

Harry R. Hughes Center for Agro-Ecology

Call for Pre-Proposals

October 4, 2022

The Harry R. Hughes Center for Agro-Ecology is a 501(c)(3) corporation affiliated with the University of Maryland College Park and the University System of Maryland. The mission of the Harry R. Hughes Center for Agro-Ecology is to provide leadership to promote environmentally sound and economically viable agriculture and forestry as Maryland's preferred land use through research, outreach, and collaboration. We deliver information that is science-based, applied, and unbiased that fosters collaborative solutions. Our work is grounded in the values of equity and environmental justice. More about our Center is available at

https://agnr.umd.edu/sites/agnr.umd.edu/files/files/documents/Hughes%20Center/Hughes%20StratPlan_2019-2024_Final.pdf

Pre-Proposal Overview

The Harry R. Hughes Center for Agro-Ecology is calling for research pre-proposals to address one or more of the following five topic areas: oyster aquaculture, technical assistance, carbon reductions and sequestration in agriculture and forestry, climate resilience, and effectiveness of best management practices (see below). The Hughes Center anticipates awarding up to \$400,000 total, for three to five proposals. The Hughes Center does not fund overhead costs. Projects must have a start date before July 1, 2023. The duration of a proposal may be one or two years.

Topics:

1. Oyster aquaculture: Under the current system of commercial oyster fishing and with the decline in Bay health, the oyster population is a small fraction of its peak in the 19th century. However, demand for oysters dramatically exceeds supply, and increasing the number of oysters produced through aquaculture in the Bay would have numerous environmental benefits. *With respect to aquaculture, are there areas of public policy or oyster production that would benefit Maryland's economy and Bay health?*
2. Technical assistance: Both the private and public sectors provide technical assistance, yet farmers often express that more technical assistance is needed and agencies express that training of providers should be improved. Is there an issue with the way that technical assistance is provided? How can training be improved and careers in technical assistance be incentivized? Is there a way to generate more demand for technical services? *Are there other options for restructuring technical assistance that will increase nutrient reduction on farms?*
3. Carbon: Solutions to increasing pressure on our lands due to climate change require a systems approach to agriculture. How can farmers in agriculture and forestry be incentivized to adhere to

innovative practices to sequester carbon in the soil, reduce carbon emissions, and improve soil health and the economic and environmental sustainability of their enterprises? What role can public entities and private companies continue to play in that incentivization process? *Are there innovative ways to support the ability of Maryland farmers to increase carbon sequestration and reduce emissions, and benefit from these efforts?*

4. Climate resilience: As farmers experience greater extreme weather patterns and other consequences of climate change they will need to adopt practices and farming methods to become more resilient. Are there specific production practices such as cultivars, alternative crops, or animal breeds that would help farmers be more resilient? In addition, public policy changes can assist in their ability to continue to produce food and fiber. *What research is needed to assist our farms to adapt to climate change?*
5. Effectiveness of Best Management Practices (BMPs): There is a need to increase understanding of the site-specific impact of BMPs and conservation practices. For example, the performance of BMPs or the value of alternative land uses such as conversion to forest or wetlands varies among individual sites. In addition, the return on investment for a farmer, along with the magnitude of the environmental benefit to Maryland is variable. We need a better understanding of how BMP termination vs. upkeep and long-term management of BMPs affect economic and environmental outcomes. *Can we encourage BMP adoption through improved information on placement and the quantification of economic and environmental outcomes on individual farms or in targeted regions? Can we increase the availability and accessibility of tools to assist farmers in making decisions about BMP adoption and maintenance? What are the delivery systems and who are the appropriate entities to ensure farmers receive available information on BMP effectiveness for their fields and farms?*

The Submission Process

- Pre-proposal submission is required.
 - No more than one pre-proposal may be submitted per researcher.
 - Completed pre-proposals (one-page narrative) must be received by 5:00 pm EST, Monday, Oct. 31, 2022, to hughescenter@umd.edu with the words “Grant Proposal” in the subject line.
 - Final proposals will be invited on or around Nov. 21, 2022. Requests for full proposals are upon invitation only, based on the evaluation of the pre-proposal
 - Invited full proposals must be received by 5:00 pm, Dec. 16, 2022, and submitted to hughescenter@umd.edu with the words “Grant Proposal” in the subject line.
 - Selected projects will be asked to present at a Board meeting estimated for the third week in January.
 - Proposal review and announcement of final project selection will be no later than January 31, 2023.
 - **Who Can Apply:** Professionals and academics with credentials supporting their ability to complete this project. The Center encourages proposals that engage in collaboration across disciplines and among organizations, agencies, and institutions.
- Researchers with outstanding reports due to the Hughes Center are ineligible.**

Pre-proposal Format

Title:

Project director(s) and contact information:

Anticipated budget request (The Hughes Center does not support indirect costs.)

Pre-proposal - Maximum one page and required to include the following:

- Topic area addressed
 - Brief description of project justification
 - Research methods and analyses
 - Impact on Maryland’s agriculture or forestry industries
 - Impact on environmental or ecosystem indicators, such as nutrient reductions, carbon sequestration, Bay health, etc.
 - Impact, if any, on underserved communities or populations, or an aspect of the proposal that addresses equity
 - How the project information will be disseminated to stakeholders
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Review Process

Hughes Center Board members, staff, and Ad hoc reviewers with expertise in the subject area evaluate pre-proposals and select submissions to invite for the full proposal process. For the full proposal outline, see below.

All inquiries regarding the RFP should be directed to Dr. Kate Everts, Executive Director of the Harry R. Hughes Center for Agro-Ecology, Keverts@umd.edu and 410-827-6202. **Your pre-proposal and full proposal submissions should be emailed to hughescenter@umd.edu with the words “Grant Proposal” in the subject line.**

Invited full proposals should include the following:

Full proposal Format (only upon invitation)

1. Cover Sheet: Maximum of 1 page
 - a. Proposal Title
 - b. Names and Contact Information of Principal Investigator and all participants
 - c. Date of Submittal
 - d. Start and end dates of project (start date must be on or before June 30, 2023).

- e. Topic area addressed
- f. Budget total
- 2. Proposal: Maximum of 4 pages
 - a. A clear statement of the need for the project
 - b. A methods section including experimental or project design, and how data will be collected, analyzed and interpreted
 - c. Brief description of the role of each participant
 - d. Potential limitations in completing the project
 - e. An outreach plan including the methods and tools that will be used to share the findings with stakeholders
 - f. Timeline of the Project
 - a. Provide specific dates when deliverables will be available to the Center
 - b. Include information regarding the outreach efforts to stakeholders which may extend beyond the grant time period
- 3. Budget: Include a chart and description of each category in the chart, Maximum of 1 page
 - a. The budget should include the following categories:
 - i. Salaries
 - ii. Fringe benefits
 - iii. Subcontractors' salaries/fringe benefits
 - iv. Equipment/materials/supplies
 - v. Travel
 - vi. Outreach expenses
 - vii. The total amount of the project and total amount requested from the Hughes Center

Matching funds are not required. If your organization is providing resources, or has conducted significant work that contributes to the proposed project, these are best described in the proposal text. For projects with additional funders, if possible please provide further information on the likelihood of award and the amount requested from each potential funder.

- 4. Qualifications of the Participants: Maximum of 2 pages per person
 - a. Brief bio of the project participants with highlights of their skills and expertise that will bring value to this project
 - b. Current and Pending Support information on other grant-funded projects that are related to this proposal should include
 - i. PI and co-PI names and project title
 - ii. Supporting Agency
 - iii. Amount of Award
 - iv. Beginning and ending dates of grant award

The following are evaluation criteria for invited full proposals:

- How well does the proposal meet the mission and goals of the Hughes Center?
- Does the proposal help further the knowledge base in the agricultural, forestry, natural resource, or policy arenas so that something significant and beneficial to working lands and the Chesapeake Bay and its resources can be derived from the work?
- Does the project display scientific merit in theory, methods and design?
- Has a realistic and achievable public education/awareness/outreach component been included?
- Do the Investigator(s) appear qualified to perform the work as outlined?
- Is the budget feasible for the scope and time frame of the project?
- Is the time frame adequate for the work proposed?
- Is this work original and not duplicated elsewhere?
- Has the proposal identified key collaborators who can assist in achievement of project outcomes and goals?
- Rate the project's impact, if any, on underserved communities or populations, or its ability to address equity.