

#### 14142500 SANDY RIVER BELOW BULL RUN RIVER, NEAR BULL RUN, OR

Lower Columbia Basin Lower Columbia-Sandy Subbasin

LOCATION.--Lat 45°26′57", long 122°14′38" referenced to North American Datum of 1927, in SW ¼ sec.30, T.1 S., R.5 E., Clackamas County, OR, Hydrologic Unit 17080001, on left bank, 0.1 mi downstream from Bull Run River, 0.2 mi downstream from Dodge Park, 400 ft downstream from city of Portland water conduit crossing Sandy River and at mile 18.4.

DRAINAGE AREA .-- 436 mi<sup>2</sup>.

#### **SURFACE-WATER RECORDS**

PERIOD OF RECORD.--April 1910 to September 1914, October 1929 to September 1966, May 1984 to current year. Monthly discharge only for some periods during the 1911-12 and water years, published in WSP 1318.

REVISED RECORDS.--WDR OR-96-1: 1986 (P).

- GAGE.--Water-stage recorder. Elevation of gage is 240 ft above NGVD of 1929, from topographic map. April 1910 to September 1914, staff gage at present site at different datum. October 1929 to September 1966, water-stage recorder at site 0.8 mi downstream at different datum.
- REMARKS.--No estimated daily discharges. Records good. Flow regulated since 1915 by Bull Run Lake (station 14138560), since 1929 by Bull Run Reservoir Number One (station 14139000) and since 1961 by Bull Run Reservoir Number Two (station 14139900). Some fluctuation caused by Bull Run powerplant of Portland General Electric Company. Portland Water Bureau diverted 143,500 acre-ft from Bull Run River, of which 40,410 acre-ft were used for power generation by Portland General Electric Company and returned to Bull Run River.
- AVERAGE DISCHARGE FOR PERIOD OF RECORD.--4 years (water years 1911-14) 2,321 ft³/s, 1,681,000 acre-ft/yr. 60 years (water years 1930-66, 1985-2007), 2,257 ft³/s, 1,635,000 acre-ft/yr, regulated period.
- EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 84,400 ft³/s Dec. 22, 1964, gage height, 22.3 ft, site and datum then in use; minimum discharge, 45 ft³/s Sept. 26, 1962, minimum daily discharge, 63 ft³/s Oct. 12, Nov. 9, 1952.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 41,200 ft³/s Nov. 7, gage height, 19.47 ft; minimum discharge, 231 ft³/s Sept. 20, 21, 23-26.

### 14142500 SANDY RIVER BELOW BULL RUN RIVER, NEAR BULL RUN, OR—Continued

# DISCHARGE, CUBIC FEET PER SECOND WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 DAILY MEAN VALUES

1 319 469 3.800 2.360 1.260 2.230 3.040 1.580 909 550 443 3 3 2 355 537 2.870 2.670 1.220 2.290 2.660 1.620 926 562 444 3 3 3 352 1.010 2.360 14,700 1.200 3.170 2.290 1.580 962 629 440 3 3 352 1.010 6.510 1.200 1.200 4.160 2.040 1.580 981 586 428 4 5 349 3.200 2.110 6.510 1.320 3.850 1.840 1.490 1.000 605 421 3 6 3 30 4.850 1.740 5.810 1.320 3.850 1.840 1.490 1.000 605 421 3 6 3 30 4.850 1.740 5.810 1.430 3.650 1.750 1.390 1.020 666 419 3 7 343 27,500 1.850 5.560 1.450 3.930 1.900 1.380 1.030 565 416 416 3 9 362 8.440 2.090 6.350 1.450 3.930 1.900 1.380 1.030 565 416 416 3 9 362 8.440 2.090 6.350 1.600 3.350 2.630 1.380 865 607 412 3 10 325 5.710 2.390 5.410 1.560 3.180 2.810 1.290 1.100 555 385 3 12 329 5.160 5.170 3.430 1.590 3.850 2.630 1.200 1.040 556 382 3 12 329 5.160 5.170 3.430 1.590 6.760 2.520 1.160 890 547 370 3 13 322 8.290 9.840 2.990 1.500 6.760 2.520 1.160 890 547 370 3 13 322 8.290 9.840 2.990 1.500 6.760 2.320 1.160 894 601 367 3 14 327 8.820 13.200 2.560 1.510 4.610 2.340 1.100 796 534 386 3 15 33 15 35 5.760 12.000 2.090 7.090 3.520 2.460 1.070 778 523 389 3 16 750 6.600 6.340 1.900 13.900 2.880 2.190 1.090 840 525 384 3 18 434 3.610 3.730 1.710 6.180 2.840 2.750 1.000 778 523 389 3 16 750 6.600 6.340 1.900 13.900 2.880 2.190 1.090 840 525 384 3 18 434 3.610 3.730 1.710 6.180 2.840 2.750 1.000 774 523 389 3 18 434 3.610 3.730 1.710 6.180 2.840 2.750 1.000 774 538 530 3.63 3 3 18 434 3.610 3.730 1.710 6.180 2.840 2.750 1.000 724 536 402 3 2 2 4 432 7.480 4.060 1.830 8.780 2.560 2.410 1.060 815 530 363 3 2 2 4 461 3.330 3.350 1.830 6.030 3.770 2.240 1.010 724 538 507 2 2 483 4.000 3.590 1.500 3.580 2.240 1.010 724 538 507 2 2 483 4.000 3.590 1.500 3.580 2.240 1.010 724 538 507 2 2 483 4.000 3.590 1.500 3.580 2.270 2.430 1.130 651 539 406 3 2 2 2 481 4.32 7.480 4.060 1.630 3.470 2.420 2.900 1.010 724 538 531 36 3 2 3 393 4.900 3.590 1.500 3.580 2.270 2.430 1.130 651 539 406 3 3 2 3 393 4.900 3.590 1.500 3.580 2.270 2.430 1.130 661 484 33 365 3 3 3 3 4.900 3.590 1.500 3.500 3.470 2.420 2.090 1.00		DAILY MEAN VALUES													
2         355         537         2,870         2,670         1,220         2,290         2,660         1,620         926         562         444         3           3         352         1,010         2,360         14,700         1,200         3,170         2,290         1,580         962         629         440         3           5         349         3,200         2,110         6,510         1,320         3,850         1,840         1,490         1,000         605         421         3           6         330         4,850         1,740         5,810         1,430         3,650         1,750         1,390         1,020         666         419         3           7         343         27,500         1,850         5,560         1,450         3,930         1,900         1,380         1,030         565         540         416         3           8         356         14,800         1,920         7,890         1,470         3,950         2,150         1,380         1,60         540         416         3           9         362         8,400         2,990         6,350         1,600         3,180         2,630         1,2	Day	0ct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		
3         352         1,010         2,360         14,700         1,200         3,170         2,290         1,580         962         629         440         3           4         355         1,530         2,170         10,100         1,220         4,160         2,040         1,540         981         586         428         428           5         349         3,200         2,110         6,510         1,320         3,850         1,840         1,490         1,000         605         421         3           6         330         4,850         1,740         5,810         1,430         3,650         1,750         1,390         1,020         666         419         3           8         356         14,800         1,920         7,890         1,470         3,950         2,150         1,390         896         540         416         3           9         362         8,440         2,990         6,350         1,560         3,180         2,810         1,290         1,100         555         385         3           10         322         5,160         5,170         3,430         1,590         6,760         2,520         1,160 <t< th=""><td>1</td><td>319</td><td>469</td><td>3,800</td><td>2,360</td><td>1,260</td><td>2,230</td><td>3,040</td><td>1,580</td><td>909</td><td>550</td><td>443</td><td>377</td></t<>	1	319	469	3,800	2,360	1,260	2,230	3,040	1,580	909	550	443	377		
4         355         1,530         2,170         10,100         1,220         4,160         2,040         1,540         981         586         428         4           5         349         3,200         2,110         6,510         1,320         3,850         1,840         1,490         1,000         605         421         3           6         330         4,850         1,740         5,810         1,430         3,650         1,750         1,390         1,030         565         415         3           7         343         27,500         1,850         5,560         1,450         3,930         1,900         1,380         1,030         565         415         3           8         356         14,800         1,920         7,890         1,470         3,950         2,150         1,390         896         540         416         3           9         362         8,440         2,090         6,350         1,600         3,180         2,630         1,290         1,100         555         385           11         335         6,140         3,060         4,140         1,590         3,850         2,630         1,200         1,040	2	355	537	2,870	2,670	1,220	2,290	2,660	1,620	926	562	444	366		
4         355         1,530         2,170         10,100         1,220         4,160         2,040         1,540         981         586         428         4           5         349         3,200         2,110         6,510         1,320         3,850         1,840         1,490         1,000         605         421         3           6         330         4,850         1,740         5,810         1,430         3,650         1,750         1,390         1,020         666         419         3           7         343         27,500         1,850         5,560         1,470         3,950         2,150         1,390         896         540         416         3           8         356         14,800         1,920         7,890         1,470         3,950         2,150         1,390         896         540         416         3           9         362         8,440         2,090         6,350         1,600         3,180         2,630         1,290         1,00         555         385         3           10         322         8,160         5,170         3,430         1,590         6,760         2,520         1,160         8	3	352	1,010	2,360	14,700	1,200	3,170	2,290	1,580	962	629	440	361		
5         349         3,200         2,110         6,510         1,320         3,850         1,840         1,490         1,000         605         421         3           6         330         4,850         1,740         5,810         1,430         3,650         1,750         1,390         1,020         666         419         3           7         343         27,500         1,850         5,560         1,450         3,930         1,900         1,380         1,030         565         415         3           9         362         8,440         2,090         6,350         1,600         3,350         2,630         1,380         865         607         412         3           10         325         5,710         2,390         5,410         1,560         3,180         2,810         1,290         1,100         555         385         3           11         335         6,140         3,060         4,140         1,590         6,760         2,520         1,100         595         385         3           12         329         5,160         5,170         3,430         1,590         6,760         2,520         1,160         890 <t< th=""><td></td><td>355</td><td>1,530</td><td></td><td>10,100</td><td></td><td>4,160</td><td></td><td></td><td>981</td><td>586</td><td>428</td><td>414</td></t<>		355	1,530		10,100		4,160			981	586	428	414		
7         343         27,500         1,850         5,560         1,450         3,930         1,900         1,380         1,030         565         415         3           8         356         14,800         1,920         7,890         1,470         3,950         2,150         1,390         896         540         416         3           9         362         8,440         2,090         6,350         1,600         3,350         2,630         1,380         865         607         412         3           10         325         5,710         2,390         5,410         1,560         3,880         2,630         1,290         1,100         555         385         3           11         335         6,140         3,060         4,140         1,590         6,760         2,520         1,160         890         547         370         3           12         329         5,160         5,170         3,430         1,590         6,760         2,520         1,160         890         547         370         3           13         322         8,290         9,840         2,990         1,500         6,950         2,320         1,160													364		
8         356         14,800         1,920         7,890         1,470         3,950         2,150         1,390         896         540         416         3           9         362         8,440         2,090         6,350         1,600         3,350         2,630         1,380         865         607         412         3           10         325         5,710         2,390         5,410         1,560         3,180         2,810         1,290         1,100         555         385         385           11         335         6,140         3,060         4,140         1,590         6,760         2,520         1,160         890         547         370         3           13         322         8,290         9,840         2,990         1,500         6,950         2,320         1,160         890         547         370         3           14         327         8,820         13,000         2,500         1,510         4,610         2,340         1,100         796         534         386         3           15         353         5,760         12,000         2,900         7,090         3,520         2,440         1,070 <t< th=""><td>6</td><td>330</td><td>4,850</td><td>1,740</td><td>5,810</td><td>1,430</td><td>3,650</td><td>1,750</td><td>1,390</td><td>1,020</td><td>666</td><td>419</td><td>355</td></t<>	6	330	4,850	1,740	5,810	1,430	3,650	1,750	1,390	1,020	666	419	355		
9         362         8,440         2,090         6,350         1,600         3,350         2,630         1,380         865         607         412         3           10         325         5,710         2,390         5,410         1,560         3,180         2,810         1,290         1,100         555         385         3           11         335         6,140         3,060         4,140         1,590         6,670         2,520         1,160         890         547         370         3           12         329         5,160         5,170         3,430         1,590         6,676         2,520         1,160         890         547         370         3           14         327         8,820         13,200         2,560         1,510         4,610         2,320         1,160         834         601         367         3           15         353         5,760         12,000         2,090         7,090         3,520         2,460         1,070         778         523         389         3           16         750         6,600         6,340         1,900         13,900         2,880         2,190         1,090 <th< th=""><td>7</td><td>343</td><td>27,500</td><td>1,850</td><td>5,560</td><td>1,450</td><td>3,930</td><td>1,900</td><td>1,380</td><td>1,030</td><td>565</td><td>415</td><td>346</td></th<>	7	343	27,500	1,850	5,560	1,450	3,930	1,900	1,380	1,030	565	415	346		
10         325         5,710         2,390         5,410         1,560         3,180         2,810         1,290         1,100         555         385         3           11         335         6,140         3,060         4,140         1,590         3,850         2,630         1,200         1,040         556         382         3           12         329         5,160         5,170         3,430         1,590         6,760         2,520         1,160         890         547         370         3           13         322         8,290         9,840         2,990         1,500         6,950         2,320         1,160         834         601         367         3           14         327         8,820         13,200         2,560         1,510         4,610         2,340         1,100         796         534         386         3           15         353         5,760         12,000         2,990         7,090         3,520         2,460         1,070         778         523         389         3           16         750         6,600         6,340         1,900         13,900         2,880         2,560         2,410	8	356	14,800	1,920	7,890	1,470	3,950	2,150	1,390	896	540	416	345		
10         325         5,710         2,390         5,410         1,560         3,180         2,810         1,290         1,100         555         385         3           11         335         6,140         3,060         4,140         1,590         3,850         2,630         1,200         1,040         556         382         3           12         329         5,160         5,170         3,430         1,590         6,760         2,520         1,160         890         547         370         3           13         322         8,290         9,840         2,990         1,500         6,950         2,320         1,160         834         601         367         3           14         327         8,820         13,200         2,560         1,510         4,610         2,340         1,100         796         534         386         3           15         353         5,760         12,000         2,990         7,090         3,520         2,460         1,070         778         523         389         3           16         750         6,600         6,340         1,900         13,900         2,880         2,560         2,410	9	362	8,440	2,090	6,350	1,600	3,350	2,630	1,380	865	607	412	334		
12         329         5,160         5,170         3,430         1,590         6,760         2,520         1,160         890         547         370         3           13         322         8,290         9,840         2,990         1,500         6,950         2,320         1,160         834         601         367         3           14         327         8,820         13,200         2,560         1,510         4,610         2,340         1,100         796         534         386         3           15         353         5,760         12,000         2,090         7,090         3,520         2,460         1,070         778         523         389         3           16         750         6,600         6,340         1,900         13,900         2,880         2,190         1,090         840         525         384         3           17         652         4,810         4,660         1,800         8,780         2,560         2,410         1,060         815         530         363         3           18         434         3,610         3,730         1,710         6,180         2,840         2,750         1,020													330		
13         322         8,290         9,840         2,990         1,500         6,950         2,320         1,160         834         601         367         3           14         327         8,820         13,200         2,560         1,510         4,610         2,340         1,100         796         534         386         3           15         353         5,760         12,000         2,090         7,090         3,520         2,460         1,070         778         523         389         3           16         750         6,600         6,340         1,900         13,900         2,880         2,190         1,090         840         525         384         3           17         652         4,810         4,660         1,800         8,780         2,560         2,410         1,060         815         530         363         3           18         434         3,610         3,730         1,710         6,180         2,640         2,750         1,020         759         534         347         3           19         687         3,350         3,250         1,640         5,180         2,840         2,780         1,020	11	335	6,140	3,060	4,140	1,590	3,850	2,630	1,200	1,040	556	382	335		
13         322         8,290         9,840         2,990         1,500         6,950         2,320         1,160         834         601         367         3           14         327         8,820         13,200         2,560         1,510         4,610         2,340         1,100         796         534         386         3           15         353         5,760         12,000         2,090         7,090         3,520         2,460         1,070         778         523         389         3           16         750         6,600         6,340         1,900         13,900         2,880         2,190         1,090         840         525         384         3           17         652         4,810         4,660         1,800         8,780         2,560         2,410         1,060         815         530         363         3           18         434         3,610         3,730         1,710         6,180         2,640         2,750         1,020         759         534         347         3           19         687         3,350         3,250         1,640         5,180         2,840         2,780         1,020	12	329	5,160	5,170	3,430	1,590	6,760	2,520	1,160	890	547	370	336		
14         327         8,820         13,200         2,560         1,510         4,610         2,340         1,100         796         534         386         3           15         353         5,760         12,000         2,090         7,090         3,520         2,460         1,070         778         523         389         3           16         750         6,600         6,340         1,900         13,900         2,880         2,190         1,090         840         525         384         3           17         652         4,810         4,660         1,800         8,780         2,560         2,410         1,060         815         530         363         3           18         434         3,610         3,730         1,710         6,180         2,640         2,750         1,020         759         534         347         3           19         687         3,350         3,250         1,640         5,180         2,840         2,780         1,020         759         534         347         3           20         799         3,930         2,820         1,910         6,730         3,790         2,490         1,010	13	322	8,290	9,840	2,990	1,500	6,950	2,320	1,160	834	601	367	334		
15         353         5,760         12,000         2,090         7,090         3,520         2,460         1,070         778         523         389         3           16         750         6,600         6,340         1,900         13,900         2,880         2,190         1,090         840         525         384         3           17         652         4,810         4,660         1,800         8,780         2,560         2,410         1,060         815         530         363         3           18         434         3,610         3,730         1,710         6,180         2,640         2,750         1,020         759         534         347         3           19         687         3,350         3,250         1,640         5,180         2,840         2,780         1,020         724         636         402         3           20         799         3,930         2,820         1,910         6,730         3,790         2,490         1,010         724         518         507         2           21         453         3,430         3,050         1,830         6,030         3,170         2,350         1,360         7	14												331		
17       652       4,810       4,660       1,800       8,780       2,560       2,410       1,060       815       530       363       3         18       434       3,610       3,730       1,710       6,180       2,640       2,750       1,020       759       534       347       3         19       687       3,350       3,250       1,640       5,180       2,840       2,780       1,020       724       636       402       3         20       799       3,930       2,820       1,910       6,730       3,790       2,490       1,010       724       518       507       2         21       453       3,430       3,050       1,830       6,030       3,170       2,350       1,360       714       520       627       2         22       461       3,930       3,120       1,740       4,310       2,620       2,680       1,310       684       531       436       3         23       393       4,900       3,590       1,690       3,580       2,270       2,430       1,130       651       539       406       3         24       432       7,480       4,060       <													323		
17       652       4,810       4,660       1,800       8,780       2,560       2,410       1,060       815       530       363       3         18       434       3,610       3,730       1,710       6,180       2,640       2,750       1,020       759       534       347       3         19       687       3,350       3,250       1,640       5,180       2,840       2,780       1,020       724       636       402       3         20       799       3,930       2,820       1,910       6,730       3,790       2,490       1,010       724       518       507       2         21       453       3,430       3,050       1,830       6,030       3,170       2,350       1,360       714       520       627       2         22       461       3,930       3,120       1,740       4,310       2,620       2,680       1,310       684       531       436       3         23       393       4,900       3,590       1,690       3,580       2,270       2,430       1,130       651       539       406       3         24       432       7,480       4,060       <	16	750	6,600	6,340	1,900	13,900	2,880	2,190	1,090	840	525	384	318		
18       434       3,610       3,730       1,710       6,180       2,640       2,750       1,020       759       534       347       3         19       687       3,350       3,250       1,640       5,180       2,840       2,780       1,020       724       636       402       3         20       799       3,930       2,820       1,910       6,730       3,790       2,490       1,010       724       518       507       2         21       453       3,430       3,050       1,830       6,030       3,170       2,350       1,360       714       520       627       2         22       461       3,930       3,120       1,740       4,310       2,620       2,680       1,310       684       531       436       3         23       393       4,900       3,590       1,690       3,580       2,270       2,430       1,130       651       539       406       3         24       432       7,480       4,060       1,630       3,470       2,420       2,090       1,070       637       524       392       3         25       577       5,780       5,630       <	17	652	4,810	4,660	1,800	8,780	2,560	2,410	1,060		530	363	377		
19       687       3,350       3,250       1,640       5,180       2,840       2,780       1,020       724       636       402       3         20       799       3,930       2,820       1,910       6,730       3,790       2,490       1,010       724       518       507       2         21       453       3,430       3,050       1,830       6,030       3,170       2,350       1,360       714       520       627       2         22       461       3,930       3,120       1,740       4,310       2,620       2,680       1,310       684       531       436       3         23       393       4,900       3,590       1,690       3,580       2,270       2,430       1,130       651       539       406       3         24       432       7,480       4,060       1,630       3,470       2,420       2,090       1,070       637       524       392       3         25       577       5,780       5,630       1,590       3,470       5,940       1,990       1,030       681       484       375       2         26       540       4,470       6,840       <	18	434			1,710	6,180	2,640	2,750	1,020		534	347	345		
20         799         3,930         2,820         1,910         6,730         3,790         2,490         1,010         724         518         507         2           21         453         3,430         3,050         1,830         6,030         3,170         2,350         1,360         714         520         627         2           22         461         3,930         3,120         1,740         4,310         2,620         2,680         1,310         684         531         436         3           23         393         4,900         3,590         1,690         3,580         2,270         2,430         1,130         651         539         406         3           24         432         7,480         4,060         1,630         3,470         2,420         2,090         1,070         637         524         392         3           25         577         5,780         5,630         1,590         3,470         5,940         1,990         1,030         681         484         375         2           26         540         4,470         6,840         1,530         3,360         5,060         1,890         1,000         614													316		
22       461       3,930       3,120       1,740       4,310       2,620       2,680       1,310       684       531       436       3         23       393       4,900       3,590       1,690       3,580       2,270       2,430       1,130       651       539       406       3         24       432       7,480       4,060       1,630       3,470       2,420       2,090       1,070       637       524       392       3         25       577       5,780       5,630       1,590       3,470       5,940       1,990       1,030       681       484       375       2         26       540       4,470       6,840       1,530       3,360       5,060       1,890       1,000       614       483       365       3         27       483       4,070       6,910       1,510       2,960       3,990       1,810       1,010       601       497       351       3         28       464       3,110       5,000       1,430       2,550       3,450       1,750       971       621       478       356       4         29       487       2,650       3,920 <td< th=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>294</td></td<>													294		
23       393       4,900       3,590       1,690       3,580       2,270       2,430       1,130       651       539       406       3         24       432       7,480       4,060       1,630       3,470       2,420       2,090       1,070       637       524       392       3         25       577       5,780       5,630       1,590       3,470       5,940       1,990       1,030       681       484       375       2         26       540       4,470       6,840       1,530       3,360       5,060       1,890       1,000       614       483       365       3         27       483       4,070       6,910       1,510       2,960       3,990       1,810       1,010       601       497       351       3         28       464       3,110       5,000       1,430       2,550       3,450       1,750       971       621       478       356       4         29       487       2,650       3,920       1,370        2,900       1,680       951       667       463       366       4         30       492       2,970       3,120       1,3	21	453	3,430	3,050	1,830	6,030	3,170	2,350	1,360	714	520	627	295		
24       432       7,480       4,060       1,630       3,470       2,420       2,090       1,070       637       524       392       3         25       577       5,780       5,630       1,590       3,470       5,940       1,990       1,030       681       484       375       2         26       540       4,470       6,840       1,530       3,360       5,060       1,890       1,000       614       483       365       3         27       483       4,070       6,910       1,510       2,960       3,990       1,810       1,010       601       497       351       3         28       464       3,110       5,000       1,430       2,550       3,450       1,750       971       621       478       356       4         29       487       2,650       3,920       1,370        2,900       1,680       951       667       463       366       4         30       492       2,970       3,120       1,320        2,440       1,630       931       631       453       389       5         31       431        2,730       1,290 <td>22</td> <td>461</td> <td>3,930</td> <td>3,120</td> <td>1,740</td> <td>4,310</td> <td>2,620</td> <td>2,680</td> <td>1,310</td> <td>684</td> <td>531</td> <td>436</td> <td>328</td>	22	461	3,930	3,120	1,740	4,310	2,620	2,680	1,310	684	531	436	328		
24       432       7,480       4,060       1,630       3,470       2,420       2,090       1,070       637       524       392       3         25       577       5,780       5,630       1,590       3,470       5,940       1,990       1,030       681       484       375       2         26       540       4,470       6,840       1,530       3,360       5,060       1,890       1,000       614       483       365       3         27       483       4,070       6,910       1,510       2,960       3,990       1,810       1,010       601       497       351       3         28       464       3,110       5,000       1,430       2,550       3,450       1,750       971       621       478       356       4         29       487       2,650       3,920       1,370        2,900       1,680       951       667       463       366       4         30       492       2,970       3,120       1,320        2,440       1,630       931       631       453       389       5         31       431        2,730       1,290 <td>23</td> <td>393</td> <td>4,900</td> <td>3,590</td> <td>1,690</td> <td>3,580</td> <td>2,270</td> <td>2,430</td> <td>1,130</td> <td>651</td> <td>539</td> <td>406</td> <td>315</td>	23	393	4,900	3,590	1,690	3,580	2,270	2,430	1,130	651	539	406	315		
25         577         5,780         5,630         1,590         3,470         5,940         1,990         1,030         681         484         375         2           26         540         4,470         6,840         1,530         3,360         5,060         1,890         1,000         614         483         365         3           27         483         4,070         6,910         1,510         2,960         3,990         1,810         1,010         601         497         351         3           28         464         3,110         5,000         1,430         2,550         3,450         1,750         971         621         478         356         4           29         487         2,650         3,920         1,370          2,900         1,680         951         667         463         366         4           30         492         2,970         3,120         1,320          2,440         1,630         931         631         453         389         5           31         431          2,730         1,290          2,450          925	24	432	7,480	4,060	1,630	3,470	2,420	2,090	1,070	637	524	392	310		
27       483       4,070       6,910       1,510       2,960       3,990       1,810       1,010       601       497       351       3         28       464       3,110       5,000       1,430       2,550       3,450       1,750       971       621       478       356       4         29       487       2,650       3,920       1,370        2,900       1,680       951       667       463       366       4         30       492       2,970       3,120       1,320        2,440       1,630       931       631       453       389       5         31       431        2,730       1,290        2,450        925        441       396         Total       13,647       167,306       135,340       108,460       97,510       110,870       68,300       37,218       24,390       16,782       12,579       10,5         Mean       440       5,577       4,366       3,499       3,482       3,576       2,277       1,201       813       541       406       3	25	577	5,780	5,630	1,590	3,470	5,940	1,990	1,030	681	484	375	294		
28       464       3,110       5,000       1,430       2,550       3,450       1,750       971       621       478       356       4         29       487       2,650       3,920       1,370        2,900       1,680       951       667       463       366       4         30       492       2,970       3,120       1,320        2,440       1,630       931       631       453       389       5         31       431        2,730       1,290        2,450        925        441       396         Total       13,647       167,306       135,340       108,460       97,510       110,870       68,300       37,218       24,390       16,782       12,579       10,5         Mean       440       5,577       4,366       3,499       3,482       3,576       2,277       1,201       813       541       406       3	26	540	4,470	6,840	1,530	3,360	5,060	1,890	1,000	614	483	365	319		
28       464       3,110       5,000       1,430       2,550       3,450       1,750       971       621       478       356       4         29       487       2,650       3,920       1,370        2,900       1,680       951       667       463       366       4         30       492       2,970       3,120       1,320        2,440       1,630       931       631       453       389       5         31       431        2,730       1,290        2,450        925        441       396         Total       13,647       167,306       135,340       108,460       97,510       110,870       68,300       37,218       24,390       16,782       12,579       10,5         Mean       440       5,577       4,366       3,499       3,482       3,576       2,277       1,201       813       541       406       3	27	483	4,070	6,910	1,510	2,960	3,990	1,810	1,010	601	497	351	316		
30     492     2,970     3,120     1,320      2,440     1,630     931     631     453     389     5       31     431      2,730     1,290      2,450      925      441     396       Total     13,647     167,306     135,340     108,460     97,510     110,870     68,300     37,218     24,390     16,782     12,579     10,5       Mean     440     5,577     4,366     3,499     3,482     3,576     2,277     1,201     813     541     406     3	28	464	3,110	5,000	1,430	2,550	3,450	1,750	971	621	478	356	427		
30     492     2,970     3,120     1,320      2,440     1,630     931     631     453     389     5       31     431      2,730     1,290      2,450      925      441     396       Total     13,647     167,306     135,340     108,460     97,510     110,870     68,300     37,218     24,390     16,782     12,579     10,5       Mean     440     5,577     4,366     3,499     3,482     3,576     2,277     1,201     813     541     406     3	29	487	2,650	3,920	1,370		2,900	1,680	951	667	463	366	468		
31     431      2,730     1,290      2,450      925      441     396       Total     13,647     167,306     135,340     108,460     97,510     110,870     68,300     37,218     24,390     16,782     12,579     10,5       Mean     440     5,577     4,366     3,499     3,482     3,576     2,277     1,201     813     541     406     3	30	492	2,970	3,120	1,320			1,630	931	631	453	389	538		
<b>Mean</b> 440 5,577 4,366 3,499 3,482 3,576 2,277 1,201 813 541 406 3								*							
<b>Mean</b> 440 5,577 4,366 3,499 3,482 3,576 2,277 1,201 813 541 406 3	Total	13,647	167,306	135,340	108,460	97,510	110,870	68,300	37,218	24,390	16,782	12,579	10,511		
	Mean	440	5,577	4,366	3,499	3,482	3,576			813	541	406	350		
<b>Max</b> 799 27,500 13,200 14,700 13,900 6,950 3,040 1,620 1,100 666 627 5	Max	799	27,500	13,200	14,700	13,900	6,950	3,040	1,620	1,100	666	627	538		
													294		
	Ac-ft												20,850		

#### STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2007, BY WATER YEAR (WY)

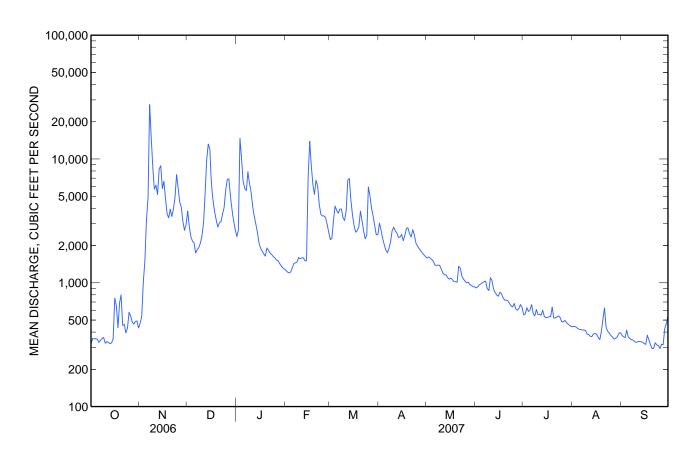
	0ct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,081	3,039	3,774	3,486	3,353	2,978	3,229	2,713	1,749	783	491	511
Max	4,086	7,882	10,700	8,955	8,793	6,426	5,176	5,357	4,887	1,756	731	1,947
(WY)	(1960)	(1996)	(1965)	(1953)	(1996)	(1932)	(1937)	(1949)	(1933)	(1955)	(1964)	(1959)
Min	242	294	992	791	1,127	997	980	998	479	390	308	310
(WY)	(1988)	(1953)	(1953)	(1937)	(2005)	(1941)	(1941)	(1992)	(1992)	(1992)	(1992)	(1994)

Water-Data Report 2007

### 14142500 SANDY RIVER BELOW BULL RUN RIVER, NEAR BULL RUN, OR—Continued

#### **SUMMARY STATISTICS**

	Calendar Y	ear 2006	Water Ye	ar 2007	Water Yea	rs 1930 - 2007
Annual total	875,895		802,913			
Annual mean	2,400		2,200		2,257	
Highest annual mean					3,456	1996
Lowest annual mean					1,334	2001
Highest daily mean	27,500	Nov 7	27,500	Nov 7	57,800	Dec 22, 1964
Lowest daily mean	285	Sep 13	294	Sep 20	63	Oct 12, 1952
Annual seven-day minimum	315	Sep 25	307	Sep 19	228	Oct 19, 1942
Annual runoff (ac-ft)	1,737,000		1,593,000		1,635,000	
10 percent exceeds	5,610		5,170		4,660	
50 percent exceeds	1,670		1,320		1,580	
90 percent exceeds	357		356		400	



#### 14142500 SANDY RIVER BELOW BULL RUN RIVER, NEAR BULL RUN, OR—Continued

#### **WATER-QUALITY RECORDS**

#### PERIOD OF RECORD .--

TURBIDITY: March 2006 to current year.

INSTRUMENTATION.—Water-quality monitor. Any use of trade, product, or firm names in this publication is for descriptive purposes only and does not imply endorsement by the U.S. Government.

#### REMARKS .--

TURBIDITY: Records good except those for June 1, 2007 to Sept. 30, 2007, which are fair. Data collected using an Analite 395 turbidity sensor. Manufacturer's stated precision is +/- 1 percent of reading at 25°C. Formazin Nephelometric Unit values below 10 are reported to nearest 0.1 FNU. Negative recorded values are reported as 0.0 FNU.

#### EXTREMES FOR PERIOD OF RECORD .--

TURBIDITY: Maximum recorded, 264 FNU July 6, 2007, but may have been higher during periods of missing record; minimum recorded, 0.0 FNU on several days each year.

#### EXTREMES FOR CURRENT YEAR .--

TURBIDITY: Maximum recorded, 264 FNU July 6, but may have been h; igher during periods of missing record; minimum recorded, 0.0 FNU on several days during year.

## 14142500 SANDY RIVER BELOW BULL RUN RIVER, NEAR BULL RUN, OR—Continued

## TURBIDITY, WATER, UNFILT, NEAR IR LED LIGHT, 780-900 NM, DETECT ANG. 90 DEG, FORMAZIN NEPHELOMETRIC UNITS WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median	
		October			November			December			January		
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16										2.1	0.7	1.0	
17										2.4	0.7	1.0	
18										1.1	0.7	0.9	
19										1.3	0.7	0.9	
20										7.0	0.8	1.3	
21										1.0	0.5	0.7	
22										0.7	0.4	0.6	
23													
24													
25													
26										0.5	0.3	0.4	
27										0.6	0.2	0.3	
28										0.8	0.2	0.3	
29										0.6	0.3	0.3	
30										0.5	0.2	0.3	
31										0.4	0.1	0.3	
Max													
Min													

## 14142500 SANDY RIVER BELOW BULL RUN RIVER, NEAR BULL RUN, OR—Continued

## TURBIDITY, WATER, UNFILT, NEAR IR LED LIGHT, 780-900 NM, DETECT ANG. 90 DEG, FORMAZIN NEPHELOMETRIC UNITS WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

	Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
2 1.3 0.1 0.3 2.1 1.1 1.4 0.6 0.1 0.2 9.4 0.1 0.6 3 0.4 0.1 0.2 5.7 1.6 2.0 0.2 0.1 0.1 0.1 0.2 0.3 0.0 0.1 5 0.7 0.2 0.4 4.0 1.6 1.9 0.2 0.1 0.2 0.3 0.0 0.1 5 0.7 0.2 0.4 4.0 1.6 1.9 0.2 0.1 0.2 0.3 0.0 0.1 5 0.7 0.2 0.4 4.0 1.6 1.9 0.2 0.1 0.2 0.3 0.0 0.1 6 0.7 0.3 0.6 2.4 1.7 2.1 0.2 0.1 0.2 0.3 3.3 0.0 0.1 7 0.8 0.2 0.4 3.0 1.3 2.2 11 0.2 0.3 3.3 0.0 0.1 8 0.6 0.3 0.4 1.6 1.2 1.3 3.7 0.4 0.6 12 0.1 0.2 0.3 3.3 0.0 0.1 9 5.0 0.3 0.9 1.4 1.2 1.3 4.1 0.4 0.6 6.5 0.1 0.2 10 1.7 0.4 0.7 1.4 1.0 1.1 0.6 0.2 0.4 0.3 0.1 0.2 11 0.2 11 0.9 0.4 0.6 0.6 0.2 0.4 0.3 0.1 0.2 11 0.2 11 0.9 0.4 0.6 0.6 0.1 0.1 1.5 0.9 0.1 0.2 0.3 3.7 0.1 0.1 0.2 12 12 2.4 0.6 1.0 20 3.3 9.6 0.6 0.6 0.2 0.3 37 0.1 0.1 13 2.0 0.6 1.1 12 4.2 6.2 0.9 0.4 0.5 0.3 37 0.1 0.1 14 2.3 0.2 0.5 4.5 2.4 3.7 5.8 0.2 0.8 0.3 0.3 0.0 0.1 14 2.3 0.2 0.5 4.5 2.4 3.7 5.8 0.2 0.8 0.3 0.0 0.1 18 26 4.8 7.1 3.2 2.0 2.8 0.3 0.1 0.2 0.7 0.1 0.2 16 248 33 64 4.5 2.8 3.2 0.2 0.1 0.2 0.8 0.3 0.0 0.1 18 26 4.8 7.1 0.8 8.8 0.1 0.1 0.1 0.2 0.1 0.1 12 0.1 12 0.1 0.1 12 0.2 0.4 0.1 0.2 0.1 0.1 12 0.2 0.1 0.1 12			February	у		March			April			May	
3         0.4         0.1         0.2         5.7         1.6         2.0         0.2         0.1         0.1         0.2         0.0         0.1           4         0.7         0.1         0.3         2.5         1.6         1.7         0.2         0.1         0.2         0.3         0.0         0.1           5         0.7         0.2         0.4         4.0         1.6         1.9         0.2         0.1         0.2         0.3         0.0         0.1           6         0.7         0.3         0.6         2.4         1.7         2.1         0.2         0.1         0.2         0.3         0.0         0.1           7         0.8         0.2         0.4         3.0         1.3         2.2         11         0.2         0.3         3.3         0.0         0.1           9         5.0         0.3         0.9         1.4         1.2         1.3         3.7         0.4         0.6         6.5         0.1         0.2           10         1.7         0.4         0.7         1.4         1.0         1.5         0.9         0.1         0.2         0.4         0.1         0.2	1	0.8	0.1	0.3	7.1	1.1	1.2	0.8	0.2	0.4	0.4	0.1	0.1
4         0.7         0.1         0.3         2.5         1.6         1.7         0.2         0.1         0.2         0.3         0.0         0.1           5         0.7         0.2         0.4         4.0         1.6         1.9         0.2         0.1         0.2         0.3         0.0         0.1           6         0.7         0.3         0.6         2.4         1.7         2.1         0.2         0.1         0.2         0.3         0.0         0.1           7         0.8         0.2         0.4         3.0         1.3         2.2         11         0.2         0.3         3.3         0.0         0.1           8         0.6         0.3         0.4         1.6         1.2         1.3         3.7         0.4         0.6         1.0         1.0           9         5.0         0.3         0.9         1.4         1.2         1.3         4.1         0.4         0.6         6.5         0.1         0.2           10         1.7         0.4         0.7         1.4         1.0         1.1         0.6         0.2         0.4         0.3         0.1         0.2           11	2	1.3	0.1	0.3	2.1	1.1	1.4	0.6	0.1	0.2	9.4	0.1	0.6
5         0.7         0.2         0.4         4.0         1.6         1.9         0.2         0.1         0.2         0.3         0.0         0.1           6         0.7         0.3         0.6         2.4         1.7         2.1         0.2         0.1         0.2         0.3         0.0         0.1           7         0.8         0.2         0.4         3.0         1.3         2.2         11         0.2         0.3         3.3         0.0         0.1           8         0.6         0.3         0.4         1.6         1.2         1.3         3.7         0.4         0.6         12         0.1         0.1           9         5.0         0.3         0.9         1.4         1.2         1.3         3.7         0.4         0.6         6.5         0.1         0.2           10         1.7         0.4         0.7         1.4         1.0         1.1         0.6         0.2         0.4         0.6         6.5         0.1         0.2           11         0.9         0.4         0.6         6.0         1.0         1.5         0.9         0.1         0.2         0.4         0.1         0.2	3	0.4	0.1	0.2	5.7	1.6	2.0	0.2	0.1	0.1	0.2	0.0	0.1
6         0.7         0.3         0.6         2.4         1.7         2.1         0.2         0.1         0.2         0.3         0.0         0.1           7         0.8         0.2         0.4         3.0         1.3         2.2         11         0.2         0.3         3.3         0.0         0.1           8         0.6         0.3         0.4         1.6         1.2         1.3         3.7         0.4         0.6         12         0.1         0.1           9         5.0         0.3         0.9         1.4         1.2         1.3         4.1         0.4         0.6         6.5         0.1         0.2           10         1.7         0.4         0.7         1.4         1.0         1.1         0.6         0.2         0.4         0.6         6.5         0.1         0.2           11         0.9         0.4         0.6         6.0         1.0         1.5         0.9         0.1         0.2         0.4         0.1         0.2           12         2.4         0.6         1.0         20         3.3         9.6         0.6         0.2         0.3         3.7         0.1         0.2	4	0.7	0.1	0.3	2.5	1.6	1.7	0.2	0.1	0.2	0.3	0.0	0.1
7         0.8         0.2         0.4         3.0         1.3         2.2         11         0.2         0.3         3.3         0.0         0.1           8         0.6         0.3         0.4         1.6         1.2         1.3         3.7         0.4         0.6         12         0.1         0.1           9         5.0         0.3         0.9         1.4         1.2         1.3         4.1         0.4         0.6         6.5         0.1         0.2           10         1.7         0.4         0.7         1.4         1.0         1.1         0.6         0.2         0.4         0.3         0.1         0.2           11         0.9         0.4         0.6         6.0         1.0         1.5         0.9         0.1         0.2         0.4         0.1         0.2           12         2.4         0.6         1.0         20         3.3         9.6         0.6         0.2         0.3         3.0         0.0         0.1           13         2.0         0.6         1.1         12         4.2         6.2         0.9         0.4         0.5         0.3         0.0         0.1	5	0.7	0.2	0.4	4.0	1.6	1.9	0.2	0.1	0.2	0.3	0.0	0.1
8         0.6         0.3         0.4         1.6         1.2         1.3         3.7         0.4         0.6         12         0.1         0.1           9         5.0         0.3         0.9         1.4         1.2         1.3         4.1         0.4         0.6         6.5         0.1         0.2           10         1.7         0.4         0.7         1.4         1.0         1.1         0.6         0.2         0.4         0.3         0.1         0.2           11         0.9         0.4         0.6         6.0         1.0         1.5         0.9         0.1         0.2         0.4         0.1         0.2           12         2.4         0.6         1.0         20         3.3         9.6         0.6         0.2         0.3         37         0.1         0.1           13         2.0         0.6         1.1         12         4.2         6.2         0.9         0.4         0.5         0.3         0.0         0.1           14         2.3         0.2         0.5         4.5         2.4         3.7         5.8         0.2         0.8         0.3         0.0         0.1	6	0.7		0.6	2.4	1.7		0.2	0.1	0.2		0.0	
9         5.0         0.3         0.9         1.4         1.2         1.3         4.1         0.4         0.6         6.5         0.1         0.2           10         1.7         0.4         0.7         1.4         1.0         1.1         0.6         0.2         0.4         0.3         0.1         0.2           11         0.9         0.4         0.6         6.0         1.0         1.5         0.9         0.1         0.2         0.4         0.1         0.2           12         2.4         0.6         1.0         20         3.3         9.6         0.6         0.2         0.3         37         0.1         0.1           13         2.0         0.6         1.1         12         4.2         6.2         0.9         0.4         0.5         0.3         0.0         0.1           14         2.3         0.2         0.5         4.5         2.4         3.7         5.8         0.2         0.8         0.3         0.0         0.1           15              8.8         0.1         0.1         1.8         0.1         0.1           16		0.8		0.4								0.0	
10       1.7       0.4       0.7       1.4       1.0       1.1       0.6       0.2       0.4       0.3       0.1       0.2         11       0.9       0.4       0.6       6.0       1.0       1.5       0.9       0.1       0.2       0.4       0.1       0.2         12       2.4       0.6       1.0       20       3.3       9.6       0.6       0.2       0.3       37       0.1       0.1         13       2.0       0.6       1.1       12       4.2       6.2       0.9       0.4       0.5       0.3       0.0       0.1         14       2.3       0.2       0.5       4.5       2.4       3.7       5.8       0.2       0.8       0.3       0.0       0.1         15          3.2       2.0       2.8       0.3       0.1       0.2       0.7       0.1       0.2         16       248       33       64       4.5       2.8       3.2       0.2       0.1       0.1       18       0.1       0.1         17       36       10       19          0.2       0.1       <		0.6		0.4	1.6	1.2	1.3	3.7	0.4	0.6		0.1	0.1
11       0.9       0.4       0.6       6.0       1.0       1.5       0.9       0.1       0.2       0.4       0.1       0.2         12       2.4       0.6       1.0       20       3.3       9.6       0.6       0.2       0.3       37       0.1       0.1         13       2.0       0.6       1.1       12       4.2       6.2       0.9       0.4       0.5       0.3       0.0       0.1         14       2.3       0.2       0.5       4.5       2.4       3.7       5.8       0.2       0.8       0.3       0.0       0.1         15          3.2       2.0       2.8       0.3       0.1       0.2       0.7       0.1       0.2         16       248       33       64       4.5       2.8       3.2       0.2       0.1       0.1       18       0.1       0.1       0.2         17       36       10       19          0.2       0.1       0.1       18       0.1       0.1       0.2       0.1       0.1         18       26       4.8       7.1        -		5.0		0.9	1.4			4.1		0.6		0.1	
12         2.4         0.6         1.0         20         3.3         9.6         0.6         0.2         0.3         37         0.1         0.1           13         2.0         0.6         1.1         12         4.2         6.2         0.9         0.4         0.5         0.3         0.0         0.1           14         2.3         0.2         0.5         4.5         2.4         3.7         5.8         0.2         0.8         0.3         0.0         0.1           15             3.2         2.0         2.8         0.3         0.1         0.2         0.7         0.1         0.2           16         248         33         64         4.5         2.8         3.2         0.2         0.1         0.1         18         0.1         0.1           17         36         10         19            8.8         0.1         0.1         0.2         0.1         0.1           18         26         4.8         7.1            0.3         0.1         0.1         0.2         0.1         0.1 </td <td>10</td> <td>1.7</td> <td>0.4</td> <td>0.7</td> <td>1.4</td> <td>1.0</td> <td>1.1</td> <td>0.6</td> <td>0.2</td> <td>0.4</td> <td>0.3</td> <td>0.1</td> <td>0.2</td>	10	1.7	0.4	0.7	1.4	1.0	1.1	0.6	0.2	0.4	0.3	0.1	0.2
13       2.0       0.6       1.1       12       4.2       6.2       0.9       0.4       0.5       0.3       0.0       0.1         14       2.3       0.2       0.5       4.5       2.4       3.7       5.8       0.2       0.8       0.3       0.0       0.1         15           3.2       2.0       2.8       0.3       0.1       0.2       0.7       0.1       0.2         16       248       33       64       4.5       2.8       3.2       0.2       0.1       0.1       18       0.1       0.1         17       36       10       19          8.8       0.1       0.1       0.2       0.1       0.1         18       26       4.8       7.1          0.3       0.1       0.1       26       0.1       0.1         19       6.1       2.8       3.8          0.4       0.1       0.2       60       0.1       0.1         20       16       3.7       5.3          0.4       0	11	0.9	0.4	0.6	6.0	1.0	1.5	0.9	0.1	0.2	0.4	0.1	0.2
14       2.3       0.2       0.5       4.5       2.4       3.7       5.8       0.2       0.8       0.3       0.0       0.1         15          3.2       2.0       2.8       0.3       0.1       0.2       0.7       0.1       0.2         16       248       33       64       4.5       2.8       3.2       0.2       0.1       0.1       18       0.1       0.1         17       36       10       19          8.8       0.1       0.1       0.2       0.1       0.1         18       26       4.8       7.1         0.3       0.1       0.1       26       0.1       0.1         19       6.1       2.8       3.8          0.4       0.1       0.2       60       0.1       0.1         20       16       3.7       5.3          0.4       0.1       0.2       0.2       0.0       0.1         21       7.5       1.8       2.6          0.4       0.1       0.2	12	2.4	0.6	1.0	20	3.3	9.6	0.6	0.2	0.3	37	0.1	0.1
15            3.2         2.0         2.8         0.3         0.1         0.2         0.7         0.1         0.2           16         248         33         64         4.5         2.8         3.2         0.2         0.1         0.1         18         0.1         0.1           17         36         10         19            8.8         0.1         0.1         0.2         0.1         0.1           18         26         4.8         7.1            0.3         0.1         0.1         0.2         0.1         0.1           19         6.1         2.8         3.8            0.4         0.1         0.2         60         0.1         0.1           20         16         3.7         5.3            0.4         0.1         0.2         60         0.1         0.1           21         7.5         1.8         2.6            0.4         0.1         0.2         13         0.1         0.1           <					12	4.2	6.2	0.9	0.4	0.5	0.3	0.0	0.1
16       248       33       64       4.5       2.8       3.2       0.2       0.1       0.1       18       0.1       0.1         17       36       10       19          8.8       0.1       0.1       0.2       0.1       0.1         18       26       4.8       7.1         0.3       0.1       0.1       26       0.1       0.1         19       6.1       2.8       3.8         0.4       0.1       0.2       60       0.1       0.1         20       16       3.7       5.3         0.4       0.1       0.2       60       0.1       0.1         20       16       3.7       5.3         0.4       0.1       0.2       0.2       0.0       0.1         21       7.5       1.8       2.6         0.4       0.1       0.2       13       0.1       0.0         22       4.0       1.5       1.8       1.9       0.5       0.6       0.8       0.2       0.3       0.1       0.0       0.1         23<	14	2.3	0.2	0.5	4.5	2.4	3.7	5.8	0.2	0.8	0.3	0.0	0.1
17       36       10       19          8.8       0.1       0.1       0.2       0.1       0.1         18       26       4.8       7.1          0.3       0.1       0.1       26       0.1       0.1         19       6.1       2.8       3.8         0.4       0.1       0.2       60       0.1       0.1         20       16       3.7       5.3         0.4       0.1       0.2       60       0.1       0.1         21       7.5       1.8       2.6          0.4       0.1       0.2       0.2       0.0       0.1         22       4.0       1.5       1.8       1.9       0.5       0.6       0.8       0.2       0.3       0.1       0.0       0.1         23       1.7       1.3       1.5       0.8       0.3       0.4       3.1       0.2       0.3       0.2       0.0       0.1         24       2.5       1.3       1.6       1.1       0.2       0.4       9.2       0.3       0.5       0.1 <t< td=""><td>15</td><td></td><td></td><td></td><td>3.2</td><td>2.0</td><td>2.8</td><td>0.3</td><td>0.1</td><td>0.2</td><td>0.7</td><td>0.1</td><td>0.2</td></t<>	15				3.2	2.0	2.8	0.3	0.1	0.2	0.7	0.1	0.2
18       26       4.8       7.1          0.3       0.1       0.1       26       0.1       0.1         19       6.1       2.8       3.8          0.4       0.1       0.2       60       0.1       0.1         20       16       3.7       5.3          0.4       0.1       0.2       0.2       0.0       0.1         21       7.5       1.8       2.6         0.4       0.1       0.2       13       0.1       0.1         22       4.0       1.5       1.8       1.9       0.5       0.6       0.8       0.2       0.3       0.1       0.0       0.1         23       1.7       1.3       1.5       0.8       0.3       0.4       3.1       0.2       0.3       0.2       0.0       0.1         24       2.5       1.3       1.6       1.1       0.2       0.4       9.2       0.3       0.5       0.1       0.0       0.1         25       1.7       1.3       1.5       12       0.8       3.7       0.6       0.3       0.4			33		4.5	2.8	3.2					0.1	
19       6.1       2.8       3.8          0.4       0.1       0.2       60       0.1       0.1         20       16       3.7       5.3          0.4       0.1       0.2       0.2       0.0       0.1         21       7.5       1.8       2.6          0.4       0.1       0.2       13       0.1       0.1         22       4.0       1.5       1.8       1.9       0.5       0.6       0.8       0.2       0.3       0.1       0.0       0.1         23       1.7       1.3       1.5       0.8       0.3       0.4       3.1       0.2       0.3       0.2       0.0       0.1         24       2.5       1.3       1.6       1.1       0.2       0.4       9.2       0.3       0.5       0.1       0.0       0.1         25       1.7       1.3       1.5       12       0.8       3.7       0.6       0.3       0.4       39       0.0       0.1         26       1.4       1.1       1.2       3.3       0.3       0.6       2.6       0.0		36										0.1	
20       16       3.7       5.3          0.4       0.1       0.2       0.2       0.0       0.1         21       7.5       1.8       2.6          0.4       0.1       0.2       13       0.1       0.1         22       4.0       1.5       1.8       1.9       0.5       0.6       0.8       0.2       0.3       0.1       0.0       0.1         23       1.7       1.3       1.5       0.8       0.3       0.4       3.1       0.2       0.3       0.2       0.0       0.1         24       2.5       1.3       1.6       1.1       0.2       0.4       9.2       0.3       0.5       0.1       0.0       0.1         25       1.7       1.3       1.5       12       0.8       3.7       0.6       0.3       0.4       39       0.0       0.1         26       1.4       1.1       1.2       6.9       0.6       1.0       9.7       0.5       1.6       11       0.1       0.1         27       1.6       1.1       1.2       3.3       0.3       0.6       2.6       0.0								0.3	0.1			0.1	
21       7.5       1.8       2.6          0.4       0.1       0.2       13       0.1       0.1         22       4.0       1.5       1.8       1.9       0.5       0.6       0.8       0.2       0.3       0.1       0.0       0.1         23       1.7       1.3       1.5       0.8       0.3       0.4       3.1       0.2       0.3       0.2       0.0       0.1         24       2.5       1.3       1.6       1.1       0.2       0.4       9.2       0.3       0.5       0.1       0.0       0.1         25       1.7       1.3       1.5       12       0.8       3.7       0.6       0.3       0.4       39       0.0       0.1         26       1.4       1.1       1.2       6.9       0.6       1.0       9.7       0.5       1.6       11       0.1       0.1         27       1.6       1.1       1.2       3.3       0.3       0.6       2.6       0.0       0.1       36       0.1       7.5         28       2.3       1.1       1.2       2.3       0.2       0.3       0.1       0.0													
22       4.0       1.5       1.8       1.9       0.5       0.6       0.8       0.2       0.3       0.1       0.0       0.1         23       1.7       1.3       1.5       0.8       0.3       0.4       3.1       0.2       0.3       0.2       0.0       0.1         24       2.5       1.3       1.6       1.1       0.2       0.4       9.2       0.3       0.5       0.1       0.0       0.1         25       1.7       1.3       1.5       12       0.8       3.7       0.6       0.3       0.4       39       0.0       0.1         26       1.4       1.1       1.2       6.9       0.6       1.0       9.7       0.5       1.6       11       0.1       0.1         27       1.6       1.1       1.2       3.3       0.3       0.6       2.6       0.0       0.1       36       0.1       7.5         28       2.3       1.1       1.2       2.3       0.2       0.3       0.2       0.0       0.1       85       2.6       11         29          0.5       0.2       0.2       0.1       0.0	20	16	3.7	5.3				0.4	0.1	0.2	0.2	0.0	0.1
23       1.7       1.3       1.5       0.8       0.3       0.4       3.1       0.2       0.3       0.2       0.0       0.1         24       2.5       1.3       1.6       1.1       0.2       0.4       9.2       0.3       0.5       0.1       0.0       0.1         25       1.7       1.3       1.5       12       0.8       3.7       0.6       0.3       0.4       39       0.0       0.1         26       1.4       1.1       1.2       6.9       0.6       1.0       9.7       0.5       1.6       11       0.1       0.1         27       1.6       1.1       1.2       3.3       0.3       0.6       2.6       0.0       0.1       36       0.1       7.5         28       2.3       1.1       1.2       2.3       0.2       0.3       0.2       0.0       0.1       85       2.6       11         29         0.3       0.2       0.3       0.1       0.0       0.1            30         0.5       0.2       0.2       0.1       0.0       0.1								0.4				0.1	
24       2.5       1.3       1.6       1.1       0.2       0.4       9.2       0.3       0.5       0.1       0.0       0.1         25       1.7       1.3       1.5       12       0.8       3.7       0.6       0.3       0.4       39       0.0       0.1         26       1.4       1.1       1.2       6.9       0.6       1.0       9.7       0.5       1.6       11       0.1       0.1         27       1.6       1.1       1.2       3.3       0.3       0.6       2.6       0.0       0.1       36       0.1       7.5         28       2.3       1.1       1.2       2.3       0.2       0.3       0.2       0.0       0.1       85       2.6       11         29          0.3       0.2       0.3       0.1       0.0       0.1            30         0.5       0.2       0.2       0.1       0.0       0.1            31          2.8       0.2       0.3         2.4													
25       1.7       1.3       1.5       12       0.8       3.7       0.6       0.3       0.4       39       0.0       0.1         26       1.4       1.1       1.2       6.9       0.6       1.0       9.7       0.5       1.6       11       0.1       0.1         27       1.6       1.1       1.2       3.3       0.3       0.6       2.6       0.0       0.1       36       0.1       7.5         28       2.3       1.1       1.2       2.3       0.2       0.3       0.2       0.0       0.1       85       2.6       11         29         0.3       0.2       0.3       0.1       0.0       0.1            30         0.5       0.2       0.2       0.1       0.0       0.1            31         2.8       0.2       0.3         2.4       0.0       0.0         Max           11       0.5       1.6					0.8							0.0	
26       1.4       1.1       1.2       6.9       0.6       1.0       9.7       0.5       1.6       11       0.1       0.1         27       1.6       1.1       1.2       3.3       0.3       0.6       2.6       0.0       0.1       36       0.1       7.5         28       2.3       1.1       1.2       2.3       0.2       0.3       0.2       0.0       0.1       85       2.6       11         29          0.3       0.2       0.3       0.1       0.0       0.1            30         0.5       0.2       0.2       0.1       0.0       0.1            31         2.8       0.2       0.3         2.4       0.0       0.0         Max          11       0.5       1.6								9.2				0.0	
27       1.6       1.1       1.2       3.3       0.3       0.6       2.6       0.0       0.1       36       0.1       7.5         28       2.3       1.1       1.2       2.3       0.2       0.3       0.2       0.0       0.1       85       2.6       11         29          0.3       0.2       0.3       0.1       0.0       0.1            30         0.5       0.2       0.2       0.1       0.0       0.1            31         2.8       0.2       0.3         2.4       0.0       0.0         Max           11       0.5       1.6	25	1.7	1.3	1.5	12	0.8	3.7	0.6	0.3	0.4	39	0.0	0.1
28     2.3     1.1     1.2     2.3     0.2     0.3     0.2     0.0     0.1     85     2.6     11       29        0.3     0.2     0.3     0.1     0.0     0.1          30       0.5     0.2     0.2     0.1     0.0     0.1          31       2.8     0.2     0.3       2.4     0.0     0.0       Max	26	1.4			6.9	0.6	1.0	9.7	0.5	1.6	11	0.1	
29 0.3 0.2 0.3 0.1 0.0 0.1 30 0.5 0.2 0.2 0.1 0.0 0.1 31 2.8 0.2 0.3 2.4 0.0 0.0    Max 11 0.5 1.6					3.3	0.3	0.6	2.6	0.0	0.1	36	0.1	7.5
<b>30</b> 0.5 0.2 0.2 0.1 0.0 0.1 31 2.8 0.2 0.3 11 0.5 1.6		2.3	1.1	1.2					0.0		85	2.6	
<b>31</b> 2.8 0.2 0.3 2.4 0.0 0.0 <b>Max</b> 11 0.5 1.6								0.1	0.0				
Max 11 0.5 1.6								0.1	0.0	0.1			
	31				2.8	0.2	0.3				2.4	0.0	0.0
Min 0.1 0.0 0.1	Max								0.5	1.6			
	Min							0.1	0.0	0.1			

## 14142500 SANDY RIVER BELOW BULL RUN RIVER, NEAR BULL RUN, OR—Continued

## TURBIDITY, WATER, UNFILT, NEAR IR LED LIGHT, 780-900 NM, DETECT ANG. 90 DEG, FORMAZIN NEPHELOMETRIC UNITS WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
		June			July			August		;	Septembe	er
1	4.6	0.0	2.1	45	3.2	6.6	11	5.8	7.5	118	30	47
2	8.3	2.3	3.1	19	2.8	6.2	14	6.7	8.6	53	17	34
3	36	4.6	7.2	19	3.4	6.0	25	8.0	13	36	13	20
4	32	17	25	31	5.7	13	21	9.7	13	33	12	17
5	35	18	25	119	10	23	15	5.9	10	30	15	20
6	32	9.0	14	264	30	65	19	4.9	6.8	26	8.9	16
7	11	5.7	8.0	214	40	65	12	4.1	6.4	30	8.3	12
8	6.2	3.1	4.3	64	20	34	20	5.3	9.0	23	7.2	10
9	4.6	2.5	3.5	43	13	24	19	7.4	11	13	6.0	8.2
10	7.1	2.8	4.1	53	7.9	18	16	5.7	8.2	13	6.1	7.5
11	8.3	4.1	6.0	30	9.5	14	15	5.1	6.9	12	5.6	7.4
12	5.1	2.5	3.5	22	11	15	9.1	4.2	5.7	46	6.4	13
13	3.5	2.1	2.8	32	16	25	14	4.0	6.4	31	8.5	12
14	4.3	2.2	2.9	51	18	27	6.4	3.0	4.2	26	7.4	11
15	5.6	1.8	2.8	32	13	18	16	2.9	7.4	14	6.5	8.9
16	12	2.3	3.5	32	12	18	26	6.7	11	32	7.3	12
17	15	3.0	5.3	33	14	20	49	11	18	19	7.2	11
18	10	2.1	2.9	50	13	20	30	7.2	12	13	3.8	7.1
19	9.7	1.8	2.5	44	15	23	10	5.0	7.2	12	3.9	5.1
20	2.9	1.8	2.2	48	9.9	18	18	4.0	6.8	7.0	3.1	4.5
21	3.8	2.4	3.1	13	7.4	9.3	34	7.6	15	6.7	2.3	3.7
22	5.2	3.3	4.3	15	7.6	9.0	28	8.1	18	5.2	1.7	3.2
23	5.0	2.5	3.8	31	12	17	13	4.5	8.3	12	1.9	4.6
24	3.9	2.1	2.6	66	28	35	14	3.5	6.8	6.3	1.9	4.2
25	6.5	1.7	2.3	49	12	24	44	3.4	5.8	3.7	1.9	2.8
26	6.7	1.4	2.0	18	8.7	13	18	4.2	6.3	4.6	2.0	2.8
27	2.2	1.3	1.8	17	8.9	13	11	4.5	6.4	6.9	1.9	3.7
28	2.3	1.4	1.8	31	9.1	15	7.2	3.4	4.8	20	2.6	7.7
29	3.9	1.9	2.8	21	9.6	13	7.3	3.6	4.8	15	4.8	7.3
30	5.0	2.9	3.9	20	8.5	12	15	3.7	6.6	13	3.2	6.1
31				17	6.9	9.9	40	6.0	26			
Max	36	18	25	264	40	65	49	11	26	118	30	47
Min	2.2	0.0	1.8	13	2.8	6.0	6.4	2.9	4.2	3.7	1.7	2.8