



Air Quality Monitoring Study for the Grand Valley Provides Data and Improves Understanding.

The Challenge

Within the Grand Junction air shed, there is only one official particulates monitor, located at the top of the Powell Building in downtown Grand Junction. Yet particulate concentrations are likely to vary dramatically across the valley because of its extremely varied terrain. The limited coverage hinders our understanding of what may be taking place. In turn, this limits our ability to provide good data, necessary to address community concerns about health effects. Even short term exposure to high levels of particulates can cause problems, especially for children, the elderly, and those who already suffer from respiratory and other ailments.

The Plan

After four years of reviewing a range of air quality monitors, Citizens for Clean Air (CCA) has identified a low cost, reliable option that produces high quality data on particulates. We are utilizing monitors manufactured by "Purple Air", an LLC with headquarters in Utah (<https://www.purpleair.com>) to collect and report particulate activities in our region. The Weather Underground, a company owned by IBM, has endorsed it. And the Utah Department of Environmental Quality reports Purple Air data on their website.

We have also done some in-house evaluation, comparing Purple Air monitor values to those of the EPA-certified particulates monitor in downtown Grand Junction. In an initial assessment, the results from the two monitors were surprisingly close. To provide ongoing quality control, a Purple Air monitor has been located next to the Powell building EPA-certified monitor with assistance from the Colorado Department of Public Health and the Environment.

The Next Step

Thanks to individual donations, CCA has placed 25 monitors in the Grand Valley so far. We anticipate the need for even more. We are in the process of installing the units in strategic locations throughout the region. For the study to be a success, we invite interested community members to participate! An area map shows an aerial view of locations where monitors are installed and reporting, and anyone with a computer can visit the map and see real time data as well as other information:

<https://www.purpleair.com/map?&zoom=12&lat=39.09864026298141&lng=-108.56749455168722&clusterize=30&orderby=L&latr=0.2278057455769371&lng=0.4717254638671875>

We invite questions and comments. For more information contact Gerald C. Nelson, PhD., nelson.gerald.c@gmail.com, or Karen Sjoberg, Citizens for Clean Air, citizensforcleanairgj@gmail.com, 970-242-1054.