PM10 - Grass Valley (Tables 5, 12)

There were no PM10 samplers located in western Nevada County between August of 2003 through October of 2004. The one Hi-Volume sampler that operated within the Grass Valley city limits was shutdown permanently in July of 2000. The District did install a BAM in the Grass Valley area in October of 2004. Unfortunately, because of the complex terrain and resulting microclimates, it is very difficult to collected PM10 data that is representative of the Grass Valley area. The 12 years of Hi-Vol data collected at the downtown site showed a steady improvement in the annual geometric mean. This same improvement is not so evident with the twelve years of TEOM data. Numerous days with significant wildfire smoke incursions resulted in some of the highest PM10 values ever-recorded in Grass Valley during 1999. All nine exceedances of the CAAQS in 1999 were directly attributable to smoke transported into the foothill region from wildfires in Northern California. 2003 was one of our cleanest years to date, but because of the regrettable termination of the TEOM 2003 was also a non-representative year. Table 12 tells the story. 2005 was the first representative year of BAM data in Grass Valley. The BAM data shows the PM10 values to be at or near an historical low.

Long Term Outlook: It is expected that with continued, and possibly increased prescribed fire activity, PM10 levels could increase during years when weather is less conducive to good smoke dispersion. The anticipated increases in prescribed burning have the potential to wreak havoc on air quality in the foothill region. Although the much anticipated increases in prescribed burning have been forecasted for some years now, no real increases in prescribed burning have been observed.