02-20-01	1107	740	.4	4	7.0	504	--	12.0	--	--	--	--	--
04-18-01	1107	737	.3	--	7.0	--	18.0	11.0	--	--	--	--	--
06-20-01	1107	735	.4	--	6.9	--	--	11.5	--	--	--	--	--
08-21-01	1107	732	.2	--	7.2	--	--	12.5	--	--	--	--	--
10-30-00	1107	728	M	0	7.3	542	--	12.0	220	67.5	11.4	7.79	.8
12-22-00	1107	730	.1	0	7.3	520	--	12.0	--	--	--	--	--
02-20-01	1107	740	.1	0	7.3	520	--	12.0	--	--	--	--	--
04-18-01	1107	737	.2	2	7.4	572	18.0	12.0	--	--	--	--	--
06-20-01	1107	735	.2	--	7.0	--	--	12.0	--	--	--	--	--
08-21-01	1107	732	.1	--	7.5	--	--	12.5	--	--	--	--	--

PAPIO-MISSOURI STUDY--Continued
WATER QUALITY FROM WELL NESTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ANC	CHLO-	FLUO-	SILICA,	SULFATE	SOLIDS,	SOLIDS,	NITRO-	NITRO-	NITRO-	NITRO-
			UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	RIDE, DIS- SOLVED (MG/L AS CL) (00940)	RIDE, DIS- SOLVED (MG/L AS F) (00950)	DIS- SOLVED AS SIO2) (00955)	DIS- SOLVED (MG/L AS SO4) (00945)	DIS- SOLVED (TONS PER AC-FT) (70303)	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)
BURT COUNTY													
10-31-00	56.1	20	307	27.6	1.0	18.7	239	.99	731	.195	.25	--	--
12-20-00	--	--	--	--	--	--	--	--	--	--	--	--	--
02-21-01	--	--	--	--	--	--	--	--	--	--	--	--	--
04-19-01	--	--	--	--	--	--	--	--	--	--	--	--	--
06-21-01	--	--	--	--	--	--	--	--	--	--	--	--	--
08-22-01	--	--	--	--	--	--	--	--	--	--	--	--	--
10-31-00	51.3	19	316	25.2	.8	20.7	205	.92	676	.143	.18	--	--
12-20-00	--	--	--	--	--	--	--	--	--	--	--	--	--
02-21-01	--	--	--	--	--	--	--	--	--	--	--	--	--
04-19-01	--	--	--	--	--	--	--	--	--	--	--	--	--
06-21-01	--	--	--	--	--	--	--	--	--	--	--	--	--
08-22-01	--	--	--	--	--	--	--	--	--	--	--	--	--
10-31-00	20.6	9	373	17.0	.4	20.4	34.4	.77	566	<.041	--	20.0	88.4
12-20-00	--	--	--	--	--	--	--	--	--	--	--	--	--
02-21-01	--	--	--	--	--	--	--	--	--	--	--	--	--
04-19-01	--	--	--	--	--	--	--	--	--	--	--	--	--
06-21-01	--	--	--	--	--	--	--	--	--	--	--	--	--
08-22-01	--	--	--	--	--	--	--	--	--	--	--	--	--
DAKOTA COUNTY													
10-31-00	58.2	20	344	29.7	.7	31.7	247	1.05	771	.452	.58	--	--
12-20-00	--	--	--	--	--	--	--	--	--	--	--	--	--
04-19-01	--	--	--	--	--	--	--	--	--	--	--	--	--
06-21-01	--	--	--	--	--	--	--	--	--	--	--	--	--
08-22-01	--	--	--	--	--	--	--	--	--	--	--	--	--
10-31-00	26.8	11	415	5.9	.5	31.7	83.6	.77	569	.367	.47	--	--
12-20-00	--	--	--	--	--	--	--	--	--	--	--	--	--
02-21-01	--	--	--	--	--	--	--	--	--	--	--	--	--
04-19-01	--	--	--	--	--	--	--	--	--	--	--	--	--
06-21-01	--	--	--	--	--	--	--	--	--	--	--	--	--
08-22-01	--	--	--	--	--	--	--	--	--	--	--	--	--
10-31-00	20.4	8	478	4.8	.5	31.6	72.6	.85	624	.100	.13	--	--
12-20-00	--	--	--	--	--	--	--	--	--	--	--	--	--
02-21-01	--	--	--	--	--	--	--	--	--	--	--	--	--
04-19-01	--	--	--	--	--	--	--	--	--	--	--	--	--
06-21-01	--	--	--	--	--	--	--	--	--	--	--	--	--
08-22-01	--	--	--	--	--	--	--	--	--	--	--	--	--
DOUGLAS COUNTY													
10-30-00	11.0	9	155	10.3	.3	25.4	72.7	.45	332	E.025	--	4.58	20.3
12-22-00	--	--	--	--	--	--	--	--	--	--	--	--	--
02-20-01	--	--	--	--	--	--	--	--	--	--	--	--	--
04-18-01	--	--	--	--	--	--	--	--	--	--	--	--	--
06-20-01	--	--	--	--	--	--	--	--	--	--	--	--	--
08-21-01	--	--	--	--	--	--	--	--	--	--	--	--	--
10-30-00	27.5	21	185	11.9	.4	32.5	72.6	.48	353	<.041	--	2.32	10.3
12-22-00	--	--	--	--	--	--	--	--	--	--	--	--	--
02-20-01	--	--	--	--	--	--	--	--	--	--	--	--	--
04-18-01	--	--	--	--	--	--	--	--	--	--	--	--	--
06-20-01	--	--	--	--	--	--	--	--	--	--	--	--	--
08-21-01	--	--	--	--	--	--	--	--	--	--	--	--	--

CHEMICAL ANALYSES OF GROUND WATER

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PAPIO-MISSOURI STUDY--Continued
WATER QUALITY FROM WELL NESTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
BURT COUNTY								
10-31-00	4.20	--	<.006	--	E.013	55	<10	488
12-20-00	12.4	--	--	--	--	--	--	--
02-21-01	1.16	--	--	--	--	--	--	--
04-19-01	<.047	--	--	--	--	--	--	--
06-21-01	4.75	--	--	--	--	--	--	--
08-22-01	E.025	--	--	--	--	--	--	--
10-31-00	3.00	--	E.004	.074	.024	60	20	253
12-20-00	5.22	--	--	--	--	--	--	--
02-21-01	.067	--	--	--	--	--	--	--
04-19-01	<.047	--	--	--	--	--	--	--
06-21-01	.133	--	--	--	--	--	--	--
08-22-01	E.024	--	--	--	--	--	--	--
10-31-00	20.0	.108	.033	.368	.120	44	<10	<3.2
12-20-00	18.0	--	--	--	--	--	--	--
02-21-01	19.0	--	--	--	--	--	--	--
04-19-01	19.4	--	--	--	--	--	--	--
06-21-01	19.1	--	--	--	--	--	--	--
08-22-01	20.9	--	--	--	--	--	--	--
DAKOTA COUNTY								
10-31-00	E.025	.020	.006	--	E.017	58	5640	352
12-20-00	<.047	--	--	--	--	--	--	--
04-19-01	<.047	--	--	--	--	--	--	--
06-21-01	<.050	--	--	--	--	--	--	--
08-22-01	E.037	--	--	--	--	--	--	--
10-31-00	E.023	--	<.006	--	<.018	61	5690	474
12-20-00	<.047	--	--	--	--	--	--	--
02-21-01	<.047	--	--	--	--	--	--	--
04-19-01	<.047	--	--	--	--	--	--	--
06-21-01	<.050	--	--	--	--	--	--	--
08-22-01	E.026	--	--	--	--	--	--	--
10-31-00	E.024	--	<.006	--	<.018	70	8150	1040
12-20-00	<.047	--	--	--	--	--	--	--
02-21-01	<.047	--	--	--	--	--	--	--
04-19-01	<.047	--	--	--	--	--	--	--
06-21-01	<.050	--	--	--	--	--	--	--
08-22-01	.069	--	--	--	--	--	--	--
DOUGLAS COUNTY								
10-30-00	4.67	.286	.087	.064	.021	44	<10	503
12-22-00	4.08	--	--	--	--	--	--	--
02-20-01	4.33	--	--	--	--	--	--	--
04-18-01	.617	--	--	--	--	--	--	--
06-20-01	2.06	--	--	--	--	--	--	--
08-21-01	3.01	--	--	--	--	--	--	--
10-30-00	2.32	.020	.006	.273	.089	18	30	42.4
12-22-00	2.27	--	--	--	--	--	--	--
02-20-01	2.68	--	--	--	--	--	--	--
04-18-01	2.90	--	--	--	--	--	--	--
06-20-01	2.66	--	--	--	--	--	--	--
08-21-01	2.53	--	--	--	--	--	--	--

CHEMICAL ANALYSES OF GROUND WATER

PAPIO-MISSOURI STUDY--Continued
WATER QUALITY FROM WELL NESTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

STATION NUMBER	LOCAL IDENT- I- FIER	LAT- I- TUDE	LONG- I- TUDE	GEO- LOGIC UNIT	HYDRO- LOGIC UNIT CODE	DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DEPTH OF WELL, TOTAL (FEET) (72008)
DOUGLAS COUNTY									
411231096193202	14N 10E 5CBDD2	41 12 31 N	096 19 32 W	112SDGV	10220003	10-30-00	1410	8.46	58
		41 12 31 N	096 19 32 W	112SDGV	10220003	12-22-00	1230	7.42	58
		41 12 31 N	096 19 32 W	112SDGV	10220003	02-20-01	1530	6.82	58
		41 12 31 N	096 19 32 W	112SDGV	10220003	04-18-01	1510	5.49	58
		41 12 31 N	096 19 32 W	112SDGV	10220003	06-20-01	1345	5.32	58
412151096180801	16N 10E16BAAA1	41 12 31 N	096 19 32 W	112SDGV	10220003	08-21-01	1445	5.51	58
		41 21 51 N	096 18 08 W	112SDGV	10220003	10-30-00	1530	5.90	33
		41 21 51 N	096 18 08 W	112SDGV	10220003	12-21-00	1510	5.78	33
		41 21 51 N	096 18 08 W	112SDGV	10220003	04-20-01	1400	6.27	33
		41 21 51 N	096 18 08 W	112SDGV	10220003	06-22-01	1250	5.87	33
412151096180802	16N 10E16BAAA2	41 21 51 N	096 18 08 W	112SDGV	10220003	08-23-01	1310	5.79	33
		41 21 51 N	096 18 08 W	112SDGV	10220003	10-30-00	1545	5.98	25
		41 21 51 N	096 18 08 W	112SDGV	10220003	12-21-00	1530	5.82	25
		41 21 51 N	096 18 08 W	112SDGV	10220003	04-20-01	1410	6.02	25
		41 21 51 N	096 18 08 W	112SDGV	10220003	06-22-01	1300	6.10	25
410243096082001	12N 11E 1BBBB1	41 21 51 N	096 18 08 W	112SDGV	10220003	08-23-01	1320	5.76	25
		41 02 43 N	096 08 20 W	112SDGV	10200202	10-30-00	1110	16.98	83
		41 02 43 N	096 08 20 W	112SDGV	10200202	12-22-00	1000	15.99	83
		41 02 43 N	096 08 20 W	112SDGV	10200202	02-20-01	1200	15.02	83
		41 02 43 N	096 08 20 W	112SDGV	10200202	04-18-01	1220	14.16	83
410243096082002	12N 11E 1BBBB2	41 02 43 N	096 08 20 W	112SDGV	10200202	06-20-01	1100	14.08	83
		41 02 43 N	096 08 20 W	112SDGV	10200202	08-21-01	1220	14.09	83
		41 02 43 N	096 08 20 W	112SDGV	10200202	10-30-00	1130	16.88	70
		41 02 43 N	096 08 20 W	112SDGV	10200202	12-22-00	1020	15.78	70
		41 02 43 N	096 08 20 W	112SDGV	10200202	02-20-01	1220	14.88	70
410243096082003	12N 11E 1BBBB3	41 02 43 N	096 08 20 W	112SDGV	10200202	04-18-01	1240	14.04	70
		41 02 43 N	096 08 20 W	112SDGV	10200202	06-20-01	1120	13.90	70
		41 02 43 N	096 08 20 W	112SDGV	10200202	08-21-01	1240	14.11	70
		41 02 43 N	096 08 20 W	112SDGV	10200202	10-30-00	1145	15.94	55
		41 02 43 N	096 08 20 W	112SDGV	10200202	12-22-00	1040	15.68	55
410334096182801	13N 10E33BBAB1	41 02 43 N	096 08 20 W	112SDGV	10200202	02-20-01	1245	14.82	55
		41 02 43 N	096 08 20 W	112SDGV	10200202	04-18-01	1300	13.73	55
		41 02 43 N	096 08 20 W	112SDGV	10200202	06-20-01	1130	13.60	55
		41 02 43 N	096 08 20 W	112SDGV	10200202	08-21-01	1300	14.14	55
		41 03 34 N	096 18 28 W	112SDGV	10200202	10-30-00	0930	5.99	55
410334096182802	13N 10E33BBAB2	41 03 34 N	096 18 28 W	112SDGV	10200202	12-19-00	1100	5.54	55
		41 03 34 N	096 18 28 W	112SDGV	10200202	02-20-01	1045	5.38	55
		41 03 34 N	096 18 28 W	112SDGV	10200202	04-18-01	0940	3.26	55
		41 03 34 N	096 18 28 W	112SDGV	10200202	06-20-01	0845	3.20	55
		41 03 34 N	096 18 28 W	112SDGV	10200202	08-21-01	1020	5.50	55
410334096182803	13N 10E33BBAB3	41 03 34 N	096 18 28 W	112SDGV	10200202	10-30-00	0945	6.52	37.5
		41 03 34 N	096 18 28 W	112SDGV	10200202	12-19-00	1115	5.89	37.5
		41 03 34 N	096 18 28 W	112SDGV	10200202	02-20-01	1100	--	37.5
		41 03 34 N	096 18 28 W	112SDGV	10200202	04-18-01	1000	3.97	37.5
		41 03 34 N	096 18 28 W	112SDGV	10200202	06-20-01	0900	3.82	37.5
410334096182803	13N 10E33BBAB3	41 03 34 N	096 18 28 W	112SDGV	10200202	08-21-01	1030	6.69	37.5
		41 03 34 N	096 18 28 W	112SDGV	10200202	10-30-00	1010	6.40	21
		41 03 34 N	096 18 28 W	112SDGV	10200202	12-19-00	1130	5.78	21
		41 03 34 N	096 18 28 W	112SDGV	10200202	02-20-01	1115	5.62	21
		41 03 34 N	096 18 28 W	112SDGV	10200202	04-18-01	1010	4.14	21
410334096182803	13N 10E33BBAB3	41 03 34 N	096 18 28 W	112SDGV	10200202	06-20-01	0910	--	21
		41 03 34 N	096 18 28 W	112SDGV	10200202	06-20-01	0910	--	21

CHEMICAL ANALYSES OF GROUND WATER

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PAPIO-MISSOURI STUDY--Continued
WATER QUALITY FROM WELL NESTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	BARO- METRIC PRES- SURE (MM HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM AD- SORP- TION RATIO (00931)
DOUGLAS COUNTY													
10-30-00	1107	728	M	0	7.3	598	--	12.0	250	79.0	13.3	8.18	.7
12-22-00	1107	730	.1	0	7.2	578	--	12.0	--	--	--	--	--
02-20-01	1107	740	M	0	7.3	560	--	12.0	--	--	--	--	--
04-18-01	1107	737	.3	3	7.3	584	18.0	12.0	--	--	--	--	--
06-20-01	1107	735	.2	--	7.3	--	--	12.5	--	--	--	--	--
08-21-01	1107	732	.1	--	7.4	--	--	12.0	--	--	--	--	--
10-30-00	1136	728	.9	9	7.2	550	--	12.5	250	75.7	15.4	4.20	.5
12-21-00	1136	732	1.0	9	7.3	548	--	12.0	--	--	--	--	--
04-20-01	1136	726	1.1	11	7.3	542	20.0	12.0	--	--	--	--	--
06-22-01	1136	735	1.2	--	7.2	--	--	11.5	--	--	--	--	--
08-23-01	1136	732	.8	--	7.3	--	--	12.0	--	--	--	--	--
10-30-00	1136	728	.7	6	7.2	590	--	12.0	270	82.0	16.5	4.49	.5
12-21-00	1136	732	.3	3	7.2	589	--	12.0	--	--	--	--	--
04-20-01	1136	726	.2	2	7.2	582	20.0	12.0	--	--	--	--	--
06-22-01	1136	735	.7	--	7.2	--	--	12.0	--	--	--	--	--
08-23-01	1136	732	.7	--	7.2	--	--	12.0	--	--	--	--	--
SARPY COUNTY													
10-30-00	1020	728	4.8	48	7.1	496	--	12.5	230	64.1	16.7	3.04	.5
12-22-00	1020	730	4.8	47	7.1	508	--	12.0	--	--	--	--	--
02-20-01	1020	738	4.8	46	7.1	506	--	12.5	--	--	--	--	--
04-18-01	1020	737	5.7	55	7.2	510	14.0	12.5	--	--	--	--	--
06-20-01	1020	738	6.0	--	7.2	--	--	12.5	--	--	--	--	--
08-21-01	1020	732	4.3	--	7.2	--	--	12.5	--	--	--	--	--
10-30-00	1020	728	4.6	45	7.0	496	--	12.5	230	64.3	17.3	3.12	.5
12-22-00	1020	730	4.9	48	7.1	498	--	12.0	--	--	--	--	--
02-20-01	1020	738	4.6	44	7.1	495	--	12.0	--	--	--	--	--
04-18-01	1020	737	5.3	52	7.1	496	15.0	12.5	--	--	--	--	--
06-20-01	1020	738	5.6	--	7.1	--	--	12.5	--	--	--	--	--
08-21-01	1020	732	4.2	--	7.1	--	--	13.0	--	--	--	--	--
10-30-00	1020	728	1.4	14	7.1	480	--	12.5	220	63.0	16.4	3.56	.5
12-22-00	1020	730	2.6	26	7.1	486	--	12.5	--	--	--	--	--
02-20-01	1020	738	1.4	14	7.2	492	--	12.5	--	--	--	--	--
04-18-01	1020	737	3.0	29	7.2	509	15.0	12.5	--	--	--	--	--
06-20-01	1020	738	1.9	--	7.0	--	--	12.5	--	--	--	--	--
08-21-01	1020	732	1.8	--	7.2	--	--	13.0	--	--	--	--	--
10-30-00	1055	728	.1	0	7.5	488	--	12.5	190	54.0	13.1	7.58	.8
12-19-00	1055	728	.1	0	7.5	498	--	12.0	--	--	--	--	--
02-20-01	1055	740	.1	0	7.4	490	--	12.0	--	--	--	--	--
04-18-01	1055	737	.1	0	7.4	512	12.0	12.5	--	--	--	--	--
06-20-01	1055	738	.3	--	7.4	--	--	12.5	--	--	--	--	--
08-21-01	1055	732	M	--	7.5	--	--	13.0	--	--	--	--	--
10-30-00	1055	728	.2	2	7.5	465	--	13.0	180	49.7	12.4	7.30	.8
12-19-00	1055	728	.1	0	7.4	460	--	12.5	--	--	--	--	--
02-20-01	1055	740	.1	0	7.4	456	--	12.5	--	--	--	--	--
04-18-01	1055	737	.2	2	7.5	448	12.0	12.5	--	--	--	--	--
06-20-01	1055	738	.2	--	7.4	--	--	12.5	--	--	--	--	--
08-21-01	1055	732	M	--	7.5	--	--	12.5	--	--	--	--	--
10-30-00	1055	728	.4	4	7.1	598	--	14.5	210	60.6	13.5	8.72	1
12-19-00	1055	728	.1	0	7.1	589	--	13.0	--	--	--	--	--
02-20-01	1055	740	.1	0	7.1	590	--	13.0	--	--	--	--	--
04-18-01	1055	737	.3	--	7.2	--	12.0	11.0	--	--	--	--	--
06-20-01	1055	738	.2	--	7.2	--	--	11.5	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ANC	CHLO-	FLUO-	SILICA,	SULFATE	SOLIDS,	SOLIDS,	NITRO-	NITRO-	NITRO-	NITRO-
			UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	RIDE, DIS- SOLVED (MG/L AS CL) (00940)	RIDE, DIS- SOLVED (MG/L AS F) (00950)	DIS- SOLVED (MG/L AS SIO2) (00955)	DIS- SOLVED (MG/L AS SO4) (00945)	DIS- SOLVED (TONS PER AC-FT) (70303)	SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)
DOUGLAS COUNTY													
10-30-00	24.5	17	207	13.8	.4	30.7	80.6	.52	386	<.041	--	2.45	10.8
12-22-00	--	--	--	--	--	--	--	--	--	--	--	--	--
02-20-01	--	--	--	--	--	--	--	--	--	--	--	--	--
04-18-01	--	--	--	--	--	--	--	--	--	--	--	--	--
06-20-01	--	--	--	--	--	--	--	--	--	--	--	--	--
08-21-01	--	--	--	--	--	--	--	--	--	--	--	--	--
10-30-00	18.7	14	234	4.2	.6	24.5	55.6	.47	343	.242	.31	--	--
12-21-00	--	--	--	--	--	--	--	--	--	--	--	--	--
04-20-01	--	--	--	--	--	--	--	--	--	--	--	--	--
06-22-01	--	--	--	--	--	--	--	--	--	--	--	--	--
08-23-01	--	--	--	--	--	--	--	--	--	--	--	--	--
10-30-00	17.5	12	242	4.9	.5	27.6	68.4	.50	371	.325	.42	--	--
12-21-00	--	--	--	--	--	--	--	--	--	--	--	--	--
04-20-01	--	--	--	--	--	--	--	--	--	--	--	--	--
06-22-01	--	--	--	--	--	--	--	--	--	--	--	--	--
08-23-01	--	--	--	--	--	--	--	--	--	--	--	--	--
SARPY COUNTY													
10-30-00	19.0	15	234	4.5	.4	29.4	17.9	.43	316	<.041	--	--	--
12-22-00	--	--	--	--	--	--	--	--	--	--	--	--	--
02-20-01	--	--	--	--	--	--	--	--	--	--	--	--	--
04-18-01	--	--	--	--	--	--	--	--	--	--	--	--	--
06-20-01	--	--	--	--	--	--	--	--	--	--	--	--	--
08-21-01	--	--	--	--	--	--	--	--	--	--	--	--	--
10-30-00	19.1	15	230	4.7	.4	30.3	19.1	.43	317	<.041	--	--	--
12-22-00	--	--	--	--	--	--	--	--	--	--	--	--	--
02-20-01	--	--	--	--	--	--	--	--	--	--	--	--	--
04-18-01	--	--	--	--	--	--	--	--	--	--	--	--	--
06-20-01	--	--	--	--	--	--	--	--	--	--	--	--	--
08-21-01	--	--	--	--	--	--	--	--	--	--	--	--	--
10-30-00	17.6	14	228	4.7	.4	35.1	25.3	.43	314	.057	.07	--	--
12-22-00	--	--	--	--	--	--	--	--	--	--	--	--	--
02-20-01	--	--	--	--	--	--	--	--	--	--	--	--	--
04-18-01	--	--	--	--	--	--	--	--	--	--	--	--	--
06-20-01	--	--	--	--	--	--	--	--	--	--	--	--	--
08-21-01	--	--	--	--	--	--	--	--	--	--	--	--	--
10-30-00	25.6	22	218	13.4	.4	30.3	20.9	.41	299	.515	.66	--	--
12-19-00	--	--	--	--	--	--	--	--	--	--	--	--	--
02-20-01	--	--	--	--	--	--	--	--	--	--	--	--	--
04-18-01	--	--	--	--	--	--	--	--	--	--	--	--	--
06-20-01	--	--	--	--	--	--	--	--	--	--	--	--	--
08-21-01	--	--	--	--	--	--	--	--	--	--	--	--	--
10-30-00	25.7	23	202	12.5	.4	27.1	22.9	.38	282	.290	.37	--	--
12-19-00	--	--	--	--	--	--	--	--	--	--	--	--	--
02-20-01	--	--	--	--	--	--	--	--	--	--	--	--	--
04-18-01	--	--	--	--	--	--	--	--	--	--	--	--	--
06-20-01	--	--	--	--	--	--	--	--	--	--	--	--	--
08-21-01	--	--	--	--	--	--	--	--	--	--	--	--	--
10-30-00	43.2	30	275	9.7	.5	31.0	35.0	.51	371	.221	.28	--	--
12-19-00	--	--	--	--	--	--	--	--	--	--	--	--	--
02-20-01	--	--	--	--	--	--	--	--	--	--	--	--	--
04-18-01	--	--	--	--	--	--	--	--	--	--	--	--	--
06-20-01	--	--	--	--	--	--	--	--	--	--	--	--	--

CHEMICAL ANALYSES OF GROUND WATER

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PAPIO-MISSOURI STUDY--Continued
WATER QUALITY FROM WELL NESTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
DOUGLAS COUNTY								
10-30-00	2.49	.128	.039	.190	.062	22	<10	233
12-22-00	2.44	--	--	--	--	--	--	--
02-20-01	2.69	--	--	--	--	--	--	--
04-18-01	2.52	--	--	--	--	--	--	--
06-20-01	2.59	--	--	--	--	--	--	--
08-21-01	2.46	--	--	--	--	--	--	--
10-30-00	E.028	--	<.006	.117	.038	26	1790	1160
12-21-00	<.047	--	--	--	--	--	--	--
04-20-01	<.047	--	--	--	--	--	--	--
06-22-01	<.050	--	--	--	--	--	--	--
08-23-01	<.050	--	--	--	--	--	--	--
10-30-00	E.024	--	<.006	.071	.023	32	2160	1640
12-21-00	<.047	--	--	--	--	--	--	--
04-20-01	<.047	--	--	--	--	--	--	--
06-22-01	<.050	--	--	--	--	--	--	--
08-23-01	E.023	--	--	--	--	--	--	--
SARPY COUNTY								
10-30-00	4.63	--	<.006	.368	.120	39	<10	E2.0
12-22-00	4.62	--	--	--	--	--	--	--
02-20-01	5.04	--	--	--	--	--	--	--
04-18-01	5.04	--	--	--	--	--	--	--
06-20-01	4.89	--	--	--	--	--	--	--
08-21-01	5.55	--	--	--	--	--	--	--
10-30-00	4.62	--	<.006	.478	.156	41	<10	<3.2
12-22-00	4.89	--	--	--	--	--	--	--
02-20-01	5.12	--	--	--	--	--	--	--
04-18-01	4.92	--	--	--	--	--	--	--
06-20-01	5.17	--	--	--	--	--	--	--
08-21-01	5.65	--	--	--	--	--	--	--
10-30-00	2.15	--	<.006	1.69	.551	35	230	228
12-22-00	1.62	--	--	--	--	--	--	--
02-20-01	2.05	--	--	--	--	--	--	--
04-18-01	2.07	--	--	--	--	--	--	--
06-20-01	2.20	--	--	--	--	--	--	--
08-21-01	2.51	--	--	--	--	--	--	--
10-30-00	E.023	--	<.006	.166	.054	13	1190	683
12-19-00	<.047	--	--	--	--	--	--	--
02-20-01	E.033	--	--	--	--	--	--	--
04-18-01	<.047	--	--	--	--	--	--	--
06-20-01	<.050	--	--	--	--	--	--	--
08-21-01	E.023	--	--	--	--	--	--	--
10-30-00	E.023	--	<.006	.120	.039	14	1620	750
12-19-00	<.047	--	--	--	--	--	--	--
02-20-01	<.047	--	--	--	--	--	--	--
04-18-01	<.047	--	--	--	--	--	--	--
06-20-01	<.050	--	--	--	--	--	--	--
08-21-01	E.026	--	--	--	--	--	--	--
10-30-00	<.047	--	<.006	--	E.012	39	3250	819
12-19-00	<.047	--	--	--	--	--	--	--
02-20-01	<.047	--	--	--	--	--	--	--
04-18-01	<.047	--	--	--	--	--	--	--
06-20-01	<.050	--	--	--	--	--	--	--

CHEMICAL ANALYSES OF GROUND WATER

PAPIO-MISSOURI STUDY--Continued
WATER QUALITY FROM WELL NESTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

STATION	NUMBER	LOCAL IDENT- I- FIER	LAT- I- TUDE	LONG- I- TUDE	GEO- LOGIC UNIT	HYDRO- LOGIC UNIT CODE	DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DEPTH OF WELL, TOTAL (FEET) (72008)
SARPY COUNTY										
410334096182803	13N 10E33BBAB3		41 03 34 N	096 18 28 W	112SDGV	10200202	08-21-01	1040	6.42	21
THURSTON COUNTY										
420840096290901	25N 8E14ADBA1		42 08 40 N	096 29 09 W	211DKOT	10230001	10-31-00	0930	15.82	162
			42 08 40 N	096 29 09 W	211DKOT	10230001	12-20-00	1030	17.42	162
			42 08 40 N	096 29 09 W	211DKOT	10230001	02-21-01	1100	17.09	162
			42 08 40 N	096 29 09 W	211DKOT	10230001	04-19-01	1130	13.02	162
			42 08 40 N	096 29 09 W	211DKOT	10230001	06-21-01	1020	12.88	162
			42 08 40 N	096 29 09 W	211DKOT	10230001	08-22-01	1130	13.29	162
420840096290902	25N 8E14ADBA2		42 08 40 N	096 29 09 W	211DKOT	10230001	10-31-00	1015	16.57	133
			42 08 40 N	096 29 09 W	211DKOT	10230001	12-20-00	1100	18.18	133
			42 08 40 N	096 29 09 W	211DKOT	10230001	02-21-01	1140	17.68	133
			42 08 40 N	096 29 09 W	211DKOT	10230001	04-19-01	1210	12.70	133
			42 08 40 N	096 29 09 W	211DKOT	10230001	06-21-01	1100	12.52	133
			42 08 40 N	096 29 09 W	211DKOT	10230001	08-22-01	1210	13.70	133
420840096290903	25N 8E14ADBA3		42 08 40 N	096 29 09 W	211DKOT	10230001	10-31-00	1045	16.89	104.5
			42 08 40 N	096 29 09 W	211DKOT	10230001	12-20-00	1130	16.82	104.5
			42 08 40 N	096 29 09 W	211DKOT	10230001	02-21-01	1215	16.38	104.5
			42 08 40 N	096 29 09 W	211DKOT	10230001	04-19-01	1240	13.10	104.5
			42 08 40 N	096 29 09 W	211DKOT	10230001	06-21-01	1130	12.97	104.5
			42 08 40 N	096 29 09 W	211DKOT	10230001	08-22-01	1240	13.56	104.5
WASHINGTON COUNTY										
412527096081201	17N 11E24CCBC1		41 25 27 N	096 08 12 W	112SDGV	10230006	11-01-00	1115	160.62	225
			41 25 27 N	096 08 12 W	112SDGV	10230006	12-21-00	1045	159.11	225
			41 25 27 N	096 08 12 W	112SDGV	10230006	02-22-01	1130	158.86	225
			41 25 27 N	096 08 12 W	112SDGV	10230006	04-20-01	1120	160.16	225
			41 25 27 N	096 08 12 W	112SDGV	10230006	06-22-01	1050	159.91	225
			41 25 27 N	096 08 12 W	112SDGV	10230006	08-23-01	1040	162.93	225
412527096081202	17N 11E24CCBC2		41 25 27 N	096 08 12 W	112SDGV	10230006	12-21-00	1130	155.38	193.5
			41 25 27 N	096 08 12 W	112SDGV	10230006	02-22-01	1200	157.99	193.5
			41 25 27 N	096 08 12 W	112SDGV	10230006	04-20-01	1150	159.46	193.5
			41 25 27 N	096 08 12 W	112SDGV	10230006	06-22-01	1120	159.31	193.5
			41 25 27 N	096 08 12 W	112SDGV	10230006	08-23-01	1130	161.88	193.5
412637095565901	17N 13E16BDAA1		41 26 37 N	095 56 59 W	112SDGV	10230006	11-01-00	0900	9.88	100
			41 26 37 N	095 56 59 W	112SDGV	10230006	12-21-00	1300	8.86	100
			41 26 37 N	095 56 59 W	112SDGV	10230006	02-22-01	0830	8.60	100
			41 26 37 N	095 56 59 W	112SDGV	10230006	04-20-01	0850	9.38	100
			41 26 37 N	095 56 59 W	112SDGV	10230006	06-22-01	0840	9.21	100
			41 26 37 N	095 56 59 W	112SDGV	10230006	08-23-01	0840	8.85	100
412637095565902	17N 13E16BDAA2		41 26 37 N	095 56 59 W	112SDGV	10230006	11-01-00	0915	9.58	60
			41 26 37 N	095 56 59 W	112SDGV	10230006	12-21-00	1320	8.70	60
			41 26 37 N	095 56 59 W	112SDGV	10230006	02-22-01	0900	8.48	60
			41 26 37 N	095 56 59 W	112SDGV	10230006	04-20-01	0910	9.63	60
			41 26 37 N	095 56 59 W	112SDGV	10230006	06-22-01	0900	9.72	60
			41 26 37 N	095 56 59 W	112SDGV	10230006	08-23-01	0900	8.92	60
412637095565903	17N 13E16BDAA3		41 26 37 N	095 56 59 W	112SDGV	10230006	11-01-00	0930	9.36	25
			41 26 37 N	095 56 59 W	112SDGV	10230006	12-21-00	1340	8.46	25
			41 26 37 N	095 56 59 W	112SDGV	10230006	02-22-01	0915	8.28	25
			41 26 37 N	095 56 59 W	112SDGV	10230006	04-20-01	0920	9.88	25
			41 26 37 N	095 56 59 W	112SDGV	10230006	06-22-01	0910	9.53	25
412637095565903	17N 13E16BDAA3		41 26 37 N	095 56 59 W	112SDGV	10230006	08-23-01	0910	8.52	25

CHEMICAL ANALYSES OF GROUND WATER

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PAPIO-MISSOURI STUDY--Continued
WATER QUALITY FROM WELL NESTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CaCO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM AD- SORP- TION RATIO (00931)
SARPY COUNTY													
08-21-01	1055	732	.1	--	7.2	--	--	13.0	--	--	--	--	--
THURSTON COUNTY													
10-31-00	1212	730	.1	0	7.1	934	--	11.0	390	118	23.0	13.4	.9
12-20-00	1212	730	.2	2	7.4	980	--	11.0	--	--	--	--	--
02-21-01	1212	743	.1	1	7.2	974	--	11.0	--	--	--	--	--
04-19-01	1212	720	.2	2	7.2	997	17.0	11.5	--	--	--	--	--
06-21-01	1212	733	.2	--	7.0	--	--	11.5	--	--	--	--	--
08-22-01	1212	730	.4	--	7.1	--	--	12.0	--	--	--	--	--
10-31-00	1212	730	.1	0	7.1	836	--	11.0	410	129	22.6	10.1	.8
12-20-00	1212	730	.1	1	7.0	984	--	11.0	--	--	--	--	--
02-21-01	1212	743	.1	0	7.0	984	--	11.0	--	--	--	--	--
04-19-01	1212	720	.7	7	7.1	857	18.0	11.0	--	--	--	--	--
06-21-01	1212	733	.2	--	7.0	--	--	11.0	--	--	--	--	--
08-22-01	1212	730	.1	--	7.0	--	--	11.5	--	--	--	--	--
10-31-00	1212	730	.1	0	7.1	754	--	11.0	370	115	21.2	9.96	.6
12-20-00	1212	730	.2	2	6.9	904	--	11.0	--	--	--	--	--
02-21-01	1212	743	.1	1	7.1	910	--	11.0	--	--	--	--	--
04-19-01	1212	720	.1	1	7.1	823	18.0	11.0	--	--	--	--	--
06-21-01	1212	733	.4	--	6.9	--	--	11.0	--	--	--	--	--
08-22-01	1212	730	.7	--	7.1	--	--	11.5	--	--	--	--	--
WASHINGTON COUNTY													
11-01-00	1210	732	3.5	35	7.5	750	--	13.5	340	94.9	25.9	4.72	.8
12-21-00	1210	730	3.4	33	7.1	769	--	13.0	--	--	--	--	--
02-22-01	1210	733	3.0	29	7.1	754	--	13.0	--	--	--	--	--
04-20-01	1210	726	3.8	38	7.3	736	18.0	14.0	--	--	--	--	--
06-22-01	1210	735	3.9	--	7.3	--	--	14.0	--	--	--	--	--
08-23-01	1210	732	3.4	--	7.4	--	--	14.0	--	--	--	--	--
12-21-00	1208	730	3.8	37	7.4	710	--	13.0	--	--	--	--	--
02-22-01	1208	733	4.0	40	7.4	738	--	13.5	--	--	--	--	--
04-20-01	1208	726	2.8	--	7.6	--	19.0	13.5	--	--	--	--	--
06-22-01	1208	735	2.5	--	7.5	--	--	14.0	--	--	--	--	--
08-23-01	1208	732	4.0	--	7.5	--	--	14.0	--	--	--	--	--
11-01-00	995	730	.1	0	7.2	1160	--	12.5	580	152	49.2	7.13	.8
12-21-00	995	732	.1	0	7.0	1080	--	12.5	--	--	--	--	--
02-22-01	995	737	.1	0	7.0	1080	--	12.5	--	--	--	--	--
04-20-01	995	726	.1	1	7.0	1140	15.0	12.5	--	--	--	--	--
06-22-01	995	738	.2	--	7.1	--	--	12.5	--	--	--	--	--
08-23-01	995	732	.6	--	7.0	--	--	12.5	--	--	--	--	--
11-01-00	995	730	.1	0	7.2	1140	--	12.5	570	151	46.2	6.98	.8
12-21-00	995	732	.1	0	7.1	1300	--	11.5	--	--	--	--	--
02-22-01	995	737	.1	1	7.1	1290	--	11.5	--	--	--	--	--
04-20-01	995	726	.1	1	7.1	1110	15.0	12.5	--	--	--	--	--
06-22-01	995	738	.2	--	7.1	--	--	12.0	--	--	--	--	--
08-23-01	995	732	.2	--	7.1	--	--	12.5	--	--	--	--	--
11-01-00	995	730	.8	8	7.0	924	--	14.0	480	117	46.5	4.57	.5
12-21-00	995	732	.7	7	7.1	724	--	13.5	--	--	--	--	--
02-22-01	995	737	.8	8	7.0	742	--	13.5	--	--	--	--	--
04-20-01	995	726	.9	9	7.0	885	15.0	12.0	--	--	--	--	--
06-22-01	995	738	1.1	--	7.0	--	--	12.0	--	--	--	--	--
08-23-01	995	732	.7	--	7.0	--	--	13.0	--	--	--	--	--

PAPIO-MISSOURI STUDY--Continued
WATER QUALITY FROM WELL NESTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ANC	CHLO-	FLUO-	SILICA,	SULFATE	SOLIDS,	SUM OF	NITRO-	NITRO-	NITRO-	NITRO-
			UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	RIDE, DIS- SOLVED (MG/L AS CL) (00940)	RIDE, DIS- SOLVED (MG/L AS F) (00950)	DIS- SOLVED (MG/L AS SIO2) (00955)	DIS- SOLVED (MG/L AS SO4) (00945)	DIS- SOLVED (TONS PER AC-FT) (70303)	CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
SARPY COUNTY													
08-21-01	--	--	--	--	--	--	--	--	--	--	--	E.026	--
THURSTON COUNTY													
10-31-00	42.9	19	309	28.1	1.0	12.7	164	.80	589	.386	.50	<.047	<.006
12-20-00	--	--	--	--	--	--	--	--	--	--	--	<.047	--
02-21-01	--	--	--	--	--	--	--	--	--	--	--	<.047	--
04-19-01	--	--	--	--	--	--	--	--	--	--	--	<.047	--
06-21-01	--	--	--	--	--	--	--	--	--	--	--	<.050	--
08-22-01	--	--	--	--	--	--	--	--	--	--	--	<.050	--
10-31-00	35.4	15	318	21.0	.8	13.4	119	.74	543	.374	.48	<.047	<.006
12-20-00	--	--	--	--	--	--	--	--	--	--	--	<.050	--
02-21-01	--	--	--	--	--	--	--	--	--	--	--	<.047	--
04-19-01	--	--	--	--	--	--	--	--	--	--	--	<.047	--
06-21-01	--	--	--	--	--	--	--	--	--	--	--	<.050	--
08-22-01	--	--	--	--	--	--	--	--	--	--	--	<.050	--
10-31-00	26.9	13	325	15.3	.9	15.8	86.1	.66	488	.410	.53	<.047	<.006
12-20-00	--	--	--	--	--	--	--	--	--	--	--	<.047	--
02-21-01	--	--	--	--	--	--	--	--	--	--	--	<.047	--
04-19-01	--	--	--	--	--	--	--	--	--	--	--	<.047	--
06-21-01	--	--	--	--	--	--	--	--	--	--	--	<.050	--
08-22-01	--	--	--	--	--	--	--	--	--	--	--	E.023	--
WASHINGTON COUNTY													
11-01-00	32.3	17	388	3.2	.3	23.4	34.4	.62	453	.416	.54	E.023	<.006
12-21-00	--	--	--	--	--	--	--	--	--	--	--	<.047	--
02-22-01	--	--	--	--	--	--	--	--	--	--	--	<.047	--
04-20-01	--	--	--	--	--	--	--	--	--	--	--	<.047	--
06-22-01	--	--	--	--	--	--	--	--	--	--	--	<.050	--
08-23-01	--	--	--	--	--	--	--	--	--	--	--	E.026	--
12-21-00	--	--	--	--	--	--	--	--	--	--	--	<.047	--
02-22-01	--	--	--	--	--	--	--	--	--	--	--	<.047	--
04-20-01	--	--	--	--	--	--	--	--	--	--	--	<.047	--
06-22-01	--	--	--	--	--	--	--	--	--	--	--	E.026	--
08-23-01	--	--	--	--	--	--	--	--	--	--	--	E.025	--
11-01-00	42.3	13	633	8.3	.4	30.8	39.7	.98	718	1.28	1.65	<.047	<.006
12-21-00	--	--	--	--	--	--	--	--	--	--	--	<.047	--
02-22-01	--	--	--	--	--	--	--	--	--	--	--	<.047	--
04-20-01	--	--	--	--	--	--	--	--	--	--	--	<.047	--
06-22-01	--	--	--	--	--	--	--	--	--	--	--	<.050	--
08-23-01	--	--	--	--	--	--	--	--	--	--	--	E.025	--
11-01-00	45.7	15	635	3.0	.3	32.1	28.4	.96	706	1.31	1.68	<.047	<.006
12-21-00	--	--	--	--	--	--	--	--	--	--	--	<.047	--
02-22-01	--	--	--	--	--	--	--	--	--	--	--	<.047	--
04-20-01	--	--	--	--	--	--	--	--	--	--	--	<.047	--
06-22-01	--	--	--	--	--	--	--	--	--	--	--	<.050	--
08-23-01	--	--	--	--	--	--	--	--	--	--	--	E.023	--
11-01-00	26.0	10	478	4.5	.3	21.1	71.4	.79	580	.180	.23	E.027	<.006
12-21-00	--	--	--	--	--	--	--	--	--	--	--	<.047	--
02-22-01	--	--	--	--	--	--	--	--	--	--	--	<.047	--
04-20-01	--	--	--	--	--	--	--	--	--	--	--	<.047	--
06-22-01	--	--	--	--	--	--	--	--	--	--	--	<.050	--
08-23-01	--	--	--	--	--	--	--	--	--	--	--	E.024	--

CHEMICAL ANALYSES OF GROUND WATER

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PAPIO-MISSOURI STUDY--Continued
WATER QUALITY FROM WELL NESTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
SARPY COUNTY					
08-21-01	--	--	--	--	--
THURSTON COUNTY					
10-31-00	--	E.015	49	650	228
12-20-00	--	--	--	--	--
02-21-01	--	--	--	--	--
04-19-01	--	--	--	--	--
06-21-01	--	--	--	--	--
08-22-01	--	--	--	--	--
10-31-00	--	<.018	51	930	176
12-20-00	--	--	--	--	--
02-21-01	--	--	--	--	--
04-19-01	--	--	--	--	--
06-21-01	--	--	--	--	--
08-22-01	--	--	--	--	--
10-31-00	--	<.018	55	990	439
12-20-00	--	--	--	--	--
02-21-01	--	--	--	--	--
04-19-01	--	--	--	--	--
06-21-01	--	--	--	--	--
08-22-01	--	--	--	--	--
WASHINGTON COUNTY					
11-01-00	.055	.018	23	590	230
12-21-00	--	--	--	--	--
02-22-01	--	--	--	--	--
04-20-01	--	--	--	--	--
06-22-01	--	--	--	--	--
08-23-01	--	--	--	--	--
12-21-00	--	--	--	--	--
02-22-01	--	--	--	--	--
04-20-01	--	--	--	--	--
06-22-01	--	--	--	--	--
08-23-01	--	--	--	--	--
11-01-00	--	<.018	85	6500	322
12-21-00	--	--	--	--	--
02-22-01	--	--	--	--	--
04-20-01	--	--	--	--	--
06-22-01	--	--	--	--	--
08-23-01	--	--	--	--	--
11-01-00	--	<.018	81	9580	266
12-21-00	--	--	--	--	--
02-22-01	--	--	--	--	--
04-20-01	--	--	--	--	--
06-22-01	--	--	--	--	--
08-23-01	--	--	--	--	--
11-01-00	--	<.018	95	1090	1440
12-21-00	--	--	--	--	--
02-22-01	--	--	--	--	--
04-20-01	--	--	--	--	--
06-22-01	--	--	--	--	--
08-23-01	--	--	--	--	--

CHEMICAL ANALYSES OF GROUND WATER

PUMPKIN CREEK VALLEY STUDY
GROUND-WATER QUALITY

(Local identifier: indicates location by township, range, and section. Geologic unit: 112SDGV, Pleistocene sand and gravel deposits; 123BRUL, Oligocene Brule Formation. Remark code: <, less than; E, estimated; M, presence verified, not quantified)

COUNTIES.-- Banner, Morrill, Scotts Bluff

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

STATION NUMBER	LOCAL IDENT- I- FIER	LAT- I- TUDE	LONG- I- TUDE	GEO- LOGIC UNIT	HYDRO- LOGIC UNIT CODE	DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DEPTH OF WELL, TOTAL (FEET) (72008)
BANNER COUNTY									
413002103453801	18N 56W27DBAC1	41 30 02 N	103 45 38 W	123BRUL	--	05-24-01	1000	--	300
413002103453802	18N 56W27DBAC2	41 30 02 N	103 45 38 W	123BRUL	10180013	06-29-01	1100	--	240
		41 30 02 N	103 45 38 W	123BRUL	10180013	07-02-01	0946	--	240
412850103480101	18N 56W32DCCD1	41 28 50 N	103 48 01 W	112SDGV	10180013	07-02-01	1430	222.59	350
412850103480102	18N 56W32DCCD2	41 28 50 N	103 48 01 W	112SDGV	10180013	07-02-01	1530	222.80	275
412941104012901	18N 58W29DDDD1	41 29 41 N	104 01 29 W	123BRUL	10180013	06-27-01	1430	125.05	315
412941104012902	18N 58W29DDDD2	41 29 41 N	104 01 29 W	112SDGV	10180013	07-03-01	1030	176.38	255
413820104030001	19N 58W 7ABBB1	41 38 20 N	104 03 00 W	123BRUL	10180013	05-14-01	1200	76.65	85
		41 38 20 N	104 03 00 W	123BRUL	10180013	06-26-01	1430	--	85
MORRILL COUNTY									
413850103055901	19N 50W 5DDAA1	41 38 50 N	103 05 59 W	112SDGV	10180013	05-18-01	1030	--	183
		41 38 50 N	103 05 59 W	112SDGV	10180013	05-22-01	1000	--	183
413850103055902	19N 50W 5DDAA2	41 38 50 N	103 05 59 W	112SDGV	10180013	05-17-01	1430	--	100
413850103055903	19N 50W 5DDAA3	41 38 50 N	103 05 59 W	110SDGV	10180013	05-17-01	1300	--	30
414517103191201	21N 52W35BCAB1	41 45 16 N	103 19 11 W	112SDGV	10180009	05-16-01	1530	--	133
414517103191202	21N 52W35BCAB2	41 45 16 N	103 19 11 W	112SDGV	10180009	05-16-01	1730	--	133
414517103191203	21N 52W35BCAB3	41 45 16 N	103 19 11 W	112SDGV	10180009	05-17-01	0930	--	80
415118103020901	22N 49W19CDD1	41 51 18 N	103 02 09 W	123BRUL	10180009	07-17-01	1230	34.96	296
415118103020902	22N 49W19CDD2	41 51 18 N	103 02 09 W	123BRUL	10180009	07-17-01	1400	36.93	198
415118103020903	22N 49W19CDD3	41 51 18 N	103 02 09 W	112SDGV	10180009	07-17-01	1500	32.59	58
SCOTTS BLUFF COUNTY									
414337103564901	20N 57W 7BBBB1	41 43 37 N	103 56 49 W	123BRUL	10180013	06-26-01	1130	16.51	125
414851103295701	21N 53W 7AAAA1	41 48 50 N	103 29 57 W	112SDGV	10180009	05-16-01	1100	--	188
414851103295702	21N 53W 7AAAA2	41 48 50 N	103 29 57 W	112SDGV	10180009	05-16-01	0900	--	30
414851103295703	21N 53W 7AAAA3	41 48 50 N	103 29 57 W	112SDGV	10180009	05-16-01	1200	--	100
414850103295701	21N 53W 7AAAA4	41 48 50 N	103 29 57 W	112SDGV	10180009	05-16-01	0930	--	191
415157103352302	22N 54W21CAAB2	41 51 57 N	103 35 22 W	112SDGV	10180009	05-14-01	1330	--	73.5

CHEMICAL ANALYSES OF GROUND WATER
PUMPKIN CREEK VALLEY STUDY--Continued
GROUND-WATER QUALITY

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WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM AD- SORP- TION RATIO (00931)
BANNER COUNTY													
05-24-01	4995	635	5.7	68	8.4	394	--	15.0	57	15.0	4.62	5.97	4
06-29-01	4995	635	6.9	87	7.7	332	30.0	17.5	150	44.7	8.51	5.51	.2
07-02-01	4995	--	--	--	--	--	--	--	--	--	--	--	--
07-02-01	5040	635	5.0	63	7.9	306	34.0	17.5	100	27.3	7.81	5.57	1
07-02-01	5040	635	6.8	85	7.9	297	32.0	17.0	130	38.4	8.09	4.80	.2
06-27-01	4926	650	.4	5	8.0	1300	30.0	18.0	66	16.5	5.97	10.6	15
07-03-01	4926	635	6.2	73	8.0	378	30.0	14.5	120	32.0	9.19	3.60	1
05-14-01	4664	--	6.8	--	7.8	594	--	14.9	--	--	--	--	--
06-26-01	4664	650	--	--	8.1	625	30.0	18.0	--	--	--	--	--
MORRILL COUNTY													
05-18-01	3660	--	2.9	--	7.2	5090	--	14.5	1400	408	85.9	27.8	4
05-22-01	3660	--	--	--	--	--	--	--	--	--	--	--	--
05-17-01	3660	--	--	--	7.6	1010	--	13.0	280	86.6	15.6	12.2	3
05-17-01	3660	665	.2	2	7.6	1230	7.6	11.5	320	95.3	21.0	18.3	3
05-16-01	3755.55	660	5.1	56	7.4	1120	--	12.5	450	138	25.2	14.7	2
05-16-01	3755.45	660	2.4	26	7.4	1230	--	13.0	410	103	36.5	35.8	2
05-17-01	3755.45	665	2.9	31	7.5	1440	--	12.0	450	105	45.0	38.5	3
07-17-01	4165	655	.6	7	7.7	585	25.0	14.5	130	36.1	9.24	9.69	3
07-17-01	4165	655	.00	.0	7.6	485	25.0	13.0	150	42.3	11.2	8.39	1
07-17-01	4165	655	.00	.0	8.1	264	25.0	12.0	77	20.1	6.61	24.1	.6
SCOTTS BLUFF COUNTY													
06-26-01	4432	650	4.3	49	8.4	542	30.0	14.0	23	5.97	1.89	5.15	10
05-16-01	3822.62	660	.2	2	7.8	810	--	12.5	250	71.2	16.9	9.11	2
05-16-01	3822.42	660	.3	3	7.4	948	--	11.5	330	93.6	22.3	9.79	2
05-16-01	3822.81	660	.4	4	7.4	1380	--	9.5	420	94.4	44.9	21.6	3
05-16-01	3822.09	--	.1	--	7.6	848	--	12.0	260	72.0	18.8	9.18	2
05-14-01	3943.49	655	7.2	83	7.6	801	--	14.5	260	76.5	17.2	9.37	2

CHEMICAL ANALYSES OF GROUND WATER
PUMPKIN CREEK VALLEY STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
BANNER COUNTY													
05-24-01	67.3	70	166	154	184	2	3.6	1.1	59.4	33.6	292	<.040	2.08
06-29-01	5.0	7	145	137	--	--	22.9	.5	57.8	30.7	268	E.024	2.37
07-02-01	--	--	--	--	--	--	--	--	--	--	--	--	--
07-02-01	24.2	33	148	136	--	--	7.5	.6	56.9	5.1	223	<.040	1.36
07-02-01	5.6	8	125	116	--	--	25.6	.5	55.3	37.3	257	E.028	2.71
06-27-01	281	89	559	509	--	--	22.3	1.0	52.8	135	839	.044	1.80
07-03-01	31.5	36	152	--	--	--	5.9	.5	59.7	18.2	270	E.025	4.22
05-14-01	--	--	--	--	--	--	--	--	--	--	--	--	--
06-26-01	--	--	--	153	183	2	--	--	--	--	--	--	--
MORRILL COUNTY													
05-18-01	312	33	184	--	--	--	1320	.2	50.7	115	2440	E.032	3.21
05-22-01	--	--	--	--	--	--	--	--	--	--	--	--	--
05-17-01	116	46	291	--	--	--	26.1	.6	49.6	207	690	<.040	.482
05-17-01	142	47	341	--	--	--	29.5	.7	45.8	268	827	<.040	.159
05-16-01	82.1	28	282	--	--	--	21.0	.5	56.8	249	801	<.040	10.1
05-16-01	99.7	32	307	--	--	--	26.6	.9	63.4	280	865	<.040	7.78
05-17-01	134	37	353	--	--	--	35.9	1.2	72.1	335	1020	<.040	9.32
07-17-01	73.8	53	206	178	215	--	7.0	.7	62.3	82.8	394	<.040	1.53
07-17-01	42.0	36	199	--	--	--	3.0	.6	62.3	51.7	347	<.040	1.33
07-17-01	12.8	20	107	--	--	--	1.0	.9	44.3	22.8	198	<.040	.138
SCOTT'S BLUFF COUNTY													
06-26-01	111	89	226	208	246	4	10.7	.6	65.8	25.8	365	<.040	3.07
05-16-01	84.2	41	258	--	--	--	21.0	.4	43.3	129	542	<.040	2.66
05-16-01	87.2	36	259	--	--	--	18.3	.3	48.9	207	656	<.040	3.13
05-16-01	144	41	374	--	--	--	42.2	.9	44.7	300	927	<.040	2.18
05-16-01	85.4	41	267	--	--	--	21.6	.3	43.8	148	571	<.040	2.64
05-14-01	71.2	36	235	--	--	--	14.2	.4	55.4	158	557	<.040	3.10

CHEMICAL ANALYSES OF GROUND WATER

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PUMPKIN CREEK VALLEY STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L) (75987)	ALPHA RADIO. WATER DISS AS TH-230 (PCI/L) (04126)	BETA, 2 SIGMA WATER, DISS, AS CS-137 (PCI/L) (75989)	C-13 / C-12 STABLE ISOTOPE RATIO PER MIL (82081)	CARBON- 14 CNT ERR WATER FLTRD PERCENT (49934)	CARBON- 14 WATER FLTRD PERCENT (49933)
BANNER COUNTY													
05-24-01	.018	--	<.020	1.3	--	10	<3.0	--	--	--	-8.23	.320	24.43
06-29-01	.007	--	<.020	5.6	--	<10	<3.0	4.3	7.75	2.8	-7.89	.460	71.37
07-02-01	--	--	--	--	--	--	--	--	--	--	--	--	--
07-02-01	.007	--	<.020	3.6	--	<10	<3.0	--	--	--	-8.61	.400	58.37
07-02-01	.006	--	<.020	3.0	--	<10	<3.0	3.9	5.88	2.4	--	--	--
06-27-01	.330	--	E.013	11	--	10	6.2	--	--	--	-9.33	.270	31.08
07-03-01	.009	--	<.020	2.9	--	M	<3.0	--	--	--	--	--	--
05-14-01	--	--	--	--	--	--	--	--	--	--	--	--	--
06-26-01	--	--	--	--	--	--	--	--	--	--	-7.35	.290	36.24
MORRILL COUNTY													
05-18-01	.006	--	<.020	23	4.8	<30	<10.0	--	--	--	--	--	--
05-22-01	--	--	--	--	--	--	--	--	--	--	--	--	--
05-17-01	E.005	.138	.045	14	--	<100	37.1	6.1	17.4	5.9	--	--	--
05-17-01	.006	.193	.063	17	--	<100	153	11	51.2	6.5	--	--	--
05-16-01	.010	--	E.009	22	5.0	<100	<3.2	7.2	18.8	7.2	--	--	--
05-16-01	<.006	.196	.064	24	10.7	<100	<3.2	7.4	21.6	8.5	--	--	--
05-17-01	<.006	.359	.117	22	14.9	<100	<3.2	9.4	27.5	10	--	--	--
07-17-01	.140	--	<.020	8.0	--	<10	5.6	5.1	12.7	3.1	-9.60	.310	36.51
07-17-01	.046	--	<.020	9.7	--	<10	5.0	--	--	--	--	--	--
07-17-01	.013	.074	.024	1.6	--	<10	57.7	3.5	4.56	2.5	--	--	--
SCOTT'S BLUFF COUNTY													
06-26-01	<.006	--	<.020	1.7	--	<10	<3.0	--	--	--	-4.46	.260	30.75
05-16-01	.009	--	E.009	7.9	4.7	<10	66.1	4.9	16.2	5.1	--	--	--
05-16-01	.009	.089	.029	20	6.6	<100	3.2	7.2	31.1	6.0	--	--	--
05-16-01	.035	--	<.020	29	9.0	<100	213	9.5	36.4	8.7	--	--	--
05-16-01	.011	.110	.036	13	--	<10	178	--	--	--	--	--	--
05-14-01	<.006	.077	.025	11	5.6	<10	<3.2	4.7	11.0	3.7	--	--	--

CHEMICAL ANALYSES OF GROUND WATER

PUMPKIN CREEK VALLEY STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	GROSS ALPHA, 2X CL, SS MDC, WATER, FLTRD, (PCI/L) (99337)	GROSS BETA, DIS- SOLVED (PCI/L) AS CS-137) (03515)	GROSS BETA, 2X CL, SS MDC, WATER, FLTRD, (PCI/L) (99323)	H-2 / H-1 STABLE ISOTOPE RATIO PER MIL (82082)	N15/N14 NO3 FRAC WATER FLTRD 0.45 U PER MIL (82690)	O-18 / O-16 STABLE ISOTOPE RATIO PER MIL (82085)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L) (09511)	RA-226 2 SIGMA WATER, DISS, (PCI/L) (76001)	RADON 222, 2X CL, SS MDC, WATER, UNFLTRD (PCI/L) (82303)	RN-222 2 SIGMA WATER, WHOLE, TOTAL, (PCI/L) (76002)	TRITIUM 2 SIGMA WATER, WHOLE, TOTAL (PCI/L) (07000)	TRITIUM 2 SIGMA WATER, WHOLE, TOTAL (PCI/L) (75985)
BANNER COUNTY												
05-24-01	--	--	--	-109	--	-14.58	--	--	--	--	--	--
06-29-01	5.240	8.66	4.310	-113	4.20	-14.89	.08	.02	--	--	--	--
07-02-01	--	--	--	--	--	--	--	--	365	23.0	22	--
07-02-01	--	--	--	-107	--	-14.19	--	--	788	23.0	28	--
07-02-01	5.130	6.56	3.870	-115	4.80	-15.24	.20	.05	261	23.0	19	--
06-27-01	--	--	--	-110	--	-14.23	--	--	--	--	--	43.8
07-03-01	--	--	--	-110	--	-14.49	--	--	--	--	--	--
05-14-01	--	--	--	--	--	--	--	--	--	--	--	5.4
06-26-01	--	--	--	-110	--	-14.22	--	--	--	--	--	2.6
MORRILL COUNTY												
05-18-01	--	--	--	-101	3.50	-12.48	.53	.12	--	--	--	--
05-22-01	--	--	--	--	--	--	--	--	575	21.0	24	--
05-17-01	6.050	18.6	8.840	-106	26.50	-12.79	.10	.02	336	22.0	20	--
05-17-01	7.300	37.8	8.450	-103	18.30	-12.16	.15	.03	336	21.0	20	--
05-16-01	7.370	30.5	9.650	-108	1.90	-13.52	.11	.03	465	23.0	23	--
05-16-01	7.190	55.9	10.7	-108	5.30	-13.33	.22	.05	221	27.0	21	--
05-17-01	9.160	58.4	13.2	-105	5.20	-13.13	.24	.05	576	22.0	24	--
07-17-01	5.400	16.5	4.200	-91.92	--	-12.12	.06	.02	--	--	--	12.5
07-17-01	--	--	--	-88.69	7.50	-11.79	--	--	--	--	--	--
07-17-01	4.830	24.0	2.640	-88.33	12.80	-11.90	.08	.02	--	--	--	--
SCOTTS BLUFF COUNTY												
06-26-01	--	--	--	-109	--	-14.16	--	--	--	--	--	.6
05-16-01	4.420	25.7	6.540	-105	10.30	-13.45	.11	.03	593	22.0	25	--
05-16-01	5.460	30.3	7.780	-111	3.70	-13.73	.14	.03	303	21.0	20	--
05-16-01	7.850	44.9	11.1	-107	9.90	-13.33	.40	.08	540	22.0	24	--
05-16-01	--	--	--	-106	--	-13.55	--	--	--	--	--	--
05-14-01	5.410	25.8	4.440	-110	2.80	-13.77	.11	.03	361	21.0	20	--

PUMPKIN CREEK VALLEY STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	URANIUM NATURAL 2 SIGMA WATER, DISS, (UG/L) (75990)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
BANNER COUNTY		
05-24-01	--	--
06-29-01	1.6	6.61
07-02-01	--	--
07-02-01	--	--
07-02-01	.90	3.82
06-27-01	--	--
07-03-01	--	--
05-14-01	--	--
06-26-01	--	--
MORRILL COUNTY		
05-18-01	9.9	41.9
05-22-01	--	--
05-17-01	3.4	20.9
05-17-01	13	55.4
05-16-01	4.3	26.5
05-16-01	3.6	22.6
05-17-01	3.7	22.9
07-17-01	2.0	12.1
07-17-01	--	--
07-17-01	.99	4.17
SCOTTS BLUFF COUNTY		
06-26-01	--	--
05-16-01	4.3	26.7
05-16-01	8.2	34.7
05-16-01	8.7	36.6
05-16-01	--	--
05-14-01	2.9	18.0

CHEMICAL ANALYSES OF GROUND WATER
PUMPKIN CREEK VALLEY STUDY--Continued
GROUND-WATER QUALITY
WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

STATION NUMBER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	GEO-LOGIC UNIT	HYDRO-LOGIC UNIT CODE	DATE	TIME	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)
SCOTTS BLUFF COUNTY									
415157103352303	22N 54W21CAAB3	41 51 57 N	103 35 22 W	112SDGV	10180009	05-14-01	1530	80	3943.32
415058103393201	22N 55W26DABD1	41 50 58 N	103 39 31 W	112SDGV	10180009	05-15-01	1100	81	3875.67
415058103393202	22N 55W26DABD2	41 50 58 N	103 39 31 W	112SDGV	10180009	05-15-01	1500	30	3875.8
415058103393203	22N 55W26DABD3	41 50 58 N	103 39 31 W	112SDGV	10180009	05-15-01	1300	81	3876.01
415058103393204	22N 55W26DABD4	41 50 57 N	103 39 32 W	112SDGV	10180009	05-15-01	1600	80	3877.19
415625103480201	23N 56W27ABDC1	41 56 26 N	103 48 02 W	112SDGV	10180009	05-22-01	1630	115	3946
		41 56 26 N	103 48 02 W	112SDGV	10180009	05-23-01	0930	115	3946
415625103480202	23N 56W27ABDC2	41 56 25 N	103 48 02 W	112SDGV	10180009	05-22-01	1800	30	3948
		41 56 25 N	103 48 02 W	112SDGV	10180009	05-23-01	0950	30	3948
415756103555401	23N 57W16ADAC1	41 57 55 N	103 56 02 W	112SDGV	10180009	05-19-01	1230	195.00	3994.63
		41 57 55 N	103 56 02 W	112SDGV	10180009	05-22-01	1240	195.00	3994.63
415756103555402	23N 57W16ADAC2	41 57 55 N	103 56 02 W	112SDGV	10180009	05-19-01	1400	112.00	3994.63
		41 57 55 N	103 56 02 W	112SDGV	10180009	05-22-01	1255	112.00	3994.63
415756103555403	23N 57W16ADAC3	41 57 55 N	103 56 02 W	110SDGV	10180009	05-19-01	1500	30.00	3994.63
		41 57 55 N	103 56 02 W	110SDGV	10180009	05-22-01	1320	30.00	3994.63
415525104023801	23N 58W34BCCB1	41 55 25 N	104 02 38 W	112SDGV	10180009	05-22-01	1100	115	4053
415525104023802	23N 58W34BCCB2	41 55 25 N	104 02 38 W	110SDGV	10180009	05-22-01	1300	30	4053

DATE	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)
SCOTTS BLUFF COUNTY													
05-14-01	655	8.0	92	7.3	1050	14.5	380	114	24.3	16.6	2	73.3	28
05-15-01	--	.2	--	7.6	970	17.0	310	86.4	23.4	10.5	2	89.4	37
05-15-01	--	2.8	--	7.4	926	15.0	300	88.1	18.9	10.3	2	89.8	39
05-15-01	--	9.1	--	7.9	988	12.0	320	88.6	24.3	8.99	2	90.3	37
05-15-01	--	7.0	--	7.7	1010	11.0	350	96.3	26.4	7.11	2	91.6	36
05-22-01	660	7.0	79	7.5	970	14.0	360	99.8	26.6	17.5	1	64.5	27
05-23-01	--	--	--	--	--	--	--	--	--	--	--	--	--
05-22-01	660	6.7	72	7.6	923	12.0	340	94.2	25.2	14.5	1	62.2	27
05-23-01	--	--	--	--	--	--	--	--	--	--	--	--	--
05-19-01	660	.5	6	7.9	680	14.5	190	51.9	14.9	11.9	2	74.1	44
05-22-01	--	--	--	--	--	--	--	--	--	--	--	--	--
05-19-01	660	1.6	18	7.7	813	15.0	270	73.7	21.2	12.2	2	71.3	35
05-22-01	--	--	--	--	--	--	--	--	--	--	--	--	--
05-19-01	660	4.2	47	7.6	927	14.5	350	89.7	31.4	18.3	1	64.3	27
05-22-01	--	--	--	--	--	--	--	--	--	--	--	--	--
05-22-01	660	5.0	55	7.4	1310	12.5	370	89.5	36.2	18.2	3	148	45
05-22-01	660	5.4	58	7.4	1320	12.0	370	90.7	35.9	17.9	3	146	44

CHEMICAL ANALYSES OF GROUND WATER

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PUMPKIN CREEK VALLEY STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)
SCOTTS BLUFF COUNTY													
05-14-01	269	17.8	.7	51.1	240	741	<.040	9.67	<.006	.120	.039	26	3.9
05-15-01	279	18.1	.5	33.2	208	652	<.040	3.37	.006	--	E.012	14	4.0
05-15-01	256	20.0	.6	28.7	205	627	<.040	2.82	<.006	--	E.009	20	--
05-15-01	282	20.7	1.2	28.8	213	659	<.040	3.04	<.006	.117	.038	6.9	4.0
05-15-01	287	21.2	1.0	22.9	229	667	--	--	--	--	--	11	--
05-22-01	257	15.4	.5	47.2	210	685	<.040	11.1	<.006	--	<.020	16	3.8
05-23-01	--	--	--	--	--	--	--	--	--	--	--	--	--
05-22-01	246	15.3	.5	46.8	208	650	<.040	7.88	<.006	--	<.020	12	3.6
05-23-01	--	--	--	--	--	--	--	--	--	--	--	--	--
05-19-01	232	12.7	.6	42.5	117	467	<.040	.505	E.004	--	<.020	5.6	8.3
05-22-01	--	--	--	--	--	--	--	--	--	--	--	--	--
05-19-01	215	14.0	.5	53.1	194	582	<.040	2.90	.009	--	<.020	8.3	12.3
05-22-01	--	--	--	--	--	--	--	--	--	--	--	--	--
05-19-01	303	13.4	.9	60.7	180	642	E.024	--	<.006	1.56	.510	15	35.0
05-22-01	--	--	--	--	--	--	--	--	--	--	--	--	--
05-22-01	403	27.3	1.3	57.0	272	911	<.040	4.39	<.006	.089	.029	31	18.8
05-22-01	405	27.2	1.3	58.3	278	918	<.040	4.43	<.006	.080	.026	31	18.9
DATE	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L) (75987)	ALPHA RADIO. WATER DISS AS TH-230 (PCI/L) (04126)	BETA, 2 SIGMA WATER, DISS, AS CS-137 (PCI/L) (75989)	GROSS ALPHA, 2X CL, WATER, FLTRD, (PCI/L) (99337)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, 2X CL, SS MDC, WATER, FLTRD, (PCI/L) (99323)	H-2 / H-1 STABLE ISOTOPE RATIO PER MIL (82082)	N15/N14 NO3 FRAC WATER FLTRD 0.45 U PER MIL (82690)	O-18 / O-16 STABLE ISOTOPE RATIO PER MIL (82085)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L) (09511)	RA-226 2 SIGMA WATER, DISS, (PCI/L) (76001)
SCOTTS BLUFF COUNTY													
05-14-01	<10	<3.2	4.3	8.43	4.5	5.610	32.5	5.230	-110	2.90	-13.75	.28	.06
05-15-01	<10	5.3	4.9	14.2	3.9	5.030	27.4	4.710	-111	6.50	-13.65	.18	.04
05-15-01	<10	<3.2	--	--	--	--	--	--	-106	8.60	-13.12	--	--
05-15-01	<10	<3.2	6.0	18.9	4.3	5.870	30.4	5.070	-109	7.20	-13.62	.10	.02
05-15-01	<10	<3.2	--	--	--	--	--	--	-111	--	-13.76	--	--
05-22-01	<10	<3.0	--	--	--	--	--	--	-111	.000	-13.84	.14	.03
05-23-01	--	--	--	--	--	--	--	--	--	--	--	--	--
05-22-01	<10	<3.0	--	--	--	--	--	--	-111	.40	-13.76	.25	.05
05-23-01	--	--	--	--	--	--	--	--	--	--	--	--	--
05-19-01	<10	<3.0	--	--	--	--	--	--	-114	14.40	-14.20	.27	.06
05-22-01	--	--	--	--	--	--	--	--	--	--	--	--	--
05-19-01	<10	<3.0	--	--	--	--	--	--	-113	2.90	-14.09	.07	.02
05-22-01	--	--	--	--	--	--	--	--	--	--	--	--	--
05-19-01	<10	<3.0	--	--	--	--	--	--	-108	1.80	-13.29	.26	.05
05-22-01	--	--	--	--	--	--	--	--	--	--	--	--	--
05-22-01	<10	<3.0	--	--	--	--	--	--	-109	6.10	-13.42	.15	.03
05-22-01	<10	<3.0	--	--	--	--	--	--	-107	5.70	-13.39	.06	.02

CHEMICAL ANALYSES OF GROUND WATER
PUMPKIN CREEK VALLEY STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	RADON 222 TOTAL (PCI/L) (82303)	RADON 222, 2X CL, SS MDC, WATER, UNFLTRD (PCI/L) (99327)	RN-222 2 SIGMA WATER, WHOLE, TOTAL, (PCI/L) (76002)	URANIUM NATURAL 2 SIGMA WATER, DISS, (UG/L) (75990)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
SCOTTS BLUFF COUNTY					
05-14-01	234	21.0	18	2.5	15.5
05-15-01	559	22.0	24	4.2	26.0
05-15-01	--	--	--	--	--
05-15-01	509	22.0	23	4.4	27.0
05-15-01	--	--	--	--	--
05-22-01	--	--	--	2.3	9.83
05-23-01	1480	22.0	36	--	--
05-22-01	--	--	--	2.1	13.3
05-23-01	377	22.0	22	--	--
05-19-01	--	--	--	2.4	14.8
05-22-01	423	21.0	21	--	--
05-19-01	--	--	--	3.1	19.0
05-22-01	253	21.0	19	--	--
05-19-01	--	--	--	2.0	12.1
05-22-01	494	22.0	23	--	--
05-22-01	594	22.0	25	4.8	29.4
05-22-01	715	22.0	26	7.5	31.2

CHEMICAL ANALYSES OF GROUND WATER

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ASHLAND WELL FIELD STUDY
GROUND-WATER QUALITY

(Local identifier: indicates location by township, range, and section. Geologic unit: 110QRTR, Quaternary system deposits, undifferentiated; 112SDGV, Pleistocene sand and gravel deposits. Remark code: <, less than; E, estimated; M, presence verified, not quantified)

COUNTIES--- Sarpy and Saunders

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

STATION	NUMBER	LOCAL IDENT- I- FIER	LAT- I- TUDE	LONG- I- TUDE	GEO- LOGIC UNIT	HYDRO- LOGIC UNIT CODE	DATE	TIME	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)
SARPY COUNTY										
410233096181801	12N 10E 4BADB1		41 02 33 N	096 18 18 W	--	10200202	08-28-01	1130	--	--
410159096181001	12N 10E 4CDA1		41 01 59 N	096 18 10 W	112SDGV	10200202	05-01-01	1120	80	40
			41 01 59 N	096 18 10 W	112SDGV	10200202	08-28-01	0900	--	--
410312096183901	13N 10E32ADDD1		41 03 12 N	096 18 39 W	110SDGV	10200202	04-10-01	1030	46	38
			41 03 12 N	096 18 39 W	110SDGV	10200202	04-10-01	1210	34	32
			41 03 12 N	096 18 39 W	110SDGV	10200202	04-10-01	1320	24	22
			41 03 12 N	096 18 39 W	112SDGV	10200202	08-28-01	1230	--	--
410324096191801	13N 10E32BAD1		41 03 24 N	096 19 18 W	112SDGV	10200202	08-28-01	1010	--	--
SAUNDERS COUNTY										
410707096220601	13N 9E 2DDDD1		41 07 07 N	096 22 06 W	110QRNR	10200203	04-03-01	1350	106	104
			41 07 07 N	096 22 06 W	110QRNR	10200203	04-03-01	1550	--	--
			41 07 07 N	096 22 06 W	110QRNR	10200203	04-03-01	1720	25	23
			41 07 07 N	096 22 06 W	110QRNR	10200203	08-29-01	0950	--	--
410612096220601	13N 9E14AAAA1		41 06 11 N	096 22 06 W	110QRNR	10200203	08-29-01	0840	--	--
410518096220601	13N 9E23AAAA1		41 05 18 N	096 22 06 W	110SDGV	10200202	04-19-01	0950	54	52
			41 05 18 N	096 22 06 W	110SDGV	10200202	04-19-01	1100	39	37
			41 05 18 N	096 22 06 W	110SDGV	10200202	04-19-01	1200	24	22
410335096220301	13N 9E25CCCC1		41 03 35 N	096 22 03 W	110SDGV	10200202	04-04-01	1040	37	35
			41 03 35 N	096 22 03 W	110SDGV	10200202	04-04-01	1200	32	30
410703096205301	13N 10E 7BBBB1		41 07 03 N	096 20 53 W	110QRNR	10200203	04-17-01	1000	90	88
			41 07 03 N	096 20 53 W	110QRNR	10200203	04-17-01	1200	60	58
			41 07 03 N	096 20 53 W	110QRNR	10200203	04-17-01	1320	30	28
			41 07 03 N	096 20 53 W	110QRNR	10200203	08-29-01	1040	--	--
410527096203201	13N 10E18CDBD1		41 05 27 N	096 20 32 W	110SDGV	10200202	04-05-01	1430	57	55
			41 05 27 N	096 20 32 W	110SDGV	10200202	04-05-01	1600	37	35
			41 05 27 N	096 20 32 W	110SDGV	10200202	04-05-01	1720	22	20
410427096202501	13N 10E19CDDD1		41 04 27 N	096 20 25 W	110SDGV	10200202	04-05-01	0900	57	55
			41 04 27 N	096 20 25 W	110SDGV	10200202	04-05-01	1030	37	35
			41 04 27 N	096 20 25 W	110SDGV	10200202	04-05-01	1130	22	20
			41 04 27 N	096 20 25 W	112SDGV	10200202	08-29-01	1200	--	--
410340096202201	13N 10E30CDDA1		41 03 40 N	096 20 22 W	110SDGV	10200202	04-12-01	1050	63	61
			41 03 40 N	096 20 22 W	110SDGV	10200202	04-12-01	1300	43	41
			41 03 40 N	096 20 22 W	110SDGV	10200202	04-12-01	1440	22	20
410303096192901	13N 10E32CABC1		41 03 03 N	096 19 29 W	112SDGV	10200203	08-29-01	1330	--	--
410307096193801	13N 10E32CBAB1		41 03 07 N	096 19 38 W	110SDGV	10200202	04-18-01	1020	43	41
			41 03 07 N	096 19 38 W	110SDGV	10200202	04-18-01	1150	33	31
			41 03 07 N	096 19 38 W	110SDGV	10200202	04-18-01	1330	23	21

CHEMICAL ANALYSES OF GROUND WATER

ASHLAND WELL FIELD STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
SARPY COUNTY													
08-28-01	--	1052	732	.1	0	7.7	621	27.0	12.0	210	59.6	14.0	9.20
05-01-01	--	1052	--	.2	--	7.6	593	--	12.5	210	62.0	14.6	10.0
08-28-01	--	1052	732	M	0	7.7	623	26.0	10.5	210	58.6	15.1	9.17
04-10-01	46.00	1056	--	.3	--	7.6	531	--	16.5	180	48.3	15.6	10.3
04-10-01	46.00	1056	--	.3	--	7.6	532	--	17.0	180	47.3	16.1	10.3
04-10-01	46.00	1056	--	.3	--	7.5	531	--	17.5	180	46.8	15.9	10.3
08-28-01	46.00	1056	732	.1	0	7.7	562	27.0	10.0	180	44.1	15.7	8.84
08-28-01	--	1060.21	732	.1	1	7.6	592	26.0	11.5	190	56.8	11.6	7.74
SAUNDERS COUNTY													
04-03-01	130.00	1077.00	--	.2	--	7.3	906	--	11.5	270	70.6	22.5	10.1
04-03-01	130.00	1077.00	--	.2	--	7.3	765	--	11.5	260	75.4	16.5	8.71
04-03-01	130.00	1077.00	--	.2	--	7.4	1260	--	12.0	310	62.3	38.2	16.4
08-29-01	130.00	1077.00	730	M	0	7.2	605	30.0	13.0	--	--	--	--
08-29-01	98.00	1075.00	730	.1	0	7.1	605	28.0	12.5	--	--	--	--
04-19-01	76.00	1069.00	--	.1	--	6.9	530	--	13.0	180	57.4	9.85	8.44
04-19-01	76.00	1069.00	--	.1	--	6.9	525	--	14.0	190	57.9	10.1	8.45
04-19-01	76.00	1069.00	--	.1	--	6.9	914	--	15.0	290	90.0	15.2	11.9
04-04-01	36.00	1065.00	--	3.2	--	6.9	911	--	9.0	370	113	21.2	2.64
04-04-01	36.00	1065.00	--	3.4	--	7.2	907	--	10.0	370	112	21.5	2.65
04-17-01	96.00	1075.00	--	.2	--	7.2	418	--	11.5	150	46.4	8.68	5.61
04-17-01	96.00	1075.00	--	.2	--	7.2	460	--	12.0	160	49.6	9.27	7.44
04-17-01	96.00	1075.00	--	.2	--	7.2	448	--	13.0	160	49.1	9.21	6.41
08-29-01	96.00	1075.00	730	.1	0	7.3	420	31.0	20.5	--	--	--	--
04-05-01	56.	1070	--	.5	--	7.7	566	--	12.0	190	51.4	13.8	9.18
04-05-01	56.	1070	--	2.9	--	7.7	540	--	11.5	170	47.3	12.9	8.08
04-05-01	56.	1070	--	1.1	--	7.7	555	--	11.5	170	48.1	13.0	8.54
04-05-01	56.	1065	--	.3	--	7.7	476	--	16.5	160	42.8	12.4	9.26
04-05-01	56.	1065	--	1.3	--	7.5	478	--	18.0	160	43.3	12.4	9.84
04-05-01	56.	1065	--	.6	--	7.7	488	--	17.0	160	43.2	12.4	9.50
08-29-01	56.	1065	730	.1	1	7.5	502	32.0	10.0	180	49.2	14.3	8.32
04-12-01	70.	1059	--	4.0	--	7.5	568	--	12.0	200	59.3	13.7	7.13
04-12-01	70.	1059	--	1.3	--	7.3	522	--	13.5	170	48.2	11.7	7.61
04-12-01	70.	1059	--	6.3	--	7.6	518	--	7.0	170	49.2	12.2	4.21
08-29-01	86.	1056	730	.1	0	7.7	494	33.0	16.5	170	44.9	13.6	10.1
04-18-01	46.	1055	--	4.8	--	7.5	514	--	10.0	180	48.6	14.4	6.41
04-18-01	46.	1055	--	6.0	--	7.5	483	--	9.0	160	42.0	13.4	6.61
04-18-01	46.	1055	--	7.3	--	7.5	512	--	6.5	170	45.2	14.2	5.65

CHEMICAL ANALYSES OF GROUND WATER

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ASHLAND WELL FIELD STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SODIUM AD- SORP- TION RATIO (00931)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)
SARPY COUNTY													
08-28-01	1	38.8	28	198	16.0	.4	27.4	88.0	--	--	--	--	--
05-01-01	1	37.3	26	204	15.7	.5	31.8	81.0	.51	376	.343	.44	--
08-28-01	1	36.3	26	200	15.8	.4	27.1	79.9	--	--	--	--	--
04-10-01	1	32.9	27	188	16.0	.4	19.5	62.9	.44	321	E.036	--	--
04-10-01	1	33.5	27	182	16.4	.4	18.1	69.6	.44	322	--	--	--
04-10-01	1	33.8	27	180	15.7	.4	17.5	68.1	.43	318	.213	.27	--
08-28-01	1	33.2	28	183	16.4	.2	11.1	62.4	.41	304	--	--	--
08-28-01	1	38.8	30	179	14.6	.4	29.9	82.7	--	--	--	--	--
SAUNDERS COUNTY													
04-03-01	2	92.1	42	297	19.2	.6	35.3	163	.81	595	.205	.26	--
04-03-01	2	62.9	34	233	23.3	.6	31.3	129	.67	492	.126	.16	--
04-03-01	4	171	53	420	14.1	.6	41.0	247	1.15	847	E.029	--	--
08-29-01	--	--	--	--	--	--	--	--	--	--	--	--	--
08-29-01	--	--	--	--	--	--	--	--	--	--	--	--	--
04-19-01	1	34.1	28	192	17.2	.3	39.1	56.0	.46	339	.187	.24	--
04-19-01	1	37.1	29	220	15.8	.4	42.8	51.5	.49	358	<.041	--	--
04-19-01	2	76.7	36	374	33.7	.4	41.0	78.5	.78	574	.105	.14	--
04-04-01	1	58.7	25	409	33.0	.3	35.3	52.3	.77	565	<.041	--	--
04-04-01	1	57.5	25	406	32.9	.3	35.3	51.0	.76	560	<.041	--	--
04-17-01	.7	20.0	22	146	7.1	.4	31.8	58.5	.36	267	E.022	--	--
04-17-01	.8	24.8	24	158	8.3	.4	32.2	66.8	.40	295	<.041	--	--
04-17-01	.8	22.8	23	154	7.8	.4	31.0	63.9	.39	284	<.041	--	--
08-29-01	--	--	--	--	--	--	--	--	--	--	--	--	--
04-05-01	1	44.2	33	167	16.3	.5	33.7	98.2	.50	368	<.041	--	--
04-05-01	1	41.1	33	166	15.9	.5	31.5	85.0	.47	342	<.041	--	--
04-05-01	1	42.3	33	166	15.3	.5	31.4	85.7	.47	345	.425	.55	--
04-05-01	1	34.8	31	151	13.3	.5	33.6	70.1	.42	308	<.041	--	--
04-05-01	1	34.5	30	151	13.4	.5	32.3	74.1	.43	313	<.041	--	.390
04-05-01	1	35.1	31	152	13.5	.4	32.2	73.4	.43	313	<.041	--	.343
08-29-01	1	39.3	31	164	15.4	.3	21.2	88.1	--	--	--	--	--
04-12-01	1	38.9	28	167	15.5	.4	18.3	110	.49	363	<.041	--	--
04-12-01	1	38.7	32	144	16.7	.5	18.9	96.8	.44	326	<.041	--	--
04-12-01	1	37.8	32	143	15.6	.7	8.8	97.0	.42	312	E.023	--	.125
08-29-01	1	34.9	30	156	15.5	.4	37.4	78.5	.45	329	--	--	--
04-18-01	1	36.2	29	161	15.1	.4	27.9	82.2	.45	332	<.041	--	--
04-18-01	1	33.8	30	148	14.4	.5	28.7	79.4	.42	308	.140	.18	.074
04-18-01	1	33.9	29	151	15.0	.5	29.7	85.0	.44	323	.141	.18	.572

CHEMICAL ANALYSES OF GROUND WATER

ASHLAND WELL FIELD STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)
SARPY COUNTY													
08-28-01	--	--	--	--	--	--	7.6	7.3	197	<1.00	76	<8.00	<10.0
05-01-01	--	<.047	.036	.011	--	<.018	9.5	--	--	--	--	--	--
08-28-01	--	--	--	--	--	--	7.7	8.1	143	<1.00	64	<8.00	<10.0
04-10-01	--	E.043	--	E.003	--	<.018	9.8	--	--	--	--	--	--
04-10-01	--	--	--	--	--	--	9.7	--	--	--	--	--	--
04-10-01	--	<.047	--	<.006	.166	.054	9.8	--	--	--	--	--	--
08-28-01	--	--	--	--	--	--	7.4	2.2	194	<1.00	49	<8.00	<10.0
08-28-01	--	--	--	--	--	--	8.3	5.4	152	<1.00	77	<8.00	<10.0
SAUNDERS COUNTY													
04-03-01	--	<.047	--	<.006	.110	.036	31	--	--	--	--	--	--
04-03-01	--	<.047	--	<.006	--	E.012	23	--	--	--	--	--	--
04-03-01	--	<.047	--	<.006	.684	.223	35	--	--	--	--	--	--
08-29-01	--	--	--	--	--	--	--	--	--	--	--	--	--
08-29-01	--	--	--	--	--	--	--	--	--	--	--	--	--
04-19-01	--	E.039	.020	.006	--	<.018	48	--	--	--	--	--	--
04-19-01	--	<.047	--	<.006	--	<.018	55	--	--	--	--	--	--
04-19-01	--	<.047	--	<.006	--	<.018	85	--	--	--	--	--	--
04-04-01	--	.296	--	<.006	1.52	.497	93	--	--	--	--	--	--
04-04-01	--	.298	--	<.006	1.46	.476	51	--	--	--	--	--	--
04-17-01	--	<.047	--	<.006	.218	.071	18	--	--	--	--	--	--
04-17-01	--	<.047	--	<.006	--	<.018	20	--	--	--	--	--	--
04-17-01	--	<.047	--	<.006	.141	.046	18	--	--	--	--	--	--
08-29-01	--	--	--	--	--	--	--	--	--	--	--	--	--
04-05-01	--	<.047	--	<.006	.803	.262	6.6	--	--	--	--	--	--
04-05-01	--	E.023	--	<.006	.721	.235	6.5	--	--	--	--	--	--
04-05-01	--	<.047	--	<.006	.156	.051	6.9	--	--	--	--	--	--
04-05-01	--	<.047	--	<.006	.711	.232	5.9	--	--	--	--	--	--
04-05-01	1.73	.410	.066	.020	.534	.174	8.6	--	--	--	--	--	--
04-05-01	1.52	.361	.059	.018	.555	.181	6.1	--	--	--	--	--	--
08-29-01	--	--	--	--	--	--	9.6	5.2	80.2	<1.00	67	<8.00	<10.0
04-12-01	--	<.047	--	<.006	--	<.018	11	--	--	--	--	--	--
04-12-01	--	<.047	--	<.006	.095	.031	15	--	--	--	--	--	--
04-12-01	.553	.137	.038	.011	.190	.062	7.3	--	--	--	--	--	--
08-29-01	--	--	--	--	--	--	5.7	8.1	69.1	<1.00	87	<8.00	<10.0
04-18-01	--	.884	--	E.005	.650	.212	10	--	--	--	--	--	--
04-18-01	.328	.093	.062	.019	.077	.025	8.2	--	--	--	--	--	--
04-18-01	2.53	.608	.118	.036	.199	.065	8.2	--	--	--	--	--	--

CHEMICAL ANALYSES OF GROUND WATER

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ASHLAND WELL FIELD STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)
SARPY COUNTY													
08-28-01	<13.0	--	160	<.08	17.5	1060	<.01	<50.0	<50.0	E2.0	<5.0	415	E5.5
05-01-01	--	--	<10	--	--	212	--	--	--	--	--	--	--
08-28-01	<13.0	--	<10	E.07	16.5	170	<.01	<50.0	<50.0	3.2	<5.0	424	E5.3
04-10-01	--	--	1160	--	--	763	--	--	--	--	--	--	--
04-10-01	--	--	490	--	--	731	--	--	--	--	--	--	--
04-10-01	--	--	480	--	--	730	--	--	--	--	--	--	--
08-28-01	<13.0	<5.0	450	<.08	12.2	817	<.01	<50.0	<50.0	<2.0	<5.0	371	<8.0
08-28-01	<13.0	--	10	E.05	15.2	75.7	<.01	<50.0	<50.0	<2.0	<5.0	376	<8.0
SAUNDERS COUNTY													
04-03-01	--	--	2790	--	--	387	--	--	--	--	--	--	--
04-03-01	--	--	3170	--	--	355	--	--	--	--	--	--	--
04-03-01	--	--	3000	--	--	472	--	--	--	--	--	--	--
08-29-01	--	--	--	--	--	--	--	--	--	--	--	--	--
08-29-01	--	--	--	--	--	--	--	--	--	--	--	--	--
04-19-01	--	--	1220	--	--	117	--	--	--	--	--	--	--
04-19-01	--	--	1430	--	--	242	--	--	--	--	--	--	--
04-19-01	--	--	1510	--	--	353	--	--	--	--	--	--	--
04-04-01	--	--	<10	--	--	--	--	--	--	--	--	--	--
04-04-01	--	--	<10	--	--	--	--	--	--	--	--	--	--
04-17-01	--	--	240	--	--	500	--	--	--	--	--	--	--
04-17-01	--	--	580	--	--	541	--	--	--	--	--	--	--
04-17-01	--	--	330	--	--	546	--	--	--	--	--	--	--
08-29-01	--	--	--	--	--	--	--	--	--	--	--	--	--
04-05-01	--	--	20	--	--	132	--	--	--	--	--	--	--
04-05-01	--	--	30	--	--	81.7	--	--	--	--	--	--	--
04-05-01	--	--	M	--	--	95.4	--	--	--	--	--	--	--
04-05-01	--	--	10	--	--	8.7	--	--	--	--	--	--	--
04-05-01	--	--	<10	--	--	E2.5	--	--	--	--	--	--	--
04-05-01	--	--	<10	--	--	5.0	--	--	--	--	--	--	--
08-29-01	<13.0	--	<10	<.08	13.4	35.5	<.01	<50.0	<50.0	E1.7	--	444	E7.3
04-12-01	--	--	<10	--	--	36.4	--	--	--	--	--	--	--
04-12-01	--	--	<10	--	--	115	--	--	--	--	--	--	--
04-12-01	--	--	<10	--	--	21.3	--	--	--	--	--	--	--
08-29-01	<13.0	<5.0	10	E.06	24.9	48.8	<.01	<50.0	<50.0	<2.0	<5.0	410	E7.1
04-18-01	--	--	<10	--	--	E2.7	--	--	--	--	--	--	--
04-18-01	--	--	M	--	--	<3.2	--	--	--	--	--	--	--
04-18-01	--	--	M	--	--	<3.2	--	--	--	--	--	--	--

[illegible]

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

[illegible]

CHEMICAL ANALYSES OF GROUND WATER
ASHLAND WELL FIELD STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

[illegible]

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

[illegible]

ASHLAND WELL FIELD STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

[illegible]

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

[illegible]

CHEMICAL ANALYSES OF GROUND WATER
ASHLAND WELL FIELD STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	1,3-DI- CHLORO- PROPANE WAT. WH TOTAL (UG/L) (77173)	STYRENE TOTAL (UG/L) (77128)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	TOLUENE P-CHLOR UNFLTRD WATER REC (UG/L) (77277)	TOLUENE TOTAL (UG/L) (34010)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34699)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	H-2 / H-1 STABLE ISOTOPE RATIO PER MIL (82082)	O-18 / O-16 STABLE ISOTOPE RATIO PER MIL (82085)	TRITIUM TOTAL (PCI/L) (07000)	TRITIUM 2 SIGMA WATER, WHOLE, TOTAL (PCI/L) (75985)
SARPY COUNTY													
08-28-01	--	--	--	--	--	--	--	--	--	--	--	--	--
05-01-01	--	--	--	--	--	--	--	--	--	-66.57	-8.83	22.4	1.9
08-28-01	--	--	--	--	--	--	--	--	--	--	--	--	--
04-10-01	--	--	--	--	--	--	--	--	--	-52.86	-6.37	--	--
04-10-01	--	--	--	--	--	--	--	--	--	-52.27	-6.34	--	--
04-10-01	--	--	--	--	--	--	--	--	--	-52.29	-6.34	--	--
08-28-01	--	--	--	--	--	--	--	--	--	--	--	--	--
08-28-01	--	--	--	--	--	--	--	--	--	--	--	--	--
SAUNDERS COUNTY													
04-03-01	--	--	--	--	--	--	--	--	--	-65.05	-8.91	--	--
04-03-01	--	--	--	--	--	--	--	--	--	-66.68	-9.06	--	--
04-03-01	--	--	--	--	--	--	--	--	--	-60.17	-8.52	--	--
08-29-01	<.2	<.20	<.2	<.20	<.20	<.20	<.20	<.20	<.2	--	--	--	--
08-29-01	<.2	<.20	<.2	<.20	<.20	<.20	<.20	<.20	<.2	--	--	--	--
04-19-01	--	--	--	--	--	--	--	--	--	-51.78	-7.70	7.0	1.9
04-19-01	--	--	--	--	--	--	--	--	--	-50.74	-7.65	--	--
04-19-01	--	--	--	--	--	--	--	--	--	-51.71	-7.69	--	--
04-04-01	--	--	--	--	--	--	--	--	--	-51.61	-7.73	--	--
04-04-01	--	--	--	--	--	--	--	--	--	-50.72	-7.78	--	--
04-17-01	--	--	--	--	--	--	--	--	--	-66.21	-8.82	5.1	1.9
04-17-01	--	--	--	--	--	--	--	--	--	-64.44	-8.41	--	--
04-17-01	--	--	--	--	--	--	--	--	--	-65.80	-8.57	--	--
08-29-01	<.2	<.20	<.2	<.20	<.20	<.20	<.20	<.20	<.2	--	--	--	--
04-05-01	--	--	--	--	--	--	--	--	--	-63.91	-8.16	25.3	2.6
04-05-01	--	--	--	--	--	--	--	--	--	-63.05	-7.88	--	--
04-05-01	--	--	--	--	--	--	--	--	--	-63.10	-7.93	--	--
04-05-01	--	--	--	--	--	--	--	--	--	-63.82	-8.13	20.5	1.9
04-05-01	--	--	--	--	--	--	--	--	--	-65.79	-8.33	--	--
04-05-01	--	--	--	--	--	--	--	--	--	-65.55	-8.47	--	--
08-29-01	--	--	--	--	--	--	--	--	--	--	--	--	--
04-12-01	--	--	--	--	--	--	--	--	--	-51.67	-6.39	--	--
04-12-01	--	--	--	--	--	--	--	--	--	-46.80	-5.35	--	--
04-12-01	--	--	--	--	--	--	--	--	--	-51.99	-6.30	--	--
08-29-01	--	--	--	--	--	--	--	--	--	--	--	--	--
04-18-01	--	--	--	--	--	--	--	--	--	-74.23	-9.74	--	--
04-18-01	--	--	--	--	--	--	--	--	--	-74.74	-9.89	--	--
04-18-01	--	--	--	--	--	--	--	--	--	-75.38	-9.83	--	--

CHEMICAL ANALYSES OF GROUND WATER

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GROUND-WATER PROTECTION AREA
MIDDLE REPUBLICAN RIVER

(Local identifier: indicates location by township, range, and section. Geologic unit: 112SDGV, Pleistocene sand and gravel deposits)

COUNTIES.--Red Willow

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

STATION NUMBER	LOCAL IDENT- I- FIER	LAT- I- TUDE	LONG- I- TUDE	GEO- LOGIC UNIT	HYDRO- LOGIC UNIT CODE	DATE	TIME	DEPTH OF WELL, TOTAL (FEET) (72008)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)
401454100215401	3N 27W 9AAAA1	40 14 54 N	100 21 54 W	112SDGV	10250004	07-25-01	1400	40.00	2368
400357100135202	1N 26W11CBBB2	40 03 57 N	100 13 52 W	112SDGV	10250014	07-25-01	1200	36.00	2366
	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)		
	DATE								
	07-25-01	700	6.2	66	7.5	584	28.0	14.0	1.1
	07-25-01	700	.4	4	7.4	1150	27.0	14.0	4.3

MISCELLANEOUS SURFACE- AND GROUND-WATER QUALITY DATA

SCOTTS BLUFF NATIONAL MONUMENT
WATER-QUALITY MONITORING

(Remark code: <, less than; E, estimated value)

COUNTIES.--Scotts Bluff

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

STATION	NUMBER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	HYDROLOGIC UNIT CODE	DATE	TIME	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	TURBIDITY (NTU) (00076)			
06680100	N PLATTE R NR SCOTTSBLUFF,		41 51 45 N	103 43 23 W	10180009	05-21-01	1300	--	465	23			
			41 51 45 N	103 43 23 W	10180009	06-25-01	1330	--	300	--			
			41 51 45 N	103 43 23 W	10180009	09-20-01	1200	--	1800	--			
414956103415601	SCOTTS SPRING		41 49 56 N	103 41 56 W	10180009	05-21-01	1130	4145	--	--			
DATE	TURBIDITY LAB HACH 2100AN (NTU) (99872)	BAROMETRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS NONCARB DISSOLV FLD. AS CAC03 (MG/L) (00904)	HARD-NESS TOTAL (MG/L CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
05-21-01	16	--	9.1	--	8.0	880	--	13.5	53	280	75.5	21.8	7.90
06-25-01	54	660	8.0	110	8.3	900	30.0	23.5	62	280	77.6	21.3	8.46
09-20-01	250	660	8.8	109	8.4	818	24.5	18.0	46	240	65.7	18.3	6.86
05-21-01	--	660	9.2	99	8.4	308	--	12.0	--	22	6.58	1.43	4.50
DATE	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CAC03) (90410)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CAC03) (39086)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
05-21-01	2	89.5	40	--	226	264	6	18.9	.5	27.7	209	35	.85
06-25-01	2	95.0	41	233	220	261	4	17.1	.4	25.4	217	101	.84
09-20-01	2	75.1	40	215	194	230	3	16.2	.5	24.4	186	228	.75
05-21-01	6	66.4	84	--	154	185	1	4.5	.5	60.9	5.8	128	
DATE	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA, DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
05-21-01	783	624	598	.045	.31	.49	.06	2.6	2.24	9.92	2.26	.053	.016
06-25-01	499	616	603	<.040	.33	.75	--	2.1	1.78	7.86	1.79	.062	.019
09-20-01	2680	551	517	<.040	.37	1.2	--	1.9	1.47	6.52	1.48	.030	.009
05-21-01	--	257		E.021	E.09	--	--	--	--	--	.766	--	<.006
DATE	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	PHEO-PHYTIN A, PERI-PHYTON (MG/M2) (62359)	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2) (70957)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)
05-21-01	.27	.45	2.7	--	.012	<.020	.071	--	5.6	9.0	<15	5.1	76.3
06-25-01	--	--	2.5	.064	.035	.021	.148	2.2	13	19.4	<15	5.4	86.3
09-20-01	--	--	2.7	--	.015	<.020	.289	1.6	6.0	13.0	<15	5.1	--
05-21-01	--	--	--	--	.006	<.020	--	--	--	--	<15	14.6	18.2

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENIUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)
05-21-01	<1.00	126	<8.00	<10.0	<13.0	<5.0	<10	E.06	35.9	6.4	<.01	<50.0	<50.0
06-25-01	<1.00	135	<8.00	<10.0	<13.0	<5.0	<10	<.08	38.9	5.7	--	<50.0	<50.0
09-20-01	<1.00	121	<8.00	<10.0	<13.0	<5.0	<10	<.08	32.9	E2.6	.06	<50.0	<50.0
05-21-01	<1.00	78	<8.00	<10.0	<13.0	<5.0	<10	<.08	8.5	4.3	<.01	<50.0	<50.0
DATE	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (82660)	ACETO- CHLOR, WATER, FLTRD REC (49260)	ALA- CHLOR, WATER, DISS, REC, (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (39632)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (82673)	BUTYL- ATE, WATER, DISS, REC (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (82680)
05-21-01	2.8	<5.0	805	E7.9	<20	<.002	<.004	.005	<.005	.015	<.010	<.002	<.041
06-25-01	2.6	<5.0	764	8.9	<20	<.002	<.004	<.002	<.005	.009	<.010	<.002	<.041
09-20-01	E2.0	<5.0	624	E7.7	<20	<.002	<.004	<.002	<.005	.008	<.010	<.002	<.041
05-21-01	<2.0	<5.0	104	--	<20	--	--	--	--	--	--	--	--
DATE	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (82677)	EPTC WATER FLTRD 0.7 U GF, REC (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS- SOLVED (UG/L) (39341)
05-21-01	<.020	<.005	<.018	<.003	E.016	<.005	<.005	<.021	.008	<.009	<.005	<.003	<.004
06-25-01	<.020	<.005	<.018	<.003	E.003	<.005	<.005	<.021	.018	<.009	<.005	<.003	<.004
09-20-01	<.020	<.005	<.018	<.003	E.007	<.005	<.005	<.021	<.007	<.009	<.005	<.003	<.004
05-21-01	--	--	--	--	--	--	--	--	--	--	--	--	--
DATE	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (82687)
05-21-01	<.035	<.027	<.050	<.006	E.005	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006
06-25-01	<.035	<.027	<.050	<.006	.013	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006
09-20-01	<.035	<.027	<.050	<.006	E.003	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006
05-21-01	--	--	--	--	--	--	--	--	--	--	--	--	--
DATE	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (82661)
05-21-01	<.011	E.008	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005	<.002	<.009
06-25-01	<.011	E.007	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005	<.002	<.009
09-20-01	<.011	E.004	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005	<.002	<.009
05-21-01	--	--	--	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS SURFACE- AND GROUND-WATER QUALITY DATA

SCOTTS BLUFF NATIONAL MONUMENT--Continued
WATER-QUALITY MONITORING

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	H-2 / H-1 STABLE ISOTOPE RATIO PER MIL (82082)	O-18 / O-16 STABLE ISOTOPE RATIO PER MIL (82085)	U-234 2 SIGMA WATER, DISS, (PCI/L) (75992)	URANIUM -234 WATER DISSOLV (PCI/L) (22610)	U-235 2 SIGMA WATER, DISS, (PCI/L) (75994)	URANIUM -235 WATER, DISS, (PCI/L) (22620)	U-238 2 SIGMA WATER, DISS, (PCI/L) (75991)	URANIUM -238 WATER DISSOLV (PCI/L) (22603)
05-21-01	--	--	2.1	12.1	.06	.26	1.3	7.33
06-25-01	--	--	2.2	12.1	.07	.30	1.3	7.35
09-20-01	--	--	1.9	10.2	.07	.28	1.1	6.10
05-21-01	-93.60	-12.01	.29	1.57	.01	.03	.15	.77

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WATER RESOURCES DATA—NEBRASKA, 2001
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CONVERSION FACTORS AND VERTICAL DATUM

Multiply

By

To obtain

Length

inch (in.)	2.54×10^1	millimeter
	2.54×10^{-2}	meter
foot (ft)	3.048×10^{-1}	meter
mile (mi)	1.609×10^0	kilometer

Area

acre	4.047×10^3	square meter
	4.047×10^{-1}	square hectometer
	4.047×10^{-3}	square kilometer
square mile (mi ²)	2.590×10^0	square kilometer

Volume

gallon (gal)	3.785×10^0	liter
	3.785×10^0	cubic decimeter
	3.785×10^{-3}	cubic meter
million gallons (Mgal)	3.785×10^3	cubic meter
	3.785×10^{-3}	cubic hectometer
cubic foot (ft ³)	2.832×10^1	cubic decimeter
	2.832×10^{-2}	cubic meter
cubic-foot-per-second day [(ft ³ /s) d]	2.447×10^3	cubic meter
	2.447×10^{-3}	cubic hectometer
acre-foot (acre-ft)	1.233×10^3	cubic meter
	1.233×10^{-3}	cubic hectometer
	1.233×10^{-6}	cubic kilometer

Flow

cubic foot per second (ft ³ /s)	2.832×10^1	liter per second
	2.832×10^1	cubic decimeter per second
	2.832×10^{-2}	cubic meter per second
gallon per minute (gal/min)	6.309×10^{-2}	liter per second
	6.309×10^{-2}	cubic decimeter per second
	6.309×10^{-5}	cubic meter per second
million gallons per day (Mgal/d)	4.381×10^1	cubic decimeter per second
	4.381×10^{-2}	cubic meter per second

Mass

ton (short)	9.072×10^{-1}	megagram or metric ton
-------------	------------------------	------------------------

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

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