

Water-Data Report 2010

**06869500 SALINE RIVER AT TESCOTT, KS**

Smoky Hill Basin  
Lower Saline Subbasin

LOCATION.--Lat 39°00'14", long 97°52'25" referenced to North American Datum of 1927, in NE ¼ SE ¼ SE ¼ sec.16, T.12 S., R.5 W., Ottawa County, KS, Hydrologic Unit 10260010, on right bank at downstream side of county highway bridge, 0.5 mi south of Tescott, 0.5 mi upstream from Dry Creek, and at mile 68.5.

DRAINAGE AREA.--2,820 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--September 1919 to current year.

REVISED RECORDS.--WSP 806: Drainage area. WSP 856: 1931. WSP 1310: 1926-28(M), 1935(M), 1945(M), 1947-48(M). WSP 1919: 1922, 1960.

GAGE.--Water-stage recorders. Datum of gage is 1,265.34 ft above NGVD of 1929. Prior to Nov. 23, 1934, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Some diurnal fluctuation caused by powerplants upstream from station. Diversions upstream from station for irrigation. Flow moderately regulated since 1964 by Wilson Lake (station 06868100), 85.4 mi upstream. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 13, 1951, was greatest known since at least 1903 and exceeded the flood of May-June 1903 by about 1.0 ft, from information by local residents.

## 06869500 SALINE RIVER AT TESCOTT, KS—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**  
**DAILY MEAN VALUES**

[e, estimated]

| Day          | Oct   | Nov   | Dec    | Jan    | Feb   | Mar   | Apr    | May    | Jun    | Jul   | Aug   | Sep   |
|--------------|-------|-------|--------|--------|-------|-------|--------|--------|--------|-------|-------|-------|
| 1            | 36    | 75    | 50     | e240   | 191   | 141   | 218    | 833    | 313    | 62    | 39    | 30    |
| 2            | 35    | 61    | 49     | e230   | 200   | 140   | 214    | 765    | 307    | 60    | 119   | 31    |
| 3            | 34    | 54    | 48     | 229    | 188   | 141   | 196    | 743    | 302    | 59    | 128   | 33    |
| 4            | 34    | 51    | 43     | 228    | 185   | 140   | 186    | 675    | 297    | 63    | 50    | 34    |
| 5            | 34    | 48    | e40    | e230   | 188   | 139   | 181    | 497    | 293    | 506   | 39    | 31    |
| 6            | 35    | 48    | e40    | e230   | 194   | 140   | 179    | 298    | 273    | 642   | 36    | 29    |
| 7            | 36    | 48    | e38    | e230   | 200   | 141   | 178    | 261    | 218    | 253   | 35    | 29    |
| 8            | 37    | 48    | e42    | e230   | 204   | 143   | 162    | 237    | 213    | 142   | 33    | 28    |
| 9            | 38    | 48    | e43    | 226    | 201   | 149   | 142    | 228    | 221    | 194   | 32    | 28    |
| 10           | 37    | 48    | 53     | e230   | 157   | 166   | 131    | 224    | 224    | 161   | 32    | 28    |
| 11           | 38    | 47    | 55     | e230   | 165   | 188   | 130    | 225    | 212    | 87    | 32    | 29    |
| 12           | 39    | 46    | 57     | e230   | 197   | 233   | 127    | 229    | 208    | 69    | 31    | 28    |
| 13           | 40    | 46    | 170    | e230   | 172   | 209   | 125    | 228    | 266    | 61    | 30    | 28    |
| 14           | 44    | 46    | 281    | e230   | 148   | 185   | 123    | 226    | 674    | 57    | 31    | 54    |
| 15           | 49    | 47    | 288    | e230   | 149   | 176   | 121    | 229    | 445    | 55    | 32    | 526   |
| 16           | 49    | 48    | 271    | e230   | 163   | 167   | 130    | 234    | 208    | 52    | 33    | 835   |
| 17           | 48    | 49    | 257    | e220   | 131   | 159   | 170    | 233    | 146    | 131   | 36    | 217   |
| 18           | 59    | 52    | 261    | e220   | 152   | 157   | 196    | 231    | 127    | 143   | 36    | 176   |
| 19           | 56    | 55    | 260    | e220   | 144   | 154   | 225    | 231    | 109    | 98    | 34    | 118   |
| 20           | 44    | 52    | 263    | e220   | 143   | 111   | 197    | 345    | 100    | 68    | 34    | 79    |
| 21           | 45    | 50    | 261    | e220   | 144   | 76    | 208    | 563    | 187    | 77    | 33    | 57    |
| 22           | 50    | 49    | 260    | e220   | 143   | 73    | 503    | 383    | 202    | 227   | 33    | 47    |
| 23           | 52    | 48    | 265    | e220   | 138   | 80    | 1,210  | 330    | 197    | 181   | 31    | 43    |
| 24           | 53    | 50    | 283    | e220   | 129   | 86    | 1,050  | 295    | 186    | 83    | 41    | 44    |
| 25           | 45    | 55    | 326    | e220   | 140   | 82    | 801    | 270    | 163    | 59    | 39    | 50    |
| 26           | 48    | 62    | 240    | e210   | 154   | 82    | 799    | 258    | 100    | 51    | 35    | 44    |
| 27           | 48    | 59    | 191    | e203   | 145   | 99    | 713    | 262    | 76     | 47    | 34    | 40    |
| 28           | 47    | 53    | 247    | e190   | 142   | 317   | 673    | 259    | 70     | 44    | 33    | 37    |
| 29           | 53    | 51    | e250   | e185   | ---   | 257   | 661    | 269    | 66     | 41    | 32    | 36    |
| 30           | 132   | 50    | e250   | 175    | ---   | 180   | 792    | 332    | 64     | 42    | 31    | 36    |
| 31           | 107   | ---   | e250   | 161    | ---   | 154   | ---    | 323    | ---    | 42    | 29    | ---   |
| <b>Mean</b>  | 48.5  | 51.5  | 175    | 219    | 165   | 150   | 358    | 346    | 216    | 124   | 40.1  | 94.2  |
| <b>Max</b>   | 132   | 75    | 326    | 240    | 204   | 317   | 1,210  | 833    | 674    | 642   | 128   | 835   |
| <b>Min</b>   | 34    | 46    | 38     | 161    | 129   | 73    | 121    | 224    | 64     | 41    | 29    | 28    |
| <b>Ac-ft</b> | 2,980 | 3,060 | 10,770 | 13,460 | 9,140 | 9,250 | 21,300 | 21,260 | 12,830 | 7,650 | 2,470 | 5,600 |

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2010, BY WATER YEAR (WY)**

|             | Oct    | Nov    | Dec    | Jan    | Feb    | Mar    | Apr    | May    | Jun    | Jul    | Aug    | Sep    |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>Mean</b> | 142    | 103    | 93.8   | 89.1   | 111    | 154    | 220    | 346    | 474    | 395    | 244    | 219    |
| <b>Max</b>  | 1,650  | 1,639  | 1,736  | 1,540  | 984    | 1,698  | 2,445  | 2,054  | 6,756  | 6,589  | 2,363  | 2,131  |
| <b>(WY)</b> | (1994) | (1994) | (1994) | (1994) | (1974) | (1960) | (1973) | (1961) | (1951) | (1951) | (1928) | (1951) |
| <b>Min</b>  | 4.77   | 5.60   | 6.16   | 2.32   | 12.5   | 8.74   | 10.5   | 8.44   | 12.2   | 7.96   | 7.13   | 5.83   |
| <b>(WY)</b> | (1925) | (1925) | (1935) | (1925) | (1938) | (1935) | (1968) | (1967) | (1966) | (2006) | (1924) | (1924) |

06869500 SALINE RIVER AT TESCOTT, KS—Continued

SUMMARY STATISTICS

|                          | Calendar Year 2009 |        | Water Year 2010 |        | Water Years 1920 - 2010 |              |
|--------------------------|--------------------|--------|-----------------|--------|-------------------------|--------------|
| Annual mean              | 132                |        | 165             |        | 214                     |              |
| Highest annual mean      |                    |        |                 |        | 1,590                   | 1951         |
| Lowest annual mean       |                    |        |                 |        | 14.1                    | 2006         |
| Highest daily mean       | 1,140              | Aug 27 | 1,210           | Apr 23 | 47,600                  | Jul 13, 1951 |
| Lowest daily mean        | 34                 | Oct 3  | 28              | Sep 8  | 0.00                    | Jan 22, 1935 |
| Annual seven-day minimum | 35                 | Sep 30 | 28              | Sep 7  | 1.9                     | Dec 5, 1934  |
| Maximum peak flow        |                    |        | 1,310           | Apr 23 | 61,400                  | Jul 13, 1951 |
| Maximum peak stage       |                    |        | 14.06           | Apr 23 | 30.14                   | Jul 23, 1993 |
| Instantaneous low flow   |                    |        | 27              | Sep 13 | 0.00                    | 1935,1936    |
| Annual runoff (ac-ft)    | 95,850             |        | 119,800         |        | 154,800                 |              |
| 10 percent exceeds       | 242                |        | 285             |        | 409                     |              |
| 50 percent exceeds       | 116                |        | 140             |        | 56                      |              |
| 90 percent exceeds       | 44                 |        | 35              |        | 15                      |              |

