

Water-Data Report 2013

**13251000 PAYETTE RIVER NEAR PAYETTE, ID**

Middle Snake-Boise Basin  
Payette Subbasin

LOCATION.--Lat 44°02'32", long 116°55'31" referenced to North American Datum of 1983, in NE ¼ SE ¼ SW ¼ sec.10, T.8 N., R.5 W., Payette County, ID, Hydrologic Unit 17050122, Payette quad., on right bank just upstream from bridge on U.S. Highway 95, 1.8 mi south of Payette, and at mile 4.1.

DRAINAGE AREA.--3,240 mi<sup>2</sup>, approximately.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--August 1935 to current year. Records for January 1895 to July 1897 (published as "at Payette" in 18th and 19th Annual Reports) have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 1397: 1949 (m), 1952, 1953-54 (m).

GAGE.--Water-stage recorder. Datum of gage is 2,138.44 ft above NGVD of 1929. Aug. 1, 1935 to Aug. 7, 1939, nonrecording gage at site 50 ft downstream at present datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Station equipment includes satellite telemetry. Flow regulated by Deadwood Reservoir, Cascade Reservoir beginning November 1947, other smaller reservoirs, and to some extent by Black Canyon Dam 34.6 mi upstream, where flow is regulated by diversion and gate operation at dam. Diversions above station for irrigation of about 196,000 acres, of which about 100 acres are irrigated by withdrawals from ground water, about 5,100 acres are located below station, and about 53,000 acres are in adjacent basins (1966 determination).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 32,000 ft<sup>3</sup>/s Jan. 2, 1997; minimum, 17 ft<sup>3</sup>/s June 25, 2001, gage height, 3.09 ft (result of irrigation diversion upstream); minimum daily, 127 ft<sup>3</sup>/s Aug. 15, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,610 ft<sup>3</sup>/s, Dec. 6, gage height, 7.67 ft; minimum, 408 ft<sup>3</sup>/s, Sept. 3, gage height, 4.19 ft.

## 13251000 PAYETTE RIVER NEAR PAYETTE, 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            | 664    | 1,850  | 1,750   | 1,270  | 1,770  | 1,180   | 2,380  | 1,370   | 2,160   | 2,290  | 1,340  | 633    |
| 2            | 657    | 1,790  | 2,170   | 1,170  | 1,770  | 1,450   | 2,370  | 1,260   | 1,960   | 2,050  | 1,430  | 572    |
| 3            | 580    | 1,780  | 2,840   | 1,170  | 1,880  | 1,540   | 2,530  | 1,130   | 1,930   | 1,910  | 1,270  | 549    |
| 4            | 561    | 1,650  | 4,360   | 1,230  | 1,840  | 1,760   | 2,290  | 1,130   | 1,760   | 1,860  | 1,250  | 863    |
| 5            | 551    | 1,600  | 3,700   | e1,230 | 1,630  | 1,830   | 2,430  | 1,260   | 1,800   | 1,860  | 1,220  | 838    |
| 6            | 700    | 1,650  | 6,110   | e1,300 | 1,640  | 1,680   | 2,760  | 1,310   | 2,900   | 1,810  | 1,180  | 1,050  |
| 7            | 786    | 1,850  | 4,330   | e1,500 | 1,680  | 1,670   | 2,980  | 1,420   | 3,100   | 1,750  | 1,140  | 1,190  |
| 8            | 850    | 1,730  | 3,390   | e1,540 | 1,620  | 1,830   | 3,530  | 1,700   | 3,170   | 1,710  | 1,140  | 1,100  |
| 9            | 963    | 1,700  | 2,910   | 1,540  | 1,570  | 1,780   | 3,110  | 2,130   | 3,200   | 1,620  | 1,130  | 926    |
| 10           | 953    | 1,660  | 2,510   | 1,560  | 1,550  | 1,750   | 2,550  | 2,580   | 3,180   | 1,580  | 1,180  | 916    |
| 11           | 909    | 1,630  | 2,360   | 1,560  | 1,510  | 1,780   | 2,090  | 3,120   | 3,350   | 1,570  | 1,200  | 834    |
| 12           | 911    | 1,600  | 1,970   | e1,370 | 1,450  | 1,670   | 1,840  | 3,580   | 3,230   | 1,540  | 1,260  | 611    |
| 13           | 892    | 1,580  | 2,300   | e1,300 | 1,420  | 2,090   | 1,640  | 3,860   | 3,040   | 1,590  | 1,220  | 666    |
| 14           | 933    | 1,410  | 1,940   | e1,200 | 1,600  | 1,860   | 1,540  | 4,370   | 2,870   | 1,590  | 1,240  | 703    |
| 15           | 957    | 1,430  | 2,000   | e1,160 | 1,580  | 1,560   | 1,350  | 4,690   | 2,690   | 1,590  | 1,220  | 630    |
| 16           | 1,120  | 1,660  | 1,970   | e1,430 | 1,380  | 1,510   | 1,110  | 4,390   | 2,500   | 1,540  | 1,200  | 612    |
| 17           | 1,380  | 1,670  | 1,920   | e1,430 | 1,450  | 1,560   | 920    | 4,040   | 2,280   | 1,520  | 1,300  | 526    |
| 18           | 1,480  | 1,610  | 2,070   | e1,500 | 1,490  | 2,210   | 784    | 4,430   | 2,080   | 1,500  | 1,420  | 548    |
| 19           | 1,230  | 1,600  | 1,880   | e1,400 | 1,480  | 2,380   | 552    | 4,210   | 2,120   | 1,460  | 1,410  | 541    |
| 20           | 1,120  | 1,940  | 1,620   | e1,280 | 1,160  | 2,100   | 765    | 3,870   | 2,300   | 1,430  | 1,310  | 552    |
| 21           | 1,130  | 1,890  | 1,670   | e1,230 | 1,100  | 2,370   | 1,350  | 3,600   | 2,520   | 1,370  | 1,360  | 556    |
| 22           | 1,210  | 1,600  | 1,800   | e1,120 | 902    | 2,860   | 1,240  | 3,980   | 2,430   | 1,360  | 1,360  | 556    |
| 23           | 1,320  | 1,860  | 1,820   | e1,300 | 906    | 2,390   | 1,180  | 3,910   | 2,290   | 1,300  | 1,340  | 503    |
| 24           | 1,390  | 1,840  | 1,770   | e1,450 | 929    | 2,060   | 1,020  | 3,620   | 2,200   | 1,290  | 1,410  | 517    |
| 25           | 1,330  | 1,760  | 1,720   | e1,680 | 923    | 2,070   | 809    | 3,550   | 2,190   | 1,320  | 1,480  | 782    |
| 26           | 1,370  | 1,800  | 1,660   | e2,200 | 825    | 1,760   | 756    | 3,180   | 2,530   | 1,370  | 1,470  | 1,020  |
| 27           | 1,360  | 1,540  | 1,610   | e2,790 | 805    | 1,690   | 796    | 3,140   | 3,150   | 1,390  | 1,450  | 1,070  |
| 28           | 1,430  | 1,430  | 1,600   | e2,470 | 820    | 1,590   | 997    | 3,100   | 3,170   | 1,400  | 1,540  | 881    |
| 29           | 1,640  | 1,370  | 1,540   | e2,090 | ---    | 1,570   | 1,230  | 3,280   | 2,740   | 1,410  | 1,500  | 885    |
| 30           | 2,400  | 1,540  | 1,450   | 2,260  | ---    | 2,350   | 1,370  | 2,990   | 2,490   | 1,350  | 1,500  | 1,230  |
| 31           | 2,080  | ---    | 1,390   | 1,950  | ---    | 2,580   | ---    | 2,670   | ---     | 1,350  | 1,000  | ---    |
| <b>Total</b> | 34,857 | 50,020 | 72,130  | 47,680 | 38,680 | 58,480  | 50,269 | 92,870  | 77,330  | 48,680 | 40,470 | 22,860 |
| <b>Mean</b>  | 1,124  | 1,667  | 2,327   | 1,538  | 1,381  | 1,886   | 1,676  | 2,996   | 2,578   | 1,570  | 1,305  | 762    |
| <b>Max</b>   | 2,400  | 1,940  | 6,110   | 2,790  | 1,880  | 2,860   | 3,530  | 4,690   | 3,350   | 2,290  | 1,540  | 1,230  |
| <b>Min</b>   | 551    | 1,370  | 1,390   | 1,120  | 805    | 1,180   | 552    | 1,130   | 1,760   | 1,290  | 1,000  | 503    |
| <b>Ac-ft</b> | 69,140 | 99,210 | 143,100 | 94,570 | 76,720 | 116,000 | 99,710 | 184,200 | 153,400 | 96,560 | 80,270 | 45,340 |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2013, BY WATER YEAR (WY)

|             | Oct    | Nov    | Dec    | Jan    | Feb    | Mar    | Apr    | May    | Jun    | Jul    | Aug    | Sep    |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>Mean</b> | 1,399  | 1,637  | 1,931  | 2,102  | 2,421  | 3,311  | 5,082  | 6,580  | 6,379  | 2,040  | 1,321  | 1,339  |
| <b>Max</b>  | 2,399  | 2,896  | 4,803  | 9,545  | 7,398  | 8,793  | 14,990 | 12,010 | 13,170 | 6,348  | 2,244  | 2,488  |
| <b>(WY)</b> | (1963) | (1984) | (1965) | (1997) | (1997) | (1986) | (1943) | (1946) | (1974) | (1982) | (2011) | (1985) |
| <b>Min</b>  | 440    | 919    | 793    | 813    | 961    | 939    | 421    | 564    | 397    | 311    | 348    | 435    |
| <b>(WY)</b> | (1936) | (1937) | (1936) | (1937) | (1937) | (1977) | (1977) | (1977) | (1977) | (1977) | (2001) | (1994) |

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## SUMMARY STATISTICS

|                                 | Calendar Year 2012 |        | Water Year 2013 |        | Water Years 1935 - 2013 |              |
|---------------------------------|--------------------|--------|-----------------|--------|-------------------------|--------------|
| <b>Annual total</b>             | 1,250,998          |        | 634,326         |        |                         |              |
| <b>Annual mean</b>              | 3,418              |        | 1,738           |        | 2,960                   |              |
| <b>Highest annual mean</b>      |                    |        |                 |        | 5,506                   |              |
| <b>Lowest annual mean</b>       |                    |        |                 |        | 945                     |              |
| <b>Highest daily mean</b>       | 17,700             | Apr 28 | 6,110           | Dec 6  | 32,000                  | Jan 2, 1997  |
| <b>Lowest daily mean</b>        | 473                | Sep 19 | 503             | Sep 23 | 127                     | Aug 15, 1991 |
| <b>Annual seven-day minimum</b> | 550                | Sep 15 | 539             | Sep 18 | 173                     | Jun 22, 1994 |
| <b>Annual runoff (ac-ft)</b>    | 2,481,000          |        | 1,258,000       |        | 2,144,000               |              |
| <b>10 percent exceeds</b>       | 9,180              |        | 2,980           |        | 7,180                   |              |
| <b>50 percent exceeds</b>       | 1,840              |        | 1,560           |        | 1,840                   |              |
| <b>90 percent exceeds</b>       | 926                |        | 858             |        | 855                     |              |

