National Estuarine Research Reserve System Science Collaborative

2020 Request for Catalyst Proposals

~ Catalyst Grants: Targeted Investment for Advancing Collaborative Science ~

RFP Release: October 11, 2019

Letters of Intent Due: December 16, 2019
Proposals Due: February 19, 2020

About the NERRS Science Collaborative

The National Estuarine Research Reserve System (NERRS) Science Collaborative's primary goal is to support the co-development and application of relevant and usable knowledge to address critical coastal management issues identified by the NERRS in order to improve the long-term stewardship of the nation's estuaries. The Science Collaborative works to achieve this goal through regular funding opportunities, project support and management, and an adaptive approach to program implementation that fosters ongoing learning and improvement.

Consistent with the NERRS strategic plan, NOAA has identified the following focus areas for Science Collaborative funding opportunities in 2019 - 2023:

- Research and monitoring related to biophysical, social, economic and behavioral impacts of habitat change resulting from climate change and/or coastal development.
- Understanding how an ecosystem service approach can be utilized to support the protection and restoration of estuarine systems.
- Understanding the impacts of land use change, eutrophication, and contamination in estuarine ecosystems and the options for management and mitigation.
- Investigating options for improving estuarine habitat resilience; processes for identifying, prioritizing, and restoring sites; and monitoring and evaluating success.
- Syntheses of long-term monitoring data and information, originating from programs such as the NERRS System-wide Monitoring Program and associated monitoring efforts, to develop regional and national data products that address coastal management priorities for the NERRS and NOAA.

The Science Collaborative is managed through a cooperative agreement between the University of Michigan and the National Oceanic and Atmospheric Administration (NOAA).

Contents

Overview

The National Estuarine Research Reserve System (NERRS) Science Collaborative is soliciting proposals for one-year collaborative science catalyst grants. Catalyst grants support activities that advance collaborative science by facilitating the development of *new* collaborative science ideas; amplifying or enhancing *existing* collaborative research; or synthesizing NERRS System-wide Monitoring Program (SWMP)[1] data for a regional or national application. All proposals must adopt an end user[2] driven approach and meet a reserve management need.[3] Applicants may draw on both the social sciences and physical/natural sciences to meet the goals of this request for proposals (RFP).

Funding Amount

The Science Collaborative is interested in funding a variety of catalyst projects with awards ranging between $75,000 and $200,000. Budgets of $200,000 are expected to be most appropriate for multi-reserve projects.

Eligibility for Funding

Proposals must address one or more reserve management need(s), as identified by the reserve(s) with which they wish to work, and have the full support of the relevant reserve manager(s), as demonstrated by a written assessment from the reserve manager(s).

This funding opportunity is open to applicants from United States (U.S.) academic, non-government organizations, and non-federal public sectors working in partnership with NERRS staff.

Each proposal must designate a fiduciary institution and a fiscal lead[4] that will receive and manage the award, if granted. Researchers from institutions outside the U.S. cannot serve as the fiscal lead, but can be included in the project and may be funded by sub-awards through an eligible U.S. entity. Federal employees and agencies are not eligible to receive funding from the Science Collaborative, but may participate as unfunded project team members.

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[1] SWMP refers to the NERRS System-wide Monitoring Program, which involves a range of standardized monitoring parameters collected at all the reserve sites and made available for others to use. To learn more about the program and data available, visit: coast.noaa.gov/nerrs/research/

[2] End user is defined as a person or group in a position to apply the information or tools being produced, evaluated, or transferred through a Science Collaborative project in a way that is of direct consequence to the ecological, social, or economic integrity of a reserve(s) and/or surrounding watershed(s). Examples of end users include, but are not limited to, reserve staff, and public, private, or non-governmental decision/policy makers, including landowners, resource managers, land use planners, and educators at all levels.

[3] This document is a compilation of the current management needs within NOAA's reserve system. Management needs are submitted by reserve managers to NOAA and are updated on an annual basis.

[4] In most cases, the project lead is also the fiscal lead. In cases where the project lead is not employed by the institution that will receive and manage the grant, a project team member from the fiduciary institution may serve as fiscal lead and will have ultimate responsibility for ensuring that the proposed scope of work is completed.

Proposal Submission Process

Potential applicants should review the application process as outlined in this RFP and follow directions to submit both a letter of intent (LOI) and proposal using the timeline outlined below. The LOI is **mandatory** and will be used to inform reviewer recruitment, not the review process. LOIs are one page in length and outline the project lead, planned team members, reserves expected to participate in the project, a draft project title, and a one-paragraph description of the project. Proposals submitted without a LOI will not be considered. Applicants should not expect a response or comments to the LOI other than confirmation of receipt.

Key Dates

Date	Activity
November 12, 2019 at 3:30pm EST	Webinar: RFP Question & Answer
December 16, 2019 by 11:59pm EST	Mandatory letter of intent due
February 19, 2020 by 11:59pm EST	Proposals due
February 24, 2020	Manager proposal assessments due
June 2020	Funding notifications
October 1, 2020	Anticipated project start date

Supporting Documents

All supporting documents can be found at
www.nerrssciencecollaborative.org/catalyst

About Collaborative Science Catalyst Grants

Collaborative science catalyst grants are intended to be targeted investments for advancing collaborative science, and a range of activities could be supported by this opportunity. This section can help applicants decide if their idea is appropriate for this opportunity and provides guidance for selecting the appropriate primary RFP objective for a proposal.

RFP Objectives and Eligible Activities

Collaborative science catalyst proposals must address at least one reserve management need and provide an actionable plan to achieve ***at least one of*** the following objectives:

- Objective 1: Facilitate the development of *new* collaborative science ideas;
- Objective 2: Amplify or enhance *existing* collaborative research efforts; or
- Objective 3: Conduct NERRS System-wide Monitoring Program (SWMP) syntheses for a regional and/or national application.

Proposals ***must*** include at least ***one, or a combination of***, the following core activities:

- Collecting and analyzing new data (including social science data);
- Compiling and analyzing existing data; and/or
- Developing new or refining existing tools or products to maximize utility.

Objective 1: Developing New Ideas

To achieve objective 1, facilitating *new* collaborative science ideas, proposals must engage end users to develop a clear and actionable plan for pursuing future funding opportunities via the Science Collaborative or other programs. Example activities include, but are not limited to the following:

- Collection of preliminary data and analysis to refine and focus a research question;
- Synthesis of existing data to identify gaps or trends that can be filled or elucidated by a targeted future funding opportunity; or
- Data collection or data synthesis, in combination with partnership building and engagement activities to understand end user needs and identify a collective set of research priorities.

Objective 2: Amplifying or Enhancing Existing Research

To achieve objective 2, amplifying or enhancing *existing* collaborative research efforts, proposals must build on prior research accomplishments and advance their application for coastal management. This new work must be distinct from prior or existing collaborative research projects. Funds cannot be used to support ongoing work already funded by the Science Collaborative or another funding source. Example activities include, but are not limited to the following:

- Additional data collection and analysis to answer a critical follow up question from an end user;
- Assessment of policy or management options based on a synthesis of existing science (similar to an integrated assessment);
- Development of a new decision support tool to make existing products accessible to a broader and highly relevant end user group; and
- Evaluation of the effectiveness of an existing product and refinement to maximize use by current and/or additional end users.

The principles and methods of integrated assessment (IA) could serve as a useful guide for projects that are evaluating options for addressing a specific management or policy question. The IA approach is most useful for situations where considerable information exists but has yet to be synthesized in ways that allow people to assess options for effectively tackling the issue. Most IAs use a combination of technical analyses and stakeholder engagement activities to examine the focal issue. Project activities generally employ existing data and information and do not involve fieldwork or experimentation. As such, applicants drawing upon the integrated assessment approach are encouraged to identify objective 2 as their primary objective type.

Additional resources about IAs, such as the Integrated Assessment Primer, are available on the Science Collaborative website. ***Applicants interested in applying the IA approach to their catalyst idea are encouraged to take a customized approach, adopting elements that are most useful for their situation to ensure that activities are achievable within the one-year timeframe.***

Objective 3: Synthesis of Monitoring Data

To achieve objective 3, conducting SWMP[5] syntheses for a regional and/or national application, proposals must utilize existing SWMP long-term monitoring data, and potentially other relevant coastal observing data, to address priority coastal management issues. SWMP syntheses may be conducted at the local, regional, or national scales. However, local and regional syntheses must be transferrable to other regional or national applications. Example activities include, but are not limited to the following:

- Cross-reserve data comparisons to make SWMP relevant to regional or national coastal management questions;
- Identification of ecologically relevant patterns, extreme events, or trends in the data and potential impacts of these trends on a coastal management issue; and
- Development of new analytical tools that can facilitate the use of SWMP data in the future.

[5] Data from the NERRS System-wide Monitoring Program (SWMP) is made available here: cdmo.baruch.sc.edu and coast.noaa.gov/digitalcoast/data/nerr.html

Outputs

Project outputs are specific products that are developed during or upon project completion. Outputs must address end user and reserve management needs. Examples of outputs include, but are not limited to the following:

- A detailed and actionable strategy for pursuing future funding opportunities, including those offered by the Science Collaborative or another source;
- A refined collaborative research question informed by preliminary data collection and analysis and end user engagement;
- A new dataset or synthesis of existing data to meet an end user need;
- An analysis of policy options to address an issue, such as those generated through an integrated assessment; and
- Specific product(s) or tools that translate and/or apply information in a way that addresses the identified end user's needs, e.g., decision support tools, implementation guides, management recommendations, training curricula, and technical or non-technical reports.

At least one output must include an activity that shares the project approach and results with the broader NERRS community, such as a poster or session at a conference, like the NERRS/NERRA Annual Meeting, a system-wide webinar, or a NERRS sector meeting.

Outcomes

Project outcomes are the expected impacts of the project process and outputs. Examples of project outcomes include, but are not limited to the following:

- Stronger collaborative relationship among reserve staff, partners, and end users;
- A team that is well-positioned to pursue future collaborative research funding opportunities;
- New or refined decision-making and/or management processes;
- SWMP data integrated into products used to address regional or national management needs; or
- Additional technical capacity at reserves to advance their collaborative science agenda.

Required Elements

In order for proposals to achieve the purpose of this RFP, they must include three elements, all of which are critical to collaborative science with the NERR System. All proposals must:

1) Clearly identify, engage, and be responsive to the interests and needs of end users[6];
2) Directly involve at least one reserve, address one or more reserve management need(s) identified by the reserve with which the team wishes to work, and have the full support of the relevant reserve manager(s); and
3) Include a data sharing plan and account for the costs and time associated with implementing the plan in the proposal budget and timeline.

1) Collaboration and End User Integration

Proposals must clearly identify, engage, and be responsive to the interests and needs of end users—the intended users of the project outputs. A collaborative process that engages end users in project development and implementation is important to producing usable outputs. The one-year time frame of catalyst grants will require an efficient, targeted process for engaging end users. For example, close collaboration with a single, highly relevant end user group may be sufficient to develop a strong proposal and, in some cases, to complete a successful catalyst grant project. The goals and type of work proposed should dictate the approach to engagement as well as the breadth and depth of engagement planned during the project.

To this end, all proposals must:

- Identify the primary end user(s) and their needs;
- Describe how the end user's input helped to shape the project;
- Describe a clear process that will accommodate iterative engagement with the end user(s), including mechanisms for being adaptive and responsive to their input;
- Provide evidence of the end user's interest in the project and intent to be involved in it, i.e., a letter of support. (All proposals must include at least one letter of support from an end user. End users should describe how they have been engaged with the development of the proposal, how they see themselves continuing to inform the project if funded, and how they and how they anticipate using project outputs.);

[6] End user is defined as a person or group in a position to apply the information or tools being produced, evaluated, or transferred through a Science Collaborative project in a way that is of direct consequence to the ecological, social, or economic integrity of a reserve(s) and/or surrounding watershed(s). Examples of end users include, but are not limited to, reserve staff, and public, private, or non-governmental decision/policy makers, including landowners, resource managers, land use planners, and educators at all levels.

- Identify an individual who will be responsible for leading the collaborative process—the collaborative lead[7]—and describe her/his relevant experience and skills; and
- Demonstrate that sufficient time and resources are dedicated to support a collaborative, end user engagement process throughout the project, e.g., budget and timeline.

The Science Collaborative has resources online that can help you design your end user engagement process, including key considerations for engaging end users effectively and efficiently, which is particularly important for one-year projects.

2) Reserve Engagement

All proposals must address one or more reserve management needs, demonstrate a plan for productive collaboration with relevant reserve staff[8], and have the full support of the relevant reserve manager(s).

Relevant reserve managers and staff must be consulted and engaged in the development of the proposal. ***It is the responsibility of the applicant to ensure that the reserve manager and other appropriate staff are engaged sufficiently in project development.***

The proposal title page must identify a lead reserve as well as any additional reserves that will be participating in the proposed work. For each proposal that engages their reserve, managers will submit a written assessment of how well the proposal meets the following criteria:

1) The proposal addresses a management need for your reserve.
2) The proposing team engaged reserve staff sufficiently during the proposal development process.
3) You agree with the proposed allocation of resources to the reserve, and/or proposed allocation of reserve staff time or other resources if not covered in the budget.

These assessments will be submitted by reserve managers directly to the Science Collaborative, separate from the proposal. ***Applicants must provide a copy of their final proposal to the manager of every reserve named on the project.*** Relevant managers are

[7] The collaborative lead is responsible for the full engagement of end users by helping to develop and manage a process that ensures meaningful user input, including mechanisms for being adaptive and responsive to their input. This person should have the appropriate experience and skills to design and implement a collaborative process that provides the team with the end user input necessary to produce outputs that are responsive to their needs.

[8] Reserve staff have played a variety of roles in Science Collaborative projects, including serving as project, technical or collaborative lead, providing critical contributions to the technical work, and participating as an end user representative and project advisor. Roles should match the expertise and interests of the individuals involved and the scope of a particular project, and be clearly explained in the proposal.

those whose reserves will be directly engaged in project implementation and, as a result, should be able to answer each of the three criteria above definitively. If a reserve is not directly engaged in the proposed work, that reserve should not be listed as a partner on the project title page and the manager will not be expected to submit a proposal assessment.

3) Data Management

NOAA requires that environmental and social science data collected and/or created under NOAA grants and cooperative agreements be made visible, accessible, and independently understandable to general users. It should be available free of charge or at minimal cost, and made available in a timely manner (typically no later than two (2) years after the data are collected or created), except where limited by law, regulation, policy, or security requirements.

Applicants that propose the collection of new data are required to develop and include a Data Sharing Plan as a part of their full proposal package. This plan must address elements such as methods and protocols for data collection, data quality control/quality assurance procedures, metadata, data access, and data archival. A valid Data Sharing Plan may include only the statement that no detailed plan is needed, as long as the statement is accompanied by a clear justification, e.g., no new data are being collected.

Applicants must account for the costs and personnel associated with implementing a Data Sharing Plan in their budget and project narrative. Additional guidance and details for support in developing a Data Sharing Plan can be found in the proposal requirements section below.

Letter of Intent Requirements

Applicants are required to submit a Letter of Intent by 11:59pm EST on Monday December 16, 2019. Proposals submitted without first submitting an LOI by this deadline will not be considered.

Letters of Intent (LOI) must be provided as a single, one-page pdf file using 12-point, Times New Roman font and one-inch margins. LOIs should include the following information and be organized using the following headers:

1) Project Lead – Name, institution, telephone, and e-mail address
2) Planned Team Members – Names, institutions and anticipated role (e.g., project lead, collaborative lead, team member, end user). Team roles are defined in the team section of the proposal narrative requirements below. Note: Team members may be added or removed and roles may shift at the proposal stage, but the project lead should remain the same.
3) Name of Reserve(s) – Identify the lead reserve and any additional reserve(s) that are expected to be directly engaged in the project. Note: Reserve partners may be added or removed and the lead reserve can be updated at the proposal stage.
4) Project Objective(s) – Indicate the primary RFP objective(s) to which your project idea relates: Objective 1: Facilitate the development of *new* collaborative science ideas; Objective 2: Amplify or enhance *existing* collaborative research efforts; and/or Objective 3: Conduct NERRS System-wide Monitoring Program (SWMP) syntheses for a regional and/or national application.
5) Draft Project Title
6) Project Topic – Provide no more than one paragraph describing the planned work.

Information gathered through LOIs will be used exclusively to guide recruitment of appropriate reviewers and will not influence the proposal evaluation process. No feedback will be provided to applicants on the content of their LOI.

How to Submit Your Letter of Intent

Letters of Intent must be submitted by 11:59pm EST on Monday December 16, 2019.

Access the application page by clicking the "Begin your application" button at www.nerrssciencecollaborative.org/catalyst. Once you have logged in[9], you will need to complete an online application form, upload your LOI, and save your application. The application form mirrors some of the content in the LOI and all entries in the form can be updated at the proposal stage.

[9] You will need a U-M Account or Friend Account to start an application and submit your LOI. You will be prompted to login or create an account when you access the application page.

You will receive a confirmation email when you have successfully saved your LOI. You may continue to edit your LOI submission until the deadline. Your saved LOI will be automatically submitted at 11:59pm EST on December 16, 2019. If you do not receive a confirmation email, your LOI was not saved properly and you should resave or contact us directly at NERRS-info@umich.edu.

The confirmation email will also include a unique URL specific to your application. ***Save this email – you will need this URL and login credentials to submit your proposal.***

Proposal Requirements

Proposals must be submitted by 11:59pm EST on Wednesday, February 19, 2020.

Proposals must be provided as a single PDF file using 12-point Times New Roman font, no less than single space, with one-inch margins and be organized using the headers below. Proposals must include a title page, up to 10-page maximum narrative, and appendices as outlined below. **Proposals not meeting these requirements, including the header requirements, will be removed from the competition without further review.**

Title Page (up to 2 pages):
Organize your title page using the following headers:

1) Project Title
2) Project Lead / Fiscal Lead[10] (primary contact for the project) –
    a) Title / Position
    b) Institution
    c) Telephone Number
    d) Postal Mailing Address
    e) E-mail Address
3) Additional Team Members (anyone receiving project resources or contributing significant resources to the project) – Name, institution, telephone, e-mail, and role, e.g., project lead, collaboration lead, technical lead, end user, team member, or other role. **Note: Project and collaborative leads are required.** One person can serve multiple roles. See team section for definitions of these roles.

[10] In most cases, the project lead is also the fiscal lead. In rare cases where the project lead is not employed by the institution that will receive and manage the grant, a project team member from the fiduciary institution may serve as fiscal lead and will have ultimate responsibility for ensuring that the proposed scope of work is completed.

4) Fiduciary Information – Indicate the institution that would receive and manage the grant contract. Please provide a point of contact, including email address, to receive fiscal questions. The fiduciary institution is responsible for managing any project subcontracts, tracking grant-related spending, and submitting invoices to the University of Michigan for reimbursement on behalf of the grant.

5) Name of Reserve(s) – Identify a lead reserve for the project. If relevant, identify any additional reserves that are directly engaged in the project. See the reserve engagement section for a detailed definition of "directly engaged reserve." Multiple reserves may collaborate on a proposal but a *single, lead* reserve must be identified here. Managers of each listed reserve will submit an assessment of the proposal.

    a) Lead reserve:

    b) Any additional reserves:

6) RFP Objective(s) – Indicate the primary RFP objective the proposed work will address. If relevant, identify any secondary objectives. The proposal may address multiple objectives but a *single, primary* objective must be indicated here.

    a) Primary objective:

    b) Any additional objectives:

7) Budget Request – Requested dollar amount. Total request must fall within the range of $75,000 to $200,000. Budgets of $200,000 are expected to be most appropriate for multi-reserve projects.

8) Project Duration – Projects should start on October 1, 2020 and end no later than September 31, 2021.

9) Project Summary – Provide a 200-word summary of the proposed project that is suitable for a non-technical audience. Include the project's objectives, responsiveness to end user needs, planned outputs, and anticipated outcomes.

Project Narrative (10-page maximum):
Organize your narrative using the following headers:

1) Objective & End User Need –

    a) Identify the issue the project will address. Discuss the importance and context, with particular emphasis on how the project will address one or more reserve management need(s).

    b) Be explicit about which of the eligible RFP objective(s) you seek to achieve and how it aligns with an end user need. If you are building on existing work, explain how the proposed work is distinct and addresses end user needs.

c) Identify the primary intended users[11] of project outputs, explain how their input helped to shape the project, and indicate how the work is designed to meet their needs. This should be corroborated by letters of support in Appendix E.

2) Outputs and Outcomes – Clearly distinguishing between the two, provide a list of the planned outputs and anticipated outcomes. Describe these briefly, clearly stating how the outputs meet the end user and reserve management needs discussed in the "objective and end user need" section and how the outputs will help lead to the anticipated outcomes.

   a) *Output* – A specific product that is developed during or upon project completion; there may be several outputs associated with a project. See example outputs provided above. Outputs must address end user and reserve management needs and include an activity that shares the project approach and results with the broader NERRS community.

   b) *Outcome* – An expected impact of the project process and outputs; there may be several outcomes associated with a project. See example outcomes provided above.

3) Project Approach – Provide a detailed description of the project approach, including the specific activities that will achieve the project outputs and outcomes. **Note: The proposal must include one or a combination of the core activities of this RFP.** Identify specific methods and tools you will use, e.g., survey instruments, models, or analytical approaches. Describe the collaborative process that will be followed to ensure iterative engagement with end users, including specific mechanisms for being adaptive and responsive to their input, and an explanation for why the chosen approach is appropriate. Make clear how the approach will address the research question and lead to the planned outputs.

4) Team – Identify each team member and explain how the team and its expertise are well qualified to implement the project, including the collaborative approach. Describe the role of each team member (e.g., project lead, collaborative lead, technical lead, end user, team member) and explain each member's contribution to the project. Two-page resumes for all team members must be included in Appendix F.

   Note: Project lead, fiscal lead, and collaborative lead must be specified. One person can serve multiple roles. Team member roles are defined as follows:

   - The project lead is the primary contact for the project, coordinates the project team, and ensures all elements of the project are implemented. In most situations, the project lead is also the fiscal lead.

[11] Primary end users are those most instrumental in developing the project, most directly engaged in the project, and who stand to benefit the most from the outputs.

- The fiscal lead manages the grant award and will have ultimate responsibility for ensuring that the proposed scope of work is completed. The fiscal lead must be employed at the fiduciary institution that will receive the grant contract. In rare cases where the project lead is not employed by the fiduciary institution, a project team member from the fiduciary institution may serve as fiscal lead.
- The technical lead serves as a content area expert within the team, coordinates technical aspects of the project, and ensures the quality of the science. Catalyst teams do not need to identify a technical lead although, if appropriate, one may be identified.
- The collaborative lead is responsible for the full engagement of end users by helping to develop and manage a process that ensures meaningful user input, including mechanisms for being adaptive and responsive to their input.

5) Data Accessibility – For projects using existing datasets, identify who owns them and how the project team will access them. If a critical dataset is not publicly available, demonstrate permission for accessing the data by including letters of support in Appendix E.

Appendices (all appendices are required):

A. Timeline – Using the required timeline template found on the application website, provide the following:
   i. Project start and end dates. Projects should start on October 1, 2020 and end no later than September 31, 2021.
   ii. A schedule with key tasks and deliverables. This schedule must:
      a) Identify significant tasks, including end user engagement;
      b) Cite and connect directly to the outputs identified in the project narrative;
      c) Include project lead and collaborative lead attendance at the NERRS Science Collaborative project workshop in the fall of 2020 (the Science Collaborative will provide travel support, outside of the project budget); and
      d) Indicate completion of all final project outputs.

B. References – Up to 2 pages of references may be included.

C. Budget & Budget Narrative – Use the budget template found on the application website to provide an itemized estimate of all project costs. The total amount requested must fall within the range of $75,000 to $200,000. Budgets of $200,000 are expected to be most appropriate for multi-reserve projects. **Proposals with budgets that exceed $200,000 will be disqualified from the competition.**

Multi-reserve projects are complex and require an efficient subcontracting process to ensure project teams are able to begin their work quickly. It is important to identify a fiduciary institution and fiscal point of contact that is familiar with the subcontracting process and has mechanisms currently in place in order to facilitate the sub-award process effectively.

The overall budget must include a separate budget for each subcontract (using the budget template). The Science Collaborative will reimburse overhead costs up to the subcontractor's federally negotiated indirect cost rate agreement[12]. Unless otherwise noted in the indirect cost rate agreement, indirect costs may only be applied to the first $25,000 of each subcontract.

Budget Narrative – Provide a budget narrative to justify expenses in all budget categories. Please note the following:

i. Personnel costs must be broken out by team member including number of months and percentage of time requested.

ii. Any unnamed personnel, e.g., reserve staff, graduate students, post-doctoral researchers, or technicians, must be identified by their job title, and their personnel costs explained as described above.

iii. The contribution of any personnel to the project goals shall be explained even if not receiving support under this grant. In particular, all reserve staff time anticipated for the project must be accounted for, even if funds are not being requested to support that time.

iv. Equipment costs must describe the equipment to be purchased and its contribution to the achievement of project goals. If a piece of equipment costs more than $5,000, a cost analysis will be required. If a lease vs. purchase analysis cannot be completed at the time of proposal development, a statement is needed that the analysis will be completed before the equipment is purchased. This analysis will compare the cost of purchasing a piece of equipment against the cost of leasing the same piece of equipment. The benefits of leasing or purchasing should be addressed in this analysis as well.

v. Travel costs must be broken out by number of people traveling, destination, and purpose of travel, and projected costs per person. Domestic and foreign travel should be itemized separately. Foreign travel must comply with the Fly America Act which limits the use of foreign flag carriers. For more information, go to http://www.gsa.gov/portal/content/103191.

vi. If collecting new data, proposals must include appropriate budgets to support required data management activities. It is anticipated that for projects proposing significant new data collection efforts, appropriate

[12] If a subcontractor does not have a federally negotiated indirect rate, they are able to use the de minimus rate of 10%.

personnel time should be committed for data QA/QC and metadata development. For budget allocation guidance, it is anticipated that 10% to 15% of the overall budget should go to support data management activities.

vii. Overhead may be charged up to the fiscal institution's federally negotiated indirect cost rate.

viii. A separate budget narrative is required for each subcontract, including the same detail as is required for the overall budget. As noted above, unless otherwise noted in the indirect cost rate agreement, overhead may only be applied to the first $25,000 of each subcontract.

If a proposal includes an estimate for a subcontract, for example, for work that will be competitively bid after the project is awarded, the budget narrative should include a summary of and justification for the subcontract services. If the project is selected for funding, exact costs must be provided before funding is awarded. In all cases, contractual expenses will be capped at the amount listed in the budget.

D. Fiscal Letters of Commitment – The fiduciary institution must provide a letter of commitment approving the proposal submission, including approval of any subcontracts included in the proposal. A letter of commitment is also required from each subcontracting institution. There is no standard form for this letter.

E. Letters of Support – Provide letters from individuals and/or partners confirming contributions to and support for the project. Include letters from the following:

a) Primary end users who will be engaged throughout the project and will use the outputs. In their letters of support, end users should describe in their own words: (i) how they have been engaged with the development of the proposal; (ii) how they see themselves continuing to inform the project if funded; and (iii) how they anticipate using project outputs. Reviewers will be looking for personalized, signed letters on an organization's letterhead to confirm end user engagement and understand how the work will meet their needs. **All proposals must include at least one letter of support from an end user.**

b) Team members or partners included in the project approach but not funded in the budget.

c) Individuals, groups, and/or institutions that have agreed to provide data/access to data or other resources necessary for the project not otherwise accounted for in the budget.

F. Resumes – Two-page resumes for each team member are required. Resumes will be used by reviewers to determine whether the team has the requisite technical and collaborative skills and experience to undertake the project successfully.

G. Data Sharing Plan – All Science Collaborative proposals must address data management requirements in one of two ways:

i. For projects that propose the collection of new data: A Data Sharing Plan of two to five pages is required for all proposals that collect new data. Use the Data Sharing Plan Requirements and Outline available on the funding opportunity website to develop a Data Sharing Plan.

ii. For projects that do not propose the collection of new data: A statement that "no detailed Data Sharing Plan is needed," accompanied by a clear justification as to why, e.g., no new data are being collected.

The Centralized Data Management Office is the coordinating entity for Science Collaborative data management activities. CDMO personnel will provide data management guidance during proposal development and technical support for projects. Clarifying information and opportunities for questions and answers about Data Sharing Plan requirements will be made available during the webinar described below.

How to Submit Your Proposal

Proposals must be submitted by 11:59pm EST on Wednesday, February 19, 2020 at the unique URL emailed to you when you submitted your LOI.

Clicking on the unique URL emailed to you when you submitted your LOI will prompt you to log in and then direct you to your application page. Once logged in, you will need to review and update your project information in the fields at the top of the application form, then scroll down to the proposal upload field, upload your proposal, and save your application. Please note that in order to submit your proposal, your login credentials must be the same as those used to submit your LOI.

You will receive a confirmation email when you have successfully saved your proposal. You may use your unique application URL to revisit and edit your submission until the deadline. Your saved application will be automatically submitted at 11:59pm EST on February 19, 2020.

If you do not receive a confirmation email, your proposal was not saved properly and you should resave or contact us directly at NERRS-info@umich.edu.

Please email NERRS-info@umich.edu at least 24 hours in advance of the proposal deadline if you anticipate challenges accessing your existing account.

Evaluation Criteria

Proposals must comply with all submission instructions and requirements to be considered for funding. Proposals not meeting these requirements will be removed from the competition without further review.

Each compliant proposal will be evaluated based on the criteria listed below. Proposal review will also be informed by reserve manager assessments to determine the extent to which projects were developed collaboratively with reserves and address their management needs.

1) Priority Issue
    a) Does the proposal clearly articulate at least one of the eligible RFP objectives and how it aligns with an end user need(s)?
    b) Does the proposed work relate to at least one reserve management need as confirmed by the relevant reserve manager(s)?
2) Collaboration and End User Integration
    a) Does the proposal identify appropriate end user(s) and clearly articulate their needs?
    b) Will the outputs meet the identified end user's needs, as indicated in letters of support from the end user(s)?
    c) Does the proposal clearly indicate how end user input will be incorporated into the final outputs?
3) Project Approach
    a) Is the approach appropriate for achieving the project outputs?
    b) Are the methods sufficiently detailed and technically sound?
    c) Does the approach incorporate an appropriate strategy for end user input?
4) Feasibility
    a) Does the team have adequate expertise, experience, and well-defined roles to complete the proposed work?
    b) Is the timeline realistic for the proposed work, and does it include sufficient time for integrating end user input and completing proposed project outputs?
    c) Is the budget appropriate for the proposed work and does it include sufficient resources for integrating end user input?
    d) Does the proposal demonstrate access to and/or availability of necessary resources, including data? Where relevant, is this corroborated in letters of support?
5) Potential Impact – Are the proposed process and outputs likely to lead to the desired outcomes, including catalyzing collaborative science?

Review and Selection Process

Review Process

The review process for collaborative science catalyst proposals is as follows. A more detailed summary of the review process, including decision points, inputs to each decision, and a summary of the process participants can be found here.

1) **Letter of intent** – Submitting a letter of intent by the December 16, 2019 deadline is the first required step of the application process. Proposals not meeting this requirement will be removed from the competition without further review. LOIs will be used by Science Collaborative staff to inform proposal reviewer recruitment; they will not be used as an evaluative tool.

2) **Minimum requirements assessment** – Science Collaborative staff will review all submitted proposals with an LOI to confirm that they meet the requirements as described in this RFP, including all proposal elements, the budget request, and adherence to header requirements. Proposals not meeting these requirements will be removed from the competition without further review.

3) **Written review** – Each proposal that meets the minimum requirements will be matched to non-conflicted technical experts who will conduct written reviews. Reviewers will consist of technical experts from the specific content area of the proposed work and collaboration practitioners with experience working on natural resource issues. Reviewers will be asked to rate each proposal according to the evaluation criteria.

4) **Applicant response to reviews (optional)** - Applicants will receive their written reviews and be given the option to provide a response (one page maximum).

5) **Panel review** –A subset of the experts conducting the written review will form the review panel in addition to at least one non-conflicted NERRS representative. Panel composition will include diverse disciplinary expertise, practical experience with collaborative science, and broad geographic representation. Panelists will convene to discuss the outcomes of the written reviews and the proposal assessments submitted by relevant reserve managers. For each proposal, panelists will discuss strengths and weaknesses and any discrepancies among the written reviews. Panelists will identify projects that are supportable in rank order as input to the final selection process as outlined in the following section. Applicants will receive a copy of the panel summary along with the blinded written reviews.

Selection Process

Final funding recommendations will be based on the panel recommendation of supportable projects in rank order. In consultation with the NOAA Program Manager, the NERRS Science Collaborative shall award projects based on available funds in rank order unless a proposal is justified to be selected out of rank order based upon one or more of the following factors:

1) Availability of funding;
2) RFP objective type, i.e.: Objective 1: Facilitate the development of *new* collaborative science ideas; Objective 2: Amplify or enhance *existing* collaborative research efforts; and/or Objective 3: Conduct NERRS System-wide Monitoring Program (SWMP) syntheses for a regional and/or national application[13];
3) Balance/distribution of funds geographically by NERRS regions; and
4) No reserve will serve as the lead reserve on more than one catalyst project.

Funding notifications are expected in June 2020.

Environmental Compliance Review

Applicants should be aware of the following environmental compliance requirements:

NOAA requires that, prior to award, every Science Collaborative project recommended for funding undergo review for potential impacts to the environment and/or cultural resources. This initial review process by NOAA takes a minimum of 30 days.

Projects that are identified by NOAA as potentially impacting the environment and/or cultural resources, e.g., involve field work, and/or are conducted in areas where historic or archeological artifacts might be present, will require further review by the agency. NOAA will be reviewing for compliance with the National Historic Preservation Act (NHPA), the Endangered Species Act (ESA), the Marine Mammal Protection Act (MMPA), and the Magnuson-Stevens Fishery Conservation and Management Act related to essential fish habitat (EFH). If the proposed project is placing fixed structures in the environment, consultation with the U.S. Army Corps of Engineers may also be required. NHPA, ESA, MMPA, and EFH reviews take a minimum of 30 days to complete, but can often take 60 to 90 days.

Guidance to Applicants

All applicants should plan for a minimum 30-day initial review process by NOAA; this process will be initiated immediately after funding notifications. If funded, a detailed description of field sampling methods along with a map showing the location of each field site, including each field site's latitude and longitude will need to be provided to NOAA. Questions regarding this requirement should be directed to Dwight Trueblood (603-862-3580, Dwight.Trueblood@noaa.gov).

[13] Application of this selection factor would mean that one project of each objective type would be selected before funding another of the same type.

Proprietary Information & Intellectual Property

Applicants should be aware that the disclosure of patentable ideas, trade secrets, and privileged, confidential, commercial, or financial information can hinder an applicant's chances to secure patents, trademarks, or copyrights.

Proprietary information of this kind should only be included in proposals when it is necessary to convey an understanding of the proposed project. Applicants must mark proprietary information clearly in the proposal with appropriate labels, such as, "The following is (proprietary or confidential) information that (proposing entity) requests not be released to persons outside the NERRS Science Collaborative, except for purposes of review and evaluation."

Please protect your intellectual property rights at the proposal preparation stage as appropriate. This will allow you to speak freely about ideas and avoid the inadvertent loss of intellectual property rights. You should contact your institution's technology transfer or intellectual property office to determine the best way to protect your intellectual property.

Questions Regarding this Request for Proposals

Question and Answer Record: Responses to all questions, without reference to project specifics, will be posted on a rolling basis for all interested applicants to view online at www.nerrssciencecollaborative.org/catalyst

Q&A Webinar: The Science Collaborative will host a question and answer webinar on **November 12, 2019 at 3:30pm EST**.

To register, go to https://attendee.gotowebinar.com/register/565105398248958466

After the webinar, questions and responses will be incorporated into the online Q&A Record and webinar slides and the recording will be posted online at www.nerrssciencecollaborative.org/catalyst

Email: The Science Collaborative will accept and reply to written questions regarding this request for proposals through February 17, 2020. Questions should be submitted to nerrs-info@umich.edu.

Phone: The Science Collaborative will also accept questions via phone regarding this request for proposals. Questions should be directed to or Lynn Vaccaro (734-763-0056) or Maeghan Brass (734-763-0727).

Website: More information about the NERRS Science Collaborative can be found at www.nerrssciencecollaborative.org