

Summary of Completed Colorado Water Plan Action

Agency Action 4.5

Convene workshops on water and climate vulnerability, adaptation, and resilience

The Colorado Water Conservation Board (CWCB) held two Climate and Water Workshops in April 2025 that brought state and local water leaders together to share climate and water-related resources and engage in a table-top exercise that prompted discussions about preparing for a future with more frequent and intensifying climate hazards.

The workshop participants were made up of state and local governments, water utilities, water conservation districts, non-profit organizations, academic institutions, private consulting groups, and even some local elected officials. The diversity of participants drove engaging discussions and provided an opportunity to meet water professionals across sectors.

Two workshops were held to ensure that communities on both the East and West Slopes were able to engage and participate.

Workshop 1: Pueblo, CO

Location: CSU Pueblo Date: April 3, 2025

Number of participants: 40

Workshop 2: Clifton, CO

Location: Clifton Community Center

Date: April 23, 2025

Number of participants: 50

Each workshop started with a lightning round of presentations from several state agencies about their unique climate and water-related resources, tools, and funding opportunities. The following state agencies participated in the workshops: Colorado Department of Agriculture (CDA), Colorado Department of Public Health and the Environment (CDPHE), Department of Local Affairs (DOLA), Department of Homeland Security and Emergency Management (DHSEM), Colorado Energy Office (CEO), Colorado Parks and Wildlife (CPW), and the Colorado Water Conservation Board (CWCB). Following the state agency presentations, the participants had a chance to further connect with the state agency representatives at each agency's booth table that contained information about their unique programs.

With support from Lynker and Colorado State University researchers, the CWCB created an interactive tabletop activity designed to facilitate participant engagement and strategic planning. Workshop attendees were tasked with developing both short-term response actions and long-term adaptation strategies in the face of drought, wildfire, and



flooding. The tabletop exercise established a fictional scenario featuring "Subaru City," a hypothetical Colorado town lacking plans for future hazard response and adaptation. Given the workshop participants' real world experience responding to and adapting to climate hazards, they were appointed to "Subaru City's" Climate Resilience Committee to help create response and adaptation plans. The activity progressed through a series of modules as "Subaru City" experienced rapidly intensifying drought, a nearby wildfire, and flash flooding. The participant teams generated short-term response actions and long-term adaptation strategies for each hazard scenario.

The actions and strategies collaboratively developed by the participant teams directly informed the CWCB's forthcoming Climate Impacts and Vulnerabilities Report. This report builds on the 2024 Climate Change in Colorado report, examining the impacts of increasingly frequent and severe climate hazards on Colorado's communities and key economic sectors. It analyzes the disproportionate effects of drought, wildfire, flooding, and extreme heat across Colorado communities and, informed by the discussions and insights from the Climate and Water Workshops, provides examples of successful response and adaptation planning and implementation within Colorado.

Key Takeaways

- 1. **Hazards that pose a significant threat to Colorado water users:** Drought, flood, wildfire, extreme heat, dam failure, debris flow, extreme storms, shifting runoff seasons, water quality degradation
- 2. Most Impacted Sectors: Agriculture, recreation, municipal water systems, tourism
- 3. **Vulnerable Populations:** Ag producers, mobile home residents near rivers, elderly, people out of communication range, medical device users, tourists without alerts, rural communities, English as a second language
- 4. Overarching Resilience and Adaptation Strategies:
 - a. Local water systems and municipalities:
 - Ensure redundant water supplies and invest in water infrastructure upgrades
 - ii. Look for opportunities to recharge aquifers
 - iii. Assess dam and other water infrastructure safety
 - iv. Implement green infrastructure for stormwater management



- v. Consider zoning shifts or land use changes to reduce exposure to flooding or wildfire
- vi. Update water use policy related to landscaping and municipal water use
- b. Agricultural resilience:
 - i. Install more efficient irrigation systems for local producers
 - ii. Invest in alternate crops that use less water while supporting farmers as they transition to new markets
 - iii. Increase grazing range and shift to intensive rotational grazing,
 - iv. Expand soil health practices
- c. Watershed management:
 - i. Plan for post-fire impacts (flood, debris flow, sedimentation)
 - ii. Implement fire mitigation strategies, including tree thinning, removing fuel sources, burn scar treatments
 - iii. Invest in riparian and forest ecosystem restoration
 - iv. Increase water quality testing after hazard events
- d. Integrated, cross-sector planning at the local level: hazard mitigation plans, drought plans, wildfire ready action plans, climate action plans, etc.
- e. Public communication and education before, during, and after hazard events
- f. Strengthen coalitions and be proactive when building trust with community members, community groups, industry, and local governments
- Coordination Needs: Identify values at risk from hazards, City/county partnerships with water utilities, mutual aid agreements, shared water storage, collaborative fire-water planning, education and communication efforts aimed toward residents,
- Technology & Data: Monitoring systems, filling data gaps, better snowpack info, forecasting tools, expanded emergency communications, develop data hubs for centralized water condition monitoring
- 7. **Mindset Shift:** "Don't waste a good drought"—use crises as opportunities to implement lasting resilience improvements.

Link to Meeting Slides



Photos from Workshop 1 in Pueblo, CO







Photos from Workshop 2 - Clifton



