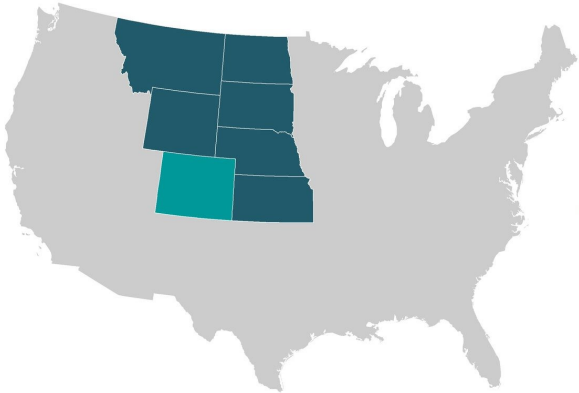




COLORADO

Colorado falls within the domain of the North Central Climate Adaptation Science Center (CASC)



North Central CASC Consortium Institutions

Host: University of Colorado at Boulder

Consortium:

University of Montana

Conservation Science Partners

South Dakota State University

Great Plains Tribal Water Alliance

Wildlife Conservation Society

OUR WORK IN COLORADO

41+

Projects

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2011

Key Science Topics



Drought



Forests



Freshwater



Grasslands & Plains



Wildlife & Plants



PROJECT HIGHLIGHTS



Climate Science to Inform Grazing Management in Colorado

The NPS is responsible for managing livestock grazing in 94 units, and several park grazing management planning efforts are currently underway. However, there is a recognized need to update grazing management practices to address potential future effects of management practices and climate change.

WHAT: The North Central CASC is engaging managers from three western Colorado parks—Dinosaur National Monument, Curecanti National Recreation Area, and Black Canyon of the Gunnison National Park—to develop a process for incorporating information on potential future climate scenarios into grazing management plans.

IMPACT: This project will serve as an important step towards developing a transferable process that can help western parks ensure that grazing management practices and plans are responsive and adaptive to future climate change.



Rising Temperatures Impact Colorado River

Approximately 40 million people in seven western states rely on the Colorado River and its tributaries to provide some, if not all, of their municipal water needs, and to irrigate 5.5 million acres of land.

WHAT: The Southwest CASC examined the influence of temperature on streamflow in the Colorado River, as rising temperatures and more intense droughts threaten the water supply.

RESULTS: Researchers discovered that warming temperatures—not just reduced precipitation—have led to reductions in the Colorado River's streamflow.

IMPACT: Addresses a knowledge gap consistently raised by water managers—what are the climate conditions that lead to reduced flow in the Colorado Basin? Also enhances streamflow forecasts and improves the ability of water managers throughout the watershed (e.g. Bureau of Reclamation's Lower Colorado Region; NOAA's Colorado Basin River Forecast Center) effectively plan for future water supplies.