The Montana Mesonet
MT American Water Resources Annual Conference – Red Lodge, MT – 9 – 10 October 2019

Kevin Hyde, Montana Climate Office
Kelsey Jencso, Montana Climate Office
Lee Schmelter, MSU Extension Service
Brett Heitschueen, Montana Dept. of Agriculture
Camela Carstarphen, MT Bureau of Mines and Geology
Kyle Bocinsky, Montana Climate Office
Zach Hoytman, Montana Climate Office
Bruce Maxwell, Montana State University

Montana Mesonet Sites
74 as of 6 Oct 2019
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Soil Moisture Education
MCO conducted and continues to develop Soil Moisture Education Workshops training framers, ranchers, and land managers to interpret soil water data to support agricultural decisions.

Flood Forecasting
MCO collaborates across the Upper Missouri River Basin to support flood forecasting with the US Army Corps of Engineers.

Drought Early Warning
MT Mesonet provides data to develop drought early warning tools supporting the Governor’s Water Supply and Drought Committee.

Real-time Well Monitoring
Partnership with the MT Department of Agriculture moves real-time well data directly to the Ground Water Information System.

Rangeland Health
Collaboration between MCO, BLM, USGS, iob, and MSU Extension develops methods to monitor vegetation response to assess rangeland health and for predicting forage production.

Public Access to Data
The MCO website provides public access to current weather. MesoWest.Utah.edu integrates MT Mesonet data for public use.

Plant Available Water
In collaboration with MSU Extension, the MCO Soil Lab analyzes samples from each station to generate water retention curves and models of plant available water.

Data Dashboards
Under development: MCO actively plans data visualization and analysis dashboard to support land management decisions across sectors.

Climate.umt.edu

Active Partnerships
- MT Department of Agriculture
- Bureau of Land Management
- Montana Institute on Ecosystems
- Private Ranches and Farms through MSU
- MSU Agricultural Extension Service
- MT Dept. Natural Resources & Conservation
- The Blackfoot Challenge • Stillwater County
- National Weather Service • Crow Tribe of MT
- National Mesonet System • USDA Forest Service
- Governor’s Water Supply & Drought Committee • Montana Bureau of Mines & Geology
- Montana Space Grant Consortium • National Integrated Drought Information System
- MBNG Groundwater Information Center • USDA Agricultural Research Centers
- DOI US Geological Survey
- US Army Corps of Engineers
- National Weather Service

The Montana Mesonet

Havre
14 - 15 Sep

Rain
1-8 Oct

Snow
30 Oct

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