

Water-Data Report 2013

## 13057155 SNAKE RIVER ABOVE EAGLE ROCK NEAR IDAHO FALLS, ID

Upper Snake Basin  
Idaho Falls Subbasin

LOCATION.--Lat 43°36'17", long 112°03'31" referenced to North American Datum of 1983, in NE ¼ NW ¼ SW ¼ sec.12, T.3 N., R.37 E., Bonneville County, ID, Hydrologic Unit 17040201, Idaho Falls North quad., on right bank 3.5 mi upstream of Idaho Falls Municipal powerplant, 8.0 mi north of Idaho Falls, and at mile 805.

### **SURFACE-WATER RECORDS**

PERIOD OF RECORD.--October 1987 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 4,730.00 ft above NGVD of 1929 (levels by U.S. Geological Survey). Records comparable with former station "Snake River near Idaho Falls" (station 13057160) except during irrigation season.

REMARKS.--Records good except for estimated daily discharges, which are fair. Station equipment includes satellite telemetry. Some regulation by Jackson Lake, Palisades Reservoir, Island Park Reservoir, Henrys Lake and Grassy Lake. Diversions above station for irrigation of about 700,000 acres. Considerable water leaks above station into the Snake River Plain aquifer. To determine total discharge in the Snake River below Great Western Spillback, add daily discharges from stations 13057132 and 13057155.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,600 ft<sup>3</sup>/s June 16, 1997, gage height, 18.91 ft; minimum daily, 950 ft<sup>3</sup>/s Dec. 22, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16,400 ft<sup>3</sup>/s, May 21, gage height 11.14 ft; minimum daily 1,760 ft<sup>3</sup>/s, Jan. 14.

## 13057155 SNAKE RIVER ABOVE EAGLE ROCK NEAR IDAHO FALLS, ID—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**  
**DAILY MEAN VALUES**  
[e, estimated]

| Day          | Oct     | Nov     | Dec     | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     |
|--------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1            | 3,890   | 4,130   | 2,790   | e2,360  | e2,850  | e2,790  | 2,850   | 5,830   | 6,700   | 6,860   | 9,050   | 5,640   |
| 2            | 3,710   | 3,930   | 2,970   | e2,010  | e2,830  | e2,780  | 3,110   | 5,410   | 6,200   | 6,430   | 8,770   | 5,760   |
| 3            | 3,560   | 3,550   | 3,120   | e1,960  | e2,820  | e2,720  | 3,200   | 4,990   | 5,740   | 6,310   | 7,810   | 6,030   |
| 4            | 3,530   | 3,190   | 3,210   | e1,920  | e2,940  | e2,760  | 3,150   | 5,020   | 5,480   | 6,500   | 7,560   | 6,190   |
| 5            | 3,450   | 2,980   | 3,090   | e1,980  | e2,920  | e2,690  | 3,110   | 5,400   | 6,170   | 6,620   | 7,560   | 5,540   |
| 6            | 3,250   | 3,040   | 3,220   | e2,020  | e2,910  | e2,650  | 3,360   | 5,740   | 6,430   | 6,700   | 7,340   | 5,290   |
| 7            | 3,300   | 2,950   | 3,410   | e1,960  | e2,880  | e2,740  | 3,480   | 5,620   | 6,330   | 6,940   | 6,980   | 5,300   |
| 8            | 3,370   | 2,910   | 3,150   | e2,220  | e2,920  | e2,740  | 3,560   | 5,520   | 6,310   | 6,990   | 6,850   | 5,380   |
| 9            | 3,400   | 2,990   | 2,850   | e2,160  | e2,930  | e2,700  | 3,030   | 5,350   | 6,880   | 6,810   | 6,860   | 5,540   |
| 10           | 3,260   | 3,040   | 2,700   | e2,060  | e2,860  | e2,660  | 2,770   | 5,370   | 7,230   | 6,710   | 6,980   | 5,470   |
| 11           | 3,160   | 2,840   | 2,960   | e1,960  | e2,760  | e2,650  | 2,830   | 5,800   | 7,340   | 6,740   | 7,140   | 5,110   |
| 12           | 2,980   | 2,740   | 3,080   | e1,860  | e2,780  | e2,630  | 2,700   | 6,250   | 7,750   | 6,830   | e7,140  | 4,900   |
| 13           | 2,760   | 2,700   | 2,990   | e1,800  | e2,760  | 2,620   | 2,610   | 6,730   | 8,870   | 6,980   | e6,900  | 4,920   |
| 14           | 2,740   | 2,670   | 2,940   | e1,760  | e2,840  | 2,610   | 2,690   | 6,850   | 8,790   | 7,340   | e6,500  | 4,970   |
| 15           | 2,720   | 2,760   | 2,920   | e1,800  | e2,840  | 2,670   | 2,810   | 7,960   | 8,810   | 7,660   | 6,050   | 4,970   |
| 16           | 2,810   | 2,680   | 2,910   | e1,790  | e2,870  | e2,840  | 2,550   | 9,500   | 8,760   | 7,770   | 6,000   | 5,050   |
| 17           | 2,890   | 2,600   | 2,910   | e1,780  | e2,950  | 2,860   | 3,210   | 10,800  | 8,560   | 8,090   | 6,130   | 4,910   |
| 18           | 2,960   | 2,740   | e2,740  | e1,960  | e2,910  | 2,910   | 3,900   | 12,400  | 7,760   | 8,310   | 6,630   | 4,960   |
| 19           | 2,940   | 2,860   | e2,460  | e1,920  | e2,890  | 2,800   | 3,840   | 14,700  | 7,330   | 8,450   | 6,670   | 5,210   |
| 20           | 2,930   | 2,690   | e2,360  | e2,060  | e2,830  | 2,770   | 3,870   | 15,900  | 7,340   | 8,760   | 6,280   | 5,210   |
| 21           | 2,910   | 2,570   | e2,340  | e2,160  | e2,860  | 2,830   | 3,650   | 15,900  | 7,490   | 9,090   | 6,100   | 4,540   |
| 22           | 3,160   | 2,730   | e2,660  | e2,210  | e2,820  | e2,910  | 3,930   | 14,700  | 7,550   | 9,240   | 6,190   | 4,080   |
| 23           | 3,660   | 2,700   | e2,710  | e2,260  | e2,800  | 2,870   | 3,940   | 13,400  | 7,710   | 8,870   | 6,210   | 3,880   |
| 24           | 3,850   | 2,640   | e2,480  | e2,420  | e2,770  | 2,830   | 3,810   | 12,300  | 7,640   | 8,440   | 6,480   | 3,650   |
| 25           | 3,760   | 2,800   | e2,450  | e2,660  | e2,790  | 2,610   | 4,010   | 11,400  | 7,160   | 8,590   | 6,440   | 3,570   |
| 26           | 3,820   | 2,650   | e2,560  | e2,760  | e2,790  | 2,370   | 4,520   | 10,300  | 7,070   | e8,850  | 6,530   | 3,550   |
| 27           | 3,970   | 2,600   | e2,360  | e2,860  | e2,780  | 2,620   | 4,960   | 9,300   | 7,060   | e9,100  | 6,280   | 3,690   |
| 28           | 4,200   | 2,590   | e2,320  | e2,940  | e2,820  | 2,510   | 5,270   | 8,350   | 7,020   | e9,360  | 6,080   | 3,790   |
| 29           | 4,280   | 2,410   | e2,260  | e2,960  | ---     | 2,480   | 5,920   | 7,570   | 6,960   | e9,620  | 5,880   | 3,770   |
| 30           | 4,270   | 2,670   | e2,450  | e2,920  | ---     | 2,590   | 6,130   | 7,300   | 6,840   | 9,620   | 5,760   | 3,770   |
| 31           | 3,840   | ---     | e2,470  | e2,860  | ---     | 2,800   | ---     | 6,920   | ---     | 9,150   | 5,530   | ---     |
| <b>Total</b> | 105,330 | 86,350  | 85,840  | 68,350  | 79,720  | 84,010  | 108,770 | 268,580 | 217,280 | 243,730 | 208,680 | 144,640 |
| <b>Mean</b>  | 3,398   | 2,878   | 2,769   | 2,205   | 2,847   | 2,710   | 3,626   | 8,664   | 7,243   | 7,862   | 6,732   | 4,821   |
| <b>Max</b>   | 4,280   | 4,130   | 3,410   | 2,960   | 2,950   | 2,910   | 6,130   | 15,900  | 8,870   | 9,620   | 9,050   | 6,190   |
| <b>Min</b>   | 2,720   | 2,410   | 2,260   | 1,760   | 2,760   | 2,370   | 2,550   | 4,990   | 5,480   | 6,310   | 5,530   | 3,550   |
| <b>Ac-ft</b> | 208,900 | 171,300 | 170,300 | 135,600 | 158,100 | 166,600 | 215,700 | 532,700 | 431,000 | 483,400 | 413,900 | 286,900 |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2013, BY WATER YEAR (WY)

|             | Oct    | Nov    | Dec    | Jan    | Feb    | Mar    | Apr    | May    | Jun    | Jul    | Aug    | Sep    |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>Mean</b> | 3,385  | 3,409  | 3,092  | 3,134  | 3,630  | 4,478  | 6,666  | 10,850 | 12,280 | 8,472  | 6,438  | 5,013  |
| <b>Max</b>  | 6,084  | 6,308  | 6,560  | 7,901  | 12,100 | 16,040 | 16,260 | 24,050 | 35,400 | 19,040 | 9,863  | 7,203  |
| <b>(WY)</b> | (2012) | (1998) | (1998) | (1997) | (1997) | (1997) | (1997) | (1997) | (1997) | (2011) | (1997) | (1990) |
| <b>Min</b>  | 2,326  | 2,258  | 1,821  | 1,616  | 1,711  | 1,935  | 2,242  | 4,911  | 6,184  | 5,767  | 4,511  | 3,703  |
| <b>(WY)</b> | (2004) | (2004) | (2008) | (2008) | (2002) | (2008) | (2008) | (2002) | (2002) | (2001) | (2001) | (1988) |

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SUMMARY STATISTICS

|                                 | Calendar Year 2012 |        | Water Year 2013 |        | Water Years 1988 - 2013 |              |
|---------------------------------|--------------------|--------|-----------------|--------|-------------------------|--------------|
| <b>Annual total</b>             | 2,311,870          |        | 1,701,280       |        |                         |              |
| <b>Annual mean</b>              | 6,317              |        | 4,661           |        | 5,911                   |              |
| <b>Highest annual mean</b>      |                    |        |                 |        | 12,880                  | 1997         |
| <b>Lowest annual mean</b>       |                    |        |                 |        | 3,797                   | 2002         |
| <b>Highest daily mean</b>       | 13,800             | Apr 28 | 15,900          | May 20 | 47,900                  | Jun 16, 1997 |
| <b>Lowest daily mean</b>        | 2,260              | Dec 29 | 1,760           | Jan 14 | 950                     | Dec 22, 1990 |
| <b>Annual seven-day minimum</b> | 2,410              | Dec 25 | 1,820           | Jan 11 | 1,210                   | Dec 19, 1990 |
| <b>Annual runoff (ac-ft)</b>    | 4,586,000          |        | 3,374,000       |        | 4,282,000               |              |
| <b>10 percent exceeds</b>       | 9,840              |        | 7,870           |        | 11,500                  |              |
| <b>50 percent exceeds</b>       | 6,030              |        | 3,530           |        | 4,460                   |              |
| <b>90 percent exceeds</b>       | 2,800              |        | 2,480           |        | 2,190                   |              |

