

# NOAA's Central Region

NOAA Central Region represents the “inner coast” within the United States. Numerous challenges affect this region including ecosystem management, high-impact weather, Geodesy (geospatial height modernization), navigation, and water quality and supply concerns.

## Geography and Environment

NOAA Central Region represents 13 states that make up the Heartland of the United States. Water plays a critical role in the Central Region; the three largest watersheds in the Nation (Mississippi, Missouri and Ohio Rivers) flow through NOAA Central Region and represent the “inner coast” of the United States.

The unique geography of the region makes it a focus for high-impact weather events. The majority of the Nation’s tornadoes occur each year in NOAA Central Region. Severe winter storms, flooding, drought, heat and cold pose significant impacts to the region.

## Social and Economic Context

NOAA Central Region represents the “bread basket” of the Nation. A significant portion of the Nation’s agriculture, particularly wheat and corn, comes from the Region. In addition to agriculture, an integrated advanced technology corridor stretches along the Front Range of the Rockies, with assets and commercial interests in climate research and space environment.

Challenges within Central Region can pose significant economic impacts for the Nation. Navigation routes for goods and services are a strong part of the economy in the Central Region. The Missouri, Mississippi and Ohio Rivers represent major transportation networks. The drainage of these river basins, along with the Arkansas River basin, has a profound effect on the ecosystems of the Gulf of Mexico. The water that drains from the large watersheds in NOAA Central Region makes up the balance of the fresh water flow into the Gulf.

High-impact weather events also paint a strong social context within NOAA Central Region, as the damage produced by these events represent a significant economic impact each year.

## Capabilities and Challenges

NOAA’s key partnerships within the Central Region focus on water quality and quantity issues (particularly with regards to drought (National Integrated Drought

Information System - NIDIS), climate, weather research, and geodesy. NOAA Central Region’s main challenges center on issues of inland ecosystem, weather and water. Specific areas of focus include:

*Water quality and supply concerns.* NOAA Central Region is actively working to develop partnerships with the NIDIS program. Efforts also have been directed towards a new partnership with the Missouri River Recovery Implementation Committee on water quality and quantity within the Missouri River Basin.

*Geodesy.* Many NOAA Line Offices and external clients such as the U.S. Geological Survey, Federal Emergency Management Agency and the Corps of Engineers use geospatial height datums in their daily work. NOAA’s work in the area of “real-time” Global Positioning System (GPS) data is expected to significantly improve these processes and remove space weather-induced biases. Efforts are underway to infuse current NOAA research to enable users to better utilize GPS technology.

*High-impact weather events such as tornadoes, windstorms, large hail, flash floods, wildfires, ice storms and blizzards.* A significant NOAA weather and climate research consortium exists within NOAA Central Region. Efforts are underway to better translate state-of-the-art research into operations within NOAA and into the operations of many of NOAA’s partners, to better protect the citizens of the U.S.



The Central region encompasses the United State’s “inner coast.”