

Water-Data Report 2013

**08279000 EMBUDO CREEK AT DIXON, NM**

Upper Rio Grande Basin  
Upper Rio Grande Subbasin

LOCATION.--Lat 36°12'39.08", long 105°54'49.07" referenced to North American Datum of 1983, Rio Arriba County, NM, Hydrologic Unit 13020101, on right bank 750 ft upstream from State Highway 68, 0.5 mi upstream from mouth, 0.5 mi east of Embudo Post Office, and 1.7 mi northwest of Dixon.

DRAINAGE AREA.--305 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--October 1923 to February 1926, October 1926 to September 1955 (annual maximum), water years 1956 to current year. Monthly discharge only for some periods, published in WSP 1312. Figures of daily discharge for July 6-25, 1932, published in WSP 733, and maximum discharges for water years 1931-33, 1935, 1937-38, and 1941 are unreliable and should not be used.

REVISED RECORDS.--WSP 1512: 1931-32, 1941, 1947(M).

GAGE.--Water-stage recorder with satellite telemetry. Prior to July 8, 2008 about 300 feet downstream at a datum of 5,858.60 ft above NGVD of 1929. Prior to Nov. 30, 1938, at site about 1 mile upstream at different datum. Nov. 30, 1938, to Aug. 1, 1941, at site about 0.9 mi upstream at datum about 59.9 ft higher. Aug. 2, 1941, to Sept. 1, 1971, at site 750 ft downstream at datum 9.10 ft lower. Apr. 1956 to Sept. 21, 1962, crest-stage gage.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 6,600 acres, a small part of which is irrigation downstream of the gage.

## 08279000 EMBUDO CREEK AT DIXON, NM—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            | 6.3   | 14    | 24    | e21   | 23    | 21    | 20    | 18    | e4.1 | 1.3  | 2.3   | e0.66    |
| 2            | 6.4   | 16    | 24    | e19   | 23    | 22    | 19    | 22    | e3.9 | 1.3  | 2.4   | e0.66    |
| 3            | 6.4   | 16    | 24    | e20   | 24    | 24    | 20    | 19    | e4.1 | 1.3  | 1.8   | e0.66    |
| 4            | 5.9   | 15    | 23    | e20   | 25    | 25    | 20    | 16    | e3.8 | 1.3  | 1.7   | e0.59    |
| 5            | 4.9   | 17    | 23    | e20   | 23    | 22    | 18    | 16    | e3.4 | 1.3  | 1.6   | e0.80    |
| 6            | 5.5   | 18    | 23    | e20   | 24    | 23    | 16    | 17    | e3.2 | 1.3  | 1.6   | 1.6      |
| 7            | 5.9   | 18    | 24    | 20    | 26    | 26    | 16    | 18    | e3.7 | 1.3  | 1.5   | 2.0      |
| 8            | 9.2   | 18    | 22    | e21   | 25    | 27    | 13    | 14    | e4.0 | 1.2  | 1.4   | 1.6      |
| 9            | e10   | 19    | 19    | 20    | 24    | 28    | 14    | 13    | e4.2 | 1.2  | 1.4   | 0.82     |
| 10           | e10   | 21    | 11    | 21    | 21    | 25    | 15    | 9.8   | e3.9 | 1.4  | 2.2   | 5.9      |
| 11           | e10   | 22    | 12    | 22    | 19    | 22    | 14    | 9.0   | e3.4 | 1.3  | 2.8   | 7.8      |
| 12           | e11   | 16    | 15    | e19   | 21    | 27    | 13    | 7.0   | e3.1 | e1.3 | 1.7   | 5.6      |
| 13           | e14   | 19    | 18    | e19   | 19    | 28    | 11    | 6.2   | e2.8 | e1.2 | 1.6   | 169      |
| 14           | e16   | 22    | 22    | e20   | 23    | 28    | 10    | 5.7   | e2.8 | e1.5 | 1.4   | 237      |
| 15           | e15   | 23    | 25    | e19   | 26    | 29    | 8.1   | 6.1   | e3.1 | 1.9  | 1.3   | 180      |
| 16           | e15   | 26    | 25    | e19   | 21    | 30    | 6.2   | 8.6   | e3.2 | 1.3  | 1.2   | 215      |
| 17           | e14   | 26    | 25    | 19    | 22    | 27    | 7.3   | 10    | e3.1 | 1.1  | 1.0   | 160      |
| 18           | e14   | 27    | 26    | 19    | 24    | 25    | 11    | 8.0   | e2.7 | 1.0  | 1.1   | 139      |
| 19           | e14   | 25    | 28    | 20    | 21    | 23    | 11    | 8.4   | e2.3 | 1.6  | 1.0   | 133      |
| 20           | e14   | 24    | 18    | 20    | 25    | 22    | 9.6   | 8.4   | e2.0 | 1.1  | 5.2   | 95       |
| 21           | e14   | 23    | 18    | 20    | 22    | 23    | 8.1   | 9.2   | e1.6 | 2.8  | 3.8   | 77       |
| 22           | e14   | 24    | 22    | 21    | 23    | 24    | 6.9   | 7.1   | e1.7 | 1.8  | 3.2   | 119      |
| 23           | e14   | 24    | 24    | 21    | 20    | 23    | 6.6   | 5.8   | e1.6 | 1.8  | 1.7   | 169      |
| 24           | e14   | 23    | 26    | 22    | 24    | 17    | 8.9   | 6.4   | e1.4 | 1.9  | 1.1   | 96       |
| 25           | e14   | 22    | 27    | 23    | 21    | 18    | 9.7   | e5.5  | 1.8  | 1.8  | e0.84 | 73       |
| 26           | e13   | 21    | 22    | 24    | 20    | 21    | 10    | e5.4  | 1.7  | 1.8  | e0.76 | 58       |
| 27           | 11    | 20    | 26    | 30    | 21    | 23    | 11    | e6.9  | 1.6  | 1.8  | e0.76 | 56       |
| 28           | 11    | 19    | 20    | 32    | 20    | 21    | 12    | 7.9   | 1.4  | 2.0  | e0.60 | 64       |
| 29           | 12    | 22    | 21    | 27    | ---   | 21    | 13    | 6.9   | 1.4  | 2.1  | e0.61 | 54       |
| 30           | 13    | 25    | 21    | 18    | ---   | 21    | 12    | 5.5   | 1.4  | 2.2  | e0.66 | 47       |
| 31           | 13    | ---   | e21   | 24    | ---   | 18    | ---   | 4.9   | ---  | 2.2  | e0.66 | ---      |
| <b>Total</b> | 350.5 | 625   | 679   | 660   | 630   | 734   | 370.4 | 311.7 | 82.4 | 48.4 | 50.89 | 2,169.69 |
| <b>Mean</b>  | 11.3  | 20.8  | 21.9  | 21.3  | 22.5  | 23.7  | 12.3  | 10.1  | 2.75 | 1.56 | 1.64  | 72.3     |
| <b>Max</b>   | 16    | 27    | 28    | 32    | 26    | 30    | 20    | 22    | 4.2  | 2.8  | 5.2   | 237      |
| <b>Min</b>   | 4.9   | 14    | 11    | 18    | 19    | 17    | 6.2   | 4.9   | 1.4  | 1.0  | 0.60  | 0.59     |
| <b>Ac-ft</b> | 695   | 1,240 | 1,350 | 1,310 | 1,250 | 1,460 | 735   | 618   | 163  | 96   | 101   | 4,300    |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 2013, BY WATER YEAR (WY)

|             | Oct    | Nov    | Dec    | Jan    | Feb    | Mar    | Apr    | May    | Jun    | Jul    | Aug    | Sep    |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>Mean</b> | 36.8   | 35.5   | 31.4   | 29.0   | 30.5   | 46.6   | 138    | 297    | 183    | 46.2   | 47.3   | 39.2   |
| <b>Max</b>  | 116    | 95.5   | 54.3   | 42.2   | 72.7   | 129    | 505    | 1,231  | 813    | 204    | 222    | 190    |
| <b>(WY)</b> | (1942) | (1942) | (1942) | (1985) | (1932) | (1989) | (1942) | (1941) | (1941) | (1937) | (1991) | (1929) |
| <b>Min</b>  | 3.09   | 4.18   | 9.75   | 12.0   | 15.0   | 15.5   | 12.3   | 3.50   | 1.99   | 0.86   | 1.64   | 2.79   |
| <b>(WY)</b> | (1951) | (1951) | (1951) | (1951) | (1951) | (1951) | (2013) | (2002) | (2002) | (1951) | (2013) | (1950) |

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## SUMMARY STATISTICS

|                                 | Calendar Year 2012 |        | Water Year 2013 |        | Water Years 1924 - 2013 |              |
|---------------------------------|--------------------|--------|-----------------|--------|-------------------------|--------------|
| <b>Annual total</b>             | 15,135.4           |        | 6,711.98        |        |                         |              |
| <b>Annual mean</b>              | 41.4               |        | 18.4            |        | 80.3                    |              |
| <b>Highest annual mean</b>      |                    |        |                 |        | 235                     | 1941         |
| <b>Lowest annual mean</b>       |                    |        |                 |        | 12.8                    | 1951         |
| <b>Highest daily mean</b>       | 344                | Apr 27 | 237             | Sep 14 | 2,590                   | May 14, 1941 |
| <b>Lowest daily mean</b>        | 2.0                | Sep 8  | 0.59            | Sep 4  | 0.20                    | Jun 27, 1950 |
| <b>Annual seven-day minimum</b> | 2.6                | Sep 5  | 0.64            | Aug 29 | 0.60                    | Jul 16, 1951 |
| <b>Maximum peak flow</b>        |                    |        | 479             | Sep 22 | <sup>a</sup> 4,200      | Aug 29, 1977 |
| <b>Maximum peak stage</b>       |                    |        | 10.58           | Sep 22 | <sup>b</sup> 10.80      | Aug 1, 2010  |
| <b>Instantaneous low flow</b>   |                    |        | 0.37            | Sep 5  | 0.06                    | Jun 26, 1950 |
| <b>Annual runoff (ac-ft)</b>    | 30,020             |        | 13,310          |        | 58,140                  |              |
| <b>10 percent exceeds</b>       | 113                |        | 26              |        | 197                     |              |
| <b>50 percent exceeds</b>       | 23                 |        | 15              |        | 34                      |              |
| <b>90 percent exceeds</b>       | 4.2                |        | 1.4             |        | 12                      |              |

<sup>a</sup> From rating curve extended above 1,600 ft<sup>3</sup>/s.<sup>b</sup> Maximum gage height, 10.80 ft, Aug. 1, 2010, at new datum.