

CALENDAR FOR WATER YEAR 2000

1999

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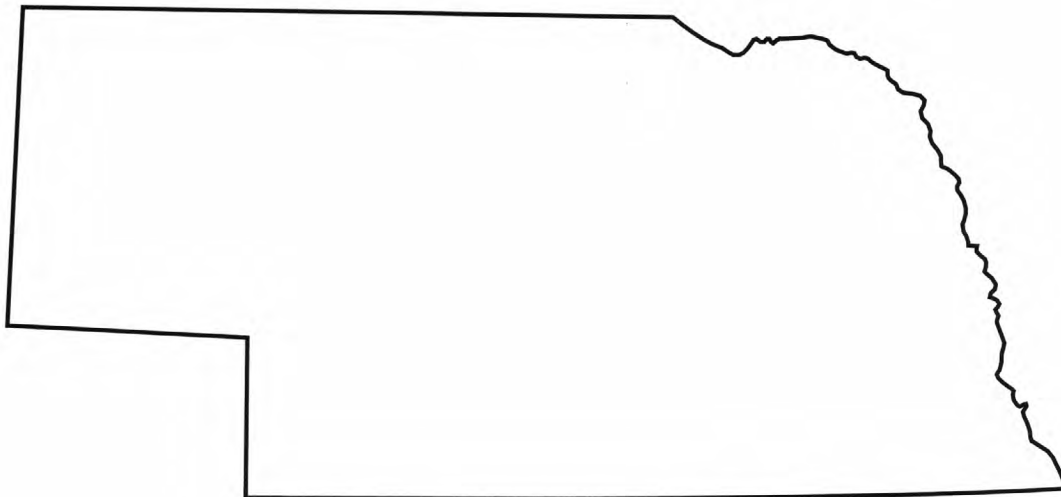
2000

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Water Resources Data Nebraska Water Year 2000

By Glenn B. Engel

Water-Data Report NE-00-1



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

J.A. Boohar, V.C. Walczyk, J.S. Stanton, P.A. Bartz, J.D. Frankforter, G.V. Steele, V.L. Mcguire, D.L. Rus, M.J. Griffin, K.E. Wilson, and S.K. Sebree of the District office.

S.H. Hull, 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.

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This report was prepared in cooperation with the State of Nebraska and with other agencies under the general supervision of M.E. Slifer, District Chief, Nebraska.

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| 13. ABSTRACT (Maximum 200 words) Water resources data for the 2000 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 95 streamflow-gaging stations, 17 partial-record or miscellaneous streamflow stations, and 5 crest-stage, partial-record streamflow stations; stage and contents records for 7 lakes and reservoirs; water-quality records for 10 streamflow-gaging stations, for 7 ungaged stream sites, and for 192 wells; and water levels for 47 observation wells. These data represent that part of the National Water Data System operated by the U. S. Geological Survey and cooperating Federal, State, and local agencies in Nebraska. | | | | |
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SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER,
FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

[Letter after station name designates type of data: (d) discharge, (st) stage, (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]

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| Republican River at McCook (d)----- | 8370 | 258 |
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GROUND-WATER WELLS, BY COUNTY,
FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

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| ADAMS COUNTY | | | | |
| Well 403403098244001 | Local number | 7N 10W 23AB----- | | 304 |
| BLAINE COUNTY | | | | |
| Well 414958100061501 | Local number | 22N 24W 33CA ----- | | 304 |
| BOONE COUNTY | | | | |
| Well 413323098074501 | Local number | 18N 7W 4CA ----- | | 304 |
| BOX BUTTE COUNTY | | | | |
| Well 420945102551501 | Local number | 25N 48W 4DDD----- | | 305 |
| BUFFALO COUNTY | | | | |
| Well 404618098504401 | Local number | 9N 14W 1DC ----- | | 305 |
| Well 404345098560001 | Local number | 9N 14W 19DD ----- | | 305 |
| BUTLER COUNTY | | | | |
| Well 410612096592601 | Local number | 13N 4E 17ABA ----- | | 306 |
| CHASE COUNTY | | | | |
| Well 403220101384001 | Local number | 7N 38W 28CC----- | | 306 |
| Well 403235101395501 | Local number | 7N 38W 29CBB----- | | 306 |
| CHERRY COUNTY | | | | |
| Well 423205100321501 | Local number | 30N 28W 36AAA ----- | | 307 |
| COLFAX COUNTY | | | | |
| Well 412810097054501 | Local number | 17N 3E 4CC ----- | | 307 |
| DAWES COUNTY | | | | |
| Well 424100103243501 | Local number | 31N 52W 3DC ----- | | 307 |
| DAWSON COUNTY | | | | |
| Well 404949099445701 | Local number | 10N 21W 18DDD ----- | | 308 |
| DUNDY COUNTY | | | | |
| Well 400155101521302 | Local number | 1N 40W 29BB2 ----- | | 308 |
| FILLMORE COUNTY | | | | |
| Well 402504097432201 | Local number | 5N 4W 12BDC ----- | | 309 |
| Well 403800097300701 | Local number | 8N 2W 26AD ----- | | 309 |

GROUND-WATER WELLS, BY COUNTY,
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GARFIELD COUNTY

| | | | |
|----------------------|--------------|-------------------|-----|
| Well 414718099083201 | Local number | 21N 16W 14CB----- | 309 |
|----------------------|--------------|-------------------|-----|

GOSPER COUNTY

| | | | |
|----------------------|--------------|------------------|-----|
| Well 403626099451401 | Local number | 7N 21W 6BC ----- | 310 |
|----------------------|--------------|------------------|-----|

HALL COUNTY

| | | | |
|----------------------|--------------|---------------------|-----|
| Well 405315098304302 | Local number | 11N 11W 25CC2 ----- | 310 |
|----------------------|--------------|---------------------|-----|

HAMILTON COUNTY

| | | | |
|----------------------|--------------|---------------------|-----|
| Well 404836097584101 | Local number | 10N 6W 27ACAA ----- | 311 |
|----------------------|--------------|---------------------|-----|

| | | | |
|----------------------|--------------|------------------|-----|
| Well 405514097573901 | Local number | 11N 6W 13CB----- | 311 |
|----------------------|--------------|------------------|-----|

HARLAN COUNTY

| | | | |
|----------------------|--------------|-------------------|-----|
| Well 400920099215501 | Local number | 2N 18W 9BCC ----- | 311 |
|----------------------|--------------|-------------------|-----|

HOLT COUNTY

| | | | |
|----------------------|--------------|-------------------|-----|
| Well 421605098203001 | Local number | 27N 9W 34DA ----- | 312 |
|----------------------|--------------|-------------------|-----|

| | | | |
|----------------------|--------------|---------------------|-----|
| Well 423148098300601 | Local number | 30N 10W 32DAA ----- | 312 |
|----------------------|--------------|---------------------|-----|

| | | | |
|----------------------|--------------|---------------------|-----|
| Well 423730098560001 | Local number | 31N 14W 27DDD ----- | 312 |
|----------------------|--------------|---------------------|-----|

HOOKE COUNTY

| | | | |
|----------------------|--------------|--------------------|-----|
| Well 420204101200502 | Local number | 24N 35W 23DC ----- | 313 |
|----------------------|--------------|--------------------|-----|

KEARNEY COUNTY

| | | | |
|----------------------|--------------|-------------------|-----|
| Well 402625098594501 | Local number | 6N 15W 34DC ----- | 313 |
|----------------------|--------------|-------------------|-----|

KIMBALL COUNTY

| | | | |
|----------------------|--------------|--------------------|-----|
| Well 411416103361101 | Local number | 15N 55W 26CCC----- | 313 |
|----------------------|--------------|--------------------|-----|

LANCASTER COUNTY

| | | | |
|----------------------|--------------|-------------------|-----|
| Well 403929096401001 | Local number | 8N 7E 18DDB ----- | 314 |
|----------------------|--------------|-------------------|-----|

| | | | |
|----------------------|--------------|-------------------|-----|
| Well 403833096385501 | Local number | 8N 7E 20DDA ----- | 314 |
|----------------------|--------------|-------------------|-----|

| | | | |
|----------------------|--------------|--------------------|-----|
| Well 404706096413001 | Local number | 10N 6E 36CDD ----- | 314 |
|----------------------|--------------|--------------------|-----|

McPHERSON COUNTY

| | | | |
|----------------------|--------------|--------------------|-----|
| Well 413130100531201 | Local number | 18N 31W 16DD ----- | 315 |
|----------------------|--------------|--------------------|-----|

NUCKOLLS COUNTY

| | | | |
|----------------------|--------------|------------------|-----|
| Well 400240098111301 | Local number | 1N 8W 23AB ----- | 315 |
|----------------------|--------------|------------------|-----|

PHELPS COUNTY

| | | | |
|----------------------|--------------|------------------|-----|
| Well 403123099261501 | Local number | 6N 19W 2AA ----- | 315 |
|----------------------|--------------|------------------|-----|

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

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|----------------------------|--------------|-----|------------------|------|
| PLATTE COUNTY | | | | |
| Well 412955097192001 | Local number | 18N | 1E 28CD ----- | 316 |
| SALINE COUNTY | | | | |
| Well 403855097072501 | Local number | 8N | 3E 19ADA ----- | 316 |
| SARPY COUNTY | | | | |
| Well 410308096190701 | Local number | 13N | 10E 32DBBA ----- | 316 |
| SAUNDERS COUNTY | | | | |
| Well 410558096210601 | Local number | 13N | 9E 13ADBA ----- | 317 |
| Well 410427096202501 | Local number | 13N | 10E 19CDDD ----- | 317 |
| Well 410340096202201 | Local number | 13N | 10E 30CDDA ----- | 318 |
| Well 410303096192901 | Local number | 13N | 10E 32CABC ----- | 318 |
| Well 411005096281502 | Local number | 14N | 8E 24ACD2----- | 318 |
| SCOTTS BLUFF COUNTY | | | | |
| Well 415325103392801 | Local number | 22N | 55W 11DDC ----- | 319 |
| SEWARD COUNTY | | | | |
| Well 405406097115001 | Local number | 11N | 2E 21DD ----- | 320 |
| VALLEY COUNTY | | | | |
| Well 412955099123201 | Local number | 18N | 16W 30CC----- | 320 |
| WEBSTER COUNTY | | | | |
| Well 400423098314001 | Local number | 1N | 11W 11AB ----- | 321 |
| YORK COUNTY | | | | |
| Well 405305097351503 | Local number | 11N | 2W 31BA3----- | 321 |

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 |
| Minnechaduza Creek near Kilgore (d) | 4609 | 85.0 | 1958-74 |
| Minnechaduza Creek at Valentine (d) | 4610 | 390 | 1948-93 |
| Niobrara River near Norden (d) | 4620 | 8,390 | 1953-83, 1986 |
| Plum Creek at Meadville (d) | 4625 | 536 | 1948-75, 1977-94 |

WATER RESOURCES DATA - NEBRASKA, 2000

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, 2000

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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 |

WATER RESOURCES DATA - NEBRASKA, 2000

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 |
| Big Blue River at Surprise (d) | 8799 | 345 | 1964-93 |
| Lincoln Creek near Seward (d) | 8800 | 438 | 1954-73, 1974-94 |

WATER RESOURCES DATA - NEBRASKA, 2000

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 | | | |
| Big Blue River at Seward (d) | 8805 | 1,107 | 1954-94 |
| Turkey Creek near Wilber (d) | 8812 | 461 | 1960-94 |
| Big Blue River at Beatrice (d) | 8815 | 3,900 | 1911-15, 1975-94 |
| Little Blue River below Pawnee Creek, near Pauline (d) | 8829 | 929 | 1963-68 |
| Little Blue River at Angus (d) | 8835 | -- | 1950-53 |
| Little Blue River near Alexandria (d) | 883570 | 1,557 | 1960-72, 1975-92 |
| Big Sandy Creek at Alexandria (d) | 883940 | 607 | 1980-93 |

*Partial year only.

**Irrigation season only.

The following surface-water crest stage stations in Nebraska have been discontinued. The years given in the period of record represent water years for which the annual maximum has been determined for each station. Each station has been assigned an 8-digit station number. For ease in reading the station number, the 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, 2000

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 |

WATER RESOURCES DATA - NEBRASKA, 2000

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 Brabch above Sprague | 8012 | 43 | 1956-61 |
| Olive Branch below Sprague | 801320 | 81 | 1956-58 |
| Hickman Branch above Hickman | 801340 | 14.7 | 1956-61 |
| Hickman Branch at Hickman | 801360 | 42.8 | 1956-61 |
| Antelope Creek at 48th Street, Lincoln | 8032 | 6.82 | 1951, 1958-78 |
| Antelope Creek at 27th Street, Lincoln | 8033 | 10.4 | 1957-78 |
| Antelope Creek at 17th Street, Lincoln | 8034 | 12.5 | 1963-78 |
| Dee Creek near Alvo | 803540 | 8.06 | 1962-78 |
| Dunlap Creek tributary near Weston | 803570 | .31 | 1950-78 |
| North Fork Wahoo Creek near Prague | 8036 | 15.2 | 1951-78 |
| Dunlap Creek near Weston | 8037 | 8.90 | 1951-67 |
| North Fork Wahoo Creek at Weston | 8039 | 43.7 | 1951-78 |
| Silver Creek near Cedar Bluffs | 8041 | 10.9 | 1950-78 |
| Silver Creek near Colon | 8042 | 29.9 | 1950-78 |
| Silver Creek tributary near Colon | 8043 | 14.3 | 1951-78 |
| Silver Creek tributary at Colon | 8044 | 22.4 | 1951-78 |
| Silver Creek at Ithaca | 8045 | 72.0 | 1959-78 |
| Buffalo Creek near Gretna | 805510 | 4.29 | 1968-78 |
| Weeping Water Creek Basin | | | |
| Weeping Water Creek at Elmwood | 8064 | 20.8 | 1951-67 |
| Stove Creek near Elmwood | 806420 | 5.23 | 1951-67 |
| Stove Creek at Elmwood | 806440 | 10.0 | 1950-78 |
| Weeping Water Creek at Weeping Water | 806460 | 75.5 | 1947, 1950-78 |
| Weeping Water Creek tributary near Weeping Water | 806470 | .87 | 1950-78 |
| Honey Creek Basin | | | |
| Honey Creek near Peru | 810060 | 3.40 | 1968-78 |
| Little Nemaha River Basin | | | |
| Hooper Creek tributary near Palmyra | 8101 | 7.81 | 1950-78 |
| Hooper Creek near Palmyra | 8102 | 57.5 | 1951-67 |
| Wolf Creek near Syracuse | 8103 | 25.5 | 1951-67 |
| Little Nemaha River tributary near Syracuse | 8104 | .76 | 1950-78 |

DISCONTINUED SURFACE-WATER CREST STAGE STATIONS--Continued

[mi², square mile; No., number;]

| Station name | Station number | Drainage area (mi ²) | Period of record (water years) |
|--|----------------|----------------------------------|--------------------------------|
| Big Nemaha River Basin | | | |
| Muddy Creek at Verdon | 8155 | 186 | 1973 |
| Temple Creek near Falls City | 815510 | 3.02 | 1968-78 |
| Kansas River Basin | | | |
| North Branch Indian Creek near Max | 8281 | 4.76 | 1962, 1970-78 |
| Thompson Canyon near Trenton | 8297 | 10 | 1966-78 |
| Spring Creek tributary near Grant | 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 |

WATER RESOURCES DATA - NEBRASKA, 2000

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 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 |

WATER RESOURCES DATA - NEBRASKA, 2000

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 |

WATER RESOURCES DATA - NEBRASKA, 2000

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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 | | | | | |
| Bazille Creek near Creighton | 4662 | *1967 | c | | |
| Missouri River | | | | | |
| Missouri River at Yankton, SD | 4675 | 1951, 1957-59 | c | | |
| | | 1957-59 | | | t |
| Missouri River at Decatur | 6012 | 1969-73 | c | m | t |
| Missouri River at Omaha | 6100 | 1969-72 | c | m | t |
| Missouri River at Bellevue | 6106 | 1969-70, 1971-73 | c | m | t |
| Missouri River near Mormon Bridge at Omaha | 6098 | 1974-75 | c | m | t |
| 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 | | |

WATER RESOURCES DATA - NEBRASKA, 2000

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 | |

WATER RESOURCES DATA - NEBRASKA, 2000

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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 |

WATER RESOURCES DATA - NEBRASKA, 2000

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 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 Dundan | 7740 | 1965-94 1996-99 | c c | s | t t |
| Middle Loup River near Seneca | 7750 | *1949-51 | | | s |

WATER RESOURCES DATA - NEBRASKA, 2000

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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 |

WATER RESOURCES DATA - NEBRASKA, 2000

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 |
| Loup River Power Canal at Diversion near Genoa | 792499 | 1973-86 | c m s t |
| Cedar River near Fullerton | 7920 | 1958-59, 1974-96 | c |
| | | 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 |

WATER RESOURCES DATA - NEBRASKA, 2000

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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 | |

WATER RESOURCES DATA - NEBRASKA, 2000

DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

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

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

4. DISCONTINUED SURFACE-WATER QUALITY STATIONS--Continued

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

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

WATER RESOURCES DATA - NEBRASKA, 2000

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 |

WATER RESOURCES DATA - NEBRASKA, 2000

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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 |

WATER RESOURCES DATA - NEBRASKA, 2000

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 |

WATER RESOURCES DATA - NEBRASKA, 2000

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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 | |

WATER RESOURCES DATA - NEBRASKA, 2000

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 |

WATER RESOURCES DATA - NEBRASKA, 2000

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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 95 streamflow-gaging stations (continuous records), for 22 partial-record or miscellaneous streamflow stations, including 5 crest-stage gages; (2) stage-only records for 3 stations; (3) stage and contents for 7 lakes and reservoirs; (4) water-quality records for 10 streamflow-gaging stations, for 7 ungaged stream sites, and for 192 wells; and (5) water-level records for 47 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 2000 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, and provisional data from the Nebraska Climate Office, University of Nebraska, for the eight National Weather Service divisions in Nebraska are shown in figure 1 and listed in table 1. Precipitation for the normal period (1961-90) and water year 2000, 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 1998, 1999, 2000, and normal precipitation (1961-90) are shown in figure 2. Precipitation totals for each division for each month of water year 2000 and normal precipitation are shown in figure 3.

All divisions received less-than-normal precipitation during the first quarter of water year 2000 (table 1). There was some improvement in moisture during the second quarter of the water year as three divisions—the Panhandle, Southwest, and South Central—had greater-than-normal precipitation, but only the Panhandle received enough precipitation to have a greater-than-normal total for the first half of the water year. All divisions had less-than-normal precipitation for both the third and fourth quarters, except the Southwest, which had slightly more than normal precipitation during the fourth quarter. All divisions had less than normal precipitation during the water year. Departures from normal precipitation varied from -0.92 inches in the Panhandle to -9.36 inches in the East Central division during the 2000 water year.

Table 1. Precipitation and departures from normal, water year 2000

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

| National Weather Service division | Precipitation | | | | | | | | | | | |
|-----------------------------------|-------------------------------------|-----------------|-----------|-----------------------------------|-----------------|-----------|-------------------------------|-----------------|-----------|------------------------------------|-----------------|-----------|
| | First quarter (October-December) | | | Second quarter (January-March) | | | Third quarter (April-June) | | | Fourth quarter (July-September) | | |
| | Normal | Water year 2000 | Departure | Normal | Water year 2000 | Departure | Normal | Water year 2000 | Departure | Normal | Water year 2000 | Departure |
| Panhandle | 1.80 | 0.58 | -1.22 | 1.77 | 3.53 | 1.76 | 7.80 | 6.86 | -0.94 | 5.39 | 4.87 | -0.52 |
| North Central | 2.59 | .51 | -2.08 | 2.34 | 1.85 | -.49 | 9.03 | 8.57 | -.46 | 7.68 | 5.57 | -2.11 |
| Northeast | 3.60 | 1.12 | -2.48 | 3.10 | 2.57 | -.53 | 10.48 | 9.79 | -.69 | 8.66 | 5.25 | -3.41 |
| Central | 3.05 | .72 | -2.33 | 2.77 | 2.52 | -.25 | 10.12 | 6.19 | -3.93 | 8.48 | 6.91 | -1.57 |
| East Central | 4.40 | 1.40 | -3.00 | 3.46 | 2.83 | -.63 | 11.20 | 8.60 | -2.60 | 10.11 | 6.98 | -3.13 |
| Southwest | 2.17 | .59 | -1.58 | 2.11 | 2.86 | .75 | 8.58 | 3.87 | -4.71 | 6.72 | 6.90 | .18 |
| South Central | 2.93 | .54 | -2.39 | 2.70 | 4.94 | 2.24 | 9.86 | 6.34 | -3.52 | 8.85 | 7.70 | -1.15 |
| Southeast | 4.62 | 1.63 | -2.99 | 3.68 | 3.17 | -.51 | 11.02 | 8.63 | -2.39 | 11.02 | 8.17 | -2.85 |

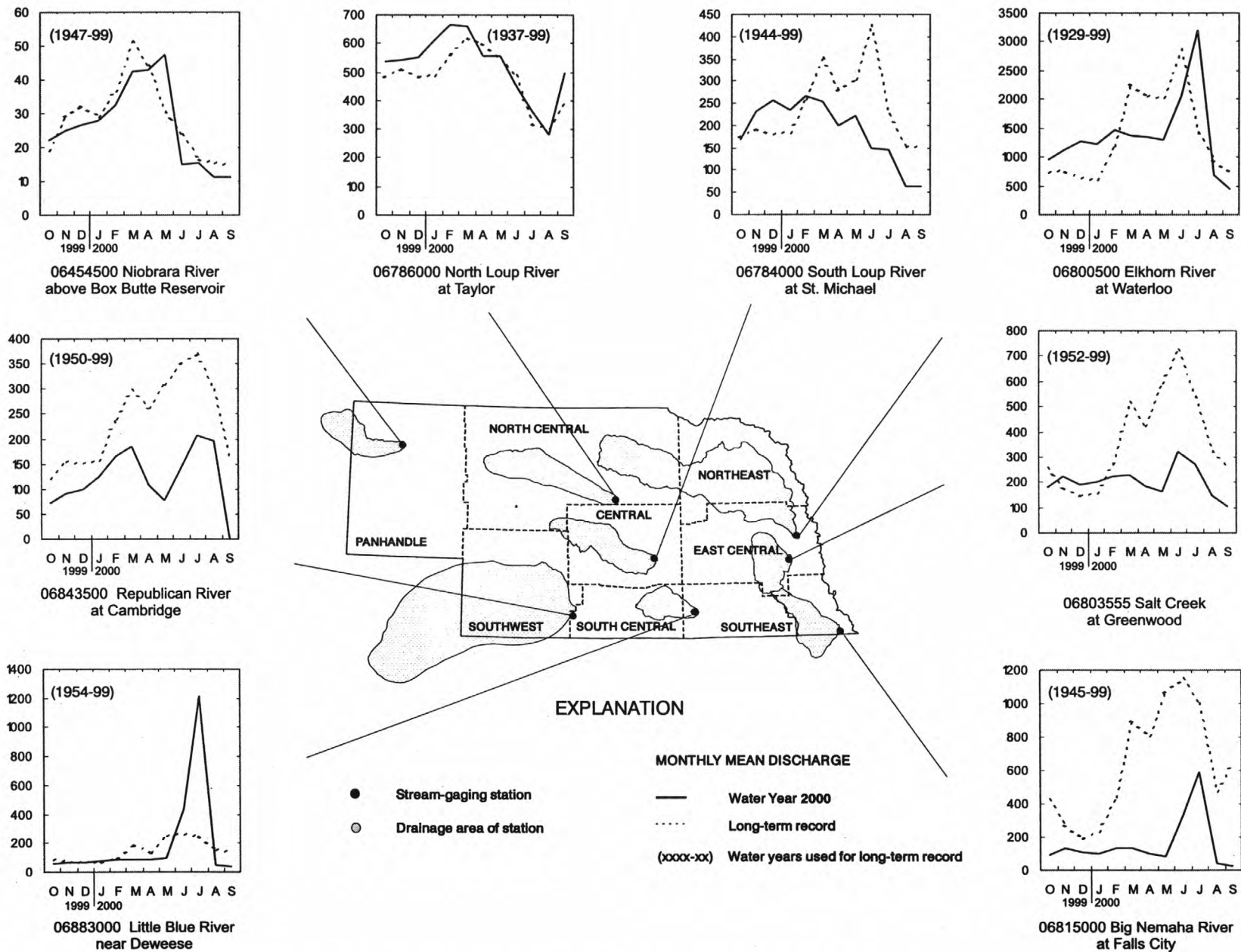


Figure 1. Streamflow data for water year 2000 and the long-term record. Refer to page 5 for precipitation graphs (fig. 3).

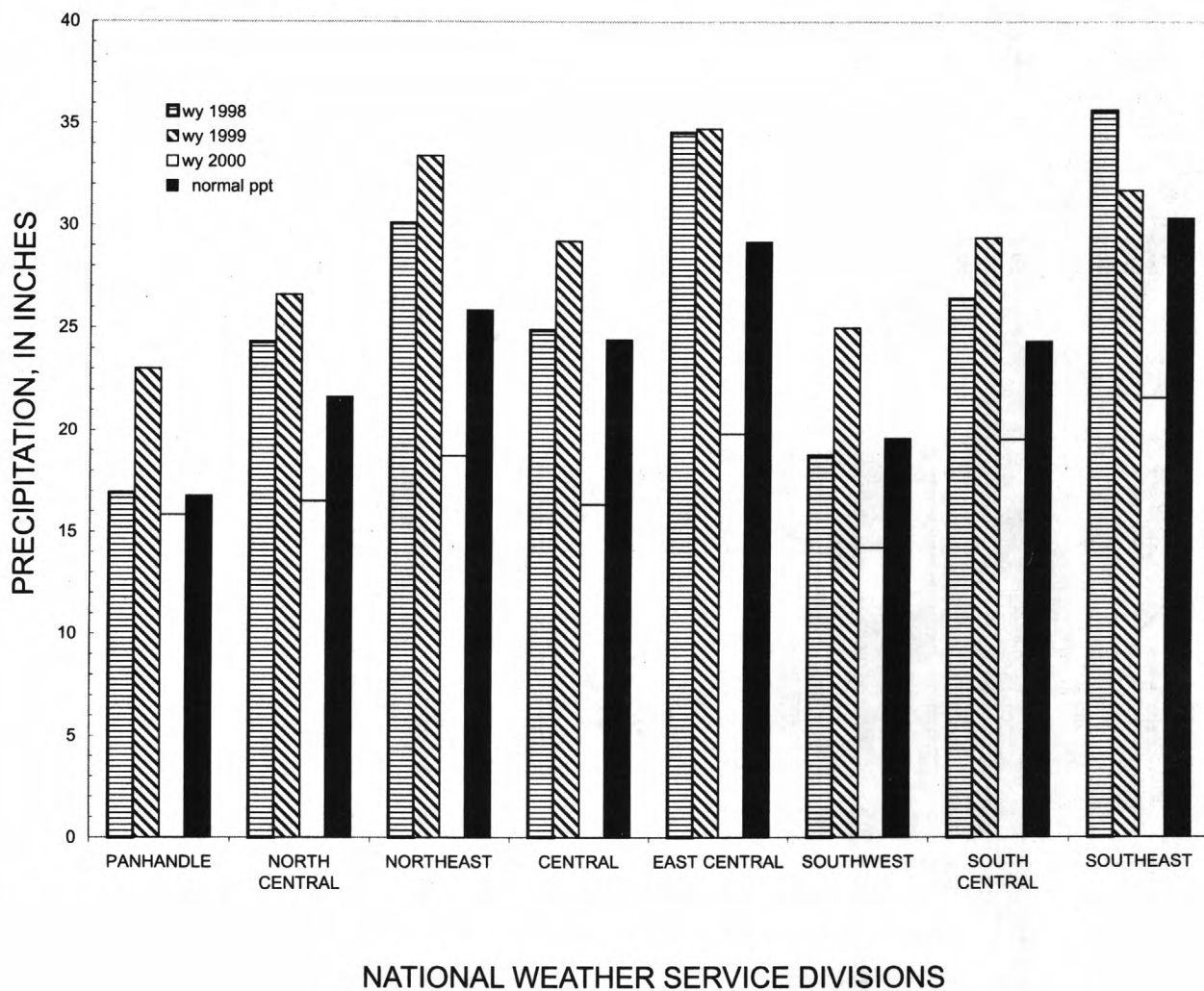


Figure 2. Precipitation for water years 1998, 1999, 2000, and normal precipitation (1961-90) for the eight National Weather Service divisions in Nebraska.

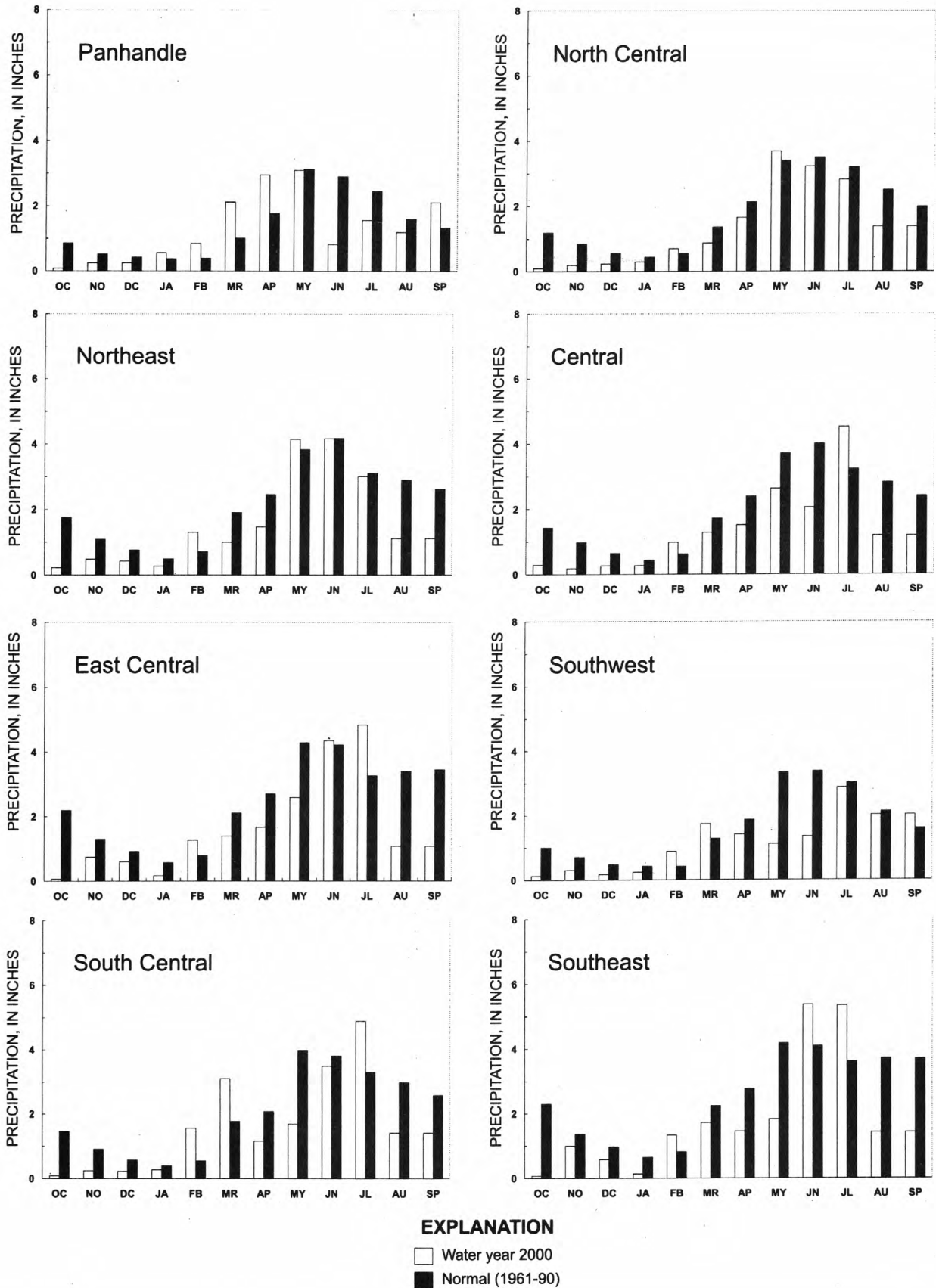


Figure 3. Monthly precipitation for water year 2000 and normal precipitation (1961-90) for each National Weather Service division in Nebraska.

Streamflow

This report covers representative stations that have drainage areas within or mostly within the eight National Weather Service 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 National Weather Service 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. Refer to page 3 (fig. 1) for the following stations.

The individual graphs demonstrate the varied streamflow conditions in the State during water year 2000. For stations with regulated streamflow 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.

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. At the beginning of the water year, flow was less than the long-term mean, was slightly greater than the long-term mean through the winter months as there was very little storage as ice, and was again less than the long-term mean February through May. Flow increased greatly in June and July. The mean flow for July 2000 was about 5 times the July long-term mean. Precipitation was 148 percent of normal in the South Central division during July. Flow decreased again to less than normal during August and September.

Data for station 06843500, Republican River at Cambridge, was supplied by the Nebraska Department of Water Resources office in Cambridge, and is located near the eastern edge of the Southwest division. This station 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 runoff. Streamflow was less than normal during the entire water year at this gaging station. Precipitation was 5.36 inches less than normal in the Southwest division during the water year and only during February and March was the precipitation greater than normal.

Data for station 06454500, Niobrara River above Box Butte Reservoir, in the Panhandle division, was supplied by the Nebraska Department of Water Resources office in Bridgeport. Precipitation in the Panhandle was greater than normal during the second quarter of the water year, but was less than normal during the other quarters. Streamflow was only greater than normal during October and May, and was less than normal during all the other months.

Station 06786000, North Loup River at Taylor, located in the south-central part of the North Central division, receives runoff from the Sandhills in the west-central and south-central parts of the division. Precipitation in the North Central division

was greater than normal only during February and May and was 5.14 inches less than normal for the water year. Streamflow, however, was greater than normal for most of the year. Only during April, June, and August was streamflow less than normal. Because ground water is the major contributor to streamflow at this site, it reflects the conditions of the ground-water table and streamflow remains relatively steady.

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. A significant part of the flow also is derived from ground-water discharge. Flow was less than normal during October, but increased to greater than normal during the months of November through February. Although precipitation was less than normal for most of this period, temperatures were warm, and there was little storage in ice. Streamflow was less than normal for the remainder of the year starting in March as precipitation was less than normal overall for this period. Only July indicated greater-than-normal precipitation.

Station 06800500, Elkhorn River at Waterloo, located in the East Central division of the State, has a drainage area that lies in 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 greater than the long-term mean at the beginning of the water year, which continued through February. However, precipitation was less than normal for this period, except for the month of February. The higher flows were due to wetter-than-normal conditions in the basin in 1999, higher ground-water levels maintaining the ground-water discharge to the river, and low ice storage during winter months. Streamflow was less than normal for the remainder of the water year except for July. Thunderstorms during the first part of July produced runoff exceeding twice the mean July flow.

Station 06803555, Salt Creek at Greenwood, is located in and receives runoff almost entirely from the East Central division. Flow was less than normal in October at the beginning of the water year, but increased to greater than normal November through January. Precipitation was less than normal for this period, so the higher flows were the result of less ice storage than normal. As the dry conditions continued, streamflow also declined, with some increases in June and July. Increases were not enough to bring the mean flow up to the long-term mean. The East Central division had the greatest precipitation deficit of all the divisions during the water year, at -9.36 inches, 68 percent of normal.

Station 06815000, Big Nemaha River at Falls City, located in the southeast part of the Southeast division, receives runoff from the eastern part of the division. Flow at this gaging station was less than normal for the entire water year. The mean flow for the 2000 water year was only 25 percent of the long-term annual mean for this site. Precipitation was less than normal for all months except February, June, and July. The precipitation in June and July produced increased flow in the river, but not enough to bring the flow up to the long-term mean.

The Southwest division had the second largest precipitation deficit of the National Weather Service divisions, at -8.74 inches, 71 percent of normal.

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 2000 were determined from a statewide network of observation wells measured by 28 Federal, State, and local agencies. The network consists of approximately 4,000 wells measured annually, semiannually, or monthly and 86 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 are shown in figure 4.

Data from 47 observation wells are included in this report; 19 of these wells are equipped with continuous recorders. Water levels declined in most recorder wells from the end of water year 1999 to the end of water year 2000.

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 through seepage to streams and evapotranspiration. Water levels decline during the spring and summer

months, when discharge by seepage to streams and by evapotranspiration is greater than recharge from precipitation.

In water year 2000, total precipitation was less than normal in all divisions (table 1), providing less water available for recharge to the aquifers. Water level changes in the individual divisions are described next.

In the National Weather Service's Central division in Nebraska, monthly total precipitation was less than normal during all months except one from October to June; the monthly total precipitation for February was slightly greater than normal. The hydrograph for the Buffalo County well (fig. 4) generally is representative of hydrographs for wells in this division. The water year 2000 hydrograph from this well shows that the lack of precipitation from October through June affected ground-water levels. Ground-water levels during this time indicate very little recharge to the aquifer. Monthly total precipitation in July exceeded normal precipitation amounts, but during August and September, precipitation once again was less than normal. The hydrograph of the Buffalo County well shows that water levels declined from June through the middle of September. This reflects withdrawals of ground water for irrigation in the Central division. The water level at the end of water year 2000 was 4.7 feet lower than at the end of water year 1999.

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 1999 and 2000. Despite low precipitation during October-April, the water level in this well rose, showing recovery after the 1999 irrigation season. The ground-water level declined during the irrigation season, with some recovery by September 30. The water level at the end of water year 2000 was 1.23 feet lower than at the end of water year 1999.

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 1999 and 2000. During water year 2000, the water level in this well had recovered by April 2000 to about 1 foot below the water level of April 1999. However, water-level declines during water year 2000 were greater than water-level declines during water year 1999. The water level at the end of the year was 2.15 feet lower than at the end of water year 1999.

Water-level fluctuations for an observation well in Holt County (fig. 4) are generally representative of water-level fluctuations in wells in north-central Nebraska. Except for February, precipitation was less than normal in north-central Nebraska during the October through April time period of water year 2000. The water level in this well did not recover to the same level as it did in water year 1999. The water level started declining earlier and the drawdown was greater in water year 2000 than in water year 1999. Precipitation was less than normal during every month of the growing season, May through September, except for the month of May. The water level at the end of water year 2000 was 3.5 feet lower than at the end of water year 1999.

Ground-water levels typically reach the highest levels in early to late spring (March through June) (fig. 4) prior to withdrawals for ground-water irrigation. Exceptions to this can occur when leakage from surface-water irrigation canals, typically operating from May-June through September, recharge shallow aquifers (Scotts Bluff County well, fig. 4). The hydrograph for the observation well in Scotts Bluff County shows the influences of recharge from surface irrigation canals. 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 2000 was nearly the same as the lowest water level in June 1999, 26.73 feet to 26.75 feet, respectively.

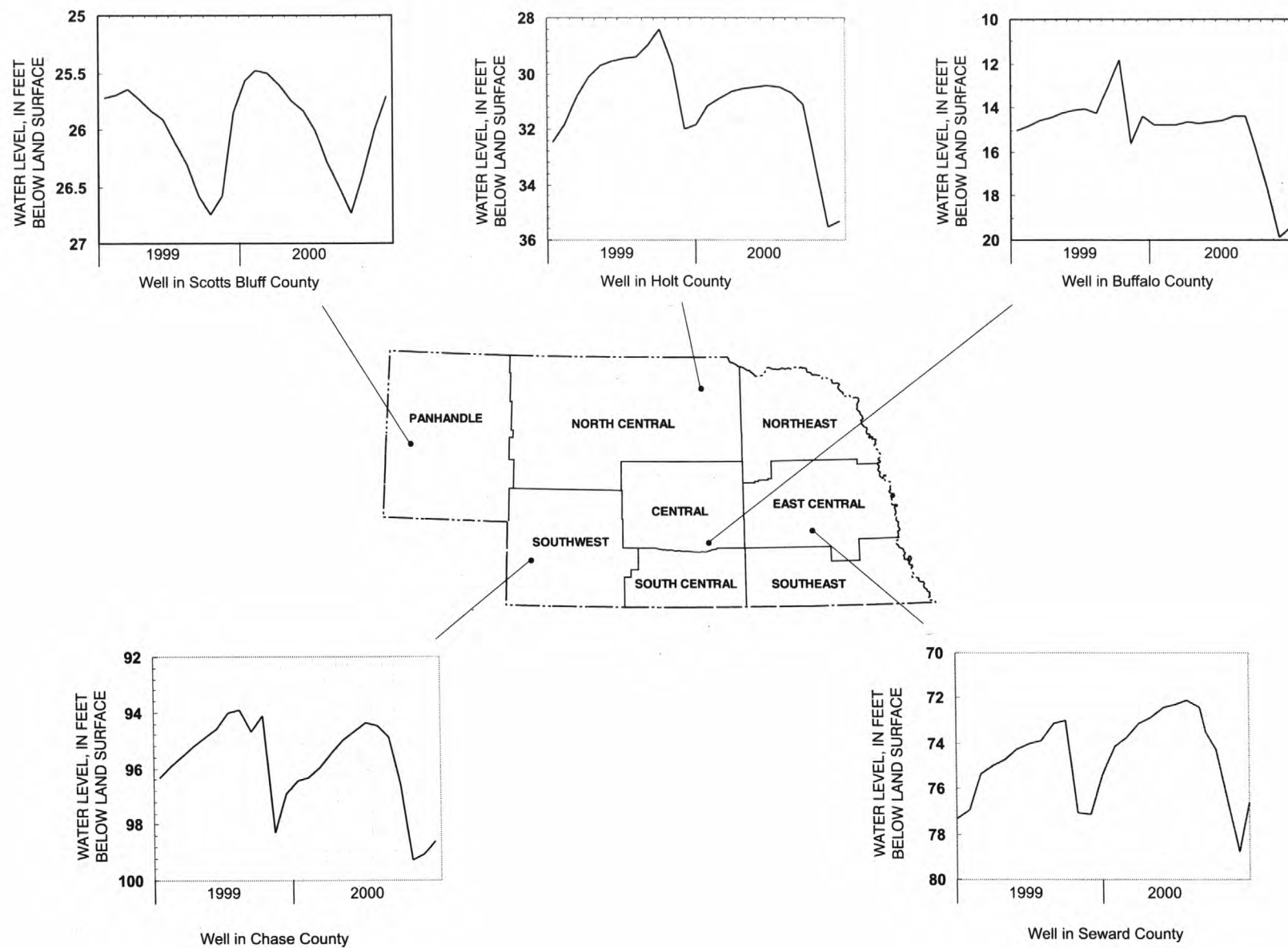


Figure 4. Water levels in selected observation wells, water years 1999 and 2000.

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 offstream water use.
- Livestock water use was 141.90 Mgal/d, or 1.4 percent of all offstream use.
- Total power generation was 24,451 Gwh (giga watt hours).

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

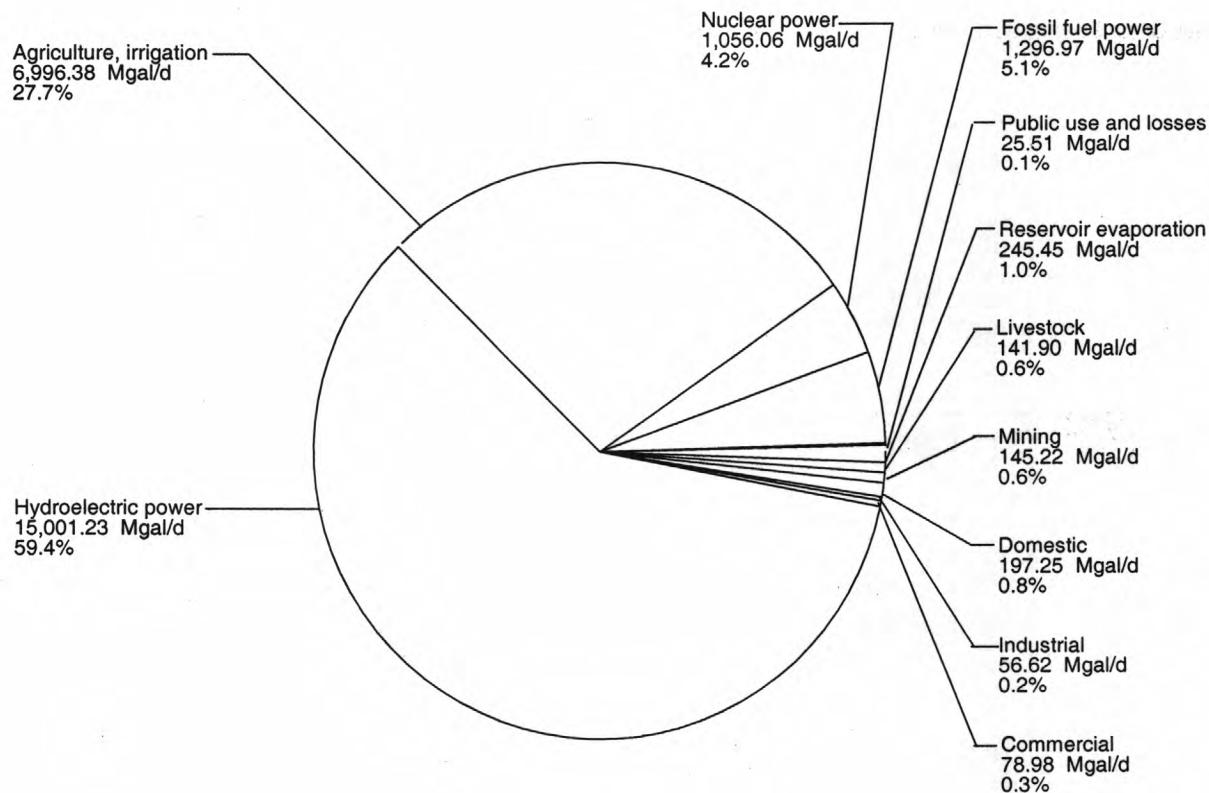


Figure 5. (a) Estimated total water use in Nebraska, 1995.

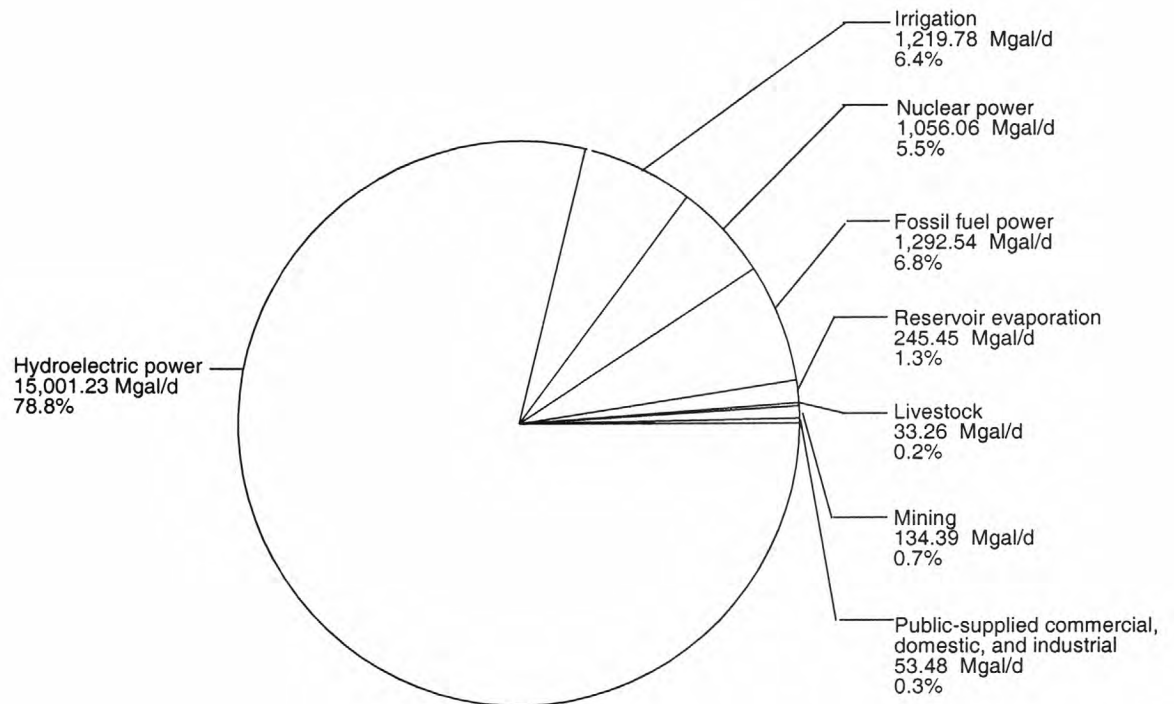


Figure 5. (b) Estimated total surface-water use in Nebraska, 1995.

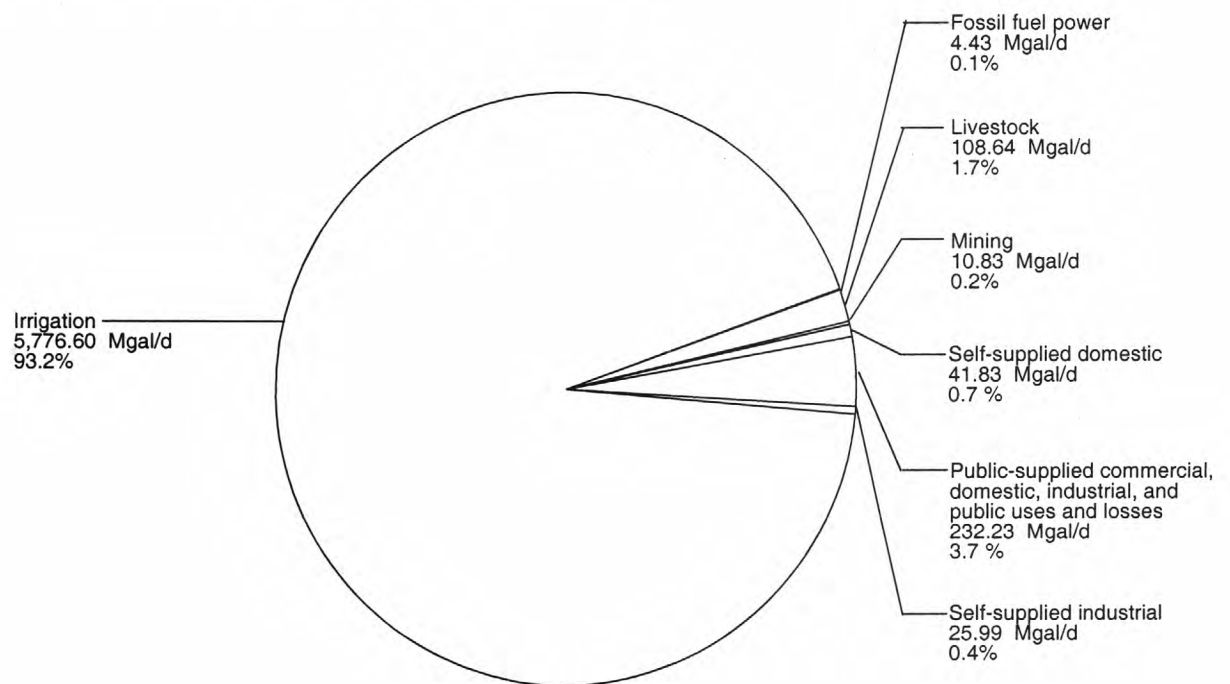


Figure 5. (c) Estimated total ground-water use in Nebraska, 1995.

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 hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by human activities.

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within four of the Nation's largest river basins--the Mississippi, Columbia, Colorado, and Rio Grande. The network consists of 39 stations. 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 re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical climate of precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to accomplish the following objectives: (1) Provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 191 precipitation chemistry monitoring sites; (2) Provide the mechanism to evaluate the effectiveness of the significant reduction in SO₂ emissions that began in 1995 as implementation of the Clean Air Act Amendments (CAAA) occurred; (3) Provide the scientific basis and nationwide evaluation mechanism for implementation of the Phase II CAAA emission reductions for SO₂ and NO_x scheduled to begin in 2000.

Data from the network, as well as information about individual sites, are available through the world wide web at:

<http://nadp.nrel.colostate.edu/NADP>

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 53 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 is available through the world wide web at:

http://water.usgs.gov/nawqa/nawqa_home.html

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

EXPLANATION OF THE RECORDS

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

Downstream Order System

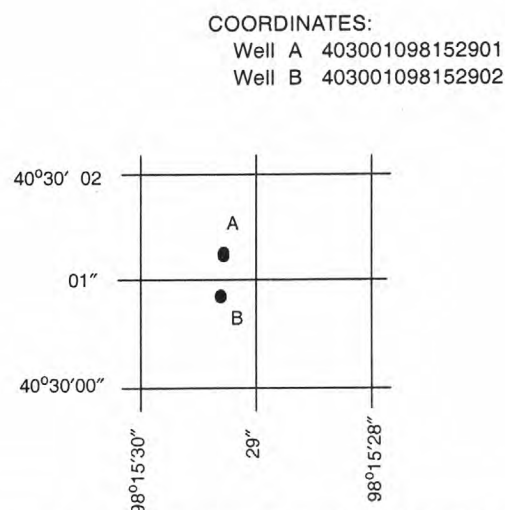
Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a mainstream station are listed before that station. A station on a tributary that enters between two mainstream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

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

Latitude-Longitude System

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

of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description. (See figure).



System for numbering wells (latitude and longitude)

Records of Stage and Water Discharge

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

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

Data Collection and Computation

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

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

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

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

the stage-discharge relations that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and records for other stations in the same or nearby basins for comparable periods.

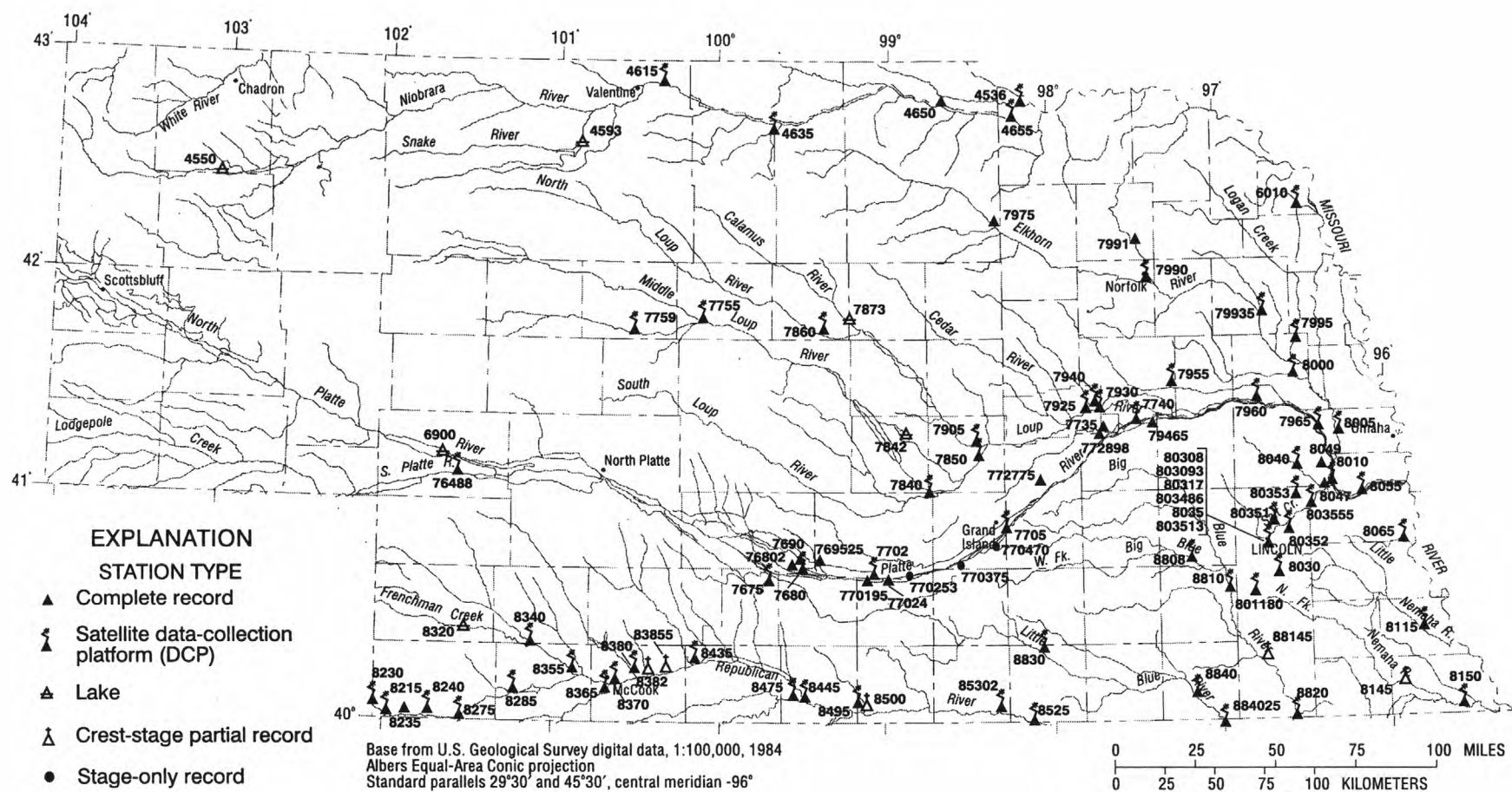
In computing records of lake or reservoir contents, it is necessary to have available data from surveys, curves or tables defining the relationship of stage and content. The application of stage to the stage-content curves or tables gives the contents from which daily, monthly, or yearly changes then 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



8230 Abbreviated station number

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

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

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

Station Manuscript

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

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

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

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

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

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

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

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

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

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

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

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

Headings for AVERAGE DISCHARGE, EXTREMES FOR PERIOD OF RECORD, and EXTREMES FOR

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

Data table of Daily Mean Values

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

Statistics of Monthly Mean Data

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

Summary Statistics

A table titled "SUMMARY STATISTICS" follows the statistics of monthly mean data tabulation. This table consists of four columns, with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year

and for a designated period, as appropriate. The designated period selected, "WATER YEARS - ," will consist of all the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (See line headings below.), except for the "ANNUAL 7-DAY MINIMUM" statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Identifying Estimated Daily Discharge

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

Accuracy of the Records

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

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

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft³/s; to the nearest tenth between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures for more than 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the

discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

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

Other Records Available

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

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

Records of discharge, not published by the Geological Survey, are collected in Nebraska at several sites by the U.S. Army Corps of Engineers. The National Water Data Exchange (NAWDEX), U.S. Geological Survey, Reston, VA 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

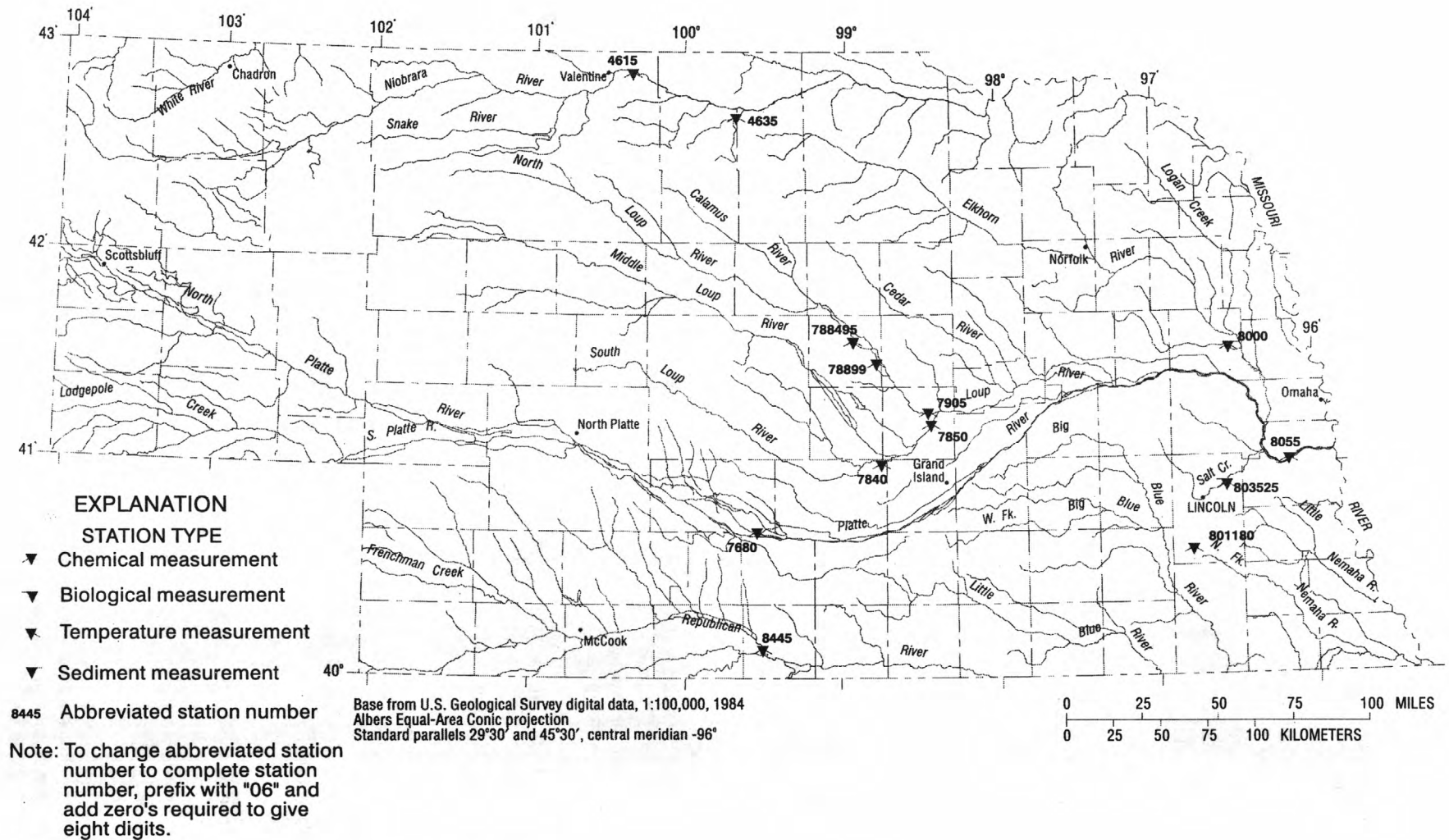


Figure 7. Location of active surface-water quality stations.

samples to the laboratory. 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 Geological Survey laboratory in Arvada, Colorado. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the Geological Survey laboratory are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. These methods are consistent with ASTM standards and generally follow ISO standards.

Data Presentation

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

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

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

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

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

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

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

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

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

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

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

ical Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to insure the most recent updates.

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

Records of Ground-Water Levels

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

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

Data Collection and Computation

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

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

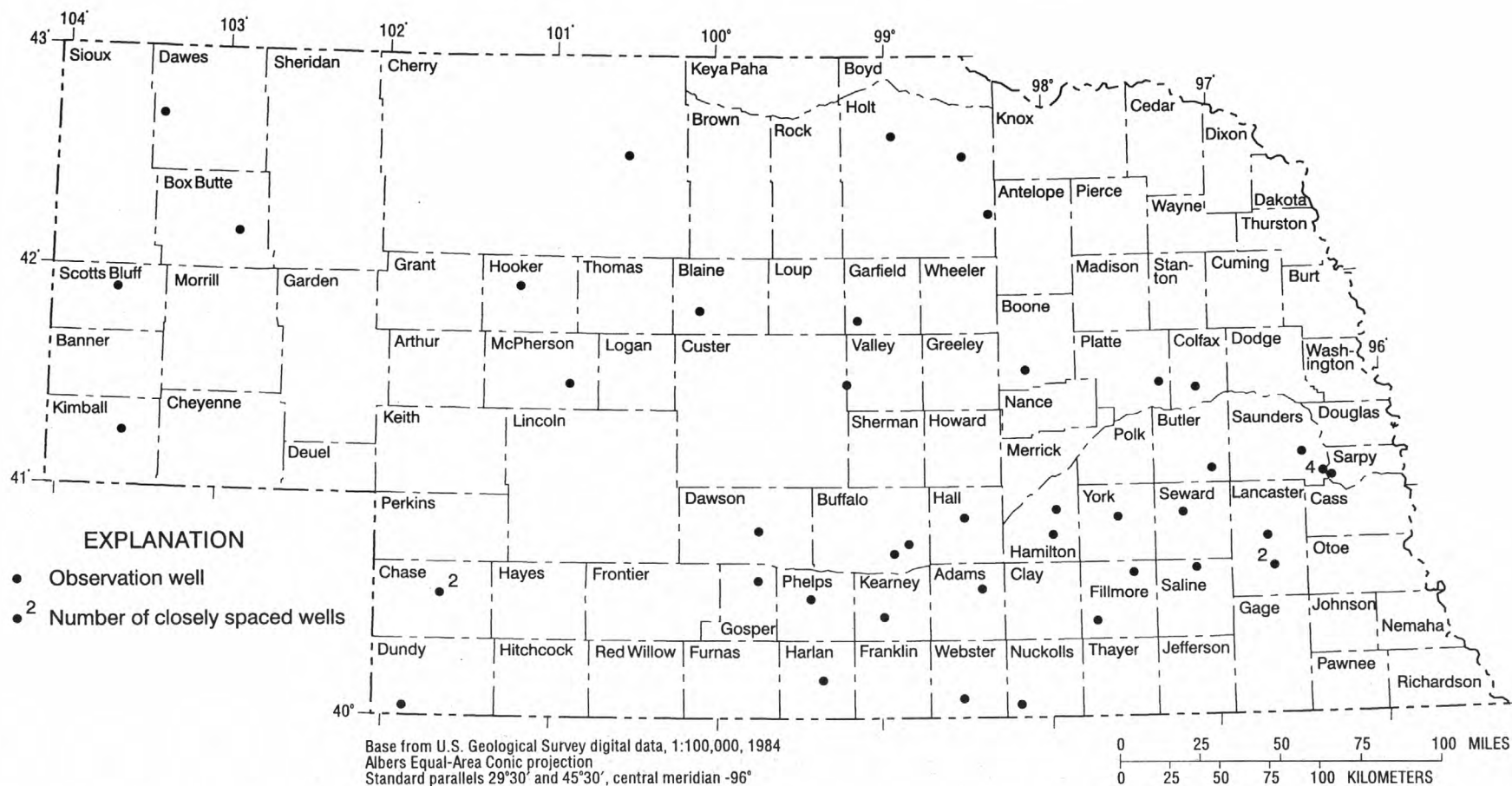


Figure 8. Location of selected observation wells.

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 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 individual 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

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

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 known as alkalinity).

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 325,851 gallons or 1,233 cubic meters.

Adenosine triphosphate (ATP) is an organic, phosphate-rich compound important in the transfer of energy in organisms. Its central role in living cells makes it 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.

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

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 in 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 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 (see definition above).

Cubic foot per second per square mile [CSFM, (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.

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.

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

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.

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

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

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. 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 which ferment lactose with gas formation within 48 hours at 35 °C. In the laboratory, these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35 °C plus or minus 1.0 °C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of 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.

Fecal streptococcal bacteria are bacteria found also in the intestine of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria 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 °C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

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 which 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.

Base flow is flow in a channel sustained by ground-water discharge in the absence of direct runoff.

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

Benthic invertebrates are invertebrate animals inhabiting the bottom of lakes, streams, and other water bodies. 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 the mass per unit area or volume of habitat.

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

Dry mass refers to the mass of residue present after drying in an oven at 105 °C for zooplankton and periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass.

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

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

Bottom material: See Bed material.

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, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons, or 2,447 cubic meters.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Colloid is any substance with particles in such fine state of subdivision dispersed in a medium (for example, water) that they do not settle out; but not in so fine a state of subdivision that they can be said to be truly dissolved.

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

Color unit is produced by one 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.

Content 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.

Continuing-record station is a site that meets either of the following conditions:

1. Stage or streamflow are recorded at some interval on a continuous basis. The recording interval is usually 15 minutes, but may be less or more frequent.
2. Water-quality, sediment, or other hydrologic measurements are recorded at least daily.

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

Cubic foot per second (ft^3/s , ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Cubic-foot-per-second day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons, or 2,445 cubic meters.

Datum, as used in this report, is an elevation above mean sea level to which all gage height readings are referenced.

Gage datum is the elevation of the zero point of the reference gage from which gage height is determined as compared to sea level. This elevation is established by a system of levels from known benchmarks, by approximation from topographic maps, or by geographical positioning system.

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

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

<http://www.ngs.noaa.gov/faq.shtml#WhatVD29VD88>

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

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

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

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

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

Dissolved-solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

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

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

Extractable organic halides (EOX) are organic compounds that contain halogen atoms such as chlorine. These organic compounds are semivolatile and extractable by ethyl acetate from air-dried stream bottom sediments. The ethyl acetate 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 stream bottom sediments.

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

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

High tide is the maximum height reached by each rising tide.

Hydrologic Benchmark Network is a network of 50 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

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

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

Low tide is the minimum height reached by each rising tide.

Mean high tide is the average of all high tides over a specified period.

Mean low tide is the average of all low tides over a specified period.

Mean water level is the average of all tides over a specified period.

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

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.

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

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

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

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

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

Miscellaneous site, or miscellaneous station, is a site where streamflow, sediment, and/or water-quality data are collected once, or more often, on a random or discontinuous basis.

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. It 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.

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within four of the Nation's largest river basins--the Mississippi, Columbia, Colorado, and Rio Grande. The network consists of 39 stations. 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 re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals.

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.

Organism is any living entity.

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

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

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

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

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

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

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

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

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

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

Periodic station is a site where stage, discharge, sediment, chemical, 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.

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

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

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

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

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

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

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

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

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.

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 by the plants (carbon method).

Primary productivity (carbon method) is expressed as milligrams of carbon per area per unit time [$\text{mg}/\text{C}/(\text{m}^2/\text{time})$] 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.

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.

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

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

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

River mile as used in this report, is the distance above the mouth of the river where the gaging station is located, measured in miles.

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

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

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

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

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

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

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). The entire sample is used for the analysis.

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

Suspended-sediment discharge (t/d) is the rate at which dry mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft^3/s) x 0.0027.

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

Suspended total residue at 105 °C concentration is the concentration of suspended sediment in the sampled zone expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). A small aliquot of the sample is used for the analysis.

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

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

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

Sodium-adsorption-ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25 °C ($\mu\text{S}/\text{cm}$). Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water.

Commonly, the concentration of dissolved solids (in milligrams per liter) is from 55 to 75 percent of the specific conductance (in $\mu\text{S}/\text{cm}$). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

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

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

Substrate is the physical surface upon which an organism lives.

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

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

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

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

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

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

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

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45- μm membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

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

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.

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> |

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

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

Tons per day (T/DAY or t/d) is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour period.

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

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

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

Turbidity is a measurement of the collective optical properties of a water sample that cause light to be scattered and absorbed rather than transmitted in straight lines; the higher the intensity of scattered light, the higher the turbidity. Turbidity is expressed in nephelometric turbidity units (NTU) to Formazin turbidity units (FTU), depending on the method and equipment used.

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 man-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 level is the water-surface elevation or stage of the free surface of a body of water above or below any datum (see "Gage height"), or the surface of water standing in a well, usually indicative of the position of the water table or other potentiometric surface.

Water table is the surface of a ground-water body at which the water is at atmospheric pressure.

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

Water year in U.S. Geological Survey reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 2000, is called the "2000 water year."

Well is an excavation (pit, hole, tunnel) generally cylindrical in form and often walled in, drilled, dug, driven, bored, or jetted into the ground to such a depth as to penetrate water-yielding geologic material and allow the water to flow or be pumped to the surface.

Wet weight refers to the weight of animal tissue or other substance including its contained water.

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

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

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

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

The USGS 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 pages.
- 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 pages.

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 pages.
- 2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F.P. Haeni: USGS-TWRI book 2, chap. D2. 1988. 86 pages.

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 pages.
- 2-E2. *Borehole geophysics applied to ground-water investigations*, by W.S. Keys: USGS-TWRI book 2, chap. E2. 1990. 150 pages.

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 pages.

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 pages.
- 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 pages.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G.L. Bodhaine: USGS-TWRI book 3, chap. A3. 1968. 60 pages.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H.F. Matthai: USGS-TWRI book 3, chap. A4. 1967. 44 pages.

36 PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS—Continued

- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS-TWRI book 3, chap. A5. 1967. 29 pages.
- 3-A6. *General procedure for gaging streams*, by R.W. Carter and Jacob Davidian: USGS-TWRI book 3, chap. A6. 1968. 13 pages.
- 3-A7. *Stage measurement at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS-TWRI book 3, chap. A7. 1968. 28 pages.
- 3-A8. *Discharge measurements at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS-TWRI book 3, chap. A8. 1969. 65 pages.
- 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 pages.
- 3-A10. *Discharge ratings at gaging stations*, by E.J. Kennedy: USGS-TWRI book 3, chap. A10. 1984. 59 pages.
- 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 pages.
- 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 pages.
- 3-A13. *Computation of continuous records of streamflow*, by E.J. Kennedy: USGS-TWRI book 3, chap. A13. 1983. 53 pages.
- 3-A14. *Use of flumes in measuring discharge*, by F.A. Kilpatrick and V.R. Schneider: USGS-TWRI book 3, chap. A14. 1983. 46 pages.
- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS-TWRI book 3, chap. A15. 1984. 48 pages.
- 3-A16. *Measurement of discharge using tracers*, by F.A. Kilpatrick and E.D. Cobb: USGS-TWRI book 3, chap. A16. 1985. 52 pages.
- 3-A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS-TWRI book 3, chap. A17. 1985. 38 pages.
- 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 pages.
- 3-A19. *Levels at streamflow gaging stations*, by E.J. Kennedy: USGS-TWRI book 3, chap. A19. 1990. 31 pages.
- 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 pages.
- 3-A21. *Stream-gaging cableways*, by C. Russell Wagner: USGS-TWRI book 3, chap. A21. 1995. 56 pages.

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

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

Section C. Sedimentation and Erosion Techniques

- 3-C1. *Fluvial sediment concepts*, by H.P. Guy: USGS-TWRI book 3, chap. C1. 1970. 55 pages.
- 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 pages.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS-TWRI book 3, chap. C3. 1972. 66 pages.

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 pages.
- 4-A2. *Frequency curves*, by H.C. Riggs: USGS-TWRI book 4, chap. A2. 1968. 15 pages.

Section B. Surface Water

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

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 pages.

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 pages.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P.R. Barnett and E.C. Mallory, Jr.: USGS-TWRI book 5, chap. A2. 1971. 31 pages.
- 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 pages.
- 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 pages.
- 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 pages.
- 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 pages.

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 pages.

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 pages.
- 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 pages.
- 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 pages.
- 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 pages.
- 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 pages.
- 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 pages.

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 pages.
- 7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L.F. Konikow and J.D. Bredehoeft: USGS-TWRI book 7, chap. C2. 1978. 90 pages.
- 7-C3. *A model for simulation of flow in singular and interconnected channels*, by R.W. Schaffranek, R.A. Baltzer, and D.E. Goldberg: USGS-TWRI book 7, chap. C3. 1981. 110 pages.

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 pages.
- 8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J.D. Craig: USGS-TWRI book 8, chap. A2. 1983. 57 pages.

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 pages.

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 pages.
- 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 pages.

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 |

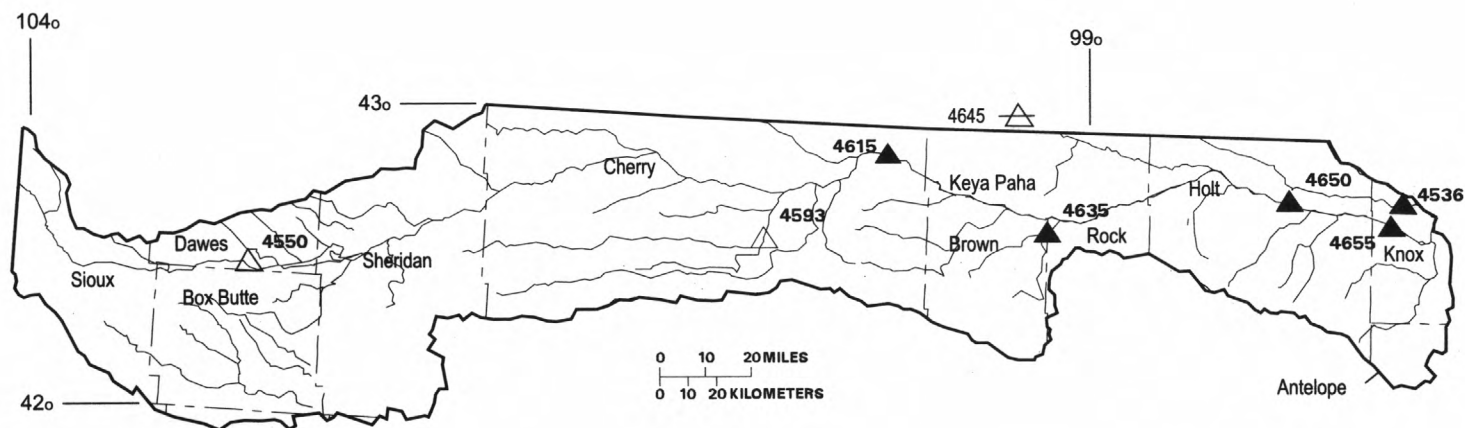
Dissolved Trace-Element Concentrations

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 intercomparison study, is available from the NADP/NTN Coordination Office, Colorado State University, Fort Collins, CO 80523 (Telephone: 303-491-5643).

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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 | 44 |
| | NIOBRARA RIVER BASIN | |
| 4550 | Box Butte Reservoir near Hemingford | 46 |
| 4593 | Merritt Reservoir near Burge | 47 |
| 4615 | Niobrara River near Sparks | 48 |
| 4635 | Long Pine Creek near Riverview | 52 |
| 4645 | Keya Paha River at Wewela, SD | 56 |
| 4650 | Niobrara River near Spencer | 58 |
| 4655 | Niobrara River near Verdel | 60 |

* 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°48'40", long 98°10'35", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ 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 good except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|------|
| 1 | 30 | 44 | 55 | e25 | e32 | 106 | 54 | 69 | 50 | 17 | 3.3 | .00 |
| 2 | 32 | 42 | 56 | e24 | e38 | 98 | 54 | 68 | 45 | 15 | 2.9 | .26 |
| 3 | 35 | 44 | 56 | e22 | e40 | 89 | 52 | 72 | 51 | 14 | 2.4 | .00 |
| 4 | 38 | 45 | 60 | e21 | e38 | 88 | 51 | 66 | 69 | 14 | 2.2 | .10 |
| 5 | 37 | 44 | 57 | e22 | e39 | 85 | 52 | 55 | 44 | 14 | 2.0 | .00 |
| 6 | 37 | 42 | 55 | e23 | e42 | 84 | 49 | 47 | 39 | 14 | 1.3 | .27 |
| 7 | 38 | 45 | 55 | e27 | e42 | 82 | 49 | 46 | 34 | 13 | 3.0 | .56 |
| 8 | 37 | 46 | 53 | e30 | e47 | 89 | 49 | 45 | 31 | 21 | 3.1 | .00 |
| 9 | 37 | 46 | 56 | e29 | e56 | 96 | 49 | 41 | 27 | 23 | 2.3 | .00 |
| 10 | 37 | 46 | 60 | e29 | e54 | 98 | 47 | 42 | 28 | 21 | 1.1 | .00 |
| 11 | 37 | 47 | 55 | e29 | e54 | 87 | 48 | 45 | 26 | 19 | .00 | .00 |
| 12 | 37 | 47 | 55 | e27 | e58 | 77 | 48 | 41 | 30 | 20 | .00 | .00 |
| 13 | 35 | 47 | e50 | e28 | e58 | 70 | 48 | 39 | 51 | 16 | .00 | .05 |
| 14 | 36 | 46 | e40 | e31 | e60 | 69 | 47 | 40 | 41 | 14 | .00 | .00 |
| 15 | 36 | 47 | e32 | e30 | e70 | 70 | 50 | 37 | 34 | 12 | .00 | .00 |
| 16 | 36 | 47 | e33 | e28 | e74 | 69 | 67 | 37 | 30 | 11 | .00 | .00 |
| 17 | 35 | 47 | e31 | e30 | 78 | 67 | 71 | 40 | 29 | 9.7 | .00 | .00 |
| 18 | 37 | 48 | e32 | e32 | 77 | 66 | 74 | 131 | 30 | 8.7 | .00 | .00 |
| 19 | 37 | 49 | e28 | e31 | 77 | 64 | 79 | 150 | 25 | 9.1 | 1.5 | .05 |
| 20 | 38 | 49 | e23 | e31 | 79 | 61 | 77 | 211 | 25 | 9.3 | .00 | .00 |
| 21 | 39 | 50 | e21 | e32 | 88 | 60 | 70 | 158 | 23 | 8.5 | .00 | .00 |
| 22 | 38 | 52 | e22 | e32 | 100 | 59 | 71 | 120 | 20 | 8.6 | 8.2 | 3.5 |
| 23 | 37 | 52 | e26 | e31 | 142 | 61 | 72 | 96 | 18 | 9.8 | 12 | 2.4 |
| 24 | 39 | 52 | e28 | e32 | 202 | 71 | 63 | 75 | 36 | 9.5 | 6.6 | 1.9 |
| 25 | 41 | 50 | e29 | e31 | 190 | 74 | 58 | 64 | 36 | 7.9 | 4.3 | .53 |
| 26 | 41 | 53 | e28 | e31 | 188 | 75 | 57 | 70 | 24 | 9.7 | 1.1 | .05 |
| 27 | 42 | 54 | e28 | e30 | 159 | 68 | 61 | 90 | 18 | 12 | .26 | .00 |
| 28 | 42 | 54 | e30 | e30 | 134 | 61 | 62 | 79 | 19 | 12 | .79 | .00 |
| 29 | 42 | 54 | e32 | e28 | 115 | 59 | 62 | 67 | 18 | 6.0 | .00 | .00 |
| 30 | 44 | 55 | e29 | e28 | --- | 57 | 64 | 59 | 18 | 5.2 | .27 | .00 |
| 31 | 44 | --- | e29 | e29 | --- | 55 | --- | 53 | --- | 4.2 | .00 | --- |
| TOTAL | 1171 | 1444 | 1244 | 883 | 2431 | 2315 | 1755 | 2253 | 969 | 388.2 | 58.62 | 9.67 |
| MEAN | 37.8 | 48.1 | 40.1 | 28.5 | 83.8 | 74.7 | 58.5 | 72.7 | 32.3 | 12.5 | 1.89 | .32 |
| MAX | 44 | 55 | 60 | 32 | 202 | 106 | 79 | 211 | 69 | 23 | 12 | 3.5 |
| MIN | 30 | 42 | 21 | 21 | 32 | 55 | 47 | 37 | 18 | 4.2 | .00 | .00 |
| AC-FT | 2320 | 2860 | 2470 | 1750 | 4820 | 4590 | 3480 | 4470 | 1920 | 770 | 116 | 19 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2000, BY WATER YEAR (WY)

| | MEAN | 27.6 | 31.1 | 21.3 | 18.5 | 55.9 | 225 | 202 | 190 | 152 | 93.8 | 41.7 | 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 | .000 | 6.53 | 4.77 | 5.64 | .006 | .000 | .000 | |
| (WY) | 1959 | 1977 | 1971 | 1959 | 1969 | 1965 | 1981 | 1981 | 1976 | 1966 | 1968 | 1958 | |

PONCA CREEK BASIN

06453600 PONCA CREEK AT VERDEL, NE--Continued

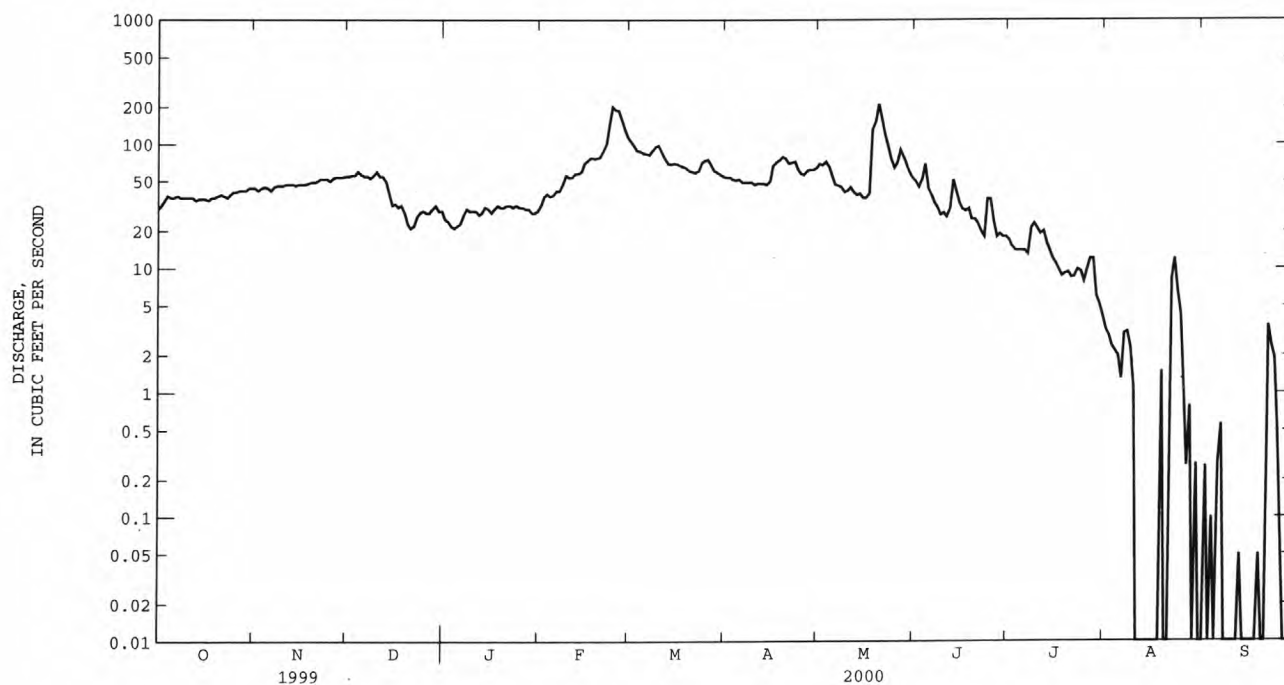
| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1958 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 75956 | | 14921.49 | | 91.0 | |
| ANNUAL MEAN | 208 | | 40.8 | | 65 | |
| MEDIAN OF ANNUAL MEANS | | | | | 343 | |
| HIGHEST ANNUAL MEAN | | | | | 3.75 | |
| LOWEST ANNUAL MEAN | | | | | 14800 | |
| HIGHEST DAILY MEAN | 3440 | Apr 11 | 211 | May 20 | 14800 | Mar 28 1960 |
| LOWEST DAILY MEAN | 21 | Dec 21 | .00 | Aug 11 | *.00 | Oct 1 1957 |
| ANNUAL SEVEN-DAY MINIMUM | 25 | Dec 19 | .00 | Aug 11 | .00 | Oct 1 1957 |
| INSTANTANEOUS PEAK FLOW | | | 244 | May 20 | **15700 | Mar 27 1960 |
| INSTANTANEOUS PEAK STAGE | | | 5.95 | May 20 | ***17.30 | Mar 6 1993 |
| ANNUAL RUNOFF (AC-FT) | 150700 | | 29600 | | 65930 | |
| 10 PERCENT EXCEEDS | 390 | | 75 | | 199 | |
| 50 PERCENT EXCEEDS | 88 | | 38 | | 23 | |
| 90 PERCENT EXCEEDS | 36 | | .26 | | .17 | |

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, 23,880 acre-ft June 1, elevation, 4,002.14 ft; minimum observed, 9,140 acre-ft Sept. 2, elevation, 3,988.67 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| Date | Elevation (feet) | Contents (acre-feet) | Change in contents (acre-feet) |
|---------------|---------------------|-------------------------|--------------------------------------|
| Sep 30..... | 3,989.87 | 10,160 | -- |
| Oct. 31..... | 3,991.61 | 11,720 | +1,560 |
| Nov. 30..... | 3,992.88 | 12,950 | +1,230 |
| Dec. 31..... | 3,994.19 | 14,270 | +1,320 |
| CAL YR 1999 | -- | -- | -820 |
| Jan. 31..... | 3,995.49 | 15,640 | +1,370 |
| Feb. 29..... | 3,996.83 | 17,140 | +1,500 |
| Mar. 31..... | 3,998.83 | 19,530 | +2,390 |
| Apr. 30..... | 4,000.42 | 21,560 | +2,030 |
| May 31..... | 4,002.08 | 23,790 | +2,230 |
| June 30..... | 4,001.54 | 23,060 | -730 |
| July 31..... | 3,995.20 | 15,330 | -7,730 |
| Aug. 31..... | 3,989.01 | 9,420 | -5,910 |
| Sept. 30..... | 3,989.43 | 9,780 | +360 |
| WTR YR 2000 | -- | -380 | |

*Elevations read on or near last day of month.

NIOBRARA RIVER BASIN

47

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 Unseaworthy 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 76,250 acre-ft May 21, elevation, 2,946.6 ft; minimum observed 30,000 acre-ft Sept. 9, elevation, 2,924.7 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| Date | *Elevation (feet) | Contents (acre-feet) | Change in contents (acre-feet) |
|---------------|----------------------|-------------------------|--------------------------------------|
| Sep 30..... | 2,933.6 | 44,450 | -- |
| Oct. 31..... | 2,939.7 | 57,690 | +13,240 |
| Nov. 30..... | 2,944.2 | 69,390 | +11,700 |
| Dec. 31..... | 2,944.1 | 69,110 | -280 |
| CAL YR 1999 | -- | -- | -560 |
| Jan. 31..... | 2,943.9 | 68,560 | -550 |
| Feb. 29..... | 2,944.2 | 69,390 | +830 |
| Mar. 31..... | 2,944.7 | 70,780 | +1,390 |
| Apr. 30..... | 2,946.3 | 75,370 | +4,590 |
| May 31..... | 2,946.4 | 75,660 | +290 |
| June 30..... | 2,946.1 | 74,780 | -880 |
| July 31..... | 2,939.5 | 57,210 | -17,570 |
| Aug. 31..... | 2,926.5 | 32,530 | -24,680 |
| Sept. 30..... | 2,929.3 | 36,840 | +4,310 |
| WTR YR 2000 | -- | -- | -7,610 |

*Elevations read on or near last day of month.

NIOBRARA RIVER BASIN

06461500 NIOBRARA RIVER NEAR SPARKS, NE--Continued

WATER QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1982 to September 1993.

WATER TEMPERATURES: October 1982 to September 1993.

EXTREMES FOR PERIOD OF DAILY RECORD.--

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | TIME | DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061) | 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) | 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) |
|--------------|--|--|--|--|--|--|--|--|--|--|
| OCT 13... | 1415 | 655 | .24 | 311 | 176 | 8.8 | 223 | 13.0 | 12.5 | 81 |
| NOV 16... | 1320 | 680 | .25 | 344 | 187 | 8.8 | 220 | 18.0 | 8.0 | 98 |
| MAY 10... | 0740 | 1540 | .27 | 826 | 199 | 8.3 | 262 | 15.5 | 15.0 | 110 |
| AUG 01... | 0750 | 586 | .24 | 284 | 180 | 8.7 | 225 | 19.5 | 21.5 | 89 |
| DATE | 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) | 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) |
| OCT 13... | 26.1 | 3.78 | 6.0 | .3 | 7.2 | 15 | 114 | 1.2 | .3 | 55.2 |
| NOV 16... | 31.9 | 4.49 | 6.1 | .4 | 9.2 | 16 | 113 | 1.3 | .4 | 57.4 |
| MAY 10... | 34.1 | 5.07 | 7.3 | .5 | 12.1 | 19 | 128 | 3.1 | .4 | 51.7 |
| AUG 01... | 28.9 | 4.02 | 6.3 | .4 | 8.6 | 16 | 113 | 1.2 | .2 | 57.0 |
| DATE | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | 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) | 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) |
| OCT 13... | 5.6 | <.020 | .12 | .51 | .396 | <.010 | .175 | .060 | .057 | .106 |
| NOV 16... | 6.0 | <.020 | .26 | .77 | .510 | <.010 | .144 | <.050 | .047 | .158 |
| MAY 10... | 8.1 | -- | -- | -- | -- | -- | -- | -- | -- | .340 |
| AUG 01... | 5.2 | <.020 | .17 | -- | <.050 | <.010 | .043 | <.050 | .014 | .141 |
| DATE | CARBON DIOXIDE DIS- SOLVED (UG/L AS CO2) (00405) | ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106) | ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095) | ARSENIC DIS- SOLVED (UG/L AS AS) (01000) | BARIUM, DIS- SOLVED (UG/L AS BA) (01005) | BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010) | BORON, DIS- SOLVED (UG/L AS B) (01020) | CADMIUM DIS- SOLVED (UG/L AS CD) (01025) | CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030) | COBALT, DIS- SOLVED (UG/L AS CO) (01035) |
| OCT 13... | .3 | -- | -- | -- | -- | -- | 23 | -- | -- | -- |
| NOV 16... | .3 | -- | -- | -- | -- | -- | 33 | -- | -- | -- |
| MAY 10... | 1.2 | -- | -- | -- | -- | -- | 34 | -- | -- | -- |
| AUG 01... | .4 | 29 | <1 | 6.4 | 85 | <1 | 30 | <1.0 | <.8 | -- |

NIOBRARA RIVER BASIN

06461500 NIOBRARA RIVER NEAR SPARKS, NE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | COPPER, DIS- SOLVED (UG/L AS CU) (01040) | IRON, DIS- SOLVED (UG/L AS FE) (01046) | LEAD, DIS- SOLVED (UG/L AS PB) (01049) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056) | MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060) | NICKEL, DIS- SOLVED (UG/L AS NI) (01065) | SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145) | SILVER, DIS- SOLVED (UG/L AS AG) (01075) | ZINC, DIS- SOLVED (UG/L AS ZN) (01090) | URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703) |
|--------------|---|---|---|---|--|---|--|---|---|---|
| OCT 13... | -- | <10 | -- | 2 | -- | -- | -- | -- | -- | -- |
| NOV 16... | -- | E10 | -- | 4 | -- | -- | -- | -- | -- | -- |
| MAY 10... | -- | 20 | -- | E2 | -- | -- | -- | -- | -- | -- |
| AUG 01... | <1 | <10 | <1 | 1 | 1 | <1 | <2.4 | <1 | 14 | 1 |

NIOBRARA RIVER BASIN

06461500 NIOBRARA RIVER NEAR SPARKS, NE

LOCATION.--Lat 42°54'10", long 100°21'40", in SE ¼ 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 Minnehadaza 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 periods of estimated record, which are fair. Natural flow of stream affected by irrigation and power developments, storage in Box Butte Reservoir (station 06455000), and since May 1964 by storage in Merritt Reservoir (station 06459300).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 597 | 656 | 858 | 735 | 912 | 1120 | 927 | 1210 | 1030 | 711 | 598 | 562 |
| 2 | 614 | 669 | 907 | 742 | 866 | 1140 | 931 | 1110 | 1010 | 690 | 588 | 566 |
| 3 | 595 | 650 | 904 | e720 | 875 | 1110 | 948 | 1100 | 891 | 713 | 584 | 565 |
| 4 | 599 | 657 | 903 | e680 | 899 | 1100 | 914 | 1080 | 895 | 850 | 580 | 557 |
| 5 | 594 | 652 | 884 | e700 | 887 | 1090 | 902 | 1100 | 881 | 708 | 566 | 561 |
| 6 | 601 | 655 | 868 | e740 | 887 | 1040 | 937 | 1060 | 856 | 668 | 575 | 554 |
| 7 | 613 | 654 | 863 | e760 | 900 | 1050 | 909 | 1040 | 846 | 656 | 581 | 576 |
| 8 | 634 | 658 | 912 | 785 | 895 | 1170 | 899 | 1080 | 828 | 639 | 559 | 557 |
| 9 | 629 | 653 | 908 | 825 | 910 | 1270 | 912 | 1040 | 817 | 618 | 547 | 554 |
| 10 | 626 | 652 | 881 | 833 | 945 | 1250 | 902 | 1440 | 776 | 613 | 541 | 544 |
| 11 | 634 | 658 | 880 | 855 | 987 | 1200 | 765 | 1180 | 805 | 769 | 536 | 539 |
| 12 | 635 | 661 | 899 | 828 | 962 | 1160 | 682 | 1210 | 927 | 711 | 523 | 541 |
| 13 | 649 | 661 | 874 | 903 | 957 | 1150 | 643 | 1140 | 830 | 683 | 518 | 548 |
| 14 | 661 | 655 | 855 | 823 | 992 | 1140 | 674 | 1020 | 814 | 654 | 519 | 549 |
| 15 | 690 | 666 | 855 | 846 | 896 | 1120 | 669 | 1040 | 784 | 630 | 512 | 547 |
| 16 | 663 | 665 | 785 | 872 | 983 | 1100 | 691 | 968 | 777 | 626 | 530 | 547 |
| 17 | 654 | 665 | 807 | 855 | 974 | 1070 | 699 | 955 | 760 | 634 | 534 | 547 |
| 18 | 655 | 675 | 813 | 866 | 1020 | 1050 | 691 | 1480 | 749 | 612 | 526 | 545 |
| 19 | 651 | 712 | 798 | 887 | 988 | 972 | 748 | 1530 | 734 | 617 | 532 | 542 |
| 20 | 656 | 685 | e760 | 967 | 980 | 947 | 970 | 1590 | 728 | 615 | 534 | 549 |
| 21 | 659 | 699 | e740 | 896 | 976 | 954 | 1140 | 1700 | 722 | 617 | 541 | 544 |
| 22 | 659 | 700 | e770 | 902 | 1010 | 1000 | 1170 | 1620 | 710 | 637 | 546 | 585 |
| 23 | 661 | 703 | e760 | 904 | 1060 | 1020 | 1130 | 1470 | 714 | 622 | 547 | 595 |
| 24 | 659 | 704 | 730 | 947 | 1060 | 1010 | 1130 | 1470 | 716 | 613 | 539 | 592 |
| 25 | 670 | 693 | 715 | 894 | 981 | 995 | 1270 | 1290 | 697 | 603 | 525 | 585 |
| 26 | 679 | 693 | 728 | 946 | 1080 | 966 | 1040 | 1200 | 703 | 584 | 530 | 580 |
| 27 | 673 | 715 | 728 | 950 | 1020 | 957 | 1130 | 1130 | 701 | 575 | 531 | 578 |
| 28 | 679 | 745 | 717 | 689 | 1060 | 933 | 1110 | 1120 | 832 | 663 | 526 | 573 |
| 29 | 679 | 749 | 722 | e720 | 1090 | 934 | 1090 | 1050 | 836 | 638 | 529 | 569 |
| 30 | 684 | 858 | 733 | e780 | --- | 941 | 1180 | 1030 | 798 | 627 | 541 | 567 |
| 31 | 664 | --- | 744 | e840 | --- | 933 | --- | 1030 | --- | 609 | 537 | --- |
| TOTAL | 20016 | 20518 | 25301 | 25690 | 28052 | 32892 | 27803 | 37483 | 24167 | 20205 | 16875 | 16818 |
| MEAN | 646 | 684 | 816 | 829 | 967 | 1061 | 927 | 1209 | 806 | 652 | 544 | 561 |
| MAX | 690 | 858 | 912 | 967 | 1090 | 1270 | 1270 | 1700 | 1030 | 850 | 598 | 595 |
| MIN | 594 | 650 | 715 | 680 | 866 | 933 | 643 | 955 | 697 | 575 | 512 | 539 |
| AC-FT | 39700 | 40700 | 50180 | 50960 | 55640 | 65240 | 55150 | 74350 | 47940 | 40080 | 33470 | 33360 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2000, BY WATER YEAR (WY)

| | 670 | 759 | 764 | 774 | 887 | 970 | 904 | 897 | 821 | 633 | 595 | 612 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 670 | 759 | 764 | 774 | 887 | 970 | 904 | 897 | 821 | 633 | 595 | 612 |
| 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

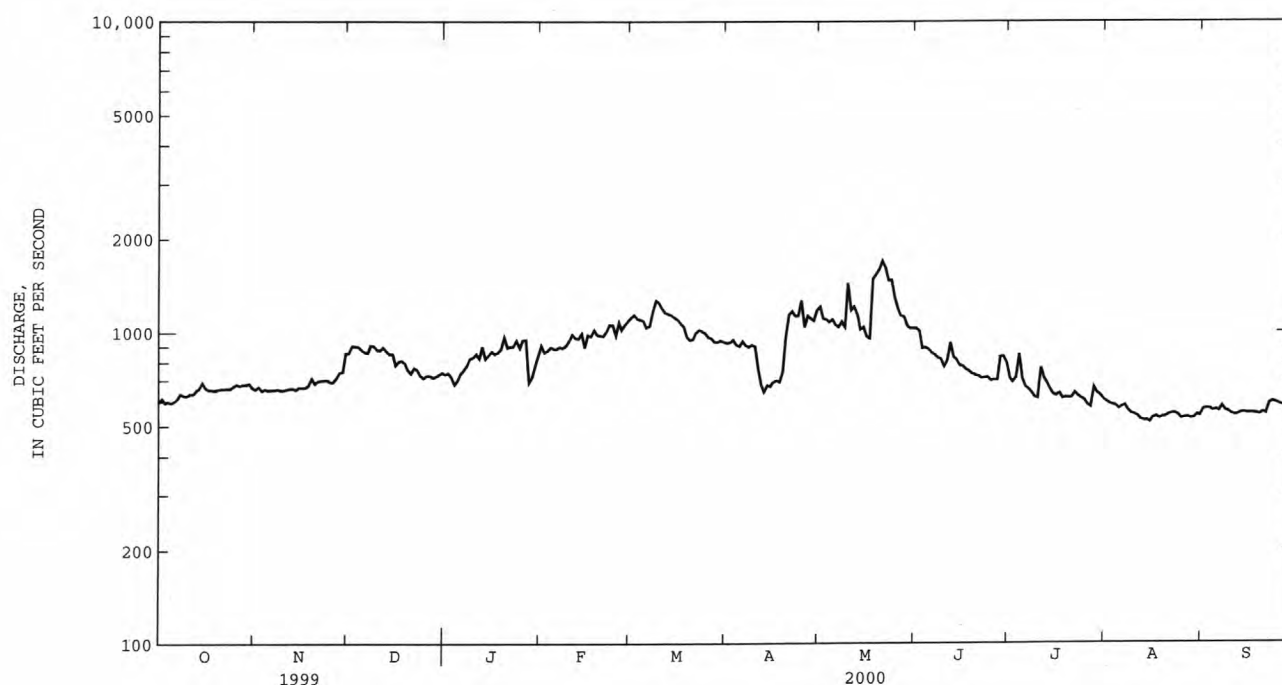
06461500 NIOBRARA RIVER NEAR SPARKS, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1946 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 296423 | | 295820 | | 773 | |
| ANNUAL MEAN | 812 | | 808 | | 911 | |
| HIGHEST ANNUAL MEAN | | | | | 598 | |
| LOWEST ANNUAL MEAN | | | | | 5000 | |
| HIGHEST DAILY MEAN | 1260 | May 3 | 1700 | May 21 | 100 | Feb 5 1984 |
| LOWEST DAILY MEAN | 519 | Aug 16 | 512 | Aug 15 | 327 | Jan 10 1957 |
| ANNUAL SEVEN-DAY MINIMUM | 527 | Aug 12 | 523 | Aug 12 | 327 | Dec 8 1949 |
| INSTANTANEOUS PEAK FLOW | | | 2010 | May 21 | *10200 | Mar 5 1949 |
| INSTANTANEOUS PEAK STAGE | | | 3.75 | May 21 | **10.06 | Feb 7 1973 |
| ANNUAL RUNOFF (AC-FT) | 588000 | | 586800 | | 560000 | |
| 10 PERCENT EXCEEDS | 1030 | | 1100 | | 1030 | |
| 50 PERCENT EXCEEDS | 829 | | 748 | | 764 | |
| 90 PERCENT EXCEEDS | 580 | | 554 | | 508 | |

e Estimated.

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

** Ice jam.



NIOBRARA RIVER BASIN

06463500 LONG PINE CREEK NEAR RIVERVIEW, NE

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

DRAINAGE AREA---458 mi².

WATER-DISCHARGE RECORDS

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

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

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

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|
| 1 | 167 | 171 | 174 | 172 | 174 | 184 | 152 | 191 | 220 | 195 | 188 | 188 |
| 2 | 168 | 169 | 172 | 173 | 174 | 181 | 152 | 198 | 212 | 192 | 193 | 196 |
| 3 | 171 | 172 | 168 | 171 | 173 | 181 | 152 | 190 | 209 | 189 | 184 | 181 |
| 4 | 172 | 175 | 168 | 161 | 170 | 184 | 155 | 191 | 208 | 186 | 191 | 178 |
| 5 | 171 | 174 | 169 | 178 | 172 | 185 | 156 | 180 | 206 | 195 | 192 | 181 |
| 6 | 172 | 174 | 170 | 173 | 173 | 185 | 152 | 175 | 198 | 214 | 178 | 188 |
| 7 | 174 | 174 | 172 | 172 | 170 | 181 | 146 | 182 | 203 | 188 | 179 | 191 |
| 8 | 171 | 175 | 170 | 172 | 175 | 185 | 151 | 199 | 188 | 180 | 178 | 182 |
| 9 | 169 | 177 | 169 | 173 | 180 | 177 | 153 | 190 | 178 | 182 | 178 | 193 |
| 10 | 168 | 175 | 167 | 175 | 182 | 172 | 155 | 179 | 199 | 182 | 181 | 182 |
| 11 | 167 | 176 | 170 | 175 | 169 | 172 | 152 | 179 | 193 | 195 | 181 | 178 |
| 12 | 169 | 174 | 171 | 173 | 170 | 173 | 152 | 183 | 239 | 169 | 177 | 181 |
| 13 | 167 | 175 | 170 | 169 | 174 | 180 | 157 | 182 | 208 | 170 | 170 | 182 |
| 14 | 169 | 174 | 172 | 175 | 173 | 171 | 151 | 184 | 199 | 167 | 175 | 173 |
| 15 | 169 | 175 | 170 | 178 | 174 | 166 | 152 | 180 | 196 | 171 | 173 | 175 |
| 16 | 166 | 176 | 173 | 173 | 174 | 164 | 158 | 180 | 193 | 171 | 182 | 181 |
| 17 | 164 | 178 | 173 | 173 | 179 | 168 | 161 | 180 | 191 | 169 | 176 | 189 |
| 18 | 169 | 177 | 170 | 177 | 174 | 167 | 161 | 365 | 186 | 172 | 179 | 190 |
| 19 | 166 | 174 | 172 | 177 | 173 | 167 | 160 | 411 | 182 | 167 | 179 | 168 |
| 20 | 166 | 176 | 160 | 174 | 174 | 169 | 183 | 374 | 188 | 184 | 176 | 163 |
| 21 | 168 | 178 | 170 | 176 | 179 | 168 | 175 | 304 | 186 | 181 | 179 | 166 |
| 22 | 165 | 174 | 169 | 176 | 184 | 171 | 167 | 272 | 184 | 196 | 183 | 182 |
| 23 | 164 | 175 | 170 | 175 | 189 | 172 | 163 | 260 | 184 | 193 | 173 | 181 |
| 24 | 168 | 172 | 173 | 175 | 197 | 171 | 161 | 238 | 208 | 190 | 162 | 170 |
| 25 | 168 | 172 | 173 | 171 | 198 | 164 | 182 | 243 | 209 | 197 | 163 | 168 |
| 26 | 169 | 175 | 173 | 171 | 205 | 163 | 182 | 241 | 196 | 176 | 166 | 167 |
| 27 | 168 | 174 | 174 | 177 | 205 | 160 | 175 | 238 | 189 | 158 | 173 | 171 |
| 28 | 167 | 174 | 175 | 176 | 195 | 156 | 170 | 228 | 211 | 467 | 177 | 171 |
| 29 | 171 | 172 | 176 | 174 | 191 | 157 | 165 | 227 | 197 | 407 | 179 | 171 |
| 30 | 174 | 174 | 175 | 174 | --- | 158 | 173 | 226 | 197 | 265 | 178 | 171 |
| 31 | 173 | --- | 173 | 172 | --- | 154 | --- | 225 | --- | 211 | 173 | --- |
| TOTAL | 5230 | 5231 | 5301 | 5381 | 5220 | 5306 | 4824 | 6995 | 5957 | 6279 | 5516 | 5358 |
| MEAN | 169 | 174 | 171 | 174 | 180 | 171 | 161 | 226 | 199 | 203 | 178 | 179 |
| MAX | 174 | 178 | 176 | 178 | 205 | 185 | 183 | 411 | 239 | 467 | 193 | 196 |
| MIN | 164 | 169 | 160 | 161 | 169 | 154 | 146 | 175 | 178 | 158 | 162 | 163 |
| AC-FT | 10370 | 10380 | 10510 | 10670 | 10350 | 10520 | 9570 | 13870 | 11820 | 12450 | 10940 | 10630 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2000, BY WATER YEAR (WY)

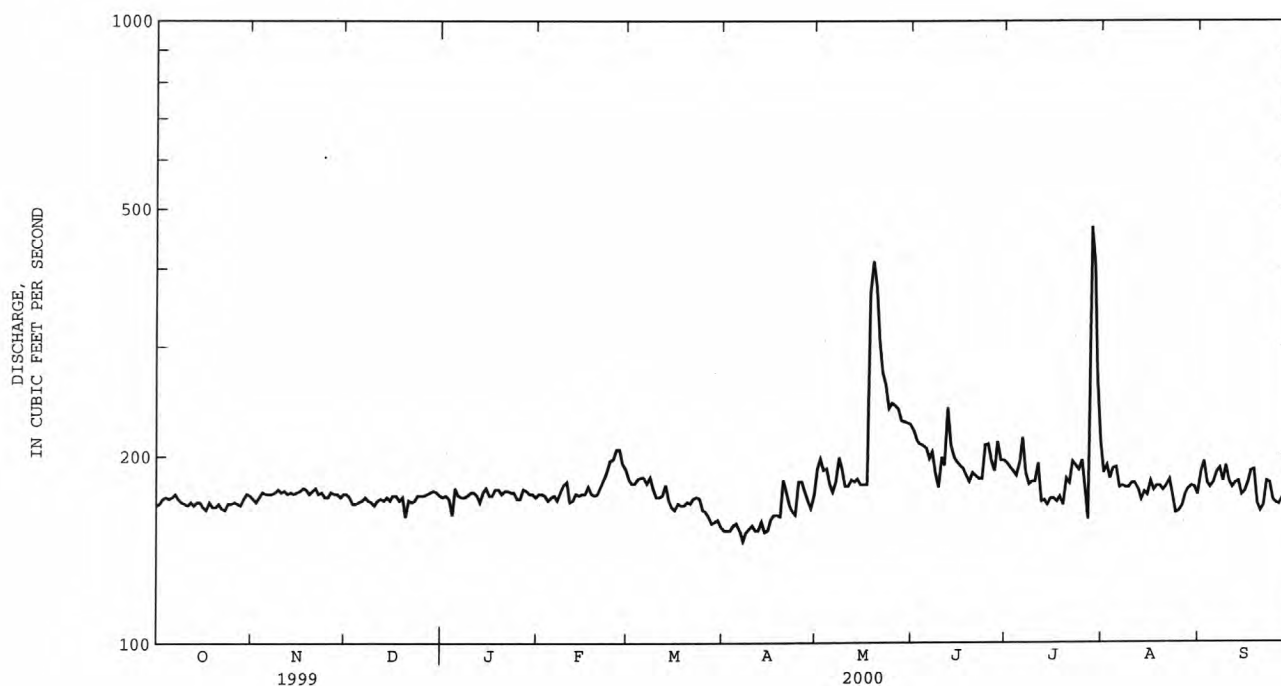
| | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 141 | 142 | 140 | 137 | 147 | 168 | 171 | 184 | 173 | 164 | 161 | 157 |
| MAX | 254 | 238 | 191 | 180 | 256 | 257 | 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 |

NIOBRARA RIVER BASIN

06463500 LONG PINE CREEK NEAR RIVERVIEW, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1948 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 74181 | | 66598 | | 158 | |
| ANNUAL MEAN | 203 | | 182 | | 231 | 1995 |
| HIGHEST ANNUAL MEAN | | | | | 111 | 1949 |
| LOWEST ANNUAL MEAN | | | | | 3050 | Jul 1 1962 |
| HIGHEST DAILY MEAN | 668 | May 6 | 467 | Jul 28 | 44 | Jan 10 1963 |
| LOWEST DAILY MEAN | 159 | Jul 10 | 146 | Apr 7 | 76 | Jan 10 1963 |
| ANNUAL SEVEN-DAY MINIMUM | 166 | Oct 17 | 152 | Apr 6 | 9650 | Jul 1 1962 |
| INSTANTANEOUS PEAK FLOW | | | 774 | Jul 28 | *15.68 | Jul 1 1962 |
| INSTANTANEOUS PEAK STAGE | | | 3.17 | Jul 28 | | |
| ANNUAL RUNOFF (AC-FT) | 147100 | | 132100 | | 114300 | |
| 10 PERCENT EXCEEDS | 240 | | 198 | | 202 | |
| 50 PERCENT EXCEEDS | 189 | | 174 | | 146 | |
| 90 PERCENT EXCEEDS | 169 | | 164 | | 110 | |

* Backwater from fallen bridge.



NIOBRARA RIVER BASIN

06463500 LONG PINE CREEK NEAR RIVERVIEW, NE--Continued

WATER QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | TIME | DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061) | 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) | 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) |
|--------------|------|---|--|--|--|--|--|---|---|--|
| OCT 14... | 0910 | 170 | .24 | 82.5 | 180 | 8.2 | 198 | 15.0 | 10.5 | 95 |
| NOV 17... | 0850 | 176 | .27 | 92.8 | 195 | 8.1 | 204 | 1.5 | 7.0 | 83 |
| MAY 09... | 1250 | 198 | .22 | 86.4 | 162 | 8.3 | 192 | 23.5 | 16.5 | 77 |
| JUL 31... | 1435 | 209 | .22 | 90.9 | 161 | 8.3 | 197 | 32.0 | 24.0 | 72 |

| DATE | 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) | 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) |
|--------------|---|---|--|--|---|------------------------------|--|--|---|
| OCT 14... | 31.1 | 4.21 | 6.5 | .4 | 8.4 | 15 | 89 | 1.9 | .2 |
| NOV 17... | 26.8 | 3.82 | 5.6 | .4 | 7.5 | 15 | 123 | 2.2 | .3 |
| MAY 09... | 25.0 | 3.65 | 5.3 | .3 | 7.0 | 15 | 86 | 1.6 | .3 |
| JUL 31... | 22.9 | 3.60 | 7.8 | .4 | 7.1 | 16 | 87 | 2.2 | <.1 |

| 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,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623) | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618) | 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) |
|--------------|--|--|--|--|--|--|--|--|--|
| OCT 14... | 58.7 | 4.7 | <.020 | .12 | 2.4 | -- | -- | 2.30 | -- |
| NOV 17... | 59.3 | 5.0 | <.020 | .16 | 2.5 | -- | -- | 2.37 | -- |
| MAY 09... | 54.9 | 4.5 | <.020 | .17 | 1.9 | -- | -- | 1.72 | -- |
| JUL 31... | 53.3 | 4.6 | <.020 | .37 | 1.8 | 1.40 | 6.21 | 1.43 | .095 |

| DATE | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | 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 14... | <.010 | .396 | .118 | .129 | .161 | 1.1 | 30 | E10 | 2 |
| NOV 17... | <.010 | .466 | .144 | .152 | .082 | 1.9 | 29 | <10 | 3 |
| MAY 09... | <.010 | .346 | .131 | .113 | .216 | .8 | 24 | 10 | 3 |
| JUL 31... | .029 | .819 | .335 | .267 | .632 | .8 | 34 | 70 | 4 |

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NIOBRARA RIVER BASIN

06464500 KEYS 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 crest-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.

COOPERATION.--Records provided by U.S. Geological Survey, South Dakota District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|-------|------|------|------|------|
| 1 | 70 | 67 | 88 | e110 | e60 | 211 | 86 | 147 | 174 | 96 | 47 | 25 |
| 2 | 73 | 66 | 87 | e100 | e65 | 195 | 86 | 156 | 165 | 95 | 45 | 26 |
| 3 | 76 | 68 | 86 | e88 | e70 | 180 | 85 | 161 | 156 | 91 | 44 | 26 |
| 4 | 78 | 69 | 86 | e80 | e66 | 165 | 84 | 149 | 148 | 144 | 43 | 26 |
| 5 | 68 | 70 | 80 | e85 | e61 | 153 | 85 | 135 | 134 | 302 | 46 | 26 |
| 6 | 65 | 70 | e70 | e90 | e60 | 145 | 80 | 122 | 122 | 540 | 46 | 25 |
| 7 | 67 | 71 | e65 | e89 | e60 | 141 | 80 | 114 | 112 | 545 | 45 | 25 |
| 8 | 66 | 71 | e70 | e87 | e62 | 142 | 81 | 150 | 101 | 453 | 43 | 25 |
| 9 | 65 | 71 | e66 | e85 | e64 | 137 | 79 | 166 | 91 | 363 | 40 | 25 |
| 10 | 64 | 71 | e63 | e83 | e60 | 134 | 81 | 320 | 98 | 282 | 39 | 24 |
| 11 | 65 | 71 | e60 | e80 | e58 | 134 | 81 | 285 | 86 | 226 | 41 | 24 |
| 12 | 64 | 71 | e57 | e80 | e56 | 135 | 79 | 248 | 107 | 182 | 38 | 24 |
| 13 | 63 | 71 | e54 | e80 | e55 | 130 | 80 | 289 | 131 | 150 | 31 | 24 |
| 14 | 64 | 70 | e53 | e84 | e54 | 128 | 80 | 274 | 132 | 125 | 32 | 24 |
| 15 | 64 | 70 | e52 | e87 | e53 | 131 | 82 | 220 | 131 | 108 | 29 | 24 |
| 16 | 63 | 70 | e51 | e90 | e52 | 124 | 86 | 187 | 123 | 97 | 29 | 24 |
| 17 | 63 | 71 | e50 | e88 | e51 | 118 | 88 | 164 | 117 | 88 | 30 | 24 |
| 18 | 63 | 72 | e50 | e86 | e50 | 115 | 91 | 212 | 109 | 79 | 30 | 23 |
| 19 | 60 | 74 | e47 | e84 | e50 | 112 | 93 | 318 | 103 | 75 | 32 | 23 |
| 20 | 61 | 76 | e44 | e82 | e55 | 109 | 103 | 463 | 105 | 73 | 35 | 24 |
| 21 | 63 | 77 | e41 | e80 | e60 | 108 | 122 | 433 | 99 | 71 | 40 | 25 |
| 22 | 69 | 77 | e40 | e78 | e95 | 107 | 147 | 362 | 90 | 70 | 35 | 29 |
| 23 | 64 | 80 | e42 | e75 | e130 | 108 | 154 | 297 | 84 | 72 | 33 | 33 |
| 24 | 64 | 81 | e47 | e72 | 119 | 111 | 142 | 238 | 80 | 74 | 31 | 38 |
| 25 | 64 | 83 | e50 | e70 | 130 | 107 | 160 | 195 | 79 | 72 | 28 | 40 |
| 26 | 64 | 86 | e58 | e68 | 145 | 105 | 182 | 173 | 80 | 62 | 26 | 35 |
| 27 | 65 | 87 | e70 | e67 | 164 | 100 | 196 | 171 | 80 | 58 | 26 | 36 |
| 28 | 64 | 86 | e100 | e65 | 192 | 95 | 188 | 192 | 86 | 55 | 24 | 34 |
| 29 | 66 | 87 | e150 | e63 | 218 | 93 | 164 | 212 | 89 | 55 | 23 | 32 |
| 30 | 71 | 87 | e140 | e61 | --- | 90 | 148 | 193 | 96 | 52 | 23 | 31 |
| 31 | 76 | --- | e125 | e60 | --- | 87 | --- | 177 | --- | 49 | 24 | --- |
| TOTAL | 2052 | 2241 | 2142 | 2497 | 2415 | 3950 | 3293 | 6923 | 3308 | 4804 | 1078 | 824 |
| MEAN | 66.2 | 74.7 | 69.1 | 80.5 | 83.3 | 127 | 110 | 223 | 110 | 155 | 34.8 | 27.5 |
| MAX | 78 | 87 | 150 | 110 | 218 | 211 | 196 | 463 | 174 | 545 | 47 | 40 |
| MIN | 60 | 66 | 40 | 60 | 50 | 87 | 79 | 114 | 79 | 49 | 23 | 23 |
| AC-FT | 4070 | 4450 | 4250 | 4950 | 4790 | 7830 | 6530 | 13730 | 6560 | 9530 | 2140 | 1630 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1940, 1948 - 2000, BY WATER YEAR (WY)

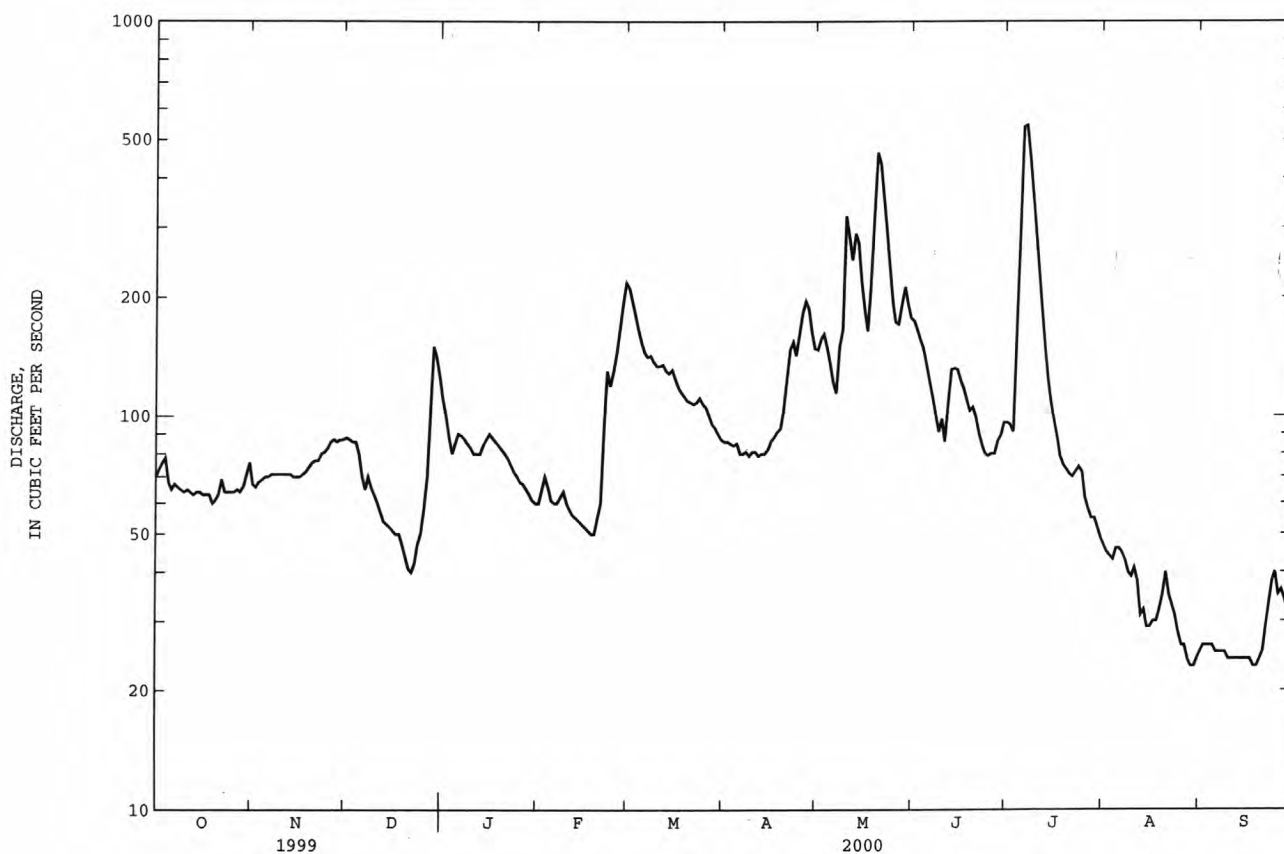
| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 41.0 | 47.0 | 37.4 | 32.8 | 76.6 | 177 | 163 | 146 | 108 | 65.7 | 37.2 | 31.3 |
| MAX | 141 | 204 | 108 | 135 | 546 | 598 | 605 | 754 | 512 | 607 | 178 | 89.2 |
| (WY) | 1996 | 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

06464500 KEYA PAHA RIVER AT WEWELA, SD--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1939-1940, 1948-2000 | |
|--------------------------|------------------------|--------|---------------------|---------|----------------------------------|--------------|
| ANNUAL TOTAL | 52913 | | 35527 | | 80.3a | |
| ANNUAL MEAN | 145 | | 97.1 | | 188 | |
| HIGHEST ANNUAL MEAN | | | | | 19.5 | |
| LOWEST ANNUAL MEAN | | | | | 4930 | |
| HIGHEST DAILY MEAN | 1150 | May 12 | 545 | Jul 7 | | Mar 30 1952 |
| LOWEST DAILY MEAN | 28 | Aug 28 | 23 | Aug 29b | .00 | Jan 10 1949c |
| ANNUAL SEVEN-DAY MINIMUM | 31 | Aug 23 | 24 | Sep 13 | .00 | Jan 10 1949 |
| INSTANTANEOUS PEAK FLOW | | | 591 | Jul 6 | 5430 | Mar 31 1952d |
| INSTANTANEOUS PEAK STAGE | | | 3.77 | Jul 6 | 13.50 | Mar 25 1950f |
| ANNUAL RUNOFF (AC-FT) | 105000 | | 70470 | | 58180 | |
| 10 PERCENT EXCEEDS | 275 | | 173 | | 165 | |
| 50 PERCENT EXCEEDS | 96 | | 79 | | 42 | |
| 90 PERCENT EXCEEDS | 51 | | 32 | | 15 | |

- a Median of annual mean discharges, 69 ft³/s.
b Also Aug. 30, Sept. 18, 19.
c Also Jan. 11 to Feb. 15, 1949, and Aug. 19 to Sept. 14, 1976.
d Gage height, 13.08 ft.
e Estimated.
f Backwater from ice.



NIOBRARA RIVER BASIN

06465000 NIOBRARA RIVER NEAR SPENCER, NE

LOCATION.--Lat 42°48'33", long 098°39'22", in SE ¼ NW ¼ sec.30, T.33 N., R.11 W., Boyd County, Hydrologic Unit 10150007, at Spencer powerplant 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 powerplant operation. Datum of gage is 1,473.67 ft above sea level. Elevation of taintor gate sill, 1,491.12 ft above sea level. Prior to December 1908, nonrecording gage on former highway bridge 275 ft downstream and Aug. 1, 1913, to Sept. 30, 1915, nonrecording gage at highway bridge 10 mi downstream at different datums. Aug. 1, 1927, to Sept. 30, 1936, and June 14, 1940, to Sept. 30, 1944, discharge computed as flow through powerhouse and over dam. Oct. 1, 1944, to Nov. 10, 1954, water-stage recorder at site 275 ft downstream at datum 4.98 ft higher, and Nov. 11, 1954, to Sept. 30, 1957, at site 0.3 mi downstream at datum 9.78 ft lower. Oct. 1, 1957 to Oct. 21, 1958, discharge computed as flow through powerhouse and over dam. Oct. 28, 1958, to Aug. 13, 1963, water-stage recorder at site 225 ft downstream at present datum. Aug. 14, 1963, gage moved to present site with discharge computed as flow through powerhouse and over dam.

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

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---------|-------|-------|--------|-------|--------|--------|--------|--------|-------|-------|-------|-------|
| 1 | e1240 | 1450 | 1580 | 1960 | 1450 | e1950 | 1680 | 2190 | 1900 | 1540 | 1140 | 961 |
| 2 | e1310 | 1480 | 1700 | 1770 | 1570 | e1960 | 1710 | 1970 | 1740 | 1290 | 1100 | 991 |
| 3 | e1320 | 1450 | 1670 | 1550 | 1880 | 1960 | 1650 | 1960 | 1720 | 1260 | 1020 | 1020 |
| 4 | e1290 | 1450 | 1720 | 441 | 1900 | 2000 | 1640 | 1780 | 1700 | 1290 | 1040 | 1040 |
| 5 | e1310 | 1470 | 1800 | 594 | 1780 | 1900 | 1660 | 1750 | 1730 | 1490 | 1060 | 1010 |
| 6 | e1280 | 1480 | 1700 | 1250 | 1730 | 1890 | 1630 | 1740 | 1540 | 1980 | 1120 | 963 |
| 7 | e1270 | 1430 | 1710 | 1600 | 1820 | 1890 | 1650 | 1760 | 1610 | 1820 | 983 | 1030 |
| 8 | e1300 | e1480 | 1720 | 1670 | 1840 | 1960 | 1650 | 1910 | 1310 | 1590 | 1010 | 980 |
| 9 | e1350 | 1270 | 1610 | 1740 | 1960 | 2170 | 1560 | 1830 | 1290 | 1440 | 973 | 994 |
| 10 | e1380 | 1480 | 1690 | 2340 | 2000 | 2120 | e1580 | 1780 | 1440 | 1390 | 965 | 988 |
| 11 | e1400 | 1480 | 1770 | 1650 | 1680 | 2070 | e1570 | 1970 | 1530 | 1370 | 945 | 988 |
| 12 | e1500 | 1480 | 1730 | 1580 | 1470 | 2000 | e1600 | 2140 | 1620 | 1390 | 921 | e980 |
| 13 | e1400 | 1490 | 1740 | 1590 | 1610 | 1980 | e1580 | 2060 | 1770 | 1360 | 890 | 982 |
| 14 | e1350 | 1490 | 1800 | 1490 | 1490 | 1910 | e1580 | 1780 | 1850 | 1260 | 894 | 964 |
| 15 | 1400 | 1500 | 1630 | 1770 | 1720 | 1920 | e1630 | 1750 | 1660 | 1150 | 875 | e1000 |
| 16 | 1520 | 1500 | 1270 | 1770 | 1790 | 1940 | e1690 | 1650 | 1690 | 1180 | 925 | e980 |
| 17 | 1540 | 1540 | 1700 | 1510 | 1790 | 1890 | e1580 | 1680 | 1610 | 1170 | 956 | e980 |
| 18 | 1460 | 1520 | 1500 | 1600 | 1790 | 1840 | 1510 | 2920 | 1470 | 1160 | 965 | e970 |
| 19 | 1450 | 1550 | 1580 | 1950 | 1750 | 1830 | 1470 | 3010 | 1340 | 1290 | 997 | e980 |
| 20 | 1460 | 1550 | 1100 | 1710 | 1910 | 1810 | 1580 | 2820 | 1410 | 1140 | 1080 | e970 |
| 21 | 1440 | 1570 | 475 | 1530 | 2190 | 1790 | 1710 | 2800 | 1520 | 1180 | 1050 | e970 |
| 22 | 1410 | 1530 | 675 | 1650 | 2460 | 1660 | 1680 | 2510 | 1240 | 1260 | 1060 | e1080 |
| 23 | 1460 | 1550 | 1060 | 1720 | 2680 | 1700 | 1890 | 2460 | 1200 | 1220 | e1040 | 1370 |
| 24 | 1460 | 1560 | 1670 | 1570 | 2560 | 1950 | 1890 | 2230 | 1450 | 1120 | 1080 | 1370 |
| 25 | 1410 | 1590 | 2040 | 1500 | 2110 | 1810 | 1950 | 2210 | 1490 | 1130 | 982 | 1310 |
| 26 | 1450 | 1580 | 2220 | 1550 | 2090 | 1770 | 2230 | 2220 | 1520 | 1100 | 977 | 1130 |
| 27 | 1470 | 1550 | 2090 | 1410 | 2040 | 1760 | 2050 | 2310 | 1330 | 1090 | 996 | 1100 |
| 28 | 1470 | 1530 | 1980 | 1400 | e2120 | 1730 | 1870 | 1860 | 1490 | 1040 | 985 | 1100 |
| 29 | 1490 | 1570 | 2030 | 1520 | 1940 | 1660 | 1880 | 1830 | e1450 | 1370 | 915 | 1110 |
| 30 | 1540 | 1590 | e1830 | 1340 | --- | 1720 | 1950 | 1850 | e1540 | 1430 | 953 | 1110 |
| 31 | 1490 | --- | e1920 | 1370 | --- | 1700 | --- | 1940 | --- | 1250 | 933 | --- |
| TOTAL | 43620 | 45160 | 50710 | 48095 | 55120 | 58240 | 51300 | 64670 | 45990 | 40540 | 30830 | 31421 |
| MEAN | 1407 | 1505 | 1636 | 1551 | 1901 | 1879 | 1710 | 2086 | 1533 | 1308 | 995 | 1047 |
| MAX | 1540 | 1590 | 2220 | 2340 | 2680 | 2170 | 2230 | 3010 | 1900 | 1980 | 1140 | 1370 |
| MIN | 1240 | 1270 | 475 | 441 | 1450 | 1660 | 1470 | 1650 | 1200 | 1040 | 875 | 961 |
| AC - FT | 86520 | 89570 | 100600 | 95400 | 109300 | 115500 | 101800 | 128300 | 91220 | 80410 | 61150 | 62320 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2000, BY WATER YEAR (WY)

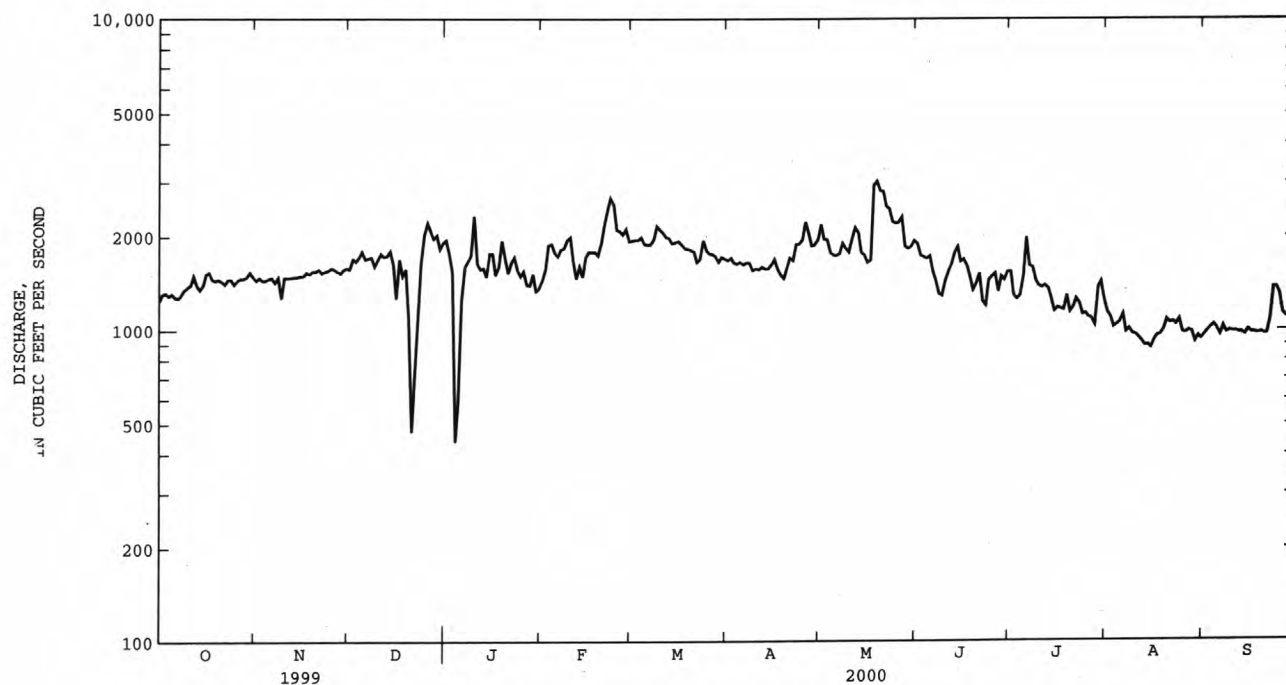
| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 1283 | 1349 | 1186 | 1236 | 1641 | 2237 | 1956 | 1882 | 1652 | 1164 | 1047 | 1122 |
| MAX | 1965 | 2333 | 1881 | 1860 | 3014 | 3941 | 3972 | 4649 | 3972 | 4156 | 2167 | 2143 |
| (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

06465000 NIOBRARA RIVER NEAR SPENCER, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1927 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 691790 | | 565696 | | 1480 | |
| ANNUAL MEAN | 1895 | | 1546 | | 2066 | 1962 |
| HIGHEST ANNUAL MEAN | | | | | 1096 | 1934 |
| LOWEST ANNUAL MEAN | | | | | 19000 | Mar 27 1960 |
| HIGHEST DAILY MEAN | 7560 | May 5 | 3010 | May 19 | 5.0 | Nov 14 1940 |
| LOWEST DAILY MEAN | 475 | Dec 21 | 441 | Jan 4 | 168 | Dec 8 1932 |
| ANNUAL SEVEN-DAY MINIMUM | 1040 | Aug 17 | 915 | Aug 11 | 27400 | Mar 12 1955 |
| INSTANTANEOUS PEAK FLOW | | | | | 12.16 | Mar 12 1955 |
| INSTANTANEOUS PEAK STAGE | | | | | 1072000 | |
| ANNUAL RUNOFF (AC-FT) | 1372000 | | 1122000 | | 2280 | |
| 10 PERCENT EXCEEDS | 2600 | | 1980 | | 1320 | |
| 50 PERCENT EXCEEDS | 1770 | | 1550 | | 780 | |
| 90 PERCENT EXCEEDS | 1200 | | 993 | | | |

e Estimated.



NIOBRARA RIVER BASIN

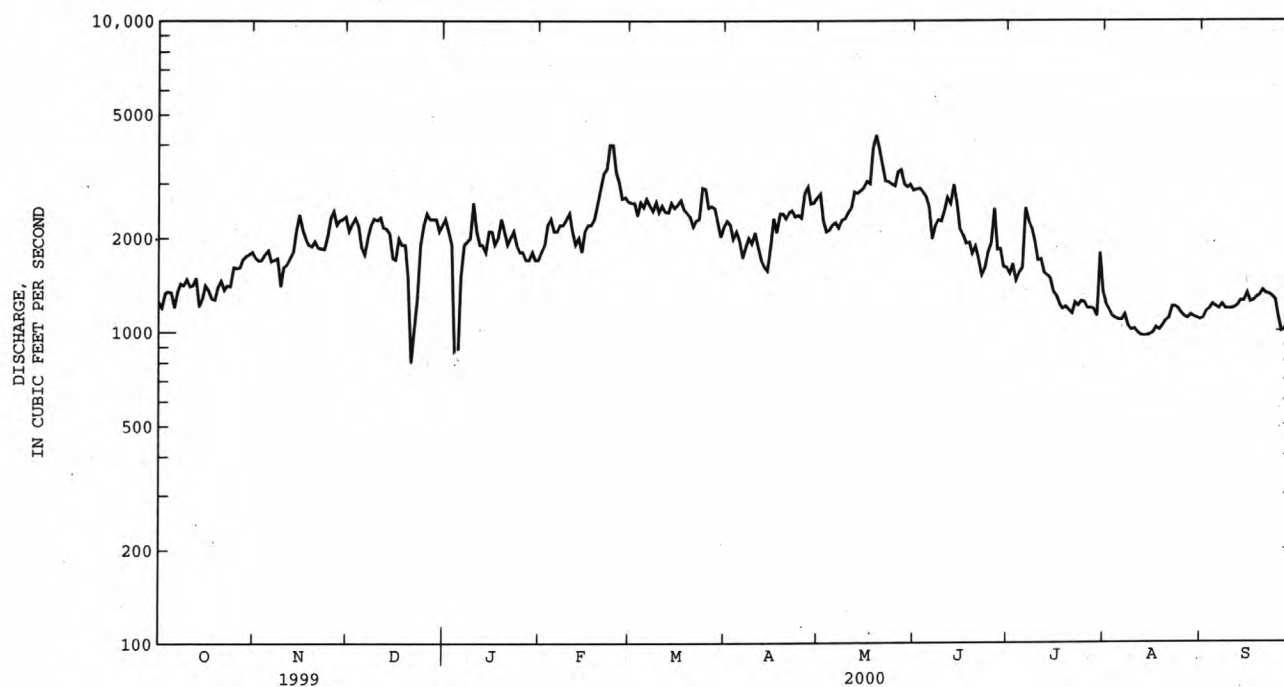
06465500 NIOBRARA RIVER NEAR VERDEL, NE--Continued

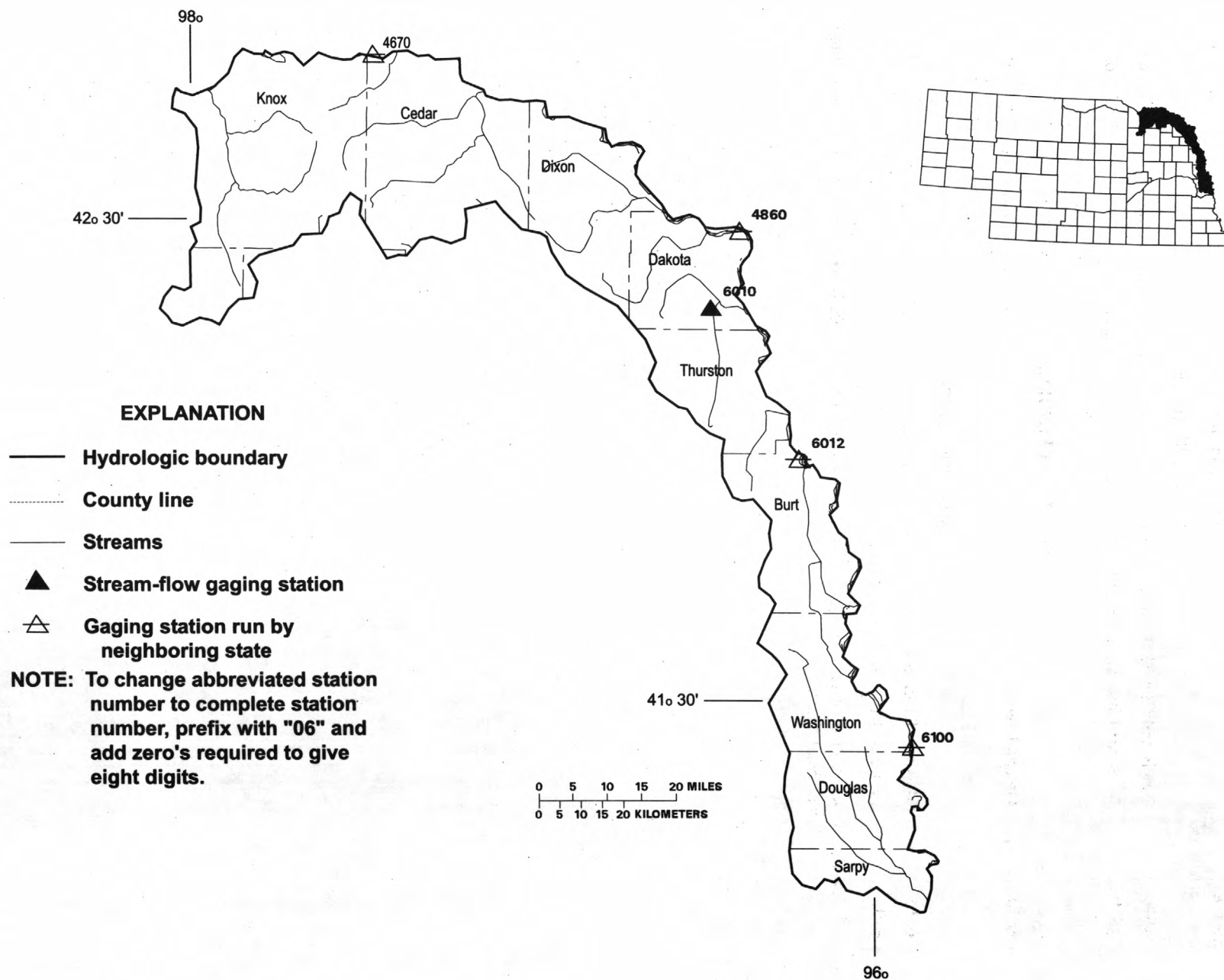
| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1938 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 843760 | | 705559 | | 1713 | |
| ANNUAL MEAN | 2312 | | 1928 | | 2461 | |
| HIGHEST ANNUAL MEAN | | | | | 1269 | |
| LOWEST ANNUAL MEAN | | | | | 25100 | |
| HIGHEST DAILY MEAN | 6590 | Jul 20 | 4270 | May 19 | 104 | Mar 27 1960 |
| LOWEST DAILY MEAN | 800 | Dec 21 | 750 | Jan 5 | 210 | Nov 30 1960 |
| ANNUAL SEVEN-DAY MINIMUM | 1280 | Sep 30 | 984 | Aug 10 | 39000 | Nov 27 1976 |
| INSTANTANEOUS PEAK FLOW | | | *4620 | May 18 | **10.62 | Mar 27 1960 |
| INSTANTANEOUS PEAK STAGE | | | **4.09 | Dec 26 | Mar 12 1966 | |
| ANNUAL RUNOFF (AC-FT) | 1674000 | | 1399000 | | 1241000 | |
| 10 PERCENT EXCEEDS | 3520 | | 2740 | | 2680 | |
| 50 PERCENT EXCEEDS | 2200 | | 1900 | | 1510 | |
| 90 PERCENT EXCEEDS | 1410 | | 1140 | | 889 | |

e Estimated.

* Stage 3.93 ft.

** Backwater from ice.





| *Station number | Station name | Page |
|--------------------|--|------|
| | MISSOURI RIVER | |
| 4670 | Lewis and Clark Lake near Yankton, SD..... | 64 |
| 4860 | Missouri River at Sioux City, IA | 66 |
| | OMAHA CREEK BASIN | |
| 6010 | Omaha Creek at Homer | 68 |
| | MISSOURI RIVER | |
| 6012 | Missouri River at Decatur, NE..... | 70 |
| 6100 | Missouri River at Omaha, NE | 72 |

* 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

MISSOURI-LEWIS AND CLARK RIVER BASIN

06467000 LEWIS AND CLARK LAKE NEAR YANKTON, SD

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

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

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

GAGE.--Water-stage recorder. Datum of gage is 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 and provided for this report by the U.S. Geological Survey, South Dakota District.

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, 403,000 acre-ft, Dec. 9; minimum contents, 339,000 acre-ft, May 14.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| Date | *Elevation (feet) | Contents (acre- feet) | Change in contents (acre- feet) |
|---------------|----------------------|-----------------------------|---|
| Sep 30..... | 1,206.89 | 381,000 | -- |
| Oct. 31..... | 1,206.85 | 380,000 | -1,000 |
| Nov. 30..... | 1,207.23 | 390,000 | +10,000 |
| Dec. 31..... | 1,207.25 | 389,000 | -1,000 |
| CAL YR 1999 | -- | -- | +14,000 |
| Jan. 31..... | 1,207.10 | 386,000 | -3,000 |
| Feb. 29..... | 1,206.14 | 361,000 | -25,000 |
| Mar. 31..... | 1,206.08 | 360,000 | -1,000 |
| Apr. 30..... | 1,205.82 | 353,000 | -7,000 |
| May 31..... | 1,206.22 | 363,000 | +10,000 |
| June 30..... | 1,206.21 | 362,000 | -1,000 |
| July 31..... | 1,205.82 | 353,000 | -9,000 |
| Aug. 31..... | 1,206.17 | 363,000 | +10,000 |
| Sept. 30..... | 1,207.00 | 384,000 | +21,000 |
| WTR YR 2000 | -- | -- | +3,000 |

*Lake frozen over Dec. 22 to Feb. 26.

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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 NW¼ SE¼ sec.16, T.29 N., R.9 E., sixth principal meridian, Dakota County, Nebraska, Hydrologic Unit 10230001, on right bank on upstream side of bridge on U.S. Highway 20 and 77 at South Sioux City, Nebraska, 1.9 mi downstream from Big Sioux River, and at mile 732.2.

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

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

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

GAGE.--Water-stage recorder. Datum of gage is 1,056.98 ft above 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. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water quality data. U.S. Army Corps of Engineers rain gage and satellite data collection platform at station.

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.

COOPERATION.--Records provided by U.S. Geological Survey, Iowa District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 48100 | 46400 | 46200 | 23900 | e19400 | 18400 | 29500 | 31900 | 36400 | 34800 | 33000 | 34400 |
| 2 | 48600 | 45700 | 46700 | 23800 | e19400 | 18600 | 29100 | 31400 | 35800 | 34700 | 32700 | 34800 |
| 3 | 48100 | 45100 | 46400 | 23700 | e19000 | 18500 | 29300 | 31300 | 35300 | 34500 | 31700 | 34600 |
| 4 | 47900 | 44500 | 44600 | 22800 | e18500 | 18500 | 29400 | 31300 | 35600 | 34400 | 31000 | 34200 |
| 5 | 47600 | 44500 | 41400 | 22000 | e18000 | 18300 | 30000 | 31000 | 36000 | 34500 | 31500 | 34000 |
| 6 | 47300 | 44900 | 38100 | 24300 | 18500 | 18600 | 30300 | 31000 | 35700 | 34200 | 31600 | 34100 |
| 7 | 47300 | 45600 | 34500 | 23300 | 18000 | 18800 | 31000 | 30900 | 35800 | 33600 | 30900 | 34300 |
| 8 | 47600 | 46000 | 31400 | 23500 | 17900 | 18900 | 31700 | 31000 | 35900 | 33800 | 31800 | 34600 |
| 9 | 47000 | 45600 | 28800 | 23300 | 18000 | 19200 | 31300 | 30900 | 35600 | 33500 | 32800 | 34900 |
| 10 | 46600 | 45200 | 26000 | 23200 | 18000 | 18500 | 31400 | 30600 | 36000 | 33500 | 32200 | 34700 |
| 11 | 46300 | 45300 | 24700 | 22700 | 17700 | 18200 | 31600 | 33100 | 36600 | 33500 | 32100 | 34700 |
| 12 | 46100 | 45600 | 24800 | 22100 | 17700 | 18300 | 31100 | 36700 | 36500 | 35600 | 32000 | 34800 |
| 13 | 46300 | 46100 | 24800 | 23200 | 17600 | 18500 | 30800 | 38500 | 37100 | 33800 | 31900 | 34700 |
| 14 | 46600 | 46500 | 24900 | 22900 | 17300 | 18500 | 30600 | 38000 | 39600 | 33700 | 31500 | 34700 |
| 15 | 46900 | 47000 | 25700 | 24500 | 17700 | 18600 | 30700 | 38200 | 38000 | 33800 | 31600 | 34600 |
| 16 | 46700 | 47000 | 24700 | 23300 | 17900 | 18400 | 31600 | 37700 | 37000 | 34300 | 31500 | 34400 |
| 17 | 46500 | 46900 | 24200 | 21500 | 17800 | 17300 | 31000 | 36600 | 36600 | 34400 | 32200 | 34500 |
| 18 | 46400 | 47000 | 24300 | 25100 | 17700 | 19100 | 30000 | 41000 | 36400 | 34000 | 32100 | 34500 |
| 19 | 46700 | 47000 | 24500 | 24600 | 17700 | 22200 | 30400 | 39400 | 36100 | 34500 | 31800 | 35200 |
| 20 | 46700 | 46400 | 24100 | 22500 | 17700 | 25000 | 30600 | 37700 | 36700 | 34600 | 32300 | 35300 |
| 21 | 46800 | 45800 | 22500 | 23400 | 17700 | 28200 | 30600 | 39200 | 36400 | 34400 | 31900 | 34900 |
| 22 | 46800 | 45700 | 23500 | e24200 | 17900 | 30300 | 30300 | 39500 | 35700 | 34000 | 32400 | 35400 |
| 23 | 46900 | 45900 | 23900 | e23700 | 18500 | 30000 | 30400 | 38900 | 35600 | 34500 | 32300 | 35300 |
| 24 | 46800 | 45500 | e24500 | e23400 | 19100 | 30000 | 30900 | 38800 | 36400 | 34100 | 32000 | 34800 |
| 25 | 46600 | 45100 | e25000 | e22600 | 18900 | 30000 | 31400 | 38400 | 37800 | 34600 | 31900 | 34600 |
| 26 | 46500 | 45000 | e24400 | e21800 | 19100 | 30000 | 31800 | 37900 | 38600 | 34800 | 31700 | 34100 |
| 27 | 46900 | 45000 | e23800 | e21300 | 19200 | 30200 | 32300 | 38000 | 35900 | 33900 | 31600 | 33800 |
| 28 | 47200 | 45100 | 24300 | e20500 | 19000 | 30100 | 32000 | 37000 | 36100 | 33800 | 31700 | 33900 |
| 29 | 47200 | 45100 | 24500 | e21000 | 19300 | 30300 | 31600 | 36400 | 35500 | 33800 | 31900 | 33900 |
| 30 | 46900 | 45600 | 24500 | e20300 | --- | 30400 | 31600 | 36800 | 35200 | 33500 | 32000 | 34100 |
| 31 | 46400 | --- | 24300 | e19800 | --- | 30300 | --- | 36500 | --- | 33400 | 32700 | --- |
| TOTAL | 1456300 | 1372100 | 896000 | 708200 | 530200 | 710200 | 924300 | 1105600 | 1091900 | 1058500 | 990300 | 1036800 |
| MEAN | 46980 | 45740 | 28900 | 22850 | 18280 | 22910 | 30810 | 35660 | 36400 | 34150 | 31950 | 34560 |
| MAX | 48600 | 47000 | 46700 | 25100 | 19400 | 30400 | 32300 | 41000 | 39600 | 35600 | 33000 | 35400 |
| MIN | 46100 | 44500 | 22500 | 19800 | 17300 | 17300 | 29100 | 30600 | 35200 | 33400 | 30900 | 33800 |
| AC-FT | 2889000 | 2722000 | 1777000 | 1405000 | 1052000 | 1409000 | 1833000 | 2193000 | 2166000 | 2100000 | 1964000 | 2056000 |
| CFSM | .15 | .15 | .09 | .07 | .06 | .07 | .10 | .11 | .12 | .11 | .10 | .11 |
| IN. | .17 | .16 | .11 | .08 | .06 | .08 | .11 | .13 | .13 | .13 | .12 | .12 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2000, BY WATER YEAR (WY)

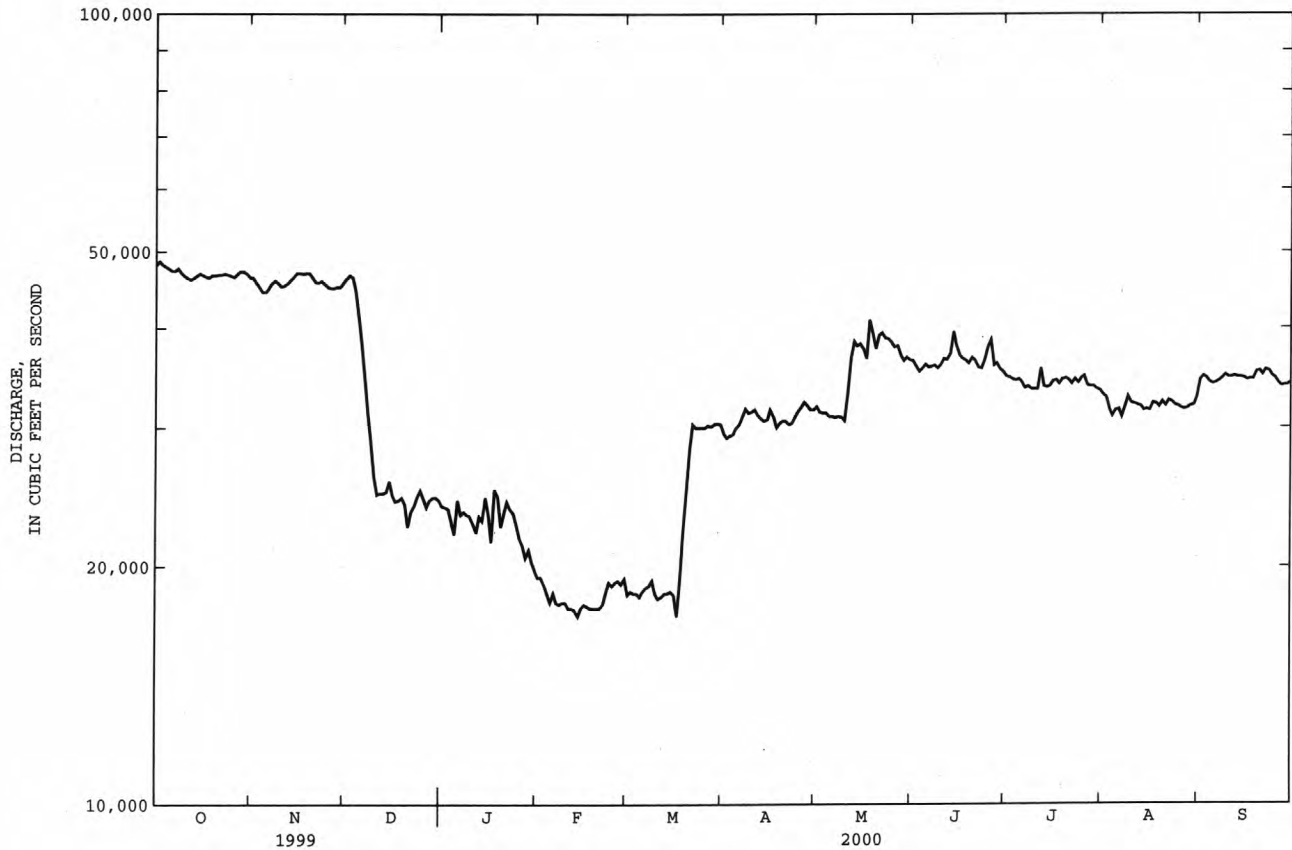
| | MEAN | 36340 | 31400 | 19060 | 16180 | 17360 | 23420 | 33340 | 34040 | 35850 | 36440 | 36790 | 36990 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| MAX | 69300 | 71600 | 39880 | 27720 | 31120 | 47020 | 88040 | 78720 | 66400 | 65550 | 65360 | 66400 | |
| (WY) | 1998 | 1998 | 1998 | 1987 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | 1997 | |
| MIN | 14350 | 6951 | 8271 | 7316 | 6293 | 9135 | 17450 | 23820 | 23270 | 26890 | 24270 | 25790 | |
| (WY) | 1962 | 1962 | 1962 | 1964 | 1963 | 1957 | 1957 | 1962 | 1960 | 1958 | 1993 | 1962 | |

MISSOURI RIVER MAIN STEM

06486000 MISSOURI RIVER AT SIOUX CITY, IA--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1953 - 2000a | |
|--------------------------|------------------------|--------|---------------------|--------|--------------------------|-------------|
| ANNUAL TOTAL | 14231000 | | 11880400 | | 29810 | |
| ANNUAL MEAN | 38990 | | 32460 | | 55890 | 1997 |
| HIGHEST ANNUAL MEAN | | | | | 19770 | 1957 |
| LOWEST ANNUAL MEAN | | | | | 105000 | Jun 25 1953 |
| HIGHEST DAILY MEAN | 54500 | Jul 22 | 48600 | Oct 2 | 3000 | Dec 11 1961 |
| LOWEST DAILY MEAN | 22500 | Dec 21 | 17300 | Feb 14 | 5430 | Feb 22 1963 |
| ANNUAL SEVEN-DAY MINIMUM | 23900 | Dec 17 | 17700 | Feb 11 | 101000 | Apr 3 1960 |
| INSTANTANEOUS PEAK FLOW | | | 48900 | Oct 2 | 30.65 | Feb 19 1971 |
| INSTANTANEOUS PEAK STAGE | | | 18.82 | Oct 2 | 21600000 | |
| ANNUAL RUNOFF (AC-FT) | 28230000 | | 23560000 | | .095 | |
| ANNUAL RUNOFF (CFMS) | | .12 | | .10 | 1.29 | |
| ANNUAL RUNOFF (INCHES) | 1.68 | | 1.40 | | | |
| 10 PERCENT EXCEEDS | 48100 | | 46400 | | 46700 | |
| 50 PERCENT EXCEEDS | 41900 | | 32700 | | 30300 | |
| 90 PERCENT EXCEEDS | 25600 | | 18900 | | 11700 | |

a Post regulation
e Estimated



OMAHA CREEK BASIN

06601000 OMAHA CREEK AT HOMER, NE

LOCATION.--Lat 42°19'29", long 096°29'43", in SW ¼ SE ¼ 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.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|-------|------|------|------|
| 1 | 45 | 47 | 44 | 49 | e39 | e41 | 44 | 36 | 33 | 67 | 33 | 16 |
| 2 | 47 | 44 | 44 | e50 | e36 | 38 | 44 | 33 | 30 | 62 | 31 | 17 |
| 3 | 47 | 45 | 44 | e38 | e34 | 41 | 44 | 32 | 28 | 58 | 29 | 16 |
| 4 | 47 | 45 | 44 | e33 | e36 | 43 | 43 | 32 | 28 | 57 | 29 | 16 |
| 5 | 47 | 45 | 44 | e41 | e40 | 45 | 43 | 31 | 28 | 59 | 33 | 17 |
| 6 | 46 | 45 | 42 | e49 | e39 | 46 | 42 | 30 | 27 | 58 | 31 | 15 |
| 7 | 45 | 46 | 44 | 53 | e39 | 45 | 42 | 30 | 26 | 53 | 27 | 14 |
| 8 | 46 | 47 | 47 | 54 | e41 | 49 | 42 | 35 | 25 | 47 | 26 | 14 |
| 9 | 46 | 47 | 46 | 53 | e40 | 47 | 43 | 35 | 23 | 45 | 25 | 13 |
| 10 | 45 | 47 | 42 | 53 | e37 | 43 | 43 | 32 | 22 | 48 | 25 | 13 |
| 11 | 45 | 46 | 44 | e50 | e37 | 42 | 43 | 30 | 22 | 49 | 24 | 13 |
| 12 | 46 | 46 | 46 | e44 | e36 | 42 | 43 | 29 | 26 | 119 | 24 | 12 |
| 13 | 46 | 47 | 44 | e38 | e34 | 43 | 44 | 27 | 30 | 57 | 23 | 13 |
| 14 | 45 | 47 | 47 | e40 | e35 | 44 | 46 | 27 | 40 | 44 | 23 | 13 |
| 15 | 45 | 46 | 47 | e47 | e37 | 44 | 48 | 28 | 30 | 41 | 22 | 13 |
| 16 | 45 | 45 | 43 | e42 | e36 | 42 | 61 | 27 | 28 | 39 | 20 | 13 |
| 17 | 44 | 45 | e40 | e45 | e35 | 41 | 68 | 28 | 27 | 39 | 22 | 14 |
| 18 | 45 | 45 | e37 | e47 | e36 | 44 | 50 | 44 | 26 | 37 | 21 | 13 |
| 19 | 45 | 45 | e33 | e36 | e37 | 49 | 42 | 36 | 24 | 39 | 21 | 14 |
| 20 | 46 | 44 | e31 | e34 | e42 | 48 | 39 | 29 | 45 | 39 | 23 | 15 |
| 21 | 47 | 44 | e37 | e36 | e46 | 47 | 39 | 32 | 30 | 37 | 23 | 16 |
| 22 | 47 | 44 | e44 | e42 | e50 | 46 | 38 | 28 | 24 | 36 | 23 | 25 |
| 23 | 45 | 54 | e42 | e40 | e55 | 46 | 37 | 26 | 24 | 42 | 23 | 28 |
| 24 | 44 | 52 | e48 | e35 | e66 | 51 | 36 | 26 | 107 | 37 | 22 | 23 |
| 25 | 46 | 46 | 53 | e31 | e86 | 48 | 37 | 26 | 4140 | 86 | 20 | 22 |
| 26 | 46 | 46 | 54 | e32 | e77 | 45 | 39 | 36 | e1600 | 48 | 19 | 21 |
| 27 | 46 | 47 | 52 | e35 | e66 | 44 | 44 | 50 | e140 | 36 | 18 | 20 |
| 28 | 46 | 46 | 51 | e36 | e56 | 42 | 40 | 36 | 244 | 35 | 18 | 20 |
| 29 | 46 | 44 | 53 | e36 | e45 | 42 | 37 | 32 | 91 | 35 | 18 | 20 |
| 30 | 47 | 44 | 53 | e37 | --- | 43 | 35 | 33 | 76 | 34 | 17 | 19 |
| 31 | 47 | --- | 49 | e39 | --- | 44 | --- | 33 | --- | 34 | 16 | --- |
| TOTAL | 1420 | 1381 | 1389 | 1295 | 1293 | 1375 | 1296 | 989 | 7044 | 1517 | 729 | 498 |
| MEAN | 45.8 | 46.0 | 44.8 | 41.8 | 44.6 | 44.4 | 43.2 | 31.9 | 235 | 48.9 | 23.5 | 16.6 |
| MAX | 47 | 54 | 54 | 54 | 86 | 51 | 68 | 50 | 4140 | 119 | 33 | 28 |
| MIN | 44 | 44 | 31 | 31 | 34 | 38 | 35 | 26 | 22 | 34 | 16 | 12 |
| AC-FT | 2820 | 2740 | 2760 | 2570 | 2560 | 2730 | 2570 | 1960 | 13970 | 3010 | 1450 | 988 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2000, BY WATER YEAR (WY)

| | 23.5 | 22.3 | 19.0 | 18.9 | 49.0 | 71.7 | 56.9 | 59.4 | 96.1 | 59.2 | 34.0 | 26.6 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 23.5 | 22.3 | 19.0 | 18.9 | 49.0 | 71.7 | 56.9 | 59.4 | 96.1 | 59.2 | 34.0 | 26.6 |
| 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 |

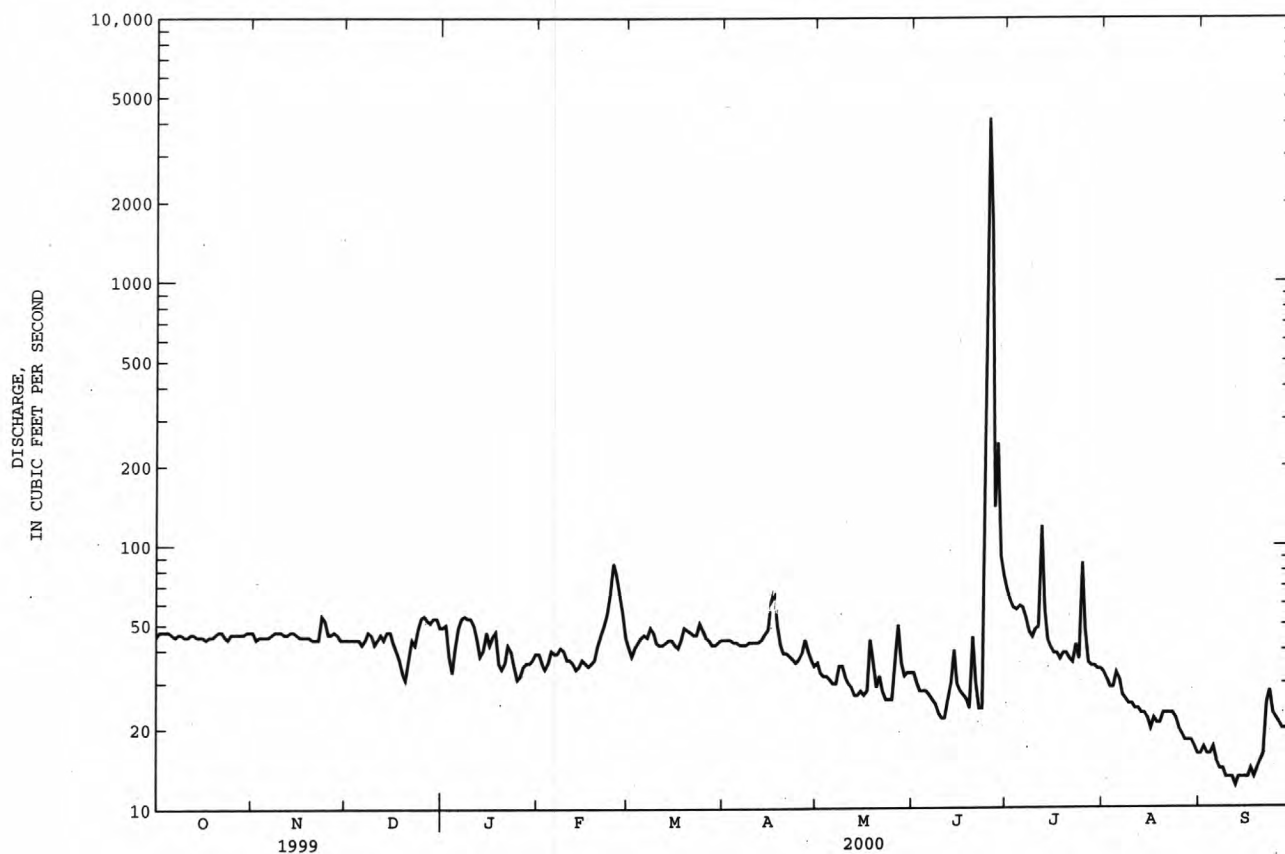
OMAHA CREEK BASIN

06601000 OMAHA CREEK AT HOMER, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1946 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 36882 | | 20226 | | 44.6 | |
| ANNUAL MEAN | 101 | | 55.3 | | 37 | |
| MEDIAN OF ANNUAL MEANS | | | | | 130 | |
| HIGHEST ANNUAL MEAN | | | | | 6.20 | |
| LOWEST ANNUAL MEAN | | | | | 6840 | |
| HIGHEST DAILY MEAN | 2190 | Jun 27 | 4140 | Jun 25 | | Feb 18 1971 |
| LOWEST DAILY MEAN | 31 | Dec 20 | 12 | Sep 12 | .10 | Sep 16 1948 |
| ANNUAL SEVEN-DAY MINIMUM | 38 | Dec 17 | 13 | Sep 9 | .16 | Sep 8 1955 |
| INSTANTANEOUS PEAK FLOW | | | 12300 | Jun 25 | *21500 | Jul 17 1996 |
| INSTANTANEOUS PEAK STAGE | | | 13.56 | Jun 25 | 28.47 | Feb 19 1971 |
| ANNUAL RUNOFF (AC-FT) | 73160 | | 40120 | | 32330 | |
| 10 PERCENT EXCEEDS | 160 | | 51 | | 82 | |
| 50 PERCENT EXCEEDS | 63 | | 42 | | 19 | |
| 90 PERCENT EXCEEDS | 45 | | 22 | | 4.3 | |

e Estimated.

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



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

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. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water quality data. U.S. Army Corps of Engineers rain gage and satellite data collection platform at station.

COOPERATION.--Records provided by U.S. Geological Survey, Iowa District.

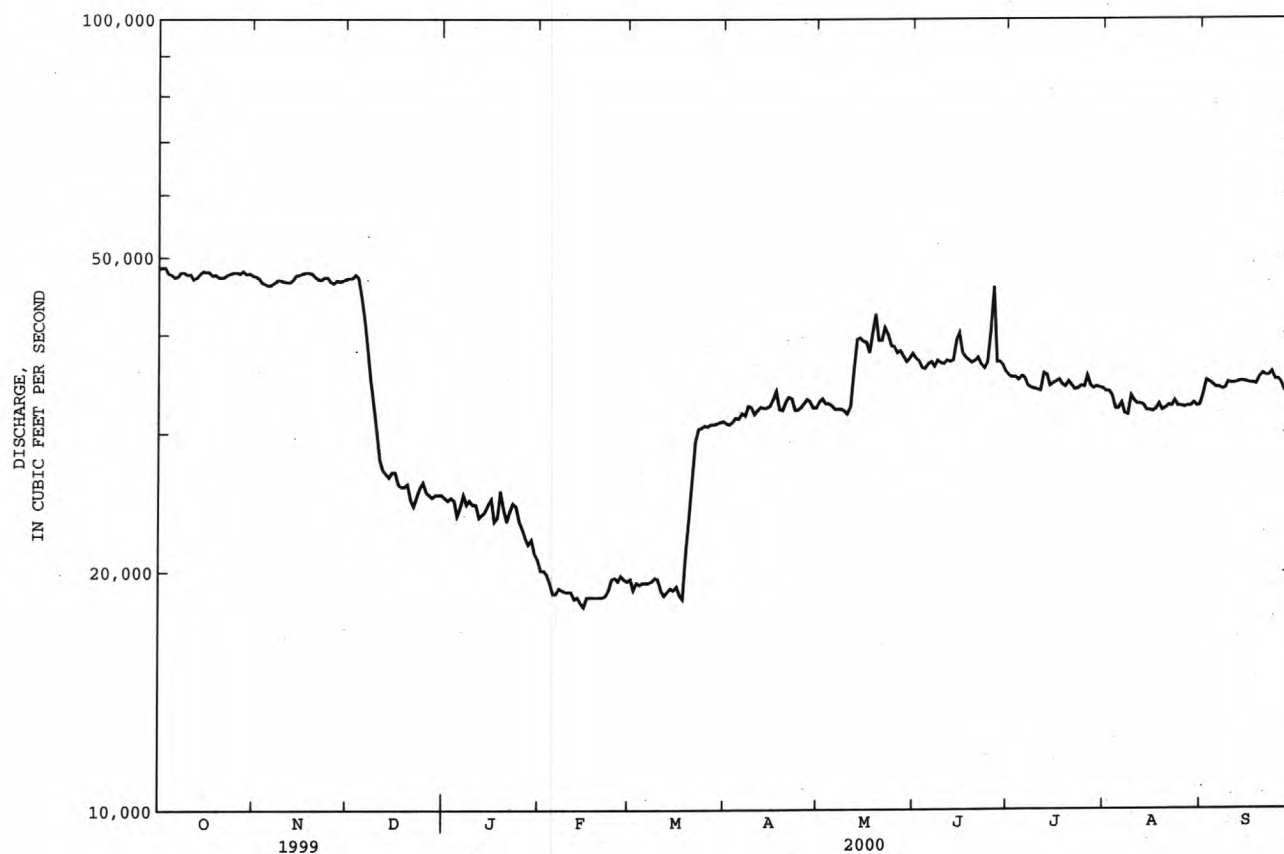
[illegible]

MISSOURI RIVER MAIN STEM

06601200 MISSOURI RIVER AT DECATUR, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1988 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 14628600 | | 12195700 | | 32930 | |
| ANNUAL MEAN | 40080 | | 33320 | | 57440 | 1997 |
| HIGHEST ANNUAL MEAN | | | | | 21450 | 1991 |
| LOWEST ANNUAL MEAN | | | | | 99900 | Apr 15 1997 |
| HIGHEST DAILY MEAN | 56600 | Jul 22 | 48600 | Oct 2 | 7130 | Dec 22 1990 |
| LOWEST DAILY MEAN | 24300 | Dec 22 | 18100 | Feb 15 | 9660 | Dec 12 1990 |
| ANNUAL SEVEN-DAY MINIMUM | 25200 | Dec 21 | 18500 | Feb 12 | 100000 | Apr 15 1997 |
| INSTANTANEOUS PEAK FLOW | | | 49400 | Jun 26 | 32.31 | Jul 18 1996 |
| INSTANTANEOUS PEAK STAGE | | | 26.24 | Jun 26 | 23860000 | |
| ANNUAL RUNOFF (AC-FT) | 29020000 | | 24190000 | | .10 | |
| ANNUAL RUNOFF (CFSM) | .13 | | .11 | | 1.41 | |
| ANNUAL RUNOFF (INCHES) | 1.72 | | 1.43 | | | |
| 10 PERCENT EXCEEDS | 48800 | | 47200 | | 55300 | |
| 50 PERCENT EXCEEDS | 42800 | | 33400 | | 31300 | |
| 90 PERCENT EXCEEDS | 26700 | | 19500 | | 14300 | |

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 SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.23, T.15 N., R.13 E., Douglas County, Hydrologic Unit 10230006, on right bank on left side of concrete floodwall, at foot of Douglas Street, 275 ft downstream from Interstate 480 Highway bridge in Omaha, and at mile 615.9.

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

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

REVISED RECORDS.--WSP 761: Drainage area.

GAGE.--Water-stage 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.--No estimated daily discharge, records good. 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. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water quality data. U.S. Army Corps of Engineers rain gage and satellite data collection platform at station.

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.

COOPERATION.--Records provided by U.S. Geological Survey, Iowa District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 51500 | 50400 | 48500 | 28400 | 23600 | 22900 | 32500 | 33900 | 41400 | 39000 | 36500 | 34000 |
| 2 | 51000 | 50300 | 48400 | 28300 | 23000 | 22700 | 32100 | 34500 | 40700 | 38800 | 36300 | 34700 |
| 3 | 51300 | 50000 | 48100 | 28200 | 22700 | 21800 | 31700 | 34800 | 40600 | 39400 | 36300 | 35900 |
| 4 | 51200 | 49800 | 48500 | 28100 | 22400 | 21900 | 31700 | 34300 | 39800 | 39300 | 36100 | 35400 |
| 5 | 50100 | 49400 | 47200 | 27700 | 21800 | 21500 | 32200 | 34500 | 39300 | 38800 | 34900 | 34900 |
| 6 | 49500 | 49000 | 44900 | 26900 | 21100 | 21400 | 32400 | 34700 | 39800 | 40500 | 35000 | 34700 |
| 7 | 48600 | 48700 | 42300 | 27400 | 20900 | 21400 | 32800 | 34800 | 39900 | 40100 | 35600 | 35000 |
| 8 | 48700 | 48700 | 39100 | 28300 | 21200 | 21700 | 32900 | 35400 | 39000 | 38900 | 34600 | 35100 |
| 9 | 49100 | 48900 | 36700 | 27800 | 21000 | 22000 | 33900 | 34900 | 39300 | 38200 | 34700 | 35200 |
| 10 | 48800 | 49100 | 34500 | 27600 | 21000 | 22300 | 34200 | 34500 | 38800 | 37900 | 36200 | 35800 |
| 11 | 48500 | 49500 | 32100 | 27600 | 20900 | 22600 | 33400 | 34000 | 38800 | 37800 | 35700 | 35900 |
| 12 | 48600 | 49900 | 29900 | 27300 | 20900 | 22100 | 33300 | 34400 | 39400 | 38000 | 35100 | 36000 |
| 13 | 49400 | 49500 | 28900 | 26700 | 20600 | 21900 | 33600 | 37400 | 39000 | 39700 | 35300 | 36100 |
| 14 | 49600 | 49600 | 28500 | 26800 | 20700 | 22200 | 33600 | 40000 | 39400 | 39300 | 35200 | 36200 |
| 15 | 49600 | 50000 | 28300 | 27100 | 20500 | 22300 | 33700 | 40300 | 42400 | 38000 | 34300 | 36300 |
| 16 | 50000 | 50100 | 28600 | 27400 | 20500 | 22000 | 34200 | 39600 | 43000 | 38200 | 34600 | 36100 |
| 17 | 49900 | 50500 | 28300 | 27700 | 21100 | 22100 | 34900 | 38900 | 40900 | 38900 | 34400 | 36000 |
| 18 | 49800 | 50600 | 27600 | 26400 | 21600 | 21900 | 35500 | 38700 | 40500 | 39200 | 34900 | 36000 |
| 19 | 49700 | 50800 | 27500 | 26600 | 21700 | 21600 | 33800 | 41200 | 40800 | 38200 | 35800 | 35800 |
| 20 | 49400 | 51100 | 27600 | 28000 | 21800 | 24100 | 33400 | 43300 | 40800 | 38100 | 35100 | 36300 |
| 21 | 49200 | 50600 | 27600 | 27000 | 22100 | 26900 | 34100 | 41400 | 40700 | 38700 | 35200 | 36900 |
| 22 | 49000 | 50100 | 26700 | 26200 | 22300 | 29800 | 34600 | 41600 | 40700 | 38000 | 35700 | 36700 |
| 23 | 49200 | 50600 | 26400 | 26800 | 22900 | 33100 | 34600 | 43200 | 39900 | 37500 | 35800 | 36800 |
| 24 | 49600 | 50700 | 27000 | 27500 | 23300 | 34300 | 33700 | 42900 | 40100 | 37600 | 35900 | 36900 |
| 25 | 49600 | 49700 | 27800 | 27200 | 24100 | 34000 | 33700 | 42500 | 40600 | 38200 | 35300 | 36100 |
| 26 | 49300 | 49500 | 28300 | 26300 | 23900 | 34000 | 34200 | 42400 | 48600 | 37700 | 35200 | 36000 |
| 27 | 49000 | 48400 | 27600 | 25800 | 23400 | 33600 | 34800 | 42400 | 52300 | 38400 | 35000 | 35200 |
| 28 | 50100 | 48400 | 27600 | 25100 | 23300 | 33200 | 35200 | 42500 | 41700 | 37400 | 35000 | 34400 |
| 29 | 50500 | 48300 | 27700 | 24700 | 23000 | 32900 | 34800 | 41700 | 40900 | 36900 | 34500 | 34600 |
| 30 | 50700 | 48400 | 28000 | 24800 | --- | 32800 | 34200 | 40800 | 39900 | 36900 | 34500 | 34900 |
| 31 | 50500 | --- | 28200 | 24200 | --- | 32800 | --- | 40900 | --- | 36800 | 33800 | --- |
| TOTAL | 1541000 | 1490600 | 1028400 | 835900 | 637300 | 799800 | 1009700 | 1196400 | 1229000 | 1190400 | 1092500 | 1069900 |
| MEAN | 49710 | 49690 | 33170 | 26960 | 21980 | 25800 | 33660 | 38590 | 40970 | 38400 | 35240 | 35660 |
| MAX | 51500 | 51100 | 48500 | 28400 | 24100 | 34300 | 35500 | 43300 | 52300 | 40500 | 36500 | 36900 |
| MIN | 48500 | 48300 | 26400 | 24200 | 20500 | 21400 | 31700 | 33900 | 38800 | 36800 | 33800 | 34000 |
| AC-FT | 3057000 | 2957000 | 2040000 | 1658000 | 1264000 | 1586000 | 2003000 | 2373000 | 2438000 | 2361000 | 2167000 | 2122000 |
| CFSM | .15 | .15 | .10 | .08 | .07 | .08 | .10 | .12 | .13 | .12 | .11 | .11 |
| IN. | .18 | .17 | .12 | .10 | .07 | .09 | .12 | .14 | .14 | .14 | .13 | .12 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2000, BY WATER YEAR (WY)

| | MEAN | 38730 | 34300 | 21230 | 17810 | 19990 | 28220 | 38860 | 38680 | 42190 | 40840 | 39340 | 39290 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 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 | |

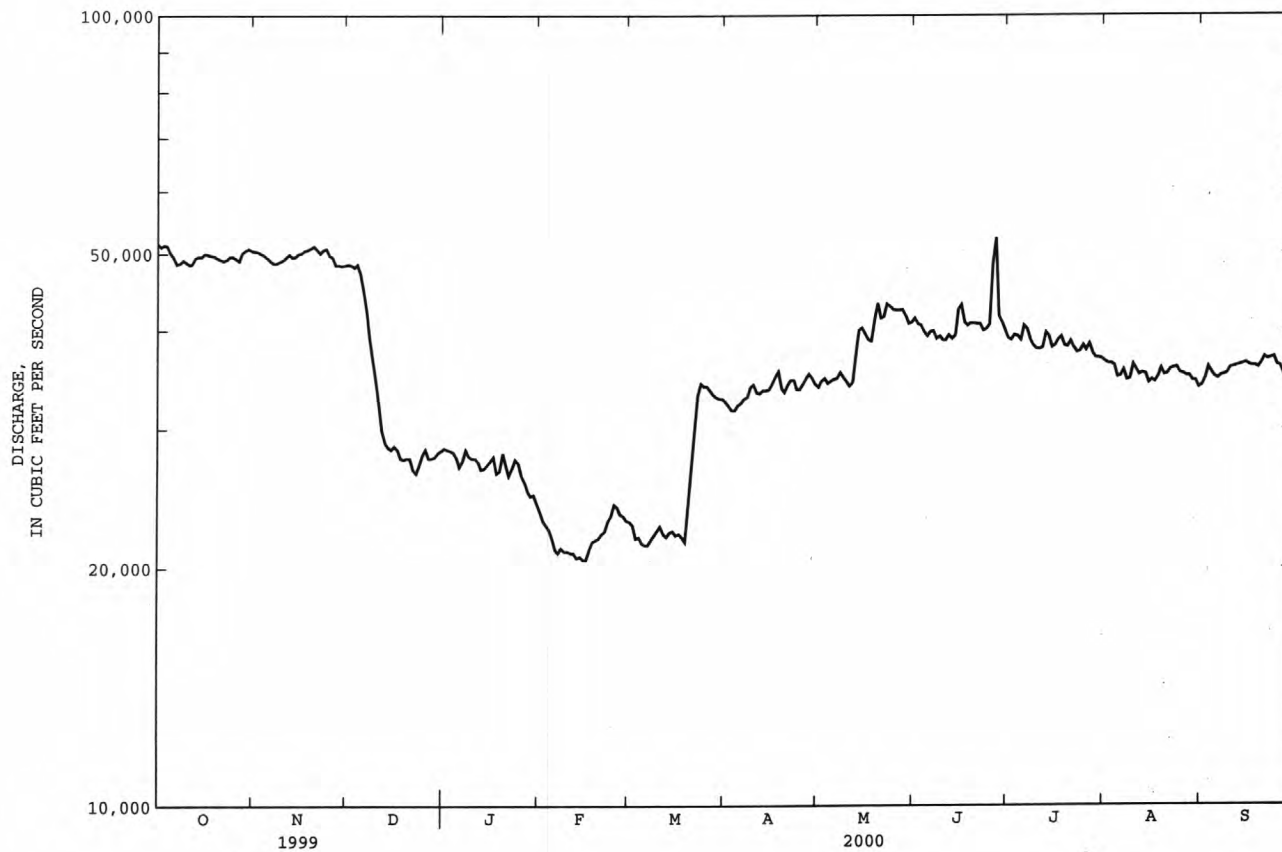
MISSOURI RIVER MAIN STEM

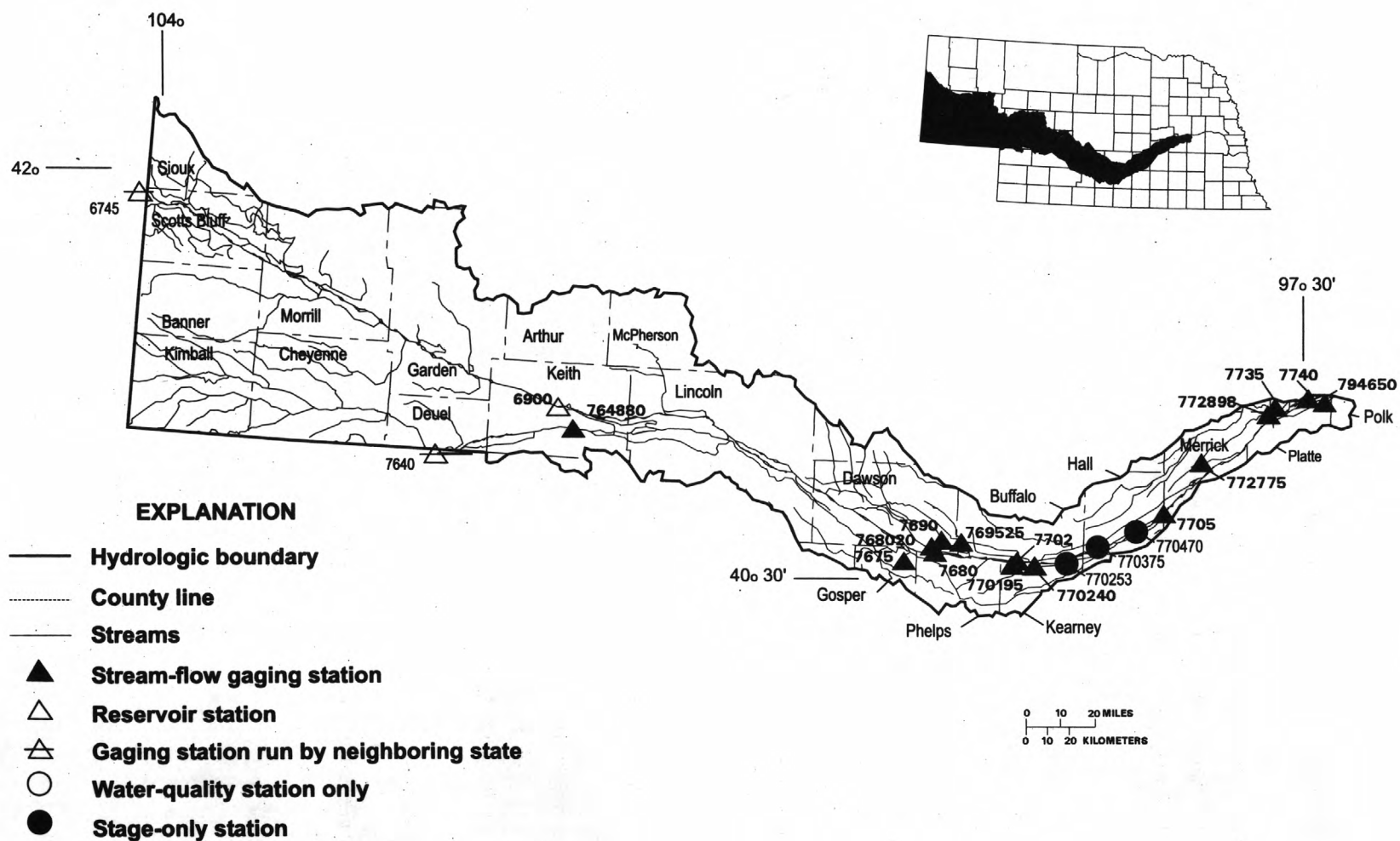
06610000 MISSOURI RIVER AT OMAHA, NE--Continued
(National stream-quality accounting network station)

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1953 - 2000a | |
|--------------------------|------------------------|--------|---------------------|---------|--------------------------|-------------|
| ANNUAL TOTAL | 16425000 | | 13120900 | | 33330 | |
| ANNUAL MEAN | 45000 | | 35850 | | 62150 | 1997 |
| HIGHEST ANNUAL MEAN | | | | | 20490 | 1957 |
| LOWEST ANNUAL MEAN | | | | | 116000 | Apr 4 1960 |
| HIGHEST DAILY MEAN | 70900 | Aug 7 | 52300 | Jun 27 | 2440 | Dec 14 1961 |
| LOWEST DAILY MEAN | 26400 | Dec 23 | 20500 | Feb 15b | 4300 | Nov 28 1955 |
| ANNUAL SEVEN-DAY MINIMUM | 27200 | Dec 18 | 20700 | Feb 10 | 120000 | Apr 1 1960 |
| INSTANTANEOUS PEAK FLOW | | | 56600 | Jun 27 | 30.26 | Jul 10 1993 |
| INSTANTANEOUS PEAK STAGE | | | 21.13 | Jun 27 | | |
| INSTANTANEOUS LOW FLOW | | | 20400 | Feb 16 | | |
| ANNUAL RUNOFF (AC-FT) | 32580000 | | 26030000 | | 24150000 | |
| ANNUAL RUNOFF (CFSM) | .14 | | .11 | | .10 | |
| ANNUAL RUNOFF (INCHES) | 1.89 | | 1.51 | | 1.40 | |
| 10 PERCENT EXCEEDS | 55700 | | 49500 | | 52900 | |
| 50 PERCENT EXCEEDS | 48400 | | 35300 | | 32700 | |
| 90 PERCENT EXCEEDS | 29600 | | 22700 | | 13600 | |

a Post regulation.

b Also Feb. 16.





PLATTE RIVER BASIN
NORTH - SOUTH - MIDDLE PLATTE

75

| *Station number | Station name | Page |
|--------------------|---|------|
| 6745 | North Platte River at Wyoming-Nebraska State Line..... | 76 |
| 6900 | Lake McConaughy near Keystone..... | 78 |
| 7640 | South Platte River at Julesburg, CO..... | 80 |
| 764880 | South Platte River at Roscoe..... | 82 |
| 7675 | Plum Creek near Smithfield..... | 84 |
| 7680 | Platte River near Overton..... | 86 |
| 768020 | Spring Creek near Overton..... | 90 |
| 7690 | Buffalo Creek near Overton..... | 92 |
| 769525 | Elm Creek near Elm Creek..... | 94 |
| 770195 | North Dry Creek 2 mi SW of Platte River bridge S of Kearney..... | 96 |
| 7702 | Platte River near Kearney..... | 98 |
| 770240 | Fort Kearney Slough near Newark..... | 100 |
| 770253 | Platte River near Newark..... | 102 |
| 770375 | Platte River near Prosser..... | 103 |
| 770470 | Platte River near Doniphan..... | 104 |
| 7705 | Platte River near Grand Island..... | 106 |
| 772775 | Warm Slough near Central City..... | 108 |
| 772898 | Silver Creek at Mile 4 near Silver Creek..... | 110 |
| 7735 | Prairie Creek near Silver Creek..... | 112 |
| 7740 | Platte River near Duncan..... | 114 |
| 794650 | Clear Creek 1.75 mi W of Polk County Line..... (Record listed in Lower Platte River Basin) | 146 |

* 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.

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.--Records provided by U.S. Geological Survey, Wyoming District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 647 | 307 | 250 | 217 | 228 | 234 | 204 | 693 | 1110 | 1310 | 1300 | 1160 |
| 2 | 601 | 301 | 247 | 220 | 228 | 232 | 204 | 799 | 1100 | 1320 | 1310 | 1070 |
| 3 | 551 | 300 | 247 | 219 | 231 | 232 | 200 | 726 | 1090 | 1330 | 1350 | 959 |
| 4 | 513 | 300 | 243 | 220 | 222 | 229 | 198 | 687 | 1020 | 1340 | 1390 | 889 |
| 5 | 490 | 295 | 240 | 219 | 222 | 222 | 198 | 732 | 1030 | 1370 | 1350 | 842 |
| 6 | 468 | 292 | 239 | 225 | 224 | 220 | 198 | 744 | 894 | 1400 | 1380 | 798 |
| 7 | 456 | 290 | 239 | 216 | 224 | 222 | 195 | 794 | 625 | 1400 | 1380 | 716 |
| 8 | 444 | 291 | 239 | 216 | 225 | 250 | 271 | 737 | 514 | 1380 | 1330 | 698 |
| 9 | 432 | 289 | 236 | 220 | 225 | 241 | 542 | 686 | 535 | 1370 | 1310 | 706 |
| 10 | 418 | 285 | 236 | 224 | 225 | 245 | 701 | 621 | 600 | 1350 | 1360 | 699 |
| 11 | 410 | 286 | 236 | 216 | 225 | 240 | 798 | 632 | 645 | 1540 | 1280 | 681 |
| 12 | 402 | 284 | 240 | 214 | 226 | 239 | 891 | 621 | 650 | 1490 | 1300 | 679 |
| 13 | 395 | 284 | 240 | 208 | 230 | 239 | 892 | 599 | 771 | 1520 | 1320 | 666 |
| 14 | 385 | 284 | 238 | 213 | 229 | 237 | 713 | 598 | 865 | 1460 | 1340 | 619 |
| 15 | 379 | 283 | 242 | 213 | 235 | 232 | 627 | 610 | 888 | 1390 | 1300 | 604 |
| 16 | 376 | 278 | 232 | 211 | 235 | 234 | 527 | 585 | 960 | 1380 | 1280 | 587 |
| 17 | 371 | 276 | 236 | 214 | 240 | 232 | 469 | 638 | 1070 | 1410 | 1260 | 578 |
| 18 | 366 | 278 | 234 | 212 | 240 | 230 | 451 | 865 | 1090 | 1470 | 1290 | 574 |
| 19 | 361 | 271 | 229 | 221 | 239 | 225 | 532 | 972 | 1140 | 1430 | 1330 | 624 |
| 20 | 353 | 269 | 223 | 215 | 237 | 242 | 464 | 1180 | 1260 | 1370 | 1330 | 756 |
| 21 | 348 | 268 | 222 | 213 | 234 | 240 | 412 | 1230 | 1340 | 1360 | 1330 | 700 |
| 22 | 341 | 267 | 220 | 215 | 233 | 232 | 376 | 1250 | 1360 | 1280 | 1340 | 665 |
| 23 | 340 | 265 | 218 | 216 | 233 | 232 | 350 | 1460 | 1390 | 1220 | 1330 | 632 |
| 24 | 336 | 262 | 218 | 218 | 234 | 229 | 337 | 1800 | 1420 | 1200 | 1310 | 585 |
| 25 | 331 | 261 | 218 | 224 | 242 | 225 | 332 | 1810 | 1490 | 1200 | 1260 | 529 |
| 26 | 324 | 258 | 218 | 225 | 240 | 223 | 365 | 1650 | 1550 | 1200 | 1240 | 470 |
| 27 | 319 | 254 | 217 | 225 | 239 | 215 | 422 | 1450 | 1490 | 1260 | 1230 | 643 |
| 28 | 316 | 254 | 215 | 230 | 242 | 211 | 451 | 1300 | 1490 | 1280 | 1200 | 916 |
| 29 | 315 | 254 | 213 | 235 | 238 | 211 | 473 | 1230 | 1380 | 1250 | 1170 | 992 |
| 30 | 312 | 253 | 212 | 236 | --- | 209 | 540 | 1230 | 1340 | 1280 | 1120 | 747 |
| 31 | 308 | --- | 212 | 231 | --- | 205 | --- | 1160 | --- | 1310 | 1080 | --- |
| TOTAL | 12408 | 8339 | 7149 | 6801 | 6725 | 7109 | 13333 | 30089 | 32107 | 41870 | 40100 | 21784 |
| MEAN | 400 | 278 | 231 | 219 | 232 | 229 | 444 | 971 | 1070 | 1351 | 1294 | 726 |
| MAX | 647 | 307 | 250 | 236 | 242 | 250 | 892 | 1810 | 1550 | 1540 | 1390 | 1160 |
| MIN | 308 | 253 | 212 | 208 | 222 | 205 | 195 | 585 | 514 | 1200 | 1080 | 470 |
| AC-FT | 24610 | 16540 | 14180 | 13490 | 13340 | 14100 | 26450 | 59680 | 63680 | 83050 | 79540 | 43210 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2000, BY WATER YEAR (WY)

| | MEAN | 507 | 422 | 373 | 331 | 336 | 509 | 668 | 1202 | 1694 | 1552 | 1269 | 866 |
|------|------|------|------|------|------|------|------|------|-------|------|------|------|-----|
| 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 | |

PLATTE RIVER BASIN

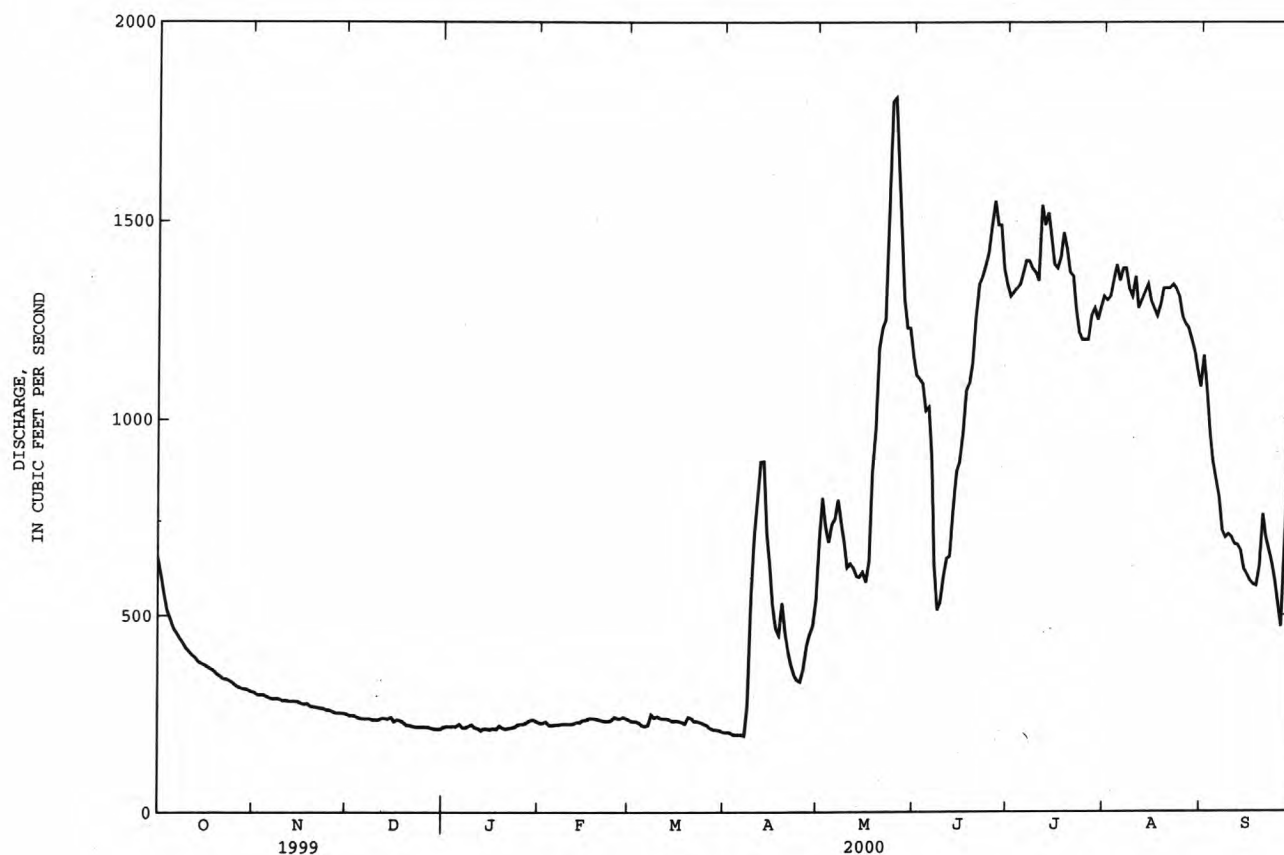
06674500 NORTH PLATTE RIVER AT WYOMING-NEBRASKA STATE LINE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1929 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 469262 | | 227814 | | -- | |
| ANNUAL MEAN | 1286 | | 622 | | 795 | |
| HIGHEST ANNUAL MEAN | -- | | -- | | 2863 | 1984 |
| LOWEST ANNUAL MEAN | -- | | -- | | 388 | 1992 |
| HIGHEST DAILY MEAN | 4350 | Jul 3 | 1810 | May 25 | 17600 | Jun 2 1929 |
| LOWEST DAILY MEAN | 160 | Jan 3 | 195 | Apr 7 | 3.9 | May 13 1992 |
| ANNUAL SEVEN-DAY MINIMUM | 184 | Mar 25 | 200 | Apr 1 | 4.4 | Jun 20 1992 |
| INSTANTANEOUS PEAK FLOW | -- | | 1910 | May 24 | *17900 | Jun 2 1929 |
| INSTANTANEOUS PEAK STAGE | -- | | 3.55 | May 24 | **7.04 | Jun 2 1929 |
| ANNUAL RUNOFF (AC-FT) | 930800 | | 451900 | | 575600 | |
| 10 PERCENT EXCEEDS | 3980 | | 1340 | | 1470 | |
| 50 PERCENT EXCEEDS | 490 | | 390 | | 488 | |
| 90 PERCENT EXCEEDS | 203 | | 218 | | 210 | |

* Maximum observed.

** Site and datum then in use.

e Estimated.



PLATTE RIVER BASIN

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, 1,568,000 acre-ft Oct. 4-6, elevation, 3,259.1 ft; minimum observed, 876,000 acre-ft Sept. 15, elevation, 3,230.0 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| Date | *Elevation (feet) | Contents (acre- feet) | Change in contents (acre- feet) |
|---------------|----------------------|-----------------------------|--|
| Sep. 30..... | 3,259.2 | 1,571,000 | -- |
| Oct. 31..... | 3,258.3 | 1,546,000 | -25,000 |
| Nov. 30..... | 3,257.4 | 1,520,000 | -26,000 |
| Dec. 31..... | 3,257.2 | 1,515,000 | -5,000 |
| CAL YR 1999 | -- | -- | +211,000 |
| Jan. 31..... | 3,257.0 | 1,509,000 | -6,000 |
| Feb. 29..... | 3,257.0 | 1,509,000 | 0 |
| Mar. 31..... | 3,257.3 | 1,518,000 | +9,000 |
| Apr. 30..... | 3,255.8 | 1,476,000 | -42,000 |
| May 31..... | 3,254.4 | 1,438,000 | -38,000 |
| June 30..... | 3,248.1 | 1,276,000 | -162,000 |
| July 31..... | 3,239.1 | 1,067,000 | -209,000 |
| Aug. 31..... | 3,230.6 | 888,000 | -179,000 |
| Sept. 30..... | 3,231.2 | 900,000 | +12,000 |
| WTR YR 2000 | -- | -- | -671,000 |

*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 ¼ NE ¼ and NE ¼ SE ¼ (two channels) sec.33, T.12 N., R.44 W., Sedgwick County, Hydrologic Unit 10190018, on left bank of channel 4 (left channel) 215 ft downstream from bridge, and on right bank of channel 2, 5 ft downstream from bridge on U.S. Highway 385, 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 estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation of 1,200,000 acres upstream from station, and return flow from irrigated areas.

COOPERATION.--Records provided by U.S. Geological Survey, Colorado District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| 1 | 1550 | 762 | 780 | e1470 | 1030 | 774 | 916 | 319 | 202 | 25 | 18 | 34 |
| 2 | 1700 | 746 | 784 | e1360 | 1010 | 788 | 859 | 252 | 192 | 23 | 25 | 38 |
| 3 | 1630 | 733 | 774 | e1390 | 1040 | 770 | 814 | 275 | 119 | 19 | 20 | 35 |
| 4 | 1410 | 743 | 737 | e1390 | 1210 | 766 | 766 | 296 | 102 | 22 | 18 | 42 |
| 5 | 1340 | 753 | 882 | e1380 | 1280 | 800 | 912 | 262 | 99 | 24 | 19 | 48 |
| 6 | 1260 | 777 | 1100 | e1410 | 1320 | 804 | 1010 | 264 | 87 | 28 | 29 | 60 |
| 7 | 1190 | 785 | 1110 | e1420 | 1320 | 858 | 955 | 226 | 68 | 27 | 31 | 125 |
| 8 | 1170 | 786 | 1150 | e1420 | 1330 | 1210 | 823 | 198 | 60 | 25 | 22 | 162 |
| 9 | 1110 | 787 | 1140 | e1400 | 1320 | 1290 | 709 | 190 | 54 | 29 | 16 | 132 |
| 10 | 1050 | 790 | 1140 | e1360 | 1320 | 1130 | 667 | 167 | 46 | 28 | 14 | 91 |
| 11 | 981 | 781 | 1140 | e1350 | 1370 | 1060 | 644 | 143 | 43 | 30 | 14 | 73 |
| 12 | 911 | 760 | 1120 | e1350 | 1370 | 1070 | 660 | 146 | 44 | 33 | 13 | 75 |
| 13 | 808 | 736 | 1150 | e1310 | 1310 | 1060 | 621 | 140 | 36 | 39 | 12 | 77 |
| 14 | 747 | 718 | 1170 | e1280 | 1300 | 1030 | 547 | 136 | 33 | 26 | 14 | 86 |
| 15 | 737 | 712 | 1150 | e1260 | 1300 | 1010 | 516 | 135 | 36 | 21 | 14 | 67 |
| 16 | 730 | 703 | 1110 | e1230 | 1310 | 968 | 500 | 138 | 36 | 16 | 19 | 56 |
| 17 | 713 | 684 | 1110 | e1230 | 1350 | 955 | 477 | 129 | 48 | 21 | 161 | 47 |
| 18 | 688 | 686 | 1130 | e1200 | 1350 | 952 | 457 | 122 | 44 | 21 | 64 | 39 |
| 19 | 673 | 661 | 1180 | e1160 | 1350 | 878 | 453 | 117 | 42 | 23 | 37 | 35 |
| 20 | 673 | 652 | 1290 | e1110 | 1330 | 856 | 373 | 103 | 39 | 28 | 29 | 46 |
| 21 | 704 | 636 | 1380 | 1070 | 1290 | 888 | 313 | 133 | 31 | 31 | 31 | 20 |
| 22 | 753 | 646 | 1380 | 1080 | 1300 | 882 | 250 | 291 | 30 | 23 | 25 | 17 |
| 23 | 792 | 676 | 1410 | 1050 | 1300 | 862 | 218 | 254 | 32 | 20 | 34 | 32 |
| 24 | 807 | 699 | 1410 | 1030 | 1160 | 856 | 239 | 124 | 26 | 17 | 33 | 64 |
| 25 | 811 | 731 | 1400 | 1030 | 938 | 862 | 219 | 96 | 19 | 17 | 21 | 66 |
| 26 | 842 | 760 | 1420 | 1020 | 836 | 922 | 183 | 83 | 22 | 17 | 17 | 96 |
| 27 | 859 | 843 | 1510 | 1010 | 766 | 951 | 149 | 73 | 27 | 17 | 17 | 139 |
| 28 | 828 | 847 | e1560 | 1040 | 758 | 955 | 142 | 68 | 28 | 23 | 14 | 129 |
| 29 | 834 | 837 | e1610 | 1050 | 768 | 937 | 139 | 72 | 28 | 24 | 13 | 95 |
| 30 | 795 | 802 | e1590 | 1010 | --- | 934 | 327 | 84 | 34 | 22 | 18 | 78 |
| 31 | 779 | --- | e1570 | 1000 | --- | 949 | --- | 164 | --- | 20 | 32 | --- |
| TOTAL | 29875 | 22232 | 37387 | 37870 | 34636 | 29027 | 15858 | 5200 | 1707 | 739 | 844 | 2104 |
| MEAN | 964 | 741 | 1206 | 1222 | 1194 | 936 | 529 | 168 | 56.9 | 23.8 | 27.2 | 70.1 |
| MAX | 1700 | 847 | 1610 | 1470 | 1370 | 1290 | 1010 | 319 | 202 | 39 | 161 | 162 |
| MIN | 673 | 636 | 737 | 1000 | 758 | 766 | 139 | 68 | 19 | 16 | 12 | 17 |
| AC-FT | 59260 | 44100 | 74160 | 75120 | 68700 | 57580 | 31450 | 10310 | 3390 | 1470 | 1670 | 4170 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1902 - 2000, BY WATER YEAR (WY)

| | 321 | 361 | 422 | 539 | 620 | 563 | 556 | 1080 | 1518 | 311 | 191 | 253 |
|------|------|------|------|------|------|------|------|------|-------|------|------|------|
| MEAN | 321 | 361 | 422 | 539 | 620 | 563 | 556 | 1080 | 1518 | 311 | 191 | 253 |
| MAX | 2427 | 2358 | 1371 | 1571 | 1864 | 2200 | 2808 | 9922 | 12200 | 5059 | 1882 | 1964 |
| (WY) | 1985 | 1985 | 1985 | 1998 | 1930 | 1939 | 1983 | 1980 | 1983 | 1983 | 1997 | 1984 |
| MIN | 5.85 | 23.0 | 18.8 | 89.9 | 78.9 | 56.9 | 17.3 | 24.1 | 8.33 | 2.15 | 2.52 | 5.60 |
| (WY) | 1904 | 1911 | 1912 | 1965 | 1935 | 1904 | 1904 | 1911 | 1910 | 1903 | 1902 | 1903 |

PLATTE RIVER BASIN

06764000 SOUTH PLATTE RIVER AT JULESBURG, CO--Continued

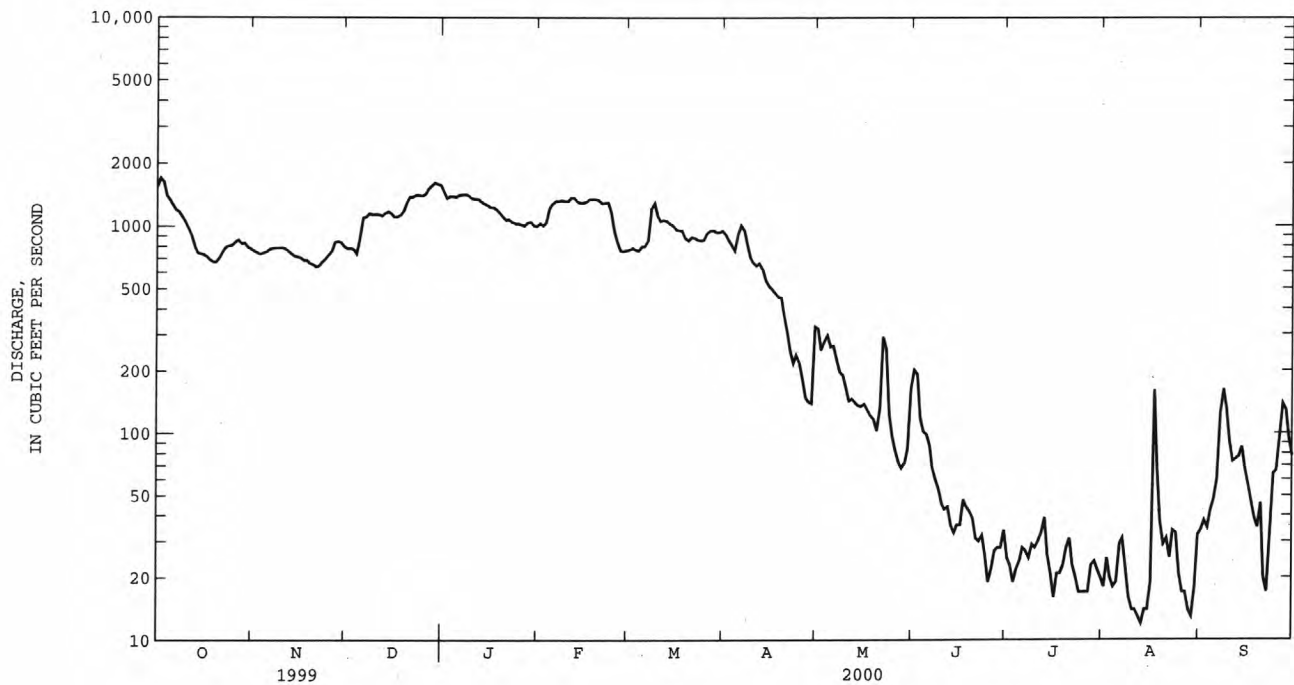
| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1902 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 536355 | | 217479 | | 565 | |
| ANNUAL MEAN | 1469 | | 594 | | 2882 | |
| HIGHEST ANNUAL MEAN | | | | | 76.3 | |
| LOWEST ANNUAL MEAN | | | | | 1983 | |
| HIGHEST DAILY MEAN | 14100 | May 6 | 1700 | Oct 2 | 30800 | Jun 16 1921 |
| LOWEST DAILY MEAN | 101 | Apr 19 | 12 | Aug 13 | *.00 | Aug 18 1902 |
| ANNUAL SEVEN-DAY MINIMUM | 133 | Jul 13 | 14 | Aug 9 | .00 | Jul 25 1903 |
| INSTANTANEOUS PEAK FLOW | | | 1790 | Oct 2 | 37600 | Jun 20 1965 |
| INSTANTANEOUS PEAK STAGE | | | **5.54 | Oct 2 | ***10.44 | Jun 20 1965 |
| ANNUAL RUNOFF (AC-FT) | 1064000 | | 431400 | | 409100 | |
| 10 PERCENT EXCEEDS | 3970 | | 1320 | | 1180 | |
| 50 PERCENT EXCEEDS | 785 | | 687 | | 238 | |
| 90 PERCENT EXCEEDS | 283 | | 23 | | 29 | |

e Estimated.

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

** Gage height recorded for channel #1.

*** 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 1/4 SW 1/4 sec.4, T.13 N., R.37 W., Keith County, Hydrologic Unit 10190018, on left bank 20 ft downstream from bridge on Highway L-51B connecting Interstate 80 and U.S. Highway 30, 0.5 mi southeast of Roscoe and at mile 54.1.

DRAINAGE AREA...23,900 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 periods, 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 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|--------|-------|--------|
| 1 | 1730 | 658 | 865 | 2150 | 1250 | 1060 | 1330 | 265 | 127 | 10 | .00 | .00 |
| 2 | 1740 | 589 | 844 | 1990 | 1300 | 1090 | 1320 | 344 | 174 | 10 | .00 | .00 |
| 3 | 1870 | 554 | 771 | 1780 | 1200 | 1120 | 1260 | 375 | 169 | 11 | .00 | .00 |
| 4 | 1620 | 512 | 672 | 1580 | 1260 | 1100 | 1230 | 358 | 129 | 10 | .00 | .00 |
| 5 | 1310 | 506 | 613 | 1620 | 1420 | 1130 | 1320 | 345 | 105 | 10 | .00 | .00 |
| 6 | 1180 | 556 | 858 | 1650 | 1500 | 1140 | 1440 | 332 | 93 | 9.6 | .00 | .00 |
| 7 | 1140 | 642 | 1140 | 1740 | 1520 | 1130 | 1400 | 280 | 89 | 7.5 | .00 | .00 |
| 8 | 1070 | 684 | 1220 | 1820 | 1610 | 1330 | 1310 | 266 | 69 | 6.2 | .15 | .00 |
| 9 | 1060 | 725 | 1260 | 1860 | 1670 | 1660 | 1310 | 250 | 60 | 16 | 2.0 | .00 |
| 10 | 1090 | 751 | 1280 | 1760 | 1710 | 1740 | 1330 | 213 | 49 | 4.9 | .02 | .06 |
| 11 | 1120 | 749 | 1410 | 1640 | 1800 | 1590 | 1330 | 173 | 41 | 3.8 | .00 | .65 |
| 12 | 1080 | 703 | 1460 | 1620 | 1930 | 1520 | 1340 | 175 | 35 | 2.8 | .00 | 1.2 |
| 13 | 972 | 625 | 1500 | 1580 | 1930 | 1480 | 1380 | 294 | 38 | 2.7 | .00 | 3.8 |
| 14 | 894 | 566 | 1550 | 1580 | 1900 | 1420 | 1300 | 468 | 31 | 1.5 | .00 | 9.9 |
| 15 | 844 | 516 | 1460 | 1640 | 1910 | 1260 | 1060 | 306 | 27 | .92 | .00 | 19 |
| 16 | e850 | 499 | 1340 | 1590 | 1840 | 1100 | 1060 | 133 | 25 | 1.0 | .00 | 20 |
| 17 | e850 | 508 | 1240 | 1640 | 1760 | 1020 | 860 | 162 | 24 | .64 | .00 | 15 |
| 18 | e840 | 499 | 1200 | 1600 | 1690 | 979 | 712 | 152 | 26 | .58 | .00 | 12 |
| 19 | e840 | 490 | 1300 | 1520 | 1660 | 943 | 613 | 152 | 28 | .43 | .12 | 20 |
| 20 | e840 | 476 | 1490 | 1400 | 1680 | 838 | 563 | 140 | 20 | .21 | .75 | 50 |
| 21 | e830 | 470 | 1700 | 1360 | 1670 | 862 | 449 | 119 | 15 | 2.6 | .04 | 45 |
| 22 | e830 | 440 | 1850 | 1320 | 1610 | 1000 | 276 | 123 | 13 | 2.4 | .00 | 53 |
| 23 | e830 | 421 | 1880 | 1200 | 1590 | 1030 | 204 | 186 | 14 | 5.8 | .00 | 40 |
| 24 | e840 | 363 | 1920 | 1180 | 1550 | 1010 | 226 | 229 | 14 | 7.5 | .00 | 47 |
| 25 | e840 | 429 | 1850 | 1250 | 1270 | 997 | 246 | 167 | 12 | 2.4 | .00 | 67 |
| 26 | 817 | 561 | 1770 | 1350 | 972 | 1080 | 250 | 158 | 12 | .00 | .00 | 88 |
| 27 | 838 | 611 | 1740 | 1400 | 903 | 1190 | 241 | 142 | 12 | 1.9 | .00 | 58 |
| 28 | 852 | 688 | 1780 | 1340 | 940 | 1180 | 240 | 109 | 14 | 5.6 | .00 | 40 |
| 29 | 850 | 731 | 1910 | 1370 | 1020 | 1140 | 198 | 101 | 11 | .79 | .00 | 28 |
| 30 | 809 | 827 | 2010 | 1420 | --- | 1160 | 197 | 94 | 11 | .25 | .00 | 35 |
| 31 | 734 | --- | 2090 | 1300 | --- | 1230 | --- | 110 | --- | .05 | .00 | --- |
| TOTAL | 32010 | 17349 | 43973 | 48250 | 44065 | 36529 | 25995 | 6721 | 1487 | 139.07 | 14.96 | 652.61 |
| MEAN | 1033 | 578 | 1418 | 1556 | 1519 | 1178 | 866 | 217 | 49.6 | 4.49 | .48 | 21.8 |
| MAX | 1870 | 827 | 2090 | 2150 | 1930 | 1740 | 1440 | 468 | 174 | 16 | 12 | 88 |
| MIN | 734 | 363 | 613 | 1180 | 903 | 838 | 197 | 94 | 11 | .00 | .00 | .00 |
| AC-FT | 63490 | 34410 | 87220 | 95700 | 87400 | 72460 | 51560 | 13330 | 2950 | 276 | 30 | 1290 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2000, BY WATER YEAR (WY)

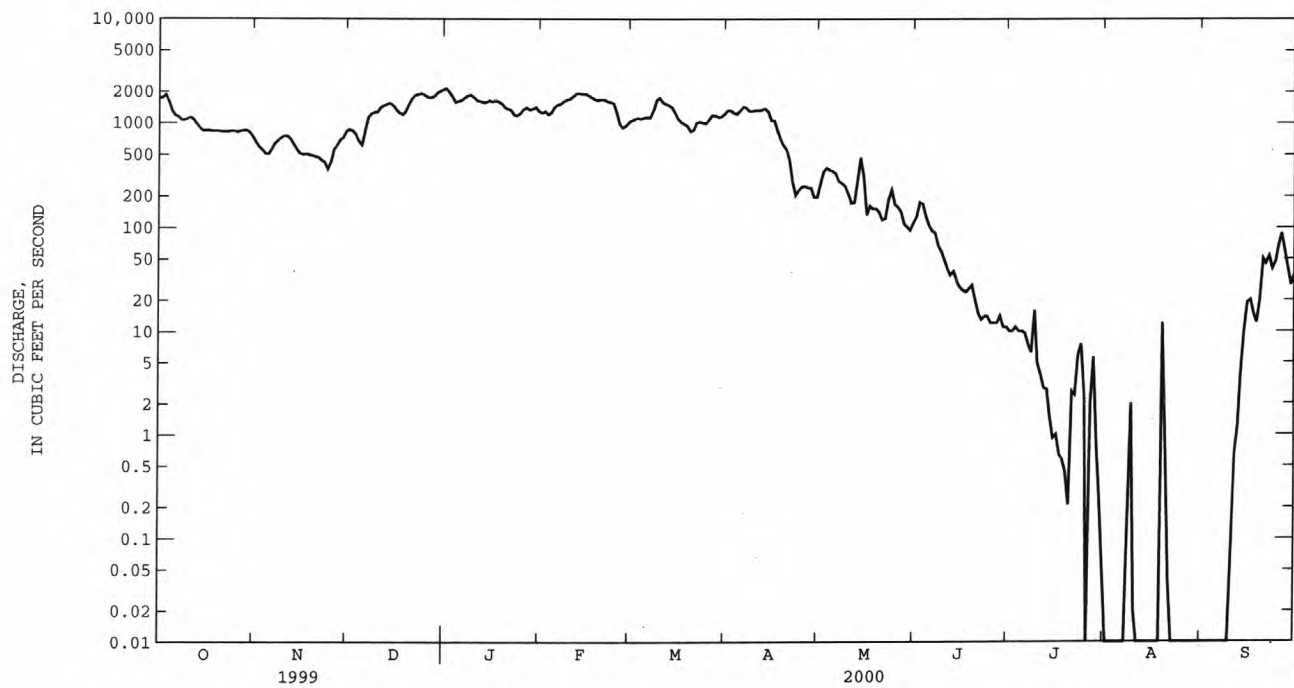
| | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|------|------|------|------|------|------|------|------|------|-------|------|------|------|
| MEAN | 611 | 506 | 613 | 953 | 1133 | 867 | 890 | 1552 | 2893 | 798 | 387 | 586 |
| MAX | 2392 | 2183 | 1418 | 1867 | 2280 | 1519 | 2767 | 7044 | 13800 | 6081 | 1924 | 2189 |
| (WY) | 1985 | 1985 | 2000 | 1998 | 1984 | 1987 | 1984 | 1983 | 1995 | 1995 | 1997 | 1996 |
| MIN | 96.9 | 77.5 | 98.5 | 145 | 455 | 273 | 199 | 76.7 | 49.6 | 4.49 | .48 | .12 |
| (WY) | 1995 | 1995 | 1990 | 1995 | 1995 | 1995 | 1989 | 1992 | 2000 | 2000 | 2000 | 1994 |

PLATTE RIVER BASIN

06764880 SOUTH PLATTE RIVER AT ROSCOE, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1983 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 586498 | | 257185.64 | | 979 | |
| ANNUAL MEAN | 1607 | | 703 | | 2941 | |
| HIGHEST ANNUAL MEAN | | | | | 281 | |
| LOWEST ANNUAL MEAN | | | | | 18100 | |
| HIGHEST DAILY MEAN | 14100 | May 7 | 2150 | Jan 1 | | Jun 6 1995 |
| LOWEST DAILY MEAN | 110 | Aug 1 | .00 | Jul 26 | .00 | Sep 11 1994 |
| ANNUAL SEVEN-DAY MINIMUM | 150 | Jul 27 | .00 | Aug 1 | .00 | Sep 11 1994 |
| INSTANTANEOUS PEAK FLOW | | | 2250 | Jan 1 | 20100 | Jun 6 1995 |
| INSTANTANEOUS PEAK STAGE | | | 5.89 | Jan 1 | 11.29 | Jun 6 1995 |
| ANNUAL RUNOFF (AC-FT) | 1163000 | | 510100 | | 709000 | |
| 10 PERCENT EXCEEDS | 4330 | | 1650 | | 1970 | |
| 50 PERCENT EXCEEDS | 852 | | 612 | | 450 | |
| 90 PERCENT EXCEEDS | 286 | | .03 | | 45 | |

e Estimated.



PLATTE RIVER BASIN

06767500 PLUM CREEK NEAR SMITHFIELD, NE

LOCATION.--Lat 40°38'30", long 099°42'37", in SE 1/4 SW 1/4 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 good except for estimated periods, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | 15 | 17 | 16 | 17 | 20 | 19 | 19 | 33 | 17 | 18 | 15 | 15 |
| 2 | 15 | 17 | 16 | 17 | 20 | 19 | 19 | 23 | 17 | 16 | 15 | 14 |
| 3 | 17 | 17 | 16 | 17 | 20 | 19 | 19 | 21 | 17 | 24 | 15 | 14 |
| 4 | 16 | 18 | 16 | 18 | 20 | 22 | 19 | 20 | 17 | 134 | 15 | 13 |
| 5 | 16 | 18 | 17 | 19 | 20 | 21 | 19 | 20 | 16 | 60 | 15 | 13 |
| 6 | 16 | 18 | 16 | 19 | 19 | 20 | 19 | 19 | 16 | 19 | 15 | 12 |
| 7 | 16 | 18 | 16 | 17 | 19 | 20 | 19 | 19 | 16 | 16 | 15 | 11 |
| 8 | 16 | 18 | 16 | 17 | 19 | 24 | 18 | 23 | 16 | 16 | 14 | 11 |
| 9 | 17 | 18 | 16 | 17 | 19 | 28 | 18 | 26 | 16 | 16 | 14 | 11 |
| 10 | 17 | 18 | 16 | 17 | 19 | 21 | 19 | 21 | 16 | 18 | 15 | 11 |
| 11 | 16 | 18 | 16 | 17 | 19 | 20 | 18 | 20 | 16 | 50 | 15 | 11 |
| 12 | 16 | 18 | 16 | 18 | 20 | 19 | 18 | 20 | 15 | 20 | 14 | 11 |
| 13 | 16 | 18 | 16 | 18 | 20 | 19 | 18 | 18 | 15 | 18 | 15 | 9.9 |
| 14 | 16 | 18 | 15 | 17 | 20 | 19 | 19 | 18 | 15 | 17 | 15 | 11 |
| 15 | 17 | 18 | 15 | 17 | 20 | 19 | 19 | 18 | 15 | 17 | 15 | 9.8 |
| 16 | 17 | 18 | 15 | 18 | 19 | 19 | 19 | 18 | 15 | 18 | 14 | 9.6 |
| 17 | 17 | 18 | 15 | 18 | 19 | 18 | 20 | 18 | 15 | 19 | 13 | 9.6 |
| 18 | 16 | 18 | 14 | 18 | 19 | 18 | 20 | 18 | 15 | 21 | 14 | 9.4 |
| 19 | 17 | 18 | 14 | 18 | 20 | 19 | 20 | 18 | 21 | 20 | 15 | 9.4 |
| 20 | 17 | 17 | 15 | 18 | 19 | 21 | 20 | 18 | 24 | 18 | 15 | 9.7 |
| 21 | 17 | 17 | 15 | 18 | 19 | 20 | 19 | 18 | 20 | 18 | 16 | 11 |
| 22 | 17 | 17 | e13 | 18 | 21 | 19 | 19 | 18 | 18 | 18 | 15 | 11 |
| 23 | 17 | 17 | e14 | 18 | 23 | 19 | 19 | 18 | 18 | 18 | 15 | 11 |
| 24 | 17 | 17 | e15 | 18 | 34 | 23 | 19 | 18 | 18 | 19 | 15 | 11 |
| 25 | 17 | 17 | e16 | 18 | 27 | 23 | 19 | 17 | 17 | 19 | 15 | 12 |
| 26 | 17 | 17 | 17 | 18 | 26 | 21 | 19 | 18 | 16 | 16 | 15 | 12 |
| 27 | 17 | 17 | 17 | 18 | 21 | 20 | 19 | 21 | 16 | 16 | 16 | 11 |
| 28 | 17 | 17 | 17 | 20 | 20 | 20 | 18 | 19 | 16 | 18 | 17 | 11 |
| 29 | 17 | 16 | 17 | 20 | 19 | 19 | 18 | 18 | 16 | 18 | 16 | 11 |
| 30 | 18 | 16 | 17 | 20 | --- | 19 | 20 | 17 | 18 | 17 | 15 | 11 |
| 31 | 17 | --- | 17 | 20 | --- | 19 | --- | 17 | --- | 16 | 15 | --- |
| TOTAL | 514 | 524 | 487 | 558 | 600 | 626 | 568 | 608 | 503 | 748 | 463 | 337.4 |
| MEAN | 16.6 | 17.5 | 15.7 | 18.0 | 20.7 | 20.2 | 18.9 | 19.6 | 16.8 | 24.1 | 14.9 | 11.2 |
| MAX | 18 | 18 | 17 | 20 | 34 | 28 | 20 | 33 | 24 | 134 | 17 | 15 |
| MIN | 15 | 16 | 13 | 17 | 19 | 18 | 18 | 17 | 15 | 16 | 13 | 9.4 |
| AC-FT | 1020 | 1040 | 966 | 1110 | 1190 | 1240 | 1130 | 1210 | 998 | 1480 | 918 | 669 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2000, BY WATER YEAR (WY)

| | MEAN | 10.9 | 3.81 | 3.33 | 3.39 | 6.29 | 9.51 | 4.88 | 8.69 | 36.6 | 9.72 | 6.49 | 7.01 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MAX | 130 | 17.5 | 15.7 | 18.0 | 20.7 | 55.6 | 21.3 | 26.0 | 179 | 52.7 | 23.1 | 49.5 | |
| (WY) | 1947 | 2000 | 2000 | 2000 | 2000 | 1948 | 1999 | 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

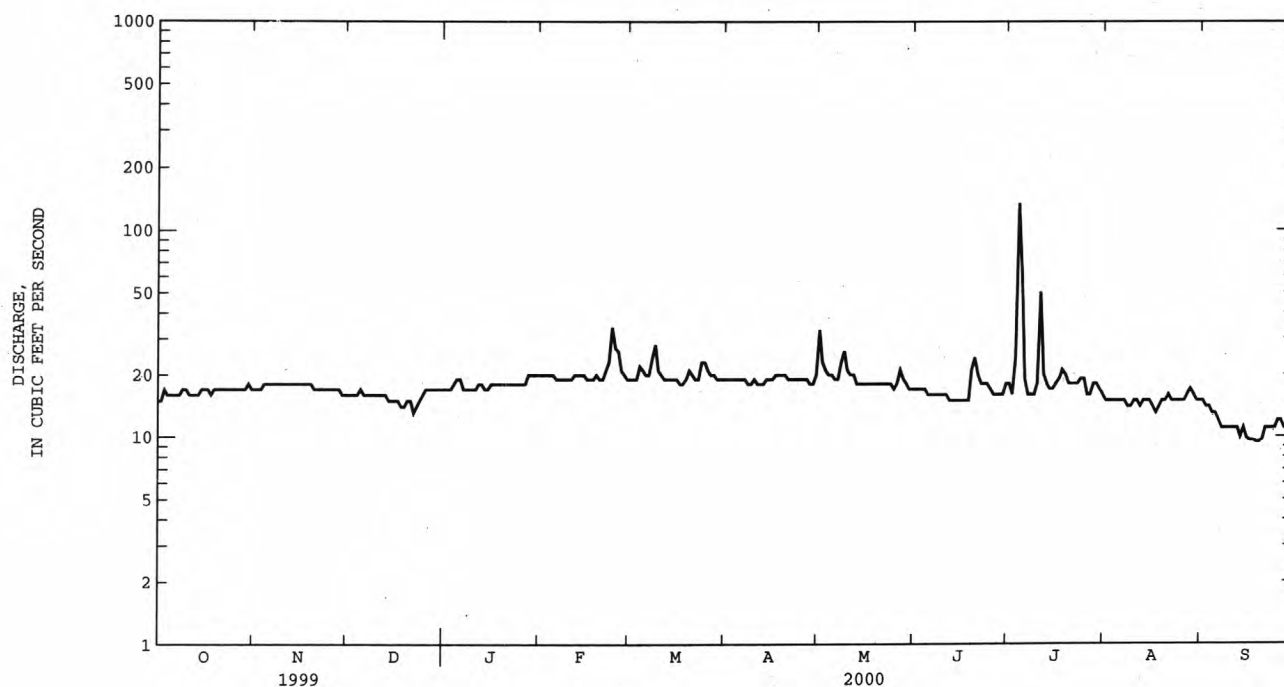
06767500 PLUM CREEK NEAR SMITHFIELD, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS a | |
|--------------------------|------------------------|--------|---------------------|--------|---------------|-------------|
| ANNUAL TOTAL | 7815.6 | | 6536.4 | | 8.99 | |
| ANNUAL MEAN | 21.4 | | 17.9 | | 27.4 | |
| HIGHEST ANNUAL MEAN | | | | | .099 | |
| LOWEST ANNUAL MEAN | | | | | 1850 | |
| HIGHEST DAILY MEAN | 230 | Jun 12 | 134 | Jul 4 | .00 | Jun 23 1947 |
| LOWEST DAILY MEAN | 5.1 | Jan 3 | 9.4 | Sep 18 | .00 | Jul 13 1946 |
| ANNUAL SEVEN-DAY MINIMUM | 9.6 | Jan 1 | 9.8 | Sep 14 | .00 | Jul 21 1946 |
| INSTANTANEOUS PEAK FLOW | | | 175 | Jul 4 | 2800 | Jun 23 1947 |
| INSTANTANEOUS PEAK STAGE | | | 7.80 | Jul 4 | *23.41 | Jun 23 1947 |
| ANNUAL RUNOFF (AC-FT) | 15500 | | 12960 | | 6520 | |
| 10 PERCENT EXCEEDS | 23 | | 20 | | 18 | |
| 50 PERCENT EXCEEDS | 18 | | 18 | | .15 | |
| 90 PERCENT EXCEEDS | 14 | | 14 | | .00 | |

e Estimated.

a Water years 1947-53, 1969-75, 1997-2000.

* Site and datum then in use.



PLATTE RIVER BASIN

06768000 PLATTE RIVER NEAR OVERTON. NE

LOCATION.--Lat 40°40'57", long 099°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 period of estimated record, which is poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas.

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 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|
| 1 | 4380 | 2740 | 2600 | 3180 | 1700 | 2840 | 2030 | 2030 | 1340 | 806 | 906 | 590 |
| 2 | 4180 | 2650 | 2660 | 3370 | 2890 | 2810 | 2100 | 1870 | 1280 | 696 | 822 | 665 |
| 3 | 4130 | 2720 | 2600 | 3250 | 3530 | 2830 | 2100 | 1960 | 1310 | 751 | 820 | 723 |
| 4 | 4110 | 2730 | 2570 | 2040 | 3680 | 2800 | 2020 | 1930 | 1300 | 2440 | 848 | 743 |
| 5 | 4240 | 2700 | 2480 | 3210 | 3730 | 2760 | 2080 | 1710 | 1320 | 2540 | 818 | 796 |
| 6 | 4250 | 2710 | 2410 | 3380 | 3650 | 2680 | 2140 | 1560 | 1370 | 1870 | 785 | 942 |
| 7 | 3930 | 2820 | 2470 | 3650 | 2480 | 2670 | 2090 | 1570 | 1400 | 1580 | 747 | 564 |
| 8 | 3770 | 2820 | 2500 | 3750 | 2950 | 2590 | 2130 | 1730 | 1330 | 1240 | 727 | 1030 |
| 9 | 3670 | 2850 | 2590 | 3730 | 3010 | 2460 | 2330 | 1570 | 1230 | 1060 | 702 | 1060 |
| 10 | 3490 | 2840 | 2710 | 3670 | 3020 | 2160 | 2470 | 1660 | 1090 | 774 | 687 | 1040 |
| 11 | 2160 | 2660 | 2620 | 3510 | 3140 | 2480 | 2490 | 1900 | 1050 | 740 | 705 | 988 |
| 12 | 2370 | 2780 | 2450 | 3240 | 3200 | 2750 | 2470 | 1740 | 973 | 610 | 752 | 824 |
| 13 | 3140 | 2900 | 2530 | 2920 | 3150 | 2850 | 2460 | 1410 | 891 | 612 | 782 | 789 |
| 14 | 3160 | 2780 | 2650 | 3080 | 3130 | 2460 | 2420 | 1260 | 904 | 591 | 808 | 771 |
| 15 | 3050 | 2730 | 2610 | 3120 | 3230 | 2100 | 2260 | 1180 | 859 | 602 | 734 | 673 |
| 16 | 2840 | 2670 | 2620 | 3020 | 2800 | 1980 | 2250 | 1160 | 794 | 571 | 653 | 673 |
| 17 | 2740 | 2530 | 2580 | 3070 | 2570 | 1950 | 2230 | 1050 | 762 | 588 | 636 | 685 |
| 18 | 2720 | 2490 | 2820 | 3090 | 2510 | 2510 | 2130 | 523 | 862 | 623 | 628 | 659 |
| 19 | 2630 | 2470 | 3000 | 3090 | 2650 | 2700 | 1910 | 583 | 1070 | 641 | 671 | 647 |
| 20 | 2700 | 2420 | 2630 | 2800 | 2900 | 2820 | 1960 | 1910 | 1470 | 664 | 744 | 670 |
| 21 | 2700 | 2380 | 2760 | 3080 | 2960 | 2820 | 1960 | 2170 | 1360 | 670 | 728 | 661 |
| 22 | 2720 | 2340 | 2760 | 3060 | 2970 | 2760 | 2030 | 1200 | 1350 | 694 | 651 | 752 |
| 23 | 2660 | 2300 | 3260 | 3070 | 2920 | 2220 | 2040 | 1020 | 1480 | 719 | 640 | 780 |
| 24 | 2600 | 2250 | 3800 | 3020 | 2730 | 2250 | 2110 | 930 | 1150 | 691 | 703 | 851 |
| 25 | 2640 | 2250 | 3640 | 2820 | 2820 | 2780 | 2090 | 1100 | 1040 | 592 | 683 | 619 |
| 26 | 2510 | 2330 | 3420 | 2870 | 2960 | 2830 | 2040 | 1460 | 922 | 713 | 656 | 925 |
| 27 | 2790 | 2350 | 3360 | 2770 | 3000 | 2840 | 2010 | 1530 | 711 | 783 | 687 | 891 |
| 28 | 2740 | 2380 | 3420 | 2710 | 3070 | 2820 | 1900 | 1410 | 563 | 1080 | 638 | 1050 |
| 29 | 2680 | 2420 | 3380 | 2550 | 2620 | 1560 | 1960 | 1380 | 605 | 1360 | 601 | 896 |
| 30 | 2720 | 2510 | 3250 | 2660 | --- | 665 | 2070 | 1380 | 663 | 1330 | 605 | 1010 |
| 31 | 2740 | --- | 3300 | 2840 | --- | 1820 | --- | 1440 | --- | 1230 | 597 | --- |
| TOTAL | 97160 | 77520 | 88450 | 95620 | 85970 | 76565 | 64280 | 45326 | 32449 | 29861 | 22164 | 23967 |
| MEAN | 3134 | 2584 | 2853 | 3085 | 2964 | 2470 | 2143 | 1462 | 1082 | 963 | 715 | 799 |
| MAX | 4380 | 2900 | 3800 | 3750 | 3730 | 2850 | 2490 | 2170 | 1480 | 2540 | 906 | 1060 |
| MIN | 2160 | 2250 | 2410 | 2040 | 1700 | 665 | 1900 | 523 | 563 | 571 | 597 | 564 |
| AC-FT | 192700 | 153800 | 175400 | 189700 | 170500 | 151900 | 127500 | 89900 | 64360 | 59230 | 43960 | 47540 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2000, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|-------|-------|-------|-------|------|------|
| MEAN | 1426 | 1496 | 1602 | 1682 | 1971 | 2119 | 1949 | 2217 | 2498 | 1089 | 730 | 1229 |
| 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

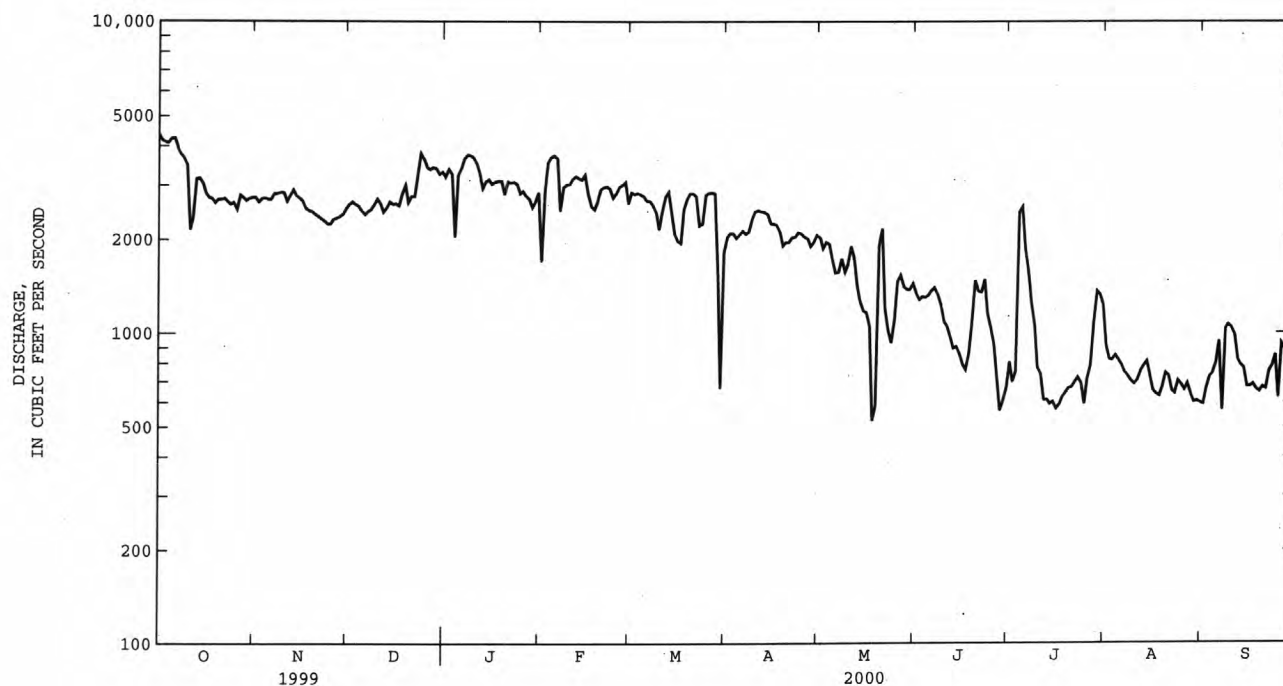
06768000 PLATTE RIVER NEAR OVERTON, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1942 - 2000a | |
|--------------------------|------------------------|--------|---------------------|--------|--------------------------|-------------|
| ANNUAL TOTAL | 1037118 | | 739332 | | 1664 | |
| ANNUAL MEAN | 2841 | | 2020 | | 1250 | |
| MEDIAN OF ANNUAL MEANS | | | | | 5835 | |
| HIGHEST ANNUAL MEAN | | | | | 1983 | |
| LOWEST ANNUAL MEAN | | | | | 558 | |
| HIGHEST DAILY MEAN | 12000 | May 11 | 4380 | Oct 1 | 22300 | Jun 22 1983 |
| LOWEST DAILY MEAN | 510 | Mar 23 | 523 | May 18 | 2.0 | Aug 31 1942 |
| ANNUAL SEVEN-DAY MINIMUM | 721 | Jul 10 | 600 | Jul 12 | 5.4 | Aug 25 1942 |
| INSTANTANEOUS PEAK FLOW | | | 4480 | Oct 1 | *22900 | Jun 28 1983 |
| INSTANTANEOUS PEAK STAGE | | | 3.59 | Oct 1 | **7.44 | Jun 22 1983 |
| ANNUAL RUNOFF (AC-FT) | 2057000 | | 1466000 | | 1205000 | |
| 10 PERCENT EXCEEDS | 4710 | | 3170 | | 3070 | |
| 50 PERCENT EXCEEDS | 2490 | | 2220 | | 1210 | |
| 90 PERCENT EXCEEDS | 1360 | | 672 | | 290 | |

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 1999 TO SEPTEMBER 2000

| DATE | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061) | OXYGEN, DIS-SOLVED (MG/L) (00300) | OXYGEN, (PER-CENT SATURATION) (00301) | PH WATER WHOLE FIELD (STANDARD UNITS) (00400) | SPECIFIC CONDUCTANCE (US/CM) (00095) | TEMPERATURE AIR (DEG C) (00020) | TEMPERATURE WATER (DEG C) (00010) | POTASSIUM, DIS-SOLVED (MG/L) (00935) | SODIUM, DIS-SOLVED (MG/L) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L) AS CACO3 (90410) | CHLORIDE, DIS-SOLVED (MG/L) AS CL (00940) |
|-----------|------|---|-----------------------------------|---------------------------------------|---|--------------------------------------|---------------------------------|-----------------------------------|--------------------------------------|-----------------------------------|---|---|
| FEB 24... | 0930 | 2640 | 13.4 | 111 | 8.3 | 1060 | 9.0 | 3.5 | 10.8 | 93.5 | 201 | 41.6 |
| MAY 02... | 1000 | 1890 | 10.0 | 105 | 8.2 | 947 | 20.5 | 14.0 | 12.6 | 88.4 | 179 | 37.2 |
| AUG 02... | 1400 | 862 | 8.5 | -- | 8.5 | 830 | 30.5 | 27.5 | 11.6 | 79.1 | 180 | 24.3 |
| SEP 13... | 1000 | 800 | 6.0 | 72 | 8.4 | 815 | 25.0 | 20.0 | 11.1 | 85.0 | 170 | 25.4 |

| DATE | FLUORIDE, DIS-SOLVED (MG/L) AS F (00950) | SILICA, DIS-SOLVED (MG/L) AS SIO2 (00955) | SULFATE, DIS-SOLVED (MG/L) AS SO4 (00945) | NITROGEN, AMMONIA, DIS-SOLVED (MG/L) AS N (00608) | NITROGEN, AMMONIA, DIS-SOLVED (MG/L) AS NH4 (71846) | NITROGEN, NITRATE, DIS-SOLVED (MG/L) AS N (00618) | 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) | PHOSPHATE, ORTHO, DIS-SOLVED (MG/L) AS PO4 (00660) |
|-----------|--|---|---|---|---|---|---|---|---|---|--|
| FEB 24... | .5 | 20.7 | 288 | .020 | .03 | 2.86 | 12.7 | 2.87 | .039 | .012 | .325 |
| MAY 02... | .5 | 16.8 | 257 | <.020 | -- | 1.32 | 5.82 | 1.33 | .039 | .012 | .147 |
| AUG 02... | .5 | 22.8 | 201 | <.020 | -- | -- | -- | .955 | -- | <.010 | .120 |
| SEP 13... | .1 | 22.4 | 194 | <.020 | -- | 1.19 | 5.28 | 1.21 | .039 | .012 | .212 |

| DATE | PHOSPHORUS, DIS-SOLVED (MG/L) AS P (00666) | PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L) AS P (00671) | CARBON DIOXIDE, DIS-SOLVED (MG/L) AS CO2 (00405) | ALUMINUM, DIS-SOLVED (UG/L) AS AL (01106) | ANTIMONY, DIS-SOLVED (UG/L) AS SB (01095) | ARSENIC, DIS-SOLVED (UG/L) AS AS (01000) | BARIUM, DIS-SOLVED (UG/L) AS BA (01005) | BERYLLIUM, DIS-SOLVED (UG/L) AS BE (01010) | BORON, DIS-SOLVED (UG/L) AS B (01020) | CADMIUM, DIS-SOLVED (UG/L) AS CD (01025) | CHROMIUM, DIS-SOLVED (UG/L) AS CR (01030) |
|-----------|--|---|--|---|---|--|---|--|---------------------------------------|--|---|
| FEB 24... | .122 | .106 | 1.9 | -- | -- | -- | -- | -- | 174 | -- | -- |
| MAY 02... | .056 | .048 | 2.2 | -- | -- | -- | -- | -- | 158 | -- | -- |
| AUG 02... | E.049 | .039 | 1.1 | -- | -- | -- | -- | -- | 135 | -- | -- |
| SEP 13... | .082 | .069 | 1.3 | 1 | <1 | 5.4 | 78 | <1 | 136 | <1.0 | <.8 |

| 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) | MANGANESE, DIS-SOLVED (UG/L) AS MN (01056) | MOLYBDENUM, DIS-SOLVED (UG/L) AS MO (01060) | NICKEL, DIS-SOLVED (UG/L) AS NI (01065) | SELENIUM, DIS-SOLVED (UG/L) AS SE (01145) | SILVER, DIS-SOLVED (UG/L) AS AG (01075) | ZINC, DIS-SOLVED (UG/L) AS ZN (01090) | URANIUM, NATURAL, DIS-SOLVED (UG/L) AS U (22703) |
|-----------|---|---|---------------------------------------|---------------------------------------|--|---|---|---|---|---------------------------------------|--|
| FEB 24... | -- | -- | <10 | -- | 4 | -- | -- | -- | -- | -- | -- |
| MAY 02... | -- | -- | <10 | -- | 4 | -- | -- | -- | -- | -- | -- |
| AUG 02... | -- | -- | <10 | -- | 5 | -- | -- | -- | -- | -- | -- |
| SEP 13... | <1 | 1 | <10 | <1 | 3 | 4 | <1 | E2.0 | <1 | 2 | 19 |

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PLATTE RIVER BASIN

06768020 SPRING CREEK NEAR OVERTON, NE

LOCATION.--Lat 40°42'26", long 099°33'34", in SE $\frac{1}{4}$ SE $\frac{1}{4}$, sec.35, T.9 N., R.20 W., Dawson County, Hydrologic Unit 10200101, on upstream side of county road bridge, 1.0 mi west and 2.5 mi south of Overton.

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

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

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|-------|-------|------|------|------|------|------|------|--------|
| 1 | 18 | 14 | 14 | e11 | e7.2 | 13 | 15 | 21 | 60 | 48 | 56 | 34 |
| 2 | 17 | 13 | 16 | e10 | e7.1 | 12 | 15 | 24 | 60 | 42 | 43 | 24 |
| 3 | 17 | 14 | 14 | e8.0 | e7.8 | 13 | 15 | 25 | 60 | 44 | 40 | 9.2 |
| 4 | 17 | 14 | 16 | e7.0 | e8.0 | 15 | 15 | 26 | 60 | 97 | 41 | 5.8 |
| 5 | 16 | 14 | 15 | e8.0 | e9.0 | 15 | 15 | 25 | 59 | 108 | 46 | 5.4 |
| 6 | 17 | 14 | e14 | e8.0 | e10 | 14 | 16 | 24 | 58 | 94 | 45 | 4.7 |
| 7 | 17 | 14 | 14 | e8.0 | e11 | 14 | 15 | 25 | 55 | 79 | 39 | 4.3 |
| 8 | 22 | 14 | 14 | e9.0 | 13 | 17 | 14 | 26 | 49 | 73 | 32 | 3.7 |
| 9 | 17 | 14 | 13 | e10 | 13 | 19 | 15 | 29 | 45 | 74 | 33 | 3.2 |
| 10 | 16 | 13 | e12 | e11 | 13 | 18 | 15 | 31 | 44 | 81 | 36 | 2.7 |
| 11 | 16 | 13 | e11 | e11 | e12 | 18 | 15 | 33 | 40 | 75 | 43 | 2.2 |
| 12 | 16 | 14 | e11 | e9.0 | e11 | 17 | 15 | 32 | 40 | 60 | 41 | 2.0 |
| 13 | 16 | 13 | e10 | e10 | e10 | 16 | 15 | 32 | 49 | 48 | 40 | 1.6 |
| 14 | 17 | 13 | e10 | e11 | e10 | 16 | 16 | 34 | 61 | 52 | 42 | 1.6 |
| 15 | 16 | 13 | e11 | e10 | e11 | 16 | 14 | 36 | 57 | 56 | 28 | 1.4 |
| 16 | 15 | 13 | e10 | e10 | e12 | 15 | 15 | 36 | 47 | 57 | 17 | 1.2 |
| 17 | 15 | 13 | e9.0 | e10 | 14 | 15 | 16 | 37 | 46 | 81 | 25 | .90 |
| 18 | 15 | 13 | e8.0 | e11 | e14 | 14 | 16 | 37 | 65 | 77 | 21 | .78 |
| 19 | 15 | 13 | e7.4 | e11 | e13 | 15 | 16 | 37 | 62 | 76 | 23 | .93 |
| 20 | 15 | 13 | e6.8 | e10 | e14 | 16 | 16 | 36 | 57 | 69 | 26 | 2.6 |
| 21 | 15 | 13 | e8.0 | e11 | e14 | 15 | 16 | 37 | 46 | 75 | 34 | 1.2 |
| 22 | 14 | 13 | e9.0 | e11 | 15 | 15 | 16 | 38 | 38 | 85 | 31 | 2.1 |
| 23 | 14 | 13 | e10 | e11 | 16 | 15 | 16 | 38 | 31 | 95 | 28 | 1.2 |
| 24 | 14 | 13 | e10 | e10 | 18 | 17 | 16 | 38 | 32 | 101 | 49 | 2.9 |
| 25 | 15 | 13 | e10 | e9.6 | 17 | 17 | 16 | 39 | 36 | 90 | 64 | 3.1 |
| 26 | 15 | 14 | e11 | e9.0 | 15 | 17 | 16 | 43 | 30 | 74 | 69 | 2.4 |
| 27 | 15 | 14 | e11 | e8.0 | 14 | 16 | 16 | 52 | 23 | 58 | 55 | 2.0 |
| 28 | 15 | 13 | e11 | e8.0 | 14 | 16 | 16 | 55 | 31 | 60 | 44 | 1.8 |
| 29 | 15 | 13 | e11 | e8.0 | 14 | 16 | 16 | 58 | 27 | 60 | 33 | 1.4 |
| 30 | 14 | 14 | e10 | e8.0 | --- | 16 | 17 | 59 | 44 | 72 | 30 | 1.1 |
| 31 | 14 | --- | e11 | e7.4 | --- | 15 | --- | 59 | --- | 68 | 34 | --- |
| TOTAL | 490 | 402 | 348.2 | 294.0 | 357.1 | 483 | 465 | 1122 | 1412 | 2229 | 1188 | 131.41 |
| MEAN | 15.8 | 13.4 | 11.2 | 9.48 | 12.3 | 15.6 | 15.5 | 36.2 | 47.1 | 71.9 | 38.3 | 4.38 |
| MAX | 22 | 14 | 16 | 11 | 18 | 19 | 17 | 59 | 65 | 108 | 69 | 34 |
| MIN | 14 | 13 | 6.8 | 7.0 | 7.1 | 12 | 14 | 21 | 23 | 42 | 17 | .78 |
| AC-FT | 972 | 797 | 691 | 583 | 708 | 958 | 922 | 2230 | 2800 | 4420 | 2360 | 261 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2000, BY WATER YEAR (WY)

| | 1996 | 1997 | 1998 | 1999 | 2000 |
|------|------|------|------|------|------|
| MEAN | 18.6 | 18.7 | 15.1 | 14.6 | 16.9 |
| MAX | 26.8 | 24.7 | 20.6 | 21.4 | 25.1 |
| (WY) | 1997 | 1997 | 1997 | 1997 | 1997 |
| MIN | 9.18 | 13.4 | 9.57 | 6.99 | 9.56 |
| (WY) | 1999 | 2000 | 1999 | 1999 | 1999 |

PLATTE RIVER BASIN

06768020 SPRING CREEK NEAR OVERTON, NE--Continued

SUMMARY STATISTICS

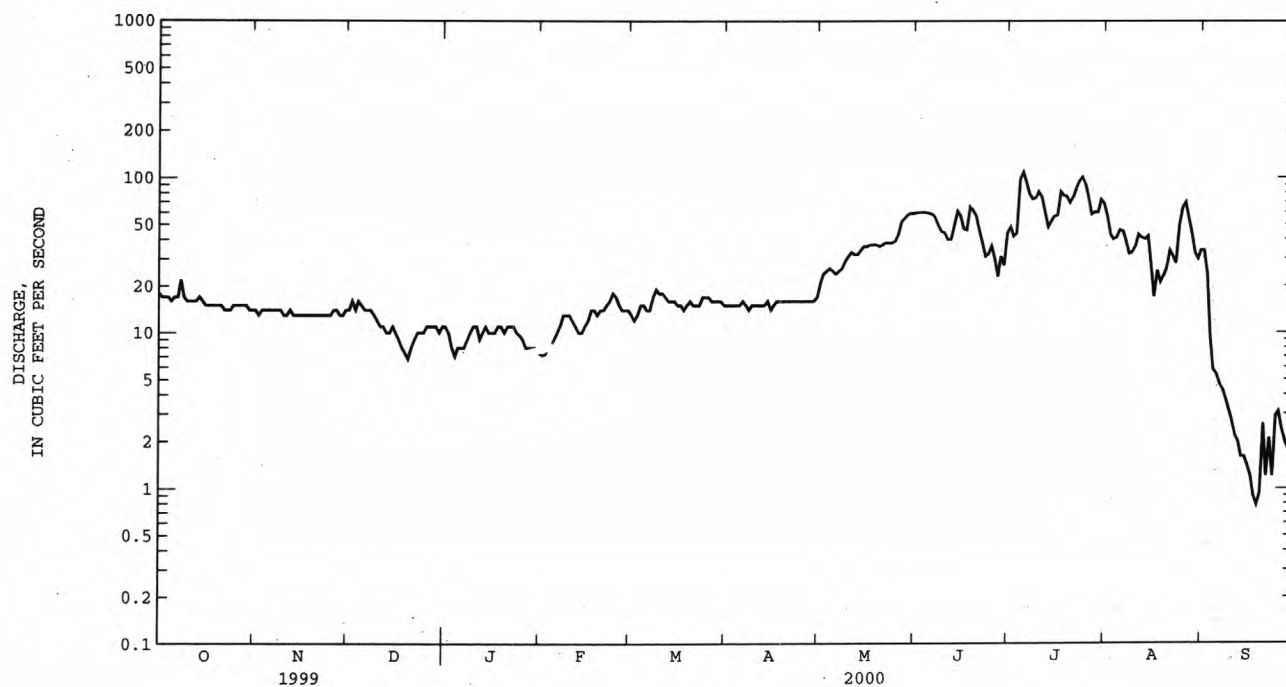
FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1996 - 2000

| | | | | | | |
|--------------------------|---------|--------|---------|--------|-------|-------------|
| ANNUAL TOTAL | 16811.4 | | 8921.71 | | | |
| ANNUAL MEAN | 46.1 | | 24.4 | | 35.5 | 1999 |
| HIGHEST ANNUAL MEAN | | | | | 45.4 | 2000 |
| LOWEST ANNUAL MEAN | | | | | 24.4 | 2000 |
| HIGHEST DAILY MEAN | 431 | Aug 19 | 108 | Jul 5 | 431 | Aug 19 1999 |
| LOWEST DAILY MEAN | 5.0 | Jan 1 | .78 | Sep 18 | .78 | Sep 18 2000 |
| ANNUAL SEVEN-DAY MINIMUM | 6.0 | Jan 1 | 1.2 | Sep 13 | 1.2 | Sep 13 2000 |
| INSTANTANEOUS PEAK FLOW | | | 125 | Jul 4 | 453 | Aug 19 1999 |
| INSTANTANEOUS PEAK STAGE | | | 5.36 | Jul 4 | 7.62 | Aug 19 1999 |
| ANNUAL RUNOFF (AC-FT) | 33350 | | 17700 | | 25750 | |
| 10 PERCENT EXCEEDS | 115 | | 58 | | 91 | |
| 50 PERCENT EXCEEDS | 16 | | 15 | | 22 | |
| 90 PERCENT EXCEEDS | 8.0 | | 8.0 | | 9.2 | |

e Estimated.



PLATTE RIVER BASIN

06769000 BUFFALO CREEK NEAR OVERTON, NE

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

DRAINAGE AREA.--175 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 fair except for periods of estimated record which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|--------|
| 1 | 4.0 | 3.7 | 5.0 | e4.5 | e4.2 | 13 | 3.1 | 44 | 80 | 57 | 85 | 54 |
| 2 | 3.2 | 3.7 | 5.0 | e4.3 | e4.1 | 13 | 2.6 | 36 | 76 | 50 | 73 | 56 |
| 3 | 2.9 | 3.7 | 4.3 | e4.0 | e4.1 | 13 | 3.2 | 28 | 82 | 46 | 55 | 24 |
| 4 | 2.6 | 3.7 | 4.7 | e4.0 | e4.6 | 11 | 3.6 | 36 | 84 | 56 | 48 | 8.4 |
| 5 | 2.8 | 3.8 | 4.6 | e4.0 | e5.0 | 13 | 3.6 | 27 | 84 | 64 | 53 | 5.4 |
| 6 | 2.8 | 3.8 | 4.7 | e4.3 | e5.0 | 15 | 3.3 | 23 | 74 | 71 | 56 | 5.0 |
| 7 | 3.0 | 4.4 | 4.8 | e4.5 | e5.2 | 17 | 2.7 | 61 | 78 | 56 | 65 | 5.4 |
| 8 | 3.1 | 4.4 | 5.5 | e4.5 | e5.6 | 17 | 2.6 | 77 | 71 | 52 | 56 | 4.8 |
| 9 | 3.2 | 4.7 | 5.2 | e4.5 | e5.6 | 9.5 | 2.8 | 57 | 63 | 46 | 41 | 4.0 |
| 10 | 3.4 | 4.3 | 4.7 | e4.8 | e5.6 | 6.8 | 1.9 | 57 | 64 | 45 | 35 | 2.6 |
| 11 | 3.4 | 4.0 | 4.9 | e5.0 | e5.4 | 9.6 | 1.2 | 55 | 60 | 56 | 35 | 2.1 |
| 12 | 3.5 | 4.7 | 4.7 | e5.0 | e5.4 | 7.6 | .84 | 51 | 52 | 46 | 33 | 1.5 |
| 13 | 3.5 | 5.2 | 5.1 | e5.0 | e5.4 | 5.8 | 1.5 | 46 | 43 | 45 | 37 | 1.1 |
| 14 | 3.6 | 4.4 | 5.3 | e5.0 | e5.0 | 5.4 | 1.3 | 35 | 62 | 44 | 44 | 1.2 |
| 15 | 3.6 | 3.9 | 4.6 | e5.0 | e5.0 | 4.9 | .70 | 35 | 64 | 49 | 43 | 1.1 |
| 16 | 3.7 | 3.8 | e4.4 | e4.7 | e5.0 | 4.5 | .62 | 34 | 55 | 47 | 49 | 1.0 |
| 17 | 3.8 | 3.8 | e4.4 | e5.0 | e5.4 | 4.5 | 1.0 | 30 | 53 | 48 | 36 | .94 |
| 18 | 3.7 | 3.8 | e4.4 | e5.2 | e6.0 | 4.8 | 1.0 | 28 | 63 | 63 | 29 | .79 |
| 19 | 3.6 | 3.7 | e4.4 | e5.2 | e7.0 | 4.8 | 1.2 | 24 | 71 | 79 | 41 | .58 |
| 20 | 3.7 | 6.3 | e4.2 | e5.2 | 9.5 | 4.6 | .66 | 27 | 78 | 72 | 54 | .57 |
| 21 | 3.7 | 4.1 | e4.2 | e5.2 | 15 | 4.6 | .62 | 50 | 79 | 66 | 70 | .70 |
| 22 | 3.6 | 3.8 | e4.2 | e5.0 | 14 | 4.5 | .86 | 63 | 70 | 66 | 74 | .60 |
| 23 | 3.6 | 4.0 | e4.4 | e5.0 | 23 | 4.8 | 1.1 | 60 | 55 | 77 | 68 | .43 |
| 24 | 3.7 | 3.9 | e4.7 | e4.5 | 25 | 5.0 | .81 | 34 | 60 | 80 | 59 | .49 |
| 25 | 3.8 | 4.1 | e5.0 | e4.5 | 30 | 4.8 | 2.2 | 40 | 71 | 72 | 65 | .51 |
| 26 | 3.8 | 4.5 | e5.0 | e4.6 | 23 | 4.5 | 1.9 | 70 | 66 | 59 | 58 | .48 |
| 27 | 3.8 | 4.1 | e5.0 | e4.6 | 20 | 4.3 | .77 | 110 | 55 | 47 | 69 | .36 |
| 28 | 3.8 | 4.1 | e5.0 | e4.6 | 19 | 3.8 | 2.2 | 97 | 58 | 49 | 80 | .28 |
| 29 | 3.8 | 4.1 | e5.0 | e4.5 | 17 | 3.6 | 12 | 86 | 62 | 65 | 57 | .25 |
| 30 | 3.7 | 4.8 | e5.0 | e4.5 | --- | 3.5 | 36 | 83 | 56 | 78 | 45 | .19 |
| 31 | 3.7 | --- | e5.0 | e4.3 | --- | 3.1 | --- | 82 | --- | 85 | 48 | --- |
| TOTAL | 108.1 | 125.3 | 147.4 | 145.0 | 294.1 | 231.3 | 97.88 | 1586 | 1989 | 1836 | 1661 | 184.77 |
| MEAN | 3.49 | 4.18 | 4.75 | 4.68 | 10.1 | 7.46 | 3.26 | 51.2 | 66.3 | 59.2 | 53.6 | 6.16 |
| MAX | 4.0 | 6.3 | 5.5 | 5.2 | 30 | 17 | 36 | 110 | 84 | 85 | 85 | 56 |
| MIN | 2.6 | 3.7 | 4.2 | 4.0 | 4.1 | 3.1 | .62 | 23 | 43 | 44 | 29 | .19 |
| AC-FT | 214 | 249 | 292 | 288 | 583 | 459 | 194 | 3150 | 3950 | 3640 | 3290 | 366 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2000, BY WATER YEAR (WY)

| | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 11.1 | 4.45 | 3.60 | 2.99 | 4.06 | 4.83 | 4.12 | 22.3 | 48.8 | 49.9 | 59.3 | 35.6 |
| MAX | 33.1 | 15.4 | 13.4 | 10.9 | 10.1 | 15.3 | 12.0 | 51.7 | 130 | 106 | 174 | 71.1 |
| (WY) | 1951 | 1998 | 1997 | 1998 | 2000 | 1952 | 1998 | 1999 | 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 |

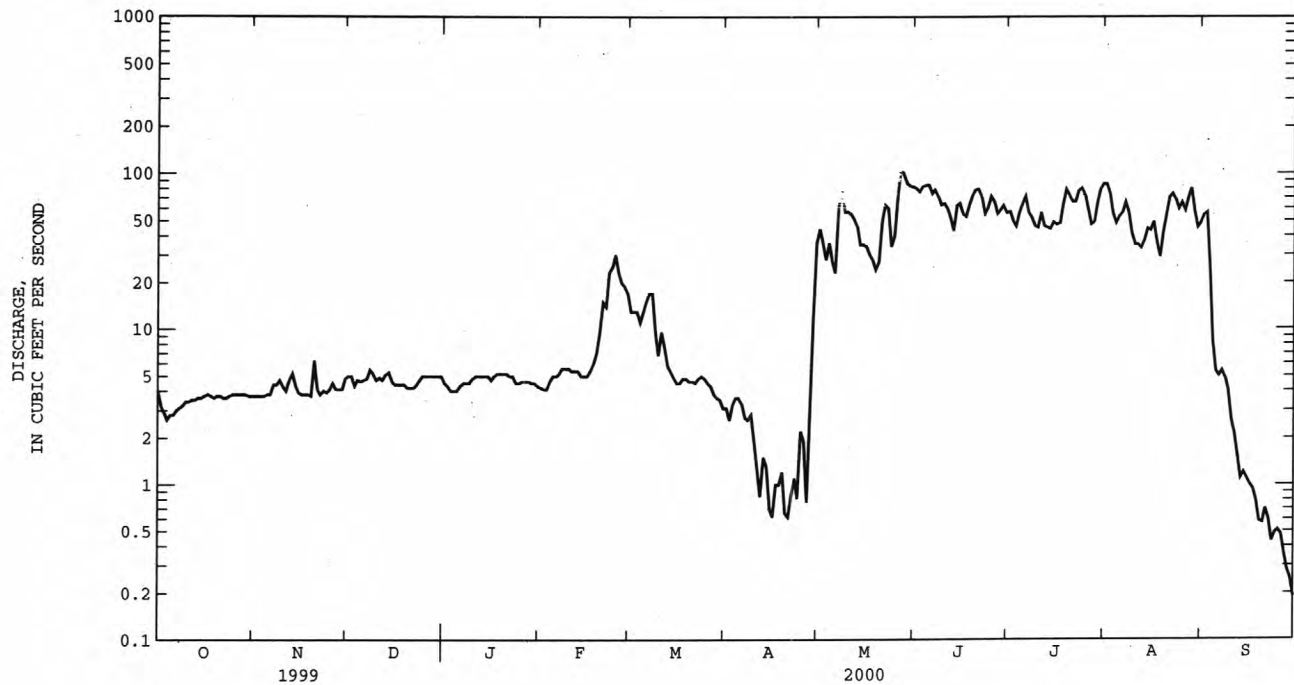
PLATTE RIVER BASIN

06769000 BUFFALO CREEK NEAR OVERTON, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | FOR 2000 WATER YEAR | WATER YEARS a |
|--------------------------|------------------------|---------------------|-------------------|
| ANNUAL TOTAL | 14848.3 | 8405.85 | 19.5 |
| ANNUAL MEAN | 40.7 | 23.0 | 40.9 |
| HIGHEST ANNUAL MEAN | | | 3.07 |
| LOWEST ANNUAL MEAN | | | 1999 |
| HIGHEST DAILY MEAN | 472 Jun 12 | 110 May 27 | 472 Jun 12 1999 |
| LOWEST DAILY MEAN | 2.3 Mar 26 | .19 Sep 30 | .00 Apr 26 1953 |
| ANNUAL SEVEN-DAY MINIMUM | 2.7 Mar 25 | .37 Sep 24 | .00 Jul 16 1953 |
| INSTANTANEOUS PEAK FLOW | | 132 May 27 | 509 Jun 12 1999 |
| INSTANTANEOUS PEAK STAGE | | 6.97 May 27 | 10.79 Jun 12 1999 |
| ANNUAL RUNOFF (AC-FT) | 29450 | 16670 | 14140 |
| 10 PERCENT EXCEEDS | 117 | 66 | 70 |
| 50 PERCENT EXCEEDS | 5.0 | 5.0 | 5.4 |
| 90 PERCENT EXCEEDS | 3.3 | 2.0 | .00 |

e Estimated.

a Water years 1949-58, 1996-2000.



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 1999 TO SEPTEMBER 2000
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 | 13 | 7.6 | 6.1 | 10 |
| 2 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 12 | 8.5 | 5.1 | 12 |
| 3 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 11 | 7.0 | 5.3 | 1.8 |
| 4 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 11 | 14 | 5.6 | .00 |
| 5 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 11 | 13 | 4.1 | .00 |
| 6 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 12 | 13 | 4.8 | .00 |
| 7 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 12 | 13 | 4.3 | .00 |
| 8 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 11 | 13 | 2.2 | .00 |
| 9 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 10 | 9.2 | 1.1 | .00 |
| 10 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .05 | 10 | 1.0 | .66 | .00 |
| 11 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 5.5 | 11 | 97 | .46 | .00 |
| 12 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 7.0 | 22 | 45 | .41 | .00 |
| 13 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 7.9 | 13 | 13 | .06 | .00 |
| 14 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 8.7 | 13 | 10 | .00 | .00 |
| 15 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 9.1 | 11 | 6.1 | .00 | .00 |
| 16 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 9.1 | 15 | 4.1 | .00 | .00 |
| 17 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 8.2 | 12 | 7.9 | .00 | .00 |
| 18 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 7.7 | 16 | 14 | .67 | .00 |
| 19 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 5.6 | 23 | 14 | 1.3 | .00 |
| 20 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 7.6 | 14 | 11 | 1.5 | .00 |
| 21 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 8.7 | 8.9 | 8.7 | 2.4 | .00 |
| 22 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 9.4 | 9.5 | 9.0 | 1.7 | .00 |
| 23 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 9.2 | 4.3 | 8.1 | 3.6 | .00 |
| 24 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 7.5 | 12 | 7.7 | 3.1 | .00 |
| 25 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 7.8 | 12 | 17 | 4.5 | .00 |
| 26 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 53 | 12 | 13 | 2.6 | .00 |
| 27 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 64 | 9.0 | 8.4 | 5.9 | .00 |
| 28 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 14 | 4.8 | 8.4 | 8.8 | .00 |
| 29 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 12 | 4.3 | 8.8 | 10 | .00 |
| 30 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 12 | 7.1 | 9.0 | 10 | .00 |
| 31 | .00 | --- | .00 | .00 | .00 | .00 | --- | 12 | --- | 8.7 | 9.5 | --- |
| TOTAL | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 286.05 | 346.9 | 428.2 | 105.76 | 23.80 |
| MEAN | .000 | .000 | .000 | .000 | .000 | .000 | .000 | 9.23 | 11.6 | 13.8 | 3.41 | .79 |
| MAX | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 64 | 23 | 97 | 10 | 12 |
| MIN | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 4.3 | 1.0 | .00 | .00 |
| AC-FT | .00 | .00 | .00 | .00 | .00 | .00 | .00 | 567 | 688 | 849 | 210 | 47 |

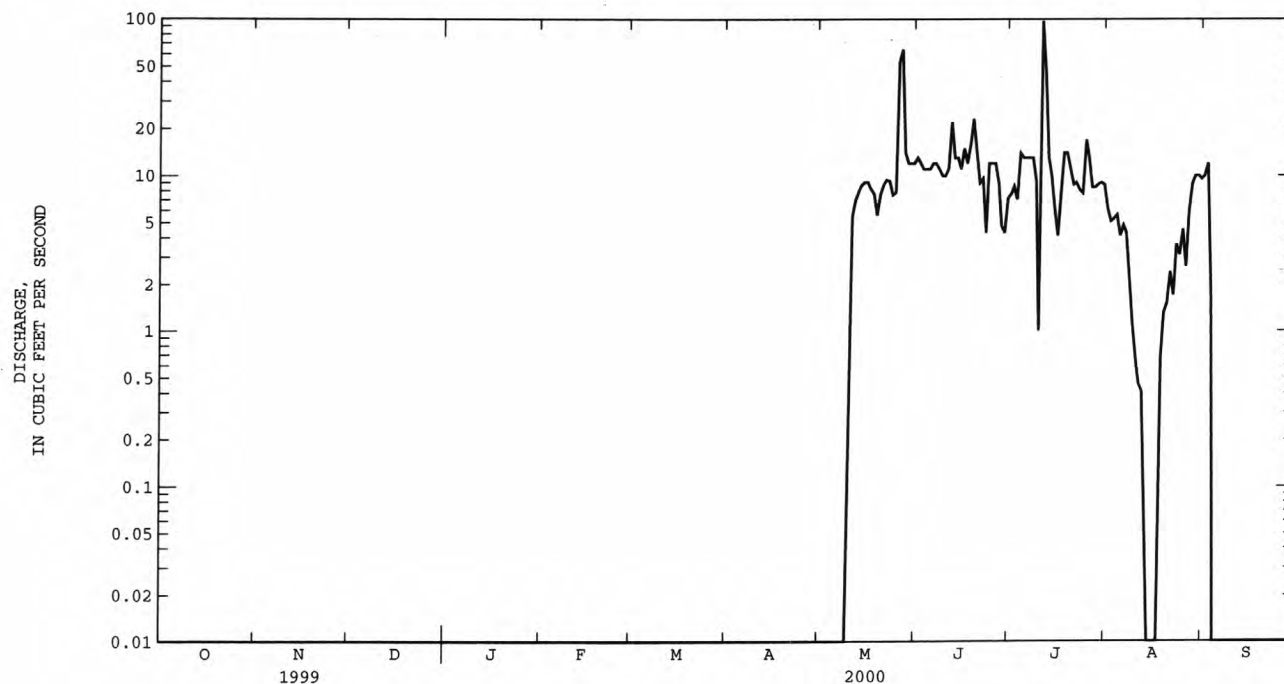
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2000, BY WATER YEAR (WY)

| | 1996 | 1997 | 1998 | 1999 | 2000 |
|------|------|------|------|------|------|
| MEAN | .000 | .018 | .000 | .000 | .000 |
| MAX | .000 | .073 | .000 | .000 | .000 |
| (WY) | 1997 | 1997 | 1997 | 1997 | 1997 |
| MIN | .000 | .000 | .000 | .000 | .000 |
| (WY) | 1997 | 1998 | 1997 | 1997 | 1997 |

PLATTE RIVER BASIN

06769525 ELM CREEK NEAR ELM CREEK, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | FOR 2000 WATER YEAR | WATER YEARS 1996 - 2000 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 2150.42 | 1190.71 | |
| ANNUAL MEAN | 5.89 | 3.25 | 3.76 |
| HIGHEST ANNUAL MEAN | | | 5.89 1999 |
| LOWEST ANNUAL MEAN | | | 1.80 1997 |
| HIGHEST DAILY MEAN | 188 Jun 11 | 97 Jul 11 | 188 Jun 11 1999 |
| LOWEST DAILY MEAN | .00 Jan 1 | .00 Oct 1 | .00 Mar 21 1996 |
| ANNUAL SEVEN-DAY MINIMUM | .00 Jan 1 | .00 Oct 1 | .00 Mar 21 1996 |
| INSTANTANEOUS PEAK FLOW | | 174 Jul 11 | 317 May 21 1998 |
| INSTANTANEOUS PEAK STAGE | | 8.07 Jul 11 | 8.76 May 21 1998 |
| ANNUAL RUNOFF (AC-FT) | 4270 | 2360 | 2730 |
| 10 PERCENT EXCEEDS | 15 | 11 | 12 |
| 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 99°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 period of estimated record, which is poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|-------|------|------|------|------|-------|------|-------|-------|
| 1 | 11 | 11 | 11 | 11 | 12 | 13 | 16 | 16 | 12 | 21 | 18 | 7.3 |
| 2 | 11 | 11 | 11 | 12 | 13 | 13 | 16 | 14 | 11 | 19 | 21 | 5.6 |
| 3 | 10 | 11 | 11 | 11 | 12 | 14 | 16 | 13 | 11 | 20 | 26 | 4.9 |
| 4 | 10 | 11 | 11 | e10 | 13 | 14 | 16 | 13 | 11 | 293 | 23 | 3.8 |
| 5 | 10 | 11 | 12 | e9.0 | 12 | 14 | 16 | 13 | 11 | 470 | 22 | 3.6 |
| 6 | 10 | 11 | 11 | e10 | 12 | 14 | 16 | 13 | 10 | 70 | 22 | 3.7 |
| 7 | 11 | 11 | 11 | e10 | 11 | 13 | 16 | 13 | 9.9 | 32 | 19 | 3.7 |
| 8 | 11 | 11 | 11 | e10 | 11 | 16 | 15 | 14 | 11 | 23 | 18 | 3.9 |
| 9 | 11 | 11 | 10 | 11 | e10 | 16 | 15 | 14 | 8.8 | 20 | 18 | 2.7 |
| 10 | 11 | 11 | 11 | 12 | e10 | 15 | 15 | 13 | 7.8 | 15 | 17 | 2.0 |
| 11 | 10 | 11 | 11 | 13 | e10 | 14 | 14 | 14 | 7.3 | 15 | 14 | 1.3 |
| 12 | 11 | 11 | 11 | 11 | e11 | 14 | 14 | 13 | 12 | 16 | 12 | 1.1 |
| 13 | 11 | 11 | 11 | 11 | e12 | 14 | 14 | 13 | 13 | 21 | 12 | .35 |
| 14 | 11 | 11 | 11 | 11 | 13 | 14 | 14 | 12 | 13 | 23 | 11 | .43 |
| 15 | 12 | 11 | 13 | 11 | 12 | 16 | 16 | 12 | 12 | 24 | 10 | 1.2 |
| 16 | 11 | 11 | 11 | 11 | 12 | 15 | 16 | 14 | 12 | 24 | 11 | 1.0 |
| 17 | 11 | 11 | 11 | 11 | 12 | 14 | 15 | 15 | 12 | 30 | 11 | 1.3 |
| 18 | 11 | 12 | 11 | 11 | e10 | 16 | 15 | 15 | 14 | 32 | 11 | 1.2 |
| 19 | 11 | 11 | 11 | 11 | e10 | 16 | 15 | 13 | 18 | 31 | 16 | 1.3 |
| 20 | 11 | 11 | 16 | 13 | e11 | 16 | 15 | 14 | 120 | 29 | 16 | 2.3 |
| 21 | 11 | 11 | 17 | 13 | 12 | 16 | 14 | 14 | 46 | 25 | 11 | 2.4 |
| 22 | 11 | 11 | 16 | 12 | 14 | 15 | 14 | 14 | 23 | 24 | 10 | 2.2 |
| 23 | 11 | 11 | 16 | 12 | 16 | 16 | 14 | 14 | 17 | 24 | 9.2 | 2.4 |
| 24 | 10 | 11 | 13 | 14 | 19 | 20 | 13 | 13 | 18 | 23 | 9.4 | 2.8 |
| 25 | 11 | 11 | 11 | 13 | 16 | 18 | 13 | 12 | 16 | 60 | 9.9 | 2.9 |
| 26 | 11 | 11 | 11 | 13 | 15 | 16 | 13 | 14 | 15 | 26 | 9.7 | 2.4 |
| 27 | 11 | 11 | 11 | 15 | 13 | 16 | 13 | 15 | 16 | 24 | 10 | 2.3 |
| 28 | 11 | 10 | 11 | 15 | 13 | 16 | 13 | 13 | 18 | 33 | 10 | 2.0 |
| 29 | 11 | 10 | 12 | 12 | 14 | 16 | 13 | 13 | 20 | 30 | 9.5 | 2.1 |
| 30 | 11 | 10 | 11 | 12 | --- | 16 | 14 | 12 | 23 | 20 | 9.9 | 2.2 |
| 31 | 11 | --- | 11 | 12 | --- | 18 | --- | 12 | --- | 16 | 9.0 | --- |
| TOTAL | 336 | 328 | 367 | 363.0 | 361 | 474 | 439 | 417 | 548.8 | 1533 | 435.6 | 76.38 |
| MEAN | 10.8 | 10.9 | 11.8 | 11.7 | 12.4 | 15.3 | 14.6 | 13.5 | 18.3 | 49.5 | 14.1 | 2.55 |
| MAX | 12 | 12 | 17 | 15 | 19 | 20 | 16 | 16 | 120 | 470 | 26 | 7.3 |
| MIN | 10 | 10 | 10 | 9.0 | 10 | 13 | 13 | 12 | 7.3 | 15 | 9.0 | .35 |
| AC-FT | 666 | 651 | 728 | 720 | 716 | 940 | 871 | 827 | 1090 | 3040 | 864 | 151 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2000, BY WATER YEAR (WY)

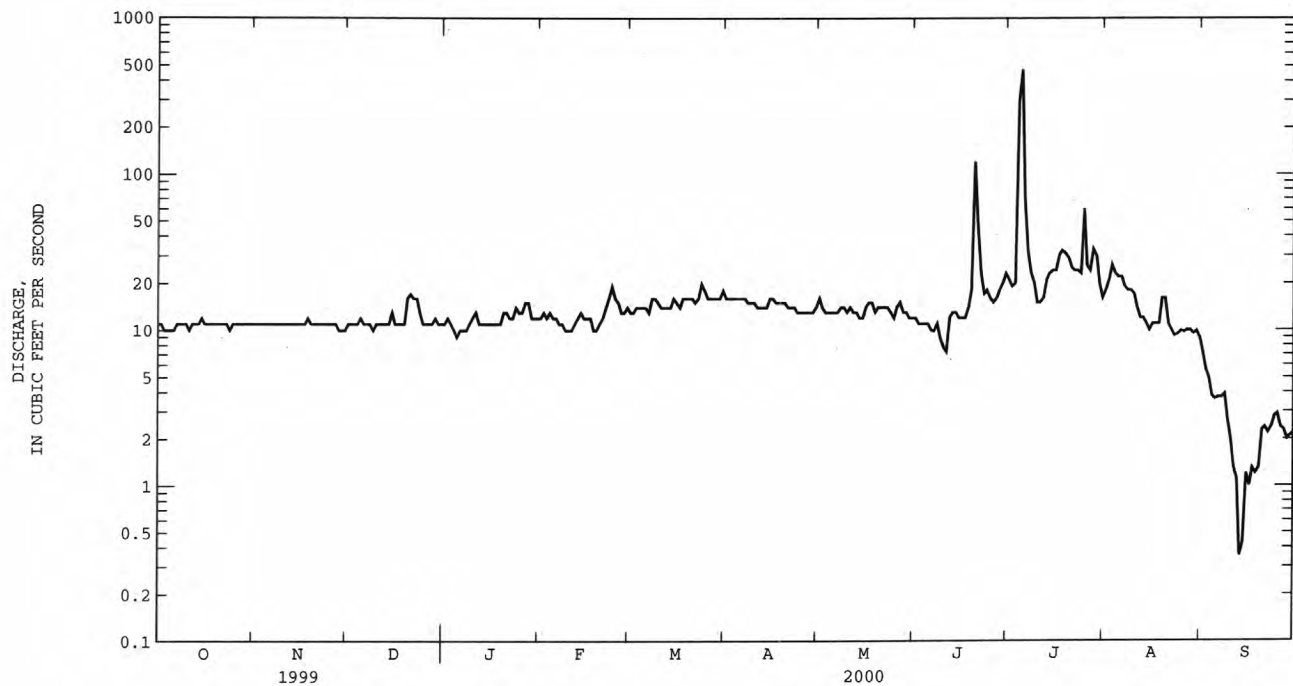
| | 1996 | 1997 | 1998 | 1999 | 2000 |
|------|------|------|------|------|------|
| MEAN | 13.2 | 17.0 | 14.6 | 12.6 | 15.3 |
| MAX | 17.0 | 22.6 | 18.0 | 13.9 | 16.9 |
| (WY) | 1997 | 1998 | 1998 | 1997 | 1998 |
| MIN | 10.8 | 10.9 | 11.8 | 11.7 | 12.4 |
| (WY) | 2000 | 2000 | 2000 | 2000 | 2000 |

PLATTE RIVER BASIN

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

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1996 - 2000 | |
|--------------------------|------------------------|-------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 8610.0 | | 5678.78 | | 20.4 | |
| ANNUAL MEAN | 23.6 | | 15.5 | | 24.7 | 1998 |
| HIGHEST ANNUAL MEAN | | | | | 15.5 | 2000 |
| LOWEST ANNUAL MEAN | | | | | | |
| HIGHEST DAILY MEAN | 260 | Jun 1 | 470 | Jul 5 | 470 | Jul 5 2000 |
| LOWEST DAILY MEAN | 9.0 | Jan 4 | .35 | Sep 13 | .35 | Sep 13 2000 |
| ANNUAL SEVEN-DAY MINIMUM | 10 | Jan 3 | .94 | Sep 12 | .94 | Sep 12 2000 |
| INSTANTANEOUS PEAK FLOW | | | 862 | Jul 5 | 862 | Jul 5 2000 |
| INSTANTANEOUS PEAK STAGE | | | 6.68 | Jul 5 | 6.68 | Jul 5 2000 |
| ANNUAL RUNOFF (AC-FT) | 17080 | | 11260 | | 14800 | |
| 10 PERCENT EXCEEDS | 41 | | 20 | | 37 | |
| 50 PERCENT EXCEEDS | 16 | | 12 | | 16 | |
| 90 PERCENT EXCEEDS | 11 | | 9.3 | | 10 | |

e Estimated.



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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 1 | 3900 | 2910 | 2490 | 3160 | 2940 | 2630 | 2020 | 2110 | 1530 | 938 | 1120 | 606 |
| 2 | 3960 | 2760 | 2400 | 3200 | 2200 | 2920 | 2070 | 2060 | 1430 | 970 | 828 | 624 |
| 3 | 3810 | 2730 | 2530 | 3110 | 3420 | 2990 | 2230 | 2030 | 1410 | 842 | 725 | 687 |
| 4 | 3850 | 2730 | 2730 | 2860 | 3680 | 2950 | 2180 | 2100 | 1430 | 1730 | 686 | 633 |
| 5 | 3900 | 2710 | 2720 | 3190 | 3790 | 2850 | 2180 | 2010 | 1410 | 2980 | 672 | 608 |
| 6 | 3990 | 2640 | 2620 | 3160 | 3860 | 2730 | 2130 | 1910 | 1430 | 2360 | 620 | 640 |
| 7 | 3910 | 2570 | 2510 | 3270 | 3640 | 2650 | 2120 | 1840 | 1420 | 1960 | 621 | 647 |
| 8 | 3680 | 2490 | 2510 | 3620 | 2540 | 2820 | 2070 | 2040 | 1350 | 1590 | 606 | 472 |
| 9 | 3410 | 2560 | 2510 | 3750 | 3190 | 2700 | 2210 | 1970 | 1280 | 1240 | 609 | 862 |
| 10 | 3160 | 2640 | 2480 | 3760 | 3310 | 2610 | 2240 | 1820 | 1180 | 1090 | 570 | 821 |
| 11 | 2740 | 2640 | 2480 | 3620 | 3350 | 2420 | 2210 | 1900 | 1110 | 797 | 579 | 886 |
| 12 | 1800 | 2720 | 2370 | 3490 | 3370 | 2620 | 2230 | 1870 | 1200 | 805 | 603 | 771 |
| 13 | 2460 | 2720 | 2260 | 3240 | 3380 | 2740 | 2320 | 1710 | 1040 | 640 | 632 | 681 |
| 14 | 2710 | 2680 | 2380 | 3180 | 3160 | 2760 | 2410 | 1630 | 946 | 599 | 664 | 636 |
| 15 | 2730 | 2670 | 2350 | 3300 | 3290 | 2480 | 2400 | 1640 | 942 | 584 | 684 | 621 |
| 16 | 2660 | 2810 | 2460 | 3190 | 3200 | 2340 | 2420 | 1630 | 875 | 664 | 606 | 553 |
| 17 | 2590 | 2750 | 2500 | 3250 | 2850 | 2350 | 2310 | 1550 | 881 | 695 | 557 | 532 |
| 18 | 2590 | 2700 | 2640 | 3300 | 2730 | 2510 | 2240 | 1350 | 805 | 707 | 540 | 531 |
| 19 | 2560 | 2530 | 2960 | 3230 | 2630 | 2950 | 2100 | 838 | 1050 | 674 | 561 | 534 |
| 20 | 2600 | 2480 | 2710 | 3140 | 2870 | 2990 | 1950 | 1060 | 1950 | 674 | 642 | 579 |
| 21 | 2630 | 2430 | 2670 | 3200 | 3070 | 2980 | 1940 | 1980 | 2090 | 698 | 711 | 534 |
| 22 | 2540 | 2410 | 2660 | 3240 | 3220 | 2930 | 1960 | 1660 | 1750 | 703 | 708 | 592 |
| 23 | 2410 | 2480 | 3050 | 3240 | 3660 | 2860 | 2060 | 1360 | 1690 | 710 | 659 | 638 |
| 24 | 2370 | 2480 | 3330 | 3080 | 3440 | 2390 | 2120 | 1220 | 1540 | 750 | 632 | 711 |
| 25 | 2420 | 2480 | 3600 | 3000 | 3270 | 2570 | 2150 | 1180 | 1330 | 970 | 731 | 652 |
| 26 | 2530 | 2590 | 3390 | 2940 | 3420 | 2850 | 2040 | 1560 | 1190 | 702 | 787 | 628 |
| 27 | 2460 | 2610 | 3240 | 2880 | 3440 | 2900 | 1940 | 1670 | 1070 | 761 | 765 | 721 |
| 28 | 2630 | 2610 | 3240 | 2940 | 3300 | 2840 | 1920 | 1570 | 897 | 832 | 770 | 700 |
| 29 | 2740 | 2650 | 3200 | 2990 | 3170 | 2570 | 1810 | 1500 | 784 | 1120 | 666 | 808 |
| 30 | 2860 | 2580 | 3240 | 3040 | --- | 1240 | 1980 | 1470 | 869 | 1270 | 621 | 741 |
| 31 | 2930 | --- | 3230 | 3200 | --- | 1190 | --- | 1510 | --- | 1260 | 578 | --- |
| TOTAL | 91530 | 78760 | 85460 | 99770 | 93390 | 81330 | 63960 | 51748 | 37879 | 32315 | 20753 | 19649 |
| MEAN | 2953 | 2625 | 2757 | 3218 | 3220 | 2624 | 2132 | 1669 | 1263 | 1042 | 669 | 655 |
| MAX | 3990 | 2910 | 3600 | 3760 | 3860 | 2990 | 2420 | 2110 | 2090 | 2980 | 1120 | 886 |
| MIN | 1800 | 2410 | 2260 | 2860 | 2200 | 1190 | 1810 | 838 | 784 | 584 | 540 | 472 |
| AC-FT | 181500 | 156200 | 169500 | 197900 | 185200 | 161300 | 126900 | 102600 | 75130 | 64100 | 41160 | 38970 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2000, BY WATER YEAR (WY)

| | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|------|------|------|------|------|------|------|------|-------|-------|-------|------|------|
| MEAN | 1818 | 1854 | 1942 | 2187 | 2555 | 2643 | 2457 | 2673 | 3710 | 1961 | 1385 | 1978 |
| 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

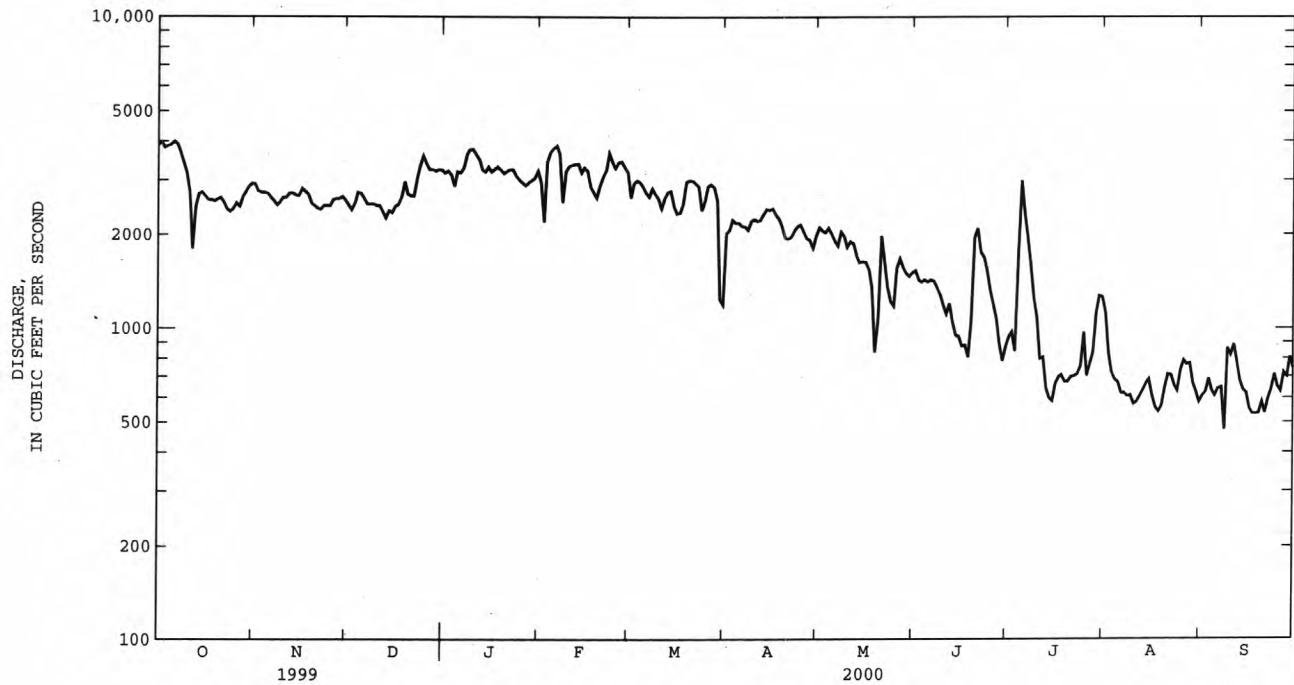
06770200 PLATTE RIVER NEAR KEARNEY, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1983 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 1105996 | | 756544 | | 2259 | |
| ANNUAL MEAN | 3030 | | 2067 | | 5418 | 1983 |
| HIGHEST ANNUAL MEAN | | | | | 797 | 1991 |
| LOWEST ANNUAL MEAN | | | | | 22300 | Jun 29 1983 |
| HIGHEST DAILY MEAN | 11300 | May 12 | 3990 | Oct 6 | 3.0 | Sep 7 1990 |
| LOWEST DAILY MEAN | 700 | Mar 24 | 472 | Sep 8 | 13 | Sep 2 1990 |
| ANNUAL SEVEN-DAY MINIMUM | 838 | Jul 26 | 551 | Sep 16 | **23700 | Jun 29 1983 |
| INSTANTANEOUS PEAK FLOW | | | *4100 | Oct 1 | ***8.62 | Feb 24 1994 |
| INSTANTANEOUS PEAK STAGE | | | 4.44 | Oct 6 | | |
| ANNUAL RUNOFF (AC-FT) | 2194000 | | 1501000 | | 1636000 | |
| 10 PERCENT EXCEEDS | 5100 | | 3260 | | 4300 | |
| 50 PERCENT EXCEEDS | 2650 | | 2330 | | 1720 | |
| 90 PERCENT EXCEEDS | 1510 | | 646 | | 472 | |

* Stage 4.43 ft.

** Stage 7.42 ft.

*** Backwater from ice.



PLATTE RIVER BASIN

06770240 FORT KEARNEY SLOUGH NEAR NEWARK, NE

LOCATION.--Lat 40°38'28", long 098°59'22", in SE 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| 1 | 2.7 | 2.4 | 3.3 | 3.7 | 4.2 | 4.9 | 5.5 | 5.8 | 5.0 | 3.3 | 3.9 | 1.8 |
| 2 | 1.3 | 2.5 | 3.2 | 3.5 | 4.5 | 5.0 | 5.6 | 5.9 | 5.1 | 4.0 | 4.1 | 3.0 |
| 3 | 1.2 | 2.7 | 3.2 | 3.5 | 4.4 | 5.1 | 5.4 | 5.6 | 5.4 | 3.8 | 4.5 | 3.0 |
| 4 | 1.7 | 2.7 | 3.1 | 3.4 | 4.3 | 5.1 | 5.5 | 5.4 | 4.7 | 10 | 4.7 | 2.4 |
| 5 | 2.2 | 2.5 | 3.1 | 3.7 | 4.5 | 5.2 | 5.6 | 5.1 | 4.9 | 3.6 | 5.9 | 2.8 |
| 6 | 2.8 | 2.6 | 3.2 | 3.4 | 4.5 | 5.2 | 5.5 | 4.4 | 4.9 | 4.0 | 4.5 | 3.9 |
| 7 | 2.7 | 2.6 | 3.3 | 3.5 | 4.4 | 5.2 | 5.4 | 3.7 | 4.9 | 4.1 | 4.0 | 2.8 |
| 8 | 2.1 | 2.7 | 3.2 | 3.9 | 4.6 | 5.3 | 5.4 | 4.4 | 4.5 | 3.8 | 3.2 | 3.1 |
| 9 | 1.9 | 2.7 | 3.1 | 3.9 | 4.9 | 5.1 | 5.5 | 3.8 | 4.3 | 3.7 | 2.0 | 4.3 |
| 10 | 1.8 | 2.6 | 3.2 | 3.6 | 4.5 | 5.0 | 5.5 | 3.0 | 2.7 | 4.1 | 3.2 | 3.1 |
| 11 | 2.0 | 2.6 | 3.3 | 3.5 | 4.2 | 5.0 | 5.3 | 3.0 | 2.8 | 4.0 | 3.2 | 2.4 |
| 12 | 1.9 | 2.7 | 3.2 | 3.6 | 4.5 | 5.1 | 5.5 | 3.3 | 4.2 | 4.0 | 2.9 | .00 |
| 13 | 1.9 | 2.8 | 3.3 | 3.4 | 4.4 | 5.1 | 5.6 | 3.0 | 2.3 | 3.4 | 2.4 | .00 |
| 14 | 2.1 | 2.8 | 3.4 | 3.8 | 4.4 | 5.1 | 5.6 | 2.5 | 2.2 | 3.6 | 2.0 | .00 |
| 15 | 2.0 | 2.8 | 3.2 | 4.1 | 4.5 | 5.1 | 5.4 | 2.5 | 2.4 | 4.0 | 1.6 | .00 |
| 16 | 2.0 | 2.8 | 3.3 | 3.6 | 4.2 | 4.9 | 5.4 | 2.9 | 2.8 | 3.9 | 2.6 | .00 |
| 17 | 2.1 | 2.9 | 3.2 | 3.9 | 4.5 | 5.0 | 5.4 | 3.4 | 2.8 | 2.5 | 1.5 | .00 |
| 18 | 2.1 | 2.8 | 3.4 | 4.0 | 4.2 | 5.1 | 5.7 | 2.6 | 2.8 | 2.3 | 1.4 | .00 |
| 19 | 2.1 | 2.4 | 3.4 | 4.2 | 4.2 | 5.1 | 5.6 | 2.6 | 8.0 | 3.7 | 3.5 | .00 |
| 20 | 2.2 | 2.6 | 3.1 | 3.7 | 4.3 | 5.2 | 5.4 | 2.7 | 71 | 3.4 | 1.6 | .00 |
| 21 | 2.2 | 2.7 | 3.1 | 4.2 | 4.9 | 5.1 | 5.5 | 3.0 | 5.8 | 3.7 | 2.1 | .00 |
| 22 | 2.2 | 2.6 | 3.1 | 4.3 | 5.2 | 5.2 | 5.7 | 3.2 | 3.4 | 2.9 | 2.7 | .00 |
| 23 | 2.2 | 2.6 | 3.2 | 3.8 | 5.8 | 5.5 | 5.5 | 3.3 | 2.7 | 3.0 | 1.9 | .00 |
| 24 | 2.4 | 2.6 | 3.2 | 3.9 | 5.8 | 7.0 | 5.5 | 3.3 | 2.2 | 3.6 | 1.9 | .00 |
| 25 | 2.4 | 2.9 | 3.3 | 3.9 | 5.6 | 5.8 | 5.5 | 3.4 | 2.6 | 7.7 | 2.4 | .00 |
| 26 | 2.5 | 3.0 | 3.3 | 4.0 | 5.2 | 5.8 | 5.6 | 7.6 | 2.5 | 3.7 | 1.7 | .00 |
| 27 | 2.5 | 2.9 | 3.4 | 3.9 | 5.1 | 5.7 | 5.6 | 8.4 | 2.8 | 3.3 | 2.3 | .00 |
| 28 | 2.5 | 2.9 | 3.7 | 4.0 | 5.2 | 5.6 | 5.7 | 6.5 | 3.0 | 3.2 | 2.0 | .00 |
| 29 | 2.6 | 2.9 | 3.8 | 4.1 | 5.2 | 5.5 | 5.7 | 6.2 | 2.8 | 4.0 | 1.6 | .00 |
| 30 | 2.4 | 3.1 | 3.4 | 4.2 | --- | 5.5 | 5.7 | 5.6 | 2.9 | 3.3 | 4.2 | .00 |
| 31 | 2.5 | --- | 3.5 | 4.3 | --- | 5.5 | --- | 5.4 | --- | 2.6 | 3.5 | --- |
| TOTAL | 67.2 | 81.4 | 101.7 | 118.5 | 136.2 | 164.0 | 165.8 | 131.5 | 178.4 | 120.2 | 89.0 | 32.60 |
| MEAN | 2.17 | 2.71 | 3.28 | 3.82 | 4.70 | 5.29 | 5.53 | 4.24 | 5.95 | 3.88 | 2.87 | 1.09 |
| MAX | 2.8 | 3.1 | 3.8 | 4.3 | 5.8 | 7.0 | 5.7 | 8.4 | 71 | 10 | 5.9 | 4.3 |
| MIN | 1.2 | 2.4 | 3.1 | 3.4 | 4.2 | 4.9 | 5.3 | 2.5 | 2.2 | 2.3 | 1.4 | .00 |
| AC-FT | 133 | 161 | 202 | 235 | 270 | 325 | 329 | 261 | 354 | 238 | 177 | 65 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2000, BY WATER YEAR (WY)

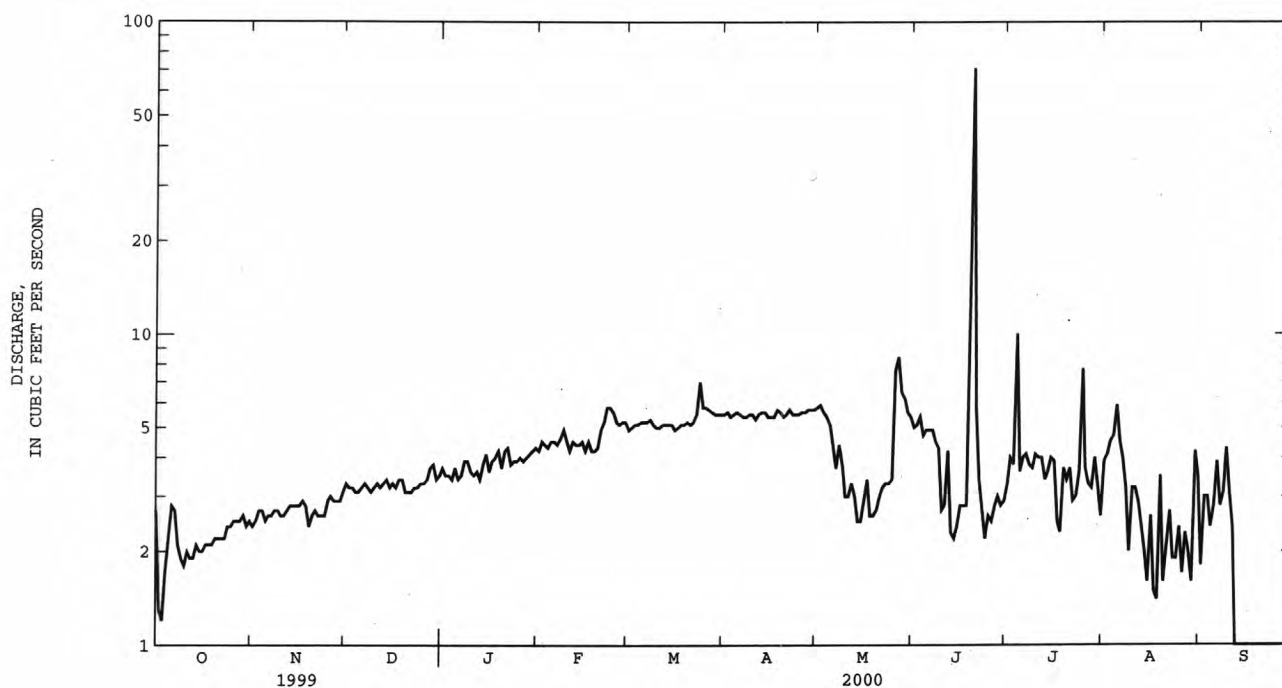
| | 1996 | 1997 | 1998 | 1999 | 2000 |
|------|------|------|------|------|------|
| MEAN | 4.36 | 6.94 | 6.11 | 5.23 | 6.21 |
| MAX | 6.60 | 11.5 | 8.26 | 6.95 | 8.53 |
| (WY) | 1997 | 1997 | 1998 | 1997 | 1997 |
| MIN | 2.17 | 2.71 | 3.28 | 3.82 | 4.70 |
| (WY) | 2000 | 2000 | 2000 | 2000 | 1999 |

PLATTE RIVER BASIN

06770240 FORT KEARNEY SLOUGH NEAR NEWARK, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | FOR 2000 WATER YEAR | WATER YEARS 1996 - 2000 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 1979.45 | 1386.50 | |
| ANNUAL MEAN | 5.42 | 3.79 | 6.23 |
| HIGHEST ANNUAL MEAN | | | 8.82 |
| LOWEST ANNUAL MEAN | | | 3.79 |
| HIGHEST DAILY MEAN | 31 Jun 1 | 71 Jun 20 | 80 Jun 16 1996 |
| LOWEST DAILY MEAN | .66 Sep 12 | .00 Sep 12 | .00 Mar 26 1996 |
| ANNUAL SEVEN-DAY MINIMUM | .85 Sep 10 | .00 Sep 12 | .00 Sep 12 2000 |
| INSTANTANEOUS PEAK FLOW | | 114 Jun 20 | *140 Jun 16 1996 |
| INSTANTANEOUS PEAK STAGE | | 7.70 Jun 20 | 7.70 Jun 20 2000 |
| ANNUAL RUNOFF (AC-FT) | 3930 | 2750 | 4520 |
| 10 PERCENT EXCEEDS | 9.8 | 5.5 | 13 |
| 50 PERCENT EXCEEDS | 4.7 | 3.4 | 5.3 |
| 90 PERCENT EXCEEDS | 2.2 | 2.0 | 1.7 |

* 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 fair.

EXTREMES FOR CURRENT YEAR.--Maximum instantaneous gage height, 3.63 Feb. 23; minimum instantaneous gage height, 2.40 ft Sept. 19.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 3.41 | 3.26 | 3.22 | 3.44 | 3.25 | 3.30 | 3.16 | 3.08 | 2.88 | 2.64 | 2.81 | 2.55 |
| 2 | 3.44 | 3.27 | 3.18 | 3.40 | 3.01 | 3.37 | 3.22 | 3.09 | 2.83 | 2.65 | 2.66 | 2.54 |
| 3 | 3.45 | 3.24 | 3.18 | 3.40 | 3.48 | 3.41 | 3.24 | 3.05 | 2.86 | 2.63 | 2.56 | 2.53 |
| 4 | 3.50 | 3.29 | 3.23 | 3.36 | 3.54 | 3.41 | 3.21 | 3.04 | 2.84 | 2.92 | 2.55 | 2.51 |
| 5 | 3.48 | 3.32 | 3.24 | 3.44 | 3.52 | 3.41 | 3.17 | 3.01 | 2.85 | 3.44 | 2.56 | 2.56 |
| 6 | 3.54 | 3.31 | 3.23 | 3.34 | 3.50 | 3.33 | 3.14 | 2.91 | 2.87 | 3.31 | 2.54 | 2.58 |
| 7 | 3.58 | 3.30 | 3.25 | 3.33 | 3.45 | 3.33 | 3.06 | 2.86 | 2.87 | 3.09 | 2.51 | 2.60 |
| 8 | 3.53 | 3.27 | 3.25 | 3.38 | 3.13 | 3.42 | 3.07 | 2.93 | 2.85 | 2.95 | 2.50 | 2.43 |
| 9 | 3.49 | 3.22 | 3.25 | 3.40 | 3.29 | 3.37 | 3.05 | 2.98 | 2.81 | 2.85 | 2.52 | 2.61 |
| 10 | 3.47 | 3.27 | 3.29 | 3.40 | 3.29 | 3.32 | 3.13 | 2.99 | 2.68 | 2.82 | 2.54 | 2.59 |
| 11 | 3.44 | 3.20 | 3.33 | 3.38 | 3.41 | 3.22 | 3.18 | 3.03 | 2.64 | 2.74 | 2.47 | 2.57 |
| 12 | 3.08 | 3.23 | 3.32 | 3.39 | 3.46 | 3.30 | 3.21 | 3.06 | 2.77 | 2.74 | 2.46 | 2.58 |
| 13 | 3.34 | 3.26 | 3.31 | 3.39 | 3.49 | 3.36 | 3.19 | 3.03 | 2.67 | 2.69 | 2.47 | 2.57 |
| 14 | 3.37 | 3.27 | 3.28 | 3.38 | 3.42 | 3.41 | 3.15 | 2.99 | 2.59 | 2.64 | 2.48 | 2.55 |
| 15 | 3.28 | 3.30 | 3.23 | 3.39 | 3.40 | 3.31 | 3.12 | 2.99 | 2.60 | 2.61 | 2.48 | 2.55 |
| 16 | 3.24 | 3.36 | 3.28 | 3.37 | 3.39 | 3.23 | 3.13 | 2.97 | 2.56 | 2.65 | 2.48 | 2.49 |
| 17 | 3.18 | 3.30 | 3.25 | 3.36 | 3.28 | 3.18 | 3.12 | 2.95 | 2.54 | 2.65 | 2.45 | 2.47 |
| 18 | 3.08 | 3.21 | 3.26 | 3.33 | 3.26 | 3.17 | 3.11 | 2.82 | 2.55 | 2.66 | 2.47 | 2.45 |
| 19 | 3.10 | 3.19 | 3.27 | 3.26 | 3.29 | 3.29 | 3.06 | 2.65 | 2.64 | 2.64 | 2.52 | 2.42 |
| 20 | 3.13 | 3.26 | 3.20 | 3.22 | 3.38 | 3.28 | 2.99 | 2.64 | 3.10 | 2.63 | 2.54 | 2.48 |
| 21 | 3.18 | 3.28 | 3.15 | 3.22 | 3.42 | 3.22 | 3.02 | 3.08 | 3.14 | 2.62 | 2.56 | 2.56 |
| 22 | 3.23 | 3.28 | 3.19 | 3.24 | 3.42 | 3.18 | 3.04 | 3.02 | 3.03 | 2.62 | 2.56 | 2.56 |
| 23 | 3.15 | 3.25 | 3.27 | 3.27 | 3.56 | 3.24 | 3.06 | 2.81 | 2.96 | 2.63 | 2.52 | --- |
| 24 | 3.11 | 3.21 | 3.34 | 3.24 | 3.44 | 3.11 | 3.07 | 2.69 | 2.88 | 2.64 | 2.50 | --- |
| 25 | 3.17 | 3.22 | 3.41 | 3.25 | 3.34 | 3.15 | 3.11 | 2.65 | 2.75 | 2.74 | 2.54 | --- |
| 26 | 3.23 | 3.28 | 3.38 | 3.23 | 3.30 | 3.24 | 3.04 | 2.86 | 2.71 | 2.65 | 2.56 | 2.58 |
| 27 | 3.25 | 3.33 | 3.40 | 3.21 | 3.37 | 3.27 | 3.02 | 2.95 | 2.69 | 2.64 | 2.50 | 2.60 |
| 28 | 3.30 | 3.32 | 3.42 | 3.24 | 3.40 | 3.34 | 3.04 | 2.96 | 2.62 | 2.66 | 2.49 | 2.58 |
| 29 | 3.33 | 3.27 | 3.49 | 3.24 | 3.38 | 3.34 | 3.03 | 2.92 | 2.60 | 2.79 | 2.57 | 2.68 |
| 30 | 3.27 | 3.28 | 3.52 | 3.30 | --- | 2.91 | 3.06 | 2.86 | 2.62 | 2.84 | 2.58 | 2.62 |
| 31 | 3.27 | --- | 3.50 | 3.32 | --- | 2.71 | --- | 2.86 | --- | 2.86 | 2.54 | --- |
| MAX | 3.58 | 3.36 | 3.52 | 3.44 | 3.56 | 3.42 | 3.24 | 3.09 | 3.14 | 3.44 | 2.81 | 2.68 |
| MIN | 3.08 | 3.19 | 3.15 | 3.21 | 3.01 | 2.71 | 2.99 | 2.64 | 2.54 | 2.61 | 2.45 | 2.42 |

PLATTE RIVER BASIN

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, 3.65 ft Feb. 23,24; minimum instantaneous gage height, 2.18 ft Sept. 8.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-----|------|------|------|------|------|------|------|------|------|------|------|
| 1 | --- | --- | 3.09 | 3.34 | 3.13 | 3.22 | 2.88 | 3.05 | 2.86 | 2.37 | 2.65 | 2.32 |
| 2 | --- | --- | 3.08 | 3.35 | --- | 3.22 | 3.09 | 2.97 | 2.80 | 2.40 | 2.54 | 2.31 |
| 3 | --- | --- | --- | 3.43 | --- | 3.25 | 3.12 | 2.94 | 2.76 | 2.40 | 2.44 | 2.28 |
| 4 | --- | --- | --- | 3.31 | 3.35 | 3.24 | 3.10 | 2.96 | 2.77 | 2.60 | 2.42 | 2.28 |
| 5 | --- | --- | --- | 3.26 | 3.37 | 3.22 | 3.10 | 3.01 | 2.74 | 3.10 | 2.42 | 2.31 |
| 6 | --- | --- | --- | 3.32 | 3.42 | 3.23 | 3.09 | 2.98 | 2.74 | 3.30 | 2.41 | 2.31 |
| 7 | --- | --- | --- | 3.26 | 3.45 | 3.21 | 3.10 | 2.90 | 2.75 | 3.06 | 2.38 | 2.36 |
| 8 | --- | --- | --- | 3.30 | 3.24 | 3.31 | 3.03 | 2.94 | 2.75 | 2.88 | 2.35 | 2.31 |
| 9 | --- | --- | --- | 3.34 | 3.31 | 3.28 | 3.04 | 2.93 | 2.74 | 2.73 | 2.31 | 2.27 |
| 10 | --- | --- | --- | 3.38 | 3.41 | 3.25 | 3.08 | 2.85 | 2.74 | 2.65 | 2.29 | 2.40 |
| 11 | --- | --- | --- | 3.40 | 3.39 | 3.20 | 3.13 | 2.85 | 2.71 | 2.61 | 2.27 | 2.40 |
| 12 | --- | --- | --- | 3.44 | 3.37 | 3.26 | 3.12 | 2.87 | 2.75 | 2.57 | 2.27 | 2.42 |
| 13 | --- | --- | --- | 3.39 | 3.43 | 3.32 | 3.05 | 2.85 | 2.72 | 2.52 | 2.28 | 2.40 |
| 14 | --- | --- | --- | 3.30 | 3.36 | 3.37 | 3.04 | 2.79 | 2.60 | 2.43 | 2.31 | 2.35 |
| 15 | --- | --- | --- | 3.29 | 3.37 | 3.29 | 3.05 | 2.72 | 2.54 | 2.40 | 2.32 | 2.31 |
| 16 | --- | --- | --- | 3.25 | 3.37 | 3.16 | 3.08 | 2.73 | 2.51 | 2.41 | 2.30 | 2.30 |
| 17 | --- | --- | --- | 3.20 | 3.27 | 3.13 | 3.02 | 2.73 | 2.49 | 2.42 | 2.25 | 2.28 |
| 18 | --- | 3.18 | --- | 3.23 | 3.20 | 3.14 | 3.02 | 2.76 | 2.52 | 2.44 | 2.22 | 2.26 |
| 19 | --- | 3.16 | --- | 3.22 | 3.10 | 3.25 | 2.99 | 2.61 | 2.49 | 2.44 | 2.26 | 2.27 |
| 20 | --- | 3.19 | --- | 3.13 | 3.15 | 3.25 | 2.96 | 2.49 | 2.96 | 2.41 | 2.31 | 2.30 |
| 21 | --- | 3.26 | --- | 3.16 | 3.26 | 3.23 | 2.92 | 2.77 | 3.15 | 2.38 | 2.38 | 2.25 |
| 22 | --- | 3.29 | 3.06 | 3.21 | 3.34 | 3.21 | 2.92 | 3.02 | 3.04 | 2.38 | 2.40 | 2.28 |
| 23 | --- | 3.34 | 2.97 | 3.23 | 3.51 | 3.22 | 3.02 | 2.85 | 2.94 | 2.37 | 2.34 | 2.32 |
| 24 | --- | 3.33 | 3.04 | 3.19 | 3.53 | 3.18 | 3.05 | 2.74 | 2.92 | 2.37 | 2.30 | 2.40 |
| 25 | --- | 3.30 | 3.15 | 3.21 | 3.36 | 3.09 | 3.09 | 2.64 | 2.77 | 2.46 | 2.28 | 2.43 |
| 26 | --- | 3.25 | 3.17 | 3.16 | 3.31 | 3.23 | 3.07 | 2.74 | 2.67 | 2.53 | 2.33 | 2.30 |
| 27 | --- | 3.17 | 3.16 | 3.15 | 3.32 | 3.26 | 3.09 | 2.92 | 2.58 | 2.47 | 2.35 | 2.35 |
| 28 | --- | 3.11 | 3.17 | 3.18 | 3.33 | 3.31 | 3.04 | 2.95 | 2.46 | 2.53 | 2.35 | 2.38 |
| 29 | --- | 3.09 | 3.25 | 3.23 | 3.33 | 3.33 | 2.98 | 2.92 | 2.36 | 2.55 | 2.36 | 2.37 |
| 30 | --- | 3.10 | 3.30 | 3.24 | --- | 3.07 | 3.00 | 2.89 | 2.35 | 2.64 | 2.31 | 2.39 |
| 31 | --- | --- | 3.31 | 3.16 | --- | 2.68 | --- | 2.86 | --- | 2.69 | 2.31 | --- |
| MAX | --- | 3.34 | 3.31 | 3.44 | 3.53 | 3.37 | 3.13 | 3.05 | 3.15 | 3.30 | 2.65 | 2.43 |
| MIN | --- | 3.09 | 2.97 | 3.13 | 3.10 | 2.68 | 2.88 | 2.49 | 2.35 | 2.37 | 2.22 | 2.25 |

PLATTE RIVER BASIN

06770470 PLATTE RIVER NEAR DONIPHAN, NE

LOCATION.--Lat 40°47'18", long 098°26'17", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.33, T.10 N., R.10 W., Hall County, Hydrologic Unit 10200101, on left bank, at Platte River Whooping Crane Maintenance Trust, 3.2 mi west of U.S. Highway 281, and 3 mi northwest of Doniphan.

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

GAGE.--Water-stage recorder. Datum of gage is 1899.80 ft above sea level.

REMARKS.--Records fair.

EXTREMES FOR CURRENT YEAR.--Maximum instantaneous gage height, 3.19 ft Mar. 23; minimum instantaneous gage height, 2.07 ft Sept. 9, 18.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 2.90 | 2.72 | 2.78 | 3.02 | --- | 2.99 | 2.42 | 2.73 | 2.50 | 2.21 | 2.46 | 2.16 |
| 2 | 2.95 | 2.74 | 2.80 | 2.97 | --- | 2.89 | 2.72 | 2.73 | 2.43 | 2.20 | 2.39 | 2.14 |
| 3 | 2.94 | 2.76 | 2.83 | 2.88 | --- | 2.90 | 2.75 | 2.70 | 2.41 | 2.19 | 2.29 | 2.15 |
| 4 | 2.96 | 2.76 | 2.89 | 2.77 | --- | 2.87 | 2.74 | 2.65 | 2.44 | 2.38 | 2.22 | 2.14 |
| 5 | 2.96 | 2.74 | 2.94 | 2.80 | --- | 2.85 | 2.69 | 2.62 | 2.46 | 2.65 | 2.23 | 2.15 |
| 6 | 2.99 | 2.69 | 2.91 | 2.96 | --- | 2.86 | 2.69 | 2.58 | 2.46 | 2.97 | 2.22 | 2.16 |
| 7 | 3.03 | 2.68 | 2.83 | 2.92 | --- | 2.89 | 2.65 | 2.56 | 2.43 | 2.82 | 2.20 | 2.17 |
| 8 | 3.03 | 2.72 | 2.77 | 2.90 | --- | 2.99 | 2.64 | 2.60 | 2.44 | 2.69 | 2.17 | 2.19 |
| 9 | 3.04 | 2.72 | 2.78 | 2.97 | 2.86 | 2.99 | 2.65 | 2.65 | 2.41 | 2.57 | 2.15 | 2.10 |
| 10 | 3.01 | 2.70 | 2.79 | 3.02 | 2.86 | 2.92 | 2.67 | 2.65 | 2.32 | 2.47 | 2.19 | 2.21 |
| 11 | 2.98 | 2.74 | 2.80 | 2.99 | 2.83 | 2.84 | 2.69 | 2.64 | 2.30 | 2.41 | 2.19 | 2.25 |
| 12 | 2.85 | 2.75 | 2.82 | 2.99 | 2.81 | 2.81 | 2.73 | 2.66 | 2.35 | 2.32 | 2.17 | 2.25 |
| 13 | 2.70 | 2.79 | 2.77 | 2.94 | 2.82 | 2.83 | 2.74 | 2.67 | 2.40 | 2.31 | 2.18 | 2.25 |
| 14 | 2.88 | 2.81 | 2.71 | 2.91 | 2.82 | 2.88 | 2.73 | 2.65 | 2.31 | 2.25 | 2.17 | 2.20 |
| 15 | 2.92 | 2.80 | 2.73 | 2.91 | 2.85 | 2.85 | 2.75 | 2.60 | 2.23 | 2.20 | 2.16 | 2.16 |
| 16 | 2.94 | 2.78 | 2.75 | 2.89 | 2.88 | 2.78 | 2.79 | 2.57 | 2.24 | 2.16 | 2.16 | 2.15 |
| 17 | 2.93 | 2.74 | 2.77 | 2.82 | 2.84 | 2.74 | 2.72 | 2.57 | 2.25 | 2.22 | 2.12 | 2.13 |
| 18 | 2.89 | 2.70 | 2.77 | 2.88 | 2.89 | 2.75 | 2.72 | 2.51 | 2.27 | 2.25 | 2.11 | 2.10 |
| 19 | 2.82 | 2.68 | 2.80 | 2.88 | 2.81 | 2.84 | 2.72 | 2.39 | 2.24 | 2.23 | 2.16 | 2.11 |
| 20 | 2.79 | 2.68 | 2.81 | 2.84 | 2.79 | 2.91 | 2.65 | 2.19 | 2.49 | 2.23 | 2.15 | 2.16 |
| 21 | 2.77 | 2.69 | 2.73 | 2.80 | 2.89 | 2.92 | 2.61 | 2.29 | 2.74 | 2.23 | 2.15 | 2.15 |
| 22 | 2.76 | 2.69 | 2.77 | 2.82 | 2.94 | 2.95 | 2.63 | 2.66 | 2.75 | 2.28 | 2.18 | 2.14 |
| 23 | 2.74 | 2.69 | 2.84 | --- | 3.04 | 3.06 | 2.63 | 2.57 | 2.65 | 2.23 | 2.20 | 2.16 |
| 24 | 2.75 | 2.67 | 3.00 | --- | 3.03 | 3.06 | 2.67 | 2.43 | 2.64 | 2.25 | 2.20 | 2.22 |
| 25 | 2.78 | 2.67 | 3.01 | --- | 2.86 | 2.82 | 2.73 | 2.38 | 2.57 | 2.28 | 2.17 | 2.25 |
| 26 | 2.79 | 2.68 | 3.02 | --- | 2.80 | 2.83 | 2.75 | 2.44 | 2.49 | 2.37 | 2.18 | 2.23 |
| 27 | 2.80 | 2.68 | 3.00 | --- | 2.87 | 2.91 | 2.71 | 2.61 | 2.43 | 2.25 | 2.23 | 2.21 |
| 28 | 2.76 | 2.73 | 2.98 | --- | 2.95 | 2.93 | 2.69 | 2.65 | 2.35 | 2.32 | 2.24 | 2.25 |
| 29 | 2.80 | 2.77 | 3.01 | --- | 2.98 | 2.92 | 2.68 | 2.62 | 2.28 | 2.33 | 2.20 | 2.25 |
| 30 | 2.79 | 2.79 | 3.03 | --- | --- | 2.81 | 2.67 | 2.56 | 2.21 | 2.45 | 2.20 | 2.25 |
| 31 | 2.77 | --- | 3.02 | --- | --- | 2.42 | --- | 2.52 | --- | 2.52 | 2.18 | --- |
| MAX | 3.04 | 2.81 | 3.03 | 3.02 | 3.04 | 3.06 | 2.79 | 2.73 | 2.75 | 2.97 | 2.46 | 2.25 |
| MIN | 2.70 | 2.67 | 2.71 | 2.77 | 2.79 | 2.42 | 2.42 | 2.19 | 2.21 | 2.16 | 2.11 | 2.10 |

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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 ¼ SW ¼ 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 periods of estimated record, 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 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 1 | 3480 | 2810 | 3000 | 3260 | 3100 | 3000 | 1580 | 2330 | 1620 | 761 | 1220 | 473 |
| 2 | 3700 | 2780 | 2960 | 3200 | 2840 | 2700 | 2410 | 2350 | 1600 | 755 | 1080 | 461 |
| 3 | 3820 | 2760 | 2940 | 3320 | 2450 | 2840 | 2510 | 2150 | 1580 | 791 | 763 | 458 |
| 4 | 3830 | 2810 | 2970 | 3160 | 3330 | 2840 | 2620 | 1970 | 1530 | 1190 | 634 | 443 |
| 5 | 3940 | 2880 | 2970 | 2700 | 3390 | 2780 | 2520 | 1990 | 1520 | 1640 | 591 | 472 |
| 6 | 3950 | 2940 | 2870 | 3290 | 3420 | 2780 | 2450 | 1970 | 1490 | 2830 | 605 | 494 |
| 7 | 3960 | 3000 | 2770 | 3290 | 3480 | 2860 | 2400 | 1950 | 1430 | 2460 | 570 | 444 |
| 8 | 3980 | 2960 | 2720 | 3280 | 3400 | 3040 | 2350 | 2190 | 1420 | 1950 | 538 | 473 |
| 9 | 3880 | 2940 | 2670 | 3340 | 2640 | 3030 | 2310 | 2210 | 1420 | 1610 | 523 | 384 |
| 10 | 3710 | 2970 | 2650 | 3320 | 3000 | 2900 | 2450 | 2140 | 1320 | 1410 | 543 | 463 |
| 11 | 3560 | 3050 | 2740 | 3240 | 2960 | 2820 | 2500 | 2000 | 1210 | 1320 | 517 | 595 |
| 12 | 3230 | 3000 | 2840 | 3290 | 2890 | 2710 | 2500 | 2000 | 1180 | 1110 | 507 | 585 |
| 13 | 2450 | 3060 | 2740 | 3260 | 2870 | 2840 | 2460 | 2030 | 1260 | 1030 | 504 | 580 |
| 14 | 3010 | 3060 | 2620 | 3120 | 2900 | 3010 | 2440 | 1990 | 1120 | 860 | 504 | 492 |
| 15 | 3240 | 3110 | 2630 | 3050 | 2870 | 3040 | 2490 | 1830 | 987 | 742 | 496 | 472 |
| 16 | 3230 | 3110 | 2670 | 3150 | 2920 | 2780 | 2750 | 1720 | 937 | 730 | 502 | 453 |
| 17 | 3120 | 3030 | 2810 | 2970 | 2890 | 2600 | 2700 | 1710 | 921 | 764 | 481 | 420 |
| 18 | 3030 | 2900 | 2870 | 2970 | 2850 | 2580 | 2610 | 1690 | 949 | 775 | 433 | 383 |
| 19 | 2880 | 2840 | 2850 | 2980 | 2780 | 2670 | 2560 | 1520 | 933 | 764 | 495 | 373 |
| 20 | 2730 | 2850 | 2770 | 2850 | 2770 | 2940 | 2470 | 1150 | 1250 | 759 | 533 | 426 |
| 21 | 2720 | 2830 | 2350 | 2720 | 2960 | 2950 | 2330 | 1100 | 2180 | 789 | 544 | 468 |
| 22 | 2770 | 2900 | 2400 | 2830 | 3070 | 2890 | 2330 | 1940 | 2290 | 918 | 589 | 479 |
| 23 | 2880 | 3000 | 2660 | 2880 | 3300 | 3010 | 2240 | 1930 | 2020 | 819 | 611 | 479 |
| 24 | 2890 | 2910 | 3340 | 2870 | 3740 | 3190 | 2270 | 1520 | 1930 | 797 | 528 | 555 |
| 25 | 2800 | 2870 | 3300 | 2750 | 3260 | 2720 | 2380 | 1360 | 1720 | 769 | 508 | 632 |
| 26 | 2770 | 2860 | 3340 | 2810 | 2970 | 2790 | 2440 | 1400 | 1400 | 980 | 547 | 626 |
| 27 | 2800 | 2890 | 3200 | 2720 | 2990 | 3000 | 2330 | 1720 | 1260 | 855 | 565 | 500 |
| 28 | 2590 | 3000 | 3140 | 2830 | 3060 | 3040 | 2310 | 1800 | 1090 | 965 | 568 | 579 |
| 29 | 2680 | 2990 | 3160 | 2990 | 3060 | 3090 | 2300 | 1810 | 878 | 975 | 533 | 625 |
| 30 | 2750 | 3020 | 3160 | 3010 | --- | 2980 | 2130 | 1710 | 793 | 1130 | 497 | 690 |
| 31 | 2780 | --- | 3230 | 3070 | --- | 2000 | --- | 1620 | --- | 1300 | 453 | --- |
| TOTAL | 99160 | 88130 | 89340 | 94520 | 88160 | 88420 | 72140 | 56800 | 41238 | 34548 | 17982 | 14977 |
| MEAN | 3199 | 2938 | 2882 | 3049 | 3040 | 2852 | 2405 | 1832 | 1375 | 1114 | 580 | 499 |
| MAX | 3980 | 3110 | 3340 | 3340 | 3740 | 3190 | 2750 | 2350 | 2290 | 2830 | 1220 | 690 |
| MIN | 2450 | 2760 | 2350 | 2700 | 2450 | 2000 | 1580 | 1100 | 793 | 730 | 433 | 373 |
| AC-FT | 196700 | 174800 | 177200 | 187500 | 174900 | 175400 | 143100 | 112700 | 81800 | 68530 | 35670 | 29710 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2000, BY WATER YEAR (WY)

| | 1942 | 1943 | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 |
|------|------|------|------|------|------|------|------|-------|-------|-------|------|------|
| MEAN | 1317 | 1409 | 1429 | 1531 | 2050 | 2419 | 2092 | 2307 | 2571 | 1208 | 624 | 984 |
| 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

06770500 PLATTE RIVER NEAR GRAND ISLAND, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1942 - 2000 a | |
|--------------------------|------------------------|--------|---------------------|--------|---------------------------|-------------|
| ANNUAL TOTAL | 1173670 | | 785415 | | 1658 | |
| ANNUAL MEAN | 3216 | | 2146 | | 1340 | |
| MEDIAN OF ANNUAL MEANS | | | | | 5380 | |
| HIGHEST ANNUAL MEAN | | | | | 414 | |
| LOWEST ANNUAL MEAN | | | | | 23500 | |
| HIGHEST DAILY MEAN | 11700 | May 14 | 3980 | Oct 8 | 23500 | Jun 30 1983 |
| LOWEST DAILY MEAN | 746 | Jul 31 | 373 | Sep 19 | *.00 | Oct 1 1941 |
| ANNUAL SEVEN-DAY MINIMUM | 836 | Jul 26 | 428 | Sep 15 | .00 | Oct 1 1941 |
| INSTANTANEOUS PEAK FLOW | | | **4040 | Oct 7 | ***23900 | Jun 30 1983 |
| INSTANTANEOUS PEAK STAGE | | | 2.91 | Feb 24 | ****6.16 | Mar 27 1960 |
| ANNUAL RUNOFF (AC-FT) | 2328000 | | 1558000 | | 1201000 | |
| 10 PERCENT EXCEEDS | 5350 | | 3210 | | 3300 | |
| 50 PERCENT EXCEEDS | 2800 | | 2570 | | 1190 | |
| 90 PERCENT EXCEEDS | 1690 | | 533 | | 146 | |

e Estimated.

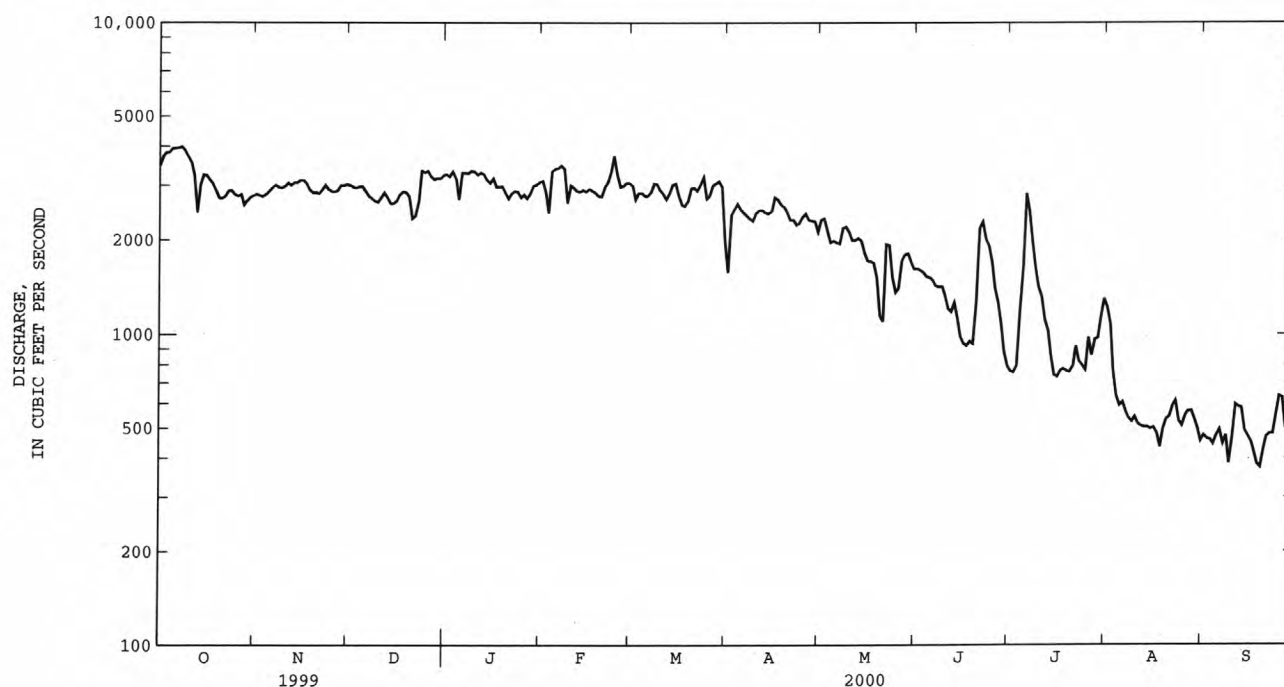
a Since beginning of storage in Lake McConaughy.

* No flow at times in many years.

** Stage 2.84 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 periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|------|-------|-------|-------|-------|-------|------|------|------|
| 1 | .00 | .00 | .00 | e.45 | e.13 | e3.8 | 3.8 | 4.2 | 4.5 | .00 | .00 | .00 |
| 2 | .00 | .00 | .00 | e.45 | e.09 | 4.1 | 3.9 | 4.5 | 4.0 | .00 | .00 | .00 |
| 3 | .00 | .00 | .00 | e.40 | e.10 | 4.2 | 3.5 | 4.4 | 3.7 | .00 | .00 | .00 |
| 4 | .00 | .00 | .00 | e.30 | e.11 | 4.2 | 3.4 | 4.1 | 3.8 | .31 | .00 | .00 |
| 5 | .00 | .00 | .00 | e.20 | e.11 | 4.2 | 3.7 | 4.0 | 3.4 | .00 | .00 | .00 |
| 6 | .00 | .00 | .00 | e.21 | e.12 | 4.1 | 3.4 | 3.8 | 3.2 | .00 | .00 | .00 |
| 7 | .00 | .00 | .19 | e.23 | e.14 | 3.9 | 3.3 | 4.0 | 3.1 | .00 | .00 | .00 |
| 8 | .00 | .00 | .76 | e.24 | e.15 | 4.5 | 3.1 | 4.1 | 2.9 | .00 | .00 | .00 |
| 9 | .00 | .00 | .00 | e.25 | e.17 | 3.7 | 3.1 | 3.9 | 2.5 | .00 | .00 | .00 |
| 10 | .00 | .00 | .00 | e.26 | e.18 | 3.7 | 3.2 | 4.0 | 1.7 | .00 | .00 | .00 |
| 11 | .00 | .00 | .29 | e.24 | e.16 | 3.7 | 2.8 | 4.1 | .92 | .00 | .00 | .00 |
| 12 | .00 | .00 | 1.1 | e.22 | e.15 | 3.8 | 2.7 | 3.7 | .00 | .00 | .00 | .00 |
| 13 | .00 | .00 | .87 | e.21 | e.14 | 4.3 | 2.9 | 3.4 | .42 | .00 | .00 | .00 |
| 14 | .00 | .00 | 1.4 | e.23 | e.13 | 4.2 | 3.1 | 3.2 | .81 | .00 | .00 | .00 |
| 15 | .00 | .00 | 1.5 | e.20 | e.14 | 3.9 | 2.9 | 3.1 | .45 | .00 | .00 | .00 |
| 16 | .00 | .00 | e1.0 | e.20 | e.30 | 3.4 | 3.6 | 3.2 | .36 | .00 | .00 | .00 |
| 17 | .00 | .00 | e.90 | e.22 | e.25 | 3.4 | 3.9 | 3.3 | .03 | .00 | .00 | .00 |
| 18 | .00 | .00 | e.80 | e.23 | e.23 | 3.7 | 4.9 | 3.4 | .00 | .00 | .00 | .00 |
| 19 | .00 | .00 | e.50 | e.23 | e.20 | 3.9 | 5.5 | 3.0 | .00 | .00 | .00 | .00 |
| 20 | .00 | .00 | e.30 | e.25 | e.25 | 4.3 | 5.5 | 3.0 | .37 | .00 | .00 | .00 |
| 21 | .00 | .00 | e.29 | e.23 | e.30 | 4.6 | 5.2 | 3.3 | .57 | .00 | .00 | .00 |
| 22 | .00 | .00 | e.30 | e.21 | e.40 | 4.6 | 5.4 | 3.3 | .00 | .00 | .00 | .00 |
| 23 | .00 | .00 | e.35 | e.21 | e.55 | 5.1 | 5.1 | 3.2 | .00 | .00 | .00 | .00 |
| 24 | .00 | .00 | e.40 | e.19 | e.90 | 5.5 | 4.8 | 2.9 | .00 | .00 | .00 | .00 |
| 25 | .00 | .00 | e.45 | e.19 | e1.3 | 6.2 | 4.8 | 2.7 | .00 | .00 | .00 | .00 |
| 26 | .00 | .00 | e.50 | e.17 | e1.7 | 6.2 | 4.3 | 3.4 | .00 | .00 | .00 | .00 |
| 27 | .00 | .00 | e.50 | e.16 | e2.5 | 5.5 | 4.2 | 4.6 | .00 | .00 | .00 | .00 |
| 28 | .00 | .00 | e.52 | e.15 | e3.0 | 5.2 | 4.2 | 4.4 | .00 | .00 | .00 | .00 |
| 29 | .00 | .00 | e.52 | e.15 | e3.3 | 4.6 | 4.3 | 4.8 | .00 | .00 | .00 | .00 |
| 30 | .00 | .00 | e.50 | e.15 | --- | 4.2 | 4.1 | 5.1 | .00 | .00 | .00 | .00 |
| 31 | .00 | --- | e.40 | e.15 | --- | 3.8 | --- | 4.7 | --- | .00 | .00 | --- |
| TOTAL | 0.00 | 0.00 | 14.34 | 7.18 | 17.20 | 134.5 | 118.6 | 116.8 | 36.73 | 0.31 | 0.00 | 0.00 |
| MEAN | .000 | .000 | .46 | .23 | .59 | 4.34 | 3.95 | 3.77 | 1.22 | .010 | .000 | .000 |
| MAX | .00 | .00 | 1.5 | .45 | 3.3 | 6.2 | 5.5 | 5.1 | 4.5 | .31 | .00 | .00 |
| MIN | .00 | .00 | .00 | .15 | .09 | 3.4 | 2.7 | 2.7 | .00 | .00 | .00 | .00 |
| AC-FT | .00 | .00 | 28 | 14 | 34 | 267 | 235 | 232 | 73 | .6 | .00 | .00 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2000, BY WATER YEAR (WY)

| | 1996 | 1997 | 1998 | 1999 | 2000 |
|------|------|------|------|------|------|
| MEAN | 4.88 | 8.66 | 5.86 | 4.53 | 6.89 |
| MAX | 19.4 | 23.1 | 14.4 | 9.50 | 14.0 |
| (WY) | 1998 | 1998 | 1998 | 1998 | 1998 |
| MIN | .000 | .000 | .46 | .23 | .59 |
| (WY) | 1997 | 2000 | 2000 | 2000 | 2000 |

PLATTE RIVER BASIN

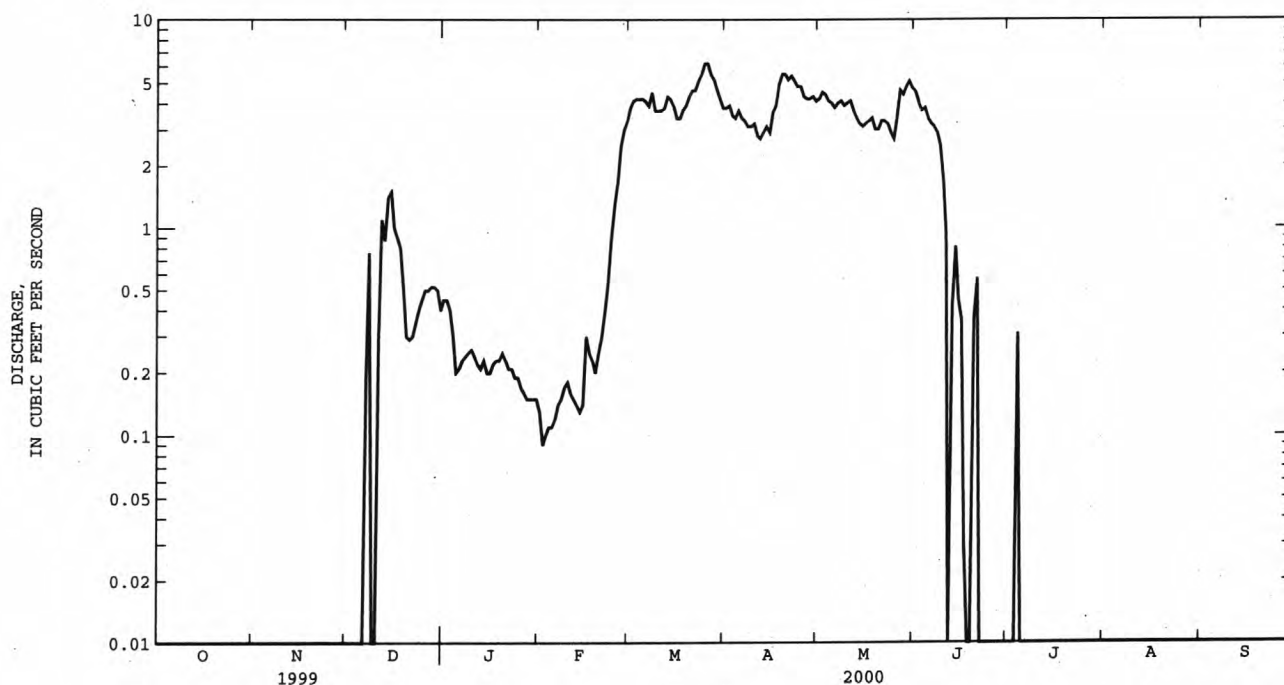
06772775 WARM SLOUGH NEAR CENTRAL CITY, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | FOR 2000 WATER YEAR | WATER YEARS 1996 - 2000 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 3898.49 | 445.66 | 10.7 |
| ANNUAL MEAN | 10.7 | 1.22 | 23.1 |
| HIGHEST ANNUAL MEAN | | | 1.22 |
| LOWEST ANNUAL MEAN | | | 1998 |
| HIGHEST DAILY MEAN | 135 Apr 16 | 6.2 Mar 25 | 413 Apr 8 1998 |
| LOWEST DAILY MEAN | .00 Feb 1 | .00 Oct 1 | .00 Apr 1 1996 |
| ANNUAL SEVEN-DAY MINIMUM | .00 Aug 28 | .00 Oct 1 | .00 Apr 1 1996 |
| INSTANTANEOUS PEAK FLOW | | *6.7 Mar 26 | 443 Apr 8 1998 |
| INSTANTANEOUS PEAK STAGE | | **3.57 Feb 25 | 8.04 Apr 8 1998 |
| ANNUAL RUNOFF (AC-FT) | 7730 | 884 | 7720 |
| 10 PERCENT EXCEEDS | 29 | 4.2 | 25 |
| 50 PERCENT EXCEEDS | 2.8 | .15 | 3.6 |
| 90 PERCENT EXCEEDS | .00 | .00 | .00 |

e Estimated.

* Stage 3.48 ft.

** Backwater from ice.



LOCATION.--Lat 41°17'51", long 097°42'50", in NW ¼ SW ¼ 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.

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

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

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

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
| 1 | .85 | 1.9 | 3.9 | 5.5 | 4.1 | 8.0 | 7.4 | 6.3 | 3.7 | .00 | .00 | .00 |
| 2 | .73 | 1.8 | 4.0 | 5.6 | 5.6 | 7.9 | 7.4 | 6.2 | 3.5 | .00 | .00 | .00 |
| 3 | .76 | 1.9 | 4.4 | 5.1 | 6.4 | 8.1 | 7.3 | 5.7 | 3.3 | .14 | .00 | .00 |
| 4 | .76 | 2.1 | 4.2 | 6.0 | 6.0 | e8.0 | 7.3 | 5.5 | 3.2 | .08 | .00 | .00 |
| 5 | .78 | 2.3 | 3.6 | 5.7 | 6.6 | e8.0 | 7.2 | 5.3 | 3.0 | .00 | .00 | .00 |
| 6 | .78 | 2.2 | 4.0 | 3.6 | 6.7 | e8.0 | 6.9 | 5.3 | 2.8 | .00 | .00 | .00 |
| 7 | .79 | 2.2 | 4.2 | 4.1 | 6.6 | e8.6 | 6.7 | 5.6 | 2.5 | .00 | .00 | .00 |
| 8 | .83 | 2.3 | 4.5 | 4.8 | 6.2 | e8.6 | 6.7 | 6.3 | 2.3 | .00 | .00 | .00 |
| 9 | .84 | 2.4 | 4.1 | 5.4 | 6.8 | e8.6 | 7.3 | 5.8 | 2.0 | .00 | .00 | .00 |
| 10 | .80 | 2.3 | 3.8 | 6.1 | 7.0 | e8.0 | 7.1 | 5.6 | 1.8 | .07 | .00 | .00 |
| 11 | .80 | 2.3 | 4.1 | 5.9 | 5.4 | e8.0 | 6.8 | 5.4 | 1.7 | .00 | .00 | .00 |
| 12 | .89 | 2.5 | 4.3 | 5.2 | 5.2 | e8.0 | 6.7 | 4.8 | 1.7 | .00 | .00 | .00 |
| 13 | .92 | 2.6 | 4.1 | 6.2 | 5.7 | e8.0 | 6.8 | 4.6 | 1.7 | .00 | .00 | .00 |
| 14 | 1.1 | 2.6 | 4.7 | 4.5 | 6.6 | e8.0 | 6.7 | 4.5 | 1.4 | .00 | .00 | .00 |
| 15 | 1.1 | 2.8 | 3.5 | 5.6 | 7.6 | e8.6 | 6.7 | 4.4 | 1.3 | .11 | .00 | .00 |
| 16 | 1.0 | 2.9 | 4.1 | 4.8 | 6.5 | e8.6 | 8.2 | 4.3 | 1.2 | .00 | .00 | .00 |
| 17 | 1.1 | 3.1 | 4.2 | 5.3 | 7.1 | 8.4 | 7.5 | 4.3 | 1.1 | .00 | .00 | .00 |
| 18 | 1.1 | 3.2 | 4.3 | 5.8 | 5.7 | 8.4 | 7.4 | 4.4 | 1.1 | .00 | .00 | .00 |
| 19 | 1.2 | 3.0 | 4.6 | 6.2 | 6.5 | 8.4 | 7.3 | 4.2 | 1.0 | .03 | .00 | .00 |
| 20 | 1.3 | 3.0 | 4.6 | 5.0 | 8.4 | 8.3 | 7.1 | 4.0 | .96 | .16 | .00 | .00 |
| 21 | 1.3 | 3.3 | 4.6 | 5.3 | 8.5 | 8.0 | 6.8 | 3.9 | .84 | .00 | .00 | .00 |
| 22 | 1.2 | 3.2 | 4.7 | 5.8 | 8.4 | 8.0 | 6.8 | 3.6 | .67 | .00 | .00 | .00 |
| 23 | 1.2 | 4.1 | 4.4 | 5.5 | 9.0 | 8.9 | 6.7 | 3.5 | .49 | .00 | .00 | .00 |
| 24 | 1.3 | 3.6 | 3.5 | 6.7 | 8.9 | 8.9 | 6.5 | 3.3 | .60 | .00 | .00 | .00 |
| 25 | 1.4 | 3.7 | 4.2 | 5.4 | 9.2 | 8.2 | 6.4 | 3.1 | .58 | .00 | .00 | .00 |
| 26 | 1.4 | 3.9 | 4.8 | 5.6 | 8.5 | 8.0 | 6.6 | 4.9 | .40 | .00 | .00 | .00 |
| 27 | 1.5 | 3.6 | 5.1 | 4.7 | 8.0 | 7.9 | 6.4 | 5.3 | .27 | .00 | .00 | .00 |
| 28 | 1.4 | 3.4 | 5.3 | 4.4 | 8.2 | 7.8 | 6.2 | 4.1 | .38 | .72 | .00 | .00 |
| 29 | 1.6 | 3.3 | 5.5 | 4.7 | 8.3 | 7.6 | 6.1 | 3.9 | .09 | .00 | .00 | .00 |
| 30 | 1.6 | 3.5 | 5.3 | 4.6 | --- | 7.4 | 6.2 | 3.9 | .00 | .00 | .00 | .00 |
| 31 | 1.8 | --- | 5.0 | 5.1 | --- | 7.2 | --- | 3.7 | --- | .00 | .00 | --- |
| TOTAL | 34.13 | 85.0 | 135.6 | 164.2 | 203.7 | 252.4 | 207.2 | 145.7 | 45.58 | 1.31 | 0.00 | 0.00 |
| MEAN | 1.10 | 2.83 | 4.37 | 5.30 | 7.02 | 8.14 | 6.91 | 4.70 | 1.52 | .042 | .000 | .000 |
| MAX | 1.8 | 4.1 | 5.5 | 6.7 | 9.2 | 8.9 | 8.2 | 6.3 | .72 | .72 | .00 | .00 |
| MIN | .73 | 1.8 | 3.5 | 3.6 | 4.1 | 7.2 | 6.1 | 3.1 | .00 | .00 | .00 | .00 |
| AC-FT | 68 | 169 | 269 | 326 | 404 | 501 | 411 | 289 | 90 | 2.6 | .00 | .00 |

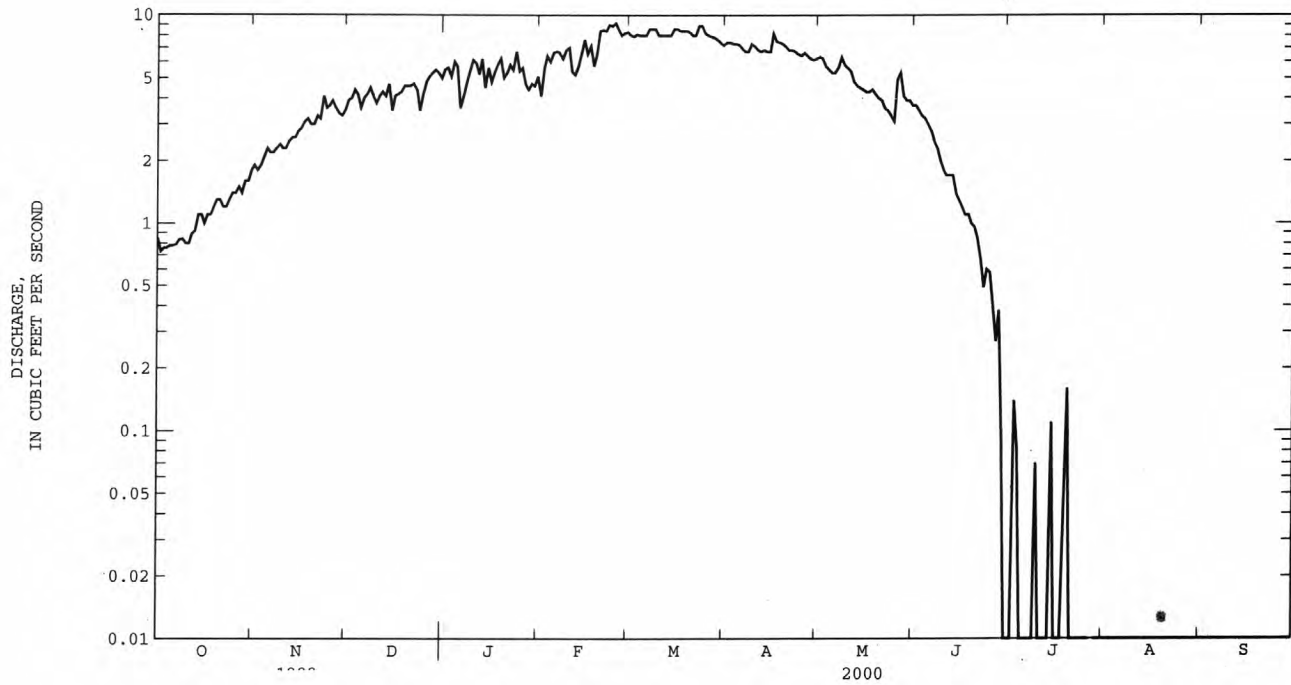
[illegible]

PLATTE RIVER BASIN

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

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | FOR 2000 WATER YEAR | WATER YEARS 1996 - 2000 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 19230.57 | 1274.82 | |
| ANNUAL MEAN | 52.7 | 3.48 | 30.4 |
| HIGHEST ANNUAL MEAN | | | 55.5 |
| LOWEST ANNUAL MEAN | | | 3.48 |
| HIGHEST DAILY MEAN | 2100 | 9.2 | 2100 |
| LOWEST DAILY MEAN | .73 | .00 | .00 |
| ANNUAL SEVEN-DAY MINIMUM | .77 | .00 | .00 |
| INSTANTANEOUS PEAK FLOW | | 18 | 3070 |
| INSTANTANEOUS PEAK STAGE | | 4.91 | 9.11 |
| ANNUAL RUNOFF (AC-FT) | 38140 | 2530 | 22020 |
| 10 PERCENT EXCEEDS | 88 | 7.9 | 56 |
| 50 PERCENT EXCEEDS | 18 | 3.6 | 11 |
| 90 PERCENT EXCEEDS | 1.2 | .00 | .56 |

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.

REMARKS---Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|------|------|------|------|------|-------|-------|-------|------|------|
| 1 | 7.6 | 9.4 | 13 | 18 | 21 | 16 | 14 | 13 | 8.9 | .77 | .15 | .00 |
| 2 | 6.8 | 8.4 | 12 | 16 | 25 | 15 | 14 | 13 | 8.1 | .67 | .43 | .00 |
| 3 | 6.9 | 9.1 | 13 | 14 | 26 | 14 | 13 | 13 | 7.7 | .57 | .29 | .00 |
| 4 | 7.7 | 9.3 | 13 | 11 | 27 | 14 | 13 | 13 | 7.2 | 1.7 | .30 | .00 |
| 5 | 8.0 | 8.9 | 11 | 14 | 23 | 14 | 14 | 12 | 6.4 | .60 | .41 | .00 |
| 6 | 8.0 | 8.6 | 13 | 17 | 20 | 14 | 13 | 12 | 6.1 | .48 | .16 | .00 |
| 7 | 9.3 | 9.3 | 13 | 20 | 29 | 14 | 13 | 13 | 5.9 | .38 | .00 | .00 |
| 8 | 8.0 | 9.9 | 13 | 21 | 28 | 15 | 12 | 13 | 5.2 | 25 | .00 | .00 |
| 9 | 8.4 | 11 | 12 | 22 | 19 | 14 | 13 | 13 | 4.4 | 23 | .00 | .00 |
| 10 | 8.1 | 9.6 | 11 | 22 | 18 | 13 | 12 | 13 | 4.1 | 12 | .00 | .00 |
| 11 | 7.9 | 9.9 | 11 | 23 | 16 | 14 | 12 | 13 | 3.6 | 5.7 | .00 | .00 |
| 12 | 8.4 | 10 | 12 | 22 | 19 | 16 | 12 | 12 | 4.1 | 2.4 | .00 | .00 |
| 13 | 7.5 | 10 | 11 | 30 | 19 | 14 | 13 | 11 | 3.9 | .56 | .00 | .00 |
| 14 | 8.1 | 9.8 | 12 | 25 | 23 | 14 | 13 | 11 | 3.0 | .61 | .00 | .00 |
| 15 | 8.3 | 10 | 10 | 25 | 18 | 14 | 11 | 11 | 2.2 | .45 | .00 | .00 |
| 16 | 7.0 | 11 | 14 | 30 | 16 | 12 | 15 | 11 | 1.7 | .51 | .00 | .00 |
| 17 | 7.0 | 11 | 15 | 28 | 18 | 13 | 15 | 11 | 1.4 | .50 | .00 | .00 |
| 18 | 9.1 | 11 | 19 | 29 | 14 | 13 | 16 | 12 | 1.3 | .10 | .00 | .00 |
| 19 | 8.0 | 10 | 18 | 27 | 18 | 14 | 19 | 11 | 1.1 | .08 | .15 | .00 |
| 20 | 8.1 | 10 | 21 | 31 | 18 | 14 | 18 | 11 | 1.2 | 1.6 | .00 | .00 |
| 21 | 8.9 | 11 | 14 | 30 | 21 | 14 | 17 | 11 | .79 | .21 | .00 | .00 |
| 22 | 8.2 | 10 | 20 | 25 | 19 | 16 | 16 | 10 | .95 | .05 | .00 | .00 |
| 23 | 7.8 | 12 | 22 | 27 | 22 | 19 | 15 | 9.9 | 1.0 | .34 | .10 | .00 |
| 24 | 8.9 | 12 | 22 | 28 | 22 | 20 | 15 | 9.0 | 2.2 | .02 | .00 | .00 |
| 25 | 9.4 | 13 | 23 | 20 | 26 | 18 | 14 | 8.4 | 1.8 | .30 | .00 | .00 |
| 26 | 9.2 | 13 | 23 | 23 | 25 | 18 | 14 | 11 | 1.2 | .30 | .00 | .00 |
| 27 | 9.4 | 12 | 24 | 22 | 25 | 19 | 14 | 15 | .97 | .00 | .00 | .00 |
| 28 | 9.1 | 12 | 26 | 24 | 22 | 16 | 13 | 11 | 1.1 | 2.7 | .00 | .00 |
| 29 | 9.9 | 12 | 25 | 23 | 18 | 16 | 13 | 11 | .79 | .83 | .00 | .00 |
| 30 | 9.8 | 13 | 20 | 23 | --- | 15 | 13 | 9.9 | .72 | .48 | .00 | .00 |
| 31 | 9.3 | --- | 16 | 22 | --- | 14 | --- | 8.8 | --- | .25 | .00 | --- |
| TOTAL | 258.1 | 316.2 | 502 | 712 | 615 | 466 | 419 | 357.0 | 99.02 | 83.16 | 1.99 | 0.00 |
| MEAN | 8.33 | 10.5 | 16.2 | 23.0 | 21.2 | 15.0 | 14.0 | 11.5 | 3.30 | 2.68 | .064 | .000 |
| MAX | 9.9 | 13 | 26 | 31 | 29 | 20 | 19 | 15 | 8.9 | 25 | .43 | .00 |
| MIN | 6.8 | 8.4 | 10 | 11 | 14 | 12 | 11 | 8.4 | .72 | .00 | .00 | .00 |
| AC-FT | 512 | 627 | 996 | 1410 | 1220 | 924 | 831 | 708 | 196 | 165 | 3.9 | .00 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2000, BY WATER YEAR (WY)

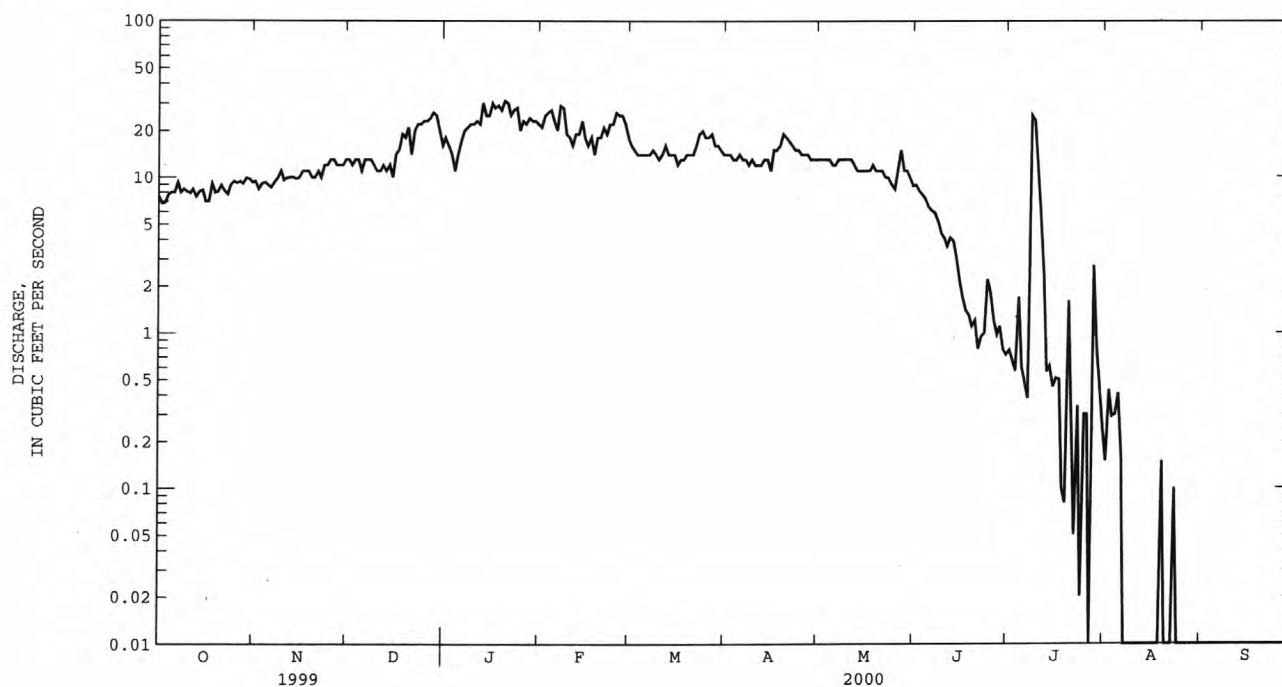
| | 1996 | 1997 | 1998 | 1999 | 2000 |
|------|------|------|------|------|------|
| MEAN | 30.5 | 48.3 | 24.3 | 24.2 | 30.4 |
| MAX | 90.0 | 80.8 | 36.9 | 29.7 | 38.6 |
| (WY) | 1998 | 1998 | 1998 | 1998 | 1998 |
| MIN | 8.33 | 10.5 | 16.2 | 20.1 | 21.2 |
| (WY) | 2000 | 2000 | 2000 | 1997 | 2000 |

PLATTE RIVER BASIN

06773500 PRAIRIE CREEK NEAR SILVER CREEK, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1996 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 32351.2 | | 3829.47 | | 63.6 | |
| ANNUAL MEAN | 88.6 | | 10.5 | | 113 | |
| HIGHEST ANNUAL MEAN | | | | | 10.5 | |
| LOWEST ANNUAL MEAN | | | | | 1590 | |
| HIGHEST DAILY MEAN | 1460 | Jun 28 | 31 | Jan 20 | *.00 | Apr 10 1998 |
| LOWEST DAILY MEAN | 6.8 | Oct 2 | *.00 | Jul 27 | *.00 | Jul 27 2000 |
| ANNUAL SEVEN-DAY MINIMUM | 7.6 | Sep 30 | .00 | Aug 7 | .00 | Aug 7 2000 |
| INSTANTANEOUS PEAK FLOW | | | 60 | Feb 7 | 1640 | Apr 10 1998 |
| INSTANTANEOUS PEAK STAGE | | | 3.41 | Feb 7 | 9.29 | Apr 10 1998 |
| ANNUAL RUNOFF (AC-FT) | 64170 | | 7600 | | 46050 | |
| 10 PERCENT EXCEEDS | 202 | | 22 | | 132 | |
| 50 PERCENT EXCEEDS | 30 | | 11 | | 27 | |
| 90 PERCENT EXCEEDS | 9.3 | | .00 | | 8.2 | |

* Many days.



PLATTE RIVER BASIN

06774000 PLATTE RIVER NEAR DUNCAN, NE

LOCATION.--Lat 41°22'04", long 097°29'40", in SE ¼ SW ¼ sec.12, T.16 N., R.2 W., Platte County, Hydrologic Unit 10200103, on left bank near northwest corner of county bridge, 1.5 mi south of Duncan, and 15.3 mi upstream from Loup River, and at mile 114.

DRAINAGE AREA.--59,300 mi², of which about 54,630 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--June 1895 to December 1909 (irrigation seasons only 1885-1900). July 1910 to December 1911 (gage heights and discharge measurements only), April 1912 to September 1915, June 1928 to current year. Published as "near Columbus" 1895-1915.

REVISED RECORDS.--WSP 956: 1935. WSP 1390: 1897, 1899-1901, 1903-05, 1929-32, 1935(M), 1936. WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 1,476.82 ft above sea level. June 1895 to December 1909, April 1912 to September 1915, and June to October 1928, nonrecording gage at site 7 mi downstream at different datums. Oct. 25, 1928, to Feb. 20, 1935, nonrecording gage, and Feb. 20, 1935 to Mar. 21, 1984, recording gage both at present site at 2.00 ft higher datum. Mar. 22, 1984, to Mar. 4, 1987, at site 300 ft downstream at present datum. Data collection platform at station.

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

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 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 1 | 3230 | 2980 | 2950 | 3530 | 3360 | 3950 | 2690 | 2020 | 1690 | 590 | 983 | 402 |
| 2 | 3310 | 2980 | 2950 | 3550 | 3580 | 3900 | 1870 | 2110 | 1700 | 492 | 1190 | 372 |
| 3 | 3620 | 3010 | 2990 | 3570 | 3600 | 3440 | 2050 | 2340 | 1720 | 460 | 1150 | 367 |
| 4 | 3770 | 2960 | 3040 | 3440 | 2740 | 3520 | 2420 | 2220 | 1580 | 599 | 1020 | 408 |
| 5 | 3770 | 2910 | 3060 | 2910 | 3250 | 3580 | 2520 | 2020 | 1510 | 1040 | 767 | 325 |
| 6 | 3810 | 2950 | 3080 | 2430 | 3810 | 3540 | 2560 | 1930 | 1480 | 1080 | 637 | 313 |
| 7 | 3790 | 3000 | 3030 | 3360 | 3930 | 3460 | 2480 | 1900 | 1440 | 2180 | 614 | 321 |
| 8 | 3710 | 3040 | 2990 | 3610 | 3910 | 3490 | 2540 | 1840 | 1350 | 2770 | 567 | 361 |
| 9 | 3710 | 3000 | 2930 | 3630 | 3880 | 3440 | 2550 | 2010 | 1340 | 2310 | 503 | 334 |
| 10 | 3610 | 2940 | 2940 | 3770 | 3070 | 3450 | 2460 | 1900 | 1270 | 1930 | 450 | 362 |
| 11 | 3560 | 3010 | 2930 | 3810 | 3220 | 3250 | 2330 | 1790 | 1170 | 1650 | 450 | 259 |
| 12 | 3450 | 3080 | 2930 | 3800 | e2700 | 3070 | 2470 | 1630 | 1140 | 1360 | 424 | 374 |
| 13 | 3230 | 3100 | 2970 | 3740 | e2400 | 2700 | 2490 | 1590 | 980 | 1110 | 375 | 518 |
| 14 | 2600 | 3090 | 2880 | 3790 | e2800 | 2930 | 2520 | 1700 | 988 | 835 | 333 | 503 |
| 15 | 2600 | 3120 | 2760 | 3760 | 3580 | 3040 | 2400 | 1720 | 1030 | 728 | 247 | 472 |
| 16 | 2890 | 3160 | 2830 | 3540 | 3440 | 3060 | 2780 | 1680 | 873 | 556 | 223 | 409 |
| 17 | 2960 | 3150 | 2760 | 3580 | 3520 | 2790 | 3040 | 1680 | 803 | 557 | 209 | 350 |
| 18 | 3010 | 3090 | 2820 | 3530 | 3680 | 2530 | 2830 | 1670 | 830 | 674 | 221 | 290 |
| 19 | 2990 | 2840 | 2890 | 3520 | 3380 | 2680 | 2810 | 1760 | 800 | 695 | 371 | 252 |
| 20 | 2970 | 2820 | 2880 | 3450 | 3230 | 2780 | 2800 | 1670 | 776 | 876 | 452 | 248 |
| 21 | 2860 | 2820 | 2730 | 3360 | 3180 | 3240 | 2930 | 1410 | 736 | 694 | 386 | 275 |
| 22 | 2800 | 2810 | 2520 | 3300 | 3420 | 3400 | 2600 | 1050 | 1580 | 660 | 393 | 346 |
| 23 | 2760 | 3020 | 2680 | 3290 | 3860 | 3570 | 2480 | 1400 | 2270 | 735 | 507 | 351 |
| 24 | 2760 | 3040 | 3050 | 3250 | 4190 | 3690 | 2430 | 2050 | 2320 | 755 | 533 | 397 |
| 25 | 2760 | 2930 | 3740 | 3190 | 4740 | 3680 | 2500 | 1640 | 1990 | 649 | 481 | 469 |
| 26 | 2780 | 2840 | 3840 | 2730 | 4200 | 3120 | 2660 | 1620 | 1660 | 584 | 387 | 554 |
| 27 | 2820 | 2780 | 3790 | 2830 | 3890 | 2870 | 2730 | 1730 | 1290 | 601 | 372 | 592 |
| 28 | 2840 | 2760 | 3640 | 2670 | 3900 | 3190 | 2360 | 1700 | 1030 | 1130 | 430 | 560 |
| 29 | 2810 | 2810 | 3530 | 2600 | 3950 | 3310 | 2160 | 1880 | 902 | 841 | 456 | 439 |
| 30 | 2900 | 2860 | 3490 | 2740 | --- | 3380 | 2040 | 1930 | 755 | 844 | 473 | 499 |
| 31 | 2990 | --- | 3510 | 3000 | --- | 3410 | --- | 1810 | --- | 766 | 415 | --- |
| TOTAL | 97670 | 88900 | 95130 | 103280 | 102410 | 101460 | 75500 | 55400 | 39003 | 30751 | 16019 | 11722 |
| MEAN | 3151 | 2963 | 3069 | 3332 | 3531 | 3273 | 2517 | 1787 | 1300 | 992 | 517 | 391 |
| MAX | 3810 | 3160 | 3840 | 3810 | 4740 | 3950 | 3040 | 2340 | 2320 | 2770 | 1190 | 592 |
| MIN | 2600 | 2760 | 2520 | 2430 | 2400 | 2530 | 1870 | 1050 | 736 | 460 | 209 | 248 |
| AC-FT | 193700 | 176300 | 188700 | 204900 | 203100 | 201200 | 149800 | 109900 | 77360 | 60990 | 31770 | 23250 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2000, BY WATER YEAR (WY)

| | 1408 | 1561 | 1518 | 1578 | 2336 | 2960 | 2546 | 2655 | 2966 | 1472 | 671 | 984 |
|------|------|------|------|------|------|------|-------|-------|-------|-------|------|------|
| MEAN | 1408 | 1561 | 1518 | 1578 | 2336 | 2960 | 2546 | 2655 | 2966 | 1472 | 671 | 984 |
| MAX | 6673 | 5617 | 5107 | 5603 | 8795 | 9531 | 13410 | 15450 | 18320 | 12590 | 6135 | 6785 |
| (WY) | 1974 | 1985 | 1985 | 1984 | 1984 | 1984 | 1984 | 1984 | 1983 | 1983 | 1983 | 1983 |
| MIN | .000 | .000 | 15.7 | 44.5 | 269 | 820 | 574 | 150 | 11.3 | .000 | .000 | .000 |
| (WY) | 1957 | 1957 | 1942 | 1942 | 1942 | 1957 | 1967 | 1955 | 1956 | 1956 | 1956 | 1956 |

PLATTE RIVER BASIN

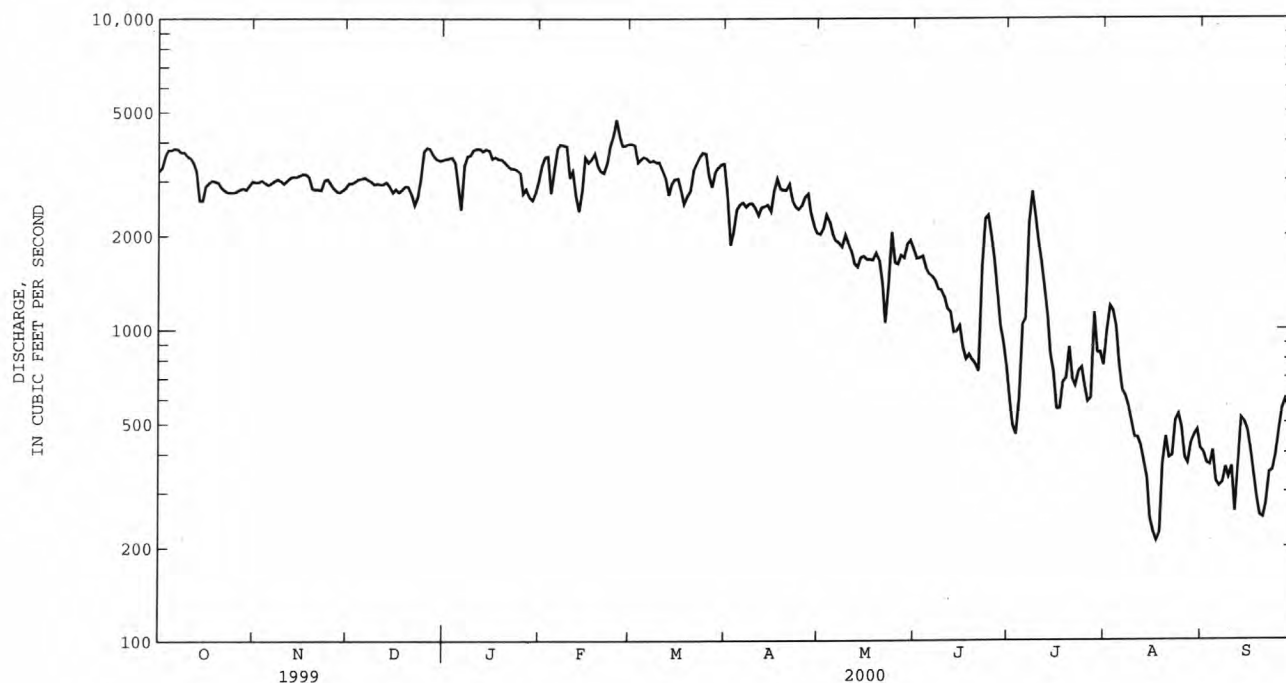
06774000 PLATTE RIVER NEAR DUNCAN, NE--Continued

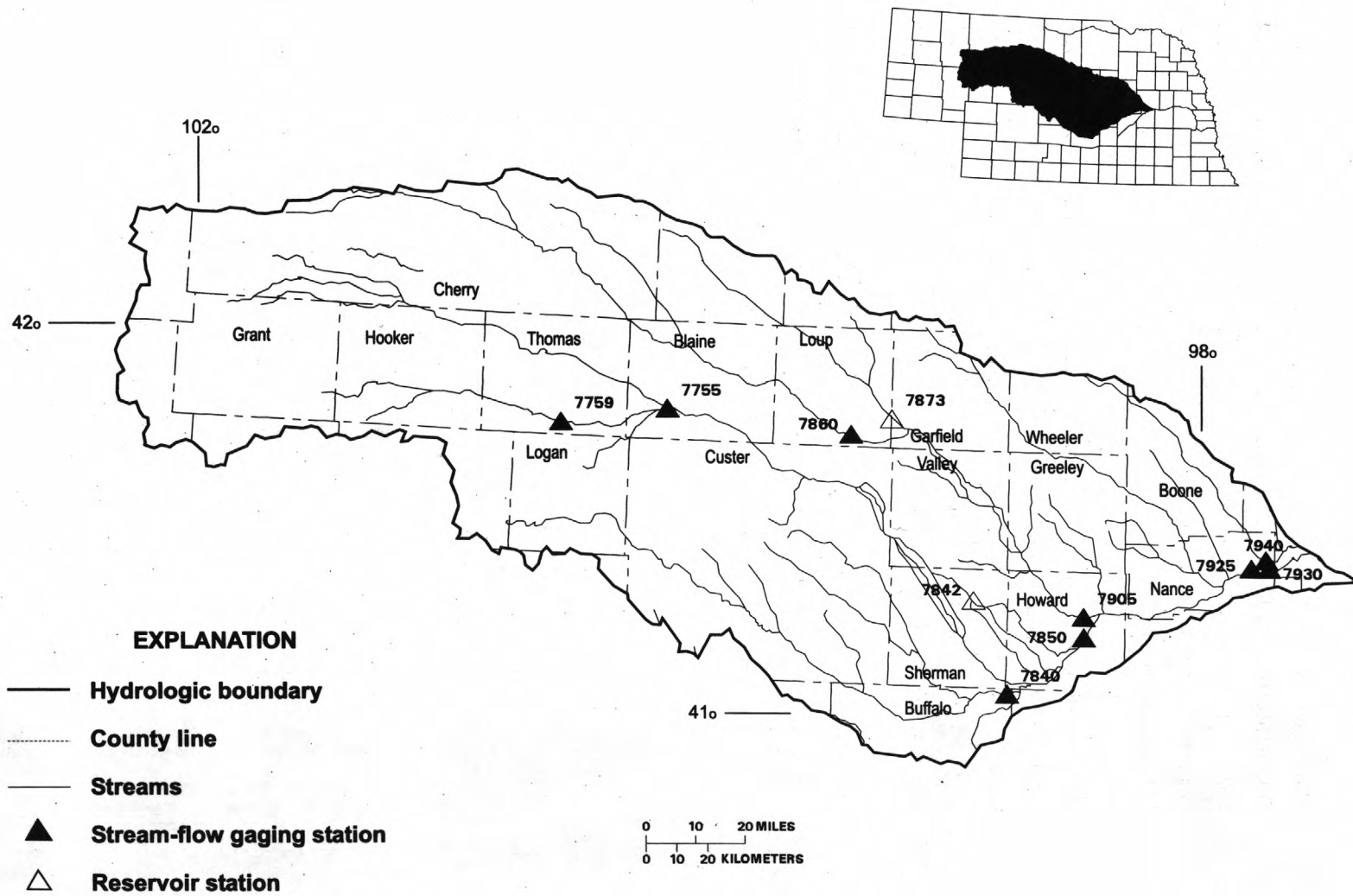
| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1942 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 1312710 | | 817245 | | 1883 | |
| ANNUAL MEAN | 3596 | | 2233 | | 1430 | |
| MEDIAN OF ANNUAL MEANS | | | | | 6652 | |
| HIGHEST ANNUAL MEAN | | | | | 494 | |
| LOWEST ANNUAL MEAN | | | | | 23800 | |
| HIGHEST DAILY MEAN | 11300 | May 15 | 4740 | Feb 25 | .00 | Jul 1 1983 |
| LOWEST DAILY MEAN | 1070 | Aug 1 | 209 | Aug 17 | .00 | Jan 4 1942 |
| ANNUAL SEVEN-DAY MINIMUM | 1170 | Jul 29 | 283 | Aug 13 | .00 | Oct 1 1943 |
| INSTANTANEOUS PEAK FLOW | | | 4890 | Feb 25 | *25400 | Mar 28 1960 |
| INSTANTANEOUS PEAK STAGE | | | 5.09 | Feb 25 | **7.86 | Mar 11 1993 |
| ANNUAL RUNOFF (AC-FT) | 2604000 | | 1621000 | | 1364000 | |
| 10 PERCENT EXCEEDS | 6210 | | 3600 | | 3990 | |
| 50 PERCENT EXCEEDS | 2950 | | 2680 | | 1300 | |
| 90 PERCENT EXCEEDS | 2070 | | 447 | | 104 | |

e Estimated.

* Stage 6.36 ft.

** Backwater from ice.





LOUP RIVER BASIN

| *Station number | Station name | Page |
|--------------------|--|------|
| 7755 | Middle Loup River at Dunning..... | 118 |
| 7759 | Dismal River near Thedford..... | 120 |
| 7840 | South Loup River at St. Michael..... | 122 |
| 7842 | Sherman Reservoir near Loup City..... | 125 |
| 7850 | Middle Loup River at St. Paul..... | 126 |
| 7860 | North Loup River at Taylor..... | 130 |
| 7873 | Calamus Reservoir near Burwell..... | 132 |
| 7905 | North Loup River near St. Paul..... | 134 |
| 7925 | Loup River Power Canal near Genoa..... | 138 |
| 7930 | Loup River near Genoa..... | 140 |
| 7940 | Beaver Creek at Genoa..... | 142 |

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

PLATTE RIVER BASIN

06775500 MIDDLE LOUP RIVER AT DUNNING, NE

LOCATION.--Lat 41°49'50", long 100°06'20", in NW ¼ SE ¼ sec.33, T.22 N., R.24 W., Blaine County, Hydrologic Unit 10210001, on left bank near upstream end of bridge on State Highway 2 at north edge of Dunning, 1.0 mi upstream from Dismal River, and at mile 204.

DRAINAGE AREA.--1,830 mi², of which about 79 mi² contributes directly to surface runoff.

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

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

GAGE.--Water-stage recorder. Datum of gage is 2,604.14 ft above sea level. Prior to Sept. 12, 1946, nonrecording gage, and Sept. 12, 1946, to Sept. 30, 1962, water-stage recorder at site 0.2 mi upstream at datum 3.03 ft higher. Oct. 1, 1962, to May 15, 1989, at present site, and May 15, 1989, to Mar. 20, 1990, at site 0.2 mi upstream, both at datum 3.00 ft higher.

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 465 | 502 | 509 | 478 | 463 | 500 | 506 | 550 | 526 | 515 | 443 | 420 |
| 2 | 460 | 478 | 513 | 470 | 453 | 509 | 517 | 550 | 506 | 491 | 444 | 422 |
| 3 | 455 | 478 | 514 | 478 | 481 | 503 | 504 | 555 | 514 | 487 | 450 | 452 |
| 4 | 455 | 487 | 494 | 460 | 469 | 513 | 497 | 564 | 508 | 504 | 447 | 473 |
| 5 | 452 | 492 | 490 | 429 | 470 | 513 | 521 | 562 | 500 | 543 | 447 | 442 |
| 6 | 466 | 487 | 490 | 425 | 474 | 519 | 518 | 562 | 494 | 526 | 440 | 433 |
| 7 | 485 | 498 | 482 | 434 | 474 | 524 | 531 | 562 | 494 | 495 | 441 | 452 |
| 8 | 486 | 499 | 475 | 452 | 470 | 569 | 500 | 563 | 492 | 480 | 438 | 437 |
| 9 | 482 | 515 | 474 | 464 | 488 | 503 | 512 | 555 | 485 | 477 | 438 | 439 |
| 10 | 482 | 521 | 476 | 462 | 498 | 503 | 526 | 572 | 499 | 503 | 438 | 428 |
| 11 | 489 | 516 | 481 | 449 | 482 | 518 | 516 | 577 | 491 | 514 | 427 | 433 |
| 12 | 492 | 503 | 485 | 447 | 475 | 534 | 511 | 563 | 530 | 518 | 424 | 438 |
| 13 | 486 | 504 | 478 | 462 | 470 | 519 | 517 | 532 | 532 | 494 | 424 | 432 |
| 14 | 479 | 501 | 493 | 442 | 464 | 511 | 529 | 530 | 506 | 487 | 431 | 433 |
| 15 | 499 | 498 | 470 | 457 | 469 | 522 | 521 | 532 | 488 | 471 | 429 | 433 |
| 16 | 476 | 515 | 466 | 476 | 467 | 502 | 492 | 527 | 490 | 478 | 429 | 431 |
| 17 | 460 | 521 | 473 | 471 | 488 | 494 | 482 | 555 | 489 | 479 | 432 | 433 |
| 18 | 478 | 517 | 469 | 479 | 484 | 491 | 516 | 640 | 482 | 467 | 430 | 438 |
| 19 | 475 | 506 | 483 | 497 | 479 | 485 | 525 | 581 | 479 | 459 | 428 | 450 |
| 20 | 479 | 483 | 483 | 470 | 488 | 491 | 523 | 590 | 478 | 463 | 429 | 466 |
| 21 | 486 | 502 | 497 | 461 | 497 | 499 | 516 | 604 | 465 | 463 | 430 | 447 |
| 22 | 489 | 507 | 485 | 478 | 510 | 507 | 531 | 623 | 464 | 465 | 425 | 476 |
| 23 | 494 | 510 | 461 | 477 | 514 | 524 | 534 | 610 | 476 | 461 | 425 | 463 |
| 24 | 494 | 506 | 465 | 472 | 514 | 520 | 545 | 591 | 479 | 458 | 422 | 468 |
| 25 | 507 | 499 | 483 | 473 | 527 | 509 | 576 | 573 | 489 | 458 | 420 | 459 |
| 26 | 506 | 508 | 485 | 458 | 511 | 515 | 546 | 575 | 477 | 453 | 417 | 460 |
| 27 | 515 | 508 | 475 | 450 | 472 | 503 | 532 | 583 | 470 | 485 | 416 | 463 |
| 28 | 499 | 505 | 473 | 452 | 492 | 503 | 532 | 546 | 483 | 466 | 414 | 464 |
| 29 | 501 | 503 | 480 | 446 | 509 | 514 | 537 | 546 | 477 | 459 | 413 | 464 |
| 30 | 494 | 495 | 475 | 450 | --- | 511 | 583 | 551 | 500 | 454 | 412 | 478 |
| 31 | 492 | --- | 479 | 455 | --- | 502 | --- | 534 | --- | 445 | 419 | --- |
| TOTAL | 14978 | 15064 | 14956 | 14274 | 14052 | 15830 | 15696 | 17558 | 14763 | 14918 | 13322 | 13427 |
| MEAN | 483 | 502 | 482 | 460 | 485 | 511 | 523 | 566 | 492 | 481 | 430 | 448 |
| MAX | 515 | 521 | 514 | 497 | 527 | 569 | 583 | 640 | 532 | 543 | 450 | 478 |
| MIN | 452 | 478 | 461 | 425 | 453 | 485 | 482 | 527 | 464 | 445 | 412 | 420 |
| AC-FT | 29710 | 29880 | 29670 | 28310 | 27870 | 31400 | 31130 | 34830 | 29280 | 29590 | 26420 | 26630 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2000, BY WATER YEAR (WY)

| | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 410 | 420 | 416 | 410 | 430 | 456 | 456 | 445 | 422 | 397 | 398 | 401 |
| MAX | 519 | 517 | 509 | 494 | 526 | 544 | 553 | 590 | 545 | 491 | 490 | 504 |
| (WY) | 1997 | 1992 | 1994 | 1998 | 1998 | 1993 | 1995 | 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 |

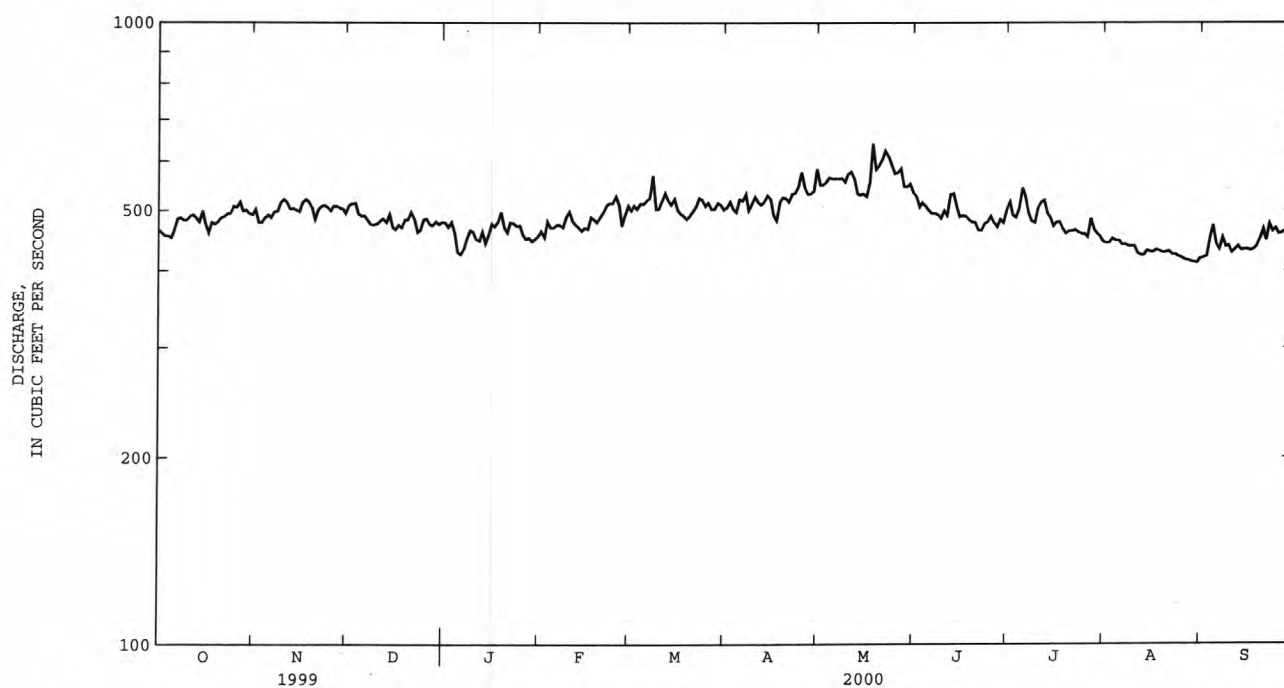
PLATTE RIVER BASIN

06775500 MIDDLE LOUP RIVER AT DUNNING, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1946 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 180776 | | 178838 | | 422 | |
| ANNUAL MEAN | 495 | | 489 | | 498 | 1998 |
| HIGHEST ANNUAL MEAN | | | | | 365 | 1950 |
| LOWEST ANNUAL MEAN | | | | | 778 | Apr 20 1971 |
| HIGHEST DAILY MEAN | 635 | Jul 20 | 640 | May 18 | 100 | Dec 5 1950 |
| LOWEST DAILY MEAN | 380 | Jan 3 | 412 | Aug 30 | 231 | Jan 1 1949 |
| ANNUAL SEVEN-DAY MINIMUM | 407 | Jan 3 | 416 | Aug 25 | *2480 | Mar 25 1996 |
| INSTANTANEOUS PEAK FLOW | | | 702 | May 18 | **7.02 | Mar 31 1949 |
| INSTANTANEOUS PEAK STAGE | | | 3.69 | May 18 | | |
| ANNUAL RUNOFF (AC-FT) | 358600 | | 354700 | | 305400 | |
| 10 PERCENT EXCEEDS | 535 | | 533 | | 501 | |
| 50 PERCENT EXCEEDS | 491 | | 486 | | 415 | |
| 90 PERCENT EXCEEDS | 462 | | 438 | | 351 | |

* 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.

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.

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 230 | 228 | 234 | 244 | 216 | 231 | 222 | 242 | 234 | 242 | 229 | 226 |
| 2 | 223 | 219 | 237 | 245 | 227 | 234 | 224 | 236 | 237 | 233 | 232 | 229 |
| 3 | 227 | 224 | 232 | 239 | 232 | 224 | 224 | 235 | 238 | 229 | 231 | 233 |
| 4 | 228 | 229 | 226 | 237 | 224 | 227 | 222 | 237 | 240 | 237 | 238 | 241 |
| 5 | 235 | 223 | 222 | 236 | 223 | 236 | 229 | 236 | 245 | 243 | 239 | 237 |
| 6 | 235 | 228 | 225 | 235 | 229 | 236 | 233 | 237 | 246 | 235 | 236 | 232 |
| 7 | 236 | 227 | 236 | 226 | 227 | 238 | 231 | 234 | 245 | 231 | 231 | 237 |
| 8 | 238 | 228 | 232 | 235 | 232 | 250 | 230 | 234 | 247 | 228 | 231 | 229 |
| 9 | 230 | 233 | 223 | 236 | 229 | 227 | 229 | 222 | 246 | 236 | 234 | 229 |
| 10 | 233 | 229 | 215 | 223 | 229 | 229 | 229 | 227 | 249 | 235 | 232 | 227 |
| 11 | 231 | 229 | 228 | 240 | 229 | 227 | 230 | 227 | 245 | 252 | 232 | 225 |
| 12 | 232 | 223 | 230 | 237 | 227 | 238 | 231 | 222 | 232 | 246 | 231 | 226 |
| 13 | 234 | 228 | 226 | 227 | 220 | 241 | 232 | 219 | 221 | 234 | 232 | 225 |
| 14 | 236 | 228 | 226 | 220 | 216 | 241 | 229 | 222 | 241 | 230 | 231 | 227 |
| 15 | 237 | 228 | 221 | 238 | 231 | 236 | 227 | 221 | 250 | 230 | 233 | 229 |
| 16 | 228 | 224 | 234 | 230 | 227 | 224 | 227 | 225 | 252 | 230 | 233 | 226 |
| 17 | 224 | 226 | 236 | 230 | 222 | 224 | 229 | 235 | 253 | 228 | 235 | 225 |
| 18 | 228 | 224 | 234 | 230 | 224 | 229 | 228 | 258 | 251 | 228 | 227 | 224 |
| 19 | 225 | 224 | 234 | 233 | 234 | 234 | 226 | 242 | 246 | 227 | 227 | 225 |
| 20 | 225 | 225 | 227 | 225 | 224 | 229 | 228 | 237 | 245 | 230 | 239 | 229 |
| 21 | 230 | 227 | 224 | 222 | 234 | 222 | 232 | 237 | 248 | 229 | 238 | 229 |
| 22 | 226 | 227 | 223 | 228 | 227 | 231 | 237 | 233 | 241 | 229 | 234 | 231 |
| 23 | 231 | 225 | 230 | 231 | 238 | 238 | 239 | 237 | 231 | 234 | 231 | 229 |
| 24 | 225 | 222 | 232 | 224 | 229 | 234 | 238 | 237 | 229 | 236 | 228 | 228 |
| 25 | 229 | 220 | 244 | 223 | 227 | 229 | 245 | 223 | 232 | 234 | 226 | 227 |
| 26 | 230 | 232 | 240 | 215 | 231 | 231 | 237 | 212 | 235 | 233 | 225 | 224 |
| 27 | 231 | 234 | 240 | 214 | 227 | 229 | 232 | 219 | 237 | 243 | 225 | 227 |
| 28 | 227 | 232 | 241 | 223 | 229 | 229 | 236 | 223 | 227 | 240 | 225 | 228 |
| 29 | 223 | 231 | 245 | 218 | 224 | 227 | 235 | 224 | 228 | 240 | 226 | 227 |
| 30 | 228 | 233 | 236 | 225 | --- | 227 | 248 | 224 | 290 | 233 | 225 | 227 |
| 31 | 228 | --- | 242 | 227 | --- | 231 | --- | 231 | --- | 233 | 224 | --- |
| TOTAL | 7123 | 6810 | 7175 | 7116 | 6588 | 7183 | 6939 | 7148 | 7261 | 7268 | 7160 | 6858 |
| MEAN | 230 | 227 | 231 | 230 | 227 | 232 | 231 | 231 | 242 | 234 | 231 | 229 |
| MAX | 238 | 234 | 245 | 245 | 238 | 250 | 248 | 258 | 290 | 252 | 239 | 241 |
| MIN | 223 | 219 | 215 | 214 | 216 | 222 | 222 | 212 | 221 | 227 | 224 | 224 |
| AC-FT | 14130 | 13510 | 14230 | 14110 | 13070 | 14250 | 13760 | 14180 | 14400 | 14420 | 14200 | 13600 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2000, BY WATER YEAR (WY)

| | 200 | 204 | 202 | 201 | 203 | 208 | 210 | 208 | 202 | 200 | 197 | 198 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 200 | 204 | 202 | 201 | 203 | 208 | 210 | 208 | 202 | 200 | 197 | 198 |
| 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 |

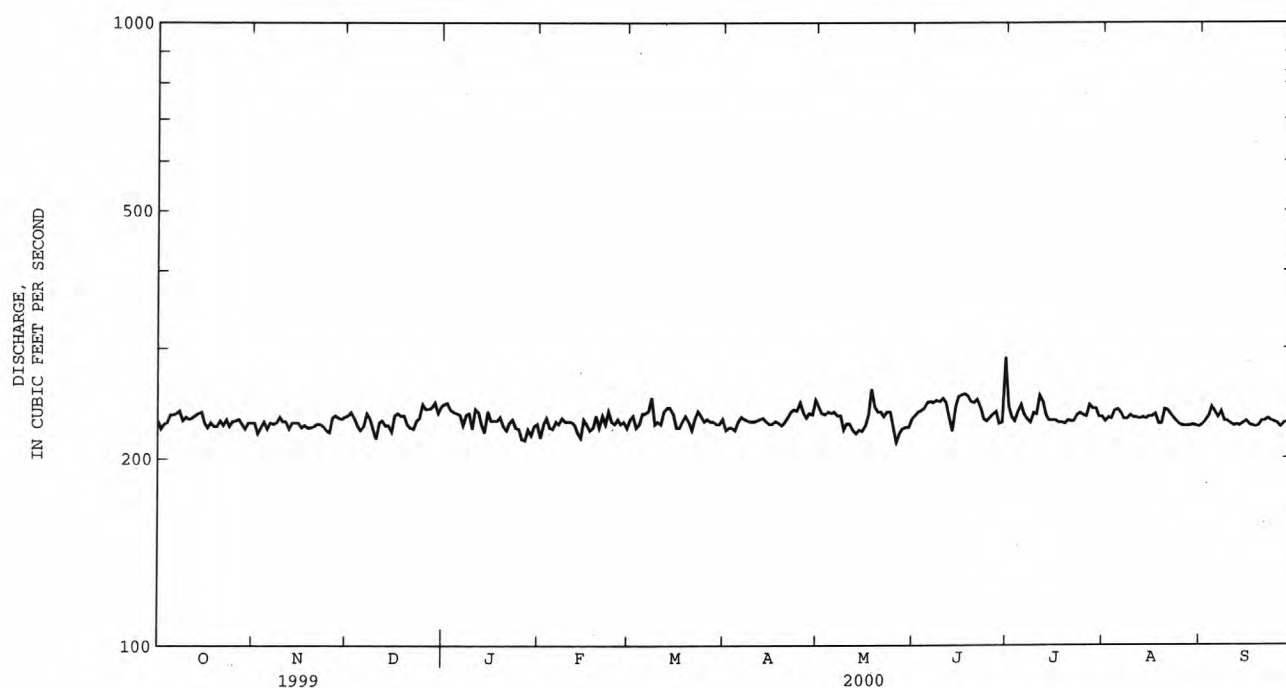
PLATTE RIVER BASIN

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

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1967 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 82540 | | 84629 | | 203 | |
| ANNUAL MEAN | 226 | | 231 | | 231 | |
| HIGHEST ANNUAL MEAN | | | | | 188 | |
| LOWEST ANNUAL MEAN | | | | | 2000 | |
| HIGHEST DAILY MEAN | 339 | Jul 20 | 290 | Jun 30 | 463 | Aug 23 1983 |
| LOWEST DAILY MEAN | 176 | Jan 9 | 212 | May 26 | 125 | Feb 3 1989 |
| ANNUAL SEVEN-DAY MINIMUM | 193 | Jan 3 | 220 | Jan 26 | 153 | Dec 29 1982 |
| INSTANTANEOUS PEAK FLOW | | | 333 | Jun 30 | *1160 | Aug 23 1983 |
| INSTANTANEOUS PEAK STAGE | | | 1.23 | Jun 30 | **5.10 | Dec 18 1983 |
| ANNUAL RUNOFF (AC-FT) | 163700 | | 167900 | | 147000 | |
| 10 PERCENT EXCEEDS | 244 | | 241 | | 229 | |
| 50 PERCENT EXCEEDS | 226 | | 230 | | 200 | |
| 90 PERCENT EXCEEDS | 212 | | 223 | | 182 | |

* Stage 3.83 ft.

** Backwater from ice.



PLATTE RIVER BASIN

06784000 SOUTH LOUP RIVER AT ST. MICHAEL, NE

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.

DRAINAGE AREA.--2,320 mi², of which about 1,590 mi² contributes directly to surface runoff.

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder. Datum of gage is 1,921.26 ft above sea level. Prior to June 22, 1947, water-stage recorder, and June 25 to Sept. 30, 1947, nonrecording gage, at present site at datum 2.00 ft higher. Oct. 1, 1947 to July 3, 1958, nonrecording gage at present site and datum. July 4, 1958 to Sept. 7, 1960, water-stage recorder at site 600 ft upstream at present datum. Sept. 8, 1960 to June 24, 1968, water-stage recorder at site 100 ft upstream at present datum. June 25 to Nov. 21, 1968, nonrecording gage at present site and datum. Nov. 22, 1968 to May 19, 1981, water-stage recorder at site 40 ft upstream at present datum. May 20 to July 16, 1981, water-stage recorder at site 70 ft upstream at present datum. Data collection platform at station.

REMARKS.--Records good except for periods of estimated record, which are poor. Minor irrigation developments above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| 1 | 150 | 168 | 277 | 267 | e170 | 304 | 197 | 273 | 226 | 77 | 113 | 71 |
| 2 | 148 | 177 | 272 | 255 | e180 | 294 | 184 | 269 | 225 | 75 | 101 | 78 |
| 3 | 155 | 193 | 272 | 253 | e200 | 298 | 180 | 253 | 207 | 79 | 86 | 66 |
| 4 | 154 | 206 | 265 | e220 | e220 | 294 | 171 | 240 | 178 | 525 | 71 | 61 |
| 5 | 155 | 206 | 250 | e200 | e220 | 291 | 176 | 216 | 171 | 448 | 71 | 53 |
| 6 | 157 | 211 | 247 | 219 | e240 | 277 | 174 | 212 | 166 | 289 | 75 | 46 |
| 7 | 163 | 207 | 238 | 210 | e260 | 261 | 177 | 209 | 164 | 164 | 68 | 42 |
| 8 | 175 | 207 | 233 | 216 | 275 | 290 | 172 | 257 | 164 | 132 | 73 | 39 |
| 9 | 176 | 212 | 236 | 236 | 278 | 284 | 183 | 247 | 164 | 130 | 69 | 36 |
| 10 | 179 | 211 | 234 | 262 | 276 | 290 | 185 | 237 | 164 | 126 | 60 | 36 |
| 11 | 170 | 206 | 245 | 269 | 252 | 277 | 185 | 213 | 164 | 121 | 56 | 35 |
| 12 | 169 | 206 | 259 | 271 | 230 | 260 | 181 | 193 | 161 | 110 | 48 | 33 |
| 13 | 165 | 216 | 250 | 229 | e230 | 257 | 182 | 176 | 159 | 109 | 39 | 33 |
| 14 | 168 | 224 | 273 | 241 | e240 | 244 | 180 | 169 | 159 | 101 | 38 | 35 |
| 15 | 155 | 230 | 288 | 254 | e250 | 225 | 175 | 165 | 159 | 88 | 41 | 38 |
| 16 | 157 | 228 | 254 | 245 | 257 | 221 | 199 | 162 | 159 | 81 | 42 | 39 |
| 17 | 152 | 225 | 270 | 281 | 255 | 211 | 201 | 161 | 159 | 115 | 32 | 40 |
| 18 | 152 | 230 | 263 | 276 | 262 | 217 | 211 | 171 | 159 | 104 | 32 | 40 |
| 19 | 153 | 227 | 266 | 237 | 257 | 229 | 213 | 183 | 159 | 105 | 42 | 41 |
| 20 | 151 | 234 | 213 | 208 | 254 | 223 | 204 | 190 | 159 | 109 | 58 | 50 |
| 21 | 147 | 255 | 108 | 208 | 264 | 216 | 196 | 260 | 146 | 112 | 71 | 60 |
| 22 | 157 | 262 | e160 | 205 | 271 | 216 | 193 | 242 | 129 | 165 | 71 | 74 |
| 23 | 176 | 272 | e200 | 224 | 347 | 249 | 194 | 230 | 128 | 150 | 80 | 77 |
| 24 | 181 | 280 | e270 | 226 | 388 | 305 | 192 | 228 | 119 | 118 | 67 | 100 |
| 25 | 182 | 281 | e320 | 220 | 356 | 300 | 226 | 209 | 112 | 119 | 54 | 117 |
| 26 | 192 | 278 | e330 | 231 | 331 | 277 | 245 | 232 | 95 | 112 | 67 | 116 |
| 27 | 199 | 267 | e300 | 242 | 314 | 255 | 256 | 281 | 89 | 131 | 66 | 112 |
| 28 | 198 | 267 | e290 | 234 | 295 | 231 | 240 | 267 | 87 | 149 | 64 | 105 |
| 29 | 199 | 267 | e290 | e210 | 301 | 208 | 236 | 241 | 88 | 113 | 59 | 101 |
| 30 | 184 | 272 | e280 | e190 | --- | 208 | 253 | 238 | 79 | 121 | 54 | 98 |
| 31 | 173 | --- | e270 | e170 | --- | 204 | --- | 234 | --- | 120 | 49 | --- |
| TOTAL | 5192 | 6925 | 7923 | 7209 | 7673 | 7916 | 5961 | 6858 | 4498 | 4498 | 1917 | 1872 |
| MEAN | 167 | 231 | 256 | 233 | 265 | 255 | 199 | 221 | 150 | 145 | 61.8 | 62.4 |
| MAX | 199 | 281 | 330 | 281 | 388 | 305 | 256 | 281 | 226 | 525 | 113 | 117 |
| MIN | 147 | 168 | 108 | 170 | 170 | 204 | 171 | 161 | 79 | 75 | 32 | 33 |
| AC-FT | 10300 | 13740 | 15720 | 14300 | 15220 | 15700 | 11820 | 13600 | 8920 | 8920 | 3800 | 3710 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2000, BY WATER YEAR (WY)

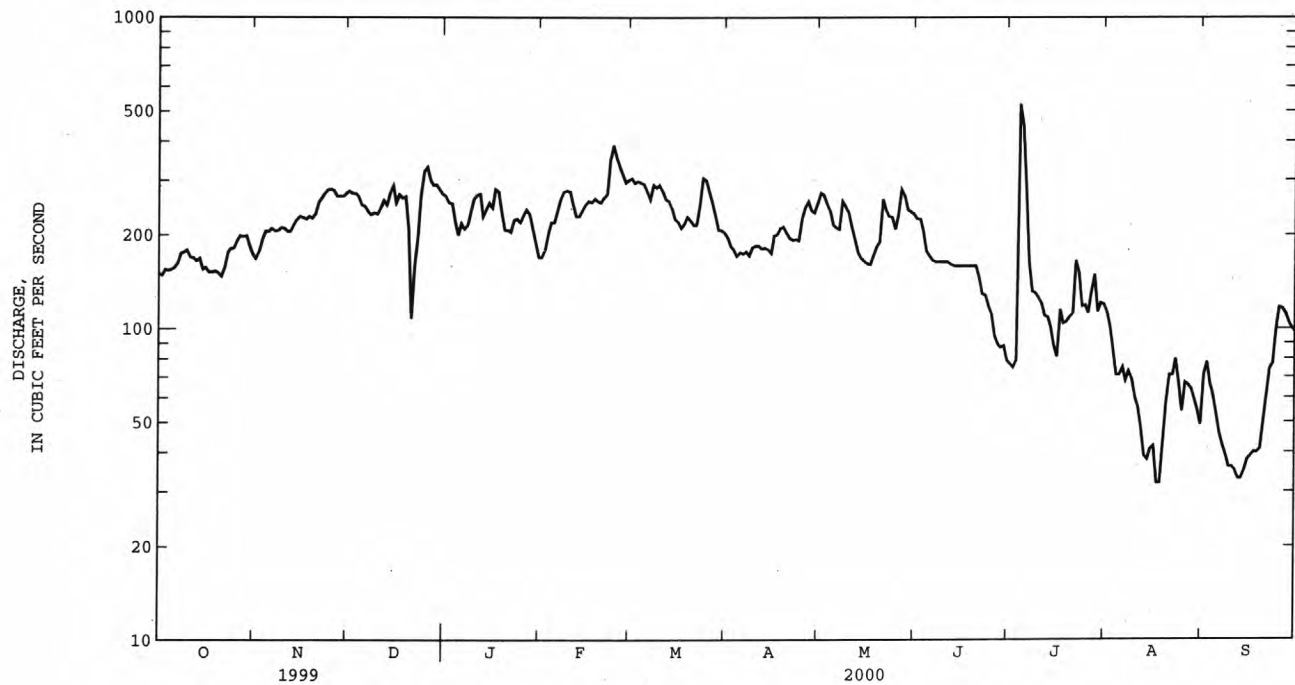
| | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 175 | 193 | 182 | 185 | 261 | 351 | 277 | 303 | 419 | 222 | 151 | 149 | |
| MAX | 619 | 276 | 275 | 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 | 1957 | 1956 | 1972 | 1989 | 1981 | 1992 | 1975 | 1981 | 1980 | 1955 | 1956 | |

PLATTE RIVER BASIN

06784000 SOUTH LOUP RIVER AT ST. MICHAEL, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1944 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 96707 | | 68442 | | 239 | |
| ANNUAL MEAN | 265 | | 187 | | 483 | 1947 |
| HIGHEST ANNUAL MEAN | | | | | 161 | 1955 |
| LOWEST ANNUAL MEAN | | | | | 28000 | Jun 23 1947 |
| HIGHEST DAILY MEAN | 1390 | Jun 11 | 525 | Jul 4 | .00 | Aug 5 1980 |
| LOWEST DAILY MEAN | 103 | Aug 27 | 32 | Aug 17 | .65 | Aug 4 1980 |
| ANNUAL SEVEN-DAY MINIMUM | 112 | Sep 10 | 35 | Sep 9 | *50000 | Jun 22 1947 |
| INSTANTANEOUS PEAK FLOW | | | 1020 | Jul 4 | 12.00 | Jun 22 1947 |
| INSTANTANEOUS PEAK STAGE | | | 5.07 | Jan 5 | | |
| ANNUAL RUNOFF (AC-FT) | 191800 | | 135800 | | 172900 | |
| 10 PERCENT EXCEEDS | 419 | | 277 | | 340 | |
| 50 PERCENT EXCEEDS | 235 | | 199 | | 193 | |
| 90 PERCENT EXCEEDS | 139 | | 67 | | 104 | |

e Estimated.

* Estimated. Maximum computed discharge 27,500 ft³/s, June 24, 1968, gage height 11.00 ft.

[illegible]

06784200 SHERMAN RESERVOIR NEAR LOUP CITY, NE

LOCATION.--Lat 41°18'10", long 98°52'45", in SW¹/₄ NW¹/₄ sec. 1, T. 15 N., R. 14 W., Sherman County, Hydrologic Unit 10210003, in control house of outlet works of Sherman Dam, 5 mi northeast of Loup City.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Mercury-column pressure gage read once daily. Datum of gage is sea level.

REMARKS.--Reservoir is formed by earthfill dam; closure date of dam, August 1960. First diversions from Middle Loup River, Nov. 8, 1962. Usable capacity, 65,237 acre-ft between elevations 2,118.5 ft, sill of canal outlet works, and 2,162.3 ft, crest of spillway. Dead and inactive storage, 3,839 acre-ft below elevation 2,118.5 ft. Figures given herein represent total contents. Water is used for irrigation of Farwell Unit of Bureau of Reclamation.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 70,810 acre-ft June 25, 1989, elevation, 2,162.9 ft; minimum observed since appreciable storage was attained, 9,450 acre-ft Aug. 2, 1980, elevation, 2,127.7 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 70,520 acre-ft May 30, elevation, 2,162.8 ft; minimum observed, 34,910 acre-ft Sept. 2, elevation, 2147.7 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| Date | *Elevation (feet) | Contents (acre- feet) | Change in contents (acre- feet) |
|---------------|----------------------|-----------------------------|--|
| Sep 30..... | 2,155.8 | 52,000 | -- |
| Oct. 31..... | 2,156.9 | 54,670 | -2,670 |
| Nov. 30..... | 2,156.4 | 53,450 | -1,220 |
| Dec. 31..... | 2,155.9 | 52,240 | -1,210 |
| CAL YR 1999 | -- | -- | -240 |
| Jan. 31..... | 2,155.5 | 51,290 | -950 |
| Feb. 29..... | 2,155.2 | 50,580 | -710 |
| Mar. 31..... | 2,154.8 | 49,650 | -930 |
| Apr. 30..... | 2,156.9 | 54,670 | +5,020 |
| May 31..... | 2,162.8 | 70,520 | +15,850 |
| June 30..... | 2,159.8 | 62,140 | -8,380 |
| July 31..... | 2,156.8 | 54,430 | -7,710 |
| Aug. 31..... | 2,147.9 | 35,280 | -19,150 |
| Sept. 30..... | 2,155.3 | 50,820 | +15,540 |
| WTR YR 2000 | -- | -- | -1,180 |

*Elevations read on or near last day of month.

PLATTE RIVER BASIN

06785000 MIDDLE LOUP RIVER AT ST. PAUL, NE

LOCATION.--Lat 41°12'13", long 098°26'46", in SE 1/4 NW 1/4 NE 1/4 sec.10, T.14 N., R.10 W., Howard County, Hydrologic Unit 10210003, on left bank at St. Paul, 50 ft upstream from bridge on U.S. Highway 281, 6 mi upstream from confluence with North Loup River, and at mile 74.0.

DRAINAGE AREA.--8,075 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 periods of estimated record, which are poor. Diversions above station for irrigation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 714 | 1290 | 1310 | 1210 | e1650 | 1680 | 1220 | 1210 | 1260 | 202 | 529 | 460 |
| 2 | 674 | 1560 | 1320 | 1350 | 1690 | 1750 | 1070 | 1410 | 1110 | 220 | 433 | 540 |
| 3 | 684 | 1390 | 1660 | 1330 | 1750 | 1570 | 1140 | 1060 | 1020 | 230 | 390 | 549 |
| 4 | 740 | 1330 | 1880 | 891 | 2040 | 1540 | 1190 | 997 | 864 | 2160 | 354 | 619 |
| 5 | 691 | 1360 | 1660 | e960 | 1850 | 1430 | 1140 | 937 | 838 | 2550 | 370 | 627 |
| 6 | 708 | 1420 | 1550 | e1020 | 1740 | 1380 | 1210 | 855 | 800 | 1220 | 362 | 826 |
| 7 | 689 | 1330 | 1460 | 1080 | 1560 | 1430 | 1130 | 876 | 774 | 649 | 431 | 840 |
| 8 | 803 | 1470 | 1350 | 1130 | 1470 | 1520 | 1150 | 1170 | 687 | 479 | 445 | 623 |
| 9 | 1300 | 1670 | 1350 | 976 | 1490 | 1470 | 1120 | 1020 | 583 | 414 | 405 | 547 |
| 10 | 1510 | 1770 | 1290 | 939 | 1470 | 1310 | 950 | 1070 | 482 | 430 | 364 | 506 |
| 11 | 1460 | 1850 | 1430 | 943 | 1360 | 1130 | 1040 | 975 | 462 | 521 | 329 | 509 |
| 12 | 1440 | 1630 | 1330 | 974 | 1450 | 1120 | 1130 | 920 | 456 | 493 | 326 | 502 |
| 13 | 1420 | 1480 | 1120 | 936 | 1750 | 1040 | 1100 | 862 | 509 | 474 | 287 | 505 |
| 14 | 1370 | 1430 | 1200 | 1070 | 1840 | 1140 | 1090 | 907 | 501 | 461 | 275 | 527 |
| 15 | 1290 | 1070 | 1400 | 1110 | 1930 | 1190 | 1070 | 858 | 758 | 390 | 317 | 535 |
| 16 | 1330 | 1280 | 1310 | 1130 | 1860 | 1110 | 966 | 751 | 545 | 327 | 368 | 845 |
| 17 | 1300 | 1340 | 1080 | 1370 | 1410 | 1070 | 872 | 766 | 420 | 394 | 354 | 778 |
| 18 | 1260 | 1570 | 1130 | 1700 | 1500 | 956 | 786 | 710 | 589 | 603 | 301 | 763 |
| 19 | 1200 | 1610 | 1380 | 1600 | 1820 | 1040 | 831 | 1310 | 441 | 564 | 497 | 779 |
| 20 | 1030 | 1480 | 1360 | 1190 | 1700 | 908 | 941 | 925 | 855 | 507 | 605 | 864 |
| 21 | 1250 | 1280 | e700 | 1330 | 1650 | 768 | 892 | 778 | 519 | 437 | 632 | 921 |
| 22 | 1290 | 1220 | e900 | 1440 | 1690 | 707 | 747 | 864 | 508 | 918 | 709 | 960 |
| 23 | 1460 | 1500 | 1060 | 1570 | 1920 | 853 | 831 | 857 | 316 | 1030 | 677 | 905 |
| 24 | 1460 | 1420 | 1500 | 1560 | 2110 | 1420 | 837 | 777 | 258 | 784 | 517 | 981 |
| 25 | 1340 | 1270 | 1790 | 1520 | 2090 | 1510 | 1090 | 728 | 273 | 656 | 544 | 1170 |
| 26 | 1510 | 1400 | 1510 | 1440 | 1830 | 1630 | 1340 | 777 | 359 | 555 | 532 | 1090 |
| 27 | 1410 | 1430 | 1340 | 1560 | 1750 | 1590 | 978 | 844 | 314 | 573 | 752 | 924 |
| 28 | 1540 | 1600 | 1340 | 1410 | 1680 | 1340 | 1030 | 908 | 261 | 972 | 634 | 855 |
| 29 | 1460 | 1530 | 1160 | e1400 | 1570 | 1220 | 1030 | 849 | 245 | 827 | 483 | 848 |
| 30 | 1320 | 1390 | 941 | e1500 | --- | 1360 | 954 | 790 | 287 | 607 | 449 | 903 |
| 31 | 1390 | --- | 1040 | e1600 | --- | 1400 | --- | 1000 | --- | 572 | 452 | --- |
| TOTAL | 37043 | 43370 | 40851 | 39239 | 49620 | 39582 | 30875 | 28761 | 17294 | 21219 | 14123 | 22301 |
| MEAN | 1195 | 1446 | 1318 | 1266 | 1711 | 1277 | 1029 | 928 | 576 | 684 | 456 | 743 |
| MAX | 1540 | 1850 | 1880 | 1700 | 2110 | 1750 | 1340 | 1410 | 1260 | 2550 | 752 | 1170 |
| MIN | 674 | 1070 | 700 | 891 | 1360 | 707 | 747 | 710 | 245 | 202 | 275 | 460 |
| AC-FT | 73470 | 86020 | 81030 | 77830 | 98420 | 78510 | 61240 | 57050 | 34300 | 42090 | 28010 | 44230 |

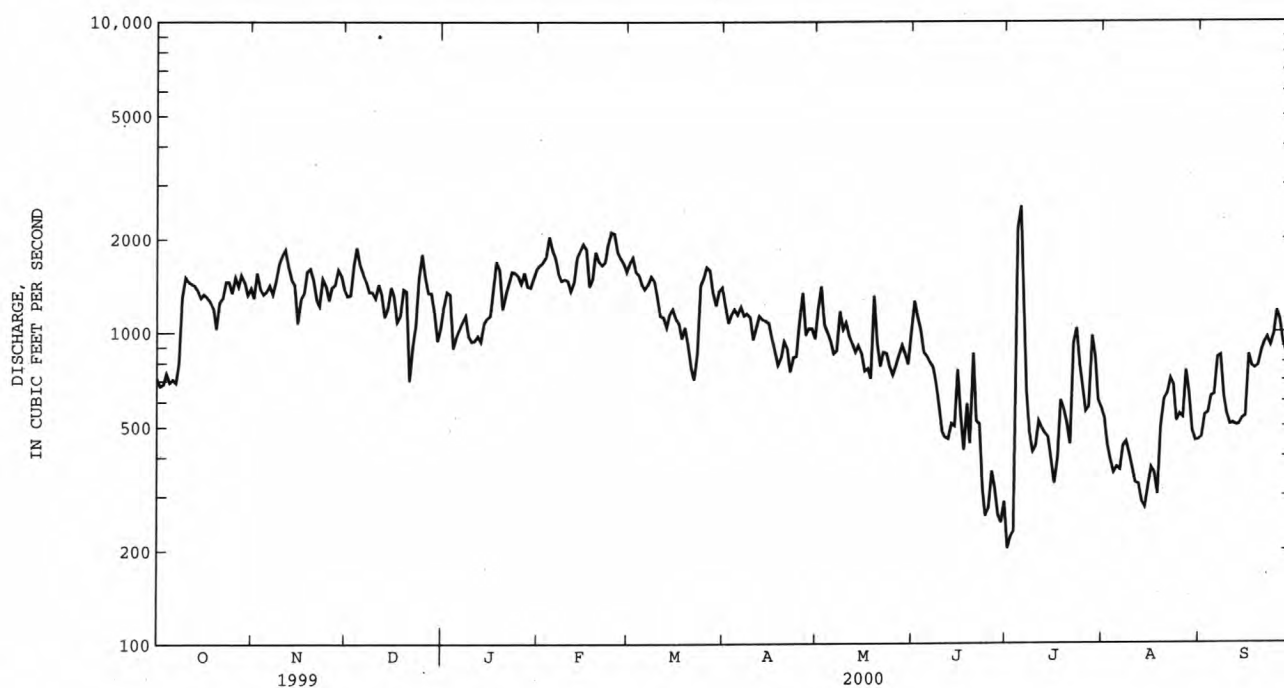
| STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2000, BY WATER YEAR (WY) | | | | | | | | | | | | |
|---|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 1167 | 1302 | 1161 | 1176 | 1552 | 1759 | 1349 | 1151 | 1192 | 659 | 577 | 764 |
| MAX | 2444 | 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

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

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1963 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 550300 | | 384278 | | 1148 | |
| ANNUAL MEAN | 1508 | | 1050 | | 1832 | 1993 |
| HIGHEST ANNUAL MEAN | | | | | 831 | 1970 |
| LOWEST ANNUAL MEAN | | | | | 21800 | Jun 12 1984 |
| HIGHEST DAILY MEAN | 4980 | Feb 5 | 2550 | Jul 5 | 23 | Aug 9 1980 |
| LOWEST DAILY MEAN | 484 | Aug 22 | 202 | Jul 1 | 31 | Aug 4 1980 |
| ANNUAL SEVEN-DAY MINIMUM | 525 | Aug 21 | 251 | Jun 27 | 72000 | Jun 23 1947 |
| INSTANTANEOUS PEAK FLOW | | | 4690 | Jul 4 | 12.69 | Jun 23 1947 |
| INSTANTANEOUS PEAK STAGE | | | 3.85 | Jul 4 | | |
| ANNUAL RUNOFF (AC-FT) | 1092000 | | 762200 | | 831500 | |
| 10 PERCENT EXCEEDS | 2320 | | 1600 | | 1860 | |
| 50 PERCENT EXCEEDS | 1420 | | 1050 | | 1080 | |
| 90 PERCENT EXCEEDS | 702 | | 448 | | 366 | |

e Estimated.



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 periods of estimated record, which are poor. North Loup Public Power and Irrigation District canal began diversion from river in April 1939 at point 5 mi above station. Several smaller diversions above station for irrigation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 511 | 586 | 605 | 590 | e600 | 692 | 576 | 639 | 565 | 401 | 400 | 319 |
| 2 | 495 | 529 | 613 | 593 | e620 | 694 | 557 | 518 | 541 | 375 | 376 | 353 |
| 3 | 496 | 509 | 613 | 578 | e620 | 701 | 538 | 540 | 523 | 323 | 366 | 378 |
| 4 | 506 | 528 | 584 | 514 | e620 | 717 | 547 | 521 | 506 | 407 | 340 | 584 |
| 5 | 516 | 560 | 556 | 479 | 635 | 711 | 566 | 514 | 498 | 460 | 315 | 524 |
| 6 | 523 | 538 | 535 | e580 | 663 | 718 | 548 | 514 | 488 | 742 | 287 | 458 |
| 7 | 560 | 547 | 533 | e620 | 640 | 707 | 546 | 508 | 481 | 411 | 269 | 461 |
| 8 | 570 | 575 | 582 | e640 | 648 | 754 | 497 | 517 | 446 | 290 | 239 | 493 |
| 9 | 553 | 594 | 521 | 651 | 671 | 744 | 542 | 496 | 428 | 254 | 232 | 460 |
| 10 | 552 | 571 | 514 | 642 | 668 | 678 | 569 | 487 | 431 | 264 | 232 | 427 |
| 11 | 524 | 547 | 538 | 632 | 583 | 661 | 539 | 475 | 482 | 273 | 233 | 466 |
| 12 | 555 | 563 | 564 | 600 | 598 | 670 | 494 | 474 | 543 | 293 | 220 | 547 |
| 13 | 542 | 529 | 549 | 578 | 631 | 659 | 504 | 442 | 640 | 323 | 217 | 538 |
| 14 | 555 | 524 | 571 | 639 | 584 | 623 | 516 | 433 | 573 | 265 | 227 | 547 |
| 15 | 561 | 535 | 543 | 656 | 618 | 650 | 489 | 431 | 516 | 234 | 214 | 521 |
| 16 | 548 | 537 | 553 | 648 | 657 | 625 | 477 | 438 | 483 | 242 | 224 | 504 |
| 17 | 517 | 524 | 532 | 618 | 654 | 619 | 480 | 493 | 480 | 265 | 297 | 487 |
| 18 | 496 | 539 | 524 | 605 | 631 | 593 | 509 | 752 | 477 | 307 | 236 | 495 |
| 19 | 495 | 514 | 545 | 572 | 640 | 622 | 566 | 791 | 468 | 262 | 249 | 512 |
| 20 | 512 | 525 | 442 | 572 | 656 | 665 | 572 | 633 | 460 | 267 | 287 | 521 |
| 21 | 530 | 528 | 336 | 629 | 709 | 674 | 579 | 640 | 399 | 297 | 282 | 512 |
| 22 | 534 | 524 | 393 | 623 | 743 | 690 | 530 | 645 | 355 | 375 | 272 | 556 |
| 23 | 538 | 523 | e540 | 657 | 765 | 692 | 548 | 641 | 334 | 432 | 278 | 574 |
| 24 | 535 | 527 | e580 | 623 | 775 | 705 | 567 | 603 | 371 | 368 | 272 | 583 |
| 25 | 564 | 506 | e620 | 614 | 794 | 651 | 690 | 578 | 355 | 402 | 258 | 556 |
| 26 | 567 | 508 | e620 | 624 | 791 | 648 | 739 | 599 | 354 | 406 | 267 | 529 |
| 27 | 573 | 552 | 611 | 647 | 706 | 591 | 636 | 607 | 348 | 413 | 303 | 521 |
| 28 | 550 | 551 | 577 | e620 | 681 | 564 | 592 | 592 | 350 | 502 | 317 | 521 |
| 29 | 549 | 564 | 627 | e620 | 699 | 565 | 585 | 574 | 357 | 496 | 318 | 512 |
| 30 | 575 | 558 | 639 | e600 | --- | 576 | 656 | 632 | 373 | 491 | 311 | 512 |
| 31 | 578 | --- | 609 | e600 | --- | 579 | --- | 575 | --- | 442 | 310 | --- |
| TOTAL | 16680 | 16215 | 17169 | 18864 | 19300 | 20438 | 16754 | 17302 | 13625 | 11282 | 8648 | 14971 |
| MEAN | 538 | 540 | 554 | 609 | 666 | 659 | 558 | 558 | 454 | 364 | 279 | 499 |
| MAX | 578 | 594 | 639 | 657 | 794 | 754 | 739 | 791 | 640 | 742 | 400 | 584 |
| MIN | 495 | 506 | 336 | 479 | 583 | 564 | 477 | 431 | 334 | 234 | 214 | 319 |
| AC - FT | 33080 | 32160 | 34050 | 37420 | 38280 | 40540 | 33230 | 34320 | 27030 | 22380 | 17150 | 29690 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2000, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 486 | 515 | 485 | 490 | 564 | 621 | 601 | 547 | 488 | 323 | 305 | 393 |
| MAX | 706 | 730 | 669 | 738 | 863 | 896 | 836 | 1128 | 870 | 716 | 527 | 665 |
| (WY) | 1984 | 1987 | 1994 | 1941 | 1984 | 1993 | 1993 | 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

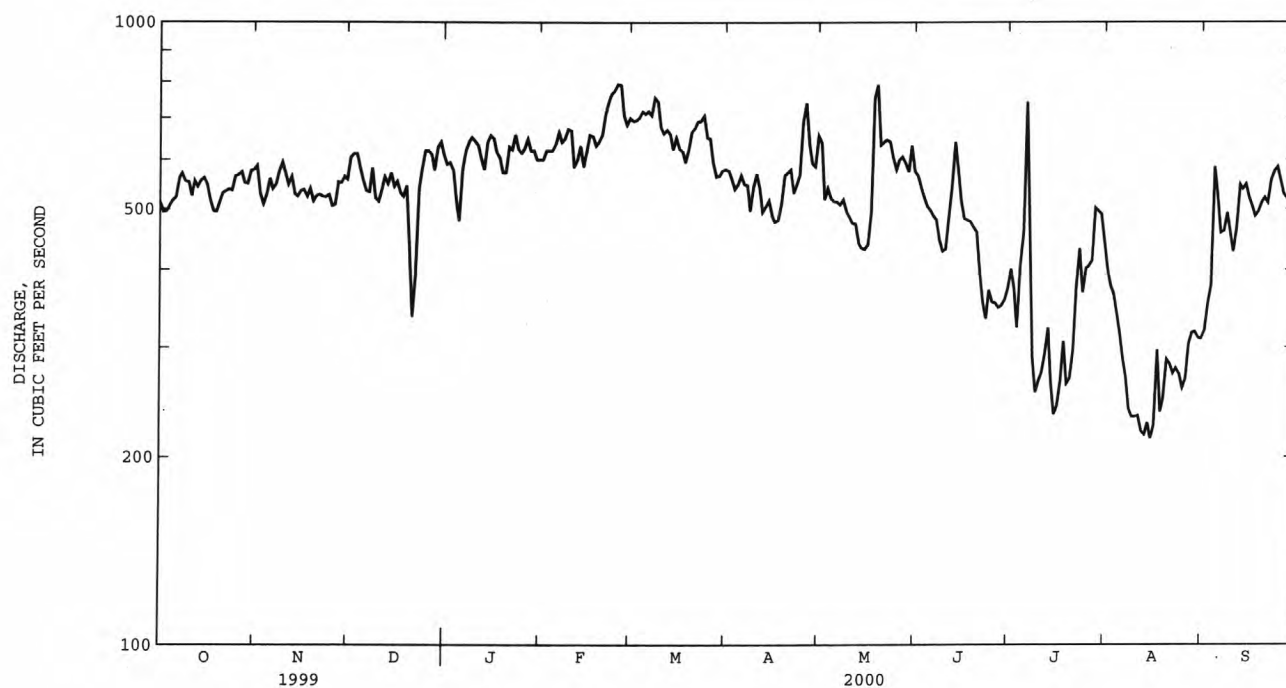
06786000 NORTH LOUP RIVER AT TAYLOR, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1937 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 214137 | | 191248 | | 485 | |
| ANNUAL MEAN | 587 | | 523 | | 644 | 1993 |
| HIGHEST ANNUAL MEAN | | | | | 354 | 1940 |
| LOWEST ANNUAL MEAN | | | | | 2690 | May 28 1995 |
| HIGHEST DAILY MEAN | 1030 | May 5 | 794 | Feb 25 | 45 | Jul 26 1941 |
| LOWEST DAILY MEAN | 278 | Aug 17 | 214 | Aug 15 | 74 | Jul 11 1981 |
| ANNUAL SEVEN-DAY MINIMUM | 302 | Aug 17 | 224 | Aug 10 | *3480 | May 28 1995 |
| INSTANTANEOUS PEAK FLOW | | | 969 | Jul 6 | **9.50 | Feb 25 1957 |
| INSTANTANEOUS PEAK STAGE | | | 4.20 | Jul 6 | | |
| ANNUAL RUNOFF (AC-FT) | 424700 | | 379300 | | 351400 | |
| 10 PERCENT EXCEEDS | 759 | | 657 | | 684 | |
| 50 PERCENT EXCEEDS | 575 | | 542 | | 479 | |
| 90 PERCENT EXCEEDS | 408 | | 311 | | 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, 131,100 acre-ft June 25, 1988, elevation, 2244.71 ft; minimum observed since appreciable storage was attained, 51,830 acre-ft Sept. 30, 1999, elevation 2224.87 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 128,940 acre-ft May 23, elevation, 2244.30 ft; minimum observed, 51,860 acre-ft Oct. 2, elevation, 2224.88 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| Date | *Elevation (feet) | Contents (acre- feet) | Change in contents (acre- feet) |
|---------------|----------------------|-----------------------------|--|
| Sep 30..... | 2,224.87 | 51,830 | -- |
| Oct. 31..... | 2,225.08 | 52,440 | +610 |
| Nov. 30..... | 2,229.31 | 65,740 | +13,300 |
| Dec. 31..... | 2,234.33 | 83,950 | +18,210 |
| CAL YR 1999 | -- | -- | -34,350 |
| Jan. 31..... | 2,238.51 | 101,260 | +17,310 |
| Feb. 29..... | 2,242.18 | 118,300 | +17,040 |
| Mar. 31..... | 2,243.81 | 126,430 | +8,130 |
| Apr. 30..... | 2,244.01 | 127,450 | +1,020 |
| May 31..... | 2,244.12 | 128,020 | +570 |
| June 30..... | 2,243.62 | 125,460 | -2,560 |
| July 31..... | 2,238.10 | 99,470 | -25,990 |
| Aug. 31..... | 2,230.30 | 69,120 | -30,350 |
| Sept. 30..... | 2,228.09 | 61,720 | -7,400 |
| WTR YR 2000 | -- | -- | +9,890 |

*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 good except for period of estimated record, which is poor. Natural flow affected by diversions and ground-water withdrawals for irrigation and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 1180 | 1120 | 840 | 709 | e620 | 946 | 1110 | 1050 | 1070 | 265 | 915 | 915 |
| 2 | 1140 | 1100 | 858 | 708 | e640 | 948 | 1120 | 1120 | 1080 | 624 | 883 | 913 |
| 3 | 1150 | 1050 | 859 | 733 | e680 | 921 | 1110 | 964 | 905 | 850 | 824 | 878 |
| 4 | 1100 | 1020 | 901 | 589 | e660 | 918 | 1040 | 885 | 754 | 861 | 800 | 893 |
| 5 | 1100 | 1060 | 925 | e640 | e660 | 888 | 1010 | 921 | 709 | 738 | 770 | 977 |
| 6 | 1090 | 1090 | 903 | 707 | e660 | 880 | 954 | 857 | 690 | 807 | 677 | 1020 |
| 7 | 1110 | 1110 | 901 | 859 | 674 | 870 | 976 | 806 | 658 | 1030 | 647 | 967 |
| 8 | 1190 | 1110 | 861 | 989 | 675 | 960 | 979 | 815 | 629 | 1100 | 624 | 863 |
| 9 | 1100 | 1110 | 888 | 1020 | 717 | 1080 | 963 | 835 | 592 | 806 | 665 | 874 |
| 10 | 1110 | 924 | 924 | 996 | 772 | 1090 | 935 | 789 | 565 | 699 | 635 | 931 |
| 11 | 1090 | 866 | 935 | 1080 | 729 | 1020 | 959 | 707 | 567 | 671 | 639 | 892 |
| 12 | 1090 | 821 | 925 | 1040 | 652 | 946 | 884 | 665 | 589 | 653 | 634 | 827 |
| 13 | 1040 | 824 | 876 | 1060 | 655 | 930 | 826 | 620 | 695 | 602 | 653 | 852 |
| 14 | 1030 | 808 | 905 | 969 | 701 | 950 | 826 | 539 | 877 | 610 | 649 | 943 |
| 15 | 1050 | 816 | 877 | 968 | 780 | 1000 | 849 | 541 | 893 | 648 | 649 | 907 |
| 16 | 1020 | 844 | 869 | 943 | 721 | 1020 | 1050 | 501 | 811 | 575 | 590 | 878 |
| 17 | 977 | 826 | 895 | 1000 | 804 | 1030 | 999 | 504 | 746 | 561 | 518 | 806 |
| 18 | 997 | 809 | 863 | 1020 | 840 | 1040 | 962 | 504 | 729 | 537 | 497 | 838 |
| 19 | 981 | 813 | 857 | 842 | 804 | 1040 | 953 | 687 | 676 | 536 | 623 | 1050 |
| 20 | 997 | 821 | 680 | 801 | 814 | 1020 | 903 | 1040 | 777 | 562 | 702 | 1100 |
| 21 | 1020 | 840 | e620 | 713 | 822 | 1030 | 868 | 865 | 1030 | 567 | 717 | 1070 |
| 22 | 1000 | 867 | e560 | 756 | 871 | 1030 | 942 | 812 | 659 | 663 | 732 | 1130 |
| 23 | 986 | 882 | e540 | 763 | 956 | 1090 | 974 | 878 | 526 | 1380 | 730 | 1150 |
| 24 | 1010 | 854 | e580 | 667 | 1120 | 1250 | 858 | 927 | 475 | 1070 | 707 | 1200 |
| 25 | 1010 | 832 | e640 | 688 | 1060 | 1190 | 927 | 920 | 466 | 847 | 655 | 1240 |
| 26 | 1020 | 828 | e600 | 774 | 995 | 1200 | 993 | 941 | 475 | 801 | 804 | 1240 |
| 27 | 1050 | 806 | e580 | 647 | 963 | 1150 | 1080 | 996 | 424 | 788 | 1050 | 1170 |
| 28 | 1080 | 779 | e620 | 630 | 968 | 1140 | 1050 | 1040 | 321 | 2760 | 960 | 1120 |
| 29 | 1090 | 792 | 639 | e620 | 997 | 1090 | 976 | 1030 | 275 | 2490 | 864 | 1080 |
| 30 | 1090 | 786 | 666 | e620 | --- | 1080 | 958 | 991 | 263 | 1150 | 849 | 1070 |
| 31 | 1090 | --- | 690 | e620 | --- | 1120 | --- | 1070 | --- | 958 | 841 | --- |
| TOTAL | 32988 | 27208 | 24277 | 25171 | 23010 | 31867 | 29034 | 25820 | 19926 | 27209 | 22503 | 29794 |
| MEAN | 1064 | 907 | 783 | 812 | 793 | 1028 | 968 | 833 | 664 | 878 | 726 | 993 |
| MAX | 1190 | 1120 | 935 | 1080 | 1120 | 1250 | 1120 | 1120 | 1080 | 2760 | 1050 | 1240 |
| MIN | 977 | 779 | 540 | 589 | 620 | 870 | 826 | 501 | 263 | 265 | 497 | 806 |
| AC-FT | 65430 | 53970 | 48150 | 49930 | 45640 | 63210 | 57590 | 51210 | 39520 | 53970 | 44630 | 59100 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2000, BY WATER YEAR (WY)

| | MEAN | 892 | 928 | 874 | 882 | 1121 | 1262 | 1108 | 1061 | 1054 | 712 | 679 | 826 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
| MAX | 1224 | 1330 | 1385 | 1703 | 1861 | 2589 | 1843 | 1743 | 2516 | 2471 | 1812 | 1384 | |
| (WY) | 1996 | 1999 | 1998 | 1998 | 1998 | 1936 | 1987 | 1995 | 1947 | 1993 | 1966 | 1965 | |
| MIN | 568 | 647 | 433 | 517 | 603 | 787 | 702 | 576 | 606 | 199 | 221 | 326 | |
| (WY) | 1940 | 1938 | 1930 | 1940 | 1942 | 1934 | 1946 | 1943 | 1934 | 1974 | 1941 | 1940 | |

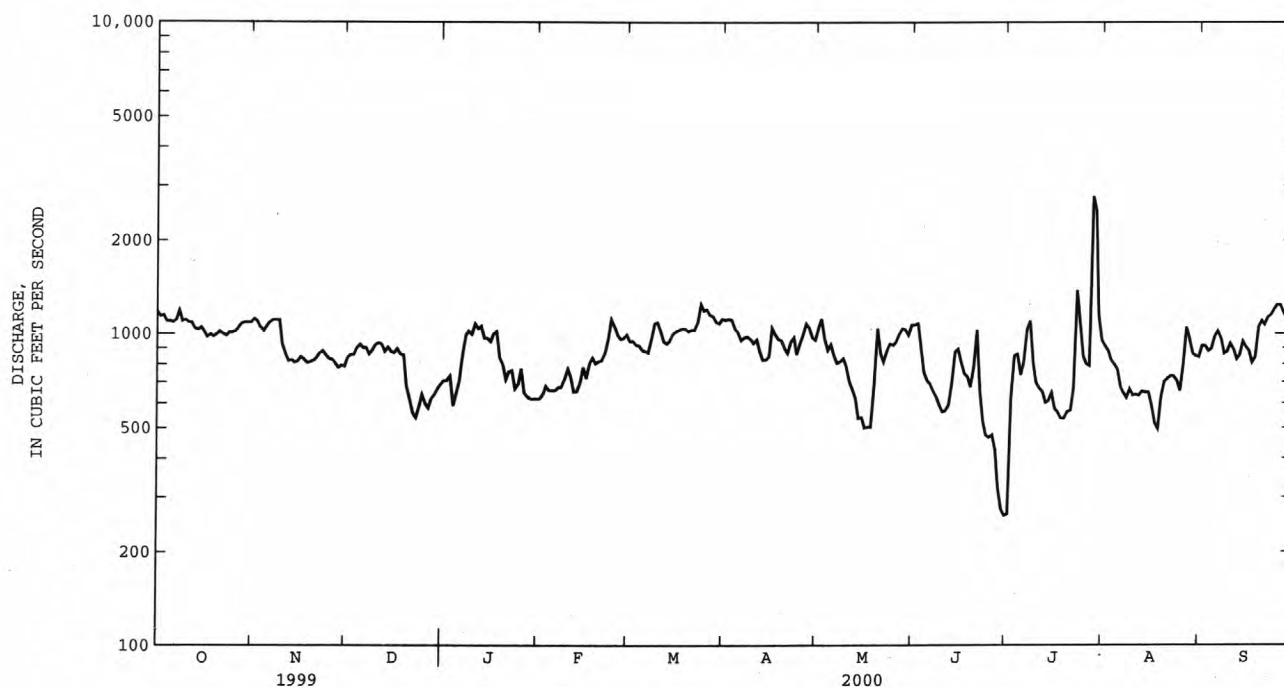
PLATTE RIVER BASIN

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

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1928 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 416122 | | 318807 | | 948 | |
| ANNUAL MEAN | 1140 | | 871 | | 1223 | 1993 |
| HIGHEST ANNUAL MEAN | | | | | 668 | 1940 |
| LOWEST ANNUAL MEAN | | | | | 21300 | Jun 22 1947 |
| HIGHEST DAILY MEAN | 3760 | Jun 27 | 2760 | Jul 28 | 85 | Aug 8 1941 |
| LOWEST DAILY MEAN | 540 | Dec 23 | 263 | Jun 30 | 98 | Aug 6 1941 |
| ANNUAL SEVEN-DAY MINIMUM | 589 | Dec 21 | 356 | Jun 25 | 90000 | Jun 6 1896 |
| INSTANTANEOUS PEAK FLOW | | | 4410 | Jul 28 | *14.90 | Jun 6 1896 |
| INSTANTANEOUS PEAK STAGE | | | 4.41 | Jul 28 | 687000 | |
| ANNUAL RUNOFF (AC-FT) | 825400 | | 632400 | | 1370 | |
| 10 PERCENT EXCEEDS | 1650 | | 1100 | | 894 | |
| 50 PERCENT EXCEEDS | 1090 | | 876 | | 509 | |
| 90 PERCENT EXCEEDS | 707 | | 620 | | | |

e Estimated.

* From floodmark, datum then in use.



[illegible]

PLATTE RIVER BASIN

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible][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 powerplants near Monroe and
Columbus and is returned to Platte River 1.5 mi downstream from Loup River. Diversion began Dec. 2, 1936.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|--------|---------|-------|-------|--------|--------|--------|-------|-------|-------|--------|
| 1 | 1800 | 2560 | 2420 | 895 | 124 | 2130 | 2430 | 1820 | 1770 | 833 | 1850 | 1470 |
| 2 | 1790 | 2670 | 2540 | 1790 | 237 | 2130 | 2250 | 2070 | 2110 | 691 | 1730 | 1450 |
| 3 | 1790 | 2870 | 2560 | 1770 | 620 | 2110 | 2470 | 1920 | 2260 | 935 | 1570 | 1460 |
| 4 | 1810 | 2880 | 2870 | 226 | 680 | 2090 | 2330 | 1820 | 2190 | 1420 | 1420 | 1510 |
| 5 | 1740 | 2630 | 2870 | 52 | 124 | 2060 | 2120 | 1650 | 1950 | 2200 | 1360 | 1500 |
| 6 | 1770 | 2760 | 2850 | 204 | 744 | 2020 | 1960 | 1730 | 1920 | 2400 | 1270 | 1610 |
| 7 | 1770 | 2840 | 1690 | 371 | 997 | 2140 | 1970 | 1690 | 1840 | 2060 | 1170 | 1710 |
| 8 | 1820 | 2810 | 2450 | 159 | 908 | 2200 | 2140 | 1640 | 1790 | 1770 | 1120 | 1730 |
| 9 | 1920 | 2770 | 2420 | 466 | 1610 | 2370 | 2020 | 1900 | 1610 | 1650 | 1080 | 1560 |
| 10 | 2140 | 2740 | 2470 | 957 | 1640 | 2450 | 1940 | 1750 | 1510 | 1400 | 1060 | 1470 |
| 11 | 2300 | 2700 | 2410 | 254 | 389 | 2430 | 2010 | 1690 | 1400 | 1270 | 904 | 1440 |
| 12 | 2290 | 2710 | 2220 | 377 | 56 | 2320 | 1960 | 1520 | 1220 | 1320 | 907 | 1480 |
| 13 | 2270 | 2600 | 548 | 178 | 64 | 2300 | 1920 | 1520 | 1380 | 1200 | 894 | 1450 |
| 14 | 2330 | 2600 | 2240 | 97 | 29 | 2330 | 1740 | 1450 | 1510 | 1060 | 925 | 1450 |
| 15 | 2320 | 2580 | 169 | 472 | 635 | 2310 | 1950 | 1360 | 1830 | 1020 | 880 | 1480 |
| 16 | 2380 | 2400 | 19 | 226 | 790 | 2380 | 2290 | 1410 | 1850 | 1020 | 885 | 1470 |
| 17 | 2510 | 2540 | 6.7 | 80 | 1290 | 2350 | 2300 | 1360 | 1710 | 980 | 740 | 1580 |
| 18 | 2090 | 2510 | 38 | 459 | 471 | 2370 | 1910 | 1500 | 1570 | 958 | 653 | 1580 |
| 19 | 1920 | 2510 | 231 | 1220 | 510 | 2280 | 1840 | 1410 | 1500 | 1050 | 880 | 1570 |
| 20 | 2280 | 2830 | 248 | 164 | 850 | 1520 | 1890 | 2300 | 1450 | 1430 | 1280 | 1720 |
| 21 | 2390 | 2960 | 68 | 40 | 1670 | 1460 | 2020 | 2280 | 1700 | 1390 | 1380 | 1800 |
| 22 | 2370 | 2650 | 43 | 291 | 1920 | 1510 | 1800 | 1730 | 1800 | 1290 | 1380 | 1870 |
| 23 | 2400 | 2700 | 40 | 317 | 2050 | 1490 | 1650 | 2030 | 1390 | 1620 | 1520 | 1890 |
| 24 | 2540 | 2890 | 58 | 120 | 2200 | 1760 | 1640 | 1940 | 1280 | 2230 | 1470 | 1950 |
| 25 | 2430 | 2810 | 116 | 49 | 2250 | 2140 | 1630 | 1990 | 1190 | 1850 | 1360 | 2130 |
| 26 | 2440 | 2680 | 395 | 38 | 2220 | 2110 | 1880 | 1930 | 1080 | 1620 | 1290 | 2140 |
| 27 | 2430 | 2640 | 591 | 40 | 2220 | 2070 | 2060 | 1800 | 1260 | 1500 | 1270 | 2130 |
| 28 | 2370 | 2570 | 492 | 80 | 2210 | 2070 | 1950 | 1780 | 1030 | 2130 | 1210 | 2060 |
| 29 | 2600 | 2570 | 226 | 80 | 2150 | 2320 | 1890 | 1810 | 899 | 2820 | 1610 | 1990 |
| 30 | 2580 | 2500 | 712 | 90 | --- | 2490 | 1820 | 1640 | 815 | 2650 | 1500 | 1900 |
| 31 | 2540 | --- | 520 | 108 | --- | 2220 | --- | 1620 | --- | 2110 | 1470 | --- |
| TOTAL | 68130 | 80480 | 36530.7 | 11670 | 31658 | 65930 | 59780 | 54060 | 46814 | 47877 | 38038 | 50550 |
| MEAN | 2198 | 2683 | 1178 | 376 | 1092 | 2127 | 1993 | 1744 | 1560 | 1544 | 1227 | 1685 |
| MAX | 2600 | 2960 | 2870 | 1790 | 2250 | 2490 | 2470 | 2300 | 2260 | 2820 | 1850 | 2140 |
| MIN | 1740 | 2400 | 6.7 | 38 | 29 | 1460 | 1630 | 1360 | 815 | 691 | 653 | 1440 |
| AC-FT | 135100 | 159600 | 72460 | 23150 | 62790 | 130800 | 118600 | 107200 | 92860 | 94960 | 75450 | 100300 |

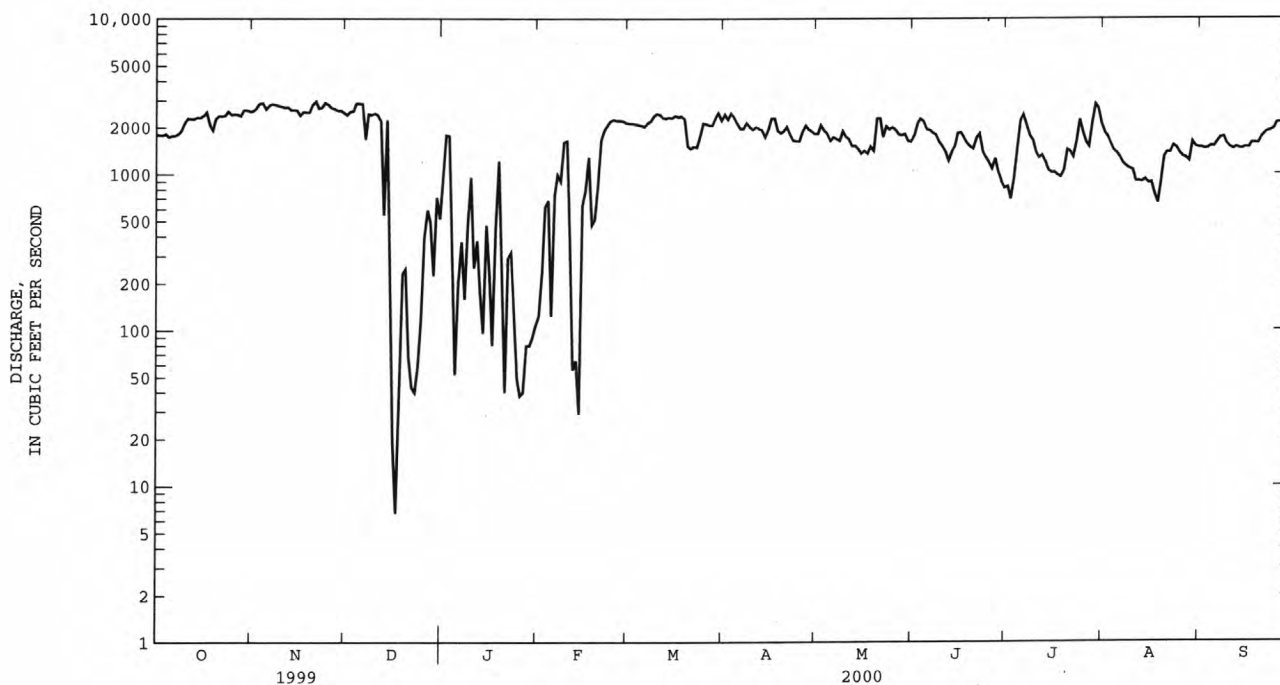
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2000, BY WATER YEAR (WY)

| | 1942 | 1853 | 992 | 1163 | 1529 | 1843 | 2137 | 1995 | 1943 | 1385 | 1253 | 1567 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 1942 | 1853 | 992 | 1163 | 1529 | 1843 | 2137 | 1995 | 1943 | 1385 | 1253 | 1567 |
| 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

06792500 LOUP RIVER POWER CANAL NEAR GENOA, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1938 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 730705.7 | | 591517.7 | | 1632 | |
| ANNUAL MEAN | 2002 | | 1616 | | 2006 | |
| HIGHEST ANNUAL MEAN | | | | | 1999 | |
| LOWEST ANNUAL MEAN | | | | | 585 | |
| HIGHEST DAILY MEAN | 3430 | May 25 | 2960 | Nov 21 | 3560 | Nov 3 1994 |
| LOWEST DAILY MEAN | 6.7 | Dec 17 | 6.7 | Dec 17 | .00 | Aug 16 1966 |
| ANNUAL SEVEN-DAY MINIMUM | 93 | Dec 16 | 69 | Jan 25 | 11 | Dec 3 1978 |
| ANNUAL RUNOFF (AC-FT) | 1449000 | | 1173000 | | 1182000 | |
| 10 PERCENT EXCEEDS | 2820 | | 2540 | | 2580 | |
| 50 PERCENT EXCEEDS | 2060 | | 1740 | | 1740 | |
| 90 PERCENT EXCEEDS | 1160 | | 252 | | 519 | |



PLATTE RIVER BASIN

06793000 LOUP RIVER NEAR GENOA, NE

LOCATION.--Lat 41°25'05", long 097°43'25", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.25, T.17 N., R.4 W., Nance County, Hydrologic Unit 10210009, on right bank 12 ft downstream from bridge on State Highway 39, 2 mi south of Genoa, 3 mi upstream from Beaver Creek, 6 mi downstream from diversion dam of Loup River Public Power District and at mile 26.8.

DRAINAGE AREA --14,320 mi², of which about 5,620 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--August 1928 to June 1932, October 1943 to current year (October 1953 to April 1955, monthly discharge only).

REVISED RECORDS.--WDR NE-94-1: Drainage area. WDR NE-99-1: 1993 (maximum stage).

NOTE: The maximum stage for the 1993 water year had been revised in 1994 and is listed in the peak flow file, but the change was never actually shown in the 1994 water year report. The stage was changed from 11.01 ft July 24, 1993, to 12.69 ft Mar.8, 1993, affected by backwater from ice.

GAGE.--Water-stage recorder. Datum of gage is 1,540.13 ft above sea level. Aug. 17, 1928, to June 30, 1932, nonrecording gage at present site at datum 1.49 ft higher. Oct. 1, 1943, to Sept. 16, 1974, (Apr. 26 to Dec. 22, 1949, wire-weight gage only), at present site and datum. Sept. 17, 1974, to Nov. 21, 1977, at site 300 ft upstream at present datum. Data collection platform at station.

REMARKS.--Records fair except for period of estimated record, which is poor. Natural flow of stream affected by power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. Records do not include flow of Loup River power canal (station 06792500), which diverts at point 6 mi upstream and returns to Platte River below mouth of Loup River; diversion began Dec. 2, 1936.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|--------|-------|-------|-------|------|------|--------|------|------|
| 1 | 45 | 78 | 119 | 1670 | e1500 | 789 | 422 | 143 | 123 | 42 | 38 | 80 |
| 2 | 44 | 136 | 85 | 1190 | e1650 | 720 | 634 | 117 | 115 | 33 | 36 | 94 |
| 3 | 42 | 96 | 140 | 1060 | e1450 | 749 | 514 | 367 | 138 | 72 | 28 | 100 |
| 4 | 43 | 78 | 47 | e1170 | e1300 | 667 | 548 | 101 | 68 | 65 | 51 | 121 |
| 5 | 135 | 77 | 79 | e1650 | e1750 | 651 | 262 | 149 | 82 | 219 | 34 | 115 |
| 6 | 45 | 50 | 39 | e1500 | e1660 | 634 | 196 | 56 | 68 | 169 | 37 | 113 |
| 7 | 40 | 39 | 537 | e1950 | e1800 | 448 | 257 | 55 | 94 | 38 | 32 | 121 |
| 8 | 40 | 32 | 114 | e2250 | e2090 | 582 | 487 | 105 | 47 | 20 | 41 | 96 |
| 9 | 47 | 31 | 83 | e1950 | e1290 | 808 | 307 | 60 | 82 | 70 | 30 | 75 |
| 10 | 87 | 30 | 115 | e1450 | e1160 | 1150 | 228 | 85 | 57 | 21 | 27 | 90 |
| 11 | 78 | 30 | 132 | e2050 | e2400 | 815 | 229 | 53 | 56 | 18 | 39 | 136 |
| 12 | 48 | 32 | 178 | e2000 | e2740 | 545 | 396 | 82 | 234 | 24 | 41 | 72 |
| 13 | 38 | 37 | 1090 | e2200 | 2640 | 567 | 205 | 47 | 70 | 10 | 41 | 73 |
| 14 | 43 | 31 | 192 | e2400 | 2510 | 566 | 274 | 49 | 100 | 8.6 | 34 | 66 |
| 15 | 38 | 40 | 1520 | e2050 | 2020 | 442 | 186 | 73 | 57 | 27 | 33 | 59 |
| 16 | 36 | 161 | e1580 | e2470 | 1980 | 641 | 989 | 39 | 69 | 52 | 49 | 68 |
| 17 | 37 | 128 | e1690 | e2620 | 1180 | 686 | 696 | 58 | 46 | 55 | 107 | 101 |
| 18 | 252 | 103 | e1760 | e2140 | 1990 | 798 | 381 | 65 | 52 | 31 | 169 | 45 |
| 19 | 551 | 155 | e1370 | e1380 | 2030 | 908 | 361 | 80 | 103 | 51 | 104 | 67 |
| 20 | 275 | 124 | e850 | e2340 | 1670 | 1560 | 217 | 220 | 47 | 58 | 55 | 108 |
| 21 | 73 | 101 | e1130 | 2390 | 808 | 1580 | 300 | 76 | 78 | 22 | 27 | 70 |
| 22 | 56 | 25 | e1260 | 2080 | 618 | 1600 | 181 | 227 | 64 | 37 | 23 | 30 |
| 23 | 45 | 57 | e1460 | 1800 | 691 | 1650 | 89 | 79 | 125 | 61 | 57 | 27 |
| 24 | 61 | 32 | 2260 | 1660 | 1000 | 1810 | 89 | 139 | 60 | 73 | 31 | 61 |
| 25 | 41 | 22 | 2430 | 1380 | 1080 | 1490 | 77 | 72 | 44 | 17 | 35 | 32 |
| 26 | 61 | 15 | 2700 | 1780 | 891 | 947 | 209 | 108 | 59 | 19 | 63 | 60 |
| 27 | 41 | 12 | 2320 | 1830 | 847 | 1020 | 426 | 103 | 61 | 17 | 107 | 23 |
| 28 | 34 | 21 | 2810 | e1450 | 798 | 1150 | 293 | 90 | 42 | 356 | 513 | 15 |
| 29 | 71 | 34 | 2720 | e1350 | 641 | 668 | 134 | 92 | 41 | 1530 | 76 | 14 |
| 30 | 104 | 96 | e1700 | e1100 | --- | 346 | 94 | 150 | 37 | 626 | 61 | 23 |
| 31 | 73 | --- | e1750 | e1050 | --- | 561 | --- | 76 | --- | 45 | 78 | --- |
| TOTAL | 2624 | 1903 | 34260 | 55360 | 44184 | 27548 | 9681 | 3216 | 2319 | 3886.6 | 2097 | 2155 |
| MEAN | 84.6 | 63.4 | 1105 | 1786 | 1524 | 889 | 323 | 104 | 77.3 | 125 | 67.6 | 71.8 |
| MAX | 551 | 161 | 2810 | 2620 | 2740 | 1810 | 989 | 367 | 234 | 1530 | 513 | 136 |
| MIN | 34 | 12 | 39 | 1050 | 618 | 346 | 77 | 39 | 37 | 8.6 | 23 | 14 |
| AC-FT | 5200 | 3770 | 67950 | 109800 | 87640 | 54640 | 19200 | 6380 | 4600 | 7710 | 4160 | 4270 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2000, BY WATER YEAR (WY)

| | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 149 | 431 | 1059 | 971 | 1382 | 1653 | 673 | 628 | 913 | 372 | 256 | 235 |
| 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

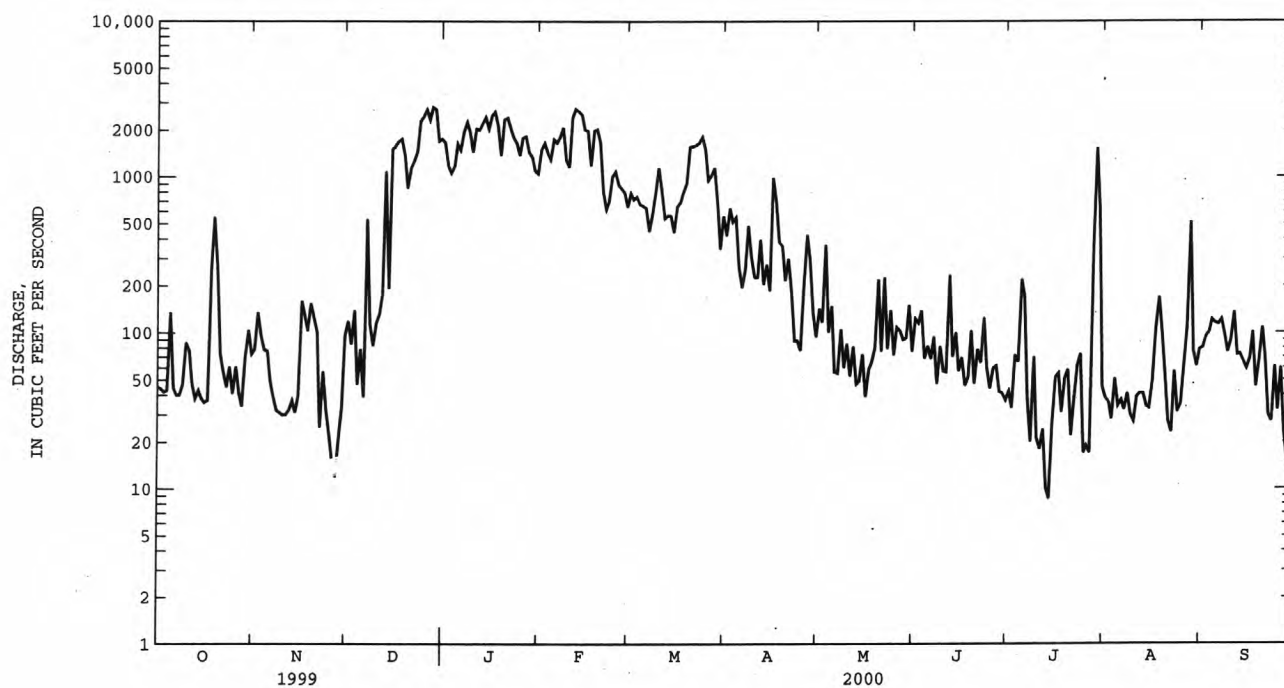
06793000 LOUP RIVER NEAR GENOA, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1944 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 393003 | | 189233.6 | | 724 | |
| ANNUAL MEAN | 1077 | | 517 | | 1993 | 1993 |
| HIGHEST ANNUAL MEAN | | | | | 182 | 1963 |
| LOWEST ANNUAL MEAN | | | | | 70800 | Aug 13 1966 |
| HIGHEST DAILY MEAN | 11500 | Jun 28 | 2810 | Dec 28 | .00 | Aug 20 1956 |
| LOWEST DAILY MEAN | 12 | Nov 27 | 8.6 | Jul 14 | .00 | Aug 20 1956 |
| ANNUAL SEVEN-DAY MINIMUM | 26 | Nov 22 | 23 | Jul 10 | 129000 | Aug 13 1966 |
| INSTANTANEOUS PEAK FLOW | | | *3370 | Dec 26 | 13.93 | Aug 13 1966 |
| INSTANTANEOUS PEAK STAGE | | | **7.05 | Jan 10 | | |
| ANNUAL RUNOFF (AC-FT) | 779500 | | 375300 | | 524300 | |
| 10 PERCENT EXCEEDS | 2500 | | 1750 | | 2090 | |
| 50 PERCENT EXCEEDS | 600 | | 104 | | 120 | |
| 90 PERCENT EXCEEDS | 44 | | 32 | | 13 | |

e Estimated.

* Stage 6.67 ft.

** Backwater from ice; peak stage also occurred on Jan. 11 and Feb. 8.



PLATTE RIVER BASIN

06794000 BEAVER CREEK AT GENOA, NE

LOCATION.--Lat 41°26'32", long 097°44'11", in NE ¼ SE ¼ sec.14, T.17 N., R.4 W., Nance County, Hydrologic Unit 10210009, on left bank in city park at southwest corner of Genoa, 0.2 mi downstream from Union Pacific Railroad bridge, 0.2 mi upstream from bridge on State Highway 39, and 4.0 mi upstream from mouth.

DRAINAGE AREA.--677 mi², of which about 429 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1940 to current year.

REVISED RECORDS.--WSP 1310: 1942(M). WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,542.13 ft above sea level. October 1940 to Nov. 5, 1942, nonrecording gage and Nov. 6, 1942, to Nov. 1, 1955, water-stage recorder, at site 0.4 mi upstream at datum 4.62 ft higher.

REMARKS.--Records fair except for periods of estimated record, which are poor. Natural flow affected slightly by ground-water and surface-water withdrawals for irrigation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|------|
| 1 | 73 | 88 | 91 | 129 | e106 | 139 | 106 | 105 | 201 | 80 | 45 | 38 |
| 2 | 72 | 85 | 95 | 117 | e112 | 129 | 102 | 109 | 176 | 93 | 29 | 30 |
| 3 | 74 | 86 | 93 | 112 | e114 | 125 | 100 | 117 | 161 | 85 | 24 | 32 |
| 4 | 80 | 86 | 91 | e90 | e110 | 125 | 102 | 110 | 146 | 97 | 28 | 41 |
| 5 | 87 | 88 | 88 | e84 | e100 | 125 | 108 | 101 | 129 | 83 | 32 | 43 |
| 6 | 83 | 87 | 87 | e96 | e96 | 122 | 105 | 96 | 117 | 882 | 34 | 61 |
| 7 | 78 | 85 | 85 | e104 | e110 | 122 | 97 | 96 | 112 | 741 | 25 | 54 |
| 8 | 85 | 88 | 87 | e108 | 124 | 130 | 90 | 96 | 105 | 502 | 17 | 50 |
| 9 | 85 | 92 | 90 | e114 | 118 | 125 | 92 | 96 | 98 | 365 | 17 | 47 |
| 10 | 83 | 91 | 92 | e118 | 123 | 133 | 93 | 96 | 92 | 244 | 18 | 42 |
| 11 | 83 | 90 | 89 | e120 | 104 | 127 | 91 | 94 | 81 | 183 | 17 | 40 |
| 12 | 83 | 86 | 90 | e114 | 101 | 123 | 91 | 85 | 88 | 163 | 18 | 36 |
| 13 | 82 | 92 | 80 | e116 | 108 | 115 | 92 | 80 | 83 | 162 | 18 | 38 |
| 14 | 82 | 92 | 83 | e118 | e106 | 117 | 93 | 73 | 75 | 135 | 15 | 37 |
| 15 | 85 | 89 | 83 | e116 | e104 | 116 | 87 | 72 | 77 | 122 | 12 | 45 |
| 16 | 92 | 89 | 82 | e112 | 112 | 107 | 110 | 73 | 77 | 107 | 10 | 41 |
| 17 | 83 | 90 | e78 | e114 | 113 | 107 | 129 | 82 | 61 | 91 | 8.4 | 33 |
| 18 | 82 | 90 | e74 | e116 | 117 | 112 | 168 | 390 | 59 | 79 | 8.4 | 31 |
| 19 | 81 | 88 | e68 | e110 | 110 | 116 | 184 | 392 | 54 | 68 | 19 | 32 |
| 20 | 85 | 86 | e58 | e96 | 103 | 120 | 180 | 224 | 246 | 66 | 36 | 36 |
| 21 | 89 | 88 | e54 | e100 | 111 | 124 | 162 | 178 | 263 | 67 | 40 | 36 |
| 22 | 89 | 88 | e76 | e106 | 121 | 116 | 143 | 147 | 158 | 78 | 38 | 45 |
| 23 | 85 | 99 | e82 | e104 | 145 | 125 | 133 | 127 | 118 | 74 | 47 | 51 |
| 24 | 84 | 93 | e90 | e98 | 175 | 138 | 123 | 113 | 205 | 97 | 45 | 56 |
| 25 | 86 | 92 | e92 | e92 | 324 | 154 | 114 | 100 | 312 | 121 | 40 | 56 |
| 26 | 88 | 91 | e94 | e90 | 262 | 177 | 109 | 108 | 266 | 75 | 40 | 56 |
| 27 | 88 | 91 | e96 | e96 | 211 | 151 | 110 | 172 | 188 | 60 | 40 | 61 |
| 28 | 88 | 89 | e102 | e102 | 173 | 129 | 108 | 223 | 132 | 50 | 31 | 57 |
| 29 | 87 | 87 | e106 | e100 | 152 | 115 | 108 | 247 | 104 | 56 | 38 | 46 |
| 30 | 87 | 87 | e114 | e98 | --- | 110 | 104 | 229 | 81 | 62 | 40 | 43 |
| 31 | 88 | --- | 126 | e96 | --- | 111 | --- | 253 | --- | 52 | 39 | --- |
| TOTAL | 2597 | 2673 | 2716 | 3286 | 3865 | 3885 | 3434 | 4484 | 4065 | 5140 | 868.8 | 1314 |
| MEAN | 83.8 | 89.1 | 87.6 | 106 | 133 | 125 | 114 | 145 | 136 | 166 | 28.0 | 43.8 |
| MAX | 92 | 99 | 126 | 129 | 324 | 177 | 184 | 392 | 312 | 882 | 47 | 61 |
| MIN | 72 | 85 | 54 | 84 | 96 | 107 | 87 | 72 | 54 | 50 | 8.4 | 30 |
| AC-FT | 5150 | 5300 | 5390 | 6520 | 7670 | 7710 | 6810 | 8890 | 8060 | 10200 | 1720 | 2610 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2000, BY WATER YEAR (WY)

| | MEAN | 81.7 | 88.4 | 85.3 | 84.1 | 136 | 198 | 168 | 177 | 234 | 142 | 94.7 | 81.0 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 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 | |

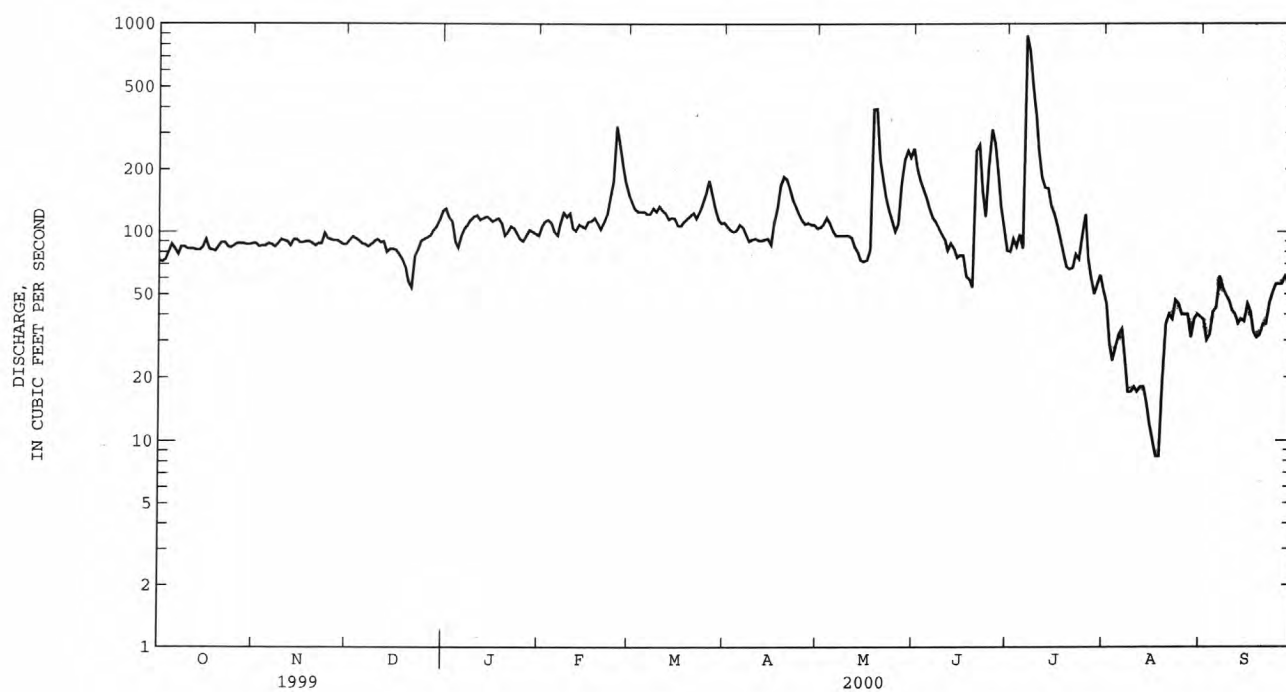
PLATTE RIVER BASIN

06794000 BEAVER CREEK AT GENOA, NE--Continued

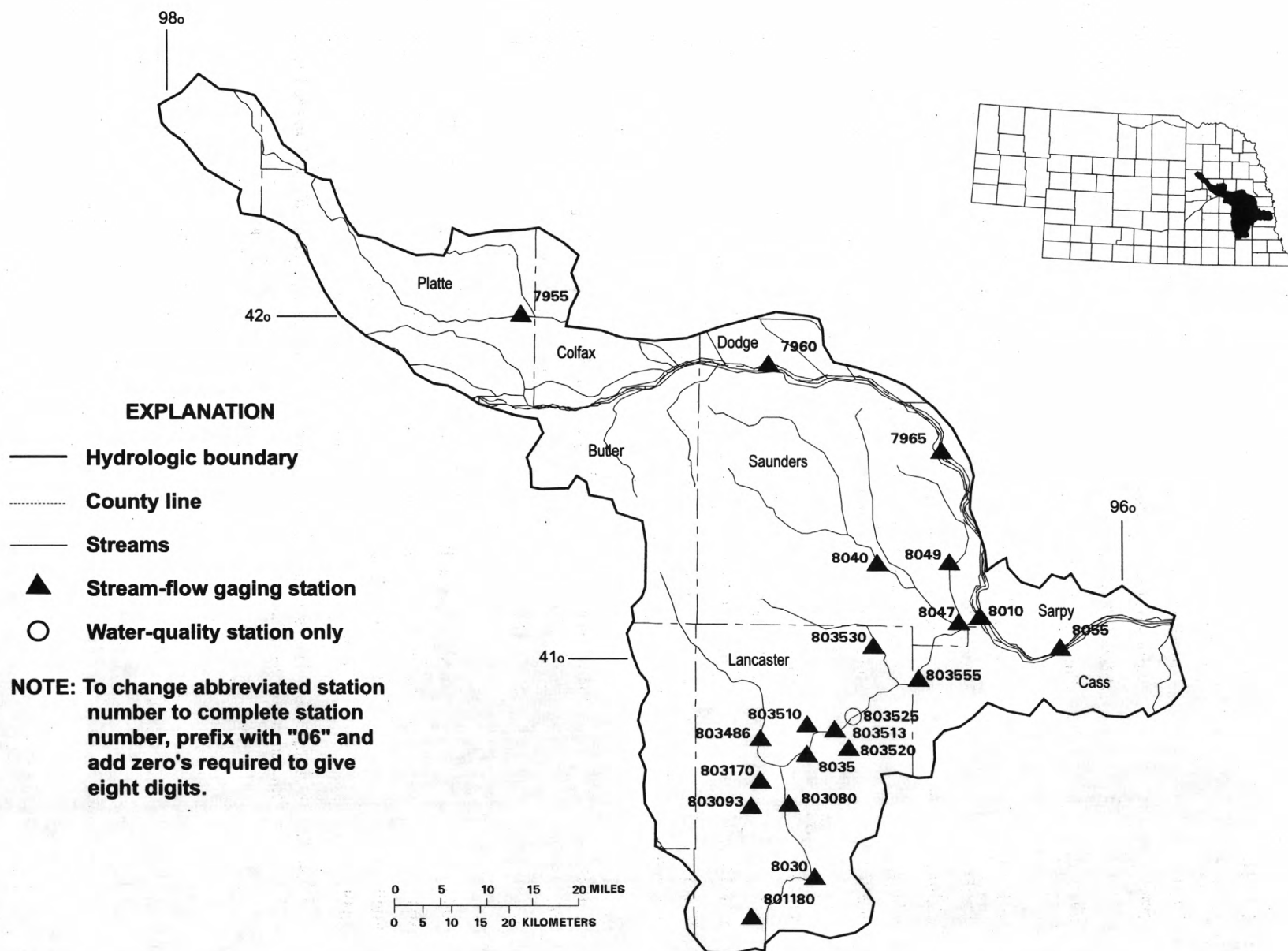
| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1941 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 60555 | | 38327.8 | | 131 | |
| ANNUAL MEAN | 166 | | 105 | | 268 | 1993 |
| HIGHEST ANNUAL MEAN | | | | | 70.9 | 1981 |
| LOWEST ANNUAL MEAN | | | | | 10000 | Jul 19 1950 |
| HIGHEST DAILY MEAN | 1660 | Jun 27 | 882 | Jul 6 | .41 | Jul 25 1974 |
| LOWEST DAILY MEAN | 43 | Aug 27 | 8.4 | Aug 17 | .90 | Jul 24 1974 |
| ANNUAL SEVEN-DAY MINIMUM | 47 | Aug 27 | 13 | Aug 12 | 21200 | Jul 19 1950 |
| INSTANTANEOUS PEAK FLOW | | | 1230 | Jul 6 | *18.70 | Jul 19 1950 |
| INSTANTANEOUS PEAK STAGE | | | 9.09 | Jul 6 | 94660 | |
| ANNUAL RUNOFF (AC-FT) | 120100 | | 76020 | | 210 | |
| 10 PERCENT EXCEEDS | 334 | | 159 | | 90 | |
| 50 PERCENT EXCEEDS | 123 | | 92 | | 49 | |
| 90 PERCENT EXCEEDS | 67 | | 40 | | | |

e Estimated.

* Site and datum then in use.



PLATTE RIVER BASIN
LOWER PLATTE RIVER BASIN



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..... | 146 |
| 7955 | Shell Creek near Columbus..... | 148 |
| 7960 | Platte River at North Bend..... | 150 |
| 7965 | Platte River near Leshara..... | 152 |
| | (Elkhorn River Basin stations)..... | 154-173 |
| 8010 | Platte River near Ashland..... | 174 |
| 801180 | Olive Branch near Hallam..... | 176 |
| 8030 | Salt Creek at Roca..... | 180 |
| 803080 | Salt Creek at Pioneers Blvd at Lincoln..... | 182 |
| 803093 | Haines Branch at SW 56th St. at Lincoln..... | 184 |
| 803170 | Middle Creek at SW 40th St. at Lincoln..... | 186 |
| 803486 | Oak Creek at Air Park Rd. at Lincoln..... | 188 |
| 8035 | Salt Creek at Lincoln..... | 190 |
| 803510 | Little Salt Creek near Lincoln..... | 192 |
| 803513 | Salt Creek at 70th St. at Lincoln..... | 194 |
| 803520 | Stevens Creek near Lincoln..... | 196 |
| 803525 | Salt Creek below Stevens Creek, near Waverly..... | 198 |
| 803530 | Rock Creek near Ceresco..... | 202 |
| 803555 | Salt Creek at Greenwood..... | 204 |
| 8040 | Wahoo Creek at Ithaca..... | 206 |
| 8047 | Wahoo Creek at Ashland..... | 208 |
| 8049 | Johnson Creek near Memphis..... | 210 |
| 8055 | Platte River at Louisville..... | 212 |

*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 1/4 SW 1/4, 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| 1 | 10 | 13 | 14 | 15 | 15 | 19 | 19 | 23 | 17 | 14 | 5.2 | 3.6 |
| 2 | 11 | 13 | 14 | 16 | 15 | 18 | 18 | 22 | 16 | 14 | 5.1 | 3.6 |
| 3 | 11 | 12 | 15 | 15 | 16 | 19 | 18 | 22 | 16 | 13 | 4.8 | 3.7 |
| 4 | 11 | 13 | 15 | 14 | 15 | 19 | 18 | 21 | 17 | 14 | 4.2 | 3.9 |
| 5 | 12 | 13 | 14 | 15 | 15 | 19 | 18 | 20 | 17 | 13 | 3.9 | 3.8 |
| 6 | 11 | 13 | 14 | 15 | 16 | 19 | 18 | 19 | 17 | 12 | 3.6 | 3.7 |
| 7 | 12 | 14 | 14 | 15 | 15 | 18 | 18 | 19 | 17 | 12 | 3.5 | 3.7 |
| 8 | 12 | 14 | 14 | 15 | 15 | 19 | 17 | 18 | 16 | 11 | 3.4 | 3.7 |
| 9 | 12 | 14 | 14 | 16 | 16 | 18 | 17 | 18 | 15 | 9.0 | 3.4 | 3.7 |
| 10 | 12 | 14 | 14 | 16 | 16 | 18 | 17 | 17 | 15 | 7.9 | 3.4 | 3.7 |
| 11 | 12 | 14 | 14 | 15 | 16 | 17 | 18 | 16 | 14 | 7.6 | 3.3 | 3.8 |
| 12 | 12 | 14 | 14 | 15 | 16 | 17 | 18 | 16 | 14 | 6.8 | 3.2 | 3.7 |
| 13 | 12 | 14 | 14 | 15 | 16 | 17 | 18 | 15 | 16 | 6.5 | 3.2 | 3.8 |
| 14 | 12 | 14 | 14 | 15 | 16 | 17 | 19 | 14 | 14 | 6.0 | 2.9 | 3.9 |
| 15 | 12 | 14 | 14 | 16 | 16 | 17 | 18 | 14 | 13 | 5.5 | 2.7 | 3.8 |
| 16 | 12 | 14 | 14 | 15 | 16 | 17 | 21 | 13 | 13 | 7.3 | 2.7 | 3.9 |
| 17 | 12 | 14 | 14 | 16 | 16 | 16 | 22 | 14 | 13 | 9.3 | 2.6 | 3.9 |
| 18 | 12 | 14 | 14 | 16 | 17 | 18 | 23 | 14 | 13 | 7.2 | 2.6 | 3.9 |
| 19 | 12 | 14 | 15 | 16 | 16 | 19 | 24 | 14 | 12 | 6.7 | 3.4 | 4.0 |
| 20 | 12 | 13 | 13 | 16 | 16 | 19 | 23 | 14 | 13 | 6.9 | 3.2 | 4.1 |
| 21 | 12 | 14 | 14 | 16 | 18 | 19 | 23 | 14 | 11 | 6.3 | 3.3 | 4.0 |
| 22 | 12 | 13 | 13 | 16 | 18 | 19 | 23 | 14 | 11 | 6.1 | 3.3 | 4.4 |
| 23 | 12 | 16 | 14 | 16 | 20 | 20 | 23 | 14 | 10 | 6.0 | 3.6 | 4.3 |
| 24 | 12 | 14 | 14 | 15 | 20 | 21 | 23 | 13 | 12 | 5.9 | 3.6 | 4.3 |
| 25 | 12 | 14 | 14 | 15 | 21 | 21 | 23 | 13 | 22 | 5.7 | 3.7 | 4.2 |
| 26 | 12 | 14 | 15 | 15 | 20 | 22 | 25 | 17 | 23 | 5.6 | 3.7 | 4.2 |
| 27 | 12 | 14 | 15 | 15 | 19 | 21 | 25 | 18 | 18 | 5.4 | 3.8 | 4.1 |
| 28 | 12 | 14 | 15 | 15 | 19 | 20 | 24 | 17 | 16 | 5.9 | 3.8 | 4.1 |
| 29 | 13 | 14 | 15 | 15 | 19 | 20 | 24 | 17 | 15 | 5.6 | 3.7 | 4.2 |
| 30 | 12 | 14 | 15 | 15 | --- | 19 | 23 | 18 | 14 | 5.3 | 3.6 | 4.1 |
| 31 | 12 | --- | 15 | 16 | --- | 19 | --- | 17 | --- | 5.2 | 3.6 | --- |
| TOTAL | 367 | 413 | 441 | 476 | 489 | 581 | 618 | 515 | 450 | 252.7 | 110.0 | 117.8 |
| MEAN | 11.8 | 13.8 | 14.2 | 15.4 | 16.9 | 18.7 | 20.6 | 16.6 | 15.0 | 8.15 | 3.55 | 3.93 |
| MAX | 13 | 16 | 15 | 16 | 21 | 22 | 25 | 23 | 23 | 14 | 5.2 | 4.4 |
| MIN | 10 | 12 | 13 | 14 | 15 | 16 | 17 | 13 | 10 | 5.2 | 2.6 | 3.6 |
| AC-FT | 728 | 819 | 875 | 944 | 970 | 1150 | 1230 | 1020 | 893 | 501 | 218 | 234 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2000, BY WATER YEAR (WY)

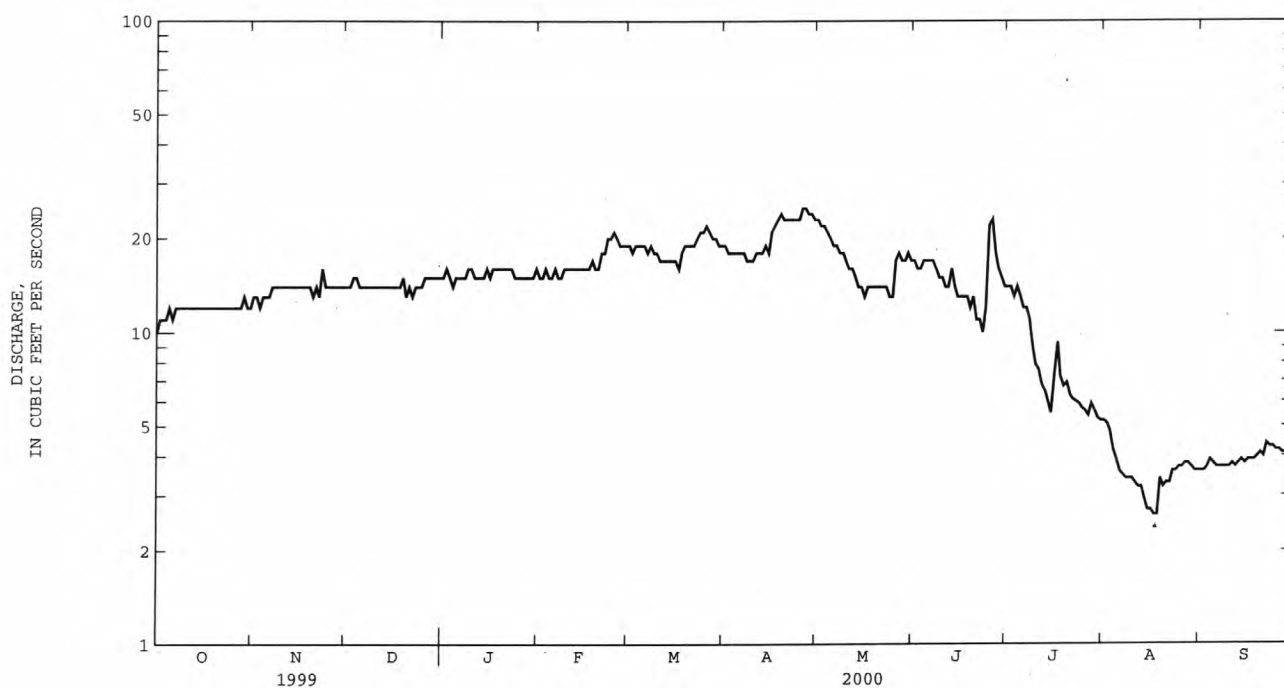
| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 11.3 | 19.5 | 19.3 | 16.4 | 20.4 | 24.6 | 51.0 | 41.6 | 83.9 | 22.8 | 12.7 | 7.95 |
| MAX | 13.2 | 26.0 | 25.0 | 20.1 | 24.1 | 33.5 | 114 | 75.5 | 234 | 58.6 | 25.8 | 15.2 |
| (WY) | 1997 | 1997 | 1997 | 1999 | 1999 | 1999 | 1998 | 1999 | 1999 | 1999 | 1996 | 1996 |
| MIN | 7.98 | 13.8 | 14.2 | 12.5 | 16.9 | 18.7 | 18.2 | 16.6 | 15.0 | 8.15 | 2.97 | 3.93 |
| (WY) | 1998 | 2000 | 2000 | 1998 | 2000 | 2000 | 1996 | 2000 | 2000 | 2000 | 1997 | 2000 |

PLATTE RIVER BASIN

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

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1996 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 17846.1 | | 4830.5 | | 28.3 | |
| ANNUAL MEAN | 48.9 | | 13.2 | | 50.3 | |
| HIGHEST ANNUAL MEAN | | | | | 13.2 | |
| LOWEST ANNUAL MEAN | | | | | 1160 | |
| HIGHEST DAILY MEAN | 1160 | Jun 2 | 25 | Apr 26 | 1160 | Jun 2 1999 |
| LOWEST DAILY MEAN | 9.7 | Sep 14 | 2.6 | Aug 17 | 2.5 | Aug 23 1997 |
| ANNUAL SEVEN-DAY MINIMUM | 9.9 | Sep 13 | 2.8 | Aug 12 | 2.7 | Aug 21 1997 |
| INSTANTANEOUS PEAK FLOW | | | 43 | Jun 25 | 1360 | Jun 2 1999 |
| INSTANTANEOUS PEAK STAGE | | | 4.78 | Jun 25 | *8.65 | Jun 2 1999 |
| ANNUAL RUNOFF (AC-FT) | 35400 | | 9580 | | 20530 | |
| 10 PERCENT EXCEEDS | 80 | | 19 | | 46 | |
| 50 PERCENT EXCEEDS | 22 | | 14 | | 18 | |
| 90 PERCENT EXCEEDS | 12 | | 3.8 | | 6.0 | |

* From floodmark.



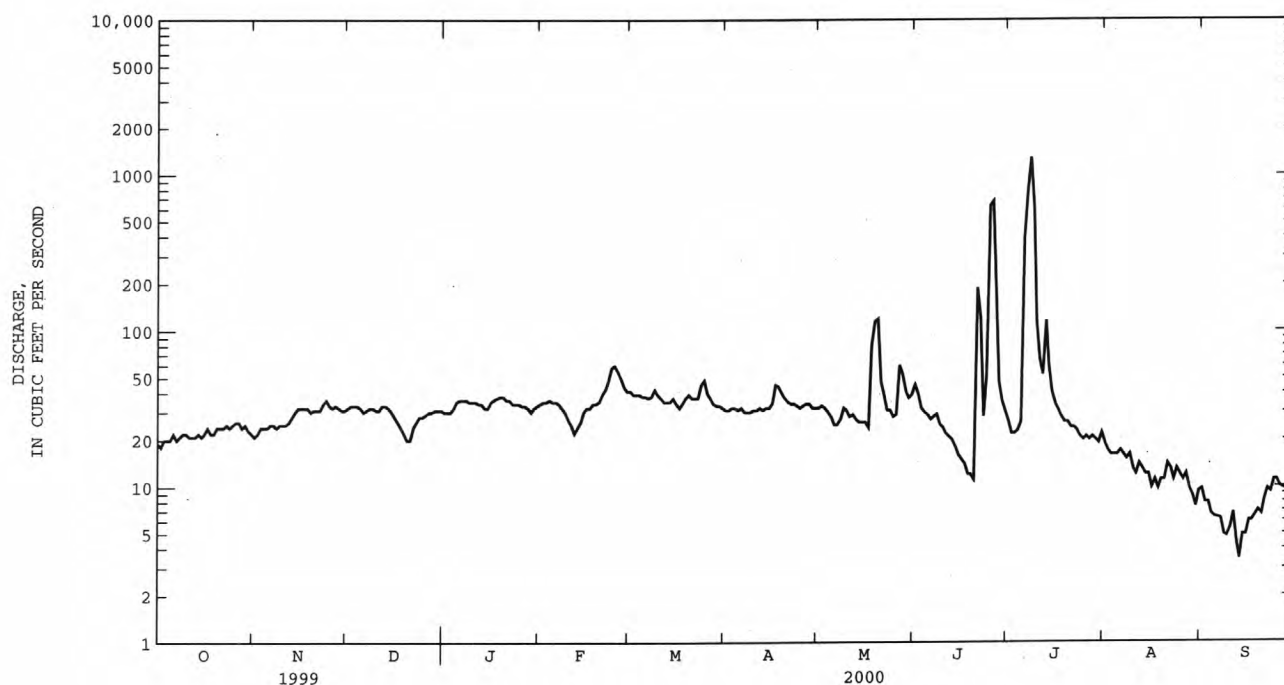
| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 18.0 | 17.7 | 15.5 | 19.0 | 52.0 | 94.6 | 42.9 | 68.7 | 126 | 67.0 | 39.3 | 24.3 |
| MAX | 74.6 | 62.9 | 42.2 | 84.7 | 322 | 469 | 210 | 552 | 702 | 515 | 202 | 195 |
| (WY) | 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

06795500 SHELL CREEK NEAR COLUMBUS, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1948 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 33027 | | 15018.0 | | 48.7 | |
| ANNUAL MEAN | 90.5 | | 41.0 | | 136 | |
| HIGHEST ANNUAL MEAN | | | | | 13.6 | |
| LOWEST ANNUAL MEAN | | | | | 4900 | |
| HIGHEST DAILY MEAN | 3710 | Jun 6 | 1290 | Jul 8 | | Jun 17 1990 |
| LOWEST DAILY MEAN | 14 | Sep 2 | 3.4 | Sep 13 | .40 | Jul 27 1954 |
| ANNUAL SEVEN-DAY MINIMUM | 15 | Aug 29 | 4.9 | Sep 8 | .86 | Jul 22 1954 |
| INSTANTANEOUS PEAK FLOW | | | 1630 | Jul 8 | 8000 | Jun 17 1990 |
| INSTANTANEOUS PEAK STAGE | | | 13.30 | Jul 8 | 22.76 | Jun 17 1990 |
| ANNUAL RUNOFF (AC-FT) | 65510 | | 29790 | | 35300 | |
| 10 PERCENT EXCEEDS | 128 | | 41 | | 68 | |
| 50 PERCENT EXCEEDS | 35 | | 30 | | 17 | |
| 90 PERCENT EXCEEDS | 19 | | 11 | | 6.0 | |

e Estimated.



PLATTE RIVER BASIN

06796000 PLATTE RIVER AT NORTH BEND, NE

LOCATION.--Lat 41°27'10", long 096°45'50", in SE $\frac{1}{4}$ sec. 7., T. 17 N., R. 6 E., Douglas County, Hydrologic Unit 10200202, on left bank 80 ft upstream from bridge on State Highway 79, 1 mi south of North Bend, 5 mi downstream from Shell Creek, and at mile 73.0.

DRAINAGE AREA.--70,400 mi², of which about 57,800 mi² contributes directly to surface runoff.

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

GAGE.--Water-stage recorder. Datum of gage is 1,262.32 ft above sea level. Prior to Sept. 12, 1951, nonrecording gage and Sept. 12, 1951 to Sept. 30, 1970 water-stage recorder, at present site at datum 2.00 ft higher. Data collection platform at station.

REMARKS.--Records good except for periods of estimated record, 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 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | 5080 | 5920 | 5450 | 5450 | 4470 | 5880 | 5560 | 4500 | 4130 | 2100 | 3350 | 1790 |
| 2 | 5430 | 6490 | 5430 | 6300 | 4770 | 5530 | 5990 | 4960 | 4310 | 1690 | 2950 | 1820 |
| 3 | 5090 | 6320 | 5510 | 5710 | 5040 | 5230 | 4920 | 5100 | 4690 | 1420 | 2780 | 1960 |
| 4 | 5750 | 6030 | 5750 | 4920 | 5070 | 5130 | 5240 | 5020 | 4680 | 2020 | 2910 | 1500 |
| 5 | 5610 | 6160 | 5550 | 5300 | 4510 | 5450 | 5450 | 4940 | 4390 | 2730 | 2570 | 1820 |
| 6 | 5300 | 6050 | 5590 | 4630 | 4930 | 5000 | 5300 | 4110 | 4260 | 4440 | 1770 | 1720 |
| 7 | 5450 | 6020 | 5320 | 4000 | 5220 | 5900 | 4370 | 4530 | 4010 | 5580 | 1840 | 1940 |
| 8 | 5840 | 5980 | 5000 | 5540 | 4970 | 5700 | 4660 | 4350 | 3630 | 5740 | 1430 | 2080 |
| 9 | 5690 | 5770 | 5400 | 5940 | 5400 | 6060 | 4310 | 4190 | 3480 | 6090 | 2000 | 2190 |
| 10 | 5580 | 5980 | 5490 | 6620 | 5120 | 6490 | 5030 | 4960 | 3280 | 4300 | 1240 | 1870 |
| 11 | 5680 | 5840 | 5430 | 6690 | 4010 | 6990 | 4720 | 4390 | 3150 | 3310 | 1670 | 2010 |
| 12 | 5740 | 5890 | 5610 | 6470 | 4540 | 5770 | 4870 | 3990 | 2960 | 3070 | 1080 | 1810 |
| 13 | 5610 | 6280 | 4790 | 6960 | 4530 | 6970 | 4810 | 3790 | 3040 | 2590 | 940 | 2090 |
| 14 | 5280 | 6070 | 5170 | 6210 | 4870 | 5070 | 5330 | 3890 | 2400 | 3000 | 1010 | 2000 |
| 15 | 4470 | 5940 | 5500 | 6470 | 4740 | 5240 | 5000 | 3580 | 2970 | 1820 | 1370 | 2040 |
| 16 | 5420 | 6090 | 4990 | 6320 | 5340 | 5340 | 5380 | 3930 | 3280 | 1670 | 599 | 1990 |
| 17 | 5980 | 5730 | 4730 | 5390 | 5490 | 5470 | 6530 | 3300 | 3040 | 2150 | 1760 | 1700 |
| 18 | 5740 | 6220 | 4800 | 5960 | 5500 | 4580 | 6350 | 3760 | 3290 | 2300 | 632 | 2040 |
| 19 | 6570 | 6350 | 4720 | 6000 | 5660 | 5740 | 6070 | 3660 | 2430 | 1860 | 712 | 2610 |
| 20 | 5540 | 6000 | 5030 | 5870 | 5090 | 5880 | 5870 | 3420 | 2630 | 2740 | 1510 | 1470 |
| 21 | 6140 | 6490 | 4920 | 5780 | 4990 | 4960 | 4880 | 4920 | 2830 | 2280 | 2430 | 2180 |
| 22 | 5860 | 6350 | 4610 | 5950 | 4800 | 5420 | 5590 | 4070 | 3050 | 2720 | 1830 | 2130 |
| 23 | 5560 | 6510 | 3490 | 5910 | 4920 | 5980 | 5480 | 3350 | 2950 | 2430 | 1940 | 2320 |
| 24 | 5450 | 6580 | 4050 | 6020 | 5680 | 6440 | 4960 | 4230 | 3910 | 2800 | 1960 | 2250 |
| 25 | 5650 | 6350 | 5440 | 5670 | 6850 | 6300 | 4740 | 4360 | 4390 | 3370 | 2100 | 2150 |
| 26 | 5170 | 5690 | 7110 | 5460 | 7660 | 6490 | 5110 | 3970 | 4660 | 3220 | 2330 | 2600 |
| 27 | 5440 | 5980 | 7670 | 4160 | 6780 | 6120 | 5670 | 4790 | 4270 | 1930 | 1650 | 2640 |
| 28 | 5380 | 5700 | 6970 | 4100 | 6240 | 6240 | 5920 | 4750 | 3110 | 2500 | 1670 | 2940 |
| 29 | 5880 | 5440 | 6460 | 3990 | 5990 | 6320 | 5580 | 4310 | 2870 | 3320 | 1910 | 2610 |
| 30 | 5350 | 5480 | 6250 | 3970 | --- | 5980 | 5120 | 4320 | 2150 | 5100 | 1860 | 2240 |
| 31 | 6010 | --- | 5610 | 4100 | --- | 6900 | --- | 4260 | --- | 4100 | 1960 | --- |
| TOTAL | 172740 | 181700 | 167840 | 171860 | 153180 | 180570 | 158810 | 131700 | 104240 | 94390 | 55763 | 62510 |
| MEAN | 5572 | 6057 | 5414 | 5544 | 5282 | 5825 | 5294 | 4248 | 3475 | 3045 | 1799 | 2084 |
| MAX | 6570 | 6580 | 7670 | 6960 | 7660 | 6990 | 6530 | 5100 | 4690 | 6090 | 3350 | 2940 |
| MIN | 4470 | 5440 | 3490 | 3970 | 4010 | 4580 | 4310 | 3300 | 2150 | 1420 | 599 | 1470 |
| AC-FT | 342600 | 360400 | 332900 | 340900 | 303800 | 358200 | 315000 | 261200 | 206800 | 187200 | 110600 | 124000 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2000, BY WATER YEAR (WY)

| | MEAN | 3857 | 4211 | 3647 | 3507 | 5412 | 7477 | 6124 | 5993 | 6771 | 3784 | 2561 | 3110 |
|------|-------|------|------|------|-------|-------|-------|-------|-------|-------|------|------|------|
| MAX | 10130 | 9462 | 8581 | 7361 | 11850 | 16870 | 19400 | 21770 | 25340 | 17070 | 8021 | 9022 | |
| (WY) | 1974 | 1985 | 1985 | 1984 | 1984 | 1993 | 1984 | 1984 | 1984 | 1983 | 1983 | 1986 | |
| MIN | 1624 | 1938 | 1413 | 1206 | 2689 | 3685 | 2881 | 1952 | 1932 | 381 | 442 | 936 | |
| (WY) | 1980 | 1956 | 1956 | 1957 | 1979 | 1957 | 1967 | 1955 | 1981 | 1974 | 1955 | 1955 | |

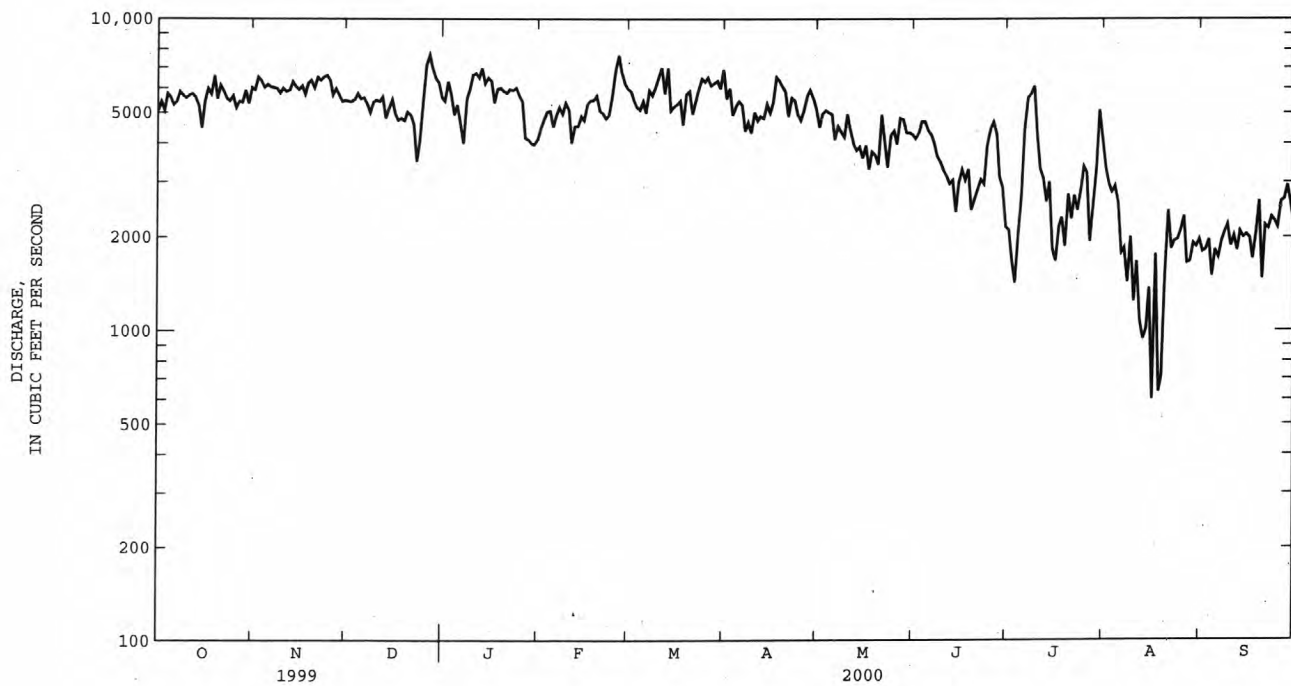
PLATTE RIVER BASIN

06796000 PLATTE RIVER AT NORTH BEND, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1949 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 2637790 | | 1635303 | | 4687 | |
| ANNUAL MEAN | 7227 | | 4468 | | 10070 | |
| HIGHEST ANNUAL MEAN | | | | | 2168 | |
| LOWEST ANNUAL MEAN | | | | | 82300 | |
| HIGHEST DAILY MEAN | 38100 | Jun 28 | 7670 | Dec 27 | 36 | Mar 10 1993 |
| LOWEST DAILY MEAN | 1730 | Aug 1 | 599 | Aug 16 | 146 | Jul 29 1974 |
| ANNUAL SEVEN-DAY MINIMUM | 2250 | Jul 31 | 1000 | Aug 13 | 112000 | Jul 24 1974 |
| INSTANTANEOUS PEAK FLOW | | | 8830 | Feb 26 | **15.55 | Mar 29 1960 |
| INSTANTANEOUS PEAK STAGE | | | 4.98 | Feb 26 | Mar 19 1978 | |
| ANNUAL RUNOFF (AC-FT) | 5232000 | | 3244000 | | 3395000 | |
| 10 PERCENT EXCEEDS | 11800 | | 6240 | | 8470 | |
| 50 PERCENT EXCEEDS | 6020 | | 4950 | | 3820 | |
| 90 PERCENT EXCEEDS | 4130 | | 1950 | | 1440 | |

* 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 periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | 5280 | 5680 | 5330 | 5270 | e5000 | 6930 | 6930 | 4800 | 4410 | 2100 | 3770 | 1670 |
| 2 | 5800 | 6170 | 5820 | 6310 | e5200 | 6410 | 6430 | 4230 | 4230 | 1970 | 2800 | 1630 |
| 3 | 5370 | 5750 | 5710 | 5840 | e5600 | 6180 | 5490 | 4790 | 4080 | 1520 | 2850 | 1750 |
| 4 | 5570 | 6630 | 6280 | 6750 | e6200 | 5960 | 5310 | 5050 | 4540 | 1200 | 2990 | 1810 |
| 5 | 6330 | 6150 | 6050 | 4810 | e5800 | 5950 | 5810 | 5150 | 4210 | 2350 | 2390 | 1570 |
| 6 | 5640 | 6000 | 6060 | 4700 | e6400 | 5800 | 5630 | 4990 | 3740 | 6530 | 2390 | 1820 |
| 7 | 6130 | 6090 | 6370 | 3490 | e6800 | 5960 | 4930 | 4970 | 4110 | 7020 | 1570 | 1740 |
| 8 | 6180 | 5980 | 5380 | 4850 | e6600 | 5940 | 5180 | 5020 | 3610 | 6250 | 1700 | 1930 |
| 9 | 6250 | 5520 | 5720 | 5630 | e6800 | 6100 | 4350 | 5160 | 3580 | 7070 | 1260 | 2130 |
| 10 | 6140 | 5550 | 5590 | 6320 | e6200 | 5810 | 6010 | 4920 | 3340 | 5380 | 1720 | 2000 |
| 11 | 6170 | 6040 | 5960 | 6040 | e5800 | 6560 | 5730 | 5670 | 3160 | 4380 | 1130 | 1960 |
| 12 | 6180 | 5850 | 5550 | 5940 | e6000 | 6650 | 4980 | 4790 | 2950 | 3580 | 1190 | 1880 |
| 13 | 5940 | 6070 | 5340 | 6510 | e6000 | 6830 | 5820 | 4250 | 2740 | 3280 | 904 | 1850 |
| 14 | 5960 | 6120 | 4960 | 5800 | 6240 | 6420 | 5660 | 3680 | 2320 | 3030 | 783 | 1860 |
| 15 | 5310 | 5990 | 6130 | 6110 | 7010 | 6150 | 5290 | 3770 | 2200 | 2340 | 750 | 1880 |
| 16 | 4910 | 6190 | 4450 | 5920 | 7990 | 6120 | 5810 | 3860 | 2380 | 1540 | 971 | 1850 |
| 17 | 5820 | 5970 | 4680 | 4680 | 6340 | 6220 | 6250 | 3150 | 2450 | 1330 | 627 | 1780 |
| 18 | 6180 | 6080 | 4400 | 5390 | 6420 | 6250 | 6400 | 3750 | 2370 | 1680 | 1300 | 1680 |
| 19 | 6270 | 6220 | 4630 | 5520 | 6410 | 6100 | 5640 | 3910 | 2220 | 1460 | 599 | 1910 |
| 20 | 6160 | 5790 | 4860 | 4680 | 6370 | 6160 | 5310 | 3730 | 2160 | 1480 | 739 | 2230 |
| 21 | 5820 | 5580 | e5100 | 4450 | 5210 | 6640 | 4290 | 4710 | 2540 | 2450 | 1510 | 1530 |
| 22 | 6240 | 5930 | e4800 | 5120 | 5580 | 6550 | 5090 | 4540 | 2060 | 1730 | 1830 | 1950 |
| 23 | 5600 | 5680 | e3800 | 4910 | 5910 | 7090 | 4590 | 3670 | 2540 | 1900 | 1790 | 2240 |
| 24 | 5570 | 6080 | e5200 | 5150 | 6640 | 7530 | 4620 | 3710 | 3490 | 2170 | 1880 | 2310 |
| 25 | 5790 | 6330 | e6200 | 5650 | 7430 | 7780 | 3890 | 4350 | 4170 | 2520 | 1900 | 2480 |
| 26 | 5300 | 5700 | 8560 | 5660 | 8050 | 7290 | 4940 | 4220 | 5040 | 2950 | 1980 | 2470 |
| 27 | 6260 | 5870 | 10400 | 4680 | 7640 | 7500 | 5090 | 4550 | 4760 | 2470 | 2170 | 2760 |
| 28 | 5770 | 5520 | 9920 | 4910 | 6820 | 6910 | 5610 | 4410 | 3450 | 1920 | 1450 | 3000 |
| 29 | 6140 | 5370 | 9430 | 5100 | 6690 | 7140 | 5360 | 4590 | 3000 | 2190 | 1320 | 2910 |
| 30 | 5940 | 5470 | 8530 | 5100 | --- | 6860 | 4920 | 4730 | 2710 | 4690 | 1640 | 2700 |
| 31 | 5770 | --- | 5840 | 4630 | --- | 7380 | --- | 4410 | --- | 3970 | 1720 | --- |
| TOTAL | 181790 | 177370 | 187050 | 165920 | 185150 | 203170 | 161360 | 137530 | 98560 | 94450 | 51623 | 61280 |
| MEAN | 5864 | 5912 | 6034 | 5352 | 6384 | 6554 | 5379 | 4436 | 3285 | 3047 | 1665 | 2043 |
| MAX | 6330 | 6630 | 10400 | 6750 | 8050 | 7780 | 6930 | 5670 | 5040 | 7070 | 3770 | 3000 |
| MIN | 4910 | 5370 | 3800 | 3490 | 5000 | 5800 | 3890 | 3150 | 2060 | 1200 | 599 | 1530 |
| AC-FT | 360600 | 351800 | 371000 | 329100 | 367200 | 403000 | 320100 | 272800 | 195500 | 187300 | 102400 | 121500 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2000, BY WATER YEAR (WY)

| | MEAN | 5623 | 6154 | 5691 | 5307 | 7468 | 6744 | 7666 | 7660 | 10390 | 5685 | 4451 | 4287 |
|------|------|------|------|------|-------|------|-------|-------|-------|-------|------|------|------|
| 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 | 4022 | 4611 | 4487 | 3413 | 5648 | 5823 | 5379 | 4436 | 3285 | 3047 | 1665 | 2043 | |
| (WY) | 1995 | 1995 | 1996 | 1996 | 1995 | 1996 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | |

PLATTE RIVER BASIN

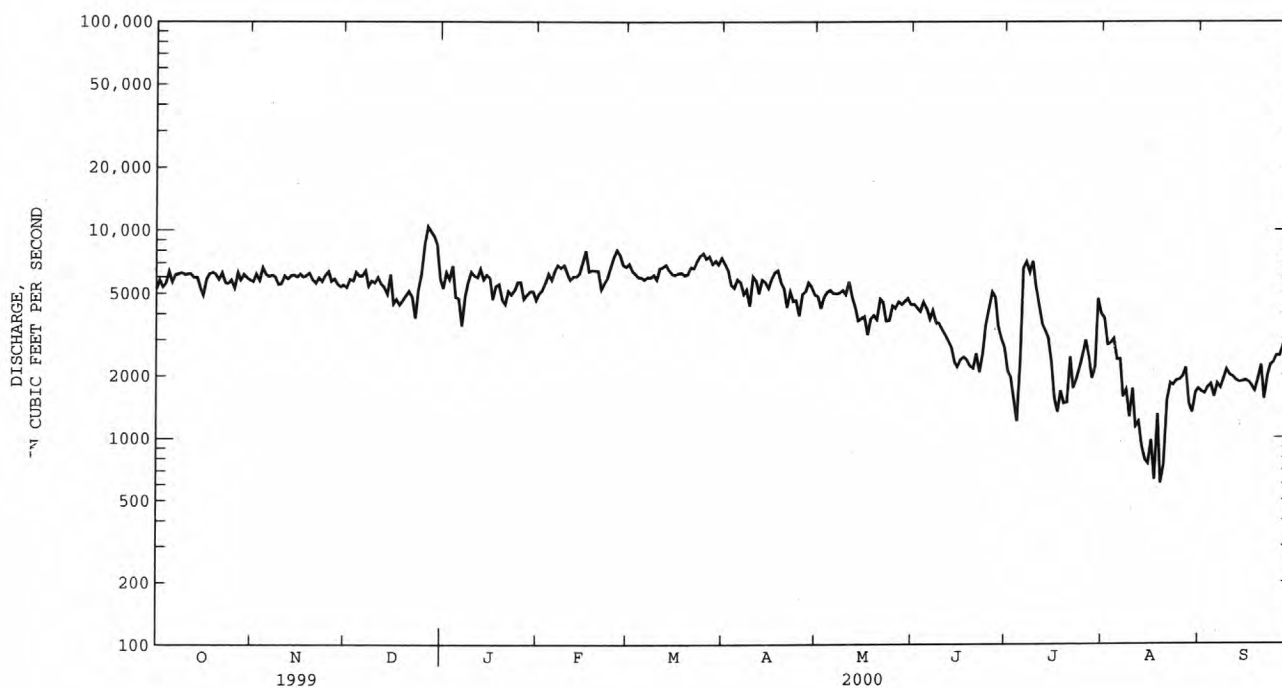
06796500 PLATTE RIVER NEAR LESHARA, NE--Continued

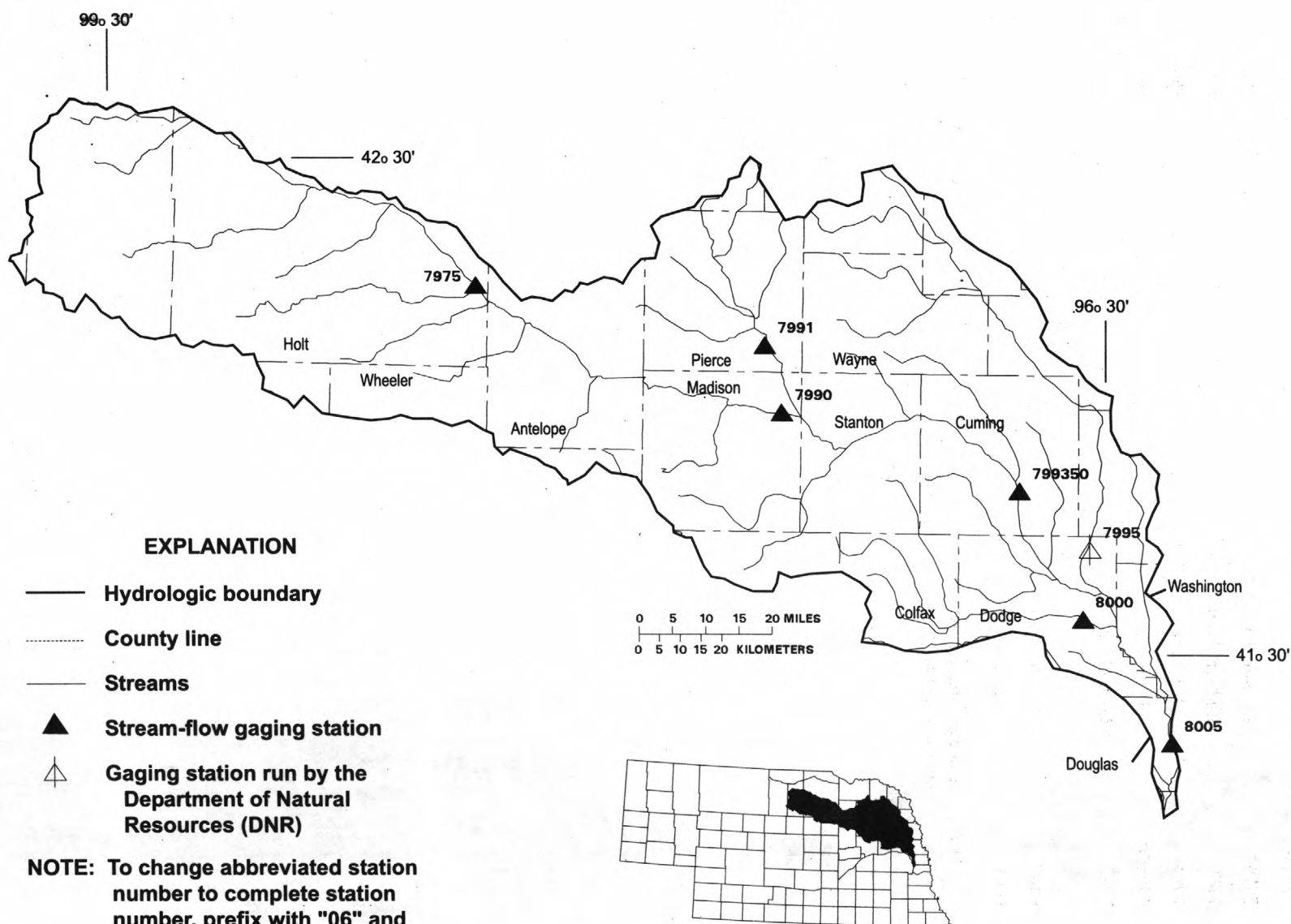
| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1994 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 2750080 | | 1705253 | | 6446 | |
| ANNUAL MEAN | 7534 | | 4659 | | 7444 | 1999 |
| HIGHEST ANNUAL MEAN | | | | | 4659 | 2000 |
| LOWEST ANNUAL MEAN | | | | | 29600 | Jun 28 1999 |
| HIGHEST DAILY MEAN | 29600 | Jun 28 | 10400 | Dec 27 | 599 | Aug 19 2000 |
| LOWEST DAILY MEAN | 2100 | Aug 3 | 599 | Aug 19 | 824 | Aug 14 2000 |
| ANNUAL SEVEN-DAY MINIMUM | 3070 | Jul 30 | 824 | Aug 14 | 32600 | Jun 2 1999 |
| INSTANTANEOUS PEAK FLOW | | | *8730 | Jul 6 | 11.84 | Feb 9 1996 |
| INSTANTANEOUS PEAK STAGE | | | **9.55 | Feb 3 | | |
| ANNUAL RUNOFF (AC-FT) | 5455000 | | 3382000 | | 4670000 | |
| 10 PERCENT EXCEEDS | 12000 | | 6540 | | 9980 | |
| 50 PERCENT EXCEEDS | 6260 | | 5160 | | 5820 | |
| 90 PERCENT EXCEEDS | 4600 | | 1800 | | 2920 | |

e Estimated.

* Stage 5.08 ft.

** Floodmark, backwater from ice.





PLATTE RIVER BASIN
ELKHORN RIVER BASIN

155

| *Station number | Station name | Page |
|--------------------|----------------------------------|------|
| 7975 | Elkhorn River at Ewing..... | 156 |
| 7990 | Elkhorn River at Norfolk..... | 158 |
| 7991 | N.F. Elkhorn near Pierce..... | 160 |
| 799350 | Elkhorn River at West Point..... | 162 |
| 7995 | Logan Creek near Uehling..... | 164 |
| 8000 | Maple Creek near Nickerson..... | 166 |
| 8005 | Elkhorn River at Waterloo..... | 172 |

* 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°16'03", long 098°20'11", in NW ¼ SW ¼ sec.35, T.27 N., R.9 W., Holt County, Hydrologic Unit 10220001, on right bank 800 ft downstream from bridge on State Highway L-45B, 0.8 mi north of Ewing, 1.5 mi upstream from South Fork Elkhorn River, and at mile 199.

DRAINAGE AREA.--1,400 mi², approximately, of which about 740 mi² contributes directly to surface runoff.

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

GAGE.--Water-stage recorder. Datum of gage is 1,836.24 ft above sea level, levels by Nebraska Department of Roads. Prior to Oct. 22, 1952, at site 300 ft upstream at same datum.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 1 | 39 | 52 | 65 | e56 | e70 | 113 | 89 | 97 | 186 | 46 | 24 | 10 |
| 2 | 40 | 50 | 64 | e56 | e80 | 111 | 87 | 102 | 168 | 45 | 23 | 10 |
| 3 | 41 | 50 | 63 | e52 | e78 | 111 | 84 | 101 | 150 | 41 | 21 | 9.8 |
| 4 | 43 | 52 | 66 | e52 | e76 | 111 | 83 | 99 | 135 | 43 | 21 | 11 |
| 5 | 45 | 54 | e63 | e58 | e80 | 110 | 85 | 96 | 122 | 43 | 20 | 9.0 |
| 6 | 44 | 54 | e54 | e58 | e80 | 106 | 81 | 93 | 112 | 68 | 18 | 8.5 |
| 7 | 46 | 54 | e60 | e68 | e78 | 105 | 78 | 92 | 106 | 65 | 17 | 9.1 |
| 8 | 47 | 58 | e68 | e68 | e90 | 106 | 79 | 92 | 95 | 47 | 16 | 7.9 |
| 9 | 45 | 56 | e66 | e66 | e88 | 108 | 80 | 89 | 81 | 41 | 15 | 7.2 |
| 10 | 45 | 54 | e64 | e66 | e84 | 108 | 80 | 87 | 76 | 38 | 14 | 7.1 |
| 11 | 43 | 53 | e64 | e66 | e84 | 109 | 80 | 86 | 70 | 49 | 14 | 6.8 |
| 12 | 45 | 54 | e66 | e62 | e86 | 110 | 79 | 82 | 69 | 45 | 13 | 6.4 |
| 13 | 44 | 55 | e64 | e64 | e86 | 108 | 81 | 77 | 84 | 40 | 12 | 6.7 |
| 14 | 45 | 54 | e64 | e68 | e86 | 108 | 80 | 76 | 90 | 37 | 11 | 6.5 |
| 15 | 46 | 55 | e62 | e66 | e90 | 106 | 78 | 74 | 82 | 35 | 10 | 6.2 |
| 16 | 45 | 55 | e56 | e60 | e90 | 100 | 101 | 74 | 81 | 33 | 10 | 6.1 |
| 17 | 45 | 56 | e56 | e64 | e86 | 98 | 107 | 74 | 80 | 32 | 11 | 6.1 |
| 18 | 46 | 57 | e54 | e70 | e82 | 98 | 126 | 90 | 77 | 31 | 10 | 5.5 |
| 19 | 47 | 58 | e50 | e66 | e86 | 100 | 123 | 144 | 73 | 32 | 11 | 6.1 |
| 20 | 48 | 58 | e44 | e66 | 92 | 99 | 114 | 174 | 70 | 33 | 12 | 6.2 |
| 21 | 49 | 60 | e46 | e66 | 110 | 98 | 108 | 172 | 67 | 31 | 13 | 6.0 |
| 22 | 48 | 59 | e48 | e66 | 109 | 97 | 106 | 164 | 63 | 33 | 13 | 14 |
| 23 | 46 | 60 | e49 | e64 | 109 | 102 | 101 | 147 | 60 | 41 | 13 | 15 |
| 24 | 47 | 60 | e52 | e66 | 123 | 113 | 93 | 128 | 59 | 34 | 12 | 16 |
| 25 | 49 | 59 | e56 | e64 | 133 | 114 | 91 | 123 | 61 | 33 | 12 | 16 |
| 26 | 50 | 61 | e56 | e64 | 132 | 111 | 91 | 143 | 56 | 31 | 14 | 17 |
| 27 | 50 | 63 | e56 | e64 | 128 | 107 | 97 | 204 | 51 | 29 | 13 | 17 |
| 28 | 49 | 64 | e58 | e64 | 123 | 100 | 96 | 243 | 48 | 29 | 14 | 17 |
| 29 | 50 | 62 | e60 | e62 | 120 | 98 | 93 | 233 | 48 | 27 | 12 | 16 |
| 30 | 52 | 63 | e58 | e64 | --- | 97 | 93 | 218 | 48 | 26 | 11 | 16 |
| 31 | 52 | --- | e60 | e66 | --- | 92 | --- | 196 | --- | 24 | 9.4 | --- |
| TOTAL | 1431 | 1700 | 1812 | 1962 | 2759 | 3254 | 2764 | 3870 | 2568 | 1182 | 439.4 | 302.2 |
| MEAN | 46.2 | 56.7 | 58.5 | 63.3 | 95.1 | 105 | 92.1 | 125 | 85.6 | 38.1 | 14.2 | 10.1 |
| MAX | 52 | 64 | 68 | 70 | 133 | 114 | 126 | 243 | 186 | 68 | 24 | 17 |
| MIN | 39 | 50 | 44 | 52 | 70 | 92 | 78 | 74 | 48 | 24 | 9.4 | 5.5 |
| AC-FT | 2840 | 3370 | 3590 | 3890 | 5470 | 6450 | 5480 | 7680 | 5090 | 2340 | 872 | 599 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2000, BY WATER YEAR (WY)

| | MEAN | 90.2 | 95.0 | 81.6 | 71.4 | 143 | 356 | 493 | 414 | 321 | 167 | 77.2 | 78.1 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 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

06797500 ELKHORN RIVER AT EWING, NE--Continued

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

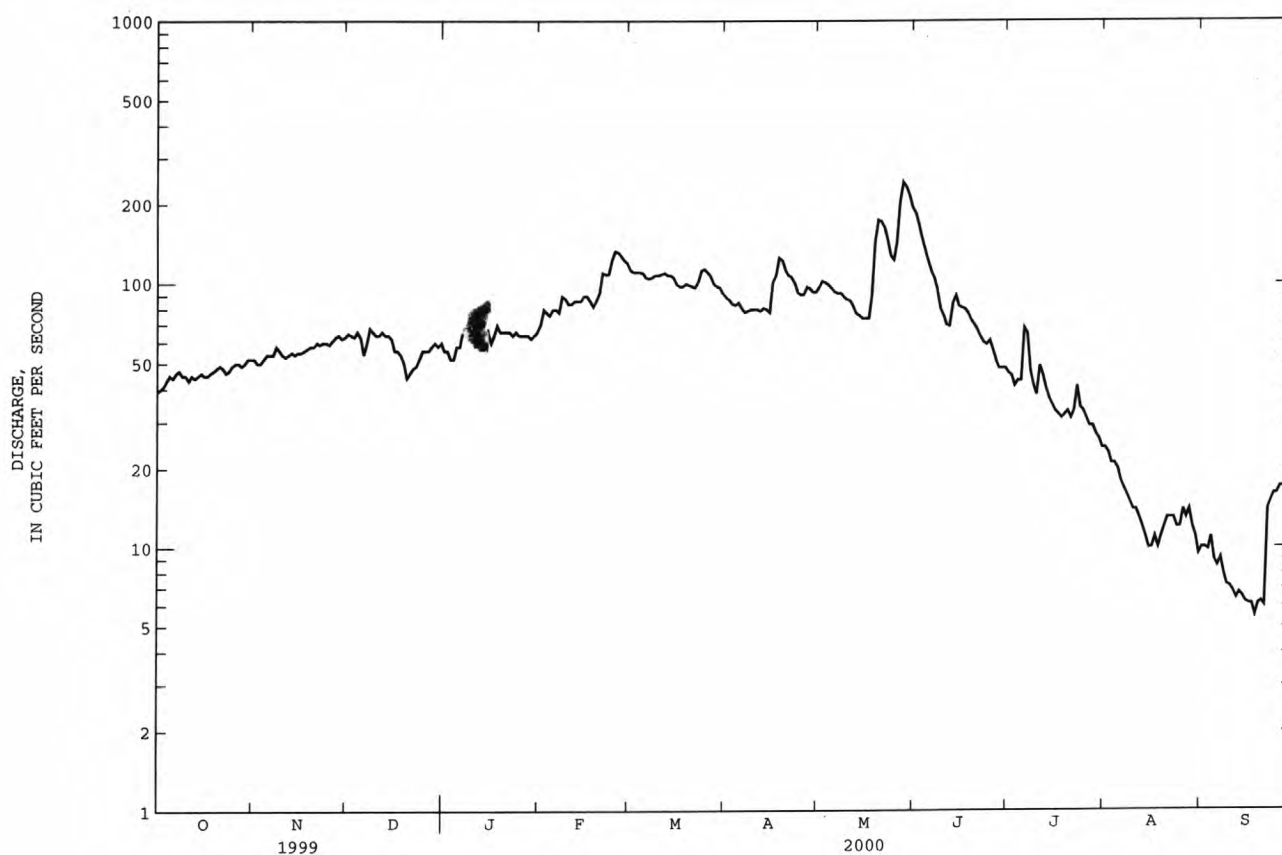
WATER YEARS 1947 - 2000

| | | | | | | |
|--------------------------|--------|--------|---------|--------|--------|-------------|
| ANNUAL TOTAL | 106828 | | 24043.6 | | | |
| ANNUAL MEAN | 293 | | 65.7 | | | 199 |
| MEDIAN OF ANNUAL MEANS | | | | | | 140 |
| HIGHEST ANNUAL MEAN | | | | | | 543 |
| LOWEST ANNUAL MEAN | | | | | | 42.8 |
| HIGHEST DAILY MEAN | 5930 | May 7 | 243 | May 28 | 8480 | May 30 1995 |
| LOWEST DAILY MEAN | 33 | Sep 2 | 5.5 | Sep 18 | 5.2 | Sep 6 1976 |
| ANNUAL SEVEN-DAY MINIMUM | 36 | Aug 28 | 6.0 | Sep 15 | 6.0 | Sep 15 2000 |
| INSTANTANEOUS PEAK FLOW | | | *254 | May 28 | 9050 | May 29 1995 |
| INSTANTANEOUS PEAK STAGE | | | **4.99 | Dec 21 | 11.09 | May 29 1995 |
| ANNUAL RUNOFF (AC-FT) | 211900 | | 47690 | | 144100 | |
| 10 PERCENT EXCEEDS | 678 | | 110 | | 421 | |
| 50 PERCENT EXCEEDS | 159 | | 62 | | 79 | |
| 90 PERCENT EXCEEDS | 44 | | 13 | | 31 | |

e Estimated.

* Stage 3.97 ft.

** Backwater from ice.



PLATTE RIVER BASIN

06799000 ELKHORN RIVER AT NORFOLK, NE

LOCATION.--Lat 42°00'14", long 97°25'31", in SW ¼ SW ¼ 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 periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| 1 | 193 | 258 | 285 | 432 | 375 | 492 | 412 | 364 | 708 | 235 | 167 | 102 |
| 2 | 197 | 259 | 285 | 426 | 402 | 473 | 412 | 376 | 615 | 232 | 164 | 103 |
| 3 | 202 | 251 | 289 | 418 | 460 | 459 | 411 | 376 | 571 | 214 | 158 | 104 |
| 4 | 204 | 255 | 289 | e330 | 430 | 446 | 390 | 371 | 537 | 204 | 157 | 107 |
| 5 | 216 | 267 | 291 | e270 | 377 | 436 | 387 | 363 | 476 | 277 | 154 | 107 |
| 6 | 222 | 277 | 295 | e330 | 404 | 427 | 385 | 354 | 436 | 2060 | 148 | 107 |
| 7 | 225 | 287 | 297 | e400 | 425 | 424 | 383 | 349 | 401 | 1650 | 142 | 109 |
| 8 | 232 | 291 | 300 | e450 | 437 | 427 | 369 | 352 | 370 | 831 | 135 | 105 |
| 9 | 245 | 297 | 299 | 471 | 458 | 436 | 365 | 350 | 333 | 485 | 130 | 105 |
| 10 | 250 | 304 | 302 | 443 | 467 | 436 | 358 | 358 | 307 | 351 | 125 | 103 |
| 11 | 235 | 307 | 304 | 319 | 403 | 425 | 357 | 360 | 289 | 724 | 122 | 101 |
| 12 | 235 | 309 | 304 | 363 | e340 | 417 | 343 | 346 | 279 | 1330 | 117 | 94 |
| 13 | 239 | 307 | 308 | 345 | e300 | 414 | 343 | 348 | 280 | 844 | 114 | 96 |
| 14 | 238 | 297 | 308 | 367 | e290 | 412 | 332 | 327 | 280 | 493 | 110 | 83 |
| 15 | 237 | 294 | 303 | 390 | e310 | 398 | 324 | 321 | 286 | 372 | 108 | 72 |
| 16 | 244 | 299 | 313 | 379 | e330 | 378 | 344 | 318 | 290 | 314 | 106 | 74 |
| 17 | 255 | 304 | 298 | 364 | e350 | 370 | 410 | 316 | 285 | 279 | 107 | 75 |
| 18 | 242 | 306 | 265 | 403 | e360 | 371 | 465 | 584 | 284 | 254 | 105 | 75 |
| 19 | 238 | 300 | e260 | 420 | e370 | 381 | 469 | 912 | 281 | 237 | 114 | 81 |
| 20 | 251 | 293 | e240 | 398 | 380 | 385 | 468 | 583 | 287 | 223 | 130 | 87 |
| 21 | 260 | 293 | e230 | 350 | 400 | 380 | 470 | 509 | 328 | 214 | 127 | 87 |
| 22 | 261 | 299 | e240 | 332 | 400 | 388 | 454 | 490 | 261 | 210 | 131 | 106 |
| 23 | 264 | 299 | e280 | 350 | 445 | 400 | 435 | 465 | 246 | 199 | 132 | 116 |
| 24 | 272 | 295 | e330 | 364 | 556 | 449 | 417 | 435 | 366 | 205 | 129 | 126 |
| 25 | 264 | 294 | e390 | 317 | 606 | 470 | 404 | 398 | 879 | 204 | 124 | 137 |
| 26 | 258 | 294 | 414 | 293 | 616 | 463 | 388 | 429 | 709 | 203 | 122 | 138 |
| 27 | 267 | 293 | 412 | e300 | 576 | 443 | 380 | 585 | 376 | 196 | 116 | 139 |
| 28 | 270 | 296 | 410 | e320 | 550 | 424 | 378 | 668 | 296 | 191 | 119 | 136 |
| 29 | 267 | 298 | 431 | e330 | 526 | 412 | 374 | 648 | 265 | 179 | 125 | 131 |
| 30 | 272 | 285 | 438 | e340 | --- | 411 | 361 | 749 | 248 | 174 | 118 | 130 |
| 31 | 266 | --- | 417 | 348 | --- | 407 | --- | 769 | --- | 171 | 107 | --- |
| TOTAL | 7521 | 8708 | 9827 | 11362 | 12343 | 13054 | 11788 | 14153 | 11569 | 13755 | 3963 | 3136 |
| MEAN | 243 | 290 | 317 | 367 | 426 | 421 | 393 | 457 | 386 | 444 | 128 | 105 |
| MAX | 272 | 309 | 438 | 471 | 616 | 492 | 470 | 912 | 879 | 2060 | 167 | 139 |
| MIN | 193 | 251 | 230 | 270 | 290 | 370 | 324 | 316 | 246 | 171 | 105 | 72 |
| AC - FT | 14920 | 17270 | 19490 | 22540 | 24480 | 25890 | 23380 | 28070 | 22950 | 27280 | 7860 | 6220 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2000, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 323 | 338 | 305 | 292 | 496 | 891 | 1041 | 891 | 932 | 492 | 317 | 275 |
| 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

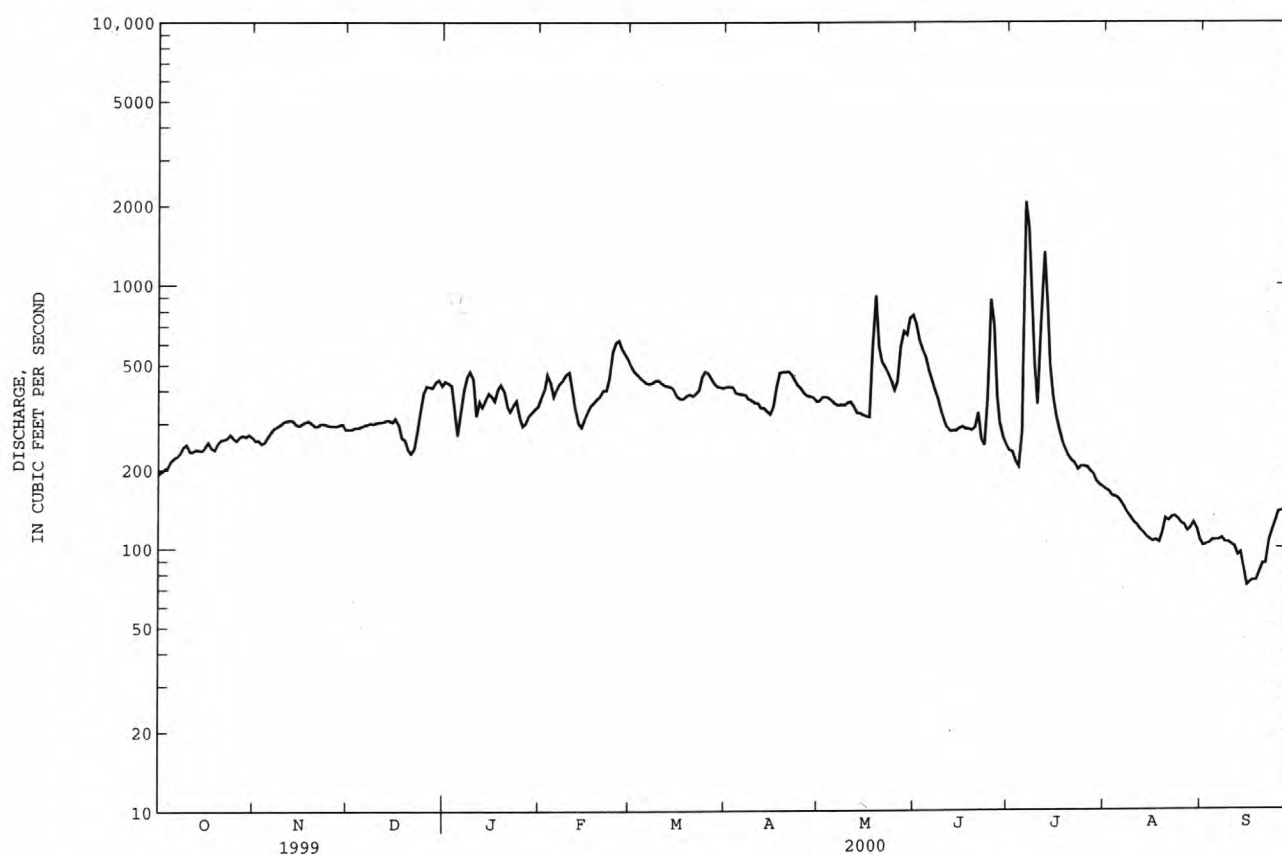
06799000 ELKHORN RIVER AT NORFOLK, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1946 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 253062 | | 121179 | | 549 | |
| ANNUAL MEAN | 693 | | 331 | | 450 | |
| MEDIAN OF ANNUAL MEANS | | | | | 1355 | |
| HIGHEST ANNUAL MEAN | | | | | 224 | |
| LOWEST ANNUAL MEAN | | | | | 17500 | |
| HIGHEST DAILY MEAN | 7530 | May 8 | 2060 | Jul 6 | 17500 | May 31 1995 |
| LOWEST DAILY MEAN | 170 | Sep 5 | 72 | Sep 15 | 33 | Aug 3 1980 |
| ANNUAL SEVEN-DAY MINIMUM | 178 | Aug 30 | 78 | Sep 14 | 40 | Aug 24 1976 |
| INSTANTANEOUS PEAK FLOW | | | 3030 | Jul 6 | *16900 | Jun 14 1967 |
| INSTANTANEOUS PEAK STAGE | | | 7.00 | Jul 6 | **15.63 | Mar 11 1949 |
| ANNUAL RUNOFF (AC-FT) | 501900 | | 240400 | | 397500 | |
| 10 PERCENT EXCEEDS | 1280 | | 469 | | 1070 | |
| 50 PERCENT EXCEEDS | 480 | | 308 | | 317 | |
| 90 PERCENT EXCEEDS | 206 | | 122 | | 164 | |

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.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 34 | 41 | 51 | 59 | 56 | 113 | 81 | 72 | e130 | 94 | 24 | 14 |
| 2 | 34 | 41 | 51 | 58 | 60 | 107 | 80 | 70 | e120 | 85 | 23 | 14 |
| 3 | 35 | 40 | 52 | 58 | 63 | 103 | 80 | 68 | e115 | 74 | 23 | 14 |
| 4 | 36 | 41 | 52 | e32 | 56 | 101 | 77 | 63 | e110 | 68 | 22 | 14 |
| 5 | 36 | 42 | 49 | e40 | e50 | 99 | 76 | 59 | e120 | 62 | 23 | 13 |
| 6 | 36 | 42 | 44 | e46 | e56 | 96 | 74 | 56 | e115 | 67 | 20 | 13 |
| 7 | 37 | 43 | 48 | 52 | e54 | 95 | 70 | 55 | e105 | 66 | 21 | 15 |
| 8 | 38 | 43 | 53 | 54 | e60 | 96 | 68 | 54 | e100 | 61 | 18 | 14 |
| 9 | 38 | 44 | 51 | 57 | e58 | 104 | 70 | 56 | e96 | 56 | 16 | 14 |
| 10 | 37 | 44 | 47 | 58 | e54 | 111 | 69 | 54 | e92 | 52 | 15 | 15 |
| 11 | 37 | 43 | 48 | e45 | e50 | 107 | 69 | 52 | e90 | 73 | 15 | 15 |
| 12 | 37 | 42 | 50 | e45 | e52 | 100 | 69 | 48 | e88 | 88 | 14 | 14 |
| 13 | 37 | 43 | 46 | e43 | e50 | 97 | 69 | 45 | e84 | 64 | 14 | 14 |
| 14 | 38 | 42 | 52 | e47 | e50 | 96 | 69 | 43 | e80 | 59 | 12 | 14 |
| 15 | 38 | 42 | e40 | e50 | e56 | 92 | 66 | 42 | e84 | 54 | 11 | 15 |
| 16 | 39 | 43 | e34 | e45 | e54 | 88 | 76 | 43 | e86 | 50 | 10 | 15 |
| 17 | 38 | 43 | e37 | e43 | e54 | 87 | 112 | 43 | e80 | 47 | 13 | 16 |
| 18 | 38 | 44 | e40 | e45 | e52 | 88 | 132 | 182 | e76 | 43 | 13 | 16 |
| 19 | 39 | 45 | e40 | e42 | e58 | 90 | 114 | 518 | e78 | 40 | 14 | 16 |
| 20 | 40 | 45 | e32 | e41 | e64 | 91 | 98 | 293 | e80 | 39 | 18 | 17 |
| 21 | 39 | 44 | e35 | e41 | 68 | 93 | 92 | 147 | e74 | 38 | 20 | 18 |
| 22 | 40 | 45 | e39 | e43 | 79 | 93 | 88 | 136 | e68 | 37 | 19 | 22 |
| 23 | 39 | 48 | e44 | e42 | 104 | 93 | 83 | 120 | e64 | 36 | 18 | 22 |
| 24 | 39 | 49 | e50 | e43 | 174 | 113 | 78 | 111 | e120 | 34 | 17 | 20 |
| 25 | 41 | 47 | 56 | e42 | 209 | 126 | 74 | 102 | e100 | 32 | 17 | 20 |
| 26 | 41 | 47 | 57 | e40 | 172 | 115 | 73 | 117 | 204 | 33 | 19 | 20 |
| 27 | 40 | 51 | 57 | e40 | 146 | 100 | 76 | 223 | 273 | 29 | 15 | 19 |
| 28 | 39 | 52 | 57 | e42 | 130 | 91 | 78 | 267 | 169 | 26 | 15 | 19 |
| 29 | 41 | 51 | 59 | e42 | 122 | 88 | 75 | 161 | 153 | 27 | 14 | 19 |
| 30 | 41 | 51 | 59 | e45 | --- | 86 | 72 | 251 | 113 | 27 | 14 | 19 |
| 31 | 41 | --- | 59 | e49 | --- | 83 | --- | 149 | --- | 24 | 13 | --- |
| TOTAL | 1183 | 1338 | 1489 | 1429 | 2311 | 3042 | 2408 | 3700 | 3267 | 1585 | 520 | 490 |
| MEAN | 38.2 | 44.6 | 48.0 | 46.1 | 79.7 | 98.1 | 80.3 | 119 | 109 | 51.1 | 16.8 | 16.3 |
| MAX | 41 | 52 | 59 | 59 | 209 | 126 | 132 | 518 | 273 | 94 | 24 | 22 |
| MIN | 34 | 40 | 32 | 32 | 50 | 83 | 66 | 42 | 64 | 24 | 10 | 13 |
| AC-FT | 2350 | 2650 | 2950 | 2830 | 4580 | 6030 | 4780 | 7340 | 6480 | 3140 | 1030 | 972 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2000, BY WATER YEAR (WY)

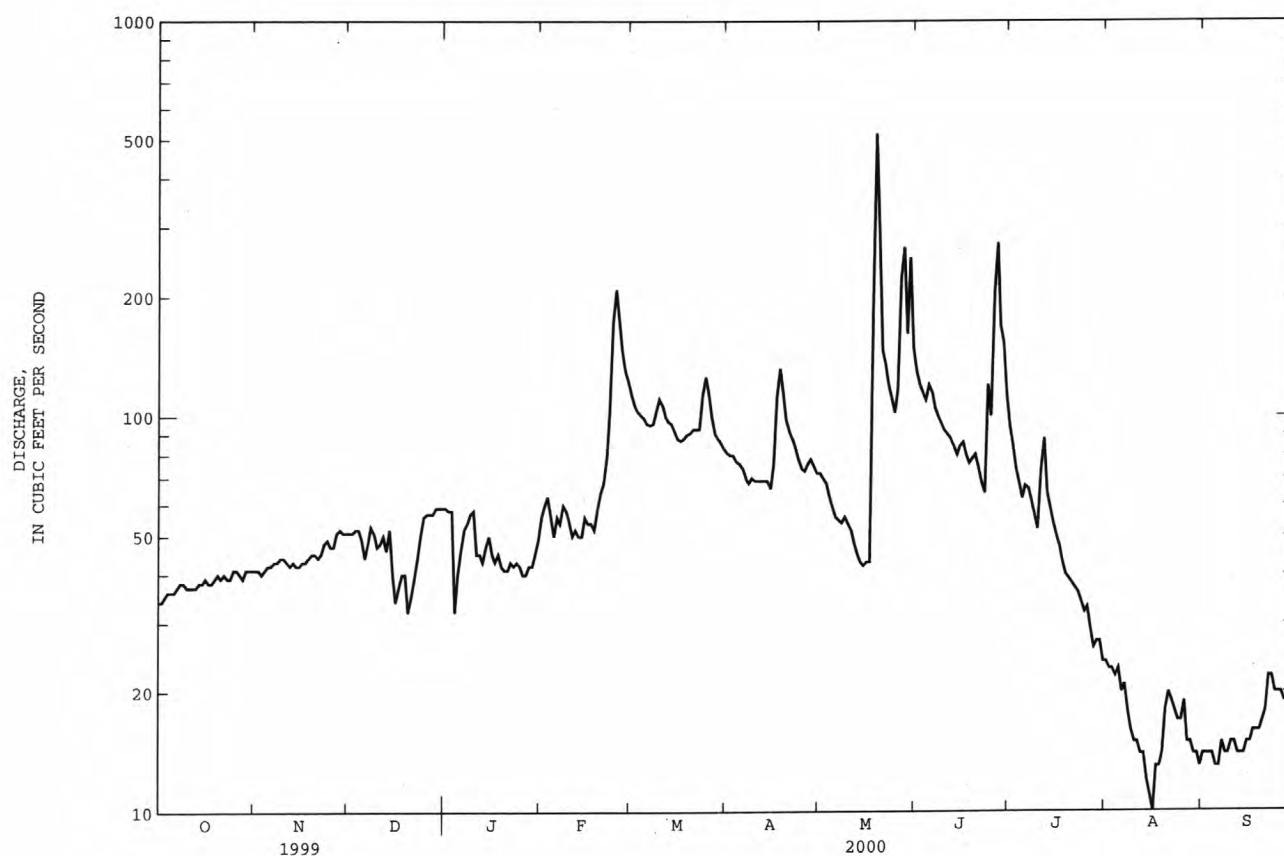
| | 54.4 | 61.0 | 52.4 | 48.7 | 118 | 205 | 193 | 162 | 189 | 100 | 55.7 | 47.4 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 54.4 | 61.0 | 52.4 | 48.7 | 118 | 205 | 193 | 162 | 189 | 100 | 55.7 | 47.4 |
| MAX | 241 | 233 | 141 | 111 | 834 | 1120 | 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

06799100 NORTH FORK ELKHORN RIVER NEAR PIERCE, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1960 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 61602 | | 22762 | | 107 | |
| ANNUAL MEAN | 169 | | 62.2 | | 80 | |
| MEDIAN OF ANNUAL MEANS | | | | | 287 | |
| HIGHEST ANNUAL MEAN | | | | | 21.5 | |
| LOWEST ANNUAL MEAN | | | | | 10400 | |
| HIGHEST DAILY MEAN | 1800 | Jun 29 | 518 | May 19 | 2.7 | Mar 28 1962 |
| LOWEST DAILY MEAN | 29 | Sep 3 | 10 | Aug 16 | 3.7 | Jul 29 1989 |
| ANNUAL SEVEN-DAY MINIMUM | 29 | Sep 8 | 12 | Aug 12 | 15200 | Aug 15 1990 |
| INSTANTANEOUS PEAK FLOW | | | 617 | May 19 | 15.10 | Feb 19 1971 |
| INSTANTANEOUS PEAK STAGE | | | 6.06 | May 19 | 77310 | Feb 19 1971 |
| ANNUAL RUNOFF (AC-FT) | 122200 | | 45150 | | 205 | |
| 10 PERCENT EXCEEDS | 352 | | 111 | | 48 | |
| 50 PERCENT EXCEEDS | 107 | | 50 | | 22 | |
| 90 PERCENT EXCEEDS | 34 | | 17 | | | |

e Estimated.



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.--5,100 mi², approximately, of which about 4,100 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1972 to current year. March 1960 to September 1972 (no winter records 1960-68) in files of Corps of Engineers. Gage-height records collected since 1940 are in reports of U.S. Weather 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 periods of estimated record, which are poor. Some small diversions above station for irrigation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 397 | 478 | 543 | 1040 | e680 | 954 | 722 | 648 | 3290 | 524 | 418 | 214 |
| 2 | 410 | 457 | 545 | 958 | e700 | 908 | 720 | 625 | 2170 | 433 | 402 | 210 |
| 3 | 425 | 458 | 561 | e800 | e680 | 876 | 716 | 627 | 1640 | 373 | 390 | 204 |
| 4 | 451 | 455 | 552 | e400 | e880 | 841 | 690 | 632 | 1380 | 376 | 374 | 205 |
| 5 | 458 | 451 | 548 | e200 | e700 | 827 | 683 | 599 | 1220 | 439 | 362 | 202 |
| 6 | 466 | 454 | 542 | e230 | e800 | 804 | 649 | 565 | 1100 | 4430 | 353 | 198 |
| 7 | 472 | 469 | 550 | e300 | e740 | 781 | 642 | 533 | 1020 | 8770 | 334 | 194 |
| 8 | 494 | 487 | 549 | 852 | e700 | 821 | 639 | 543 | 917 | 3930 | 315 | 186 |
| 9 | 504 | 490 | 546 | 947 | e660 | 821 | 621 | 528 | e780 | 1730 | 295 | 182 |
| 10 | 499 | 484 | 550 | 954 | e600 | 796 | 630 | 506 | e660 | 971 | 298 | 171 |
| 11 | 500 | 488 | 576 | 845 | e560 | 792 | 630 | 515 | e540 | 733 | 267 | 165 |
| 12 | 496 | 497 | 572 | 822 | e520 | 789 | 622 | 491 | e460 | 3130 | 266 | 159 |
| 13 | 474 | 495 | 556 | 807 | e520 | 756 | 604 | 431 | 378 | 2140 | 263 | 163 |
| 14 | 481 | 493 | 586 | 845 | e500 | 740 | 608 | 407 | 334 | 1760 | 245 | 159 |
| 15 | 478 | 496 | e500 | e780 | e500 | 732 | 577 | 393 | 386 | 1220 | 228 | 158 |
| 16 | 456 | 492 | e450 | e740 | e520 | 700 | 718 | 366 | 383 | 934 | 209 | 156 |
| 17 | 449 | 491 | e400 | e760 | e520 | 694 | 966 | 357 | 375 | 775 | 200 | 159 |
| 18 | 451 | 498 | e430 | e740 | e540 | 726 | 1080 | 583 | 368 | 670 | 196 | 151 |
| 19 | 447 | 498 | e400 | e700 | e560 | 755 | 1130 | 1790 | 357 | 634 | 205 | 160 |
| 20 | 451 | 495 | e350 | e600 | e560 | 775 | 1010 | 1820 | 637 | 614 | 242 | 179 |
| 21 | 445 | 501 | e340 | e600 | e600 | 759 | 992 | 1540 | 657 | 587 | 257 | 187 |
| 22 | 445 | 506 | e330 | e660 | e700 | 752 | 956 | 982 | 637 | 555 | 255 | 215 |
| 23 | 447 | 568 | e340 | e700 | 867 | 774 | 890 | 824 | 449 | 575 | 267 | 250 |
| 24 | 464 | 583 | e380 | e700 | 1220 | 895 | 810 | 727 | 556 | 800 | 263 | 253 |
| 25 | 465 | 575 | e450 | e640 | 1470 | 977 | 752 | 649 | 2300 | 571 | 250 | 262 |
| 26 | 471 | 554 | e500 | e560 | 1530 | 981 | 734 | 691 | 4820 | 534 | 239 | 275 |
| 27 | 473 | 535 | e700 | e600 | 1330 | 910 | 791 | 1100 | 3900 | 514 | 239 | 267 |
| 28 | 465 | 536 | e900 | e640 | 1150 | 802 | 762 | 1560 | 2060 | 490 | 234 | 265 |
| 29 | 479 | 538 | 1040 | e640 | 1050 | 752 | 694 | 2190 | 927 | 460 | 231 | 257 |
| 30 | 473 | 546 | 1060 | e660 | --- | 719 | 668 | 1740 | 643 | 438 | 241 | 234 |
| 31 | 478 | --- | 1110 | e600 | --- | 708 | --- | 2090 | --- | 435 | 221 | --- |
| TOTAL | 14364 | 15068 | 17456 | 21320 | 22357 | 24917 | 22706 | 27052 | 35344 | 40545 | 8559 | 6040 |
| MEAN | 463 | 502 | 563 | 688 | 771 | 804 | 757 | 873 | 1178 | 1308 | 276 | 201 |
| MAX | 504 | 583 | 1110 | 1040 | 1530 | 981 | 1130 | 2190 | 4820 | 8770 | 418 | 275 |
| MIN | 397 | 451 | 330 | 200 | 500 | 694 | 577 | 357 | 334 | 373 | 196 | 151 |
| AC-FT | 28490 | 29890 | 34620 | 42290 | 44350 | 49420 | 45040 | 53660 | 70100 | 80420 | 16980 | 11980 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2000, BY WATER YEAR (WY)

| | MEAN | 563 | 640 | 589 | 550 | 1069 | 1831 | 1846 | 1629 | 1615 | 1041 | 622 | 487 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
| MAX | 1606 | 1802 | 1314 | 1106 | 2744 | 5256 | 6171 | 5618 | 3844 | 6945 | 1994 | 1646 | |
| (WY) | 1987 | 1999 | 1994 | 1995 | 1983 | 1987 | 1984 | 1995 | 1995 | 1993 | 1993 | 1986 | |
| MIN | 174 | 241 | 203 | 168 | 201 | 411 | 378 | 325 | 339 | 154 | 90.0 | 137 | |
| (WY) | 1977 | 1979 | 1977 | 1977 | 1979 | 1981 | 1981 | 1981 | 1976 | 1976 | 1976 | 1976 | |

PLATTE RIVER BASIN

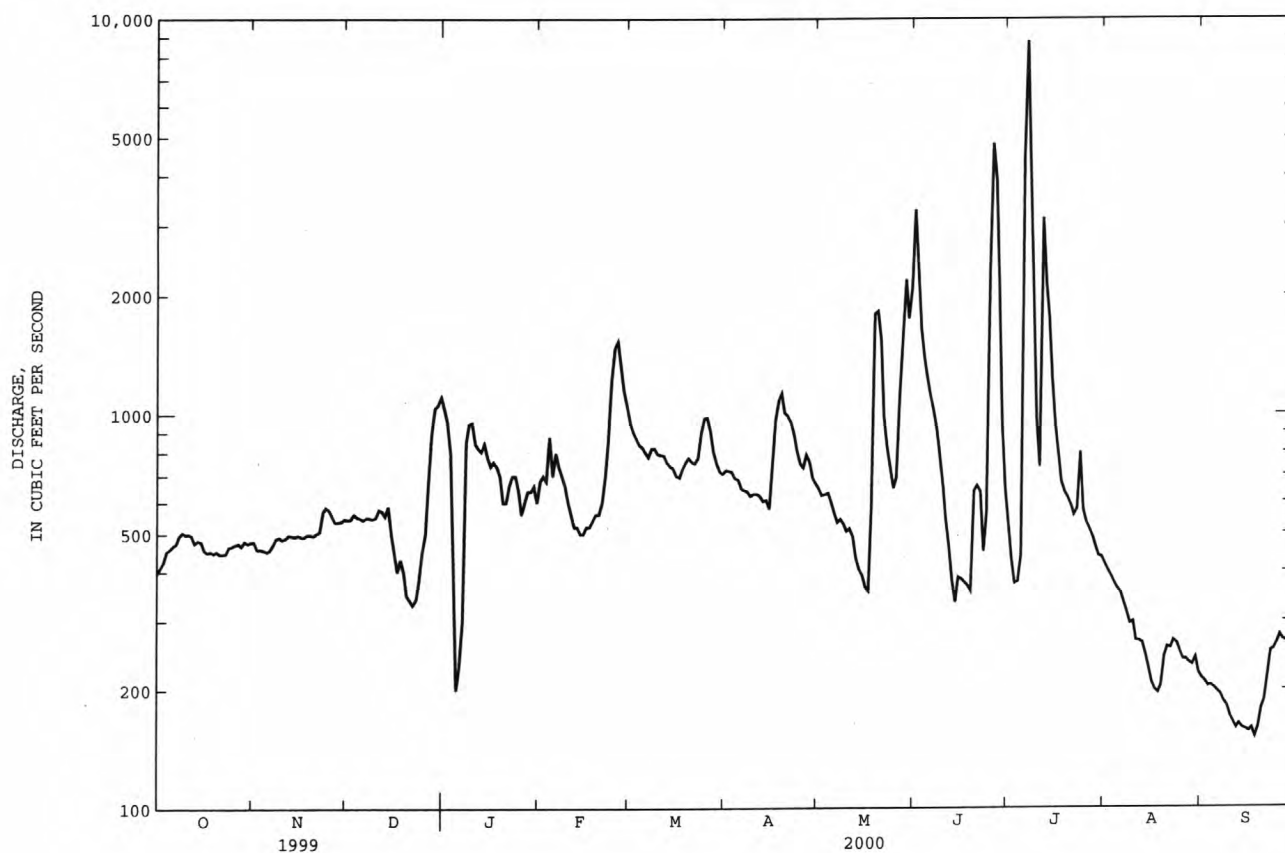
06799350 ELKHORN RIVER AT WEST POINT, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1973 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 542259 | | 255728 | | 1039 | |
| ANNUAL MEAN | 1486 | | 699 | | 887 | |
| MEDIAN OF ANNUAL MEANS | | | | | 2253 | 1993 |
| HIGHEST ANNUAL MEAN | | | | | 332 | 1981 |
| LOWEST ANNUAL MEAN | | | | | 26000 | Mar 9 1993 |
| HIGHEST DAILY MEAN | 11600 | Jun 5 | 8770 | Jul 7 | 41 | Aug 31 1976 |
| LOWEST DAILY MEAN | 330 | Dec 22 | 151 | Sep 18 | 45 | Aug 27 1976 |
| ANNUAL SEVEN-DAY MINIMUM | 362 | Sep 19 | 158 | Sep 12 | *33000 | Jun 25 1969 |
| INSTANTANEOUS PEAK FLOW | | | 10800 | Jul 7 | **18.60 | Mar 9 1993 |
| INSTANTANEOUS PEAK STAGE | | | 11.03 | Jul 7 | | |
| ANNUAL RUNOFF (AC-FT) | 1076000 | | 507200 | | 752600 | |
| 10 PERCENT EXCEEDS | 2800 | | 1040 | | 2100 | |
| 50 PERCENT EXCEEDS | 1180 | | 554 | | 610 | |
| 90 PERCENT EXCEEDS | 443 | | 242 | | 231 | |

e Estimated.

* Stage 13.21 ft.

** From floodmark, ice jam.



| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 122 | 115 | 99.2 | 109 | 267 | 408 | 288 | 317 | 504 | 261 | 168 | 128 |
| MAX | 499 | 453 | 337 | 583 | 2177 | 2388 | 1742 | 1417 | 2766 | 1843 | 1056 | 613 |
| (WY) | 1993 | 1999 | 1994 | 1973 | 1971 | 1962 | 1984 | 1984 | 1984 | 1993 | 1951 | 1993 |
| MIN | 32.8 | 38.2 | 31.9 | 34.1 | 38.1 | 57.4 | 42.8 | 39.9 | 56.6 | 17.3 | 15.0 | 31.6 |
| (WY) | 1944 | 1949 | 1944 | 1957 | 1979 | 1943 | 1957 | 1943 | 1976 | 1976 | 1976 | 1943 |

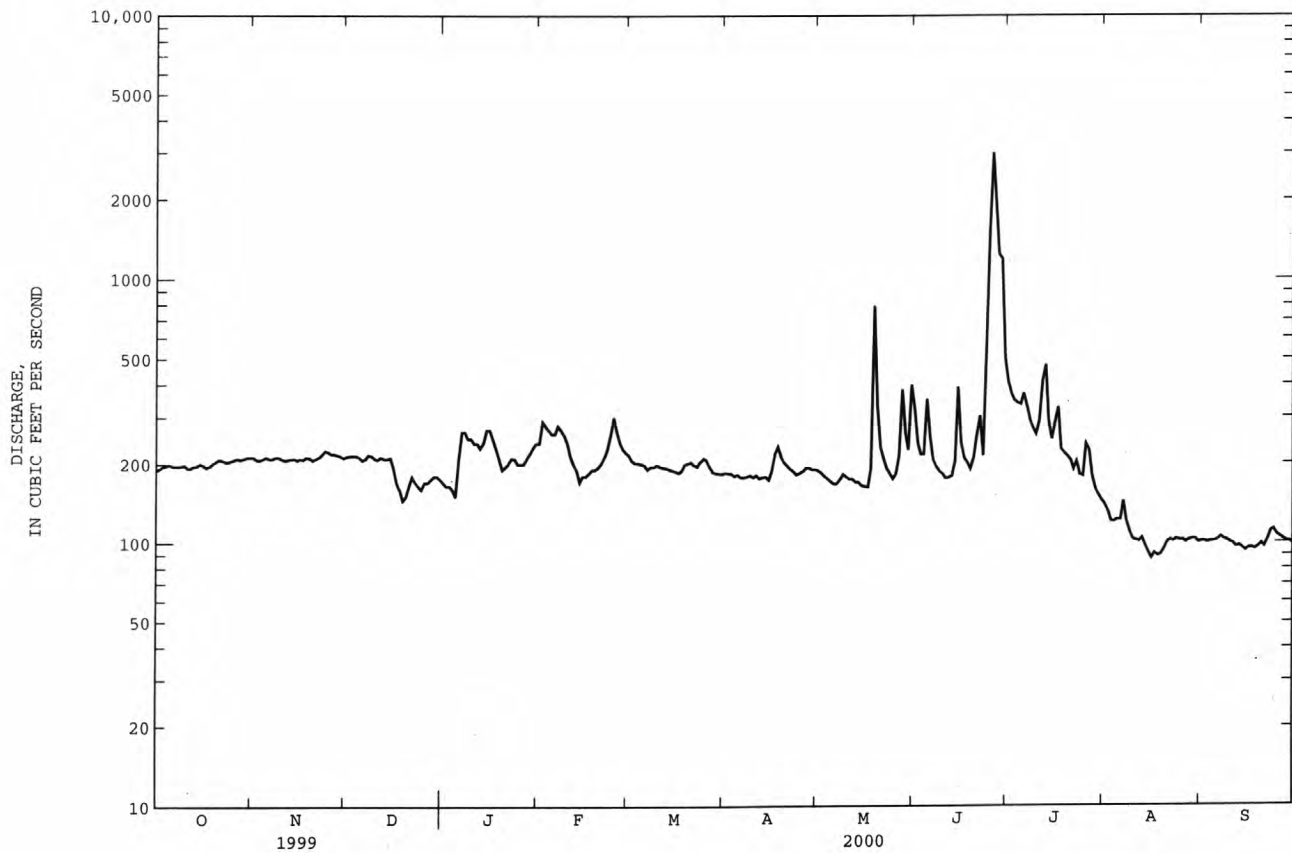
PLATTE RIVER BASIN

06799500 LOGAN CREEK NEAR UEHLING, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1942 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 169199 | | 80289 | | 232 | |
| ANNUAL MEAN | 464 | | 219 | | 190 | |
| MEDIAN OF ANNUAL MEANS | | | | | 710 | 1984 |
| HIGHEST ANNUAL MEAN | | | | | 66.4 | 1943 |
| LOWEST ANNUAL MEAN | | | | | 20100 | Feb 20 1971 |
| HIGHEST DAILY MEAN | 5280 | Aug 7 | 2990 | Jun 26 | 6.1 | Jul 26 1976 |
| LOWEST DAILY MEAN | 145 | Dec 19 | 87 | Aug 16 | 8.8 | Jul 12 1976 |
| ANNUAL SEVEN-DAY MINIMUM | 162 | Dec 18 | 91 | Aug 14 | *25200 | Feb 20 1971 |
| INSTANTANEOUS PEAK FLOW | | | 4170 | Jun 26 | 20.86 | Feb 20 1997 |
| INSTANTANEOUS PEAK STAGE | | | 13.00 | Jun 26 | 167800 | |
| ANNUAL RUNOFF (AC-FT) | 335600 | | 159300 | | 416 | |
| 10 PERCENT EXCEEDS | 843 | | 270 | | 100 | |
| 50 PERCENT EXCEEDS | 330 | | 197 | | 45 | |
| 90 PERCENT EXCEEDS | 199 | | 102 | | | |

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.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|-------|------|------|
| 1 | 64 | 67 | 67 | 73 | e60 | 70 | 56 | 52 | 42 | 38 | 55 | 30 |
| 2 | 64 | 67 | 67 | 77 | 77 | 67 | 56 | 49 | 39 | 37 | 56 | 29 |
| 3 | 64 | 67 | 69 | 77 | 43 | 64 | 56 | 48 | 39 | 38 | 86 | 27 |
| 4 | 66 | 67 | 68 | e56 | 34 | 62 | 57 | 47 | 41 | 39 | 60 | 27 |
| 5 | 69 | 70 | 67 | e50 | 37 | 62 | 57 | 44 | 41 | 49 | 54 | 26 |
| 6 | 69 | 70 | 63 | e51 | 36 | 62 | 59 | 43 | 38 | 4300 | 52 | 25 |
| 7 | 69 | 70 | 64 | e56 | 43 | 61 | 59 | 44 | 37 | 1300 | 50 | 25 |
| 8 | 69 | 70 | 70 | e59 | 46 | 62 | 59 | 49 | 34 | 205 | 48 | 24 |
| 9 | 69 | 72 | 71 | 69 | 55 | 63 | 59 | 50 | 31 | 137 | 45 | 23 |
| 10 | 68 | 71 | 62 | 66 | 65 | 65 | 59 | 49 | 31 | 114 | 43 | 22 |
| 11 | 65 | 70 | 63 | 61 | 39 | 64 | 62 | 45 | 31 | 104 | 41 | 21 |
| 12 | 65 | 70 | 70 | 62 | 36 | 61 | 59 | 41 | 30 | 168 | 40 | 21 |
| 13 | 65 | 69 | 66 | 56 | 52 | 60 | 56 | 38 | 31 | 334 | 45 | 20 |
| 14 | 65 | 69 | 68 | 59 | 54 | 60 | 54 | 37 | 33 | 106 | 44 | 19 |
| 15 | 65 | 69 | e45 | 64 | 64 | 59 | 54 | 37 | 31 | 82 | 41 | 18 |
| 16 | 65 | 68 | e41 | 62 | 57 | 59 | 67 | 37 | 32 | 87 | 38 | 18 |
| 17 | 65 | 67 | e40 | 61 | 67 | 58 | 86 | 38 | 30 | 136 | 36 | 18 |
| 18 | 65 | 69 | e39 | 66 | 55 | 58 | 86 | 41 | 31 | 91 | 35 | 18 |
| 19 | 65 | 70 | e49 | 70 | 51 | 62 | 68 | 42 | 29 | 68 | 37 | 18 |
| 20 | 66 | 70 | e37 | 52 | 64 | 65 | 62 | 40 | 31 | 66 | 39 | 21 |
| 21 | 67 | 69 | e36 | 53 | 87 | 66 | 59 | 43 | 33 | 65 | 41 | 22 |
| 22 | 67 | 68 | e41 | 65 | 92 | 65 | 54 | 43 | 41 | 63 | 38 | 24 |
| 23 | 67 | e67 | e47 | 66 | 92 | 64 | 53 | 39 | 26 | 60 | 40 | 27 |
| 24 | 67 | e67 | 66 | 57 | 116 | 67 | 52 | 35 | 263 | 261 | 37 | 28 |
| 25 | 67 | e68 | 65 | 57 | 132 | 86 | 53 | 34 | 471 | 95 | 36 | 27 |
| 26 | 69 | e68 | 66 | e45 | 93 | 71 | 53 | 41 | 923 | 64 | 34 | 24 |
| 27 | 69 | e68 | 68 | e40 | 82 | 63 | 56 | 57 | 199 | 58 | 34 | 24 |
| 28 | 69 | e67 | 69 | e42 | 69 | 62 | 58 | 82 | 58 | 208 | 32 | 23 |
| 29 | 68 | 68 | 73 | e46 | 68 | 60 | 52 | 54 | 44 | 170 | 32 | 23 |
| 30 | 67 | 67 | 79 | e50 | --- | 60 | 50 | 45 | 41 | 70 | 31 | 22 |
| 31 | 67 | --- | 74 | e54 | --- | 57 | --- | 43 | --- | 58 | 30 | --- |
| TOTAL | 2066 | 2059 | 1870 | 1822 | 1866 | 1965 | 1771 | 1387 | 2781 | 8671 | 1330 | 694 |
| MEAN | 66.6 | 68.6 | 60.3 | 58.8 | 64.3 | 63.4 | 59.0 | 44.7 | 92.7 | 280 | 42.9 | 23.1 |
| MAX | 69 | 72 | 79 | 77 | 132 | 86 | 86 | 82 | 923 | 4300 | 86 | 30 |
| MIN | 64 | 67 | 36 | 40 | 34 | 57 | 50 | 34 | 26 | 37 | 30 | 18 |
| AC-FT | 4100 | 4080 | 3710 | 3610 | 3700 | 3900 | 3510 | 2750 | 5520 | 17200 | 2640 | 1380 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2000, BY WATER YEAR (WY)

| | MEAN | 37.5 | 29.4 | 23.4 | 23.9 | 71.8 | 133 | 94.9 | 117 | 221 | 103 | 70.2 | 46.7 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 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

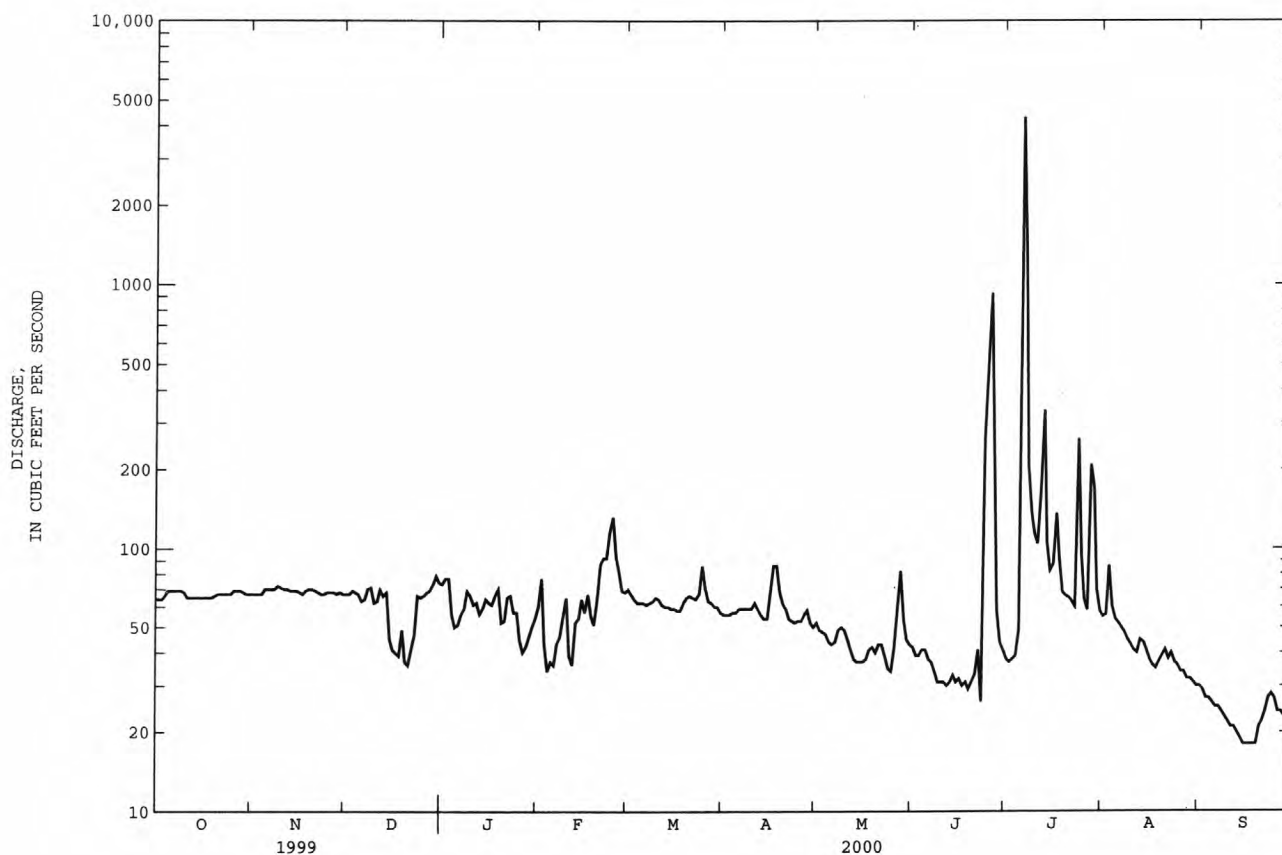
06800000 MAPLE CREEK NEAR NICKERSON, NE--Continued
(National Water-Quality Assessment, NAWQA, station)

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1952 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 66655 | | 28282 | | 80.9 | |
| ANNUAL MEAN | 183 | | 77.3 | | 66 | |
| MEDIAN OF ANNUAL MEANS | | | | | 264 | 1984 |
| HIGHEST ANNUAL MEAN | | | | | 5.19 | 1956 |
| LOWEST ANNUAL MEAN | | | | | 10400 | Aug 6 1996 |
| HIGHEST DAILY MEAN | 4020 | Aug 7 | 4300 | Jul 6 | .10 | Jan 15 1956 |
| LOWEST DAILY MEAN | 36 | Dec 21 | 18 | Sep 15 | .19 | Sep 17 1981 |
| ANNUAL SEVEN-DAY MINIMUM | 40 | Dec 16 | 18 | Sep 13 | *13700 | Aug 6 1996 |
| INSTANTANEOUS PEAK FLOW | | | 7930 | Jul 6 | **17.65 | Jun 17 1984 |
| INSTANTANEOUS PEAK STAGE | | | 15.11 | Jul 6 | 58620 | |
| ANNUAL RUNOFF (AC-FT) | 132200 | | 56100 | | 131 | |
| 10 PERCENT EXCEEDS | 296 | | 77 | | 23 | |
| 50 PERCENT EXCEEDS | 109 | | 59 | | 1.4 | |
| 90 PERCENT EXCEEDS | 67 | | 31 | | | |

e Estimated.

* Stage 17.33 ft.

** Site and datum then in use.



[illegible]

PLATTE RIVER BASIN

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342) | ALPHA BHC DIS- SOLVED (UG/L) (34253) | ATRA- ZINE, WATER, DISS, REC (UG/L) (39632) | BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673) | BUTYL- ATE, WATER, DISS, REC (UG/L) (04028) | CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680) | CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674) | CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DI- AZINON, DIS- SOLVED (UG/L) (39572) |
|-------|--|--|---|---|--|--|--|---|--|---|--|---|
| OCT | | | | | | | | | | | | |
| 13... | <.002 | <.002 | .063 | <.002 | <.002 | <.003 | <.003 | <.004 | .022 | <.002 | E.026 | <.002 |
| NOV | | | | | | | | | | | | |
| 17... | <.002 | <.002 | .047 | <.002 | <.002 | E.005 | <.003 | <.004 | .011 | <.002 | E.018 | <.002 |
| DEC | | | | | | | | | | | | |
| 14... | <.002 | <.002 | .044 | <.002 | <.002 | <.003 | <.003 | <.004 | .011 | <.002 | E.016 | <.002 |
| JAN | | | | | | | | | | | | |
| 20... | <.002 | <.002 | .041 | <.002 | <.002 | <.003 | <.003 | <.004 | .013 | <.002 | E.021 | <.002 |
| FEB | | | | | | | | | | | | |
| 15... | <.002 | <.002 | .032 | <.002 | <.002 | E.005 | <.003 | <.004 | .013 | <.002 | E.019 | <.002 |
| MAR | | | | | | | | | | | | |
| 23... | <.002 | <.002 | .028 | <.002 | <.002 | E.012 | <.003 | <.004 | <.010 | <.002 | E.016 | <.002 |
| APR | | | | | | | | | | | | |
| 25... | .006 | <.002 | .114 | <.002 | <.002 | <.003 | <.003 | <.004 | .013 | <.002 | E.028 | <.002 |
| MAY | | | | | | | | | | | | |
| 09... | .010 | <.002 | .238 | <.002 | <.002 | <.003 | <.003 | .004 | .021 | <.002 | E.042 | <.002 |
| 23... | .006 | <.002 | .866 | <.002 | <.002 | <.003 | <.003 | <.004 | .013 | <.002 | E.073 | .005 |
| JUN | | | | | | | | | | | | |
| 08... | <.002 | <.002 | .532 | <.002 | <.002 | <.003 | <.003 | <.004 | .014 | <.002 | E.074 | <.002 |
| 22... | .007 | <.002 | .186 | <.002 | <.002 | <.003 | <.003 | <.004 | .014 | <.002 | E.043 | <.002 |
| JUL | | | | | | | | | | | | |
| 05... | .005 | <.002 | .591 | <.002 | <.002 | <.003 | <.003 | <.004 | .041 | E.002 | E.093 | <.002 |
| 18... | .007 | <.002 | .462 | <.002 | <.002 | <.003 | <.040 | <.004 | .026 | <.002 | E.11 | E.002 |
| AUG | | | | | | | | | | | | |
| 03... | <.002 | <.002 | .154 | <.002 | <.002 | <.003 | <.003 | <.004 | .010 | <.002 | E.067 | <.002 |
| 16... | <.002 | <.002 | .085 | <.002 | <.002 | <.003 | <.003 | <.004 | .011 | <.002 | E.037 | <.002 |
| SEP | | | | | | | | | | | | |
| 08... | <.002 | <.002 | .057 | <.002 | <.002 | <.003 | <.003 | <.004 | .008 | <.002 | E.035 | <.002 |
| 20... | <.002 | <.002 | .046 | <.002 | <.002 | <.003 | <.003 | <.004 | .007 | <.002 | E.038 | E.002 |
| | | | | | | | | | | | | |
| DATE | 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) | 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) |
| OCT | | | | | | | | | | | | |
| 13... | <.001 | <.017 | <.002 | <.004 | <.003 | <.003 | <.004 | <.002 | <.005 | <.001 | <.006 | .018 |
| NOV | | | | | | | | | | | | |
| 17... | <.001 | <.017 | <.002 | <.004 | <.003 | <.003 | <.004 | <.002 | <.005 | <.001 | <.006 | .010 |
| DEC | | | | | | | | | | | | |
| 14... | <.001 | <.017 | <.002 | <.004 | <.003 | <.003 | <.004 | <.002 | <.005 | <.001 | <.006 | .010 |
| JAN | | | | | | | | | | | | |
| 20... | <.001 | <.017 | <.002 | <.004 | <.003 | <.003 | <.004 | <.002 | <.005 | <.001 | <.006 | .010 |
| FEB | | | | | | | | | | | | |
| 15... | <.001 | <.017 | <.002 | <.004 | <.003 | <.003 | <.004 | <.002 | <.005 | <.001 | <.006 | .010 |
| MAR | | | | | | | | | | | | |
| 23... | <.001 | <.017 | <.002 | <.004 | <.003 | <.003 | <.004 | <.002 | <.005 | <.001 | <.006 | .008 |
| APR | | | | | | | | | | | | |
| 25... | <.001 | <.017 | <.004 | <.004 | <.003 | <.003 | <.004 | <.002 | <.005 | <.001 | <.006 | .100 |
| MAY | | | | | | | | | | | | |
| 09... | <.001 | <.017 | .007 | <.004 | <.003 | <.003 | E.002 | <.002 | <.005 | <.001 | <.006 | .160 |
| 23... | <.001 | <.017 | <.002 | <.004 | <.003 | <.003 | <.004 | <.002 | <.005 | <.001 | <.006 | .141 |
| JUN | | | | | | | | | | | | |
| 08... | <.001 | <.017 | <.002 | <.004 | <.003 | <.003 | <.004 | <.002 | <.005 | <.001 | <.006 | .093 |
| 22... | <.001 | <.017 | <.002 | <.004 | <.003 | <.003 | <.004 | <.002 | <.010 | <.010 | <.006 | .043 |
| JUL | | | | | | | | | | | | |
| 05... | <.001 | <.017 | <.002 | <.004 | <.003 | <.003 | <.004 | <.002 | <.005 | <.001 | <.006 | .156 |
| 18... | <.001 | <.017 | <.002 | <.004 | <.003 | <.003 | <.004 | <.002 | <.005 | <.001 | <.006 | .428 |
| AUG | | | | | | | | | | | | |
| 03... | <.001 | <.017 | <.002 | <.004 | <.003 | <.003 | <.009 | <.002 | <.005 | <.001 | <.006 | .108 |
| 16... | <.001 | <.017 | <.002 | <.004 | <.003 | <.003 | <.004 | <.002 | <.005 | <.001 | <.006 | .029 |
| SEP | | | | | | | | | | | | |
| 08... | <.001 | <.017 | <.002 | <.004 | <.003 | <.003 | <.004 | <.002 | E.004 | <.001 | <.006 | .020 |
| 20... | <.005 | <.017 | <.002 | <.004 | <.003 | <.003 | <.004 | <.002 | <.005 | <.001 | <.006 | .017 |

PLATTE RIVER BASIN

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630) | MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671) | NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684) | P, P' DDE DISSOLV (UG/L) (34653) | PARA- THION, DIS- SOLVED (UG/L) (39542) | PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669) | PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683) | PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687) | 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) |
|-----------|--|--|---|---|--|---|---|--|---|--|---|--|
| OCT 13... | <.004 | <.004 | <.003 | <.006 | <.004 | <.004 | <.004 | <.005 | <.002 | <.018 | <.003 | <.007 |
| NOV 17... | <.004 | <.004 | <.003 | <.006 | <.004 | <.004 | <.004 | <.005 | <.002 | E.003 | <.003 | <.007 |
| DEC 14... | <.004 | <.004 | <.003 | <.006 | <.004 | <.004 | <.004 | <.005 | <.002 | E.003 | <.003 | <.007 |
| JAN 20... | <.004 | <.004 | <.003 | <.006 | <.004 | <.004 | <.004 | <.005 | <.002 | E.003 | <.003 | <.007 |
| FEB 15... | <.004 | <.004 | <.003 | <.006 | <.004 | <.004 | <.004 | <.005 | <.002 | <.018 | <.003 | <.007 |
| MAR 23... | <.004 | <.004 | <.003 | <.006 | <.004 | <.004 | <.004 | <.005 | <.002 | <.018 | <.003 | <.007 |
| APR 25... | <.004 | <.004 | <.003 | <.006 | <.004 | <.004 | <.004 | <.005 | <.002 | E.009 | <.003 | <.007 |
| MAY 09... | <.004 | <.004 | <.003 | <.006 | <.004 | <.004 | .007 | <.005 | <.002 | E.004 | <.003 | <.007 |
| 23... | <.004 | <.004 | <.003 | <.006 | <.004 | <.004 | .008 | <.005 | <.002 | .061 | <.003 | <.007 |
| JUN 08... | <.004 | <.004 | <.003 | <.006 | <.004 | <.004 | <.004 | <.005 | <.002 | E.012 | <.003 | <.007 |
| 22... | <.004 | <.004 | <.003 | E.002 | <.004 | <.004 | <.005 | <.005 | <.002 | .119 | <.003 | <.007 |
| JUL 05... | .006 | <.004 | <.003 | <.006 | <.004 | <.004 | <.004 | <.005 | <.002 | E.006 | <.003 | <.007 |
| 18... | .014 | <.004 | <.003 | <.020 | <.004 | <.004 | <.004 | <.005 | <.002 | E.017 | <.003 | <.007 |
| AUG 03... | .006 | <.004 | <.003 | <.006 | <.004 | <.004 | <.004 | <.005 | <.002 | E.009 | <.003 | <.007 |
| 16... | <.004 | <.004 | <.003 | <.006 | <.004 | <.004 | <.004 | <.005 | <.002 | E.008 | <.003 | <.007 |
| SEP 08... | <.004 | <.004 | <.003 | <.006 | <.004 | <.004 | <.004 | <.005 | <.002 | E.007 | <.003 | <.007 |
| 20... | <.004 | <.004 | <.003 | <.006 | <.004 | <.004 | <.004 | <.005 | <.002 | E.005 | <.003 | <.007 |
| DATE | PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679) | PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685) | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670) | TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665) | TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | 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 13... | <.004 | <.013 | <.005 | <.010 | <.007 | <.013 | <.002 | <.001 | <.002 | 54 | 173 | 30 |
| NOV 17... | <.004 | <.013 | <.005 | <.010 | <.007 | <.013 | <.002 | <.001 | <.002 | 57 | 127 | 23 |
| DEC 14... | <.004 | <.013 | <.005 | <.010 | <.007 | <.013 | <.002 | <.001 | <.002 | 60 | 157 | 28 |
| JAN 20... | <.004 | <.013 | <.005 | <.010 | <.007 | <.013 | <.002 | <.001 | <.002 | 63 | 125 | 15 |
| FEB 15... | <.004 | <.013 | <.005 | <.010 | <.007 | <.013 | <.002 | <.001 | <.002 | 70 | 172 | 29 |
| MAR 23... | <.004 | <.013 | <.005 | <.010 | <.007 | <.013 | <.002 | <.001 | <.002 | 67 | 127 | 22 |
| APR 25... | <.004 | <.013 | <.005 | <.010 | <.007 | <.013 | <.002 | <.001 | .005 | 50 | 80 | 12 |
| MAY 09... | <.004 | <.013 | <.005 | <.010 | <.007 | <.013 | <.002 | <.001 | E.001 | -- | -- | -- |
| 23... | <.004 | <.013 | <.005 | <.010 | <.007 | <.013 | <.002 | <.001 | E.002 | -- | -- | -- |
| JUN 08... | <.004 | <.013 | <.005 | <.010 | <.007 | <.013 | <.002 | <.001 | <.002 | 45 | 29 | 2.8 |
| 22... | <.004 | <.013 | .007 | <.010 | <.007 | <.013 | <.002 | <.001 | E.004 | -- | -- | -- |
| JUL 05... | <.004 | <.013 | E.002 | <.010 | <.007 | <.013 | <.002 | <.001 | <.002 | 67 | 95 | 11 |
| 18... | <.004 | <.013 | .008 | <.010 | <.007 | <.013 | <.002 | <.001 | E.004 | -- | -- | -- |
| AUG 03... | <.004 | <.013 | <.005 | E.003 | <.007 | <.013 | <.002 | <.001 | <.002 | 90 | 761 | 205 |
| 16... | <.004 | <.013 | <.005 | <.010 | <.007 | <.013 | <.002 | <.001 | <.002 | -- | -- | -- |
| SEP 08... | <.004 | <.013 | <.005 | <.010 | <.007 | <.013 | <.002 | <.001 | E.003 | 63 | 42 | 2.9 |
| 20... | <.004 | <.013 | <.005 | <.010 | <.007 | <.013 | <.002 | <.001 | <.002 | -- | -- | -- |

PLATTE RIVER BASIN

06800500 ELKHORN RIVER AT WATERLOO, NE

LOCATION.--Lat 41°17'37", long 096°17'00", in SW ¼ 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 fair except for periods of estimated record, which are poor. Some small diversions above station for irrigation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|-------|-------|
| 1 | 893 | 1100 | 1180 | e1700 | e1060 | 1760 | 1270 | 1260 | 1950 | 1420 | 949 | 527 |
| 2 | 892 | 1040 | 1190 | e1600 | e1200 | 1590 | 1250 | 1220 | 2410 | 1300 | 930 | 505 |
| 3 | 890 | 1040 | 1220 | e1400 | 1280 | 1480 | 1240 | e1250 | 1990 | 1220 | 914 | 498 |
| 4 | 901 | 1070 | 1260 | e1100 | 1340 | 1450 | 1230 | 1140 | 1680 | 1230 | 906 | 490 |
| 5 | 933 | 1060 | 1250 | e1140 | 1360 | 1420 | 1220 | 1120 | 1490 | 1550 | 858 | 473 |
| 6 | 961 | 1060 | 1220 | e1160 | 1330 | 1400 | 1230 | 1100 | 1560 | 4260 | 834 | 454 |
| 7 | 975 | 1060 | 1200 | e1100 | 1350 | 1380 | 1230 | 1080 | 1440 | 11000 | 807 | 450 |
| 8 | 973 | 1080 | 1200 | e1300 | 1360 | 1390 | 1210 | 1080 | 1360 | 9380 | 804 | 450 |
| 9 | 984 | 1100 | 1210 | e1400 | 1450 | 1370 | 1200 | 1100 | 1270 | 6400 | 765 | 446 |
| 10 | 990 | 1120 | 1200 | e1200 | 1570 | 1370 | 1210 | 1100 | 1180 | 4940 | 726 | 435 |
| 11 | 989 | 1110 | 1180 | e1250 | 1500 | 1360 | 1220 | 1100 | 1190 | 4410 | 697 | 428 |
| 12 | 986 | 1100 | 1190 | e1350 | 1320 | 1330 | 1210 | 1050 | 1110 | 4540 | 686 | 417 |
| 13 | 988 | 1110 | 1210 | e1300 | 1290 | 1320 | 1200 | 1010 | 1090 | 9270 | 672 | 401 |
| 14 | 984 | 1120 | 1190 | e1400 | 1310 | 1320 | 1220 | 969 | 1050 | 6400 | 694 | 395 |
| 15 | 984 | 1120 | 1220 | e1500 | 1380 | 1320 | 1230 | 946 | 1140 | 5120 | 656 | 388 |
| 16 | 993 | 1120 | 1200 | e1400 | 1400 | 1290 | 1280 | 951 | 1280 | 4540 | 615 | 376 |
| 17 | 984 | 1130 | 1090 | e1500 | 1430 | 1280 | 1370 | 969 | 1140 | 3760 | 582 | 377 |
| 18 | 974 | 1150 | e1000 | e1400 | 1410 | 1270 | 1540 | 1140 | 1040 | 2420 | 565 | 374 |
| 19 | 985 | 1160 | e800 | e1200 | 1320 | 1310 | 1680 | 1240 | 1020 | e1700 | 560 | 371 |
| 20 | 964 | 1160 | e900 | e1000 | 1340 | 1340 | 1690 | 2560 | 947 | 1290 | 560 | 382 |
| 21 | 929 | 1160 | e1200 | e1040 | 1490 | 1350 | 1670 | 2000 | 954 | 1240 | 562 | 393 |
| 22 | 905 | 1170 | e1260 | e1140 | 1670 | 1350 | 1580 | 1660 | 1170 | 1170 | 587 | 410 |
| 23 | 866 | 1220 | e1200 | e1100 | 1640 | 1340 | 1480 | 1470 | 1230 | 1140 | 613 | 421 |
| 24 | 832 | 1250 | e1150 | e1140 | 1680 | 1360 | 1450 | 1300 | 1560 | 1140 | 621 | 438 |
| 25 | 814 | 1240 | e1500 | e1000 | 1880 | 1400 | 1420 | 1190 | 3010 | 1320 | 602 | 454 |
| 26 | 835 | 1230 | e1400 | e920 | 2060 | 1440 | 1410 | 1120 | 10500 | 1150 | 595 | 450 |
| 27 | 842 | 1220 | e1500 | e1020 | 1980 | 1430 | 1410 | 1180 | 6430 | 1110 | 577 | 449 |
| 28 | 860 | 1210 | e1700 | e1000 | 1820 | 1390 | 1430 | 1330 | 4110 | 1260 | 558 | 454 |
| 29 | 894 | 1190 | e2000 | e960 | 1670 | 1340 | 1460 | 1880 | 3320 | 1270 | 546 | 445 |
| 30 | 1200 | 1180 | e1800 | e1020 | --- | 1310 | 1460 | 1950 | 2100 | 1100 | 541 | 429 |
| 31 | 1160 | --- | e1600 | e1100 | --- | 1290 | --- | 1920 | --- | 990 | 538 | --- |
| TOTAL | 29360 | 34080 | 39420 | 37840 | 42890 | 42750 | 40700 | 40385 | 61721 | 99040 | 21120 | 12980 |
| MEAN | 947 | 1136 | 1272 | 1221 | 1479 | 1379 | 1357 | 1303 | 2057 | 3195 | 681 | 433 |
| MAX | 1200 | 1250 | 2000 | 1700 | 2060 | 1760 | 1690 | 2560 | 10500 | 11000 | 949 | 527 |
| MIN | 814 | 1040 | 800 | 920 | 1060 | 1270 | 1200 | 946 | 947 | 990 | 538 | 371 |
| AC-FT | 58240 | 67600 | 78190 | 75060 | 85070 | 84790 | 80730 | 80100 | 122400 | 196400 | 41890 | 25750 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2000, BY WATER YEAR (WY)

| | MEAN | MAX | (WY) | MIN | (WY) |
|------|------|-------|------|------|------|
| 1929 | 728 | 2780 | 1987 | 150 | 1940 |
| 1930 | 752 | 2792 | 1999 | 240 | 1940 |
| 1931 | 655 | 1803 | 1994 | 150 | 1930 |
| 1932 | 616 | 1650 | 1973 | 180 | 1977 |
| 1933 | 1202 | 6439 | 1971 | 256 | 1940 |
| 1934 | 2269 | 8082 | 1993 | 489 | 1981 |
| 1935 | 2052 | 10450 | 1984 | 512 | 1981 |
| 1936 | 2030 | 7565 | 1995 | 327 | 1934 |
| 1937 | 2846 | 11950 | 1984 | 405 | 1933 |
| 1938 | 1445 | 11470 | 1993 | 173 | 1936 |
| 1939 | 961 | 4755 | 1951 | 117 | 1976 |
| 1940 | 731 | 2705 | 1951 | 87.8 | 1939 |

PLATTE RIVER BASIN

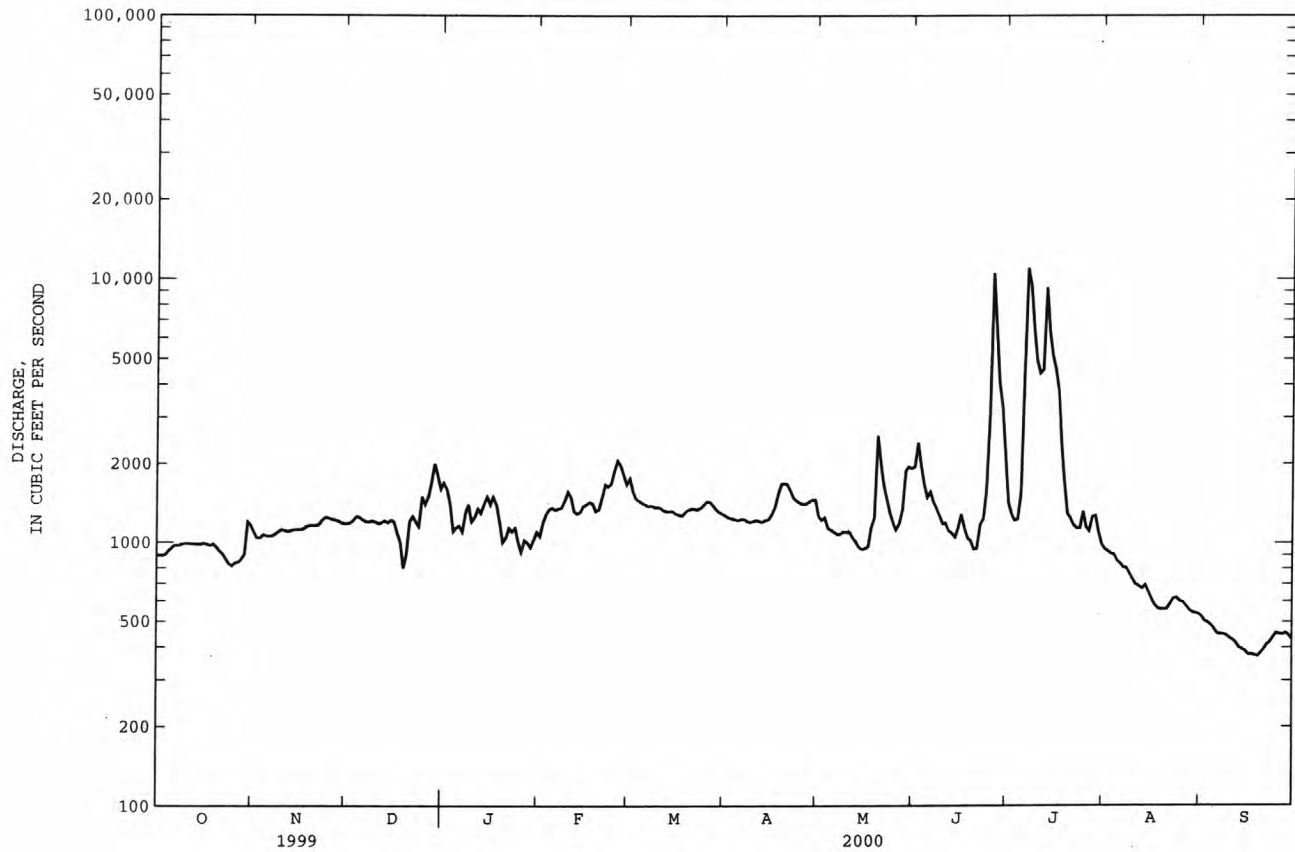
06800500 ELKHORN RIVER AT WATERLOO, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1929 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 1035777 | | 502286 | | 1356 | |
| ANNUAL MEAN | 2838 | | 1372 | | 1092 | |
| MEDIAN OF ANNUAL MEANS | | | | | 3870 | 1993 |
| HIGHEST ANNUAL MEAN | | | | | 417 | 1939 |
| LOWEST ANNUAL MEAN | | | | | 93800 | Jun 12 1944 |
| HIGHEST DAILY MEAN | 21600 | Aug 8 | 11000 | Jul 7 | 64 | Sep 16 1939 |
| LOWEST DAILY MEAN | 800 | Dec 19 | 371 | Sep 19 | 66 | Sep 15 1939 |
| ANNUAL SEVEN-DAY MINIMUM | 849 | Oct 23 | 380 | Sep 15 | 100000 | Jun 12 1944 |
| INSTANTANEOUS PEAK FLOW | | | 11900 | Jul 7 | **16.60 | Jun 12 1944 |
| INSTANTANEOUS PEAK STAGE | | | *9.11 | Jul 7 | | |
| ANNUAL RUNOFF (AC-FT) | 2054000 | | 996300 | | 982200 | |
| 10 PERCENT EXCEEDS | 5340 | | 1700 | | 2710 | |
| 50 PERCENT EXCEEDS | 2000 | | 1200 | | 726 | |
| 90 PERCENT EXCEEDS | 984 | | 561 | | 300 | |

e Estimated.

* From floodmark

** 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 $\frac{1}{4}$ SW $\frac{1}{4}$ sec.29, T.13 N., R.10 E., Sarpy County, Hydrologic Unit 10200202, on left bank upstream side and 35 ft northeast of Highway 6 bridge, 3 mi northeast of Ashland, 2 mi upstream from Salt Creek, and at mile 27.9.

DRAINAGE AREA.--84,200 mi² from state base maps, scale 1:1,000,000.

PERIOD OF RECORD.--August 1928 to May 1953, July 1988 to current year.

REVISED RECORDS.--WDR NE-94-1: 1993 (M).

GAGE.--Water-stage recorder. Datum of gage is 1,040.00 ft above sea level. Prior to Oct. 1, 1929, chain gage at former highway bridge $\frac{1}{2}$ mi upstream at datum 15.83 ft higher. Oct. 1, 1929 to Oct. 7, 1933 staff or chain gage at former bridge datum 14.79 ft higher. Oct. 14, 1933 to Dec. 10, 1938 water-stage recorder at site 950 ft upstream from former bridge at datum 14.79 ft higher. Dec. 11, 1938 to June 16, 1948 water-stage recorder at site of former bridge $\frac{1}{2}$ mi upstream at datum 14.79 ft higher. June 17, 1948 to May 11, 1953 $\frac{1}{2}$ mi downstream on Highway 6 bridge at datum 12.51 ft higher. Data collection platform at station.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | 6670 | 6780 | 6030 | 1700 | e5000 | 9810 | 7870 | 6160 | 7480 | 4480 | 4760 | 2360 |
| 2 | 6400 | 6860 | 6480 | 1640 | e5600 | 9580 | 6690 | 5570 | 7700 | 3950 | 4020 | 2210 |
| 3 | 6650 | 7070 | 6610 | 2550 | e6200 | 9580 | 6570 | 5980 | 7280 | 3460 | 3700 | 2150 |
| 4 | 6540 | 7240 | 7080 | 2790 | e7200 | 9130 | 5600 | 6090 | 7290 | 3140 | 3410 | 2280 |
| 5 | 7320 | 6560 | 6920 | 1610 | e6800 | 8970 | 4470 | 6060 | 6990 | 3140 | 3560 | 2100 |
| 6 | 6860 | 6620 | 6870 | 1690 | e6600 | 8890 | 6120 | 6030 | 6680 | 8720 | 3080 | 2160 |
| 7 | 6890 | 6730 | 7050 | 1050 | e7200 | 8320 | 6070 | 5470 | 6290 | 18200 | 2370 | 2260 |
| 8 | 6900 | 6840 | 6300 | 1070 | e7400 | 8870 | 5580 | 6080 | 5760 | 15100 | 2300 | 2350 |
| 9 | 7220 | 6900 | 6820 | 2430 | e7600 | 8730 | 5940 | 5850 | 5270 | 11100 | 1950 | 2450 |
| 10 | 7290 | 6670 | 6680 | 2550 | e7700 | 8750 | 6410 | 5690 | 4990 | 8770 | 2150 | 2590 |
| 11 | 7210 | 6950 | 6600 | 3020 | e7800 | 9010 | 6540 | 6560 | 4840 | 6850 | 1800 | 2080 |
| 12 | 7420 | 6800 | 6330 | 3130 | e7000 | 9290 | 5870 | 5980 | 4850 | 5930 | 2100 | 2270 |
| 13 | 7700 | 6880 | 6670 | 3780 | e7400 | 8680 | 5820 | 5560 | 4760 | 7430 | 1470 | 2130 |
| 14 | 7890 | 7140 | 6180 | 4180 | e7200 | 9290 | 5690 | 5370 | 4690 | 5970 | 1490 | 2220 |
| 15 | 7690 | 6800 | 6920 | 4060 | e7600 | 8180 | 6070 | 5310 | 3700 | 5220 | 1390 | 2090 |
| 16 | 7080 | 6750 | 6500 | 4210 | e7800 | 8210 | 6250 | 4890 | 4590 | 3500 | 1530 | 2220 |
| 17 | 7330 | 6580 | 6240 | 3810 | e8200 | 8140 | 6650 | 5200 | 4650 | 3600 | 1180 | 2150 |
| 18 | 7100 | 6310 | 5470 | 3970 | e8000 | 8250 | 7320 | 4980 | 4170 | 4450 | 1330 | 1820 |
| 19 | 6590 | 6660 | 6310 | 4510 | e7800 | 7450 | 7460 | 5950 | 4430 | 3580 | 1450 | 2150 |
| 20 | 7050 | 6410 | 5620 | 4440 | e7800 | 8150 | 7360 | 6470 | 3870 | 2680 | 971 | 2580 |
| 21 | 6060 | 6040 | 6290 | 3990 | e7800 | 8430 | 6900 | 7040 | 3420 | 2850 | 1180 | 1860 |
| 22 | 6720 | 6700 | 5680 | 4610 | e8000 | 7840 | 6300 | 7710 | 4130 | 2960 | 2260 | 2470 |
| 23 | 6130 | 6580 | 5230 | e4300 | e8200 | 8050 | 6510 | 6700 | 4540 | 2700 | 2000 | 2320 |
| 24 | 5900 | 6870 | 4660 | e4200 | 8340 | 8420 | 6110 | 5430 | 5610 | 2570 | 2120 | 2680 |
| 25 | 5590 | 6930 | 1200 | e4500 | 8780 | 8500 | 5560 | 6000 | 7350 | 3060 | 2090 | 2580 |
| 26 | 5730 | 6750 | 3120 | e4200 | 9990 | 8090 | 5270 | 6380 | 15300 | 3590 | 2400 | 2630 |
| 27 | 5500 | 6550 | 3150 | e4100 | 10100 | 8510 | 5880 | 6230 | 12200 | 3590 | 2520 | 2800 |
| 28 | 5680 | 6450 | 3940 | e4200 | 9730 | 7800 | 6280 | 7070 | 9580 | 2810 | 2140 | 2850 |
| 29 | 5820 | 6130 | 3180 | e4400 | 9760 | 7890 | 6540 | 7310 | 7190 | 3290 | 1970 | 3080 |
| 30 | 6310 | 6220 | 2960 | e4200 | --- | 7720 | 6380 | 7360 | 6420 | 3840 | 2040 | 2820 |
| 31 | 5990 | --- | 2150 | e4500 | --- | 7420 | --- | 7430 | --- | 5570 | 2250 | --- |
| TOTAL | 207230 | 200770 | 171240 | 105390 | 224600 | 263950 | 188480 | 189910 | 186020 | 166100 | 68981 | 70710 |
| MEAN | 6685 | 6692 | 5524 | 3400 | 7745 | 8515 | 6283 | 6126 | 6201 | 5358 | 2225 | 2357 |
| MAX | 7890 | 7240 | 7080 | 4610 | 10100 | 9810 | 7870 | 7710 | 15300 | 18200 | 4760 | 3080 |
| MIN | 5500 | 6040 | 1200 | 1050 | 5000 | 7420 | 4470 | 4890 | 3420 | 2570 | 971 | 1820 |
| AC-FT | 411000 | 398200 | 339700 | 209000 | 445500 | 523500 | 373900 | 376700 | 369000 | 329500 | 136800 | 140300 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2000, BY WATER YEAR (WY)

| | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|------|
| MEAN | 5656 | 6216 | 5630 | 5195 | 7368 | 9735 | 8893 | 9005 | 12090 | 8414 | 5515 | 4993 |
| 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 | 5128 | 5233 | 4618 | 2969 | 2928 | 2448 | 1288 | 1533 |
| (WY) | 1992 | 1989 | 1990 | 1991 | 1990 | 1991 | 1989 | 1989 | 1989 | 1991 | 1991 | 1991 |

PLATTE RIVER BASIN

06801000 PLATTE RIVER NEAR ASHLAND, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1989 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 3500060 | | 2043381 | | | |
| ANNUAL MEAN | 9589 | | 5583 | | *7386 | |
| HIGHEST ANNUAL MEAN | | | | | 11820 | 1993 |
| LOWEST ANNUAL MEAN | | | | | 4612 | 1989 |
| HIGHEST DAILY MEAN | 41400 | Jun 28 | 18200 | Jul 7 | 110000 | Mar 10 1993 |
| LOWEST DAILY MEAN | 1200 | Dec 25 | 971 | Aug 20 | 662 | Sep 2 1991 |
| ANNUAL SEVEN-DAY MINIMUM | 2810 | Dec 25 | 1290 | Aug 15 | 701 | Aug 29 1991 |
| INSTANTANEOUS PEAK FLOW | | | 19900 | Jul 7 | **130000 | Mar 10 1993 |
| INSTANTANEOUS PEAK STAGE | | | ***18.50 | Feb 13 | ****23.05 | Feb 20 1997 |
| ANNUAL RUNOFF (AC-FT) | 6942000 | | 4053000 | | 5351000 | |
| 10 PERCENT EXCEEDS | 16800 | | 8190 | | 12100 | |
| 50 PERCENT EXCEEDS | 7400 | | 6060 | | 6210 | |
| 90 PERCENT EXCEEDS | 5310 | | 2160 | | 2700 | |

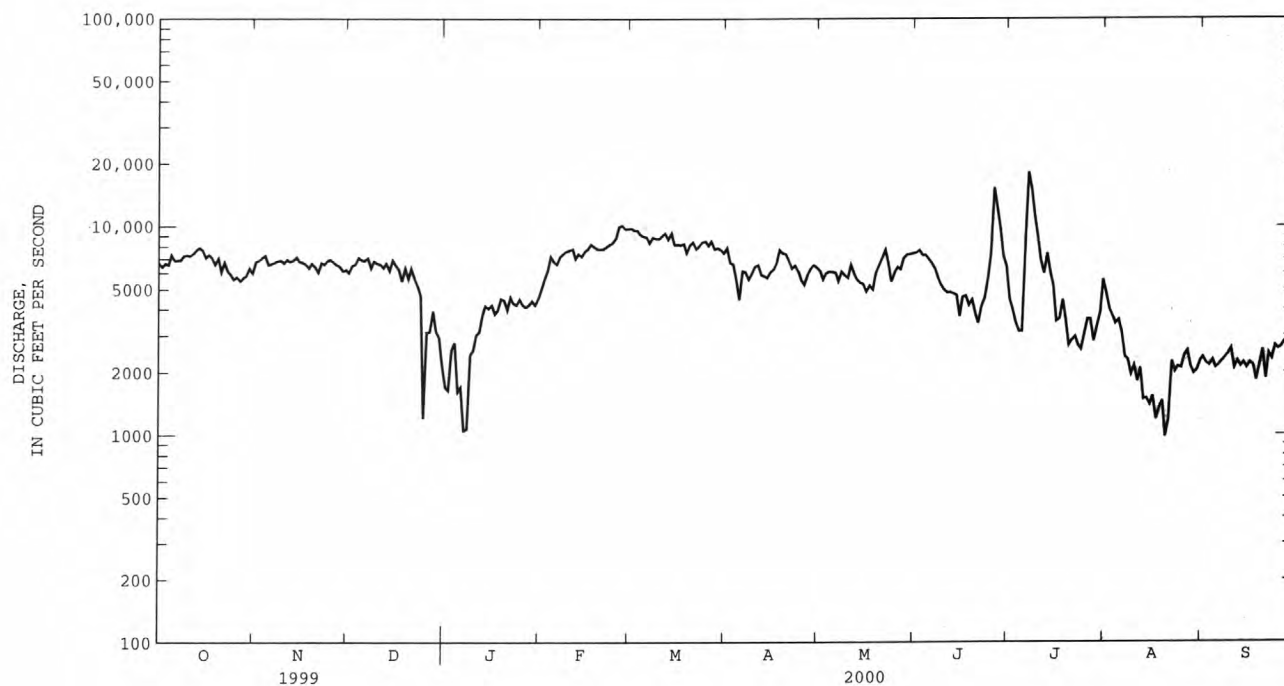
e Estimated.

* Average discharge for water years 1942-52, 5,961 ft³/s.

** Estimated; discharge includes overbank flow, stage 19.23 ft., backwater from ice.

*** Backwater from ice.

**** Ice jam.



PLATTE RIVER BASIN

06801180 OLIVE BRANCH NEAR HALLAM, NE

LOCATION.--Lat 40°35'44", long 96°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 periods of estimated record which are poor.

CORRECTIONS.--The maximum discharge for water year 1998 is 495 ft³/s Nov. 29, 1997, gage height, 7.55 ft: the previously published figure was not the maximum.

COOPERATION.--Station operated in cooperation with the Nebraska Public Power District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|
| 1 | .91 | 1.0 | 1.5 | 1.1 | e.90 | .75 | 1.2 | 1.3 | 1.2 | e2.0 | .21 | .66 |
| 2 | .91 | 1.0 | 1.3 | e1.0 | e.90 | .23 | 1.2 | .91 | 1.2 | e2.2 | .25 | .72 |
| 3 | .91 | 1.0 | 1.4 | e.80 | e1.0 | .36 | 1.2 | .73 | 1.1 | e4.0 | 1.2 | .77 |
| 4 | .91 | 1.1 | 1.4 | e.50 | e1.0 | .13 | 1.2 | .67 | 1.2 | e2.0 | 1.2 | .91 |
| 5 | .91 | 1.2 | 1.3 | e.50 | e1.0 | .26 | 1.2 | 1.0 | 1.2 | e8.0 | 1.1 | 1.1 |
| 6 | .91 | 1.2 | .96 | e1.0 | e.90 | .09 | 1.3 | .96 | 1.1 | 2.4 | 1.0 | .65 |
| 7 | .91 | 1.3 | 1.2 | 1.3 | e.90 | .09 | 1.4 | 1.3 | 1.2 | 1.9 | 1.2 | .54 |
| 8 | .91 | 1.4 | 1.6 | 1.3 | e.80 | .70 | 1.2 | 1.5 | 1.1 | e1.6 | 1.1 | .57 |
| 9 | .91 | 1.6 | 1.8 | 1.1 | e.90 | .10 | 1.2 | 1.6 | 1.1 | e1.4 | 1.0 | .52 |
| 10 | .91 | 1.7 | 1.6 | 1.2 | e.90 | .16 | 1.3 | 1.2 | 1.1 | e1.3 | .88 | .52 |
| 11 | .93 | 1.7 | 1.9 | 1.3 | e.80 | .26 | .86 | 1.1 | 1.1 | e1.2 | .70 | e.50 |
| 12 | .98 | 2.2 | 2.0 | 1.1 | e.90 | .38 | .93 | .74 | 1.1 | e1.0 | .64 | e.50 |
| 13 | 1.0 | 2.1 | 1.9 | 1.3 | e1.0 | .35 | 1.4 | .68 | 1.1 | e1.0 | .53 | e.50 |
| 14 | 1.0 | 1.9 | 1.9 | 1.4 | e1.1 | .53 | .74 | .81 | 1.0 | e1.0 | .52 | e.60 |
| 15 | 1.0 | 1.8 | e1.4 | 1.1 | e1.2 | .46 | .51 | 1.0 | 1.0 | e1.0 | .57 | e.60 |
| 16 | 1.0 | 1.8 | e1.1 | e1.0 | 1.4 | .48 | 1.1 | .67 | 1.0 | e1.2 | .59 | e.50 |
| 17 | 1.0 | 2.0 | e.90 | e1.0 | 1.5 | .41 | 1.3 | .81 | 1.0 | e2.6 | .53 | e.50 |
| 18 | 1.0 | 1.5 | e.60 | e1.0 | 1.8 | 1.1 | 1.5 | 1.0 | .93 | e2.0 | .52 | e.50 |
| 19 | 1.0 | 1.1 | e.40 | e.90 | 1.7 | 1.6 | 1.5 | .86 | .83 | e1.8 | .62 | .82 |
| 20 | 1.0 | 1.1 | e.30 | e.80 | e2.2 | 1.4 | 1.5 | 1.1 | .92 | 8.6 | .60 | .65 |
| 21 | 1.0 | 1.0 | e.20 | e.90 | e1.8 | 1.1 | 1.4 | 1.3 | .21 | e5.0 | .59 | .66 |
| 22 | 1.0 | 1.3 | e.40 | e1.0 | 2.2 | 1.3 | 1.5 | 1.4 | .06 | e3.4 | .58 | .71 |
| 23 | 1.0 | 4.5 | e.80 | e.90 | 1.4 | 1.5 | 1.5 | 1.3 | .10 | e2.2 | .59 | .69 |
| 24 | 1.0 | 1.4 | 1.7 | e.80 | 1.4 | 1.3 | 1.5 | .98 | .29 | e1.6 | .59 | .71 |
| 25 | 1.0 | 1.1 | 2.0 | e.70 | .73 | .78 | 1.5 | 1.2 | 74 | e1.5 | .59 | .73 |
| 26 | 1.0 | 1.1 | 2.1 | e.70 | .08 | .96 | 1.5 | 1.1 | 53 | e1.4 | .64 | .74 |
| 27 | 1.2 | 1.3 | 2.1 | e.60 | .16 | .83 | 1.4 | 1.2 | 2.8 | e1.2 | .60 | .76 |
| 28 | 1.2 | 1.3 | 2.1 | e.80 | .14 | 1.3 | 1.5 | .82 | 1.8 | e1.2 | .58 | .78 |
| 29 | 1.0 | 1.3 | 2.1 | e.90 | .25 | 1.4 | 1.0 | .65 | 1.7 | e1.1 | .52 | .79 |
| 30 | 1.0 | 1.4 | 1.7 | e1.0 | --- | 1.4 | .91 | .97 | e1.8 | e1.0 | .60 | .81 |
| 31 | 1.0 | --- | 1.2 | e.90 | --- | 1.3 | --- | .98 | --- | .92 | .69 | --- |
| TOTAL | 30.41 | 45.4 | 42.86 | 29.90 | 30.96 | 23.01 | 37.45 | 31.84 | 157.24 | 86.72 | 21.53 | 20.01 |
| MEAN | .98 | 1.51 | 1.38 | .96 | 1.07 | .74 | 1.25 | 1.03 | 5.24 | 2.80 | .69 | .67 |
| MAX | 1.2 | 4.5 | 2.1 | 1.4 | 2.2 | 1.6 | 1.5 | 1.6 | 74 | 20 | 1.2 | 1.1 |
| MIN | .91 | 1.0 | .20 | .50 | .08 | .09 | .51 | .65 | .06 | .92 | .21 | .50 |
| AC-FT | 60 | 90 | 85 | 59 | 61 | 46 | 74 | 63 | 312 | 172 | 43 | 40 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2000, BY WATER YEAR (WY)

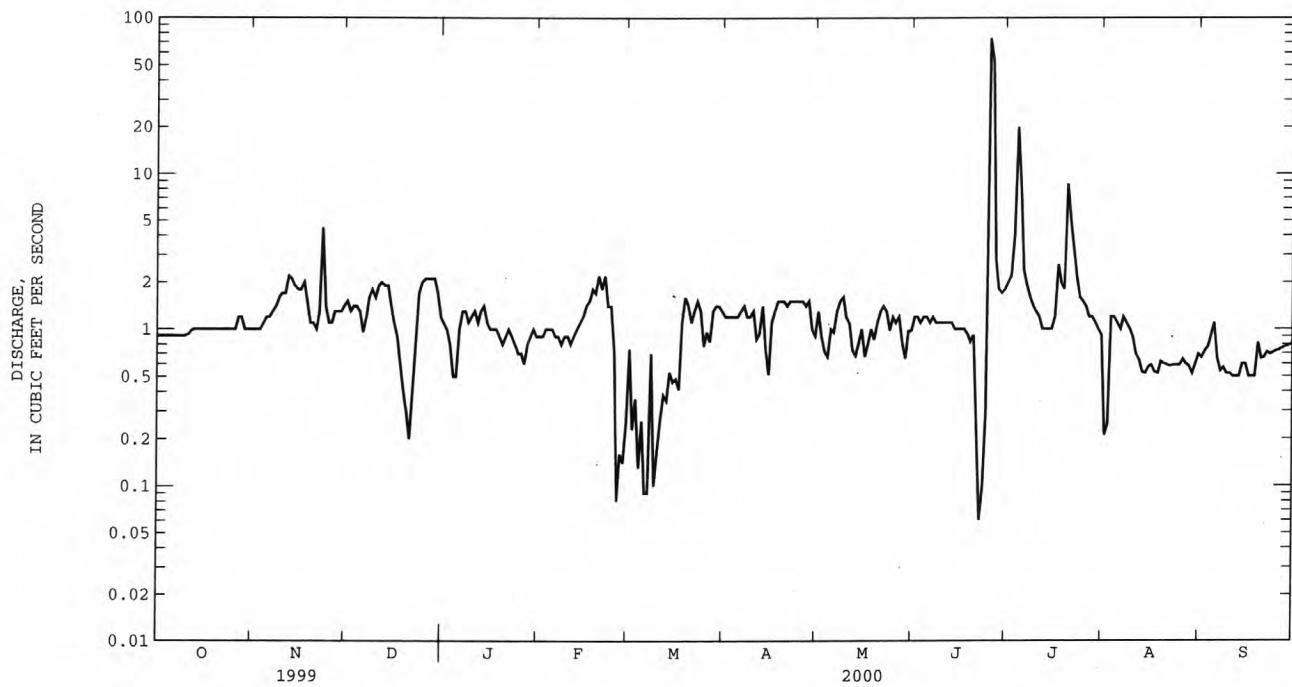
| | 1997 | 1998 | 1999 | 2000 |
|------|------|------|------|------|
| MEAN | 7.50 | 16.3 | 4.68 | 2.56 |
| MAX | 17.2 | 35.6 | 6.37 | 4.21 |
| (WY) | 1999 | 1999 | 1999 | 1998 |
| MIN | .98 | 1.51 | 1.38 | .96 |
| (WY) | 2000 | 2000 | 2000 | 2000 |

PLATTE RIVER BASIN

06801180 OLIVE BRANCH NEAR HALLAM, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | FOR 2000 WATER YEAR | WATER YEARS 1997 - 2000 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 2460.28 | 557.33 | |
| ANNUAL MEAN | 6.74 | 1.52 | 8.74 |
| HIGHEST ANNUAL MEAN | | | 13.4 |
| LOWEST ANNUAL MEAN | | | 1.52 |
| HIGHEST DAILY MEAN | 386 Apr 15 | 74 Jun 25 | 386 Apr 15 1999 |
| LOWEST DAILY MEAN | .20 Dec 21 | .06 Jun 22 | .06 Jun 22 2000 |
| ANNUAL SEVEN-DAY MINIMUM | .51 Dec 17 | .22 Mar 4 | .22 Mar 4 2000 |
| INSTANTANEOUS PEAK FLOW | | 501 Jun 25 | 917 Apr 15 1999 |
| INSTANTANEOUS PEAK STAGE | | 7.59 Jun 25 | 9.98 Apr 15 1999 |
| ANNUAL RUNOFF (AC-FT) | 4880 | 1110 | 6330 |
| 10 PERCENT EXCEEDS | 12 | 1.8 | 15 |
| 50 PERCENT EXCEEDS | 2.7 | 1.0 | 3.0 |
| 90 PERCENT EXCEEDS | .91 | .51 | .82 |

e Estimated.



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 1999 TO SEPTEMBER 2000

| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
|-------|---------|------|----------|------|----------|------|---------|------|----------|------|-----------|------|
| | OCTOBER | | NOVEMBER | | DECEMBER | | JANUARY | | FEBRUARY | | MARCH | |
| 1 | 13.3 | 10.4 | 10.1 | 9.1 | 8.5 | 7.2 | 5.4 | 4.5 | 4.1 | 2.6 | 9.4 | 6.8 |
| 2 | 11.7 | 9.4 | 9.1 | 6.9 | 9.4 | 8.3 | 5.2 | 4.4 | 4.5 | 2.6 | 7.9 | 7.2 |
| 3 | 11.0 | 9.4 | 7.9 | 6.0 | 9.0 | 8.2 | 5.0 | 3.7 | 4.8 | 3.3 | 9.5 | 7.1 |
| 4 | 10.9 | 7.7 | 8.4 | 6.2 | 8.2 | 6.9 | 3.7 | 2.6 | 3.9 | 2.6 | 10.7 | 7.2 |
| 5 | 12.4 | 9.3 | 9.2 | 7.9 | 6.9 | 5.5 | 4.0 | 3.0 | 4.3 | 2.4 | 11.9 | 8.7 |
| 6 | 13.1 | 9.7 | 9.4 | 7.5 | 5.7 | 4.6 | 4.0 | 3.1 | 5.3 | 3.1 | 13.1 | 9.7 |
| 7 | 13.5 | 11.8 | 10.0 | 7.9 | 6.5 | 5.0 | 4.1 | 3.0 | 5.0 | 2.9 | 13.9 | 11.6 |
| 8 | 14.0 | 12.3 | 11.6 | 9.0 | 6.4 | 5.3 | 4.5 | 3.3 | 5.8 | 3.0 | 13.2 | 10.4 |
| 9 | 13.7 | 11.4 | 12.2 | 10.8 | 6.1 | 5.5 | 5.0 | 4.1 | 6.1 | 3.8 | 10.4 | 7.7 |
| 10 | 13.3 | 11.6 | 11.8 | 10.1 | 5.5 | 4.1 | 4.8 | 3.8 | 5.6 | 4.1 | 8.8 | 6.8 |
| 11 | 12.8 | 10.4 | 10.5 | 8.7 | 5.8 | 4.4 | 4.4 | 3.4 | 4.1 | 2.9 | 9.6 | 6.2 |
| 12 | 14.0 | 12.1 | 10.3 | 9.1 | 5.6 | 4.7 | 4.6 | 3.5 | 3.5 | 3.1 | 10.5 | 6.9 |
| 13 | 13.9 | 11.6 | 10.6 | 8.6 | 5.3 | 4.0 | 4.2 | 3.1 | 3.7 | 3.1 | 10.0 | 6.9 |
| 14 | 12.1 | 9.9 | 10.5 | 9.5 | 5.5 | 4.7 | 4.5 | 2.9 | 5.5 | 2.7 | 11.3 | 7.9 |
| 15 | 13.2 | 11.7 | 9.5 | 7.8 | 5.2 | 4.1 | 5.6 | 4.0 | 6.8 | 3.5 | 9.5 | 6.7 |
| 16 | 13.1 | 10.6 | 9.2 | 7.6 | 4.4 | 3.6 | 4.9 | 3.3 | 5.6 | 3.5 | 8.4 | 4.7 |
| 17 | 10.6 | 9.2 | 9.5 | 8.0 | 4.3 | 3.6 | 4.8 | 3.4 | 4.6 | 3.7 | 8.1 | 5.4 |
| 18 | 9.8 | 7.9 | 11.2 | 9.4 | 4.1 | 3.7 | 5.4 | 3.4 | 4.1 | 2.9 | 7.2 | 6.4 |
| 19 | 9.2 | 7.9 | 10.7 | 7.9 | 4.0 | 3.7 | 5.6 | 3.6 | --- | --- | 6.7 | 5.7 |
| 20 | 9.5 | 7.0 | 8.2 | 6.6 | 3.7 | 2.9 | 3.8 | 2.7 | --- | --- | 7.0 | 6.2 |
| 21 | 10.7 | 7.9 | 8.6 | 7.5 | 3.8 | 2.8 | 4.3 | 2.8 | --- | --- | 8.8 | 6.7 |
| 22 | 10.7 | 9.4 | 8.3 | 6.9 | 3.7 | 2.9 | 4.9 | 3.4 | --- | --- | 9.9 | 8.0 |
| 23 | 9.9 | 7.8 | 8.0 | 6.7 | 4.1 | 3.1 | 4.0 | 2.8 | 10.1 | 9.4 | 10.0 | 9.5 |
| 24 | 8.6 | 6.3 | 6.8 | 5.7 | 4.1 | 3.4 | 3.9 | 2.5 | 10.4 | 8.5 | 10.7 | 9.3 |
| 25 | 9.5 | 7.6 | 6.9 | 5.5 | 4.6 | 3.3 | 3.4 | 2.5 | 12.0 | 9.5 | 11.8 | 8.9 |
| 26 | 10.1 | 7.6 | 8.0 | 6.5 | 4.2 | 3.4 | 3.5 | 2.2 | 9.5 | 7.1 | 12.5 | 10.1 |
| 27 | 11.8 | 9.0 | 8.2 | 7.3 | 3.9 | 3.6 | 3.6 | 2.8 | 9.1 | 5.8 | 12.4 | 9.3 |
| 28 | 11.5 | 9.7 | 8.1 | 7.5 | 5.3 | 3.3 | 3.7 | 3.0 | 10.0 | 7.2 | 11.3 | 8.1 |
| 29 | 11.7 | 9.0 | 7.5 | 6.3 | 5.3 | 3.7 | 3.8 | 2.8 | 9.2 | 8.0 | 11.1 | 8.4 |
| 30 | 11.2 | 10.2 | 7.8 | 6.3 | 5.2 | 4.2 | 3.6 | 2.5 | --- | --- | 12.6 | 9.5 |
| 31 | 10.3 | 8.2 | --- | --- | 5.2 | 3.7 | 3.8 | 2.3 | --- | --- | 10.9 | 10.1 |
| MONTH | 14.0 | 6.3 | 12.2 | 5.5 | 9.4 | 2.8 | 5.6 | 2.2 | 12.0 | 2.4 | 13.9 | 4.7 |
| DAY | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN |
| | APRIL | | MAY | | JUNE | | JULY | | AUGUST | | SEPTEMBER | |
| 1 | 12.2 | 9.7 | 14.7 | 13.7 | 18.6 | 18.0 | 16.6 | 14.0 | 21.1 | 18.0 | 19.1 | 17.1 |
| 2 | 11.5 | 9.9 | 16.9 | 13.1 | 18.4 | 17.1 | 18.3 | 15.0 | 20.1 | 17.0 | 19.3 | 16.7 |
| 3 | 11.2 | 9.5 | 17.3 | 15.3 | 18.1 | 16.7 | --- | --- | 22.9 | 18.5 | 19.3 | 17.2 |
| 4 | 10.6 | 8.4 | 18.3 | 15.3 | 18.1 | 17.2 | --- | --- | 21.7 | 19.7 | 19.2 | 17.0 |
| 5 | 12.2 | 9.6 | 18.7 | 16.3 | 18.0 | 16.2 | --- | --- | 23.5 | 19.9 | 19.0 | 16.6 |
| 6 | 12.6 | 10.9 | 17.9 | 16.8 | 17.1 | 15.9 | 26.3 | 19.6 | 24.1 | 20.3 | 18.0 | 16.2 |
| 7 | 12.2 | 9.6 | 17.7 | 17.0 | 17.5 | 16.1 | --- | --- | 22.0 | 19.1 | 18.0 | 16.2 |
| 8 | 10.0 | 7.9 | 17.7 | 16.4 | 18.6 | 16.9 | 26.2 | 20.0 | 22.8 | 18.6 | 17.6 | 15.0 |
| 9 | 11.6 | 9.0 | 17.0 | 15.3 | 18.6 | 17.4 | 26.0 | 20.3 | 21.8 | 18.8 | 18.1 | 16.7 |
| 10 | 11.6 | 10.5 | 16.7 | 15.3 | 19.1 | 18.2 | 25.4 | 20.1 | 21.6 | 17.7 | 18.3 | 17.7 |
| 11 | 11.1 | 9.3 | 18.8 | 16.2 | 19.1 | 18.4 | 24.9 | 20.3 | 21.6 | 18.2 | 18.3 | 17.4 |
| 12 | 12.0 | 9.5 | 18.6 | 16.8 | 19.4 | 18.5 | 24.9 | 19.8 | 21.9 | 18.6 | 17.8 | 15.2 |
| 13 | 13.7 | 9.9 | 16.9 | 14.6 | 19.5 | 19.1 | 24.7 | 18.3 | 22.3 | 18.8 | 16.9 | 14.9 |
| 14 | 15.6 | 11.9 | 15.5 | 14.1 | 19.1 | 17.8 | 26.3 | 18.7 | 21.3 | 18.2 | 17.0 | 15.7 |
| 15 | 14.0 | 10.4 | 15.7 | 13.9 | 18.2 | 16.9 | 25.6 | 19.4 | 20.3 | 17.6 | 16.1 | 13.9 |
| 16 | 10.4 | 8.3 | 16.3 | 14.5 | 18.0 | 17.2 | 22.4 | 19.8 | 20.1 | 18.4 | 15.3 | 13.8 |
| 17 | 10.4 | 8.2 | 16.9 | 16.2 | 18.0 | 16.9 | 23.2 | 18.8 | 19.5 | 17.6 | 16.1 | 14.9 |
| 18 | 12.1 | 10.2 | 16.9 | 15.5 | 18.0 | 16.5 | 21.9 | 19.4 | 18.2 | 15.9 | 16.6 | 16.1 |
| 19 | 14.6 | 12.1 | 15.9 | 14.6 | 18.8 | 17.2 | 19.9 | 18.4 | 18.6 | 16.2 | 16.7 | 16.4 |
| 20 | 14.2 | 11.1 | 16.1 | 14.5 | 20.6 | 18.6 | 21.4 | 18.0 | 20.8 | 17.5 | 16.4 | 14.3 |
| 21 | 12.8 | 10.0 | 17.0 | 15.4 | 20.6 | 19.3 | 22.7 | 17.7 | 20.2 | 17.6 | 15.7 | 14.3 |
| 22 | 14.4 | 12.2 | 17.7 | 16.2 | 19.7 | 18.3 | 22.8 | 18.4 | 19.8 | 17.7 | 16.3 | 15.1 |
| 23 | 14.6 | 13.6 | 18.4 | 16.8 | 19.2 | 17.9 | 21.9 | 18.3 | 20.8 | 17.7 | 16.2 | 14.0 |
| 24 | 15.4 | 13.6 | 18.3 | 17.2 | 18.8 | 17.8 | 21.8 | 17.7 | 20.2 | 17.7 | 14.0 | 12.7 |
| 25 | 15.0 | 14.1 | 18.1 | 16.2 | 18.7 | 17.3 | 22.6 | 18.0 | 20.2 | 17.1 | 13.9 | 12.3 |
| 26 | 14.6 | 13.1 | 17.5 | 16.4 | 18.7 | 17.5 | 23.1 | 19.1 | 22.4 | 18.3 | 14.7 | 13.1 |
| 27 | 13.9 | 12.9 | 16.8 | 16.1 | 18.1 | 16.2 | 23.3 | 19.1 | 21.5 | 19.8 | 15.2 | 14.7 |
| 28 | 16.3 | 12.5 | 17.4 | 15.7 | 16.6 | 15.0 | 22.4 | 20.7 | 21.4 | 18.9 | 15.7 | 15.1 |
| 29 | 16.8 | 13.4 | 18.7 | 16.6 | 15.8 | 13.4 | 22.7 | 19.2 | 20.4 | 18.3 | 15.9 | 15.6 |
| 30 | 15.2 | 14.3 | 20.0 | 17.9 | 16.3 | 13.6 | 22.6 | 18.8 | 20.7 | 17.9 | 16.4 | 15.9 |
| 31 | --- | --- | 19.9 | 17.9 | --- | --- | 22.5 | 19.1 | 19.9 | 17.5 | --- | --- |
| MONTH | 16.8 | 7.9 | 20.0 | 13.1 | 20.6 | 13.4 | 26.3 | 14.0 | 24.1 | 15.9 | 19.3 | 12.3 |
| YEAR | 26.3 | 2.2 | | | | | | | | | | |

PLATTE RIVER BASIN
06801180 OLIVE BRANCH NEAR HALLAM, NE--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 622 | 833 | 818 | 800 | 749 | 627 | 667 | 852 | 746 | 665 | 678 | 827 |
| 2 | 647 | 824 | 817 | 798 | 748 | 632 | 664 | 829 | 757 | 653 | 733 | 807 |
| 3 | 663 | 823 | 819 | 796 | 740 | 641 | 666 | 757 | 762 | 661 | 760 | 813 |
| 4 | 665 | 822 | 827 | 794 | 733 | 650 | 670 | 740 | 737 | --- | 750 | 819 |
| 5 | 666 | 816 | 828 | 791 | 730 | 653 | 676 | 767 | 739 | 632 | 753 | 828 |
| 6 | 670 | 811 | 827 | 790 | 724 | 662 | 676 | 809 | 721 | 623 | 759 | 830 |
| 7 | 679 | 820 | 825 | 788 | 720 | 668 | 678 | 845 | 718 | 629 | 751 | 848 |
| 8 | 698 | 818 | 827 | 784 | 715 | 663 | 668 | 865 | 726 | 650 | 751 | 799 |
| 9 | 715 | 816 | 828 | 781 | 706 | 662 | 680 | 870 | 725 | 666 | 761 | 838 |
| 10 | 737 | 816 | 827 | 777 | 695 | 666 | 704 | 868 | 735 | 680 | 765 | 790 |
| 11 | 759 | 819 | 826 | 777 | 685 | 671 | 722 | 871 | 744 | 695 | 763 | 897 |
| 12 | 778 | 821 | 825 | 776 | 675 | 678 | 742 | 864 | 753 | 726 | 754 | 909 |
| 13 | 793 | 820 | 824 | 778 | 665 | 683 | 764 | 839 | 758 | 747 | 760 | 888 |
| 14 | 803 | 823 | 822 | 782 | 663 | 689 | 790 | 821 | 763 | 742 | 787 | 885 |
| 15 | 817 | 823 | 824 | 781 | 663 | 691 | 791 | 808 | 763 | 731 | 794 | 840 |
| 16 | 830 | 824 | 823 | 777 | 658 | 689 | 760 | 787 | 762 | 719 | 802 | 814 |
| 17 | 844 | 823 | 822 | 778 | 651 | 686 | 738 | 766 | 760 | 715 | 813 | 783 |
| 18 | 843 | 812 | 821 | 780 | 646 | 684 | 732 | 755 | 757 | 697 | 814 | 772 |
| 19 | 848 | 807 | 819 | 778 | 640 | 681 | 729 | 754 | 752 | 691 | 820 | 807 |
| 20 | 849 | 806 | 820 | 779 | --- | 678 | 717 | 757 | 751 | 649 | 816 | 871 |
| 21 | 839 | 804 | 819 | 780 | --- | 674 | 721 | 763 | 745 | 673 | 779 | 930 |
| 22 | 836 | 805 | 818 | 778 | 621 | 666 | 728 | 765 | 721 | 685 | 759 | 947 |
| 23 | 841 | 807 | 818 | 777 | 610 | 659 | 733 | 769 | 708 | 679 | 757 | 920 |
| 24 | 854 | 811 | 818 | 776 | 601 | 656 | 747 | 772 | 681 | 686 | 741 | 880 |
| 25 | 851 | 811 | 816 | 773 | 593 | 656 | 768 | 770 | 697 | 700 | --- | 826 |
| 26 | 855 | 810 | 815 | 772 | 598 | 655 | 797 | 764 | 721 | 697 | 737 | 763 |
| 27 | 863 | 814 | 812 | 769 | 607 | 654 | 832 | 760 | 729 | 694 | 726 | 724 |
| 28 | 871 | 820 | 810 | 762 | 616 | 657 | 881 | 756 | 730 | 676 | 776 | 807 |
| 29 | 879 | 826 | 807 | 755 | 621 | 662 | 873 | 750 | 752 | 649 | 810 | 871 |
| 30 | 867 | 824 | 806 | 750 | --- | 669 | 857 | 741 | 734 | 632 | 842 | 893 |
| 31 | 835 | --- | 804 | 749 | --- | 667 | --- | 735 | --- | 632 | 828 | --- |
| MEAN | 784 | 817 | 820 | 778 | 669 | 665 | 739 | 793 | 738 | 679 | 771 | 841 |
| MAX | 879 | 833 | 828 | 800 | 749 | 691 | 881 | 871 | 763 | 747 | 842 | 947 |
| MIN | 622 | 804 | 804 | 749 | 593 | 627 | 664 | 735 | 681 | 623 | 678 | 724 |

PLATTE RIVER BASIN

06803000 SALT CREEK AT ROCA, NE

LOCATION.--Lat 40°39'29", long 096°39'55", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.17, T.8 N., R.7 E., Lancaster County, Hydrologic Unit 10200203, on left bank 15 ft downstream from highway bridge at west edge of Roca, and at mile 54.2.

DRAINAGE AREA.--167 mi².

PERIOD OF RECORD.--May 1951 to current year.

REVISED RECORDS.--WDR NE-71: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,192.50 ft above sea level, Kansas City supplementary adjustment of 1943. Prior to May 16, 1956, nonrecording gage at present site and datum. Data collection platform at station.

REMARKS.--Records good. Flood flow affected by several detention dams.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|-------|-------|-------|------|------|-------|--------|-------|-------|-------|
| 1 | 15 | 10 | 12 | 14 | e9.0 | 12 | 16 | 17 | 11 | 15 | 9.8 | 5.1 |
| 2 | 7.2 | 10 | 12 | e14 | e8.8 | 18 | 17 | 17 | 10 | 14 | 8.3 | 5.3 |
| 3 | 7.6 | 10 | 13 | e12 | e9.2 | 16 | 20 | 15 | 11 | 23 | 7.8 | 4.9 |
| 4 | 7.8 | 11 | 13 | 9.0 | e9.2 | 15 | 19 | 14 | 11 | 316 | 9.0 | 5.1 |
| 5 | 7.7 | 11 | 13 | 11 | e9.0 | 14 | 18 | 14 | 10 | 65 | 9.5 | 5.6 |
| 6 | 7.8 | 11 | 12 | 11 | e9.4 | 14 | 16 | 13 | 9.9 | 26 | 9.1 | 5.0 |
| 7 | 7.4 | e12 | 12 | 11 | e9.2 | 15 | 15 | 13 | 8.4 | 17 | 9.1 | 4.4 |
| 8 | 8.0 | 13 | 13 | 12 | e9.0 | 17 | 15 | 15 | 7.3 | 14 | 8.9 | 4.6 |
| 9 | 7.6 | 12 | 13 | 12 | e9.0 | 16 | 16 | 17 | 7.1 | 12 | 7.3 | 4.4 |
| 10 | 7.7 | 11 | 13 | 13 | e9.2 | 16 | 19 | 14 | 6.7 | 11 | 6.4 | 4.6 |
| 11 | 8.3 | 11 | 13 | 12 | e8.8 | 15 | 19 | 12 | 7.1 | 10 | 6.3 | 4.5 |
| 12 | 6.8 | 11 | e13 | 12 | e8.8 | 15 | 17 | 11 | 7.2 | 10 | 6.8 | 4.6 |
| 13 | 8.4 | 12 | e13 | 11 | e9.0 | 14 | 16 | 9.9 | 7.2 | 8.9 | 6.9 | 3.8 |
| 14 | 8.8 | 12 | e14 | 12 | 12 | 14 | 18 | 9.6 | 8.3 | 8.5 | 6.0 | 4.1 |
| 15 | 10 | 12 | e14 | 12 | 13 | 15 | 17 | 10 | 9.4 | 8.7 | 5.5 | 3.8 |
| 16 | 10 | 12 | 13 | e11 | 13 | 14 | 36 | 11 | 11 | 8.6 | 5.3 | 3.8 |
| 17 | 10 | 13 | e12 | e10 | 13 | 14 | 51 | 11 | 11 | 8.6 | 5.4 | 3.5 |
| 18 | 10 | 13 | e11 | e9.8 | 15 | 15 | 33 | 12 | 10 | 18 | 5.4 | 2.9 |
| 19 | 11 | 12 | e10 | e9.6 | e14 | 18 | 29 | 12 | 9.9 | 13 | 8.5 | 3.0 |
| 20 | 11 | 11 | e9.6 | e9.0 | e13 | 19 | 25 | 12 | 17 | 128 | 14 | 4.9 |
| 21 | 15 | 12 | e9.0 | e9.0 | 15 | 19 | 23 | 12 | 13 | 27 | 9.6 | 5.1 |
| 22 | 38 | 13 | e10 | e9.2 | 19 | 20 | 21 | 12 | 9.5 | 15 | 8.1 | 4.6 |
| 23 | 25 | 26 | e11 | e9.4 | 23 | 21 | 19 | 12 | 8.9 | 12 | 7.7 | 4.7 |
| 24 | 24 | 21 | e12 | e9.4 | 21 | 27 | 18 | 12 | 21 | 11 | 7.2 | 5.7 |
| 25 | 25 | 13 | 13 | e9.2 | 16 | 26 | 18 | 11 | 170 | 10 | 6.9 | 7.5 |
| 26 | 26 | 12 | 14 | e9.0 | 12 | 21 | 21 | 16 | 532 | 8.9 | 9.5 | 23 |
| 27 | 23 | 13 | 13 | e9.2 | 12 | 18 | 22 | 19 | 50 | 8.2 | 9.1 | 8.4 |
| 28 | 11 | 12 | 13 | e9.4 | 11 | 15 | 21 | 15 | 27 | 17 | 8.3 | 6.8 |
| 29 | 11 | 12 | 14 | e9.2 | 12 | 15 | 18 | 13 | 21 | 15 | 6.7 | 6.8 |
| 30 | 9.9 | 11 | 14 | e9.2 | --- | 15 | 15 | 12 | 16 | 11 | 5.5 | 5.9 |
| 31 | 10 | --- | 14 | e9.0 | --- | 16 | --- | 12 | --- | 10 | 5.5 | --- |
| TOTAL | 396.0 | 375 | 385.6 | 328.6 | 351.6 | 519 | 628 | 405.5 | 1058.9 | 880.4 | 239.4 | 166.4 |
| MEAN | 12.8 | 12.5 | 12.4 | 10.6 | 12.1 | 16.7 | 20.9 | 13.1 | 35.3 | 28.4 | 7.72 | 5.55 |
| MAX | 38 | 26 | 14 | 14 | 23 | 27 | 51 | 19 | 532 | 316 | 14 | 23 |
| MIN | 6.8 | 10 | 9.0 | 9.0 | 8.8 | 12 | 15 | 9.6 | 6.7 | 8.2 | 5.3 | 2.9 |
| AC-FT | 785 | 744 | 765 | 652 | 697 | 1030 | 1250 | 804 | 2100 | 1750 | 475 | 330 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2000, BY WATER YEAR (WY)

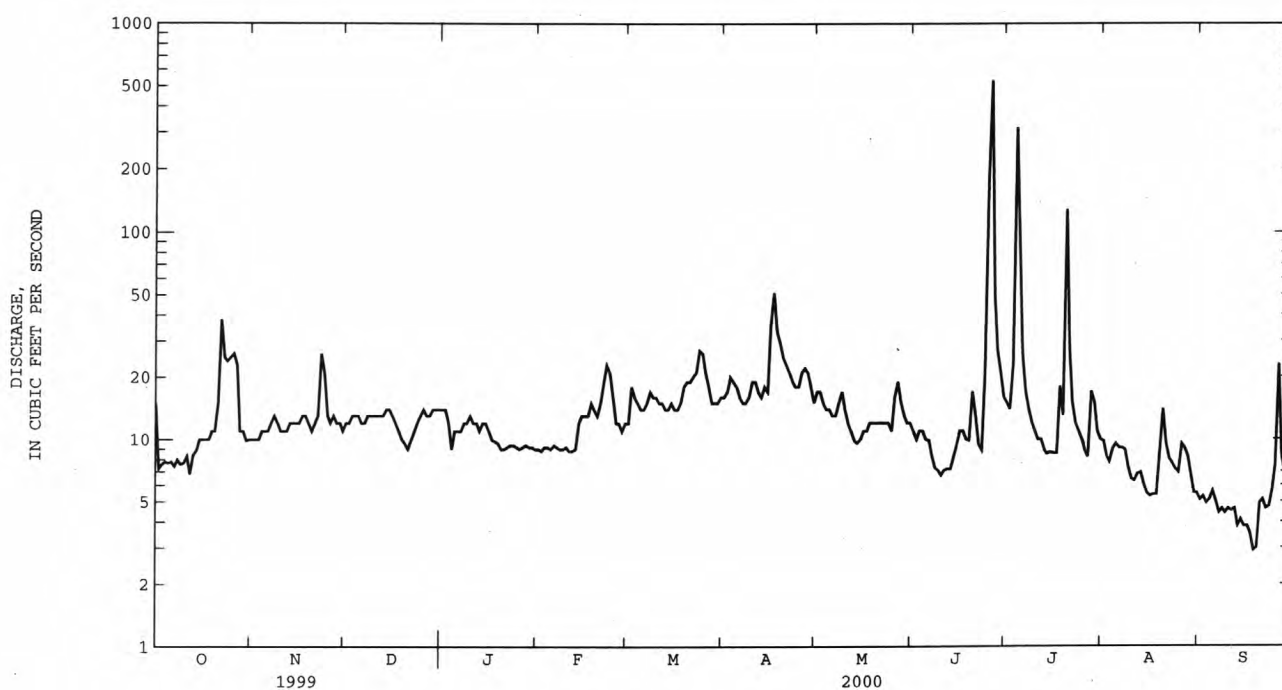
| | 40.9 | 21.4 | 16.6 | 18.9 | 38.2 | 86.2 | 69.4 | 92.2 | 90.5 | 81.1 | 31.3 | 23.5 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 40.9 | 21.4 | 16.6 | 18.9 | 38.2 | 86.2 | 69.4 | 92.2 | 90.5 | 81.1 | 31.3 | 23.5 |
| MAX | 617 | 167 | 108 | 140 | 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

06803000 SALT CREEK AT ROCA, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | FOR 2000 WATER YEAR | WATER YEARS 1952 - 2000 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 19501.4 | 5734.4 | 50.9 |
| ANNUAL MEAN | 53.4 | 15.7 | 41 |
| MEDIAN OF ANNUAL MEANS | | | 200 |
| HIGHEST ANNUAL MEAN | | | 1987 |
| LOWEST ANNUAL MEAN | | | 6.15 |
| HIGHEST DAILY MEAN | 2460 Apr 15 | 532 Jun 26 | 6070 Jul 14 1952 |
| LOWEST DAILY MEAN | 6.8 Oct 12 | 2.9 Sep 18 | .20 Jul 23 1955 |
| ANNUAL SEVEN-DAY MINIMUM | 7.6 Oct 2 | 3.6 Sep 13 | .61 Sep 6 1955 |
| INSTANTANEOUS PEAK FLOW | | 955 Jun 25 | 16700 Jul 10 1958 |
| INSTANTANEOUS PEAK STAGE | | 8.42 Jun 25 | 22.70 Jul 10 1958 |
| ANNUAL RUNOFF (AC-FT) | 38680 | 11370 | 36900 |
| 10 PERCENT EXCEEDS | 88 | 21 | 79 |
| 50 PERCENT EXCEEDS | 25 | 12 | 11 |
| 90 PERCENT EXCEEDS | 9.5 | 6.8 | 4.0 |

e Estimated.

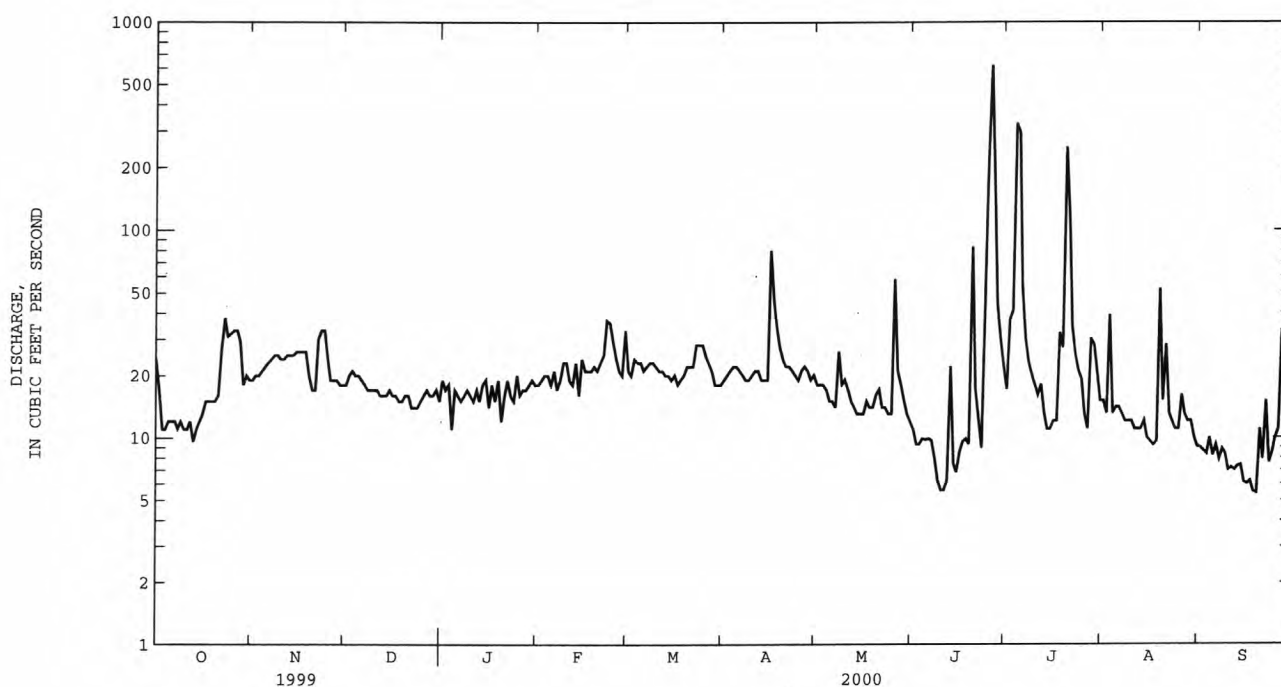


PLATTE RIVER BASIN

06803080 SALT CREEK AT PIONEERS BOULEVARD AT LINCOLN, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1994 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 24255.6 | | 8601.8 | | 86.6 | |
| ANNUAL MEAN | 66.5 | | 23.5 | | 124 | |
| HIGHEST ANNUAL MEAN | | | | | 23.5 | |
| LOWEST ANNUAL MEAN | | | | | 3380 | |
| HIGHEST DAILY MEAN | 1700 | Apr 15 | 619 | Jun 26 | 4.2 | May 9 1996 |
| LOWEST DAILY MEAN | 9.6 | Oct 13 | 5.4 | Sep 19 | 5.4 | Feb 3 1996 |
| ANNUAL SEVEN-DAY MINIMUM | 11 | Oct 8 | 6.3 | Sep 13 | 5.4 | Oct 17 1997 |
| INSTANTANEOUS PEAK FLOW | | | 1050 | Jun 25 | 6360 | Jul 20 1996 |
| INSTANTANEOUS PEAK STAGE | | | 9.50 | Jun 25 | 22.92 | Jul 20 1996 |
| ANNUAL RUNOFF (AC-FT) | 48110 | | 17060 | | 62740 | |
| 10 PERCENT EXCEEDS | 134 | | 29 | | 164 | |
| 50 PERCENT EXCEEDS | 33 | | 18 | | 31 | |
| 90 PERCENT EXCEEDS | 14 | | 9.3 | | 13 | |

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 1/4 NE 1/4, sec.12, T.9 N., R.5 E., Lancaster County, Hydrologic Unit 10200203, on right upstream bank.

DRAINAGE AREA.--60 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 periods of estimated record which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|
| 1 | .89 | 1.6 | 3.4 | 5.1 | 3.4 | 4.8 | 4.3 | 4.0 | .62 | 2.4 | 5.1 | .18 |
| 2 | .88 | 1.5 | 3.5 | 4.6 | 3.5 | 4.0 | 4.3 | 4.0 | .58 | 11 | 1.5 | .35 |
| 3 | 1.0 | 1.6 | 4.3 | e4.5 | e3.5 | 4.1 | 4.0 | 3.6 | .69 | 48 | 1.2 | .54 |
| 4 | 1.2 | 1.9 | 4.4 | e4.4 | e3.8 | 3.8 | 3.9 | 3.7 | .92 | 149 | 1.2 | .66 |
| 5 | 1.4 | 2.4 | 3.6 | 4.3 | e2.8 | 3.9 | 4.4 | 3.7 | .92 | 36 | 2.4 | .34 |
| 6 | 1.6 | 2.2 | 3.4 | 4.1 | e2.2 | 3.8 | 3.9 | 3.5 | .85 | 19 | 1.4 | .13 |
| 7 | 1.4 | 2.2 | 3.9 | 3.7 | e2.5 | 4.0 | 4.1 | 3.6 | .97 | 14 | .69 | .09 |
| 8 | 1.1 | 2.3 | 3.4 | 4.2 | e3.0 | 4.6 | 3.9 | 5.1 | .79 | 9.4 | 1.6 | .09 |
| 9 | 1.7 | 2.5 | 3.3 | 4.6 | e3.0 | 3.9 | 3.8 | 4.9 | .64 | 7.0 | .48 | .09 |
| 10 | 1.2 | 2.6 | 2.8 | 7.9 | e2.8 | 3.3 | 4.1 | 3.5 | .61 | 4.5 | .35 | .09 |
| 11 | 1.3 | 2.7 | 4.6 | 8.1 | e3.1 | 3.6 | 4.6 | 2.7 | .60 | 3.4 | .36 | .08 |
| 12 | 1.5 | 3.3 | 4.1 | 7.3 | e3.2 | 3.6 | 4.0 | 2.1 | .77 | 3.1 | .24 | .08 |
| 13 | 1.4 | 3.1 | 4.1 | 5.5 | e3.3 | 3.7 | 3.8 | 1.5 | .96 | 2.5 | .18 | .09 |
| 14 | 1.8 | 3.0 | e3.5 | 3.7 | e3.4 | 3.9 | 3.9 | 1.5 | 1.5 | 2.1 | .16 | .13 |
| 15 | 2.6 | 2.8 | e3.2 | 4.6 | 5.4 | 3.9 | 4.0 | 1.6 | 1.1 | 1.5 | .27 | .31 |
| 16 | 2.3 | 3.5 | e3.2 | 5.5 | 6.4 | 3.9 | 6.4 | 1.5 | .99 | 1.6 | .32 | .13 |
| 17 | 2.2 | 2.9 | e3.1 | 4.6 | 4.0 | 3.7 | 6.7 | 1.6 | .78 | 1.9 | .32 | .09 |
| 18 | 2.3 | 2.8 | e3.0 | 6.6 | 4.3 | 4.4 | 4.9 | 1.8 | .81 | 4.7 | .34 | .09 |
| 19 | 2.1 | 2.7 | e2.8 | 4.0 | 7.5 | 4.9 | 3.8 | 1.6 | 1.1 | 3.5 | 3.9 | .04 |
| 20 | 2.0 | 2.8 | e2.5 | 2.8 | 7.4 | 4.8 | 3.5 | 1.3 | 4.4 | 38 | 3.3 | .18 |
| 21 | 1.6 | 3.1 | e2.4 | 3.0 | 5.3 | 4.6 | 3.1 | 1.3 | 2.2 | 11 | 1.6 | .32 |
| 22 | 1.6 | 3.3 | e2.6 | 4.3 | 5.1 | 4.5 | 3.2 | 1.0 | 1.1 | 5.1 | 1.5 | .38 |
| 23 | 1.8 | 5.6 | e2.9 | 4.3 | 5.7 | 5.1 | 3.2 | .96 | 1.7 | 3.4 | 1.7 | .53 |
| 24 | 2.8 | 4.2 | e3.4 | 3.1 | 5.4 | 6.1 | 3.1 | .96 | 2.7 | 2.0 | 1.5 | .80 |
| 25 | 2.3 | 3.2 | 4.2 | e2.8 | 5.2 | 5.0 | 3.0 | .77 | 72 | 1.3 | 1.0 | .90 |
| 26 | 1.8 | 3.3 | 4.3 | e2.5 | 4.1 | 4.6 | 2.9 | 2.3 | 73 | 1.6 | 17 | .80 |
| 27 | 1.5 | 3.2 | 4.5 | e2.6 | 4.0 | 4.4 | 3.1 | 2.5 | 7.1 | 1.2 | 6.2 | .90 |
| 28 | 1.7 | 3.8 | 5.0 | e2.7 | 3.9 | 4.0 | 3.2 | 1.8 | 9.6 | 18 | 2.4 | 1.0 |
| 29 | 1.5 | 3.1 | 7.5 | e2.8 | 4.6 | 4.3 | 2.9 | 1.2 | 4.7 | 13 | 1.3 | 1.0 |
| 30 | 1.5 | 3.4 | 6.9 | e2.9 | --- | 4.4 | 3.2 | 1.0 | 2.6 | 2.7 | .49 | .80 |
| 31 | 1.4 | --- | 5.5 | 3.1 | --- | 4.1 | --- | .71 | --- | 1.8 | .34 | --- |
| TOTAL | 51.37 | 86.6 | 119.3 | 134.2 | 121.8 | 131.7 | 117.2 | 71.30 | 197.30 | 423.7 | 60.34 | 11.21 |
| MEAN | 1.66 | 2.89 | 3.85 | 4.33 | 4.20 | 4.25 | 3.91 | 2.30 | 6.58 | 13.7 | 1.95 | .37 |
| MAX | 2.8 | 5.6 | 7.5 | 8.1 | 7.5 | 6.1 | 6.7 | 5.1 | 73 | 149 | 17 | 1.0 |
| MIN | .88 | 1.5 | 2.4 | 2.5 | 2.2 | 3.3 | 2.9 | .71 | .58 | 1.2 | .16 | .04 |
| AC-FT | 102 | 172 | 237 | 266 | 242 | 261 | 232 | 141 | 391 | 840 | 120 | 22 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2000, BY WATER YEAR (WY)

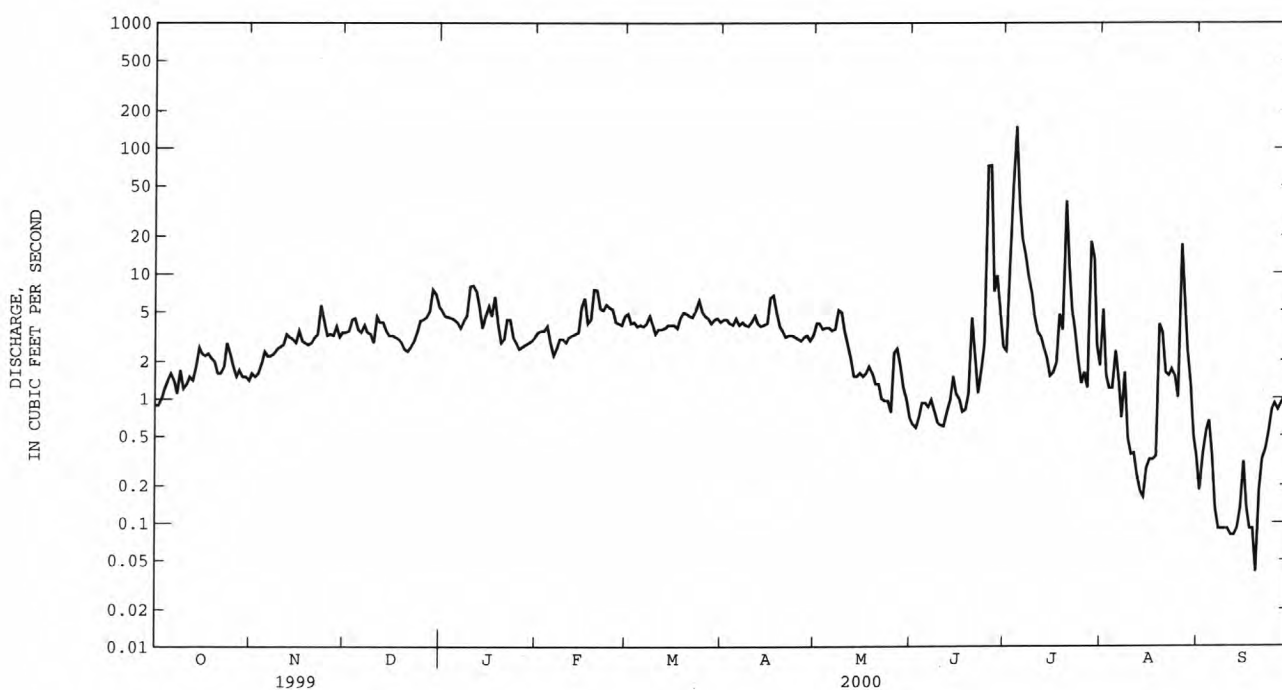
| | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|------|------|------|------|------|------|------|------|
| MEAN | 4.22 | 10.7 | 6.04 | 5.90 | 10.7 | 11.9 | 18.4 |
| MAX | 12.2 | 34.8 | 10.9 | 9.65 | 25.6 | 31.9 | 37.4 |
| (WY) | 1999 | 1999 | 1999 | 1999 | 1998 | 1998 | 1995 |
| MIN | 1.66 | 2.73 | 3.85 | 3.46 | 3.75 | 3.23 | 3.91 |
| (WY) | 2000 | 1995 | 2000 | 1996 | 1996 | 1996 | 2000 |

PLATTE RIVER BASIN

06803093 HAINES BRANCH AT SW 56th ST. AT LINCOLN, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | FOR 2000 WATER YEAR | WATER YEARS 1994 - 2000 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 4872.78 | 1526.02 | |
| ANNUAL MEAN | 13.4 | 4.17 | 14.4 |
| HIGHEST ANNUAL MEAN | | | 22.2 |
| LOWEST ANNUAL MEAN | | | 4.17 |
| HIGHEST DAILY MEAN | 325 | 149 | 786 |
| LOWEST DAILY MEAN | .88 | .04 | .04 |
| ANNUAL SEVEN-DAY MINIMUM | 1.2 | .09 | .09 |
| INSTANTANEOUS PEAK FLOW | | 446 | 1780 |
| INSTANTANEOUS PEAK STAGE | | 6.62 | 12.06 |
| ANNUAL RUNOFF (AC-FT) | 9670 | 3030 | 10460 |
| 10 PERCENT EXCEEDS | 24 | 5.4 | 28 |
| 50 PERCENT EXCEEDS | 8.7 | 3.0 | 5.5 |
| 90 PERCENT EXCEEDS | 1.6 | .61 | 1.6 |

e Estimated.



PLATTE RIVER BASIN

06803170 MIDDLE CREEK AT SW 40th ST. AT LINCOLN, NE

LOCATION...Lat 40°48'20", long 096°46'39", in NW ¼ SW ¼, sec.29, T.10 N., R.6 E., Lancaster County, Hydrologic Unit 10200203, on right downstream side of bridge.

DRAINAGE AREA...94 mi².

PERIOD OF RECORD...October 1994 to current year.

GAGE...Water-stage recorder. Datum of gage is 1,144.45 ft above sea level. Data collection platform at station.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| 1 | 3.5 | 3.7 | 4.5 | 4.6 | e4.0 | 5.6 | 4.6 | 4.3 | 3.7 | 2.5 | 2.7 | 2.0 |
| 2 | 3.2 | 3.8 | 4.6 | 4.6 | e4.2 | 5.6 | 4.5 | 3.9 | 3.5 | 2.7 | 2.7 | 1.9 |
| 3 | 3.3 | 3.8 | 5.0 | 4.5 | e4.2 | 4.6 | 4.4 | 3.8 | 3.4 | 38 | 2.9 | 1.9 |
| 4 | 3.4 | 3.9 | 5.1 | e4.0 | e4.4 | 4.5 | 4.4 | 3.8 | 3.2 | 118 | 2.7 | 1.9 |
| 5 | 3.4 | 4.1 | 4.7 | e3.8 | e4.4 | 4.3 | 4.1 | 3.8 | 3.2 | 10 | 2.7 | 1.8 |
| 6 | 3.3 | 4.3 | 4.4 | e30 | e4.4 | 4.3 | 4.1 | 3.9 | 3.1 | 4.3 | 2.6 | 1.8 |
| 7 | 3.4 | 4.3 | 4.4 | e25 | e4.2 | 4.5 | 4.1 | 4.3 | 3.0 | 3.3 | 2.4 | 1.7 |
| 8 | 3.2 | 4.5 | 4.5 | 21 | e4.2 | 4.6 | 4.5 | 4.4 | 2.9 | 3.0 | 2.2 | 1.8 |
| 9 | 3.3 | 4.4 | 4.3 | 17 | e4.0 | 4.7 | 4.3 | 4.5 | 2.4 | 2.8 | 2.2 | 1.7 |
| 10 | 3.2 | 4.3 | 4.8 | 17 | e4.0 | 4.7 | 4.1 | 4.2 | 2.6 | 2.8 | 2.2 | 1.7 |
| 11 | 3.1 | 4.2 | 4.3 | 16 | e4.2 | 4.3 | 4.5 | 4.2 | 2.5 | 2.9 | 2.2 | 1.7 |
| 12 | 3.4 | 4.3 | 4.3 | 17 | e4.0 | 4.2 | 4.2 | 4.1 | 3.7 | 2.7 | 2.3 | 1.7 |
| 13 | 3.3 | 4.2 | 5.2 | 20 | e4.0 | 4.3 | 4.4 | 4.1 | 3.9 | 2.6 | 2.1 | 1.7 |
| 14 | 3.6 | 4.2 | 4.3 | 27 | 5.6 | 4.5 | 4.5 | 4.2 | 2.9 | 2.6 | 2.1 | 1.6 |
| 15 | 3.8 | 4.2 | e4.1 | 9.7 | 4.7 | 4.4 | 4.3 | 4.5 | 2.5 | 2.6 | 2.0 | 1.7 |
| 16 | 3.7 | 4.2 | e3.6 | 9.1 | 4.6 | 4.5 | 6.5 | 4.5 | 2.4 | 2.8 | 2.0 | 1.7 |
| 17 | 3.3 | 4.2 | e3.8 | 9.5 | 4.6 | 4.3 | 7.1 | 4.6 | 2.4 | 2.8 | 2.0 | 1.7 |
| 18 | 3.5 | 4.3 | e4.0 | 9.1 | 6.2 | 4.6 | 5.4 | 4.5 | 2.2 | 4.0 | 2.1 | 1.7 |
| 19 | 3.6 | 4.1 | e3.9 | e6.4 | 4.9 | 5.2 | 4.6 | 4.8 | 2.3 | 3.5 | 3.5 | 1.8 |
| 20 | 3.8 | 4.3 | e3.5 | e5.0 | 4.9 | 5.2 | 4.1 | 4.7 | 3.8 | 52 | 3.1 | 2.1 |
| 21 | 6.6 | 4.2 | e3.0 | e4.2 | 4.8 | 4.9 | 4.4 | 4.9 | 2.9 | 7.4 | 3.4 | 2.0 |
| 22 | 19 | 4.5 | e3.1 | e4.2 | 5.1 | 4.8 | 3.7 | 4.4 | 2.6 | 3.2 | 2.7 | 2.0 |
| 23 | 19 | 6.0 | e3.5 | e4.4 | 5.8 | 5.1 | 3.7 | 4.2 | 2.3 | 2.7 | 2.2 | 2.0 |
| 24 | 19 | 5.2 | 4.8 | e4.4 | 5.7 | 5.7 | 3.7 | 4.2 | 2.7 | 2.6 | 2.1 | 2.1 |
| 25 | 19 | 4.7 | 5.1 | e4.2 | 5.2 | 5.3 | 3.7 | 4.1 | 47 | 2.7 | 2.1 | 1.9 |
| 26 | 18 | 4.6 | 4.7 | e3.8 | 4.6 | 4.7 | 3.8 | 6.1 | 89 | 2.6 | 2.1 | 2.0 |
| 27 | 15 | 4.4 | 4.7 | e3.6 | 4.4 | 4.4 | 3.9 | 7.8 | 5.0 | 2.6 | 2.0 | 4.9 |
| 28 | 3.9 | 4.4 | 4.7 | e4.0 | 4.3 | 4.3 | 3.9 | 6.1 | 3.1 | 3.4 | 2.0 | 5.0 |
| 29 | 3.7 | 4.2 | 4.9 | e4.4 | 4.6 | 4.3 | 3.7 | 4.8 | 2.7 | 4.9 | 1.9 | 4.8 |
| 30 | 3.7 | 4.3 | 4.7 | e4.2 | --- | 4.3 | 3.8 | 4.1 | 2.5 | 3.1 | 1.9 | 4.7 |
| 31 | 3.8 | --- | 4.9 | e4.0 | --- | 4.3 | --- | 3.8 | --- | 2.8 | 1.9 | --- |
| TOTAL | 199.0 | 129.8 | 135.4 | 305.7 | 134.2 | 145.0 | 131.0 | 139.6 | 219.4 | 303.9 | 73.0 | 67.0 |
| MEAN | 6.42 | 4.33 | 4.37 | 9.86 | 4.63 | 4.68 | 4.37 | 4.50 | 7.31 | 9.80 | 2.35 | 2.23 |
| MAX | 19 | 6.0 | 5.2 | 30 | 6.2 | 5.7 | 7.1 | 7.8 | 89 | 118 | 3.5 | 5.0 |
| MIN | 3.1 | 3.7 | 3.0 | 3.6 | 4.0 | 4.2 | 3.7 | 3.8 | 2.2 | 2.5 | 1.9 | 1.6 |
| AC-FT | 395 | 257 | 269 | 606 | 266 | 288 | 260 | 277 | 435 | 603 | 145 | 133 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2000, BY WATER YEAR (WY)

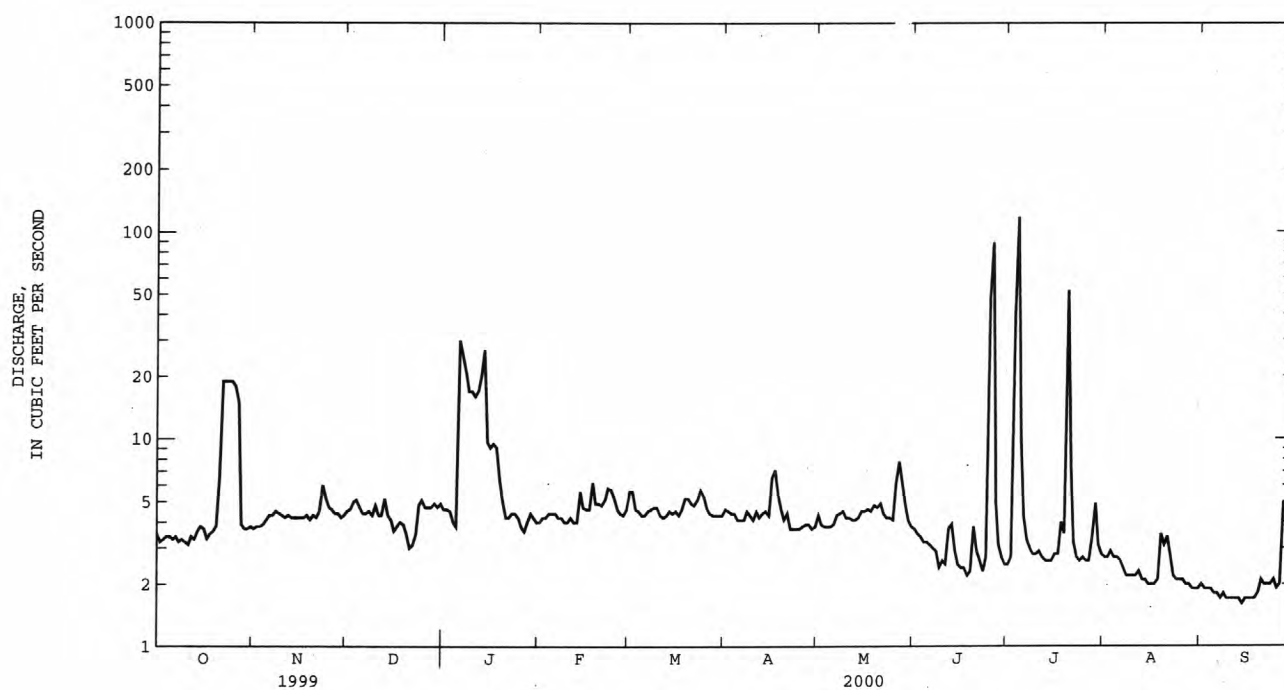
| | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|------|------|------|------|------|------|------|------|
| MEAN | 7.74 | 9.87 | 8.26 | 7.84 | 9.80 | 12.0 | 17.9 |
| MAX | 13.0 | 17.7 | 19.8 | 9.86 | 14.3 | 23.1 | 37.4 |
| (WY) | 1997 | 1999 | 1998 | 2000 | 1998 | 1998 | 1995 |
| MIN | 5.12 | 3.98 | 4.05 | 4.03 | 4.63 | 3.40 | 1.98 |
| (WY) | 1995 | 1996 | 1996 | 1996 | 2000 | 1996 | 2000 |

PLATTE RIVER BASIN

06803170 MIDDLE CREEK AT SW 40th ST. AT LINCOLN, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1994 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 8661.9 | | 1983.0 | | 19.9 | |
| ANNUAL MEAN | 23.7 | | 5.42 | | 32.6 | |
| HIGHEST ANNUAL MEAN | | | | | 5.42 | |
| LOWEST ANNUAL MEAN | | | | | 1840 | |
| HIGHEST DAILY MEAN | 423 | Jul 1 | 118 | Jul 4 | 1.2 | Jun 14 1998 |
| LOWEST DAILY MEAN | 3.0 | Dec 21 | 1.6 | Sep 14 | .92 | Aug 29 1995 |
| ANNUAL SEVEN-DAY MINIMUM | 3.2 | Sep 15 | 1.7 | Sep 9 | 1.2 | Apr 21 1996 |
| INSTANTANEOUS PEAK FLOW | | | 352 | Jul 4 | 4030 | Jun 14 1998 |
| INSTANTANEOUS PEAK STAGE | | | 5.05 | Jul 4 | 16.25 | Jun 14 1998 |
| ANNUAL RUNOFF (AC-FT) | 17180 | | 3930 | | 14440 | |
| 10 PERCENT EXCEEDS | 55 | | 5.7 | | 37 | |
| 50 PERCENT EXCEEDS | 11 | | 4.2 | | 7.1 | |
| 90 PERCENT EXCEEDS | 3.7 | | 2.1 | | 3.4 | |

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 $\frac{1}{4}$ NE $\frac{1}{4}$, sec.7, T.10 N., R.6 E., Lancaster County, Hydrologic Unit 10200203, on left bank at downstream of bridge on Air Park Road immediately west of NW 42nd Street in West Lincoln Industrial Park.

DRAINAGE AREA.--240 mi².

PERIOD OF RECORD.--October 1999 to September 2000.

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 good except for periods of estimated record 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 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|--------|------|-------|-------|
| 1 | 29 | 97 | 28 | 29 | e27 | 29 | 24 | 34 | 17 | 23 | 25 | 7.5 |
| 2 | 28 | 96 | 28 | 30 | e28 | 31 | 25 | 34 | 15 | 23 | 24 | 6.6 |
| 3 | 28 | 94 | 30 | 29 | e23 | 24 | 25 | 33 | 14 | 39 | 25 | 7.1 |
| 4 | 27 | 97 | 32 | 20 | e26 | 23 | 23 | 31 | 14 | 48 | 23 | 9.5 |
| 5 | 27 | 99 | 30 | 28 | 30 | 22 | 22 | 32 | 12 | 23 | 20 | 9.8 |
| 6 | 27 | 99 | 28 | 32 | 24 | 23 | 22 | 33 | 11 | 19 | 20 | 8.6 |
| 7 | 28 | 99 | 27 | 34 | 18 | 22 | 22 | 34 | 11 | 17 | 21 | 7.6 |
| 8 | 27 | 100 | 28 | 62 | 18 | 23 | e21 | 40 | 10 | 15 | 19 | 7.6 |
| 9 | 27 | 101 | 27 | 60 | 24 | 22 | e21 | 33 | 9.8 | 13 | 16 | 8.0 |
| 10 | 26 | 101 | 26 | 62 | 22 | 22 | 21 | 19 | 8.9 | 11 | 12 | 8.0 |
| 11 | 25 | 101 | 25 | 66 | 20 | 20 | 23 | 17 | 8.6 | 19 | 6.5 | 7.3 |
| 12 | 26 | 100 | 26 | 56 | 16 | 19 | 24 | 15 | 18 | 55 | 5.6 | 7.2 |
| 13 | 27 | 100 | 24 | 60 | e14 | 20 | 23 | 14 | 16 | 36 | 6.3 | 6.6 |
| 14 | 27 | 99 | 25 | e70 | e16 | 20 | 21 | 14 | 16 | 28 | 7.7 | 6.3 |
| 15 | 28 | 99 | 27 | 62 | e19 | 18 | e21 | 14 | 13 | 27 | 6.6 | 6.1 |
| 16 | 26 | 99 | 24 | 54 | e18 | 20 | e22 | 15 | 16 | 28 | 6.3 | 7.2 |
| 17 | 27 | 98 | e23 | 54 | e17 | 20 | e23 | 16 | 15 | 29 | 5.9 | 5.8 |
| 18 | 26 | 98 | e24 | 56 | e17 | 20 | e23 | 18 | 14 | 36 | 6.3 | 6.0 |
| 19 | 26 | 39 | e23 | 56 | 19 | 22 | 24 | 20 | 13 | 34 | 17 | 5.2 |
| 20 | 27 | 29 | e22 | 43 | 19 | 21 | e23 | 22 | 27 | 33 | 14 | 7.4 |
| 21 | 26 | 29 | e23 | e38 | 24 | 22 | 23 | 17 | 25 | 29 | 27 | 6.6 |
| 22 | 83 | 31 | e24 | e45 | 25 | 22 | e22 | 17 | 14 | 25 | 19 | 8.7 |
| 23 | 93 | 36 | 26 | e42 | 28 | 24 | e22 | 16 | 7.5 | 24 | 17 | 7.4 |
| 24 | 93 | 34 | 28 | e38 | 28 | 27 | e23 | 15 | 17 | 27 | 15 | 8.7 |
| 25 | 94 | 30 | 29 | e35 | 27 | e25 | 27 | 15 | 109 | 29 | 12 | 8.0 |
| 26 | 94 | 30 | 30 | e33 | 23 | e23 | 27 | 28 | 371 | 25 | 14 | 7.6 |
| 27 | 95 | 29 | 29 | e34 | 20 | 19 | 28 | 32 | 92 | 23 | 12 | 6.9 |
| 28 | 94 | 29 | 29 | e30 | 20 | 20 | 30 | 28 | 41 | 22 | 13 | 6.9 |
| 29 | 95 | 28 | 30 | e28 | 25 | 21 | 30 | 20 | 30 | 23 | 9.9 | 6.0 |
| 30 | 95 | 28 | 30 | e26 | --- | 22 | 32 | 18 | 25 | 20 | 8.4 | 6.0 |
| 31 | 97 | --- | 29 | e25 | --- | 23 | --- | 18 | --- | 20 | 7.4 | --- |
| TOTAL | 1498 | 2149 | 834 | 1337 | 635 | 689 | 717 | 712 | 1010.8 | 823 | 441.9 | 218.2 |
| MEAN | 48.3 | 71.6 | 26.9 | 43.1 | 21.9 | 22.2 | 23.9 | 23.0 | 33.7 | 26.5 | 14.3 | 7.27 |
| MAX | 97 | 101 | 32 | 70 | 30 | 31 | 32 | 40 | 371 | 55 | 27 | 9.8 |
| MIN | 25 | 28 | 22 | 20 | 14 | 18 | 21 | 14 | 7.5 | 11 | 5.6 | 5.2 |
| AC-FT | 2970 | 4260 | 1650 | 2650 | 1260 | 1370 | 1420 | 1410 | 2000 | 1630 | 877 | 433 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2000, BY WATER YEAR (WY)

| | MEAN | MAX | MIN | (WY) |
|------|------|-----|-----|------|
| 2000 | 48.3 | 97 | 25 | 2000 |
| 2000 | 71.6 | 101 | 28 | 2000 |
| 2000 | 26.9 | 32 | 22 | 2000 |
| 2000 | 43.1 | 70 | 20 | 2000 |
| 2000 | 21.9 | 30 | 14 | 2000 |
| 2000 | 22.2 | 31 | 18 | 2000 |
| 2000 | 23.9 | 32 | 21 | 2000 |
| 2000 | 23.0 | 40 | 14 | 2000 |
| 2000 | 33.7 | 371 | 7.5 | 2000 |
| 2000 | 26.5 | 55 | 11 | 2000 |
| 2000 | 14.3 | 27 | 5.6 | 2000 |
| 2000 | 7.27 | 9.8 | 5.2 | 2000 |

PLATTE RIVER BASIN

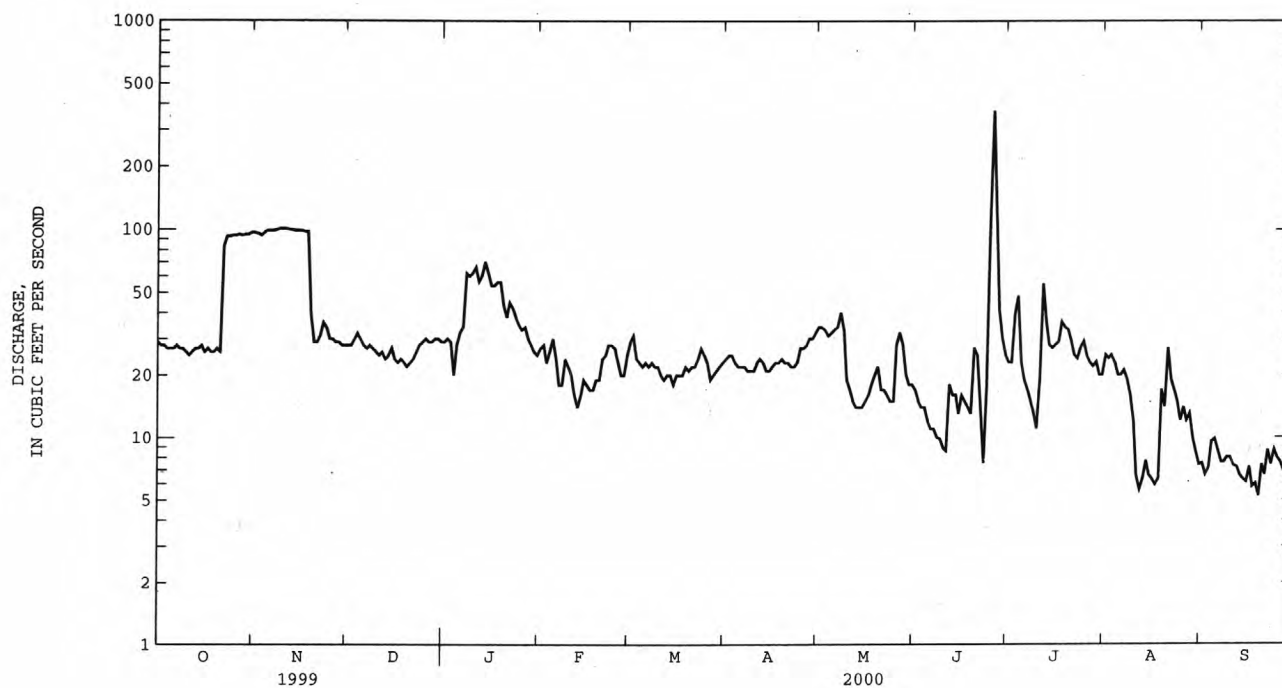
06803486 OAK CREEK AT AIR PARK ROAD AT LINCOLN, NE--Continued

SUMMARY STATISTICS

FOR 2000 WATER YEAR

| | | |
|--------------------------|---------|--------|
| ANNUAL TOTAL | 11064.9 | |
| ANNUAL MEAN | 30.2 | |
| HIGHEST DAILY MEAN | 371 | Jun 26 |
| LOWEST DAILY MEAN | 5.2 | Sep 19 |
| ANNUAL SEVEN-DAY MINIMUM | 6.2 | Sep 13 |
| INSTANTANEOUS PEAK FLOW | 584 | Jun 26 |
| INSTANTANEOUS PEAK STAGE | 4.16 | Jun 26 |
| ANNUAL RUNOFF (AC-FT) | 21950 | |
| 10 PERCENT EXCEEDS | 61 | |
| 50 PERCENT EXCEEDS | 24 | |
| 90 PERCENT EXCEEDS | 8.5 | |

e Estimated.



PLATTE RIVER BASIN

06803500 SALT CREEK AT LINCOLN, NE

LOCATION.--Lat 40°50'49", long 096°40'54", in NW 1/4 SW 1/4 sec.7, T.10 N., R.7 E., Lancaster County, Hydrologic Unit 10200203 on right bank 135 ft downstream from bridge on North 27th Street at north edge of Lincoln, 1 mi downstream from Oak Creek and at mile 31.0.

DRAINAGE AREA. - - 685 mi².

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

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

GAGE.--Water-stage recorder. Datum of gage is 1,113.90 ft above sea level. Prior to July 27, 1979, water-stage recorder for stages above 6.2 ft on downstream side of bridge pier, 135 ft upstream at same datum, and nonrecording gage read twice daily. Data collection platform at station.

REMARKS.--Records good. Flood flow affected by several detention dams.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|-------|-------|------|------|
| 1 | 119 | 173 | 89 | 78 | 126 | 138 | 107 | 121 | 99 | 116 | 108 | 82 |
| 2 | 106 | 168 | 91 | 79 | 106 | 122 | 100 | 114 | 93 | 113 | 103 | 76 |
| 3 | 95 | 166 | 119 | 80 | 105 | 110 | 100 | 106 | 89 | 354 | 150 | 72 |
| 4 | 96 | 165 | 103 | e78 | 95 | 101 | 101 | 100 | 88 | 887 | 110 | 133 |
| 5 | 99 | 167 | 97 | 97 | 85 | 98 | 103 | 93 | 77 | 473 | 104 | 77 |
| 6 | 99 | 170 | 94 | 115 | 103 | 96 | 110 | 92 | 69 | 227 | 103 | 74 |
| 7 | 98 | 164 | 90 | 110 | 92 | 98 | 105 | 88 | 68 | 155 | 103 | 69 |
| 8 | 95 | 169 | 89 | 128 | 91 | 124 | 104 | 201 | 65 | 129 | 97 | 67 |
| 9 | 96 | 168 | 89 | 147 | 107 | 105 | 99 | 132 | 63 | 114 | 93 | 67 |
| 10 | 94 | 167 | 86 | 144 | 100 | 104 | 105 | 109 | 58 | 110 | 86 | 62 |
| 11 | 91 | 166 | 84 | 139 | 92 | 97 | 108 | 92 | 55 | 105 | 76 | 66 |
| 12 | 92 | 169 | 85 | 139 | 87 | 95 | 110 | 85 | 210 | 236 | 72 | 64 |
| 13 | 89 | 171 | 84 | 132 | 99 | 94 | 109 | 82 | 164 | 137 | 70 | 67 |
| 14 | 89 | 163 | 85 | 138 | 92 | 94 | 109 | 76 | 110 | 114 | 74 | 67 |
| 15 | 93 | 163 | 86 | 148 | 109 | 91 | 107 | 80 | 75 | 101 | 73 | 66 |
| 16 | 91 | 162 | 78 | 133 | 102 | 92 | 390 | 80 | 93 | 102 | 72 | 66 |
| 17 | 90 | 162 | 79 | 134 | 104 | 89 | 193 | 95 | 73 | 102 | 70 | 65 |
| 18 | 90 | 165 | e82 | 138 | 118 | 122 | 160 | 98 | 72 | 264 | 68 | 64 |
| 19 | 90 | 111 | e86 | 141 | 123 | 112 | 139 | 96 | 75 | 155 | 296 | 62 |
| 20 | 95 | 100 | e74 | 97 | 122 | 102 | 129 | 104 | 409 | 495 | 120 | 148 |
| 21 | 98 | 94 | 78 | 110 | 128 | 101 | 129 | 117 | 121 | 297 | 301 | 71 |
| 22 | 171 | 147 | 84 | 140 | 121 | 98 | 120 | 92 | 92 | 164 | 128 | 131 |
| 23 | 227 | 249 | 87 | 120 | 218 | 151 | 115 | 89 | 77 | 146 | 110 | 73 |
| 24 | 214 | 140 | 90 | 87 | 144 | 150 | 118 | 85 | 178 | 132 | 100 | 77 |
| 25 | 216 | 113 | 84 | 124 | 131 | 118 | 113 | 87 | 608 | 138 | 95 | 71 |
| 26 | 216 | 99 | 92 | 103 | 115 | 108 | 119 | 365 | 1440 | 118 | 108 | 69 |
| 27 | 215 | 94 | 98 | 129 | 106 | 100 | 127 | 154 | 450 | 112 | 105 | 103 |
| 28 | 193 | 94 | 94 | 129 | 102 | 94 | 113 | 127 | 202 | 177 | 96 | 80 |
| 29 | 181 | 94 | 94 | 123 | 210 | 91 | 108 | 113 | 152 | 159 | 89 | 73 |
| 30 | 175 | 90 | 94 | 122 | --- | 92 | 139 | 104 | 127 | 121 | 84 | 67 |
| 31 | 174 | --- | 77 | 112 | --- | 95 | --- | 100 | --- | 106 | 80 | --- |
| TOTAL | 3987 | 4423 | 2742 | 3694 | 3333 | 3282 | 3789 | 3477 | 5552 | 6159 | 3344 | 2329 |
| MEAN | 129 | 147 | 88.5 | 119 | 115 | 106 | 126 | 112 | 185 | 199 | 108 | 77.6 |
| MAX | 227 | 249 | 119 | 148 | 218 | 151 | 390 | 365 | 1440 | 887 | 301 | 148 |
| MIN | 89 | 90 | 74 | 78 | 85 | 89 | 99 | 76 | 55 | 101 | 68 | 62 |
| AC-FT | 7910 | 8770 | 5440 | 7330 | 6610 | 6510 | 7520 | 6900 | 11010 | 12220 | 6630 | 4620 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2000, BY WATER YEAR (WY)

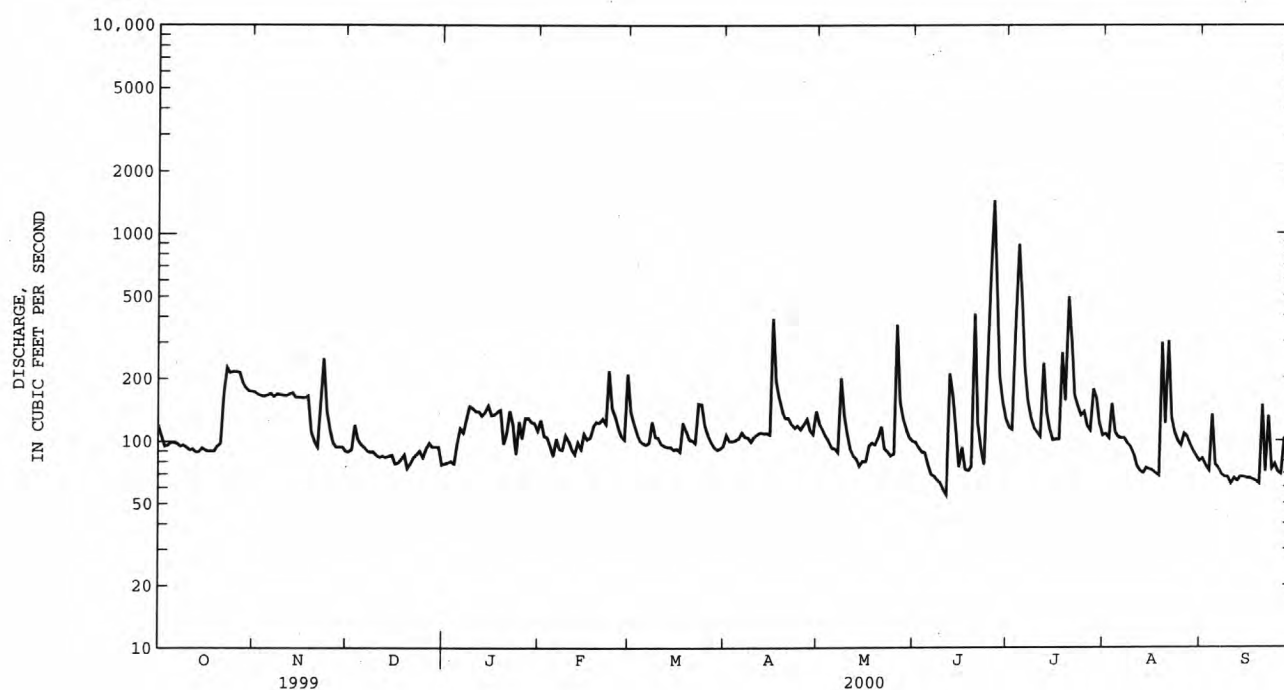
| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 174 | 117 | 97.3 | 106 | 173 | 334 | 284 | 400 | 502 | 343 | 187 | 175 |
| MAX | 1621 | 442 | 349 | 350 | 577 | 1972 | 1383 | 1693 | 3061 | 3205 | 704 | 1075 |
| (WY) | 1974 | 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

06803500 SALT CREEK AT LINCOLN, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1950 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 108156 | | 46111 | | 241 | |
| ANNUAL MEAN | 296 | | 126 | | 721 | 1987 |
| HIGHEST ANNUAL MEAN | | | | | 81.4 | 1970 |
| LOWEST ANNUAL MEAN | | | | | 22100 | Jun 2 1951 |
| HIGHEST DAILY MEAN | 4800 | Apr 15 | 1440 | Jun 26 | 21 | Jul 10 1977 |
| LOWEST DAILY MEAN | 74 | Dec 20 | 55 | Jun 11 | 26 | May 19 1956 |
| ANNUAL SEVEN-DAY MINIMUM | 80 | Dec 16 | 65 | Jun 5 | 28400 | Jul 24 1993 |
| INSTANTANEOUS PEAK FLOW | | | 1960 | Jun 26 | 26.52 | Jul 24 1993 |
| INSTANTANEOUS PEAK STAGE | | | 6.89 | Jun 26 | 174700 | |
| ANNUAL RUNOFF (AC-FT) | 214500 | | 91460 | | 397 | |
| 10 PERCENT EXCEEDS | 518 | | 171 | | 98 | |
| 50 PERCENT EXCEEDS | 166 | | 103 | | 51 | |
| 90 PERCENT EXCEEDS | 92 | | 74 | | | |

e Estimated.



LOCATION.--Lat 40°53'36", long 096°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.

GAGE.--Water-stage recorder. Datum of gage is 1,114.73 ft above sea level. Prior to Oct. 10, 1980, water-stage recorder at present site and datum 3.00 ft higher.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2000, BY WATER YEAR (WY)

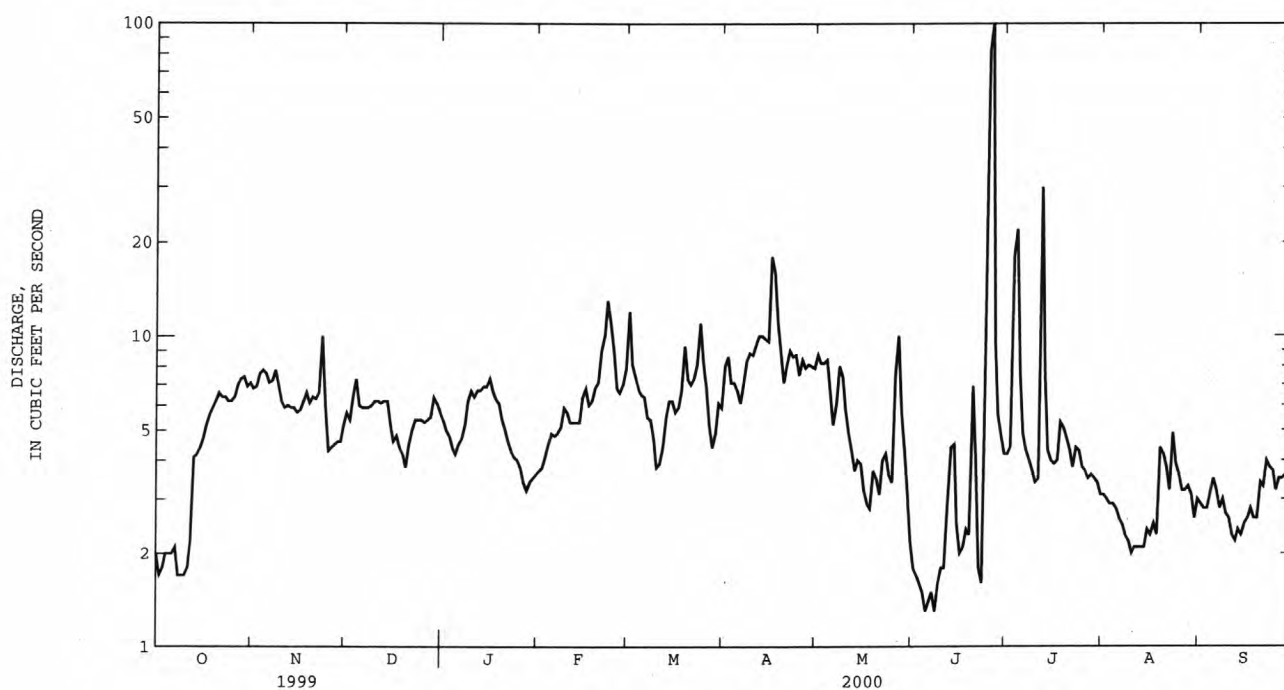
| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 10.1 | 7.62 | 6.62 | 7.23 | 12.0 | 25.4 | 17.2 | 23.0 | 24.9 | 26.9 | 11.6 | 10.1 |
| MAX | 87.5 | 20.5 | 16.8 | 25.3 | 42.3 | 134 | 68.6 | 85.3 | 180 | 379 | 110 | 87.2 |
| (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

06803510 LITTLE SALT CREEK NEAR LINCOLN, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1969 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 5660.0 | | 2116.3 | | 15.3 | |
| ANNUAL MEAN | 15.5 | | 5.78 | | 51.7 | |
| HIGHEST ANNUAL MEAN | | | | | 3.59 | |
| LOWEST ANNUAL MEAN | | | | | 1993 | |
| HIGHEST DAILY MEAN | 697 | Jun 30 | 100 | Jun 26 | 5020 | Jul 24 1993 |
| LOWEST DAILY MEAN | 1.7 | Oct 2 | 1.3 | Jun 5 | .20 | Sep 29 1969 |
| ANNUAL SEVEN-DAY MINIMUM | 1.9 | Oct 5 | 1.5 | Jun 3 | .28 | Sep 28 1969 |
| INSTANTANEOUS PEAK FLOW | | | 460 | Jun 25 | 8480 | Jul 24 1993 |
| INSTANTANEOUS PEAK STAGE | | | 5.98 | Jun 25 | 20.58 | Jul 24 1993 |
| ANNUAL RUNOFF (AC-FT) | 11230 | | 4200 | | 11120 | |
| 10 PERCENT EXCEEDS | 17 | | 8.2 | | 19 | |
| 50 PERCENT EXCEEDS | 7.1 | | 5.0 | | 5.8 | |
| 90 PERCENT EXCEEDS | 3.9 | | 2.3 | | 2.3 | |

e Estimated.



PLATTE RIVER BASIN

06803513 SALT CREEK AT 70th STREET AT LINCOLN, NE

LOCATION.--Lat 40°53'10", long 096°37'26", in SW ¼ SW ¼ sec. 27, T.11 N., R.7 W., Lancaster County, Hydrologic Unit 10200203, on left bank downstream from bridge.

DRAINAGE AREA.--753 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 1,095.85 ft above sea level. Data collection platform at station.

REMARKS.--Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|-------|-------|------|------|
| 1 | 135 | 158 | 100 | 108 | 152 | 172 | 110 | 135 | 98 | 120 | 113 | 82 |
| 2 | 122 | 157 | 101 | 109 | 142 | 143 | 101 | 121 | 91 | 119 | 112 | 80 |
| 3 | 114 | 157 | 129 | 110 | 135 | 137 | 101 | 115 | 89 | 379 | 195 | 76 |
| 4 | 117 | 153 | 113 | 102 | 130 | 126 | 104 | 109 | 86 | 906 | 130 | 128 |
| 5 | 114 | 152 | 111 | 117 | 121 | 120 | 100 | 103 | 84 | 439 | 114 | 80 |
| 6 | 112 | 155 | 108 | 133 | 132 | 115 | 102 | 102 | 79 | 230 | 110 | 77 |
| 7 | 110 | 152 | 106 | 131 | 123 | 110 | 100 | 101 | 90 | 155 | 111 | 73 |
| 8 | 108 | 157 | 105 | 142 | 119 | 135 | 103 | 229 | 76 | 129 | 107 | 73 |
| 9 | 106 | 158 | 105 | 157 | 128 | 117 | 98 | 141 | 74 | 114 | 102 | 72 |
| 10 | 104 | 156 | 105 | 158 | 125 | 118 | 101 | 123 | 72 | 111 | 93 | 67 |
| 11 | 105 | 156 | 104 | 156 | 121 | 112 | 106 | 107 | 69 | 109 | 88 | 68 |
| 12 | 104 | 155 | 104 | 158 | 120 | 106 | 106 | 99 | 238 | 369 | 83 | 68 |
| 13 | 101 | 155 | 105 | 150 | 121 | 107 | 103 | 91 | 167 | 151 | 77 | 68 |
| 14 | 101 | 151 | 105 | 154 | 116 | 109 | 102 | 85 | 155 | 122 | 81 | 66 |
| 15 | 105 | 151 | 112 | 165 | 124 | 104 | 102 | 89 | 95 | 114 | 81 | 67 |
| 16 | 103 | 150 | 111 | 155 | 120 | 106 | 432 | 87 | 108 | 112 | 82 | 67 |
| 17 | 102 | 151 | 109 | 153 | 118 | 104 | 199 | 94 | 91 | 116 | 80 | 65 |
| 18 | 105 | 153 | 113 | 158 | 133 | 129 | 159 | 103 | 86 | 297 | 78 | 66 |
| 19 | 106 | 124 | 117 | 160 | 139 | 133 | 137 | 103 | 88 | 162 | 320 | 66 |
| 20 | 107 | 104 | 100 | 138 | 138 | 118 | 127 | 100 | 450 | 443 | 140 | 145 |
| 21 | 107 | 100 | 103 | 137 | 143 | 116 | 124 | 121 | 135 | 284 | 331 | 83 |
| 22 | 142 | 120 | 110 | 162 | 140 | 113 | 117 | 96 | 105 | 165 | 141 | 132 |
| 23 | 195 | 295 | 110 | 150 | 239 | 153 | 114 | 93 | 101 | 150 | 117 | 84 |
| 24 | 187 | 139 | 114 | 128 | 167 | 172 | 115 | 91 | 195 | 136 | 105 | 88 |
| 25 | 189 | 119 | 108 | 150 | 153 | 127 | 113 | 93 | 871 | 136 | 99 | 86 |
| 26 | 191 | 106 | 112 | 140 | 134 | 116 | 110 | 407 | 1460 | 123 | 100 | 82 |
| 27 | 190 | 101 | 117 | 150 | 126 | 110 | 132 | 184 | 460 | 118 | 102 | 99 |
| 28 | 175 | 100 | 115 | 151 | 124 | 105 | 111 | 131 | 201 | 172 | 93 | 90 |
| 29 | 167 | 101 | 118 | 149 | 231 | 103 | 109 | 113 | 155 | 160 | 88 | 84 |
| 30 | 160 | 101 | 120 | 146 | --- | 98 | 139 | 106 | 134 | 128 | 84 | 80 |
| 31 | 159 | --- | 108 | 142 | --- | 100 | --- | 101 | --- | 116 | 81 | --- |
| TOTAL | 4043 | 4287 | 3398 | 4419 | 4014 | 3734 | 3777 | 3773 | 6203 | 6385 | 3638 | 2462 |
| MEAN | 130 | 143 | 110 | 143 | 138 | 120 | 126 | 122 | 207 | 206 | 117 | 82.1 |
| MAX | 195 | 295 | 129 | 165 | 239 | 172 | 432 | 407 | 1460 | 906 | 331 | 145 |
| MIN | 101 | 100 | 100 | 102 | 116 | 98 | 98 | 85 | 69 | 109 | 77 | 65 |
| AC-FT | 8020 | 8500 | 6740 | 8770 | 7960 | 7410 | 7490 | 7480 | 12300 | 12660 | 7220 | 4880 |

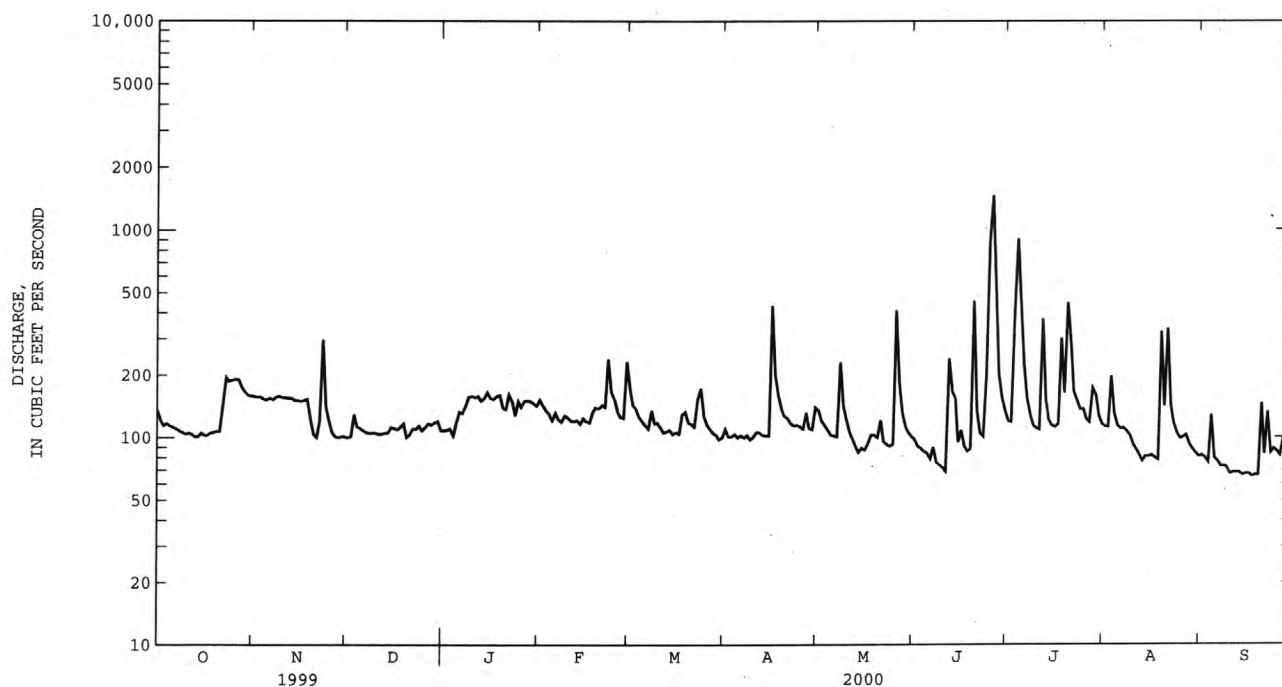
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2000, BY WATER YEAR (WY)

| | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|------|------|------|------|------|------|------|------|
| MEAN | 155 | 239 | 148 | 147 | 206 | 227 | 343 |
| MAX | 307 | 471 | 220 | 162 | 327 | 455 | 621 |
| (WY) | 1999 | 1999 | 1998 | 1998 | 1998 | 1998 | 1995 |
| MIN | 96.4 | 99.3 | 107 | 115 | 138 | 120 | 126 |
| (WY) | 1996 | 1996 | 1996 | 1996 | 2000 | 2000 | 2000 |

PLATTE RIVER BASIN

06803513 SALT CREEK AT 70th STREET AT LINCOLN, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | FOR 2000 WATER YEAR | WATER YEARS 1994 - 2000 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 115543 | 50133 | |
| ANNUAL MEAN | 317 | 137 | 303 |
| HIGHEST ANNUAL MEAN | | | 400 |
| LOWEST ANNUAL MEAN | | | 137 |
| HIGHEST DAILY MEAN | 4980 | 1460 | 10200 |
| LOWEST DAILY MEAN | 100 | 65 | 65 |
| ANNUAL SEVEN-DAY MINIMUM | 101 | 66 | 66 |
| INSTANTANEOUS PEAK FLOW | | 3190 | 15800 |
| INSTANTANEOUS PEAK STAGE | | 11.44 | 23.65 |
| ANNUAL RUNOFF (AC-FT) | 229200 | 99440 | 219300 |
| 10 PERCENT EXCEEDS | 546 | 167 | 528 |
| 50 PERCENT EXCEEDS | 175 | 114 | 161 |
| 90 PERCENT EXCEEDS | 109 | 84 | 99 |



PLATTE RIVER BASIN

06803520 STEVENS CREEK NEAR LINCOLN, NE

LOCATION.--Lat 40°51'25", long 096°35'42", in NW ¼ NE ¼ sec.11, T.10 N., R.7 E., Lancaster County, Hydrologic Unit 10200203, on left bank 10 ft upstream, 20 ft west from county road bridge on Havelock Avenue, 1.6 mi east of 70th Street at east edge of Lincoln, and at mile 3.2.

DRAINAGE AREA.--47.8 mi².

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,123.57 ft above sea level. Oct. 1968 to Aug. 14, 1997 at present site and datum 2.0 ft higher. Data collection platform at station.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|
| 1 | 2.5 | 3.3 | 4.7 | 4.7 | e4.5 | 5.3 | 3.5 | 4.0 | 2.4 | 3.6 | .88 | .85 |
| 2 | 2.4 | 3.3 | 4.8 | e4.5 | 24 | 4.8 | 3.6 | 4.1 | 2.2 | 3.3 | .74 | .82 |
| 3 | 2.6 | 3.3 | 5.0 | e4.4 | 13 | 4.3 | 3.3 | 3.6 | 2.1 | 3.9 | 1.0 | .74 |
| 4 | 2.7 | 3.5 | 4.8 | e3.9 | 5.7 | 4.1 | 3.2 | 3.6 | 2.1 | 10 | 1.6 | .90 |
| 5 | 2.8 | 3.4 | 4.5 | e3.6 | 7.2 | 4.0 | 3.4 | 3.4 | 2.0 | 9.5 | 1.1 | .99 |
| 6 | 2.8 | 3.4 | 4.6 | e4.0 | 4.2 | 3.8 | 3.3 | 3.2 | 2.0 | 5.6 | .94 | 1.0 |
| 7 | 2.7 | 3.5 | 4.7 | 4.5 | 4.3 | 3.7 | 3.1 | 3.3 | 2.0 | 3.6 | .89 | .81 |
| 8 | 2.7 | 3.7 | 4.8 | 4.8 | 4.3 | 4.3 | 3.4 | 4.0 | 2.0 | 2.8 | .89 | .82 |
| 9 | 2.7 | 3.7 | 4.6 | 5.0 | 4.6 | 3.8 | 3.4 | 4.3 | 1.9 | 2.3 | .93 | .76 |
| 10 | 2.7 | 3.7 | 4.7 | 5.1 | 4.4 | 3.5 | 3.3 | 4.1 | 1.8 | 2.0 | .73 | .77 |
| 11 | 2.6 | 3.6 | 4.6 | 4.7 | 3.9 | 3.6 | 3.5 | 3.8 | 1.9 | 1.8 | .88 | .71 |
| 12 | 2.7 | 3.5 | 4.7 | 4.4 | 3.9 | 3.5 | 3.4 | 3.4 | 2.1 | 29 | .95 | .68 |
| 13 | 2.7 | 3.6 | 4.6 | 4.8 | 4.2 | 3.5 | 3.4 | 3.0 | 2.2 | 7.0 | .83 | .72 |
| 14 | 2.7 | 3.6 | 4.6 | 4.4 | 4.1 | 3.6 | 3.4 | 2.8 | 3.4 | 2.9 | .89 | .71 |
| 15 | 2.8 | 3.5 | e4.4 | 4.5 | 4.4 | 3.6 | 3.3 | 2.9 | 2.1 | 2.1 | .88 | .64 |
| 16 | 2.8 | 3.6 | e4.3 | 4.4 | 4.1 | 3.3 | 6.5 | 2.8 | 1.8 | 1.7 | .93 | .63 |
| 17 | 2.7 | 3.7 | e4.2 | 4.5 | 4.0 | 3.1 | 7.8 | 2.9 | 1.8 | 1.7 | .90 | .65 |
| 18 | 2.8 | 3.8 | e4.1 | 4.6 | 4.1 | 3.4 | 5.4 | 2.8 | 1.8 | 9.7 | .82 | .63 |
| 19 | 2.9 | 3.5 | e3.8 | 4.5 | 4.2 | 4.1 | 5.2 | 2.7 | 1.8 | 5.3 | 2.1 | .58 |
| 20 | 3.0 | 3.5 | e3.5 | 4.3 | 4.3 | 4.3 | 4.5 | 3.0 | 14 | 6.2 | 1.7 | .82 |
| 21 | 3.1 | 3.5 | e3.3 | 4.2 | 5.3 | 3.8 | 4.1 | 3.1 | 9.7 | 7.6 | 3.3 | .79 |
| 22 | 3.1 | 3.9 | e3.7 | 4.3 | 6.2 | 3.8 | 3.9 | 2.8 | 4.9 | 2.6 | 2.3 | .93 |
| 23 | 3.1 | 8.3 | e4.1 | 4.3 | 8.9 | 4.0 | 3.9 | 2.9 | 4.0 | 1.8 | 1.6 | .87 |
| 24 | 3.1 | 5.9 | 4.6 | e4.0 | 8.4 | 4.6 | 4.0 | 2.5 | 10 | 1.4 | 1.2 | .79 |
| 25 | 3.2 | 4.5 | 5.0 | e3.8 | 6.1 | 4.3 | 3.8 | 2.4 | 146 | 1.3 | 1.2 | .93 |
| 26 | 3.1 | 4.2 | 5.1 | e3.5 | 4.8 | 3.9 | 3.8 | 4.4 | 275 | 1.1 | 1.1 | .82 |
| 27 | 3.2 | 4.1 | 4.9 | e3.0 | 4.5 | 3.4 | 4.0 | 3.8 | 21 | .98 | .99 | .63 |
| 28 | 3.1 | 4.1 | 4.9 | e3.5 | 4.3 | 3.2 | 4.1 | 3.1 | 11 | 1.1 | .97 | .61 |
| 29 | 3.4 | 3.9 | 5.2 | e3.8 | 4.7 | 3.2 | 3.9 | 2.8 | 5.8 | 2.6 | .91 | .65 |
| 30 | 3.1 | 4.1 | 5.1 | e3.9 | --- | 3.2 | 3.7 | 2.5 | 4.3 | 1.5 | .86 | .64 |
| 31 | 3.1 | --- | 4.7 | e4.0 | --- | 3.2 | --- | 2.4 | --- | 1.0 | .84 | --- |
| TOTAL | 88.9 | 117.2 | 140.6 | 131.9 | 170.6 | 118.2 | 119.1 | 100.4 | 545.1 | 136.98 | 35.85 | 22.89 |
| MEAN | 2.87 | 3.91 | 4.54 | 4.25 | 5.88 | 3.81 | 3.97 | 3.24 | 18.2 | 4.42 | 1.16 | .76 |
| MAX | 3.4 | 8.3 | 5.2 | 5.1 | 24 | 5.3 | 7.8 | 4.4 | 275 | 29 | 3.3 | 1.0 |
| MIN | 2.4 | 3.3 | 3.3 | 3.0 | 3.9 | 3.1 | 3.1 | 2.4 | 1.8 | .98 | .73 | .58 |
| AC-FT | 176 | 232 | 279 | 262 | 338 | 234 | 236 | 199 | 1080 | 272 | 71 | 45 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2000, BY WATER YEAR (WY)

| | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 13.8 | 7.08 | 6.49 | 7.26 | 13.3 | 30.9 | 26.2 | 38.6 | 32.5 | 32.8 | 11.8 | 16.6 |
| 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 |

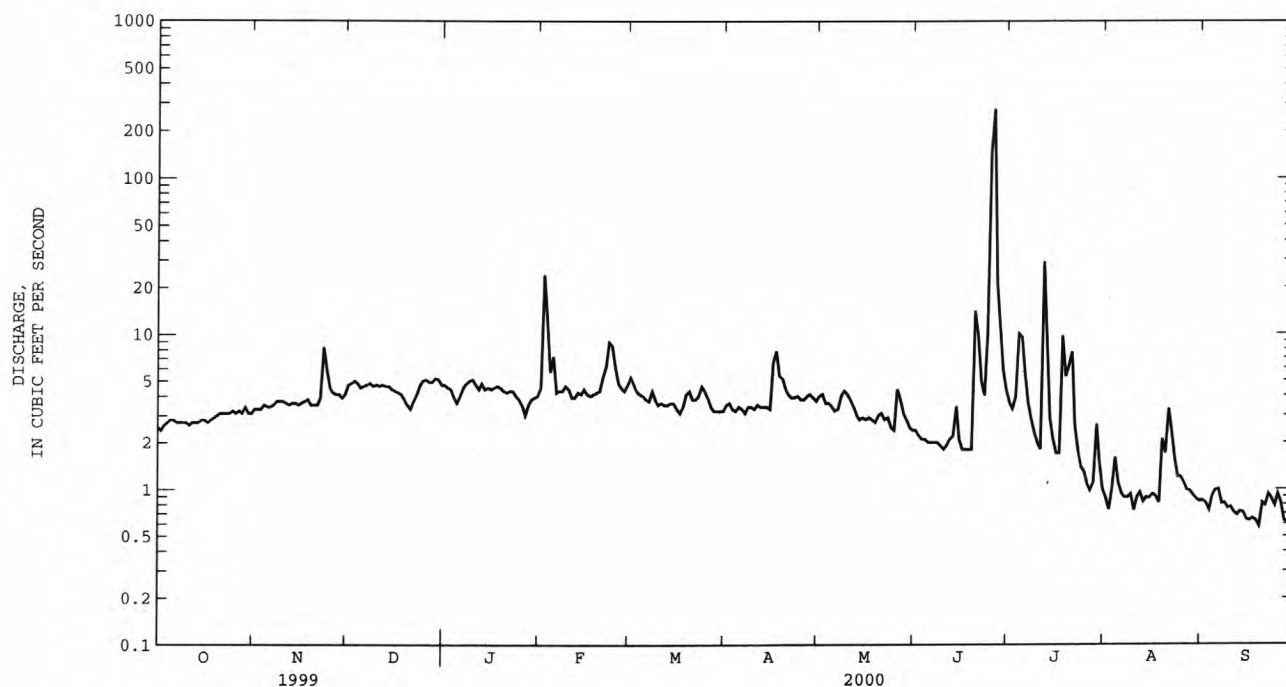
PLATTE RIVER BASIN

06803520 STEVENS CREEK NEAR LINCOLN, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1969 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 9438.9 | | 1727.72 | | 19.8 | |
| ANNUAL MEAN | 25.9 | | 4.72 | | 18 | |
| MEDIAN OF ANNUAL MEANS | | | | | 69.3 | |
| HIGHEST ANNUAL MEAN | | | | | 1.84 | |
| LOWEST ANNUAL MEAN | | | | | 4810 | |
| HIGHEST DAILY MEAN | 838 | Apr 15 | 275 | Jun 26 | | Sep 8 1989 |
| LOWEST DAILY MEAN | 2.0 | Sep 27 | .58 | Sep 19 | .00 | Jul 31 1977 |
| ANNUAL SEVEN-DAY MINIMUM | 2.3 | Sep 26 | .65 | Sep 13 | .00 | Jul 29 1977 |
| INSTANTANEOUS PEAK FLOW | | | 909 | Jun 26 | *12900 | Sep 8 1989 |
| INSTANTANEOUS PEAK STAGE | | | 9.43 | Jun 26 | 19.57 | Jun 13 1984 |
| ANNUAL RUNOFF (AC-FT) | 18720 | | 3430 | | 14350 | |
| 10 PERCENT EXCEEDS | 38 | | 5.1 | | 25 | |
| 50 PERCENT EXCEEDS | 9.2 | | 3.5 | | 4.2 | |
| 90 PERCENT EXCEEDS | 3.0 | | .89 | | .88 | |

e Estimated.

* Stage 19.42 ft.



PLATTE RIVER BASIN

06803525 SALT CREEK BELOW STEVENS CREEK, NEAR WAVERLY, NE

LOCATION.--Lat 40°54'18", long 096°35'09", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.24, T.11 N., R.7 E., Lancaster County, Hydrologic Unit 10200203, at bridge 0.5 mi north of Interstate Highway 80 and 3 mi southwest of Waverly.

DRAINAGE AREA.--815 mi².

PERIOD OF RECORD.--Water years 1971-1992, January 1994 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | TIME | DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061) | 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) | OXYGEN, DIS- SOLVED (MG/L) (00300) | OXYGEN, DIS- SOLVED (BER- 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) | |
|-------|------|---|--|---|--|--|---|--|--|--|---|--|
| | | | | | | | | | | | | |
| OCT | | | | | | | | | | | | |
| 14... | 1415 | 112 | 5.12 | 1140 | 3770 | 9.0 | 99 | 7.9 | 6770 | 21.5 | 16.8 | |
| NOV | | | | | | | | | | | | |
| 15... | 1230 | 160 | 3.42 | 1090 | 2520 | 12.4 | 118 | 7.4 | 4620 | 19.0 | 10.5 | |
| DEC | | | | | | | | | | | | |
| 08... | 1200 | 110 | 4.41 | 963 | 3240 | 10.9 | 93 | 7.9 | 5560 | 7.0 | 6.0 | |
| JAN | | | | | | | | | | | | |
| 24... | 0900 | 110 | 3.61 | 788 | 2650 | 12.1 | 88 | 8.5 | 4970 | -3.0 | .0 | |
| FEB | | | | | | | | | | | | |
| 16... | 1400 | 140 | 4.32 | 1200 | 3180 | 14.1 | 120 | 8.3 | 5360 | 5.5 | 6.5 | |
| MAR | | | | | | | | | | | | |
| 22... | 1130 | 105 | -- | -- | -- | 10.4 | 100 | 7.6 | 5260 | 14.5 | 11.5 | |
| APR | | | | | | | | | | | | |
| 26... | 1300 | 115 | 4.48 | 1020 | 3300 | 11.8 | 135 | 7.7 | 6010 | 25.5 | 19.0 | |
| MAY | | | | | | | | | | | | |
| 22... | 1100 | 85 | 4.72 | 796 | 3470 | 10.7 | 128 | 6.8 | 6550 | 28.0 | 21.0 | |
| JUN | | | | | | | | | | | | |
| 07... | 1100 | 112 | 5.50 | 1220 | 4040 | 10.9 | 130 | 6.9 | 6880 | 26.5 | 21.0 | |
| JUL | | | | | | | | | | | | |
| 06... | 0930 | 310 | 2.07 | 1270 | 1520 | 5.3 | 66 | 7.6 | 2800 | 28.0 | 23.5 | |
| AUG | | | | | | | | | | | | |
| 02... | 1030 | 100 | 4.55 | 903 | 3340 | 11.9 | 148 | 7.8 | 5190 | 22.0 | 23.5 | |
| SEP | | | | | | | | | | | | |
| 05... | 1030 | 74 | 5.22 | 767 | 3840 | 12.5 | 148 | 7.9 | 6400 | 20.0 | 20.5 | |
| | | | | | | | | | | | | |
| DATE | | 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) | 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) |
| OCT | | | | | | | | | | | | |
| 14... | 370 | 95.5 | 31.2 | 16.6 | 28 | 1230 | 87 | 344 | 1810 | .8 | 23.4 | |
| NOV | | | | | | | | | | | | |
| 15... | 320 | 84.8 | 27.2 | 10.9 | 20 | 822 | 84 | 276 | 1160 | .6 | 16.5 | |
| DEC | | | | | | | | | | | | |
| 08... | 360 | 97.2 | 29.5 | 13.2 | 24 | 1040 | 86 | 345 | 1530 | .7 | 24.6 | |
| JAN | | | | | | | | | | | | |
| 24... | 330 | 86.5 | 26.7 | 11.9 | 20 | 834 | 84 | 307 | 1220 | .6 | 22.2 | |
| FEB | | | | | | | | | | | | |
| 16... | 360 | 96.5 | 29.5 | 2.7 | 23 | 1000 | 86 | 325 | 1530 | .6 | 24.7 | |
| MAR | | | | | | | | | | | | |
| 22... | -- | 89.1 | 28.2 | 13.5 | -- | 971 | -- | 307 | 1440 | .8 | 23.2 | |
| APR | | | | | | | | | | | | |
| 26... | 360 | 93.8 | 30.3 | 13.4 | 25 | 1080 | 86 | 288 | 1570 | .8 | 23.9 | |
| MAY | | | | | | | | | | | | |
| 22... | 350 | 91.2 | 28.9 | 13.9 | 27 | 1150 | 87 | 273 | 1690 | .7 | 24.9 | |
| JUN | | | | | | | | | | | | |
| 07... | 360 | 91.2 | 31.7 | 16.0 | 32 | 1410 | 89 | 288 | 1950 | .9 | 22.6 | |
| JUL | | | | | | | | | | | | |
| 06... | 210 | 60.4 | 15.3 | 14.4 | 14 | 465 | 81 | 156 | 702 | .5 | 18.6 | |
| AUG | | | | | | | | | | | | |
| 02... | 310 | 79.4 | 27.4 | 15.2 | 27 | 1110 | 88 | 247 | 1640 | .8 | 19.5 | |
| SEP | | | | | | | | | | | | |
| 05... | 340 | 87.1 | 30.1 | 14.0 | 31 | 1320 | 89 | 240 | 1880 | .8 | 22.0 | |

PLATTE RIVER BASIN

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605) |
|-------|--|--|---|--|--|--|---|--|--|--|
| OCT | | | | | | | | | | |
| 14... | 329 | 4.77 | 6.3 | 6.14 | 1.20 | 5.30 | 1.66 | 1.52 | .462 | 1.5 |
| NOV | | | | | | | | | | |
| 15... | 216 | 1.70 | 2.7 | 2.18 | 1.02 | 4.52 | 1.24 | .720 | .219 | .98 |
| DEC | | | | | | | | | | |
| 08... | 275 | 6.88 | 11 | 8.86 | 1.54 | 6.83 | 1.87 | 1.08 | .329 | 4.0 |
| JAN | | | | | | | | | | |
| 24... | 250 | 3.27 | 4.2 | 4.21 | 2.23 | 9.87 | 2.56 | 1.08 | .330 | .92 |
| FEB | | | | | | | | | | |
| 16... | 274 | 4.63 | 6.0 | 5.97 | 2.22 | 9.81 | 2.54 | 1.06 | .323 | 1.4 |
| MAR | | | | | | | | | | |
| 22... | 261 | 6.28 | 8.6 | 8.08 | 1.21 | 5.34 | 1.52 | 1.03 | .312 | 2.3 |
| APR | | | | | | | | | | |
| 26... | 287 | 6.03 | 7.4 | 7.77 | 1.38 | 6.10 | 1.96 | 1.91 | .581 | 1.4 |
| MAY | | | | | | | | | | |
| 22... | 289 | 3.88 | 5.6 | 4.99 | 1.01 | 4.48 | 1.72 | 2.31 | .703 | 1.7 |
| JUN | | | | | | | | | | |
| 07... | 336 | 9.05 | 10 | 11.6 | .764 | 3.38 | 1.42 | 2.14 | .652 | .99 |
| JUL | | | | | | | | | | |
| 06... | 138 | 1.88 | 3.9 | 2.43 | 1.99 | 8.81 | 2.42 | 1.42 | .432 | 2.0 |
| AUG | | | | | | | | | | |
| 02... | 284 | 6.37 | 8.4 | 8.20 | .982 | 4.35 | 1.61 | 2.06 | .628 | 2.0 |
| SEP | | | | | | | | | | |
| 05... | 319 | 6.36 | 8.0 | 8.18 | .599 | 2.65 | 1.26 | 2.17 | .659 | 1.7 |
| | | | | | | | | | | |
| DATE | NITRO- GEN, TOTAL (MG/L AS N) (00600) | PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660) | 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) | COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625) | FECAL STREP, KF STRP MF, WATER (COL/ 100 ML) (31673) | ARSENIC TOTAL (UG/L AS AS) (01002) | BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007) |
| OCT | | | | | | | | | | |
| 14... | 7.9 | 3.34 | 1.09 | 1.71 | 8.9 | 9.4 | 1100 | 1100 | -- | -- |
| NOV | | | | | | | | | | |
| 15... | 3.9 | 1.85 | .602 | .813 | 22 | 5.3 | 2300 | 1400 | 5 | 115 |
| DEC | | | | | | | | | | |
| 08... | 13 | 4.18 | 1.36 | 1.66 | 9.0 | 27 | >1400 | >920 | -- | -- |
| JAN | | | | | | | | | | |
| 24... | 6.7 | 2.10 | .685 | .854 | 1.8 | 6.9 | 1100 | 1000 | -- | -- |
| FEB | | | | | | | | | | |
| 16... | 8.5 | 3.35 | 1.09 | 1.28 | 2.9 | 7.5 | 1800 | 3900 | 3 | 96.8 |
| MAR | | | | | | | | | | |
| 22... | 10 | 4.30 | 1.40 | 1.77 | 16 | 9.3 | 800 | 2400 | -- | -- |
| APR | | | | | | | | | | |
| 26... | 9.4 | 3.78 | 1.23 | 1.64 | 10 | 8.9 | 2900 | 760 | -- | -- |
| MAY | | | | | | | | | | |
| 22... | 7.3 | 3.31 | 1.08 | 1.40 | 84 | 9.3 | 3100 | 2300 | 7 | 35.1 |
| JUN | | | | | | | | | | |
| 07... | 11 | 3.05 | .994 | 1.18 | 69 | 11 | 3400 | 1900 | -- | -- |
| JUL | | | | | | | | | | |
| 06... | 6.3 | 1.72 | .561 | 1.01 | 7.4 | 18 | 3600 | 880 | -- | -- |
| AUG | | | | | | | | | | |
| 02... | 10 | 4.96 | 1.62 | 2.16 | 7.4 | 9.9 | 4900 | 2500 | 7 | 38.8 |
| SEP | | | | | | | | | | |
| 05... | 9.3 | 3.87 | 1.26 | 1.50 | 6.2 | 9.4 | 5100 | 2300 | -- | -- |

PLATTE RIVER BASIN

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

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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.

REMARKS.--Record fair except for estimated periods which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|-------|------|------|------|------|------|------|-------|-------|-------|
| 1 | e8.0 | 12 | 16 | e17 | e15 | 35 | 14 | 17 | 14 | 27 | 7.5 | 5.2 |
| 2 | e8.0 | 12 | 16 | e17 | e16 | 23 | 15 | 17 | 13 | 28 | 8.9 | 5.6 |
| 3 | e9.0 | 12 | 16 | e16 | e16 | 21 | 13 | 17 | 13 | 33 | 9.2 | 5.2 |
| 4 | e9.0 | 14 | 19 | e14 | e15 | 20 | 14 | 18 | 13 | 32 | 5.7 | 6.1 |
| 5 | e9.0 | 13 | 15 | e15 | e13 | 20 | 16 | 18 | 12 | 30 | e5.6 | 6.0 |
| 6 | e8.6 | 13 | 12 | e15 | e12 | 20 | 16 | 18 | 12 | 28 | e6.2 | 5.2 |
| 7 | e8.0 | 13 | 13 | e17 | e14 | 20 | 14 | 19 | 14 | 27 | 7.5 | 4.9 |
| 8 | e7.0 | 15 | 13 | e17 | e15 | 20 | 15 | 24 | 14 | 25 | 7.6 | 4.8 |
| 9 | e7.0 | 13 | 13 | e17 | e16 | 16 | 17 | 24 | 14 | 24 | 6.4 | 5.5 |
| 10 | e7.4 | 11 | 12 | 16 | e17 | 15 | 17 | 12 | 14 | 21 | 5.1 | 5.4 |
| 11 | e7.6 | 11 | 11 | 15 | e16 | 15 | 17 | 11 | 14 | 19 | 5.2 | 5.5 |
| 12 | e9.0 | 11 | 12 | 16 | e15 | 15 | 18 | 13 | 14 | 19 | 4.7 | 4.4 |
| 13 | 11 | 13 | 14 | e16 | e14 | 15 | 20 | 11 | 15 | e17 | 4.6 | 5.1 |
| 14 | 12 | 12 | 12 | e16 | e16 | 16 | 21 | 11 | 15 | 17 | 5.0 | 6.7 |
| 15 | 13 | 12 | e11 | e17 | e16 | 15 | 19 | 12 | 14 | 16 | 4.8 | 5.7 |
| 16 | 12 | 14 | e9.0 | e17 | e17 | 14 | 23 | 13 | 14 | 16 | 4.4 | 6.0 |
| 17 | 11 | 13 | e9.6 | e16 | 15 | 14 | 37 | 14 | 14 | 15 | 4.2 | 6.4 |
| 18 | 11 | 15 | e9.4 | e16 | 15 | 14 | 24 | 13 | 15 | 16 | 4.0 | 6.9 |
| 19 | 11 | 11 | e8.8 | e15 | 16 | 17 | 19 | 14 | 15 | 19 | 4.3 | 6.3 |
| 20 | 12 | 12 | e7.6 | e14 | 17 | 17 | 15 | 13 | 27 | 15 | 6.0 | 5.8 |
| 21 | 14 | 14 | e8.0 | e15 | 20 | 16 | 16 | 14 | 30 | 13 | 5.6 | 5.3 |
| 22 | 11 | 15 | e9.0 | e16 | 24 | 15 | 16 | 14 | 17 | 11 | 5.1 | 6.0 |
| 23 | 11 | 21 | e11 | e15 | 36 | 15 | 17 | 14 | 17 | 11 | 6.6 | 5.1 |
| 24 | 13 | 18 | e12 | e15 | 34 | 20 | 17 | 14 | 49 | 11 | 6.9 | 4.3 |
| 25 | 13 | 17 | e13 | e12 | 28 | 19 | 16 | 13 | 39 | 11 | 5.6 | 5.1 |
| 26 | 14 | 18 | e15 | e13 | 23 | 17 | 14 | 16 | 170 | 11 | 6.0 | 5.1 |
| 27 | 15 | 17 | e16 | e14 | 20 | 15 | 16 | 26 | 39 | 10 | 5.4 | 5.2 |
| 28 | 13 | 16 | e16 | e14 | 19 | 11 | 17 | 18 | 24 | 11 | 6.1 | 5.3 |
| 29 | 15 | 16 | e17 | e14 | 20 | 11 | 17 | 15 | 23 | 10 | 5.8 | 6.0 |
| 30 | 13 | 16 | e17 | e14 | --- | 13 | 16 | 16 | 25 | 9.2 | 5.3 | 6.0 |
| 31 | 14 | --- | e17 | e14 | --- | 12 | --- | 15 | --- | 8.9 | 5.0 | --- |
| TOTAL | 336.6 | 420 | 400.4 | 475 | 530 | 526 | 526 | 484 | 723 | 561.1 | 180.3 | 166.1 |
| MEAN | 10.9 | 14.0 | 12.9 | 15.3 | 18.3 | 17.0 | 17.5 | 15.6 | 24.1 | 18.1 | 5.82 | 5.54 |
| MAX | 15 | 21 | 19 | 17 | 36 | 35 | 37 | 26 | 170 | 33 | 9.2 | 6.9 |
| MIN | 7.0 | 11 | 7.6 | 12 | 12 | 11 | 13 | 11 | 12 | 8.9 | 4.0 | 4.3 |
| AC-FT | 668 | 833 | 794 | 942 | 1050 | 1040 | 1040 | 960 | 1430 | 1110 | 358 | 329 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2000, BY WATER YEAR (WY)

| | MEAN | 23.1 | 16.9 | 14.8 | 15.6 | 32.9 | 56.7 | 43.0 | 64.8 | 71.3 | 56.1 | 47.1 | 24.0 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MAX | 191 | 45.5 | 44.8 | 63.3 | 116 | 260 | 236 | 237 | 272 | 648 | 527 | 128 | |
| (WY) | 1987 | 1978 | 1985 | 1973 | 1983 | 1979 | 1984 | 1996 | 1998 | 1993 | 1987 | 1989 | |
| MIN | 3.85 | 5.23 | 5.26 | 3.93 | 7.92 | 8.41 | 7.40 | 10.2 | 5.34 | 3.07 | 2.08 | 3.86 | |
| (WY) | 1977 | 1977 | 1977 | 1977 | 1979 | 1972 | 1971 | 1976 | 1976 | 1976 | 1976 | 1971 | |

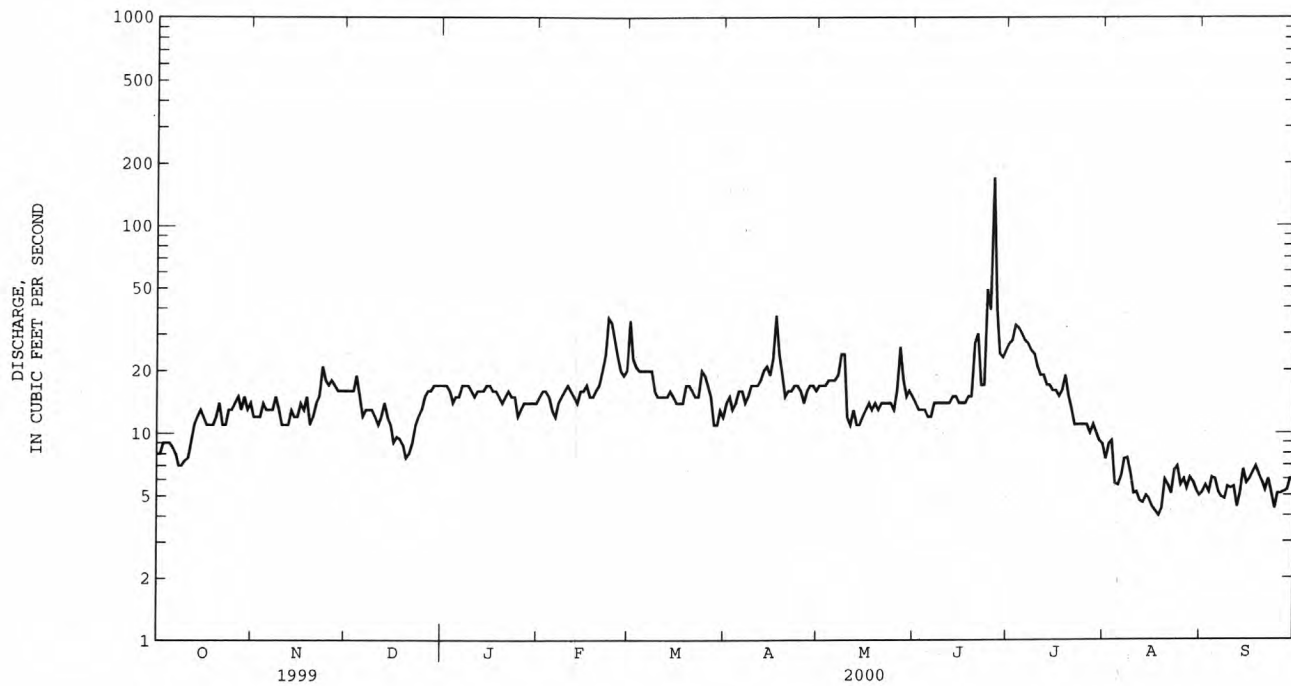
PLATTE RIVER BASIN

06803530 ROCK CREEK NEAR CERESCO, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1971 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 16135.6 | | 5328.5 | | 38.9 | |
| ANNUAL MEAN | 44.2 | | 14.6 | | 32 | |
| MEDIAN OF ANNUAL MEANS | | | | | 123 | |
| HIGHEST ANNUAL MEAN | | | | | 8.68 | |
| LOWEST ANNUAL MEAN | | | | | 11400 | |
| HIGHEST DAILY MEAN | 1590 | Jun 27 | 170 | Jun 26 | | Aug 25 1987 |
| LOWEST DAILY MEAN | 7.0 | Sep 28 | 4.0 | Aug 18 | .25 | Jul 13 1976 |
| ANNUAL SEVEN-DAY MINIMUM | 7.6 | Sep 24 | 4.5 | Aug 13 | 1.1 | Jul 11 1976 |
| INSTANTANEOUS PEAK FLOW | | | 269 | Jun 26 | *23300 | Aug 25 1987 |
| INSTANTANEOUS PEAK STAGE | | | 5.62 | Jun 26 | 20.50 | May 22 1998 |
| ANNUAL RUNOFF (AC-FT) | 32000 | | 10570 | | 28180 | |
| 10 PERCENT EXCEEDS | 54 | | 20 | | 46 | |
| 50 PERCENT EXCEEDS | 20 | | 14 | | 13 | |
| 90 PERCENT EXCEEDS | 10 | | 5.7 | | 6.0 | |

e Estimated.

* Includes road overflow; stage 19.60 ft, from floodmark.



| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 255 | 178 | 148 | 160 | 268 | 512 | 418 | 586 | 716 | 532 | 318 | 259 |
| 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 |

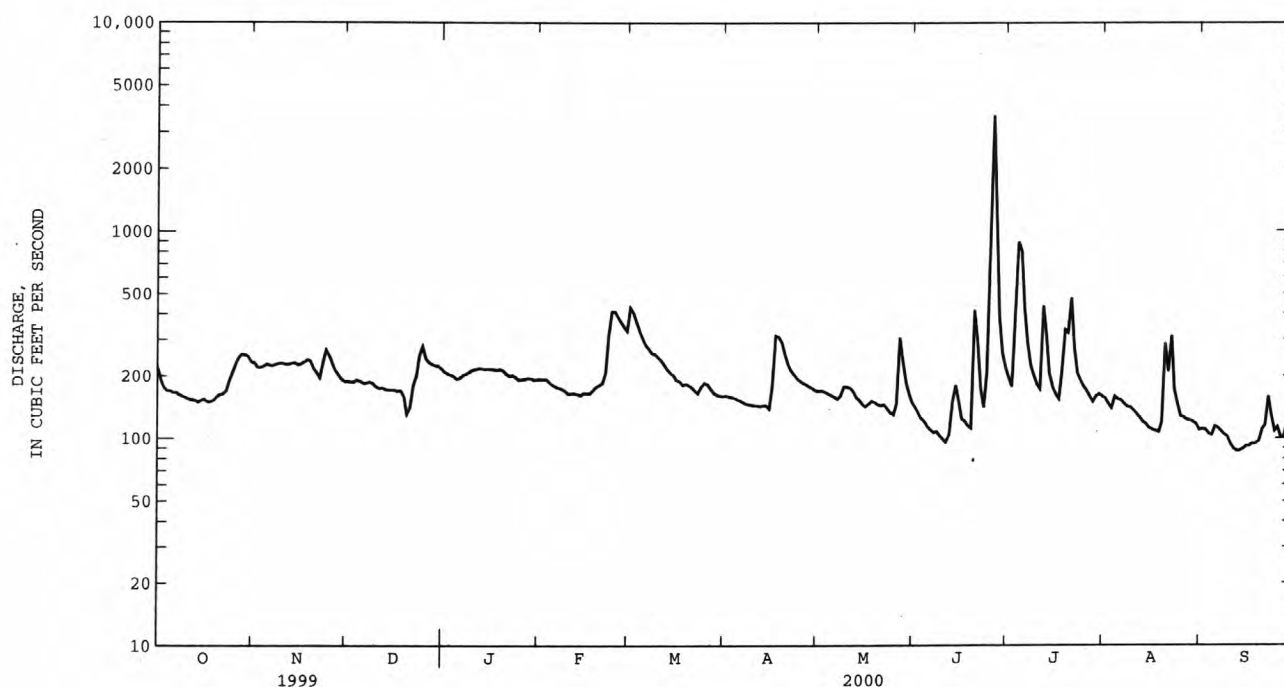
PLATTE RIVER BASIN

06803555 SALT CREEK AT GREENWOOD, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1952 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 184777 | | 74402 | | 361 | |
| ANNUAL MEAN | 506 | | 203 | | 289 | |
| MEDIAN OF ANNUAL MEANS | | | | | 1054 | |
| HIGHEST ANNUAL MEAN | | | | | 1987 | |
| LOWEST ANNUAL MEAN | | | | | 107 | |
| HIGHEST DAILY MEAN | 10400 | Jul 1 | 3600 | Jun 26 | 37100 | Jun 13 1984 |
| LOWEST DAILY MEAN | 130 | Dec 20 | 87 | Sep 12 | 14 | Jan 10 1957 |
| ANNUAL SEVEN-DAY MINIMUM | 141 | Sep 14 | 90 | Sep 10 | 17 | Jan 10 1957 |
| INSTANTANEOUS PEAK FLOW | | | 5410 | Jun 26 | *46800 | Jun 13 1984 |
| INSTANTANEOUS PEAK STAGE | | | 8.21 | Jun 26 | 26.57 | Jul 24 1993 |
| ANNUAL RUNOFF (AC-FT) | 366500 | | 147600 | | 261500 | |
| 10 PERCENT EXCEEDS | 832 | | 277 | | 586 | |
| 50 PERCENT EXCEEDS | 241 | | 177 | | 147 | |
| 90 PERCENT EXCEEDS | 160 | | 112 | | 72 | |

e Estimated.

* Stage 26.50 ft.



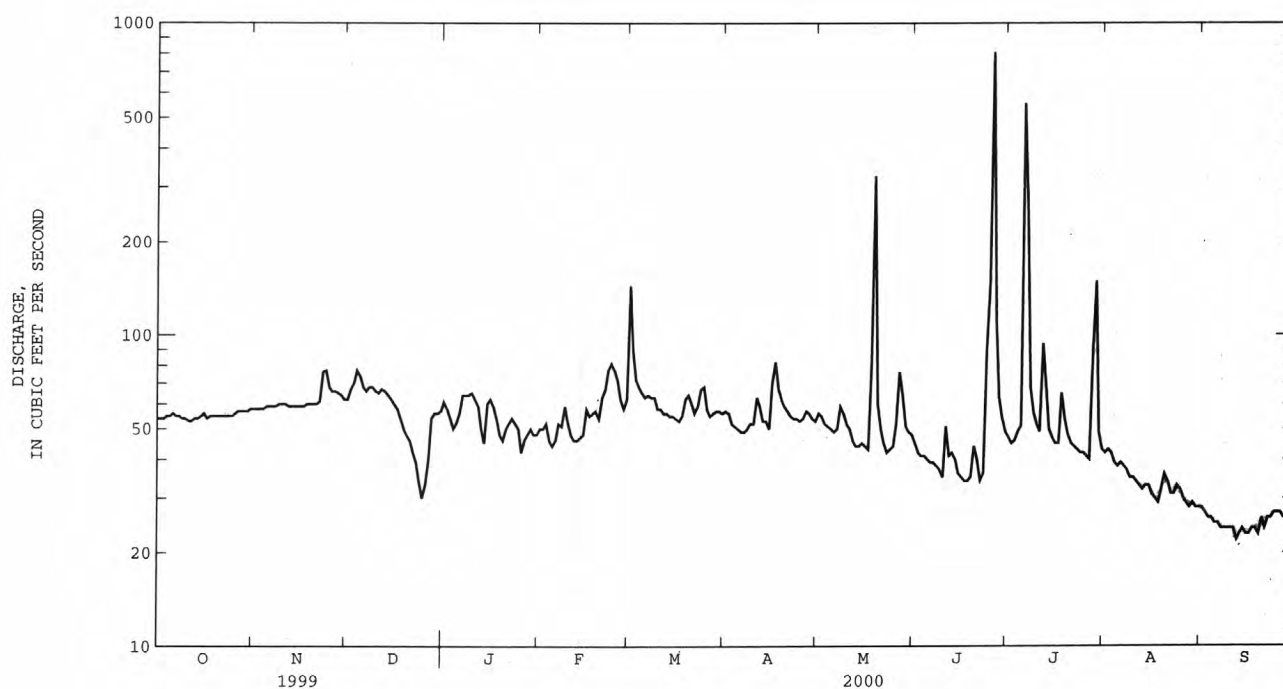
| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 51.1 | 40.6 | 35.7 | 39.5 | 73.2 | 121 | 90.3 | 121 | 227 | 89.7 | 96.8 | 70.8 |
| MAX | 343 | 110 | 96.3 | 125 | 276 | 518 | 430 | 401 | 1051 | 728 | 640 | 663 |
| (WY) | 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

06804000 WAHOO CREEK AT ITHACA, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1950 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 51502 | | 20582 | | 87.9 | |
| ANNUAL MEAN | 141 | | 56.2 | | 77 | |
| MEDIAN OF ANNUAL MEANS | | | | | 207 | |
| HIGHEST ANNUAL MEAN | | | | | 15.3 | |
| LOWEST ANNUAL MEAN | | | | | 22100 | |
| HIGHEST DAILY MEAN | 2350 | Jun 11 | 808 | Jun 26 | 22100 | Jun 24 1963 |
| LOWEST DAILY MEAN | 30 | Dec 25 | 22 | Sep 12 | 3.3 | Jun 11 1955 |
| ANNUAL SEVEN-DAY MINIMUM | 38 | Dec 21 | 23 | Sep 10 | 4.4 | Oct 12 1955 |
| INSTANTANEOUS PEAK FLOW | | | 1130 | Jul 15 | 77400 | Jun 24 1963 |
| INSTANTANEOUS PEAK STAGE | | | 11.99 | Jul 15 | 22.93 | Jun 24 1963 |
| ANNUAL RUNOFF (AC-FT) | 102200 | | 40820 | | 63710 | |
| 10 PERCENT EXCEEDS | 215 | | 67 | | 115 | |
| 50 PERCENT EXCEEDS | 72 | | 54 | | 36 | |
| 90 PERCENT EXCEEDS | 55 | | 30 | | 18 | |

e Estimated.



PLATTE RIVER BASIN

06804700 WAHOO CREEK AT ASHLAND, NE

LOCATION.--Lat 41°03'13", long 096°22'04", in SE 1/4 NE 1/4 sec.35, T.13 N., R.9 E., Saunders County, Hydrologic Unit 10200203, at right upstream side of bridge near end of guard rail on State Highway 63, 1 mi north of Ashland, and at mile 2.6.

DRAINAGE AREA.--416 mi².

PERIOD OF RECORD.--September 1990 to current year.

REVISED RECORDS.--WDR NE-99-1: Datum.

GAGE.--Water-stage recorder. Datum of gage is 1,048.77 ft above sea level.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|-------|------|------|------|
| 1 | 75 | 76 | 82 | 81 | e66 | 119 | 85 | 77 | 85 | e68 | e90 | 49 |
| 2 | 74 | 75 | 85 | 84 | e66 | 133 | 85 | 78 | 83 | e62 | 77 | 48 |
| 3 | 75 | 76 | 88 | 84 | e64 | 110 | 83 | 75 | 80 | e64 | 57 | 48 |
| 4 | 75 | 76 | 92 | e76 | e62 | 108 | 82 | 74 | 78 | e68 | 58 | 48 |
| 5 | 76 | 76 | 94 | e68 | e56 | 113 | 81 | 74 | 79 | e150 | 58 | 47 |
| 6 | 75 | 76 | 89 | e76 | e66 | 113 | 79 | 74 | 77 | e400 | 56 | 48 |
| 7 | 75 | 77 | 87 | e82 | e72 | 110 | 79 | 73 | 76 | e700 | 56 | 47 |
| 8 | 74 | 77 | 87 | 87 | e74 | 110 | 79 | 84 | 74 | e300 | 57 | 47 |
| 9 | 74 | 78 | 87 | 84 | e76 | 94 | 79 | 80 | 71 | e150 | 57 | 47 |
| 10 | 74 | 77 | 86 | 85 | e80 | 87 | 82 | 74 | 71 | e76 | 54 | 46 |
| 11 | 73 | 77 | 84 | 83 | e82 | 86 | 88 | 73 | 68 | e66 | 55 | 47 |
| 12 | 73 | 78 | 85 | 81 | e78 | 87 | 88 | 72 | 73 | e90 | 55 | 46 |
| 13 | 73 | 78 | 86 | e78 | e70 | 85 | 83 | 72 | 73 | e120 | 53 | 46 |
| 14 | 73 | 78 | 85 | e76 | e80 | 86 | 81 | 71 | 75 | e80 | 54 | 46 |
| 15 | 73 | 78 | 86 | e74 | e89 | 86 | 79 | 71 | 67 | e66 | 53 | 45 |
| 16 | 73 | 78 | 86 | e74 | e86 | 84 | 92 | 71 | 62 | e62 | 50 | 45 |
| 17 | 73 | 79 | 82 | e72 | 82 | 84 | 110 | 70 | 61 | e62 | 51 | 45 |
| 18 | 73 | 79 | e72 | e72 | 86 | 86 | 101 | 70 | 59 | e74 | 51 | 45 |
| 19 | 73 | 79 | e68 | e70 | 84 | 90 | 91 | 223 | 59 | e70 | 54 | 44 |
| 20 | 73 | 79 | e64 | e70 | 84 | 92 | 88 | 104 | e68 | e64 | 57 | 47 |
| 21 | 74 | 80 | e60 | e60 | 85 | 89 | 85 | 92 | e74 | e60 | 57 | 46 |
| 22 | 74 | 81 | e58 | e68 | 97 | 88 | 84 | 91 | e60 | e56 | 57 | 48 |
| 23 | 74 | 87 | e56 | e70 | 124 | 89 | 83 | 90 | e80 | e54 | 57 | 48 |
| 24 | 74 | 92 | e52 | e70 | 130 | 93 | 82 | 89 | e130 | e50 | 57 | 49 |
| 25 | 75 | 89 | e50 | e68 | 127 | 95 | 81 | 84 | e300 | e50 | 57 | 49 |
| 26 | 75 | 85 | e60 | e60 | 118 | 92 | 79 | 84 | e700 | e50 | 57 | 48 |
| 27 | 75 | 83 | e70 | e64 | 113 | 89 | 81 | 86 | e1000 | e70 | 54 | 48 |
| 28 | 75 | 83 | 85 | e66 | 108 | 86 | 82 | 89 | e500 | e100 | 54 | 46 |
| 29 | 75 | 82 | 85 | e68 | 108 | 86 | 80 | 88 | e200 | e180 | 53 | 47 |
| 30 | 75 | 81 | 85 | e68 | --- | 86 | 76 | 86 | e80 | e150 | 52 | 47 |
| 31 | 75 | --- | 83 | e68 | --- | 85 | --- | 86 | --- | e120 | 50 | --- |
| TOTAL | 2298 | 2390 | 2419 | 2287 | 2513 | 2941 | 2528 | 2625 | 4563 | 3732 | 1758 | 1407 |
| MEAN | 74.1 | 79.7 | 78.0 | 73.8 | 86.7 | 94.9 | 84.3 | 84.7 | 152 | 120 | 56.7 | 46.9 |
| MAX | 76 | 92 | 94 | 87 | 130 | 133 | 110 | 223 | 1000 | 700 | 90 | 49 |
| MIN | 73 | 75 | 50 | 60 | 56 | 84 | 76 | 70 | 59 | 50 | 50 | 44 |
| AC-FT | 4560 | 4740 | 4800 | 4540 | 4980 | 5830 | 5010 | 5210 | 9050 | 7400 | 3490 | 2790 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2000, BY WATER YEAR (WY)

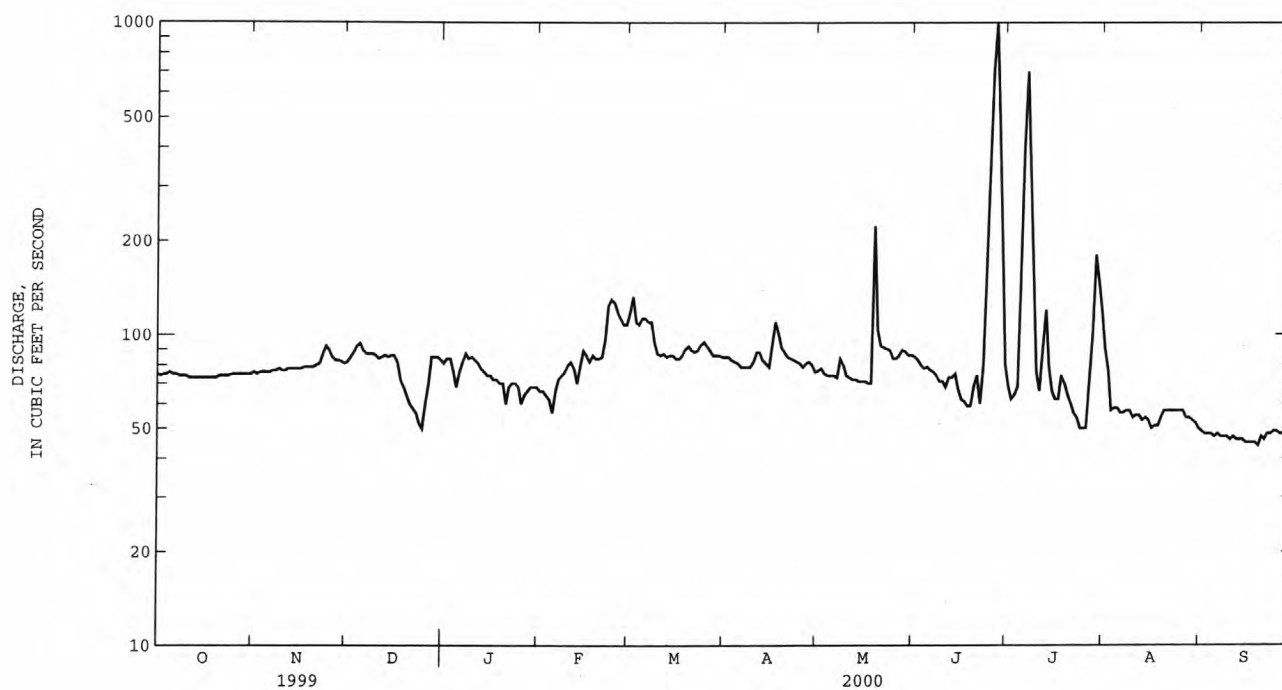
| | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| (WY) | 1994 | 1999 | 1999 | 1995 | 1997 | 1993 | 1999 | 1995 | 1991 | 1993 | 1998 | 1993 |
| (WY) | 1992 | 1991 | 1993 | 1993 | 1992 | 1992 | 1992 | 1997 | 1992 | 1997 | 1997 | 1990 |
| | 58.5 | 71.1 | 62.8 | 65.4 | 97.4 | 147 | 128 | 205 | 394 | 244 | 114 | 65.2 |
| | 98.2 | 125 | 85.9 | 91.5 | 199 | 580 | 247 | 552 | 1031 | 1032 | 341 | 150 |
| | 36.0 | 42.5 | 40.1 | 40.4 | 42.8 | 57.3 | 64.4 | 67.5 | 55.9 | 69.8 | 39.1 | 28.0 |

PLATTE RIVER BASIN

06804700 WAHOO CREEK AT ASHLAND, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1990 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 61384 | | 31461 | | 138 | |
| ANNUAL MEAN | 168 | | 86.0 | | 223 | |
| HIGHEST ANNUAL MEAN | | | | | 63.9 | |
| LOWEST ANNUAL MEAN | | | | | 7000 | |
| HIGHEST DAILY MEAN | 2910 | Jun 28 | 1000 | Jun 27 | 21 | Jun 15 1991 |
| LOWEST DAILY MEAN | 50 | Dec 25 | 44 | Sep 19 | 24 | Sep 16 1990 |
| ANNUAL SEVEN-DAY MINIMUM | 57 | Dec 20 | 45 | Sep 13 | 7000 | Sep 11 1990 |
| INSTANTANEOUS PEAK FLOW | | | e1500 | Jun 27 | 20.50 | Jun 15 1991 |
| INSTANTANEOUS PEAK STAGE | | | | | 99960 | Jun 15 1991 |
| ANNUAL RUNOFF (AC-FT) | 121800 | | 62400 | | | |
| 10 PERCENT EXCEEDS | 250 | | 96 | | 190 | |
| 50 PERCENT EXCEEDS | 99 | | 76 | | 74 | |
| 90 PERCENT EXCEEDS | 74 | | 51 | | 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.

REMARKS.--Records fair except those for period Sept. 2 to Sept. 30, and periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|-------|-------|-------|------|------|------|
| 1 | 1.2 | 1.4 | 1.4 | 1.8 | 1.8 | 2.1 | 1.7 | 1.2 | 2.7 | 2.4 | 2.2 | 1.7 |
| 2 | 1.2 | 1.4 | 1.4 | 1.9 | 1.8 | 1.9 | 1.6 | .88 | 2.7 | 2.3 | 2.3 | 2.0 |
| 3 | 1.3 | 1.5 | 1.5 | 1.9 | 1.8 | 1.8 | 1.6 | .97 | 2.7 | 2.6 | 2.5 | 2.0 |
| 4 | 1.3 | 1.5 | 1.4 | 1.8 | 1.7 | 1.7 | 1.4 | 1.1 | 3.0 | 2.6 | 2.5 | 1.9 |
| 5 | 1.3 | 1.5 | 1.5 | 1.8 | 1.7 | 1.7 | 1.5 | 1.1 | 3.0 | 2.6 | 2.4 | 1.7 |
| 6 | 1.4 | 1.5 | 1.5 | 1.8 | 1.7 | 1.7 | 1.4 | 1.2 | 3.0 | 5.4 | 2.2 | 1.5 |
| 7 | 1.4 | 1.5 | 1.5 | 1.8 | 1.7 | 1.7 | 1.4 | 1.2 | 3.1 | 3.0 | 2.0 | 1.5 |
| 8 | 1.5 | 1.5 | 1.8 | 1.9 | 1.7 | 1.7 | 1.2 | 6.3 | 3.1 | 2.6 | 1.9 | 1.5 |
| 9 | 1.4 | 1.5 | 1.7 | 1.9 | 1.7 | 1.7 | 1.2 | 1.7 | 3.2 | 2.4 | 1.9 | 1.6 |
| 10 | 1.5 | 1.5 | 1.7 | 2.0 | 1.6 | 1.6 | 1.3 | 1.2 | 3.3 | 2.4 | 1.6 | 1.7 |
| 11 | 1.5 | 1.4 | 1.6 | 2.1 | 1.6 | 1.5 | 1.3 | 1.3 | 3.3 | 2.3 | 1.5 | 1.5 |
| 12 | 1.5 | 1.4 | 1.7 | 2.2 | 1.6 | 1.5 | 1.1 | 1.2 | 3.7 | 2.4 | 1.5 | 1.4 |
| 13 | 1.6 | 1.4 | 1.6 | 2.1 | 1.6 | 1.5 | 1.2 | 1.1 | 4.3 | 2.3 | 1.6 | 1.5 |
| 14 | 1.6 | 1.3 | 1.7 | 2.2 | 1.6 | 1.8 | 1.1 | 1.1 | 6.7 | 2.2 | 1.7 | 1.5 |
| 15 | 1.5 | 1.3 | 1.7 | 2.2 | 1.6 | 1.5 | 1.1 | 1.1 | 4.4 | 2.1 | 1.5 | 1.7 |
| 16 | 1.5 | 1.4 | 1.7 | 2.1 | 1.5 | 1.5 | 1.3 | 1.2 | 4.3 | 2.2 | 1.4 | 1.7 |
| 17 | 1.5 | 1.3 | 1.7 | e2.1 | 1.5 | 1.4 | 1.3 | 1.3 | 4.1 | 2.3 | 1.5 | 1.7 |
| 18 | 1.4 | 1.3 | 1.7 | e2.0 | 1.6 | 1.5 | 1.1 | 1.4 | 4.0 | 2.4 | 1.5 | 1.6 |
| 19 | 1.5 | 1.3 | 1.7 | e1.9 | 1.6 | 1.6 | 1.1 | 1.4 | 3.8 | 2.6 | 1.6 | 1.6 |
| 20 | 1.5 | 1.3 | 1.7 | e1.8 | 1.6 | 1.6 | 1.0 | 1.4 | 4.2 | 2.5 | 1.7 | 1.8 |
| 21 | 1.5 | 1.3 | 1.7 | e1.9 | 1.6 | 1.5 | 1.0 | 1.5 | 3.9 | 2.4 | 1.5 | 1.9 |
| 22 | 1.4 | 1.3 | 1.7 | e1.9 | 1.7 | 1.6 | 1.1 | 1.6 | 3.7 | 2.2 | 1.4 | 2.0 |
| 23 | 1.4 | 1.6 | 1.7 | e1.8 | 1.9 | 1.7 | 1.1 | 1.7 | 3.7 | 2.1 | 1.4 | 1.9 |
| 24 | 1.4 | 1.4 | 1.7 | e1.6 | 1.9 | 1.7 | .94 | 1.8 | 23 | 2.1 | 1.3 | 2.1 |
| 25 | 1.4 | 1.4 | 1.8 | e1.5 | 2.0 | 1.6 | 1.0 | 1.8 | 14 | 2.1 | 1.2 | 2.3 |
| 26 | 1.4 | 1.5 | 1.8 | e1.4 | 2.0 | 1.6 | 1.0 | 2.1 | 40 | 1.9 | 1.1 | 2.0 |
| 27 | 1.4 | 1.4 | 1.8 | e1.5 | 1.9 | 1.5 | 1.1 | 2.3 | 4.3 | 2.0 | 1.1 | 2.3 |
| 28 | 1.4 | 1.3 | 1.8 | e1.6 | 1.9 | 1.5 | .97 | 2.2 | 3.2 | 2.5 | 1.5 | 2.4 |
| 29 | 1.4 | 1.4 | 1.8 | e1.6 | 1.9 | 1.5 | .97 | 2.2 | 2.9 | 2.6 | 1.6 | 2.3 |
| 30 | 1.4 | 1.4 | 1.8 | e1.7 | --- | 1.6 | 1.1 | 2.5 | 2.6 | 2.3 | 1.7 | 2.0 |
| 31 | 1.4 | --- | 1.8 | e1.7 | --- | 1.6 | --- | 2.6 | --- | 2.2 | 1.8 | --- |
| TOTAL | 44.1 | 42.2 | 51.6 | 57.5 | 49.8 | 50.4 | 36.18 | 51.65 | 173.9 | 76.0 | 52.6 | 54.3 |
| MEAN | 1.42 | 1.41 | 1.66 | 1.85 | 1.72 | 1.63 | 1.21 | 1.67 | 5.80 | 2.45 | 1.70 | 1.81 |
| MAX | 1.6 | 1.6 | 1.8 | 2.2 | 2.0 | 2.1 | 1.7 | 6.3 | 40 | 5.4 | 2.5 | 2.4 |
| MIN | 1.2 | 1.3 | 1.4 | 1.4 | 1.5 | 1.4 | .94 | .88 | 2.6 | 1.9 | 1.1 | 1.4 |
| AC-FT | 87 | 84 | 102 | 114 | 99 | 100 | 72 | 102 | 345 | 151 | 104 | 108 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2000, BY WATER YEAR (WY)

| MEAN | 1.66 | 1.84 | 1.86 | 1.75 | 2.40 | 4.11 | 2.97 | 3.12 | 11.2 | 5.56 | 2.98 | 2.31 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MAX | 2.56 | 3.04 | 3.82 | 2.24 | 5.20 | 17.8 | 7.67 | 6.38 | 26.9 | 26.1 | 11.1 | 5.11 |
| (WY) | 1994 | 1998 | 1998 | 1998 | 1998 | 1993 | 1999 | 1999 | 1991 | 1993 | 1998 | 1999 |
| MIN | 1.02 | 1.22 | 1.40 | 1.34 | 1.52 | 1.54 | 1.21 | 1.42 | 2.15 | 1.21 | .84 | .72 |
| (WY) | 1993 | 1991 | 1991 | 1999 | 1992 | 1992 | 2000 | 1997 | 1992 | 1991 | 1991 | 1992 |

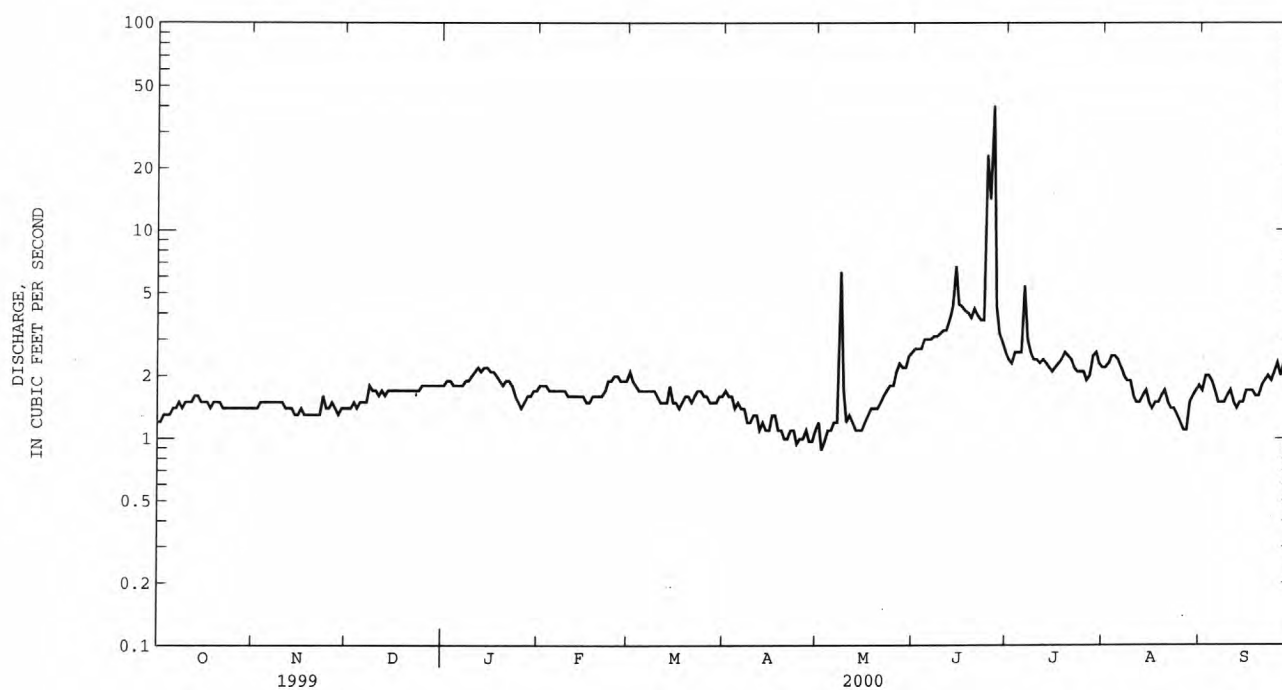
PLATTE RIVER BASIN

06804900 JOHNSON CREEK NEAR MEMPHIS, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | FOR 2000 WATER YEAR | WATER YEARS 1991 - 2000 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 1224.26 | 740.23 | |
| ANNUAL MEAN | 3.35 | 2.02 | 3.46 |
| HIGHEST ANNUAL MEAN | | | 6.79 |
| LOWEST ANNUAL MEAN | | | 1.75 |
| HIGHEST DAILY MEAN | 73 Sep 5 | 40 Jun 26 | 240 Jul 23 1993 |
| LOWEST DAILY MEAN | .55 Sep 10 | .88 May 2 | .36 Jul 22 1995 |
| ANNUAL SEVEN-DAY MINIMUM | .60 Sep 9 | 1.0 Apr 23 | .60 Sep 9 1999 |
| INSTANTANEOUS PEAK FLOW | | 157 Jun 25 | *269 Jun 14 1991 |
| INSTANTANEOUS PEAK STAGE | | 8.95 Jun 25 | 10.49 Jun 1 1994 |
| ANNUAL RUNOFF (AC-FT) | 2430 | 1470 | 2510 |
| 10 PERCENT EXCEEDS | 6.5 | 2.6 | 3.8 |
| 50 PERCENT EXCEEDS | 1.9 | 1.6 | 1.8 |
| 90 PERCENT EXCEEDS | 1.0 | 1.2 | 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 periods of estimated record, which are poor. Natural flow of stream affected by storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | 7670 | 7450 | 7240 | 9130 | 6100 | 10100 | 8560 | 6680 | 7520 | 5850 | 4980 | 2610 |
| 2 | 6920 | 7100 | 7350 | 8870 | 6380 | 9700 | 7510 | 6330 | 7750 | 5130 | 4570 | 2490 |
| 3 | 7320 | 7510 | 7490 | 9400 | 7770 | 9250 | 7660 | 6300 | 7830 | 5020 | 4070 | 2420 |
| 4 | 6660 | 7420 | 7710 | 8620 | 9890 | 8830 | 6760 | 6400 | 7440 | 4850 | 3930 | 2530 |
| 5 | 6970 | 7190 | 7690 | 6950 | 8950 | 8590 | 6900 | 6310 | 7270 | 5140 | 3950 | 2550 |
| 6 | 7200 | 7500 | 7560 | e6000 | 8530 | 8520 | 7250 | 6210 | 6730 | 7700 | 3310 | 2270 |
| 7 | 6900 | 7100 | 7760 | e5000 | e9000 | 7950 | 7270 | 5640 | 6420 | 19000 | 3080 | 2510 |
| 8 | 7280 | 8370 | 7610 | 6610 | e9600 | 8500 | 6680 | 6260 | 6490 | 15500 | 2690 | 2370 |
| 9 | 7510 | 7960 | 7530 | 8320 | e10000 | 8290 | 7170 | 6000 | 5740 | 11100 | 2760 | 2440 |
| 10 | 7420 | 7360 | 7550 | 8510 | e9900 | 8490 | 6520 | 5760 | 5540 | 9310 | 2470 | 2560 |
| 11 | 7320 | 7510 | 7430 | 9070 | e9400 | 8670 | 7820 | 6070 | 5440 | 7520 | 2740 | 2140 |
| 12 | 7470 | 7510 | 7350 | 8820 | 8940 | 8800 | 7140 | 6010 | 5390 | 6770 | 2380 | 2190 |
| 13 | 7580 | 7410 | 7460 | 8590 | 9420 | 8070 | 6790 | 5380 | 5650 | 7460 | 2210 | 2110 |
| 14 | 7460 | 7690 | 6950 | 8600 | 9150 | 8960 | 7030 | 5350 | 5610 | 7070 | 2130 | 2090 |
| 15 | 7190 | 7440 | 7340 | 8240 | 8900 | 7500 | 7220 | 5190 | 4640 | 6000 | 1970 | 2010 |
| 16 | 6440 | 7450 | 7580 | 9070 | 8800 | 7650 | 7190 | 5080 | 5060 | 4720 | 1920 | 2110 |
| 17 | 6620 | 7470 | 6790 | 8740 | 8720 | 7520 | 8150 | 5410 | 5230 | 4410 | 2050 | 2080 |
| 18 | 7040 | 7310 | 6320 | 8070 | 9080 | 7710 | 8540 | 4840 | 5040 | 5610 | 1610 | 1990 |
| 19 | 7070 | 7620 | 6700 | 8520 | 8630 | 7220 | 8500 | 6190 | 5020 | 5130 | 2470 | 2080 |
| 20 | 7460 | 7500 | 6570 | 8430 | 8850 | 7840 | 8130 | 6020 | 4750 | 3930 | 1920 | 2480 |
| 21 | 6810 | 7190 | 6430 | 7650 | 8900 | 8090 | 7790 | 6900 | 4350 | 4320 | 1720 | 2540 |
| 22 | 7120 | 7530 | 6000 | 7650 | 9320 | 7550 | 6710 | 7590 | 4470 | 4500 | 2880 | 2380 |
| 23 | 7170 | 7810 | 3880 | 7830 | 9300 | 7870 | 7470 | 6710 | 4610 | 3820 | 2800 | 2610 |
| 24 | 6990 | 7660 | 5940 | 7490 | 9260 | 8490 | 6870 | 5430 | 6950 | 3600 | 2750 | 2920 |
| 25 | 7100 | 7700 | 6810 | 7810 | 9520 | 8580 | 6430 | 5850 | 7670 | 3970 | 2680 | 2850 |
| 26 | 7320 | 7840 | 8060 | 7970 | 10900 | 8410 | 5840 | 6390 | 16000 | 4450 | 2770 | 2980 |
| 27 | 6830 | 7510 | 11800 | 7420 | 10900 | 8430 | 6600 | 6650 | 13600 | 4440 | 2890 | 2990 |
| 28 | 7380 | 7660 | 13700 | 6540 | 9970 | 7990 | 6690 | 6910 | 10200 | 3840 | 2870 | 3180 |
| 29 | 7050 | 7400 | 13000 | 5560 | 9710 | 7940 | 7130 | 6960 | 7710 | 4150 | 2330 | 3400 |
| 30 | 7400 | 7290 | 11500 | 4960 | --- | 7920 | 6940 | 7330 | 7290 | 4230 | 2180 | 3130 |
| 31 | 7010 | --- | 10100 | 5320 | --- | 7650 | --- | 7640 | --- | 5990 | 2520 | --- |
| TOTAL | 221680 | 225460 | 243200 | 239760 | 263790 | 257080 | 217260 | 191790 | 203410 | 194530 | 85600 | 75010 |
| MEAN | 7151 | 7515 | 7845 | 7734 | 9096 | 8293 | 7242 | 6187 | 6780 | 6275 | 2761 | 2500 |
| MAX | 7670 | 8370 | 13700 | 9400 | 10900 | 10100 | 8560 | 7640 | 16000 | 19000 | 4980 | 3400 |
| MIN | 6440 | 7100 | 3880 | 4960 | 6100 | 7220 | 5840 | 4840 | 4350 | 3600 | 1610 | 1990 |
| AC-FT | 439700 | 447200 | 482400 | 475600 | 523200 | 509900 | 430900 | 380400 | 403500 | 385900 | 169800 | 148800 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2000, BY WATER YEAR (WY)

| | MEAN | 5218 | 5555 | 4940 | 4815 | 7645 | 11210 | 10010 | 9869 | 11500 | 6426 | 4218 | 4338 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 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 | |

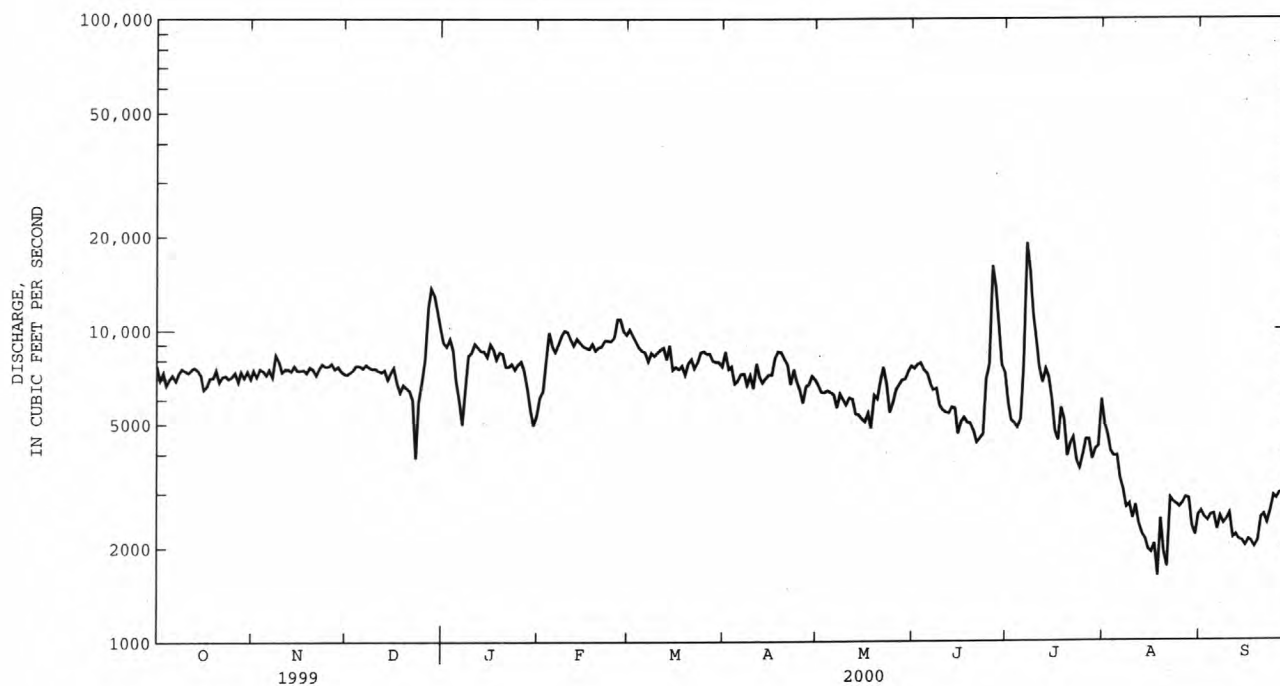
PLATTE RIVER BASIN

06805500 PLATTE RIVER AT LOUISVILLE, NE--Continued
 (National Stream-Quality Accounting Network, NASQAN, station)
 (National Water-Quality Assessment, NAWQA, station)

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1953 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 4174650 | | 2418570 | | 7158 | |
| ANNUAL MEAN | 11440 | | 6608 | | 16210 | 1984 |
| HIGHEST ANNUAL MEAN | | | | | 2885 | 1956 |
| LOWEST ANNUAL MEAN | | | | | 138000 | Jul 25 1993 |
| HIGHEST DAILY MEAN | 50500 | Jun 28 | 19000 | Jul 7 | 131 | Sep 3 1976 |
| LOWEST DAILY MEAN | 3880 | Dec 23 | 1610 | Aug 18 | 159 | Aug 29 1976 |
| ANNUAL SEVEN-DAY MINIMUM | 5400 | Jul 31 | 1950 | Aug 15 | *160000 | Jul 25 1993 |
| INSTANTANEOUS PEAK FLOW | | | 22300 | Jul 7 | 12.45 | Mar 30 1960 |
| INSTANTANEOUS PEAK STAGE | | | 6.38 | Jul 7 | | |
| ANNUAL RUNOFF (AC-FT) | 8280000 | | 4797000 | | 5186000 | |
| 10 PERCENT EXCEEDS | 20700 | | 8970 | | 13000 | |
| 50 PERCENT EXCEEDS | 8330 | | 7140 | | 5370 | |
| 90 PERCENT EXCEEDS | 6400 | | 2610 | | 2020 | |

e Estimated.

* Stage 11.90 ft.



PLATTE RIVER BASIN

06805500 PLATTE RIVER AT LOUISVILLE, NE--Continued
(National Stream-Quality Accounting Network, NASQAN, station)
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1974 to September 1981.

WATER TEMPERATURES: November 1974 to September 1981.

SUSPENDED SEDIMENT DISCHARGE: October 1971 to September 1981.

REMARKS.--Prior to July 1, 1971, sediment records were obtained by the U.S. 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 1999 TO SEPTEMBER 2000

| DATE | TIME | DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061) | 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) | SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301) | TUR- BID- ITY (NTU) (00076) | OXYGEN, DIS- SOLVED (MG/L) (00300) | OXYGEN, DIS- SOLVED 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) |
|-------|---|--|--|--|---|---|---|---|--|--|--|---|
| OCT | | | | | | | | | | | | |
| 12... | 1230 | 8160 | .69 | 11200 | 507 | 507 | 120 | 12.1 | 140 | 8.3 | 728 | 26.0 |
| NOV | | | | | | | | | | | | |
| 23... | 1030 | 7900 | .65 | 10200 | 478 | 473 | 30 | 10.6 | 87 | 7.5 | 632 | 3.5 |
| DEC | | | | | | | | | | | | |
| 16... | 1100 | 7790 | .66 | 10200 | 485 | 441 | 31 | 14.1 | 102 | 7.4 | 620 | -4.0 |
| JAN | | | | | | | | | | | | |
| 21... | 1100 | 7690 | .72 | 11100 | 533 | 511 | -- | 13.9 | 99 | 7.1 | 512 | -3.0 |
| FEB | | | | | | | | | | | | |
| 17... | 1100 | 8980 | .68 | 12200 | 502 | 484 | 34 | 13.8 | 98 | 7.9 | 765 | 1.0 |
| MAR | | | | | | | | | | | | |
| 21... | 1030 | 8080 | .62 | 9880 | 453 | 434 | 45 | 12.2 | 99 | 7.7 | 640 | 6.0 |
| APR | | | | | | | | | | | | |
| 27... | 1130 | 6450 | .53 | 6770 | 389 | 386 | 30 | 12.3 | 127 | 9.0 | 628 | 16.0 |
| MAY | | | | | | | | | | | | |
| 10... | 1030 | 6080 | .52 | 6280 | 382 | 371 | 27 | 9.5 | 103 | 8.9 | 525 | 15.0 |
| 19... | 1530 | 6900 | .66 | 9040 | 485 | 475 | 91 | 10.5 | 119 | 8.5 | 522 | 24.0 |
| JUN | | | | | | | | | | | | |
| 02... | 0930 | 7640 | .53 | 8040 | 390 | 386 | 64 | 7.8 | 90 | 8.4 | 563 | 20.0 |
| 21... | 0900 | 4330 | .55 | 4760 | 407 | 388 | 56 | 10.4 | 126 | 8.6 | 566 | 20.0 |
| 26... | 1000 | 17600 | .38 | 13400 | 283 | 273 | 560 | 4.6 | 54 | 7.5 | 438 | 19.5 |
| JUL | | | | | | | | | | | | |
| 14... | 1030 | 6800 | .43 | 5860 | 319 | 308 | 310 | 6.6 | 88 | 8.1 | 448 | 29.5 |
| AUG | | | | | | | | | | | | |
| 04... | 0900 | 3580 | .63 | 4500 | 466 | 452 | 56 | 9.3 | 117 | 8.5 | 468 | 22.0 |
| SEP | | | | | | | | | | | | |
| 14... | 1000 | 2000 | .59 | 2330 | 431 | 431 | 27 | 9.2 | 107 | 8.5 | 480 | 20.0 |
| | | | | | | | | | | | | |
| DATE | TEMPER- ATURE WATER (DEG C) (00010) | UV ABSORB- ANCE 254 NM, WTR FLT (UNITS (CM) (50624) | UV ABSORB- ANCE 280 NM, WTR FLT (UNITS (CM) (61726) | HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904) | HARD- NESS NONCARB DISSOLV LAB AS CACO3 (MG/L) (00905) | 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 | | | | | | | | | | | | |
| 12... | 20.0 | .068 | -- | 67 | 61 | 220 | 56.2 | 20.4 | 10.1 | 2 | 73.5 | 40 |
| NOV | | | | | | | | | | | | |
| 23... | 5.5 | .052 | .038 | 54 | 44 | 230 | 63.9 | 17.4 | 8.2 | 2 | 63.7 | 36 |
| DEC | | | | | | | | | | | | |
| 16... | .5 | .052 | .038 | 28 | 27 | 230 | 63.1 | 16.9 | 7.0 | 1 | 48.5 | 31 |
| JAN | | | | | | | | | | | | |
| 21... | .2 | -- | -- | 53 | -- | 250 | 69.6 | 19.2 | 8.6 | 2 | 63.8 | 34 |
| FEB | | | | | | | | | | | | |
| 17... | .0 | .050 | .036 | 49 | 44 | 240 | 67.2 | 17.6 | 7.9 | 2 | 56.4 | 33 |
| MAR | | | | | | | | | | | | |
| 21... | 5.0 | .069 | .050 | 46 | 37 | 230 | 64.0 | 17.0 | 8.3 | 1 | 48.5 | 31 |
| APR | | | | | | | | | | | | |
| 27... | 15.0 | .068 | .049 | 44 | 40 | 180 | 45.8 | 16.6 | 8.8 | 2 | 56.9 | 39 |
| MAY | | | | | | | | | | | | |
| 10... | 17.0 | .071 | .052 | 40 | 38 | 180 | 44.4 | 16.9 | 9.3 | 2 | 54.3 | 38 |
| 19... | 19.0 | .068 | .040 | 41 | 36 | 190 | 46.5 | 17.7 | 8.7 | 3 | 91.3 | 50 |
| JUN | | | | | | | | | | | | |
| 02... | 20.5 | .150 | .114 | 19 | 16 | 190 | 52.5 | 15.3 | 10.2 | 2 | 48.7 | 34 |
| 21... | 23.0 | .108 | .087 | 32 | 17 | 160 | 40.5 | 14.5 | 9.9 | 2 | 66.7 | 46 |
| 26... | 22.0 | .173 | .132 | 14 | 17 | 120 | 33.3 | 9.73 | 8.5 | 2 | 41.6 | 40 |
| JUL | | | | | | | | | | | | |
| 14... | 27.5 | .565 | .505 | 18 | 18 | 180 | 50.9 | 12.2 | 10.8 | 1 | 31.5 | 26 |
| AUG | | | | | | | | | | | | |
| 04... | 24.5 | .109 | .080 | 19 | 16 | 170 | 45.0 | 13.9 | 10.5 | 3 | 86.8 | 51 |
| SEP | | | | | | | | | | | | |
| 14... | 20.5 | .078 | .057 | -- | 11 | 170 | 43.8 | 14.4 | 9.6 | 3 | 83.0 | 50 |

PLATTE RIVER BASIN

06805500 PLATTE RIVER AT LOUISVILLE, NE--Continued
 (National Stream-Quality Accounting Network, NASQAN, station)
 (National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | ALKA- LIVITY WAT.DIS FET LAB CACO3 (MG/L) (29801) | ALKA- LIVITY 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) | 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) |
|-----------|--|--|--|---|--|--|--|---|--|--|---|--|
| OCT 12... | 164 | 158 | 164 | 14 | 50.2 | .5 | 22.8 | 176 | <.020 | .38 | .45 | -- |
| NOV 23... | 188 | 178 | 217 | 0 | 54.9 | .4 | 32.8 | 116 | .027 | .22 | .87 | .03 |
| DEC 16... | 201 | 200 | 244 | 0 | 31.1 | .4 | 32.8 | 110 | .069 | .31 | .91 | .09 |
| JAN 21... | -- | 200 | 244 | 0 | 44.9 | .4 | 32.8 | 141 | .079 | .26 | .72 | .10 |
| FEB 17... | 197 | 192 | 234 | 0 | 45.1 | .4 | 31.7 | 130 | .135 | .35 | .90 | .17 |
| MAR 21... | 194 | 184 | 203 | 11 | 32.9 | .4 | 31.8 | 110 | .028 | .24 | .91 | .04 |
| APR 27... | 143 | 138 | 112 | 28 | 41.5 | .5 | 15.4 | 116 | <.020 | .28 | 1.6 | -- |
| MAY 10... | 143 | 142 | 156 | 8 | 36.1 | .3 | 14.3 | 110 | <.020 | .26 | 1.0 | -- |
| 19... | 154 | 148 | 165 | 8 | 89.3 | .4 | 15.9 | 114 | <.020 | .25 | 1.8 | -- |
| JUN 02... | 179 | 175 | 155 | 29 | 33.7 | .4 | 20.4 | 93.9 | <.020 | .48 | 2.6 | -- |
| 21... | 145 | 135 | 131 | 13 | 60.4 | .3 | 21.9 | 95.6 | <.020 | .28 | 1.4 | -- |
| 26... | 107 | 110 | 134 | 0 | 39.4 | .3 | 13.6 | 52.2 | .258 | .89 | 9.0 | .33 |
| JUL 14... | 160 | 160 | 195 | 0 | 22.9 | .4 | 19.4 | 54.3 | .021 | .53 | 4.6 | .03 |
| AUG 04... | 154 | 152 | 156 | 14 | 99.1 | .4 | 19.7 | 83.3 | <.020 | .31 | 1.3 | -- |
| SEP 14... | 158 | -- | -- | -- | 82.0 | .4 | 25.1 | 77.7 | <.020 | .28 | 1.1 | -- |
| DATE | NITRO- GEN DIS- SOLVED (MG/L AS N) (00602) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618) | NITRO- GEN, NITRATE SOLVED (MG/L AS NO3) (71851) | NITRO- GEN, NO2+NO3 SOLVED (MG/L AS NO2) (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) | 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 12... | .69 | .298 | 1.32 | .313 | .049 | .015 | -- | -- | .76 | .012 | .016 | .004 |
| NOV 23... | 2.0 | 1.75 | 7.75 | 1.76 | .036 | .011 | .19 | .85 | 2.6 | .534 | .179 | .174 |
| DEC 16... | 2.5 | -- | -- | 2.16 | -- | <.010 | .24 | .84 | 3.1 | .626 | .197 | .204 |
| JAN 21... | 2.7 | 2.38 | 10.6 | 2.40 | .046 | .014 | .18 | .64 | 3.1 | .576 | .204 | .188 |
| FEB 17... | 2.8 | 2.46 | 10.9 | 2.47 | .036 | .011 | .22 | .76 | 3.4 | .632 | .238 | .206 |
| MAR 21... | 2.3 | -- | -- | 2.08 | -- | <.010 | .21 | .89 | 3.0 | .586 | .182 | .191 |
| APR 27... | -- | -- | -- | <.050 | -- | <.010 | -- | -- | -- | .031 | .010 | .010 |
| MAY 10... | -- | -- | -- | <.050 | -- | <.010 | -- | -- | -- | .009 | .008 | .003 |
| 19... | .48 | .196 | .868 | .229 | .108 | .033 | -- | -- | 2.0 | .080 | .041 | .026 |
| JUN 02... | 1.5 | .989 | 4.38 | 1.01 | .072 | .022 | -- | -- | 3.6 | .313 | .126 | .102 |
| 21... | -- | -- | -- | <.050 | -- | <.010 | -- | -- | -- | .107 | .046 | .035 |
| 26... | 2.6 | 1.53 | 6.76 | 1.67 | .460 | .140 | .63 | 8.8 | 11 | .362 | .145 | .118 |
| JUL 14... | 2.4 | 1.74 | 7.71 | 1.87 | .417 | .127 | .51 | 4.6 | 6.5 | .908 | .355 | .296 |
| AUG 04... | .52 | .188 | .832 | .217 | .095 | .029 | -- | -- | 1.5 | .598 | .178 | .195 |
| SEP 14... | -- | -- | -- | <.050 | .036 | .011 | -- | -- | -- | .230 | .082 | .075 |

PLATTE RIVER BASIN

06805500 PLATTE RIVER AT LOUISVILLE, NE--Continued
(National Stream-Quality Accounting Network, NASQAN, station)
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | PHOS- PHORUS TOTAL (MG/L AS P) (00665) | PHOS- PHORUS SEDI- MENT SUSP. PERCENT (30292) | CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681) | CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689) | CARBON SED. SUSP. PERCENT (30244) | CARBON, ORGANIC SUS- PENDED, TOTAL (UG/L PERCENT (50465) | 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) |
|-----------|---|---|---|--|---|---|--|--|---|---|---|---|
| OCT 12... | .159 | -- | 3.5 | >5.0 | -- | -- | -- | -- | 5.3 | -- | -- | 111 |
| NOV 23... | .298 | -- | 2.5 | .4 | -- | -- | -- | -- | 5.2 | -- | -- | 93 |
| DEC 16... | .339 | .035 | 2.6 | 3.7 | 1.8 | 1.2 | 2 | <1 | 5.1 | 120 | <1 | 82 |
| JAN 21... | .315 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB 17... | .377 | .049 | 2.6 | 1.1 | 2.3 | 1.4 | 5 | <1 | 5.2 | 126 | <1 | 86 |
| MAR 21... | .385 | .078 | 2.9 | 3.7 | 3.0 | 1.9 | 1 | <1 | 5.4 | 121 | <1 | 78 |
| APR 27... | .340 | -- | 3.7 | 4.2 | -- | -- | -- | -- | 4.8 | -- | -- | 89 |
| MAY 10... | .325 | -- | 3.4 | >5.0 | -- | -- | -- | -- | 5.6 | -- | -- | 94 |
| 19... | .648 | -- | 3.6 | >5.0 | -- | -- | -- | -- | 4.5 | -- | -- | 113 |
| JUN 02... | .663 | .11 | 5.2 | >5.0 | 3.2 | 2.5 | 7 | <1 | 6.8 | 114 | <1 | 75 |
| 21... | .463 | -- | 4.2 | >5.0 | -- | -- | -- | -- | 5.3 | -- | -- | 90 |
| 26... | 3.45 | -- | 6.3 | >5.0 | -- | -- | -- | -- | 3.7 | -- | -- | 61 |
| JUL 14... | 1.86 | -- | 6.7 | >5.0 | -- | -- | -- | -- | 7.9 | -- | -- | 70 |
| AUG 04... | .490 | .13 | 3.8 | >5.0 | 4.1 | 3.0 | 5 | <1 | 7.9 | 108 | <1 | 102 |
| SEP 14... | .421 | -- | 3.7 | >5.0 | -- | -- | -- | -- | 7.8 | -- | -- | 95 |

| 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) |
|-----------|---|--|---|---|---|---|---|---|--|---|--|---|
| OCT 12... | -- | -- | -- | -- | 210 | -- | 28.0 | -- | -- | -- | 2.5 | -- |
| NOV 23... | -- | -- | -- | -- | <10 | -- | 25.6 | -- | -- | -- | E2.0 | -- |
| DEC 16... | <1.0 | <.8 | <1 | 10 | <10 | 4 | 20.8 | 7 | 3 | 1 | 3.4 | <1 |
| JAN 21... | -- | -- | -- | -- | <10 | -- | -- | 7 | -- | -- | -- | -- |
| FEB 17... | <1.0 | <1.0 | <1 | 11 | <10 | <1 | 23.4 | 10 | 4 | 3 | 3.5 | <1 |
| MAR 21... | <1.0 | <1.0 | <1 | 5 | <10 | <1 | 22.6 | 3 | 3 | <1 | 2.6 | <1 |
| APR 27... | -- | -- | -- | -- | <10 | -- | 24.0 | -- | -- | -- | 3.5 | -- |
| MAY 10... | -- | -- | -- | -- | <10 | -- | 22.9 | -- | -- | -- | 3.2 | -- |
| 19... | -- | -- | -- | -- | <10 | -- | 28.0 | -- | -- | -- | 4.0 | -- |
| JUN 02... | <1.0 | <.8 | <1 | 6 | <10 | <1 | 22.8 | <1 | 4 | 3 | 3.6 | <1 |
| 21... | -- | -- | -- | -- | <10 | -- | 21.3 | -- | -- | -- | E2.0 | -- |
| 26... | -- | -- | -- | -- | E10 | -- | 13.7 | -- | -- | -- | 2.6 | -- |
| JUL 14... | -- | -- | -- | -- | <10 | -- | 15.5 | -- | -- | -- | 4.3 | -- |
| AUG 04... | <1.0 | <.8 | <1 | 4 | E10 | <1 | 23.1 | <1 | 5 | 2 | 3.2 | <1 |
| SEP 14... | -- | -- | -- | -- | <10 | -- | 25.0 | -- | -- | -- | 3.1 | -- |

[illegible][illegible]

PLATTE RIVER BASIN

06805500 PLATTE RIVER AT LOUISVILLE, NE--Continued
(National Stream-Quality Accounting Network, NASQAN, station)
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | VANA- DIUM SED. SUSP. (UG/G) (29853) | ZINC SED. SUSP. (UG/G) (29855) | 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 12... | -- | -- | <.003 | <.002 | <.002 | <.002 | .097 | <.002 | <.002 | <.003 | <.003 | <.004 |
| NOV 23... | -- | -- | <.003 | <.002 | <.002 | <.002 | .066 | <.002 | <.002 | <.003 | <.003 | <.004 |
| DEC 16... | 31 | 120 | <.003 | <.002 | <.002 | <.002 | .046 | <.002 | <.002 | <.003 | <.003 | <.004 |
| JAN 21... | -- | -- | <.003 | <.002 | <.002 | <.002 | .068 | <.002 | <.002 | E.006 | <.003 | <.004 |
| FEB 17... | 45 | 250 | <.003 | <.002 | <.002 | <.002 | .044 | <.002 | <.002 | <.003 | <.003 | <.004 |
| MAR 21... | 46 | 180 | <.003 | <.002 | <.002 | <.002 | .044 | <.002 | <.002 | <.003 | <.003 | <.004 |
| APR 27... | -- | -- | <.003 | .056 | .014 | <.002 | .142 | <.002 | <.002 | <.003 | <.003 | <.004 |
| MAY 10... | -- | -- | <.003 | .111 | .033 | <.002 | .241 | <.002 | <.002 | <.003 | <.003 | <.004 |
| 19... | -- | -- | <.003 | .402 | .032 | <.002 | 2.37 | <.002 | <.002 | <.003 | <.003 | <.004 |
| JUN 02... | 80 | 190 | <.003 | .132 | .026 | <.002 | 1.37 | <.002 | <.002 | <.003 | <.003 | <.004 |
| 21... | -- | -- | <.003 | .051 | .014 | <.002 | .758 | <.002 | <.002 | E.004 | <.003 | <.004 |
| 26... | -- | -- | <.003 | .623 | .101 | <.002 | 3.14 | <.002 | <.002 | E.013 | E.034 | .015 |
| JUL 14... | -- | -- | <.003 | .066 | .009 | <.002 | .543 | <.002 | <.002 | <.003 | E.051 | <.004 |
| AUG 04... | 78 | 310 | <.003 | .008 | .007 | <.002 | .337 | <.002 | <.002 | <.003 | <.003 | <.004 |
| SEP 14... | -- | -- | <.003 | <.002 | <.002 | <.002 | .090 | <.002 | <.002 | <.003 | <.003 | <.004 |

| 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) |
|-----------|--|---|--|---|--|--|---|---|--|--|--|
| OCT 12... | .008 | E.004 | E.043 | <.002 | <.001 | <.017 | <.002 | <.004 | <.003 | <.003 | <.004 |
| NOV 23... | <.004 | <.002 | E.032 | <.002 | <.001 | <.017 | <.002 | <.004 | <.003 | <.003 | <.004 |
| DEC 16... | .008 | <.002 | E.035 | <.002 | <.001 | <.017 | <.002 | <.004 | <.003 | <.003 | <.004 |
| JAN 21... | .007 | <.002 | E.046 | <.002 | <.001 | <.017 | <.002 | <.004 | <.003 | <.003 | <.004 |
| FEB 17... | .006 | <.002 | E.031 | <.002 | <.001 | <.017 | <.002 | <.004 | <.003 | <.003 | <.004 |
| MAR 21... | <.004 | <.002 | E.039 | <.002 | <.001 | <.017 | <.002 | <.004 | <.003 | <.003 | <.004 |
| APR 27... | .011 | <.002 | E.059 | <.002 | <.001 | <.017 | <.002 | <.004 | <.003 | <.003 | <.004 |
| MAY 10... | .017 | <.002 | E.051 | E.002 | <.001 | <.017 | E.003 | <.004 | <.003 | <.003 | <.004 |
| 19... | .018 | <.002 | E.11 | <.002 | <.001 | <.017 | <.002 | <.004 | <.003 | <.003 | <.004 |
| JUN 02... | .128 | <.002 | E.18 | <.002 | <.001 | <.017 | <.006 | <.004 | <.003 | <.003 | <.004 |
| 21... | .029 | E.001 | E.099 | .024 | <.001 | <.017 | <.002 | <.004 | <.003 | <.003 | <.004 |
| 26... | .377 | E.001 | E.43 | .039 | <.001 | <.017 | .004 | <.004 | <.003 | <.003 | <.004 |
| JUL 14... | .057 | <.002 | E.12 | .015 | <.001 | <.017 | <.002 | <.004 | <.003 | <.003 | <.004 |
| AUG 04... | .014 | <.002 | E.095 | E.003 | <.001 | <.017 | <.002 | <.004 | <.003 | <.003 | <.004 |
| SEP 14... | <.004 | <.002 | E.043 | .004 | <.001 | <.017 | <.002 | <.004 | <.003 | <.003 | <.004 |

PLATTE RIVER BASIN

06805500 PLATTE RIVER AT LOUISVILLE, NE--Continued
(National Stream-Quality Accounting Network, NASQAN, station)
(National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| 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 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... | <.002 | <.005 | <.001 | <.006 | .013 | <.004 | <.004 | <.003 | <.006 | <.004 | <.004 |
| NOV | | | | | | | | | | | |
| 23... | <.002 | <.005 | <.001 | <.006 | .010 | <.004 | <.004 | <.003 | <.006 | <.004 | <.004 |
| DEC | | | | | | | | | | | |
| 16... | <.002 | <.005 | <.001 | <.006 | .010 | <.004 | <.004 | <.003 | <.006 | <.004 | <.004 |
| JAN | | | | | | | | | | | |
| 21... | <.002 | <.005 | <.001 | <.006 | .014 | <.025 | <.004 | <.003 | <.006 | <.004 | <.004 |
| FEB | | | | | | | | | | | |
| 17... | <.002 | <.005 | <.001 | <.006 | .010 | <.004 | <.004 | <.003 | <.006 | <.004 | <.004 |
| MAR | | | | | | | | | | | |
| 21... | <.002 | <.005 | <.001 | <.006 | .009 | <.004 | <.004 | <.003 | <.006 | <.004 | <.004 |
| APR | | | | | | | | | | | |
| 27... | <.002 | <.005 | <.001 | <.006 | .061 | <.004 | <.004 | <.003 | <.006 | <.004 | <.004 |
| MAY | | | | | | | | | | | |
| 10... | <.002 | <.005 | <.001 | <.006 | .114 | E.003 | <.004 | <.003 | E.002 | <.004 | <.004 |
| 19... | <.002 | <.005 | <.001 | <.006 | .983 | <.004 | <.004 | <.003 | <.006 | <.004 | <.004 |
| JUN | | | | | | | | | | | |
| 02... | <.002 | <.005 | <.001 | <.006 | .528 | <.004 | <.004 | <.003 | <.006 | <.004 | <.004 |
| 21... | <.002 | <.005 | <.001 | <.006 | .269 | .010 | <.004 | <.003 | <.006 | <.004 | <.004 |
| 26... | <.007 | <.005 | <.001 | <.006 | 1.41 | .095 | <.004 | <.003 | <.006 | <.004 | <.004 |
| JUL | | | | | | | | | | | |
| 14... | <.002 | <.005 | <.001 | <.006 | .336 | .013 | <.004 | <.003 | <.006 | <.004 | <.004 |
| AUG | | | | | | | | | | | |
| 04... | <.002 | <.005 | <.001 | <.006 | .077 | <.004 | <.004 | <.003 | <.006 | <.004 | <.004 |
| SEP | | | | | | | | | | | |
| 14... | <.002 | <.005 | <.001 | <.006 | .011 | <.004 | <.004 | <.003 | <.006 | <.004 | <.004 |
| | | | | | | | | | | | |
| 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) |
| OCT | | | | | | | | | | | |
| 12... | <.004 | <.005 | <.002 | E.011 | <.003 | <.007 | <.004 | <.013 | .006 | E.005 | <.007 |
| NOV | | | | | | | | | | | |
| 23... | <.004 | <.005 | <.002 | E.014 | <.003 | <.007 | <.004 | <.013 | <.005 | <.010 | <.007 |
| DEC | | | | | | | | | | | |
| 16... | <.004 | <.005 | <.002 | E.008 | <.003 | <.007 | <.004 | <.013 | .006 | E.004 | <.007 |
| JAN | | | | | | | | | | | |
| 21... | <.004 | <.005 | <.002 | E.009 | <.003 | <.007 | <.004 | <.013 | E.004 | <.010 | <.007 |
| FEB | | | | | | | | | | | |
| 17... | <.004 | <.005 | <.002 | E.007 | <.003 | <.007 | <.004 | <.013 | E.003 | E.003 | <.007 |
| MAR | | | | | | | | | | | |
| 21... | <.004 | <.005 | <.002 | E.007 | <.003 | <.007 | <.004 | <.013 | E.004 | <.010 | <.007 |
| APR | | | | | | | | | | | |
| 27... | <.004 | <.005 | <.002 | E.011 | <.003 | <.007 | <.004 | <.013 | .014 | E.007 | <.007 |
| MAY | | | | | | | | | | | |
| 10... | <.004 | <.005 | <.002 | E.015 | <.003 | <.007 | <.004 | <.013 | .005 | <.010 | <.007 |
| 19... | <.020 | <.005 | <.002 | E.015 | <.003 | E.005 | <.004 | <.013 | .012 | <.010 | <.007 |
| JUN | | | | | | | | | | | |
| 02... | <.004 | <.005 | <.002 | .021 | <.003 | <.007 | <.004 | <.013 | .015 | E.004 | <.007 |
| 21... | .008 | <.005 | <.002 | .031 | <.003 | <.007 | <.004 | <.013 | .009 | <.010 | <.007 |
| 26... | .018 | <.005 | <.002 | .035 | <.003 | <.007 | <.004 | <.013 | .021 | .019 | <.007 |
| JUL | | | | | | | | | | | |
| 14... | <.004 | <.005 | <.002 | .024 | <.003 | <.007 | <.004 | <.013 | .012 | <.010 | <.007 |
| AUG | | | | | | | | | | | |
| 04... | <.004 | <.005 | <.002 | E.011 | <.003 | <.007 | <.004 | <.013 | .008 | <.010 | <.007 |
| SEP | | | | | | | | | | | |
| 14... | <.004 | <.005 | <.002 | E.008 | <.003 | <.007 | <.004 | <.013 | .010 | <.010 | <.007 |

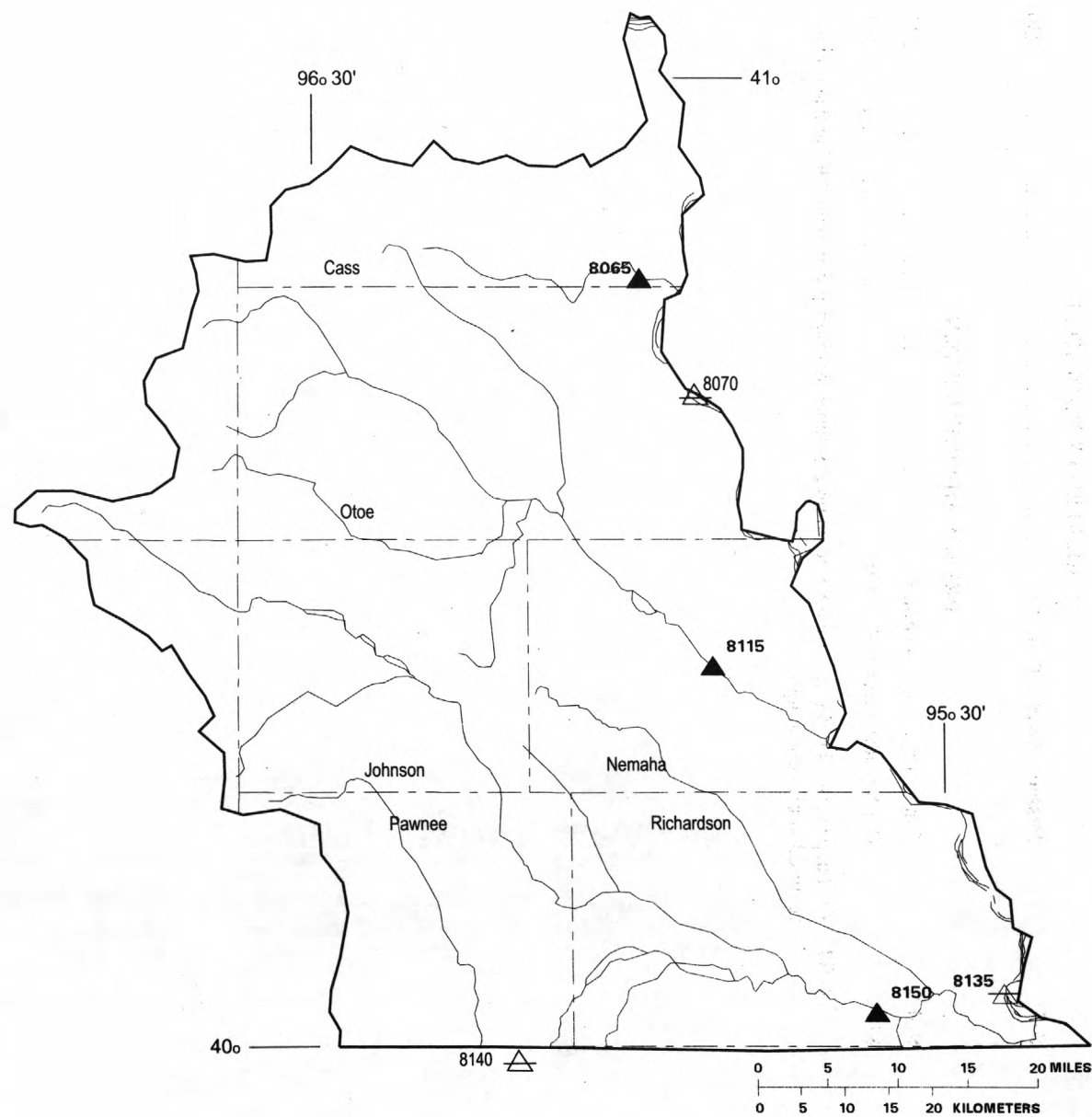
PLATTE RIVER BASIN

06805500 PLATTE RIVER AT LOUISVILLE, NE--Continued
 (National Stream-Quality Accounting Network, NASQAN, station)
 (National Water-Quality Assessment, NAWQA, station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675) | TER- BUTHYL- AZINE, WATER, DISS, REC (UG/L) (04022) | THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681) | TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678) | TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661) | URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703) | URANIUM SEDI- MENT SUSP. (UG/G) (35046) | 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) | SEDI- MENT SUSP., FLOW- THROUGH CENTRIF (MG/L) (50279) |
|--------------|--|--|---|---|---|---|--|--|---|--|---|
| OCT 12... | <.013 | E.002 | <.002 | <.001 | <.002 | -- | -- | 47 | 638 | 14100 | -- |
| NOV 23... | <.013 | -- | <.002 | <.001 | <.002 | -- | -- | 28 | 558 | 11900 | -- |
| DEC 16... | <.013 | -- | <.002 | <.001 | <.002 | 12 | <50 | 30 | 597 | 12600 | 376 |
| JAN 21... | <.013 | -- | <.002 | <.001 | <.002 | -- | -- | 9 | 1270 | 26400 | -- |
| FEB 17... | <.013 | -- | <.002 | <.001 | <.002 | 14 | <100 | 32 | 488 | 11800 | 263 |
| MAR 21... | <.013 | -- | <.002 | <.001 | <.002 | 12 | <100 | 32 | 769 | 16800 | 333 |
| APR 27... | <.013 | .010 | <.002 | <.001 | <.002 | -- | -- | 36 | 460 | 8010 | -- |
| MAY 10... | <.013 | E.014 | <.002 | <.001 | <.002 | -- | -- | 43 | 391 | 6420 | -- |
| 19... | <.013 | .011 | <.002 | <.001 | E.003 | -- | -- | 24 | 1910 | 35600 | -- |
| JUN 02... | <.013 | E.023 | <.002 | <.001 | <.002 | 9 | <50 | 78 | 505 | 10400 | 367 |
| 21... | <.013 | E.017 | <.002 | <.001 | <.002 | -- | -- | 59 | 275 | 3220 | -- |
| 26... | <.013 | E.020 | <.002 | <.001 | .010 | -- | -- | 66 | 5020 | 239000 | -- |
| JUL 14... | <.013 | E.059 | <.002 | <.001 | .004 | -- | -- | 89 | 1540 | 28300 | -- |
| AUG 04... | <.013 | E.004 | <.002 | <.001 | <.002 | 6 | <100 | 82 | 237 | 2290 | 178 |
| SEP 14... | <.013 | E.019 | <.002 | <.001 | <.002 | -- | -- | 46 | 282 | 1520 | -- |

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EXPLANATION

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

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



| *Station number | Station name | Page |
|--------------------|--|------|
| | WEeping WATER CREEK BASIN | |
| 8065 | Weeping Water Creek at Union..... | 224 |
| | MISSOURI RIVER MAIN STEM | |
| 8070 | Missouri River at Nebraska City, NE..... | 226 |
| | LITTLE NEMAHA RIVER BASIN | |
| 8115 | Little Nemaha River at Auburn..... | 228 |
| | MISSOURI RIVER MAIN STEM | |
| 8135 | Missouri River at Rulo, NE..... | 230 |
| | BIG NEMAHA RIVER BASIN | |
| 8140 | Turkey Creek near Seneca, KS..... | 232 |
| 8150 | Big Nemaha River at Falls City..... | 234 |

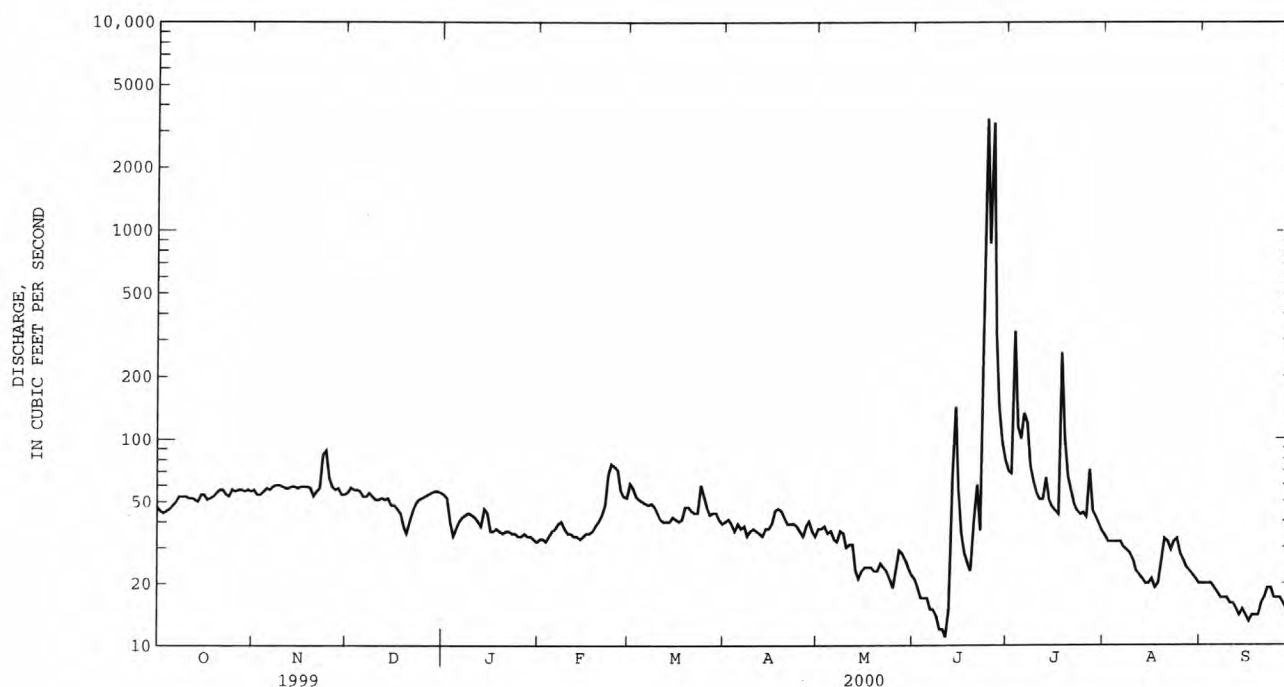
*NOTE: To change abbreviated station number to complete station number, prefix with "06" and add zeros required to give eight digits.

WEeping WATER CREEK BASIN

06806500 WEeping WATER CREEK AT UNION, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1951 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 78067 | | 23783 | | 105 | |
| ANNUAL MEAN | 214 | | 65.0 | | 76 | |
| MEDIAN OF ANNUAL MEANS | | | | | 433 | 1993 |
| HIGHEST ANNUAL MEAN | | | | | 19.9 | 1956 |
| LOWEST ANNUAL MEAN | | | | | 34000 | Jul 23 1993 |
| HIGHEST DAILY MEAN | 8390 | Jun 27 | 3440 | Jun 24 | .10 | Sep 10 1955 |
| LOWEST DAILY MEAN | 35 | Dec 20 | 11 | Jun 11 | .13 | Sep 9 1955 |
| ANNUAL SEVEN-DAY MINIMUM | 42 | Dec 16 | 13 | Jun 6 | 65100 | Jul 23 1993 |
| INSTANTANEOUS PEAK FLOW | | | 7730 | Jun 26 | 30.97 | Jul 23 1993 |
| INSTANTANEOUS PEAK STAGE | | | 24.41 | Jun 26 | 75830 | |
| ANNUAL RUNOFF (AC-FT) | 154800 | | 47170 | | 172 | |
| 10 PERCENT EXCEEDS | 306 | | 59 | | 40 | |
| 50 PERCENT EXCEEDS | 96 | | 40 | | 9.4 | |
| 90 PERCENT EXCEEDS | 53 | | 19 | | | |

e Estimated.



MISSOURI RIVER MAIN STEM

06807000 MISSOURI RIVER AT NEBRASKA CITY, NE

LOCATION.--Lat 40°40'55", long 95°50'48", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.9, T.8 N., R.14 E., Otoe County, Hydrologic Unit 10240001, on right bank 1.0 mi upstream from Highway 2 Bridge at Nebraska City, and at mile 562.6.

DRAINAGE AREA.--410,000 mi², approximately. The 3,959 mi² in Great Divide basin are not included.

PERIOD OF RECORD.--August 1929 to current year. Gage-height records collected in this vicinity from August 1878 to December 1899 are contained in reports of Missouri River Commission.

REVISED RECORDS.--WSP 761: Drainage area.

GAGE.--Water-stage 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. 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. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water quality data. U.S. Army Corps of Engineers rain gage and satellite data collection platform at station.

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.

COOPERATION.--Records provided by U.S. Geological Survey, Iowa District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 53200 | 51800 | 52300 | 34200 | 25500 | 30700 | 38900 | 37300 | 45600 | 42800 | 40700 | 35200 |
| 2 | 52900 | 52100 | 52400 | 33800 | 26000 | 30600 | 38200 | 37200 | 45200 | 41100 | 39600 | 35700 |
| 3 | 52800 | 52300 | 52700 | 33900 | 26300 | 29600 | 36700 | 37200 | 44900 | 43500 | 38900 | 36600 |
| 4 | 52800 | 52200 | 53200 | 33800 | 27600 | 28900 | 36600 | 37500 | 44500 | 41400 | 38600 | 37000 |
| 5 | 52200 | 52100 | 53300 | 33600 | 28200 | 28600 | 36400 | 37300 | 43800 | 40600 | 37700 | 36800 |
| 6 | 52700 | 51700 | 51400 | 31600 | 27300 | 28200 | 36500 | 37400 | 43300 | 45900 | 37100 | 36300 |
| 7 | 52100 | 52000 | 48800 | 31200 | 27100 | 28300 | 36600 | 37400 | 43200 | 49500 | 37100 | 36200 |
| 8 | 52300 | 52200 | 45800 | 31000 | 28500 | 28100 | 36600 | 38300 | 42500 | 52600 | 36500 | 36500 |
| 9 | 52700 | 52500 | 42400 | 31000 | 29900 | 28600 | 36600 | 38600 | 41700 | 47200 | 35800 | 36400 |
| 10 | 52800 | 52600 | 40500 | 32400 | 30500 | 28600 | 37000 | 38200 | 41400 | 45100 | 36300 | 36700 |
| 11 | 52700 | 52900 | 38500 | 32700 | 29900 | 28600 | 37700 | 38100 | 40500 | 43200 | 37000 | 37300 |
| 12 | 52600 | 53600 | 36400 | 32700 | 28300 | 28400 | 37100 | 38700 | 41100 | 42600 | 36200 | 37000 |
| 13 | 52900 | 53600 | 34700 | 31900 | 27400 | 27700 | 37100 | 39700 | 41400 | 42100 | 36100 | 37200 |
| 14 | 53400 | 53700 | 33900 | 31400 | 28200 | 26800 | 37800 | 41900 | 43300 | 44300 | 36100 | 37200 |
| 15 | 53400 | 54000 | 33200 | 31700 | 27600 | 27400 | 38000 | 43100 | 41600 | 41500 | 35800 | 37400 |
| 16 | 53400 | 54200 | 33900 | 31800 | 27500 | 26800 | 39100 | 43300 | 42800 | 40700 | 35400 | 37300 |
| 17 | 53000 | 54500 | 33700 | 32500 | 27800 | 27100 | 40000 | 42900 | 42100 | 39600 | 35900 | 37200 |
| 18 | 53500 | 54400 | 33000 | 31700 | 28200 | 27300 | 40500 | 43000 | 41000 | 41200 | 35800 | 37200 |
| 19 | 53500 | 54600 | 32200 | 30400 | 28700 | 27500 | 40500 | 44100 | 40700 | 41500 | 36700 | 36900 |
| 20 | 53300 | 54700 | 32100 | 32000 | 27900 | 27400 | 39400 | 46100 | 41800 | 39600 | 37700 | 37200 |
| 21 | 53200 | 54400 | 32000 | 32100 | 28300 | 30400 | 39600 | 46000 | 41200 | 39000 | 36500 | 37900 |
| 22 | 52700 | 54000 | 31200 | 30400 | 28600 | 32900 | 39500 | 45600 | 41100 | 39600 | 36600 | 37800 |
| 23 | 52800 | 55000 | 29000 | 30200 | 29500 | 34900 | 39600 | 46900 | 41400 | 38900 | 37900 | 38000 |
| 24 | 52600 | 54900 | 28600 | 30500 | 30100 | 37700 | 39300 | 46800 | 47900 | 38400 | 37700 | 38200 |
| 25 | 52600 | 54400 | 31000 | 30700 | 30900 | 38600 | 38400 | 45800 | 44300 | 39000 | 37000 | 38100 |
| 26 | 52200 | 53600 | 32200 | 30300 | 31700 | 39500 | 37900 | 46300 | 58500 | 39500 | 36400 | 37800 |
| 27 | 52100 | 52600 | 32800 | 30000 | 32100 | 39700 | 38000 | 46400 | 65600 | 40900 | 36300 | 37900 |
| 28 | 52400 | 52100 | 33600 | 29200 | 31200 | 40400 | 38400 | 46200 | 54000 | 41200 | 36200 | 37200 |
| 29 | 52800 | 51500 | 34200 | 27800 | 30300 | 40000 | 38500 | 46000 | 46700 | 39300 | 35800 | 37100 |
| 30 | 52900 | 51700 | 34200 | 25900 | --- | 40300 | 38000 | 45700 | 44400 | 39700 | 35400 | 37400 |
| 31 | 52600 | --- | 34300 | 25800 | --- | 39600 | --- | 45400 | --- | 40000 | 35300 | --- |
| TOTAL | 1637100 | 1595900 | 1187500 | 968200 | 831100 | 979200 | 1144500 | 1304400 | 1337500 | 1301500 | 1142100 | 1112700 |
| MEAN | 52810 | 53200 | 38310 | 31230 | 28660 | 31590 | 38150 | 42080 | 44580 | 41980 | 36840 | 37090 |
| MAX | 53500 | 55000 | 53300 | 34200 | 32100 | 40400 | 40500 | 46900 | 65600 | 52600 | 40700 | 38200 |
| MIN | 52100 | 51500 | 28600 | 25800 | 25500 | 26800 | 36400 | 37200 | 40500 | 38400 | 35300 | 35200 |
| AC-FT | 3247000 | 3165000 | 2355000 | 1920000 | 1648000 | 1942000 | 2270000 | 2587000 | 2653000 | 2582000 | 2265000 | 2207000 |
| CFSM | .13 | .13 | .09 | .08 | .07 | .08 | .09 | .10 | .11 | .10 | .09 | .09 |
| IN. | .15 | .14 | .11 | .09 | .08 | .09 | .10 | .12 | .12 | .10 | .10 | .10 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2000, BY WATER YEAR (WY)

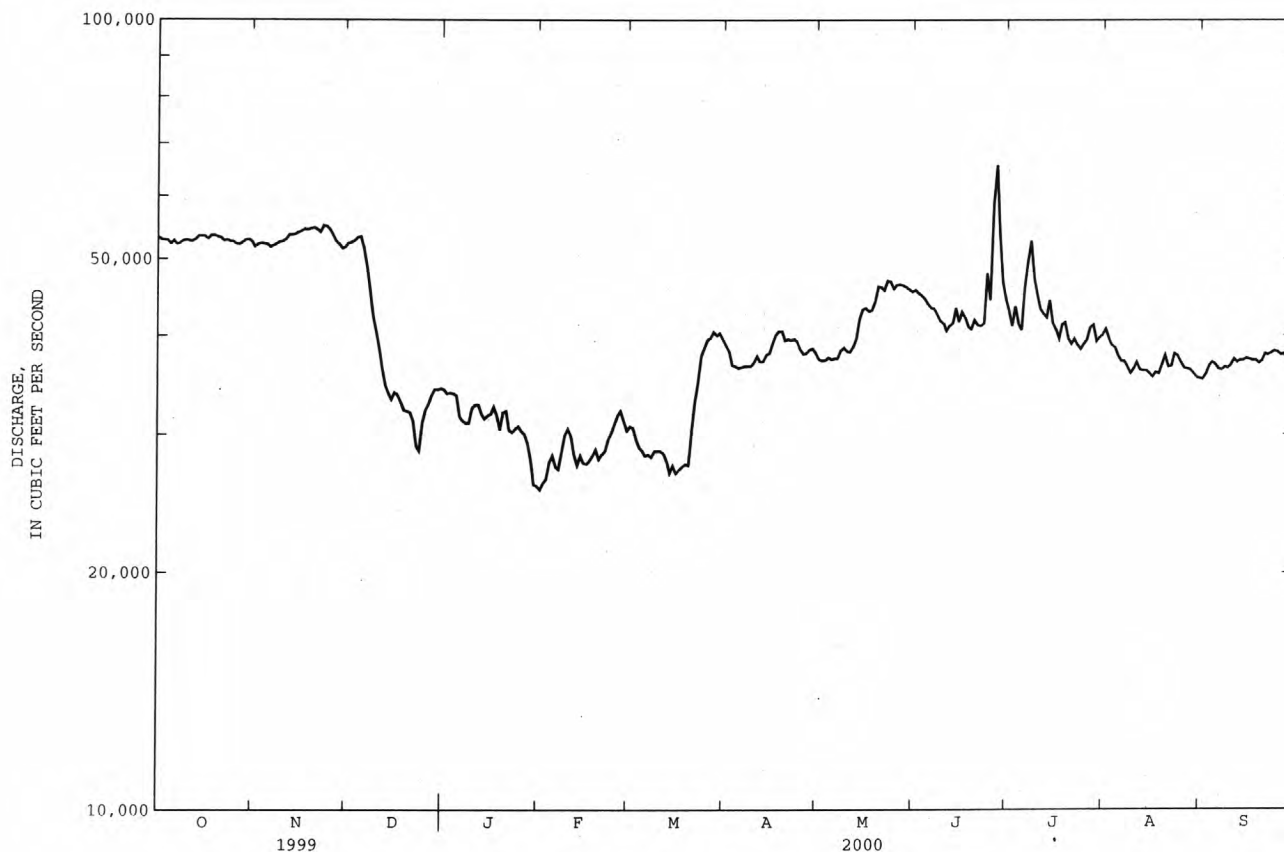
| | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|-------|-------|
| MEAN | 43050 | 39090 | 25760 | 21510 | 26740 | 38110 | 47840 | 47670 | 52680 | 46790 | 43030 | 42880 |
| MAX | 76760 | 79410 | 52410 | 39970 | 48630 | 66730 | 98960 | 90280 | 117500 | 116700 | 71540 | 73410 |
| (WY) | 1998 | 1998 | 1987 | 1987 | 1983 | 1983 | 1997 | 1997 | 1984 | 1993 | 1996 | 1997 |
| MIN | 22420 | 14380 | 10510 | 10160 | 12780 | 15310 | 21850 | 32470 | 33530 | 32760 | 29870 | 32560 |
| (WY) | 1962 | 1962 | 1956 | 1957 | 1957 | 1957 | 1957 | 1955 | 1958 | 1961 | 1955 | 1958 |

MISSOURI RIVER MAIN STEM

06807000 MISSOURI RIVER AT NEBRASKA CITY, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1953 - 2000a | |
|--------------------------|------------------------|--------|---------------------|--------|--------------------------|-------------|
| ANNUAL TOTAL | 19303100 | | 14541700 | | 39630 | |
| ANNUAL MEAN | 52890 | | 39730 | | 66450 | 1997 |
| HIGHEST ANNUAL MEAN | | | | | 25370 | 1957 |
| LOWEST ANNUAL MEAN | | | | | 188000 | Jul 25 1993 |
| HIGHEST DAILY MEAN | 102000 | Jun 29 | 65600 | Jun 27 | 4320 | Jan 11 1957 |
| LOWEST DAILY MEAN | 28600 | Dec 24 | 25500 | Feb 1 | 5590 | Nov 29 1955 |
| ANNUAL SEVEN-DAY MINIMUM | 30900 | Dec 19 | 26400 | Jan 29 | 196000 | Jul 23 1993 |
| INSTANTANEOUS PEAK FLOW | | | 67800 | Jun 27 | 27.19 | Jul 23 1993 |
| INSTANTANEOUS PEAK STAGE | | | 15.33 | Jun 27 | | |
| INSTANTANEOUS LOW FLOW | | | 25300 | Feb 1 | | |
| ANNUAL RUNOFF (AC-FT) | 38290000 | | 28840000 | | 28710000 | |
| ANNUAL RUNOFF (CFSM) | .13 | | .097 | | .097 | |
| ANNUAL RUNOFF (INCHES) | 1.75 | | 1.32 | | 1.31 | |
| 10 PERCENT EXCEEDS | 67700 | | 52800 | | 62100 | |
| 50 PERCENT EXCEEDS | 53200 | | 38100 | | 37400 | |
| 90 PERCENT EXCEEDS | 36000 | | 28600 | | 17600 | |

a Post regulation.



| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 223 | 136 | 115 | 119 | 230 | 445 | 372 | 567 | 548 | 599 | 226 | 241 |
| 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 |

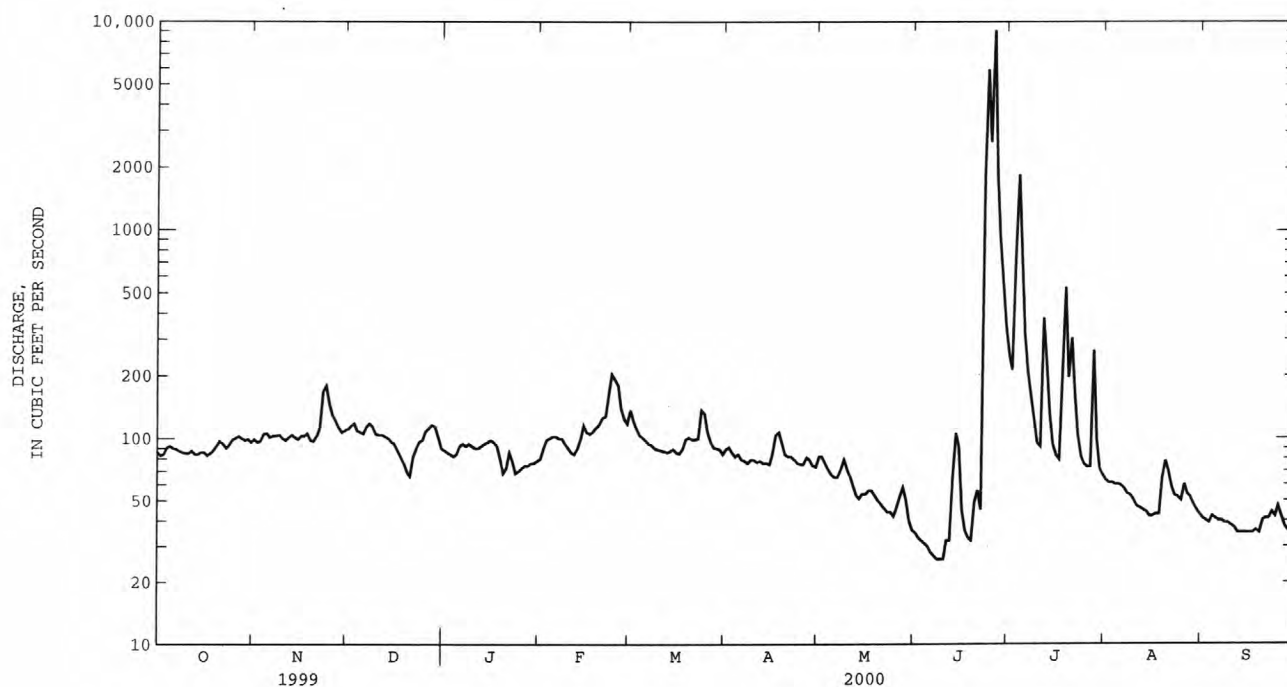
LITTLE NEMAHA RIVER BASIN

06811500 LITTLE NEMAHA RIVER AT AUBURN, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1950 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 171153 | | 57458 | | 319 | |
| ANNUAL MEAN | 469 | | 157 | | 260 | |
| MEDIAN OF ANNUAL MEANS | | | | | 1389 | 1993 |
| HIGHEST ANNUAL MEAN | | | | | 64.4 | 1981 |
| LOWEST ANNUAL MEAN | | | | | 70400 | Jul 24 1993 |
| HIGHEST DAILY MEAN | 15200 | May 21 | 9100 | Jun 26 | .87 | Jul 6 1977 |
| LOWEST DAILY MEAN | 66 | Dec 21 | 26 | Jun 8 | 1.1 | Jul 3 1977 |
| ANNUAL SEVEN-DAY MINIMUM | 79 | Dec 17 | 28 | Jun 4 | 164000 | May 9 1950 |
| INSTANTANEOUS PEAK FLOW | | | 19100 | Jun 24 | *27.65 | May 9 1950 |
| INSTANTANEOUS PEAK STAGE | | | 21.98 | Jun 24 | | |
| ANNUAL RUNOFF (AC-FT) | 339500 | | 114000 | | 231100 | |
| 10 PERCENT EXCEEDS | 829 | | 130 | | 470 | |
| 50 PERCENT EXCEEDS | 176 | | 86 | | 101 | |
| 90 PERCENT EXCEEDS | 86 | | 40 | | 35 | |

e Estimated.

* From floodmark.



MISSOURI RIVER MAIN STEM

06813500 MISSOURI RIVER AT RULO, NE

LOCATION.--Lat 40°03'13", long 95°25'19", in NW¹/₄ NW¹/₄ sec.17, T.1 N., R.18 E., Richardson County, Hydrologic Unit 10240005, on right bank at downstream side of bridge on U.S. Highway 159 at Rulo, 3.2 mi upstream from Big Nemaha River, and at mile 498.0.

DRAINAGE AREA.--414,900 mi², approximately. The 3,959 mi² in Great Divide basin are not included.

PERIOD OF RECORD.--October 1949 to current year in reports of U.S. Geological Survey. Gage height record collected at site 80 ft upstream January 1886 to December 1899 published in reports of Missouri River Commission; September 1929 to September 1950 in files of Kansas City office of U.S. Army Corps of Engineers.

GAGE.--Water-stage recorder. Datum of gage is 837.23 ft above 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. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water quality data. U.S. Army Corps of Engineers satellite data collection platform at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 358,000 ft³/s Apr. 22, 1952, gage height, 25.60 ft; minimum daily discharge, 4,420 ft³/s Jan. 13, 1957; minimum gage height, -0.19 ft Dec. 25, 1990, result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1881 reached a stage of 22.9 ft, from floodmark, discharge not determined.

COOPERATION.--Records provided by U.S. Geological Survey, Iowa District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 55100 | 57300 | 55500 | 37600 | 28600 | 32800 | 40500 | 40100 | 47400 | 44600 | 41900 | 35800 |
| 2 | 55900 | 57200 | 56000 | 37100 | 28300 | 33100 | 40400 | 39600 | 47400 | 43000 | 41400 | 36000 |
| 3 | 56000 | 57700 | 55500 | 36900 | 28600 | 32900 | 39300 | 39500 | 47000 | 43600 | 40900 | 36800 |
| 4 | 57100 | 58200 | 55800 | 36900 | 29200 | 31700 | 39000 | 39400 | 46800 | 48800 | 40400 | 37700 |
| 5 | 57100 | 58300 | 56000 | 36400 | 30300 | 31400 | 38400 | 39400 | 45800 | 47100 | 40200 | 37800 |
| 6 | 57300 | 57500 | 55400 | 35200 | 29800 | 31100 | 38300 | 39300 | 45200 | 45000 | 39400 | 37400 |
| 7 | 58000 | 57500 | 52400 | 33900 | 28900 | 30900 | 38800 | 39200 | 44800 | 51500 | 39200 | 37000 |
| 8 | 57100 | 57900 | 49600 | 33100 | 29100 | 30800 | 38800 | 39000 | 44700 | 55200 | 39100 | 37100 |
| 9 | 57500 | 58000 | 46000 | 32700 | 31000 | 31000 | 38600 | 40000 | 44100 | 51500 | 38300 | 37100 |
| 10 | 57300 | 58200 | 43600 | 33100 | 31800 | 31300 | 39200 | 39500 | 43700 | 47200 | 38000 | 37000 |
| 11 | 56800 | 57800 | 42200 | 33800 | 31500 | 31600 | 39500 | 39200 | 43300 | 46100 | 38400 | 37100 |
| 12 | 56400 | 58100 | 40400 | 33900 | 30300 | 31700 | 39700 | 39000 | 43200 | 44900 | 38400 | 37100 |
| 13 | 56600 | 58400 | 38900 | 33400 | 28900 | 31300 | 38900 | 39500 | 44200 | 44500 | 37400 | 37200 |
| 14 | 56200 | 58100 | 38000 | 32900 | 28600 | 30300 | 38900 | 40800 | 47000 | 44800 | 37500 | 37500 |
| 15 | 56500 | 58200 | 37600 | 33400 | 29200 | 29600 | 39600 | 42600 | 47200 | 45100 | 37000 | 37800 |
| 16 | 57200 | 58000 | 37300 | 33900 | 28400 | 28900 | 39900 | 43600 | 45300 | 42500 | 36200 | 38300 |
| 17 | 57100 | 58200 | 38000 | 34400 | 28400 | 28700 | 41000 | 43900 | 45000 | 42000 | 36200 | 38300 |
| 18 | 57200 | 58400 | 37400 | 34700 | 29400 | 28500 | 41800 | 43700 | 43800 | 41900 | 36800 | 38400 |
| 19 | 58100 | 57700 | 36800 | 33600 | 30300 | 28300 | 42000 | 44100 | 43100 | 44100 | 37400 | 38600 |
| 20 | 58200 | 57800 | 36600 | 34000 | 30300 | 28000 | 41000 | 46500 | 43100 | 43100 | 39000 | 38800 |
| 21 | 58300 | 57500 | 36400 | 35300 | 30300 | 29700 | 40700 | 47600 | 43600 | 42000 | 38900 | 39100 |
| 22 | 57700 | 57000 | 36100 | 34100 | 31000 | 32700 | 41000 | 46900 | 43000 | 42200 | 38200 | 39800 |
| 23 | 57400 | 58000 | 34700 | 33300 | 31700 | 35200 | 40800 | 47500 | 43600 | 42300 | 38400 | 39600 |
| 24 | 57100 | 58300 | 32600 | 33300 | 32400 | 38400 | 41100 | 48100 | e54000 | 41400 | 39100 | 39800 |
| 25 | 57000 | 57600 | 33600 | 33500 | 32600 | 40200 | 40200 | 47100 | e52000 | 42400 | 38400 | 40000 |
| 26 | 57000 | 57200 | 36100 | 33100 | 33700 | 40900 | 39900 | 47600 | e70000 | 42800 | 37600 | 39500 |
| 27 | 56600 | 56800 | 36400 | 32700 | 34500 | 41600 | 39600 | 48400 | 67600 | 44000 | 37100 | 39200 |
| 28 | 55700 | 55900 | 37000 | 32500 | 34200 | 41500 | 40300 | 48300 | 59400 | 45100 | 36800 | 38900 |
| 29 | 56600 | 55400 | 37700 | 31400 | 33000 | 41500 | 40600 | 48200 | 49800 | 44100 | 36600 | 38300 |
| 30 | 57200 | 55300 | 37900 | 29700 | --- | 40900 | 40500 | 47700 | 46100 | 41400 | 36000 | 38300 |
| 31 | 57400 | --- | 37800 | 28700 | --- | 40700 | --- | 47500 | --- | 41200 | 36000 | --- |
| TOTAL | 1766700 | 1727500 | 1305300 | 1048500 | 884300 | 1037200 | 1198300 | 1342800 | 1431200 | 1385400 | 1186200 | 1141300 |
| MEAN | 56990 | 57580 | 42110 | 33820 | 30490 | 33460 | 39940 | 43320 | 47710 | 44690 | 38260 | 38040 |
| MAX | 58300 | 58400 | 56000 | 37600 | 34500 | 41600 | 42000 | 48400 | 70000 | 55200 | 41900 | 40000 |
| MIN | 55100 | 55300 | 32600 | 28700 | 28300 | 28000 | 38300 | 39000 | 43000 | 41200 | 36000 | 35800 |
| AC-FT | 3504000 | 3426000 | 2589000 | 2080000 | 1754000 | 2057000 | 2377000 | 2663000 | 2839000 | 2748000 | 2353000 | 2264000 |
| CFSM | .14 | .14 | .10 | .08 | .07 | .08 | .10 | .10 | .11 | .11 | .09 | .09 |
| IN. | .16 | .15 | .12 | .09 | .08 | .09 | .11 | .12 | .13 | .12 | .11 | .10 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2000, BY WATER YEAR (WY)

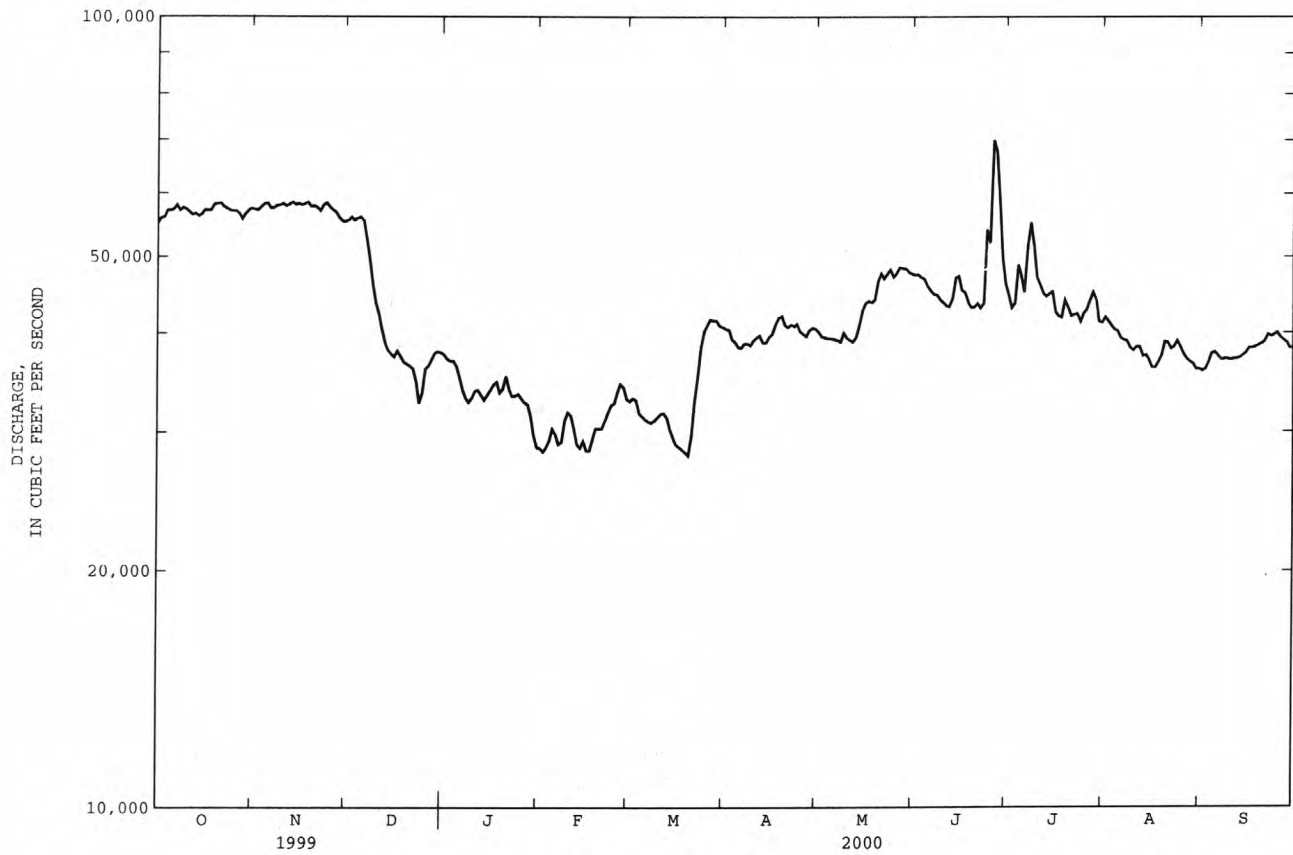
| | MEAN | 45070 | 41210 | 27510 | 22850 | 28760 | 41380 | 51490 | 51910 | 57190 | 51380 | 45340 | 45490 |
|------|-------|-------|-------|-------|-------|-------|--------|-------|--------|--------|-------|-------|-------|
| MAX | 80050 | 83880 | 57380 | 42280 | 53140 | 79590 | 106100 | 97280 | 130600 | 164800 | 78730 | 76410 | |
| (WY) | 1998 | 1998 | 1998 | 1973 | 1997 | 1979 | 1997 | 1997 | 1984 | 1993 | 1996 | 1997 | |
| MIN | 25580 | 17000 | 9953 | 10800 | 13220 | 15380 | 21820 | 33790 | 33710 | 33860 | 29820 | 34140 | |
| (WY) | 1962 | 1962 | 1956 | 1957 | 1957 | 1957 | 1957 | 1956 | 1956 | 1963 | 1955 | 1991 | |

MISSOURI RIVER MAIN STEM

06813500 MISSOURI RIVER AT RULO, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1953 - 2000a | |
|--------------------------|------------------------|--------|---------------------|--------|--------------------------|-------------|
| ANNUAL TOTAL | 21748700 | | 15454700 | | 42500 | |
| ANNUAL MEAN | 59590 | | 42230 | | 71880 | 1997 |
| HIGHEST ANNUAL MEAN | | | | | 26340 | 1957 |
| LOWEST ANNUAL MEAN | | | | | 289000 | Jul 24 1993 |
| HIGHEST DAILY MEAN | 122000 | Jun 29 | 70000 | Jun 26 | 4420 | Jan 13 1957 |
| LOWEST DAILY MEAN | 32600 | Dec 24 | 28000 | Mar 20 | 5560 | Nov 30 1955 |
| ANNUAL SEVEN-DAY MINIMUM | 35100 | Dec 21 | 28800 | Mar 15 | 307000 | Jul 24 1993 |
| INSTANTANEOUS PEAK FLOW | | | 72100 | Jun 26 | 25.37 | Jul 24 1993 |
| INSTANTANEOUS PEAK STAGE | | | 15.63 | Jun 26 | | |
| INSTANTANEOUS LOW FLOW | | | 27700 | Mar 20 | | |
| ANNUAL RUNOFF (AC-FT) | 43140000 | | 30650000 | | 30790000 | |
| ANNUAL RUNOFF (CFSM) | .14 | | .10 | | .10 | |
| ANNUAL RUNOFF (INCHES) | 1.95 | | 1.39 | | 1.39 | |
| 10 PERCENT EXCEEDS | 84100 | | 57200 | | 67000 | |
| 50 PERCENT EXCEEDS | 57300 | | 39800 | | 39000 | |
| 90 PERCENT EXCEEDS | 38000 | | 31400 | | 18700 | |

a Post regulation.
e Estimated.



MISSOURI RIVER BASIN
BIG NEMAHA RIVER BASIN

06814000 TURKEY CREEK NEAR SENECA, KS

LOCATION.--Lat 39°56'52", long 96°06'30", in SW1/4 NW1/4 SW1/4 sec.20, T.1 S., R.12 E., Nemaha County, Hydrologic Unit 10240007, on left bank at downstream side of county highway bridge, 2.0 mi downstream from Clear Creek, 5.0 mi upstream from Big Nemaha River, and 8.0 mi northwest of Seneca.

DRAINAGE AREA.--276 mi².

PERIOD OF RECORD.--October 1948 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 1,037.53 ft above sea level. Prior to Oct. 19, 1956, water-stage recorder (occasional operation only) and nonrecording gage on former channel 400 ft south of present site at present datum. Oct. 19, 1956, to June 15, 1957, nonrecording gage at highway bridge 1.2 mi upstream at different datum. June 16, 1957, to Mar. 27, 1958, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemeter at station.

COOPERATION.--Records provided by U.S. Geological Survey, Kansas District.

PEAK DISCHARGES GREATER THAN BASE 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) |
|--------|------|-----------------------------------|---------------------|--|------|-----------------------------------|---------------------|
| July 4 | 2115 | *4,520 | *18.26 | No other peak greater than base discharge. | | | |

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

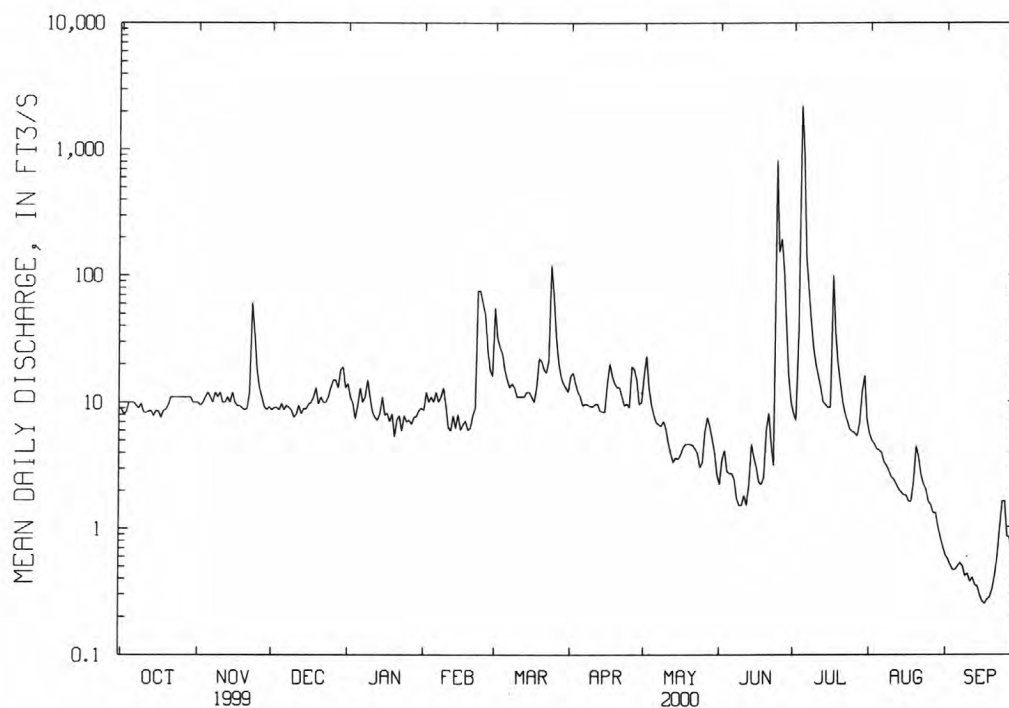
| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|------|------|-----|
| 1 | 8.9 | 10 | 8.7 | 14 | 8.6 | 55 | 16 | 16 | 2.2 | 8.1 | 5.6 | .60 |
| 2 | 8.1 | 9.5 | 9.1 | 11 | 12 | 32 | 17 | 23 | 3.5 | 7.1 | 4.9 | .56 |
| 3 | 8.4 | 10 | 9.1 | 9.8 | 10 | 27 | 14 | 13 | 4.1 | 34 | 4.6 | .50 |
| 4 | 10 | 11 | 8.7 | 7.4 | 11 | 24 | 12 | 9.6 | 2.8 | 2240 | 4.2 | .46 |
| 5 | 10 | 12 | 9.8 | 9.5 | 10 | 18 | 11 | 7.9 | 2.7 | 919 | 4.1 | .46 |
| 6 | 10 | 11 | 8.7 | 13 | 12 | 15 | 9.3 | 6.9 | 2.7 | 143 | 3.9 | .49 |
| 7 | 9.5 | 10 | 9.5 | 10 | 10 | 13 | 9.7 | 6.6 | 2.4 | 79 | 3.3 | .52 |
| 8 | 9.0 | 12 | 9.1 | 11 | 11 | 14 | 9.5 | 6.4 | 1.7 | e44 | 3.1 | .49 |
| 9 | 9.8 | 11 | 8.7 | 15 | 13 | 13 | 9.3 | 7.0 | 1.5 | e27 | 2.8 | .41 |
| 10 | 8.4 | 12 | 7.6 | 11 | 9.4 | 11 | 9.2 | 6.1 | 1.5 | e20 | 2.5 | .43 |
| 11 | 8.3 | 10 | 8.0 | 8.4 | 6.3 | 11 | 9.6 | 4.7 | 1.8 | e16 | 2.4 | .37 |
| 12 | 8.5 | 10 | 9.5 | 7.6 | 5.9 | 11 | 9.7 | 3.9 | 1.5 | e13 | 2.2 | .40 |
| 13 | 8.6 | 11 | 8.1 | 7.2 | 7.8 | 11 | 8.5 | 3.3 | 2.2 | e10 | 2.0 | .35 |
| 14 | 7.8 | 10 | 8.9 | 8.1 | 6.2 | 12 | 8.4 | 3.6 | 4.6 | e9.5 | 1.9 | .34 |
| 15 | 8.6 | 12 | 8.9 | 11 | 8.0 | 12 | 8.3 | 3.5 | 3.6 | e9.0 | 1.8 | .29 |
| 16 | 8.5 | 10 | 9.7 | 7.9 | 6.0 | 11 | 14 | 3.8 | 3.0 | e9.0 | 1.8 | .26 |
| 17 | 7.6 | 9.4 | 10 | 8.2 | 6.6 | 10 | 20 | 4.3 | 2.3 | e100 | 1.6 | .25 |
| 18 | 8.6 | 9.4 | 11 | 7.0 | 7.1 | 13 | 16 | 4.6 | 2.2 | e35 | 1.6 | .27 |
| 19 | 8.8 | 9.0 | 13 | 8.1 | 6.0 | 22 | 14 | 4.6 | 2.5 | e20 | 2.3 | .28 |
| 20 | 9.6 | 8.7 | 9.7 | 5.3 | 6.2 | 21 | 13 | 4.6 | 5.9 | e14 | 4.4 | .32 |
| 21 | 11 | 9.0 | 11 | 7.3 | 7.8 | 18 | 13 | 4.5 | 8.1 | e10 | 3.6 | .41 |
| 22 | 11 | 12 | 10 | 7.8 | 9.0 | 17 | 11 | 4.2 | 4.6 | e8.0 | 2.6 | .57 |
| 23 | 11 | 61 | 10 | 5.9 | 76 | 21 | 9.3 | 3.9 | 3.1 | e7.0 | 2.2 | .96 |
| 24 | 11 | 35 | 11 | 7.8 | 75 | 119 | 9.7 | 3.0 | 811 | e6.0 | 2.0 | 1.6 |
| 25 | 11 | 18 | 13 | 7.0 | 60 | 71 | 9.0 | 3.3 | 151 | e5.8 | 1.6 | 1.6 |
| 26 | 11 | 13 | 15 | 7.2 | 49 | 33 | 19 | 5.8 | 193 | e5.6 | 1.5 | .84 |
| 27 | 11 | 11 | 15 | 6.7 | 26 | 21 | 18 | 7.5 | 110 | 5.3 | 1.3 | .83 |
| 28 | 11 | 9.2 | 13 | 7.6 | 18 | 16 | 15 | 6.3 | 40 | 6.7 | 1.3 | .53 |
| 29 | 11 | 8.8 | 18 | 7.7 | 16 | 14 | 9.6 | 5.0 | 16 | 12 | 1.0 | .37 |
| 30 | 10 | 9.2 | 19 | 8.6 | --- | 13 | 9.9 | 3.9 | 10 | 16 | .83 | .28 |
| 31 | 10 | --- | 13 | 9.0 | --- | 12 | --- | 2.6 | --- | 7.2 | .70 | --- |
| MEAN | 9.55 | 13.1 | 10.8 | 8.81 | 17.6 | 22.9 | 12.1 | 6.24 | 46.7 | 124 | 2.57 | .53 |
| MAX | 11 | 61 | 19 | 15 | 76 | 119 | 20 | 23 | 811 | 2240 | 5.6 | 1.6 |
| MIN | 7.6 | 8.7 | 7.6 | 5.3 | 5.9 | 10 | 8.3 | 2.6 | 1.5 | 5.3 | .70 | .25 |
| AC-FT | 587 | 782 | 662 | 542 | 1010 | 1410 | 718 | 384 | 2780 | 7630 | 158 | 32 |

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2000, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|-------|------|------|------|------|------|-------|------|------|------|------|------|
| MEAN | 85.2 | 50.2 | 34.2 | 41.4 | 91.2 | 206 | 181 | 227 | 239 | 206 | 82.6 | 129 |
| 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 |

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1949 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL MEAN | 188 | | 23.0 | | 129 | |
| HIGHEST ANNUAL MEAN | | | | | 547 | 1993 |
| LOWEST ANNUAL MEAN | | | | | 3.24 | 1956 |
| HIGHEST DAILY MEAN | 6850 | Apr 27 | 2240 | Jul 4 | 16700 | Oct 11 1973 |
| LOWEST DAILY MEAN | 5.7 | Sep 25 | .25 | Sep 17 | .00 | Jul 28 1956 |
| ANNUAL SEVEN-DAY MINIMUM | 6.6 | Sep 20 | .29 | Sep 14 | .00 | Aug 21 1956 |
| INSTANTANEOUS PEAK FLOW | | | 4520 | Jul 4 | 21400 | Oct 11 1973 |
| INSTANTANEOUS PEAK STAGE | | | 18.26 | Jul 4 | 24.77 | Oct 11 1973 |
| INSTANTANEOUS LOW FLOW | | | .23 | Sep 16 | .00 | Jul 28 1956 |
| ANNUAL RUNOFF (AC-FT) | 136400 | | 16690 | | 93760 | |
| 10 PERCENT EXCEEDS | 330 | | 19 | | 210 | |
| 50 PERCENT EXCEEDS | 36 | | 9.0 | | 22 | |
| 90 PERCENT EXCEEDS | 8.6 | | 1.5 | | 2.1 | |



— 06814000 TURKEY C NR SENECA, KS

BIG NEMAHA RIVER BASIN

06815000 BIG NEMAHA RIVER AT FALLS CITY, NE

LOCATION.--Lat 40°02'08", long 95°35'45", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.22, T.1 N., R.16 E., Richardson County, Hydrologic Unit 10240008, on right bank near upstream side of bridge on U.S. Highway 73, 1 mi south of Falls City and 14.5 mi upstream from mouth.

DRAINAGE AREA.--1,339 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 periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|-------|-------|------|------|
| 1 | 99 | 108 | 108 | e106 | e102 | 130 | 107 | 115 | 37 | 172 | 52 | 27 |
| 2 | 82 | 109 | 112 | e106 | e102 | 146 | 113 | 138 | 48 | 145 | 43 | 27 |
| 3 | 86 | 109 | 116 | e100 | e106 | 141 | 114 | 148 | 57 | 160 | 43 | 26 |
| 4 | 87 | 111 | 114 | e90 | e108 | 123 | 97 | 126 | 43 | 5410 | 39 | 29 |
| 5 | 86 | 113 | 112 | e96 | e110 | 124 | 88 | 105 | 39 | 6770 | 37 | 29 |
| 6 | 95 | 112 | 108 | e106 | e108 | 110 | 80 | 93 | 36 | e1500 | 38 | 25 |
| 7 | 90 | 110 | 111 | e108 | e106 | e102 | 82 | 90 | 35 | e600 | 35 | 24 |
| 8 | 80 | 116 | 112 | e110 | e100 | e100 | 79 | 91 | 32 | e300 | 34 | 22 |
| 9 | 78 | 111 | 115 | e114 | e92 | e84 | 77 | 99 | 26 | e200 | 27 | 22 |
| 10 | 80 | 110 | 110 | e120 | e84 | 82 | 75 | 97 | 21 | e150 | 25 | 21 |
| 11 | 79 | 106 | 107 | e116 | e80 | 81 | 81 | 95 | 22 | 111 | 24 | 21 |
| 12 | 77 | 110 | 109 | e112 | e76 | 78 | 79 | 83 | 25 | 100 | 25 | 19 |
| 13 | 72 | 108 | 110 | e108 | e78 | 79 | 81 | 72 | 26 | 89 | 24 | 19 |
| 14 | 74 | 107 | 109 | e104 | e80 | 82 | 79 | 65 | 198 | 84 | 30 | 19 |
| 15 | 78 | 107 | 111 | e100 | e88 | 89 | 78 | 63 | 177 | 63 | 24 | 19 |
| 16 | 79 | 105 | e96 | e100 | 96 | 88 | 99 | 65 | 107 | 57 | 25 | 20 |
| 17 | 76 | 106 | e92 | e96 | 94 | 83 | 125 | 69 | 67 | 88 | 23 | 20 |
| 18 | 78 | 115 | e90 | e92 | 93 | 88 | 144 | 72 | 48 | 378 | 21 | 20 |
| 19 | 83 | 110 | e86 | e90 | 95 | 123 | 133 | 71 | 39 | 54 | 42 | 20 |
| 20 | 90 | 113 | e78 | e90 | 88 | 139 | 111 | 74 | 62 | 126 | 145 | 29 |
| 21 | 99 | 113 | e84 | e96 | 90 | 141 | 104 | 69 | 77 | 677 | 119 | 36 |
| 22 | 105 | 130 | e100 | e104 | 96 | 130 | 97 | 65 | 89 | 346 | 70 | 36 |
| 23 | 99 | 277 | e110 | e108 | 167 | 137 | 95 | 62 | 79 | 160 | 51 | 45 |
| 24 | 103 | 322 | e112 | e110 | 321 | 226 | 97 | 60 | e1600 | 87 | 37 | 47 |
| 25 | 110 | 252 | e114 | e112 | 348 | 489 | 90 | 49 | e1400 | 76 | 31 | 51 |
| 26 | 109 | 201 | e112 | e112 | 309 | 274 | 92 | 55 | e3000 | 50 | 31 | 45 |
| 27 | 138 | 177 | e114 | e110 | 261 | 171 | 124 | 60 | 1250 | 40 | 30 | 43 |
| 28 | 123 | 116 | e112 | e108 | 157 | 129 | 128 | 68 | 897 | 40 | 26 | 40 |
| 29 | 112 | 109 | e110 | e104 | 125 | 111 | 112 | 71 | 352 | 56 | 28 | 37 |
| 30 | 113 | 108 | e110 | e100 | --- | 106 | 104 | 55 | 226 | 65 | 30 | 33 |
| 31 | 109 | --- | e108 | e100 | --- | 98 | --- | 45 | --- | 56 | 28 | --- |
| TOTAL | 2869 | 4001 | 3292 | 3228 | 3760 | 4084 | 2965 | 2490 | 10115 | 18220 | 1237 | 871 |
| MEAN | 92.5 | 133 | 106 | 104 | 130 | 132 | 98.8 | 80.3 | 337 | 588 | 39.9 | 29.0 |
| MAX | 138 | 322 | 116 | 120 | 348 | 489 | 144 | 148 | 3000 | 6770 | 145 | 51 |
| MIN | 72 | 105 | 78 | 90 | 76 | 78 | 75 | 45 | 21 | 40 | 21 | 19 |
| AC-FT | 5690 | 7940 | 6530 | 6400 | 7460 | 8100 | 5880 | 4940 | 20060 | 36140 | 2450 | 1730 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2000, BY WATER YEAR (WY)

| | MEAN | MAX | (WY) | MIN | (WY) |
|------|------|-------|------|------|------|
| 1944 | 422 | 5229 | 1974 | 21.0 | 1957 |
| 1945 | 276 | 1851 | 1999 | 28.1 | 1957 |
| 1946 | 189 | 1036 | 1974 | 24.1 | 1957 |
| 1947 | 230 | 1446 | 1974 | 19.9 | 1957 |
| 1948 | 437 | 2998 | 1949 | 42.2 | 1957 |
| 1949 | 882 | 5819 | 1979 | 42.5 | 1956 |
| 1950 | 819 | 4462 | 1984 | 32.3 | 1956 |
| 1951 | 1063 | 6166 | 1995 | 44.5 | 1989 |
| 1952 | 1141 | 7816 | 1951 | 46.4 | 1981 |
| 1953 | 988 | 15690 | 1993 | 20.7 | 1977 |
| 1954 | 474 | 3898 | 1954 | 29.8 | 1991 |
| 1955 | 630 | 3408 | 1958 | 16.6 | 1956 |

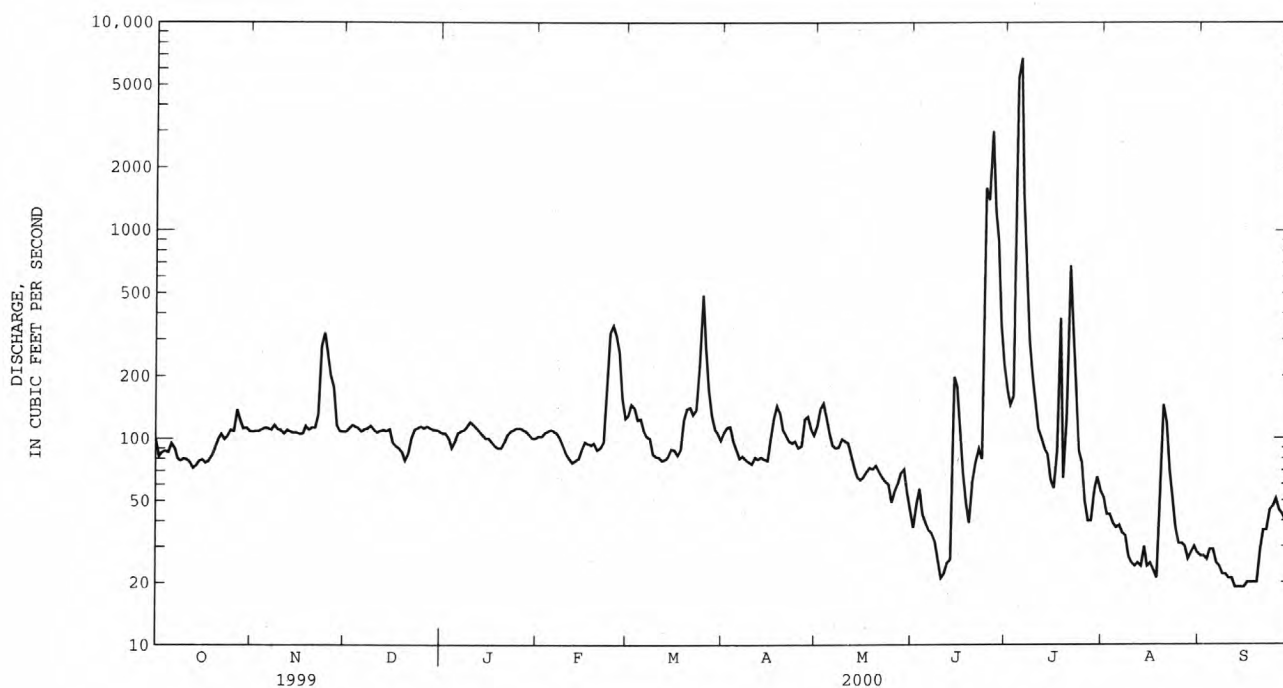
BIG NEMAHA RIVER BASIN

06815000 BIG NEMAHA RIVER AT FALLS CITY, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1944 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 319833 | | 57132 | | 627 | |
| ANNUAL MEAN | 876 | | 156 | | 509 | |
| MEDIAN OF ANNUAL MEANS | | | | | 2559 | 1993 |
| HIGHEST ANNUAL MEAN | | | | | 86.7 | 1956 |
| LOWEST ANNUAL MEAN | | | | | 57600 | Oct 11 1973 |
| HIGHEST DAILY MEAN | 29900 | Apr 27 | 6770 | Jul 5 | 3.0 | Jul 9 1977 |
| LOWEST DAILY MEAN | 66 | Sep 17 | 19 | Sep 12 | 4.0 | Jul 4 1977 |
| ANNUAL SEVEN-DAY MINIMUM | 74 | Sep 14 | 19 | Sep 12 | 71600 | Oct 11 1973 |
| INSTANTANEOUS PEAK FLOW | | | 13400 | Jul 4 | *31.40 | Oct 11 1973 |
| INSTANTANEOUS PEAK STAGE | | | 16.73 | Jul 4 | 454000 | |
| ANNUAL RUNOFF (AC-FT) | 634400 | | 113300 | | 1070 | |
| 10 PERCENT EXCEEDS | 1650 | | 152 | | 161 | |
| 50 PERCENT EXCEEDS | 235 | | 96 | | 45 | |
| 90 PERCENT EXCEEDS | 94 | | 29 | | | |

e Estimated.

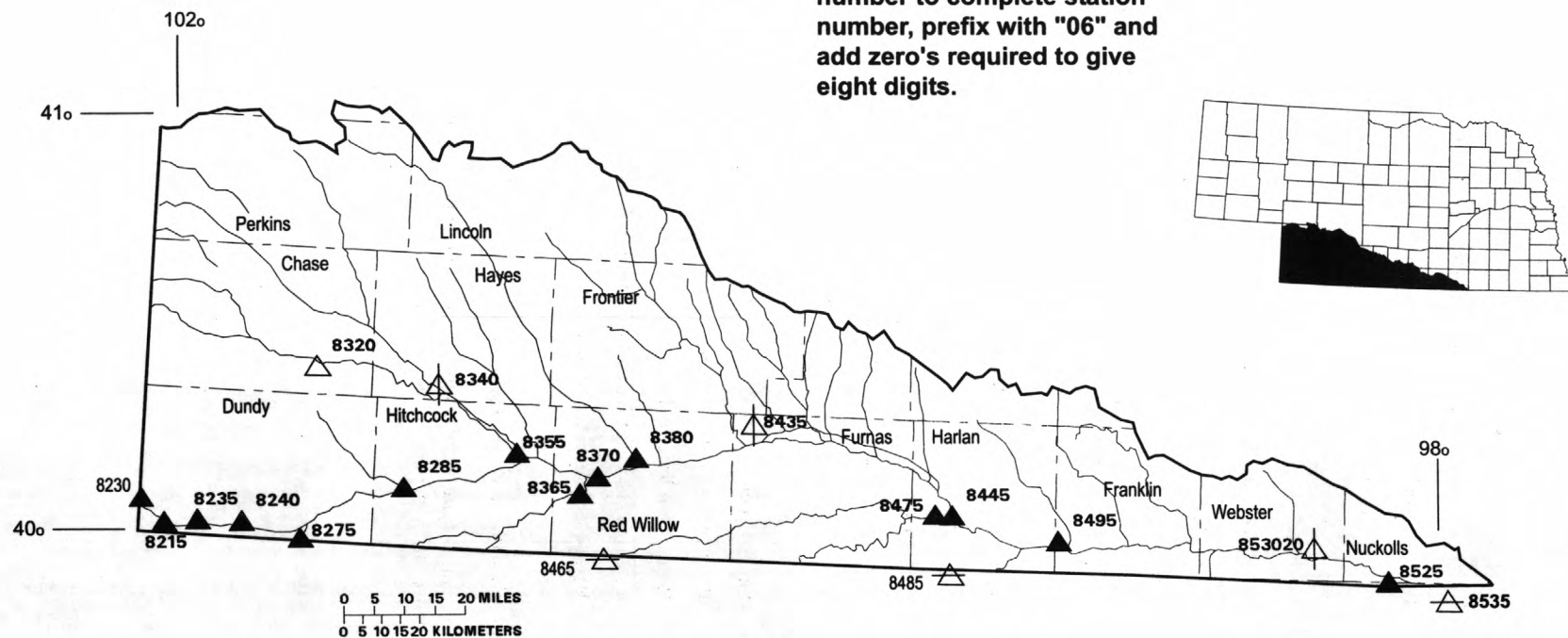
* Datum then in use.



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

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| *Station number | Station name | Page |
|--------------------|--|------|
| 8215 | Arikaree River at Haigler..... | 238 |
| 8230 | N.F. Republican River at Colorado-Nebraska State Line..... | 240 |
| 8235 | Buffalo Creek near Haigler..... | 242 |
| 8240 | Rock Creek at Parks..... | 244 |
| 8275 | S.F. Republican River near Benkelman..... | 246 |
| 8285 | Republicam River at Stratton..... | 248 |
| 8320 | Enders Reservoir near Enders..... | 250 |
| 8340 | Frenchman Creek at Palisade..... | 252 |
| 8355 | Frenchman Creek at Culbertson..... | 254 |
| 8365 | Driftwood Creek near McCook..... | 256 |
| 8370 | Republican River at McCook..... | 258 |
| 8380 | Red Willow Creek near Red Willow..... | 260 |
| 8435 | Republican River at Cambridge..... | 262 |
| 8445 | Republican River near Orleans..... | 264 |
| 8465 | Beaver Creek at Cedar Bluffs, KS..... | 268 |
| 8475 | Sappa Creek near Stamford..... | 270 |
| 8485 | Prairie Dog Creek near Woodruff, KS..... | 272 |
| 8495 | Republican River below Harlan County Dam..... | 274 |
| 8525 | Courtland Canal at Nebraska-Kansas State Line..... | 276 |
| 853020 | Republican River at Guide Rock..... | 278 |
| 8535 | Republican River near Hardy, KS..... | 280 |

* 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 period, which is poor. Natural flow affected by ground-water withdrawals and diversions for irrigation of about 1,500 acres in Colorado and by return flow from Haigler Canal.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|--------|------|-------|-------|-------|
| 1 | 8.5 | 6.2 | .75 | 2.6 | 4.2 | 4.2 | 14 | 29 | .61 | .00 | .78 | .00 |
| 2 | 6.4 | 1.7 | .74 | 3.4 | 4.6 | 5.5 | 13 | 15 | .37 | .00 | .08 | .00 |
| 3 | 6.0 | 1.2 | .64 | 2.5 | 7.3 | 11 | 11 | 11 | .31 | .00 | .00 | .00 |
| 4 | 5.8 | 1.0 | .63 | 1.4 | 5.4 | 9.0 | 9.9 | 9.6 | .25 | .00 | .10 | .00 |
| 5 | 5.2 | .87 | .59 | 1.3 | 4.8 | 7.7 | 9.1 | 8.0 | .19 | .00 | 1.3 | .00 |
| 6 | 4.9 | .80 | .66 | 1.2 | 6.1 | 7.0 | 7.7 | 8.6 | .18 | .00 | 2.8 | .00 |
| 7 | 4.2 | .76 | .59 | 1.4 | 5.3 | 7.2 | 6.7 | 7.4 | .17 | .00 | 2.9 | .00 |
| 8 | 4.7 | .77 | .48 | 1.7 | 5.1 | 56 | 6.0 | 8.3 | .13 | .00 | 5.0 | .00 |
| 9 | 4.3 | .76 | .45 | 2.5 | 5.5 | 25 | 6.6 | 9.0 | .11 | .00 | 3.5 | .00 |
| 10 | 4.1 | .72 | .46 | 3.0 | 5.4 | 19 | 6.2 | 5.9 | .07 | 3.2 | 3.8 | .00 |
| 11 | 4.5 | .72 | .51 | 2.7 | 4.2 | 16 | 5.4 | 5.5 | .05 | 39 | 3.8 | .00 |
| 12 | 4.4 | .74 | .47 | 3.5 | 3.6 | 14 | 5.6 | 4.2 | .03 | 5.5 | 4.3 | .00 |
| 13 | 4.7 | .74 | .50 | 3.6 | 4.5 | 13 | 5.3 | 3.6 | .00 | 1.6 | 1.6 | .00 |
| 14 | 6.3 | .71 | .58 | 3.6 | 6.1 | 12 | 4.8 | 3.3 | .00 | .22 | .08 | .00 |
| 15 | 5.4 | .68 | .50 | 4.1 | 8.1 | 11 | 4.0 | 3.2 | .00 | .01 | .00 | .00 |
| 16 | 6.2 | .65 | .55 | 4.8 | 4.6 | 11 | 4.4 | 2.7 | .00 | .00 | .00 | .00 |
| 17 | 7.3 | .68 | .78 | 4.6 | 5.2 | 11 | 4.3 | 3.1 | .00 | .43 | .00 | .00 |
| 18 | 7.8 | .74 | .75 | 7.5 | 4.0 | 11 | 4.1 | 1.8 | .00 | 1.3 | .00 | .00 |
| 19 | 6.4 | .73 | .70 | 7.0 | 5.5 | 11 | 3.1 | 1.7 | .00 | 1.9 | .00 | .02 |
| 20 | 6.1 | .84 | .60 | 4.1 | 6.1 | 10 | 2.4 | 1.2 | .00 | 1.7 | .00 | .73 |
| 21 | 7.0 | .76 | .63 | 4.8 | 6.8 | 11 | 12 | 1.2 | .00 | 6.3 | .00 | 4.0 |
| 22 | 7.7 | .69 | .60 | 6.0 | 5.9 | 11 | 24 | 1.8 | .00 | 10 | .00 | 4.5 |
| 23 | 7.5 | .80 | .66 | 4.8 | 7.0 | 10 | 22 | 2.3 | .00 | 2.6 | .00 | 4.2 |
| 24 | 7.5 | .70 | 1.1 | 4.1 | 6.3 | 9.5 | 15 | 1.8 | .00 | 2.5 | .00 | 5.0 |
| 25 | 7.3 | .68 | 2.0 | 3.9 | 6.3 | 8.0 | 12 | 1.1 | .00 | .48 | .00 | 7.6 |
| 26 | 6.5 | .75 | 1.9 | 4.6 | 6.2 | 7.7 | 8.3 | .96 | .00 | .00 | .00 | 7.2 |
| 27 | 5.8 | .70 | 1.8 | 4.9 | 4.9 | 7.2 | 4.8 | .82 | .02 | .00 | .00 | 6.3 |
| 28 | 6.7 | .65 | 2.9 | 4.3 | 5.6 | 7.0 | 3.3 | .69 | .24 | .00 | .00 | 3.9 |
| 29 | 9.7 | .65 | 2.4 | 3.9 | 5.1 | 6.7 | 2.7 | 1.0 | .41 | .40 | .00 | 4.3 |
| 30 | 10 | .71 | 2.4 | 4.1 | --- | 6.7 | 21 | .86 | .04 | .69 | .00 | 4.9 |
| 31 | 8.7 | --- | 2.0 | 4.3 | --- | 9.5 | --- | .87 | --- | .79 | .00 | --- |
| TOTAL | 197.6 | 29.10 | 30.32 | 116.2 | 159.7 | 365.9 | 258.7 | 155.50 | 3.18 | 78.62 | 30.04 | 52.65 |
| MEAN | 6.37 | .97 | .98 | 3.75 | 5.51 | 11.8 | 8.62 | 5.02 | .11 | 2.54 | .97 | 1.75 |
| MAX | 10 | 6.2 | 2.9 | 7.5 | 8.1 | 56 | 24 | 29 | .61 | 39 | 5.0 | 7.6 |
| MIN | 4.1 | .65 | .45 | 1.2 | 3.6 | 4.2 | 2.4 | .69 | .00 | .00 | .00 | .00 |
| AC-FT | 392 | 58 | 60 | 230 | 317 | 726 | 513 | 308 | 6.3 | 156 | 60 | 104 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2000, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 9.79 | 8.02 | 6.47 | 7.66 | 15.6 | 28.0 | 23.1 | 40.5 | 39.9 | 19.7 | 18.5 | 15.2 |
| MAX | 39.8 | 31.8 | 28.3 | 24.0 | 67.0 | 400 | 78.0 | 709 | 599 | 193 | 111 | 140 |
| (WY) | 1943 | 1947 | 1939 | 1934 | 1937 | 1960 | 1944 | 1935 | 1935 | 1962 | 1938 | 1938 |
| MIN | 1.41 | .61 | .31 | .40 | .46 | 2.17 | 2.72 | 3.61 | .11 | .044 | .000 | .58 |
| (WY) | 1984 | 1983 | 1999 | 1999 | 1999 | 1995 | 1978 | 1986 | 2000 | 1997 | 1952 | 1953 |

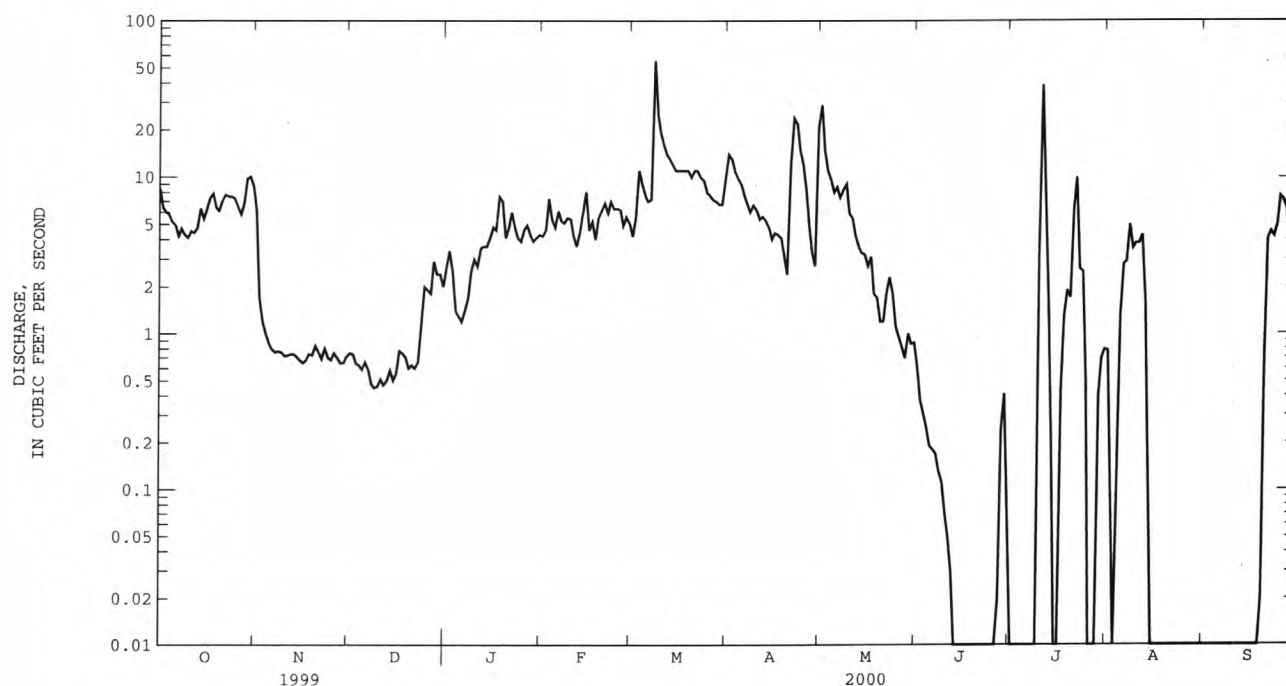
KANSAS RIVER BASIN

239

06821500 ARIKAREE RIVER AT HAIGLER, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | FOR 2000 WATER YEAR | WATER YEARS 1932 - 2000 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 3430.01 | 1477.51 | |
| ANNUAL MEAN | 9.40 | 4.04 | 19.3 |
| MEDIAN OF ANNUAL MEANS | | | 15.1 |
| HIGHEST ANNUAL MEAN | | | 127 |
| LOWEST ANNUAL MEAN | | | 3.69 |
| HIGHEST DAILY MEAN | 337 Aug 8 | 56 Mar 8 | 17000 May 31 1935 |
| LOWEST DAILY MEAN | .00 Jul 15 | .00 Jun 13 | .00 Jul 21 1932 |
| ANNUAL SEVEN-DAY MINIMUM | .08 Jul 20 | .00 Jun 13 | .00 Jul 30 1934 |
| INSTANTANEOUS PEAK FLOW | | 150 Jul 11 | 50000 May 31 1935 |
| INSTANTANEOUS PEAK STAGE | | 7.24 Jul 11 | *11.20 May 31 1935 |
| ANNUAL RUNOFF (AC-FT) | 6800 | 2930 | 14010 |
| 10 PERCENT EXCEEDS | 15 | 9.5 | 30 |
| 50 PERCENT EXCEEDS | 2.4 | 2.7 | 8.6 |
| 90 PERCENT EXCEEDS | .39 | .00 | .70 |

* 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 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 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| 1 | 37 | 34 | 44 | 42 | 44 | 56 | 46 | 13 | 6.3 | 6.7 | 7.6 | 7.4 |
| 2 | 40 | 38 | 45 | 41 | 43 | 57 | 42 | 11 | 6.2 | 5.4 | 7.7 | 6.4 |
| 3 | 41 | 43 | 45 | 41 | 43 | 64 | 39 | 10 | 6.6 | 4.8 | 8.0 | 6.2 |
| 4 | 40 | 47 | 44 | e42 | 42 | 64 | 37 | 7.7 | 6.9 | 4.6 | 8.8 | 7.6 |
| 5 | 39 | 47 | 43 | e43 | 42 | 60 | 37 | 6.8 | 6.1 | 4.0 | 8.6 | 9.0 |
| 6 | 39 | 47 | 43 | 44 | 42 | 62 | 40 | 6.5 | 3.6 | 4.5 | 7.4 | 8.5 |
| 7 | 39 | 47 | 40 | 44 | 42 | 62 | 39 | 6.2 | 4.4 | 3.4 | 7.6 | 8.4 |
| 8 | 38 | 47 | 38 | 44 | 42 | 72 | 37 | 6.0 | 4.8 | 3.3 | 6.2 | 8.5 |
| 9 | 39 | 47 | 38 | 43 | 42 | 58 | 41 | 6.6 | 4.5 | 3.9 | 5.3 | 7.5 |
| 10 | 38 | 47 | 37 | 43 | 43 | 53 | 41 | 9.2 | 4.4 | 3.9 | 5.3 | 7.2 |
| 11 | 37 | 46 | 37 | 42 | 43 | 50 | 41 | 8.1 | 5.9 | 3.3 | 5.0 | 7.3 |
| 12 | 34 | 46 | 37 | 42 | 43 | 47 | 44 | 8.8 | 8.1 | 2.9 | 5.3 | 6.3 |
| 13 | 29 | 47 | 36 | 42 | 43 | 46 | 46 | 10 | 9.5 | 3.0 | 5.6 | 6.2 |
| 14 | 27 | 47 | 38 | 42 | 43 | 45 | 44 | 8.3 | 7.0 | 2.9 | 6.3 | 5.6 |
| 15 | 24 | 47 | 42 | 42 | 43 | 46 | 44 | 7.2 | 5.2 | 2.6 | 5.5 | 6.0 |
| 16 | 21 | 46 | 41 | 42 | 50 | 45 | 43 | 6.4 | 4.1 | 2.7 | 5.8 | 5.7 |
| 17 | 22 | 45 | 44 | 42 | 49 | 45 | 44 | 6.5 | 5.4 | 3.7 | 5.8 | 5.4 |
| 18 | 22 | 44 | 48 | 42 | 51 | 45 | 43 | 6.8 | 7.9 | 4.6 | 5.4 | 5.7 |
| 19 | 22 | 38 | 47 | 42 | 52 | 45 | 48 | 6.8 | 8.2 | 6.5 | 5.3 | 6.4 |
| 20 | 23 | 34 | 44 | 43 | 53 | 44 | 34 | 6.9 | 7.5 | 7.3 | 5.1 | 8.3 |
| 21 | 23 | 39 | 44 | 43 | 54 | 46 | 13 | 6.4 | 6.4 | 12 | 5.3 | 8.9 |
| 22 | 23 | 41 | 43 | 45 | 54 | 47 | 11 | 6.2 | 5.4 | 43 | 6.4 | 8.6 |
| 23 | 24 | 42 | 43 | 45 | 54 | 46 | 11 | 6.0 | 5.5 | 26 | 6.7 | 9.3 |
| 24 | 24 | 42 | 44 | 43 | 50 | 45 | 10 | 5.7 | 4.5 | 15 | 6.0 | 15 |
| 25 | 24 | 43 | 44 | 43 | 51 | 44 | 12 | 5.4 | 4.5 | 13 | 7.1 | 20 |
| 26 | 24 | 44 | 43 | 43 | 58 | 43 | 13 | 5.4 | 4.3 | 10 | 7.3 | 25 |
| 27 | 23 | 44 | 43 | 43 | 58 | 42 | 11 | 6.5 | 4.4 | 8.8 | 7.2 | 25 |
| 28 | 20 | 44 | 43 | 43 | 56 | 42 | 10 | 6.4 | 4.8 | 9.3 | 7.8 | 25 |
| 29 | 22 | 44 | 43 | 43 | 56 | 43 | 9.7 | 6.0 | 14 | 8.4 | 9.0 | 25 |
| 30 | 24 | 44 | 43 | 44 | --- | 44 | 11 | 5.6 | 9.1 | 8.2 | 9.3 | 24 |
| 31 | 23 | --- | 42 | 44 | --- | 45 | --- | 6.0 | --- | 8.0 | 8.5 | --- |
| TOTAL | 905 | 1311 | 1306 | 1327 | 1386 | 1553 | 941.7 | 224.4 | 185.5 | 245.7 | 208.2 | 325.4 |
| MEAN | 29.2 | 43.7 | 42.1 | 42.8 | 47.8 | 50.1 | 31.4 | 7.24 | 6.18 | 7.93 | 6.72 | 10.8 |
| MAX | 41 | 47 | 48 | 45 | 58 | 72 | 48 | 13 | 14 | 43 | 9.3 | 25 |
| MIN | 20 | 34 | 36 | 41 | 42 | 42 | 9.7 | 5.4 | 3.6 | 2.6 | 5.0 | 5.4 |
| AC-FT | 1800 | 2600 | 2590 | 2630 | 2750 | 3080 | 1870 | 445 | 368 | 487 | 413 | 645 |

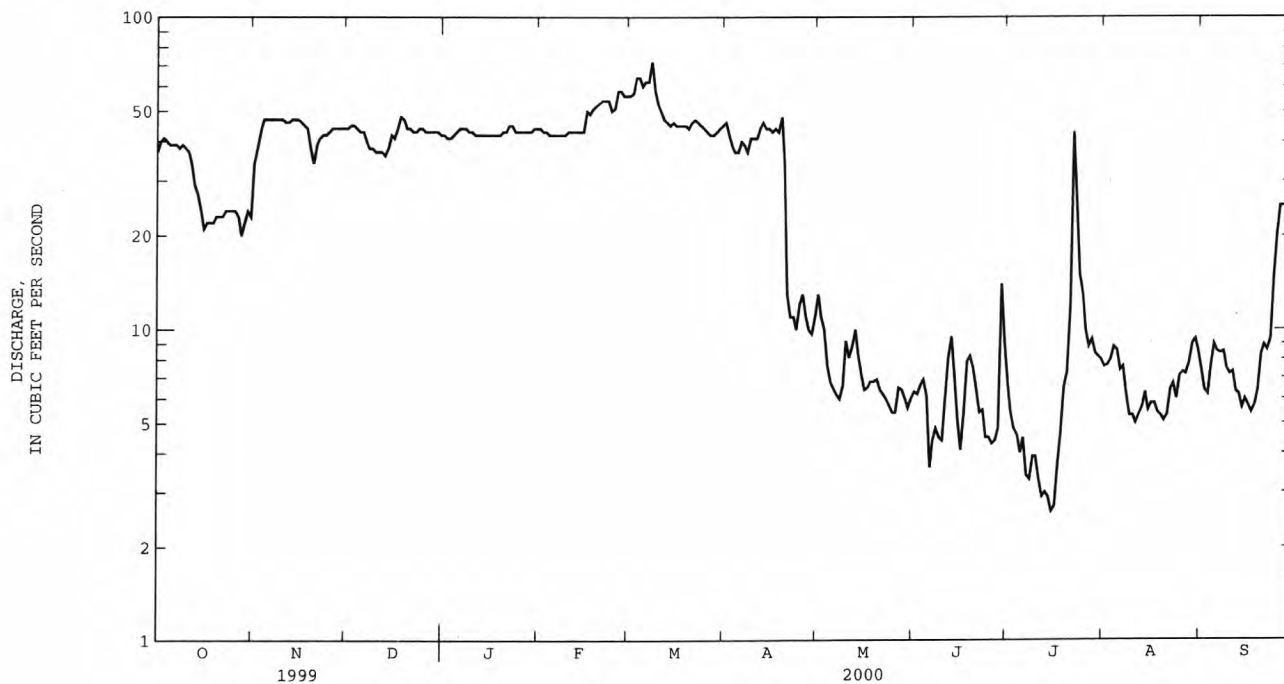
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2000, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 36.7 | 56.4 | 60.1 | 59.8 | 61.7 | 64.3 | 56.8 | 40.9 | 34.3 | 18.5 | 18.6 | 25.8 |
| 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 1999 CALENDAR YEAR | FOR 2000 WATER YEAR | WATER YEARS 1935 - 2000 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 10877.1 | 9918.9 | |
| ANNUAL MEAN | 29.8 | 27.1 | 44.3 |
| HIGHEST ANNUAL MEAN | | | 65.3 |
| LOWEST ANNUAL MEAN | | | 27.1 |
| HIGHEST DAILY MEAN | 68 Mar 14 | 72 Mar 8 | 761 May 15 1951 |
| LOWEST DAILY MEAN | 1.5 Sep 12 | 2.6 Jul 15 | 1.5 Sep 12 1999 |
| ANNUAL SEVEN-DAY MINIMUM | 2.4 Sep 10 | 3.0 Jul 11 | 2.3 Aug 5 1940 |
| INSTANTANEOUS PEAK FLOW | | 85 Mar 8 | 2110 Apr 28 1947 |
| INSTANTANEOUS PEAK STAGE | | 1.27 Mar 8 | 5.92 Apr 28 1947 |
| ANNUAL RUNOFF (AC-FT) | 21570 | 19670 | 32080 |
| 10 PERCENT EXCEEDS | 55 | 47 | 72 |
| 50 PERCENT EXCEEDS | 29 | 34 | 49 |
| 90 PERCENT EXCEEDS | 6.6 | 5.4 | 8.8 |

e Estimated.



KANSAS RIVER BASIN

06823500 BUFFALO CREEK NEAR HAIGLER, NE

LOCATION.--Lat 40°02'22", long 101°51'57", in SE 1/4 NW 1/4 sec.20, T.1 N., R.40 W., Dundy County, Hydrologic Unit 10250002, on upstream side of bridge, 0.4 mi upstream from mouth, and 4 mi northeast of Haigler.

DRAINAGE AREA.--172 mi², of which about 8.6 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1940 to current year.

REVISED RECORDS.--WSP 2119: 1948-50(M), 1957(M). WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,189.00 ft above sea level. Prior to Sept. 19, 1980, at site 0.5 mi upstream at datum 15.57 ft higher. Sept. 18, 1980 to June 4, 1996 on left bank 15 ft upstream from county highway bridge at datum 0.10 ft lower. June 4, 1996 to Nov. 7, 1996 135 ft downstream from county highway bridge, at datum 0.10 ft lower.

REMARKS.--Records fair except for estimated period, which is poor. Natural flow affected by diversion about 1 mi upstream for irrigation of 880 acres.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|------|-------|-------|--------|-------|------|------|-------|
| 1 | 6.0 | 2.8 | 2.9 | e4.9 | e5.2 | 3.5 | 6.2 | 8.5 | 3.5 | .00 | .00 | .00 |
| 2 | 5.5 | 2.7 | 3.1 | e4.7 | e5.2 | 3.9 | 5.1 | 5.9 | 4.1 | .00 | .00 | .00 |
| 3 | 5.5 | 2.6 | 3.2 | e4.5 | 4.0 | 5.2 | 4.7 | 4.9 | 3.9 | .00 | .00 | .00 |
| 4 | 5.8 | 2.4 | 4.0 | e4.5 | 2.9 | 4.6 | 4.7 | 4.5 | 3.6 | .00 | .00 | .00 |
| 5 | 5.7 | 2.2 | 3.1 | e4.5 | 3.7 | 4.3 | 4.6 | 4.3 | 3.3 | .00 | .00 | .00 |
| 6 | 5.6 | 2.4 | 4.2 | e4.5 | 3.5 | 6.0 | 4.3 | 3.9 | 3.4 | .00 | .00 | .00 |
| 7 | 5.3 | 2.8 | 5.2 | e4.6 | 3.1 | 4.9 | 3.8 | 3.4 | 2.7 | .00 | .00 | .00 |
| 8 | 5.6 | 2.2 | 4.4 | e4.7 | 2.9 | 6.0 | 3.9 | 3.1 | .16 | .00 | .00 | .00 |
| 9 | 5.7 | 2.0 | 3.9 | e4.8 | 3.1 | 4.8 | 3.6 | 3.8 | .08 | .00 | .00 | .00 |
| 10 | 5.2 | 2.1 | 5.2 | e5.0 | 3.2 | 4.4 | 3.5 | 4.0 | .07 | .00 | .00 | .00 |
| 11 | 5.8 | 1.7 | 4.2 | e5.0 | 3.0 | 4.2 | 2.9 | 3.6 | .00 | .00 | .00 | .00 |
| 12 | 5.3 | 1.6 | 4.8 | e5.0 | 3.1 | 4.2 | 2.2 | 3.3 | .00 | .00 | .00 | .00 |
| 13 | 4.9 | .92 | 5.7 | e5.0 | e3.0 | 4.1 | 2.0 | 3.5 | .00 | .00 | .00 | .00 |
| 14 | 4.6 | 1.2 | e5.3 | e5.0 | e3.0 | 4.1 | 2.0 | 3.7 | .00 | .00 | .00 | .00 |
| 15 | 3.6 | 1.0 | e5.0 | e5.0 | e3.0 | 4.0 | 1.9 | 3.7 | .00 | .00 | .00 | .00 |
| 16 | 4.4 | .99 | e4.6 | e5.4 | e3.1 | 4.3 | 2.0 | 3.9 | .00 | .00 | .00 | .00 |
| 17 | 4.8 | .84 | e4.4 | e5.6 | 3.2 | 4.3 | 2.0 | 3.9 | .00 | .00 | .00 | .00 |
| 18 | 4.6 | .59 | e4.2 | e6.0 | 3.3 | 4.3 | 2.0 | 3.3 | .00 | .00 | .00 | .00 |
| 19 | 3.4 | e.70 | e4.3 | e5.8 | 3.3 | 4.4 | 2.2 | 3.8 | .00 | .00 | .00 | .00 |
| 20 | 3.2 | e.80 | e4.6 | e5.4 | e3.2 | 4.3 | 2.2 | 3.6 | .00 | .00 | .00 | .00 |
| 21 | 3.3 | e1.0 | e5.0 | e5.4 | e3.1 | 4.8 | 2.5 | 3.5 | .00 | .00 | .00 | .00 |
| 22 | 3.1 | 1.3 | e5.0 | e5.4 | e3.1 | 5.0 | 3.1 | 3.7 | .00 | .00 | .00 | .00 |
| 23 | 2.9 | 1.4 | e4.8 | e5.4 | e3.0 | 5.0 | 3.9 | 3.9 | .00 | .00 | .00 | 2.5 |
| 24 | 2.8 | 2.4 | e4.6 | e5.4 | 3.0 | 5.3 | 4.2 | 3.8 | .00 | .00 | .00 | 3.9 |
| 25 | 2.8 | 2.8 | e4.5 | e5.4 | 3.4 | 5.2 | 4.2 | 3.9 | .00 | .00 | .00 | 3.2 |
| 26 | 2.4 | 3.6 | e4.5 | e5.4 | 3.2 | 4.9 | 4.2 | 4.2 | .00 | .00 | .00 | .97 |
| 27 | 2.5 | 3.1 | e4.5 | e5.4 | 3.0 | 4.7 | 4.1 | 4.7 | .00 | .00 | .00 | .37 |
| 28 | 2.7 | 2.8 | e4.5 | e5.4 | 3.3 | 4.6 | 4.3 | 4.5 | .00 | .00 | .00 | .35 |
| 29 | 2.5 | 2.8 | e4.6 | e5.4 | 3.5 | 5.0 | 4.4 | 9.9 | .00 | .00 | .00 | .41 |
| 30 | 2.5 | 2.9 | e4.8 | e5.4 | --- | 5.4 | 11 | 2.1 | .00 | .00 | .00 | .49 |
| 31 | 2.6 | --- | e5.0 | e5.2 | --- | 5.8 | --- | .70 | --- | .00 | .00 | --- |
| TOTAL | 130.6 | 58.64 | 138.1 | 159.1 | 96.6 | 145.5 | 111.7 | 127.50 | 24.81 | 0.00 | 0.00 | 12.19 |
| MEAN | 4.21 | 1.95 | 4.45 | 5.13 | 3.33 | 4.69 | 3.72 | 4.11 | .83 | .000 | .000 | .41 |
| MAX | 6.0 | 3.6 | 5.7 | 6.0 | 5.2 | 6.0 | 11 | 9.9 | 4.1 | .00 | .00 | 3.9 |
| MIN | 2.4 | .59 | 2.9 | 4.5 | 2.9 | 3.5 | 1.9 | .70 | .00 | .00 | .00 | .00 |
| AC-FT | 259 | 116 | 274 | 316 | 192 | 289 | 222 | 253 | 49 | .00 | .00 | 24 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2000, BY WATER YEAR (WY)

| | MEAN | 6.76 | 7.89 | 8.06 | 8.30 | 8.87 | 9.18 | 9.04 | 7.76 | 5.58 | 2.67 | 2.47 | 4.22 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 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

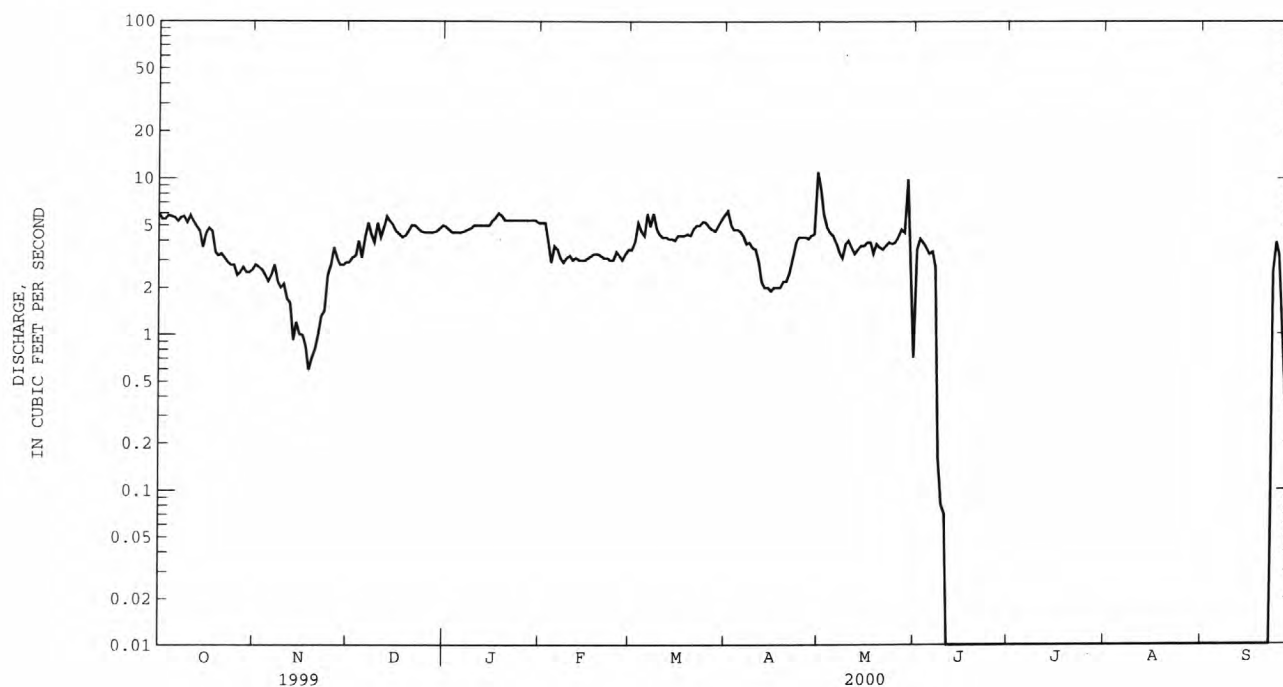
| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | FOR 2000 WATER YEAR | WATER YEARS 1941 - 2000 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 1582.55 | 1004.74 | |
| ANNUAL MEAN | 4.34 | 2.75 | 6.72 |
| HIGHEST ANNUAL MEAN | | | 10.9 1951 |
| LOWEST ANNUAL MEAN | | | 2.51 1998 |
| HIGHEST DAILY MEAN | 15 Aug 18 | 11 Apr 30 | 90 Aug 11 1950 |
| LOWEST DAILY MEAN | .00 Jul 9 | .00 Jun 11 | .00 Aug 3 1955 |
| ANNUAL SEVEN-DAY MINIMUM | .00 Jul 16 | .00 Jun 11 | .00 Aug 14 1973 |
| INSTANTANEOUS PEAK FLOW | | *23 May 29 | **140 Jun 27 1948 |
| INSTANTANEOUS PEAK STAGE | | ***2.09 Jan 31 | ***5.93 Jan 3 1976 |
| ANNUAL RUNOFF (AC-FT) | 3140 | 1990 | 4870 |
| 10 PERCENT EXCEEDS | 7.9 | 5.3 | 11 |
| 50 PERCENT EXCEEDS | 4.5 | 3.1 | 7.4 |
| 90 PERCENT EXCEEDS | .09 | .00 | .23 |

e Estimated.

* Stage 6.78 ft.

** Stage 4.37 ft.

*** Backwater from ice.



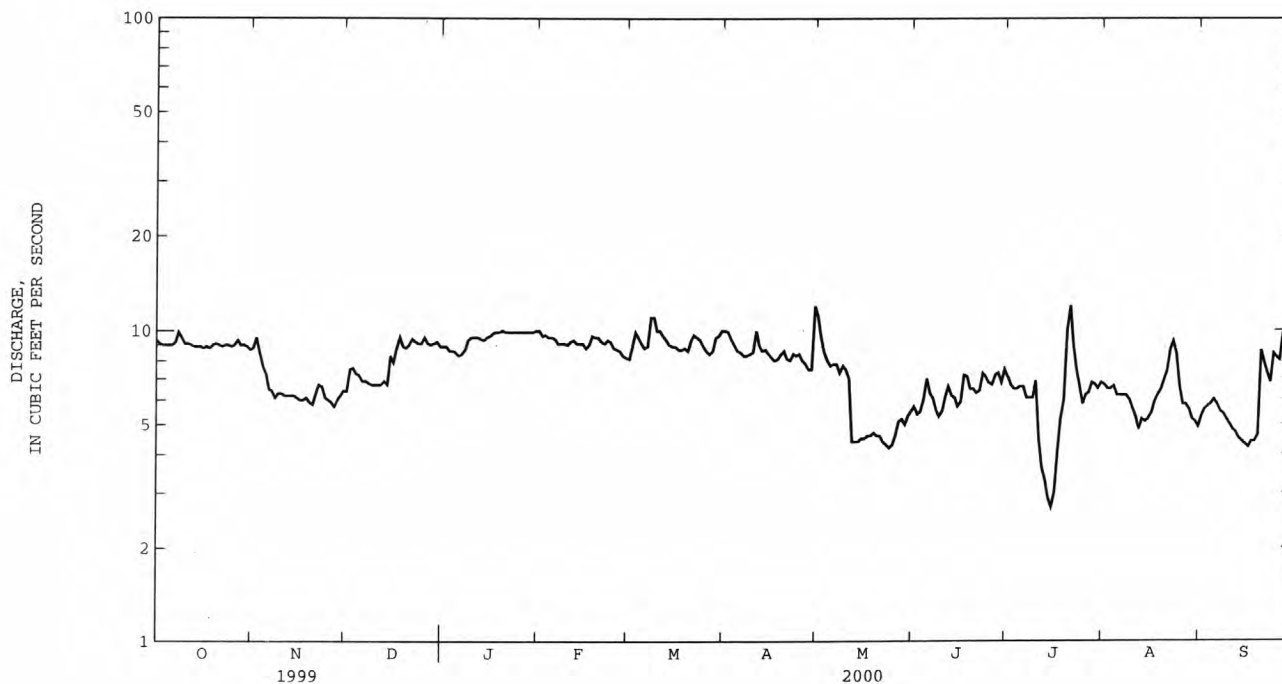
06824000 ROCK CREEK AT PARKS, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1941 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 3171.0 | | 2770.7 | | 12.9 | |
| ANNUAL MEAN | 8.69 | | 7.57 | | 15.8 | |
| HIGHEST ANNUAL MEAN | | | | | 7.57 | |
| LOWEST ANNUAL MEAN | | | | | 111 | |
| HIGHEST DAILY MEAN | 77 | Aug 29 | 12 | Apr 30 | 2.6 | Jul 6 1965 |
| LOWEST DAILY MEAN | 4.5 | Jun 6 | 2.7 | Jul 15 | 3.1 | Nov 19 1975 |
| ANNUAL SEVEN-DAY MINIMUM | 4.8 | Jul 25 | 3.4 | Jul 11 | 493 | Feb 17 1943 |
| INSTANTANEOUS PEAK FLOW | | | *24 | Jul 20 | 6.00 | Jul 5 1965 |
| INSTANTANEOUS PEAK STAGE | | | **1.93 | Jan 20 | 9320 | Jul 5 1965 |
| ANNUAL RUNOFF (AC-FT) | 6290 | | 5500 | | 16 | |
| 10 PERCENT EXCEEDS | 11 | | 9.6 | | 13 | |
| 50 PERCENT EXCEEDS | 8.3 | | 8.0 | | 9.1 | |
| 90 PERCENT EXCEEDS | 6.0 | | 5.1 | | | |

e Estimated.

* Stage 1.77 ft.

** Backwater from ice.



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 periods of estimated record, which are poor. Natural flow affected by irrigation development above station, and since July 6, 1950, by storage in Bonny Reservoir.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|--------|-------|-------|------|------|------|-------|-------|------|------|------|
| 1 | .00 | .00 | 12 | 9.8 | 17 | 18 | 24 | 19 | 2.8 | .00 | .00 | .00 |
| 2 | .00 | .00 | 11 | 9.7 | 20 | 18 | 24 | 18 | 2.8 | .00 | .00 | .00 |
| 3 | .00 | .00 | 11 | 9.6 | 16 | 20 | 24 | 17 | 2.0 | .00 | .00 | .00 |
| 4 | .00 | .00 | 10 | e10 | 15 | 20 | 25 | 17 | 1.4 | .00 | .00 | .00 |
| 5 | .00 | .00 | 10 | 11 | e15 | 20 | 25 | 16 | 1.3 | .00 | .00 | .00 |
| 6 | .00 | .00 | 8.0 | e11 | 15 | 20 | 21 | 16 | .86 | .00 | .00 | .00 |
| 7 | .00 | .00 | 6.3 | e11 | 15 | 20 | 19 | 15 | .44 | .00 | .00 | .00 |
| 8 | .00 | .00 | e6.0 | e11 | 16 | 23 | 18 | 15 | .34 | .00 | .00 | .00 |
| 9 | .00 | .00 | e5.8 | e11 | 16 | 23 | 19 | 15 | .25 | .00 | .00 | .00 |
| 10 | .00 | 3.8 | e6.0 | e11 | 16 | 22 | 19 | 15 | .12 | .00 | .00 | .00 |
| 11 | .00 | 9.4 | 6.2 | e12 | 15 | 22 | 18 | 15 | .06 | .00 | .00 | .00 |
| 12 | .00 | 11 | e6.2 | e12 | e15 | 22 | 18 | 13 | .01 | .00 | .00 | .00 |
| 13 | .00 | 11 | e6.4 | e12 | e15 | 21 | 18 | 13 | .00 | .00 | .00 | .00 |
| 14 | .00 | 12 | 6.7 | e12 | e16 | 21 | 18 | 12 | .00 | .00 | .00 | .00 |
| 15 | .00 | 12 | e7.0 | e12 | 17 | 21 | 17 | 12 | .00 | .00 | .00 | .00 |
| 16 | .00 | 12 | e7.2 | 12 | 16 | 20 | 17 | 12 | .00 | .00 | .00 | .00 |
| 17 | .00 | 13 | e7.4 | 13 | 16 | 20 | 17 | 12 | .00 | .00 | .00 | .00 |
| 18 | .00 | 13 | e7.4 | 13 | 16 | 20 | 17 | 10 | .00 | .00 | .00 | .00 |
| 19 | .00 | 13 | 7.5 | 13 | 18 | 21 | 17 | 9.9 | .00 | .00 | .00 | .00 |
| 20 | .00 | 13 | e7.7 | 13 | 18 | 20 | 16 | 9.5 | .00 | .00 | .00 | .00 |
| 21 | .00 | 13 | e7.8 | e13 | 18 | 20 | 15 | 9.0 | .00 | .00 | .00 | .00 |
| 22 | .00 | 14 | e8.0 | e13 | 18 | 22 | 15 | 8.9 | .00 | .00 | .00 | .00 |
| 23 | .00 | 14 | e8.0 | 13 | 19 | 23 | 15 | 8.8 | .00 | .00 | .00 | .00 |
| 24 | .00 | 14 | 8.4 | e13 | 19 | 23 | 15 | 8.8 | .00 | .00 | .00 | .00 |
| 25 | .00 | 15 | 8.4 | e13 | 18 | 24 | 15 | 8.7 | .00 | .00 | .00 | .00 |
| 26 | .00 | 14 | 8.3 | e14 | 18 | 25 | 15 | 6.8 | .00 | .00 | .00 | .00 |
| 27 | .00 | 13 | 8.7 | 14 | 18 | 25 | 14 | 5.3 | .00 | .00 | .00 | .00 |
| 28 | .00 | 13 | 9.0 | 15 | 18 | 24 | 14 | 5.0 | .00 | .00 | .00 | .00 |
| 29 | .00 | 13 | 9.1 | 15 | 18 | 24 | 14 | 4.1 | .00 | .00 | .00 | .00 |
| 30 | .00 | 12 | 9.3 | 16 | --- | 24 | 18 | 3.3 | .00 | .00 | .00 | .00 |
| 31 | .00 | --- | e9.6 | 17 | --- | 24 | --- | 3.3 | --- | .00 | .00 | --- |
| TOTAL | 0.00 | 258.20 | 250.4 | 385.1 | 487 | 670 | 541 | 353.4 | 12.38 | 0.00 | 0.00 | 0.00 |
| MEAN | .000 | 8.61 | 8.08 | 12.4 | 16.8 | 21.6 | 18.0 | 11.4 | .41 | .000 | .000 | .000 |
| MAX | .00 | 15 | 12 | 17 | 20 | 25 | 25 | 19 | 2.8 | .00 | .00 | .00 |
| MIN | .00 | .00 | 5.8 | 9.6 | 15 | 18 | 14 | 3.3 | .00 | .00 | .00 | .00 |
| AC-FT | .00 | 512 | 497 | 764 | 966 | 1330 | 1070 | 701 | 25 | .00 | .00 | .00 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2000, BY WATER YEAR (WY)

| | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 16.5 | 21.6 | 20.7 | 23.3 | 39.5 | 51.7 | 56.9 | 71.6 | 72.6 | 57.4 | 34.4 | 24.2 |
| MAX | 160 | 113 | 77.0 | 77.5 | 121 | 227 | 158 | 396 | 455 | 616 | 383 | 335 |
| (WY) | 1966 | 1970 | 1943 | 1943 | 1949 | 1942 | 1958 | 1957 | 1948 | 1946 | 1958 | 1951 |
| MIN | .000 | .000 | .000 | .000 | 6.62 | 18.1 | 12.1 | 6.57 | .077 | .000 | .000 | .000 |
| (WY) | 1940 | 1953 | 1953 | 1977 | 1978 | 1995 | 1956 | 1979 | 1956 | 1943 | 1940 | 1939 |

06827500 SOUTH FORK REPUBLICAN RIVER NEAR BENKELMAN, NE--Continued

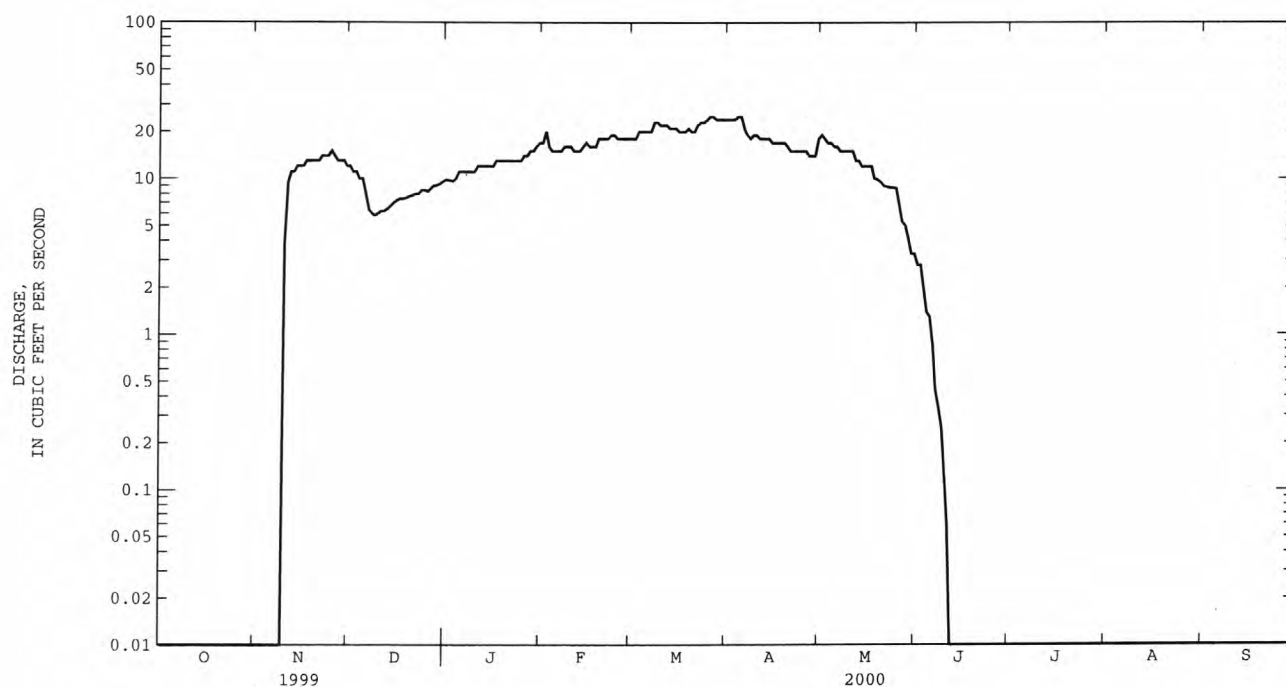
| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | FOR 2000 WATER YEAR | WATER YEARS 1938 - 2000 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 4540.64 | 2957.48 | |
| ANNUAL MEAN | 12.4 | 8.08 | 40.8 |
| HIGHEST ANNUAL MEAN | | | 121 1951 |
| LOWEST ANNUAL MEAN | | | 8.08 2000 |
| HIGHEST DAILY MEAN | 137 Jun 14 | 25 Mar 26 | 6220 Aug 16 1958 |
| LOWEST DAILY MEAN | .00 Jul 29 | .00 Oct 1 | .00 Jul 3 1938 |
| ANNUAL SEVEN-DAY MINIMUM | .00 Aug 4 | .00 Oct 1 | .00 Aug 1 1938 |
| INSTANTANEOUS PEAK FLOW | | *28 Apr 4 | 19600 Aug 16 1958 |
| INSTANTANEOUS PEAK STAGE | | **2.68 Dec 8 | ***8.70 Aug 16 1958 |
| ANNUAL RUNOFF (AC-FT) | 9010 | 5870 | 29590 |
| 10 PERCENT EXCEEDS | 23 | 19 | 85 |
| 50 PERCENT EXCEEDS | 13 | 7.8 | 19 |
| 90 PERCENT EXCEEDS | .00 | .00 | .00 |

e Estimated.

* Stage 1.79 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 ¼ NW ¼ 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 periods of estimated records, which are poor. Natural flow affected by irrigation development above station and by storage in Bonny Reservoir (station 06826000).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|--------|------|------|------|------|
| 1 | 37 | 37 | 46 | e33 | e64 | 88 | 112 | 74 | .00 | .00 | .00 | .00 |
| 2 | 38 | 39 | 47 | e32 | e68 | 90 | 109 | 77 | .00 | .00 | .00 | .00 |
| 3 | 38 | 42 | 45 | e30 | e70 | 108 | 109 | 75 | .00 | .00 | .00 | .00 |
| 4 | 36 | 42 | 52 | e27 | 74 | 118 | 112 | 60 | .00 | .00 | .00 | .00 |
| 5 | 33 | 46 | 40 | e28 | 72 | 126 | 121 | 55 | .00 | .00 | .00 | .00 |
| 6 | 32 | 33 | 44 | e28 | 76 | 131 | 113 | 51 | .00 | .00 | .00 | .00 |
| 7 | 31 | 33 | 46 | e28 | 75 | 134 | 100 | 48 | .00 | .00 | .00 | .00 |
| 8 | 36 | 38 | 45 | e30 | 81 | 143 | 84 | 43 | .00 | .00 | .00 | .00 |
| 9 | 36 | 35 | 41 | e31 | 84 | 115 | 88 | 41 | .00 | .00 | .00 | .00 |
| 10 | 34 | 34 | 37 | e32 | 80 | 146 | 89 | 36 | .00 | .00 | .00 | .00 |
| 11 | 35 | 32 | e36 | e34 | 75 | 136 | 83 | 32 | .00 | .65 | .00 | .00 |
| 12 | 34 | 28 | e35 | e36 | 54 | 128 | 90 | 26 | .00 | .73 | .00 | .00 |
| 13 | 21 | 31 | e35 | e38 | 60 | 126 | 90 | 16 | .00 | .00 | .00 | .00 |
| 14 | 19 | 30 | e34 | e40 | 62 | 125 | 91 | 11 | .00 | .00 | .00 | .00 |
| 15 | 18 | 31 | e33 | e42 | 83 | 116 | 68 | 8.3 | .00 | .00 | .00 | .00 |
| 16 | 18 | 33 | e33 | e45 | 84 | 94 | 69 | 8.5 | .00 | .00 | .00 | .00 |
| 17 | 21 | 34 | e33 | e45 | 81 | 92 | 73 | 8.6 | .00 | .00 | .00 | .00 |
| 18 | 25 | 39 | e33 | e42 | 80 | 95 | 81 | 6.8 | .00 | .00 | .00 | .00 |
| 19 | 27 | 36 | e32 | e41 | 69 | 97 | 72 | 6.3 | .00 | .00 | .00 | .00 |
| 20 | 30 | 24 | e30 | e40 | 76 | 97 | 62 | 5.4 | .00 | .12 | .00 | .00 |
| 21 | 37 | 25 | e27 | e43 | 91 | 98 | 63 | 4.3 | .00 | 1.8 | .00 | .00 |
| 22 | 38 | 27 | e29 | e44 | 92 | 118 | 67 | 3.4 | .00 | 3.1 | .00 | .00 |
| 23 | 37 | 37 | e30 | e45 | 106 | 120 | 64 | 2.3 | .00 | .00 | .00 | .00 |
| 24 | 37 | 25 | e31 | e45 | 107 | 118 | 67 | 1.2 | .00 | .00 | .00 | .00 |
| 25 | 38 | 24 | e31 | e45 | 110 | 119 | 71 | .66 | .00 | .00 | .00 | .00 |
| 26 | 37 | 36 | e32 | e43 | 99 | 123 | 66 | 1.7 | .00 | .00 | .00 | .00 |
| 27 | 36 | 38 | e33 | e41 | 89 | 114 | 58 | 1.6 | .00 | .00 | .00 | .00 |
| 28 | 35 | 37 | e34 | e42 | 96 | 104 | 50 | .23 | .00 | .00 | .00 | .00 |
| 29 | 34 | 39 | e34 | e46 | 97 | 102 | 45 | .01 | .00 | .00 | .00 | .00 |
| 30 | 35 | 41 | e35 | e50 | --- | 100 | 60 | .00 | .00 | .00 | .00 | .00 |
| 31 | 38 | --- | e34 | e56 | --- | 104 | --- | .00 | --- | .00 | .00 | --- |
| TOTAL | 1001 | 1026 | 1127 | 1202 | 2355 | 3525 | 2427 | 704.30 | 0.00 | 6.40 | 0.00 | 0.00 |
| MEAN | 32.3 | 34.2 | 36.4 | 38.8 | 81.2 | 114 | 80.9 | 22.7 | .000 | .21 | .000 | .000 |
| MAX | 38 | 46 | 52 | 56 | 110 | 146 | 121 | 77 | .00 | 3.1 | .00 | .00 |
| MIN | 18 | 24 | 27 | 27 | 54 | 88 | 45 | .00 | .00 | .00 | .00 | .00 |
| AC-FT | 1990 | 2040 | 2240 | 2380 | 4670 | 6990 | 4810 | 1400 | .00 | 13 | .00 | .00 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2000, BY WATER YEAR (WY)

| | MEAN | MAX | MIN | (WY) | MEAN | MAX | MIN | (WY) | MEAN | MAX | MIN | (WY) |
|--|------|-----|------|------|------|-----|------|------|------|------|------|------|
| | 48.4 | 285 | .000 | 1966 | 89.7 | 218 | 9.52 | 1970 | 90.2 | 157 | 27.6 | 1966 |
| | 100 | 159 | 22.8 | 1974 | 143 | 225 | 51.6 | 1963 | 179 | 788 | 78.0 | 1960 |
| | 169 | 388 | 75.6 | 1980 | 174 | 766 | 22.7 | 1957 | 143 | 572 | .000 | 1951 |
| | 174 | 766 | 22.7 | 1957 | 143 | 572 | .000 | 1951 | 87.5 | 759 | .000 | 1962 |
| | 174 | 766 | 22.7 | 1957 | 143 | 572 | .000 | 1951 | 65.2 | 479 | .000 | 1950 |
| | 174 | 766 | 22.7 | 1957 | 143 | 572 | .000 | 1951 | 52.3 | 1005 | .000 | 1951 |
| | 174 | 766 | 22.7 | 1957 | 143 | 572 | .000 | 1951 | 52.3 | 1005 | .000 | 1952 |

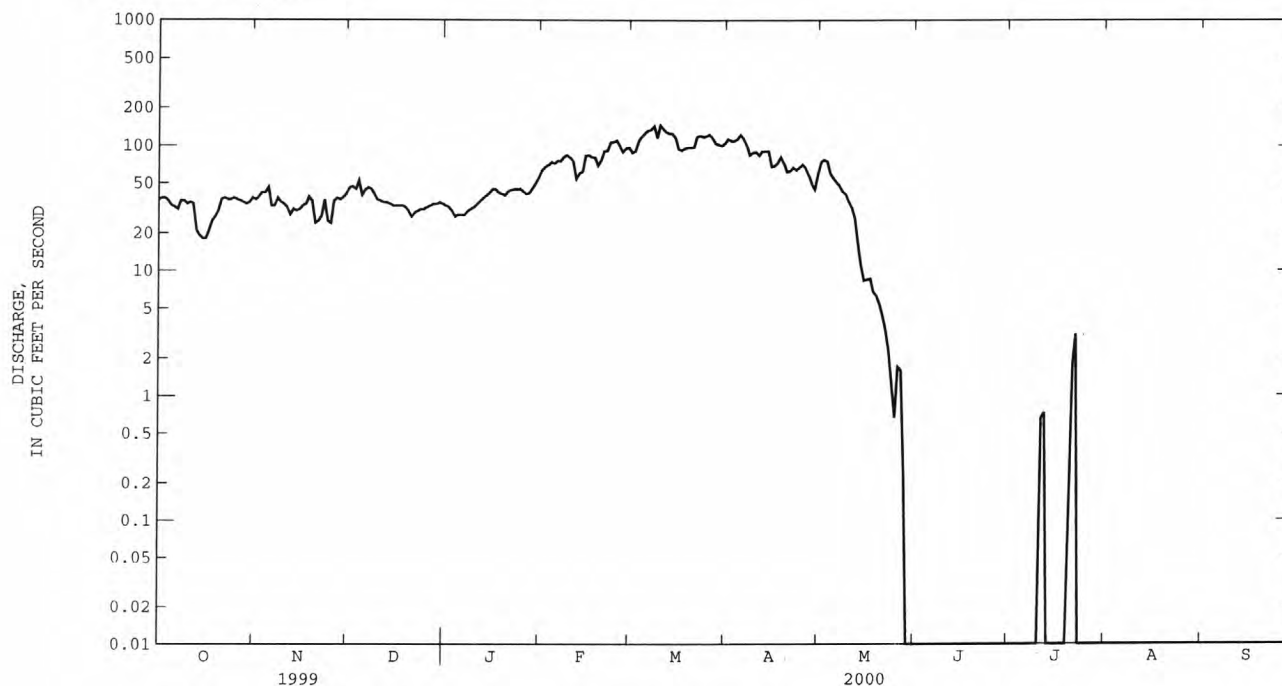
06828500 REPUBLICAN RIVER AT STRATTON, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | FOR 2000 WATER YEAR | WATER YEARS 1950 - 2000 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 17275.85 | 13373.70 | |
| ANNUAL MEAN | 47.3 | 36.5 | 111 |
| MEDIAN OF ANNUAL MEANS | | | 100 |
| HIGHEST ANNUAL MEAN | | | 304 |
| LOWEST ANNUAL MEAN | | | 36.5 |
| HIGHEST DAILY MEAN | 218 Jun 15 | 146 Mar 10 | 8180 Aug 1 1962 |
| LOWEST DAILY MEAN | .00 Jul 26 | .00 May 30 | .00 Jun 18 1952 |
| ANNUAL SEVEN-DAY MINIMUM | .00 Jul 26 | .00 May 30 | .00 Jun 18 1952 |
| INSTANTANEOUS PEAK FLOW | | *168 Mar 10 | 26800 Jul 31 1962 |
| INSTANTANEOUS PEAK STAGE | | **8.06 Dec 23 | 9.34 Jul 31 1962 |
| ANNUAL RUNOFF (AC-FT) | 34270 | 26530 | 80190 |
| 10 PERCENT EXCEEDS | 85 | 97 | 217 |
| 50 PERCENT EXCEEDS | 40 | 33 | 84 |
| 90 PERCENT EXCEEDS | 1.5 | .00 | .00 |

e Estimated.

* Stage 7.20 ft.

** Backwater from ice.



KANSAS RIVER BASIN

06832000 ENDERS RESERVOIR NEAR ENDERS, NE

LOCATION.--Lat 40°25'05", long 101°30'55", in NE ¼ 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 recorders: Graphic recorder and electronic data-logger, installed Dec. 15, 1997. 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, 23,920 acre-ft June 1, elevation, 3,099.11 ft; minimum, 8,961 acre-ft Aug. 10, elevation, 3,082.42 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 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 16280 | 17030 | 18060 | 19210 | 20340 | 21470 | 22710 | 23490 | 23900 | 18570 | 10760 | 9407 |
| 2 | 16300 | 17050 | 18090 | 19210 | 20390 | 21540 | 22750 | 23530 | 23900 | 18270 | 10550 | 9426 |
| 3 | 16350 | 17090 | 18140 | 19300 | 20470 | 21600 | 22780 | 23550 | 23900 | 18000 | 10340 | 9433 |
| 4 | 16390 | 17110 | 18200 | 19340 | 20470 | 21620 | 22820 | 23570 | 23870 | 17730 | 10130 | 9445 |
| 5 | 16430 | 17140 | 18210 | 19350 | 20500 | 21660 | 22820 | 23600 | 23890 | 17520 | 9913 | 9460 |
| 6 | 16450 | 17170 | 18230 | 19410 | 20520 | 21680 | 22820 | 23630 | 23860 | 17260 | 9667 | 9478 |
| 7 | 16480 | 17210 | 18290 | 19460 | 20550 | 21770 | 22860 | 23670 | 23850 | 16980 | 9426 | 9498 |
| 8 | 16510 | 17250 | 18310 | 19490 | 20600 | 21840 | 22900 | 23680 | 23810 | 16690 | 9189 | 9517 |
| 9 | 16530 | 17270 | 18360 | 19500 | 20630 | 21690 | 22920 | 23680 | 23800 | 16390 | 8992 | 9518 |
| 10 | 16550 | 17310 | 18380 | 19550 | 20700 | 21930 | 22960 | 23720 | 23790 | 16180 | 8974 | 9530 |
| 11 | 16560 | 17340 | 18430 | 19550 | 20770 | 21980 | 22970 | 23720 | 23770 | 15870 | 8980 | 9550 |
| 12 | 16570 | 17380 | 18460 | 19580 | 20810 | 22010 | 23000 | 23690 | 23720 | 15570 | 9005 | 9564 |
| 13 | 16600 | 17420 | 18510 | 19640 | 20890 | 22020 | 23000 | 23680 | 23670 | 15270 | 9024 | 9586 |
| 14 | 16610 | 17450 | 18560 | 19680 | 20920 | 22070 | 23040 | 23690 | 23610 | 14940 | 9049 | 9589 |
| 15 | 16640 | 17470 | 18560 | 19700 | 20930 | 22120 | 23080 | 23710 | 23470 | 14600 | 9052 | 9595 |
| 16 | 16670 | 17500 | 18600 | 19740 | 20970 | 22140 | 23110 | 23740 | 23290 | 14330 | 9097 | 9621 |
| 17 | 16700 | 17550 | 18650 | 19770 | 21010 | 22180 | 23110 | 23780 | 23160 | 14030 | 9125 | 9611 |
| 18 | 16720 | 17590 | 18680 | 19820 | 21050 | 22220 | 23200 | 23770 | 22970 | 13780 | 9132 | 9634 |
| 19 | 16750 | 17590 | 18750 | 19850 | 21090 | 22240 | 23240 | 23770 | 22770 | 13590 | 9151 | 9711 |
| 20 | 16770 | 17500 | 18770 | 19890 | 21140 | 22290 | 23160 | 23810 | 22550 | 13340 | 9174 | 9777 |
| 21 | 16790 | 17520 | 18800 | 19940 | 21170 | 22360 | 23170 | 23830 | 22280 | 13150 | 9198 | 9799 |
| 22 | 16820 | 17740 | 18840 | 19970 | 21200 | 22400 | 23190 | 23850 | 21900 | 12920 | 9224 | 9817 |
| 23 | 16850 | 17770 | 18860 | 19990 | 21260 | 22470 | 23200 | 23830 | 21510 | 12740 | 9234 | 9850 |
| 24 | 16870 | 17810 | 18900 | 20030 | 21270 | 22470 | 23280 | 23830 | 21100 | 12580 | 9250 | 9917 |
| 25 | 16900 | 17840 | 18950 | 20050 | 21350 | 22490 | 23280 | 23790 | 20710 | 12400 | 9265 | 9943 |
| 26 | 16920 | 17890 | 18980 | 20100 | 21370 | 22490 | 23310 | 23870 | 20300 | 12180 | 9274 | 9973 |
| 27 | 16920 | 17910 | 19020 | 20150 | 21400 | 22510 | 23310 | 23860 | 19900 | 11980 | 9291 | 10000 |
| 28 | 16930 | 17940 | 19030 | 20210 | 21430 | 22520 | 23340 | 23870 | 19530 | 11710 | 9301 | 10020 |
| 29 | 16940 | 17980 | 19070 | 20220 | 21440 | 22570 | 23360 | 23860 | 19190 | 11440 | 9323 | 10030 |
| 30 | 16970 | 18010 | 19120 | 20290 | --- | 22590 | 23470 | 23890 | 18890 | 11190 | 9329 | 10060 |
| 31 | 17000 | --- | 19160 | 20320 | --- | 22650 | --- | 23910 | --- | 10970 | 9365 | --- |
| MEAN | 16670 | 17490 | 18610 | 19750 | 20920 | 22120 | 23070 | 23740 | 22560 | 14590 | 9380 | 9679 |
| MAX | 17000 | 18010 | 19160 | 20320 | 21440 | 22650 | 23470 | 23910 | 23900 | 18570 | 10760 | 10060 |
| MIN | 16280 | 17030 | 18060 | 19210 | 20340 | 21470 | 22710 | 23490 | 18890 | 10970 | 8974 | 9407 |

(*) 3092.76 3093.79 3094.91 3095.99 3096.99 3098.04 3098.73 3099.10 3094.65 3085.42 3083.06 3084.12
 (**) +730 +1010 +1150 +1160 +1120 +1210 +820 +440 -5020 -7920 -1605 +695

CAL YR 1999 MAX 24210 MIN 1280 (**) -960
 CAL YR 2000 MAX 23910 MIN 8974 (**) -6210

(*) 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 1/4 SE 1/4 sec.36, T.5 N., R.34 W., Hayes County, Hydrologic Unit 10250005, on right bank at upstream side of bridge on U.S. Highway 6, 0.7 mi west of Palisade, 1.5 mi upstream from Stinking Water Creek, and at mile 30.2.

DRAINAGE AREA.--1,300 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 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|--------|------|--------|-------|
| 1 | 23 | 22 | 27 | 27 | 29 | 27 | 27 | 23 | 16 | 147 | 118 | 8.7 |
| 2 | 23 | 22 | 27 | 27 | 33 | 27 | 26 | 23 | 16 | 144 | 110 | 8.5 |
| 3 | 23 | 23 | 26 | 27 | 27 | 29 | 25 | 22 | 15 | 143 | 106 | 7.8 |
| 4 | 23 | 23 | e25 | e26 | 27 | 28 | 26 | 22 | 15 | 134 | 113 | 7.4 |
| 5 | 23 | 23 | e25 | e27 | 28 | 28 | 26 | 22 | 14 | 127 | 113 | 7.0 |
| 6 | 23 | 23 | e26 | e28 | 27 | 27 | 25 | 21 | 13 | 114 | 113 | 6.4 |
| 7 | 23 | 22 | e26 | e28 | 26 | 27 | 25 | 21 | 12 | 109 | 120 | 6.3 |
| 8 | 24 | 22 | 27 | e28 | 26 | 30 | 24 | 21 | 11 | 115 | 123 | 7.8 |
| 9 | 24 | 22 | 27 | e29 | 26 | 28 | 25 | 21 | 9.8 | 115 | 124 | 9.0 |
| 10 | 23 | 23 | e26 | 30 | 27 | 28 | 25 | 21 | 9.0 | 131 | 114 | 7.2 |
| 11 | 22 | 22 | e26 | 30 | e26 | 30 | 25 | 20 | 7.9 | 138 | 76 | 6.9 |
| 12 | 23 | 23 | e26 | 27 | e26 | 29 | 25 | 19 | 7.8 | 142 | 46 | 6.6 |
| 13 | 22 | 23 | e26 | 26 | e26 | 28 | 25 | 19 | 8.7 | 138 | 36 | 6.6 |
| 14 | 22 | 23 | e26 | 27 | e26 | 28 | 24 | 19 | 8.3 | 139 | 30 | 6.3 |
| 15 | 22 | 23 | e26 | 27 | e26 | 27 | 23 | 19 | 7.3 | 139 | 26 | 6.2 |
| 16 | 22 | 23 | e27 | 26 | 27 | 27 | 24 | 19 | 8.2 | 152 | 23 | 6.2 |
| 17 | 22 | 23 | 30 | 27 | 26 | 27 | 25 | 19 | 32 | 170 | 22 | 6.1 |
| 18 | 23 | 26 | 27 | 27 | 27 | 27 | 25 | 19 | 52 | 152 | 19 | 6.0 |
| 19 | 24 | 27 | 27 | 27 | e26 | 27 | 24 | 18 | 62 | 134 | 18 | 6.0 |
| 20 | 24 | 26 | e26 | 27 | 27 | 26 | 24 | 18 | 72 | 130 | 17 | 11 |
| 21 | 23 | 27 | e26 | 30 | 27 | 26 | 23 | 18 | 74 | 127 | 16 | 11 |
| 22 | 23 | 27 | e25 | 28 | 27 | 27 | 23 | 18 | 77 | 127 | 15 | 11 |
| 23 | 23 | e26 | e25 | 28 | 28 | 27 | 23 | 18 | 124 | 124 | 14 | 11 |
| 24 | 23 | e25 | e26 | 30 | 27 | 27 | 24 | 17 | 157 | 110 | 13 | 13 |
| 25 | 23 | e25 | 27 | 30 | 27 | 26 | 24 | 17 | 162 | 99 | 12 | 15 |
| 26 | 23 | e26 | 27 | 27 | 27 | 26 | 23 | 17 | 162 | 94 | 11 | 16 |
| 27 | 22 | e26 | 27 | 27 | 27 | 25 | 22 | 17 | 166 | 108 | 12 | 15 |
| 28 | 22 | 27 | 27 | e26 | 27 | 25 | 21 | 17 | 182 | 114 | 12 | 14 |
| 29 | 23 | 26 | 27 | e26 | 27 | 25 | 21 | 16 | 166 | 123 | 11 | 14 |
| 30 | 23 | 26 | 27 | e26 | --- | 26 | 24 | 15 | 152 | 124 | 9.6 | 13 |
| 31 | 22 | --- | 28 | e28 | --- | 26 | --- | 15 | --- | 128 | 9.2 | --- |
| TOTAL | 708 | 725 | 821 | 854 | 783 | 841 | 726 | 591 | 1819.0 | 3991 | 1601.8 | 277.0 |
| MEAN | 22.8 | 24.2 | 26.5 | 27.5 | 27.0 | 27.1 | 24.2 | 19.1 | 60.6 | 129 | 51.7 | 9.23 |
| MAX | 24 | 27 | 30 | 30 | 33 | 30 | 27 | 23 | 182 | 170 | 124 | 16 |
| MIN | 22 | 22 | 25 | 26 | 26 | 25 | 21 | 15 | 7.3 | 94 | 9.2 | 6.0 |
| AC-FT | 1400 | 1440 | 1630 | 1690 | 1550 | 1670 | 1440 | 1170 | 3610 | 7920 | 3180 | 549 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2000, BY WATER YEAR (WY)

| | MEAN | 39.5 | 35.3 | 35.4 | 37.3 | 42.5 | 47.5 | 46.9 | 52.6 | 71.5 | 183 | 171 | 68.3 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 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 | 19.5 | 67.0 | 38.5 | 8.32 | |
| (WY) | 1991 | 1990 | 1990 | 1979 | 1993 | 1999 | 1972 | 2000 | 1992 | 1951 | 1990 | 1990 | |

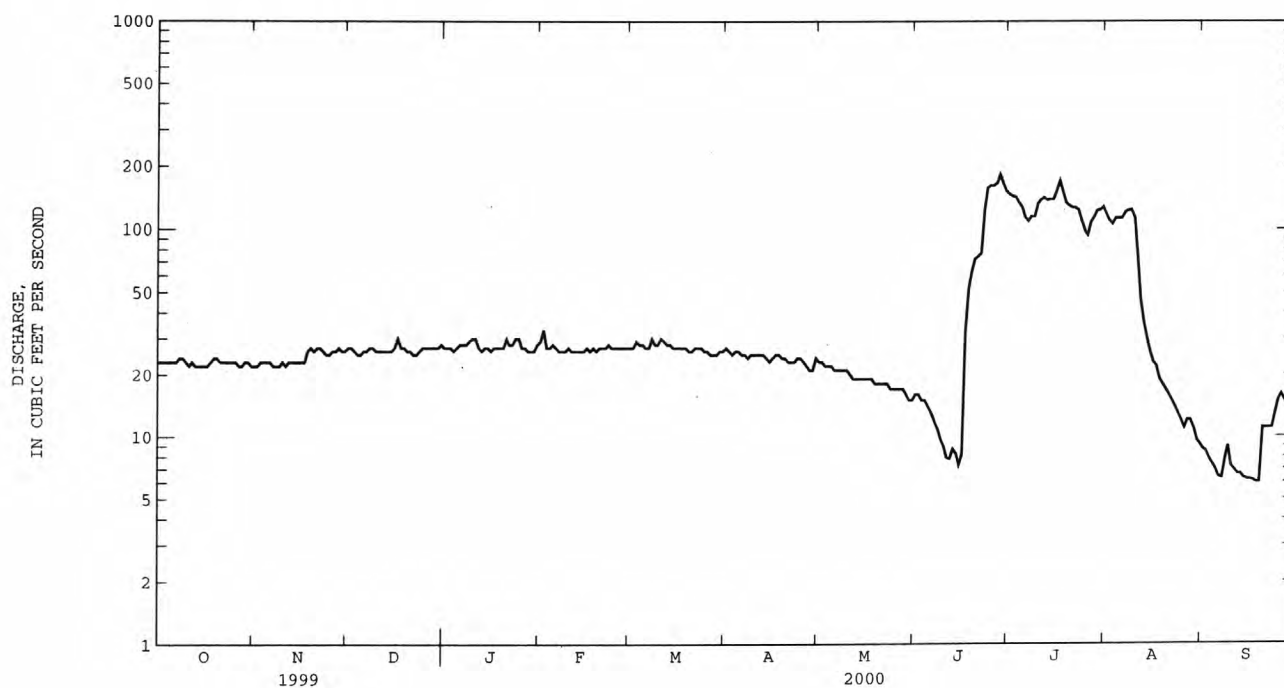
06834000 FRENCHMAN CREEK AT PALISADE, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1950 - 2000 a | |
|--------------------------|------------------------|--------|---------------------|--------|---------------------------|-------------|
| ANNUAL TOTAL | 15129 | | 13737.8 | | | |
| ANNUAL MEAN | 41.4 | | 37.5 | | 69.8 | |
| HIGHEST ANNUAL MEAN | | | | | 115 | 1960 |
| LOWEST ANNUAL MEAN | | | | | 37.5 | 2000 |
| HIGHEST DAILY MEAN | 416 | Aug 12 | 182 | Jun 28 | 2090 | Jun 17 1956 |
| LOWEST DAILY MEAN | 17 | Jun 8 | 6.0 | Sep 18 | 5.4 | Sep 14 1990 |
| ANNUAL SEVEN-DAY MINIMUM | 19 | Jun 3 | 6.2 | Sep 13 | 5.8 | Sep 4 1990 |
| INSTANTANEOUS PEAK FLOW | | | 209 | Jul 16 | 5560 | Jun 17 1956 |
| INSTANTANEOUS PEAK STAGE | | | 5.02 | Jul 16 | *8.79 | Jun 17 1956 |
| ANNUAL RUNOFF (AC-FT) | 30010 | | 27250 | | 50600 | |
| 10 PERCENT EXCEEDS | 108 | | 114 | | 162 | |
| 50 PERCENT EXCEEDS | 26 | | 26 | | 38 | |
| 90 PERCENT EXCEEDS | 22 | | 12 | | 23 | |

e Estimated.

a Since beginning of storage in Enders Reservoir.

* Site and datum then in use.



LOCATION.--Lat 40°14'05", long 100°52'40", in SW 1/4 SE 1/4 sec. 12, T.3 N., R.32 W., Hitchcock County, Hydrologic Unit 10250005, on right bank 8 ft upstream from bridge on U.S. Highways 6 and 34, 2 mi west of Culbertson, and 4.0 mi upstream from mouth.

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.

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.

EXTREME FOR TOTAL PERIOD OF RECORD.--Maximum discharge, 15,000 ft³/s (estimated), May 31, 1935, gage height 14.80 ft, from floodmark.

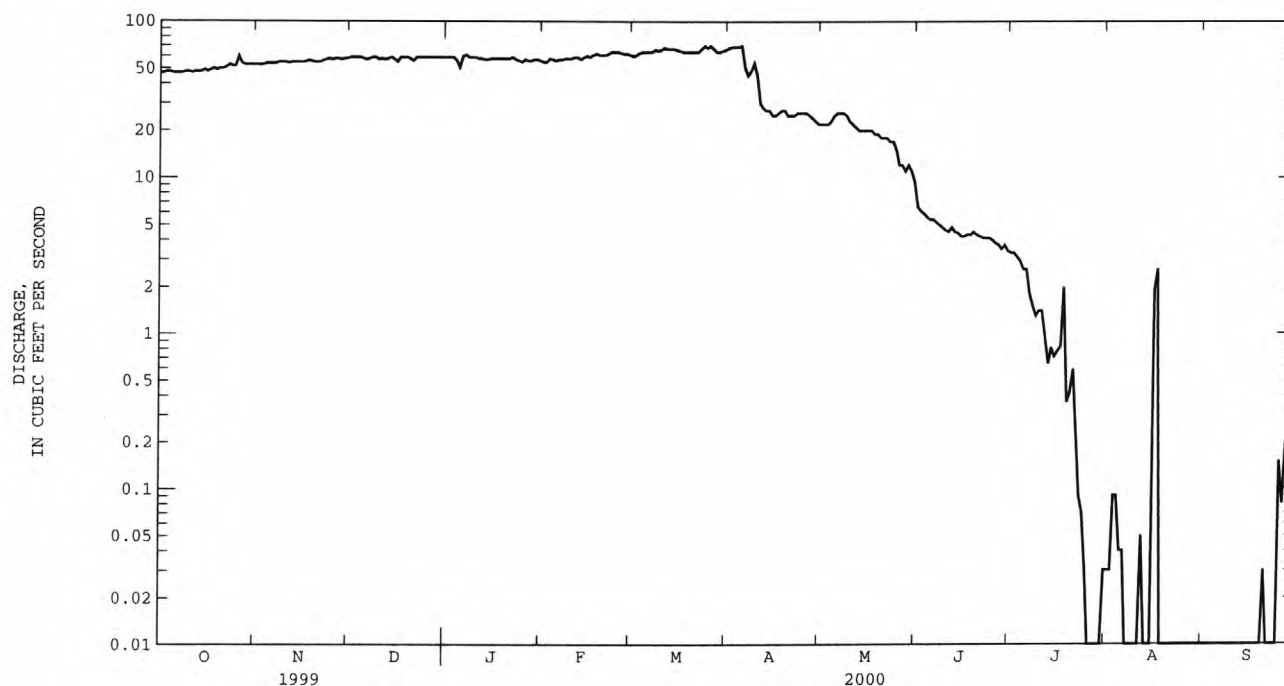
| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 71.6 | 82.1 | 80.9 | 81.4 | 99.2 | 112 | 79.1 | 65.6 | 77.6 | 48.9 | 38.3 | 57.0 |
| MAX | 172 | 146 | 162 | 182 | 210 | 543 | 290 | 222 | 351 | 269 | 258 | 245 |
| (WY) | 1963 | 1963 | 1959 | 1953 | 1952 | 1960 | 1960 | 1952 | 1967 | 1962 | 1962 | 1951 |
| MIN | 27.7 | 46.8 | 46.9 | 42.9 | 57.1 | 58.0 | 28.9 | 18.0 | 4.57 | 1.09 | .16 | .035 |
| (WY) | 1991 | 1991 | 1999 | 1996 | 1996 | 1999 | 1999 | 1986 | 2000 | 2000 | 2000 | 2000 |

06835500 FRENCHMAN CREEK AT CULBERTSON, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1951 - 2000 a | |
|--------------------------|------------------------|--------|---------------------|--------|---------------------------|-------------|
| ANNUAL TOTAL | 15978.9 | | 12423.03 | | 74.3 | |
| ANNUAL MEAN | 43.8 | | 33.9 | | 165 | |
| HIGHEST ANNUAL MEAN | | | | | 33.9 | |
| LOWEST ANNUAL MEAN | | | | | 1960 | |
| HIGHEST DAILY MEAN | 215 | Aug 13 | 70 | Mar 24 | 3060 | Jun 18 1956 |
| LOWEST DAILY MEAN | 3.4 | Aug 1 | .00 | Jul 26 | .00 | Aug 7 1980 |
| ANNUAL SEVEN-DAY MINIMUM | 4.5 | Jul 30 | .00 | Aug 18 | .00 | Aug 18 2000 |
| INSTANTANEOUS PEAK FLOW | | | 75 | Mar 24 | 5260 | Jun 17 1951 |
| INSTANTANEOUS PEAK STAGE | | | 3.03 | Mar 24 | 10.43 | Jun 17 1951 |
| ANNUAL RUNOFF (AC-FT) | 31690 | | 24640 | | 53830 | |
| 10 PERCENT EXCEEDS | 60 | | 63 | | 130 | |
| 50 PERCENT EXCEEDS | 48 | | 48 | | 64 | |
| 90 PERCENT EXCEEDS | 14 | | .00 | | 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 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|------|
| 1 | 5.1 | 3.5 | 3.9 | 4.3 | 4.6 | 4.7 | 4.3 | 3.3 | 2.5 | 4.7 | 5.3 | 2.6 |
| 2 | 4.6 | 3.5 | 3.9 | 4.4 | 4.6 | 4.9 | 4.3 | 3.4 | 2.4 | 4.8 | 5.5 | 2.7 |
| 3 | 4.2 | 3.5 | 3.8 | 4.3 | 4.4 | 5.5 | 4.2 | 3.3 | 2.5 | 4.8 | 5.6 | 2.6 |
| 4 | 3.9 | 3.6 | 4.0 | 4.2 | 4.4 | 5.3 | 4.2 | 3.3 | 2.5 | 4.9 | 6.0 | 2.5 |
| 5 | 3.7 | 3.6 | 3.9 | 4.4 | 4.4 | 5.1 | 4.1 | 3.3 | 2.4 | 5.0 | 6.0 | 2.5 |
| 6 | 3.6 | 3.6 | 4.0 | 4.3 | 4.4 | 5.0 | 4.2 | 3.3 | 2.5 | 5.1 | 5.9 | 2.4 |
| 7 | 3.5 | 3.6 | 4.1 | 4.3 | 4.3 | 5.1 | 4.1 | 3.3 | 2.9 | 5.1 | 5.9 | 2.3 |
| 8 | 3.6 | 3.5 | 4.0 | 4.3 | 4.2 | 5.6 | 4.1 | 3.1 | 2.3 | 5.2 | 6.1 | 2.3 |
| 9 | 3.6 | 3.6 | 4.0 | 4.3 | 4.3 | 5.4 | 4.1 | 3.2 | 5.8 | 5.4 | 6.0 | 2.3 |
| 10 | 3.4 | 3.5 | 3.9 | 4.3 | 4.3 | 5.3 | 4.1 | 3.2 | 4.6 | 5.4 | 5.4 | 2.2 |
| 11 | 3.4 | 3.5 | 4.1 | 4.2 | 4.3 | 5.0 | 4.0 | 3.2 | 3.5 | 5.7 | 5.2 | 2.2 |
| 12 | 3.5 | 3.5 | 4.0 | 4.3 | 4.6 | 4.8 | 4.0 | 2.9 | 3.0 | 5.7 | 4.8 | 2.1 |
| 13 | 3.6 | 3.4 | 4.1 | 4.2 | 4.4 | 4.6 | 4.1 | 2.8 | 2.8 | 5.7 | 5.9 | 2.0 |
| 14 | 3.5 | 3.4 | 4.1 | 4.2 | 4.4 | 4.6 | 4.1 | 2.9 | 2.8 | 5.9 | 6.2 | 2.0 |
| 15 | 3.4 | 3.4 | 4.0 | 4.3 | 4.4 | 4.6 | 4.0 | 2.9 | 3.0 | 6.0 | 5.3 | 2.0 |
| 16 | 3.4 | 3.5 | 4.1 | 4.4 | 4.4 | 4.5 | 4.0 | 2.9 | 3.5 | 5.9 | 4.5 | 2.0 |
| 17 | 3.5 | 3.5 | 4.1 | 4.4 | 4.4 | 4.3 | 4.0 | 3.0 | 3.6 | 6.1 | 4.9 | 1.9 |
| 18 | 3.6 | 3.6 | 4.1 | 4.5 | 4.6 | 4.4 | 4.0 | 2.8 | 3.5 | 6.4 | 4.8 | 2.0 |
| 19 | 3.5 | 3.4 | 4.1 | 4.4 | 4.6 | 4.6 | 4.0 | 2.8 | 3.6 | 6.5 | 5.8 | 2.0 |
| 20 | 3.5 | 3.5 | 4.0 | 4.3 | 4.6 | 4.5 | 3.4 | 2.8 | 3.5 | 6.5 | 5.4 | 2.4 |
| 21 | 3.4 | 3.6 | 4.2 | 4.4 | 4.8 | 4.4 | 3.7 | 2.8 | 3.8 | 6.7 | 4.3 | 2.3 |
| 22 | 3.3 | 3.6 | 4.2 | 4.5 | 4.8 | 4.5 | 3.6 | 2.7 | 3.9 | 7.0 | 5.0 | 2.2 |
| 23 | 3.3 | 3.8 | 4.2 | 4.4 | 5.1 | 4.7 | 3.6 | 2.7 | 4.0 | 7.0 | 5.0 | 2.1 |
| 24 | 3.3 | 3.8 | 4.2 | 4.4 | 5.3 | 4.8 | 3.6 | 2.6 | 4.1 | 7.1 | 4.9 | 2.3 |
| 25 | 3.3 | 3.8 | 4.2 | 4.4 | 5.1 | 4.5 | 3.5 | 2.5 | 4.1 | 7.2 | 4.0 | 2.6 |
| 26 | 3.4 | 3.9 | 4.2 | 4.5 | 5.1 | 4.4 | 3.5 | 2.7 | 4.2 | 6.5 | 3.5 | 2.3 |
| 27 | 3.4 | 3.9 | 4.3 | 4.4 | 4.9 | 4.4 | 3.5 | 2.8 | 4.2 | 4.6 | 3.5 | 2.2 |
| 28 | 3.4 | 3.9 | 4.3 | 4.4 | 4.9 | 4.4 | 3.5 | 2.6 | 4.4 | 5.9 | 3.3 | 2.1 |
| 29 | 3.5 | 3.8 | 4.4 | 4.4 | 4.9 | 4.3 | 3.4 | 2.5 | 4.4 | 6.1 | 3.4 | 2.1 |
| 30 | 3.6 | 3.9 | 4.4 | 4.4 | --- | 4.3 | 3.3 | 2.4 | 4.6 | 6.7 | 2.8 | 2.1 |
| 31 | 3.6 | --- | 4.3 | 4.5 | --- | 4.3 | --- | 2.5 | --- | 5.5 | 2.7 | --- |
| TOTAL | 111.6 | 108.2 | 127.1 | 135.0 | 133.5 | 146.8 | 116.5 | 90.5 | 104.9 | 181.1 | 152.9 | 67.3 |
| MEAN | 3.60 | 3.61 | 4.10 | 4.35 | 4.60 | 4.74 | 3.88 | 2.92 | 3.50 | 5.84 | 4.93 | 2.24 |
| MAX | 5.1 | 3.9 | 4.4 | 4.5 | 5.3 | 5.6 | 4.3 | 3.4 | 5.8 | 7.2 | 6.2 | 2.7 |
| MIN | 3.3 | 3.4 | 3.8 | 4.2 | 4.2 | 4.3 | 3.3 | 2.4 | 2.3 | 4.6 | 2.7 | 1.9 |
| AC-FT | 221 | 215 | 252 | 268 | 265 | 291 | 231 | 180 | 208 | 359 | 303 | 133 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2000, BY WATER YEAR (WY)

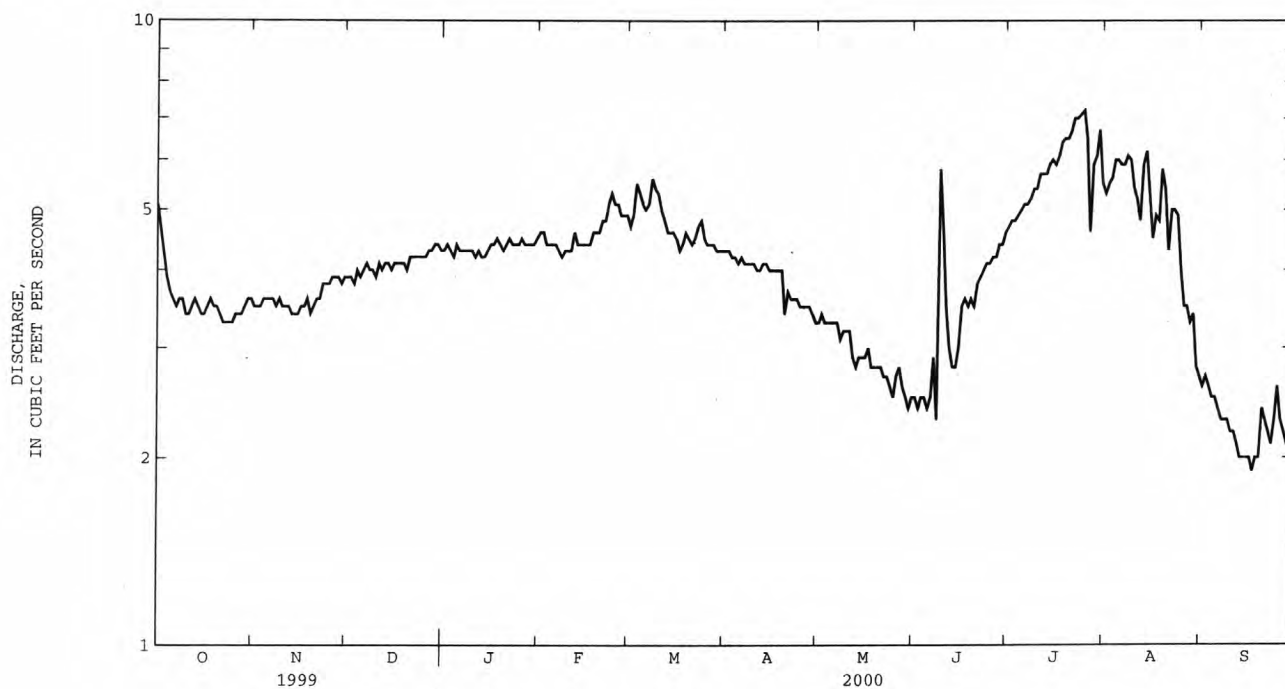
| | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 7.14 | 3.69 | 3.60 | 3.57 | 5.75 | 7.87 | 4.28 | 9.72 | 17.8 | 20.1 | 16.7 | 13.4 |
| MAX | 137 | 7.71 | 7.44 | 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 |

KANSAS RIVER BASIN

257

06836500 DRIFTWOOD CREEK NEAR MCCOOK, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | FOR 2000 WATER YEAR | WATER YEARS 1946 - 2000 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 2489.9 | 1475.4 | |
| ANNUAL MEAN | 6.82 | 4.03 | 9.50 |
| MEDIAN OF ANNUAL MEANS | | | 7.60 |
| HIGHEST ANNUAL MEAN | | | 35.0 |
| LOWEST ANNUAL MEAN | | | 1.12 |
| HIGHEST DAILY MEAN | 147 May 23 | 7.2 Jul 25 | 3950 Aug 7 1950 |
| LOWEST DAILY MEAN | 1.9 Sep 16 | 1.9 Sep 17 | .00 Apr 25 1946 |
| ANNUAL SEVEN-DAY MINIMUM | 2.0 Sep 10 | 2.0 Sep 13 | .00 Jun 12 1946 |
| INSTANTANEOUS PEAK FLOW | | 9.3 Jun 7 | 4740 Aug 7 1950 |
| INSTANTANEOUS PEAK STAGE | | 3.65 Oct 1 | 25.43 Aug 7 1950 |
| ANNUAL RUNOFF (AC-FT) | 4940 | 2930 | 6880 |
| 10 PERCENT EXCEEDS | 9.6 | 5.4 | 11 |
| 50 PERCENT EXCEEDS | 4.4 | 4.1 | 4.8 |
| 90 PERCENT EXCEEDS | 3.3 | 2.5 | .20 |



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.

PERIOD OF RECORD.--October 1930 to June 1932, October 1954 to current year. Monthly discharge only for some periods, published in WSP 1310.

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 good except for periods of estimated record, which are fair. Natural flow affected by irrigation development above station and by storage in Bonny Reservoir, Enders Reservoir (station 06832000), and Swanson Lake (station 06829000).

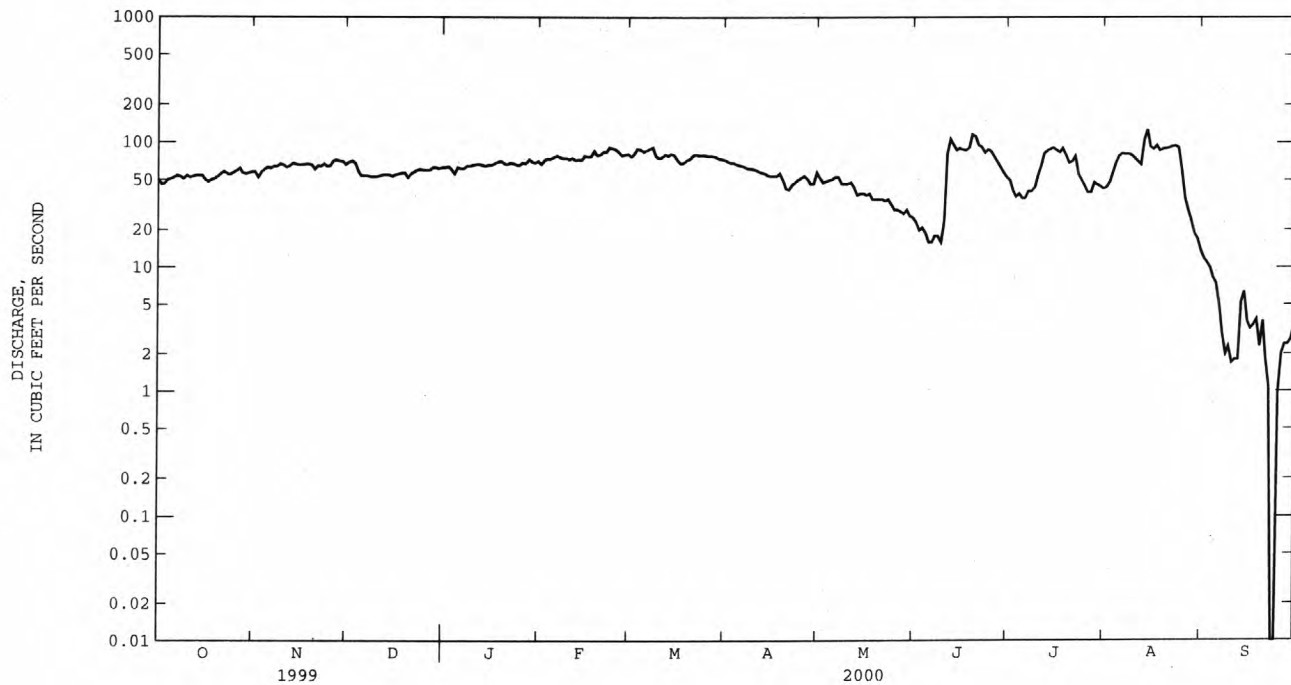
| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 98.7 | 111 | 108 | 111 | 149 | 178 | 160 | 173 | 189 | 213 | 174 | 98.5 |
| MAX | 466 | 341 | 321 | 269 | 398 | 901 | 577 | 1022 | 1070 | 1142 | 970 | 286 |
| (WY) | 1966 | 1966 | 1959 | 1959 | 1958 | 1960 | 1958 | 1957 | 1962 | 1962 | 1962 | 1962 |
| MIN | 30.0 | 62.4 | 51.7 | 59.7 | 75.2 | 77.3 | 56.4 | 22.6 | 39.8 | 58.1 | 66.1 | 3.83 |
| (WY) | 1992 | 1991 | 1996 | 1979 | 1995 | 1996 | 2000 | 1956 | 1992 | 2000 | 1978 | 2000 |

KANSAS RIVER BASIN

259

06837000 REPUBLICAN RIVER AT MCCOOK, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1955 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 27797 | | 21075.87 | | 147 | |
| ANNUAL MEAN | 76.2 | | 57.6 | | 383 | |
| HIGHEST ANNUAL MEAN | | | | | 57.6 | |
| LOWEST ANNUAL MEAN | | | | | 5020 | |
| HIGHEST DAILY MEAN | 455 | May 23 | 126 | Aug 14 | | 1962 |
| LOWEST DAILY MEAN | 37 | Jan 4 | .00 | Sep 24 | | 2000 |
| ANNUAL SEVEN-DAY MINIMUM | 40 | Jan 1 | 1.2 | Sep 21 | | 2000 |
| INSTANTANEOUS PEAK FLOW | | | 221 | Aug 14 | 5890 | Mar 21 1960 |
| INSTANTANEOUS PEAK STAGE | | | 4.66 | Aug 14 | 9.14 | Mar 21 1960 |
| ANNUAL RUNOFF (AC-FT) | 55140 | | 41800 | | 106500 | |
| 10 PERCENT EXCEEDS | 110 | | 86 | | 260 | |
| 50 PERCENT EXCEEDS | 64 | | 61 | | 107 | |
| 90 PERCENT EXCEEDS | 50 | | 18 | | 55 | |



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 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 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|-------|
| 1 | 4.1 | 7.2 | 7.8 | e8.0 | e5.4 | 8.7 | 11 | 10 | 8.1 | 7.6 | 10 | 5.5 |
| 2 | 3.8 | 7.1 | 7.8 | e8.2 | e6.6 | 9.0 | 11 | 9.5 | 5.9 | 5.9 | 21 | 5.9 |
| 3 | 4.4 | 7.3 | 7.7 | e8.0 | e7.2 | 10 | 11 | 9.7 | .72 | 5.8 | 42 | 5.6 |
| 4 | 4.5 | 7.6 | 7.8 | e7.8 | e8.0 | 9.0 | 11 | 9.4 | 4.1 | 111 | 60 | 5.4 |
| 5 | 4.3 | 7.6 | 7.9 | e8.4 | e8.0 | 8.4 | 11 | 9.3 | 22 | 21 | 55 | 4.5 |
| 6 | 4.4 | 7.8 | e8.0 | e4.0 | e8.8 | 8.4 | 10 | 9.3 | 2.8 | 8.0 | 29 | 4.2 |
| 7 | 4.7 | 7.8 | 7.9 | e3.6 | e8.6 | 8.5 | 8.3 | 9.5 | 20 | 11 | 28 | 4.1 |
| 8 | 5.0 | 8.0 | 7.8 | e4.0 | 8.4 | 10 | 8.1 | 9.4 | 77 | 10 | 20 | 4.1 |
| 9 | 5.0 | 8.0 | 7.8 | e4.2 | 8.5 | 8.4 | 8.4 | 9.3 | 94 | 8.5 | 8.5 | 4.5 |
| 10 | 4.7 | 7.9 | e7.8 | e4.5 | 8.3 | 8.5 | 8.6 | 9.2 | 90 | 6.0 | 5.1 | 4.1 |
| 11 | 5.2 | 7.8 | 7.6 | e4.7 | 9.6 | 8.5 | 8.5 | 9.1 | 93 | 14 | 3.2 | 4.2 |
| 12 | 5.7 | 7.8 | e7.6 | e5.0 | e9.4 | 8.4 | 8.7 | 8.7 | 57 | 17 | .43 | 4.4 |
| 13 | 5.5 | 8.0 | e7.4 | e5.0 | e9.0 | 8.3 | 9.0 | 8.5 | 11 | 16 | 18 | 4.6 |
| 14 | 5.3 | 7.5 | 7.5 | e5.2 | e8.6 | 9.5 | 9.0 | 8.6 | 6.5 | 12 | 28 | 4.6 |
| 15 | 5.2 | 8.0 | e7.4 | e5.4 | e8.6 | 9.6 | 9.0 | 8.6 | 6.8 | 8.3 | 33 | 4.4 |
| 16 | 5.6 | 8.0 | e7.2 | e5.4 | 8.7 | 9.5 | 9.0 | 8.6 | 5.5 | 7.4 | 42 | 4.5 |
| 17 | 6.3 | 7.8 | 7.3 | e5.6 | 8.7 | 9.8 | 9.1 | 8.9 | 6.2 | 12 | 63 | 4.6 |
| 18 | 6.7 | 7.7 | 7.8 | e6.0 | 8.8 | 10 | 9.8 | 8.4 | 7.8 | 9.8 | 62 | 4.7 |
| 19 | 6.8 | 7.4 | 7.3 | e6.6 | 9.6 | 10 | 9.7 | 8.3 | 7.3 | 4.4 | 40 | 4.8 |
| 20 | 6.9 | 7.4 | 9.2 | e7.0 | 8.6 | 10 | 9.3 | 7.8 | 4.9 | 2.4 | 45 | 7.1 |
| 21 | 7.2 | 7.8 | 9.8 | e6.6 | 8.6 | 10 | 9.5 | 7.7 | 2.7 | 17 | 72 | 5.8 |
| 22 | 7.3 | 8.4 | 8.7 | e6.8 | 8.6 | 10 | 9.7 | 7.7 | .07 | 497 | 47 | 6.4 |
| 23 | 7.0 | 8.5 | 7.4 | e6.4 | 9.3 | 11 | 9.7 | 7.7 | 1.3 | 105 | 28 | 6.4 |
| 24 | 6.7 | 8.3 | 7.3 | e6.0 | 8.9 | 12 | 9.5 | 7.9 | 4.2 | 19 | 12 | 6.9 |
| 25 | 6.7 | 7.9 | 7.4 | e5.0 | 8.8 | 11 | 10 | 8.6 | 4.2 | 24 | 12 | 6.8 |
| 26 | 6.6 | 8.1 | 6.3 | e4.8 | 8.5 | 11 | 9.5 | 9.7 | 9.8 | 19 | 10 | 16 |
| 27 | 6.8 | 8.1 | 5.4 | e4.7 | 8.6 | 11 | 8.9 | 9.5 | 9.2 | 14 | 8.2 | 7.5 |
| 28 | 7.0 | 7.6 | 6.5 | e4.6 | 8.7 | 11 | 9.2 | 9.1 | 1.4 | 15 | 6.8 | 6.8 |
| 29 | 7.2 | 7.6 | 6.7 | e4.6 | 8.7 | 11 | 9.1 | 9.0 | .13 | 15 | 5.9 | 6.5 |
| 30 | 7.1 | 7.6 | e6.6 | e4.7 | --- | 11 | 11 | 9.5 | 3.7 | 14 | 5.8 | 6.5 |
| 31 | 7.4 | --- | e7.0 | e5.0 | --- | 11 | --- | 8.3 | --- | 12 | 5.3 | --- |
| TOTAL | 181.1 | 233.6 | 233.7 | 175.8 | 246.1 | 302.5 | 285.6 | 274.8 | 567.32 | 1049.1 | 826.23 | 171.4 |
| MEAN | 5.84 | 7.79 | 7.54 | 5.67 | 8.49 | 9.76 | 9.52 | 8.86 | 18.9 | 33.8 | 26.7 | 5.71 |
| MAX | 7.4 | 8.5 | 9.8 | 8.4 | 9.6 | 12 | 11 | 10 | 94 | 497 | 72 | 16 |
| MIN | 3.8 | 7.1 | 5.4 | 3.6 | 5.4 | 8.3 | 8.1 | 7.7 | .07 | 2.4 | .43 | 4.1 |
| AC-FT | 359 | 463 | 464 | 349 | 488 | 600 | 566 | 545 | 1130 | 2080 | 1640 | 340 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2000, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 8.56 | 8.58 | 8.78 | 9.56 | 11.0 | 11.6 | 11.5 | 12.1 | 21.1 | 21.1 | 21.7 | 10.6 |
| 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 |

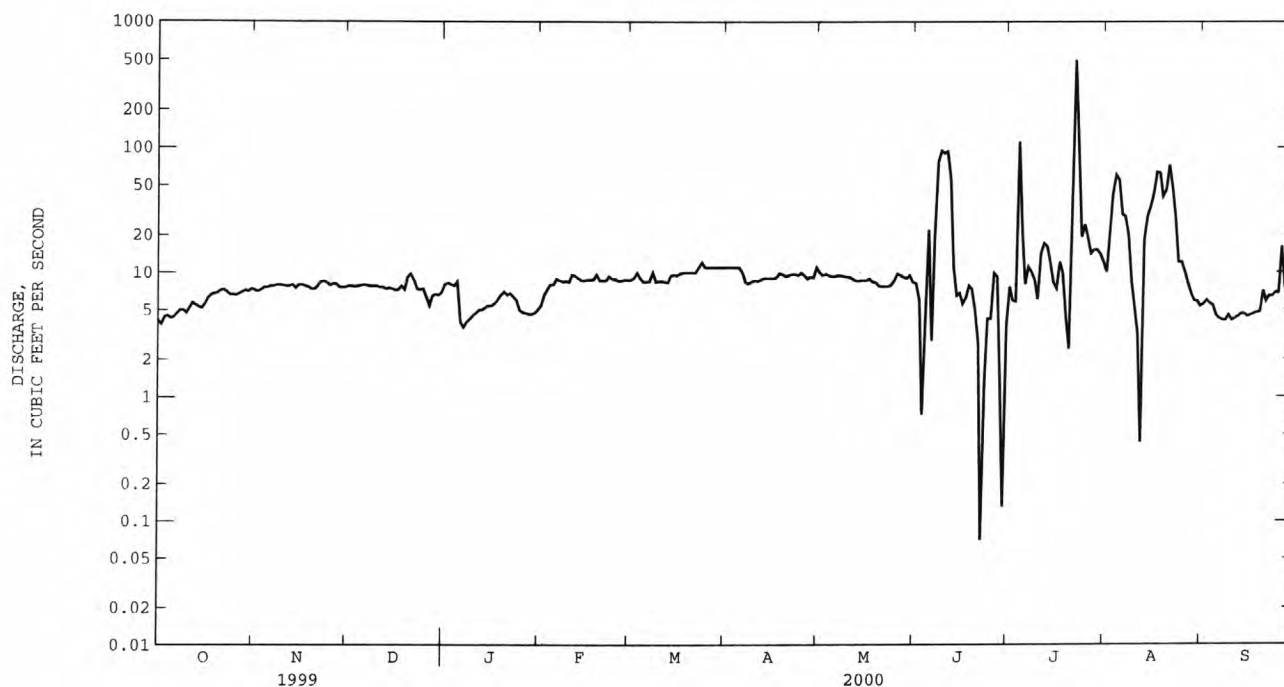
KANSAS RIVER BASIN

06838000 RED WILLOW CREEK NEAR RED WILLOW, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1962 - 2000 a | |
|--------------------------|------------------------|--------|---------------------|--------|---------------------------|-------------|
| ANNUAL TOTAL | 3155.27 | | 4547.25 | | 13.0 | |
| ANNUAL MEAN | 8.64 | | 12.4 | | 25.5 | 1967 |
| HIGHEST ANNUAL MEAN | | | | | 7.90 | 1992 |
| LOWEST ANNUAL MEAN | | | | | 668 | Jul 18 1962 |
| HIGHEST DAILY MEAN | 206 | Aug 11 | 497 | Jul 22 | .00 | Sep 2 1995 |
| LOWEST DAILY MEAN | .09 | Aug 1 | .07 | Jun 22 | .29 | Dec 31 1998 |
| ANNUAL SEVEN-DAY MINIMUM | .32 | Jan 1 | 3.5 | Jun 19 | 30000 | Jun 22 1947 |
| INSTANTANEOUS PEAK FLOW | | | 597 | Jul 22 | 18.36 | Jun 22 1947 |
| INSTANTANEOUS PEAK STAGE | | | 12.33 | Jul 22 | 9440 | |
| ANNUAL RUNOFF (AC-FT) | 6260 | | 9020 | | 20 | |
| 10 PERCENT EXCEEDS | 9.6 | | 15 | | 9.3 | |
| 50 PERCENT EXCEEDS | 7.8 | | 8.0 | | 5.8 | |
| 90 PERCENT EXCEEDS | 4.0 | | 4.6 | | | |

e Estimated.

a Since beginning of storage in Hugh Butler Lake.



06843500 REPUBLICAN RIVER AT CAMBRIDGE, NE

LOCATION.--Lat 40°17'05", long 100°08'35", in NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 28, T.4 N., R.25 W., Furnas County, Hydrologic Unit 10250004, on left bank 400 ft south of U.S. Highways 6 and 34, 0.5 mi downstream from Medicine Creek, 1 mi east of Cambridge, 1.3 mi upstream from Cambridge diversion dam, and at mile 315.

DRAINAGE AREA.--14,460 mi², of which about 7,780 mi² contributes directly to surface runoff.

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

REVISED RECORDS.--WDR NE-84-1: 1983 (M). WDR NE-94-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,239.07 ft above sea level. Prior to July 13, 1948, nonrecording gage at site 150 ft upstream at same datum and July 13, 1948 to Sept. 25, 1950 at present site and datum.

REMARKS.--Records good except for periods of estimated record, which are poor. Natural flow affected by irrigation development above station and since 1949 by regulation from upstream reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 160,000 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.

COOPERATION. - Records provided by Nebraska Department of Natural Resources and reviewed by the Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|-------|------|------|------|-------|--------|-------|
| 1 | 64 | 84 | 98 | 98 | 156 | 181 | 168 | 82 | 86 | 149 | 320 | 6.1 |
| 2 | 67 | 84 | 99 | 100 | 158 | 185 | 169 | 65 | 87 | 140 | 298 | 4.2 |
| 3 | 68 | 86 | 101 | 101 | e155 | 198 | 167 | 54 | 93 | 128 | 269 | 2.7 |
| 4 | 69 | 88 | 104 | e100 | 153 | 199 | 159 | 51 | 93 | 125 | 225 | 1.3 |
| 5 | 68 | 88 | e104 | 92 | e150 | 191 | 159 | 47 | 94 | 137 | 211 | e.80 |
| 6 | 68 | 89 | e104 | e92 | 156 | 188 | 156 | 47 | 114 | 132 | 205 | e.77 |
| 7 | 66 | 89 | e102 | e100 | 156 | 190 | 152 | 49 | 111 | 143 | 209 | e.74 |
| 8 | 67 | 89 | e104 | e104 | 157 | 214 | 144 | 51 | 105 | 145 | 250 | e.72 |
| 9 | 69 | 90 | e102 | e104 | 158 | 202 | 140 | 84 | 128 | 144 | 236 | e.69 |
| 10 | 69 | 89 | e102 | e104 | 157 | 195 | 139 | 79 | 128 | 240 | 231 | e.66 |
| 11 | 69 | 88 | e102 | e108 | e155 | 192 | 138 | 79 | 129 | 296 | 211 | e.63 |
| 12 | 68 | 88 | e100 | e118 | e155 | 187 | 107 | 78 | 148 | 276 | 199 | e.60 |
| 13 | 68 | 88 | e102 | e116 | e160 | 184 | 94 | 90 | 163 | 275 | 197 | e.58 |
| 14 | 68 | 88 | e102 | e125 | e160 | 187 | 89 | 93 | 159 | 254 | 233 | e.55 |
| 15 | 70 | 89 | e100 | e130 | 163 | 183 | 88 | 94 | 180 | 240 | 265 | e.52 |
| 16 | 70 | 88 | e100 | 134 | 163 | 179 | 85 | 94 | 182 | 240 | 259 | e.49 |
| 17 | 71 | 88 | 101 | 134 | 163 | 178 | 85 | 96 | 195 | 252 | 260 | e.46 |
| 18 | 72 | 87 | e100 | 136 | e160 | 182 | 85 | 95 | 201 | 224 | 257 | e.44 |
| 19 | 73 | 86 | 102 | 137 | e170 | 180 | 86 | 93 | 217 | 192 | 253 | e.41 |
| 20 | 73 | 88 | e98 | e130 | e175 | 175 | 85 | 90 | 191 | 196 | 241 | e1.0 |
| 21 | 74 | 89 | 94 | e140 | 176 | 173 | 83 | 87 | 146 | 187 | 240 | e.35 |
| 22 | 75 | 91 | e92 | 142 | 177 | 176 | 78 | 83 | 136 | 409 | 253 | e.32 |
| 23 | 78 | 96 | e94 | 143 | e175 | 182 | 72 | 78 | 145 | 509 | 249 | e.30 |
| 24 | 79 | 95 | e96 | e135 | e175 | 181 | 69 | 48 | 141 | 213 | 224 | e.27 |
| 25 | 79 | 96 | 96 | e140 | e180 | 177 | 70 | 74 | 133 | 166 | 120 | e.24 |
| 26 | 78 | 97 | 94 | e145 | 181 | 177 | 74 | 98 | 121 | 131 | 76 | e.21 |
| 27 | 78 | 97 | 94 | e145 | 178 | 174 | 72 | 95 | 154 | 132 | 50 | e.18 |
| 28 | 79 | 97 | 96 | e145 | 178 | 171 | 71 | 89 | 151 | 146 | 34 | e.16 |
| 29 | 82 | 99 | 97 | e145 | 180 | 173 | 69 | 86 | 146 | 143 | 22 | e.13 |
| 30 | 82 | 97 | 97 | e150 | --- | 173 | 81 | 84 | 201 | 144 | 14 | e.10 |
| 31 | 83 | --- | e98 | e155 | --- | 168 | --- | 86 | --- | 264 | 8.1 | --- |
| TOTAL | 2244 | 2708 | 3075 | 3848 | 4780 | 5695 | 3234 | 2419 | 4278 | 6372 | 6119.1 | 26.62 |
| MEAN | 72.4 | 90.3 | 99.2 | 124 | 165 | 184 | 108 | 78.0 | 143 | 206 | 197 | .89 |
| MAX | 83 | 99 | 104 | 155 | 181 | 214 | 169 | 98 | 217 | 509 | 320 | 6.1 |
| MIN | 64 | 84 | 92 | 92 | 150 | 168 | 69 | 47 | 86 | 125 | 8.1 | .10 |
| AC-FT | 4450 | 5370 | 6100 | 7630 | 9480 | 11300 | 6410 | 4800 | 8490 | 12640 | 12140 | 53 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2000, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 122 | 154 | 150 | 157 | 240 | 295 | 260 | 304 | 347 | 367 | 297 | 156 |
| 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 |

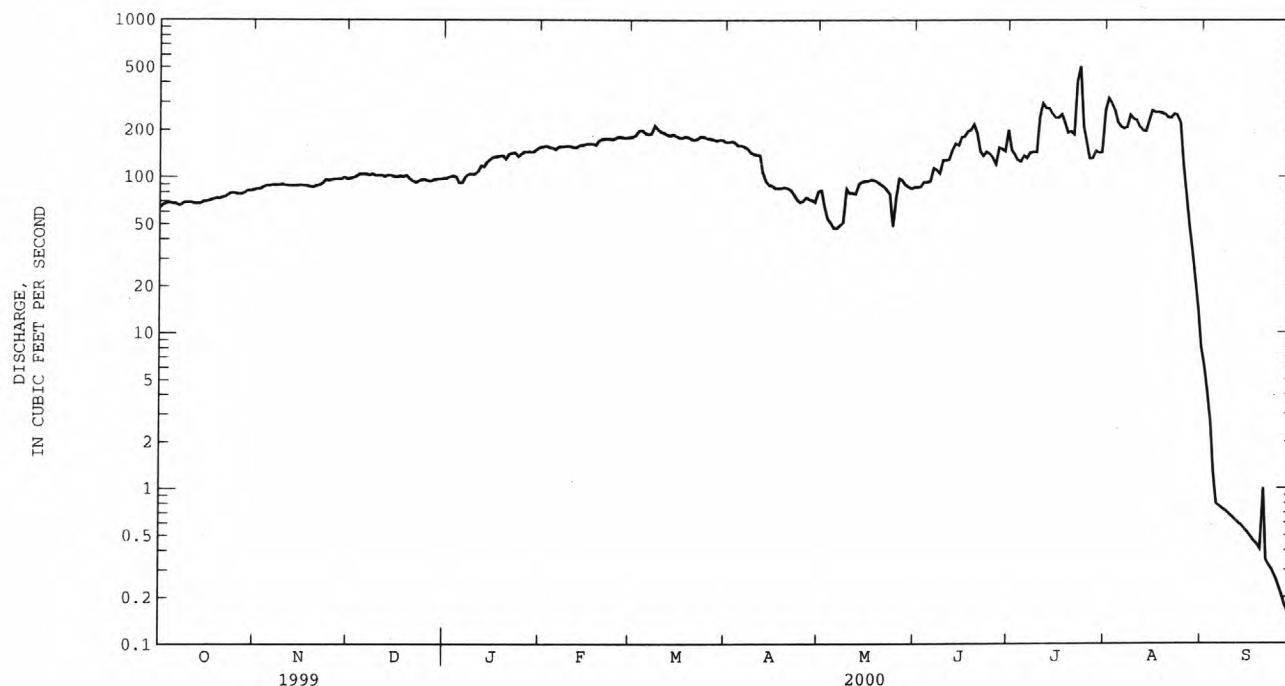
06843500 REPUBLICAN RIVER AT CAMBRIDGE, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1950 - 2000 a | |
|--------------------------|------------------------|--------|---------------------|--------|---------------------------|-------------|
| ANNUAL TOTAL | 48570 | | 44798.72 | | 237 | |
| ANNUAL MEAN | 133 | | 122 | | 686 | |
| HIGHEST ANNUAL MEAN | | | | | 110 | |
| LOWEST ANNUAL MEAN | | | | | 8610 | |
| HIGHEST DAILY MEAN | 399 | Aug 29 | 509 | Jul 23 | | 1951 |
| LOWEST DAILY MEAN | 54 | Jan 3 | .10 | Sep 30 | | 1991 |
| ANNUAL SEVEN-DAY MINIMUM | 56 | Jan 1 | .18 | Sep 24 | | Mar 22 1960 |
| INSTANTANEOUS PEAK FLOW | | | 607 | Jul 23 | .07 | Sep 27 1978 |
| INSTANTANEOUS PEAK STAGE | | | 4.96 | Jul 23 | .11 | Sep 21 1978 |
| ANNUAL RUNOFF (AC-FT) | 96340 | | 88860 | | *11000 | Sep 4 1951 |
| 10 PERCENT EXCEEDS | 290 | | 206 | | 9.35 | Mar 22 1960 |
| 50 PERCENT EXCEEDS | 103 | | 102 | | 172000 | |
| 90 PERCENT EXCEEDS | 73 | | 48 | | 410 | |
| | | | | | 167 | |
| | | | | | 75 | |

e Estimated.

a Since beginning of storage in Harry Strunk Lake (Medicine Creek).

* Stage 7.02 ft.



KANSAS RIVER BASIN

06844500 REPUBLICAN RIVER NEAR ORLEANS, NE

LOCATION.--Lat 40°07'53", long 099°30'08", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.19, T.2 N., R.19 W., Harlan County, Hydrologic Unit 10250009, on right bank 18 ft downstream from bridge on State Highway 89, 200 ft downstream from Burlington Northern Inc. bridge, 2 mi west of Orleans, 2.8 mi upstream from Sappa Creek, 23 mi upstream from Harlan County Dam, and at mile 262.

DRAINAGE AREA.--15,580 mi², approximately, of which about 8,880 mi² contributes directly to surface runoff.

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder. Datum of gage is 1,972.57 ft above sea level. Prior to June 2, 1948, nonrecording gage at present site and datum. Data collection platform at station.

REMARKS.--Records good except for period of estimated discharge, which is poor. Natural flow affected by irrigation development above station and regulation by upstream reservoirs.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|-------|-------|-------|------|------|------|--------|-------|-------|
| 1 | 75 | 101 | 124 | e150 | e180 | 198 | 211 | 132 | 47 | 127 | 33 | 10 |
| 2 | 73 | 96 | 126 | 159 | e180 | 196 | 211 | 145 | 44 | 135 | 41 | 7.4 |
| 3 | 74 | 99 | 126 | 140 | e190 | 214 | 208 | 142 | 42 | 103 | 38 | 4.8 |
| 4 | 77 | 101 | 126 | e145 | e195 | 228 | 204 | 124 | 43 | 101 | 31 | 2.3 |
| 5 | 77 | 103 | 125 | e150 | e200 | 233 | 206 | 111 | 39 | 340 | 29 | 1.9 |
| 6 | 78 | 104 | 123 | e150 | e200 | 224 | 207 | 106 | 39 | 332 | 29 | 1.4 |
| 7 | 78 | 105 | 121 | e150 | e200 | 218 | 202 | 101 | 35 | 171 | 31 | .86 |
| 8 | 79 | 107 | 125 | e170 | e190 | 244 | 194 | 98 | 33 | 102 | 28 | .68 |
| 9 | 79 | 107 | 125 | e170 | e190 | 248 | 191 | 99 | 33 | 65 | 22 | .55 |
| 10 | 76 | 105 | 119 | e170 | e190 | 244 | 186 | 96 | 26 | 38 | 18 | .53 |
| 11 | 75 | 105 | 123 | e170 | 188 | 229 | 183 | 115 | 26 | 22 | 14 | .43 |
| 12 | 76 | 108 | 125 | e170 | 188 | 225 | 186 | 103 | 26 | 20 | 11 | .21 |
| 13 | 78 | 109 | 127 | e170 | 202 | 222 | 181 | 87 | 23 | 17 | 12 | .07 |
| 14 | 82 | 109 | 131 | e170 | 221 | 233 | 157 | 82 | 19 | 15 | 9.5 | .02 |
| 15 | 82 | 109 | 136 | e170 | 221 | 235 | 147 | 92 | 15 | 11 | 7.9 | .01 |
| 16 | 79 | 110 | 138 | e175 | 213 | 230 | 145 | 99 | 11 | 11 | 7.6 | .05 |
| 17 | 76 | 112 | 137 | e180 | 210 | 221 | 141 | 104 | 11 | 9.6 | 15 | .06 |
| 18 | 81 | 113 | 129 | e180 | 212 | 226 | 140 | 86 | 21 | 14 | 20 | .09 |
| 19 | 84 | 112 | 137 | e180 | 202 | 235 | 136 | 75 | 33 | 27 | 24 | .09 |
| 20 | 87 | 110 | e125 | e175 | 202 | 231 | 130 | 70 | 74 | 39 | 35 | .38 |
| 21 | 90 | 111 | e120 | e175 | 211 | 226 | 126 | 67 | 77 | 71 | 52 | .10 |
| 22 | 92 | 111 | e130 | e175 | 207 | 221 | 123 | 62 | 69 | 166 | 58 | .11 |
| 23 | 92 | 114 | e135 | e175 | 233 | 231 | 122 | 58 | 63 | 117 | 55 | .13 |
| 24 | 94 | 114 | e140 | e170 | 255 | 245 | 120 | 55 | 57 | 292 | 46 | .88 |
| 25 | 96 | 119 | e140 | e170 | 253 | 239 | 118 | 52 | 66 | 262 | 40 | 2.1 |
| 26 | 97 | 120 | e140 | e170 | 230 | 229 | 117 | 50 | 80 | 149 | 28 | 3.9 |
| 27 | 98 | 118 | e145 | e180 | 213 | 222 | 118 | 50 | 61 | 107 | 30 | 4.2 |
| 28 | 99 | 119 | e145 | e180 | 203 | 218 | 119 | 57 | 52 | 78 | 36 | 4.4 |
| 29 | 102 | 119 | e145 | e180 | 202 | 216 | 117 | 61 | 50 | 60 | 30 | 4.0 |
| 30 | 102 | 121 | e145 | e180 | --- | 213 | 123 | 54 | 113 | 46 | 20 | 3.3 |
| 31 | 103 | --- | e145 | e180 | --- | 209 | --- | 49 | --- | 39 | 13 | --- |
| TOTAL | 2631 | 3291 | 4078 | 5229 | 5981 | 7003 | 4769 | 2682 | 1328 | 3086.6 | 864.0 | 54.95 |
| MEAN | 84.9 | 110 | 132 | 169 | 206 | 226 | 159 | 86.5 | 44.3 | 99.6 | 27.9 | 1.83 |
| MAX | 103 | 121 | 145 | 180 | 255 | 248 | 211 | 145 | 113 | 340 | 58 | 10 |
| MIN | 73 | 96 | 119 | 140 | 180 | 196 | 117 | 49 | 11 | 9.6 | 7.6 | .01 |
| AC-FT | 5220 | 6530 | 8090 | 10370 | 11860 | 13890 | 9460 | 5320 | 2630 | 6120 | 1710 | 109 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2000, BY WATER YEAR (WY)

| | MEAN | 130 | 170 | 170 | 170 | 293 | 378 | 327 | 389 | 469 | 261 | 180 | 149 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
| MAX | 840 | 519 | 438 | 392 | 772 | 1720 | 915 | 1528 | 2732 | 1602 | 1396 | 2026 | |
| (WY) | 1966 | 1966 | 1966 | 1953 | 1949 | 1960 | 1949 | 1951 | 1948 | 1962 | 1962 | 1951 | |
| MIN | .000 | 38.5 | 50.4 | 24.2 | 112 | 144 | 124 | 54.8 | 44.3 | 10.8 | 3.51 | .007 | |
| (WY) | 1992 | 1979 | 1979 | 1979 | 1996 | 1991 | 1991 | 1956 | 2000 | 1991 | 1955 | 1991 | |

KANSAS RIVER BASIN

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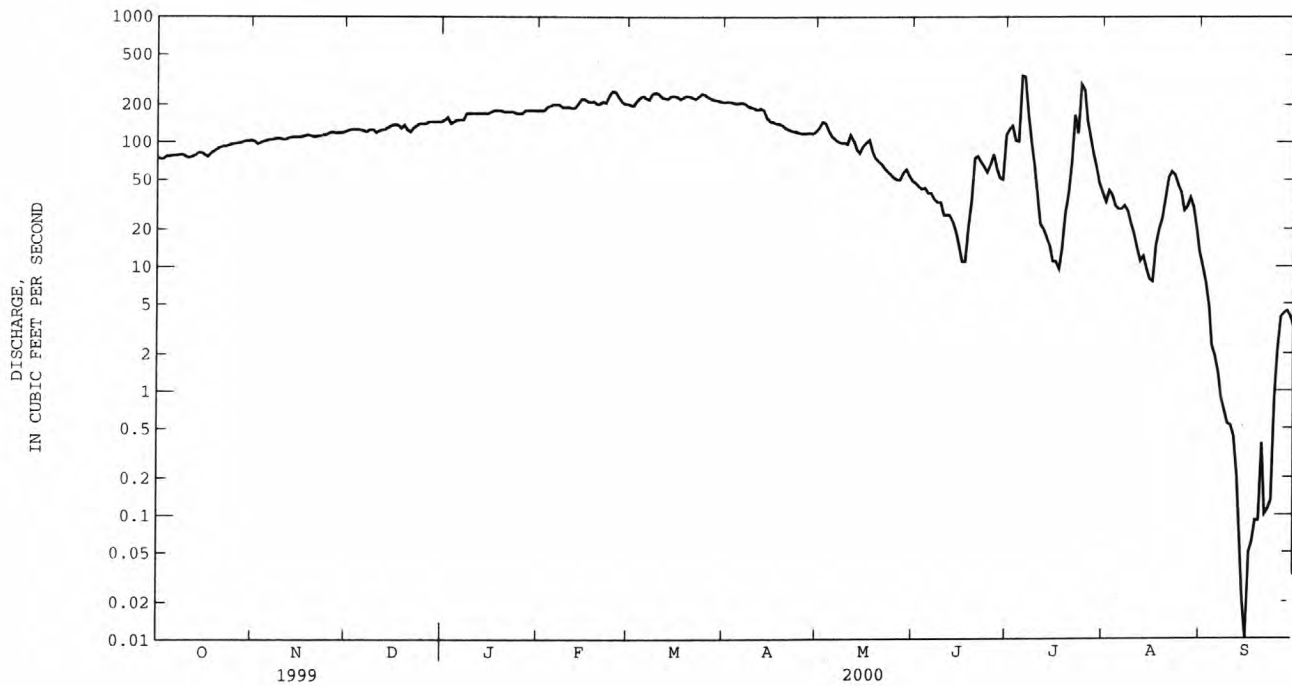
06844500 REPUBLICAN RIVER NEAR ORLEANS, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1948 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 51772 | | 40997.55 | | 257 | |
| ANNUAL MEAN | 142 | | 112 | | 746 | 1951 |
| HIGHEST ANNUAL MEAN | | | | | 78.4 | 1991 |
| LOWEST ANNUAL MEAN | | | | | 18400 | Jun 22 1948 |
| HIGHEST DAILY MEAN | 1180 | Aug 12 | 340 | Jul 5 | .00 | Sep 15 1952 |
| LOWEST DAILY MEAN | 30 | Jul 31 | .01 | Sep 15 | .00 | Sep 15 1952 |
| ANNUAL SEVEN-DAY MINIMUM | 38 | Jul 26 | .06 | Sep 13 | .00 | Sep 15 1952 |
| INSTANTANEOUS PEAK FLOW | | | *571 | Jul 5 | 40600 | Jun 22 1948 |
| INSTANTANEOUS PEAK STAGE | | | **4.65 | Jan 27 | **12.95 | Mar 8 1993 |
| ANNUAL RUNOFF (AC-FT) | 102700 | | 81320 | | 185900 | |
| 10 PERCENT EXCEEDS | 173 | | 215 | | 477 | |
| 50 PERCENT EXCEEDS | 130 | | 110 | | 160 | |
| 90 PERCENT EXCEEDS | 76 | | 11 | | 46 | |

e Estimated.

* Stage 3.86 ft.

** Backwater from ice.



KANSAS RIVER BASIN

06844500 REPUBLICAN RIVER NEAR ORLEANS, NE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969-94, October 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| | | 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) | 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) | |
|--------------|-------|---|--|---|--|--|--|--|--|--|--|--|
| FEB 23... | 1500 | -- | 10.7 | 96 | 8.1 | 668 | 13.0 | 7.0 | 16.4 | 35.7 | 256 | |
| MAY 01... | 1600 | 139 | 10.4 | -- | 8.1 | 811 | 18.0 | 14.0 | 18.3 | 53.0 | 292 | |
| AUG 03... | 0900 | 38 | 9.8 | -- | 8.5 | 586 | 24.0 | 24.0 | 17.1 | 30.3 | 227 | |
| SEP 07... | 1330 | .81 | 10.3 | 130 | 8.4 | 807 | 30.0 | 23.5 | 19.9 | 49.9 | 287 | |
| DATE | | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608) | 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) |
| FEB 23... | 18.9 | .6 | 40.6 | 65.7 | <.020 | -- | -- | 2.24 | -- | <.010 | .242 | |
| MAY 01... | 34.2 | .7 | 35.1 | 99.8 | <.020 | 1.22 | 5.40 | 1.23 | .033 | .010 | .251 | |
| AUG 03... | 16.4 | .6 | 31.6 | 57.5 | <.020 | -- | -- | <.050 | -- | <.010 | .104 | |
| SEP 07... | 28.5 | .7 | 37.6 | 107 | <.020 | -- | -- | <.050 | -- | <.010 | .199 | |
| DATE | | PHOS- PHORUS 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) | 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) |
| FEB 23... | .093 | .079 | 3.9 | -- | -- | -- | -- | -- | 116 | -- | -- | |
| MAY 01... | .092 | .082 | 5.0 | -- | -- | -- | -- | -- | 151 | -- | -- | |
| AUG 03... | E.040 | .034 | 1.3 | -- | -- | -- | -- | -- | 131 | -- | -- | |
| SEP 07... | .076 | .065 | 2.2 | 5 | <1 | 8.6 | 186 | <1 | 146 | <1.0 | <.8 | |
| DATE | | COBALT, DIS- SOLVED (UG/L AS CO) (01035) | COPPER, DIS- SOLVED (UG/L AS CU) (01040) | IRON, DIS- SOLVED (UG/L AS FE) (01046) | LEAD, DIS- SOLVED (UG/L AS PB) (01049) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056) | MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060) | NICKEL, DIS- SOLVED (UG/L AS NI) (01065) | SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145) | SILVER, DIS- SOLVED (UG/L AS AG) (01075) | ZINC, DIS- SOLVED (UG/L AS ZN) (01090) | URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703) |
| FEB 23... | -- | -- | <10 | -- | 3 | -- | -- | -- | -- | -- | -- | |
| MAY 01... | -- | -- | <10 | -- | 4 | -- | -- | -- | -- | -- | -- | |
| AUG 03... | -- | -- | <10 | -- | 5 | -- | -- | -- | -- | -- | -- | |
| SEP 07... | <1 | 1 | <10 | <1 | 624 | 9 | <1 | <2.4 | <1 | 7 | 8 | |

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06846500 BEAVER CREEK AT CEDAR BLUFFS, KS

LOCATION.--Lat 39°59'06", long 100°33'35", in NW1/4 NE1/4 sec.10, T.1 S., R.29 W., Decatur County, Hydrologic Unit 10250014, on right bank at downstream side of bridge on U.S. Highway 83, 0.2 mi north of Cedar Bluffs, 1.0 mi south of Kansas-Nebraska State line, and at mile 107.4.

DRAINAGE AREA.--1,618 mi², of which 294 mi² is probably noncontributing.

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

REVISED RECORDS.--WSP 1510: 1947, 1950-51.

GAGE.--Water-stage recorder. Datum of gage is 2,520.33 ft above sea level. Prior to Aug. 19, 1971, at site 0.1 mi upstream at same datum. Aug. 19, 1971, to July 12, 1972, at site 0.8 mi downstream at datum 5.00 ft lower.

REMARKS.--Records poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in July 1944 reached a stage of 18.16 ft, from floodmark.

COOPERATION.--Records provided by U.S. Geological Survey, Kansas District.

PEAK DISCHARGES GREATER THAN BASE FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|-------|------|-----------------------------------|---------------------|--------------------------------------|------|-----------------------------------|---------------------|
| May 7 | 2000 | *5 | *3.92 | No peak greater than base discharge. | | | |

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|------|------|------|-----|-------|-------|-------|-------|
| 1 | .00 | .00 | .00 | .00 | .00 | 1.0 | 2.4 | .83 | .00 | .00 | .00 | .00 |
| 2 | .00 | .00 | .00 | .00 | .00 | 1.1 | 2.3 | .85 | .00 | .00 | .00 | .00 |
| 3 | .00 | .00 | .00 | .00 | .00 | 1.3 | 2.4 | .74 | .00 | .00 | .00 | .00 |
| 4 | .00 | .00 | .00 | .00 | .00 | 1.5 | 2.4 | .74 | .00 | .00 | .00 | .00 |
| 5 | .00 | .00 | .00 | .00 | .00 | 1.8 | 2.2 | .66 | .00 | .00 | .00 | .00 |
| 6 | .00 | .00 | .00 | .00 | .00 | 2.4 | 2.4 | .70 | .00 | .00 | .00 | .00 |
| 7 | .00 | .00 | .00 | .00 | .00 | 3.7 | 2.3 | .96 | .00 | .00 | .00 | .00 |
| 8 | .00 | .00 | .00 | .00 | .00 | 4.1 | 1.9 | .87 | .00 | .00 | .00 | .00 |
| 9 | .00 | .00 | .00 | .00 | .00 | 3.5 | 1.8 | .69 | .00 | .00 | .00 | .00 |
| 10 | .00 | .00 | .00 | .00 | .00 | 3.8 | 1.9 | .73 | .00 | .00 | .00 | .00 |
| 11 | .00 | .00 | .00 | .00 | .00 | 3.8 | 2.0 | .76 | .00 | .00 | .00 | .00 |
| 12 | .00 | .00 | .00 | .00 | e2.0 | 3.9 | 2.5 | .98 | .00 | .00 | .00 | .00 |
| 13 | .00 | .00 | .00 | .00 | e.80 | 3.8 | 2.4 | .78 | .00 | .00 | .00 | .00 |
| 14 | .00 | .00 | .00 | .00 | e.50 | 2.9 | 2.1 | .53 | .00 | .00 | .00 | .00 |
| 15 | .00 | .00 | .00 | .00 | e.30 | 2.2 | 1.8 | .38 | .00 | .00 | .00 | .00 |
| 16 | .00 | .00 | .00 | .00 | e.20 | 1.3 | 1.9 | .25 | .00 | .00 | .00 | .00 |
| 17 | .00 | .00 | .00 | .00 | e.30 | 2.6 | 2.0 | .18 | .00 | .00 | .00 | .00 |
| 18 | .00 | .00 | .00 | .00 | e.30 | 2.6 | 2.0 | .13 | .00 | .00 | .00 | .00 |
| 19 | .00 | .00 | .00 | .00 | e.40 | 2.3 | 1.9 | .08 | .00 | .00 | .00 | .00 |
| 20 | .00 | .00 | .00 | .00 | e.50 | 2.3 | 1.9 | .04 | .00 | .00 | .00 | .00 |
| 21 | .00 | .00 | .00 | .00 | 1.0 | 2.4 | 1.6 | .02 | .00 | .00 | .00 | .00 |
| 22 | .00 | .00 | .00 | .00 | .47 | 2.1 | 1.4 | .01 | .00 | .04 | .00 | .00 |
| 23 | .00 | .00 | .00 | .00 | .44 | 1.5 | 1.2 | .00 | .00 | .01 | .00 | .00 |
| 24 | .00 | .00 | .00 | .00 | .62 | 1.3 | 1.3 | .00 | .00 | .00 | .00 | .00 |
| 25 | .00 | .00 | .00 | .00 | 1.8 | 3.4 | 1.5 | .00 | .00 | .00 | .00 | .00 |
| 26 | .00 | .00 | .00 | .00 | 1.9 | 2.8 | 1.1 | .00 | .00 | .00 | .00 | .00 |
| 27 | .00 | .00 | .00 | .00 | 1.7 | 2.3 | .85 | .00 | .00 | .00 | .00 | .00 |
| 28 | .00 | .00 | .00 | .00 | 2.9 | 1.7 | .66 | .00 | .00 | .00 | .00 | .00 |
| 29 | .00 | .00 | .00 | .00 | 1.4 | 3.1 | .59 | .00 | .00 | .00 | .00 | .00 |
| 30 | .00 | .00 | .00 | .00 | --- | 2.4 | .78 | .00 | .00 | .00 | .00 | .00 |
| 31 | .00 | --- | .00 | .00 | --- | 2.4 | --- | .00 | --- | .00 | .00 | --- |
| MEAN | .0000 | .0000 | .0000 | .0000 | .60 | 2.49 | 1.78 | .38 | .0000 | .0002 | .0000 | .0000 |
| MAX | .00 | .00 | .00 | .00 | 2.9 | 4.1 | 2.5 | .98 | .00 | .04 | .00 | .00 |
| MIN | .00 | .00 | .00 | .00 | .00 | 1.0 | .59 | .00 | .00 | .00 | .00 | .00 |
| AC-FT | .00 | .00 | .00 | .00 | 35 | 153 | 106 | 24 | .00 | .1 | .00 | .00 |

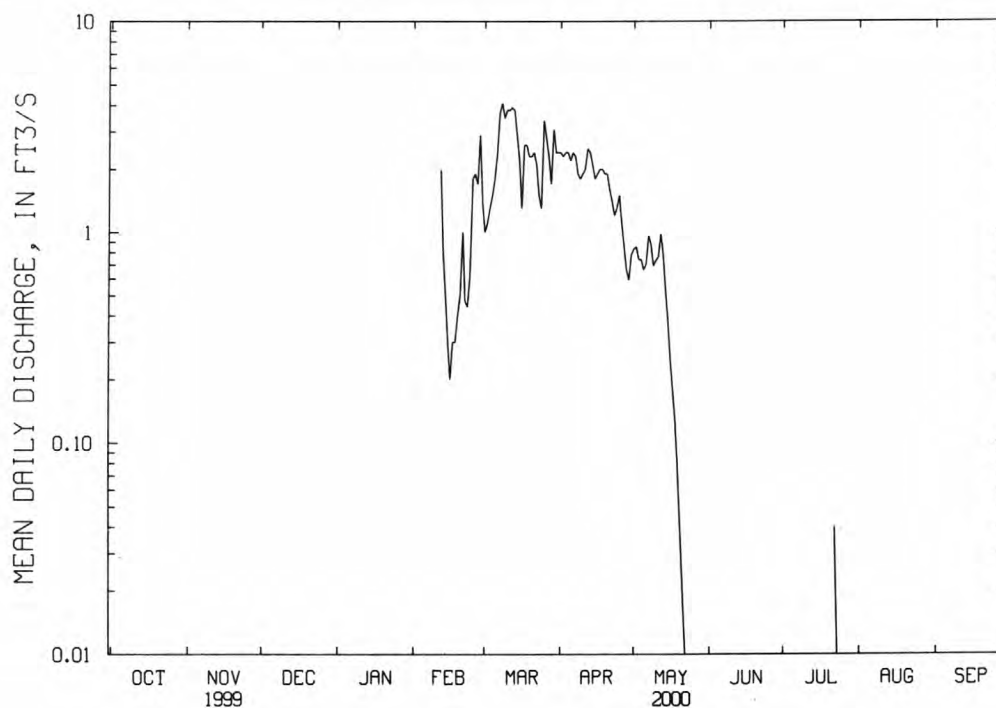
e Estimated

06846500 BEAVER CREEK AT CEDAR BLUFFS, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2000, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 8.83 | 2.91 | 2.50 | 2.17 | 3.83 | 11.7 | 7.18 | 23.4 | 38.6 | 29.6 | 15.5 | 16.0 |
| MAX | 231 | 39.6 | 30.4 | 28.4 | 28.1 | 369 | 61.7 | 432 | 278 | 391 | 146 | 421 |
| (WY) | 1947 | 1966 | 1966 | 1966 | 1966 | 1960 | 1960 | 1957 | 1960 | 1951 | 1962 | 1951 |
| MIN | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| (WY) | 1954 | 1955 | 1955 | 1955 | 1956 | 1955 | 1955 | 1955 | 1979 | 1980 | 1955 | 1953 |

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1949 - 2000 | |
|--------------------------|------------------------|--------|---------------------|-------|-------------------------|-------------|
| ANNUAL MEAN | 2.69 | | .44 | | 13.6 | |
| HIGHEST ANNUAL MEAN | | | | | 106 | 1951 |
| LOWEST ANNUAL MEAN | | | | | .000 | 1991 |
| HIGHEST DAILY MEAN | 86 | Jul 17 | 4.1 | Mar 8 | 4560 | Jun 11 1960 |
| LOWEST DAILY MEAN | .00 | Jan 1 | .00 | Oct 1 | .00 | Sep 3 1946 |
| ANNUAL SEVEN-DAY MINIMUM | .00 | Jan 1 | .00 | Oct 1 | .00 | Sep 23 1947 |
| INSTANTANEOUS PEAK FLOW | | | 5.0 | Mar 7 | 5.0 | Mar 7 0000 |
| INSTANTANEOUS PEAK STAGE | | | 3.92 | Mar 7 | 18.71 | Jun 11 1960 |
| INSTANTANEOUS LOW FLOW | | | .00 | Oct 1 | .00 | most years |
| ANNUAL RUNOFF (AC-FT) | 1950 | | 318 | | 9840 | |
| 10 PERCENT EXCEEDS | 3.7 | | 2.0 | | 23 | |
| 50 PERCENT EXCEEDS | .07 | | .00 | | .03 | |
| 90 PERCENT EXCEEDS | .00 | | .00 | | .00 | |



06846500 BEAVER C AT CEDAR BLUFFS, KS

KANSAS RIVER BASIN

06847500 SAPPA CREEK NEAR STAMFORD, NE

LOCATION.--Lat 40°07'53", long 099°33'15", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 23, T.2 N., R.20 W., Harlan County, Hydrologic Unit 10250011, on left bank 40 ft south of Burlington Northern Inc. track, 500 ft downstream from bridge on county highway, 2 mi east of Stamford, and 6.5 mi upstream from mouth.

DRAINAGE AREA.--3,840 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 good except for periods of estimated record, which are poor. Natural flow affected by irrigation development above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|------|------|------|------|------|-------|--------|--------|-------|------|
| 1 | 2.4 | 11 | 13 | e17 | e14 | 23 | 32 | 24 | 4.6 | 110 | 3.2 | .00 |
| 2 | 2.4 | 11 | 15 | e16 | e14 | 24 | 32 | 25 | 4.1 | 127 | 2.4 | .00 |
| 3 | 2.7 | 11 | 14 | e16 | e14 | 28 | 31 | 25 | 3.8 | 38 | 1.8 | .00 |
| 4 | 2.6 | 11 | 14 | e15 | e15 | 28 | 31 | 24 | 3.1 | 13 | .63 | .00 |
| 5 | 3.4 | 12 | 14 | e14 | e16 | 28 | 31 | 23 | 3.1 | 7.0 | 1.2 | .00 |
| 6 | 3.4 | 12 | e14 | e14 | e17 | 28 | 30 | 23 | 2.9 | 5.0 | 2.8 | .00 |
| 7 | 3.8 | 11 | e14 | 14 | e18 | 27 | 30 | 22 | 2.6 | 5.4 | 1.6 | .00 |
| 8 | 4.3 | 12 | e14 | e14 | e18 | 33 | 30 | 24 | 2.3 | 5.9 | .78 | .00 |
| 9 | 3.5 | 12 | e14 | e14 | e18 | 31 | 30 | 24 | 1.6 | 3.7 | .56 | .00 |
| 10 | 3.9 | 12 | e14 | e15 | e17 | 30 | 30 | 22 | 1.2 | 1.9 | .63 | .00 |
| 11 | 4.3 | 13 | e14 | e15 | e16 | 30 | 29 | 21 | .92 | .96 | .34 | .00 |
| 12 | 6.6 | 12 | e14 | e15 | e15 | 30 | 29 | 19 | .66 | .41 | .26 | .00 |
| 13 | 6.2 | 12 | e14 | e15 | e14 | 28 | 29 | 17 | .42 | .39 | .04 | .00 |
| 14 | 5.4 | 12 | e14 | e15 | e14 | 29 | 29 | 16 | .32 | .51 | .02 | .00 |
| 15 | 5.9 | 11 | 14 | e14 | e15 | 29 | 28 | 15 | .27 | .65 | .01 | .00 |
| 16 | 8.9 | 12 | e14 | e14 | e16 | 29 | 28 | 14 | .35 | .56 | .05 | .00 |
| 17 | 9.3 | 12 | e14 | e14 | e17 | 28 | 28 | 14 | .31 | 1.2 | .10 | .00 |
| 18 | 9.9 | 12 | e14 | e15 | e18 | 29 | 28 | 12 | .27 | 6.5 | .06 | .00 |
| 19 | 11 | 11 | e15 | e16 | e20 | 30 | 28 | 11 | 2.1 | 3.1 | .11 | .00 |
| 20 | 11 | 11 | e15 | e17 | e22 | 30 | 26 | 11 | 33 | 2.8 | .06 | .03 |
| 21 | 9.3 | 11 | e15 | e14 | 24 | 29 | 26 | 10 | 17 | 5.1 | .02 | .00 |
| 22 | 7.0 | 11 | e15 | e15 | 25 | 29 | 23 | 10 | 44 | 4.9 | .01 | .00 |
| 23 | 8.3 | 11 | e15 | e16 | 32 | 31 | 22 | 10 | 9.8 | 152 | .00 | .00 |
| 24 | 8.9 | 11 | e15 | e16 | 34 | 34 | 22 | 9.4 | 5.4 | 202 | .00 | .00 |
| 25 | 8.9 | 14 | e15 | e15 | 35 | 33 | 21 | 8.6 | 7.0 | 104 | .00 | .00 |
| 26 | 9.0 | 12 | e15 | e14 | 30 | 33 | 21 | 7.7 | 12 | 42 | .00 | .00 |
| 27 | 8.9 | 12 | e15 | e14 | 25 | 33 | 20 | 7.6 | 11 | 14 | .04 | .00 |
| 28 | 11 | 12 | e16 | e15 | 24 | 33 | 21 | 7.6 | 6.7 | 6.4 | .00 | .00 |
| 29 | 10 | 12 | e17 | e15 | 24 | 32 | 21 | 11 | 22 | 4.6 | .00 | .00 |
| 30 | 10 | 12 | e17 | e14 | --- | 31 | 22 | 6.9 | 180 | 4.2 | .00 | .00 |
| 31 | 11 | --- | e17 | e13 | --- | 31 | --- | 5.4 | --- | 3.1 | .00 | --- |
| TOTAL | 213.2 | 351 | 454 | 460 | 581 | 921 | 808 | 480.2 | 382.82 | 876.28 | 16.72 | 0.03 |
| MEAN | 6.88 | 11.7 | 14.6 | 14.8 | 20.0 | 29.7 | 26.9 | 15.5 | 12.8 | 28.3 | .54 | .001 |
| MAX | 11 | 14 | 17 | 17 | 35 | 34 | 32 | 25 | 180 | 202 | 3.2 | .03 |
| MIN | 2.4 | 11 | 13 | 13 | 14 | 23 | 20 | 5.4 | .27 | .39 | .00 | .00 |
| AC-FT | 423 | 696 | 901 | 912 | 1150 | 1830 | 1600 | 952 | 759 | 1740 | 33 | .06 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2000, BY WATER YEAR (WY)

| | MEAN | 40.0 | 13.1 | 10.9 | 9.38 | 19.4 | 34.8 | 24.8 | 56.9 | 148 | 89.9 | 57.9 | 40.8 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MAX | 965 | 145 | 96.2 | 71.5 | 182 | 486 | 164 | 522 | 878 | 891 | 544 | 708 | |
| (WY) | 1947 | 1947 | 1966 | 1966 | 1966 | 1960 | 1960 | 1949 | 1947 | 1951 | 1950 | 1951 | |
| MIN | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | |
| (WY) | 1954 | 1955 | 1955 | 1955 | 1956 | 1956 | 1956 | 1956 | 1981 | 1977 | 1955 | 1959 | |

06847500 SAPPAL CREEK NEAR STAMFORD, NE--Continued

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

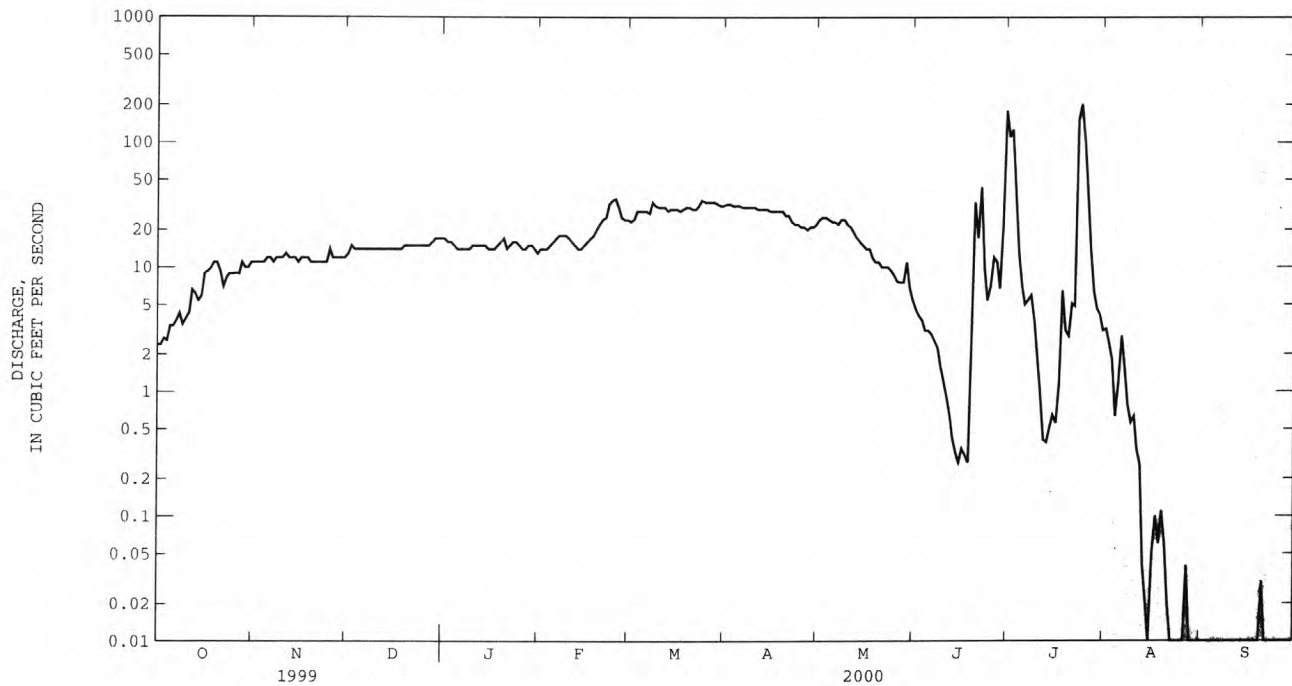
FOR 2000 WATER YEAR

WATER YEARS 1946 - 2000

| | | | | | | |
|--------------------------|--------|--------|---------|--------|--------|-------------|
| ANNUAL TOTAL | 8163.4 | | 5544.25 | | | |
| ANNUAL MEAN | 22.4 | | 15.1 | | 45.7 | |
| MEDIAN OF ANNUAL MEANS | | | | | 21.4 | |
| HIGHEST ANNUAL MEAN | | | | | 229 | 1951 |
| LOWEST ANNUAL MEAN | | | | | .59 | 1981 |
| HIGHEST DAILY MEAN | 103 | Jul 2 | 202 | Jul 24 | 16600 | Jun 24 1966 |
| LOWEST DAILY MEAN | 1.1 | Sep 19 | .00 | Aug 23 | .00 | Sep 12 1953 |
| ANNUAL SEVEN-DAY MINIMUM | 1.4 | Sep 16 | .00 | Aug 28 | .00 | Sep 12 1953 |
| INSTANTANEOUS PEAK FLOW | | | 384 | Jul 23 | 43400 | Jun 24 1966 |
| INSTANTANEOUS PEAK STAGE | | | 8.39 | Jul 23 | *22.13 | Jun 24 1966 |
| ANNUAL RUNOFF (AC-FT) | 16190 | | 11000 | | 33070 | |
| 10 PERCENT EXCEEDS | 43 | | 30 | | 82 | |
| 50 PERCENT EXCEEDS | 21 | | 13 | | 7.0 | |
| 90 PERCENT EXCEEDS | 3.9 | | .00 | | .00 | |

e Estimated.

* From floodmark.



KANSAS RIVER BASIN
REPUBLICAN RIVER BASIN

06848500 PRAIRIE DOG CREEK NEAR WOODRUFF, KS

LOCATION.--Lat 39°59'09", long 99°28'39", in NW1/4 NW1/4 sec.9, T.1 S., R.19 W., Phillips County, Hydrologic Unit 10250015, on left bank 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.

COOPERATION.--Records provided by U.S. Geological Survey, Kansas District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|------|------|-----|
| 1 | 7.8 | 5.9 | 8.1 | 9.4 | 13 | 18 | 11 | 8.1 | 4.0 | 52 | 3.8 | .72 |
| 2 | 7.3 | 5.6 | 8.1 | 9.6 | 13 | 16 | 11 | 8.2 | 3.7 | 30 | 3.4 | .76 |
| 3 | 7.3 | 6.0 | 8.1 | 9.6 | 13 | 16 | 10 | 8.4 | 3.7 | 9.6 | 3.7 | .69 |
| 4 | 7.7 | 6.3 | 8.0 | 12 | 12 | 14 | 9.9 | 8.1 | 4.1 | 5.5 | 3.5 | .64 |
| 5 | 7.4 | 6.4 | 8.1 | 11 | 14 | 13 | 10 | 7.7 | 3.8 | 4.3 | 3.2 | .61 |
| 6 | 7.1 | 7.0 | 7.7 | 10 | 14 | 13 | 9.8 | 7.3 | 4.0 | 4.0 | 3.1 | .59 |
| 7 | 6.9 | 9.7 | 8.2 | 9.5 | 12 | 11 | 9.6 | 7.2 | 3.9 | 3.1 | 2.9 | .60 |
| 8 | 6.7 | 7.4 | 8.0 | 11 | 14 | 16 | 9.3 | 7.0 | 3.4 | 4.5 | 3.0 | .65 |
| 9 | 6.4 | 7.5 | 7.4 | 11 | 13 | 17 | 9.5 | 7.0 | 3.6 | 4.8 | 3.5 | .57 |
| 10 | 5.9 | 7.4 | 8.7 | 11 | 13 | 15 | 9.6 | 7.4 | 3.0 | 4.2 | 4.6 | .52 |
| 11 | 5.7 | 7.2 | 8.5 | 11 | 15 | 14 | 9.2 | 7.4 | 3.3 | 4.9 | 3.0 | .53 |
| 12 | 5.7 | 7.3 | 9.1 | 11 | 14 | 13 | 8.5 | 7.0 | 2.8 | 76 | 1.7 | .54 |
| 13 | 5.6 | 7.3 | 8.8 | 11 | 15 | 12 | 8.4 | 6.5 | 2.7 | 83 | 1.5 | .54 |
| 14 | 5.6 | 7.5 | 9.6 | 11 | 15 | 12 | 8.4 | 6.1 | e1.9 | 37 | 1.2 | .50 |
| 15 | 5.7 | 7.3 | 8.2 | 11 | 15 | 12 | 8.3 | 6.2 | e2.1 | 19 | 1.0 | .45 |
| 16 | 5.7 | 7.3 | 9.2 | 12 | 14 | 11 | 8.2 | 6.1 | e2.3 | 17 | 1.0 | .43 |
| 17 | 5.4 | 7.4 | 8.5 | 11 | 14 | 11 | 8.2 | 6.3 | e1.7 | 16 | .86 | .41 |
| 18 | 5.5 | 7.4 | e8.3 | 11 | 14 | 11 | 8.5 | 6.2 | e1.7 | 18 | 3.1 | .37 |
| 19 | 5.5 | 7.3 | e8.0 | 11 | 15 | 12 | 8.6 | 6.2 | e1.8 | 15 | 4.2 | .33 |
| 20 | 6.4 | 7.6 | e8.0 | 11 | 14 | 12 | 8.3 | 6.4 | 2.7 | 16 | 3.2 | .44 |
| 21 | 6.4 | 7.9 | e8.2 | 12 | 13 | 12 | 8.1 | 6.2 | 2.7 | 19 | 3.3 | .45 |
| 22 | 6.3 | 7.6 | 8.9 | 14 | 12 | 12 | 8.0 | 6.1 | 3.0 | 240 | 2.4 | .40 |
| 23 | 6.2 | 7.6 | 8.9 | 13 | 15 | 13 | 7.9 | 6.0 | 4.9 | 426 | 3.6 | .33 |
| 24 | 6.0 | 7.5 | 9.0 | 13 | 16 | 14 | 8.0 | 5.8 | 68 | 53 | 3.6 | .31 |
| 25 | 5.9 | 7.6 | 15 | 12 | 16 | 14 | 7.8 | 5.5 | 129 | 18 | 2.1 | .30 |
| 26 | 5.4 | 7.9 | 11 | 13 | 15 | 14 | 7.9 | 5.5 | 41 | 7.2 | 2.1 | .27 |
| 27 | 5.3 | 8.0 | 10 | 12 | 16 | 14 | 7.6 | 5.4 | 12 | 5.1 | 1.5 | .73 |
| 28 | 5.9 | 8.1 | 9.8 | 12 | 14 | 13 | 6.8 | 6.4 | 6.8 | 4.3 | 1.1 | 1.1 |
| 29 | 6.4 | 7.9 | 10 | 13 | 15 | 12 | 7.1 | 9.2 | 4.8 | 3.6 | .84 | 1.1 |
| 30 | 5.8 | 7.9 | 9.8 | 12 | --- | 11 | 7.7 | 6.0 | 49 | 3.2 | .71 | .98 |
| 31 | 5.7 | --- | e9.0 | 12 | --- | 11 | --- | 4.9 | --- | 3.3 | .71 | --- |
| MEAN | 6.21 | 7.36 | 8.91 | 11.4 | 14.1 | 13.2 | 8.71 | 6.70 | 12.7 | 38.9 | 2.50 | .56 |
| MAX | 7.8 | 9.7 | 15 | 14 | 16 | 18 | 11 | 9.2 | 129 | 426 | 4.6 | 1.1 |
| MIN | 5.3 | 5.6 | 7.4 | 9.4 | 12 | 11 | 6.8 | 4.9 | 1.7 | 3.1 | .71 | .27 |
| AC-FT | 382 | 438 | 548 | 700 | 809 | 811 | 518 | 412 | 757 | 2390 | 154 | 33 |

e Estimated

KANSAS RIVER BASIN
REPUBLICAN RIVER BASIN

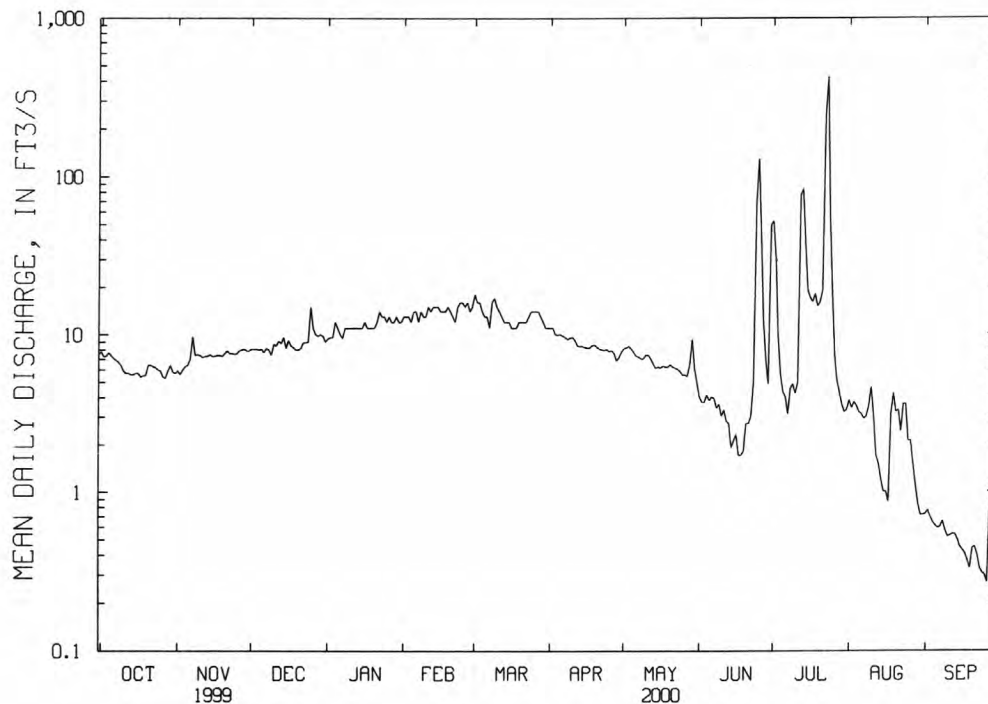
273

06848500 PRAIRIE DOG CREEK NEAR WOODRUFF, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2000, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 19.6 | 6.58 | 5.42 | 5.42 | 16.1 | 17.5 | 10.2 | 43.5 | 88.2 | 62.7 | 35.2 | 23.4 |
| MAX | 429 | 56.5 | 26.0 | 22.5 | 230 | 240 | 36.6 | 422 | 1041 | 1070 | 430 | 402 |
| (WY) | 1947 | 1931 | 1947 | 1931 | 1932 | 1960 | 1952 | 1949 | 1947 | 1951 | 1950 | 1951 |
| MIN | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| (WY) | 1955 | 1956 | 1956 | 1956 | 1957 | 1957 | 1985 | 1992 | 1984 | 1984 | 1959 | 1960 |

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1949 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL MEAN | 15.2 | | 11.0 | | 27.1 | |
| HIGHEST ANNUAL MEAN | | | | | 208 | 1951 |
| LOWEST ANNUAL MEAN | | | | | .051 | 1991 |
| HIGHEST DAILY MEAN | 224 | May 23 | 426 | Jul 23 | 9700 | Jun 23 1947 |
| LOWEST DAILY MEAN | 4.8 | Sep 21 | .27 | Sep 26 | .00 | Oct 29 1945 |
| ANNUAL SEVEN-DAY MINIMUM | 5.6 | Oct 13 | .36 | Sep 20 | .00 | Oct 5 1948 |
| INSTANTANEOUS PEAK FLOW | | | 680 | Jul 23 | 15000 | Jun 23 1947 |
| INSTANTANEOUS PEAK STAGE | | | 12.53 | Jul 23 | 21.04 | Jun 23 1947 |
| INSTANTANEOUS LOW FLOW | | | .23 | Sep 27 | .00 | most years |
| ANNUAL RUNOFF (AC-FT) | 11030 | | 7960 | | 19650 | |
| 10 PERCENT EXCEEDS | 20 | | 15 | | 28 | |
| 50 PERCENT EXCEEDS | 12 | | 7.7 | | 4.3 | |
| 90 PERCENT EXCEEDS | 6.4 | | 1.1 | | .00 | |



— 06848500 PRAIRIE DOG C NR WOODRUFF, KS

LOCATION:--Lat 40°04'45", long 099°10'05", in SW $\frac{1}{4}$ sec.6, T.1 N., R.16 W., Franklin County, Hydrologic Unit 10250016, on left bank 1.4 mi west of Naponee, 1.4 mi upstream from Turkey Creek, 2.8 mi downstream from Harlan County Dam, and at mile 234.

PERIOD OF RECORD.--December 1952 to current year.

GAGE...Water-stage recorder. Datum of gage is 1,863.38 ft above sea level (Corps of Engineers bench mark). Data collection platform at station.

REMARKS.--Records good except for estimated discharges and discharges less than 5.0 ft³/s, which are poor. Flow completely regulated by Harlan County Lake (station 06849000) and partially regulated by six upstream reservoirs.

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|--------|--------|--------|-------|-------|-------|------|
| 1 | 17 | 17 | 5.4 | 7.0 | 10 | 15 | 474 | 12 | 258 | 530 | 687 | 6.3 |
| 2 | 14 | 21 | 5.9 | 7.5 | 11 | 15 | 470 | 11 | 257 | 557 | 686 | 4.3 |
| 3 | 10 | 19 | 6.3 | 6.2 | 9.5 | 16 | 463 | 9.6 | 332 | 575 | 684 | 3.7 |
| 4 | 11 | 17 | 6.9 | 6.2 | 10 | 11 | 470 | 9.4 | 314 | 327 | 679 | 3.2 |
| 5 | 11 | 17 | 7.2 | 6.8 | 12 | 8.9 | 469 | 9.5 | 270 | 147 | 674 | 2.9 |
| 6 | 7.9 | 17 | 7.4 | 5.6 | 9.9 | 7.8 | 465 | 10 | 328 | 293 | 675 | 2.7 |
| 7 | 13 | 16 | 6.5 | 6.5 | 9.2 | 7.6 | 455 | 11 | 368 | 442 | 674 | 2.7 |
| 8 | 12 | 17 | 5.6 | 5.7 | 10 | 17 | 461 | 11 | 401 | 533 | 635 | 2.7 |
| 9 | 11 | 17 | 5.5 | 5.5 | 9.2 | 18 | 464 | 12 | 421 | 559 | 610 | 2.5 |
| 10 | 11 | 17 | 4.3 | 5.7 | 9.5 | 17 | 280 | 11 | 470 | 588 | 608 | 2.6 |
| 11 | 11 | 14 | 4.9 | 5.8 | 12 | 15 | 20 | 12 | 532 | 639 | 606 | 2.5 |
| 12 | 14 | 12 | 4.5 | 5.8 | 19 | 14 | 17 | 11 | 548 | 677 | 600 | 2.4 |
| 13 | 14 | 11 | 7.1 | 6.0 | 14 | 15 | 15 | 12 | 540 | 691 | 599 | 2.4 |
| 14 | 14 | 11 | 19 | 6.3 | 13 | 14 | 17 | 15 | 564 | 690 | 567 | 2.3 |
| 15 | 16 | 11 | 21 | 6.9 | 8.9 | 13 | 19 | 17 | 581 | 689 | 544 | 2.3 |
| 16 | 15 | 11 | 16 | 6.9 | 7.6 | 18 | 20 | 12 | 582 | 687 | 550 | 2.1 |
| 17 | 15 | 12 | 15 | 8.0 | 7.2 | 20 | 20 | 9.9 | 609 | 687 | 556 | 2.2 |
| 18 | 15 | 12 | 8.4 | 6.9 | 7.8 | 21 | 15 | 11 | 619 | 1170 | 555 | 2.2 |
| 19 | 12 | 17 | 8.2 | 7.3 | 5.6 | 20 | 6.0 | 9.1 | 635 | 744 | 547 | 2.4 |
| 20 | 12 | 8.1 | 8.3 | 8.1 | 4.9 | 20 | 6.2 | 9.3 | 513 | 691 | 523 | 3.2 |
| 21 | 9.2 | 8.9 | 9.7 | 8.4 | 5.0 | 63 | 11 | 9.0 | 404 | 706 | 486 | 2.3 |
| 22 | 8.9 | 7.8 | 7.6 | 7.5 | 5.1 | 112 | 16 | 118 | 420 | 684 | 442 | 2.3 |
| 23 | 8.7 | 12 | 8.1 | 7.1 | 12 | 156 | 16 | 206 | 426 | 679 | 396 | 2.1 |
| 24 | 9.6 | 15 | 9.6 | 8.2 | 9.0 | 383 | 16 | 207 | 448 | 696 | 378 | 2.6 |
| 25 | 11 | 5.8 | 10 | 8.6 | 9.0 | 478 | 15 | 209 | 481 | 696 | 378 | 2.3 |
| 26 | 15 | 5.9 | 9.9 | 8.5 | 12 | 481 | 12 | 129 | 478 | 694 | 376 | 2.4 |
| 27 | 14 | 6.3 | 11 | 8.8 | 10 | 481 | 9.8 | 16 | 481 | 691 | 352 | 2.1 |
| 28 | 15 | 5.8 | 9.8 | 9.9 | 8.4 | 483 | 9.6 | 70 | 489 | 693 | 309 | 2.3 |
| 29 | 17 | 5.4 | 7.2 | 9.2 | 12 | 483 | 10 | 170 | 488 | 695 | 275 | 2.4 |
| 30 | 18 | 5.4 | 6.9 | 9.9 | --- | 480 | 15 | 230 | 498 | 690 | 228 | 2.6 |
| 31 | 18 | --- | 6.8 | 11 | --- | 472 | --- | 254 | --- | 690 | 103 | --- |
| TOTAL | 400.3 | 372.4 | 270.0 | 227.8 | 282.8 | 4375.3 | 4756.6 | 1842.8 | 13755 | 19530 | 15982 | 81.0 |
| MEAN | 12.9 | 12.4 | 8.71 | 7.35 | 9.75 | 141 | 159 | 59.4 | 458 | 630 | 516 | 2.70 |
| MAX | 18 | 21 | 21 | 11 | 19 | 483 | 474 | 254 | 635 | 1170 | 687 | 6.3 |
| MIN | 7.9 | 5.4 | 4.3 | 5.5 | 4.9 | 7.6 | 6.0 | 9.0 | 257 | 147 | 103 | 2.1 |
| AC-FT | 794 | 739 | 536 | 452 | 561 | 8680 | 9430 | 3660 | 27280 | 38740 | 31700 | 161 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2000, BY WATER YEAR (WY)

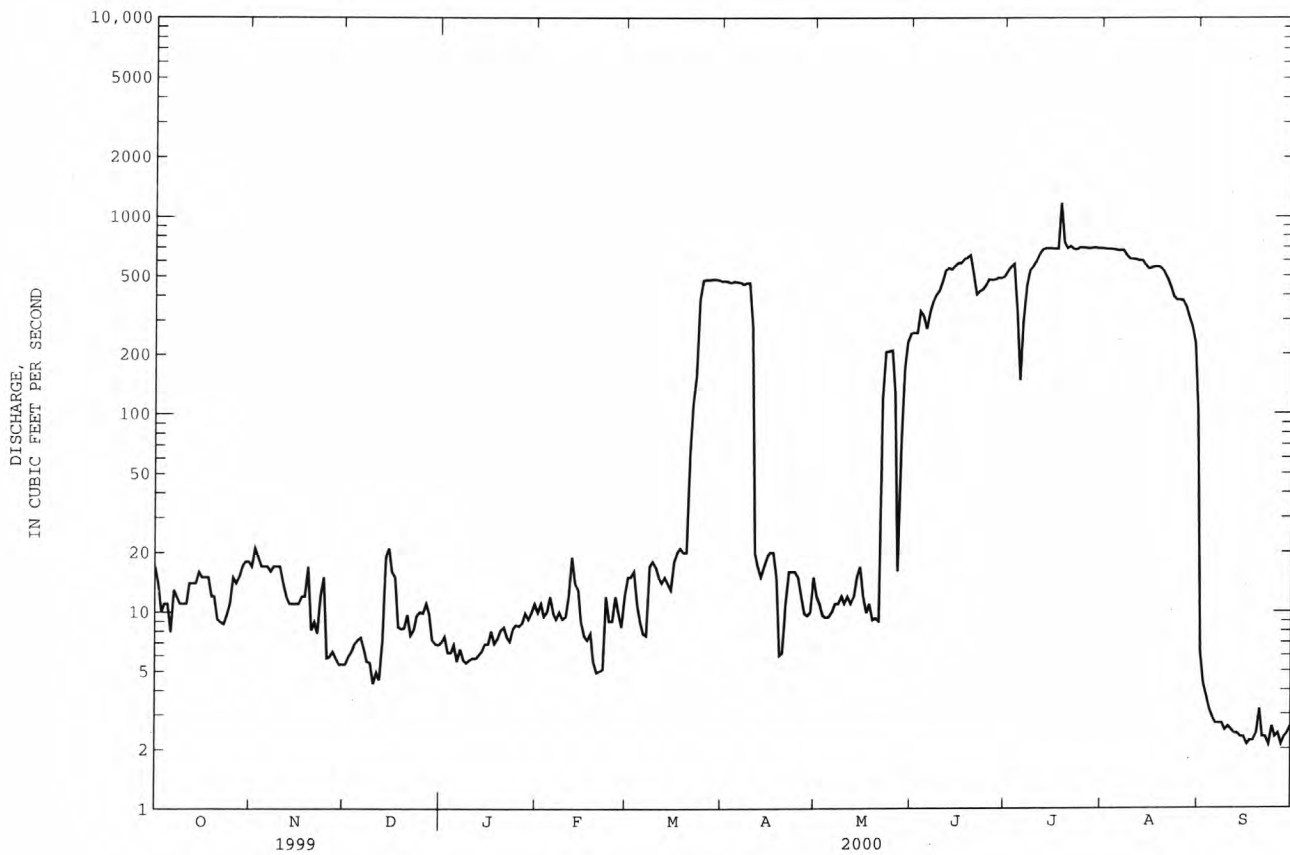
| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 124 | 75.2 | 60.9 | 54.8 | 116 | 129 | 203 | 207 | 382 | 726 | 430 | 131 |
| MAX | 2044 | 985 | 571 | 535 | 680 | 941 | 2400 | 2069 | 1763 | 2761 | 1726 | 1260 |
| (WY) | 1966 | 1994 | 1994 | 1966 | 1966 | 1963 | 1960 | 1960 | 1962 | 1962 | 1962 | 1996 |
| MIN | 3.79 | 2.50 | 2.40 | 2.30 | 2.15 | 2.88 | 2.63 | 2.70 | 14.4 | 70.3 | 91.0 | 2.70 |
| (WY) | 1990 | 1992 | 1977 | 1991 | 1977 | 1991 | 1992 | 1992 | 1993 | 1993 | 1981 | 2000 |

KANSAS RIVER BASIN

275

06849500 REPUBLICAN RIVER BELOW HARLAN COUNTY DAM, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1953 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 40721.7 | | 61876.0 | | 223 | |
| ANNUAL MEAN | 112 | | 169 | | 690 | |
| HIGHEST ANNUAL MEAN | | | | | 37.4 | |
| LOWEST ANNUAL MEAN | | | | | 1966 | |
| HIGHEST DAILY MEAN | 763 | Jul 9 | 1170 | Jul 18 | 4210 | Nov 2 1965 |
| LOWEST DAILY MEAN | 4.3 | Dec 10 | 2.1 | Sep 16 | .29 | Jun 3 1996 |
| ANNUAL SEVEN-DAY MINIMUM | 5.3 | Jan 1 | 2.3 | Sep 12 | .38 | Jun 1 1996 |
| INSTANTANEOUS PEAK FLOW | | | 2260 | Jul 18 | 4320 | Jun 25 1957 |
| INSTANTANEOUS PEAK STAGE | | | 5.04 | Jul 18 | 8.65 | Jun 25 1957 |
| ANNUAL RUNOFF (AC-FT) | 80770 | | 122700 | | 161500 | |
| 10 PERCENT EXCEEDS | 451 | | 599 | | 650 | |
| 50 PERCENT EXCEEDS | 14 | | 14 | | 15 | |
| 90 PERCENT EXCEEDS | 6.4 | | 5.4 | | 4.5 | |



KANSAS RIVER BASIN

06852500 COURTLAND CANAL AT NEBRASKA-KANSAS STATE LINE

LOCATION.--Lat 40°00'15", long 098°07'55", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.32, T.1 N., R.7 W., Nuckolls County, Nebraska, Hydrologic Unit 10250016, on left bank 0.2 mi upstream from Nebraska-Kansas State line and 3.5 mi southwest of Superior, NE.

PERIOD OF RECORD.--October 1954 to current year.

GAGE.--Water-stage recorder and concrete Parshall flume. Datum of gage is 1,612.46 ft above sea level. Data collection platform at station.

REMARKS.--Records good. Canal diverts from Republican River at Courtland diversion dam in sec.7, T.1 N., R.9 W. Water is used for irrigation in Nebraska and Kansas; figures published herein represent that portion which flows into Kansas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|------|------|--------|-------|---------|---------|-------|-------|-------|------|
| 1 | 39 | .00 | .00 | .00 | .00 | 124 | 395 | .00 | 139 | 378 | 518 | 132 |
| 2 | 14 | .00 | .00 | .00 | .00 | 138 | 396 | .00 | 151 | 395 | 513 | 120 |
| 3 | 12 | .00 | .00 | .00 | .00 | 140 | 396 | .02 | 162 | 411 | 512 | 113 |
| 4 | 12 | .00 | .00 | .00 | .00 | 144 | 379 | 35 | 164 | 437 | 511 | 100 |
| 5 | 7.7 | .00 | .00 | .00 | .00 | 139 | 335 | 45 | 193 | 415 | 511 | 89 |
| 6 | .00 | .00 | .00 | .00 | .00 | 131 | 282 | 46 | 182 | 431 | 514 | 86 |
| 7 | .00 | .00 | .00 | .00 | .00 | 123 | 231 | 47 | 184 | 433 | 517 | 100 |
| 8 | .00 | .00 | .00 | .00 | .00 | 134 | 196 | 52 | 230 | 437 | 504 | 130 |
| 9 | .00 | .00 | .00 | .00 | .00 | 144 | 195 | 47 | 245 | 435 | 463 | 109 |
| 10 | .00 | .00 | .00 | .00 | .00 | 140 | 183 | 36 | 242 | 449 | 416 | 66 |
| 11 | .00 | .00 | .00 | .00 | .00 | 130 | 139 | 66 | 247 | 435 | 409 | 61 |
| 12 | .00 | .00 | .00 | .00 | .00 | 129 | 85 | 74 | 299 | 429 | 412 | 56 |
| 13 | .00 | .00 | .00 | .00 | .00 | 125 | 40 | 68 | 322 | 435 | 413 | 54 |
| 14 | .00 | .00 | .00 | .00 | .00 | 130 | e6.0 | 69 | 335 | 432 | 418 | 53 |
| 15 | .00 | .00 | .00 | .00 | .00 | 143 | .00 | 69 | 334 | 427 | 411 | 51 |
| 16 | .00 | .00 | .00 | .00 | .00 | 135 | .00 | 65 | 350 | 428 | 379 | 50 |
| 17 | .00 | .00 | .00 | .00 | .00 | 123 | .00 | 62 | 368 | 432 | 362 | 49 |
| 18 | .00 | .00 | .00 | .00 | .00 | 126 | .00 | 62 | 374 | 440 | 369 | 46 |
| 19 | .00 | .00 | .00 | .00 | .00 | 135 | .00 | 62 | 406 | 455 | 380 | 43 |
| 20 | .00 | .00 | .00 | .00 | .00 | 136 | .00 | 62 | 431 | 467 | 387 | 52 |
| 21 | .00 | .00 | .00 | .00 | .00 | 130 | .00 | 62 | 397 | 513 | 391 | 60 |
| 22 | .00 | .00 | .00 | .00 | .00 | 127 | .00 | 61 | 377 | 530 | 375 | 62 |
| 23 | .00 | .00 | .00 | .00 | .00 | 144 | .00 | 60 | 359 | 528 | 339 | 60 |
| 24 | .00 | .00 | .00 | .00 | 8.8 | 234 | .00 | 83 | 352 | 523 | 295 | 57 |
| 25 | .00 | .00 | .00 | .00 | 132 | 264 | .00 | 155 | 357 | 515 | 281 | 57 |
| 26 | .00 | .00 | .00 | .00 | 126 | 292 | .00 | 192 | 378 | 515 | 288 | 63 |
| 27 | .00 | .00 | .00 | .00 | 112 | 329 | .00 | 139 | 373 | 519 | 295 | 63 |
| 28 | .00 | .00 | .00 | .00 | 111 | 397 | .00 | 102 | 371 | 522 | 281 | 62 |
| 29 | .00 | .00 | .00 | .00 | 114 | 415 | .00 | 99 | 370 | 528 | 245 | 59 |
| 30 | .00 | .00 | .00 | .00 | --- | 404 | .00 | 94 | 368 | 530 | 205 | 56 |
| 31 | .00 | --- | .00 | .00 | --- | 394 | --- | 101 | --- | 524 | 168 | --- |
| TOTAL | 84.70 | 0.00 | 0.00 | 0.00 | 603.80 | 5799 | 3258.00 | 2115.02 | 9060 | 14348 | 12082 | 2159 |
| MEAN | 2.73 | .000 | .000 | .000 | 20.8 | 187 | 109 | 68.2 | 302 | 463 | 390 | 72.0 |
| MAX | 39 | .00 | .00 | .00 | 132 | 415 | 396 | 192 | 431 | 530 | 518 | 132 |
| MIN | .00 | .00 | .00 | .00 | .00 | 123 | .00 | .00 | 139 | 378 | 168 | 43 |
| AC-FT | 168 | .00 | .00 | .00 | 1200 | 11500 | 6460 | 4200 | 17970 | 28460 | 23960 | 4280 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2000, BY WATER YEAR (WY)

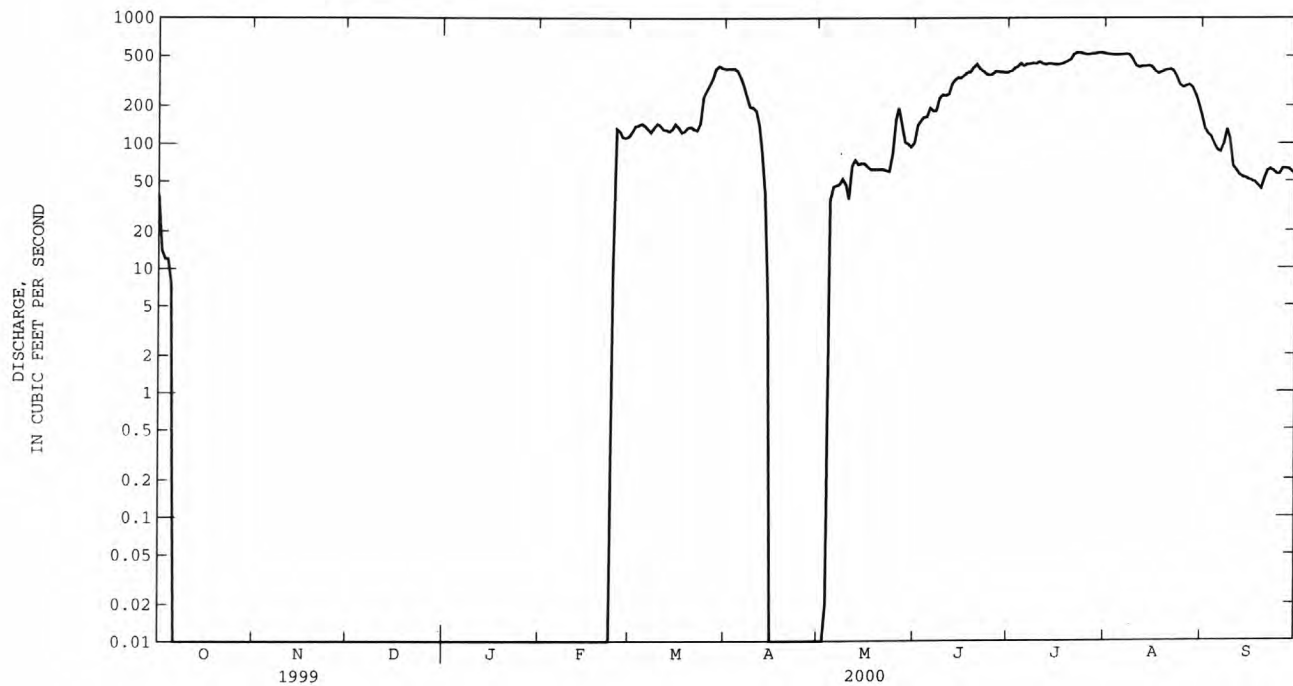
| | MEAN | 28.0 | 9.46 | 2.63 | 3.24 | 3.83 | 10.1 | 13.3 | 52.2 | 116 | 351 | 281 | 64.7 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MAX | 464 | 212 | 73.6 | 84.4 | 82.9 | 187 | 109 | 237 | 362 | 627 | 570 | 205 | |
| (WY) | 1958 | 1967 | 1992 | 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 | |

06852500 COURTLAND CANAL AT NEBRASKA-KANSAS STATE LINE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1955 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 26733.30 | | 49509.52 | | 78.9 | |
| ANNUAL MEAN | 73.2 | | 135 | | 138 | |
| HIGHEST ANNUAL MEAN | | | | | 19.5 | |
| LOWEST ANNUAL MEAN | | | | | 731 | |
| HIGHEST DAILY MEAN | 433 | Jul 11 | 530 | Jul 22 | 731 | Oct 22 1957 |
| LOWEST DAILY MEAN | .00 | Jan 1 | .00 | Oct 6 | *.00 | Oct 1 1954 |
| ANNUAL SEVEN-DAY MINIMUM | .00 | Jan 1 | .00 | Oct 6 | .00 | Oct 1 1954 |
| INSTANTANEOUS PEAK FLOW | | | 536 | Jul 22 | 781 | Sep 2 1973 |
| INSTANTANEOUS PEAK STAGE | | | 4.03 | Jul 22 | 5.05 | Sep 2 1973 |
| ANNUAL RUNOFF (AC-FT) | 53030 | | 98200 | | 57140 | |
| 10 PERCENT EXCEEDS | 279 | | 427 | | 294 | |
| 50 PERCENT EXCEEDS | .00 | | 55 | | .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 periods of estimated record, which are poor. Natural flow affected by irrigation development above station, by regulation of upstream reservoirs, and since Nov. 14, 1952, by storage in Harlan County Lake (station 06849000).

COOPERATION...Records provided by Nebraska Department of Natural Resources and reviewed by the Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|--------|-------|--------|------|-------|------|-------|
| 1 | 20 | 68 | 108 | e114 | e84 | 22 | 165 | 131 | 22 | 68 | 56 | 85 |
| 2 | 31 | 90 | 109 | e108 | 88 | 22 | 192 | 127 | 28 | 61 | 44 | 58 |
| 3 | 33 | 77 | 111 | e90 | 95 | 21 | 191 | 85 | 21 | 58 | 49 | 12 |
| 4 | 48 | 81 | 109 | e66 | 89 | e20 | 215 | 44 | 38 | 2510 | 59 | 2.5 |
| 5 | 39 | 86 | 106 | e72 | 73 | e18 | 270 | 40 | 134 | 4800 | 73 | 1.4 |
| 6 | 39 | 87 | 103 | e72 | 85 | e16 | 294 | 38 | 44 | 2260 | 74 | 1.4 |
| 7 | 40 | 90 | 106 | e78 | 86 | e14 | 329 | 38 | 35 | 492 | 66 | 1.4 |
| 8 | 44 | 93 | 109 | e78 | 79 | e12 | 402 | 37 | 35 | 201 | 54 | 1.4 |
| 9 | 47 | 83 | 109 | e84 | 78 | e11 | 404 | 36 | 21 | 102 | 55 | 1.4 |
| 10 | 50 | 110 | 104 | e92 | 75 | e10 | 432 | 31 | 28 | 57 | 42 | 1.4 |
| 11 | 50 | 82 | 107 | e96 | 73 | e10 | 468 | 28 | 21 | 31 | 43 | 1.4 |
| 12 | 53 | 97 | 110 | e100 | 76 | e9.0 | 273 | 24 | 30 | 28 | 41 | 1.4 |
| 13 | 54 | 98 | 108 | e104 | 90 | e8.6 | 210 | 19 | 30 | 27 | 53 | 1.4 |
| 14 | 57 | 98 | 113 | e108 | 111 | e8.6 | 200 | 16 | 27 | 29 | 71 | 1.4 |
| 15 | 60 | 113 | 112 | e112 | 126 | 9.0 | 177 | 17 | 23 | 30 | 60 | 1.4 |
| 16 | 61 | 99 | e112 | e114 | 129 | 10 | 182 | 20 | 31 | 27 | 35 | 1.4 |
| 17 | 60 | 101 | e112 | 112 | 127 | 12 | 173 | 21 | 27 | 57 | 37 | 1.5 |
| 18 | e60 | 103 | e112 | 116 | 122 | 17 | 165 | 20 | 37 | 115 | 48 | 1.5 |
| 19 | e40 | 99 | e106 | 114 | 120 | 18 | 158 | 18 | 41 | 634 | 84 | 1.5 |
| 20 | e28 | 98 | e100 | e107 | 118 | 20 | 150 | 18 | 476 | 778 | 131 | 1.6 |
| 21 | 88 | 102 | e84 | e92 | 120 | 21 | 142 | 16 | 483 | 191 | 133 | 1.5 |
| 22 | 78 | e110 | e86 | e96 | 124 | 21 | 136 | 14 | 151 | 138 | 136 | 1.5 |
| 23 | 75 | e108 | e96 | e98 | 120 | 29 | 133 | 11 | 114 | 127 | 121 | 1.5 |
| 24 | 76 | e110 | e110 | e98 | 99 | 27 | 136 | 8.7 | 83 | 82 | 90 | 1.5 |
| 25 | 82 | e108 | e116 | e94 | 35 | 48 | 133 | 19 | 76 | 88 | 65 | 1.5 |
| 26 | 81 | e106 | e118 | e90 | 28 | 180 | 134 | 214 | 304 | 103 | 57 | 1.5 |
| 27 | 68 | e104 | e118 | e84 | 27 | 164 | 129 | 129 | 209 | 78 | 66 | 1.5 |
| 28 | 89 | e102 | 119 | e80 | 27 | 116 | 121 | 60 | 103 | 66 | 76 | 1.5 |
| 29 | 78 | e102 | 121 | e78 | 24 | 119 | 115 | 25 | 70 | 71 | 67 | 1.4 |
| 30 | 80 | e104 | 119 | e76 | --- | 137 | 124 | 15 | 69 | 70 | 59 | 1.3 |
| 31 | 79 | --- | 115 | e78 | --- | 144 | --- | 15 | --- | 69 | 55 | --- |
| TOTAL | 1788 | 2909 | 3368 | 2901 | 2528 | 1294.2 | 6353 | 1334.7 | 2811 | 13448 | 2100 | 195.1 |
| MEAN | 57.7 | 97.0 | 109 | 93.6 | 87.2 | 41.7 | 212 | 43.1 | 93.7 | 434 | 67.7 | 6.50 |
| MAX | 89 | 113 | 121 | 116 | 129 | 180 | 468 | 214 | 483 | 4800 | 136 | 85 |
| MIN | 20 | 68 | 84 | 66 | 24 | 8.6 | 115 | 8.7 | 21 | 27 | 35 | 1.3 |
| AC-FT | 3550 | 5770 | 6680 | 5750 | 5010 | 2570 | 12600 | 2650 | 5580 | 26670 | 4170 | 387 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2000, BY WATER YEAR (WY)

| | 208 | 187 | 162 | 155 | 251 | 311 | 369 | 412 | 479 | 521 | 244 | 282 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 208 | 187 | 162 | 155 | 251 | 311 | 369 | 412 | 479 | 521 | 244 | 282 |
| 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

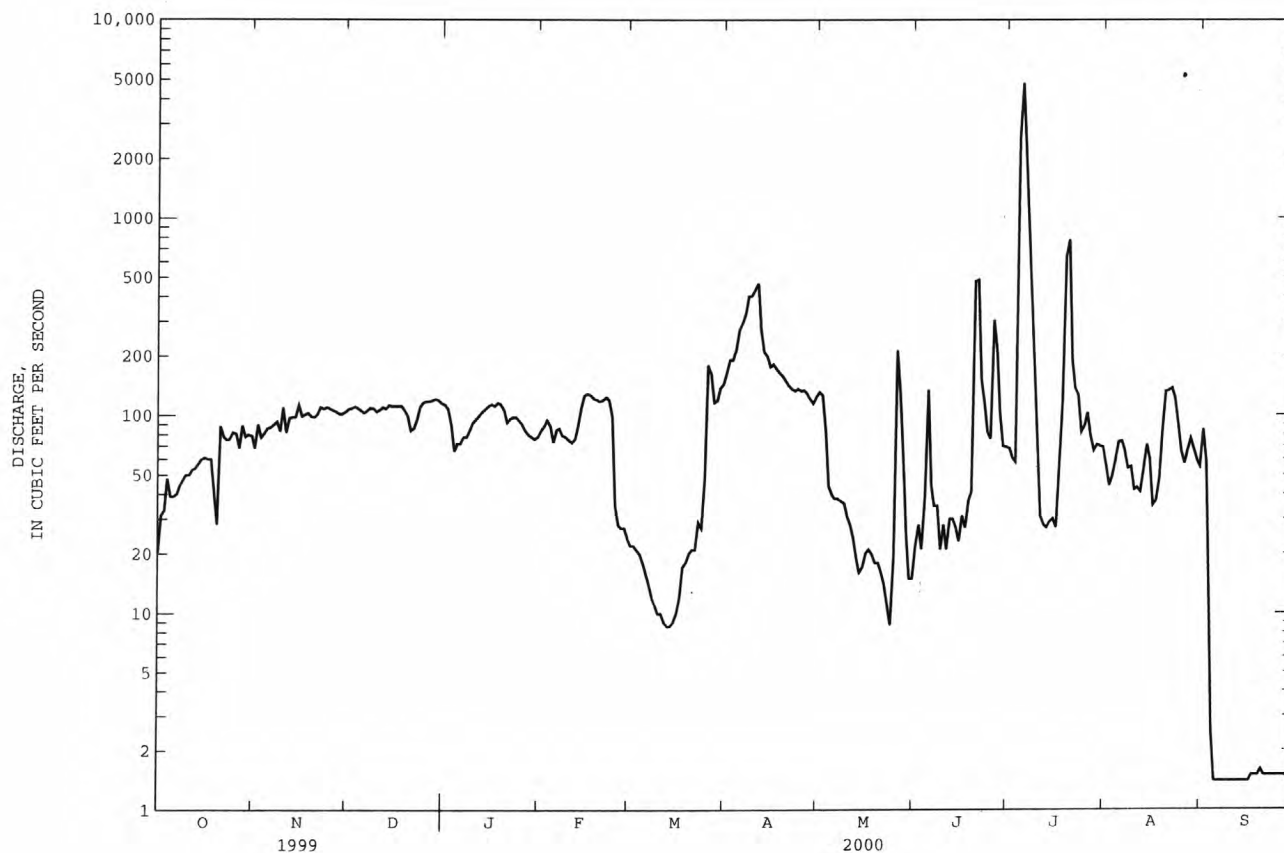
279

06853020 REPUBLICAN RIVER AT GUIDE ROCK, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1950 - 2000 |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|
| ANNUAL TOTAL | 54574.9 | | 41030.0 | | 298 |
| ANNUAL MEAN | 150 | | 112 | | 1495 |
| HIGHEST ANNUAL MEAN | | | | | 52.1 |
| LOWEST ANNUAL MEAN | | | | | 1951 |
| HIGHEST DAILY MEAN | 3610 | May 21 | 4800 | Jul 5 | 20900 |
| LOWEST DAILY MEAN | 1.8 | Sep 29 | 1.3 | Sep 30 | .10 |
| ANNUAL SEVEN-DAY MINIMUM | 2.5 | Sep 24 | 1.4 | Sep 5 | .62 |
| INSTANTANEOUS PEAK FLOW | | | 5700 | Jul 5 | 29200 |
| INSTANTANEOUS PEAK STAGE | | | 12.40 | Jul 5 | *20.73 |
| ANNUAL RUNOFF (AC-FT) | 108200 | | 81380 | | 215600 |
| 10 PERCENT EXCEEDS | 223 | | 146 | | 683 |
| 50 PERCENT EXCEEDS | 118 | | 78 | | 119 |
| 90 PERCENT EXCEEDS | 29 | | 11 | | 23 |

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 NE1/4 NE1/4 SE1/4 sec.1, T.1 S., R.6 W., in Kansas, Republic County, Hydrologic Unit 10250016, on right bank at upstream side of county highway bridge, 1.2 mi southwest of Hardy, NE, and at mile 141.2.

DRAINAGE AREA.--22,401 mi², of which about 7,500 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--June 1904 to September 1915 (no winter records), April 1931 to current year. Prior to May 1932, published as "at Bostwick." Records for June 1896 to November 1903 published as "near Superior" in 18th to 22nd Ann. Repts., inclusive, Pt. 4, and WSP 75, 84, and 99, have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 806: Drainage area. WSP 1006: 1941. WSP 1340: 1905(M), 1907-09, 1912, 1914-15, 1931. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 1,501.46 ft above sea level. Prior to May 19, 1932, nonrecording gage at site at Bostwick, 20 mi upstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow affected by irrigation development upstream from station and by storage in reservoirs in Colorado, Kansas, and Nebraska. Considerable regulation since 1952 by Harlan County Lake (station 06849000). 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.

COOPERATION.--Records provided by U.S. Geological Survey, Kansas District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|-------|------|------|-------|------|------|
| 1 | 33 | 113 | 135 | 144 | 159 | 61 | 169 | 187 | 67 | 113 | 95 | 105 |
| 2 | 38 | 105 | 136 | 145 | 136 | 61 | 174 | 195 | 78 | 105 | 86 | 129 |
| 3 | 74 | 119 | 143 | 144 | 174 | 66 | 194 | 186 | 64 | 97 | 81 | 122 |
| 4 | 82 | 114 | 143 | 134 | 171 | 63 | 199 | 149 | 70 | 1100 | 88 | 73 |
| 5 | 92 | 115 | 139 | e120 | 145 | 58 | 224 | 96 | 81 | 3890 | 90 | 48 |
| 6 | 92 | 116 | 136 | e130 | 175 | 55 | 285 | 85 | 166 | 3550 | 100 | 40 |
| 7 | 91 | 116 | 136 | e135 | 175 | 54 | 319 | 83 | 99 | 1290 | 106 | 35 |
| 8 | 92 | 116 | 139 | e150 | 154 | 60 | 364 | 79 | 69 | 591 | 95 | 34 |
| 9 | 94 | 117 | 140 | e165 | 149 | 60 | 431 | 77 | 65 | 360 | 84 | 32 |
| 10 | 92 | 110 | 137 | 169 | 148 | 57 | 436 | 73 | 51 | 253 | 72 | 30 |
| 11 | 91 | 121 | 135 | 144 | 148 | 55 | 461 | 72 | 56 | 202 | 61 | 28 |
| 12 | 91 | 108 | 137 | 142 | 138 | 54 | 478 | 64 | 55 | 154 | 64 | 27 |
| 13 | 91 | 114 | 138 | 156 | 144 | 54 | 296 | 58 | 69 | 130 | 63 | 26 |
| 14 | 91 | 116 | 138 | 149 | 148 | 56 | 235 | 55 | 66 | 113 | 72 | 25 |
| 15 | 93 | 117 | 140 | 166 | 158 | 58 | 225 | 52 | 65 | 103 | 90 | 25 |
| 16 | 94 | 126 | 139 | 165 | 158 | 55 | 218 | 51 | 58 | 100 | 82 | 25 |
| 17 | 94 | 120 | 143 | 151 | 155 | 54 | 214 | 55 | 57 | 101 | 52 | 24 |
| 18 | 95 | 120 | 147 | 147 | 157 | 56 | 212 | 55 | 62 | 130 | 51 | 23 |
| 19 | 97 | 122 | 148 | 146 | 153 | 59 | 201 | 55 | 67 | 214 | 72 | 22 |
| 20 | 98 | 121 | 145 | 144 | 150 | 57 | 190 | 52 | 114 | 759 | 102 | 28 |
| 21 | 96 | 120 | e115 | 138 | 149 | 53 | 181 | 53 | 481 | 637 | 151 | 27 |
| 22 | 111 | 124 | e115 | 141 | 152 | 53 | 176 | 50 | 452 | 343 | 149 | 26 |
| 23 | 107 | 140 | e125 | 145 | 158 | 63 | 174 | 47 | 219 | 246 | 147 | 25 |
| 24 | 106 | 142 | e140 | 143 | 157 | 73 | 169 | 43 | 167 | 221 | 130 | 26 |
| 25 | 107 | 137 | e155 | 140 | 158 | 66 | 170 | 37 | 132 | 151 | 111 | 28 |
| 26 | 107 | 133 | 175 | 148 | 84 | 62 | 169 | 58 | 121 | 140 | 96 | 27 |
| 27 | 111 | 134 | 162 | 141 | 71 | 180 | 170 | 300 | 303 | 140 | 89 | 25 |
| 28 | 102 | 135 | 150 | 149 | 65 | 189 | 168 | 230 | 273 | 115 | 90 | 25 |
| 29 | 115 | 135 | 147 | 155 | 62 | 147 | 163 | 145 | 170 | 106 | 105 | 24 |
| 30 | 112 | 135 | 148 | 166 | --- | 149 | 167 | 84 | 128 | 117 | 100 | 23 |
| 31 | 112 | --- | 146 | 169 | --- | 160 | --- | 58 | --- | 105 | 106 | --- |
| MEAN | 93.6 | 122 | 141 | 148 | 143 | 75.7 | 241 | 93.0 | 131 | 506 | 92.9 | 38.6 |
| MAX | 115 | 142 | 175 | 169 | 175 | 189 | 478 | 300 | 481 | 3890 | 151 | 129 |
| MIN | 33 | 105 | 115 | 120 | 62 | 53 | 163 | 37 | 51 | 97 | 51 | 22 |
| AC-FT | 5750 | 7260 | 8670 | 9090 | 8230 | 4660 | 14340 | 5720 | 7790 | 31090 | 5710 | 2290 |

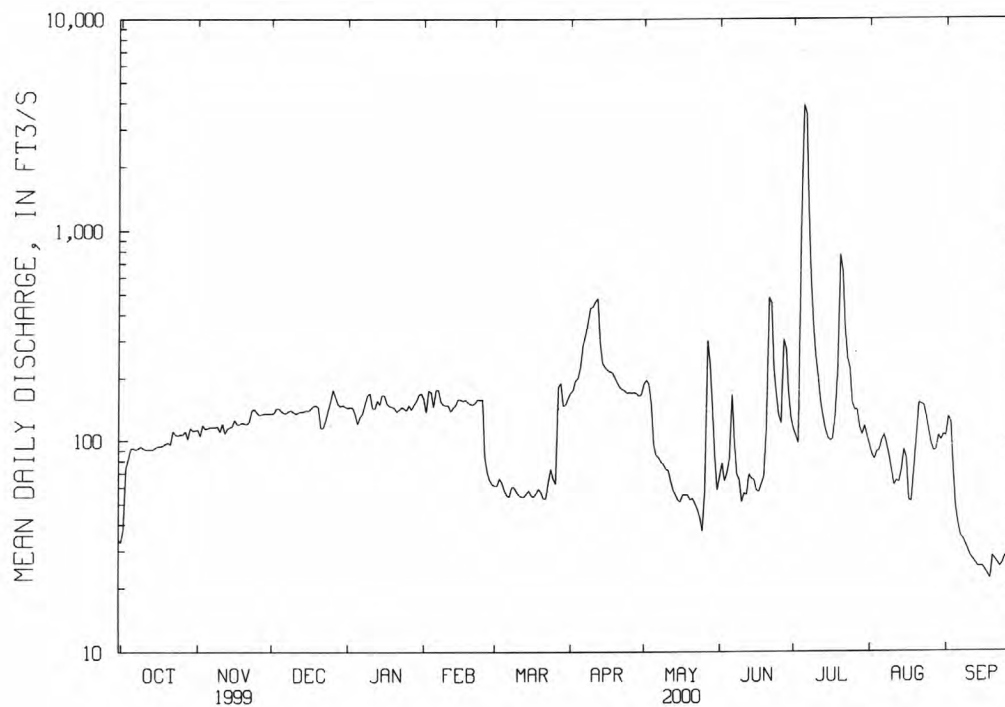
e Estimated

06853500 REPUBLICAN RIVER NEAR HARDY, NE--Continued

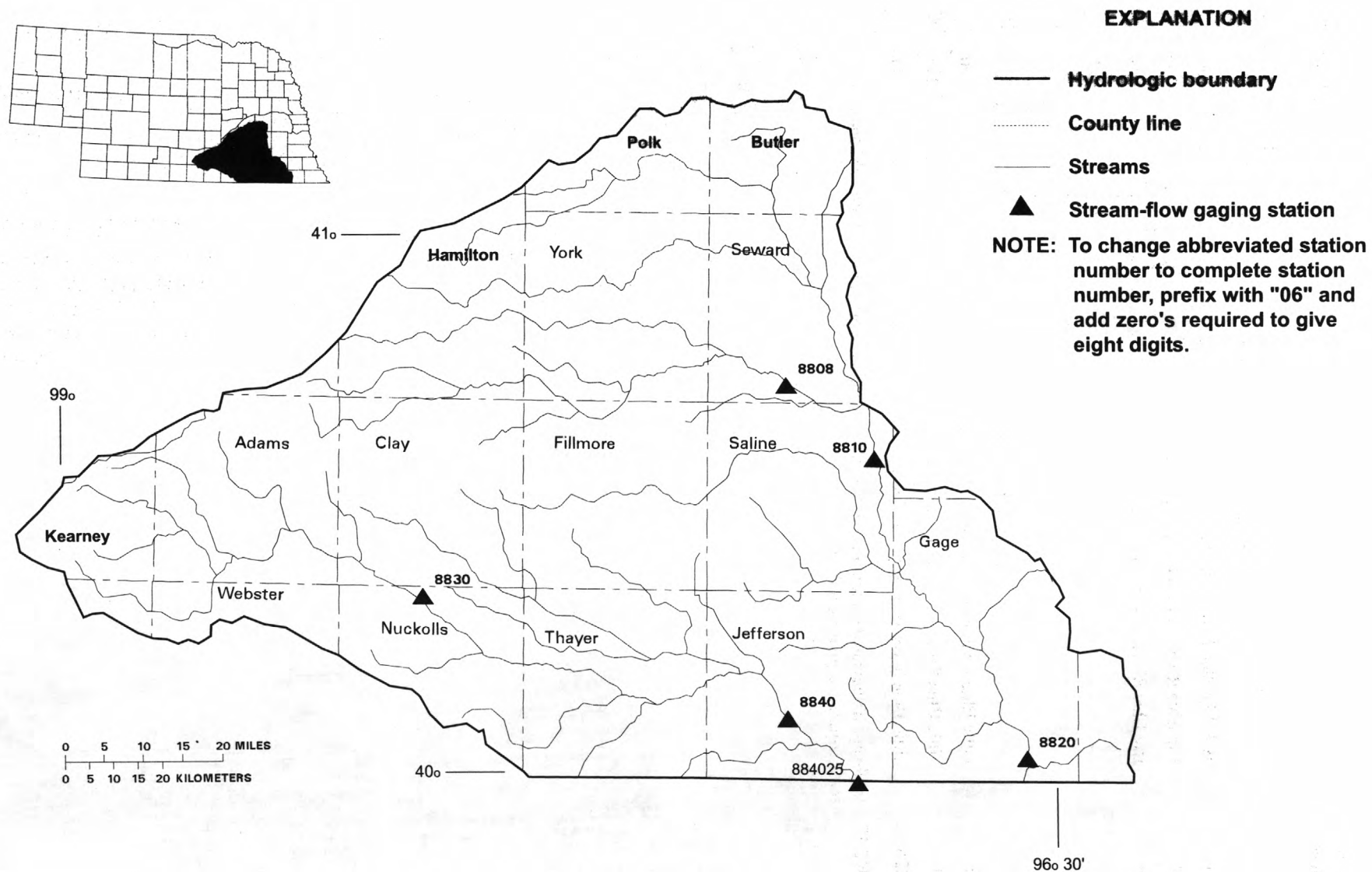
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2000, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 284 | 234 | 203 | 193 | 304 | 418 | 451 | 485 | 498 | 526 | 320 | 323 |
| MAX | 1970 | 1308 | 928 | 636 | 968 | 1584 | 2415 | 2523 | 2031 | 3210 | 1800 | 1455 |
| (WY) | 1966 | 1994 | 1994 | 1966 | 1966 | 1993 | 1960 | 1960 | 1960 | 1993 | 1962 | 1973 |
| MIN | 17.2 | 22.3 | 26.2 | 33.7 | 27.0 | 66.5 | 39.1 | 29.6 | 46.5 | 54.3 | 58.7 | 15.3 |
| (WY) | 1992 | 1992 | 1992 | 1992 | 1992 | 1991 | 1991 | 1992 | 1992 | 1991 | 1991 | 1991 |

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1958 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL MEAN | 223 | | 152 | | 353 | |
| HIGHEST ANNUAL MEAN | | | | | 800 | 1960 |
| LOWEST ANNUAL MEAN | | | | | 72.5 | 1991 |
| HIGHEST DAILY MEAN | 2980 | May 22 | 3890 | Jul 5 | 15000 | Oct 1 1983 |
| LOWEST DAILY MEAN | 33 | Sep 26 | 22 | Sep 19 | 4.8 | Aug 3 1991 |
| ANNUAL SEVEN-DAY MINIMUM | 34 | Sep 25 | 24 | Sep 13 | 9.0 | Jun 26 1992 |
| INSTANTANEOUS PEAK FLOW | | | 4150 | Jul 6 | 225000 | Jun 2 1935 |
| INSTANTANEOUS PEAK STAGE | | | 9.08 | Jul 6 | 19.40 | Jun 2 1935 |
| INSTANTANEOUS LOW FLOW | | | 22 | Sep 18 | .00 | Aug 9 1934 |
| ANNUAL RUNOFF (AC-FT) | 161700 | | 110600 | | 255900 | |
| 10 PERCENT EXCEEDS | 338 | | 200 | | 789 | |
| 50 PERCENT EXCEEDS | 175 | | 117 | | 171 | |
| 90 PERCENT EXCEEDS | 91 | | 52 | | 66 | |



06853500 REPUBLICAN R NR HARDY, NE



| *Station number | Station name | Page |
|-------------------------|--|------|
| BIG BLUE RIVER BASIN | | |
| 8808 | W.F. Big Blue River near Dorchester..... | 284 |
| 8810 | Big Blue River near Crete..... | 286 |
| 8820 | Big Blue River at Barneston..... | 288 |
| LITTLE BLUE RIVER BASIN | | |
| 8830 | Little Blue River near Deweese..... | 290 |
| 8840 | Little Blue River near Fairbury..... | 292 |
| 884025 | Little Blue River at Hollenberg, KS..... | 294 |

*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 periods of estimated record, which are poor. Some diversion by pumping for irrigation above station. Natural flow of stream affected by ground-water withdrawals for irrigation and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|-------|-------|------|------|
| 1 | e96 | 109 | 113 | 109 | e106 | 121 | 115 | 117 | 112 | 336 | 241 | 85 |
| 2 | e96 | 109 | 113 | 108 | e108 | 129 | 115 | 114 | 103 | 262 | 188 | 85 |
| 3 | e98 | 110 | 116 | 107 | e110 | 132 | 113 | 113 | 100 | 225 | 154 | 83 |
| 4 | e98 | 110 | 117 | 98 | e110 | 131 | 114 | 112 | 97 | 1100 | 131 | 84 |
| 5 | e100 | 110 | 119 | 108 | 113 | 129 | 113 | 111 | 96 | 3840 | 132 | 82 |
| 6 | e100 | 110 | 118 | 112 | 112 | 127 | 112 | 109 | 94 | 3380 | 125 | 78 |
| 7 | e102 | 110 | 118 | 117 | 113 | 125 | 111 | 111 | 90 | 1780 | 120 | 78 |
| 8 | 103 | 110 | 118 | 105 | 115 | 124 | 112 | 113 | 85 | 1360 | 111 | 79 |
| 9 | 103 | 110 | 117 | 107 | 117 | 122 | 112 | 115 | 82 | 803 | 107 | 76 |
| 10 | 100 | 111 | 118 | 107 | 117 | 120 | 112 | 117 | 81 | 490 | 115 | 75 |
| 11 | 101 | 111 | 119 | 107 | 116 | 118 | 113 | 110 | 79 | 307 | 117 | 75 |
| 12 | 101 | 111 | 119 | 107 | 116 | 116 | 112 | 108 | 304 | 239 | 116 | 73 |
| 13 | 101 | 112 | 123 | 106 | 116 | 115 | 112 | 105 | 291 | 213 | 115 | 73 |
| 14 | 102 | 111 | 119 | 106 | 116 | 117 | 113 | 103 | 150 | 200 | 114 | 73 |
| 15 | 103 | 113 | 118 | 106 | 114 | 117 | 112 | 103 | 104 | 192 | 119 | 73 |
| 16 | 102 | 112 | 117 | 108 | 114 | 115 | 120 | 102 | 89 | 196 | 113 | 73 |
| 17 | 102 | 111 | 117 | 108 | 113 | 115 | 122 | 103 | 84 | 196 | 109 | 72 |
| 18 | 102 | 112 | 117 | 109 | 118 | 118 | 122 | 106 | 82 | 214 | 105 | 72 |
| 19 | 103 | 111 | 117 | 109 | 118 | 123 | 120 | 148 | 82 | 329 | 127 | 70 |
| 20 | 105 | 111 | e100 | 108 | 118 | 125 | 118 | 113 | 104 | 464 | 190 | 76 |
| 21 | 105 | 111 | e90 | 110 | 120 | 123 | 120 | 106 | 166 | 461 | 202 | 77 |
| 22 | 105 | 112 | e82 | 110 | 121 | 121 | 120 | 104 | 139 | 298 | 168 | 80 |
| 23 | 105 | 116 | e110 | 111 | 121 | 123 | 117 | 103 | 161 | 217 | 170 | 79 |
| 24 | 105 | 118 | e120 | 108 | 122 | 128 | 115 | 101 | 253 | 198 | 148 | 80 |
| 25 | 106 | 119 | 127 | e100 | 128 | 130 | 115 | 98 | 303 | 180 | 122 | 79 |
| 26 | 107 | 120 | 123 | e92 | 129 | 123 | 116 | 103 | 1140 | 196 | 102 | 79 |
| 27 | 109 | 124 | 118 | e82 | 127 | 120 | 114 | 131 | 1860 | 230 | 109 | 80 |
| 28 | 108 | 117 | 116 | e96 | 125 | 117 | 113 | 151 | 2140 | 190 | 109 | 77 |
| 29 | 109 | 113 | 114 | e102 | 123 | 118 | 113 | 121 | 1620 | 209 | 99 | 76 |
| 30 | 109 | 113 | 112 | e104 | --- | 117 | 115 | 120 | 487 | 403 | 93 | 74 |
| 31 | 109 | --- | 110 | e106 | --- | 114 | --- | 114 | --- | 344 | 86 | --- |
| TOTAL | 3195 | 3377 | 3555 | 3273 | 3396 | 3773 | 3451 | 3485 | 10578 | 19052 | 4057 | 2316 |
| MEAN | 103 | 113 | 115 | 106 | 117 | 122 | 115 | 112 | 353 | 615 | 131 | 77.2 |
| MAX | 109 | 124 | 127 | 117 | 129 | 132 | 122 | 151 | 2140 | 3840 | 241 | 85 |
| MIN | 96 | 109 | 82 | 82 | 106 | 114 | 111 | 98 | 79 | 180 | 86 | 70 |
| AC-FT | 6340 | 6700 | 7050 | 6490 | 6740 | 7480 | 6850 | 6910 | 20980 | 37790 | 8050 | 4590 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2000, BY WATER YEAR (WY)

| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 119 | 81.6 | 69.5 | 74.1 | 144 | 305 | 176 | 265 | 364 | 338 | 193 | 153 |
| 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 |

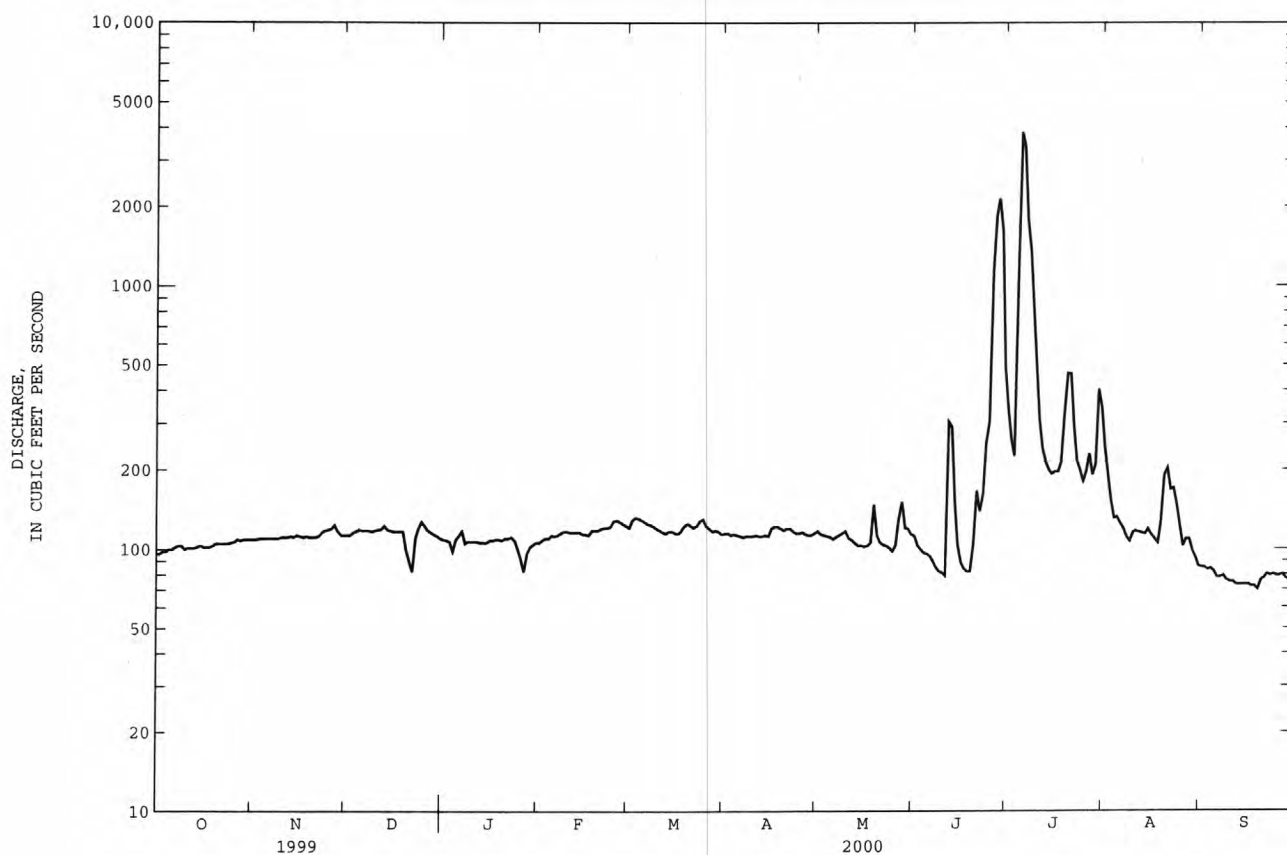
KANSAS RIVER BASIN

06880800 WEST FORK BIG BLUE RIVER NEAR DORCHESTER, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1958 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 93712 | | 63508 | | 190 | |
| ANNUAL MEAN | 257 | | 174 | | 441 | 1984 |
| HIGHEST ANNUAL MEAN | | | | | 54.4 | 1976 |
| LOWEST ANNUAL MEAN | | | | | 11100 | Mar 11 1993 |
| HIGHEST DAILY MEAN | 3760 | Jun 11 | 3840 | Jul 5 | 12 | Dec 31 1976 |
| LOWEST DAILY MEAN | 76 | Jan 4 | 70 | Sep 19 | 17 | Jul 11 1976 |
| ANNUAL SEVEN-DAY MINIMUM | 82 | Jan 4 | 72 | Sep 13 | *12400 | Mar 11 1993 |
| INSTANTANEOUS PEAK FLOW | | | 4430 | Jul 5 | 22.62 | Jul 1 1986 |
| INSTANTANEOUS PEAK STAGE | | | 17.55 | Jul 5 | | |
| ANNUAL RUNOFF (AC-FT) | 185900 | | 126000 | | 137700 | |
| 10 PERCENT EXCEEDS | 437 | | 197 | | 319 | |
| 50 PERCENT EXCEEDS | 128 | | 113 | | 84 | |
| 90 PERCENT EXCEEDS | 104 | | 85 | | 47 | |

e Estimated.

* Stage 21.71 ft.



LOCATION.--Lat 40°35'47", long 96°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.

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.

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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2000, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 239 | 158 | 133 | 143 | 311 | 693 | 408 | 562 | 937 | 688 | 347 | 317 |
| 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

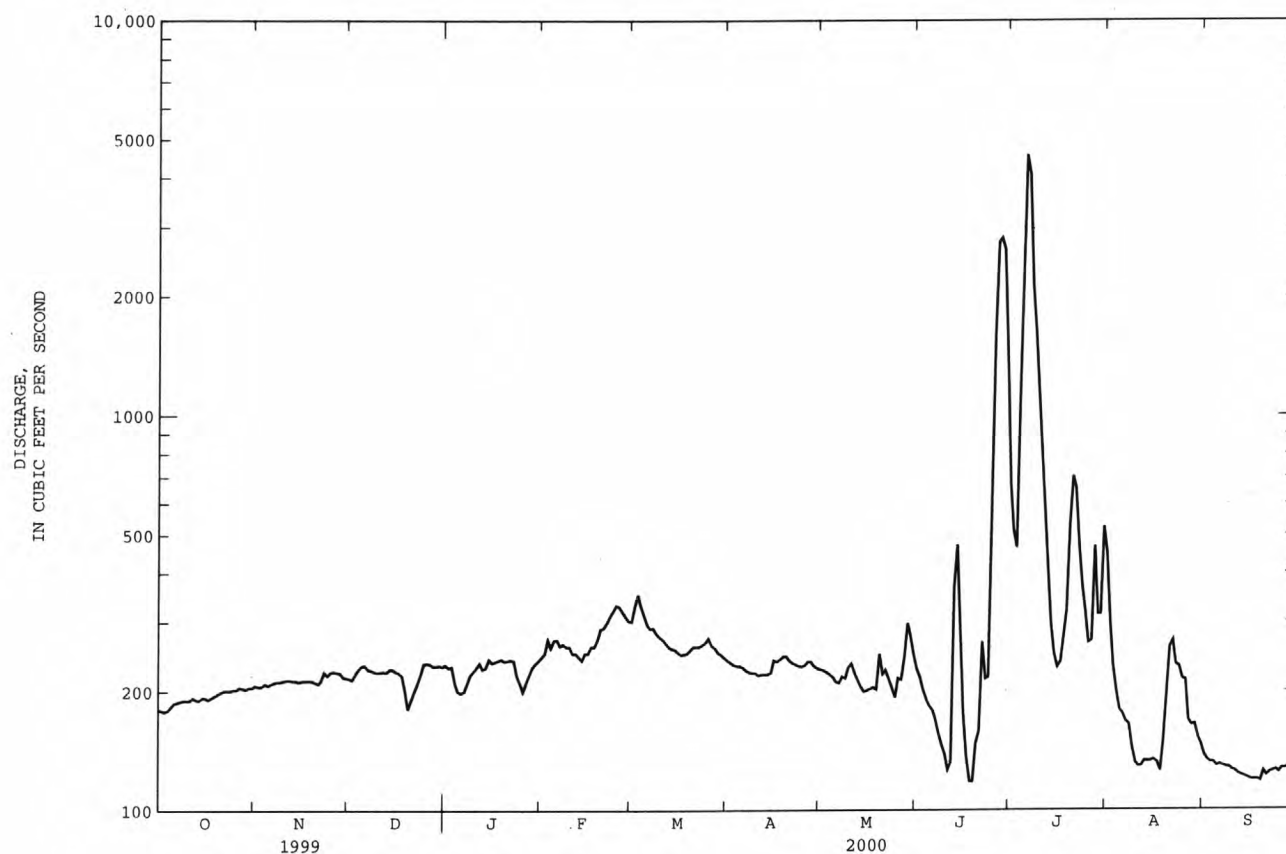
06881000 BIG BLUE RIVER NEAR CRETE, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1954 - 2000 | |
|--------------------------|------------------------|-------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 191455 | | 109614 | | 412 | |
| ANNUAL MEAN | 525 | | 299 | | 1030 | 1984 |
| HIGHEST ANNUAL MEAN | | | | | 96.6 | 1976 |
| LOWEST ANNUAL MEAN | | | | | 21400 | Jun 19 1957 |
| HIGHEST DAILY MEAN | 6490 | Jul 2 | 4560 | Jul 6 | 6.0 | Aug 1 1980 |
| LOWEST DAILY MEAN | 140 | Jan 5 | 118 | Jun 18 | 11 | Jul 12 1976 |
| ANNUAL SEVEN-DAY MINIMUM | 154 | Jan 3 | 120 | Sep 13 | *27600 | Jul 10 1950 |
| INSTANTANEOUS PEAK FLOW | | | 5090 | Jul 6 | **29.86 | Jul 3 1986 |
| INSTANTANEOUS PEAK STAGE | | | 20.91 | Jul 6 | 298200 | |
| ANNUAL RUNOFF (AC-FT) | 379800 | | 217400 | | 751 | |
| 10 PERCENT EXCEEDS | 925 | | 319 | | 160 | |
| 50 PERCENT EXCEEDS | 252 | | 224 | | 79 | |
| 90 PERCENT EXCEEDS | 184 | | 132 | | | |

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 $\frac{1}{4}$ NW $\frac{1}{4}$ sec.24, T.1 N., R.7 E., Gage County, Hydrologic Unit 10270205, on right bank at right downstream end of bridge on State Highway 8, 0.6 mi southwest of Barneston, 1.3 mi upstream from Plum Creek, and 4.3 mi upstream from Nebraska-Kansas State line.

DRAINAGE AREA.--4,447 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 periods of estimated record, which are poor. Low flow regulated by dam at unused powerplant 0.7 mi upstream. No large tributaries between station and Nebraska-Kansas State line. Some pump diversions for irrigation above station. Natural flow of stream affected by ground-water withdrawals for irrigation and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 1 | 292 | 288 | 334 | e270 | e280 | 381 | 371 | 392 | 349 | 2060 | 532 | 189 |
| 2 | 284 | 276 | 337 | e270 | e300 | 375 | 361 | 369 | 323 | 1160 | 600 | 179 |
| 3 | 282 | 284 | 341 | e250 | e310 | 385 | 348 | 358 | 291 | 821 | 471 | 163 |
| 4 | 280 | 286 | 351 | e245 | e320 | 416 | 334 | 354 | 283 | 6270 | 354 | 159 |
| 5 | 280 | 285 | 352 | e230 | e330 | 436 | 340 | 343 | 263 | 5630 | 303 | 157 |
| 6 | 282 | 293 | 361 | e220 | e330 | 412 | 328 | 338 | 250 | 4120 | 268 | 156 |
| 7 | 289 | 295 | 369 | e240 | e340 | 398 | 332 | 335 | 251 | 4770 | 240 | 158 |
| 8 | 290 | 302 | 364 | e250 | e340 | 396 | 314 | 330 | 238 | 5100 | 218 | 156 |
| 9 | 288 | 320 | 353 | e260 | 348 | 376 | 320 | 330 | 215 | 3340 | 189 | 160 |
| 10 | 287 | 313 | 340 | e260 | 357 | 362 | 318 | 325 | 205 | 2160 | 159 | 161 |
| 11 | 282 | 310 | 338 | e270 | 356 | 354 | 315 | 330 | 177 | 1530 | 142 | 161 |
| 12 | 285 | 314 | 336 | e270 | 347 | 354 | 309 | 329 | 166 | 1080 | 123 | 160 |
| 13 | 282 | 313 | 333 | e280 | 350 | 353 | 316 | 317 | 148 | 767 | 117 | 155 |
| 14 | 276 | 312 | 335 | e280 | 354 | 353 | 320 | 304 | 183 | 565 | 111 | 153 |
| 15 | 281 | 306 | 344 | e270 | 356 | 352 | 321 | 300 | 316 | 447 | 106 | 143 |
| 16 | 273 | 308 | 346 | e270 | 339 | 336 | 401 | 294 | 465 | 382 | 91 | 144 |
| 17 | 263 | 310 | 337 | e260 | 352 | 332 | 421 | 295 | 367 | 358 | 89 | 145 |
| 18 | 268 | 326 | e310 | e260 | 368 | 355 | 411 | 294 | 319 | 357 | 92 | 145 |
| 19 | 274 | 317 | e290 | e270 | 364 | 376 | 389 | 287 | 234 | 383 | 169 | 145 |
| 20 | 277 | 305 | e250 | e270 | 361 | 368 | 383 | 291 | 339 | 455 | 411 | 170 |
| 21 | 283 | 315 | e175 | e260 | 363 | 366 | 376 | 301 | 337 | 539 | 391 | 167 |
| 22 | 284 | 324 | e200 | e260 | 374 | 404 | 368 | 327 | 302 | 701 | 320 | 169 |
| 23 | 280 | 403 | e240 | e250 | 449 | 409 | 367 | 308 | 255 | 858 | 322 | 167 |
| 24 | 281 | 391 | e260 | e230 | 438 | 426 | 359 | 291 | 462 | 717 | 372 | 171 |
| 25 | 287 | 371 | e280 | e220 | 442 | 405 | 356 | 276 | 447 | 522 | 331 | 178 |
| 26 | 289 | 358 | e300 | e218 | 431 | 401 | 348 | 320 | 1570 | 425 | 309 | 173 |
| 27 | 293 | 353 | e300 | e220 | 426 | 394 | 351 | 322 | 2180 | 364 | 287 | 169 |
| 28 | 295 | 344 | e290 | e220 | 412 | 389 | 345 | 331 | 2380 | 393 | 280 | 169 |
| 29 | 299 | 334 | e290 | e230 | 408 | 374 | 348 | 318 | 2620 | 758 | 248 | 167 |
| 30 | 291 | 333 | e280 | e240 | --- | 370 | 360 | 324 | 2500 | 824 | 219 | 166 |
| 31 | 284 | --- | e280 | e260 | --- | 356 | --- | 367 | --- | 532 | 212 | --- |
| TOTAL | 8781 | 9589 | 9616 | 7803 | 10545 | 11764 | 10530 | 10000 | 18435 | 48388 | 8076 | 4855 |
| MEAN | 283 | 320 | 310 | 252 | 364 | 379 | 351 | 323 | 614 | 1561 | 261 | 162 |
| MAX | 299 | 403 | 369 | 280 | 449 | 436 | 421 | 392 | 2620 | 6270 | 600 | 189 |
| MIN | 263 | 276 | 175 | 218 | 280 | 332 | 309 | 276 | 148 | 357 | 89 | 143 |
| AC-FT | 17420 | 19020 | 19070 | 15480 | 20920 | 23330 | 20890 | 19840 | 36570 | 95980 | 16020 | 9630 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 2000, BY WATER YEAR (WY)

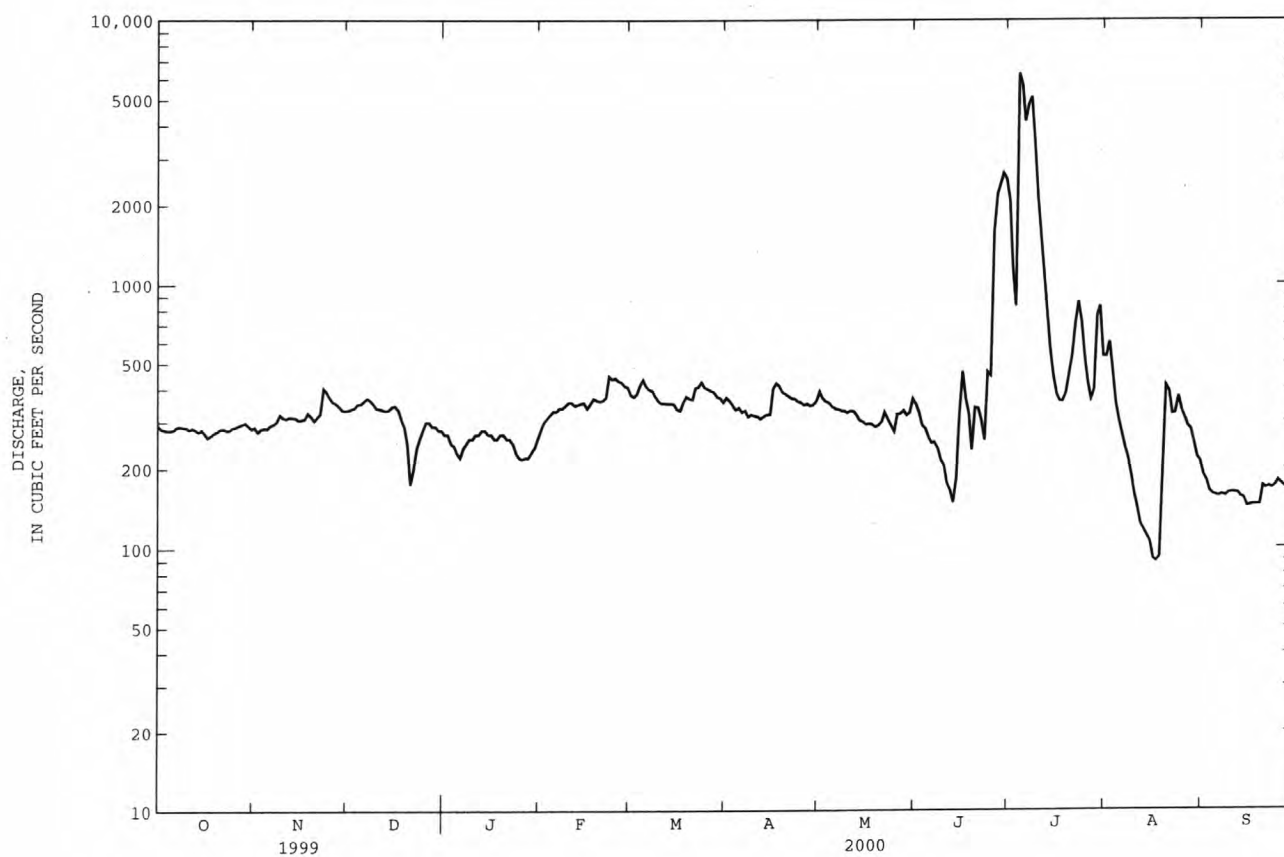
| | | | | | | | | | | | | |
|------|------|------|------|------|------|-------|------|------|-------|-------|------|------|
| MEAN | 553 | 313 | 241 | 290 | 649 | 1369 | 874 | 1264 | 2069 | 1369 | 714 | 706 |
| MAX | 7451 | 1526 | 851 | 1596 | 2876 | 10560 | 5280 | 5207 | 10460 | 12270 | 5227 | 3420 |
| (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

06882000 BIG BLUE RIVER AT BARNESTON, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1933 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 390070 | | 158382 | | 868 | |
| ANNUAL MEAN | 1069 | | 433 | | 2781 | 1993 |
| HIGHEST ANNUAL MEAN | | | | | 115 | 1934 |
| LOWEST ANNUAL MEAN | | | | | 50000 | Jun 9 1941 |
| HIGHEST DAILY MEAN | 14800 | May 21 | 6270 | Jul 4 | 1.0 | Nov 30 1945 |
| LOWEST DAILY MEAN | 175 | Dec 21 | 89 | Aug 17 | 15 | Aug 3 1934 |
| ANNUAL SEVEN-DAY MINIMUM | 242 | Dec 19 | 104 | Aug 12 | 57700 | Jun 9 1941 |
| INSTANTANEOUS PEAK FLOW | | | 11600 | Jul 4 | 34.30 | Jun 9 1941 |
| INSTANTANEOUS PEAK STAGE | | | 16.57 | Jul 4 | 628600 | |
| ANNUAL RUNOFF (AC-FT) | 773700 | | 314200 | | 1800 | |
| 10 PERCENT EXCEEDS | 2770 | | 444 | | 280 | |
| 50 PERCENT EXCEEDS | 455 | | 318 | | 103 | |
| 90 PERCENT EXCEEDS | 289 | | 170 | | | |

e Estimated.



KANSAS RIVER BASIN

06883000 LITTLE BLUE RIVER NEAR DEWEESE, NE

LOCATION.--Lat 40°19'58", long 98°04'00", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.12, T.4 N., R.7 W., Nuckolls County, Hydrologic Unit 10270206, on right bank 10 ft downstream from bridge on State Highway 14, 1 mi upstream from Walnut Creek, 3.2 mi southeast of Deweese, 6 mi northwest of Angus, and at mile 122.57.

DRAINAGE AREA.--984 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 periods of estimated record, which are poor. Natural flow affected by irrigation development above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|-------|-------|------|------|
| 1 | 48 | 65 | 71 | 70 | 80 | 104 | 87 | 95 | 84 | 438 | 122 | 23 |
| 2 | 44 | 64 | 72 | 71 | 82 | 96 | 87 | 90 | 79 | 414 | 105 | 24 |
| 3 | 44 | 67 | 75 | 70 | 84 | 94 | 84 | 88 | 78 | 656 | 90 | 26 |
| 4 | 44 | 68 | 75 | e64 | 81 | 93 | 83 | 90 | 80 | 6270 | 83 | 25 |
| 5 | 49 | 69 | 72 | e58 | 80 | 93 | 86 | 90 | 77 | 10500 | 78 | 25 |
| 6 | 57 | 68 | 71 | e62 | 83 | 90 | 85 | 91 | 75 | 7530 | 75 | 26 |
| 7 | 60 | 69 | 73 | 66 | 83 | 87 | 86 | 93 | 73 | 2190 | 72 | 29 |
| 8 | 64 | 71 | 74 | 68 | 82 | 95 | 82 | 96 | 67 | 1060 | 68 | 30 |
| 9 | 62 | 72 | 74 | 69 | 86 | 88 | 83 | 92 | 60 | 628 | 63 | 31 |
| 10 | 62 | 71 | 73 | 71 | 87 | 83 | 85 | 90 | 56 | 420 | 56 | 33 |
| 11 | 61 | 70 | 73 | 70 | 83 | 81 | 84 | 90 | 110 | 330 | 54 | 34 |
| 12 | 64 | 72 | 74 | 72 | 81 | 82 | 83 | 88 | 139 | 272 | 46 | 35 |
| 13 | 65 | 73 | 76 | 70 | 84 | 81 | 84 | 85 | 56 | 223 | 40 | 37 |
| 14 | 63 | 73 | 77 | 72 | 83 | 90 | 85 | 84 | 42 | 201 | 31 | 38 |
| 15 | 68 | 72 | 80 | 75 | 86 | 91 | 83 | 84 | 35 | 183 | 24 | 38 |
| 16 | 65 | 73 | 76 | 74 | 84 | 85 | 88 | 86 | 31 | 172 | 21 | 39 |
| 17 | 62 | 73 | 76 | 72 | 83 | 82 | 84 | 91 | 31 | 158 | 25 | 40 |
| 18 | 61 | 73 | 73 | 75 | 88 | 85 | 86 | 93 | 28 | 463 | 19 | 42 |
| 19 | 63 | 72 | e66 | 76 | 82 | 87 | 86 | 91 | 23 | 2090 | 50 | 44 |
| 20 | 66 | 71 | e60 | 74 | 85 | 86 | 85 | 113 | 522 | 750 | 86 | 59 |
| 21 | 65 | 72 | e64 | 75 | 88 | 84 | 82 | 130 | 1670 | 448 | 58 | 49 |
| 22 | 65 | 74 | 66 | 76 | 90 | 84 | 83 | 108 | 1930 | 549 | 51 | 52 |
| 23 | 63 | 80 | 66 | 77 | 97 | 92 | 84 | 95 | 1170 | 309 | 33 | 50 |
| 24 | 64 | 74 | 65 | 79 | 97 | 99 | 85 | 85 | 751 | 240 | 23 | 54 |
| 25 | 63 | 73 | 65 | 79 | 97 | 94 | 87 | 78 | 701 | 180 | 20 | 57 |
| 26 | 63 | 73 | 66 | 78 | 89 | 89 | 85 | 97 | 2140 | 150 | 21 | 54 |
| 27 | 65 | 72 | 67 | 78 | 85 | 86 | 87 | 124 | 1290 | 140 | 21 | 54 |
| 28 | 64 | 69 | 67 | 78 | 86 | 85 | 83 | 93 | 730 | 199 | 21 | 53 |
| 29 | 65 | 69 | 68 | 78 | 95 | 85 | 86 | 103 | 559 | 209 | 20 | 53 |
| 30 | 65 | 69 | 69 | 79 | --- | 84 | 92 | 97 | 487 | 176 | 20 | 53 |
| 31 | 65 | --- | 69 | 80 | --- | 83 | --- | 88 | --- | 153 | 20 | --- |
| TOTAL | 1879 | 2131 | 2193 | 2256 | 2491 | 2738 | 2550 | 2918 | 13174 | 37701 | 1516 | 1207 |
| MEAN | 60.6 | 71.0 | 70.7 | 72.8 | 85.9 | 88.3 | 85.0 | 94.1 | 439 | 1216 | 48.9 | 40.2 |
| MAX | 68 | 80 | 80 | 80 | 97 | 104 | 92 | 130 | 2140 | 10500 | 122 | 59 |
| MIN | 44 | 64 | 60 | 58 | 80 | 81 | 82 | 78 | 23 | 140 | 19 | 23 |
| AC-FT | 3730 | 4230 | 4350 | 4470 | 4940 | 5430 | 5060 | 5790 | 26130 | 74780 | 3010 | 2390 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2000, BY WATER YEAR (WY)

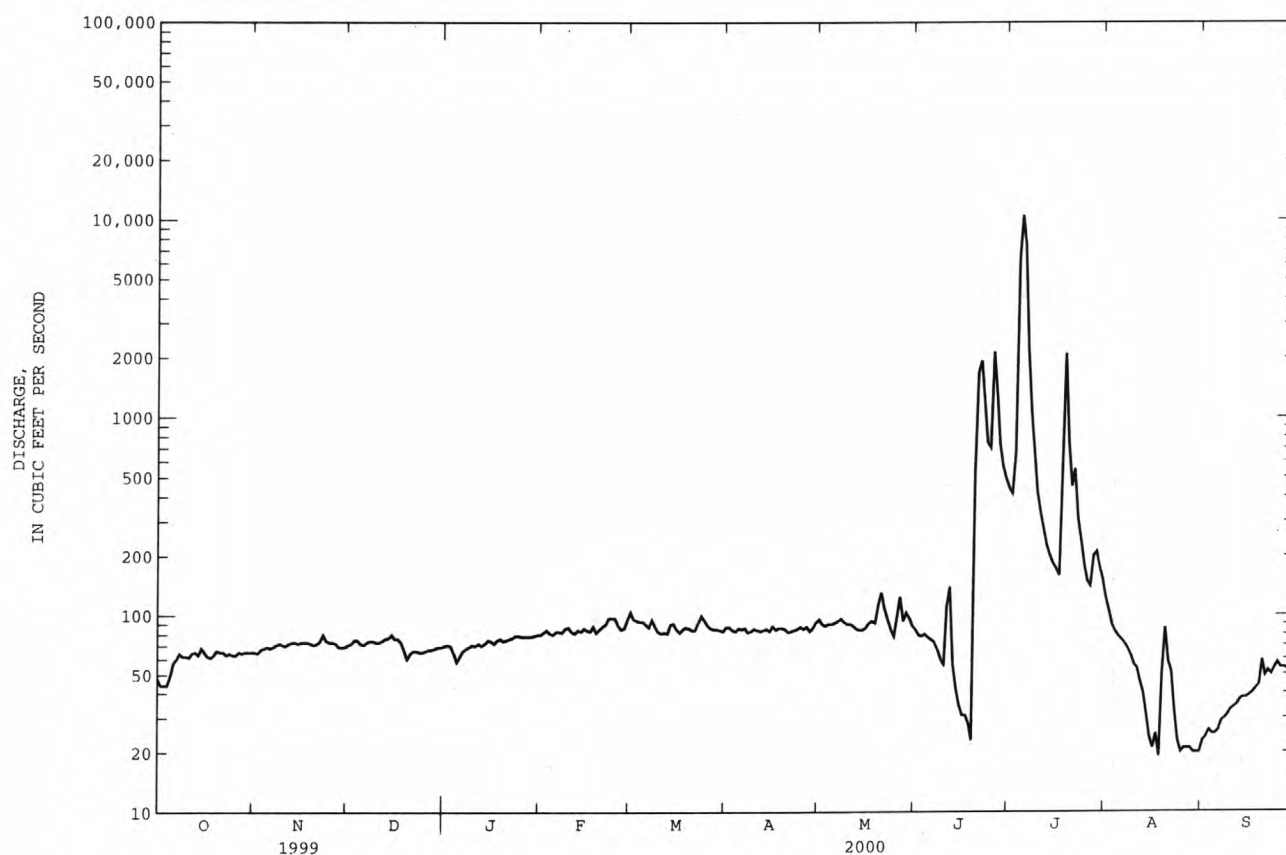
| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 81.9 | 68.7 | 64.9 | 68.6 | 94.9 | 189 | 130 | 250 | 267 | 276 | 152 | 131 |
| MAX | 347 | 193 | 115 | 207 | 245 | 1140 | 762 | 1348 | 1145 | 2655 | 883 | 911 |
| (WY) | 1966 | 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

06883000 LITTLE BLUE RIVER NEAR DEWEESE, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1954 - 2000 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 39358 | | 72754 | | 148 | |
| ANNUAL MEAN | 108 | | 199 | | 126 | |
| MEDIAN OF ANNUAL MEANS | | | | | 464 | 1993 |
| HIGHEST ANNUAL MEAN | | | | | 64.0 | 1976 |
| LOWEST ANNUAL MEAN | | | | | 14300 | Sep 1 1969 |
| HIGHEST DAILY MEAN | 1040 | Jun 2 | 10500 | Jul 5 | 3.2 | Aug 11 1988 |
| LOWEST DAILY MEAN | 30 | Aug 1 | 19 | Aug 18 | 4.2 | Aug 31 1988 |
| ANNUAL SEVEN-DAY MINIMUM | 38 | Jul 27 | 20 | Aug 25 | 25100 | Aug 31 1969 |
| INSTANTANEOUS PEAK FLOW | | | 11000 | Jul 5 | 18.57 | Aug 31 1969 |
| INSTANTANEOUS PEAK STAGE | | | 12.83 | Jul 5 | 107400 | |
| ANNUAL RUNOFF (AC-FT) | 78070 | | 144300 | | 194 | |
| 10 PERCENT EXCEEDS | 175 | | 177 | | 70 | |
| 50 PERCENT EXCEEDS | 88 | | 78 | | 44 | |
| 90 PERCENT EXCEEDS | 44 | | 40 | | | |

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 periods of estimated record, which are poor. Some regulation at low stage by thermoelectric plant above station. Natural flow of stream affected by irrigation development above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|-------|------|------|-------|-------|------|------|
| 1 | 98 | 126 | 141 | e130 | e118 | 166 | 164 | 168 | 116 | 287 | 366 | 84 |
| 2 | 96 | 124 | 143 | e118 | e120 | 166 | 163 | 162 | 124 | 221 | 294 | 84 |
| 3 | 94 | 126 | 164 | e110 | e124 | 178 | 158 | 160 | 116 | 194 | 294 | 83 |
| 4 | 95 | 128 | 172 | e100 | e130 | 181 | 156 | 154 | 112 | 1920 | 259 | 80 |
| 5 | 97 | 131 | 164 | e110 | e135 | 176 | 156 | 149 | 114 | 5700 | 199 | 69 |
| 6 | 96 | 132 | 155 | e112 | e135 | 172 | 153 | 147 | 99 | 7290 | 239 | 73 |
| 7 | 96 | 134 | 154 | e116 | e135 | 171 | 152 | 149 | 103 | 9680 | 163 | 76 |
| 8 | 98 | 136 | 155 | e125 | e130 | 178 | 150 | 153 | 98 | 3670 | 203 | 75 |
| 9 | 100 | 137 | 154 | e140 | e130 | 170 | 151 | 154 | 92 | 1820 | 183 | 74 |
| 10 | 102 | 137 | 153 | e140 | e130 | 170 | 152 | 150 | 90 | 1300 | 151 | 73 |
| 11 | 110 | 137 | 153 | e130 | e135 | 169 | 151 | 148 | 89 | 931 | 134 | 75 |
| 12 | 98 | 139 | 157 | e130 | 155 | 168 | 150 | 144 | 88 | 740 | 119 | 75 |
| 13 | 102 | 141 | 157 | e125 | 161 | 164 | 151 | 136 | 85 | 620 | 112 | 75 |
| 14 | 103 | 139 | 159 | e122 | 173 | 167 | 152 | 135 | 118 | 603 | 119 | 75 |
| 15 | 105 | 139 | 156 | e100 | 171 | 169 | 152 | 133 | 106 | 510 | 108 | 75 |
| 16 | 105 | 140 | 151 | e120 | 164 | 168 | 171 | 132 | 89 | 455 | 104 | 77 |
| 17 | 103 | 139 | e145 | e122 | 160 | 166 | 166 | 133 | 80 | 512 | 95 | 77 |
| 18 | 104 | 142 | e135 | e122 | 166 | 174 | 164 | 134 | 77 | 480 | 81 | 76 |
| 19 | 105 | 140 | e130 | e120 | 166 | 180 | 164 | 135 | 71 | 561 | 113 | 75 |
| 20 | 108 | 141 | e120 | e118 | 165 | 172 | 170 | 138 | 116 | 2000 | 230 | 87 |
| 21 | 112 | 144 | e122 | e116 | 164 | 169 | 168 | 139 | 110 | 1220 | 214 | 84 |
| 22 | 114 | 147 | e130 | e112 | 167 | 177 | 160 | 133 | 261 | 750 | 173 | 85 |
| 23 | 114 | 166 | e135 | e110 | 187 | 185 | 158 | 147 | 1170 | 747 | 153 | 83 |
| 24 | 114 | 159 | e140 | e106 | 191 | 200 | 157 | 145 | 833 | 699 | 131 | 82 |
| 25 | 116 | 155 | e145 | e101 | 188 | 189 | 160 | 133 | 560 | 450 | 116 | 82 |
| 26 | 117 | 155 | e150 | e102 | 192 | 186 | 156 | 156 | 495 | 402 | 107 | 80 |
| 27 | 121 | 154 | e145 | e104 | 184 | 182 | 154 | 139 | 1000 | 394 | 100 | 79 |
| 28 | 122 | 148 | e145 | e106 | 177 | 170 | 150 | 135 | 982 | 533 | 100 | 79 |
| 29 | 125 | 142 | e140 | e108 | 173 | 164 | 148 | 139 | 631 | 627 | 95 | 78 |
| 30 | 125 | 141 | e145 | e110 | --- | 162 | 164 | 139 | 398 | 408 | 87 | 76 |
| 31 | 129 | --- | e140 | e112 | --- | 160 | --- | 139 | --- | 376 | 86 | --- |
| TOTAL | 3324 | 4219 | 4555 | 3597 | 4526 | 5369 | 4721 | 4458 | 8423 | 46100 | 4928 | 2346 |
| MEAN | 107 | 141 | 147 | 116 | 156 | 173 | 157 | 144 | 281 | 1487 | 159 | 78.2 |
| MAX | 129 | 166 | 172 | 140 | 192 | 200 | 171 | 168 | 1170 | 9680 | 366 | 87 |
| MIN | 94 | 124 | 120 | 100 | 118 | 160 | 148 | 132 | 71 | 194 | 81 | 69 |
| AC-FT | 6590 | 8370 | 9030 | 7130 | 8980 | 10650 | 9360 | 8840 | 16710 | 91440 | 9770 | 4650 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 2000, BY WATER YEAR (WY)

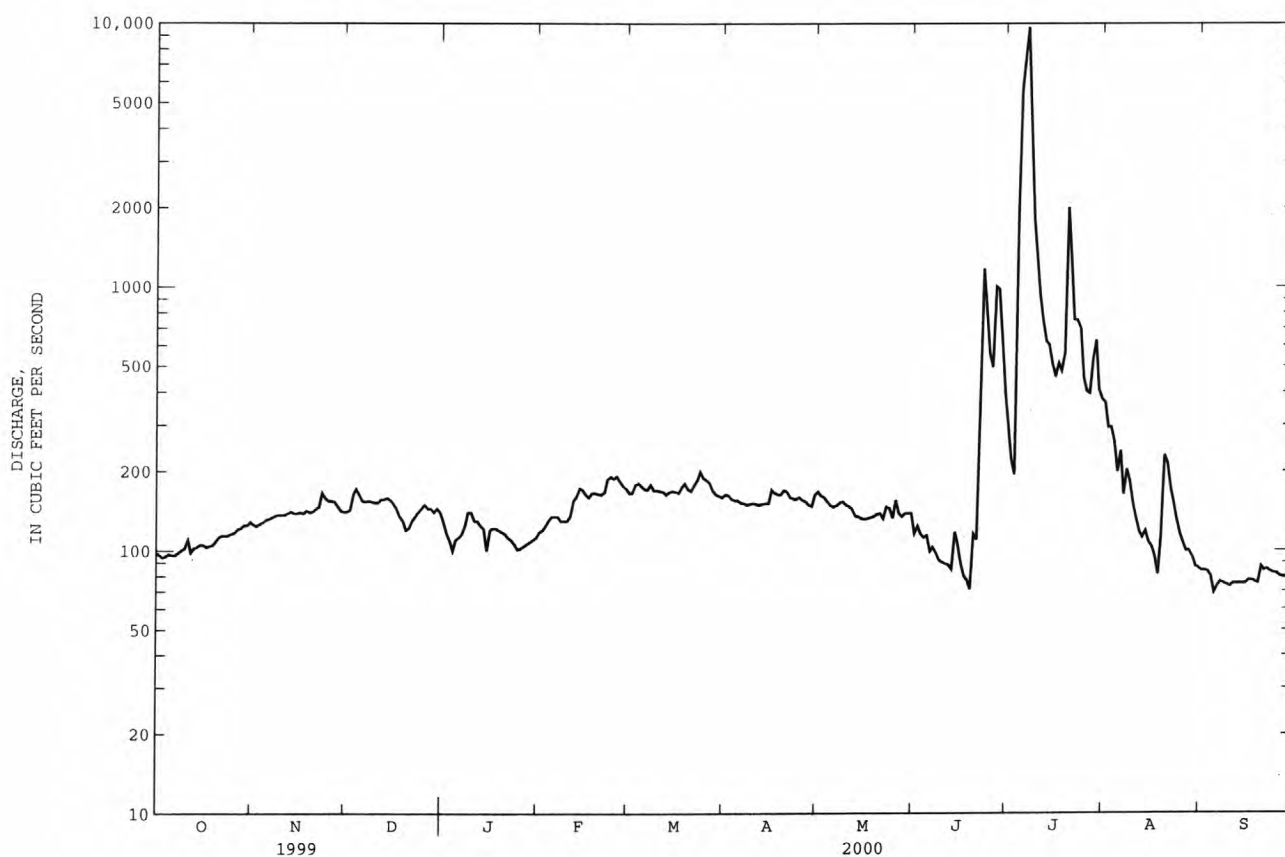
| | MEAN | 275 | 177 | 142 | 157 | 269 | 493 | 332 | 553 | 866 | 601 | 356 | 352 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
| MAX | 4406 | 886 | 282 | 594 | 1004 | 2821 | 2019 | 2419 | 4735 | 6413 | 2142 | 2189 | |
| (WY) | 1974 | 1997 | 1914 | 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

06884000 LITTLE BLUE RIVER NEAR FAIRBURY, NE--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1910 - 2000 | |
|--------------------------|------------------------|--------|---------------------|-------|-------------------------|-------------|
| ANNUAL TOTAL | 101392 | | 96566 | | 385 | |
| ANNUAL MEAN | 278 | | 264 | | 340 | |
| MEDIAN OF ANNUAL MEANS | | | | | 1239 | |
| HIGHEST ANNUAL MEAN | | | | | 107 | |
| LOWEST ANNUAL MEAN | | | | | 1993 | |
| HIGHEST DAILY MEAN | 5980 | May 21 | 9680 | Jul 7 | 36400 | Jul 26 1992 |
| LOWEST DAILY MEAN | 94 | Oct 3 | 69 | Sep 5 | 14 | Nov 22 1929 |
| ANNUAL SEVEN-DAY MINIMUM | 96 | Oct 1 | 74 | Sep 5 | 24 | Sep 14 1991 |
| INSTANTANEOUS PEAK FLOW | | | 10100 | Jul 7 | 54000 | Jul 25 1992 |
| INSTANTANEOUS PEAK STAGE | | | 16.21 | Jul 7 | 24.33 | Jul 25 1992 |
| ANNUAL RUNOFF (AC-FT) | 201100 | | 191500 | | 278700 | |
| 10 PERCENT EXCEEDS | 416 | | 369 | | 580 | |
| 50 PERCENT EXCEEDS | 177 | | 140 | | 160 | |
| 90 PERCENT EXCEEDS | 109 | | 87 | | 92 | |

e Estimated.



LOCATION.--Lat 39°58'48", long 097°00'16", NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.8, T.1 S., R.4 E., Washington County, Hydrologic Unit 10270207, on right bank 2 ft downstream from bridge on county road, 0.6 mi west of Hollenberg, 1.75 mi downstream from Nebraska-Kansas State line, and at mile 43.1.

PERIOD OF RECORD.--March 1973 to February 1974 (discharge measurements only), March 1974 to current year.

REMARKS.--Records good except for periods of estimated record, which are poor. Discharge measurements made prior to 1974 water year are published in table of miscellaneous sites in WDR NE-73.

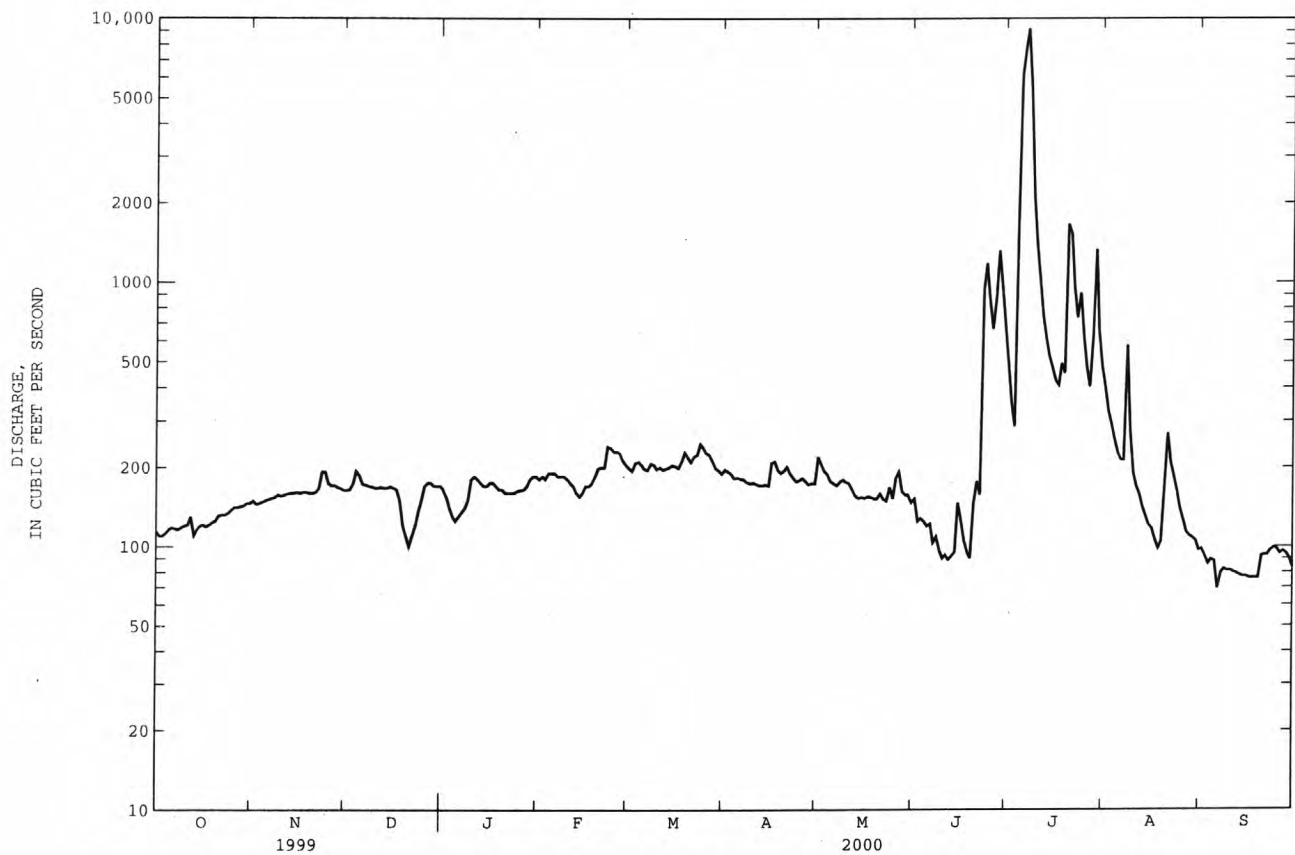
| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 322 | 255 | 188 | 181 | 343 | 801 | 570 | 775 | 941 | 1101 | 549 | 377 |
| MAX | 2163 | 1113 | 424 | 576 | 1059 | 3816 | 2379 | 2302 | 4373 | 9014 | 2572 | 1320 |
| (WY) | 1987 | 1997 | 1993 | 1984 | 1993 | 1993 | 1987 | 1995 | 1984 | 1993 | 1985 | 1977 |
| MIN | 45.3 | 81.1 | 102 | 98.5 | 115 | 118 | 125 | 108 | 151 | 111 | 72.5 | 32.0 |
| (WY) | 1992 | 1992 | 1977 | 1977 | 1992 | 1981 | 1981 | 1992 | 1981 | 1991 | 1991 | 1991 |

KANSAS RIVER BASIN

06884025 LITTLE BLUE RIVER AT HOLLENBERG, KS--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1975 - 2000 | |
|--------------------------|------------------------|---------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 138501 | | 109992 | | 535 | |
| ANNUAL MEAN | 379 | | 301 | | 450 | |
| MEDIAN OF ANNUAL MEANS | | | | | 1891 | 1993 |
| HIGHEST ANNUAL MEAN | | | | | 195 | 1991 |
| LOWEST ANNUAL MEAN | | | | | 39300 | Jul 26 1992 |
| HIGHEST DAILY MEAN | 5110 | May 21 | 9180 | Jul 7 | 26 | Oct 1 1991 |
| LOWEST DAILY MEAN | 100 | Dec 21 | 69 | Sep 6 | 27 | Sep 27 1991 |
| ANNUAL SEVEN-DAY MINIMUM | 109 | Sep. 14 | 77 | Sep 13 | 47800 | Jul 26 1992 |
| INSTANTANEOUS PEAK FLOW | | | 9790 | Jul 7 | 21.21 | Jul 26 1992 |
| INSTANTANEOUS PEAK STAGE | | | 11.44 | Jul 7 | 387600 | |
| ANNUAL RUNOFF (AC-FT) | 274700 | | 218200 | | 885 | |
| 10 PERCENT EXCEEDS | 599 | | 413 | | 211 | |
| 50 PERCENT EXCEEDS | 276 | | 170 | | 109 | |
| 90 PERCENT EXCEEDS | 120 | | 98 | | | |

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 2000

[mi², square mile; ft, foot; ft³/s, cubic feet per second; <, less than; --, no date available]

| Station number | Station name | Location | Drainage area (mi ²) | Period of record | Date | Annual maximum | |
|--------------------|--|---|----------------------------------|---|----------|------------------|---------------------------------|
| | | | | | | Gage height (ft) | Dis-charge (ft ³ /s) |
| Kansas 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 1997-2000 | 07-04-00 | 13.66 | 9,170 |
| 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 | 1961-2000 | -- | below-gage | <50 |
| 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 | 1961-2000 | -- | below gage | <10 |
| 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 a1954-61 b1962-77 a1978-89 1991-2000 | -- | below gage | <100 |
| 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, 1991-2000 | 07-04-00 | 6.3 | 320 |

* 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.

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 2000

[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 | | | | | | |
| Horse Creek (06677100) | North Platte River | Lat 41°55'12", long 104°02'40", in NW ¹ / ₄ SW ¹ / ₄ sec.34, T.23 N.,R.58 W., Scotts Bluff County, at State Spur Highway 79 bridge, at Lyman | -- | 1999 | 11-30-99 | 10 |
| Kiowa Creek (06677300) | Horse Creek | Lat 41°55'45", long 104°00'17", in NW ¹ / ₄ sec.36, T.23 N., R.58 N., Scotts Bluff County, near Union Pacific Railroad bridge, 2.2 mi northeast of Lyman | -- | 1962-65 | 11-30-99 | 19 |
| Horse Creek (06677500) | North Platte River | Lat 41°56'21", long 103°59'13", in SE ¹ / ₄ NE ¹ / ₄ sec.25, T.23 N.,R.58 W., Scotts Bluff County, at county road bridge, 3.2 mi northeast of Lyman | 1,707 | **1931-94, 1999 | 11-30-99 | 31 |
| Sheep Creek (06677995) | North Platte River | Lat 41°58'14", long 103°57'14", in SE ¹ / ₄ SE ¹ / ₂ sec.8, T.23 N., R.57 W., Scotts Bluff County, at county road bridge, 1.5 mi northwest of Morrill | -- | 1996-99 | 11-30-99 | 67 |
| North Platte (06678500) | Platte River | Lat 41°56'12", long 103°55'44", in SW ¹ / ₄ NW ¹ / ₄ sec.25, T.27 N.,R.57 W., Scotts Bluff County, at highway bridge, 2 mi south of Morrill | 24,100 | 1917-23 1996-99 | 11-30-99 | 434 |
| Pumpkin Creek (06684700) | North Platte River | Lat 41°38'29", long 103°40'44", in SW ¹ / ₄ SW ¹ / ₄ sec.4, T.19 N., R.55 W., Banner County, at Nebr. Highway 71 bridge, 7 mi northeast of Harrisburg | -- | -- | 05-03-00 07-19-00 | 0.09 0.12 |
| Pumpkin Creek (06684750) | North Platte River | Lat 41°38'56", long 103°35'23", in NW ¹ / ₄ SE ¹ / ₄ sec.6, T.19 N., R.54 W., Banner County, at Hoehn Farms, 10 mi northeast of Harrisburg | -- | -- | 05-03-00 | 0.21 |
| Unnamed spring (06684920) | Chalk Creek | Lat 41°31'11", long 103°22'07", in SE ¹ / ₄ NE ¹ / ₄ sec.24, T.18 N., R.53 W., Banner County, at Schuler Ranch, 6 mi southwest of Redington | -- | -- | 05-03-00 07-19-00 08-23-00 | 0.17 0.18 0.15 |
| Unnamed spring (06684930) | Pumpkin Creek | Lat 41°37'43", long 103°22'12", in SE ¹ / ₄ SE ¹ / ₄ sec.12, T.19 N., R.53 W., Banner County, at Olsen Ranch, 7 mi northwest of Redington | -- | -- | 05-03-00 07-19-00 | <0.01 0.62 |
| Pumpkin Creek (06684940) | North Platte River | Lat 41°35'54", long 103°16'19", in NW ¹ / ₄ NW ¹ / ₄ sec.25, T.19 N., R.52 W., Morrill County, at county road 1 mi north of Redington | -- | -- | 05-03-00 | 0.52 |
| Lawrence Fork (06684950) | Pumpkin Creek | Lat 41°32'27", long 103°17'05", in SE ¹ / ₄ SW ¹ / ₄ sec.11, T.18 N., R.52 W., Morrill County, at county road 3 mi southwest of Redington | -- | -- | 05-04-00 07-19-00 08-23-00 | 3.0 2.1 2.0 |

DISCHARGE AT PARTIAL RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 2000--Continued

[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) |
| Pumpkin Creek (06684970) | North Platte River | Lat 41°35'13", long 103°05'59", in NE ¹ / ₄ SE ¹ / ₄ sec.29, T.19 N., R.50 W., Morrill County, at Nebr. Highway 88, 5.5 mi south of Bridgeport | -- | -- | 05-04-00 | 4.6 |
| | | | | | 07-19-00 | 0.90 |
| | | | | | 08-23-00 | 0.38 |
| Middle Loup Canal No. 4 (06778450) | Middle Loup River | Lat 41°17'07", long 098°57'59", in SW ¹ / ₄ SW ¹ / ₄ sec.31, T.18 N., R.16 W., Custer County, near Comstock | -- | -- | 07-20-00 | 34 |
| Middle Loup River (06779500) | Loup River | Lat 41°16'40", long 098°59'50", in NE ¹ / ₄ sec.14, T.15 N., R.15 W., Sherman County, downstream from Nebr. Highway 92 bridge, 1 mi west of Loup City | -- | 1936-38, 1949-56 | 03-30-00 | 1,180 |
| | | | | | 07-17-00 | 188 |
| *Dane Creek (06788495) | North Loup River | Lat 41°36'31", long 98°56'36", in 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 1977-99 | 11-02-99 | 0.91 |
| | | | | | 05-01-00 | 2.2 |
| *Mira Creek (06788990) | North Loup River | Lat 41°29'54", long 98°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 | -- | 1977-99 | 11-02-99 | 1.7 |
| | | | | | 05-01-00 | 5.4 |
| Salt Creek | Platte River | Lat 40°50'19", long 96°41'23", in NW ¹ / ₄ NE ¹ / ₄ sec.13, T.10 N., R.6 E., Lancaster County, upstream of Theresa Street Sewage Plant at Lincoln | -- | -- | 04-12-00 | 58 |

* Also published with additional data elsewhere in this report.

** Operated as a continuous-record gaging station.

Low-Flow Investigations

Platte River Basin

Discharge measurements were made during water year 2000 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) | |
|---|--------------------------------------|----------|
| | 03-30-00 | 09-01-00 |
| Wahoo Creek at SW corner of NOP NW ¹ / ₄ NW ¹ / ₄ sec. 2, T. 13 N., R. 8 E. | 60.1 | 30.6 |
| Wahoo Cr below confluence with Silver Creek NE ¹ / ₄ NW ¹ / ₄ sec. 20, T. 13 N., R. 9 E. | 82.5 | 48.7 |
| Wahoo Creek at Ashland (Gage site 06804700) SE ¹ / ₄ NE ¹ / ₄ sec. 35, T. 13 N., R. 9 E. | 86.9 | 49.3 |
| Silver Creek near Ithaca SW ¹ / ₄ NW ¹ / ₄ sec. 35, T. 14 N., R. 8 E. | 11.1 | 6.13 |
| Silver Creek near Ashland NW ¹ / ₄ NE ¹ / ₄ sec. 35, T. 13 N., R. 9 E. | 1.38 | .12 |
| Johnson Creek north of NOP SW ¹ / ₄ SW ¹ / ₄ sec. 5, T. 14 N., R. 9 E. | .38 | .06 |
| Johnson Creek below dam outlet SW ¹ / ₄ SE ¹ / ₄ sec. 16, T. 14 N., R. 9 E. | Trace | .02 |
| 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. | 1.65 | 2.00 |
| Clear Creek near Memphis NW ¹ / ₄ NW ¹ / ₄ sec. 14, T. 13 N., R. 9 E. | 16.2 | 8.13 |
| Clear Creek near Ashland NE ¹ / ₄ NE ¹ / ₄ sec. 35, T. 13 N., R. 9 E. | 16.8 | 10.7 |

Kansas River Basin

Low-flow investigations made in the Big Blue and Little Blue River Basins in Nebraska during water year 2000 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 12, 1999 | |
| Big Blue River 1.5 miles north of DeWitt in SW ¹ / ₄ NE ¹ / ₄ sec. 12, T.5 N., R.4 E. | 211 |
| Clatonia Creek 1 mile northeast of DeWitt in NW ¹ / ₄ NW ¹ / ₄ sec. 17, T.5 N., R.5 E. | 1.11 |
| Turkey Creek 1.5 miles west of DeWitt in SE ¹ / ₄ NW ¹ / ₄ sec. 15, T.5 N., R.4 E. | 31.2 |
| Turkey Creek 0.5 miles south of DeWitt in SE ¹ / ₄ NW ¹ / ₄ sec. 24, T.5 N., R.4 E. | 32.0 |
| Turkey Creek 1.5 miles southeast of DeWitt in NW ¹ / ₄ SW ¹ / ₄ sec. 29, T.5 N., R.5 E. | 35.4 |
| Big Blue River 2.5 miles southeast of DeWitt in NW ¹ / ₄ NE ¹ / ₄ sec. 33, T.5 N., R.5 E. | 240 |
| Soap Creek 3.5 miles southeast of DeWitt in SE ¹ / ₄ SW ¹ / ₄ sec. 27, T.5 N., R.5 E. | .27 |
| 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. | 259 |
| Cub Creek 2 miles south of Hoag in SW ¹ / ₄ SW ¹ / ₄ sec. 24, T.4 N., R.5 E. | 1.30 |
| Bottle Creek 1.5 miles northwest of Beatrice in NW ¹ / ₄ SW ¹ / ₄ sec. 30, T.4 N., R.6 E. | .08 |
| 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. | 1.79 |
| Big Blue River at Beatrice in SW ¹ / ₄ NW ¹ / ₄ sec. 3, T.3 N., R.6 E. (Gage) | 270 |
| Little Blue River Basin | |
| October 7, 1999 | |
| Little Blue River 2.7 miles south of Alexandria in SE ¹ / ₄ SE ¹ / ₄ sec. 23, T.3 N., R.1 W. | 70.8 |
| Big Sandy Creek 0.8 miles south of Alexandria in SE ¹ / ₄ SE ¹ / ₄ sec. 11, T.3 N., R.1 W. | 21.5 |
| Big Sandy Creek 1.2 miles west of Powell in SE ¹ / ₄ SE ¹ / ₄ sec. 16, T.3 N., R.1 E. | 27.0 |
| Little Blue River 1.2 miles southwest of Powell in SE ¹ / ₄ SE ¹ / ₄ sec. 22, T.3 N., R.1 E. | 94.4 |
| Little Sandy Creek 2.0 miles east of Powell in NW ¹ / ₄ NE ¹ / ₄ sec. 19, T.3 N., R.2 E. | 1.57 |
| Whiskey Creek 2.1 miles northwest of Fairbury in SW ¹ / ₄ SE ¹ / ₄ sec. 33, T.3 N., R.2 E. | .19 |
| Little Blue River 1.3 miles northwest of Fairbury in NW ¹ / ₄ NE ¹ / ₄ sec. 9, T.2 N., R.2 E. | 94.4 |
| Trib. 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) | 96.0 |
| Brawner Creek 0.4 miles southeast of Fairbury in SE ¹ / ₄ NE ¹ / ₄ sec. 23, T.2 N., R.2 E. | .01 |
| Rose Creek 4.0 miles southwest of Endicott in NW ¹ / ₄ NW ¹ / ₄ sec. 12, T.1 N., R.2 E. | 8.96 |
| Smith Creek 0.2 miles northwest of Endicott in NW ¹ / ₄ SE ¹ / ₄ sec. 5, T.1 N., R.3 E. | .24 |
| Little Blue River 0.3 miles south of Endicott in SE ¹ / ₄ SW ¹ / ₄ sec. 4, T.1 N., R.3 E. | 112 |
| Rock Creek 0.3 miles southeast of Endicott in SE ¹ / ₄ SE ¹ / ₄ sec. 4, T.1 N., R.3 E. | .23 |
| Coon Creek 2.6 miles northwest of Steele City in NW ¹ / ₄ NE ¹ / ₄ sec. 15, T.1 N., R.3 E. | .18 |
| Little Blue River 0.5 miles south of Steele City in NW ¹ / ₄ NE ¹ / ₄ sec. 30, T.1 N., R.4 E. | 124 |
| 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) | 117 |

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | STATION | NUMBER | LOCAL IDENT- I- FIER | LAT- I- TUDE | LONG- I- TUDE | HYDRO- LOGIC UNIT CODE | DATE | TIME | DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061) | | |
|--|--|--|--|--|--|--|--|--|--|--|---|
| 06788495 DANE C AT ORD, NEBR. (LAT 41 36 31N LONG 098 56 36W) | | | | | | | | | | | |
| NOV 1999 02... MAY 2000 01... | 06788495 | DANE C AT ORD, NEBR. | | 41 36 31 N | 098 56 36 W | 10210007 | 991102 | 0900 | .91 | | |
| 01... | 06788495 | DANE C AT ORD, NEBR. | | 41 36 31 N | 098 56 36 W | 10210007 | 000501 | 0750 | 2.2 | | |
| 06788990 MIRA C AT NORTH LOUP, NEBR. (LAT 41 29 54N LONG 098 46 46W) | | | | | | | | | | | |
| NOV 1999 02... MAY 2000 01... | 06788990 | MIRA C AT NORTH LOUP, NEBR | | 41 29 54 N | 098 46 46 W | 10210007 | 991102 | 1045 | 1.7 | | |
| 01... | 06788990 | MIRA C AT NORTH LOUP, NEBR | | 41 29 54 N | 098 46 46 W | 10210007 | 000501 | 1020 | 5.4 | | |
| DATE | 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) | 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) |
| 06788495 DANE C AT ORD, NEBR. (LAT 41 36 31N LONG 098 56 36W) | | | | | | | | | | | |
| NOV 1999 02... MAY 2000 01... | .87 1.00 | 1.57 4.36 | 637 735 | 7.9 7.9 | 964 1110 | 5.0 10.0 | 4.5 11.0 | 440 500 | 131 146 | 27.9 33.9 | 21.7 30.0 |
| 06788990 MIRA C AT NORTH LOUP, NEBR. (LAT 41 29 54N LONG 098 46 46W) | | | | | | | | | | | |
| NOV 1999 02... MAY 2000 01... | .71 .71 | 2.33 7.53 | 520 520 | 8.1 8.1 | 805 822 | 9.5 16.0 | 3.5 17.5 | 370 360 | 106 98.7 | 25.2 27.5 | 14.9 20.6 |
| DATE | SODIUM AD- SORP- TION RATIO (00931) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) | ANC UNFLTRD TIT 4.5 LAB (MG/L AS PERCENT (00932) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | SILICA, DIS- SOLVED (MG/L AS SIO2) (00955) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | 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) | |
| 06788495 DANE C AT ORD, NEBR. (LAT 41 36 31N LONG 098 56 36W) | | | | | | | | | | | |
| NOV 1999 02... MAY 2000 01... | .6 .6 | 27.3 32.1 | 11 11 | 364 359 | 15.1 15.8 | .2 .2 | 42.8 31.0 | 134 219 | .161 2.33 | .21 3.00 | 3.61 1.12 |
| 06788990 MIRA C AT NORTH LOUP, NEBR. (LAT 41 29 54N LONG 098 46 46W) | | | | | | | | | | | |
| NOV 1999 02... MAY 2000 01... | .6 .8 | 28.1 33.2 | 14 16 | 392 344 | 11.0 14.4 | .2 .3 | 44.6 22.0 | 50.2 93.7 | .082 .329 | .11 .42 | .498 .189 |
| DATE | NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613) | PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660) | PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671) | CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405) | BORON, DIS- SOLVED (UG/L AS B) (01020) | IRON, DIS- SOLVED (UG/L AS FE) (01046) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056) |
| 06788495 DANE C AT ORD, NEBR. (LAT 41 36 31N LONG 098 56 36W) | | | | | | | | | | | |
| NOV 1999 02... MAY 2000 01... | 16.0 4.96 | 3.68 1.22 | .240 .322 | .073 .098 | 1.03 2.77 | .342 .980 | .336 .902 | 8.8 8.7 | 81 86 | 30 20 | 223 1070 |
| 06788990 MIRA C AT NORTH LOUP, NEBR. (LAT 41 29 54N LONG 098 46 46W) | | | | | | | | | | | |
| NOV 1999 02... MAY 2000 01... | 2.20 .837 | .508 .206 | .033 .056 | .010 .017 | 1.17 .957 | .389 .351 | .382 .312 | 6.0 5.3 | 101 87 | E10 <10 | 728 1050 |

CHEMICAL ANALYSES OF SURFACE WATER

NIOBRARA RIVER SURFACE-WATER QUALITY

(Local identifier: indicates location by township, range, and section)

COUNTIES.--Brown, Cherry, and Keya Paha Counties

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| STATION NUMBER | LOCAL IDENTIFIER | LATITUDE | LONGITUDE | DATE | TIME |
|-------------------|---|--|-------------|----------|------|
| 06460800 | NIOBRARA RIVER AT BORMAN BRIDGE | CHERRY COUNTY 42 51 08 N | 100 31 16 W | 05-31-00 | 0800 |
| | | | | 06-14-00 | 0830 |
| | | | | 07-05-00 | 1630 |
| | | | | 07-17-00 | 1630 |
| | | | | 08-01-00 | 1520 |
| | | | | 08-14-00 | 1440 |
| | | | | 09-06-00 | 1450 |
| | | | | 09-19-00 | 1550 |
| | | | | | |
| | | | | | |
| 06461499 | NIOBRARA RIVER UPSTREAM OF BERRY BRIDGE | 42 54 10 N | 100 21 42 W | 05-31-00 | 1030 |
| | | | | 07-06-00 | 0720 |
| | | | | 07-18-00 | 0710 |
| | | | | 08-02-00 | 0710 |
| | | | | 08-15-00 | 0720 |
| | | | | 09-07-00 | 0730 |
| | | | | 09-20-00 | 0800 |
| 06461500 | NIOBRARA RIVER NEAR SPARKS | 42 54 10 N | 100 21 40 W | 05-31-00 | 1100 |
| | | | | 06-14-00 | 1130 |
| | | | | 07-06-00 | 0820 |
| | | | | 07-18-00 | 0740 |
| | | | | 08-02-00 | 0820 |
| | | | | 08-15-00 | 0820 |
| | | | | 09-07-00 | 0810 |
| 06461600 | NIOBRARA RIVER AT BREWER BRIDGE | 42 52 34 N | 100 15 59 W | 05-31-00 | 1330 |
| | | | | 06-14-00 | 1430 |
| | | | | 07-06-00 | 0940 |
| | | | | 07-18-00 | 0900 |
| | | | | 08-02-00 | 0950 |
| | | | | 08-15-00 | 1030 |
| | | | | 09-06-00 | 1230 |
| 06462000 | NIOBRARA RIVER NR NORDEN | BROWN/KEYA PAHA COUNTIES 42 47 13 N | 100 02 06 W | 05-31-00 | 1540 |
| | | | | 06-14-00 | 1630 |
| | | | | 07-05-00 | 1400 |
| | | | | 07-17-00 | 1410 |
| | | | | 08-01-00 | 1310 |
| | | | | 08-14-00 | 1230 |
| | | | | 09-06-00 | 1040 |
| | | | | 09-19-00 | 1240 |

CHEMICAL ANALYSES OF SURFACE WATER
 NIOBRARA RIVER SURFACE-WATER QUALITY--Continued
 WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | DRAIN- AGE AREA (SQ. MI.) (81024) | ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000) | BARO- METRIC PRES- SURE (MM OF HG) (00025) | OXYGEN, DIS- SOLVED OXYGEN, OF (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) | COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625) |
|--------------------------|--|---|---|---|---|--|--|---|---|
| CHERRY COUNTY | | | | | | | | | |
| 05-31-00 | -- | -- | 691 | 8.7 | -- | 8.3 | 254 | -- | 190 |
| 06-14-00 | -- | -- | -- | -- | -- | -- | -- | -- | 150 |
| 07-05-00 | -- | -- | 691 | 9.3 | -- | 8.9 | 232 | -- | K26 |
| 07-17-00 | -- | -- | -- | 8.3 | -- | 8.5 | 222 | 26.0 | K23 |
| 08-01-00 | -- | -- | 693 | 9.0 | 124 | 8.9 | 215 | 26.5 | K35 |
| 08-14-00 | -- | -- | 690 | 8.4 | 123 | 8.8 | 221 | 30.0 | K20 |
| 09-06-00 | -- | -- | 689 | 8.1 | 112 | 8.6 | 220 | 26.5 | 100 |
| 09-19-00 | -- | -- | 686 | 8.8 | 105 | 8.7 | 214 | 18.5 | K48 |
| 05-31-00 | -- | -- | 694 | 9.4 | -- | 8.3 | 262 | -- | 160 |
| 07-06-00 | -- | -- | 693 | 7.3 | -- | 8.3 | 236 | -- | 90 |
| 07-18-00 | -- | -- | -- | 7.7 | -- | 8.4 | 230 | 21.5 | K44 |
| 08-02-00 | -- | -- | 695 | 7.1 | 88 | 8.7 | 226 | 21.0 | 100 |
| 08-15-00 | -- | -- | 700 | 7.2 | 91 | 8.6 | 226 | 22.5 | 83 |
| 09-07-00 | -- | -- | 699 | 8.0 | 90 | 8.7 | 224 | 17.0 | 110 |
| 09-20-00 | -- | -- | 694 | 9.4 | 98 | 8.7 | 224 | 13.0 | K49 |
| 05-31-00 | 7150 | 2288 | 695 | 9.4 | -- | 8.3 | 259 | -- | 180 |
| 06-14-00 | 7150 | 2288 | -- | -- | -- | 8.2 | 239 | -- | 90 |
| 07-06-00 | 7150 | 2288 | 694 | 7.7 | -- | 8.5 | 247 | -- | 93 |
| 07-18-00 | 7150 | 2288 | -- | 7.6 | -- | 8.4 | 229 | 21.5 | 77 |
| 08-02-00 | 7150 | 2288 | 696 | 7.6 | 94 | 8.6 | 228 | 21.0 | 93 |
| 08-15-00 | 7150 | 2288 | 700 | 7.7 | 97 | 8.6 | 226 | 22.5 | 97 |
| 09-07-00 | 7150 | 2288 | 700 | 8.2 | 94 | 8.5 | 222 | 17.5 | 90 |
| 09-20-00 | 7150 | 2288 | 695 | 9.6 | 100 | 8.6 | 218 | 13.0 | K42 |
| 05-31-00 | -- | -- | 696 | 9.3 | -- | 8.3 | 260 | -- | K170 |
| 06-14-00 | -- | -- | -- | -- | -- | 8.3 | 236 | -- | 67 |
| 07-06-00 | -- | -- | 695 | 8.1 | -- | 8.8 | 252 | -- | 97 |
| 07-18-00 | -- | -- | -- | 7.2 | -- | 8.4 | 229 | 22.0 | K56 |
| 08-02-00 | -- | -- | 697 | 8.3 | 105 | 8.7 | 226 | 22.5 | 77 |
| 08-15-00 | -- | -- | 703 | 8.8 | 112 | 8.7 | 222 | 23.0 | 83 |
| 09-06-00 | -- | -- | 694 | 10.8 | 141 | 8.8 | 220 | 24.0 | K23 |
| 09-19-00 | -- | -- | 691 | 10.3 | 122 | 8.7 | 219 | 18.5 | K45 |
| BROWN/KEYA PAHA COUNTIES | | | | | | | | | |
| 05-31-00 | 8390 | 2109 | 699 | 9.4 | -- | 8.3 | 260 | -- | 200 |
| 06-14-00 | 8390 | 2109 | -- | -- | -- | 8.3 | 254 | -- | 54 |
| 07-05-00 | 8390 | 2109 | 699 | 8.5 | -- | 8.3 | 238 | -- | 460 |
| 07-17-00 | 8390 | 2109 | -- | 8.7 | -- | 8.3 | 228 | 24.0 | K16 |
| 08-01-00 | 8390 | 2109 | 701 | 8.2 | 112 | 8.8 | 226 | 27.0 | K84 |
| 08-14-00 | 8390 | 2109 | 697 | 7.9 | 114 | 9.0 | 221 | 29.5 | K30 |
| 09-06-00 | 8390 | 2109 | 698 | 8.9 | 114 | 8.6 | 228 | 23.0 | K22 |
| 09-19-00 | 8390 | 2109 | 695 | 9.3 | 110 | 8.7 | 226 | 19.0 | K68 |

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 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 12 | 111.06 | JAN 06 | 110.18 | MAR 09 | 109.67 | MAY 08 | 109.21 | JUL 12 | 113.44 | SEP 06 | 111.96 |
| DEC 08 | 110.23 | FEB 01 | 109.89 | APR 11 | 109.56 | JUN 07 | 109.45 | AUG 08 | 114.05 | | |
| WATER YEAR 2000 | | HIGHEST | 109.21 | MAY 08, 2000 | | LOWEST | 114.05 | AUG 08, 2000 | | | |

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 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL |
|--------|-------------|
| APR 26 | 4.20 |

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 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL |
|--------|-------------|
| MAY 04 | 11.53 |

GROUND-WATER LEVELS

BOX BUTTE COUNTY

420945102551501. Local number 25N 48W 4DDD.

LOCATION.--Lat 42°09'45", long 102°55'15", SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.4, T.25 N., R.48 W., Hydrologic Unit 10150003, approximately 3.6 mi south and 2.8 mi east of Berea. Owner: U.S. Geological Survey.

AQUIFER.--Marsland Formation of Miocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1.25 in., depth 204 ft, screened 190 to 193 ft.

DATUM.--Altitude of land-surface datum is 4,032.95 ft. Measuring point: Top of pipe 3.00 ft above land-surface datum.

REMARKS.--Water levels in vicinity of well are affected by large withdrawals of ground water for irrigation use. Casing was broken off below the land surface during the summer of 1986. Well was cleaned and repaired during the spring of 1988.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 63.14 ft below land-surface datum, Jan. 25, 1950; lowest, 111.57 ft below land-surface datum, Oct. 25, 2000.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|----------------|--------|----------------|
| OCT 25 | 111.57 | APR 05 | 109.70 |
| WATER YEAR 2000 | HIGHEST | 109.70 | APR 05, 2000 |
| | LOWEST | 111.57 | OCT 25, 1999 |

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, 19.84 ft, Aug. 31, Sept. 1; minimum daily water-level depth below land surface, 14.18 ft, May 17.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 5 | 14.75 | 14.73 | 14.72 | 14.73 | 14.78 | 14.53 | 14.42 | 14.33 | 14.47 | 16.44 | 18.22 | 19.72 |
| 10 | 14.80 | 14.69 | 14.70 | 14.67 | 14.69 | 14.68 | 14.49 | 14.29 | 14.30 | 17.86 | 18.82 | 19.66 |
| 15 | 14.69 | 14.75 | 14.70 | 14.73 | 14.72 | 14.65 | 14.43 | 14.37 | 14.48 | 17.72 | 18.97 | 19.70 |
| 20 | 14.73 | 14.70 | 14.77 | 14.76 | 14.73 | 14.59 | 14.51 | 14.35 | 15.45 | 18.02 | 19.31 | 19.60 |
| 25 | 14.68 | 14.74 | 14.76 | 14.81 | 14.46 | 14.59 | 14.47 | 14.38 | 15.11 | 18.26 | 19.46 | 19.55 |
| EOM | 14.74 | 14.78 | 14.67 | 14.71 | 14.65 | 14.58 | 14.40 | 14.41 | 15.82 | 17.74 | 19.84 | 19.42 |

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 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL |
|--------|----------------|
| APR 21 | 22.67 |

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 current year.

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, 204.48 ft, Aug. 19; minimum water-level depth below land surface, 162.79 ft, May 11, 12, 13, 14.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 5 | 175.87 | 170.78 | 167.77 | 165.68 | 164.42 | 163.53 | 163.16 | 162.80 | 163.25 | 172.30 | 191.67 | 169.00 |
| 10 | 174.88 | 170.18 | 167.36 | 165.49 | 164.32 | 163.46 | 163.14 | 162.80 | 163.53 | 174.59 | 196.18 | 169.70 |
| 15 | 173.98 | 169.58 | 167.05 | 165.20 | 164.13 | 163.39 | 163.03 | 162.89 | 164.22 | 177.28 | 200.88 | 170.21 |
| 20 | 173.08 | 169.08 | 166.64 | 165.00 | 164.03 | 163.42 | 163.02 | 162.98 | 165.63 | 180.57 | 165.19 | 170.51 |
| 25 | 172.28 | 168.68 | 166.33 | 164.81 | 163.90 | 163.35 | 162.92 | 163.07 | 167.83 | 183.66 | 166.49 | 170.62 |
| EOM | 171.38 | 168.18 | 166.00 | 164.61 | 163.72 | 163.18 | 162.91 | 163.16 | 170.04 | 187.97 | 168.10 | 170.51 |

CHASE COUNTY

403220101384001. Local number 7N 38W 28CC.

LOCATION.--Lat 40°32'20", long 101°38'40", SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.28, T.7 N., R.38 W., Hydrologic Unit 10250005, about 0.5 mi north of Imperial. Owner: Roy Hust.

AQUIFER.--Ogallala Formation of Pliocene age.

WELL CHARACTERISTICS.--Drilled unused observation water-table well, diameter 18 in., depth 143 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 3,284.6 ft. Measuring point: Top of casing 0.30 ft above land-surface datum.

REMARKS.--Recording gage was installed on this well from December 1948 to December 1963. Water levels in well are affected by irrigation pumpage in area.

PERIOD OF RECORD.--December 1944; December 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 72.82 ft below land-surface datum, June 29, 1964; lowest measured, 110.26 ft below land-surface datum, Oct. 15, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE WATER
LEVEL
MAY 24 107.98

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, 100.33 ft, Aug. 29; minimum water-level depth below land surface, 93.99 ft, Apr. 12, 13.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
| 5 | 96.49 | 96.27 | 96.00 | 95.31 | 94.97 | 94.53 | 94.12 | 95.24 | 95.00 | 98.00 | 99.34 | 98.98 |
| 10 | 96.54 | 96.18 | 95.77 | 95.29 | 94.85 | 94.63 | 94.14 | 94.26 | 95.52 | 98.65 | 99.94 | 98.95 |
| 15 | 96.43 | 96.13 | 95.76 | 95.16 | 94.86 | 94.49 | 94.09 | 94.31 | 96.46 | 98.94 | 100.19 | 98.94 |
| 20 | 96.36 | 96.12 | 95.67 | 95.15 | 94.82 | 94.38 | 94.96 | 94.68 | 96.97 | 98.95 | 99.33 | 98.86 |
| 25 | 96.30 | 96.02 | 95.56 | 95.13 | 94.62 | 94.37 | 94.38 | 94.94 | 97.63 | 99.30 | 99.44 | 98.85 |
| EOM | 96.35 | 95.95 | 95.44 | 94.99 | 94.66 | 94.36 | 94.46 | 94.89 | 96.68 | 99.27 | 99.05 | 98.60 |

GROUND-WATER LEVELS

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 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL |
|--------|----------------|
| MAY 03 | .95 |

COLFAX COUNTY

412810097054501. Local number 17N 3E 4CC.

LOCATION.--Lat 41°28'10", long 97°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 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|----------------|--------|----------------|
| OCT 18 | 6.68 | MAR 29 | 6.23 |
| WATER YEAR 2000 | HIGHEST | 6.23 | MAR 29, 2000 |
| | | LOWEST | 6.68 |
| | | | OCT 18, 1999 |

DAWES COUNTY

424100103243501. Local number 31N 52W 3DC.

LOCATION.--Lat 42°41'00", long 103°24'35", SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.3, T.31 N., R.52 W., Hydrologic Unit 10140201, behind house at 312 Annin Street in Crawford. Owner: T. P. Moody.

AQUIFER.--Sand and gravel deposits, undifferentiated, of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in., depth 39 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 3,685 ft. Measuring point: Edge of iron plate at land-surface datum.

PERIOD OF RECORD.--August 1934 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.87 ft below land-surface datum, May 30, 1948; lowest, 22.60 ft below land-surface datum, Nov. 5, 1989.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|----------------|--------|----------------|
| OCT 18 | 19.93 | MAR 29 | 19.60 |
| WATER YEAR 2000 | HIGHEST | 19.60 | MAR 29, 2000 |
| | | LOWEST | 19.93 |
| | | | OCT 18, 1999 |

GROUND-WATER LEVELS

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, 14.04 ft, June 26; minimum daily water-level depth below land surface, 9.20 ft, Oct. 1.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 5 | 9.30 | 10.16 | --- | --- | 11.32 | 11.53 | 11.72 | 11.89 | 10.72 | 10.97 | 10.63 | 9.61 |
| 10 | 9.52 | 10.31 | --- | --- | 11.39 | 11.59 | 11.74 | 11.88 | 10.73 | 12.02 | 11.63 | 9.88 |
| 15 | 9.68 | 10.38 | --- | 11.16 | 11.42 | 11.61 | 11.82 | 11.95 | 10.74 | 12.84 | 12.11 | 10.17 |
| 20 | 9.75 | --- | --- | 11.18 | 11.46 | 11.62 | 11.84 | 11.87 | 10.96 | 11.66 | 10.75 | 10.44 |
| 25 | 9.92 | --- | --- | 11.25 | 11.49 | 11.63 | 11.85 | 11.62 | 13.91 | 11.66 | 9.93 | 10.52 |
| EOM | 10.05 | --- | --- | 11.29 | 11.52 | 11.67 | 11.88 | 10.95 | 12.35 | 10.53 | 9.37 | 10.66 |

DUNDY COUNTY

400155101521302. Local number 1N 40W 29BB2.

LOCATION.--Lat 40°01'55", long 101°52'13", NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.29, T.1 N., R.40 W., Hydrologic Unit 10250002, 3.5 mi east of Haigler on U.S. Highway 34 and 0.5 mi north. Well is within 0.5 mi of Republican River. 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, 29.52 ft below land-surface datum, Aug. 22, 2000.

EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 29.52 ft, Aug. 22; minimum water-level depth below land surface, 18.08 ft, Apr. 22.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 5 | 24.90 | 19.95 | 19.55 | 19.08 | 18.74 | 18.46 | 18.25 | 18.27 | 21.45 | 27.74 | 26.77 | 22.88 |
| 10 | 20.52 | 19.81 | 19.44 | 19.03 | 18.70 | 18.47 | 18.24 | 23.27 | 26.62 | 22.90 | 27.27 | 22.55 |
| 15 | 20.10 | 21.16 | 19.38 | 18.96 | 18.67 | 18.44 | 18.19 | 20.38 | 25.86 | 24.88 | 28.78 | 24.01 |
| 20 | 24.12 | 20.07 | 19.30 | 18.94 | 18.61 | 18.41 | 18.19 | 23.73 | 27.50 | 27.46 | 29.26 | 27.89 |
| 25 | 21.51 | 19.79 | 19.23 | 18.89 | 18.56 | 18.36 | 18.15 | 24.72 | 21.75 | 27.25 | 23.61 | 22.61 |
| EOM | 20.25 | 19.65 | 19.14 | 18.80 | 18.54 | 18.32 | 18.54 | 24.81 | 26.73 | 26.79 | 23.09 | 22.14 |

GROUND-WATER LEVELS

FILLMORE COUNTY

402504097432201. Local number 5N 4W 12BDC.

LOCATION.--Lat 40°25'04", long 097°43'22", SW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.12, T. 5 N., R. 4 W., Hydrologic Unit 10270206, one-half block south of fire station on principal north-south street in Shickley. 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 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 07 | 93.49 | JAN 05 | 91.91 | MAR 01 | 91.35 | MAY 10 | 90.65 | JUL 11 | 93.27 | AUG 30 | 95.59 |
| DEC 08 | 92.67 | FEB 01 | 91.88 | MAY 02 | 90.43 | JUN 06 | 91.01 | AUG 07 | 94.84 | | |
| WATER YEAR 2000 | | HIGHEST | 90.43 | MAY 02, 2000 | | LOWEST | 95.59 | AUG 30, 2000 | | | |

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 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 07 | 8.57 | JAN 05 | 9.00 | MAR 09 | 9.09 | MAY 02 | 9.26 | JUL 11 | 7.85 | SEP 06 | 10.04 |
| DEC 02 | 8.78 | FEB 03 | 9.14 | APR 10 | 9.14 | JUN 07 | 9.54 | AUG 07 | 8.00 | | |
| WATER YEAR 2000 | | HIGHEST | 7.85 | JUL 11, 2000 | | LOWEST | 10.04 | SEP 06, 2000 | | | |

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 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|--------------|--------------|
| OCT 04 | 22.78 | MAY 03 | 24.67 |
| WATER YEAR 2000 | | HIGHEST | 22.78 |
| | | OCT 04, 1999 | LOWEST |
| | | 24.67 | MAY 03, 2000 |

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 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL |
|--------|----------------|
| MAY 10 | 30.92 |

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, 15.05 ft, Sept. 25, 28; minimum daily water-level depth below land surface, 11.85 ft, Oct. 7.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 5 | 11.88 | 11.96 | 12.03 | 12.09 | 12.18 | 12.16 | 12.22 | 12.27 | 12.37 | 13.34 | 14.07 | 14.86 |
| 10 | 11.92 | 11.98 | 12.05 | 12.08 | 12.17 | 12.24 | 12.25 | 12.28 | 12.41 | 13.54 | 14.12 | 14.89 |
| 15 | 11.89 | 12.00 | 12.05 | 12.11 | 12.18 | 12.23 | 12.25 | 12.31 | 12.51 | 13.68 | 14.25 | 14.96 |
| 20 | 11.93 | 12.00 | 12.08 | 12.14 | 12.21 | 12.23 | 12.30 | 12.31 | 12.69 | 13.90 | 14.43 | 15.00 |
| 25 | 11.92 | 12.01 | 12.09 | 12.17 | 12.10 | 12.25 | 12.31 | 12.29 | 12.87 | 13.98 | 14.55 | 15.05 |
| EOM | 11.96 | 12.05 | 12.05 | 12.17 | 12.18 | 12.25 | 12.29 | 12.32 | 13.06 | 14.09 | 14.72 | 15.01 |

GROUND-WATER LEVELS

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 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|--------------|--------|-------------|------|-------------|
| OCT 12 | 85.74 | FEB 01 | 83.77 | JUN 05 | 82.31 | AUG 31 | 89.51 | SEP 20 | 88.49 | | |
| 15 | 85.27 | MAR 06 | 83.13 | JUL 10 | 85.38 | SEP 05 | 91.17 | 25 | 89.03 | | |
| DEC 07 | 84.52 | APR 11 | 82.84 | AUG 03 | 86.62 | 10 | 88.94 | 30 | 89.51 | | |
| JAN 06 | 84.10 | MAY 01 | 82.50 | 25 | 89.03 | 15 | 88.74 | | | | |
| WATER YEAR 2000 | | HIGHEST | 82.31 | JUN 05, 2000 | LOWEST | 91.17 | SEP 05, 2000 | | | | |

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 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL |
|--------|-------------|
| MAR 16 | 90.67 |

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 current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 84.39 ft below land-surface datum, May 11, 1966; lowest, 109.96 ft below land-surface datum, Sept. 15, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 108.59 ft, Aug. 17, 18; minimum water-level depth below land surface, 88.23 ft, Apr. 19.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|-------|
| 5 | 89.60 | 89.38 | 89.24 | 89.78 | 88.85 | 89.14 | 88.37 | 88.43 | 91.98 | 91.88 | 104.55 | 94.84 |
| 10 | 89.61 | 90.06 | 89.15 | 89.75 | 89.15 | 88.78 | 88.42 | 89.62 | 94.01 | 103.09 | 104.20 | 92.66 |
| 15 | 89.47 | 89.33 | 89.07 | 89.69 | 89.31 | 88.60 | 88.40 | 93.37 | 98.43 | 105.53 | 107.23 | 92.46 |
| 20 | 89.50 | 89.56 | 89.05 | 89.40 | 88.80 | 88.52 | 88.53 | 88.60 | 93.96 | --- | 103.60 | 91.56 |
| 25 | 89.39 | 89.50 | 89.03 | 88.96 | 88.57 | 88.55 | 88.43 | 89.59 | 89.53 | 95.31 | 106.22 | 91.37 |
| EOM | 89.44 | 89.36 | 89.17 | 88.84 | 89.01 | 88.55 | 92.53 | 92.89 | 91.29 | 102.60 | 102.61 | 90.95 |

GROUND-WATER LEVELS

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 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------------|
| OCT 08 | 8.95 | MAY 08 | 8.58 |
| WATER YEAR 2000 | | HIGHEST | 8.58 MAY 08, 2000 |
| | | LOWEST | 8.95 OCT 08, 1999 |

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, 41.83 ft, July 31; minimum water-level depth below land surface, 40.05 ft, May 11.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|
| 5 | 41.69 | 41.41 | 41.15 | 40.87 | 40.70 | 40.42 | 40.28 | 40.11 | 40.25 | 40.88 | --- | --- |
| 10 | 41.65 | 41.33 | 41.08 | 40.83 | 40.64 | 40.48 | 40.26 | 40.13 | 40.26 | 41.02 | --- | --- |
| 15 | 41.56 | 41.30 | 41.03 | 40.84 | 40.63 | 40.45 | 40.23 | 40.22 | 40.33 | 41.16 | --- | --- |
| 20 | 41.52 | 41.27 | 41.03 | 40.80 | 40.58 | 40.37 | 40.25 | 40.21 | 40.45 | 41.38 | --- | --- |
| 25 | 41.47 | 41.19 | 40.97 | 40.77 | 40.45 | 40.37 | 40.20 | 40.21 | 40.58 | 41.57 | --- | --- |
| EOM | 41.44 | 41.20 | 40.92 | 40.69 | 40.50 | 40.35 | 40.16 | 40.20 | 40.70 | --- | --- | --- |

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, 35.64 ft, Sept. 5, 6, 7, 8; minimum water-level depth below land surface, 30.39 ft, Apr. 19, 20.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 5 | 31.71 | 31.11 | 30.83 | 30.64 | 30.55 | 30.47 | 30.42 | 30.49 | 30.73 | 31.42 | 33.60 | 35.64 |
| 10 | 31.56 | 31.04 | 30.79 | 30.59 | 30.51 | 30.50 | 30.44 | 30.59 | 30.79 | 31.69 | 33.98 | 35.62 |
| 15 | 31.44 | 31.00 | 30.73 | 30.62 | 30.51 | 30.47 | 30.42 | 30.70 | 30.88 | 32.08 | 34.42 | 35.58 |
| 20 | 31.35 | 30.95 | 30.72 | 30.59 | 30.52 | 30.44 | 30.43 | 30.73 | 30.92 | 32.45 | 34.84 | 35.49 |
| 25 | 31.26 | 30.90 | 30.70 | 30.58 | 30.46 | 30.45 | 30.46 | 30.71 | 31.06 | 32.76 | 35.11 | 35.43 |
| EOM | 31.19 | 30.90 | 30.65 | 30.55 | 30.49 | 30.45 | 30.48 | 30.70 | 31.10 | 33.20 | 35.51 | 35.35 |

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, 4.07 ft below land-surface datum, May 3, 1999; lowest, 6.33 ft below land-surface datum, August 30, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 7.26 ft, Sept. 25; minimum water-level depth below land surface, 4.10 ft, May 20.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|
| 5 | 5.64 | 5.54 | 5.48 | 5.51 | 5.34 | 5.01 | 4.96 | 5.05 | 4.80 | 5.27 | 6.00 | 6.85 |
| 10 | 5.63 | 5.48 | 5.52 | 5.51 | 5.29 | 4.90 | 5.14 | 4.85 | 4.99 | 5.46 | 6.05 | 6.93 |
| 15 | 5.62 | 5.48 | 5.57 | 5.57 | 5.24 | 4.88 | 5.19 | 5.10 | 5.04 | 5.56 | 6.31 | 7.07 |
| 20 | 5.61 | 5.45 | 5.52 | 5.51 | 5.22 | 4.86 | 5.06 | 4.13 | 5.19 | 5.62 | 6.36 | 7.17 |
| 25 | 5.60 | 5.45 | 5.58 | 5.53 | 5.13 | 4.91 | 5.16 | 4.48 | 5.29 | 5.67 | 6.51 | 7.26 |
| EOM | 5.57 | 5.47 | 5.48 | 5.35 | 5.07 | --- | 5.18 | 4.59 | 5.20 | 5.87 | 6.72 | 6.94 |

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, 62.82 ft below land-surface datum, June 2, 1999; lowest, 119.05 ft below land-surface datum, July 25, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL |
|--------|----------------|
| MAY 10 | 64.32 |

KIMBALL COUNTY

411416103361101. Local number 15N 55W 26CCC.

LOCATION.--Lat 41°14'10", long 103°36'19", SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.26, T.15 N., R.55 W., Hydrologic Unit 10190016, east of intersection of U.S. Highway 30 and State Highway 71 in Kimball. Owner: Henry Meier.

AQUIFER.--Ogallala Formation of Pliocene age.

WELL CHARACTERISTICS.--Drilled irrigation water-table well, diameter 24 in., depth 124 ft, casing perforated below water table.

DATUM.--Altitude of land-surface datum is 4,658.3 ft. Measuring point: Top of casing 0.00 ft above land-surface datum.

REMARKS.--Local well number formerly listed as 15N 55W 26°CC. Replacement for 411600103393501, local number 15N 55W 17CC1, period of record January 1935 to November 1942; June 1950 to October 1975.

PERIOD OF RECORD.--January 1936 to October 1937; January 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.82 ft below land-surface datum, Jan. 2, 1936; lowest, 54.86 ft below land-surface datum, Nov. 4, 1996.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|----------------|---------|--------------------|
| OCT 25 | 52.85 | APR 21 | 50.61 |
| WATER YEAR 2000 | | HIGHEST | 50.61 APR 21, 2000 |
| | | LOWEST | 52.85 OCT 25, 1999 |

GROUND-WATER LEVELS

LANCASTER COUNTY

403929096401001. Local number 8N 7E 18DDB.

LOCATION.--Lat 40°39'29", long 096°40'10", NW ¼ SE ¼ SE ¼ 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 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|--------------------|
| OCT 07 | 9.89 | MAR 21 | 10.80 |
| WATER YEAR 2000 | | HIGHEST | 9.89 OCT 07, 1999 |
| | | LOWEST | 10.80 MAR 21, 2000 |

403833096385501. Local number 8N 7E 20DDA.

LOCATION.--Lat 40°38'33", long 096°38'55", NE ¼ SE ¼ SE ¼ 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 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------------|
| OCT 07 | 4.98 | MAR 21 | 5.91 |
| WATER YEAR 2000 | | HIGHEST | 4.98 OCT 07, 1999 |
| | | LOWEST | 5.91 MAR 21, 2000 |

404706096413001. Local number 10N 6E 36CDD.

LOCATION.--Lat 40°47'06", long 096°41'30", SE ¼ SE ¼ SW ¼ 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 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|--------------------|
| OCT 19 | 46.28 | APR 12 | 46.17 |
| WATER YEAR 2000 | | HIGHEST | 46.17 APR 12, 2000 |
| | | LOWEST | 46.28 OCT 19, 1999 |

GROUND-WATER LEVELS

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, 104.89 ft below land-surface datum, August 16, 2000; lowest, 112.25 ft below land-surface datum, November 14, 1986.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|----------------|---------|----------------|--------------|----------------|--------|----------------|--------------|----------------|------|----------------|
| OCT 04 | 105.45 | NOV 16 | 105.46 | FEB 08 | 105.17 | MAR 31 | 105.16 | JUN 30 | 104.90 | | |
| 15 | 105.40 | DEC 30 | 105.11 | MAR 15 | 105.10 | MAY 17 | 104.97 | AUG 16 | 104.89 | | |
| WATER YEAR 2000 | | HIGHEST | 104.89 | AUG 16, 2000 | | LOWEST | 105.46 | NOV 16, 1999 | | | |

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 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL |
|--------|----------------|
| MAY 16 | 3.65 |

PHELPS COUNTY

403123099261501. Local number 6N 19W 2AA.

LOCATION.--Lat 40°31'28", long 099°26'13", NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.2, T.6 N., R.19 W., Hydrologic Unit 10200101, 10 mi east of Bertrand. Owner: Central Nebraska Public Power and Irrigation District.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1 in., depth 151 ft, screened 149 to 151 ft.

DATUM.--Altitude of land-surface datum is 2,359.1 ft. Measuring point: Top of casing 1.00 ft above land-surface datum.

REMARKS.--Water levels in well affected by seepage losses from nearby irrigation canal.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 31.59 ft below land-surface datum, Oct. 15, 1996; lowest, 123.70 ft below land-surface datum, Mar. 9, 1945.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|----------------|--------------|----------------|
| APR 12 | 36.04 | APR 25 | 36.62 |
| WATER YEAR 2000 | | HIGHEST | 36.04 |
| | | APR 12, 2000 | LOWEST |
| | | 36.62 | APR 25, 2000 |

GROUND-WATER LEVELS

PLATTE COUNTY

412955097192001. Local number 18N 1E 28CD.

LOCATION.--Lat 41°29'55", long 097°19'20", SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.28, T.18 N., R.1 E., Hydrologic Unit 10200201, 3 mi south and 8.5 mi east of Platte Center. Owner: Loup River Public Power District.

AQUIFER.--Sand and gravel deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2 in., depth 99 ft, screened 97 to 99 ft.

DATUM.--Altitude of land-surface datum is 1,511.8 ft. Measuring point: Top of casing 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 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL |
|--------|----------------|
| MAY 16 | 60.81 |

SALINE COUNTY

403855097072501. Local number 8N 3E 19ADA.

LOCATION.--Lat 40°38'55", long 097°07'25", NE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.19, T.8 N., R.3 E., Hydrologic Unit 10270202, west edge of Dorchester, on west side of Route 15 between U.S. Highway and Route 33. 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 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|----------------|---------|----------------|--------------|----------------|--------|----------------|--------------|----------------|--------|----------------|
| OCT 06 | 96.59 | JAN 05 | 94.66 | MAR 09 | 94.14 | MAY 02 | 93.28 | JUL 11 | 95.45 | SEP 06 | 99.34 |
| DEC 02 | 94.94 | FEB 03 | 94.28 | APR 10 | 93.42 | JUN 07 | 93.59 | AUG 07 | 99.03 | | |
| WATER YEAR 2000 | | HIGHEST | 93.28 | MAY 02, 2000 | | LOWEST | 99.34 | SEP 06, 2000 | | | |

SARPY COUNTY

410308096190701. Local number 13N 10E 32DBBA.

LOCATION.--Lat 41°03'08", long 096°19'07", NE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.32, T.13N., R.10 E., Hydrologic Unit 10200202, 0.5 mi south of northern end of Platte River Island 2.5 mi northeast of Ashland and approximately 1 mi south of U.S. Highway 6 and Linoma Beach Road. Owner: City of Lincoln, NE.

AQUIFER.--Alluvial sand and gravel deposits of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 83 ft, screened 43 to 83 ft., casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1056.4 ft. Measuring point: Top of casing 4.40 ft above land-surface datum.

REMARKS.--Water levels in well affected by Platte River stages. 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, 5.06 ft, Aug. 18; minimum daily water-level depth below land surface, 1.39 ft, Feb. 4.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|
| 5 | 3.68 | 3.63 | 3.50 | 3.07 | 1.59 | 3.38 | 3.61 | 3.66 | 3.77 | 4.38 | 4.25 | 4.77 |
| 10 | 3.76 | 3.69 | 3.63 | 2.89 | 1.57 | 3.41 | 3.73 | 3.82 | 4.10 | 3.58 | 4.61 | 4.75 |
| 15 | 3.82 | 3.58 | 3.73 | 3.04 | 1.97 | 3.44 | 3.67 | 3.92 | 4.27 | 3.93 | 4.90 | 5.01 |
| 20 | 3.74 | 3.61 | 3.67 | 3.57 | 2.79 | 3.48 | 3.48 | 3.84 | 4.33 | 4.30 | 5.05 | 4.78 |
| 25 | 3.86 | 3.55 | 2.23 | 3.60 | 3.25 | 3.33 | 3.75 | 3.96 | 3.91 | 4.31 | 4.68 | 4.62 |
| EOM | 3.87 | 3.67 | 2.58 | 1.94 | 3.18 | 3.47 | 3.52 | 3.65 | 3.85 | 3.94 | 4.72 | 4.47 |

GROUND-WATER LEVELS

SAUNDERS COUNTY

410558096210601. Local number 13N 9E 13ADBA.

LOCATION.--Lat 41°05'58", long 096°21'06", NE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ 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, 14.01 ft, Sept. 11, 12; minimum water-level depth below land surface, 12.11 ft, Nov. 30.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 5 | 12.18 | 12.31 | 12.21 | 12.28 | 12.38 | 12.23 | 12.73 | 12.95 | 13.25 | 12.73 | 13.58 | 13.91 |
| 10 | 12.25 | 12.31 | 12.24 | 12.24 | 12.38 | 12.38 | 12.78 | 12.94 | 13.31 | 12.90 | 13.72 | 13.99 |
| 15 | 12.23 | 12.28 | 12.32 | 12.24 | 12.42 | 12.43 | 12.84 | 13.01 | 13.07 | 13.14 | 13.79 | 13.78 |
| 20 | 12.25 | 12.29 | 12.31 | 12.34 | 12.41 | 12.47 | 12.84 | 13.05 | 13.16 | 13.18 | 13.85 | 13.62 |
| 25 | 12.27 | 12.20 | 12.31 | 12.37 | 12.36 | 12.52 | 12.73 | 13.13 | 13.09 | 13.28 | 13.80 | 13.56 |
| EOM | 12.28 | 12.12 | 12.28 | 12.41 | 12.40 | 12.67 | 12.82 | 13.15 | 12.87 | 13.43 | 13.90 | 13.61 |

410427096202501. Local number 13N 10E 19CDDD.

LOCATION.--Lat 41°04'27", long 096°20'25", SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.19, T.13 N., R.10E., Hydrologic Unit 10200202, 2 mi north and 1.4 mi east of Ashland. Located on Nebraska National Guard camp approximately 400 ft from right bank of Platte River. 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, 11.37 ft, Sept. 21-23; minimum daily water-level depth below land surface, 5.54 ft, Feb. 5.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|
| 5 | 8.91 | 8.32 | 8.03 | 7.02 | 5.54 | 7.87 | 8.39 | 9.58 | 9.61 | 10.09 | 10.28 | 10.80 |
| 10 | 8.64 | 8.33 | 8.04 | 6.95 | 5.84 | 7.99 | 8.45 | 9.40 | 9.96 | 9.25 | 10.46 | 11.01 |
| 15 | 8.50 | 8.26 | 8.08 | 6.89 | 7.12 | 8.03 | 8.60 | 9.43 | 10.23 | 9.63 | 10.69 | 11.09 |
| 20 | 8.41 | 8.26 | 8.12 | 7.00 | 7.42 | 8.07 | 8.73 | 9.60 | 10.40 | 9.99 | 10.93 | 11.27 |
| 25 | 8.46 | 8.14 | 6.23 | 7.15 | 7.56 | 7.99 | 8.96 | 10.15 | 10.37 | 10.29 | 10.54 | 11.27 |
| EOM | 8.48 | 8.18 | 6.64 | 6.34 | 7.68 | 8.15 | 9.38 | 9.69 | 9.67 | 9.84 | 10.75 | 10.67 |

GROUND-WATER LEVELS
SAUNDERS COUNTY--Continued

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, 18.20 ft, June 13; minimum water-level depth below land surface, 7.91 ft, Mar. 7.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|------|------|-------|-------|-------|-------|-------|-------|-------|
| 5 | 13.73 | 13.29 | 10.94 | 8.39 | 8.75 | 8.06 | 10.67 | 14.50 | 17.06 | 14.48 | 13.75 | 17.40 |
| 10 | 13.62 | 13.71 | 10.17 | 8.27 | 8.56 | 8.74 | 10.49 | 13.95 | 18.17 | 15.46 | 14.38 | 17.28 |
| 15 | 13.68 | 13.54 | 9.88 | 8.59 | 8.64 | --- | 12.61 | 15.50 | 18.09 | 15.39 | 16.08 | 18.15 |
| 20 | 12.64 | 12.99 | 9.81 | 8.60 | 8.63 | 8.83 | 12.08 | 16.31 | 17.76 | 14.81 | 16.50 | 17.56 |
| 25 | 12.86 | 12.53 | 9.70 | 8.69 | 8.62 | 9.44 | 14.24 | 16.96 | 16.99 | 14.57 | 16.56 | 16.03 |
| EOM | 13.37 | 12.52 | 8.83 | 8.77 | 8.81 | 10.70 | 14.07 | 16.27 | 15.22 | 13.68 | 16.97 | 17.79 |

410303096192901. Local number 13N 10E 32CABC.

LOCATION.--Lat 41°03'03", long 096°19'29", SW ¼ NW ¼ NE ¼ SW ¼ sec.32, T.13 N., R.10E., Hydrologic Unit 10200202, 2.0 mi north and 0.6 mi south of Ashland. One-sixth mile south of highway 6 gate for Willow Point Community Housing. Northern end of Willow Point lake, approximately 400 feet from right bank of Platte River. Owner: City of Lincoln.

AQUIFER.--Alluvial sand and gravel deposits of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in., depth 86 ft., screened 51 to 86 ft., casing perforated below water table.

DATUM.--Altitude of land-surface datum is 1,056 ft. Measuring point: Top of casing 3.60 ft above land-surface datum.

REMARKS.--Water levels affected by nearby pumping of municipal wells and Platte River stage. Starting in April 1991, recorder instrument set to read depth below measuring point. GOES unit installed in September 1992.

PERIOD OF RECORD.--December 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest 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, 8.37 ft, Sept. 28; minimum water-level depth below land surface, 4.98 ft, Feb. 13.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|
| 5 | 7.10 | 6.64 | 6.66 | 7.25 | 5.68 | 6.14 | 7.41 | 6.39 | 6.73 | 7.03 | 7.01 | 7.89 |
| 10 | 7.18 | 7.05 | 6.63 | 7.52 | 5.59 | 7.17 | 6.86 | 6.43 | 6.79 | 6.06 | 7.56 | 7.91 |
| 15 | 7.23 | 7.06 | 6.66 | 7.05 | 5.47 | 6.25 | 6.75 | 6.59 | 6.92 | 6.86 | 7.65 | 7.93 |
| 20 | 7.49 | 7.08 | 6.75 | 7.27 | 5.79 | 6.27 | 6.40 | 6.57 | --- | 6.93 | 7.78 | 7.93 |
| 25 | 7.54 | 6.48 | 6.61 | 6.88 | 5.86 | 6.19 | 6.42 | 6.71 | 6.91 | 7.01 | 8.23 | 7.71 |
| EOM | 7.16 | 6.57 | 6.84 | 5.96 | 5.86 | 6.94 | 6.33 | 6.51 | 6.46 | 6.77 | 7.64 | 7.78 |

GROUND-WATER LEVELS

SAUNDERS COUNTY--Continued

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 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|-------------|--------|--------------|--------|-------------|--------|-------------|
| OCT 04 | 41.27 | DEC 10 | 40.96 | FEB 29 | 40.79 | MAR 25 | 40.72 | MAY 20 | 40.87 | AUG 09 | 41.16 |
| 05 | 41.29 | 15 | 40.93 | MAR 05 | 40.76 | 29 | 40.66 | 25 | 40.88 | SEP 06 | 41.60 |
| 10 | 41.29 | JAN 18 | 40.85 | 10 | 40.83 | 31 | 40.80 | 31 | 40.90 | | |
| 15 | 41.24 | FEB 03 | 40.80 | 13 | 40.78 | MAY 04 | 40.78 | JUN 05 | 40.94 | | |
| 20 | 41.21 | 20 | 40.84 | 15 | 40.81 | 10 | 40.80 | 08 | 40.86 | | |
| DEC 09 | 40.96 | 25 | 40.75 | 20 | 40.78 | 15 | 40.86 | JUL 11 | 41.00 | | |
| WATER YEAR 2000 | | HIGHEST | 40.66 | MAR 29, 2000 | LOWEST | 41.60 | SEP 06, 2000 | | | | |

SCOTTS BLUFF COUNTY

415325103392801. Local number 22N 55W 11DDC.

LOCATION.--Lat 41°53'25", long 103°39'28", SW $\frac{1}{4}$ SE $\frac{1}{4}$ 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 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|-------------|---------|-------------|--------------|--------------|--------|-------------|--------------|-------------|--------|-------------|
| OCT 05 | 25.52 | DEC 09 | 25.52 | FEB 10 | 25.79 | APR 10 | 26.08 | JUN 15 | 26.63 | AUG 20 | 26.13 |
| 10 | 25.49 | 10 | 25.52 | 15 | 25.80 | 15 | 26.14 | 20 | 26.73 | 25 | 26.09 |
| 15 | 25.47 | 15 | 25.53 | 17 | 25.79 | 20 | 26.19 | 25 | 26.64 | 31 | 26.00 |
| 20 | 25.46 | 20 | 25.56 | 20 | 25.81 | 25 | 26.25 | 30 | 26.60 | SEP 05 | 25.96 |
| 25 | 25.46 | 25 | 25.60 | 25 | 25.82 | 30 | 26.29 | JUL 05 | 26.50 | 06 | 25.96 |
| 31 | 25.48 | 31 | 25.61 | 29 | 25.84 | MAY 02 | 26.30 | 10 | 26.41 | 10 | 25.93 |
| NOV 05 | 25.51 | JAN 05 | 25.63 | MAR 05 | 25.85 | 05 | 26.32 | 15 | 26.41 | 15 | 25.88 |
| 10 | 25.48 | 10 | 25.67 | 10 | 25.87 | 10 | 26.33 | 20 | 26.40 | 20 | 25.86 |
| 15 | 25.50 | 15 | 25.69 | 15 | 25.91 | 15 | 26.35 | 25 | 26.41 | 25 | 25.80 |
| 16 | 25.50 | 20 | 25.70 | 20 | 25.95 | 20 | 26.39 | 31 | 26.39 | 30 | 25.71 |
| 20 | 25.49 | 21 | 25.70 | 25 | 25.98 | 25 | 26.44 | AUG 05 | 26.31 | | |
| 25 | 25.49 | 25 | 25.73 | 31 | 26.01 | 31 | 26.51 | 07 | 26.28 | | |
| 30 | 25.50 | 31 | 25.75 | APR 03 | 26.03 | JUN 05 | 26.54 | 10 | 26.27 | | |
| DEC 05 | 25.50 | FEB 05 | 25.77 | 05 | 26.03 | 10 | 26.61 | 15 | 26.19 | | |
| WATER YEAR 2000 | | HIGHEST | 25.46 | OCT 20, 1999 | OCT 25, 1999 | LOWEST | 26.73 | JUN 20, 2000 | | | |

GROUND-WATER LEVELS

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 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|----------------|---------|----------------|--------------|----------------|--------|----------------|--------------|----------------|--------|----------------|
| OCT 05 | 75.22 | NOV 25 | 73.66 | JAN 20 | 72.96 | MAR 06 | 72.44 | APR 30 | 72.11 | JUL 10 | 74.27 |
| 10 | 74.82 | 30 | 73.76 | 25 | 72.84 | 10 | 72.44 | MAY 01 | 72.10 | AUG 03 | 77.81 |
| 11 | 74.83 | DEC 05 | 73.49 | 31 | 72.87 | 15 | 72.49 | 05 | 72.09 | SEP 05 | 78.80 |
| 15 | 74.63 | 10 | 73.44 | FEB 02 | 72.82 | 20 | 72.46 | 10 | 72.02 | 10 | 78.41 |
| 20 | 74.57 | 15 | 73.32 | 05 | 72.78 | 25 | 72.38 | 15 | 72.08 | 15 | 77.96 |
| 25 | 74.40 | 20 | 73.31 | 10 | 72.63 | 31 | 72.30 | 20 | 72.16 | 20 | 77.32 |
| 31 | 74.16 | 25 | 73.34 | 15 | 72.56 | APR 05 | 72.30 | 25 | 72.24 | 25 | 77.00 |
| NOV 05 | 74.07 | 31 | 73.11 | 20 | 72.62 | 10 | 72.29 | 31 | 72.42 | 30 | 76.62 |
| 10 | 73.93 | JAN 05 | 73.03 | 25 | 72.44 | 15 | 72.24 | JUN 05 | 72.49 | | |
| 15 | 73.89 | 10 | 72.92 | 29 | 72.42 | 20 | 72.10 | 10 | 72.95 | | |
| 20 | 73.66 | 15 | 73.06 | MAR 05 | 72.49 | 25 | 72.09 | 15 | 73.50 | | |
| WATER YEAR 2000 | | HIGHEST | 72.02 | MAY 10, 2000 | | LOWEST | 78.80 | SEP 05, 2000 | | | |

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 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL |
|--------|----------------|
| MAY 05 | 3.84 |

GROUND-WATER LEVELS

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 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL |
|--------|----------------|
| MAY 16 | 7.73 |

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 1999 TO SEPTEMBER 2000

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|-----------------|----------------|---------|----------------|--------------|----------------|--------|----------------|--------------|----------------|--------|----------------|
| OCT 12 | 82.62 | JAN 05 | 79.74 | MAR 06 | 79.15 | MAY 01 | 80.75 | JUL 10 | 86.68 | SEP 05 | 85.82 |
| DEC 07 | 79.80 | FEB 02 | 80.14 | APR 11 | 79.42 | JUN 05 | 85.34 | AUG 03 | 95.61 | | |
| WATER YEAR 2000 | | HIGHEST | 79.15 | MAR 06, 2000 | | LOWEST | 95.61 | AUG 03, 2000 | | | |

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; 110SDGV, Quaternary sand and gravel deposits, undifferentiated; 112PLSC, Pleistocene series deposits; 112SDGV, Pleistocene sand and gravel deposits; 211DKOT, Upper Cretaceous Dakota Formation deposits.)

COUNTIES.--Burt, Dakota, Douglas, Sarpy, Thurston, and Washington

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| STATION | NUMBER | LOCAL IDENT- I- FIER | 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 | | | | | | | | |
| 414242096141201 | 20N 10E13ABAA1 | | 211DKOT | 10230001 | 07-20-00 | 1400 | 92.00 | 1155 |
| 414352096134201 | 20N 11E 6CBDC1 | | 211DKOT | 10230001 | 07-20-00 | 1525 | 105.00 | 1022 |
| 415004096140101 | 22N 10E36DADB1 | | 211DKOT | 10230001 | 07-20-00 | 1150 | 91.00 | 1052 |
| 415924096130901 | 23N 11E 6DCDD1 | | 110QRNR | 10230001 | 07-18-00 | 1230 | -- | 1250 |
| 414645096134301 | 21N 11E19BBCD1 | | 211DKOT | 10230001 | 07-14-00 | 1215 | 172.00 | 1148 |
| DAKOTA COUNTY | | | | | | | | |
| 421848096371801 | 27N 7E16CABD1 | | 211DKOT | 10230001 | 07-10-00 | 1405 | 565.00 | 1410 |
| 422758096243901 | 29N 9E28ABAB1 | | 211DKOT | 10170101 | 07-10-00 | 0955 | 270.00 | 1100 |
| 422316096353301 | 28N 7E22ADCD1 | | 211DKOT | 10230001 | 07-10-00 | 1205 | 149.00 | 1200 |
| DOUGLAS COUNTY | | | | | | | | |
| 411218096082101 | 14N 11E11AAAA1 | | 211DKOT | 10200202 | 07-14-00 | 1520 | 290.00 | 1066 |
| 411125096093001 | 14N 11E15AAAA1 | | 211DKOT | 10230006 | 07-14-00 | 1450 | 235.00 | 1100 |
| 411738096140601 | 15N 10E 1DDAD1 | | 211DKOT | 10230006 | 07-14-00 | 1400 | 230.00 | 1282 |
| 411500096160101 | 15N 10E23CDCB1 | | 211DKOT | 10220003 | 07-17-00 | 1225 | 50.00 | 1115 |
| 412050096143101 | 16N 10E24ABCA1 | | 211DKOT | 10230006 | 07-18-00 | 1420 | 325.00 | 1290 |
| 411914096022401 | 16N 12E35BBAB1 | | 112SDGV | 10230006 | 07-21-00 | 1300 | 141.00 | 1105 |
| 412018096084501 | 16N 11E23DCBA1 | | 110QRNR | 10230006 | 07-19-00 | 1800 | 56.00 | 1090 |
| SARPY COUNTY | | | | | | | | |
| 410530096154401 | 13N 10E14DCBB1 | | -- | | 07-19-00 | 0925 | 209.00 | 1272 |
| 410728096134401 | 13N 11E 6CAAA1 | | 112SDGV | 10230006 | 07-19-00 | 1200 | 278.00 | 1252 |
| 410651096134801 | 13N 11E 7BCAA1 | | 112SDGV | 10200202 | 07-24-00 | 1100 | 198.00 | 1270 |
| 410503096073801 | 13N 11E24ACBD1 | | 211DKOT | 10200202 | 07-25-00 | 0945 | 195.00 | 1144 |
| 410350096081001 | 13N 11E25CBCD1 | | 112SDGV | 10200202 | 07-24-00 | 1155 | 66.00 | 1035 |
| 410351096080901 | 13N 11E25CCBB1 | | 112SDGV | 10200202 | 07-25-00 | 0915 | 66.00 | 1050 |

CHEMICAL ANALYSES OF GROUND WATER

PAPIO-MISSOURI STUDY--Continued
WATER-QUALITY MONITORING

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | 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) |
|----------------|--|--|---|--|--|--|---|---|---|--|
| BURT COUNTY | | | | | | | | | | |
| 07-20-00 | 7.8 | 7.3 | 12.0 | 5.35 | -- | -- | -- | -- | -- | -- |
| 07-20-00 | 1.1 | 6.9 | 12.0 | <.050 | -- | -- | -- | -- | -- | -- |
| 07-20-00 | .2 | 7.2 | 11.5 | <.050 | -- | -- | -- | -- | -- | -- |
| 07-18-00 | .2 | 7.2 | 11.0 | .117 | -- | -- | -- | -- | -- | -- |
| 07-14-00 | 5.9 | 7.1 | 14.5 | 8.21 | -- | -- | -- | -- | -- | -- |
| DAKOTA COUNTY | | | | | | | | | | |
| 07-10-00 | .1 | 7.1 | 15.0 | <.050 | -- | -- | -- | -- | -- | -- |
| 07-10-00 | .2 | 7.0 | 12.6 | <.050 | -- | -- | -- | -- | -- | -- |
| 07-10-00 | 3.3 | 7.2 | 12.5 | 2.59 | -- | -- | -- | -- | -- | -- |
| DOUGLAS COUNTY | | | | | | | | | | |
| 07-14-00 | 4.9 | 7.3 | 13.0 | .332 | -- | -- | -- | -- | -- | -- |
| 07-14-00 | 6.8 | 7.3 | 12.5 | .975 | -- | -- | -- | -- | -- | -- |
| 07-14-00 | 5.2 | 7.2 | 12.5 | 5.68 | -- | -- | -- | -- | -- | -- |
| 07-17-00 | .4 | 7.3 | 15.5 | <.050 | -- | -- | -- | -- | -- | -- |
| 07-18-00 | .1 | 7.2 | 17.0 | <.050 | -- | -- | -- | -- | -- | -- |
| 07-21-00 | 2.4 | 7.1 | 13.0 | <.050 | <.050 | <.050 | <.05 | <.050 | <.05 | <.05 |
| 07-19-00 | 1.8 | 6.8 | 12.0 | 8.10 | -- | -- | -- | -- | -- | -- |
| SARPY COUNTY | | | | | | | | | | |
| 07-19-00 | .1 | 7.3 | 13.5 | <.050 | -- | -- | -- | -- | -- | -- |
| 07-19-00 | .1 | 7.3 | 14.0 | <.050 | E.010 | <.050 | <.05 | E.010 | <.05 | <.05 |
| 07-24-00 | 11.2 | 7.1 | 13.0 | 8.35 | -- | -- | -- | -- | -- | -- |
| 07-25-00 | 6.0 | 7.0 | 13.0 | 2.97 | -- | -- | -- | -- | -- | -- |
| 07-24-00 | 11.8 | 7.2 | 21.5 | 2.77 | E.010 | <.050 | <.05 | E.009 | <.05 | <.05 |
| 07-25-00 | 5.4 | 7.1 | 16.0 | 4.93 | -- | -- | -- | -- | -- | -- |

PAPIO-MISSOURI STUDY--Continued
WATER-QUALITY MONITORING

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible]

CHEMICAL ANALYSES OF GROUND WATER

PAPIO-MISSOURI STUDY--Continued
WATER-QUALITY MONITORING

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| STATION | NUMBER | LOCAL IDENT- I- FIER | GEO- LOGIC UNIT | HYDRO- LOGIC UNIT CODE | DATE | TIME | DEPTH OF WELL, TOTAL (FEET) (72008) | ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000) | | |
|-------------------|--|--|---|--|--|--|---|---|---|--|
| SARPY COUNTY | | | | | | | | | | |
| 410824096141901 | 14N 10E36ADCC1 | | 211DKOT | 10230006 | 07-19-00 | 1045 | 315.00 | 1260 | | |
| 410818096001201 | 14N 13E31CBBC1 | | 211DKOT | 10230006 | 07-19-00 | 1310 | 134.00 | 1078 | | |
| THURSTON COUNTY | | | | | | | | | | |
| 420519096273202 | 24N 9E 6BBAB2 | | 211DKOT | 10230001 | 07-19-00 | 1030 | 300.00 | 1368 | | |
| 420840096292402 | 25N 8E11DBC2 | | 211DKOT | 10230001 | 07-11-00 | 1405 | 200.00 | 1225 | | |
| 420825096292401 | 25N 8E11DCCC1 | | 112SDGV | | 07-11-00 | 1320 | 155.00 | 1227 | | |
| 420851096254601 | 25N 9E17AABB1 | | 110SDGV | 10230001 | 07-19-00 | 1300 | -- | 1250 | | |
| 421412096282101 | 26N 8E12CDAD1 | | 110SDGV | 10230001 | 07-11-00 | 1545 | 275.00 | 1170 | | |
| 421413096282401 | 26N 8E12CDAC1 | | 110SDGV | 10230001 | 07-11-00 | 1630 | 308.00 | 1160 | | |
| WASHINGTON COUNTY | | | | | | | | | | |
| 412736096221001 | 17N 9E11AD 1 | | 112SDGV | 10220003 | 07-18-00 | 1015 | 276.00 | 1270 | | |
| 412751096203901 | 17N 10E 7BBAC1 | | 110QRNR | 10220003 | 07-21-00 | 1600 | 164.00 | 1179 | | |
| 412636096183201 | 17N 10E16CBBB1 | | 112SDGV | 10220003 | 07-21-00 | 1430 | 316.00 | 1290 | | |
| 412629096053001 | 17N 12E17CACA1 | | 112SDGV | 10230006 | 07-19-00 | 1500 | 330.00 | 1200 | | |
| 413240096213301 | 18N 9E12CAAC1 | | 211DKOT | 10220003 | 07-19-00 | 1700 | 172.00 | 1230 | | |
| DATE | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | 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) |
| SARPY COUNTY | | | | | | | | | | |
| 07-19-00 | 6.6 | 7.2 | 15.5 | 1.70 | -- | -- | -- | -- | -- | -- |
| 07-19-00 | 9.5 | 7.1 | 13.5 | 1.25 | -- | -- | -- | -- | -- | -- |
| THURSTON COUNTY | | | | | | | | | | |
| 07-19-00 | .3 | 7.1 | 13.0 | <.050 | -- | -- | -- | -- | -- | -- |
| 07-11-00 | .2 | 7.2 | 12.0 | <.050 | -- | -- | -- | -- | -- | -- |
| 07-11-00 | .2 | 7.1 | 12.0 | <.050 | -- | -- | -- | -- | -- | -- |
| 07-19-00 | 2.1 | 7.1 | 11.5 | .693 | -- | -- | -- | -- | -- | -- |
| 07-11-00 | 9.2 | 7.2 | 13.0 | .055 | -- | -- | -- | -- | -- | -- |
| 07-11-00 | 9.4 | 7.2 | 13.0 | .052 | -- | -- | -- | -- | -- | -- |
| WASHINGTON COUNTY | | | | | | | | | | |
| 07-18-00 | .2 | 7.2 | 13.0 | <.050 | -- | -- | -- | -- | -- | -- |
| 07-21-00 | .9 | 7.1 | 12.0 | 16.7 | -- | -- | -- | -- | -- | -- |
| 07-21-00 | 1.1 | 7.4 | -- | <.050 | -- | -- | -- | -- | -- | -- |
| 07-19-00 | .7 | 7.6 | 14.5 | .069 | -- | -- | -- | -- | -- | -- |
| 07-19-00 | .8 | 7.1 | 12.5 | .422 | <.050 | <.050 | <.05 | <.050 | <.05 | <.05 |

CHEMICAL ANALYSES OF GROUND WATER

PAPIO-MISSOURI STUDY--Continued
WATER-QUALITY MONITORING

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | BUTYL- ATE, WATER, DISS, REC (UG/L) (04028) | CAR- BOXIN, WATER, DISS, REC (UG/L) (04027) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | SI- CLOATE, WATER, DISS, REC (UG/L) (04031) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DEISO- PROPYL ATRAZIN WATER, DISS, REC (UG/L) (04038) | DIPHEN- AMID, WATER, DISS, REC (UG/L) (04033) | HEXA- ZINONE, WATER, DISS, REC (UG/L) (04025) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN WATER DISSOLV (UG/L) (82630) |
|-------------------|---|---|--|---|--|--|---|---|---|--|
| SARPY COUNTY | | | | | | | | | | |
| 07-19-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-19-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| THURSTON COUNTY | | | | | | | | | | |
| 07-19-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-11-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-11-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-19-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-11-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-11-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| WASHINGTON COUNTY | | | | | | | | | | |
| 07-18-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-21-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-21-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-19-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-19-00 | <.050 | <.05 | <.200 | <.05 | <.050 | <.05 | <.05 | <.05 | <.050 | <.050 |

| DATE | PRO- METON, WATER, DISS, REC (UG/L) (04037) | PRO- METRYN, WATER, DISS, REC (UG/L) (04036) | PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024) | PROP- AZINE WATER DISS REC (UG/L) (38535) | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | 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) |
|-------------------|---|--|---|---|---|---|---|---|--|
| SARPY COUNTY | | | | | | | | | |
| 07-19-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-19-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| THURSTON COUNTY | | | | | | | | | |
| 07-19-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-11-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-11-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-19-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-11-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-11-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| WASHINGTON COUNTY | | | | | | | | | |
| 07-18-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-21-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-21-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-19-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-19-00 | <.050 | <.05 | <.050 | <.05 | <.050 | <.05 | <.05 | <.05 | <.05 |

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.)

COUNTIES.--Burt, Dakota, Douglas, Sarpy, Thurston, and Washington

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| 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) |
|-----------------|----------------|-------------------------------|--------------------|---------------------|-----------------------|---------------------------------|----------|------|--|
| BURT COUNTY | | | | | | | | | |
| 414700096134901 | 21N 11E19BBBC1 | | 41 47 00 N | 096 13 49 W | 211DKOT | 10230001 | 11-08-99 | 1515 | 171.00 |
| | | | | | 211DKOT | 10230001 | 01-27-00 | 1550 | 171.00 |
| | | | | | 211DKOT | 10230001 | 03-14-00 | 1630 | 171.00 |
| | | | | | 211DKOT | 10230001 | 05-17-00 | 1820 | 171.00 |
| | | | | | 211DKOT | 10230001 | 07-10-00 | 1700 | 171.00 |
| | | | | | 211DKOT | 10230001 | 09-12-00 | 1500 | 171.00 |
| 414700096134902 | 21N 11E19BBBC2 | | | | 211DKOT | 10230001 | 11-08-99 | 1545 | 139.00 |
| | | | | | 211DKOT | 10230001 | 01-27-00 | 1620 | 139.00 |
| | | | | | 211DKOT | 10230001 | 03-14-00 | 1700 | 139.00 |
| | | | | | 211DKOT | 10230001 | 05-17-00 | 1850 | 139.00 |
| | | | | | 211DKOT | 10230001 | 07-10-00 | 1730 | 139.00 |
| | | | | | 211DKOT | 10230001 | 09-12-00 | 1530 | 139.00 |
| 414700096134903 | 21N 11E19BBBC3 | | | | 211DKOT | 10230001 | 11-08-99 | 1600 | 80.00 |
| | | | | | 211DKOT | 10230001 | 01-27-00 | 1630 | 80.00 |
| | | | | | 211DKOT | 10230001 | 03-14-00 | 1715 | 80.00 |
| | | | | | 211DKOT | 10230001 | 05-17-00 | 1900 | 80.00 |
| | | | | | 211DKOT | 10230001 | 07-10-00 | 1745 | 80.00 |
| | | | | | 211DKOT | 10230001 | 09-12-00 | 1545 | 80.00 |
| DAKOTA COUNTY | | | | | | | | | |
| 422035096281901 | 27N 8E 1ACCC1 | | 42 20 35 N | 096 28 19 W | 112SDGV | 10230001 | 11-08-99 | 1230 | 129.00 |
| | | | | | 112SDGV | 10230001 | 01-27-00 | 1400 | 129.00 |
| | | | | | 112SDGV | 10230001 | 03-14-00 | 1345 | 129.00 |
| | | | | | 112SDGV | 10230001 | 05-17-00 | 1540 | 129.00 |
| | | | | | 112SDGV | 10230001 | 07-10-00 | 1430 | 129.00 |
| | | | | | 112SDGV | 10230001 | 09-12-00 | 1240 | 129.00 |
| 422035096281902 | 27N 8E 1ACCC2 | | | | 112SDGV | 10230001 | 11-08-99 | 1250 | 93.00 |
| | | | | | 112SDGV | 10230001 | 01-27-00 | 1330 | 93.00 |
| | | | | | 112SDGV | 10230001 | 03-14-00 | 1410 | 93.00 |
| | | | | | 112SDGV | 10230001 | 05-17-00 | 1600 | 93.00 |
| | | | | | 112SDGV | 10230001 | 07-10-00 | 1450 | 93.00 |
| | | | | | 112SDGV | 10230001 | 09-12-00 | 1300 | 93.00 |
| 422035096281903 | 27N 8E 1ACCC3 | | | | 112SDGV | 10230001 | 11-08-99 | 1310 | 53.00 |
| | | | | | 112SDGV | 10230001 | 01-27-00 | 1415 | 53.00 |
| | | | | | 112SDGV | 10230001 | 03-14-00 | 1430 | 53.00 |
| | | | | | 112SDGV | 10230001 | 05-17-00 | 1620 | 53.00 |
| | | | | | 112SDGV | 10230001 | 07-10-00 | 1500 | 53.00 |
| | | | | | 112SDGV | 10230001 | 09-12-00 | 1315 | 53.00 |
| DOUGLAS COUNTY | | | | | | | | | |
| 411231096193203 | 14N 10E 5CBDB3 | | 41 12 31 N | 096 19 32 W | 112SDGV | 10220003 | 11-09-99 | 1330 | 22.00 |
| | | | | | 112SDGV | 10220003 | 01-26-00 | 1500 | 22.00 |
| | | | | | 112SDGV | 10220003 | 03-13-00 | 1410 | 22.00 |
| | | | | | 112SDGV | 10220003 | 05-16-00 | 1450 | 22.00 |
| | | | | | 112SDGV | 10220003 | 07-11-00 | 1410 | 22.00 |
| | | | | | 112SDGV | 10220003 | 09-13-00 | 1120 | 22.00 |
| 411231096193201 | 14N 10E 5CBDD1 | | | | 112SDGV | 10220003 | 11-09-99 | 1250 | 98.00 |
| | | | | | 112SDGV | 10220003 | 01-26-00 | 1430 | 98.00 |
| | | | | | 112SDGV | 10220003 | 03-13-00 | 1350 | 98.00 |
| | | | | | 112SDGV | 10220003 | 05-16-00 | 1420 | 98.00 |
| | | | | | 112SDGV | 10220003 | 07-11-00 | 1345 | 98.00 |

CHEMICAL ANALYSES OF GROUND WATER

PAPIO-MISSOURI STUDY--Continued
WATER QUALITY FROM WELL NESTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| 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 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) |
|----------------|---|---|---|---|--|--|---|--|--|--|---|
| BURT COUNTY | | | | | | | | | | | |
| 11-08-99 | 1135 | 732 | .1 | 1 | 7.3 | 1090 | 12.5 | .561 | -- | -- | -- |
| 01-27-00 | 1135 | 730 | .1 | 1 | 7.0 | 1150 | 12.0 | .392 | -- | -- | -- |
| 03-14-00 | 1135 | 728 | .2 | 2 | 6.9 | 1170 | 12.0 | 2.07 | -- | -- | -- |
| 05-17-00 | 1135 | 728 | .2 | 1 | 6.9 | 1160 | 12.0 | 1.88 | -- | -- | -- |
| 07-10-00 | 1135 | 728 | .1 | 1 | 7.1 | 1140 | 12.5 | 1.48 | -- | -- | -- |
| 09-12-00 | 1135 | 729 | .3 | 3 | 7.0 | 1140 | 12.5 | .535 | -- | -- | -- |
| 11-08-99 | 1135 | 732 | .1 | 1 | 7.2 | 1030 | 12.5 | <.050 | -- | -- | -- |
| 01-27-00 | 1135 | 730 | .1 | 1 | 7.0 | 1050 | 12.0 | .344 | -- | -- | -- |
| 03-14-00 | 1135 | 728 | .7 | 7 | 6.9 | 1040 | 12.0 | 1.27 | -- | -- | -- |
| 05-17-00 | 1135 | 728 | .2 | 2 | 6.9 | 1050 | 12.0 | .766 | -- | -- | -- |
| 07-10-00 | 1135 | 728 | .1 | 0 | 7.0 | 1060 | 12.5 | <.050 | -- | -- | -- |
| 09-12-00 | 1135 | 729 | .6 | 6 | 7.1 | 1030 | 12.5 | 1.17 | -- | -- | -- |
| 11-08-99 | 1135 | 732 | 1.1 | 11 | 7.4 | 870 | 12.5 | 16.9 | -- | -- | -- |
| 01-27-00 | 1135 | 730 | 7.6 | 74 | 7.2 | 994 | 12.0 | 14.8 | -- | -- | -- |
| 03-14-00 | 1135 | 728 | 7.8 | 77 | 7.2 | 900 | 12.5 | 16.4 | -- | -- | -- |
| 05-17-00 | 1135 | 728 | 8.2 | 81 | 7.1 | 905 | 12.5 | 16.7 | -- | -- | -- |
| 07-10-00 | 1135 | 728 | 1.0 | 10 | 7.2 | 908 | 12.5 | 17.2 | -- | -- | -- |
| 09-12-00 | 1135 | 729 | 1.2 | 12 | 7.2 | 898 | 12.5 | 18.2 | -- | -- | -- |
| DAKOTA COUNTY | | | | | | | | | | | |
| 11-08-99 | 1092 | 732 | .5 | 4 | 7.1 | 1200 | 12.0 | <.050 | -- | -- | -- |
| 01-27-00 | 1092 | 731 | .1 | 1 | 7.1 | 1170 | 11.5 | <.050 | -- | -- | -- |
| 03-14-00 | 1092 | 729 | .1 | 1 | 6.9 | 1180 | 11.5 | <.050 | -- | -- | -- |
| 05-17-00 | 1092 | 730 | .1 | 1 | 6.8 | 1200 | 12.0 | <.050 | -- | -- | -- |
| 07-10-00 | 1092 | 730 | .1 | 0 | 7.1 | 1180 | 12.0 | <.050 | -- | -- | -- |
| 09-12-00 | 1092 | 732 | M | 0 | 7.1 | 1170 | 12.0 | <.050 | -- | -- | -- |
| 11-08-99 | 1092 | 732 | .1 | 1 | 7.3 | 898 | 11.5 | <.050 | -- | -- | -- |
| 01-27-00 | 1092 | 731 | .1 | 1 | 7.1 | 904 | 11.5 | <.050 | -- | -- | -- |
| 03-14-00 | 1092 | 729 | .1 | 1 | 7.0 | 990 | 11.5 | <.050 | -- | -- | -- |
| 05-17-00 | 1092 | 730 | .7 | 6 | 6.9 | 893 | 11.5 | <.050 | -- | -- | -- |
| 07-10-00 | 1092 | 730 | M | 0 | 7.1 | 886 | 12.0 | <.050 | -- | -- | -- |
| 09-12-00 | 1092 | 732 | M | 0 | 7.1 | 896 | 11.0 | <.050 | -- | -- | -- |
| 11-08-99 | 1092 | 732 | .2 | 2 | 7.2 | 926 | 11.5 | <.050 | -- | -- | -- |
| 01-27-00 | 1092 | 731 | 2.3 | 22 | 7.0 | 952 | 11.0 | <.050 | -- | -- | -- |
| 03-14-00 | 1092 | 729 | 2.3 | 22 | 6.9 | 968 | 11.5 | <.050 | -- | -- | -- |
| 05-17-00 | 1092 | 730 | 2.2 | 21 | 6.9 | 984 | 11.5 | <.050 | -- | -- | -- |
| 07-10-00 | 1092 | 730 | .2 | 2 | 7.1 | 1040 | 12.0 | <.050 | <.050 | <.050 | <.05 |
| 09-12-00 | 1092 | 732 | 2.5 | 24 | 7.1 | 1030 | 12.0 | <.050 | -- | -- | -- |
| DOUGLAS COUNTY | | | | | | | | | | | |
| 11-09-99 | 1107 | 730 | .1 | 1 | 7.1 | 518 | 14.5 | 6.86 | -- | -- | -- |
| 01-26-00 | 1107 | 728 | .4 | 4 | 7.0 | 514 | 13.0 | 10.2 | -- | -- | -- |
| 03-13-00 | 1107 | 739 | .5 | 5 | 7.1 | 538 | 12.0 | 10.3 | -- | -- | -- |
| 05-16-00 | 1107 | 730 | .5 | 5 | 7.2 | 508 | 11.5 | 7.36 | -- | -- | -- |
| 07-11-00 | 1107 | 729 | .1 | 1 | 6.9 | 497 | 12.5 | 4.84 | <.050 | <.050 | <.05 |
| 09-13-00 | 1107 | 734 | .3 | 3 | 6.9 | 496 | 14.0 | 1.94 | -- | -- | -- |
| 11-09-99 | 1107 | 730 | .1 | 1 | 7.5 | 526 | 12.0 | .788 | -- | -- | -- |
| 01-26-00 | 1107 | 728 | .1 | 1 | 7.4 | 526 | 12.0 | 1.15 | -- | -- | -- |
| 03-13-00 | 1107 | 739 | .1 | 1 | 7.3 | 530 | 12.0 | 1.38 | -- | -- | -- |
| 05-16-00 | 1107 | 730 | .2 | 1 | 7.3 | 532 | 12.0 | 1.56 | -- | -- | -- |
| 07-11-00 | 1107 | 729 | M | 0 | 7.4 | 536 | 12.5 | 1.89 | -- | -- | -- |

| DATE | 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) | CYANA-ZINE, WATER, DISS, REC (UG/L) (04041) | SI-CLOATE, WATER, DISS, REC (UG/L) (04031) | DEETHYL-ATRA-ZINE, WATER, DISS, REC (UG/L) (04040) | DEISO-PROPYL-ATRAZIN WATER, DISS, REC (UG/L) (04038) | DIPHEN-AMID, WATER, DISS, REC (UG/L) (04033) | HEXA-ZINONE, WATER, DISS, REC (UG/L) (04025) |
|----------------|---|---|--|---|---|--|---|---|---|---|---|
| BURT COUNTY | | | | | | | | | | | |
| 11-08-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-27-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-14-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-17-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-10-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09-12-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11-08-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-27-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-14-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-17-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-10-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09-12-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11-08-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-27-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-14-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-17-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-10-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09-12-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DAKOTA COUNTY | | | | | | | | | | | |
| 11-08-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-27-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-14-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-17-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-10-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09-12-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11-08-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-27-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-14-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-17-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-10-00 | <.050 | <.05 | <.05 | <.050 | <.05 | <.200 | <.05 | <.050 | <.05 | <.05 | <.05 |
| 09-12-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DOUGLAS COUNTY | | | | | | | | | | | |
| 11-09-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-26-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-13-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-16-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-11-00 | E.013 | <.05 | <.05 | <.050 | <.05 | <.200 | <.05 | E.017 | <.05 | <.05 | <.05 |
| 09-13-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11-09-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-26-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-13-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-16-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-11-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

[illegible]

CHEMICAL ANALYSES OF GROUND WATER

PAPIO-MISSOURI STUDY--Continued
WATER QUALITY FROM WELL NESTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| 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) |
|-----------------|----------------|-------------------------------|--------------------|---------------------|-----------------------|---------------------------------|----------|------|--|
| DOUGLAS COUNTY | | | | | | | | | |
| 411231096193201 | 14N 10E 5CBDD1 | | 41 12 31 N | 096 19 32 W | 112SDGV | 10220003 | 09-13-00 | 1050 | 98.00 |
| 411231096193202 | 14N 10E 5CBDD2 | | | | 112SDGV | 10220003 | 11-09-99 | 1310 | 58.00 |
| | | | | | 112SDGV | 10220003 | 01-26-00 | 1450 | 58.00 |
| | | | | | 112SDGV | 10220003 | 03-13-00 | 1400 | 58.00 |
| | | | | | 112SDGV | 10220003 | 05-16-00 | 1440 | 58.00 |
| | | | | | 112SDGV | 10220003 | 07-11-00 | 1400 | 58.00 |
| | | | | | 112SDGV | 10220003 | 09-13-00 | 1110 | 58.00 |
| 412151096180801 | 16N 10E16BAAA1 | | 41 21 51 N | 096 18 08 W | 112SDGV | 10220003 | 11-10-99 | 1350 | 33.00 |
| | | | | | 112SDGV | 10220003 | 01-28-00 | 0900 | 33.00 |
| | | | | | 112SDGV | 10220003 | 03-16-00 | 1410 | 33.00 |
| | | | | | 112SDGV | 10220003 | 05-18-00 | 1400 | 33.00 |
| | | | | | 112SDGV | 10220003 | 07-12-00 | 1420 | 33.00 |
| | | | | | 112SDGV | 10220003 | 09-12-00 | 1900 | 33.00 |
| 412151096180802 | 16N 10E16BAAA2 | | | | 112SDGV | 10220003 | 11-10-99 | 1410 | 25.00 |
| | | | | | 112SDGV | 10220003 | 01-28-00 | 0915 | 25.00 |
| | | | | | 112SDGV | 10220003 | 03-16-00 | 1430 | 25.00 |
| | | | | | 112SDGV | 10220003 | 05-18-00 | 1410 | 25.00 |
| | | | | | 112SDGV | 10220003 | 07-12-00 | 1440 | 25.00 |
| | | | | | 112SDGV | 10220003 | 09-12-00 | 1920 | 25.00 |
| SARPY COUNTY | | | | | | | | | |
| 410243096082001 | 12N 11E 1BBBB1 | | 41 02 43 N | 096 08 20 W | 112SDGV | 10200202 | 11-09-99 | 1015 | 83.00 |
| | | | | | 112SDGV | 10200202 | 01-26-00 | 1210 | 83.00 |
| | | | | | 112SDGV | 10200202 | 03-13-00 | 1145 | 83.00 |
| | | | | | 112SDGV | 10200202 | 05-16-00 | 1145 | 83.00 |
| | | | | | 112SDGV | 10200202 | 07-11-00 | 1110 | 83.00 |
| | | | | | 112SDGV | 10200202 | 09-11-00 | 1230 | 83.00 |
| 410243096082002 | 12N 11E 1BBBB2 | | | | 112SDGV | 10200202 | 11-09-99 | 1040 | 70.00 |
| | | | | | 112SDGV | 10200202 | 03-13-00 | 1200 | 70.00 |
| | | | | | 112SDGV | 10200202 | 05-16-00 | 1200 | 70.00 |
| | | | | | 112SDGV | 10200202 | 07-11-00 | 1130 | 70.00 |
| | | | | | 112SDGV | 10200202 | 09-11-00 | 1245 | 70.00 |
| 410243096082003 | 12N 11E 1BBBB3 | | | | 112SDGV | 10200202 | 11-09-99 | 1100 | 55.00 |
| | | | | | 112SDGV | 10200202 | 01-26-00 | 1245 | 55.00 |
| | | | | | 112SDGV | 10200202 | 03-13-00 | 1215 | 55.00 |
| | | | | | 112SDGV | 10200202 | 05-16-00 | 1215 | 55.00 |
| | | | | | 112SDGV | 10200202 | 07-11-00 | 1145 | 55.00 |
| | | | | | 112SDGV | 10200202 | 09-11-00 | 1300 | 55.00 |
| 410334096182801 | 13N 10E33BBAB1 | | 41 03 34 N | 096 18 28 W | 112SDGV | 10200202 | 11-09-99 | 0830 | 55.00 |
| | | | | | 112SDGV | 10200202 | 01-26-00 | 1030 | 55.00 |
| | | | | | 112SDGV | 10200202 | 03-13-00 | 1000 | 55.00 |
| | | | | | 112SDGV | 10200202 | 05-16-00 | 0945 | 55.00 |
| | | | | | 112SDGV | 10200202 | 05-31-00 | 1200 | 55.00 |
| | | | | | 112SDGV | 10200202 | 07-11-00 | 0845 | 55.00 |
| | | | | | 112SDGV | 10200202 | 09-11-00 | 1045 | 55.00 |
| 410334096182802 | 13N 10E33BBAB2 | | | | 112SDGV | 10200202 | 11-09-99 | 0845 | 37.50 |
| | | | | | 112SDGV | 10200202 | 01-26-00 | 1040 | 37.50 |
| | | | | | 112SDGV | 10200202 | 03-13-00 | 1015 | 37.50 |
| | | | | | 112SDGV | 10200202 | 05-16-00 | 1000 | 37.50 |
| | | | | | 112SDGV | 10200202 | 07-11-00 | 0900 | 37.50 |
| | | | | | 112SDGV | 10200202 | 09-11-00 | 1100 | 37.50 |

CHEMICAL ANALYSES OF GROUND WATER

PAPIO-MISSOURI STUDY--Continued
WATER QUALITY FROM WELL NESTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| 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 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) |
|----------------|---|---|---|---|--|--|---|--|--|--|---|
| DOUGLAS COUNTY | | | | | | | | | | | |
| 09-13-00 | 1107 | 734 | M | 0 | 7.3 | 536 | 12.0 | 1.78 | -- | -- | -- |
| 11-09-99 | 1107 | 730 | .1 | 0 | 7.4 | 690 | 12.0 | 3.82 | -- | -- | -- |
| 01-26-00 | 1107 | 728 | M | 0 | 7.3 | 564 | 12.0 | 3.51 | -- | -- | -- |
| 03-13-00 | 1107 | 739 | .1 | 1 | 7.3 | 517 | 12.0 | 2.23 | -- | -- | -- |
| 05-16-00 | 1107 | 730 | .2 | 2 | 7.4 | 576 | 12.5 | 1.86 | -- | -- | -- |
| 07-11-00 | 1107 | 729 | M | 0 | 7.4 | 568 | 12.5 | 1.85 | <.050 | <.050 | <.05 |
| 09-13-00 | 1107 | 734 | M | 0 | 7.3 | 572 | 12.5 | 2.16 | -- | -- | -- |
| 11-10-99 | 1136 | 731 | .3 | 3 | 7.4 | 596 | 12.0 | <.050 | -- | -- | -- |
| 01-28-00 | 1136 | 729 | 1.2 | 12 | 7.3 | 544 | 12.0 | <.050 | -- | -- | -- |
| 03-16-00 | 1136 | 740 | 1.2 | -- | 7.2 | -- | 12.0 | <.050 | -- | -- | -- |
| 05-18-00 | 1136 | 728 | 1.2 | 12 | 7.1 | 539 | 11.5 | <.050 | -- | -- | -- |
| 07-12-00 | 1136 | 730 | .7 | 7 | 7.3 | 553 | 12.0 | <.050 | -- | -- | -- |
| 09-12-00 | 1136 | 730 | 1.3 | 13 | 7.3 | 546 | 12.0 | <.050 | -- | -- | -- |
| 11-10-99 | 1136 | 731 | .4 | 4 | 7.5 | 556 | 12.5 | <.050 | -- | -- | -- |
| 01-28-00 | 1136 | 729 | .5 | 5 | 7.2 | 594 | 12.0 | <.050 | -- | -- | -- |
| 03-16-00 | 1136 | 740 | .5 | -- | 7.3 | -- | 12.0 | <.050 | -- | -- | -- |
| 05-18-00 | 1136 | 728 | .4 | 4 | 7.0 | 594 | 12.0 | <.050 | -- | -- | -- |
| 07-12-00 | 1136 | 730 | .7 | 7 | 7.2 | 592 | 12.0 | <.050 | -- | -- | -- |
| 09-12-00 | 1136 | 730 | .1 | 1 | 7.2 | 584 | 12.0 | <.050 | -- | -- | -- |
| SARPY COUNTY | | | | | | | | | | | |
| 11-09-99 | 1020 | 730 | .9 | 9 | 7.4 | 524 | 12.5 | 5.47 | -- | -- | -- |
| 01-26-00 | 1020 | 728 | 5.6 | 55 | 7.2 | 511 | 12.5 | 5.04 | -- | -- | -- |
| 03-13-00 | 1020 | 739 | 6.1 | 60 | 7.0 | 512 | 12.5 | 4.41 | -- | -- | -- |
| 05-16-00 | 1020 | 729 | 6.0 | 59 | 7.2 | 511 | 12.5 | 4.67 | -- | -- | -- |
| 07-11-00 | 1020 | 728 | 1.1 | 11 | 7.2 | 507 | 12.5 | 4.99 | -- | -- | -- |
| 09-11-00 | 1020 | 728 | 5.6 | -- | 7.2 | -- | 12.5 | 4.62 | -- | -- | -- |
| 11-09-99 | 1020 | 730 | 1.0 | 10 | 7.2 | 516 | 12.5 | 5.20 | -- | -- | -- |
| 03-13-00 | 1020 | 739 | 5.5 | 53 | 7.1 | 504 | 12.5 | 4.44 | -- | -- | -- |
| 05-16-00 | 1020 | 729 | 5.6 | 55 | 7.2 | 505 | 12.5 | 4.44 | -- | -- | -- |
| 07-11-00 | 1020 | 728 | 1.0 | 10 | 7.2 | 501 | 12.5 | 4.50 | -- | -- | -- |
| 09-11-00 | 1020 | 728 | 1.6 | -- | 7.2 | -- | 12.5 | 4.58 | -- | -- | -- |
| 11-09-99 | 1020 | 730 | .6 | 6 | 7.4 | 508 | 12.5 | 2.14 | -- | -- | -- |
| 01-26-00 | 1020 | 728 | 2.9 | 29 | 7.2 | 491 | 12.5 | 1.95 | -- | -- | -- |
| 03-13-00 | 1020 | 739 | 2.7 | 26 | 7.1 | 494 | 12.5 | 1.94 | -- | -- | -- |
| 05-16-00 | 1020 | 729 | 3.1 | 30 | 7.2 | 496 | 12.5 | 2.07 | -- | -- | -- |
| 07-11-00 | 1020 | 728 | .5 | 5 | 7.2 | 492 | 12.5 | 2.14 | -- | -- | -- |
| 09-11-00 | 1020 | 728 | 5.2 | -- | 7.1 | -- | 12.5 | 2.10 | -- | -- | -- |
| 11-09-99 | 1055 | 730 | .1 | 1 | 7.7 | 492 | 12.5 | <.050 | -- | -- | -- |
| 01-26-00 | 1055 | 728 | .1 | 1 | 7.4 | 491 | 12.0 | <.050 | -- | -- | -- |
| 03-13-00 | 1055 | 739 | .2 | -- | 7.3 | -- | 12.5 | <.050 | -- | -- | -- |
| 05-16-00 | 1055 | 730 | .3 | 3 | 7.4 | 494 | 12.5 | <.050 | -- | -- | -- |
| 05-31-00 | 1055 | 731 | .7 | 7 | 6.9 | 491 | 12.8 | -- | -- | -- | -- |
| 07-11-00 | 1055 | 730 | .1 | 1 | 7.6 | 488 | 12.5 | <.050 | -- | -- | -- |
| 09-11-00 | 1055 | 730 | M | -- | 7.4 | -- | 13.0 | <.050 | -- | -- | -- |
| 11-09-99 | 1055 | 730 | .1 | 1 | 7.8 | 482 | 12.5 | <.050 | -- | -- | -- |
| 01-26-00 | 1055 | 728 | .1 | 1 | 7.4 | 464 | 12.5 | <.050 | -- | -- | -- |
| 03-13-00 | 1055 | 739 | .2 | -- | 7.4 | -- | 12.5 | <.050 | -- | -- | -- |
| 05-16-00 | 1055 | 730 | .3 | 3 | 7.4 | 470 | 12.5 | <.050 | -- | -- | -- |
| 07-11-00 | 1055 | 730 | .1 | 1 | 7.6 | 463 | 12.5 | <.050 | <.050 | <.050 | <.05 |
| 09-11-00 | 1055 | 730 | M | -- | 7.4 | -- | 13.0 | <.050 | -- | -- | -- |

| DATE | 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) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | SI- CLOATE, WATER, DISS, REC (UG/L) (04031) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DEISO- PROPYL ATRAZIN WATER, DISS, REC (UG/L) (04038) | DIPHEN- AMID, WATER, DISS, REC (UG/L) (04033) | HEXA- ZINONE, WATER, DISS, REC (UG/L) (04025) |
|----------------|---|---|--|---|---|--|---|--|--|---|---|
| DOUGLAS COUNTY | | | | | | | | | | | |
| 09-13-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11-09-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-26-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-13-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-16-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-11-00 | .062 | <.05 | <.05 | <.050 | <.05 | <.200 | <.05 | .075 | <.05 | <.05 | <.05 |
| 09-13-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11-10-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-28-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-16-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-18-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-12-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09-12-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11-10-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-28-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-16-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-18-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-12-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09-12-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SARPY COUNTY | | | | | | | | | | | |
| 11-09-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-26-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-13-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-16-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-11-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09-11-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11-09-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-13-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-16-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-11-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09-11-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11-09-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-26-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-13-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-16-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-11-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09-11-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11-09-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-26-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-13-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-16-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-11-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09-11-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11-09-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-26-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-13-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-16-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-11-00 | .096 | <.05 | <.05 | <.050 | <.05 | E.040 | <.05 | E.031 | <.05 | <.05 | <.05 |

CHEMICAL ANALYSES OF GROUND WATER

PAPIO-MISSOURI STUDY--Continued
WATER QUALITY FROM WELL NESTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible]

CHEMICAL ANALYSES OF GROUND WATER

PAPIO-MISSOURI STUDY--Continued
WATER QUALITY FROM WELL NESTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| 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) |
|-------------------|----------------|-------------------------------|--------------------|---------------------|-----------------------|---------------------------------|----------|------|--|
| SARPY COUNTY | | | | | | | | | |
| 410334096182803 | 13N 10E33BBAB3 | | 41 03 34 N | 096 18 28 W | 112SDGV | 10200202 | 11-09-99 | 0900 | 21.00 |
| | | | | | 112SDGV | 10200202 | 01-26-00 | 1050 | 21.00 |
| | | | | | 112SDGV | 10200202 | 03-13-00 | 1030 | 21.00 |
| | | | | | 112SDGV | 10200202 | 05-16-00 | 1015 | 21.00 |
| | | | | | 112SDGV | 10200202 | 07-11-00 | 0915 | 21.00 |
| | | | | | 112SDGV | 10200202 | 09-11-00 | 1110 | 21.00 |
| THURSTON COUNTY | | | | | | | | | |
| 420840096290901 | 25N 8E14ADBA1 | | 42 08 40 N | 096 29 09 W | -- | 10230001 | 11-08-99 | 1000 | 162.00 |
| | | | | | -- | 10230001 | 01-27-00 | 1030 | 162.00 |
| | | | | | -- | 10230001 | 03-14-00 | 1120 | 162.00 |
| | | | | | -- | 10230001 | 05-17-00 | 1250 | 162.00 |
| | | | | | -- | 10230001 | 07-10-00 | 1145 | 162.00 |
| | | | | | -- | 10230001 | 09-12-00 | 0945 | 162.00 |
| 420840096290902 | 25N 8E14ADBA2 | | | | -- | 10230001 | 11-08-99 | 1040 | 133.00 |
| | | | | | -- | 10230001 | 01-27-00 | 1110 | 133.00 |
| | | | | | -- | 10230001 | 03-14-00 | 1200 | 133.00 |
| | | | | | -- | 10230001 | 05-17-00 | 1315 | 133.00 |
| | | | | | -- | 10230001 | 07-10-00 | 1230 | 133.00 |
| | | | | | -- | 10230001 | 09-12-00 | 1030 | 133.00 |
| 420840096290903 | 25N 8E14ADBA3 | | | | -- | 10230001 | 11-08-99 | 1115 | 104.50 |
| | | | | | -- | 10230001 | 01-27-00 | 1140 | 104.50 |
| | | | | | -- | 10230001 | 03-14-00 | 1230 | 104.50 |
| | | | | | -- | 10230001 | 05-17-00 | 1340 | 104.50 |
| | | | | | -- | 10230001 | 07-10-00 | 1300 | 104.50 |
| | | | | | -- | 10230001 | 09-12-00 | 1100 | 104.50 |
| WASHINGTON COUNTY | | | | | | | | | |
| 412527096081201 | 17N 11E24CCBC1 | | 41 25 27 N | 096 08 12 W | 112SDGV | 10230006 | 11-10-99 | 1130 | 225.00 |
| | | | | | 112SDGV | 10230006 | 03-16-00 | 1245 | 225.00 |
| | | | | | 112SDGV | 10230006 | 05-18-00 | 1245 | 225.00 |
| | | | | | 112SDGV | 10230006 | 07-12-00 | 1230 | 225.00 |
| | | | | | 112SDGV | 10230006 | 09-13-00 | 1250 | 225.00 |
| 412527096081202 | 17N 11E24CCBC2 | | | | 112SDGV | 10230006 | 11-10-99 | 1150 | 193.50 |
| | | | | | 112SDGV | 10230006 | 01-25-00 | 1300 | 193.50 |
| 412527096081203 | 17N 11E24CCBC3 | | | | 112SDGV | 10230006 | 11-10-99 | 1210 | 168.00 |
| | | | | | 112SDGV | 10230006 | 01-25-00 | 1315 | 168.00 |
| | | | | | 112SDGV | 10230006 | 03-16-00 | 1300 | 168.00 |
| | | | | | 112SDGV | 10230006 | 05-18-00 | 1300 | 168.00 |
| | | | | | 112SDGV | 10230006 | 07-12-00 | 1300 | 168.00 |
| 412637095565901 | 17N 13E16DBAA1 | | 41 26 37 N | 095 56 59 W | 112SDGV | 10230006 | 11-10-99 | 0845 | 100.00 |
| | | | | | 112SDGV | 10230006 | 01-25-00 | 0945 | 100.00 |
| | | | | | 112SDGV | 10230006 | 03-16-00 | 1015 | 100.00 |
| | | | | | 112SDGV | 10230006 | 05-18-00 | 1000 | 100.00 |
| | | | | | 112SDGV | 10230006 | 07-12-00 | 1000 | 100.00 |
| | | | | | 112SDGV | 10230006 | 09-12-00 | 1715 | 100.00 |
| 412637095565902 | 17N 13E16DBAA2 | | | | 112SDGV | 10230006 | 11-10-99 | 0900 | 60.00 |
| | | | | | 112SDGV | 10230006 | 01-25-00 | 1000 | 60.00 |
| | | | | | 112SDGV | 10230006 | 03-16-00 | 1040 | 60.00 |
| | | | | | 112SDGV | 10230006 | 05-18-00 | 1020 | 60.00 |
| | | | | | 112SDGV | 10230006 | 07-12-00 | 1015 | 60.00 |

CHEMICAL ANALYSES OF GROUND WATER

PAPIO-MISSOURI STUDY--Continued
WATER QUALITY FROM WELL NESTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| 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) (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) |
|-------------------|---|---|---|--|--|---|--|--|--|---|
| SARPY COUNTY | | | | | | | | | | |
| 11-09-99 | 1055 | 730 | .1 | 1 | 7.4 | 724 | 14.0 | <.050 | -- | -- |
| 01-26-00 | 1055 | 728 | .1 | 1 | 7.2 | 594 | 13.0 | <.050 | -- | -- |
| 03-13-00 | 1055 | 739 | .4 | -- | 7.1 | -- | 12.0 | <.050 | -- | -- |
| 05-16-00 | 1055 | 730 | .6 | 6 | 7.2 | 746 | 11.5 | <.050 | -- | -- |
| 07-11-00 | 1055 | 730 | .1 | 1 | 7.3 | 646 | 12.0 | <.050 | <.050 | <.050 |
| 09-11-00 | 1055 | 730 | .3 | -- | 7.2 | -- | 13.5 | <.050 | -- | -- |
| THURSTON COUNTY | | | | | | | | | | |
| 11-08-99 | 1212 | 732 | .2 | 1 | 7.2 | 1080 | 11.5 | <.050 | -- | -- |
| 01-27-00 | 1212 | 730 | .2 | 2 | 7.2 | 987 | 11.0 | <.050 | -- | -- |
| 03-14-00 | 1212 | 729 | .1 | 1 | 7.4 | 978 | 11.0 | <.050 | -- | -- |
| 05-17-00 | 1212 | 730 | .1 | 1 | 7.3 | 972 | 11.0 | <.050 | -- | -- |
| 07-10-00 | 1212 | 730 | .1 | 1 | 7.1 | 948 | 11.0 | <.050 | -- | -- |
| 09-12-00 | 1212 | 732 | .1 | 0 | 7.1 | 962 | 11.0 | <.050 | -- | -- |
| 11-08-99 | 1212 | 732 | .1 | 1 | 7.2 | 908 | 11.0 | <.050 | -- | -- |
| 01-27-00 | 1212 | 730 | .2 | 1 | 7.1 | 978 | 11.0 | <.050 | -- | -- |
| 03-14-00 | 1212 | 729 | .1 | 1 | 7.0 | 968 | 11.0 | <.050 | -- | -- |
| 05-17-00 | 1212 | 730 | .1 | 1 | 7.1 | 874 | 11.0 | <.050 | -- | -- |
| 07-10-00 | 1212 | 730 | .1 | 1 | 7.1 | 858 | 11.0 | <.050 | -- | -- |
| 09-12-00 | 1212 | 732 | M | 0 | 7.1 | 866 | 11.0 | <.050 | -- | -- |
| 11-08-99 | 1212 | 732 | .1 | 1 | 7.2 | 826 | 11.0 | <.050 | -- | -- |
| 01-27-00 | 1212 | 730 | .2 | 2 | 7.1 | 914 | 11.0 | <.050 | -- | -- |
| 03-14-00 | 1212 | 729 | .1 | 1 | 7.1 | 796 | 11.0 | <.050 | -- | -- |
| 05-17-00 | 1212 | 730 | .1 | 1 | 7.1 | 804 | 11.0 | <.050 | -- | -- |
| 07-10-00 | 1212 | 730 | M | 0 | 7.1 | 791 | 11.0 | <.050 | <.050 | <.050 |
| 09-12-00 | 1212 | 732 | .1 | 1 | 7.1 | 794 | 11.0 | <.050 | -- | -- |
| WASHINGTON COUNTY | | | | | | | | | | |
| 11-10-99 | 1210 | 728 | 1.0 | 10 | 7.4 | 788 | 13.5 | <.050 | -- | -- |
| 03-16-00 | 1210 | 736 | 3.9 | -- | 7.3 | -- | 13.5 | <.050 | -- | -- |
| 05-18-00 | 1210 | 726 | 4.1 | 41 | 7.2 | 760 | 13.5 | <.050 | -- | -- |
| 07-12-00 | 1210 | 732 | 2.2 | 22 | 7.3 | 756 | 14.0 | <.050 | -- | -- |
| 09-13-00 | 1210 | 732 | 3.9 | 40 | 7.3 | 745 | 14.0 | <.050 | -- | -- |
| 11-10-99 | 1208 | 728 | .7 | 7 | 7.8 | 672 | 14.0 | <.050 | -- | -- |
| 01-25-00 | 1208 | 729 | 4.6 | 46 | 7.5 | 731 | 13.0 | <.050 | -- | -- |
| 11-10-99 | 1206 | 728 | .8 | 8 | 7.8 | 586 | 13.5 | <.050 | -- | -- |
| 01-25-00 | 1206 | 729 | 3.5 | 34 | 7.6 | 575 | 13.0 | <.050 | -- | -- |
| 03-16-00 | 1206 | 736 | 3.6 | -- | 7.6 | -- | 13.0 | <.050 | -- | -- |
| 05-18-00 | 1206 | 726 | 3.6 | 36 | 7.4 | 584 | 13.0 | <.050 | -- | -- |
| 07-12-00 | 1206 | 732 | 2.0 | 20 | 7.7 | 567 | 14.0 | <.050 | -- | -- |
| 11-10-99 | 995 | 732 | .1 | 1 | 7.4 | 1110 | 12.5 | <.050 | -- | -- |
| 01-25-00 | 995 | 730 | .1 | 1 | 7.0 | 1100 | 12.5 | <.050 | -- | -- |
| 03-16-00 | 995 | 743 | .1 | -- | 7.2 | -- | 12.5 | <.050 | -- | -- |
| 05-18-00 | 995 | 728 | .1 | 1 | 6.9 | 1100 | 12.5 | <.050 | -- | -- |
| 07-12-00 | 995 | 728 | .1 | 1 | 7.2 | 1130 | 12.5 | <.050 | -- | -- |
| 09-12-00 | 995 | 728 | .1 | 1 | 7.2 | 1130 | 12.5 | <.050 | -- | -- |
| 11-10-99 | 995 | 732 | .1 | 1 | 7.4 | 1220 | 12.5 | <.050 | -- | -- |
| 01-25-00 | 995 | 730 | .1 | 1 | 7.1 | 1300 | 11.5 | <.050 | -- | -- |
| 03-16-00 | 995 | 743 | .1 | -- | 7.2 | -- | 12.5 | <.050 | -- | -- |
| 05-18-00 | 995 | 728 | .1 | 1 | 6.9 | 1180 | 12.5 | <.050 | -- | -- |
| 07-12-00 | 995 | 728 | .1 | 1 | 7.2 | 1170 | 12.5 | <.050 | -- | -- |

| DATE | 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) | CYANA - ZINE, WATER, DISS, REC (UG/L) (04041) | SI - CLOATE, WATER, DISS, REC (UG/L) (04031) | DEETHYL ATRA - ZINE, WATER, DISS, REC (UG/L) (04040) | DEISO - PROPYL ATRAZIN WATER, DISS, REC (UG/L) (04038) | DIPHEN - AMID, WATER, DISS, REC (UG/L) (04033) | HEXA - ZINONE, WATER, DISS, REC (UG/L) (04025) |
|-------------------|--|--|---|--|--|---|--|---|---|--|--|
| SARPY COUNTY | | | | | | | | | | | |
| 11-09-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-26-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-13-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-16-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-11-00 | E.017 | <.05 | <.05 | <.050 | <.05 | <.200 | <.05 | E.006 | <.05 | <.05 | <.05 |
| 09-11-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| THURSTON COUNTY | | | | | | | | | | | |
| 11-08-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-27-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-14-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-17-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-10-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09-12-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11-08-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-27-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-14-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-17-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-10-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09-12-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11-08-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-27-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-14-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-17-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-10-00 | <.050 | <.05 | <.05 | <.050 | <.05 | <.200 | <.05 | <.050 | <.05 | <.05 | <.05 |
| 09-12-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| WASHINGTON COUNTY | | | | | | | | | | | |
| 11-10-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-16-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-18-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-12-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09-13-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11-10-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-25-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11-10-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-25-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-16-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-18-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-12-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11-10-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-25-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-16-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-18-00 | -- | -- | -- | -- | -- | | | | | | |

CHEMICAL ANALYSES OF GROUND WATER

PAPIO-MISSOURI STUDY--Continued
WATER QUALITY FROM WELL NESTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | METRO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630) | PRO- METON, WATER, DISS, REC (UG/L) (04037) | PRO- METRYN, WATER, DISS, REC (UG/L) (04036) | PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024) | PROP- AZINE WATER DISS, REC (UG/L) (38535) | SI- MAZINE, WATER, DISS, REC (UG/L) (04035) | 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) |
|-------------------|--|--|---|--|---|--|---|---|---|---|--|
| SARPY COUNTY | | | | | | | | | | | |
| 11-09-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-26-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-13-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-16-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-11-00 | <.050 | <.050 | <.050 | <.05 | <.050 | <.05 | <.050 | <.05 | <.05 | <.05 | <.05 |
| 09-11-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| THURSTON COUNTY | | | | | | | | | | | |
| 11-08-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-27-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-14-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-17-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-10-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09-12-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11-08-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-27-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-14-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-17-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-10-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09-12-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11-08-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-27-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-14-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-17-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-10-00 | <.050 | <.050 | <.050 | <.05 | <.050 | <.05 | <.050 | <.05 | <.05 | <.05 | <.05 |
| 09-12-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| WASHINGTON COUNTY | | | | | | | | | | | |
| 11-10-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-16-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-18-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-12-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09-13-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11-10-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-25-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11-10-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-25-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-16-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-18-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-12-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11-10-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-25-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-16-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-18-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-12-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09-12-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 11-10-99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-25-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 03-16-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 05-18-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 07-12-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| STATION | NUMBER | LOCAL IDENT- I- FIER | LAT- I- TUDE | LONG- I- TUDE | GEO- LOGIC UNIT | HYDRO- LOGIC UNIT CODE | DATE |
|-------------------|----------------|-------------------------------|--------------------|---------------------|-----------------------|---------------------------------|----------|
| WASHINGTON COUNTY | | | | | | | |
| 412637095565902 | 17N 13E16DBAA2 | | 41 26 37 N | 095 56 59 W | 112SDGV | 10230006 | 09-12-00 |
| 412637095565903 | 17N 13E16DBAA3 | | | | 112SDGV | 10230006 | 11-10-99 |
| | | | | | 112SDGV | 10230006 | 01-25-00 |
| | | | | | 112SDGV | 10230006 | 03-16-00 |
| | | | | | 112SDGV | 10230006 | 05-18-00 |
| | | | | | 112SDGV | 10230006 | 07-12-00 |
| | | | | | 112SDGV | 10230006 | 09-12-00 |

CHEMICAL ANALYSES OF GROUND WATER

PAPIO-MISSOURI STUDY--Continued
WATER QUALITY FROM WELL NESTS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | TIME | 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 (PER- CENT SOLVED (MG/L) (00300) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301) | PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE WATER (DEG C) (00010) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631) |
|-------------------|------|--|---|---|---|---|--|--|---|--|
| WASHINGTON COUNTY | | | | | | | | | | |
| 09-12-00 | 1730 | 60.00 | 995 | 728 | .1 | 0 | 7.2 | 1140 | 12.5 | <.050 |
| 11-10-99 | 0910 | 25.00 | 995 | 732 | .3 | 3 | 7.3 | 848 | 14.0 | <.050 |
| 01-25-00 | 1015 | 25.00 | 995 | 730 | .9 | 9 | 7.0 | 732 | 13.5 | <.050 |
| 03-16-00 | 1100 | 25.00 | 995 | 743 | .9 | 9 | 7.2 | 915 | 13.0 | <.050 |
| 05-18-00 | 1030 | 25.00 | 995 | 728 | 1.0 | 9 | 6.9 | 932 | 12.0 | <.050 |
| 07-12-00 | 1030 | 25.00 | 995 | 728 | .7 | 7 | 7.0 | 914 | 12.5 | <.050 |
| 09-12-00 | 1745 | 25.00 | 995 | 728 | 1.2 | 12 | 7.1 | 880 | 13.5 | <.050 |

CHEMICAL ANALYSES OF GROUND WATER

TRI-COUNTY GROUND-WATER MOUND
GROUND-WATER QUALITY

(Local identifier: indicates location by township, range, and section. Geologic unit: 110SDGV, Quaternary sand and gravel deposits, undifferentiated; 112SDGV, Pleistocene sand and gravel deposits; 121OGLL, Miocene Ogallala Formation.)

COUNTIES.--Gosper, Kearney, and Phelps

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| STATION | NUMBER | LOCAL IDENT- I- FIER | LAT- I- TUDE | LONG- I- TUDE | GEO- LOGIC UNIT | DATE | TIME |
|-----------------|-------------|-------------------------------|--------------------|---------------------|-----------------------|----------|------|
| GOSPER COUNTY | | | | | | | |
| 402610099450101 | 5N 21W 6BD | 1 | 40 26 10 N | 099 45 01 W | 121OGLL | 01-11-00 | 1130 |
| 403010099451901 | 6N 21W 7CB | 1 | 40 30 10 N | 099 45 19 W | 110SDGV | 01-11-00 | 0915 |
| 402838099481401 | 6N 22W 22BD | 1 | 40 28 38 N | 099 48 14 W | 121OGLL | 01-11-00 | 1015 |
| 403422099441801 | 7N 21W 18DA | 3 | 40 34 22 N | 099 44 18 W | 110SDGV | 01-11-00 | 1315 |
| 403500099520201 | 7N 22W 7CC | 1 | 40 35 00 N | 099 52 02 W | 110SDGV | 01-12-00 | 1000 |
| 403224099544101 | 7N 23W 34AA | 1 | 40 32 24 N | 099 54 41 W | 121OGLL | 01-19-00 | 1130 |
| 403828099383601 | 8N 21W 24DD | 1 | 40 38 28 N | 099 38 36 W | 110SDGV | 01-14-00 | 0930 |
| 404032099495801 | 8N 22W 8DB | 2 | 40 40 32 N | 099 49 58 W | 110SDGV | 01-11-00 | 1430 |
| 403959099575301 | 8N 23W 18AD | 1 | 40 39 59 N | 099 57 53 W | 110SDGV | 01-11-00 | 1700 |
| KEARNEY COUNTY | | | | | | | |
| 402614098535501 | 5N 14W 4AA | 1 | 40 26 14 N | 098 53 55 W | 121OGLL | 01-10-00 | 1300 |
| 402211099101701 | 5N 16W 30CD | 3 | 40 22 11 N | 099 10 17 W | 121OGLL | 01-18-00 | 1200 |
| 403047098565101 | 6N 14W 6CC | 1 | 40 30 47 N | 098 56 51 W | 121OGLL | 01-10-00 | 1445 |
| 402847099074801 | 6N 16W 21AB | 1 | 40 28 47 N | 099 07 48 W | 112SDGV | 01-13-00 | 0900 |
| 403255099003301 | 7N 15W 28AD | 1 | 40 32 55 N | 099 00 33 W | 110SDGV | 01-10-00 | 1600 |
| 403417099061601 | 7N 16W 15DD | 1 | 40 34 17 N | 099 06 16 W | 110SDGV | 01-18-00 | 1630 |
| PHELPS COUNTY | | | | | | | |
| 402610099222401 | 5N 18W 4BA | 1 | 40 26 10 N | 099 22 24 W | 112SDGV | 01-12-00 | 1500 |
| 402320099343501 | 5N 20W 22AC | 1 | 40 23 20 N | 099 34 35 W | 110SDGV | 01-18-00 | 1330 |
| 403104099130201 | 6N 17W 2CB | 1 | 40 31 04 N | 099 13 02 W | 110SDGV | 01-19-00 | 1400 |
| 402851099130101 | 6N 17W 23BB | 1 | 40 28 51 N | 099 13 01 W | 110SDGV | 01-19-00 | 0930 |
| 403014099213801 | 6N 18W 10BC | 1 | 40 30 14 N | 099 21 38 W | 110SDGV | 01-18-00 | 1500 |
| 402835099301401 | 6N 19W 20BD | 1 | 40 28 35 N | 099 30 14 W | 112SDGV | 01-12-00 | 1130 |
| 403040099340501 | 6N 20W 3DD | 1 | 40 30 40 N | 099 34 05 W | 110SDGV | 01-12-00 | 1345 |
| 403314099225001 | 7N 18W 21CC | 1 | 40 33 14 N | 099 22 50 W | 110SDGV | 01-13-00 | 1430 |

CHEMICAL ANALYSES OF GROUND WATER
TRI-COUNTY GROUND-WATER MOUND--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | DEPTH OF WELL, TOTAL (FEET) (72008) | ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000) | 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) | 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) |
|----------------|--|---|--|--|--|---|--|--|--|---|
| GOSPER COUNTY | | | | | | | | | | |
| 01-11-00 | 197.00 | -- | .4 | 7.4 | 594 | 12.5 | 2.76 | <1 | <1 | 3.1 |
| 01-11-00 | 201.00 | -- | .2 | 7.4 | 698 | 13.2 | 3.68 | <1 | <1 | 4.5 |
| 01-11-00 | 235.00 | -- | .3 | 7.4 | 562 | 13.2 | 2.34 | <1 | <1 | 3.9 |
| 01-11-00 | 330.00 | -- | .8 | 7.2 | 860 | 15.0 | 11.0 | <1 | <1 | 4.5 |
| 01-12-00 | 357.00 | -- | .3 | 7.2 | 820 | 14.7 | 1.72 | 2 | <1 | 6.6 |
| 01-19-00 | 223.00 | -- | 6.3 | 7.3 | 538 | 14.8 | 2.38 | <1 | <1 | 5.0 |
| 01-14-00 | 140.00 | -- | 5.1 | 7.2 | 498 | 14.4 | 6.43 | 1 | <1 | 4.5 |
| 01-11-00 | 245.00 | -- | .2 | 7.5 | 1020 | 10.5 | .077 | <1 | <1 | 3.6 |
| 01-11-00 | 231.00 | -- | .6 | 7.4 | 778 | 13.1 | 2.66 | <1 | <1 | 5.1 |
| KEARNEY COUNTY | | | | | | | | | | |
| 01-10-00 | 253.00 | -- | .2 | 6.9 | 612 | 13.5 | <.050 | <1 | <1 | 8.3 |
| 01-18-00 | 270.00 | -- | .2 | 7.1 | 582 | 13.8 | <.050 | <1 | <1 | 4.8 |
| 01-10-00 | 172.00 | -- | .2 | 7.1 | 924 | 12.5 | .056 | <1 | <1 | 4.2 |
| 01-13-00 | 165.00 | -- | 4.0 | 6.9 | 1280 | 13.5 | 9.27 | 5 | <1 | 2.7 |
| 01-10-00 | 75.00 | -- | -- | 7.1 | 1660 | 12.5 | 19.1 | 11 | <1 | 29.3 |
| 01-18-00 | 150.00 | -- | 1.9 | 7.0 | 1010 | 12.2 | 1.61 | <1 | <1 | 10.9 |
| PHELPS COUNTY | | | | | | | | | | |
| 01-12-00 | 295.00 | -- | 6.7 | 7.2 | 808 | 13.8 | 9.20 | 8 | <1 | 4.2 |
| 01-18-00 | 246.00 | -- | 8.1 | 7.2 | 540 | 13.2 | 3.89 | -- | -- | -- |
| 01-19-00 | 64.00 | 2242 | .4 | 6.9 | 1270 | 14.5 | 15.6 | 1 | <1 | 7.9 |
| 01-19-00 | 70.00 | -- | 2.1 | 7.8 | 980 | 15.5 | 2.01 | 8 | <1 | 45.3 |
| 01-18-00 | 99.00 | -- | 2.9 | 7.3 | 918 | 18.9 | .107 | 5 | <1 | 6.7 |
| 01-12-00 | 243.00 | -- | .4 | 6.9 | 673 | 14.2 | 9.03 | 3 | <1 | 3.4 |
| 01-12-00 | 230.00 | -- | .8 | 7.0 | 1020 | 13.8 | 14.1 | 7 | <1 | 3.3 |
| 01-13-00 | 80.00 | -- | .4 | 7.5 | 1030 | 18.2 | .745 | 34 | <1 | 11.3 |

CHEMICAL ANALYSES OF GROUND WATER
TRI-COUNTY GROUND-WATER MOUND--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | 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) | 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) |
|----------------|---|---|---|---|--|---|---|---|---|---|
| GOSPER COUNTY | | | | | | | | | | |
| 01-11-00 | 238 | <1 | 50 | <1.0 | E.8 | <1 | 8 | <1 | 22.6 | 10 |
| 01-11-00 | 171 | <1 | 54 | <1.0 | 2.7 | <1 | 3 | <1 | 26.9 | 3 |
| 01-11-00 | 152 | <1 | 56 | <1.0 | 2.0 | <1 | 5 | <1 | 26.0 | 1 |
| 01-11-00 | 164 | <1 | 62 | <1.0 | 2.9 | <1 | 4 | <1 | 24.2 | <1 |
| 01-12-00 | 85 | <1 | 88 | <1.0 | 1.1 | <1 | 7 | <1 | 28.8 | <1 |
| 01-19-00 | 121 | <1 | 62 | <1.0 | 2.1 | <1 | 2 | 2 | 27.6 | <1 |
| 01-14-00 | 207 | <1 | 47 | <1.0 | E.7 | <1 | 7 | <1 | 22.6 | 3 |
| 01-11-00 | 81 | <1 | 129 | <1.0 | <.8 | <1 | 2 | <1 | 24.3 | 22 |
| 01-11-00 | 57 | <1 | 82 | <1.0 | 1.5 | <1 | 3 | <1 | 26.9 | <1 |
| KEARNEY COUNTY | | | | | | | | | | |
| 01-10-00 | 130 | <1 | 52 | <1.0 | <.8 | <1 | 3 | <1 | 17.6 | 974 |
| 01-18-00 | 59 | <1 | 66 | <1.0 | <.8 | <1 | 3 | 3 | 23.5 | 7 |
| 01-10-00 | 195 | <1 | 48 | <1.0 | <.8 | <1 | 2 | <1 | 22.7 | 332 |
| 01-13-00 | 96 | <1 | 94 | <1.0 | E.7 | <1 | 13 | <1 | 40.6 | 2 |
| 01-10-00 | 134 | <1 | 129 | <1.0 | <.8 | 1 | 9 | <1 | 42.0 | 74 |
| 01-18-00 | 167 | <1 | 94 | <1.0 | <.8 | <1 | 7 | <1 | 30.8 | <1 |
| PHELPS COUNTY | | | | | | | | | | |
| 01-12-00 | 224 | <1 | 51 | <1.0 | 2.3 | <1 | 15 | <1 | 22.6 | <1 |
| 01-18-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-19-00 | 203 | <1 | 82 | <1.0 | <.8 | 3 | 1 | <1 | 29.6 | 1730 |
| 01-19-00 | 185 | <1 | 156 | <1.0 | <.8 | <1 | 5 | 2 | 70.3 | 14 |
| 01-18-00 | 61 | <1 | 179 | <1.0 | <.8 | <1 | 5 | <1 | 31.2 | 45 |
| 01-12-00 | 263 | <1 | 49 | <1.0 | 4.5 | <1 | 5 | <1 | 16.8 | <1 |
| 01-12-00 | 308 | <1 | 47 | <1.0 | 1.8 | <1 | 15 | <1 | 22.3 | <1 |
| 01-13-00 | 70 | <1 | 148 | <1.0 | <.8 | 3 | 5 | <1 | 29.8 | 332 |

CHEMICAL ANALYSES OF GROUND WATER
TRI-COUNTY GROUND-WATER MOUND--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| 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) | STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080) | THAL- LIUM, DIS- SOLVED (UG/L AS TL) (01057) | 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) |
|-----------------|--|---|--|---|---|--|---|---|---|
| GOSPER COUNTY | | | | | | | | | |
| 01-11-00 | 3 | 7 | 2.6 | <1 | 495 | <.9 | 9 | 910 | 5 |
| 01-11-00 | 3 | 6 | 3.4 | <1 | 710 | <.9 | 12 | 89 | 7 |
| 01-11-00 | 2 | 6 | 2.7 | <1 | 604 | <.9 | 11 | 1600 | 6 |
| 01-11-00 | 2 | 8 | 6.5 | <1 | 674 | <.9 | 12 | 22 | 10 |
| 01-12-00 | 3 | 2 | 2.2 | <1 | 620 | <.9 | 14 | 9 | 6 |
| 01-19-00 | 2 | 1 | 2.8 | <1 | 711 | <.9 | 14 | 525 | 9 |
| 01-14-00 | 2 | 4 | 3.6 | <1 | 201 | <.9 | 13 | 90 | <1 |
| 01-11-00 | 4 | 9 | <.7 | <1 | 394 | <.9 | 12 | 142 | 6 |
| 01-11-00 | 3 | 2 | 3.0 | <1 | 702 | <.9 | 13 | 106 | 6 |
| KEARNEY COUNTY | | | | | | | | | |
| 01-10-00 | 6 | 6 | E.6 | <1 | 429 | <.9 | <1 | 10 | <1 |
| 01-18-00 | 2 | 2 | 10.2 | <1 | 943 | <.9 | 13 | 129 | 9 |
| 01-10-00 | 12 | 9 | 1.5 | <1 | 585 | <.9 | <1 | 6 | <1 |
| 01-13-00 | 19 | 4 | 27.9 | <1 | 806 | <.9 | 13 | 38 | 31 |
| 01-10-00 | 59 | 13 | 13.1 | <1 | 596 | <.9 | 27 | 15 | 177 |
| 01-18-00 | 18 | 4 | 9.6 | <1 | 496 | <.9 | 16 | 68 | 96 |
| PHELPS COUNTY | | | | | | | | | |
| 01-12-00 | 4 | 2 | 26.1 | <1 | 587 | <.9 | 9 | 13 | 7 |
| 01-18-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-19-00 | 55 | 4 | 9.9 | <1 | 478 | <.9 | <1 | 7 | 19 |
| 01-19-00 | 12 | 3 | E.4 | <1 | 364 | <.9 | 40 | 175 | 13 |
| 01-18-00 | 6 | 3 | 2.3 | <1 | 664 | <.9 | 18 | 88 | 14 |
| 01-12-00 | 2 | 2 | 6.3 | <1 | 428 | <.9 | 11 | 7 | 4 |
| 01-12-00 | 2 | 3 | 11.0 | <1 | 620 | <.9 | 9 | 10 | 6 |
| 01-13-00 | 7 | 5 | 1.3 | <1 | 776 | <.9 | 16 | 32 | 17 |
| STATION | NUMBER | LOCAL IDENT- I- FIER | | LAT- I- TUDE | | LONG- I- TUDE | GEO- LOGIC UNIT | DATE | TIME |
| PHELPS COUNTY | | | | | | | | | |
| 403454099304801 | 7N 19W18AA | 1 | | 40 34 59 N | | 099 30 44 W | 110SDGV | 01-14-00 | 1300 |
| 403309099250701 | 7N 19W25AA | 1 | | 40 33 15 N | | 099 25 11 W | 110SDGV | 01-14-00 | 1430 |
| 403550099315001 | 7N 20W12AA | 1 | | 40 35 50 N | | 099 31 50 W | 110SDGV | 01-12-00 | 1245 |
| 403145099381002 | 7N 20W31CA | 2 | | 40 31 45 N | | 099 38 10 W | 112SDGV | 01-12-00 | 0900 |
| 403647099144001 | 8N 17W33DC | 1 | | 40 36 47 N | | 099 14 40 W | 110SDGV | 01-19-00 | 1500 |
| 403832099293501 | 8N 19W21CC | 2 | | 40 38 32 N | | 099 29 35 W | 110SDGV | 01-14-00 | 1100 |

CHEMICAL ANALYSES OF GROUND WATER
TRI-COUNTY GROUND-WATER MOUND--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | DEPTH OF WELL, TOTAL (FEET) (72008) | ELEV. OF LAND SURFACE | OXYGEN, DIS- SOLVED (MG/L) (00300) | PH | SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095) | TEMPER- ATURE WATER (DEG C) (00010) | NITRO- GEN, NO2+NO3 | ALUM- INUM, DIS- SOLVED | ANTI- MONY, DIS- SOLVED | ARSENIC DIS- SOLVED |
|---------------|--|---|--|--|---|--|---|---|---|---|
| | | DATUM | | WATER WHOLE FIELD (STAND- ARD UNITS) (00400) | | | DIS- SOLVED (MG/L AS N) (00631) | DIS- SOLVED (UG/L AS AL) (01106) | DIS- SOLVED (UG/L AS SB) (01095) | DIS- SOLVED (UG/L AS AS) (01000) |
| | | (FT. ABOVE NGVD) (72000) | | | | | | | | |
| PHELPS COUNTY | | | | | | | | | | |
| 01-14-00 | 152.00 | 2383 | 1.8 | 9.8 | 152 | 11.8 | <.050 | -- | -- | -- |
| 01-14-00 | 112.00 | 2320 | 2.1 | 10.3 | 402 | 11.8 | <.050 | 28 | <1 | E.5 |
| 01-12-00 | 158.00 | -- | .8 | 7.0 | 1260 | 13.8 | 20.4 | 6 | <1 | 3.1 |
| 01-12-00 | 260.00 | -- | .3 | 7.0 | 940 | 15.2 | 8.06 | <1 | <1 | 2.7 |
| 01-19-00 | 73.00 | -- | 4.2 | 7.3 | 761 | 12.9 | 13.4 | <1 | <1 | 4.1 |
| 01-14-00 | 55.00 | -- | 2.2 | 6.9 | 1270 | 12.7 | 5.26 | 2 | <1 | 13.1 |
| DATE | 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) | 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) |
| | PHELPS COUNTY | | | | | | | | | |
| 01-14-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-14-00 | 11 | <1 | 61 | <1.0 | <.8 | <1 | 3 | 43 | 10.8 | <1 |
| 01-12-00 | 91 | <1 | 107 | <1.0 | 3.3 | <1 | 15 | <1 | 32.2 | <1 |
| 01-12-00 | 74 | <1 | 85 | <1.0 | 1.2 | <1 | 15 | <1 | 21.0 | 1 |
| 01-19-00 | 495 | <1 | 56 | <1.0 | E.6 | <1 | 2 | <1 | 15.8 | <1 |
| 01-14-00 | 39 | <1 | 133 | <1.0 | <.8 | <1 | 4 | <1 | 41.4 | 8 |
| 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) | STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080) | THAL- LIUM, DIS- SOLVED (UG/L AS TL) (01057) | 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) | |
| | PHELPS COUNTY | | | | | | | | | |
| 01-14-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 01-14-00 | 9 | <1 | <.7 | <1 | 36.3 | <.9 | <1 | 118 | <1 | |
| 01-12-00 | 7 | 2 | 31.4 | <1 | 610 | <.9 | 7 | 13 | 13 | |
| 01-12-00 | 2 | 2 | 5.5 | <1 | 549 | <.9 | 10 | 14 | 6 | |
| 01-19-00 | 1 | 2 | 12.5 | <1 | 406 | <.9 | 7 | 33 | 17 | |
| 01-14-00 | 20 | 11 | 8.9 | <1 | 473 | <.9 | 10 | 99 | 52 | |

CHEMICAL ANALYSES OF GROUND WATER

ASHLAND WELL FIELD STUDY
GROUND-WATER QUALITY

(Local identifier: indicates location by township, range, and section. Geologic unit: 110QRTR, Quaternary system deposits, undifferentiated; 112SDGV, Pleistocene sand and gravel deposits.)

COUNTIES.--Sarpy and Saunders

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| STATION | NUMBER | LOCAL IDENT- IFIER | GEO- LOGIC UNIT | DATE | TIME | DEPTH OF WELL, TOTAL (FEET) (72008) | ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000) | SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303) | SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301) | BARO- METRIC PRES- SURE (MM OF HG) (00025) |
|-----------------|----------------|--------------------------|-----------------------|----------|------|--|---|--|---|---|
| SARPY COUNTY | | | | | | | | | | |
| 410233096181801 | 12N 10E 4BADB1 | | -- | 09-07-00 | 1100 | -- | 1052 | .51 | 377 | 730 |
| 410312096183901 | 13N 10E32ADDD1 | | 112SDGV | 09-07-00 | 1145 | 46.00 | 1056 | .39 | 288 | 730 |
| 410324096191801 | 13N 10E32BADC1 | | 112SDGV | 09-07-00 | 0945 | -- | 1060 | .54 | 396 | 730 |
| SAUNDERS COUNTY | | | | | | | | | | |
| 410707096220601 | 13N 9E 2DDDD1 | | 110QRNR | 09-06-00 | 1100 | 130.00 | 1077 | -- | -- | 734 |
| 410612096220601 | 13N 9E14AAAA1 | | 110QRNR | 09-06-00 | 1015 | 98.00 | 1071 | -- | -- | 734 |
| 410703096205301 | 13N 10E 7BBBB1 | | 110QRNR | 09-06-00 | 1200 | 96.00 | 1075 | -- | -- | 734 |
| 410427096202501 | 13N 10E19CDDD1 | | 112SDGV | 09-07-00 | 1400 | 56.00 | 1065 | .48 | 350 | 730 |
| 410303096192901 | 13N 10E32CABC1 | | 112SDGV | 09-07-00 | 1300 | 86.00 | 1056 | .45 | 332 | 730 |

| DATE | 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) |
|-----------------|--|---|--|--|---|--|---|---|--|--|---|------------------------------|
| SARPY COUNTY | | | | | | | | | | | | |
| 09-07-00 | .4 | 4 | 7.3 | 602 | 12.5 | 240 | 68.5 | 15.7 | 8.1 | .9 | 31.0 | 22 |
| 09-07-00 | M | 0 | 7.6 | 480 | 9.5 | 180 | 44.9 | 15.4 | 7.6 | 1 | 31.1 | 27 |
| 09-07-00 | .1 | 1 | 7.5 | 621 | 15.0 | 220 | 66.7 | 13.4 | 8.0 | 1 | 37.4 | 26 |
| SAUNDERS COUNTY | | | | | | | | | | | | |
| 09-06-00 | M | 0 | 7.1 | 791 | 12.5 | -- | -- | -- | -- | -- | -- | -- |
| 09-06-00 | M | 0 | 7.2 | 820 | 12.0 | -- | -- | -- | -- | -- | -- | -- |
| 09-06-00 | M | 0 | 7.2 | 433 | 12.5 | -- | -- | -- | -- | -- | -- | -- |
| 09-07-00 | M | 0 | 7.7 | 568 | 9.5 | 160 | 43.8 | 12.8 | 7.3 | 2 | 47.4 | 38 |
| 09-07-00 | M | 0 | 7.8 | 520 | 14.5 | 160 | 41.5 | 12.5 | 7.2 | 2 | 43.2 | 36 |

| 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) | 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 | | | | | | | | | | | | |
| 09-07-00 | 202 | 13.8 | .3 | 27.8 | 88.7 | 21 | 6.9 | 212 | <2 | 86 | <8.0 | <14.0 |
| 09-07-00 | 165 | 14.6 | .3 | 11.5 | 61.4 | 7.8 | 2.7 | 197 | <2 | 66 | <8.0 | <14.0 |
| 09-07-00 | 189 | 16.7 | .3 | 33.6 | 106 | 12 | 5.7 | 181 | <2 | 79 | <8.0 | <14.0 |
| SAUNDERS COUNTY | | | | | | | | | | | | |
| 09-06-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09-06-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09-06-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09-07-00 | 138 | 18.8 | .5 | 25.0 | 111 | 5.1 | 8.4 | 73 | <2 | 132 | <8.0 | <14.0 |
| 09-07-00 | 144 | 16.0 | .5 | 31.0 | 92.9 | 4.6 | 9.6 | 60 | <2 | 115 | <8.0 | <14.0 |

CHEMICAL ANALYSES OF GROUND WATER
ASHLAND WELL FIELD STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| 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) |
|-----------------|---|--|--|---|---|---|--|--|--|---|--|---|
| SARPY COUNTY | | | | | | | | | | | | |
| 09-07-00 | <13 | <10 | 250 | <100 | 20.4 | 1160 | <.2 | <34 | E23 | 3.9 | <7 | 423 |
| 09-07-00 | <13 | <10 | 500 | <100 | 13.1 | 672 | <.2 | <34 | <40 | <2.4 | <7 | 334 |
| 09-07-00 | <13 | <10 | E10 | <100 | 17.5 | 76 | <.2 | <34 | <40 | <2.4 | <7 | 392 |
| SAUNDERS COUNTY | | | | | | | | | | | | |
| 09-06-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09-06-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09-06-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 09-07-00 | <13 | <10 | 20 | <100 | 18.6 | 34 | <.2 | <34 | <40 | <2.4 | <7 | 346 |
| 09-07-00 | <13 | <10 | E10 | <100 | 23.0 | 43 | <.2 | <34 | <40 | <2.4 | <7 | 322 |
| DATE | VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085) | ZINC, DIS- SOLVED (UG/L AS ZN) (01090) | 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) | CYANA- ZINE, WATER, DISS, REC (UG/L) (04041) | |
| SARPY COUNTY | | | | | | | | | | | | |
| 09-07-00 | <10 | E15 | <.050 | <.050 | M | .803 | <.20 | <.05 | <.050 | <.05 | <.200 | |
| 09-07-00 | <10 | <20 | <.050 | <.050 | <.05 | .365 | <.20 | <.05 | <.050 | <.05 | E.044 | |
| 09-07-00 | <10 | E14 | <.050 | <.050 | M | .344 | <.20 | <.05 | <.050 | <.05 | <.050 | |
| SAUNDERS COUNTY | | | | | | | | | | | | |
| 09-06-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 09-06-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 09-06-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 09-07-00 | E6 | <20 | <.050 | <.050 | E.01 | .794 | <.20 | <.05 | <.050 | <.05 | <.050 | |
| 09-07-00 | E9 | <20 | <.050 | <.050 | E.01 | .428 | <.20 | <.05 | <.050 | <.05 | <.050 | |
| DATE | SI- CLOATE, WATER, DISS, REC (UG/L) (04031) | DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040) | DEISO- PROPYL ATRAZIN WATER, DISS, REC (UG/L) (04038) | DIPHEN- AMID, WATER, DISS, REC (UG/L) (04033) | HEXA- ZINONE, WATER, DISS, REC (UG/L) (04025) | METO- LACHLOR WATER DISSOLV (UG/L) (39415) | METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630) | PRO- METON, WATER, DISS, REC (UG/L) (04037) | PRO- METRYN, WATER, DISS, REC (UG/L) (04036) | PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024) | PROP- AZINE WATER DISS REC (UG/L) (38535) | |
| SARPY COUNTY | | | | | | | | | | | | |
| 09-07-00 | <.05 | .12 | .06 | <.05 | <.05 | .120 | <.050 | E.010 | <.05 | <.050 | E.01 | |
| 09-07-00 | <.05 | .085 | E.03 | <.05 | <.05 | E.048 | <.050 | <.050 | <.05 | <.050 | E.01 | |
| 09-07-00 | <.05 | .090 | E.03 | <.05 | <.05 | E.046 | <.050 | E.009 | <.05 | <.050 | M | |
| SAUNDERS COUNTY | | | | | | | | | | | | |
| 09-06-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 09-06-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 09-06-00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 09-07-00 | <.05 | .17 | .06 | <.05 | <.05 | .201 | <.050 | E.008 | <.05 | <.050 | E.01 | |
| 09-07-00 | <.05 | .16 | .07 | <.05 | <.05 | .108 | <.050 | E.011 | <.05 | <.050 | E.01 | |

CHEMICAL ANALYSES OF GROUND WATER
ASHLAND WELL FIELD STUDY--Continued
GROUND-WATER QUALITY

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible]

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible]

CHEMICAL ANALYSES OF GROUND WATER
UPPER REPUBLICAN NATURAL RESOURCES DISTRICT

(Local identifier: indicates location by township, range, and section. Geologic unit: 111ALVM, Holocene alluvium deposits; 121OGLL, Miocene Ogallala Formation.)

COUNTIES.--Chase, Dundy, and Perkins

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| STATION | NUMBER | LOCAL IDENT- I- FIER | LAT- I- TUDE | LONG- I- TUDE | GEO- LOGIC UNIT | DATE | TIME | DEPTH OF WELL, TOTAL (FEET) (72008) | ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000) |
|-----------------|---------------|-------------------------------|--------------------|---------------------|-----------------------|----------------------|--------------|--|---|
| CHASE COUNTY | | | | | | | | | |
| 402505101495501 | 5N 40W11BDBB1 | | 40 25 05 N | 101 49 55 W | 121OGLL | 08-10-00 | 0730 | 230.00 | 3410 |
| 402649101484701 | 6N 40W36BO 1 | | 40 26 49 N | 101 48 47 W | 121OGLL 121OGLL | 08-09-00 08-09-00 | 0830 0831 | 323.00 323.00 | 3397 3397 |
| 403623101422901 | 7N 39W 2ACAB1 | | 40 36 23 N | 101 42 29 W | 121OGLL | 08-09-00 | 0700 | 240.00 | 3328 |
| 403531101454901 | 7N 39W 8AACD1 | | 40 38 31 N | 101 45 49 W | 121OGLL | 08-21-00 | 1200 | 260.00 | 3360 |
| 403745101314601 | 8N 37W28CO 1 | | 40 37 45 N | 101 31 46 W | 121OGLL 121OGLL | 08-09-00 08-09-00 | 1400 1401 | 290.00 290.00 | 3260 3260 |
| 403716101302001 | 8N 37W34BDAB1 | | 40 37 16 N | 101 30 20 W | 121OGLL | 08-09-00 | 1500 | 273.00 | 3232 |
| 403850101350901 | 8N 38W24CABB1 | | 40 38 50 N | 101 35 29 W | 121OGLL | 08-09-00 | 1330 | 306.00 | 3285 |
| 403757101534201 | 8N 40W29CBBB1 | | 40 37 57 N | 101 53 42 W | 121OGLL | 08-09-00 | 1200 | 231.00 | 3471 |
| 403757101544701 | 8N 40W30BCCC1 | | 40 37 57 N | 101 54 47 W | 121OGLL 121OGLL | 08-09-00 08-09-00 | 1030 1031 | 225.00 225.00 | 3482 3482 |
| 403757101552001 | 8N 41W25BDDD1 | | 40 37 57 N | 101 55 20 W | 121OGLL | 08-09-00 | 1000 | 215.00 | 3486 |
| DUNDY COUNTY | | | | | | | | | |
| 400502101253901 | 1N 36W 6ACDA1 | | 40 05 02 N | 101 25 39 W | 111ALVM 111ALVM | 08-10-00 08-10-00 | 1300 1301 | 27.00 27.00 | 2904 2904 |
| 400521101281601 | 1N 37W 2BBAC1 | | 40 05 21 N | 101 28 16 W | 111ALVM 111ALVM | 08-10-00 08-10-00 | 1400 1401 | 50.00 50.00 | 2950 2950 |
| 400403101322001 | 1N 37W 7DBBD1 | | 40 04 03 N | 101 32 20 W | 121OGLL | 08-11-00 | 0900 | 80.00 | 3072 |
| 400113101311801 | 1N 37W29DCBB1 | | 40 01 13 N | 101 31 18 W | 111ALVM | 08-10-00 | 1300 | 42.00 | 2995 |
| 400017101321201 | 1N 37W31DCAC1 | | 40 00 17 N | 101 32 12 W | 111ALVM | 08-09-00 | 1500 | 50.00 | 3000 |
| 400018101315601 | 1N 37W31DDAB1 | | 40 00 18 N | 101 31 56 W | 111ALVM 111ALVM | 08-10-00 08-10-00 | 1600 1601 | 47.00 47.00 | 3003 3003 |
| 400405101352201 | 1N 38W10DABA1 | | 40 04 05 N | 101 35 22 W | 121OGLL | 08-11-00 | 0800 | 102.00 | 3284 |
| 400340101382101 | 1N 38W17BABB1 | | 40 03 40 N | 101 38 21 W | 121OGLL 121OGLL | 08-11-00 08-11-00 | 1000 1001 | 100.00 100.00 | 3177 3177 |
| 400159101375101 | 1N 38W20DCDD1 | | 40 01 59 N | 101 37 51 W | 111ALVM | 08-11-00 | 0800 | 60.00 | 3040 |
| 400415101411201 | 1N 39W11ADEB1 | | 40 04 15 N | 101 41 12 W | -- | 08-21-00 | 1430 | -- | 3245 |
| 400228101505001 | 1N 40W21BCAD1 | | 40 02 28 N | 101 50 50 W | 111ALVM | 08-22-00 | 0830 | 95.00 | 3215 |
| 400203101504001 | 1N 40W21CDAC1 | | 40 02 03 N | 101 50 40 W | 111ALVM 111ALVM | 08-10-00 08-10-00 | 0900 0901 | 97.00 97.00 | 3180 3180 |

CHEMICAL ANALYSES OF GROUND WATER

UPPER REPUBLICAN NATURAL RESOURCES DISTRICT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301) | 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) | 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) |
|--------------|--|--|--|--|--|---|--|---|---|--|--|
| CHASE COUNTY | | | | | | | | | | | |
| 08-10-00 | -- | -- | 7.4 | 7.5 | 402 | 14.7 | -- | -- | -- | -- | -- |
| 08-09-00 | .35 | 259 | 8.4 | 7.7 | 387 | 14.3 | 150 | 40.2 | 13.0 | 10.7 | .4 |
| 08-09-00 | -- | -- | 8.4 | 7.7 | 387 | 14.3 | -- | -- | -- | -- | -- |
| 08-09-00 | -- | -- | 9.2 | 7.5 | 337 | 14.8 | -- | -- | -- | -- | -- |
| 08-21-00 | -- | -- | 8.9 | 7.8 | 323 | 14.7 | -- | -- | -- | -- | -- |
| 08-09-00 | .33 | 240 | 7.8 | 7.7 | 366 | 14.4 | 150 | 44.0 | 10.0 | 10.4 | .2 |
| 08-09-00 | -- | -- | 7.8 | 7.7 | 366 | 14.4 | -- | -- | -- | -- | -- |
| 08-09-00 | -- | -- | 7.0 | 7.7 | 381 | 14.5 | -- | -- | -- | -- | -- |
| 08-09-00 | -- | -- | -- | 8.1 | 355 | 14.7 | -- | -- | -- | -- | -- |
| 08-09-00 | -- | -- | 9.4 | 7.8 | 439 | 14.1 | -- | -- | -- | -- | -- |
| 08-09-00 | .32 | 237 | 9.1 | 7.8 | 341 | 14.1 | 120 | 37.0 | 7.86 | 7.4 | .5 |
| 08-09-00 | -- | -- | 9.1 | 7.8 | 341 | 14.1 | -- | -- | -- | -- | -- |
| 08-09-00 | -- | -- | -- | 7.9 | 362 | 16.8 | -- | -- | -- | -- | -- |
| DUNDY COUNTY | | | | | | | | | | | |
| 08-10-00 | 1.79 | 1320 | 1.4 | 7.4 | 1920 | 15.0 | 600 | 151 | 53.6 | 43.5 | 3 |
| 08-10-00 | -- | -- | 1.4 | 7.4 | 1920 | 15.0 | -- | -- | -- | -- | -- |
| 08-10-00 | 1.44 | 1060 | 5.2 | 7.2 | 1620 | 17.0 | 550 | 145 | 46.4 | 22.4 | 2 |
| 08-10-00 | -- | -- | 5.2 | 7.2 | 1620 | 17.0 | -- | -- | -- | -- | -- |
| 08-11-00 | -- | -- | 7.7 | 7.3 | 1300 | 14.6 | -- | -- | -- | -- | -- |
| 08-10-00 | -- | -- | -- | 7.9 | 2580 | 16.4 | -- | -- | -- | -- | -- |
| 08-09-00 | -- | -- | -- | 7.5 | 2360 | 16.2 | -- | -- | -- | -- | -- |
| 08-10-00 | 2.87 | 2110 | 2.7 | 7.5 | 2830 | 14.0 | 960 | 237 | 88.7 | 27.1 | 4 |
| 08-10-00 | -- | -- | 2.7 | 7.5 | 2830 | 14.0 | -- | -- | -- | -- | -- |
| 08-11-00 | -- | -- | -- | 7.6 | 686 | 15.0 | -- | -- | -- | -- | -- |
| 08-11-00 | .45 | 329 | 6.3 | 7.7 | 476 | 15.0 | 170 | 49.0 | 11.5 | 12.2 | .8 |
| 08-11-00 | -- | -- | 6.3 | 7.7 | 476 | 15.0 | -- | -- | -- | -- | -- |
| 08-11-00 | -- | -- | -- | 7.4 | 1400 | 14.2 | -- | -- | -- | -- | -- |
| 08-21-00 | -- | -- | 8.8 | 7.7 | 771 | 13.6 | -- | -- | -- | -- | -- |
| 08-22-00 | -- | -- | -- | 7.3 | 653 | 14.3 | -- | -- | -- | -- | -- |
| 08-10-00 | .63 | 460 | 6.1 | 7.3 | 708 | 14.3 | 280 | 77.0 | 21.5 | 16.6 | .8 |
| 08-10-00 | -- | -- | 6.1 | 7.3 | 708 | 14.3 | -- | -- | -- | -- | -- |

[illegible]

CHEMICAL ANALYSES OF GROUND WATER
UPPER REPUBLICAN NATURAL RESOURCES DISTRICT--Continued
WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| STATION | NUMBER | LOCAL IDENT- I- FIER | LAT- I- TUDE | LONG- I- TUDE | GEO- LOGIC UNIT | DATE | TIME | DEPTH OF WELL, TOTAL (FEET) (72008) | ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000) |
|-----------------|---------------|-------------------------------|--------------------|---------------------|-----------------------|----------------------|--------------|--|---|
| DUNDY COUNTY | | | | | | | | | |
| 400447101555801 | 1N 41W 3DBDD1 | | 40 04 47 N | 101 55 58 W | 121OGLL | 08-08-00 | 0900 | 95.00 | 3408 |
| 400521101565801 | 1N 41W 4AAAB1 | | 40 05 21 N | 101 56 58 W | 121OGLL | 08-08-00 | 1000 | 80.00 | 3410 |
| 400800101305401 | 2N 37W20AAAB1 | | 40 08 00 N | 101 30 54 W | 121OGLL | 08-09-00 | 1100 | 190.00 | 3205 |
| 400723101375801 | 2N 38W20DBCD1 | | 40 07 23 N | 101 37 58 W | 121OGLL | 08-07-00 | 1400 | 180.00 | 3300 |
| 400725101340101 | 2N 38W24CCBB1 | | 40 07 25 N | 101 34 01 W | 121OGLL 121OGLL | 08-09-00 08-09-00 | 1200 1201 | 135.00 135.00 | 3182 3182 |
| 400657101365801 | 2N 38W28BADD1 | | 40 06 57 N | 101 36 58 W | 121OGLL | 08-09-00 | 1400 | 160.00 | 3250 |
| 400536101371901 | 2N 38W33CO 1 | | 40 05 36 N | 101 37 19 W | -- | 08-09-00 | 1300 | -- | 3253 |
| 400528101353301 | 2N 38W34DCDD1 | | 40 05 28 N | 101 35 33 W | 121OGLL 121OGLL | 08-09-00 08-09-00 | 1400 1401 | 80.00 80.00 | 3185 3185 |
| 400748101443801 | 2N 39W20AO 1 | | 40 07 48 N | 101 44 38 W | 121OGLL 121OGLL | 08-10-00 08-10-00 | 1100 1101 | 170.00 170.00 | 3350 3350 |
| 400655101440401 | 2N 39W28BO 1 | | 40 06 55 N | 101 44 04 W | 121OGLL | 08-10-00 | 1200 | 137.00 | 3298 |
| 400629101440201 | 2N 39W28CO 1 | | 40 06 29 N | 101 44 02 W | 121OGLL 121OGLL | 08-10-00 08-10-00 | 1000 1001 | 115.00 115.00 | 3282 3282 |
| 400605101402201 | 2N 39W36ABCC1 | | 40 06 05 N | 101 40 22 W | 121OGLL | 08-10-00 | 0900 | 102.00 | 3252 |
| 400533101504501 | 2N 40W33CDBB1 | | 40 05 33 N | 101 50 45 W | 121OGLL | 08-22-00 | 0730 | 120.00 | 3370 |
| 400815101585401 | 2N 41W17CO 1 | | 40 08 15 N | 101 58 54 W | 121OGLL | 08-08-00 | 1200 | 120.00 | 3480 |
| 400746101572701 | 2N 41W21ACBB1 | | 40 07 46 N | 101 57 27 W | 121OGLL | 08-08-00 | 1200 | 120.00 | 3445 |
| 400639101563801 | 2N 41W27BCDD1 | | 40 06 39 N | 101 56 38 W | 121OGLL | 08-22-00 | 0930 | 100.00 | 3422 |
| 400704101574701 | 2N 41W28BBAD1 | | 40 07 04 N | 101 57 47 W | 121OGLL 121OGLL | 08-08-00 08-08-00 | 1100 1101 | 120.00 120.00 | 3480 3480 |
| 401001102010601 | 2N 42W 1CBDC1 | | 40 10 01 N | 102 01 06 W | 121OGLL | 08-08-00 | 1300 | 211.00 | 3552 |
| 401006102025701 | 2N 42W 3DBBC1 | | 40 10 06 N | 102 02 57 W | 121OGLL 121OGLL | 08-22-00 08-22-00 | 1100 1101 | 216.00 216.00 | 3570 3570 |
| 400855102004601 | 2N 42W12CDDC1 | | 40 08 55 N | 102 00 46 W | 121OGLL | 08-08-00 | 1400 | 168.00 | 3517 |
| 400646102015001 | 2N 42W26BDD1 | | 40 06 46 N | 102 01 50 W | 121OGLL | 08-21-00 | 1500 | 132.00 | 3536 |
| 400634102023801 | 2N 42W27DCAA1 | | 40 06 34 N | 102 02 38 W | 121OGLL | 08-21-00 | 1600 | 115.00 | 3540 |
| 401509101414801 | 3N 39W 2CCAC1 | | 40 15 09 N | 101 41 48 W | 121OGLL | 08-11-00 | 0900 | 310.00 | 3355 |
| 401327101400601 | 3N 39W 3DO 1 | | 40 13 27 N | 101 40 06 W | 121OGLL | 08-07-00 | 1300 | 235.00 | 3317 |

CHEMICAL ANALYSES OF GROUND WATER

UPPER REPUBLICAN NATURAL RESOURCES DISTRICT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303) | SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301) | 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) | 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) |
|--------------|--|---|--|--|--|---|--|---|---|--|--|
| DUNDY COUNTY | | | | | | | | | | | |
| 08-08-00 | -- | -- | 6.8 | 7.4 | 396 | 16.1 | -- | -- | -- | -- | -- |
| 08-08-00 | -- | -- | 9.0 | 7.4 | 378 | 17.2 | -- | -- | -- | -- | -- |
| 08-09-00 | -- | -- | 9.7 | 7.5 | 456 | 17.2 | -- | -- | -- | -- | -- |
| 08-07-00 | -- | -- | -- | 7.3 | 388 | 15.2 | -- | -- | -- | -- | -- |
| 08-09-00 | .44 | 326 | 5.7 | 7.4 | 512 | 16.2 | 190 | 54.2 | 14.4 | 10.8 | .6 |
| 08-09-00 | -- | -- | 5.7 | 7.4 | 512 | 16.2 | -- | -- | -- | -- | -- |
| 08-09-00 | -- | -- | -- | 7.8 | 395 | 16.2 | -- | -- | -- | -- | -- |
| 08-09-00 | -- | -- | -- | 7.5 | 528 | 16.4 | -- | -- | -- | -- | -- |
| 08-09-00 | .56 | 408 | 8.0 | 7.4 | 673 | 14.5 | 250 | 70.9 | 17.7 | 2.5 | .8 |
| 08-09-00 | -- | -- | 8.0 | 7.4 | 673 | 14.5 | -- | -- | -- | -- | -- |
| 08-10-00 | .37 | 270 | 7.0 | 7.5 | 388 | 16.2 | 150 | 41.7 | 10.5 | 9.0 | .5 |
| 08-10-00 | -- | -- | 7.0 | 7.5 | 388 | 16.2 | -- | -- | -- | -- | -- |
| 08-10-00 | -- | -- | 11.3 | 7.4 | 404 | 16.0 | -- | -- | -- | -- | -- |
| 08-10-00 | .42 | 306 | 7.8 | 7.5 | 444 | 15.0 | 170 | 48.0 | 11.8 | 10.8 | .5 |
| 08-10-00 | -- | -- | 7.8 | 7.5 | 444 | 15.0 | -- | -- | -- | -- | -- |
| 08-10-00 | -- | -- | -- | 8.0 | 438 | 15.6 | -- | -- | -- | -- | -- |
| 08-22-00 | -- | -- | 6.8 | 7.8 | 457 | 16.2 | -- | -- | -- | -- | -- |
| 08-08-00 | -- | -- | 7.4 | 7.3 | 424 | 18.4 | -- | -- | -- | -- | -- |
| 08-08-00 | -- | -- | 4.4 | 7.4 | 422 | 20.9 | -- | -- | -- | -- | -- |
| 08-22-00 | -- | -- | 9.2 | 7.4 | 357 | 14.3 | -- | -- | -- | -- | -- |
| 08-08-00 | .35 | 256 | 7.6 | 7.3 | 361 | 16.4 | 140 | 42.0 | 9.62 | 8.3 | .4 |
| 08-08-00 | -- | -- | 7.6 | 7.3 | 361 | 16.4 | -- | -- | -- | -- | -- |
| 08-08-00 | -- | -- | 7.2 | 7.6 | 436 | 17.9 | -- | -- | -- | -- | -- |
| 08-22-00 | .41 | 301 | -- | 7.7 | 424 | 16.0 | 170 | 48.0 | 11.2 | 8.7 | .4 |
| 08-22-00 | -- | -- | -- | 7.7 | 424 | 16.0 | -- | -- | -- | -- | -- |
| 08-08-00 | -- | -- | 6.2 | 7.5 | 440 | 19.1 | -- | -- | -- | -- | -- |
| 08-21-00 | -- | -- | 10.1 | 7.5 | 439 | 15.0 | -- | -- | -- | -- | -- |
| 08-21-00 | -- | -- | -- | 7.7 | 463 | 15.2 | -- | -- | -- | -- | -- |
| 08-11-00 | -- | -- | -- | 7.8 | 362 | 17.5 | -- | -- | -- | -- | -- |
| 08-07-00 | -- | -- | -- | 7.6 | 416 | 18.0 | -- | -- | -- | -- | -- |

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[illegible]

CHEMICAL ANALYSES OF GROUND WATER
UPPER REPUBLICAN NATURAL RESOURCES DISTRICT--Continued
WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| STATION | NUMBER | LOCAL IDENT- I- FIER | LAT- I- TUDE | LONG- I- TUDE | GEO- LOGIC UNIT | DATE | TIME | DEPTH OF WELL, TOTAL (FEET) (72008) | ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000) |
|-----------------|----------------|-------------------------------|--------------------|---------------------|-----------------------|----------------------|--------------|--|---|
| DUNDY COUNTY | | | | | | | | | |
| 401442101444001 | 3N 39W 8A0 | 1 | 40 14 42 N | 101 44 40 W | 121OGLL | 08-11-00 | 0830 | 310.00 | 3400 |
| 401418101422301 | 3N 39W10D0 | 1 | 40 14 18 N | 101 42 23 W | 121OGLL | 08-21-00 | 1330 | 310.00 | 3355 |
| 401415101401101 | 3N 39W12DCAA1 | | 40 14 15 N | 101 40 11 W | 121OGLL | 08-07-00 | 1200 | 238.00 | 3326 |
| 401328101411401 | 3N 39W14D0 | 1 | 40 13 28 N | 101 41 14 W | 121OGLL 121OGLL | 08-10-00 08-10-00 | 0900 0901 | 310.00 310.00 | 3360 3360 |
| 401506101531401 | 3N 40W 6CCAB1 | | 40 15 06 N | 101 53 14 W | 121OGLL 121OGLL | 08-08-00 08-08-00 | 1500 1501 | 290.00 290.00 | 3465 3465 |
| 401440101531401 | 3N 40W 7BCAA1 | | 40 14 40 N | 101 53 14 W | 121OGLL | 08-10-00 | 1230 | 299.00 | 3490 |
| 401348101523601 | 3N 40W18ACAA1 | | 40 13 48 N | 101 52 36 W | -- | 08-10-00 | 1100 | 264.00 | 3465 |
| 401257101512801 | 3N 40W20ACAA1 | | 40 12 57 N | 101 51 28 W | -- | 08-10-00 | 1000 | 277.00 | 3450 |
| 401233101521401 | 3N 40W20CBDC1 | | 40 12 33 N | 101 52 14 W | 121OGLL 121OGLL | 08-22-00 08-22-00 | 1030 1031 | 280.00 280.00 | 3440 3440 |
| 401052101592901 | 3N 41W31CBDA1 | | 40 10 52 N | 101 59 29 W | 121OGLL | 08-08-00 | 1500 | 235.00 | 3520 |
| 401511102013901 | 3N 42W 2DCAA1 | | 40 15 11 N | 102 01 39 W | 121OGLL | 08-10-00 | 1400 | 354.00 | 3560 |
| 401441102013601 | 3N 42W11ACAD1 | | 40 14 41 N | 102 01 36 W | 121OGLL | 08-10-00 | 1430 | 310.00 | 3580 |
| 401419102013101 | 3N 42W11DDBC1 | | 40 14 19 N | 102 01 31 W | 121OGLL 121OGLL | 08-10-00 08-10-00 | 1500 1501 | 345.00 345.00 | 3560 3560 |
| 401232102021701 | 3N 42W23CDBB1 | | 40 12 32 N | 102 02 17 W | 121OGLL 121OGLL | 08-08-00 08-08-00 | 1100 1101 | -- -- | 3550 3550 |
| 401139102013401 | 3N 42W26DCAD1 | | 40 11 39 N | 102 01 34 W | 121OGLL | 08-22-00 | 1000 | 236.00 | 3550 |
| 401721101571401 | 4N 41W28ACAA1 | | 40 17 21 N | 101 57 14 W | 121OGLL | 08-22-00 | 0800 | 320.00 | 3512 |
| 401654101571301 | 4N 41W28DCAA1 | | 40 16 54 N | 101 57 13 W | 121OGLL | 08-22-00 | 0900 | 335.00 | 3538 |
| 401601101564001 | 4N 41W34CO | 1 | 40 16 01 N | 101 56 40 W | 121OGLL 121OGLL | 08-09-00 08-09-00 | 1000 1001 | 320.00 320.00 | 3505 3505 |
| 400646102014101 | 2N 42W 26ACCC1 | | 40 06 46 N | 102 01 41 W | 121OGLL 121OGLL | 08-21-00 08-21-00 | 1400 1401 | 115.00 115.00 | 3532 3532 |
| PERKINS COUNTY | | | | | | | | | |
| 404653101284201 | 9N 37W 1AO | 1 | 40 46 53 N | 101 28 42 W | 121OGLL | 08-08-00 | 1500 | 400.00 | -- |
| 404627101295401 | 9N 37W 2DO | 1 | 40 46 27 N | 101 29 54 W | 121OGLL 121OGLL | 08-08-00 08-08-00 | 1400 1401 | 434.00 434.00 | 3280 3280 |
| 404631101310301 | 9N 37W 3DO | 1 | 40 46 31 N | 101 31 03 W | 121OGLL | 08-08-00 | 1330 | 440.00 | 3312 |

CHEMICAL ANALYSES OF GROUND WATER

UPPER REPUBLICAN NATURAL RESOURCES DISTRICT--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| DATE | SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303) | SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301) | 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) | 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) |
|----------------|--|---|--|--|--|---|--|---|---|--|--|
| DUNDY COUNTY | | | | | | | | | | | |
| 08-11-00 | -- | -- | 5.6 | 7.6 | 380 | 15.2 | -- | -- | -- | -- | -- |
| 08-21-00 | -- | -- | 6.3 | 7.8 | 374 | 15.4 | -- | -- | -- | -- | -- |
| 08-07-00 | -- | -- | -- | 7.6 | 410 | 20.5 | -- | -- | -- | -- | -- |
| 08-10-00 | .36 | 261 | 5.8 | 7.8 | 358 | 14.0 | 140 | 36.0 | 11.5 | 10.8 | .5 |
| 08-10-00 | -- | -- | 5.8 | 7.8 | 358 | 14.0 | -- | -- | -- | -- | -- |
| 08-08-00 | .33 | 244 | 5.0 | 7.9 | 335 | 15.0 | 130 | 33.5 | 10.8 | 10.6 | .5 |
| 08-08-00 | -- | -- | 5.0 | 7.9 | 335 | 15.0 | -- | -- | -- | -- | -- |
| 08-10-00 | -- | -- | 3.3 | 7.8 | 399 | 14.2 | -- | -- | -- | -- | -- |
| 08-10-00 | -- | -- | -- | 8.1 | 378 | 16.2 | -- | -- | -- | -- | -- |
| 08-10-00 | -- | -- | 6.0 | 7.8 | 383 | 14.7 | -- | -- | -- | -- | -- |
| 08-22-00 | .33 | 242 | 6.0 | 7.6 | 329 | 14.9 | 130 | 34.0 | 10.3 | 9.1 | .4 |
| 08-22-00 | -- | -- | 6.0 | 7.6 | 329 | 14.9 | -- | -- | -- | -- | -- |
| 08-08-00 | -- | -- | 8.5 | 7.7 | 315 | 16.2 | -- | -- | -- | -- | -- |
| 08-10-00 | -- | -- | 3.9 | 7.9 | 368 | 14.7 | -- | -- | -- | -- | -- |
| 08-10-00 | -- | -- | 3.5 | 7.8 | 376 | 15.2 | -- | -- | -- | -- | -- |
| 08-10-00 | .38 | 280 | 3.9 | 7.8 | 387 | 14.4 | 140 | 38.3 | 11.8 | 10.1 | .5 |
| 08-10-00 | -- | -- | 3.9 | 7.8 | 387 | 14.4 | -- | -- | -- | -- | -- |
| 08-08-00 | .31 | 229 | 5.2 | 7.9 | 300 | 15.0 | 120 | 30.4 | 9.80 | 8.6 | .4 |
| 08-08-00 | -- | -- | 5.2 | 7.9 | 300 | 15.0 | -- | -- | -- | -- | -- |
| 08-22-00 | -- | -- | 3.6 | 7.7 | 316 | 15.6 | -- | -- | -- | -- | -- |
| 08-22-00 | -- | -- | 5.9 | 7.7 | 339 | 14.8 | -- | -- | -- | -- | -- |
| 08-22-00 | -- | -- | 3.6 | 7.6 | 384 | 14.8 | -- | -- | -- | -- | -- |
| 08-09-00 | .31 | 228 | 3.8 | 7.7 | 327 | 16.0 | 130 | 35.0 | 10.1 | 9.0 | .4 |
| 08-09-00 | -- | -- | 3.8 | 7.7 | 327 | 16.0 | -- | -- | -- | -- | -- |
| 08-21-00 | .38 | 276 | 16.5 | 7.4 | 390 | 14.9 | 160 | 46.8 | 9.83 | 8.4 | .4 |
| 08-21-00 | -- | -- | 16.5 | 7.4 | 390 | 14.9 | -- | -- | -- | -- | -- |
| PERKINS COUNTY | | | | | | | | | | | |
| 08-08-00 | -- | -- | 7.0 | 7.6 | 363 | 16.3 | -- | -- | -- | -- | -- |
| 08-08-00 | .32 | 236 | 7.8 | 7.7 | 341 | 15.1 | 140 | 36.8 | 10.6 | 9.0 | .4 |
| 08-08-00 | -- | -- | 7.8 | 7.7 | 341 | 15.1 | -- | -- | -- | -- | -- |
| 08-08-00 | -- | -- | 8.2 | 7.6 | 352 | 14.8 | -- | -- | -- | -- | -- |

[illegible]

[illegible]

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[illegible]

CHEMICAL ANALYSES OF GROUND WATER
UPPER REPUBLICAN NATURAL RESOURCES DISTRICT--Continued
WATER QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| STATION | NUMBER | LOCAL IDENT- I- FIER | LAT- I- TUDE | LONG- I- TUDE | GEO- LOGIC UNIT | DATE | TIME | DEPTH OF WELL, TOTAL (FEET) (72008) |
|-----------------|---------------|-------------------------------|--------------------|---------------------|-----------------------|----------------------|--------------|--|
| PERKINS COUNTY | | | | | | | | |
| 404621101411501 | 9N 38W 7AAAA1 | | 40 46 21 N | 101 41 15 W | 121OGLL | 08-07-00 | 1200 | 270.00 |
| 404537101415701 | 9N 38W 7CDBC1 | | 40 45 37 N | 101 41 57 W | 121OGLL | 08-07-00 | 1330 | 320.00 |
| 404357101412501 | 9N 38W19DDBB1 | | 40 43 57 N | 101 41 25 W | 121OGLL | 08-08-00 | 1230 | 350.00 |
| 404325101420401 | 9N 38W30BDBB1 | | 40 43 25 N | 101 42 04 W | 121OGLL | 08-08-00 | 1130 | 240.00 |
| 404537101430801 | 9N 39W12CADA1 | | 40 45 37 N | 101 43 08 W | 121OGLL | 08-07-00 | 1600 | 350.00 |
| 404506101480701 | 9N 39W18ADDA1 | | 40 45 06 N | 101 48 07 W | 121OGLL 121OGLL | 08-08-00 08-08-00 | 0830 0831 | 340.00 340.00 |
| 404359101444801 | 9N 39W22DACB1 | | 40 43 59 N | 101 44 48 W | 121OGLL 121OGLL | 08-08-00 08-08-00 | 0930 0931 | 180.00 180.00 |
| 404413101432401 | 9N 39W24BCCB1 | | 40 44 13 N | 101 43 24 W | 121OGLL 121OGLL | 08-21-00 08-21-00 | 1100 1101 | 217.00 217.00 |
| 404302101423401 | 9N 39W25DO 1 | | 40 43 02 N | 101 42 34 W | 121OGLL | 08-08-00 | 1100 | 270.00 |
| 404305101452601 | 9N 39W27CCAA1 | | 40 43 05 N | 101 45 26 W | 121OGLL | 08-08-00 | 1000 | 350.00 |
| 404301101475101 | 9N 39W29CCAA1 | | 40 43 01 N | 101 47 51 W | 121OGLL | 08-07-00 | 1500 | 332.00 |

| DATE | ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000) | SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303) | SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301) | 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) | 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) |
|----------------|---|--|---|--|--|--|---|--|---|---|--|
| PERKINS COUNTY | | | | | | | | | | | |
| 08-07-00 | 3370 | -- | -- | 10.7 | 7.6 | 366 | 14.9 | -- | -- | -- | -- |
| 08-07-00 | 3385 | -- | -- | -- | 7.8 | 326 | 18.7 | -- | -- | -- | -- |
| 08-08-00 | -- | -- | -- | 9.3 | 7.4 | 383 | 14.3 | -- | -- | -- | -- |
| 08-08-00 | 3365 | -- | -- | -- | 7.4 | 412 | 16.4 | -- | -- | -- | -- |
| 08-07-00 | 3398 | -- | -- | 8.8 | 7.7 | 317 | 16.0 | -- | -- | -- | -- |
| 08-08-00 | 3449 | .34 | 248 | 10.3 | 7.8 | 361 | 14.6 | 140 | 39.8 | 9.32 | 8.4 |
| 08-08-00 | 3449 | -- | -- | 10.3 | 7.8 | 361 | 14.6 | -- | -- | -- | -- |
| 08-08-00 | 3405 | .36 | 263 | 9.0 | 7.6 | 374 | 14.7 | 150 | 45.1 | 9.53 | 8.1 |
| 08-08-00 | 3405 | -- | -- | 9.0 | 7.6 | 374 | 14.7 | -- | -- | -- | -- |
| 08-21-00 | -- | .37 | 275 | 9.2 | 7.7 | 398 | 14.1 | 160 | 45.8 | 10.1 | 9.2 |
| 08-21-00 | -- | -- | -- | 9.2 | 7.7 | 398 | 14.1 | -- | -- | -- | -- |
| 08-08-00 | 3370 | -- | -- | 8.4 | 7.4 | 374 | 14.2 | -- | -- | -- | -- |
| 08-08-00 | 3420 | -- | -- | 7.1 | 7.6 | 391 | 15.3 | -- | -- | -- | -- |
| 08-07-00 | 3430 | -- | -- | 10.1 | 7.7 | 354 | 15.0 | -- | -- | -- | -- |

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CHEMICAL ANALYSES OF GROUND WATER

GROUND-WATER PROTECTION AREA
MIDDLE REPUBLICAN RIVER

(Local identifier: indicates location by township, range, and section. Geologic unit: 112SDGV, Pleistocene sand and gravel deposits; 121OGLL, Miocene Ogallala Formation.)

COUNTIES.--Hitchcock and Red Willow

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

| STATION | NUMBER | LOCAL IDENT- I- FIER | LAT- I- TUDE | LONG- I- TUDE | GEO- LOGIC UNIT | JRO- LOGIC UNIT CODE | DATE | TIME |
|-------------------|---------------|-------------------------------|--------------------|---------------------|-----------------------|-------------------------------|----------|------|
| HITCHCOCK COUNTY | | | | | | | | |
| 400818101124001 | 2N 35W13AAD1 | | 40 08 18 N | 101 12 40 W | 112SDGV | 10250004 | 08-16-00 | 1500 |
| 400818101124002 | 2N 35W13AAD2 | | | | 112SDGV | 10250004 | 08-16-00 | 1530 |
| 401655100583201 | 4N 32W30DCBB1 | | 40 16 55 N | 100 58 32 W | 112SDGV | 10250005 | 08-16-00 | 1700 |
| 401655100583202 | 4N 32W30DCBB2 | | | | 112SDGV | 10250005 | 08-16-00 | 1730 |
| RED WILLOW COUNTY | | | | | | | | |
| 400357100135201 | 1N 26W11CBBB1 | | 40 03 57 N | 100 13 52 W | 112SDGV | 10250014 | 08-17-00 | 1100 |
| 400357100135202 | 1N 26W11CBBB2 | | | | 112SDGV | 10250014 | 08-17-00 | 1130 |
| 401016100391801 | 2N 30W 1ACDD1 | | 40 10 16 N | 100 39 18 W | 112SDGV | 10250004 | 08-16-00 | 1200 |
| 401016100391802 | 2N 30W 1ACDD2 | | | | 112SDGV | 10250004 | 08-16-00 | 1230 |
| 401454100215401 | 3N 27W 9AAAA1 | | 40 14 54 N | 100 21 54 W | 112SDGV | 10250004 | 08-17-00 | 0900 |
| 401454100215402 | 3N 27W 9AAAA2 | | | | 112SDGV | 10250004 | 08-17-00 | 0930 |
| 401412100364201 | 3N 29W 8DDBA1 | | 40 14 12 N | 100 36 42 W | 121OGLL | 10250004 | 08-17-00 | 1430 |
| 401412100364202 | 3N 29W 8DDBA2 | | | | 121OGLL | 10250004 | 08-17-00 | 1500 |
| 401412100364203 | 3N 29W 8DDBA3 | | | | 112SDGV | 10250004 | 08-17-00 | 1530 |

| DATE | DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019) | 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 (PER- CENT 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 TOTAL (MG/L AS N) (00630) |
|-------------------|--|--|---|---|---|--|--|---|---|
| HITCHCOCK COUNTY | | | | | | | | | |
| 08-16-00 | 19.83 | 46.00 | 2788 | 690 | .2 | 2 | 7.4 | 1390 | 12.8 |
| 08-16-00 | 20.02 | 30.00 | 2788 | 690 | 1.0 | 11 | 7.4 | 1570 | 16.7 |
| 08-16-00 | 20.76 | 61.00 | 2867 | 690 | 3.8 | 41 | 7.4 | 1200 | 11.4 |
| 08-16-00 | 20.75 | 45.00 | 2867 | 690 | 3.7 | 40 | 7.4 | 1270 | 11.5 |
| RED WILLOW COUNTY | | | | | | | | | |
| 08-17-00 | 22.25 | 64.00 | 2366 | -- | .3 | -- | 7.2 | 667 | .1 |
| 08-17-00 | 21.85 | 36.00 | 2366 | -- | .7 | -- | 7.3 | 1020 | 1.5 |
| 08-16-00 | 31.04 | 72.00 | 2493 | -- | .1 | -- | 7.3 | 1200 | 25.5 |
| 08-16-00 | 30.87 | 55.00 | 2493 | -- | .2 | -- | 7.3 | 1260 | 22.6 |
| 08-17-00 | 25.49 | 40.00 | 2368 | 705 | 6.0 | 67 | 7.4 | 584 | 1.2 |
| 08-17-00 | 25.50 | 32.00 | 2368 | 705 | 7.8 | 86 | 7.4 | 588 | 1.8 |
| 08-17-00 | 121.33 | 174.00 | 2605 | 700 | -- | -- | 7.5 | 521 | 4.7 |
| 08-17-00 | 121.17 | 159.00 | 2605 | 700 | 4.9 | 55 | 7.4 | 736 | 16.5 |
| 08-17-00 | 120.87 | 135.00 | 2605 | 700 | 5.0 | 56 | 7.4 | 1030 | 28.5 |

Numerics

7-day 10-year low flow 32

A

Algae 27

Annual 7-day minimum 29

Aquifer 27

Arikaree River at Haigler 238

Arrangement of Records (SW Quality) 19

Artificial substrate 33

Ash mass 28

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Ashland, Wahoo Creek at 208

Auburn, Little Nemaha River at 228

B

Bacteria 27

Barneston, Big Blue River at 288

Beaver Creek at Genoa 142

Bed load 32

Bed load discharge 32

Bed material 28

Benkelman, South Fork Republican River
near 246

Big Blue River at Barneston 288

Big Blue River near Crete 286

Big Nemaha River at Falls City 234

Biochemical oxygen demand 28

Biomass 28

Blue-green algae 31

Bottom material 28

Buffalo Creek near Haigler 242

Buffalo Creek near Overton 92

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Central City, Warm Slough near 108

Ceresco, Rock Creek near 202

Chemical oxygen demand 28

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Classification of records (SW Quality) 19

Clear Creek 1.75 mi W of Polk
County line 146Colorado-Nebraska state line,
North Fork Republican River at 240

Columbus, Shell Creek near 148

Contents 28

Control 28

Courtland Canal at Nebraska-Kansas
State line 276

Crete, Big Blue River near 286

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DData Collection and Computation
(GW Levels) 22Data Collection and Computation
(GW quality) 25Data Collection and Computation
(Stage and Water Discharge) 14

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Data Presentation (GW Quality) 25

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Discharge 29

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Dissolved 29

Dissolved-solids concentration 29

Doniphan, Platte River near 104

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Duncan, Platte River near 114

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| Elkhorn River at Norfolk | 158 |
| Elkhorn River at Waterloo | 172 |
| Elkhorn River at West Point | 162 |
| Elm Creek near Elm Creek | 94 |
| Elm Creek, Elm Creek near | 94 |
| Enders Reservoir near Enders | 250 |
| Enders, Enders Reservoir near | 250 |
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| Fairbury, Little Blue River near | 292 |
| Falls City, Big Nemaha River at | 234 |
| Fecal coliform bacteria | 27 |
| Fecal streptococcal bacteria | 27 |
| Fort Kearney Slough near Newark, NE | 100 |
| Frenchman Creek at Culbertson | 254 |
| Frenchman Creek at Palisade | 252 |

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| Gaging station | 29 |
| Genoa, Beaver Creek at | 142 |
| Genoa, Loup River near | 140 |
| Genoa, Loup River Power Canal near | 138 |
| Grand Island, Platte River near | 106 |
| Green algae | 31 |
| Greenwood, Salt Creek at | 204 |
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| Adams | 304 |
| Blaine | 304 |
| Boone | 304 |
| Box Butte | 305 |
| Buffalo | 305 |
| Butler | 306 |
| Chase | 306 |
| Cherry | 307 |

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|---------------------------------------|---------------|
| Colfax | 307 |
| Dawes | 307 |
| Dawson | 308 |
| Dundy | 308 |
| Fillmore | 309 |
| Garfield | 309 |
| Gosper | 310 |
| Hall | 310 |
| Hamilton | 311 |
| Harlan | 311 |
| Holt | 312 |
| Hooker | 313 |
| Kearney | 313 |
| Kimball | 313 |
| Lancaster | 314 |
| McPherson | 315 |
| Nuckolls | 315 |
| Phelps | 315 |
| Platte | 316 |
| Saline | 316 |
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| Scotts Bluff | 319 |
| Seward | 320 |
| Valley | 320 |
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| York | 321 |
| Guide Rock, Republican River at | 278 |

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| Haigler, Arikaree River at | 238 |
| Haigler, Buffalo Creek near | 242 |
| Haines Branch at SW 56th St. at Lincoln | 184 |
| Hallam, Olive Branch near | 176 |
| Hardness of water | 29 |
| Harlan County Dam, Republican River below | 274 |
| Hollenberg, KS, Little Blue River at | 294 |
| Homer, Omaha Creek at | 68 |
| Hydrologic Bench-Mark Network | 12, 29 |
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| Instantaneous discharge | 29 |
| Ithaca, Wahoo Creek at | 206 |

J

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| Johnson Creek near Memphis | 210 |
| Julesburg, CO, South Platte River at | 80 |

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| Kearney, North Dry Creek 2 mi SW of Platte River Bridge S of | 96 |
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| Latitude-Longitude System | 13 |
| Leshara, Platte River near | 152 |
| Lincoln, Haines Branch at SW 56th St. at | 184 |
| Lincoln, Little Salt Creek near | 192 |
| Lincoln, Middle Creek at SW 40th St. at | 186 |
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| Lincoln, Salt Creek at | 190 |
| Lincoln, Salt Creek at 70th St. at | 194 |
| Lincoln, Salt Creek at Pioneers Boulevard at | 182 |
| Lincoln, Stevens Creek near | 196 |
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| Little Salt Creek near Lincoln | 192 |
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| Long Pine Creek near Riverview | 52 |
| Louisville, Platte River at | 212 |
| Loup River near Genoa | 140 |
| Loup River Power Canal near Genoa | 138 |

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| Maple Creek near Nickerson | 166 |
| McCook, Driftwood Creek near | 256 |
| McCook, Republican River at | 258 |
| Mean concentration | 32 |
| Mean discharge | 29 |
| Measuring point | 30 |
| Memphis, Johnson Creek near | 210 |
| Methylene blue active substances | 30 |
| Micrograms per gram | 30 |
| Micrograms per liter | 30 |
| Middle Creek at SW 40th St. at Lincoln | 186 |
| Middle Loup River at Dunning | 118 |
| Middle Loup River at St. Paul | 126 |
| Milligrams per liter | 30 |
| Missouri River | |
| at Decatur | 70 |
| at Nebraska City | 226 |
| at Omaha | 72 |
| at Rulo | 230 |
| at Sioux City | 66 |

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|--|-----|
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| National Water-Quality Assessment | 30 |
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| Nebraska-Kansas State line, Courtland Canal at | 276 |
| Newark, NE, Fort Kearney Slough near | 100 |
| Newark, Platte River near | 102 |
| Nickerson, Maple Creek near | 166 |
| Niobrara River Basin near Sparks | 50 |
| Niobrara River near Spencer | 58 |
| Niobrara River near Verdel | 60 |
| Norfolk, Elkhorn River at | 158 |
| North Bend, Platte River at | 150 |
| North Dry Creek 2 mi SW of Platte River Bridge south of Kearney | 96 |

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| North Fork Elkhorn River near Pierce | 160 |
| North Fork Republican River at Colorado- Nebraska state line | 240 |
| North Loup River at Taylor | 130 |
| North Loup River near St. Paul | 134 |
| North Platte River at Wyoming-Nebraska State line | 76 |

O

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| Oak Creek at Air Park Road at Lincoln | 188 |
| Olive Branch near Hallam | 176 |
| Omaha Creek at Homer | 68 |
| Omaha, Missouri River at | 72 |
| On-site Measurements and Sample Collection (SW Quality) | 19 |
| Organic mass | 28 |
| Organism | 30 |
| Organism count/area | 30 |
| Organism count/volume | 30 |
| Orleans, Republican River near | 264 |
| Overton, Buffalo Creek near | 92 |
| Overton, Platte River near | 86 |
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P

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| Palisade, Frenchman Creek at | 252 |
| Parameter Code | 30 |
| Parks, Rock Creek at | 244 |
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| Particle size | 31 |
| Particle-size classification | 31 |
| Percent composition | 31 |
| Periphyton | 31 |
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| Pierce, North Fork Elkhorn River near | 160 |
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| Platte River at Louisville | 212 |
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| | |
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| Platte River near Ashland | 174 |
| Platte River near Doniphan | 104 |
| Platte River near Duncan | 114 |
| Platte River near Grand Island | 106 |
| Platte River near Kearney | 98 |
| Platte River near Leshara | 152 |
| Platte River near Newark | 102 |
| Platte River near Overton | 86 |
| Platte River near Prosser | 103 |
| Plum Creek near Smithfield | 84 |
| Polk County line, Clear Creek 1.75 mi W of | 146 |
| Ponca Creek at Verdel | 44 |
| Prairie Creek near Silver Creek | 112 |
| Prosser, Platte River near | 103 |

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| Radiochemical Program | 12 |
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| Riverview, Long Pine Creek near | 52 |
| Roca, Salt Creek at | 180 |
| Rock Creek at Parks | 244 |
| Rock Creek near Ceresco | 202 |
| Roscoe, South Platte River at | 82 |
| Rulo, Missouri River at | 230 |
| Runoff in inches | 32 |

S

| | |
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| Salt Creek at 70th St. at Lincoln | 194 |
| Salt Creek at Greenwood | 204 |
| Salt Creek at Lincoln | 190 |
| Salt Creek at Pioneers Boulevard at Lincoln | 182 |
| Salt Creek at Roca | 180 |
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| Sea level | 32 |
| Sediment | 32 |
| Sediment (SW Quality) | 21 |
| Shell Creek near Columbus | 148 |
| Silver Creek at Mile 4, near Silver Creek | 110 |
| Silver Creek, Prairie Creek near | 112 |
| Silver Creek, Silver Creek at Mile 4, near | 110 |
| Sioux City, Missouri River at | 66 |
| Smithfield, Plum Creek near | 84 |
| Sodium-adsorption-ratio | 33 |
| Solute | 33 |
| South Fork Republican River near Benkelman | 246 |
| South Loup River at St. Michael | 122 |
| South Platte River at Julesburg, CO | 80 |
| South Platte River at Roscoe | 82 |
| Sparks, Niobrara River Basin near | 50 |
| Specific conductance | 33 |
| Spencer, Niobrara River near | 58 |
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| St. Michael, South Loup River at | 122 |
| St. Paul, Middle Loup River at | 126 |
| St. Paul, North Loup River near | 134 |
| Stage-discharge relation | 33 |
| Stamford, Sappa Creek near | 270 |
| Station | 16 |
| Station Identification Numbers | 13 |
| Stevens Creek near Lincoln | 196 |
| Stratton, Republican River at | 248 |
| Streamflow | 33 |
| Substrate | 33 |
| Surface area | 33 |
| Surficial bed material | 33 |
| Suspended | 33 |

| | |
|--|----|
| Suspended sediment | 32 |
| Suspended, recoverable | 33 |
| Suspended, total | 33 |
| Suspended-sediment concentration | 32 |
| Suspended-sediment discharge | 32 |
| Suspended-sediment load | 32 |

T

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| Taxonomy | 33 |
| Taylor, North Loup River at | 130 |
| Thedford, Dismal River near | 120 |
| Thermograph | 34 |
| Time-weighted average | 34 |
| Tons per acre-foot | 34 |
| Tons per day | 34 |
| Total | 34 |
| Total coliform bacteria | 27 |
| Total discharge | 34 |
| Total organism count | 30 |
| Total sediment discharge | 32 |
| Total, recoverable | 34 |
| Total-sediment load | 32 |

U

| | |
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| Uehling, Logan Creek near | 164 |
| Union, Weeping Water Creek at | 224 |

V

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| Verdel, Niobrara River near | 60 |
| Verdel, Ponca Creek at | 44 |

W

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| Wahoo Creek at Ashland | 208 |
| Wahoo Creek at Ithaca | 206 |
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| Water year | 34 |
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| West Fork Big Blue River near Dorchester | 284 |
| West Point, Elkhorn River at | 162 |
| Wet mass | 28 |
| Wewela, Keya Paha River at | 56–57 |
| WSP | 34 |

Z

| | |
|-------------------|----|
| Zooplankton | 31 |
|-------------------|----|

CONVERSION FACTORS AND VERTICAL DATUM

| Multiply | By | To obtain |
|--|------------------------|----------------------------|
| <i>Length</i> | | |
| inch (in.) | 2.54×10^1 | millimeter |
| | 2.54×10^{-2} | meter |
| foot (ft) | 3.048×10^{-1} | meter |
| mile (mi) | 1.609×10^0 | kilometer |
| <i>Area</i> | | |
| acre | 4.047×10^3 | square meter |
| | 4.047×10^{-1} | square hectometer |
| | 4.047×10^{-3} | square kilometer |
| square mile (mi ²) | 2.590×10^0 | square kilometer |
| <i>Volume</i> | | |
| gallon (gal) | 3.785×10^0 | liter |
| | 3.785×10^0 | cubic decimeter |
| | 3.785×10^{-3} | cubic meter |
| million gallons (Mgal) | 3.785×10^3 | cubic meter |
| | 3.785×10^{-3} | cubic hectometer |
| cubic foot (ft ³) | 2.832×10^1 | cubic decimeter |
| | 2.832×10^{-2} | cubic meter |
| cubic-foot-per-second day [(ft ³ /s) d] | 2.447×10^3 | cubic meter |
| | 2.447×10^{-3} | cubic hectometer |
| acre-foot (acre-ft) | 1.233×10^3 | cubic meter |
| | 1.233×10^{-3} | cubic hectometer |
| | 1.233×10^{-6} | cubic kilometer |
| <i>Flow</i> | | |
| cubic foot per second (ft ³ /s) | 2.832×10^1 | liter per second |
| | 2.832×10^1 | cubic decimeter per second |
| | 2.832×10^{-2} | cubic meter per second |
| gallon per minute (gal/min) | 6.309×10^{-2} | liter per second |
| | 6.309×10^{-2} | cubic decimeter per second |
| | 6.309×10^{-5} | cubic meter per second |
| million gallons per day (Mgal/d) | 4.381×10^1 | cubic decimeter per second |
| | 4.381×10^{-2} | cubic meter per second |
| <i>Mass</i> | | |
| ton (short) | 9.072×10^{-1} | megagram or metric ton |

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

U.S. DEPARTMENT OF THE INTERIOR
U.S. Geological Survey
100 Centennial Mall North, Room 406
Lincoln, NE 68508



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