

Water-Data Report 2007

**08384000 LAKE SUMNER NEAR FORT SUMNER, NM**

Upper Pecos Basin  
Pecos Headwaters Subbasin

LOCATION.--Lat 34°36'30", long 104°23'06" referenced to North American Datum of 1983, De Baca County, NM, Hydrologic Unit 13060001, near center of dam on Pecos River, 5.0 mi northeast of Guadalupe, 12.2 mi northwest of Fort Sumner, and at mile 702.0.

DRAINAGE AREA.--4,390 mi<sup>2</sup>, approximately (contributing area).

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--December 1938 to September 1965 (monthend elevations and contents), October 1965 to current year. Monthend elevations September 1937 to November 1938 published in reports of Pecos River Commission. Elevations and contents May 27, 1937, to June 10, 1937, in WSP 842. Prior to October 1974, published as "Alamogordo Reservoir."

REVISED RECORDS.--WSP 1732: 1939-54 (contents). WSP 1923: 1939-53(M).

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is NGVD of 1929 (levels by Bureau of Reclamation). Apr. 1, 1946, to Sept. 30, 1957, water-stage recorder above elevation 4,234.25 ft, nonrecording gage below. Oct. 1, 1988, to current year, water-stage recorder above elevation 4,238.00 ft, nonrecording gage below.

COOPERATION.--Records provided by Bureau of Reclamation.

REMARKS.--Lake is formed by earthfill dam; completed and storage began in Aug. 1937. Capacity, 128,657 acre-ft, from capacity table dated Nov. 2001 (1988 NGVD) between elevation 4,201.89 ft and elevation 4,283.89 ft, top of flood pool, sill of outlet gate, and elevation 4,275.0 ft, normal operating level. Capacity by original survey was 132,200 acre-ft. Dead storage 2,500 acre-ft. Reservoir is used to store water for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 138,300 acre-ft, May 23-30, June 1-10, July 21, Sept. 22, 23, 30, Oct. 12, Nov. 4, 5, 30, Dec. 23, and 24, 1941, elevation, 4,275.00 ft; maximum elevation, 4,276.10 ft June 3, Sept. 8, 1958; no storage, July 28 to Aug. 2, 1951, elevation, 4,200.70 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 39,380 acre-ft, Feb. 26, elevation, 4,261.57 ft; minimum, 20,170 acre-ft, Sept. 30, elevation 4,252.52 ft.

## 08384000 LAKE SUMNER NEAR FORT SUMNER, NM—Continued

**RESERVOIR STORAGE, ACRE FEET**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**  
**DAILY OBSERVATION AT 0800 HOURS**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	23,230	21,840	25,500	28,920	31,960	37,960	27,950	26,100	24,410	24,730	25,200	23,700
2	23,130	21,960	25,630	29,020	32,070	36,660	27,530	26,080	24,330	26,840	25,200	23,420
3	23,070	22,100	25,690	29,130	32,140	34,350	27,420	26,260	24,220	26,780	25,260	23,160
4	23,000	22,280	25,800	29,200	32,200	31,580	27,340	26,240	24,130	26,260	25,180	22,830
5	22,900	22,420	25,940	29,330	32,300	29,240	27,320	26,200	24,000	25,910	25,040	22,510
6	22,830	22,560	26,040	29,410	32,410	28,040	27,260	26,140	23,870	25,650	24,930	21,960
7	22,760	22,700	26,100	29,480	32,500	27,700	27,220	26,080	23,650	25,440	24,850	20,930
8	22,700	22,830	26,280	29,630	32,590	27,730	27,180	26,000	23,500	25,160	24,730	21,100
9	22,700	23,000	26,340	29,560	32,680	27,730	27,140	25,960	23,330	24,990	24,650	21,170
10	22,810	23,150	26,490	29,720	32,770	27,700	27,100	25,890	23,280	26,200	24,560	21,210
11	22,810	23,280	26,590	29,870	32,860	27,680	27,040	25,810	23,280	26,860	24,440	21,230
12	22,760	23,370	26,680	29,950	32,980	27,660	27,210	25,710	23,370	26,880	24,330	21,240
13	22,700	23,520	26,780	30,060	33,040	27,620	27,170	25,610	23,610	26,880	24,260	21,230
14	22,670	23,650	26,920	30,150	33,090	27,680	27,190	25,510	23,500	26,880	24,150	21,210
15	22,630	23,780	27,010	30,230	33,190	27,600	27,150	25,420	23,410	26,830	24,040	21,170
16	22,610	23,910	27,130	30,300	33,310	27,520	27,070	25,280	23,280	26,740	23,920	21,100
17	22,580	24,040	27,230	30,340	33,400	27,500	27,050	25,180	23,150	26,720	23,810	21,070
18	22,540	24,150	27,310	30,300	33,470	27,460	26,980	25,180	23,030	26,610	23,660	21,140
19	22,470	24,240	27,440	30,520	33,590	27,420	26,920	25,100	22,900	26,490	23,560	21,090
20	22,420	24,330	27,540	30,710	33,660	27,380	26,860	25,160	22,860	26,400	23,460	21,020
21	22,370	24,440	27,640	30,910	33,730	27,270	26,760	25,300	22,670	26,320	23,330	20,980
22	22,300	24,540	27,730	30,960	33,800	27,290	26,660	25,380	22,540	26,220	23,200	21,000
23	22,230	24,650	27,830	31,030	33,900	27,290	26,550	25,340	22,400	26,120	22,830	20,950
24	22,190	24,750	27,930	31,140	35,130	27,460	26,490	25,220	22,300	26,000	22,370	21,770
25	22,180	24,850	28,020	31,280	37,180	27,640	26,410	25,060	22,180	25,910	21,950	21,700
26	22,100	24,970	28,120	31,320	39,380	27,770	26,320	24,930	22,030	25,770	21,740	21,740
27	22,000	25,080	28,240	31,460	39,060	27,930	26,300	24,830	21,930	25,690	21,540	21,860
28	21,960	25,100	28,300	31,550	38,620	28,020	26,240	24,850	22,020	25,590	21,420	20,270
29	21,910	25,160	28,430	31,660	---	27,970	26,200	24,750	22,020	25,500	21,930	20,220
30	21,860	25,280	28,660	31,730	---	27,910	26,140	24,850	22,670	25,400	23,960	20,170
31	21,790	---	28,760	31,820	---	27,870	---	24,520	---	25,300	23,910	---
<b>Max</b>	23,230	25,280	28,760	31,820	39,380	37,960	27,950	26,260	24,410	26,880	25,260	23,700
<b>Min</b>	21,790	21,840	25,500	28,920	31,960	27,270	26,140	24,520	21,930	24,730	21,420	20,170
<b>End of month elevation, in feet</b>	4,253.47	4,255.30	4,257.08	4,258.47	4,261.28	4,256.65	4,255.80	4,255.99	4,253.97	4,255.37	4,254.64	4,252.52
<b>Change in contents, in acre-feet</b>	-1,520	+3,490	+3,480	+3,060	+6,800	-10,750	-1,730	-1,620	-1,850	+2,630	-1,390	-3,740

	Calendar Year 2006	Water Year 2007
<b>Max</b>	28,760	39,380
<b>Min</b>	9,140	20,170

08384000 LAKE SUMNER NEAR FORT SUMNER, NM—Continued

