

## APPENDIX H

### TOTAL MAXIMUM DAILY LOADS

#### H.1 Sediment

##### H.1.1 Overview

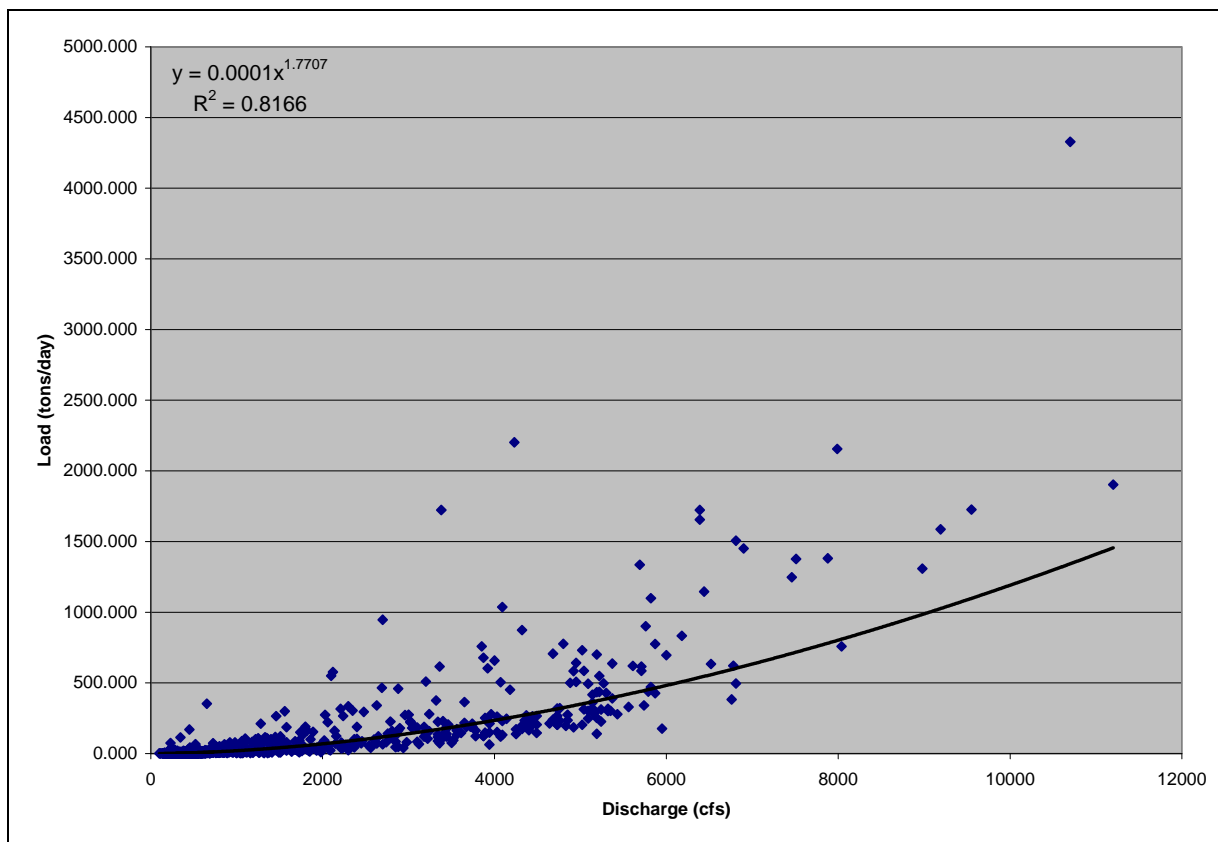
A percent reduction approach was used for the sediment TMDLs within this document because there is uncertainty associated with the loads derived from the source assessment, and using the estimated sediment loads creates a rigid perception that the loads are absolutely conclusive. However, because daily loads are a required product of TMDL development and percent reductions are most relevant at an annual scale, loads within this appendix are expressed as daily loads. Daily loads should not be considered absolutely conclusive and may be refined in the future as part of the adaptive management process. The TMDLs may not be feasible at all locations within the watershed, but if the allocations are followed, sediment loads are expected to be reduced to a degree that the sediment targets are met and beneficial uses are no longer impaired.

##### H.1.2 Approach

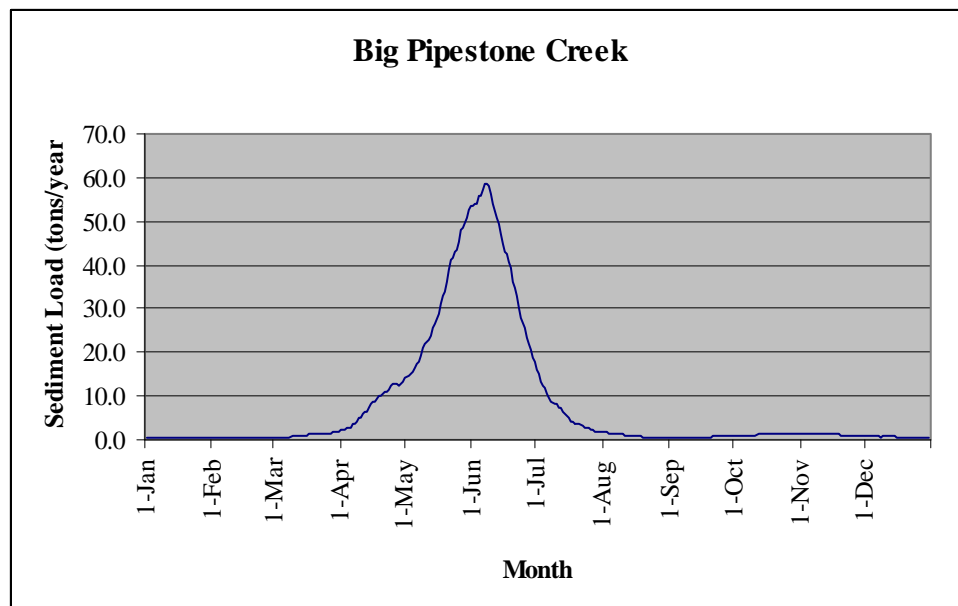
The average annual sediment loads determined from source assessments (**Section 5.0**) were used along with historical flow and suspended sediment data from the Big Hole River to determine average daily sediment loads for tributary stream in the Upper Jefferson TPA. This approach was taken primarily due to the lack of flow and sediment data available within Jefferson River. The major assumption of this approach is that the hydrogeologic properties of these watersheds are similar. For this process a sediment rating curve was developed using daily flow and suspended solids load data collected from 1960 through 1964 at the USGS gage on the Big Hole River near Melrose, MT (Station 6025500) (**Figure H-1**). The gage near Melrose was chosen for its period of record (1923-current) and amount of suspended solids data.

The daily mean discharge based on 84 years of record (1923-2007) at the USGS gage was then plugged into the equation for the sediment rating curve to get a daily suspended sediment load. The suspended sediment load is only a fraction of the total load from the source assessment, but provides an approximation of the relationship between sediment and flow in the Big Hole River. Based on the sum of the calculated daily sediment loads, a daily percentage relative to the annual suspended sediment load was calculated for each day. The daily percentages were then applied to the total average annual loads associated with the TMDL percent reductions from **Section 5.0** to determine the average daily load. To conserve resources, this appendix contains daily loads for the Big Pipestone Creek as an example. As discussed in **Section 5.7.1**, the TMDL for Big Pipestone Creek is a 46 percent reduction in the total average annual sediment load, which is roughly equivalent to 6,181 tons/year. The daily percentages discussed above were then multiplied by the annual load of 6,181 tons to get a daily expression of the Big Pipestone Creek TMDL (**Figure H-2, Table H-1**). Although the relationship between sediment and flow is likely different within the 303(d) Listed tributaries in the Upper Jefferson Watershed than in the Big Hole River, it was used to determine average daily loads because it is the best available data and

TMDL implementation activities will not be driven by the daily loads. The daily loads are a composite of the allocations, but as allocations are not feasible on a daily basis, they are not contained within this appendix. If desired, daily allocations may be obtained by applying allocations provided in **Section 5.7.1** to the daily load. Daily loads for all other TMDLs may be derived by using the daily percentages in **Table H-1** and the TMDLs expressed as an average annual load, which are discussed in **Section 5.7** and also provided in **Table H-2**.



**Figure H-1. Sediment Rating Curve for the Big Hole River**



**Figure H-2. Average Daily Sediment Load for the Big Pipestone Creek**

**Table H-1. Daily TMDL for the Big Pipestone Creek.**

| Month | Day | Daily % of annual load | Wise River TMDL (tons/day) | Month | Day | Daily % of annual load | Wise River TMDL (tons/day) |
|-------|-----|------------------------|----------------------------|-------|-----|------------------------|----------------------------|
| Jan   | 1   | 0.02%                  | 1.2                        | Feb   | 17  | 0.02%                  | 1.2                        |
| Jan   | 2   | 0.02%                  | 1.2                        | Feb   | 18  | 0.02%                  | 1.2                        |
| Jan   | 3   | 0.02%                  | 1.2                        | Feb   | 19  | 0.02%                  | 1.2                        |
| Jan   | 4   | 0.02%                  | 1.2                        | Feb   | 20  | 0.02%                  | 1.2                        |
| Jan   | 5   | 0.02%                  | 1.2                        | Feb   | 21  | 0.02%                  | 1.2                        |
| Jan   | 6   | 0.02%                  | 1.2                        | Feb   | 22  | 0.02%                  | 1.2                        |
| Jan   | 7   | 0.02%                  | 1.2                        | Feb   | 23  | 0.02%                  | 1.2                        |
| Jan   | 8   | 0.02%                  | 1.2                        | Feb   | 24  | 0.02%                  | 1.2                        |
| Jan   | 9   | 0.02%                  | 1.2                        | Feb   | 25  | 0.02%                  | 1.2                        |
| Jan   | 10  | 0.02%                  | 1.2                        | Feb   | 26  | 0.02%                  | 1.2                        |
| Jan   | 11  | 0.02%                  | 1.2                        | Feb   | 27  | 0.02%                  | 1.2                        |
| Jan   | 12  | 0.02%                  | 1.2                        | Feb   | 28  | 0.02%                  | 1.2                        |
| Jan   | 13  | 0.02%                  | 1.2                        | Feb   | 29  | 0.02%                  | 1.2                        |
| Jan   | 14  | 0.02%                  | 1.2                        | Mar   | 1   | 0.02%                  | 1.2                        |
| Jan   | 15  | 0.02%                  | 1.2                        | Mar   | 2   | 0.02%                  | 1.2                        |
| Jan   | 16  | 0.02%                  | 1.2                        | Mar   | 3   | 0.02%                  | 1.2                        |
| Jan   | 17  | 0.02%                  | 1.2                        | Mar   | 4   | 0.02%                  | 1.2                        |
| Jan   | 18  | 0.02%                  | 1.2                        | Mar   | 5   | 0.02%                  | 1.2                        |
| Jan   | 19  | 0.02%                  | 1.2                        | Mar   | 6   | 0.02%                  | 1.2                        |
| Jan   | 20  | 0.02%                  | 1.2                        | Mar   | 7   | 0.02%                  | 1.2                        |
| Jan   | 21  | 0.02%                  | 1.2                        | Mar   | 8   | 0.02%                  | 1.2                        |
| Jan   | 22  | 0.02%                  | 1.2                        | Mar   | 9   | 0.03%                  | 1.9                        |

**Table H-1. Daily TMDL for the Big Pipestone Creek.**

| Month | Day | Daily % of annual load | Wise River TMDL (tons/day) | Month | Day | Daily % of annual load | Wise River TMDL (tons/day) |
|-------|-----|------------------------|----------------------------|-------|-----|------------------------|----------------------------|
| Jan   | 23  | 0.02%                  | 1.2                        | Mar   | 10  | 0.03%                  | 1.9                        |
| Jan   | 24  | 0.02%                  | 1.2                        | Mar   | 11  | 0.03%                  | 1.9                        |
| Jan   | 25  | 0.02%                  | 1.2                        | Mar   | 12  | 0.03%                  | 1.9                        |
| Jan   | 26  | 0.02%                  | 1.2                        | Mar   | 13  | 0.03%                  | 1.9                        |
| Jan   | 27  | 0.02%                  | 1.2                        | Mar   | 14  | 0.03%                  | 1.9                        |
| Jan   | 28  | 0.02%                  | 1.2                        | Mar   | 15  | 0.03%                  | 1.9                        |
| Jan   | 29  | 0.02%                  | 1.2                        | Mar   | 16  | 0.03%                  | 1.9                        |
| Jan   | 30  | 0.02%                  | 1.2                        | Mar   | 17  | 0.04%                  | 2.5                        |
| Jan   | 31  | 0.02%                  | 1.2                        | Mar   | 18  | 0.04%                  | 2.5                        |
| Feb   | 1   | 0.02%                  | 1.2                        | Mar   | 19  | 0.04%                  | 2.5                        |
| Feb   | 2   | 0.02%                  | 1.2                        | Mar   | 20  | 0.04%                  | 2.5                        |
| Feb   | 3   | 0.02%                  | 1.2                        | Mar   | 21  | 0.04%                  | 2.5                        |
| Feb   | 4   | 0.02%                  | 1.2                        | Mar   | 22  | 0.04%                  | 2.5                        |
| Feb   | 5   | 0.02%                  | 1.2                        | Mar   | 23  | 0.04%                  | 2.5                        |
| Feb   | 6   | 0.02%                  | 1.2                        | Mar   | 24  | 0.04%                  | 2.5                        |
| Feb   | 7   | 0.02%                  | 1.2                        | Mar   | 25  | 0.05%                  | 3.1                        |
| Feb   | 8   | 0.02%                  | 1.2                        | Mar   | 26  | 0.05%                  | 3.1                        |
| Feb   | 9   | 0.02%                  | 1.2                        | Mar   | 27  | 0.05%                  | 3.1                        |
| Feb   | 10  | 0.02%                  | 1.2                        | Mar   | 28  | 0.06%                  | 3.7                        |
| Feb   | 11  | 0.02%                  | 1.2                        | Mar   | 29  | 0.07%                  | 4.3                        |
| Feb   | 12  | 0.02%                  | 1.2                        | Mar   | 30  | 0.07%                  | 4.3                        |
| Feb   | 13  | 0.02%                  | 1.2                        | Mar   | 31  | 0.07%                  | 4.3                        |
| Feb   | 14  | 0.02%                  | 1.2                        | Apr   | 1   | 0.08%                  | 4.9                        |
| Feb   | 15  | 0.02%                  | 1.2                        | Apr   | 2   | 0.08%                  | 4.9                        |
| Feb   | 16  | 0.02%                  | 1.2                        | Apr   | 3   | 0.08%                  | 4.9                        |
| Apr   | 4   | 0.09%                  | 5.6                        | May   | 21  | 1.36%                  | 84.1                       |
| Apr   | 5   | 0.10%                  | 6.2                        | May   | 22  | 1.44%                  | 89.0                       |
| Apr   | 6   | 0.12%                  | 7.4                        | May   | 23  | 1.46%                  | 90.2                       |
| Apr   | 7   | 0.13%                  | 8.0                        | May   | 24  | 1.50%                  | 92.7                       |
| Apr   | 8   | 0.15%                  | 9.3                        | May   | 25  | 1.52%                  | 94.0                       |
| Apr   | 9   | 0.17%                  | 10.5                       | May   | 26  | 1.58%                  | 97.7                       |
| Apr   | 10  | 0.18%                  | 11.1                       | May   | 27  | 1.67%                  | 103.2                      |
| Apr   | 11  | 0.20%                  | 12.4                       | May   | 28  | 1.70%                  | 105.1                      |
| Apr   | 12  | 0.22%                  | 13.6                       | May   | 29  | 1.78%                  | 110.0                      |
| Apr   | 13  | 0.23%                  | 14.2                       | May   | 30  | 1.84%                  | 113.7                      |
| Apr   | 14  | 0.25%                  | 15.5                       | May   | 31  | 1.87%                  | 115.6                      |
| Apr   | 15  | 0.28%                  | 17.3                       | Jun   | 1   | 1.87%                  | 115.6                      |
| Apr   | 16  | 0.30%                  | 18.5                       | Jun   | 2   | 1.88%                  | 116.2                      |
| Apr   | 17  | 0.31%                  | 19.2                       | Jun   | 3   | 1.88%                  | 116.2                      |
| Apr   | 18  | 0.35%                  | 21.6                       | Jun   | 4   | 1.95%                  | 120.5                      |
| Apr   | 19  | 0.35%                  | 21.6                       | Jun   | 5   | 1.95%                  | 120.5                      |

**Table H-1. Daily TMDL for the Big Pipestone Creek.**

| Month | Day | Daily % of annual load | Wise River TMDL (tons/day) | Month | Day | Daily % of annual load | Wise River TMDL (tons/day) |
|-------|-----|------------------------|----------------------------|-------|-----|------------------------|----------------------------|
| Apr   | 20  | 0.36%                  | 22.3                       | Jun   | 6   | 2.00%                  | 123.6                      |
| Apr   | 21  | 0.38%                  | 23.5                       | Jun   | 7   | 2.04%                  | 126.1                      |
| Apr   | 22  | 0.38%                  | 23.5                       | Jun   | 8   | 2.04%                  | 126.1                      |
| Apr   | 23  | 0.40%                  | 24.7                       | Jun   | 9   | 2.03%                  | 125.5                      |
| Apr   | 24  | 0.43%                  | 26.6                       | Jun   | 10  | 1.96%                  | 121.1                      |
| Apr   | 25  | 0.45%                  | 27.8                       | Jun   | 11  | 1.89%                  | 116.8                      |
| Apr   | 26  | 0.45%                  | 27.8                       | Jun   | 12  | 1.78%                  | 110.0                      |
| Apr   | 27  | 0.44%                  | 27.2                       | Jun   | 13  | 1.73%                  | 106.9                      |
| Apr   | 28  | 0.43%                  | 26.6                       | Jun   | 14  | 1.65%                  | 102.0                      |
| Apr   | 29  | 0.45%                  | 27.8                       | Jun   | 15  | 1.56%                  | 96.4                       |
| Apr   | 30  | 0.47%                  | 29.1                       | Jun   | 16  | 1.50%                  | 92.7                       |
| May   | 1   | 0.50%                  | 30.9                       | Jun   | 17  | 1.48%                  | 91.5                       |
| May   | 2   | 0.51%                  | 31.5                       | Jun   | 18  | 1.43%                  | 88.4                       |
| May   | 3   | 0.52%                  | 32.1                       | Jun   | 19  | 1.37%                  | 84.7                       |
| May   | 4   | 0.55%                  | 34.0                       | Jun   | 20  | 1.27%                  | 78.5                       |
| May   | 5   | 0.58%                  | 35.8                       | Jun   | 21  | 1.21%                  | 74.8                       |
| May   | 6   | 0.60%                  | 37.1                       | Jun   | 22  | 1.15%                  | 71.1                       |
| May   | 7   | 0.62%                  | 38.3                       | Jun   | 23  | 1.06%                  | 65.5                       |
| May   | 8   | 0.67%                  | 41.4                       | Jun   | 24  | 0.97%                  | 60.0                       |
| May   | 9   | 0.73%                  | 45.1                       | Jun   | 25  | 0.89%                  | 55.0                       |
| May   | 10  | 0.76%                  | 47.0                       | Jun   | 26  | 0.82%                  | 50.7                       |
| May   | 11  | 0.79%                  | 48.8                       | Jun   | 27  | 0.77%                  | 47.6                       |
| May   | 12  | 0.80%                  | 49.4                       | Jun   | 28  | 0.72%                  | 44.5                       |
| May   | 13  | 0.83%                  | 51.3                       | Jun   | 29  | 0.66%                  | 40.8                       |
| May   | 14  | 0.89%                  | 55.0                       | Jun   | 30  | 0.62%                  | 38.3                       |
| May   | 15  | 0.93%                  | 57.5                       | Jul   | 1   | 0.56%                  | 34.6                       |
| May   | 16  | 1.01%                  | 62.4                       | Jul   | 2   | 0.52%                  | 32.1                       |
| May   | 17  | 1.08%                  | 66.8                       | Jul   | 3   | 0.47%                  | 29.1                       |
| May   | 18  | 1.15%                  | 71.1                       | Jul   | 4   | 0.43%                  | 26.6                       |
| May   | 19  | 1.18%                  | 72.9                       | Jul   | 5   | 0.41%                  | 25.3                       |
| May   | 20  | 1.26%                  | 77.9                       | Jul   | 6   | 0.37%                  | 22.9                       |
| Jul   | 7   | 0.33%                  | 20.4                       | Aug   | 22  | 0.02%                  | 1.2                        |
| Jul   | 8   | 0.31%                  | 19.2                       | Aug   | 23  | 0.02%                  | 1.2                        |
| Jul   | 9   | 0.29%                  | 17.9                       | Aug   | 24  | 0.02%                  | 1.2                        |
| Jul   | 10  | 0.28%                  | 17.3                       | Aug   | 25  | 0.02%                  | 1.2                        |
| Jul   | 11  | 0.26%                  | 16.1                       | Aug   | 26  | 0.02%                  | 1.2                        |
| Jul   | 12  | 0.25%                  | 15.5                       | Aug   | 27  | 0.02%                  | 1.2                        |
| Jul   | 13  | 0.23%                  | 14.2                       | Aug   | 28  | 0.02%                  | 1.2                        |
| Jul   | 14  | 0.21%                  | 13.0                       | Aug   | 29  | 0.02%                  | 1.2                        |
| Jul   | 15  | 0.19%                  | 11.7                       | Aug   | 30  | 0.02%                  | 1.2                        |
| Jul   | 16  | 0.17%                  | 10.5                       | Aug   | 31  | 0.02%                  | 1.2                        |

**Table H-1. Daily TMDL for the Big Pipestone Creek.**

| Month | Day | Daily % of annual load | Wise River TMDL (tons/day) | Month | Day | Daily % of annual load | Wise River TMDL (tons/day) |
|-------|-----|------------------------|----------------------------|-------|-----|------------------------|----------------------------|
| Jul   | 17  | 0.15%                  | 9.3                        | Sep   | 1   | 0.02%                  | 1.2                        |
| Jul   | 18  | 0.14%                  | 8.7                        | Sep   | 2   | 0.02%                  | 1.2                        |
| Jul   | 19  | 0.13%                  | 8.0                        | Sep   | 3   | 0.02%                  | 1.2                        |
| Jul   | 20  | 0.13%                  | 8.0                        | Sep   | 4   | 0.02%                  | 1.2                        |
| Jul   | 21  | 0.12%                  | 7.4                        | Sep   | 5   | 0.02%                  | 1.2                        |
| Jul   | 22  | 0.11%                  | 6.8                        | Sep   | 6   | 0.02%                  | 1.2                        |
| Jul   | 23  | 0.10%                  | 6.2                        | Sep   | 7   | 0.02%                  | 1.2                        |
| Jul   | 24  | 0.10%                  | 6.2                        | Sep   | 8   | 0.02%                  | 1.2                        |
| Jul   | 25  | 0.09%                  | 5.6                        | Sep   | 9   | 0.02%                  | 1.2                        |
| Jul   | 26  | 0.08%                  | 4.9                        | Sep   | 10  | 0.02%                  | 1.2                        |
| Jul   | 27  | 0.08%                  | 4.9                        | Sep   | 11  | 0.02%                  | 1.2                        |
| Jul   | 28  | 0.07%                  | 4.3                        | Sep   | 12  | 0.02%                  | 1.2                        |
| Jul   | 29  | 0.07%                  | 4.3                        | Sep   | 13  | 0.02%                  | 1.2                        |
| Jul   | 30  | 0.07%                  | 4.3                        | Sep   | 14  | 0.02%                  | 1.2                        |
| Jul   | 31  | 0.07%                  | 4.3                        | Sep   | 15  | 0.02%                  | 1.2                        |
| Aug   | 1   | 0.06%                  | 3.7                        | Sep   | 16  | 0.02%                  | 1.2                        |
| Aug   | 2   | 0.06%                  | 3.7                        | Sep   | 17  | 0.02%                  | 1.2                        |
| Aug   | 3   | 0.06%                  | 3.7                        | Sep   | 18  | 0.02%                  | 1.2                        |
| Aug   | 4   | 0.05%                  | 3.1                        | Sep   | 19  | 0.02%                  | 1.2                        |
| Aug   | 5   | 0.05%                  | 3.1                        | Sep   | 20  | 0.02%                  | 1.2                        |
| Aug   | 6   | 0.05%                  | 3.1                        | Sep   | 21  | 0.03%                  | 1.9                        |
| Aug   | 7   | 0.04%                  | 2.5                        | Sep   | 22  | 0.03%                  | 1.9                        |
| Aug   | 8   | 0.04%                  | 2.5                        | Sep   | 23  | 0.03%                  | 1.9                        |
| Aug   | 9   | 0.04%                  | 2.5                        | Sep   | 24  | 0.03%                  | 1.9                        |
| Aug   | 10  | 0.04%                  | 2.5                        | Sep   | 25  | 0.03%                  | 1.9                        |
| Aug   | 11  | 0.03%                  | 1.9                        | Sep   | 26  | 0.03%                  | 1.9                        |
| Aug   | 12  | 0.03%                  | 1.9                        | Sep   | 27  | 0.03%                  | 1.9                        |
| Aug   | 13  | 0.03%                  | 1.9                        | Sep   | 28  | 0.03%                  | 1.9                        |
| Aug   | 14  | 0.03%                  | 1.9                        | Sep   | 29  | 0.03%                  | 1.9                        |
| Aug   | 15  | 0.03%                  | 1.9                        | Sep   | 30  | 0.03%                  | 1.9                        |
| Aug   | 16  | 0.03%                  | 1.9                        | Oct   | 1   | 0.03%                  | 1.9                        |
| Aug   | 17  | 0.03%                  | 1.9                        | Oct   | 2   | 0.03%                  | 1.9                        |
| Aug   | 18  | 0.03%                  | 1.9                        | Oct   | 3   | 0.03%                  | 1.9                        |
| Aug   | 19  | 0.02%                  | 1.2                        | Oct   | 4   | 0.03%                  | 1.9                        |
| Aug   | 20  | 0.02%                  | 1.2                        | Oct   | 5   | 0.03%                  | 1.9                        |
| Aug   | 21  | 0.02%                  | 1.2                        | Oct   | 6   | 0.03%                  | 1.9                        |
| Oct   | 7   | 0.03%                  | 1.9                        | Nov   | 22  | 0.03%                  | 1.9                        |
| Oct   | 8   | 0.03%                  | 1.9                        | Nov   | 23  | 0.03%                  | 1.9                        |
| Oct   | 9   | 0.03%                  | 1.9                        | Nov   | 24  | 0.03%                  | 1.9                        |
| Oct   | 10  | 0.03%                  | 1.9                        | Nov   | 25  | 0.03%                  | 1.9                        |
| Oct   | 11  | 0.03%                  | 1.9                        | Nov   | 26  | 0.03%                  | 1.9                        |

**Table H-1. Daily TMDL for the Big Pipestone Creek.**

| Month | Day | Daily % of annual load | Wise River TMDL (tons/day) | Month | Day | Daily % of annual load | Wise River TMDL (tons/day) |
|-------|-----|------------------------|----------------------------|-------|-----|------------------------|----------------------------|
| Oct   | 12  | 0.04%                  | 2.5                        | Nov   | 27  | 0.03%                  | 1.9                        |
| Oct   | 13  | 0.04%                  | 2.5                        | Nov   | 28  | 0.03%                  | 1.9                        |
| Oct   | 14  | 0.04%                  | 2.5                        | Nov   | 29  | 0.03%                  | 1.9                        |
| Oct   | 15  | 0.04%                  | 2.5                        | Nov   | 30  | 0.03%                  | 1.9                        |
| Oct   | 16  | 0.04%                  | 2.5                        | Dec   | 1   | 0.03%                  | 1.9                        |
| Oct   | 17  | 0.04%                  | 2.5                        | Dec   | 2   | 0.03%                  | 1.9                        |
| Oct   | 18  | 0.04%                  | 2.5                        | Dec   | 3   | 0.03%                  | 1.9                        |
| Oct   | 19  | 0.04%                  | 2.5                        | Dec   | 4   | 0.03%                  | 1.9                        |
| Oct   | 20  | 0.04%                  | 2.5                        | Dec   | 5   | 0.03%                  | 1.9                        |
| Oct   | 21  | 0.04%                  | 2.5                        | Dec   | 6   | 0.03%                  | 1.9                        |
| Oct   | 22  | 0.04%                  | 2.5                        | Dec   | 7   | 0.03%                  | 1.9                        |
| Oct   | 23  | 0.04%                  | 2.5                        | Dec   | 8   | 0.02%                  | 1.2                        |
| Oct   | 24  | 0.04%                  | 2.5                        | Dec   | 9   | 0.03%                  | 1.9                        |
| Oct   | 25  | 0.04%                  | 2.5                        | Dec   | 10  | 0.03%                  | 1.9                        |
| Oct   | 26  | 0.04%                  | 2.5                        | Dec   | 11  | 0.03%                  | 1.9                        |
| Oct   | 27  | 0.04%                  | 2.5                        | Dec   | 12  | 0.03%                  | 1.9                        |
| Oct   | 28  | 0.04%                  | 2.5                        | Dec   | 13  | 0.03%                  | 1.9                        |
| Oct   | 29  | 0.04%                  | 2.5                        | Dec   | 14  | 0.03%                  | 1.9                        |
| Oct   | 30  | 0.04%                  | 2.5                        | Dec   | 15  | 0.03%                  | 1.9                        |
| Oct   | 31  | 0.04%                  | 2.5                        | Dec   | 16  | 0.02%                  | 1.2                        |
| Nov   | 1   | 0.04%                  | 2.5                        | Dec   | 17  | 0.02%                  | 1.2                        |
| Nov   | 2   | 0.04%                  | 2.5                        | Dec   | 18  | 0.02%                  | 1.2                        |
| Nov   | 3   | 0.04%                  | 2.5                        | Dec   | 19  | 0.02%                  | 1.2                        |
| Nov   | 4   | 0.04%                  | 2.5                        | Dec   | 20  | 0.02%                  | 1.2                        |
| Nov   | 5   | 0.04%                  | 2.5                        | Dec   | 21  | 0.02%                  | 1.2                        |
| Nov   | 6   | 0.04%                  | 2.5                        | Dec   | 22  | 0.02%                  | 1.2                        |
| Nov   | 7   | 0.04%                  | 2.5                        | Dec   | 23  | 0.02%                  | 1.2                        |
| Nov   | 8   | 0.04%                  | 2.5                        | Dec   | 24  | 0.02%                  | 1.2                        |
| Nov   | 9   | 0.04%                  | 2.5                        | Dec   | 25  | 0.02%                  | 1.2                        |
| Nov   | 10  | 0.04%                  | 2.5                        | Dec   | 26  | 0.02%                  | 1.2                        |
| Nov   | 11  | 0.04%                  | 2.5                        | Dec   | 27  | 0.02%                  | 1.2                        |
| Nov   | 12  | 0.04%                  | 2.5                        | Dec   | 28  | 0.02%                  | 1.2                        |
| Nov   | 13  | 0.04%                  | 2.5                        | Dec   | 29  | 0.02%                  | 1.2                        |
| Nov   | 14  | 0.04%                  | 2.5                        | Dec   | 30  | 0.02%                  | 1.2                        |
| Nov   | 15  | 0.04%                  | 2.5                        | Dec   | 31  | 0.02%                  | 1.2                        |
| Nov   | 16  | 0.04%                  | 2.5                        |       |     |                        |                            |
| Nov   | 17  | 0.04%                  | 2.5                        |       |     |                        |                            |
| Nov   | 18  | 0.04%                  | 2.5                        |       |     |                        |                            |
| Nov   | 19  | 0.04%                  | 2.5                        |       |     |                        |                            |
| Nov   | 20  | 0.03%                  | 1.9                        |       |     |                        |                            |
| Nov   | 21  | 0.03%                  | 1.9                        |       |     |                        |                            |

**Table H-2. Upper Jefferson Tributary TMDLs**

| <b>Stream Segment</b>  | <b>Water Body #</b> | <b>TMDL expressed as average annual load (tons/year)</b> |
|--|---------------------|--|
| <b>Big Pipestone Creek</b> , from headwaters to mouth (Jefferson River)        | MT41D001_020        | 6,181  |
| <b>Cherry Creek</b> , from headwaters to mouth (Jefferson River)               | MT41D002_090        | 357  |
| <b>Fish Creek</b> , from headwaters to mouth (Jefferson River)                 | MT41D003_070        | 2,077  |
| <b>Hells Canyon Creek</b> , from headwaters to mouth (Jefferson River)         | MT41D003_030        | 974  |
| <b>Little Pipestone Creek</b> , from headwaters to mouth (Big Pipestone Creek) | MT41D003_220        | 3,461  |
| <b>Whitetail Creek</b> , from headwaters to mouth (Jefferson River)            | MT41D003_050        | 5,293  |