

09421000 Lake Mead At Hoover Dam, AZ-NV

Lower Colorado-Lake Mead Basin
Lake Mead Subbasin

LOCATION.--Lat 36°00'58", long 114°44'13" referenced to North American Datum of 1927, in NE ¼ SW ¼ sec.3, T.30 N., R.23 W., Clark County, NV, Hydrologic Unit 15010005, in powerhouse at downstream side of Hoover Dam, and at mi 342.2 upstream of the Southerly International Boundary.

DRAINAGE AREA.--171,700 mi², including 3,959 mi² in Great Divide basin in southern Wyoming, which is noncontributing (previously considered part of the Missouri River basin).

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Contents: Feb 1935 to current year. Diversions (monthly totals only): to Boulder City area, since Oct 1935; to Henderson and Las Vegas areas, since Apr 1942; combined diversions since Oct 1968. Prior to 1946 published as "at Boulder Dam."

REVISED RECORDS.--WSP 899: 1935-39.

GAGE.--Water-stage indicator read once daily at midnight, with supplementary water-stage recorder. Datum of gage is 0.00 ft to Local Powerhouse datum.

COOPERATION.--Records of gage height and contents furnished by Bureau of Reclamation. Records of diversions from Lake Mead furnished by Bureau of Reclamation and Colorado River Commission of Nevada.

REMARKS.--Reservoir is formed by concrete arch-gravity dam; storage began Feb 1, 1935; dam completed Mar 1, 1936. Total capacity (based on 1963-64 resurvey by Coast and Geodetic Survey; capacity table put into use Apr 1, 1967), 29,755,000 acre-ft, consisting of the following: Dead storage, 2,378,000 acre-ft below gage height 895.0 ft--gate sills in outlet towers; usable contents, 26,159,000 acre-ft between gage heights 895.0 ft and 1,221.4 ft (top of automatic spillway gates in raised position); uncontrolled storage, 1,218,000 acre-ft between gage heights 1,221.4 ft and 1,229.0 ft (maximum water surface). Reservoir is used to store water for flood control, irrigation, municipal water supply, power development, and recreation. Figures given herein represent usable contents.

DIVERSIONS FROM LAKE MEAD: Diversions to Boulder City area at dam; diversions to Henderson and Las Vegas areas from intakes 6 mi upstream. Diversions measured by Venturi meters.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 27,790,000 acre-ft, Jul 29, 30, 1941 (on basis of original bathymetry), gage height, 1,220.45 ft; maximum gage height, 1,225.85 ft, Jul 24, 1983 (equivalent to 26,868,000 acre-ft on basis of resurveyed bathymetry of 1963-64); minimum contents (since 1940), 10,695,000 acre-ft, Apr 26, 1956, gage height, 1,083.21 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 15,532,000 acre-ft, Feb 26, gage height 1,141.31 ft; minimum, 13,887,000 acre-ft, Sep 30, gage height, 1,125.36 ft.

09421000 Lake Mead At Hoover Dam, AZ-NV—Continued

RESERVOIR STORAGE, THOUSAND ACRE FEET
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY OBSERVATION AT 2400 HOURS

| Day | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 1 | 12,501 | 12,495 | 12,528 | 12,867 | 13,025 | 13,060 | 12,914 | 12,452 | 12,124 | 11,935 | 11,894 | 11,953 |
| 2 | 12,494 | 12,494 | 12,539 | 12,866 | 13,040 | 13,057 | 12,894 | 12,440 | 12,117 | 11,925 | 11,897 | 11,947 |
| 3 | 12,487 | 12,502 | 12,550 | 12,868 | 13,047 | 13,042 | 12,879 | 12,438 | 12,105 | 11,917 | 11,900 | 11,945 |
| 4 | 12,481 | 12,507 | 12,563 | 12,872 | 13,054 | 13,018 | 12,857 | 12,439 | 12,099 | 11,918 | 11,899 | 11,938 |
| 5 | 12,491 | 12,510 | 12,575 | 12,879 | 13,052 | 12,997 | 12,846 | 12,429 | 12,094 | 11,912 | 11,900 | 11,933 |
| 6 | 12,500 | 12,506 | 12,585 | 12,889 | 13,050 | 12,978 | 12,842 | 12,417 | 12,076 | 11,923 | 11,908 | 11,932 |
| 7 | 12,506 | 12,501 | 12,593 | 12,897 | 13,052 | 13,004 | 12,821 | 12,403 | 12,061 | 11,917 | 11,914 | 11,934 |
| 8 | 12,507 | 12,498 | 12,609 | 12,905 | 13,053 | 13,059 | 12,797 | 12,385 | 12,055 | 11,912 | 11,916 | 11,944 |
| 9 | 12,507 | 12,503 | 12,619 | 12,918 | 13,061 | 13,116 | 12,780 | 12,371 | 12,039 | 11,911 | 11,932 | 11,944 |
| 10 | 12,507 | 12,508 | 12,625 | 12,925 | 13,072 | 13,153 | 12,758 | 12,372 | 12,033 | 11,908 | 11,949 | 11,949 |
| 11 | 12,507 | 12,517 | 12,635 | 12,928 | 13,072 | 13,153 | 12,739 | 12,375 | 12,028 | 11,917 | 11,952 | 11,951 |
| 12 | 12,507 | 12,517 | 12,648 | 12,936 | 13,076 | 13,141 | 12,718 | 12,366 | 12,027 | 11,929 | 11,956 | 11,962 |
| 13 | 12,516 | 12,517 | 12,666 | 12,944 | 13,081 | 13,123 | 12,703 | 12,343 | 12,022 | 11,930 | 11,956 | 11,975 |
| 14 | 12,520 | 12,510 | 12,685 | 12,954 | 13,081 | 13,104 | 12,679 | 12,330 | 12,026 | 11,930 | 11,958 | 11,984 |
| 15 | 12,522 | 12,502 | 12,708 | 12,959 | 13,081 | 13,105 | 12,666 | 12,312 | 12,031 | 11,928 | 11,959 | 11,978 |
| 16 | 12,525 | 12,506 | 12,726 | 12,954 | 13,092 | 13,107 | 12,656 | 12,291 | 12,018 | 11,927 | 11,968 | 11,975 |
| 17 | 12,529 | 12,512 | 12,743 | 12,950 | 13,101 | 13,094 | 12,645 | 12,277 | 12,006 | 11,928 | 11,975 | 11,967 |
| 18 | 12,523 | 12,518 | 12,754 | 12,946 | 13,100 | 13,080 | 12,633 | 12,263 | 11,997 | 11,934 | 11,987 | 11,958 |
| 19 | 12,519 | 12,521 | 12,761 | 12,960 | 13,093 | 13,063 | 12,635 | 12,243 | 11,983 | 11,936 | 11,999 | 11,957 |
| 20 | 12,519 | 12,523 | 12,777 | 12,965 | 13,087 | 13,052 | 12,632 | 12,226 | 11,979 | 11,952 | 12,005 | 11,964 |
| 21 | 12,509 | 12,513 | 12,780 | 12,974 | 13,086 | 13,034 | 12,621 | 12,218 | 11,966 | 11,955 | 11,997 | 11,973 |
| 22 | 12,505 | 12,513 | 12,790 | 12,976 | 13,081 | 13,023 | 12,602 | 12,215 | 11,965 | 11,949 | 11,982 | 11,978 |
| 23 | 12,505 | 12,512 | 12,803 | 12,972 | 13,076 | 13,022 | 12,584 | 12,202 | 11,961 | 11,939 | 11,976 | 11,978 |
| 24 | 12,504 | 12,500 | 12,815 | 12,971 | 13,081 | 13,002 | 12,567 | 12,193 | 11,963 | 11,925 | 11,969 | 11,973 |
| 25 | 12,503 | 12,500 | 12,815 | 12,973 | 13,075 | 12,983 | 12,552 | 12,190 | 11,967 | 11,912 | 11,954 | 11,974 |
| 26 | 12,493 | 12,494 | 12,818 | 12,985 | 13,069 | 12,965 | 12,534 | 12,180 | 11,965 | 11,908 | 11,961 | 11,984 |
| 27 | 12,499 | 12,500 | 12,818 | 12,989 | 13,064 | 12,956 | 12,522 | 12,169 | 11,952 | 11,911 | 11,962 | 11,995 |
| 28 | 12,507 | 12,502 | 12,818 | 13,000 | 13,058 | 12,951 | 12,504 | 12,162 | 11,951 | 11,908 | 11,970 | 12,003 |
| 29 | 12,504 | 12,506 | 12,835 | 13,005 | 13,062 | 12,951 | 12,478 | 12,149 | 11,949 | 11,903 | 11,960 | 12,010 |
| 30 | 12,495 | 12,520 | 12,848 | 13,005 | --- | 12,951 | 12,463 | 12,138 | 11,941 | 11,900 | 11,962 | 12,013 |
| 31 | 12,494 | --- | 12,860 | 13,017 | --- | 12,940 | --- | 12,132 | --- | 11,890 | 11,955 | --- |
| Max | 12,529 | 12,523 | 12,860 | 13,017 | 13,101 | 13,153 | 12,914 | 12,452 | 12,124 | 11,955 | 12,005 | 12,013 |
| Min | 12,481 | 12,494 | 12,528 | 12,866 | 13,025 | 12,940 | 12,463 | 12,132 | 11,941 | 11,890 | 11,894 | 11,932 |
| Gege height, in feet, at end of month. | 1,110.95 | 1,111.22 | 1,114.81 | 1,116.46 | 1,116.93 | 1,115.65 | 1,110.61 | 1,107.05 | 1,104.98 | 1,104.42 | 1,105.13 | 1,105.76 |
| Change in contents, in acre-feet. | -11,000 | +23,000 | +340,000 | +157,000 | +45,000 | -122,000 | -477,000 | -331,000 | -191,000 | -51,000 | +65,000 | +58,000 |
| Diversions, in acre-feet. | 33,118 | 27,121 | 35,341 | 39,929 | 45,636 | 45,089 | 49,169 | 50,489 | 39,455 | 44,350 | 32,480 | 25,962 |

| | Calendar Year 2007 | Water Year 2008 |
|---|--------------------|-----------------|
| Max | 14,353 | 13,153 |
| Min | 12,481 | 11,890 |
| Change in contents, in acre-feet | -1,150,000 | -495,000 |
| Diversions, in acre-feet | 484,431 | 468,139 |