

Script for NIDIS FY22 Coping with Drought Ecological Drought Informational Webinar

July 14, 2021

Slide 1:

Good afternoon, my name is Britt Parker and I am with the National Integrated Drought Information System (or NIDIS) in Boulder, Colorado. Welcome to this informational session on the Climate Program Office FY22 Coping with Drought competition on Ecological Drought. I serve as the manager of this competition and I am joined today by Veva Deheza, the Executive Director of NIDIS. Please note this webinar is being recorded and will be available on the Climate Program Office FY22 Funding Opportunity and Drought.gov webpages along with a transcript and a frequently asked questions generated through the Q&A portion of this webinar. This FAQ will be periodically updated with questions that come in so that all can benefit from the answers.

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We are holding this webinar in advance of the Letter of Intent due date as an opportunity to clarify the focus and requirements of this competition as well as answer your questions. Our goal is to be as clear and consistent with the information we are providing as possible. We will take questions at the end of this presentation. You may enter your questions at any time in the Q&A box in your control panel. Today I will briefly cover the following topics - what is the Climate Program Office?, what is NIDIS?, important details about the NIDIS CWD competition, briefly go over application requirements, important dates, and then open it up for questions.

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The NOAA Climate Program Office (CPO) manages competitive research programs in which NOAA funds high-priority climate science, assessments, decision support research, outreach, education, and capacity-building activities designed to advance our understanding of Earth's climate system, and to foster the application of this knowledge in risk management and adaptation efforts. The National Integrated Drought Information System sits within the Climate Program Office and the FY22 Coping with Drought competitions are one of eight competitions currently open for FY22. Please note there are two NIDIS competitions this year. This one focused on ecological drought and a second focused on Building Tribal Drought Resilience. That informational webinar will be held on Thursday July 15 at 1pm MT, and all materials will also be on the Climate Program Office and drought.gov websites.

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The National Integrated Drought Information System (NIDIS), was authorized in 2006 and is a multi-agency partnership that coordinates drought monitoring, forecasting, planning and research at national, state, and local levels across the country. The mission of NIDIS is to help

the nation move to an increasingly proactive approach to understand and manage drought risks and impacts, and to improve long-term drought resilience with a mandate to establish a national drought early warning system.

Since its inception NIDIS has been working with various federal, state, local and tribal government agencies as well as a network of researchers, academics, resource managers, and policymakers to support efforts to improve prediction, forecasting and monitoring, and collaborating with existing programs and partners to undertake applied research and drought planning and preparedness. We share this work and collate drought resources on the US Drought Portal.

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While our ultimate goal is a national early warning system, we recognize that impacts and information needs differ across the country, so our approach to achieve this goal is to develop regional Drought Early Warning Systems (or DEWS) - networks of partners sharing information and actions that help communities cope with drought. Each DEWS has many of the same basic ingredients (Observations and Monitoring, Predictions and Forecasting, Planning and Preparedness, Outreach and Communication, and Applied Research) but ultimately have their own flavor to reflect the needs of their region.

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These systems are not simply in place to disseminate forecasts and information, but to encourage innovation by integrating new, locally relevant drought information and supporting the introduction of new technologies that detect and communicate drought risks and warnings. In addition, we encourage learning across the DEWS and value projects and approaches that are transferrable. There are currently 9 DEWS across the US – covering CONUS west of Mississippi, the Midwest, the Northeast, the Southeast. We are also working to strengthen our support to partners in areas such as Alaska, Hawaii and the Pacific Islands, the U.S. Caribbean, and other areas that are not part of a formal DEWS.

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Information about the Climate Program Office FY22 Federal Funding Opportunity, including the 8 competitions that are part of this NOFO, can be found on the Climate Program Office webpage under the Funding Opportunities tab. There is also information on our Coping with Drought page on drought.gov.

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The focus of the Coping with Drought competition on Ecological Drought in FY22 will be will be focused on research to **improve our understanding, early warning and management of drought risk in terrestrial and aquatic ecosystems** to inform more deliberate and expanded decision-making that supports sustainable, healthy and resilient ecosystems.

The competition will focus on two areas:

1. *Improving our ability to understand drought impacts to ecosystems and ecologically available water and integrating that information into decision-making.*
2. *Integrating ecologically-relevant information to support drought monitoring, planning and action.*

This competition builds on the foundation of the [USGS Climate Adaptation Science Center Ecological Drought Initiative](#), the NIDIS-CASC Ecological Drought webinar series (Spring 2021), and the NIDIS Regional DEWS Strategic Action Plans which defined research needs and ecological drought management challenges around the United States at national and regional scales. For the purposes of this competition, ecological drought is defined as an “episodic deficit in water availability that drives ecosystems beyond thresholds of vulnerability, impacts ecosystem services, and triggers feedback in natural and/or human systems” and ecologically available water is defined as “the amount of water that is ultimately available to ecosystems during a drought and that is influenced by a combination of natural and human-modified processes” ([Crausbay et al. 2017](#)).

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NIDIS is interested in research that explores questions that fall into two bins.

Improving our ability to understand drought impacts to ecosystems and ecologically available water and integrating that information into decision-making

1. How does drought affect thresholds and tipping points of an ecosystem, and what factors lead to recovery, habitat loss or ecosystem transformations? What are the impacts of those changes on people and communities?
2. What are effective approaches to assess and predict ecologically available water? Which indicator(s) is most useful?

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3. How do traditional measures of drought, such as precipitation and soil moisture, interact with human water use to affect ecologically available water, and the structure and function of ecosystems? How should measures of drought be updated to better reflect ecologically available water?
4. Future droughts under conditions of climate change are expected to be more frequent, more severe, and of longer duration. How will those droughts influence ecosystems?

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Integrating ecologically-relevant information to support drought monitoring, planning and action

1. What information (tools, indicators, observations, models, etc.) is needed to better incorporate ecological drought into decisions at different time scales?

2. How can tailored eco-drought metrics that integrate traditional drought indicators with ecosystem characteristics be utilized as input into drought monitoring and natural resource management efforts? What are the current limitations on incorporating ecological drought indicators into traditional drought monitoring?

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3. What are science-based approaches and considerations for incorporating ecosystem drought vulnerability into droughts, water and land use planning?
4. What information is needed to develop natural resource management strategies for mitigating drought risk based on previous droughts and future trends, including within the context of multiple extremes?
5. What are the socio-economic impacts of ecological drought (e.g. ecosystem services, recreation, tourism, fisheries), and how can that information be integrated into decision making?

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Please note that proposals may address one or more of these and/or other related research questions, and are not expected to/should not address them all.

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Pending the availability of funds, NIDIS anticipates a funding allocation for this competition of up to \$2.0 million dollars. Proposals may request funding for up to two-year grants in the form of cooperative agreements with funding up to \$600,000 over two years. We anticipate funding 6-7 projects. Applicants should use September 1, 2022 as the start date.

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Project funds will be awarded as Cooperative Agreements, thus ensuring a working partnership and substantial interaction between the Project PIs and the NIDIS Program, NOAA scientists, and other relevant staff. Projects will be expected to submit annual reports and respond to periodic data and information requests including quarterly calls to ensure co-production. Some of our most successful work to date has been accomplished when we work together with our partners and we are looking forward to working closely with our PIs.

One of NIDIS' mandates is to disseminate drought resource through the US Drought Portal. To this end, where applicable – products, tools and results will be hosted on the US Drought Portal at www.drought.gov. Accordingly, all products, tools and other deliverables produced via this competition are required to be 508 compliant in accordance with Section 508, an amendment to the United States Workforce Rehabilitation Act of 1973.

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Please pay close attention to the following important guidelines as successful proposals will:

Include partners and decision-makers from relevant sectors and communities (across all levels of government). These partners should be part of an integrated project team that will contribute subject matter expertise and/or who are the beneficiaries of the results of the proposed research to ensure the results are assimilated, utilized, and enhance planning, early warning, response and mitigation within the NIDIS DEWS after the completion of the project.

Clearly demonstrate collaboration and partnership that will take place within the project team. This may include representatives from the public and private sectors; academia; local, regional, tribal, and federal governmental entities; non-governmental organizations (NGOs); environmental groups; citizen groups, etc.

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Demonstrate relevance to the NIDIS national and regional priorities and clearly state how outcomes can be incorporated into a [national and/or regional Drought Early Warning System\(s\)](#).

Demonstrate support of diversity, equity, inclusion, and environmental justice in their proposals, not only through the required statement but in their project teams and in engagement with partners where appropriate through the proposed work.

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There are additional considerations that are important:

Research that provides concrete applications to planning and decision making are preferred. This can include drought and water management, as well as natural resource management.

Preference will be given to those proposals that focus on natural systems (e.g. freshwater, coastal, wetland, grasslands, rangeland, forest ecosystems, and/or aquaculture (coastal/freshwater)) and shall avoid well-studied systems such as intensive and industrial agriculture systems.

Applicants shall avoid single species-specific projects.

We encourage the consideration of future trends (climate change, land use, population) where applicable to the research questions.

Applicants are encouraged to be aware of and consider integration of research results into regional Drought Early Warning Systems, where appropriate. The Strategic Actions Plans for

each regional DEWS are available on the DEWS pages which can be found through <https://www.drought.gov/dews>.

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Eligible applicants are institutions of higher education, other nonprofits, commercial organizations, international organizations, and state, local and Indian tribal governments.

Please see Subsection G. “Other Submission Requirements” of the full NOFO, for additional information regarding Federal investigators/co-investigators. Federal agencies or institutions are not eligible to receive federal assistance under this notice. However, federal agencies can send their proposals to the competition manager using the same instructions and requirements to be evaluated by the same process and criteria. If the proposal receives a high enough score through the process, they would receive funding through an interagency transfer versus a cooperative agreement mechanism.

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I will now briefly cover the letters of intent and full proposals. Please see the full NOFO documentation on grants.gov to read the full details and to ensure you meet all the requirements. In addition, please ensure you are familiar with the administrative and national policy requirements to which grantees will be subject.

Investigators are strongly encouraged to submit an LOI prior to developing and submitting a full proposal using the [FY22 CWD LOI submission form](#). Investigators unable to submit via the form should email their LOI to britt.parker@noaa.gov. If you email your LOI you will receive confirmation of receipt, if you do not, please follow-up.

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The Letters of Intent are due at **5pm Eastern Time on August 9, 2021**. The purpose of the LOI process is to provide information to potential applicants on the relevance of their proposed project to the competition in advance of preparing a full application. While LOIs are strongly encouraged, applicants are not required to submit them and may submit a full application even if they have not submitted an LOI. If an LOI is submitted it should contain the following; competition name, tentative project title, names and institutions of the PIs, a problem statement, brief summary of the work to be completed including methodology and data set needed or to be collected, approximate cost, and relevance to the competition being targeted. If these items are not included or the LOI is submitted late, it will not be considered. Responses to the PIs will be sent within 4 weeks after the LOI due date with an encourage or discourage from applying, though the final decision on whether to submit a full proposal lies with the PI.

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Full proposals are due at **5pm Eastern on October 18, 2021**. Failure to comply with the provisions in the NOFO for full proposals will result in applications being returned without review.

Full applications are limited to 35 pages, single spaced, using 12-point font type with 1-inch margins on standard 8.5"x11" paper! (For proposals with 3 or more PIs, the page limit is 40 pages).

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The required components of a full proposal include the following; title page, abstract, results from prior research, a project narrative, budget narrative and table, abbreviated vitae, current and pending support, a data and information sharing plan, and statement of diversity and inclusion.

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Other components that are not included in the page limit include; federal budget forms, indirect cost rate agreements, DUNS numbers and letters of support if you have them. Special instructions for multiple applications with the same project are included in the body of the NOFO. Please do not wait until the last minute to access grants.gov as the process can take as long as four weeks if steps are not completed correctly.

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The Letters of Intent are subject to a program-led review based on relevance to the targeted competition.

Upon receipt of full applications, an administrative review will be completed for compliance with requirements and completeness. Those that pass will proceed to an independent panel technical review for three criteria – technical and scientific merit, the overall qualifications of the applicants. Each reviewer will provide one score for each criterion from 1-5. These scores will be combined using the weighting averages to produce a single numerical score for this step. More information on the weighting of the criterion at this step can be found in the NOFO. Projects scoring at least a 3 out of 5 will proceed to an independent panel review for importance, relevance and applicability to program goals where each reviewer will provide a relevance score from 1-5. To determine final score, the scores from the technical review will be combined with the relevance review with a weighting of 60% and 40% respectively.

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Before we wrap up, as I mentioned earlier, NIDIS is offering a second Coping with Drought competition in FY22 focused on Building Tribal Drought Resilience. Applications should be developed by or in full partnership with tribal nations to fund the **implementation of actions—together with research on those actions—to build drought resilience contained in existing**

plans and strategies. If you are interested, you can find more information on the same Climate Program Office Funding Opportunities website I showed at the beginning of this presentation. Please share this with your networks and those who might be interested in applying.

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Finally, a reminder for where you can find the full NOFO and the CWD Informational Sheet – please read these resources thoroughly to ensure you understand fully the focus and requirements for your proposals. A transcript of this presentation, the presentation slide deck and a FAQ based on your questions will be able on the CPO Funding Opportunities website and we will update the FAQ based on additional questions that come in. Please contact me at any time with additional questions. We will now move to the Q&A portion of the webinar: please type your questions into the Q&A box at this time.

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<Put on screen during the Q&A>