

Water-Data Report 2013

## 06467500 MISSOURI RIVER AT YANKTON, SD

Lewis and Clark Lake Basin  
Lewis and Clark Lake Subbasin

LOCATION.--Lat 42°51'58", long 97°23'37" referenced to North American Datum of 1927, in SW ¼ SW ¼ sec.18, T.93 N., R.55 W., Yankton County, SD, Hydrologic Unit 10170101, on left bank 10 ft upstream of Meridian Highway Bridge on U.S. Highway 81, 5.2 mi downstream from Gavins Point Dam, 6.0 mi upstream from James River, and at mile 805.8.

DRAINAGE AREA.--279,500 mi<sup>2</sup>, approximately.

### SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1995 to current year (daily gage-height records). October 1930 to September 1995 and October 2000 to September 2011 (daily discharge). Monthly discharge only for some periods, published in WSP 1309. Gage-height records collected at same site March 1873 to November 1886, March 1905 to May 1908 (fragmentary), August 1921 to September 1950 (except winter months prior to 1932), are contained in reports of the National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 1,139.68 ft above NGVD of 1929. Prior to Sept. 20, 1932, nonrecording gage, and Sept. 20, 1932, to Mar. 9, 1967, water-stage recorder at present site and at datum 20.0 ft higher.

COOPERATION.--Daily discharges were provided by U.S. Army Corps of Engineers from October 2000 to September 2011.

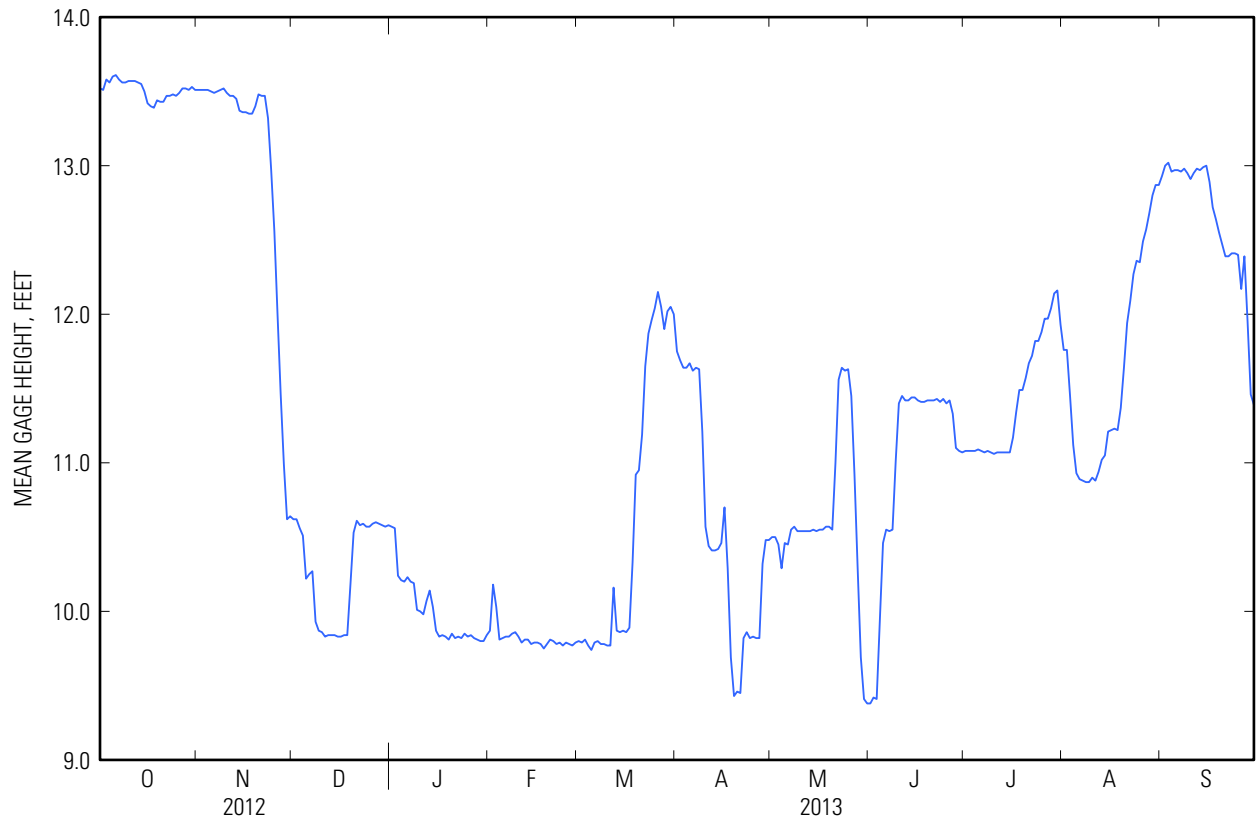
REMARKS.--Records good. Flow on Missouri River main stem completely regulated by a series of 6 dams with the most downstream being Gavins Point Dam (5.2 mi upstream from gage). Many diversions for irrigation and water supply above station. Satellite data-collection platform at station.

## 06467500 MISSOURI RIVER AT YANKTON, SD—Continued

**GAGE HEIGHT, FEET**  
**WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**  
**DAILY MEAN VALUES**

| Day         | Oct   | Nov   | Dec   | Jan   | Feb   | Mar   | Apr   | May   | Jun   | Jul   | Aug   | Sep   |
|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1           | 13.52 | 13.51 | 10.62 | 10.57 | 9.87  | 9.80  | 11.75 | 10.50 | 9.38  | 11.08 | 11.76 | 12.93 |
| 2           | 13.51 | 13.51 | 10.62 | 10.56 | 10.18 | 9.79  | 11.69 | 10.50 | 9.42  | 11.08 | 11.76 | 13.00 |
| 3           | 13.58 | 13.51 | 10.56 | 10.24 | 10.03 | 9.81  | 11.64 | 10.45 | 9.41  | 11.08 | 11.45 | 13.02 |
| 4           | 13.56 | 13.51 | 10.51 | 10.21 | 9.81  | 9.77  | 11.64 | 10.29 | 9.94  | 11.08 | 11.12 | 12.96 |
| 5           | 13.60 | 13.50 | 10.22 | 10.20 | 9.82  | 9.74  | 11.67 | 10.46 | 10.46 | 11.09 | 10.93 | 12.97 |
| 6           | 13.61 | 13.49 | 10.25 | 10.23 | 9.83  | 9.79  | 11.62 | 10.45 | 10.55 | 11.08 | 10.89 | 12.97 |
| 7           | 13.58 | 13.50 | 10.27 | 10.20 | 9.83  | 9.80  | 11.64 | 10.55 | 10.54 | 11.07 | 10.88 | 12.96 |
| 8           | 13.56 | 13.51 | 9.93  | 10.19 | 9.85  | 9.78  | 11.63 | 10.57 | 10.55 | 11.08 | 10.87 | 12.98 |
| 9           | 13.56 | 13.52 | 9.87  | 10.01 | 9.86  | 9.78  | 11.21 | 10.54 | 11.01 | 11.07 | 10.87 | 12.95 |
| 10          | 13.57 | 13.49 | 9.86  | 10.00 | 9.83  | 9.77  | 10.57 | 10.54 | 11.40 | 11.06 | 10.90 | 12.91 |
| 11          | 13.57 | 13.47 | 9.83  | 9.98  | 9.79  | 9.77  | 10.44 | 10.54 | 11.45 | 11.07 | 10.88 | 12.95 |
| 12          | 13.57 | 13.47 | 9.84  | 10.07 | 9.81  | 10.16 | 10.41 | 10.54 | 11.42 | 11.07 | 10.94 | 12.98 |
| 13          | 13.56 | 13.45 | 9.84  | 10.14 | 9.81  | 9.87  | 10.41 | 10.54 | 11.42 | 11.07 | 11.02 | 12.97 |
| 14          | 13.55 | 13.37 | 9.84  | 10.03 | 9.78  | 9.86  | 10.42 | 10.55 | 11.44 | 11.07 | 11.05 | 12.99 |
| 15          | 13.50 | 13.36 | 9.83  | 9.87  | 9.79  | 9.87  | 10.46 | 10.54 | 11.44 | 11.07 | 11.21 | 13.00 |
| 16          | 13.42 | 13.36 | 9.83  | 9.83  | 9.79  | 9.86  | 10.70 | 10.55 | 11.42 | 11.17 | 11.22 | 12.89 |
| 17          | 13.40 | 13.35 | 9.84  | 9.84  | 9.78  | 9.89  | 10.29 | 10.55 | 11.41 | 11.34 | 11.23 | 12.72 |
| 18          | 13.39 | 13.35 | 9.84  | 9.83  | 9.75  | 10.33 | 9.69  | 10.57 | 11.41 | 11.49 | 11.22 | 12.64 |
| 19          | 13.44 | 13.40 | 10.18 | 9.81  | 9.78  | 10.92 | 9.43  | 10.57 | 11.42 | 11.49 | 11.37 | 12.55 |
| 20          | 13.43 | 13.48 | 10.53 | 9.85  | 9.81  | 10.95 | 9.46  | 10.55 | 11.42 | 11.57 | 11.64 | 12.47 |
| 21          | 13.43 | 13.47 | 10.61 | 9.82  | 9.80  | 11.19 | 9.45  | 11.00 | 11.42 | 11.67 | 11.94 | 12.39 |
| 22          | 13.47 | 13.47 | 10.58 | 9.83  | 9.78  | 11.65 | 9.82  | 11.56 | 11.43 | 11.72 | 12.09 | 12.39 |
| 23          | 13.47 | 13.32 | 10.59 | 9.82  | 9.79  | 11.87 | 9.86  | 11.64 | 11.41 | 11.82 | 12.27 | 12.41 |
| 24          | 13.48 | 12.97 | 10.57 | 9.85  | 9.77  | 11.96 | 9.82  | 11.62 | 11.43 | 11.82 | 12.36 | 12.41 |
| 25          | 13.47 | 12.56 | 10.57 | 9.83  | 9.79  | 12.04 | 9.83  | 11.63 | 11.40 | 11.88 | 12.35 | 12.40 |
| 26          | 13.49 | 12.00 | 10.59 | 9.84  | 9.78  | 12.15 | 9.82  | 11.45 | 11.42 | 11.97 | 12.49 | 12.17 |
| 27          | 13.52 | 11.46 | 10.60 | 9.82  | 9.77  | 12.05 | 9.82  | 10.92 | 11.33 | 11.97 | 12.57 | 12.39 |
| 28          | 13.52 | 10.99 | 10.59 | 9.81  | 9.79  | 11.90 | 10.32 | 10.29 | 11.10 | 12.04 | 12.68 | 11.95 |
| 29          | 13.51 | 10.62 | 10.58 | 9.80  | ---   | 12.02 | 10.48 | 9.69  | 11.08 | 12.14 | 12.80 | 11.46 |
| 30          | 13.53 | 10.64 | 10.57 | 9.80  | ---   | 12.05 | 10.48 | 9.41  | 11.07 | 12.16 | 12.87 | 11.39 |
| 31          | 13.51 | ---   | 10.58 | 9.84  | ---   | 12.00 | ---   | 9.38  | ---   | 11.93 | 12.87 | ---   |
| <b>Mean</b> | 13.51 | 13.02 | 10.28 | 9.99  | 9.82  | 10.65 | 10.55 | 10.61 | 11.00 | 11.43 | 11.63 | 12.64 |
| <b>Max</b>  | 13.61 | 13.52 | 10.62 | 10.57 | 10.18 | 12.15 | 11.75 | 11.64 | 11.45 | 12.16 | 12.87 | 13.02 |
| <b>Min</b>  | 13.39 | 10.62 | 9.83  | 9.80  | 9.75  | 9.74  | 9.43  | 9.38  | 9.38  | 11.06 | 10.87 | 11.39 |

06467500 MISSOURI RIVER AT YANKTON, SD—Continued



**06467500 MISSOURI RIVER AT YANKTON, SD—Continued****WATER-QUALITY RECORDS****WATER-QUALITY DATA****WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**

[ft<sup>3</sup>/s, cubic feet per second; °C, degrees Celsius; μS/cm, microsiemens per centimeter]

| <b>Date</b>       | <b>Sample<br/>start time</b> | <b>Discharge,<br/>instanta-<br/>neous,<br/>ft<sup>3</sup>/s<br/>(00061)</b> | <b>Specific<br/>conduc-<br/>tance,<br/>water,<br/>unfiltered,<br/>μS/cm at<br/>25°C<br/>(00095)</b> | <b>Tempera-<br/>ture,<br/>air,<br/>°C<br/>(00020)</b> | <b>Tempera-<br/>ture,<br/>water,<br/>°C<br/>(00010)</b> |
|-------------------|------------------------------|---|---|---|---|
| <b>11-30-2012</b> | <b>1025</b>                  | 17,000  | 850   | -2.0  | 4.0   |
| <b>12-06-2012</b> | <b>1240</b>                  | 15,800  | 811   | 6.0   | 4.5   |
| <b>12-12-2012</b> | <b>1215</b>                  | 12,700  | 794   | 4.0   | 2.5   |
| <b>04-01-2013</b> | <b>1340</b>                  | 24,600  | 752   | 2.0   | 4.0   |