

Climate Change Data Needs for Policy and Action

1

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ON MODELS OF CLIMATE CHANGE & EXTREME WEATHER

Climate models predict that New Mexico's climate will change significantly over the next 50–100 years, with average annual temperatures increasing by 3–12°F. The magnitude of change depends on future greenhouse gas emissions – what we do to reduce them.

As broad economic damages from climate change grow, so does the impact of the climate crisis on the state budget. State Government's budget is directly and substantially at risk from expected lost revenues and increasing expenditures due to climate change damages in coming decades, such as increasing costs from physical damages to our infrastructure and healthcare expenditures, the instability of certain subsidized insurance programs, and accelerating instability that threatens global security. **Models have progressively advanced and are on a trajectory for higher resolution ...** (e.g., Seneviratne et al., [2021](#)). **Without comprehensive climate data the State and local government budget predictions will be off-base with reality.**



Important Data Is Here: Make It Accessible

As previous presenters demonstrate, enormous volumes of data exist makers and the public alike that Climate Change is real, and it is here now, accelerating its impacts on our daily lives. IF we want to save lives, protect our livelihoods and ways of life, yet more data is needed. Data needs to be highly accessible to all the people who can use it: policy makers and all New Mexicans, and especially our neighbors who are most vulnerable to its harmful impacts. We need statewide data to drive state policy, and we also need data by local community as well. The data must be accessible to policy makers – and also to the general public in accessible formats. You'll hear more examples about the need for better data, data sharing and more data later today from several panelists.

Here's a tragic example of tragic consequences of non-local data during emergencies:

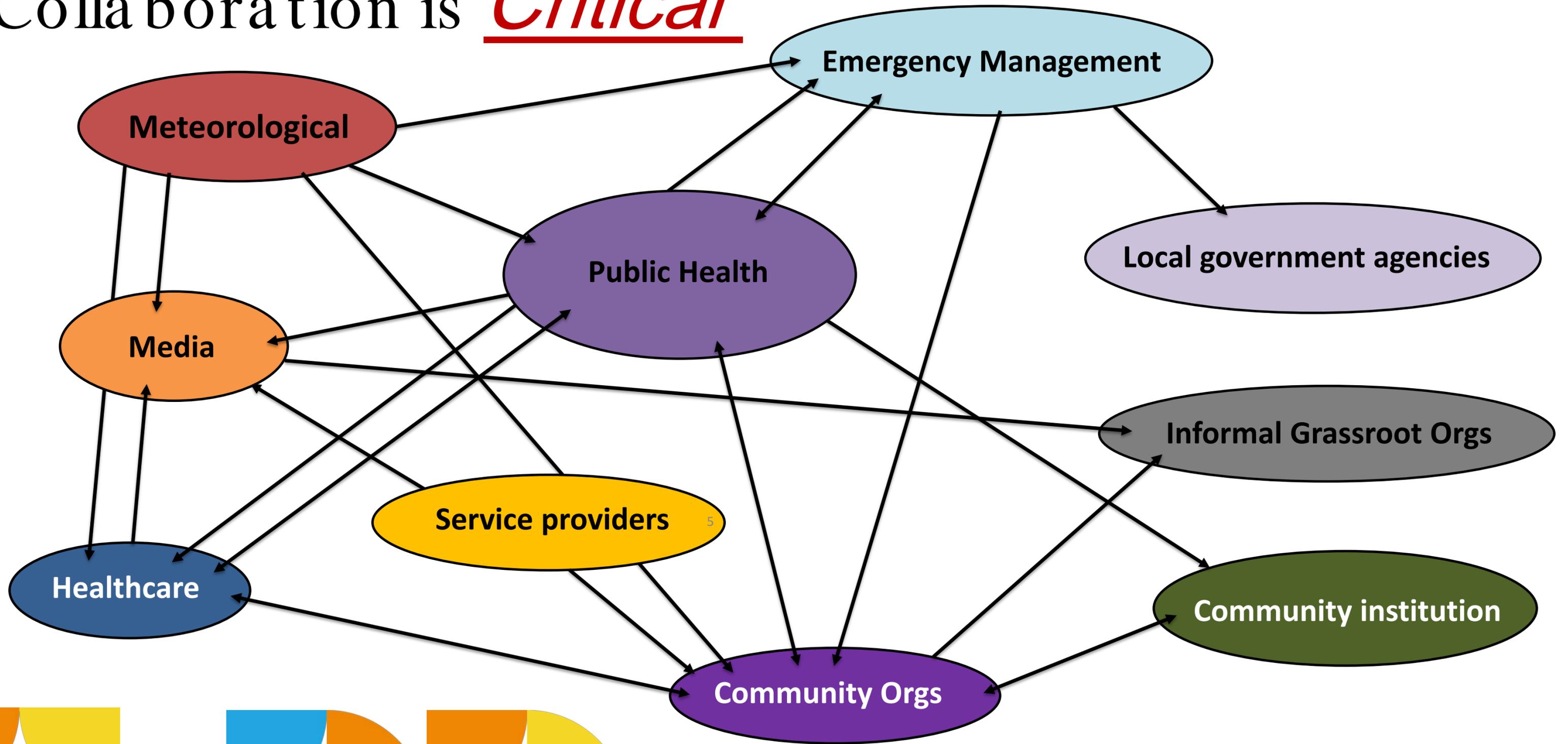


Example of
(A) Dangers of seemingly safe conditions; and
(B) The need for localized data everyone can use, in this case air quality monitors in every community.



Carter Vigh, age 9, died from wildfire exacerbated Asthma. Having the equipment to monitor air quality locally as well as air purifiers to create a safer indoor space, is critical. The day Carter died, his family didn't know how poor the air quality was because the nearest air quality monitoring station was nearly 60 miles away.

Collaboration is Critical



New Mexico Climate Risk Map

- EMNRD has a climate risk map ... <https://nmclimaterisk.org/> The Climate Risk Map is designed to help New Mexico communities and citizens identify factors that contribute to their overall climate change risk. Utilizing this tool, a user can generate maps and create a local data summary report for their area of interest, such as a county or community. Users can explore the map and generate a report for a selected area of interest. While extensive, the data in the tool do not encompass all climate change-related factors and serve as a starting point for users to identify areas for further investigation, **not a comprehensive assessment of climate risk.**
- **RECOMMENDATION:** Provide a tool for individuals and policy makers which is comprehensive and easy for J.Q.Public to use.



Agency Staff and Community Groups Require Training to Use the Data Effectively

RECOMMENDATION : Launch a specific training program that builds capacity among state and local government personnel and community groups to discover, use and widely share available climate data. This endeavor necessitates combining understanding of the information needs and capacities of practitioners and decision-makers with a robust understanding of Earth system science and research that includes observations, modeling, and projections directly applicable to each jurisdiction. That combination enables science, health and economic insights to be delivered in ways that are credible, accessible, culturally relevant, and actionable.

7

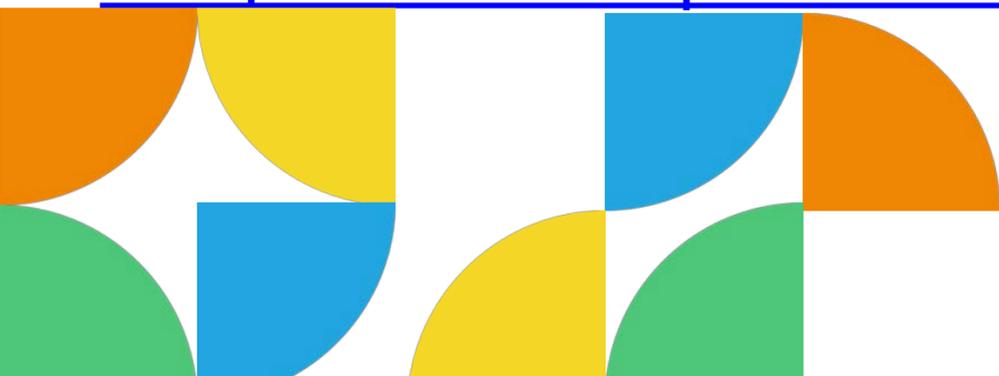


Climate Data Collection Has Many Forms

RECOMMENDATION WATER DATA– This committee has heard over and over again about the lack of comprehensive data on water resources throughout the state. Comprehensive data is needed prior to embarking on grand schemes that might have huge impacts on our precious water.

RECOMMENDATION COUNTY & TRIBAL INVOLVEMENT Support the County & Tribal health councils' instrumental role in public health - including data collection and reporting to "Increase capacity of Health Councils to assess translate, synthesize and utilize data.

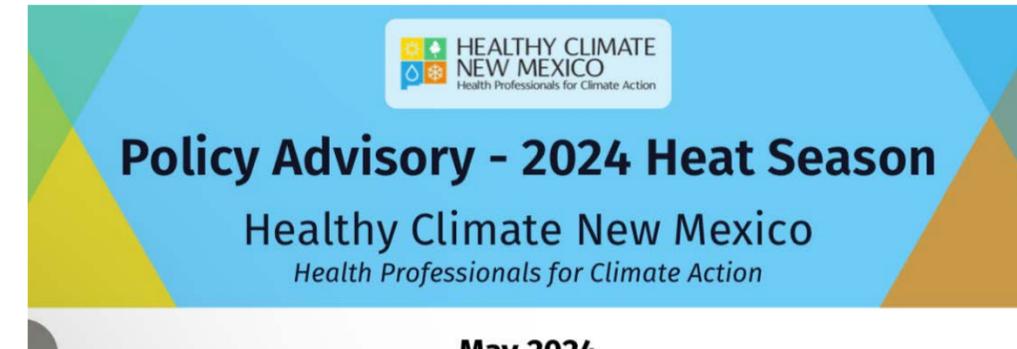
[Healthy Climate New Mexico](#) **Is doing our part to collect more data.** We are now asking the public for stories ...How has climate change affected your health? [This link is to a form for the general public](#) to contribute their stories to, and we are seeking quantitative and qualitative [data and stories from medical and public health practitioners.](#)



HCNM Policy Advisory

2024 Heat Season

Most of the recommendations called for to protect our New Mexico neighbors, families and communities require more data, collaborations and public sharing of the data.



Key Recommendations

1. *Implement an evidence-based occupational heat standard to protect workers in high-risk occupations.*
2. *Improve public health surveillance systems to capture and analyze heat-related morbidity and mortality data in a timely manner.*
3. *Treat extreme heat as a mass casualty event, coordinating response efforts and ensuring appropriate emergency waivers and patient movement authority.*
4. *Enhance resilience against concurrent hazards such as electric grid failure and wildfires.*
5. *Provide safe, accessible, and culturally appropriate cooling centers, collaborating with organizations that serve vulnerable populations.*
6. *Distribute cooling supplies to public entities and non-profit groups working with vulnerable groups.*
7. *Stop utility shut-offs during extreme heat to ensure people can run cooling devices without concern about cost.*
8. *Establish a statewide heat hotline for heat-safety information and guidance on managing heat symptoms.*
9. *Be proactive in messaging, disseminating clear, consistent, and culturally tailored information about extreme heat risks and preventive measures.*
10. *Implement a rural and tribal community cooling program, providing outreach and support for energy assistance programs and air conditioner distribution or loan programs.*

HCNM Policy Advisory - 2024 WILDFIRE

5 Data Related Recommendations



1. Establish clear statewide **evidence-based occupational air quality (AQ) standards** to protect workers. Align smoke-related advisories and activation of response plans to these standards for outdoor work and recreation.
2. **Improve public health surveillance systems to capture and timely analyze smoke-and heat-related morbidity and mortality data.**
3. **Expand New Mexico Environment Department's Statewide AQ Monitoring System** and fill in areas.
6. **Distribute** N95 respirators and air purifiers to low-income households, community centers, public facilities, schools, and community organizations in high-risk areas **before the next threat materializes.**
8. **Local authorities should identify evidence-based AQ thresholds** to postpone or encourage postponing outdoor events and when air quality becomes unhealthy ...



N.M. Needs To Factor Climate Risks For Public Budgets

RECOMMENDATION: ASSESS STATE and LOCAL GOVERNMENT FINANCIAL RISKS FROM CLIMATE CHANGE AND

EXTREME WEATHER –The State Climate Task Force develop a comprehensive review of data available - and identify the data which needs to be developed too. We need LOCALIZED scientific data before we can fully access the threat!

Where climate impact measures do exist, estimating the impact on the State and Local budgets can be challenging due to the need to tie those risks to future decisions (e.g., estimating the extent to which the U.S. government will provide disaster aid or take on other liabilities, the progress N.M. makes toward our state GHG Goals, etc.).

RECOMMENDATION Bill Analyses/Program Proposals: State agencies, both executive and legislative should include assessments of whether or not any budget or legislative proposal would move our state closer to, or farther from, our State Greenhouse Gas Emission Goals.



TWO NOTES ABOUT DATA ON CLIMATE AND BUSINESSES ...

* Ask any risk manager what's keeping them up at night, and climate change will likely be near the top of the list. ... ([A corporate web site selling services to businesses](#)). E2 presents later today on the direct economic costs of damage from climate and extreme weather, and it's no surprise that group of environmental entrepreneurs is growing. Climate Risk is everywhere in our economy.

* **Private Data-Public Consequences:** To be of most use, data must be created and shared by objective sources. The state oil and gas industry claims extraction in New Mexico is done cleanly, yet upon actual inspections [more than half of recently inspected oil and gas facilities in the Permian Basin could be in violation of state and federal air pollution rules](#) after a joint operation by the New Mexico Environment Department (NMED) and the Environmental Protection Agency. When data and information is provided by an industry about its own business, their business interest requires them to be positive. They use their glowing self-assessment to denounce proposals for setbacks, greater penalties and financial assurance and other health-related proposals to reduce harms to our personal and community health and the environment.

THANK YOU!!!

12

