## 14242580 TOUTLE RIVER AT TOWER ROAD, NEAR SILVER LAKE, WA

LOCATION.--Lat 46°20'02", long 122°50'20", in NW¼SW¼ sec.20, T.10 N., R.1 W., Cowlitz County, Hydrologic Unit 17080005, on right bank 10.7 mi downstream from confluence of North and South Forks, 2.9 mi northwest of Silver Lake, and at mile 6.5.

DRAINAGE AREA.--496 $mi^2$. A large debris avalanche generated by the eruption of Mount St. Helens on May 18, 1980 blocked tributaries in the upper North Fork Toutle River valley. As a result, from May 19, 1980 to July 7, 1981, approximately 40 $mi^2$ was noncontributing. From July 7, 1981 to October 1981, the Coldwater Lake release, approximately 21 $mi^2$, was noncontributing. From October 1981 to November 1982, the Castle Lake release, approximately 19.7 $mi^2$, was noncontributing. Since November 1982, all areas, including the Spirit Lake release, are effectively contributing.

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1981 to current year.

REVISED RECORDS.--WDR WA-86-1: 1982 (M)(P), 1983 (M)(P), 1984 (M)(P), 1985 (M).

GAGE.--Water-stage recorder. Elevation of gage is 160 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good. No regulation or diversion upstream from station. Some water-quality data available from USGS Washington Water Science Center for this station.

AVERAGE DISCHARGE.--24 years (water years 1982-2005), 2,056 $ft^3/s$, 56.33 in/yr, 1,490,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 61,800 $ft^3/s$, Feb. 8, 1996, gage height, 24.91 ft; maximum gage height, 28.03 ft Dec. 3, 1982; minimum daily, 243 $ft^3/s$, Oct. 14, 1987.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods occurred on May 18, 1980, from mudflows caused by the eruption of Mount St. Helens. A flood about 1200 hours was due to mudflow from South Fork Toutle River and a larger flood about 2100 hours was due to mudflow from North Fork Toutle River.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10,000 $ft^3/s$ and maximum (*):

| Date | Time | Discharge ($ft^3/s$) | Gage height (ft) | Date | Time | Discharge ($ft^3/s$) | Gage height (ft) |
|---|---|---|---|---|---|---|---|
| Dec 11 | 0900 | 11,100 | 9.87 | Mar 27 | 1115 | 12,100 | 10.23 |
| Jan 18 | 0745 | *12,200 | *10.27 | | | | |

Minimum discharge, 338 $ft^3/s$, Sept. 29, gage height, 3.27 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 753 | 1,830 | 1,820 | 1,450 | 1,370 | 971 | 4,060 | 1,910 | 1,620 | 932 | 525 | 412 |
| 2 | 705 | 3,380 | 1,640 | 1,340 | 1,290 | 863 | 3,640 | 2,260 | 1,820 | 901 | 528 | 408 |
| 3 | 672 | 3,970 | 1,540 | 1,230 | 1,220 | 839 | 3,330 | 2,070 | 1,690 | 883 | 515 | 406 |
| 4 | 648 | 3,130 | 1,480 | 1,170 | 1,270 | 798 | 3,140 | 1,900 | 1,500 | 828 | 506 | 402 |
| 5 | 630 | 2,650 | 1,510 | e1,100 | 1,380 | 774 | 2,740 | 1,810 | 1,450 | 794 | 495 | 402 |
| 6 | 768 | 2,270 | 1,470 | e1,100 | 1,370 | 755 | 2,540 | 1,700 | 1,520 | 882 | 489 | 400 |
| 7 | 725 | 2,000 | 1,560 | 1,150 | 1,400 | 744 | 2,680 | 1,560 | 1,390 | 845 | 487 | 394 |
| 8 | 1,000 | 1,780 | 3,650 | 1,150 | 1,240 | 737 | 2,940 | 1,460 | 1,410 | 831 | 485 | 389 |
| 9 | 2,190 | 1,610 | 3,520 | 1,090 | 1,180 | 725 | 2,520 | 1,670 | 1,270 | 1,510 | 478 | 387 |
| 10 | 1,700 | 1,480 | 5,120 | 1,050 | 1,130 | 717 | 2,240 | 2,260 | 1,180 | 1,090 | 475 | 413 |
| 11 | 1,360 | 1,360 | 9,080 | 1,010 | 1,100 | 710 | 3,040 | 2,060 | 1,310 | 990 | 476 | 434 |
| 12 | 1,170 | 1,270 | 5,980 | 1,010 | 1,100 | 699 | 3,270 | 1,860 | 1,450 | 914 | 475 | 411 |
| 13 | 1,060 | 1,190 | 4,480 | 1,040 | 1,150 | 689 | 2,930 | 1,690 | 1,310 | 866 | 469 | 396 |
| 14 | 991 | 1,130 | 3,950 | 964 | 1,100 | 678 | 2,570 | 1,820 | 1,230 | 828 | 458 | 389 |
| 15 | 937 | 1,180 | 3,410 | 950 | 1,030 | 666 | 2,390 | 1,880 | 1,190 | 784 | 447 | 390 |
| 16 | 942 | 1,300 | 2,890 | 1,130 | 990 | 675 | 5,180 | 3,030 | 1,130 | 761 | 443 | 396 |
| 17 | 2,540 | 1,150 | 2,530 | 1,980 | 952 | 766 | 5,470 | 3,030 | 1,790 | 739 | 465 | 391 |
| 18 | 3,320 | 1,530 | 2,260 | 10,200 | 935 | 710 | 4,590 | 3,170 | 1,450 | 707 | 495 | 388 |
| 19 | 3,600 | 1,560 | 2,090 | 7,310 | 925 | 722 | 3,740 | 3,980 | 1,520 | 676 | 461 | 383 |
| 20 | 3,180 | 1,360 | 1,960 | 5,260 | 894 | 1,260 | 3,200 | 3,920 | 1,340 | 655 | 435 | 379 |
| 21 | 2,770 | 1,250 | 1,850 | 4,290 | 863 | 1,600 | 2,800 | 3,920 | 1,240 | 642 | 438 | 374 |
| 22 | 2,460 | 1,220 | 1,890 | 3,480 | 840 | 1,220 | 2,550 | 3,690 | 1,280 | 689 | 436 | 372 |
| 23 | 2,330 | 1,190 | 1,680 | 2,950 | 818 | 1,090 | 2,570 | 3,300 | 1,290 | 704 | 436 | 371 |
| 24 | 2,160 | 1,380 | 1,560 | 2,540 | 798 | 1,020 | 2,720 | 2,780 | 1,130 | 634 | 434 | 368 |
| 25 | 2,000 | 2,330 | 1,540 | 2,220 | 787 | 941 | 3,040 | 2,410 | 1,070 | 614 | 425 | 367 |
| 26 | 1,950 | 2,380 | 1,990 | 2,000 | 779 | 1,710 | 2,790 | 2,110 | 1,030 | 596 | 414 | 366 |
| 27 | 1,790 | 2,080 | 1,670 | 1,860 | 768 | 10,100 | 2,510 | 1,880 | 1,100 | 579 | 410 | 365 |
| 28 | 1,660 | 1,840 | 1,540 | 1,720 | 795 | 7,790 | 2,510 | 1,700 | 1,200 | 565 | 409 | 365 |
| 29 | 1,620 | 1,660 | 1,500 | 1,740 | --- | 7,100 | 2,220 | 1,560 | 1,080 | 553 | 434 | 348 |
| 30 | 1,780 | 1,700 | 1,500 | 1,590 | --- | 5,810 | 2,080 | 1,500 | 998 | 544 | 442 | 471 |
| 31 | 1,930 | --- | 1,420 | 1,470 | --- | 4,380 | --- | 1,420 | --- | 533 | 421 | --- |
| TOTAL | 51,341 | 54,160 | 80,080 | 68,544 | 29,474 | 58,259 | 92,000 | 71,310 | 39,988 | 24,069 | 14,306 | 11,737 |
| MEAN | 1,656 | 1,805 | 2,583 | 2,211 | 1,053 | 1,879 | 3,067 | 2,300 | 1,333 | 776 | 461 | 391 |
| MAX | 3,600 | 3,970 | 9,080 | 10,200 | 1,400 | 10,100 | 5,470 | 3,980 | 1,820 | 1,510 | 528 | 471 |
| MIN | 630 | 1,130 | 1,420 | 950 | 768 | 666 | 2,080 | 1,420 | 998 | 533 | 409 | 348 |
| AC-FT | 101,800 | 107,400 | 158,800 | 136,000 | 58,460 | 115,600 | 182,500 | 141,400 | 79,320 | 47,740 | 28,380 | 23,280 |
| CFSM | 3.34 | 3.64 | 5.21 | 4.46 | 2.12 | 3.79 | 6.18 | 4.64 | 2.69 | 1.57 | 0.93 | 0.79 |
| IN. | 3.85 | 4.06 | 6.01 | 5.14 | 2.21 | 4.37 | 6.90 | 5.35 | 3.00 | 1.81 | 1.07 | 0.88 |

14242580 TOUTLE RIVER AT TOWER ROAD, NEAR SILVER LAKE, WA—Continued

DISCHARGE, CUBIC FEET PER SECOND—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2005, BY WATER YEAR (WY) | | | | | | | | | | | | |
| MEAN | 945 | 2,755 | 3,393 | 3,398 | 3,324 | 2,901 | 2,651 | 2,083 | 1,546 | 799 | 493 | 473 |
| MAX | 2,931 | 5,290 | 6,954 | 5,939 | 7,754 | 5,500 | 4,697 | 3,192 | 2,643 | 1,653 | 891 | 1,159 |
| (WY) | (1998) | (1996) | (1997) | (1997) | (1996) | (1997) | (1991) | (1999) | (1990) | (1983) | (2004) | (2004) |
| MIN | 310 | 418 | 1,350 | 1,167 | 1,053 | 1,315 | 1,521 | 1,226 | 539 | 412 | 306 | 277 |
| (WY) | (1988) | (1994) | (2001) | (2001) | (2005) | (1992) | (2004) | (1992) | (1992) | (1992) | (1992) | (1989) |

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 1981 - 2005 | |
|---|---|---|---|---|---|---|
| ANNUAL TOTAL | 677,215 | | 595,268 | | | |
| ANNUAL MEAN | 1,850 | | 1,631 | | 2,056 | |
| HIGHEST ANNUAL MEAN | | | | | 3,118 | 1997 |
| LOWEST ANNUAL MEAN | | | | | 1,168 | 2001 |
| HIGHEST DAILY MEAN | 13,900 | Jan 30 | 10,200 | Jan 18 | 48,300 | Feb 8, 1996 |
| LOWEST DAILY MEAN | 449 | Aug 20 | 348 | Sep 29 | 243 | Oct 14, 1987 |
| ANNUAL SEVEN-DAY MINIMUM | 468 | Aug 15 | 364 | Sep 23 | 248 | Oct 10, 1987 |
| ANNUAL RUNOFF (AC-FT) | 1,343,000 | | 1,181,000 | | 1,490,000 | |
| ANNUAL RUNOFF (CFSM) | 3.73 | | 3.29 | | 4.15 | |
| ANNUAL RUNOFF (INCHES) | 50.79 | | 44.65 | | 56.33 | |
| 10 PERCENT EXCEEDS | 3,140 | | 3,190 | | 4,070 | |
| 50 PERCENT EXCEEDS | 1,560 | | 1,260 | | 1,590 | |
| 90 PERCENT EXCEEDS | 649 | | 435 | | 399 | |

e Estimated

14242580 TOUTLE RIVER AT TOWER ROAD, NEAR SILVER LAKE, WA—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May to October 1990, May to September 1991.
WATER TEMPERATURE: May to October 1990, May to September 1991.
SUSPENDED SEDIMENT DISCHARGE: February 1981 to current year. Records prior to October 1985 are published in U.S. Geological Survey Open-File Report 85-632; records for 1984-87 are published in U.S. Geological Survey Open-File Report 91-219.

INSTRUMENTATION.--Water-quality monitor May 1990 to September 1991. Automatic pumping sediment sampler since February 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATION: Maximum daily, 232,000 mg/L, Mar. 20, 1982; minimum, 1 mg/L, Oct. 3, 1989.
SEDIMENT DISCHARGE: Maximum daily, 5,930,000 tons, Feb. 20, 1982; minimum, 0.71 tons, Oct. 3, 1989.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATION: Maximum daily, 5,590 mg/L, Jan. 18; minimum, 4 mg/L, on several days.
SEDIMENT DISCHARGE: Maximum daily, 159,000 tons, Jan. 18; minimum, 3.9 tons, Sept. 29.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| Day | Mean discharge (cfs) | Mean concen-tration (mg/l) | Load (tons/day) | Mean discharge (cfs) | Mean concen-tration (mg/l) | Load (tons/day) | Mean discharge (cfs) | Mean concen-tration (mg/l) | Load (tons/day) |
|---|---|---|---|---|---|---|---|---|---|
| | OCTOBER | | | NOVEMBER | | | DECEMBER | | |
| 1 | 753 | 42 | 83 | 1,830 | 342 | 1,700 | 1,820 | 417 | 2,050 |
| 2 | 705 | 27 | 52 | 3,380 | 2,300 | 25,900 | 1,640 | 282 | 1,250 |
| 3 | 672 | 26 | 47 | 3,970 | 1,650 | 18,300 | 1,540 | 217 | 900 |
| 4 | 648 | 33 | 57 | 3,130 | 795 | 6,770 | 1,480 | 190 | 759 |
| 5 | 630 | 17 | 28 | 2,650 | 558 | 4,000 | 1,510 | 260 | 1,070 |
| 6 | 768 | 31 | 68 | 2,270 | 400 | 2,470 | 1,470 | 181 | 720 |
| 7 | 725 | 1,920 | 3,840 | 2,000 | 285 | 1,540 | 1,560 | 264 | 1,150 |
| 8 | 1,000 | 866 | 3,170 | 1,780 | 238 | 1,150 | 3,650 | 2,180 | 23,300 |
| 9 | 2,190 | e3,900 | e25,000 | 1,610 | 193 | 838 | 3,520 | 872 | 8,450 |
| 10 | 1,700 | 816 | 3,790 | 1,480 | 165 | 658 | 5,120 | 1,950 | 28,100 |
| 11 | 1,360 | 462 | 1,710 | 1,360 | 137 | 505 | 9,080 | 4,940 | 126,000 |
| 12 | 1,170 | 298 | 943 | 1,270 | 110 | 379 | 5,980 | 1,800 | 29,800 |
| 13 | 1,060 | 253 | 725 | 1,190 | 93 | 299 | 4,480 | 834 | 10,200 |
| 14 | 991 | 214 | 572 | 1,130 | 84 | 258 | 3,950 | 590 | 6,320 |
| 15 | 937 | 217 | 549 | 1,180 | 132 | 436 | 3,410 | 376 | 3,490 |
| 16 | 942 | 208 | 532 | 1,300 | 149 | 534 | 2,890 | 282 | 2,210 |
| 17 | 2,540 | 4,040 | 33,500 | 1,150 | 87 | 270 | 2,530 | 219 | 1,500 |
| 18 | 3,320 | 3,660 | 32,800 | 1,530 | 321 | 1,450 | 2,260 | 206 | 1,260 |
| 19 | 3,600 | 2,920 | 29,200 | 1,560 | 173 | 735 | 2,090 | 153 | 864 |
| 20 | 3,180 | 2,040 | 17,700 | 1,360 | 107 | 394 | 1,960 | 131 | 693 |
| 21 | 2,770 | 1,170 | 8,790 | 1,250 | 90 | 306 | 1,850 | 133 | 666 |
| 22 | 2,460 | 850 | 5,660 | 1,220 | 83 | 274 | 1,890 | 151 | 771 |
| 23 | 2,330 | 639 | 4,040 | 1,190 | 78 | 251 | 1,680 | 123 | 558 |
| 24 | 2,160 | 534 | 3,110 | 1,380 | 142 | 543 | 1,560 | 99 | 419 |
| 25 | 2,000 | 555 | 2,990 | 2,330 | 1,270 | 8,890 | 1,540 | 103 | 432 |
| 26 | 1,950 | 557 | 2,930 | 2,380 | 730 | 4,730 | 1,990 | e230 | e1,300 |
| 27 | 1,790 | 538 | 2,600 | 2,080 | 554 | 3,120 | 1,670 | 95 | 432 |
| 28 | 1,660 | 438 | 1,960 | 1,840 | 493 | 2,450 | 1,540 | 68 | 284 |
| 29 | 1,620 | 310 | 1,360 | 1,660 | 311 | 1,400 | 1,500 | 69 | 279 |
| 30 | 1,780 | 473 | 2,320 | 1,700 | 307 | 1,410 | 1,500 | 72 | 292 |
| 31 | 1,930 | 421 | 2,190 | --- | --- | --- | 1,420 | 57 | 217 |
| TOTAL | 51,341 | --- | 192,316 | 54,160 | --- | 91,960 | 80,080 | --- | 255,736 |

14242580 TOUTLE RIVER AT TOWER ROAD, NEAR SILVER LAKE, WA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| Day | Mean discharge (cfs) | Mean concen-tration (mg/l) | Load (tons/ day) | Mean discharge (cfs) | Mean concen-tration (mg/l) | Load (tons/ day) | Mean discharge (cfs) | Mean concen-tration (mg/l) | Load (tons/ day) |
|---|---|---|---|---|---|---|---|---|---|
| | | JANUARY | | | FEBRUARY | | | MARCH | |
| 1 | 1,450 | 56 | 218 | 1,370 | 162 | 600 | 971 | e36 | e97 |
| 2 | 1,340 | 46 | 166 | 1,290 | 127 | 443 | 863 | 19 | 44 |
| 3 | 1,230 | 41 | 135 | 1,220 | 120 | 395 | 839 | 13 | 29 |
| 4 | 1,170 | 38 | 122 | 1,270 | e150 | e520 | 798 | 16 | 34 |
| 5 | e1,100 | e44 | e130 | 1,380 | e200 | e740 | 774 | 17 | 35 |
| 6 | e1,100 | e41 | e120 | 1,370 | e150 | e560 | 755 | 11 | 22 |
| 7 | 1,150 | 37 | 114 | 1,400 | 153 | 584 | 744 | 9 | 18 |
| 8 | 1,150 | 37 | 116 | 1,240 | 97 | 325 | 737 | 10 | 21 |
| 9 | 1,090 | 44 | 130 | 1,180 | 74 | 237 | 725 | 8 | 16 |
| 10 | 1,050 | 48 | 137 | 1,130 | 69 | 210 | 717 | 6 | 11 |
| 11 | 1,010 | 38 | 103 | 1,100 | 59 | 176 | 710 | 6 | 12 |
| 12 | 1,010 | 31 | 85 | 1,100 | 60 | 180 | 699 | 7 | 14 |
| 13 | 1,040 | 28 | 79 | 1,150 | 70 | 216 | 689 | 8 | 15 |
| 14 | 964 | 28 | 72 | 1,100 | 54 | 161 | 678 | 8 | 15 |
| 15 | 950 | 26 | 67 | 1,030 | 42 | 118 | 666 | 10 | 17 |
| 16 | 1,130 | 26 | 80 | 990 | 39 | 104 | 675 | 11 | 19 |
| 17 | 1,980 | 513 | 5,370 | 952 | 37 | 95 | 766 | e17 | e36 |
| 18 | 10,200 | 5,590 | 159,000 | 935 | 35 | 88 | 710 | 10 | 19 |
| 19 | 7,310 | 3,040 | 61,000 | 925 | 33 | 83 | 722 | 10 | 21 |
| 20 | 5,260 | 1,780 | 25,500 | 894 | 31 | 74 | 1,260 | 185 | 697 |
| 21 | 4,290 | 1,110 | 12,900 | 863 | 28 | 65 | 1,600 | e380 | e1,700 |
| 22 | 3,480 | 791 | 7,480 | 840 | 25 | 56 | 1,220 | 92 | 306 |
| 23 | 2,950 | 619 | 4,940 | 818 | 22 | 49 | 1,090 | 45 | 134 |
| 24 | 2,540 | 526 | 3,610 | 798 | 19 | 42 | 1,020 | 33 | 91 |
| 25 | 2,220 | 422 | 2,540 | 787 | 19 | 40 | 941 | 24 | 61 |
| 26 | 2,000 | 358 | 1,940 | 779 | 19 | 39 | 1,710 | 742 | 7,000 |
| 27 | 1,860 | 320 | 1,610 | 768 | 17 | 34 | 10,100 | 5,160 | 141,000 |
| 28 | 1,720 | 261 | 1,210 | 795 | 16 | 35 | 7,790 | 2,700 | 58,400 |
| 29 | 1,740 | 261 | 1,230 | --- | --- | --- | 7,100 | 1,530 | 29,400 |
| 30 | 1,590 | 233 | 1,000 | --- | --- | --- | 5,810 | 1,000 | 15,900 |
| 31 | 1,470 | 192 | 760 | --- | --- | --- | 4,380 | 655 | 7,790 |
| TOTAL | 68,544 | --- | 291,964 | 29,474 | --- | 6,269 | 58,259 | --- | 262,974 |
| | | APRIL | | | MAY | | | JUNE | |
| 1 | 4,060 | 632 | 6,980 | 1,910 | 129 | 671 | 1,620 | 105 | 464 |
| 2 | 3,640 | 537 | 5,330 | 2,260 | e170 | e1,000 | 1,820 | e140 | e680 |
| 3 | 3,330 | 305 | 2,740 | 2,070 | e110 | e610 | 1,690 | 75 | 345 |
| 4 | 3,140 | 229 | 1,940 | 1,900 | 90 | 461 | 1,500 | 55 | 225 |
| 5 | 2,740 | 191 | 1,420 | 1,810 | 79 | 388 | 1,450 | 39 | 152 |
| 6 | 2,540 | 174 | 1,190 | 1,700 | 77 | 353 | 1,520 | 40 | 162 |
| 7 | 2,680 | e260 | e2,000 | 1,560 | 68 | 286 | 1,390 | 28 | 105 |
| 8 | 2,940 | e360 | e2,900 | 1,460 | 57 | 227 | 1,410 | 31 | 119 |
| 9 | 2,520 | 221 | 1,500 | 1,670 | 87 | 399 | 1,270 | 27 | 92 |
| 10 | 2,240 | 170 | 1,030 | 2,260 | e300 | e1,900 | 1,180 | 23 | 72 |
| 11 | 3,040 | e540 | e4,700 | 2,060 | 143 | 801 | 1,310 | 41 | 145 |
| 12 | 3,270 | 481 | 4,290 | 1,860 | 84 | 422 | 1,450 | 60 | 235 |
| 13 | 2,930 | 297 | 2,350 | 1,690 | 56 | 255 | 1,310 | 50 | 175 |
| 14 | 2,570 | 241 | 1,680 | 1,820 | 90 | 445 | 1,230 | 38 | 127 |
| 15 | 2,390 | 208 | 1,350 | 1,880 | 72 | 375 | 1,190 | 25 | 80 |
| 16 | 5,180 | e2,400 | e42,000 | 3,030 | 519 | 4,410 | 1,130 | 23 | 71 |
| 17 | 5,470 | 1,430 | 21,500 | 3,030 | 342 | 2,840 | 1,790 | e320 | e1,700 |
| 18 | 4,590 | 838 | 10,500 | 3,170 | 380 | 3,340 | 1,450 | 81 | 321 |
| 19 | 3,740 | 502 | 5,100 | 3,980 | 1,020 | 11,000 | 1,520 | 94 | 391 |
| 20 | 3,200 | 358 | 3,110 | 3,920 | 648 | 6,900 | 1,340 | 64 | 233 |
| 21 | 2,800 | 268 | 2,030 | 3,920 | 587 | 6,280 | 1,240 | 37 | 124 |
| 22 | 2,550 | 226 | 1,560 | 3,690 | 442 | 4,420 | 1,280 | 47 | 165 |
| 23 | 2,570 | 247 | 1,730 | 3,300 | 312 | 2,790 | 1,290 | 52 | 182 |
| 24 | 2,720 | 300 | 2,220 | 2,780 | 218 | 1,650 | 1,130 | 35 | 107 |
| 25 | 3,040 | 446 | 3,780 | 2,410 | 142 | 929 | 1,070 | 24 | 70 |
| 26 | 2,790 | 279 | 2,120 | 2,110 | 114 | 648 | 1,030 | 24 | 67 |
| 27 | 2,510 | 199 | 1,350 | 1,880 | 92 | 469 | 1,100 | 37 | 109 |
| 28 | 2,510 | 436 | 3,000 | 1,700 | 72 | 333 | 1,200 | 48 | 156 |
| 29 | 2,220 | 208 | 1,250 | 1,560 | 63 | 265 | 1,080 | 35 | 102 |
| 30 | 2,080 | 148 | 831 | 1,500 | 56 | 225 | 998 | 27 | 73 |
| 31 | --- | --- | --- | 1,420 | 53 | 204 | --- | --- | --- |
| TOTAL | 92,000 | --- | 143,481 | 71,310 | --- | 55,296 | 39,988 | --- | 7,049 |

14242580 TOUTLE RIVER AT TOWER ROAD, NEAR SILVER LAKE, WA—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| Day | Mean discharge (cfs) | Mean concen-tration (mg/l) | Load (tons/ day) | Mean discharge (cfs) | Mean concen-tration (mg/l) | Load (tons/ day) | Mean discharge (cfs) | Mean concen-tration (mg/l) | Load (tons/ day) |
|---|---|---|---|---|---|---|---|---|---|
| | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 932 | 23 | 57 | 525 | 11 | 16 | 412 | 4 | 4.7 |
| 2 | 901 | 22 | 53 | 528 | 12 | 17 | 408 | 4 | 4.5 |
| 3 | 883 | 21 | 50 | 515 | 13 | 18 | 406 | 4 | 4.7 |
| 4 | 828 | 20 | 45 | 506 | 14 | 20 | 402 | 4 | 4.9 |
| 5 | 794 | 20 | 42 | 495 | 14 | 19 | 402 | 5 | 5.2 |
| 6 | 882 | 23 | 55 | 489 | 12 | 16 | 400 | 5 | 5.3 |
| 7 | 845 | 19 | 44 | 487 | 11 | 14 | 394 | 5 | 5.0 |
| 8 | 831 | 18 | 42 | 485 | 10 | 13 | 389 | 4 | 4.6 |
| 9 | 1,510 | e94 | e400 | 478 | 12 | 16 | 387 | 4 | 4.5 |
| 10 | 1,090 | 56 | 164 | 475 | 16 | 20 | 413 | 7 | 7.3 |
| 11 | 990 | 39 | 105 | 476 | 19 | 25 | 434 | 6 | 6.8 |
| 12 | 914 | 32 | 79 | 475 | 22 | 28 | 411 | 6 | 7.0 |
| 13 | 866 | 29 | 68 | 469 | 20 | 25 | 396 | 8 | 8.1 |
| 14 | 828 | 27 | 59 | 458 | 17 | 21 | 389 | 9 | 9.1 |
| 15 | 784 | 24 | 50 | 447 | 14 | 17 | 390 | 8 | 8.5 |
| 16 | 761 | 22 | 44 | 443 | 11 | 13 | 396 | 7 | 7.6 |
| 17 | 739 | 21 | 41 | 465 | 8 | 9.6 | 391 | 7 | 6.9 |
| 18 | 707 | 20 | 38 | 495 | 7 | 9.1 | 388 | 6 | 6.3 |
| 19 | 676 | 19 | 34 | 461 | 7 | 8.2 | 383 | 6 | 5.7 |
| 20 | 655 | 18 | 31 | 435 | 6 | 7.6 | 379 | 5 | 5.2 |
| 21 | 642 | 17 | 29 | 438 | 6 | 7.4 | 374 | 5 | 4.7 |
| 22 | 689 | 24 | 46 | 436 | 6 | 7.1 | 372 | 4 | 4.4 |
| 23 | 704 | 22 | 43 | 436 | 6 | 6.9 | 371 | 4 | 4.1 |
| 24 | 634 | 17 | 30 | 434 | 6 | 6.7 | 368 | 4 | 4.4 |
| 25 | 614 | 14 | 23 | 425 | 6 | 6.3 | 367 | 5 | 4.7 |
| 26 | 596 | 13 | 21 | 414 | 5 | 5.9 | 366 | 5 | 4.8 |
| 27 | 579 | 14 | 22 | 410 | 5 | 5.7 | 365 | 5 | 4.6 |
| 28 | 565 | 15 | 24 | 409 | 5 | 5.4 | 365 | 4 | 4.3 |
| 29 | 553 | 15 | 23 | 434 | 5 | 5.6 | 348 | 4 | 3.9 |
| 30 | 544 | 14 | 20 | 442 | 5 | 5.4 | 471 | e25 | e36 |
| 31 | 533 | 12 | 18 | 421 | 4 | 5.0 | --- | --- | --- |
| TOTAL | 24,069 | --- | 1,800 | 14,306 | --- | 399.9 | 11,737 | --- | 197.8 |
| YEAR | 595,268 | 1,309,442.7 | | | | | | | |

e Estimated