



Water-Data Report 2008

08410000 Red Bluff Reservoir near Orla, TX

Lower Pecos Basin
Lower Pecos-Red Bluff Reservoir Subbasin

LOCATION.--Lat 31°54'04", long 103°54'35" referenced to North American Datum of 1927, Reeves County, TX, Hydrologic Unit 13070001, at upstream side and near the center of Red Bluff Dam at the service outlet structure on the Pecos River, 2.8 mi upstream from Salt Creek, and 5.2 mi north of Orla.

DRAINAGE AREA.--24,495 mi² of which 3,775 mi² probably is noncontributing.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--February 1937 to February 2003 (contents), October 2003 to current year. Monthly contents only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. Prior to October 2003, nonrecording gage at right end of dam at datum 0.43 ft lower to adjust it to MSL. Satellite telemeter at station.

COOPERATION.--Records of diversions may be obtained from the Red Bluff Water Power Control District.

REMARKS.--Records fair. Interruptions in the record were due to malfunctions of the instruments. Reservoir is formed by a rock-faced earthfill dam 9,200 ft long. The dam was completed and storage began in September 1936. The dam and reservoir are owned and operated by the Red Bluff Water Power Control District. The water is used for power development and for irrigation from Mentone to Grandfalls. The uncontrolled emergency spillway, 790 ft wide, is a cut through natural ground located to the right of right end of dam. The controlled service spillway is equipped with 12 tainter gates that are 25 by 15 ft high. Inflow is regulated by many reservoirs and diversion dams. Data regarding the dam are given in the following table:

| | Elevation (feet) |
|--|---------------------|
| Top of dam..... | 2,856.4 |
| Crest of emergency spillway..... | 2,845.4 |
| Top of gates..... | 2,842.4 |
| Crest of service spillway and bottom of tainter gates..... | 2,827.4 |
| Lowest gated outlet (invert)..... | 2,764.4 |

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 352,000 acre-ft, Sept. 27, 28, 1941, gage height, 2,846.2 ft, observed on nonrecording gage at service spillway (affected by variable drawdown due to flow through tainter gates); minimum contents observed, 11,080 acre-ft, May 13, 1948, gage height, 2,781.4 ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 2,819.27 ft, Feb. 25; minimum elevation, 2,808.53 ft, Sept. 8.

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ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

| Day | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 1 | 2,815.24 | 2,815.11 | 2,818.18 | 2,818.60 | 2,819.11 | 2,819.11 | 2,818.23 | --- | 2,815.57 | 2,812.99 | 2,811.07 | 2,809.00 |
| 2 | 2,815.26 | 2,815.09 | 2,818.19 | 2,818.61 | 2,819.13 | 2,819.14 | 2,818.19 | --- | 2,815.51 | 2,812.89 | 2,811.00 | 2,808.94 |
| 3 | 2,815.29 | 2,815.11 | 2,818.20 | 2,818.62 | 2,819.14 | 2,819.14 | 2,818.18 | 2,817.08 | 2,815.44 | 2,812.80 | 2,810.95 | 2,808.89 |
| 4 | 2,815.30 | 2,815.29 | 2,818.22 | 2,818.64 | 2,819.16 | 2,819.11 | 2,818.14 | 2,817.01 | 2,815.34 | 2,812.71 | 2,810.90 | 2,808.84 |
| 5 | 2,815.30 | 2,815.58 | 2,818.24 | 2,818.66 | 2,819.17 | 2,819.12 | 2,818.10 | 2,816.95 | 2,815.25 | 2,812.61 | 2,810.86 | 2,808.77 |
| 6 | 2,815.30 | 2,815.86 | 2,818.25 | 2,818.67 | 2,819.20 | 2,819.12 | 2,818.08 | 2,816.92 | 2,815.14 | 2,812.51 | 2,810.83 | 2,808.68 |
| 7 | 2,815.29 | 2,816.18 | 2,818.27 | 2,818.69 | 2,819.21 | 2,819.12 | 2,818.05 | 2,816.90 | 2,815.06 | 2,812.41 | 2,810.79 | 2,808.58 |
| 8 | 2,815.25 | 2,816.51 | 2,818.28 | 2,818.70 | 2,819.22 | 2,819.11 | 2,818.01 | 2,816.80 | 2,815.05 | 2,812.34 | 2,810.74 | 2,808.61 |
| 9 | 2,815.20 | 2,816.83 | 2,818.29 | 2,818.72 | 2,819.20 | 2,819.12 | 2,817.98 | 2,816.73 | 2,814.99 | 2,812.28 | 2,810.68 | 2,808.64 |
| 10 | 2,815.17 | 2,817.14 | 2,818.31 | 2,818.73 | 2,819.18 | 2,819.11 | 2,817.96 | 2,816.67 | 2,814.88 | 2,812.27 | 2,810.61 | 2,808.66 |
| 11 | 2,815.15 | 2,817.46 | 2,818.33 | 2,818.74 | 2,819.17 | 2,819.10 | 2,817.88 | 2,816.58 | 2,814.80 | 2,812.28 | 2,810.54 | 2,808.70 |
| 12 | 2,815.12 | 2,817.75 | 2,818.37 | 2,818.77 | 2,819.15 | 2,819.11 | 2,817.84 | 2,816.52 | 2,814.72 | 2,812.24 | 2,810.46 | 2,808.74 |
| 13 | 2,815.10 | 2,817.94 | 2,818.39 | 2,818.81 | 2,819.13 | 2,819.11 | 2,817.81 | 2,816.45 | 2,814.64 | 2,812.21 | 2,810.38 | 2,808.75 |
| 14 | 2,815.09 | 2,817.99 | 2,818.40 | 2,818.83 | 2,819.11 | 2,819.13 | 2,817.80 | 2,816.37 | 2,814.53 | 2,812.18 | 2,810.29 | 2,808.78 |
| 15 | 2,815.06 | 2,817.96 | 2,818.42 | 2,818.86 | 2,819.10 | 2,819.09 | 2,817.76 | 2,816.30 | 2,814.42 | 2,812.13 | 2,810.20 | 2,808.82 |
| 16 | 2,815.04 | 2,817.95 | 2,818.43 | 2,818.89 | 2,819.12 | 2,819.07 | 2,817.76 | 2,816.28 | 2,814.33 | 2,812.08 | 2,810.12 | 2,808.85 |
| 17 | 2,815.03 | 2,817.95 | 2,818.44 | 2,818.90 | 2,819.12 | 2,819.07 | 2,817.76 | 2,816.22 | 2,814.23 | 2,812.08 | 2,810.05 | 2,808.86 |
| 18 | 2,814.99 | 2,817.94 | 2,818.47 | 2,818.92 | 2,819.12 | 2,819.02 | 2,817.72 | 2,816.14 | 2,814.12 | 2,812.01 | 2,810.03 | 2,808.87 |
| 19 | 2,814.98 | 2,817.94 | 2,818.47 | 2,818.93 | 2,819.14 | 2,818.91 | 2,817.72 | 2,816.08 | 2,814.02 | 2,811.93 | 2,809.96 | 2,808.88 |
| 20 | 2,814.98 | 2,817.95 | 2,818.48 | 2,818.94 | 2,819.16 | 2,818.83 | 2,817.73 | 2,816.01 | 2,813.91 | 2,811.86 | 2,809.88 | 2,808.89 |
| 21 | 2,814.98 | 2,817.97 | 2,818.50 | 2,818.92 | 2,819.18 | 2,818.76 | 2,817.71 | 2,815.97 | 2,813.86 | 2,811.80 | 2,809.81 | 2,808.88 |
| 22 | 2,814.96 | 2,817.96 | 2,818.50 | 2,818.98 | 2,819.18 | 2,818.70 | 2,817.70 | 2,815.93 | 2,813.78 | 2,811.72 | 2,809.72 | 2,808.88 |
| 23 | 2,814.97 | --- | 2,818.51 | 2,818.98 | 2,819.20 | 2,818.61 | 2,817.70 | 2,815.87 | 2,813.67 | 2,811.65 | 2,809.64 | 2,808.86 |
| 24 | 2,814.99 | --- | 2,818.52 | 2,819.00 | 2,819.20 | 2,818.53 | 2,817.69 | 2,815.82 | 2,813.57 | 2,811.57 | 2,809.56 | 2,808.82 |
| 25 | 2,815.00 | 2,818.06 | --- | 2,819.03 | 2,819.22 | 2,818.48 | 2,817.61 | 2,815.79 | 2,813.46 | 2,811.49 | 2,809.48 | 2,808.80 |
| 26 | 2,815.02 | 2,818.07 | 2,818.54 | 2,819.06 | 2,819.18 | 2,818.41 | 2,817.54 | 2,815.75 | 2,813.33 | 2,811.43 | 2,809.40 | 2,808.77 |
| 27 | 2,815.04 | 2,818.09 | 2,818.55 | 2,819.08 | 2,819.15 | 2,818.34 | 2,817.47 | 2,815.71 | 2,813.20 | 2,811.40 | 2,809.32 | 2,808.75 |
| 28 | 2,815.05 | 2,818.11 | 2,818.55 | 2,819.08 | 2,819.13 | 2,818.27 | --- | 2,815.66 | 2,813.08 | 2,811.34 | 2,809.24 | 2,808.72 |
| 29 | 2,815.07 | 2,818.12 | 2,818.57 | 2,819.09 | 2,819.12 | 2,818.25 | --- | 2,815.62 | 2,813.00 | 2,811.28 | 2,809.16 | 2,808.69 |
| 30 | 2,815.08 | 2,818.14 | 2,818.59 | 2,819.08 | --- | 2,818.26 | --- | 2,815.59 | 2,812.98 | 2,811.21 | 2,809.11 | 2,808.66 |
| 31 | 2,815.10 | --- | 2,818.60 | 2,819.11 | --- | 2,818.27 | --- | 2,815.58 | --- | 2,811.14 | 2,809.06 | --- |
| Mean | 2,815.11 | --- | --- | 2,818.86 | 2,819.16 | 2,818.86 | --- | --- | 2,814.33 | 2,812.03 | 2,810.12 | 2,808.79 |
| Max | 2,815.30 | --- | --- | 2,819.11 | 2,819.22 | 2,819.14 | --- | --- | 2,815.57 | 2,812.99 | 2,811.07 | 2,809.00 |
| Min | 2,814.96 | --- | --- | 2,818.60 | 2,819.10 | 2,818.25 | --- | --- | 2,812.98 | 2,811.14 | 2,809.06 | 2,808.58 |

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