

4.e: Unmonitored Area Analysis

Utah DAQ did not conduct an unmonitored area analysis (UAA) for this PM_{10} SIP. The maintenance areas are small and reasonable coverage is provided for by the five PM_{10} monitors used in Utah DAQ's monitored attainment test (see 4.d).

Spatial interpolation methods examined for conducting the UAA were too simple and inherently contained a large degree of uncertainty. Some of the uncertainty is due to the lack of observed speciation data.

PM_{10} filters were collected, but it was found that much of the secondary particulate nitrate had been volatilized. This is likely due to the age of the filters, which are greater than five-years old. Since nitrate makes up much of measured winter-time inversion PM_{10} , conducting a speciated UAA was not possible.

The grid-cell windows collocated with Utah's PM_{10} monitors represent five distinct 144 km^2 areas. These areas encompass the bulk of urban and industrial activity along the Wasatch Front. The figure below shows the area covered by the five PM_{10} monitors and their collocated nine-cell windows:

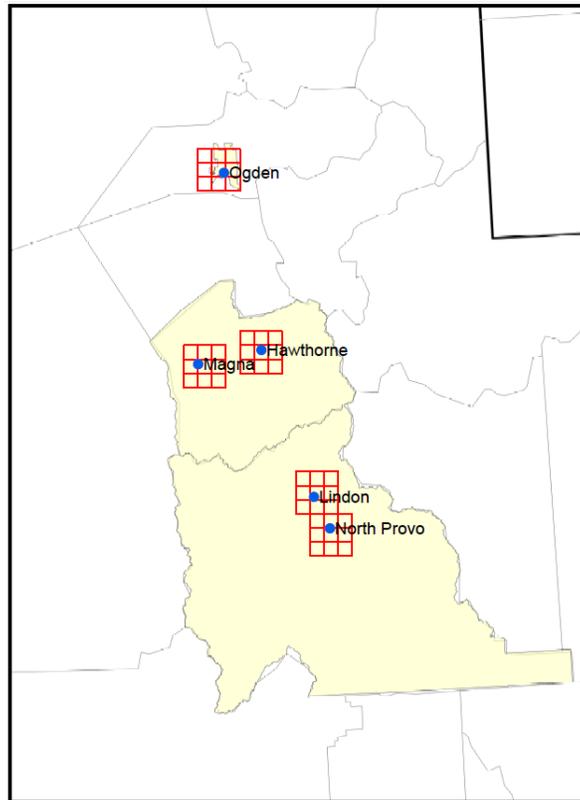


Figure 4.e.1: PM_{10} maintenance areas and grid-cell windows used for monitored attainment test. Beige shading illustrates PM_{10} maintenance areas. Red lines show the nine-cell window collocated with PM_{10} monitors. Blue dots represent location of PM_{10} monitors.