

## **Anne Kinsinger**

Director, ARID Institute



# Drylands face rapid environmental change

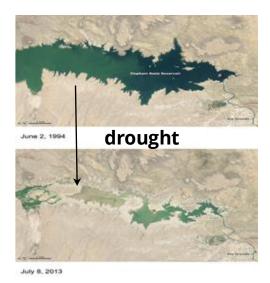




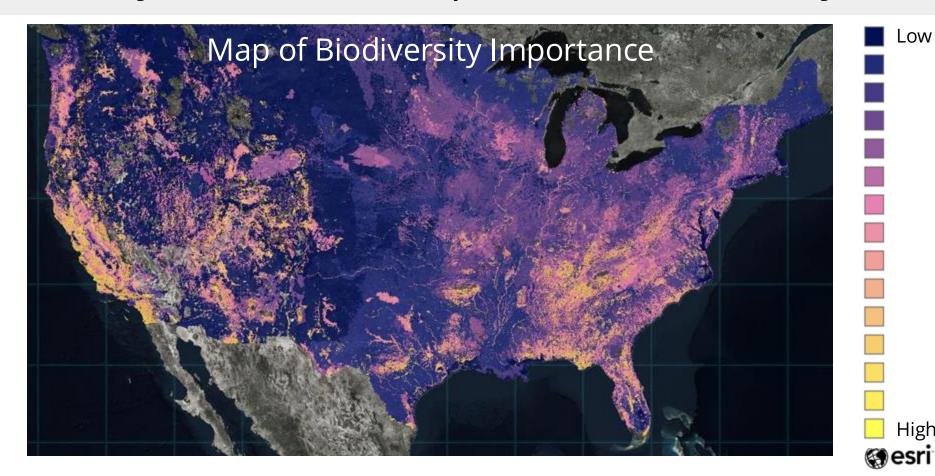




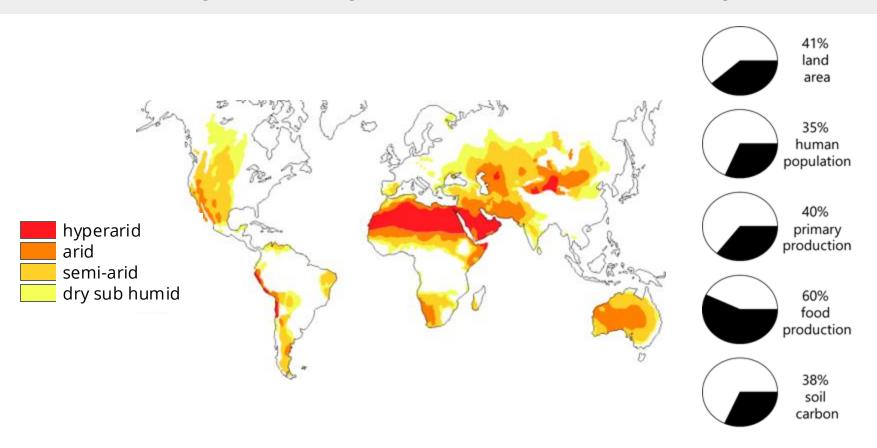
# ENVIRONMENT What caused record heat in Albuquerque in July 2023? by: Cartla Segarra Posted: Aug 7, 2023 / 10:21 AM MDT



# Drylands are hotspots of biodiversity



# Drylands provide natural capital





### **Mission**

Enhance the resilience of communities, ecosystems, and the economy to climate change through inclusive and equitable

- research
- education
- collaborative partnerships

in New Mexico and drylands worldwide.



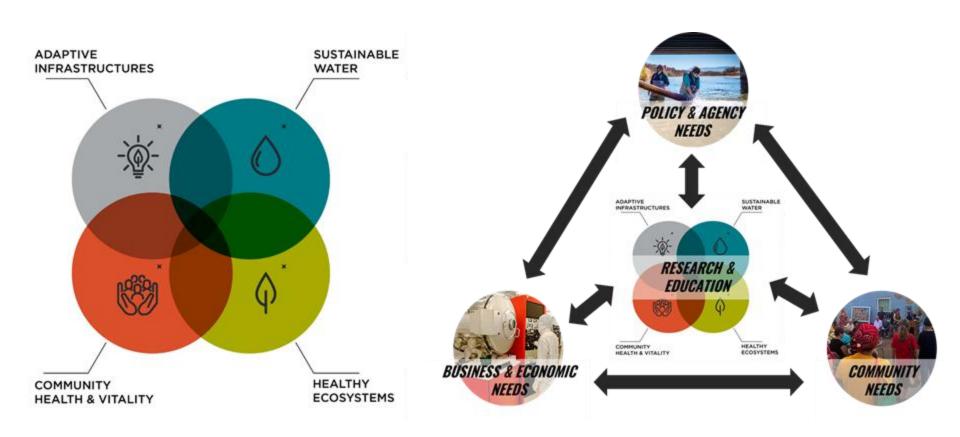
- **URGENT NEED:** Enhance the resilience of New Mexico's communities, lands and waters, and the economy.
- KNOWN GAPS: Partners have identified specific information gaps that impede the development of management actions and policies to address this critical need.
- **SOLUTIONS:** ARID is uniquely poised to fill gaps through its novel communityengaged transdisciplinary research, leadership, and advancement of the next generation of drylands scientists and practitioners.
- **OUTCOMES:** Tools, policies, and practices that improve air quality and human health, sustain thriving ecosystems, and engage scientists, Indigenous peoples, and communities to build resilience to environmental change.



ARID actionable science can help New Mexico achieve its goals to:

- Prepare communities for drought, flooding, wildfire, and other climate extremes
- Support New Mexico's economy, including agriculture and rangelands
- Meet rural and Tribal needs with community-driven solutions
- o Improve public health through resilient ecosystems and infrastructure
- Foster technological innovation, including the use of robotics, AI, and machine learning
- Provide planning tools for governments and other partners to improve the effectiveness of management actions
- Train students and educators to be leaders of dryland science

# Transdisciplinary actions for climate resilience



# Build a hub for partnerships in resilience





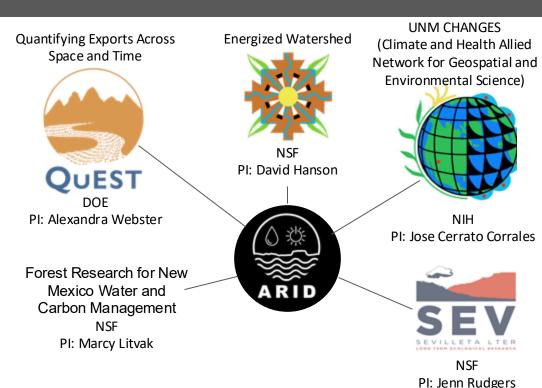
### **Recent Activities**

#### Grants and Contracts

o 9 awards totally \$28.7M

#### • Student Support and Training

- o STEM Pathways and Research Alliances: NM AMP
- Undergraduate Science Communication
   Fellowships
- EPSCoR Graduate Fellowship Program (EGFP)
- o Interdisciplinary Student Research Grants
- Rainforest Innovations Pitch Deck Competition
   Resilience Award
- Resilience Solutions Incubators (RSI) cross-listed undergraduate courses
- Science Communication Workshops





### Recent Successes

# **Upcoming Events**

#### Events:

- Thirsty for Thought: Wildfires Aug 7
- Pueblo of Santa Ana Environmental Fair –
   Aug 23
- Annual Leopold Lecture: A Reverence for Rivers: Luna Leopold's Call for Water Ethics – Sep 28 (sponsor)
- Won \$6M in grant funding in 2025
- Submitted \$12M+ in proposals in 2025
- AGU TV film about ARID Institute at December 2025 AGU conference

- ARID Café Career Panel (Nov 2025 TBD)
- Thirsty for Thought: Metal Contaminants (Nov 13)
- ARID Research Symposium (Nov 14)
- Science Communication Workshop at NM AMP
   Student Research Conference Oct 22
- Future Scenarios Planning Workshop for Drought and River Drying in the Middle Rio Grande – Oct 28-29
- NM Workforce Capacity-Building Workshop Supporting Natural Resources for Healthy Lands & People – Nov 18-19 (co-host)



# Long-Term Goals

- 1. Contribute to climate resilience in New Mexico through applied research that addresses community, business, and management needs.
- 2. Grow a climate-ready workforce for New Mexico by inclusively and equitably training and educating a diverse next generation of science leaders.
- 3. Support students and faculty in pursuing transdisciplinary research and studies.
- 4. Increase funding success and support for large regional grants related to climate resilience.



# Strategic Initiatives

- 1. Develop and implement a Resilience Science Strategy
- 2. Build transdisciplinary skills in students
- 3. Provide scientific support for external climate resilience actions
- 4. Raise the visibility and stature of ARID

# ARID LEADERSHIP TEAM





Anne Kinsinger Debbie Lee



























Rowland

Jennifer Heidi Honegger Rudgers Rogers

Andrew Schuler

Caroline Scruggs

Samuel Truett

Thomas Turner

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