

Workshop Executive Summary

March 5, 2013

Dust Workshop History

- First workshop was held on March 6, 2012
 - Half of workshop was to discuss all aspects of the dust problem.
 - Half of the workshop was to develop goals in the areas of (1) prevention, (2) detection and prediction and (3) education and response.
- Second workshop was to update information from last year, and revisit the recommendations and goals from the first workshop.
- **Preliminary 2012 data shows:**
 - No fatalities occurred on Arizona highways attributed to dust.
 - From 2011 to 2012 the I-10 corridor had 50% less incidents related to dust.

Prevention

- Progress:
 - Focus on specific problem areas:
 - ADOT dust committee analysis of dust related incident and recommendation for ITS implementation on I-10. ([Farzana Yasmin – ADOT](#))
 - Analysis of 2000-2011 dust related traffic incident ([Ken Waters – NWS](#))
- Future goals:
 - Continue on with long-term goals from 2012 and make more specific:
 - Identify and focus on specific problem areas; analyses related to highway infrastructure.
 - Implement road regulation changes
 - Recommend best management practices for land users and owners; related to PM10 attainment issues
 - Educating growers, construction crews and developers on containment issues.

Detection and Prediction Progress

- Recruit spotters in strategic areas:
 - The NWS Tucson and Phoenix offices have increase spotters by 20% in dust prone areas. (Ken Waters and Ken Drozd – NWS)
- Compile a partners list:
 - List has been developed. Many in this community are present today.
- Development of high-resolution weather models:
 - Continuing the development of high-resolution weather models for dust events. (Mike Leuthold and Ave Arellano – UofA)
- Establish an Arizona mesonet:
 - NWS Phoenix working to create a Dust Detection network for the problem areas. (Ken Waters – NWS)

Detection and Prediction

- Future goals:
 - Continue to expand the dust detection network with more spotters and inexpensive sensors before the 2013 monsoon.
 - Continue to enhance weather forecasting models incorporating new data:
 - Take into account vegetation and soil moisture changes from satellite data.
 - Use LIDARS to supplement traditional weather radar.
 - Use climatological data.
 - Increase the use of social media to relay dust reports (e.g. Twitter) and improve the public's situational awareness.

Education and Response Progress

- “Pull Aside, Stay Alive” Dust Storm Awareness Campaign Report Summary ([Tim Tait – ADOT](#))
 - Created a dust storm PSA
 - Number of TV clips collected: 90
 - Number of clips estimated to have been published around the country: more than 500
 - Publicity Value
 - Total Publicity Value: \$389,710
 - Notable Coverage
 - TV Segments: CNN and The Weather Channel
 - AP Story: The New York Times, Washington Post, Fox News, MSNBC and major daily newspapers around the country
- More aggressive use of overhead sign boards between Phoenix and Tucson.
- Expanded use of 511 system to get information out about dust events.
- Haboob haiku contest to raise public awareness about dust storms.

Education and Response Goals

- Future goals:
 - Reinvigorate “Pull aside, stay alive” campaign again in 2013 along with another haiku contest.
 - Expand this campaign into social media through local PIOs.
 - Get more information into venues such as rest areas, gas stations and restaurants along highways.
 - Revise messaging to advise people about not driving into dust storms; advise them on what to do.
 - Communicate the differences between types of dust events – long-term, sustained events versus sudden monsoon storms.
 - Develop a Dust Threat Index based on work by NWS.
 - Increase dynamic messaging signs linked to enhanced monitoring capabilities.