SUMMARY OF THE JUNE 1993 WEATHER ON THE MONTEREY PENINSULA, CALIFORNIA

General: June's weather was most unusual! Record and near record high temperatures and rainfall were prominent weather features of the month. Number of fog days and wind were near to below seasonal normal expectation.

Temperature: Wide swings in the temperature were features of the June 1993 weather on the Monterey Peninsula -- and many daily records were set. The overall average of 61.6°F is the second highest temperature in this category for June in at least 43 years, beaten only by 61.9°F in 1958. Normal is 58.6°F. The many above normal maximums contributed most to June's warm anomaly. The 71.1°F average maximum is 4.0°F above normal and, along with June 1991, is exceeded by 72.0°F in 1976, 71.5°F in 1973, and 71.2°F in 1958. The average daily minimum of 52.1°F, although 0.9°F above normal, is not a record -- three other June's were warmer (topped by 54.1°F in June 1992). The 97°F reading on 25 June exceeded the previous record for the date (96°F in 1976) and, along with the 97°F for 17 July 1988, it is the warmest day (any month) since the 42+ year record temperature of 104°F on 05 October 1987. There are only 21 days in the past 42 years (including 25 June 1993) on which temperatures reached 97°F or higher (five in June, one in July, ten in September and five in October) at the National Weather Service Climate Station, Monterey.

The warm early morning minimum of 70.2°F on 25 June 1993 is the only minimum in the 70's in June in at least 42 years. In fact, there are only three other minimums of 70°F or higher for any day in any month in the past 42 years -- all of them in the month of October, topped by 73°F on 02 October 1980.

Other daily temperature records were set or tied: minimum of 55°F on 02 June exceeded 54°F in 1992; the 60°F minimum on 17 June topped 55°F in 1958; and the lows of 54°F on 10 and 20 June tied records for the individual dates. Oddly enough, there was also a tied record for a low minimum, namely 47°F, on 23 June.

Precipitation: Rainfall in June shared the weather spotlight with temperature. The 0.84" of rain falling between the 4th and 7th of June was over four times the monthly normal of 0.20", and the second heaviest June rain in at least 43 years of National Weather Service Climate Station rainfall records. June 1967 holds the record with 1.56" on 16 days with measurable rain (nine of which were 0.03" or less).

June 30th brings the 1992/1993 rain year to a close -- 30.20" fell in the rain year just completed (01 July 1992 through 30 June 1993). That's the second wettest year in at least the last 42 years, topped by 40.64" in the 1982/1983 rain year. Normal rainfall is 18.86", and median rainfall is 16.55". This past rain year (1992/93) is the first year with rainfall both above normal and above the median in the past seven (including this year). The 1991/1992 rainfall of 17.97" was above the median, but below the normal; it can be considered the first indication of a break in the recent drought.

The El Nino phenomenon, rooted in the tropics, is widely held to be responsible for the return of the excessive rains and snows to all of California this year. Warm eastern and central equatorial and tropical South Pacific Ocean sea-surface temperatures, a mark of El Nino, continues into this summer. Further, relatively warm extreme eastern North Pacific Ocean sea-surface temperatures also continue off most of the California Coast (with anomalies of up to 5°F recorded in the past several months). It is still far too early to foretell (with any degree of credibility) the general nature of the precipitation patterns for the...
1993/94 season. The Extended Forecast Section of the National Weather Service in Washington, D.C., is forecasting below normal rainfall (and above normal temperatures) through September, which has little meaning to the local area since these are three of our four driest months of the year.

**Fog:** The number of fog days (i.e., days with one or more hours of fog) in June 1993 was near the 20-year normal of 15, but for most fog days, the period of fog was less than six hours, and light; and on two of the days (04 and 06 June) the fog was closely tied to the rain. Thus, the perception of June 1993 (at least after 06 June) as much clearer than usual is quite correct. The fog season has yet to begin in earnest on the Monterey Peninsula. July and August are normally the foggiest months of the year on the Central California Coast.

**Wind:** Winds were below seasonal expectation in June 1993, with characteristically low values on the many warm days. The Airport average, based on daily hourly wind observations from 6 AM to 11 PM, was 5.1 miles per hour (mph), while the average daily high wind gust at the National Weather Service Climate Station was 24 mph, which is one mile per hour lower than the 20-year June average. High wind gust for the past month: 34 mph was recorded on 22 June.