

Appendix E. USGS Gage Stations: Site Suspended Sediment Concentration, Frequency, and Duration Data, and Dosage

| No. | State | USGS Station ID | MAGNITUDE-FREQUENCY | | | | | | | | | | |
|-----|-------|--------------------|--|-------|-------|--------|--------|--------|---------|---------|---------|----------|----------|
| | | | Concentration in milligrams per liter | | | | | | | | | | |
| | | | Concentration exceedance: % of time a concentration is equaled or exceeded | | | | | | | | | | |
| | | | 99 | 95 | 90 | 75 | 50 | 25 | 10 | 5 | 1 | 0.1 | 0.01 |
| 1 | MT | 06120500 | 0.0 | 22.1 | 33.1 | 42.2 | 50.0 | 60.4 | 79.5 | 90.9 | 110.5 | 133.8 | 144.8 |
| 2 | MT | 06126500 | 0.2 | 1.8 | 5.3 | 15.4 | 45.3 | 104.2 | 276.8 | 525.1 | 1419.5 | 4534.9 | 7725.7 |
| 3 | MT | 06127500 | 0.0 | 18.8 | 46.3 | 90.4 | 136.1 | 188.2 | 273.5 | 350.9 | 517.1 | 795.0 | 984.6 |
| 4 | MT | 06130500 | 0.0 | 0.0 | 0.0 | 91.7 | 94.1 | 174.9 | 528.5 | 1019.3 | 2744.4 | 7587.2 | 11317.7 |
| 5 | MT | 06131200 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 143.3 | 277.8 | 445.6 | 1033.9 | 1743.6 | 2461.9 |
| 6 | MT | 06177500 | 0.0 | 0.0 | 0.0 | 54.2 | 59.7 | 66.9 | 73.0 | 77.3 | 89.5 | 101.9 | 106.0 |
| 7 | MT | 06205000 | 2.5 | 3.0 | 3.4 | 4.2 | 5.7 | 9.9 | 16.4 | 19.7 | 26.0 | 31.7 | 37.1 |
| 8 | MT | 06214500 | 7.3 | 10.7 | 12.7 | 18.2 | 28.9 | 81.3 | 252.2 | 376.5 | 667.4 | 1078.2 | 1504.4 |
| 9 | MT | 06217500 | 16.1 | 23.3 | 25.3 | 34.7 | 50.1 | 117.8 | 237.0 | 333.4 | 441.0 | 571.0 | 612.6 |
| 10 | MT | 06294000 | 26.0 | 30.3 | 35.6 | 55.1 | 92.9 | 220.8 | 689.8 | 1281.0 | 2901.7 | 6144.0 | 27208.0 |
| 11 | MT | 06294995 | 0.0 | 0.0 | 33.5 | 56.1 | 87.8 | 119.2 | 151.5 | 177.0 | 258.1 | 377.9 | 491.8 |
| 12 | MT | 06295250 | 0.0 | 0.0 | 0.0 | 37.6 | 56.6 | 96.2 | 147.6 | 208.3 | 368.6 | 522.7 | 623.1 |
| 13 | MT | 06296003 | 0.0 | 0.0 | 47.0 | 89.4 | 188.6 | 292.7 | 368.8 | 432.2 | 567.7 | 764.8 | 1017.0 |
| 14 | MT | 06296120 | 13.9 | 19.7 | 28.0 | 40.7 | 66.2 | 164.3 | 469.5 | 652.2 | 1055.8 | 1694.8 | 2228.0 |
| 15 | MT | 06306300 | 29.6 | 30.7 | 32.2 | 36.5 | 43.5 | 62.4 | 110.6 | 141.8 | 191.3 | 237.9 | 308.6 |
| 16 | MT | 06307600 | 0.0 | 0.0 | 0.0 | 48.3 | 59.5 | 68.7 | 76.7 | 83.6 | 102.2 | 140.3 | 173.2 |
| 17 | MT | 06307616 | 9.1 | 10.7 | 12.7 | 20.0 | 28.9 | 39.0 | 64.0 | 100.8 | 154.9 | 190.4 | 250.3 |
| 18 | MT | 06307740 | 0.0 | 0.0 | 70.9 | 72.8 | 74.8 | 76.6 | 78.1 | 79.0 | 82.0 | 86.5 | 87.1 |
| 19 | MT | 06307830 | 20.0 | 24.5 | 27.5 | 42.1 | 64.1 | 90.7 | 178.4 | 262.6 | 475.9 | 588.8 | 872.4 |
| 20 | MT | 06308400 | 0.0 | 0.0 | 0.0 | 0.0 | 98.4 | 367.1 | 1099.3 | 1964.3 | 3887.6 | 8588.5 | 9663.1 |
| 21 | WY | 06313000 | 0.0 | 170.3 | 774.4 | 1805.2 | 3467.1 | 6236.4 | 13530.7 | 21876.4 | 49410.1 | 179114.3 | 449186.7 |
| 22 | WY | 06313400 | 135.4 | 265.8 | 330.8 | 400.8 | 514.6 | 786.7 | 1847.5 | 4420.5 | 22207.4 | 33620.1 | 61526.6 |
| 23 | WY | 06317000 | 0.0 | 0.0 | 138.0 | 875.3 | 2038.6 | 3797.9 | 7319.6 | 11359.2 | 22496.0 | 52876.2 | 108201.3 |
| 24 | MT | 06325500 | 0.0 | 118.5 | 130.0 | 140.7 | 159.7 | 193.0 | 220.9 | 244.1 | 296.3 | 329.5 | 342.1 |
| 25 | MT | 06326300 | 0.0 | 0.0 | 0.0 | 63.6 | 201.2 | 564.1 | 1159.6 | 1704.7 | 3001.0 | 4948.4 | 5363.7 |
| 26 | MT | 06326500 | 60.1 | 65.0 | 92.3 | 344.8 | 1122.5 | 2879.6 | 6592.5 | 10517.3 | 13379.7 | 15406.0 | 16038.8 |
| 27 | MT | 06326555 | 0.0 | 0.0 | 0.0 | 0.0 | 30.4 | 47.1 | 69.4 | 96.2 | 278.2 | 693.4 | 853.2 |
| 28 | MT | 06326600 | 0.0 | 0.0 | 0.0 | 0.0 | 80.4 | 134.8 | 202.9 | 262.8 | 404.8 | 766.1 | 870.2 |
| 29 | ND | 06331850 | 0.0 | 24.8 | 26.5 | 28.7 | 31.1 | 34.0 | 40.0 | 45.9 | 55.5 | 72.9 | 76.4 |
| 30 | ND | 06332515 | 44.4 | 63.6 | 69.1 | 77.4 | 86.4 | 113.8 | 185.3 | 267.1 | 456.7 | 658.2 | 750.7 |
| 31 | ND | 06335500 | 0.0 | 94.8 | 169.1 | 299.8 | 487.5 | 949.4 | 1840.1 | 2616.4 | 4519.8 | 7765.4 | 9770.8 |

Appendix E. USGS Gage Stations: Site Suspended Sediment Concentration, Frequency, and Duration Data, and Dosage

| No. | State | USGS Station ID | MAGNITUDE-FREQUENCY | | | | | | | | | | | | | | | | | | |
|-----|-------|--------------------|---|--------|--------|--------|--------|---------|---------|---------|---------|----------|----------|----|----|----|----|---|---|-----|------|
| | | | Concentration in milligrams per liter | | | | | | | | | | | | | | | | | | |
| | | | <i>Concentration exceedance: % of time a concentration is equaled or exceeded</i> | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | mg/L | | | | | | | | | | |
| | | | | | | | | | | | 99 | 95 | 90 | 75 | 50 | 25 | 10 | 5 | 1 | 0.1 | 0.01 |
| 32 | ND | 06335750 | 0.0 | 0.0 | 4036.0 | 4250.6 | 4517.2 | 4837.4 | 5116.6 | 5254.9 | 5457.7 | 5826.9 | 5883.9 | | | | | | | | |
| 33 | ND | 06336000 | 4337.9 | 4716.2 | 4899.6 | 5089.2 | 5326.8 | 5612.4 | 5857.5 | 5989.5 | 6243.2 | 6482.9 | 6604.0 | | | | | | | | |
| 34 | MT | 06336500 | 0.0 | 0.0 | 0.0 | 30.1 | 40.3 | 49.2 | 59.0 | 69.9 | 99.6 | 113.0 | 121.7 | | | | | | | | |
| 35 | ND | 06336600 | 0.0 | 0.0 | 0.0 | 56.1 | 87.7 | 113.7 | 139.8 | 161.3 | 230.7 | 289.9 | 309.3 | | | | | | | | |
| 36 | ND | 06337000 | 0.0 | 116.6 | 225.3 | 432.5 | 926.3 | 1987.9 | 4041.3 | 6033.8 | 12018.2 | 23473.3 | 33091.6 | | | | | | | | |
| 37 | ND | 06339100 | 0.0 | 31.8 | 39.0 | 48.6 | 55.2 | 63.7 | 76.7 | 86.8 | 112.7 | 131.1 | 144.3 | | | | | | | | |
| 38 | ND | 06339550 | 0.0 | 0.0 | 28.3 | 37.3 | 44.8 | 54.9 | 68.7 | 77.7 | 98.0 | 120.9 | 124.9 | | | | | | | | |
| 39 | ND | 06340000 | 13.1 | 20.8 | 24.8 | 30.5 | 38.2 | 52.9 | 86.4 | 121.7 | 285.5 | 544.3 | 694.1 | | | | | | | | |
| 40 | ND | 06340500 | 19.8 | 29.1 | 36.2 | 46.8 | 66.5 | 109.9 | 204.8 | 329.0 | 792.9 | 1515.5 | 2289.7 | | | | | | | | |
| 41 | ND | 06340520 | 0.0 | 0.0 | 0.0 | 0.0 | 14.5 | 26.3 | 42.4 | 56.5 | 88.2 | 119.6 | 128.5 | | | | | | | | |
| 42 | ND | 06342200 | 30.5 | 36.9 | 38.8 | 41.8 | 45.2 | 53.5 | 65.5 | 80.7 | 123.5 | 174.6 | 183.8 | | | | | | | | |
| 43 | ND | 06343000 | 69.8 | 76.7 | 84.3 | 93.8 | 104.9 | 128.7 | 168.0 | 198.7 | 266.3 | 303.2 | 329.5 | | | | | | | | |
| 44 | ND | 06344600 | 0.0 | 0.0 | 24.8 | 30.8 | 34.9 | 40.9 | 49.8 | 57.7 | 76.8 | 91.3 | 100.9 | | | | | | | | |
| 45 | ND | 06350000 | 43.1 | 49.3 | 52.5 | 56.9 | 62.1 | 71.6 | 85.7 | 98.4 | 130.3 | 157.5 | 172.9 | | | | | | | | |
| 46 | ND | 06354000 | 0.0 | 8.4 | 17.6 | 51.0 | 100.0 | 197.8 | 391.7 | 610.8 | 1307.0 | 2841.7 | 3868.2 | | | | | | | | |
| 47 | SD | 06356500 | 127.4 | 204.8 | 235.3 | 273.4 | 322.0 | 426.1 | 625.0 | 827.0 | 1314.3 | 2058.8 | 3307.3 | | | | | | | | |
| 48 | SD | 06357800 | 0.0 | 214.9 | 276.1 | 392.3 | 575.6 | 806.2 | 1286.1 | 1720.9 | 2800.3 | 4231.3 | 5267.8 | | | | | | | | |
| 49 | SD | 06360500 | 0.0 | 0.0 | 0.0 | 97.6 | 418.9 | 931.7 | 1941.9 | 2843.2 | 5460.9 | 8873.7 | 11713.2 | | | | | | | | |
| 50 | WY | 06365900 | 0.0 | 0.0 | 0.0 | 10.5 | 30.7 | 164.2 | 567.2 | 919.7 | 2626.9 | 9306.5 | 21940.2 | | | | | | | | |
| 51 | SD | 06400500 | 2046.9 | 2704.0 | 3137.1 | 3783.9 | 5289.9 | 9653.3 | 19035.6 | 29061.1 | 56000.3 | 107735.5 | 164116.2 | | | | | | | | |
| 52 | WY | 06425780 | 0.0 | 0.0 | 0.0 | 16.9 | 36.5 | 105.6 | 183.4 | 241.7 | 467.0 | 841.4 | 1514.3 | | | | | | | | |
| 53 | SD | 06441110 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 322.9 | 2230.0 | 5021.3 | 17028.5 | 50548.2 | 59842.8 | | | | | | | | |
| 54 | SD | 06445700 | 0.0 | 109.6 | 191.8 | 355.9 | 636.8 | 1026.7 | 1653.0 | 2713.1 | 6281.8 | 11636.3 | 22258.8 | | | | | | | | |
| 55 | SD | 06446200 | 0.0 | 1236.6 | 1281.4 | 1315.1 | 1338.9 | 1364.6 | 1388.9 | 1415.7 | 1475.0 | 1520.8 | 1547.4 | | | | | | | | |
| 56 | SD | 06447000 | 0.0 | 776.1 | 2173.3 | 4609.1 | 8666.1 | 14955.1 | 26122.6 | 35798.8 | 61782.3 | 95399.2 | 116388.8 | | | | | | | | |
| 57 | SD | 06449300 | 205.1 | 247.8 | 281.3 | 342.8 | 461.9 | 659.7 | 871.7 | 1026.5 | 1415.4 | 2974.0 | 3943.1 | | | | | | | | |
| 58 | SD | 06452000 | 125.2 | 693.6 | 1012.6 | 1734.7 | 3327.3 | 6601.9 | 12942.1 | 17433.0 | 20902.8 | 21652.0 | 21744.1 | | | | | | | | |

Appendix E. USGS Gage

| No. | State | USGS Station ID | MAGNITUDE-DURATION | | | | | | | | | | |
|-----|-------|--------------------|---|-------|-------|------|------|------|------|------|-----|-----|-----|
| | | | Average number of consecutive days a given concentration is exceeded | | | | | | | | | | |
| | | | Concentration exceedance | | | | | | | | | | |
| 99 | 95 | 90 | 75 | 50 | 25 | 10 | 5 | 1 | 0.1 | 0.01 | | | |
| 1 | MT | 06120500 | 217.1 | 172.3 | 107.5 | 45.8 | 23.7 | 17.2 | 12.2 | 9.4 | 6.2 | 2.3 | 1.0 |
| 2 | MT | 06126500 | 204.5 | 137.6 | 90.1 | 48.0 | 26.7 | 14.9 | 13.4 | 10.1 | 7.0 | 2.8 | 1.0 |
| 3 | MT | 06127500 | 201.0 | 147.0 | 103.4 | 45.7 | 23.6 | 16.1 | 13.9 | 9.6 | 5.8 | 3.4 | 1.0 |
| 4 | MT | 06130500 | 111.8 | 111.8 | 111.8 | 50.3 | 25.4 | 17.9 | 10.6 | 8.2 | 4.8 | 3.1 | 1.0 |
| 5 | MT | 06131200 | 28.1 | 28.1 | 28.1 | 28.1 | 28.1 | 11.0 | 4.9 | 3.3 | 1.9 | 1.0 | 1.0 |
| 6 | MT | 06177500 | 61.4 | 61.4 | 61.4 | 42.5 | 36.4 | 20.6 | 10.3 | 6.6 | 2.7 | 1.9 | 1.0 |
| 7 | MT | 06205000 | 158.7 | 86.1 | 61.1 | 40.1 | 33.0 | 26.2 | 8.2 | 5.9 | 3.3 | 2.3 | 1.0 |
| 8 | MT | 06214500 | 183.5 | 106.1 | 77.5 | 47.2 | 35.0 | 32.7 | 12.0 | 7.7 | 4.7 | 3.8 | 3.0 |
| 9 | MT | 06217500 | 211.3 | 82.4 | 63.9 | 51.7 | 38.9 | 20.9 | 14.5 | 9.8 | 3.0 | 1.5 | 1.0 |
| 10 | MT | 06294000 | 75.7 | 51.4 | 43.5 | 33.3 | 22.5 | 18.8 | 11.2 | 7.7 | 4.5 | 2.3 | 2.0 |
| 11 | MT | 06294995 | 57.2 | 57.2 | 49.6 | 30.5 | 18.7 | 10.5 | 7.7 | 4.7 | 2.6 | 2.0 | 1.0 |
| 12 | MT | 06295250 | 153.6 | 153.6 | 153.6 | 34.3 | 29.7 | 20.2 | 13.5 | 10.8 | 3.7 | 3.0 | 1.0 |
| 13 | MT | 06296003 | 102.7 | 102.7 | 78.4 | 43.4 | 20.1 | 13.3 | 7.2 | 5.9 | 4.1 | 3.0 | 1.0 |
| 14 | MT | 06296120 | 131.5 | 125.7 | 74.6 | 41.0 | 31.6 | 32.4 | 9.2 | 6.5 | 5.0 | 2.0 | 1.0 |
| 15 | MT | 06306300 | 80.4 | 47.3 | 40.8 | 31.0 | 21.0 | 19.7 | 14.7 | 8.7 | 4.3 | 1.6 | 2.0 |
| 16 | MT | 06307600 | 111.5 | 111.5 | 111.5 | 58.1 | 30.5 | 12.4 | 8.2 | 6.5 | 2.6 | 1.8 | 1.0 |
| 17 | MT | 06307616 | 182.6 | 131.4 | 92.6 | 62.4 | 39.0 | 24.1 | 19.9 | 13.4 | 7.8 | 2.0 | 1.0 |
| 18 | MT | 06307740 | 118.4 | 118.4 | 65.6 | 45.2 | 26.7 | 17.7 | 10.5 | 8.6 | 6.2 | 1.8 | 1.0 |
| 19 | MT | 06307830 | 161.8 | 106.9 | 89.1 | 64.5 | 42.8 | 28.6 | 21.2 | 15.8 | 7.1 | 3.0 | 1.0 |
| 20 | MT | 06308400 | 38.7 | 38.7 | 38.7 | 38.7 | 30.2 | 10.9 | 5.2 | 3.4 | 2.5 | 1.7 | 1.0 |
| 21 | WY | 06313000 | 204.8 | 126.8 | 73.2 | 28.6 | 12.3 | 6.5 | 4.0 | 2.9 | 1.6 | 1.2 | 1.0 |
| 22 | WY | 06313400 | 118.3 | 58.9 | 33.2 | 14.2 | 8.7 | 5.7 | 3.0 | 2.4 | 2.0 | 2.0 | 1.0 |
| 23 | WY | 06317000 | 122.1 | 122.1 | 91.9 | 42.8 | 19.1 | 9.6 | 5.3 | 3.6 | 2.2 | 1.4 | 1.5 |
| 24 | MT | 06325500 | 144.6 | 86.4 | 60.8 | 30.7 | 25.6 | 12.2 | 5.8 | 3.8 | 2.9 | 3.0 | 1.0 |
| 25 | MT | 06326300 | 40.2 | 40.2 | 40.2 | 36.1 | 20.1 | 9.9 | 4.5 | 3.6 | 3.0 | 1.5 | 1.0 |
| 26 | MT | 06326500 | 101.0 | 80.4 | 81.9 | 46.5 | 24.2 | 12.4 | 6.9 | 4.9 | 3.3 | 1.7 | 1.0 |
| 27 | MT | 06326555 | 27.1 | 27.1 | 27.1 | 27.1 | 16.6 | 8.0 | 5.3 | 3.5 | 2.1 | 2.0 | 1.0 |
| 28 | MT | 06326600 | 59.8 | 59.8 | 59.8 | 59.8 | 15.1 | 15.4 | 8.2 | 5.6 | 3.5 | 2.5 | 1.0 |
| 29 | ND | 06331850 | 197.2 | 62.6 | 36.6 | 19.7 | 17.8 | 15.1 | 10.8 | 11.8 | 2.5 | 2.0 | 1.0 |
| 30 | ND | 06332515 | 198.2 | 73.9 | 42.2 | 22.3 | 16.1 | 11.6 | 6.7 | 4.5 | 2.5 | 1.7 | 1.0 |
| 31 | ND | 06335500 | 202.3 | 130.4 | 83.1 | 37.5 | 20.6 | 9.8 | 6.3 | 5.2 | 4.0 | 2.9 | 1.0 |

Appendix E. USGS Gage

| No. | State | USGS Station ID | MAGNITUDE-DURATION | | | | | | | | | | |
|-----|-------|--------------------|---|-------|-------|------|------|------|------|------|-----|-----|-----|
| | | | Average number of consecutive days a given concentration is exceeded | | | | | | | | | | |
| | | | Concentration exceedance | | | | | | | | | | |
| 99 | 95 | 90 | 75 | 50 | 25 | 10 | 5 | 1 | 0.1 | 0.01 | | | |
| 32 | ND | 06335750 | 124.7 | 124.7 | 82.2 | 49.6 | 31.7 | 19.9 | 9.9 | 5.3 | 4.0 | 2.0 | 1.0 |
| 33 | ND | 06336000 | 183.6 | 126.1 | 92.7 | 48.3 | 21.4 | 12.4 | 6.0 | 5.2 | 4.0 | 2.0 | 1.0 |
| 34 | MT | 06336500 | 71.2 | 71.2 | 71.2 | 52.5 | 27.1 | 13.9 | 7.7 | 5.9 | 3.3 | 2.2 | 1.0 |
| 35 | ND | 06336600 | 142.1 | 142.1 | 142.1 | 66.9 | 39.9 | 17.4 | 10.0 | 6.8 | 4.3 | 1.8 | 1.0 |
| 36 | ND | 06337000 | 239.9 | 159.3 | 108.8 | 54.6 | 22.1 | 10.9 | 7.0 | 5.5 | 4.1 | 4.2 | 1.5 |
| 37 | ND | 06339100 | 166.3 | 120.4 | 95.1 | 47.6 | 23.1 | 13.3 | 6.7 | 4.7 | 2.5 | 2.0 | 1.0 |
| 38 | ND | 06339550 | 92.0 | 92.0 | 80.7 | 36.4 | 17.8 | 14.3 | 8.7 | 4.7 | 3.0 | 1.0 | 1.0 |
| 39 | ND | 06340000 | 211.7 | 123.2 | 82.2 | 37.2 | 19.0 | 14.0 | 7.5 | 5.9 | 3.6 | 2.3 | 1.0 |
| 40 | ND | 06340500 | 199.8 | 125.3 | 81.3 | 54.6 | 28.4 | 13.6 | 7.3 | 5.9 | 4.0 | 3.0 | 1.5 |
| 41 | ND | 06340520 | 32.7 | 32.7 | 32.7 | 32.7 | 28.3 | 11.9 | 7.2 | 5.0 | 3.3 | 1.5 | 1.0 |
| 42 | ND | 06342200 | 130.7 | 59.4 | 42.1 | 27.8 | 14.3 | 10.8 | 7.8 | 7.1 | 2.5 | 1.0 | 1.0 |
| 43 | ND | 06343000 | 137.7 | 75.6 | 46.9 | 31.1 | 19.2 | 10.7 | 6.8 | 4.9 | 2.6 | 1.5 | 1.0 |
| 44 | ND | 06344600 | 163.9 | 163.9 | 96.2 | 45.8 | 23.3 | 13.5 | 7.5 | 4.6 | 2.2 | 1.2 | 1.0 |
| 45 | ND | 06350000 | 197.6 | 106.2 | 71.0 | 47.8 | 28.2 | 18.2 | 9.0 | 5.6 | 2.9 | 2.3 | 1.0 |
| 46 | ND | 06354000 | 207.2 | 138.6 | 127.6 | 52.6 | 25.0 | 13.4 | 8.4 | 6.5 | 4.0 | 3.3 | 3.0 |
| 47 | SD | 06356500 | 200.5 | 104.4 | 60.4 | 28.5 | 16.5 | 9.1 | 5.6 | 4.5 | 2.9 | 2.7 | 2.0 |
| 48 | SD | 06357800 | 243.6 | 133.1 | 91.9 | 50.2 | 21.5 | 12.3 | 7.1 | 4.6 | 3.4 | 2.8 | 2.0 |
| 49 | SD | 06360500 | 97.1 | 97.1 | 97.1 | 70.3 | 26.9 | 13.4 | 7.3 | 5.3 | 3.8 | 3.0 | 2.0 |
| 50 | WY | 06365900 | 50.9 | 50.9 | 50.9 | 42.3 | 22.2 | 12.5 | 5.7 | 3.4 | 1.8 | 2.0 | 1.0 |
| 51 | SD | 06400500 | 153.4 | 70.9 | 42.7 | 29.2 | 15.6 | 8.4 | 5.0 | 3.6 | 2.1 | 2.0 | 1.0 |
| 52 | WY | 06425780 | 40.4 | 40.4 | 40.4 | 27.5 | 25.1 | 10.3 | 6.0 | 4.4 | 2.4 | 1.5 | 1.0 |
| 53 | SD | 06441110 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 12.1 | 4.8 | 4.6 | 2.1 | 1.0 | 1.0 |
| 54 | SD | 06445700 | 142.1 | 77.3 | 57.4 | 25.8 | 12.9 | 8.3 | 5.2 | 4.5 | 3.2 | 2.5 | 1.0 |
| 55 | SD | 06446200 | 135.0 | 107.4 | 41.2 | 16.3 | 13.0 | 7.9 | 5.8 | 4.1 | 2.5 | 1.0 | 1.0 |
| 56 | SD | 06447000 | 123.1 | 102.4 | 63.8 | 30.6 | 13.4 | 6.1 | 3.6 | 2.8 | 1.9 | 1.2 | 1.0 |
| 57 | SD | 06449300 | 120.1 | 51.9 | 36.3 | 21.8 | 15.2 | 12.6 | 8.3 | 5.9 | 3.1 | 2.5 | 1.0 |
| 58 | SD | 06452000 | 220.3 | 112.5 | 73.4 | 38.1 | 17.7 | 8.8 | 4.9 | 2.7 | 1.2 | 1.0 | 0.0 |

Appendix E. USGS Gage

| No. | State | USGS Station ID | DOSAGE <i>Concentration x Duration</i> mg/L-day | | | | | | | | | | |
|-----|-------|--------------------|---|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| | | | <i>Concentration exceedance</i> | | | | | | | | | | |
| | | | 99 | 95 | 90 | 75 | 50 | 25 | 10 | 5 | 1 | 0.1 | 0.01 |
| 1 | MT | 06120500 | 0 | 3812 | 3563 | 1929 | 1183 | 1037 | 972 | 852 | 684 | 312 | 145 |
| 2 | MT | 06126500 | 39 | 253 | 478 | 740 | 1211 | 1555 | 3714 | 5301 | 9936 | 12849 | 7726 |
| 3 | MT | 06127500 | 0 | 2763 | 4786 | 4132 | 3208 | 3026 | 3796 | 3354 | 2992 | 2703 | 985 |
| 4 | MT | 06130500 | 0 | 0 | 0 | 4612 | 2384 | 3129 | 5626 | 8358 | 13286 | 23845 | 11318 |
| 5 | MT | 06131200 | 0 | 0 | 0 | 0 | 0 | 1579 | 1361 | 1485 | 1933 | 1744 | 2462 |
| 6 | MT | 06177500 | 0 | 0 | 0 | 2303 | 2171 | 1376 | 749 | 511 | 244 | 194 | 106 |
| 7 | MT | 06205000 | 402 | 261 | 206 | 170 | 188 | 261 | 134 | 115 | 85 | 74 | 37 |
| 8 | MT | 06214500 | 1335 | 1139 | 986 | 859 | 1011 | 2658 | 3014 | 2912 | 3152 | 4133 | 4513 |
| 9 | MT | 06217500 | 3393 | 1919 | 1620 | 1796 | 1947 | 2462 | 3436 | 3278 | 1323 | 856 | 613 |
| 10 | MT | 06294000 | 1964 | 1555 | 1547 | 1834 | 2094 | 4145 | 7737 | 9924 | 13102 | 14044 | 54416 |
| 11 | MT | 06294995 | 0 | 0 | 1665 | 1711 | 1644 | 1246 | 1159 | 838 | 679 | 756 | 492 |
| 12 | MT | 06295250 | 0 | 0 | 0 | 1290 | 1684 | 1943 | 1987 | 2245 | 1378 | 1568 | 623 |
| 13 | MT | 06296003 | 0 | 0 | 3681 | 3878 | 3787 | 3908 | 2651 | 2558 | 2352 | 2294 | 1017 |
| 14 | MT | 06296120 | 1828 | 2472 | 2086 | 1666 | 2091 | 5325 | 4313 | 4222 | 5279 | 3390 | 2228 |
| 15 | MT | 06306300 | 2378 | 1453 | 1311 | 1130 | 913 | 1230 | 1627 | 1240 | 829 | 370 | 617 |
| 16 | MT | 06307600 | 0 | 0 | 0 | 2808 | 1813 | 851 | 629 | 540 | 267 | 246 | 173 |
| 17 | MT | 06307616 | 1662 | 1409 | 1173 | 1251 | 1124 | 943 | 1271 | 1348 | 1208 | 381 | 250 |
| 18 | MT | 06307740 | 0 | 0 | 4649 | 3287 | 1996 | 1357 | 820 | 676 | 507 | 151 | 87 |
| 19 | MT | 06307830 | 3236 | 2624 | 2450 | 2715 | 2744 | 2594 | 3776 | 4152 | 3399 | 1766 | 872 |
| 20 | MT | 06308400 | 0 | 0 | 0 | 0 | 2972 | 4000 | 5765 | 6759 | 9617 | 14314 | 9663 |
| 21 | WY | 06313000 | 0 | 21593 | 56714 | 51630 | 42757 | 40524 | 54204 | 63710 | 76988 | 208967 | 449187 |
| 22 | WY | 06313400 | 16016 | 15648 | 10996 | 5707 | 4454 | 4466 | 5579 | 10448 | 44415 | 67240 | 61527 |
| 23 | WY | 06317000 | 0 | 0 | 12684 | 37492 | 38896 | 36646 | 38958 | 40448 | 48435 | 72705 | 162302 |
| 24 | MT | 06325500 | 0 | 10237 | 7905 | 4319 | 4084 | 2361 | 1288 | 935 | 847 | 988 | 342 |
| 25 | MT | 06326300 | 0 | 0 | 0 | 2296 | 4055 | 5572 | 5259 | 6115 | 9003 | 7423 | 5364 |
| 26 | MT | 06326500 | 6076 | 5226 | 7558 | 16017 | 27198 | 35787 | 45365 | 52039 | 43767 | 26610 | 16039 |
| 27 | MT | 06326555 | 0 | 0 | 0 | 0 | 503 | 377 | 364 | 335 | 587 | 1387 | 853 |
| 28 | MT | 06326600 | 0 | 0 | 0 | 0 | 1215 | 2074 | 1669 | 1470 | 1417 | 1915 | 870 |
| 29 | ND | 06331850 | 0 | 1549 | 972 | 566 | 553 | 513 | 434 | 543 | 139 | 146 | 76 |
| 30 | ND | 06332515 | 8796 | 4699 | 2917 | 1723 | 1393 | 1316 | 1248 | 1202 | 1142 | 1128 | 751 |
| 31 | ND | 06335500 | 0 | 12360 | 14058 | 11233 | 10022 | 9256 | 11578 | 13725 | 18174 | 22187 | 9771 |

Appendix E. USGS Gage

| No. | State | USGS Station ID | DOSAGE | | | | | | | | | | |
|-----|-------|--------------------|--------------------------|--------|--------|--------|--------|-------|-------|--------|--------|--------|----------|
| | | | Concentration x Duration | | | | | | | | | | mg/L-day |
| | | | Concentration exceedance | | | | | | | | | | |
| 99 | 95 | 90 | 75 | 50 | 25 | 10 | 5 | 1 | 0.1 | 0.01 | | | |
| 32 | ND | 06335750 | 0 | 0 | 331902 | 210935 | 143105 | 96023 | 50846 | 28026 | 21831 | 11654 | 5884 |
| 33 | ND | 06336000 | 796552 | 594505 | 454391 | 245704 | 113978 | 69711 | 35196 | 30879 | 24973 | 12966 | 6604 |
| 34 | MT | 06336500 | 0 | 0 | 0 | 1583 | 1092 | 683 | 453 | 415 | 324 | 249 | 122 |
| 35 | ND | 06336600 | 0 | 0 | 0 | 3757 | 3499 | 1981 | 1400 | 1090 | 980 | 507 | 309 |
| 36 | ND | 06337000 | 0 | 18570 | 24518 | 23620 | 20479 | 21738 | 28204 | 33137 | 49545 | 98588 | 49637 |
| 37 | ND | 06339100 | 0 | 3833 | 3705 | 2312 | 1273 | 847 | 511 | 406 | 281 | 262 | 144 |
| 38 | ND | 06339550 | 0 | 0 | 2280 | 1359 | 797 | 783 | 600 | 367 | 294 | 121 | 125 |
| 39 | ND | 06340000 | 2770 | 2556 | 2041 | 1133 | 726 | 738 | 651 | 714 | 1017 | 1225 | 694 |
| 40 | ND | 06340500 | 3958 | 3649 | 2946 | 2556 | 1885 | 1490 | 1495 | 1926 | 3203 | 4546 | 3435 |
| 41 | ND | 06340520 | 0 | 0 | 0 | 0 | 412 | 315 | 306 | 285 | 290 | 179 | 129 |
| 42 | ND | 06342200 | 3985 | 2191 | 1636 | 1164 | 645 | 576 | 513 | 573 | 309 | 175 | 184 |
| 43 | ND | 06343000 | 9618 | 5803 | 3955 | 2915 | 2012 | 1383 | 1143 | 980 | 682 | 455 | 329 |
| 44 | ND | 06344600 | 0 | 0 | 2382 | 1413 | 812 | 553 | 376 | 265 | 166 | 108 | 101 |
| 45 | ND | 06350000 | 8525 | 5232 | 3729 | 2718 | 1753 | 1300 | 774 | 551 | 374 | 360 | 173 |
| 46 | ND | 06354000 | 0 | 1166 | 2245 | 2683 | 2496 | 2654 | 3278 | 3990 | 5280 | 9472 | 11605 |
| 47 | SD | 06356500 | 25540 | 21368 | 14213 | 7783 | 5328 | 3884 | 3484 | 3747 | 3799 | 5490 | 6615 |
| 48 | SD | 06357800 | 0 | 28599 | 25359 | 19693 | 12356 | 9923 | 9151 | 7995 | 9622 | 11848 | 10536 |
| 49 | SD | 06360500 | 0 | 0 | 0 | 6864 | 11255 | 12503 | 14173 | 15171 | 20583 | 26621 | 23426 |
| 50 | WY | 06365900 | 0 | 0 | 0 | 446 | 680 | 2057 | 3253 | 3127 | 4790 | 18613 | 21940 |
| 51 | SD | 06400500 | 313956 | 191610 | 134089 | 110404 | 82366 | 81194 | 95959 | 105912 | 115501 | 215471 | 164116 |
| 52 | WY | 06425780 | 0 | 0 | 0 | 463 | 917 | 1084 | 1105 | 1063 | 1142 | 1262 | 1514 |
| 53 | SD | 06441110 | 0 | 0 | 0 | 0 | 0 | 3894 | 10625 | 23154 | 36185 | 50548 | 59843 |
| 54 | SD | 06445700 | 0 | 8470 | 11015 | 9173 | 8220 | 8548 | 8558 | 12150 | 19812 | 29091 | 22259 |
| 55 | SD | 06446200 | 0 | 132813 | 52815 | 21395 | 17405 | 10785 | 8046 | 5804 | 3687 | 1521 | 1547 |
| 56 | SD | 06447000 | 0 | 79510 | 138652 | 141104 | 116327 | 91437 | 95218 | 101112 | 120243 | 113286 | 116389 |
| 57 | SD | 06449300 | 24634 | 12856 | 10207 | 7457 | 7040 | 8338 | 7210 | 6061 | 4423 | 7435 | 3943 |
| 58 | SD | 06452000 | 27587 | 78050 | 74345 | 66106 | 58956 | 57775 | 63483 | 46688 | 24631 | 22735 | 0 |