Dust Workshop Discussion Session Notes (3 March 2020 at Central Arizona College)

- Dust has a direct cost, but is there an indirect cost in terms of time and money? What about detour time due to traffic diversions along with additional traffic on secondary roads causing damage and wear and tear on those roads? Can we find a way to better determine indirect costs in Arizona, New Mexico, and west Texas?
  - Tough to quantify, but significant damage (chips in the road for detour NM 9...cannot handle the commercial traffic)
  - Traffic issues for Gila River Indian Community due to I-10 diversions; also significantly impacts traffic times
  - Two-lane frontage road along I-10 near Coolidge also gets wear and tear
  - San Simone area?
  - Madison from Maricopa County DEM suggests EMs update local hazard mitigation plan that is multi-jurisdictional (have to do every 5 years; bring them up to local EM who will bring that up to county EM)
  - How does ADOT, NMDOT, TXDOT activate EOCs for these situations? Do they?

- What about crowdsourcing techniques online?
  - Many different platforms, but hard to get all into a one-stop shop so to speak; some methods that become popular become less widely used and supported over time (e.g., mPING)
  - NWS encourages dust storm reports, but often times the spotters are not located where the dust storms are; continue to try to get more reports; big reason NWS is excited about ADOT’s I-10 Dust Mitigation Project

- What about land owners taking mitigation actions? What responsibilities do they have?
  - For industrial uses (e.g., mining), commercial, real-estate...you need permits.
  - You do not need permits to farm and ranch because we do not want to punish the landowners, but we are creating “Dust Bowl” like conditions as a result (e.g., San Simone area was a new farmer to the area who did not know how to use mitigation strategies specific to Arizona, but he has changed land use...so perhaps partner education is needed?)

- As Arizona loses rights to water access that will affect agriculture, how prepared are we for these lands to become “fallow”, potentially creating the next “Dust Bowl?”
  - Using land to produce hay because of current economic conditions (it is the most profitable crop right now)
  - Will become increasingly difficult to restore these lands; political solutions?
  - Similar issues with the Salton Sea in southeast California (Imperial and Riverside Counties)...could see an increase in dust storm activity there in the future
  - Habitat restoration issues (Arizona Wildlife and Fisheries)

- Who is compiling the data for Storm Data in the NWS? Dust storm fatalities seem to be heavily underrepresented. 10 people died in 2018, but Storm Data only has 0.
- NWS is required to delineate if it is a direct or indirect fatality, so the indirect fatality does not go into the final count. Discussion suggests there may need to be an effort to improve upon fatality reporting.
- Dust underrepresented as a cause in accidents in NM as well due to how the State Trooper reports the weather conditions at the time of the accident (if they don’t note “dust” then it doesn’t make it into subsequent reports)

- The proposed I-11 corridor rationale was to alleviate dust concerns on I-10, but if it is not far enough away, how will that really help?
  - Reroutes would most likely occur due to an accident; may not be feasible to reroute traffic due to dust

- Has anyone used organic materials as a dust stabilizer?
  - Mulch application has been used
  - Not monitoring movement of mulch, but it generally hasn’t moved

- Will there be new mining activity near Lordsburg Playa?
  - Lithium mine is possible; similar to one in southern Arizona...but it does not seem like there is much lithium so this may not occur. Huge evaporation ponds would be needed, which would leave behind sediment (potentially a litigation target)

- How could a group like this benefit from deploying dust sensors and awareness across other sectors, including putting dust detection and mitigation items in grant proposals?
  - Look for opportunities to collaborate with colleagues
  - Look for federal, state grants; interdisciplinary grants; tribes/BIA may also be able to secure funding...important to work with them
  - This group helps with that
  - What about special money for farming impacts from USDA to help them follow best mitigation practices?
• Get Eleanor’s presentation link; Jaret post presentations online