CPO FY22 Federal Funding Opportunity: Coping with Drought - Ecological Drought

Britt Parker*, Veva Deheza

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Overview

What is CPO?

What is NIDIS?

Important details about the NIDIS FY22 Coping with Drought Ecological Drought Competition

Application requirements

Important dates

Q&A and discussion

What is the Climate Program Office?

The 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.

NATIONAL INTEGRATED DROUGHT INFORMATION SYSTEM (NIDIS)

MISSION + ACTIVITIES

Regional Drought Early Warning Systems

Prediction and Forecasting

Integrated Research and Monitoring

Drought Planning and Preparedness

Collaboration with Existing Programs and Partners

The U.S. Drought Portal (www.drought.gov)

Drought Early Warning

"A system that collects and **integrates information** on the key indicators of drought in order to make usable, reliable, and timely drought forecasts and assessments of drought…..

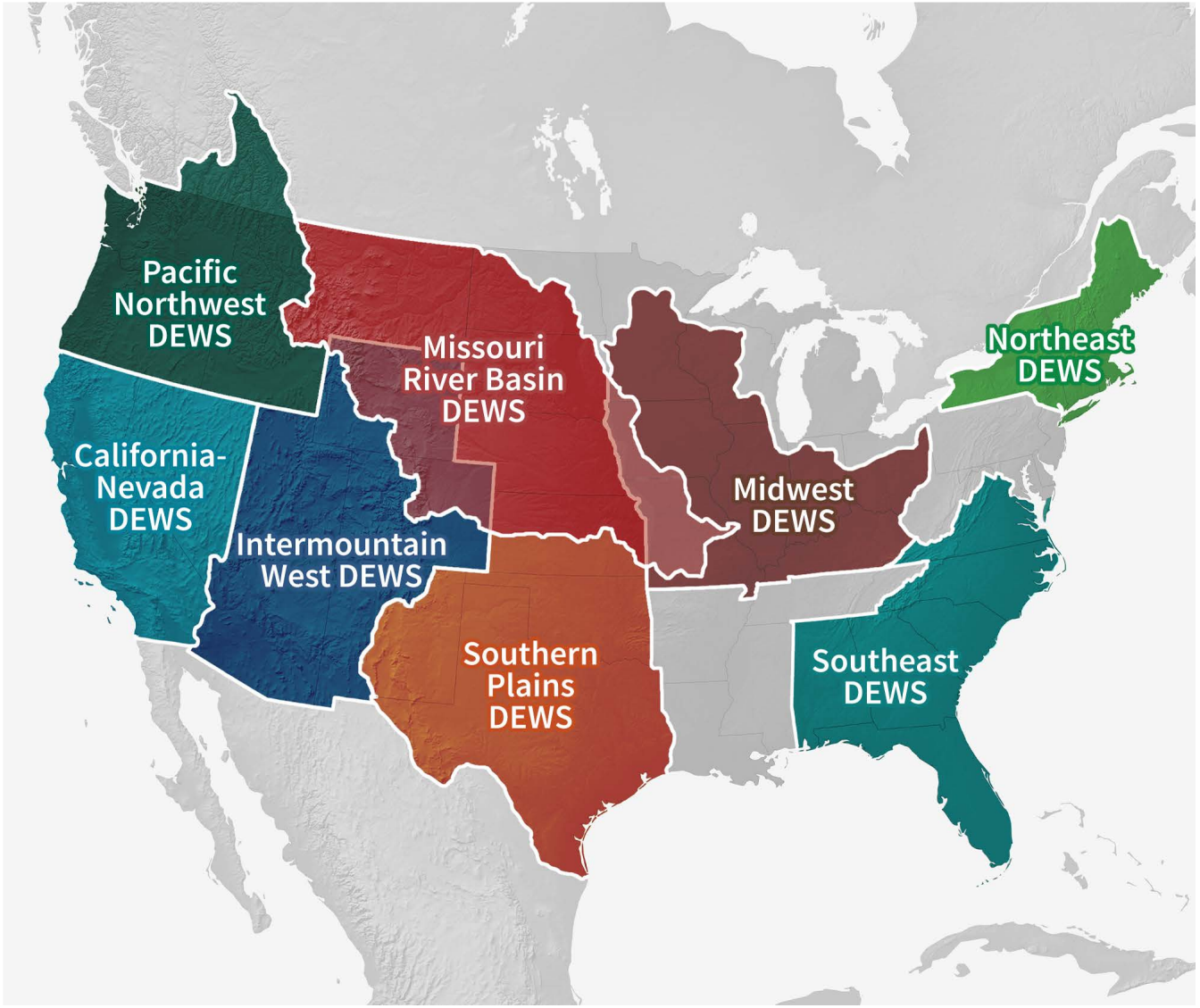
…and **communicates drought forecasts, conditions, and impacts** on an ongoing basis to decision makers, the private sector, and the public."

NIDIS Public Law 109-430

REGIONS

Drought Early Warning

A Drought Early Warning System (DEWS) utilizes new and existing networks of federal, tribal, state, local and academic partners to make climate and drought science accessible and useful for decision makers.



Where can I find information on the FY22 FFO?

What is the focus of the FY22 CWD Ecological Drought Competition?

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.

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

Examples of Research Questions Bin 1

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

- 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?

- What are effective approaches to assess and predict ecologically available water? Which indicator(s) is most useful?

Examples of Research Questions Bin 1 (cont.)

- 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?

- 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?

Examples of Research Questions Bin 2

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

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

- 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?

Examples of Research Questions Bin 2 (cont.)

- What are science-based approaches and considerations for incorporating ecosystem drought vulnerability into droughts, water and land use planning?

- 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?

- 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?

Important!

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.

Funding Availability and Start Date

- Total funds anticipated for the 2 years: **$2.0 million**
- Anticipate awarding between **6-7 projects**, with funding up to **$600,000** to be expended over 2 years through cooperative agreements
- Applicants should use September 1, 2022 as the start date

Guidelines for Applicants

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.

Guidelines for Applicants

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.

Guidelines for Applicants

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.

Guidelines for Applicants

Additional Considerations:

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 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.

Eligibility

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.

Letter of Intent

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.

Responses encouraging or discouraging a full application based on relevance will be sent to PI within 4 weeks after the due date

It is up to the PI whether to submit a full application

Letter of Intent

- Letters of Intent are due **August 9, 2021 by 5:00pm Eastern**, should be no more than 2 pages in length, and should include the following:

  - Competition Name
  - A tentative project title
  - Name(s) and Institution(s) of the Lead Primary Investigator(s) (PI) and other PI(s)
  - Statement of the problem
  - Brief summary of work to be completed, methodology to be used, data sets needed or to be collected
  - Approximate cost of the project
  - Relevance to the Competition that is being targeted

- If these items are not included or the LOI is submitted late it will not be considered

Full Proposal

- Full applications are due **October 18, 2021 by 5:00pm Eastern**
- Failure to comply with the following provisions 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)

Components of a Full Proposal

- Title Page
- Abstract *(1 page)*
- Results from Prior Research *(should not exceed 2 pages)*
- Project Narrative with associated figures and references *(not to exceed 15 pages; 20 pages for 3 or more PIs)*
- Budget Table/Narrative Justification
- Abbreviated Vitae
- Current and Pending Support
- Data/Information Sharing Plan *(up to 2 pages)*
- Statement of Diversity and Inclusion

Full Proposal Appendices (not counted in page limit)

- FFO Item 8: Federal Budget Forms SF424, SF424A *(REQUIRED)*
- FFO Item 9: Indirect Cost Rate Agreement *(REQUIRED)*
- FFO Item 12: DUNS Number *(REQUIRED)*
- Letters of Support

Review and Selection Process

Letters of Intent: Program-led review

Full Applications:
Step 1: Administrative Review - Completeness, eligibility, etc.

Step 2: Independent Panel Technical Review *(final weight 60%)*
Projects scoring at least a 3 of 5 will move forward

Step 3: Independent Panel Review for Importance/Relevance & Applicability to Program Goals *(final weight 40%)*

Related Competition

FY22 CWD 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**.

Additional Information

1. Download and read thoroughly:
   - **NOAA-OAR-CPO-2022-2006799 (full FFO)**
   - **Full FFO**: https://www.grants.gov/web/grants/view-opportunity.html?oppId=334633
   - **CWD information sheet (competition number:** 2943821**):** https://cpo.noaa.gov/Portals/0/Grants/2022/NIDIS-FY22-Program-Information-Sheet-CWD-Eco-Drought.pdf

2. An FAQ will be posted on the website along with these slides/script and will be periodically updated

3. Contact Britt Parker for additional information (britt.parker@noaa.gov)

National Integrated Drought Information System

Drought.gov

Britt Parker | britt.parker@noaa.gov