

“These are the things you need to pay attention to”

Under smokey skies from nearby forest fires, 350 Montana set off on a road trip during the last weekend of September to encourage climate resilience in three rural northwestern Montana communities.



Three provocative speakers tagged along: University of Montana professor Kyle Bocinsky, Ph.D., who directs climate outreach for the Montana Climate Office, infectious disease specialist Pam Whitney from the Missoula City-County Health Department, and Kobin Kelson, the executive director of Abundant Montana, which promotes a self-sufficient food system.

Organized by 350 Montana’s leadership team co-chair Hannah Hernandez, our goal was to provide accurate information and begin a discussion – Hannah calls it community “mapping” – profiling each community’s strengths and weaknesses as locals adapt to rising temperatures, forest fires, and more frequent extreme weather.

First up was Dr. Bocinsky, who asked people in the room if they’d noticed any record temperatures lately. Nearly every hand in the room went up. He said over the past month, weather monitors had noticed 1,063 daily high temperatures, 906 lowest temperatures, 1,296 daily precipitation records, and 19 snowfall records. “Is this normal?” he asked.

Using the analysis of eight different climate models, Dr. Bocinsky said here’s what Montanans can expect: 95 Fahrenheit days increasing likely, decreasing snowpack and resulting lower water resources in late summer, flash droughts, increasingly severe forest fires, and atmospheric rivers that produce floods like the one in Yellowstone in 2022, which was a one in 500 years event.



The models agree that “we’ve missed the boat” on the United Nation’s target ceiling of 1.5 Centigrade. But the models also reject the worst-case scenario where fossil fuels and greenhouse gases (GHGs) double by 2050 and temperatures rise by more than 4.5 C.

“We’re somewhere in the messy middle,” he told participants. Temperatures most likely will hold somewhere between 2.7 and 3.6 C ... if we cut back burning fossil fuels and greenhouse gases begin to fall by 2050. Here are the details:

- Montana will see an extra month of hot days, with up to 32 more days of 90 F-plus temperatures,
- It will be wetter overall (.5 to 2 inches more rainfall), but the seasons will shift. There will be more rain in late spring, less moisture in June, July, and August. Translation: Expect rapid melting of snowpack.
- Western Montana’s old system of irrigation from water stored in mountains probably won’t work because earlier rain in the spring will deplete the snowpack. The reservoirs will be dry in August and September,
- “Flash droughts” will be more common, like the one in 2017 that caused 1.4 million acres of forest to burn and \$2.6 billion in agricultural losses,
- Atmospheric rivers carrying enormous amounts of water from the Pacific – five to 15 times the water that the Mississippi River carries – will be more common. The Yellowstone flood was not an isolated weather event.

“These are the things we need to pay attention to is we’re going to adapt,” Dr. Bocinsky said.

The next speaker, public health nurse Pam Whitney, provided a list of illnesses already more common with warmer temperatures in Montana. Health officials are seeing degraded air quality due to forest fire smoke aggravate existing cardio-vascular illnesses. She said public health officials expect more injuries resulting from extreme weather, and she said vector-borne diseases are expanding their geographical range:

- Lyme disease is “the new kid on the block” and joins established tick-borne residents, Rocky Mountain tick fever and Colorado tick fever.

- West Nile virus is also moving into Montana, with 14 counties reporting 17 horse cases and 18 human cases this year, as of September 2025. The infections are serious and include 10 neurological cases, three non-neuro cases, and 5 asymptomatic cases.
- Several new fungus diseases (*coccidioidomycosis* and *histoplasmosis*) and *legionnaires* disease have also made acquaintance in Montana in recent years.

Robin Kelson then introduced her organization, Abundant Montana, which is a new name for the Alternative Energy Resource Organization (AERO) founded in 1974. She said that in the 1950s Montana produced 70 percent of the food we ate, and that has declined to just three percent today.

“Everything we grow, we grow for export now,” she said.

With its wildfires, weather extremes, drought, pandemics, and political strife, climate change brings with it the need to re-think Montana’s supply chain. “I see this as a time of opportunity and possibility,” she said. “Abundant Montana wants to fill every plate with local food.”

To do so, the organization has published 35,000 copies of its *Guide to Local Food*, which matches production of food in Montana, with distribution and then markets. The goal is to have 33 percent of the food consumed in Montana produced in Montana by 2033. The organization’s “33 by 33” initiative wants to change food selling behaviors, food buying and consumption, and create statewide solutions.

She asked whether they gardened, hunted, or fished, and congratulated those who did. She also asked participants to gauge how much local food they can find in their refrigerators, on their plates, in their freezers, and whether local foods had space in their monthly budgets and at their schools, events, and businesses. Abundant Montana is planning a local food summit in Helena in October 2026.



Then it was time for the community mapping exercise. On each table there was a giant sheet of paper with a few prompts, and Hannah asked the people at each table to discuss their community's advantages and weaknesses in adapting to rising temperatures.

In Thompson Falls, the groups reported advantages including abundant clean water, a farmers' market, neighbors who help neighbors, an influx of newcomers, two hydroelectrical dams, the library, and local knowledge. Disadvantages included an elderly population, poor standard of living, and a lack of housing and transportation. Ideas for improving community resilience included establishing a seed bank, older citizens teaching local youth to grow food, and creating a community kitchen for preserving the harvest.



In Libby, one group said there was a lot of love for their community and civic engagement, but there was a lot of climate denial. Another advantage was the fact that people cared about public lands. There was good air, good water close by. Disadvantages mentioned included income disparity (“haves and have nots”), while the county government was broke and there was a lack of infrastructure.

There will soon be a report to further chronicle 350 Montana's rural resilience initiative.