

Draft submission – 23 January 2008

During the Southern California wildfires in October 2007, AIRNow, EPA's nationwide operational real-time air quality data and forecast system, engaged with state and local air quality officials to assist monitoring and forecasting efforts, adapting to the extreme event. Further, AIRNow disseminated special news pegs to the media and public about particulate air pollution. These efforts got relevant data to the public and media in near real time despite the extraordinary conditions.

AIRNow receives data from state and local monitors; during the fires data from the established monitoring network in California was already flowing, as usual, to the AIRNow Data Management Center (DMC). The California Air Resources Board also deployed five mobile particulate monitors in the areas surrounding the wildfires to provide additional coverage. AIRNow DMC staff adjusted automated quality control criteria for local monitoring sites to ensure that the unusually high and variable readings were not flagged and discarded as 'bad' data.

AIRNow made several efforts to ensure that relevant air quality data was easily and widely available. Special mapping domains and timing cycles, incorporating the regular and additional monitors, were initiated to make particularly relevant data easily available on-line. *In-situ* data and map and satellite images were provided to the media through standard operational reports (i.e., standard Air Quality Index (AQI) reporting) and special "Smog Stories." These are timely event summaries with graphics describing air pollution events; previous work with weather media providers has optimized these releases to facilitate media use of the information so that near-real-time data gets to the public. A number of Smog Stories were released during the wildfires; some were picked up by the media.

Lessons Learned

- Official particulate AQI is reported in 24-hr averages, which can be inappropriate during wildfires. 3-hr averages were reported during the wildfires. The wildfire-only existence of two averages can be confusing. This methodology is documented, but communications using these averages must be very clear in the absence of an official shorter time averages for particulate. For official operational reporting such as AQI, contingencies for extraordinary events are helpful.
- Timing of satellite overpasses can make same-day media coverage with satellite imagery difficult. Consistent, reliable access to imagery is important. AIRNow was not always able to obtain the required data quickly enough to meet deadlines.
- Consistently producing air quality news pegs draws more media attention and creates user demand for data and imagery.
- Different types of media (e.g. online vs. television) require different image formats and different amounts of information. Stories should be prepared in multiple formats to accommodate this. Contact with and feedback from media before the event is very helpful for communication during the event.

- Co-release of other information relevant to human impacts of air pollution (e.g., the number of children or asthma sufferers exposed to unhealthy air) may increase interest in stories.