

## Program Information Sheet

### Program Name

#### Climate and Societal Interactions (CSI)

#### Sectoral Application Research Program's (SARP) Coping with Drought in Support of the National Integrated Drought Information System (NIDIS)

### Program Mission

The Climate and Societal Interactions (CSI) Program supports projects to address the needs of decision makers planning and preparing for extremes (i.e., droughts, floods, and heat) in the context of their overall social and economic development objectives.

The overarching goals of the CSI Program are the following:

1. Support for innovative, applicable and transferable approaches for decision-making, especially for risk characterization in the context of a variable and changing climate;
2. Establishment of a network of regionally scoped, long-term efforts to inform climate risk management and decision making; and
3. Promotion of the transfer of climate knowledge, tools, products, and services within NOAA, across the federal government, nationally, and internationally.

CSI serves a unique role within NOAA and the Federal system by resourcing a space for interdisciplinary, applied research and capacity building that helps NOAA and its partners bridge the gap between science and the Nation's economies and communities. This partnership brings together members of the external research community with NOAA Regional Climate Services Directors (RCSDs), other NOAA service line offices, and close external partners such as RISA teams, Regional Climate Centers, State Climatologists, Sea Grant and other U.S. Government agencies to help make weather and climate information and products relevant, accessible and actionable to people across the U.S.

CSI works to ensure alignment with the priorities of a number of Federal agency efforts such as the: National Integrated Drought Information System Act (P.L. 109-430); National Climate Assessment; National Ocean Council; Global Framework for Climate Services (GFCS) initiative; the Weather Research and Forecasting Act (P.L. 115-25); and the growing local and regionally-focused information needs that influence agency investments in water, security, infrastructure, and economic resilience.

### Focus for FY19

The Sectoral Application Research Program's (SARP) Coping with Drought in Support of the National Integrated Drought Information System (NIDIS) will be managed by Dr. Nancy Beller-Simms, [nancy.beller-simms@NOAA.gov](mailto:nancy.beller-simms@NOAA.gov).

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This competition lead will be holding an informational webcast to discuss the background of these programs and expectations for this competition, as well as to address questions related to the development and submission of letters of intent and proposals. For times and accessibility information, please monitor the program websites accessible via this address: <https://cpo.noaa.gov/Meet-the-Divisions/Climate-and-Societal-Interactions>  
Potential principal investigators can also contact the program managers directly.

### **Funding for FY19**

Funding for this competition will be for one-year grants in the form of Cooperative Agreements with total project costs not to exceed \$200,000.

### **Competition Information**

These Project funds should address regions identified as NIDIS Regional Drought Early Warning (DEWS) locations (<https://www.drought.gov/drought/regions>).

Specific proposal topics include the following options (please do not combine topics in one proposal):

1. Business and Decision Calendars. Research should focus on understanding decision calendars specific to businesses, industry, and the economy that are impacted by drought. Please focus on industry and economic sectors other than agriculture.

NIDIS is interested in learning the process and timing by which businesses and economic sectors make decisions knowing that drought could impact their business model. Specifically, at what decision points will drought be a factor in their planning and how will a drought forecast change their model or mode of operandi? For example, if a manufacturing plant on the west coast is considering making rain boots in Year X, is drought a consideration in factors such as: where the boots will be made, what types of materials will be used (and from where they will be procured), how and when the boots will be shipped, who will purchase the boots, and how many boots should be made? The results of this research should provide an understanding of business decision making that will help inform NIDIS regional DEW'S ability to provide actionable scientific information for decision-making.

2. **Water Markets** - Research should examine the role of water markets and their potential value as a drought mitigation strategy. As the frequency and intensity of drought events increases, NIDIS would like to learn more about how specific economic sectors, such as recreation and tourism, manufacturing, transportation and navigation, water utilities servicing large metropolitan and regional areas, may be using water markets to maintain or enhance their viability and profitability in anticipation of the next drought event. Among the questions that could be addressed in a proposal are: where are water markets being utilized as a drought mitigation strategy? What economic sectors and/or communities are employing this strategy? What are the decision-making processes for setting up the water markets? What are the socio-economic, hydrologic, meteorological parameters (e.g. the role of weather and climate forecasts) that trigger these markets? What are the components of these water market agreements? How do observation and monitoring networks, and forecasts and predictions inform water markets in the context of mitigating drought impacts and building long-term drought resilience within a community or an economic sector?
  
3. **Drought Triggers and Indicators**: This option will be focusing on the development of NIDIS' newest regional Drought Early Warning Information System in the northeastern United States (the New England states and New York). This will help us to better understand the critical, relevant, and appropriate drought triggers and indicators in this region, as well as develop new ones to inform decision-making across all time and spatial scales. Given the geographical and natural resource characteristics, and the socio-economic importance of this area, there are a variety of unique and more relevant indicators that could be identified/developed (e.g., for coastal drought, drought impact on aquaculture, soil moisture, etc.). Results should provide an improved understanding of the key drought triggers and indicators (beyond simply temperature and precipitation) for this region. Ultimately, these triggers and indicators will lead to improved drought early warning capacity, and the dissemination of relevant applied scientific information for focused decision making.

## **Expectations**

### *Research Projects*

We encourage research projects to include partners and decision-makers from relevant economic sectors and communities (across all levels of government) that would contribute subject matter expertise to the proposed research. This may include representatives from the public and private sectors; academia; local, regional, tribal, and federal governmental entities; NGOs; environmental groups; citizen groups, etc. We also encourage proposals that demonstrate external contributions (e.g., in-kind contributions and/or funding) to be leveraged with these federal research funds.

***NOTE: Priority will be given to proposals that clearly demonstrate this level of collaboration and partnership within the project teams, as part of the proposal evaluation and ranking process.***

*Leveraging and Partnering*

A proposal needs to describe the collaborative efforts that will occur during the term of the project, and the expected partnerships upon completion of the project to ensure that the outcomes of the proposed research are assimilated, utilized, and enhance early warning capabilities within the NIDIS DEWS regions after the completion of the projects.

*Interaction with NIDIS Program and the Regional DEWS*

Successful projects will demonstrate relevance to the priorities identified for the NIDIS regional DEWS, and clearly state how research outcomes will be incorporated into the NIDIS regional DEWS after completion of the research project.

Total costs should not exceed \$200,000 per research project; the duration of the projects should not exceed one year in length. Project funds will be awarded as Cooperative Agreements, thus ensuring a working partnership between the Project PIs and the NIDIS Program, NOAA scientists, and other relevant staff.

The competition manager is Dr. Nancy Beller-Simms ([nancy.beller-simms@NOAA.gov](mailto:nancy.beller-simms@NOAA.gov))

Potential applicants for this announcement may wish to participate in a webinar specific to this announcement. Information on the timing and registration procedures should check regularly on the CSI website for specifics. See: <https://cpo.noaa.gov/News/News-Article/PID/6226/evl/0/TagID/200/TagName/CSI>

## Data Management Guidance Requirements

### *Responsible NOAA Official*

For questions regarding this guidance and for verifying accessibility of data produced by funding recipients contact the competition manager.

### *Data Accessibility*

NOAA requires public access to grant-produced data. The use of open-standard formats and methods for data sharing is encouraged. Applicants must describe their approach in the Data/Information Sharing Plan section of their application (see the CPO Federal Funding Opportunity for more information on this requirement). Below are examples of methods to enable public access to grant-produced data:

- Data are submitted to the NOAA National Centers for Environmental Information (NCEI), which will provide public access and permanent archiving.
- Data are to be submitted to one of the following relevant International Council for Science (ICSU) World Data System facilities: <https://www.icsu-wds.org/community/membership/regular-members>)
- Data are submitted to another NOAA facility (other than NCEI), which will operate a publicly accessible online data server for these data.
- An existing publicly accessible online data server at the funded institution is to be used to host these data.
- Data are to be submitted to a public data repository appropriate to this scientific domain.
- Funding recipients will establish their own data hosting capability.
- Proposal may request permission not to make data publicly accessible (the application should include a rationale for lack of public access, and if funded approval will need to be obtained from the Responsible NOAA Official listed above).

### *Resources*

Proposals should include the costs of data sharing or archiving in their budgets.