The Montana Climate Assessment

Stakeholder Driven, Science Informed

The Montana Climate Assessment (MCA) is an effort to synthesize, evaluate, and share credible scientific information about climate change in Montana with the citizens of the state. Our current focus is on three of Montana’s vital sectors: agriculture, forests, and water, with the first assessment available in late 2017. In the future, we will expand the focus to other areas including human health, tourism, and fish and wildlife.

The motivation for the MCA arose from citizens and organizations in Montana who have expressed interest in receiving timely information about climate change, including information about historical variability, current trends, and projections of future impacts as they relate to topics of economic concern. The first MCA focuses on three critical sectors in the state, but the MCA is a sustained effort and will regularly incorporate new scientific information and address new sectors in response to the diverse experiences and needs of the state.

The Montana Institute on Ecosystems (IoE), a statewide institute within the Montana University System, is convening the MCA. As the organizer, the IoE is working closely with the Montana Climate Office, Montana Water Center, Montana State University Extension, state agencies, non-profit organizations, and the public to ensure an efficient process that delivers relevant information. The process is driven by stakeholder needs and informed by the best-available science through the following steps:

1. Engage with individuals and organizations around the state to identify priority topics for the assessment process;
2. Describe current scientific understanding and uncertainty in ways that are meaningful and useful to decision makers and other stakeholders;
3. Align the climate assessment effort in Montana with initiatives underway in other states and at the regional and national levels in order to support effective and consistent exchange of information; and
4. Ensure a sustainable MCA process so that Montanans can receive regular and up-to-date climate change information in ways that help address pressing needs in the state.

The first MCA is expected to be completed in the summer of 2017, and will be available as both an interactive and downloadable web report, with hard copies available by request. For regular updates, FAQs, and team bios, visit the Montana Climate Assessment website at http://montanaioe.org/mca
The Montana Climate Assessment: Frequently Asked Questions

What is a climate assessment?
A climate assessment is an essential tool for linking science and decision making related to climate change and its impacts. Assessments survey and synthesize the best-available science, highlight key information that can improve decision making, and identify significant gaps in our current understanding. The Montana Climate Assessment addresses the needs of stakeholders (i.e. what do Montanans need to know about climate change impacts in the state) by providing the current state of climate change science (i.e. providing the needed information into the hands of those who want it). The goal is to provide the best possible scientific information about climate change and its impacts in the state so that Montanans can address environmental challenges and make better decisions about the future.

What will be included in the Montana Climate Assessment?
The MCA is a sustained effort rather than a single product. The first assessment (called MCA1), available in late 2017, will focus on three of Montana’s vital sectors: forests, agriculture, and water. In the future, we hope to incorporate more sectors that are important to Montanans, including human health, tourism, and fish and wildlife. MCA1 will report on historical trends, the current status of climate in Montana, and projections of climate change for Montana’s future. It will be accessible digitally as both an interactive and downloadable web report, with hard copies available by request.

How was the content of the assessment determined?
MCA1 began with efforts to identify which climate change topics were important to Montanans in ensuring the state’s economic viability. Insights were gained from opinion surveys, conversations and listening sessions held across the state, and a team of researchers, educators, and stakeholders worked together to select the topics of water, agriculture and forests for MCA1. Members of this team included MSU and UM researchers in the Montana Institute on Ecosystems, the Montana Climate Office, Montana Water Center, Montana State University Extension, state agencies, non-profit organizations, and the public. The team also received guidance from advisors who have worked on climate assessments at the regional and national level.

Is this the first environmental assessment in Montana?
The MCA builds on a legacy of Montana environmental assessments that include previous Montana Environmental Policy Act Environmental Quality Council reports (1975 and 1996) as well as the more recent State of Montana Water Plan (2015), and the National Climate Assessment (2014). The right to a clean and healthful environment is among the inalienable rights guaranteed to Montanans in the state constitution.

Who is funding the assessment?
The MCA is funded from a combination of key sources: The National Science Foundation EPSCoR Track 1 RII grant, Montana State University, the University of Montana, the Montana EPSCoR Office, and the Montana Institute on Ecosystems.

Where can I learn more about climate in Montana?
More information about Montana’s climate can be found via the Montana Climate Office. The Montana Climate Office is the official steward of climate information for Montana. You can access useful climate change resources on their website: http://www.climate.umt.edu/