



NOAA: COOPERATIVE INSTITUTES (CI'S)

IMPACTS AT A GLANCE

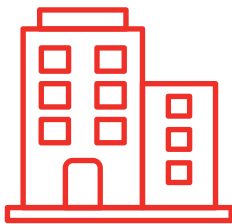
WHAT ARE THE COOPERATIVE INSTITUTES?

Across the United States, Cooperative Institutes' based at universities around the country produce research projects which support NOAA's research goals and enterprise objectives. These projects help anticipate and respond to seasonal and sub-seasonal weather and its impacts, prepare for and respond to weather-related events, develop sustainable marine fisheries, habitats within healthy and productive ecosystems, and improve coastal and Great Lakes communities that are environmentally and economically sustainable.

HOW DO CI'S WORK?

NOAA's CI's help NOAA achieve its goals by conducting research aligned with NOAA's mission and strategic plan, in close collaboration with NOAA programs and laboratories. They help extend NOAA's capacity flexibly by providing multi-year partnerships focused on addressing timely topics for periods of time shorter than the lifetime of a federal laboratory and longer than year-to-year extramural grants. By operating through regional and local universities, CI's offer additional ways for NOAA to tailor its offerings to the needs of specific communities and connect with critical partners.

AMERICAN STRENGTH AND PROSPERITY DEPENDS ON NOAA COOPERATIVE INSTITUTES



**16 COOPERATIVE
INSTITUTES**



**33 STATES, THE
DISTRICT OF COLUMBIA,
US TERRITORIES, AND
CANADA**



**80 UNIVERSITY AND
NONPROFIT RESEARCH
INSTITUTIONS**

**AMERICANS ARE MORE SECURE, COMPETITIVE, AND PROSPEROUS
BECAUSE OF REASONABLE AND MEANINGFUL INVESTMENTS IN
FEDERAL EARTH SCIENCE AND WEATHER INTELLIGENCE.**

Through these CI's, NOAA Research provides the research and technology development necessary to improve the agency's weather intelligence services, solar-terrestrial forecasts, and marine services. These activities provide the scientific basis for national policy decisions in key environmental areas.

An example of CI work is the National Drought Mitigation Center (NDMC) in Nebraska, which produces the weekly U.S. Drought Monitor (USDM) map, enabling drought classification, government relief activities, water management and agricultural planning. CIs frequently create routine regional products within a national framework, such as the Drought Early Warning System (DEWS) under the National Integrated Drought Information System. Regional DEWS products include local climate, water, and socioeconomic data to provide region-specific drought planning and risk assessment information.

Another example of how CI's support NOAA is the Cooperative Institute for Satellite Earth System Studies (CISESS), which specifically supports NCEI in creating and disseminating data and in developing and testing the techniques to convert satellite signals into meaningful environmental information. CISESS is based in Maryland, but it has consortium members in North Carolina, Maryland, Alabama, New York, Virginia, Oregon, Washington D.C., Michigan, South Carolina, Georgia, California, South Dakota, Florida, Nebraska, Washington, and Colorado.

The Cooperative Institute for Severe and High-Impact Weather Research and Operations (CIWRO) at the University of Oklahoma, focuses on advancing fundamental knowledge of weather radar, multi-scale processes, and sub-seasonal to seasonal predictions. The transition of products to operations supports faster, more accurate, and valuable weather and water information, guiding decision-making to minimize loss of life, injury, and economic damage.



Several CI's focus on creating regionally specific information that communities can use. For example, the Cooperative Institute for Great Lakes Research (CIGLR, Michigan) provides a wide array of Great Lakes-specific data and projections, including water levels, oxygen levels, harmful algal bloom status, invasive species, and overall ecosystem state. NOAA's atmospheric river forecasts arise from collaborations between NOAA laboratories, University of California San Diego's Scripps Institution of Oceanography, University of Colorado Boulder, Colorado State University, University of Wisconsin-Madison, University of Maryland, and North Carolina State University. Other CI's develop integrated marine ecosystem models that help forecast how ocean change, including climate change and ocean acidification, will affect commercial fish stocks and dependent communities.



WANT TO GET INVOLVED?



Reach out to
info@usacompetes.org



Learn more on our website:
usacompetes.org

