

National Estuarine Research Reserve System Science Collaborative 2021 Collaborative Research Full Proposal Guidelines

~ Collaborative Research Grants: Generating New Science to Inform Decisions ~

Proposals Due: 11:59 pm EDT on April 14, 2021

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).

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Overview

The National Estuarine Research Reserve System (NERRS) Science Collaborative is soliciting full proposals from invited applicants for up to three-year collaborative research grants. Collaborative research projects develop new applied science using an end user. driven, collaborative process that results in research, data, tools, or other products that will inform decision making related to a <u>reserve management need</u>. Applicants may draw on both the social sciences and physical/natural sciences to meet the goals of this request for proposals (RFP).

Funding Amount

Proposals may request up to \$200,000 per year, for up to three years. The total budget may not exceed \$600,000 for a three-year project.

Eligibility for Funding

To be eligible for this funding opportunity, applicants must have submitted a pre-proposal and been invited by the Science Collaborative to submit a full proposal.

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).

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 lead³ 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.

³ 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.



¹ End users are defined as individuals or groups 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, regulators, resource managers, land use planners, leaders of impacted communities, and educators at all levels.

² 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.

Proposal Submission Process

Invited applicants should review the application process as outlined in these full proposal guidelines and follow directions to submit a proposal using the timeline outlined below. Proposals include a 15-page maximum narrative that describes the problem being addressed, end user needs, approach, outputs and outcomes, and team members; as well as detailed budget and justification and appendices. All applicants will receive feedback on their proposals along with the funding notifications.

Key Dates

Date	Activity
March 18, 2021 at 4:00 pm EDT	Webinar: Proposal guidelines Q&A
April 14, 2021 by 11:59 pm EDT	Proposals due
May 19, 2021	Reviews returned to applicants for optional response
May 26, 2021	Optional applicant response due
July 2021	Funding notifications
October 1, 2021	Anticipated project start date

Supporting Documents

All RFP supporting documents can be found at http://nerrssciencecollaborative.org/research

About Collaborative Research Projects

Collaborative research projects conduct new applied science through an end user-driven, collaborative process that results in research, data, tools, or other products that will inform decision making related to a reserve management need. Collaborative research projects can use social and/or natural science research approaches and must have a well-defined research question that the project is designed to answer.

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 Reserve System. All proposals must:

- 1) Directly involve at least one National Estuarine Research Reserve site, address current management needs for reserve(s) that will be engaged in the project, and have the full support of the relevant reserve manager(s).
- 2) Clearly identify, engage, and be responsive to the interests and needs of end users; and
- 3) Plan for the costs associated with implementing a Data Sharing Plan.

1) Reserve Engagement

All collaborative research proposals must be developed in collaboration with at least one of the 29 reserve sites within NOAA's National Estuarine Research Reserve System (NERRS), address current management needs of the reserves involved in the project, demonstrate a plan for collaboration with relevant reserve staff ⁴, and have the full support of the relevant reserve manager(s).

Proposals must offer a clear and specific explanation of *how* the proposed work will inform and advance management related to a current management need for one or more reserves. Applicants should consult the <u>Annual Summary of Reserve Management Needs</u> that were generated by each reserve and compiled by NOAA as a reference for this RFP. Each reserve has designated a point of contact to field inquiries and offer more background on the reserve's current management needs. There may also be situations where an emerging management need is identified with reserve partner(s), particularly for multi-reserve projects. In such cases, the process for identifying the need should be clearly articulated and confirmed by relevant reserve(s) in a letter of support.

Relevant reserve managers and staff must be engaged in the development of project plans and given an opportunity to offer feedback on the proposal, particularly sections that explain the project's relevance to reserve programs, local management needs, proposed

⁴ 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 end users and project advisors. 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.



project roles for reserve staff (whether serving as end users, project advisors or team members), and any reserve resources to be provided to the project.

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 be asked to confirm that:

- 1) The proposing team engaged reserve staff sufficiently during the proposal development process; and
- 2) The reserve manager agrees with plans for how the reserve would contribute to the work (e.g., staff roles in the project) and any resources allocated to support those contributions.

Reserve managers will have an opportunity to identify any related concerns through a proposal assessment form that is submitted directly to the Science Collaborative, separate from the proposal. 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. It is the responsibility of the applicant to ensure that the relevant reserve manager(s) is adequately consulted during project development and receives a copy of the final proposal.

2) 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. Project teams should identify a set of primary end users for their project, including groups actively involved in the particular coastal management issue and that are in a position to apply the information or tools being developed through a project in a way that is of direct consequence to the ecological, social, or economic integrity of a reserve(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, regulators, land use planners, leaders of impacted communities, and educators at all levels.

Because this grant program is meant to address reserve management needs, it is appropriate to think of the reserves as one of the project's end users, even if the project is led by reserve staff. Applicants should be explicit about which aspects of the reserve program will benefit from the project (i.e., land stewardship, training, education, monitoring, etc.) and will use project outputs.

A collaborative process that engages end users in project development and implementation is important to producing usable outputs and achieving desired outcomes. This includes specific mechanism(s) for soliciting end users' input and feedback *during* the project in order to enhance the team's ability to confirm and/or adapt their outputs. Examples of these mechanisms include questionnaires, individual consultations, workshops to refine scope and provide feedback, or structured processes for end user review of draft products. Proposals should indicate when and how feedback will be solicited and what research decisions will be impacted by that input.



End user representatives can be incorporated into the project team if they will be contributing significant time, expertise, or other resources to project activities. In these cases, input can be solicited through regular team meetings and collaborative development of project products. This should be explicitly stated in the project narrative.

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. All proposals must:

- Identify the primary end user(s), their relevant needs, and how how they anticipate applying project findings and using outputs in their work;
- 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) to support and inform the research, including anticipated timing and mechanisms for soliciting input during the project and specific research decisions that will be informed by end user input;
- Provide evidence of the end user's interest in the project and intent to be involved in it, e.g., letter of support (all proposals must include at least one letter of support from an end user);
- Identify an individual who will be responsible for leading the collaborative process—the collaborative lead.⁵—and describe their relevant experience and skills; and
- Demonstrate that sufficient time and resources are dedicated to support a collaborative, end user engagement process throughout the project, and this is reflected in the budget, personnel, and timeline.

The Science Collaborative has <u>online resources</u> that can help you design your end user engagement process, including key considerations for engaging end users effectively and efficiently.

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

⁵ 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.



elements such as methods and protocols for data collection, data quality control/quality assurance procedures, metadata format, and a process for data access and data archival. Applicants must account for the costs associated with implementing a Data Sharing Plan in their budget and project narrative.

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.

The NERRS Centralized Data Management Office (CDMO) 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. In addition, CDMO can help teams archive and make accessible their project datasets using CDMO's access and archival services and standard protocols.

Teams are encouraged to identify long-term data archival portals that make sense for their type of data and potential users of that data. If teams would like to use CDMO for data access and data archival, their standard process for making data accessible would be as follows:

- The Science Collaborative will create an entry about a project's datasets in the Science Collaborative online resource library, as well as in national data catalogs (InPort), outlining the scope of the datasets and making them discoverable.
- Potential users of the data will have an option to complete a data request form. The
 form will generate an email response with a data download link connecting the
 user to the package of data and metadata files that have been archived with the
 CDMO.

If this archival/access process meets a project's needs, applicants may include it as part of their proposal's data sharing plan without consulting with CDMO in advance of proposal submission. More complicated data sharing ideas, such as development of an interactive user interface for a database, are not part of CDMO's typical support for Science Collaborative projects.

Additional guidance for developing a Data Sharing Plan can be found in the template and examples provided on the grant opportunity webpage and the proposal requirements section below. Clarifying information and opportunities for questions and answers about Data Sharing Plan requirements will be provided during the Q&A webinar described below.

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 project outputs include, but are not limited to the following:

• Specific, scientifically produced datasets and analyses;



- A synthesis of research findings;
- Specific product(s) that translate and/or apply the research findings 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; and/or
- Evaluation of existing decision making information needs.

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

Even though details will likely evolve over the course of the project, applicants are encouraged to offer specific examples of the type of information and products that could emerge from the project, how they will be shared and potentially integrated with existing information, who could use those outputs, and what specific decisions or management actions could be impacted. Those details demonstrate that you understand the management context and have thought through the steps required to inform decisions, and it is clear how the project approach and planned outputs could lead to the anticipated outcomes.

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:

- New or refined decision making and/or management processes and a plan for future iterative evaluations of these processes;
- Enhanced programs that can better address a current management need based on new data, analyses, or tools;
- Stronger collaborative relationship among reserve staff, partners, and end users; and/or
- Better understanding among researchers and end users of how their respective fields can inform each other's efforts.



Proposal Requirements

Proposals must be submitted by 11:59 pm EDT on Wednesday, April 14, 2021.

Proposals must be provided as a single pdf file using 12-point Times New Roman font, no less than single spaced, with one-inch margins, and be organized using the headers below. Proposals must include a title page, 15-page maximum narrative, and appendices as outlined below. Budget tables should be submitted as an excel file and also included as an appendix within the proposal PDF. **Proposals not meeting these requirements, including budget and header requirements, will be removed from the competition without further review.**

Title Page

Organize your title page using the following headers:

- 1) Project Title
- 2) Project Lead / Fiscal Lead. (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, etc.

 Note: Project, collaborative, and technical leads are required. One person can serve multiple roles. See team section for definitions of these roles.
- 4) <u>Fiduciary Information</u> 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 which is the lead reserve for the project as identified at the pre-proposal stage. If relevant, identify any additional reserves that are

⁶ 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.



directly engaged in the project. Multiple reserves may collaborate on a proposal but a *single*, *lead* reserve must be identified here.

- a) <u>Lead reserve</u>:
- b) Any additional reserves:
- 6) <u>Budget Request</u> Requested dollar amount. Proposals may request up to \$200,000 per year, for up to three years. The total budget may not exceed \$600,000 for a three-year project. Note: This budget request may not exceed the pre-proposal budget estimate.
- 7) <u>Project Duration</u> Projects should start October 1, 2021 and end no later than September 30, 2024.
- 8) <u>Project Summary</u> Provide a 200-word summary of the proposed project that is suitable for a non-technical audience. Please include the project's objectives, responsiveness to end user needs, planned outputs, and anticipated outcomes.

Project Narrative (15-page maximum):

The proposal narrative should be written in a way that will be compelling to a diverse set of reviewers, including individuals with expertise in natural and social sciences, collaborative processes, and coastal management. Reviewers may not be familiar with reserve programs and may not have expertise in all the disciplines of a specific project.

The project narrative should not exceed 15 pages and should be organized using the following five headers in this order.

- 1) <u>Problem Statement and Response to End User Needs</u> It is particularly important that project partners from participating reserves are consulted in the development of this section. Be sure to include the following information, using an organizational structure that best suits the proposal topic.
 - Introduce the issue(s) the project will address, discussing the importance and context.
 - Describe the project's relevance to the National Estuarine Research Reserve site(s) involved in the project and explain *how* the project will advance understanding and influence specific management actions related to one or more current reserve management needs.⁸

⁸ There may also be situations where an emerging management need is identified with reserve partner(s) subsequent to the management need document being completed. This is particularly true for multi-reserve projects. In such cases, the process for identifying the need should be clearly articulated here in the narrative, and confirmed by relevant reserve(s) in a letter of support.



⁷ See the <u>reserve engagement section</u> for additional guidance on reserve involvement. Managers of each listed reserve will have an opportunity to complete a proposal assessment and provide directly to the Science Collaborative program any concerns about the reserve's engagement in the proposal and their anticipated contribution to the project.

- Clearly identify the project's primary end user(s), their connection to the proposal topic, and their current information needs. Describe how the end user's input helped to shape the project and how they anticipate applying project findings and using outputs in their work. This should be corroborated by letters of support from end users in Appendix E.
- Briefly, indicate to what extent the proposed work would forge new relationships within the team and with primary end users, or to what extent the project builds on prior collaborations. Both new and existing partnerships are valued; this background is helpful for understanding the project approach.
- 2) <u>Project Approach</u> The approach should describe an *integrated* technical and collaborative process that will address the research questions, provide opportunities for meaningful input from end users, and ensure effective coordination of project team members. Be sure to include the following information, using an organizational structure that best suits the proposal topic.
 - Clearly identify the project's core research question(s).
 - Describe the proposed collaborative process that will accommodate iterative engagement with project end user(s) and coordination among team members. Indicate the type of insight a project's primary end users could provide and how their contributions will support and inform the research process. Outline the anticipated purpose, timing, and mechanisms for engaging end users and how that process will be managed. Be specific about the mechanism(s) for soliciting end user input (e.g., questionnaires, individual consultations, workshops), why a chosen approach is appropriate¹⁰, and how that information will be distilled and used.
 - Describe the technical approach that will be used to address the project's
 research questions, including specific natural, physical and/or social science
 data collection and analysis methods, specific tools, and/or datasets that will
 be used. Make it clear why the proposed methods are appropriate and how
 they will lead to the planned outputs. Where relevant, indicate when and
 how collaboration with end users connects to specific research tasks and
 informs the research process.

¹⁰ For example, a project might plan to leverage an existing working group because it is an efficient way to engage the identified end users, or individual end users may be integrated into a project team because those end users have a skill or expertise directly relevant to completing the project.



⁹ 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.

- 3) Outputs and Outcomes Clearly distinguishing between the two, provide a list of the planned outputs¹¹ and anticipated outcomes¹². Describe these briefly, clearly stating how the outputs meet the end user and reserve management needs and how the outputs will help lead to the anticipated outcomes. For example, you might indicate that X new dataset and series of maps will help X user select restoration techniques, resulting in restoration efforts that better account for anticipated climate change impacts. Explain how the usability of the outputs will be sustained beyond the project period, e.g., who will be responsible for disseminating products and how information products will be maintained or updated.
- 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, collaboration lead, technical lead, end user, team member) and explain each team member's contribution to the project. Two-page resumes for all team members must be included in Appendix F.

Note: Project lead, fiscal lead, collaborative lead, and technical 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.
- 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.
- The **collaborative lead** is responsible for the full engagement of end users by helping to develop and manage a process that ensures iteration with them, including mechanisms for being adaptive and responsive to their input.
- 5) <u>Data Accessibility</u> For projects using existing datasets, identify who owns them and how the project team will access them. If a critical dataset is not publicly

¹² Outcomes are the expected impacts of the project process and outputs; there may be several outcomes associated with a project. See <u>example outcomes</u> provided above.



¹¹ Outputs are specific products that are developed during or upon project completion; there may be several outputs associated with a project. See <u>example outputs</u> 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.

available, demonstrate permission for accessing the data by including letters of support in Appendix E.

Appendices:

Appendices A-I are required; appendices J and K are optional.

- A. <u>Timeline</u> Using the required <u>timeline template</u> found on the grant opportunity webpage, provide the following:
 - 1. Project start and end dates. Projects should start October 1, 2021 and end no later than September 30, 2024.
 - 2. A schedule with key tasks and deliverables. This schedule must:
 - Identify significant tasks, including planned end user engagement opportunities that allow time for integrating input;
 - Specifically cite and link directly to the outputs identified in the project narrative; and
 - Indicate completion of all final project outputs.

Note: Project leads will be expected to participate in a virtual workshop series in year 1 (approximately 8 hours over the course of the year), with the possibility of annual in-person workshops in subsequent years. These workshops do not need to be included in the project timeline, and travel support would be provided, outside of the project budget, for any in-person workshops.

- B. References Up to 2 pages of references may be included.
- C. <u>Budget, Budget Narrative & IDC Rate Agreement</u>
 - Budget Table(s) Use the budget template found on the grant opportunity webpage to provide an itemized estimate of all project costs. Budget tables should be submitted as an excel file and also included as an appendix within the proposal PDF.

Proposals may request up to \$200,000 per year, for up to three years. The total budget may not exceed \$600,000 for a three-year project. The total budget may not exceed that requested in the pre-proposal. **Proposals with budgets that do not fall within these parameters will be disqualified from the competition.**

The overall budget must include a separate budget for each subcontract, using the <u>budget template</u>, with a narrative explanation provided either as a separate section within the overall budget narrative or as a separate narrative document. Multi-institution and multi-reserve projects are complex and require an efficient subcontracting process to ensure project

¹³ Any unspent funds from one year will be carried over and available for teams to spend in subsequent years within the project period; however, your proposed budget should not exceed \$200,000 for each project year.



- teams are able to begin their work quickly. Applicants are encouraged to work closely with their fiscal point of contact to ensure they have mechanisms in place to facilitate the sub-award process effectively.
- O Indirect Rate Agreement The Science Collaborative will reimburse overhead costs up to an institution's federally negotiated indirect cost (IDC) rate agreement. Unless otherwise noted in the IDC rate agreement, indirect costs may only be applied to the first \$25,000 of each subcontract. Applicants should provide a copy of the IDC rate agreement for the fiduciary institution that would manage the grant, if they have one..¹⁴ Subcontract budgets do not need to include IDC rate agreements.
- Budget Narrative Provide a budget narrative to justify expenses in all budget categories. Please note the following:
 - a. Personnel costs must be broken out by team member, including number of months and percentage of time requested.
 - b. 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.
 - c. 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.
 - d. 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.
 - e. 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.
 - f. 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 personnel time should be committed for data QA/QC and

¹⁴ If a subcontractor does not have a federally negotiated indirect rate, they are able to use the de minimis rate of 10%.



- metadata development. For budget allocation guidance, it is anticipated that 10% to 15% of the overall budget should go to support data management activities.
- g. Overhead may be charged up to the fiscal institution's federally negotiated indirect cost rate. Applicants should include a copy of their indirect agreement, if they have one, as part of the proposal PDF.
 - The budget narrative should explain the project's IDC rate and which project expenses are used for calculating the total indirect amount.¹⁵
- h. 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. Project leads should provide budget details to their Science Collaborative program officer as any new subcontracts are established during the project period.
- D. <u>Fiscal Letters of Commitment</u> 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. <u>Letters of Support</u> Provide letters from individuals and/or partners confirming contributions to and support for the project. Include letters from the following:
 - 1. 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.
 - 2. Team members or partners included in the project approach but not funded in the budget.

¹⁵ For example, applicants should indicate if the project will use their institution's federally negotiated indirect cost rate, something lower, or a de minimus 10% rate. In addition, the budget narrative should indicate which project costs (e.g., salaries and travel but not tuition) the IDC rate is being applied to for the calculations of the total indirect amount.



- 3. 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. <u>Resumes</u> 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. <u>Data Sharing Plan</u> All Science Collaborative proposals must address data management requirements in one of two ways:
 - 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 <u>Data Sharing Plan Requirements and Outline</u> available on the grant
 opportunity webpage to develop a Data Sharing Plan.
 - **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.

See the <u>data management section</u> above for additional guidance.

- H. <u>Related Work</u> Use the <u>related work template</u> found on the grant opportunity webpage to list all current and pending projects relevant to this proposal. A single table may be used to list all relevant projects across the team.
- I. Other Supporting Documents (optional; 5 pages maximum)
- J. <u>Field Site Information</u> (optional; see <u>Environmental Compliance Review</u> for guidance on this appendix)

How to Submit Your Proposal

Proposals must be submitted by 11:59pm EDT on Wednesday April 14, 2021 at the unique application URL emailed to applicants when invited to full proposal.

Your unique URL will prompt you to log in and then direct you to your application form. Please note that in order to submit, your login credentials must be the same as those used to submit your pre-proposal.

Submitting your full proposal will consist of uploading a single PDF of your full proposal (including the budget in the appendices) and an Excel spreadsheet of your budget to your original online application form. Once logged in, you will need to scroll down toward the end of the page to the full proposal upload field, upload your proposal -- PDF and budget spreadsheet-- and then click on the "save" button. Please also review and update the other fields in the online application form, including reserves and team members involved in the proposal.

You will receive a confirmation email the first time you successfully upload and save your proposal. The email will include a link you may use to return to your proposal submission



and make edits until the deadline. Your saved application will be automatically submitted at 11:59pm EDT on April 14, 2021. You will not receive a second confirmation email

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

Proposal Evaluation Criteria

Proposals must comply with all submission instructions and guidelines 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 equally weighted criteria listed below.

1) Engagement of End Users

- Does the proposal demonstrate engagement of primary end users in the development of the research and project approach? E.g., is it clear how the end user(s) helped to shape the project?
- Is there evidence of the end user's commitment to continued involvement in the project? Is this corroborated in letters of support from the end user(s)?
- Is there evidence that the outputs meet the identified end user's needs? Is this corroborated in letters of support from the end user(s)?

2) Collaborative Approach

- Does the proposal outline an appropriate plan for facilitating and managing a collaborative process involving the team and primary end users?
- Are the purposes and methods for engaging end users clear and appropriate?
- Is it clear how the end user engagement activities will support the research process?

3) Technical Approach

- Are the methods sufficiently detailed, technically sound and appropriate for addressing the research questions?
- Will the research outputs be developed in a way that's responsive to input from end users?
- Does the proposal demonstrate access to and/or availability of necessary resources, including data? Where relevant, is this corroborated in letters of support?

4) Feasibility

• Does the team have adequate expertise and experience for the proposed technical methods and end user engagement?



- Is the timeline realistic for the proposed work and does it include sufficient time for integrating end user input and completing proposed project outputs?
- Is the budget appropriate for the proposed work and does it include sufficient resources for integrating end user input and completing proposed project outputs?

5) Potential Impact

- Does the proposal reflect a comprehensive understanding of the issue, end user's needs, and decision making context?
- Does the proposal demonstrate how the project will advance understanding and action related to at least one reserve management need?
- Are the proposed process and outputs likely to lead to the desired outcomes?

Review and Selection Process

Review Process

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

- 1) **Minimum requirements assessment** Full proposals must be submitted by the stated deadline. Science Collaborative staff will review all submittals to ensure that they meet the requirements as described in the full proposal guidelines, 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.
- 2) **Review of invited full proposals** Full proposals are reviewed by panel members from the pre-proposal stage. Additional topical experts, including technical experts from the specific content area of the proposed work and collaboration practitioners with experience working on natural resource issues also review full proposals.
 - a) Written technical review Review panel members from the pre-proposal stage as well as additional topical experts will conduct written technical reviews of full proposals. Reviewers will be asked to rate each proposal according to the evaluation criteria provided in the full proposal guidelines. Reviewers will also be asked to provide comments to explain their rating and, where possible, suggestions for improvement.
 - b) *Applicant response to reviews (optional)* Applicants will receive their written technical reviews and be given the option to provide a response (two page maximum).
 - c) Full proposal panel review The review panel will convene virtually for a final discussion of proposals. The panel will consist of pre-proposal panelists plus a non-conflicted NERRS representative. For each proposal, panelists will consider the applicant's response to reviews and discuss



- strengths and weaknesses and any discrepancies among the written reviews. Applicants will receive a summary of the panel's discussion of their proposal.
- d) Recommendations for funding Panelists will identify projects that are supportable in rank order as input to the final selection process as outlined in the following section.

Selection Process

Final funding recommendations will be based on the panel recommendations 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 secondary selection factors:

- Concerns identified by reserve managers related to their level of engagement during proposal development or the anticipated scope and level of support for reserve contributions to the project;¹⁶
- Availability of funding;
- Balance/distribution of funds geographically by NERRS regions; and
- No reserve will serve as the lead reserve on more than one collaborative research project, except in cases where a reserve is leading a project that involves three or more reserves.¹⁷

Funding notifications are expected in July 2021.

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.

¹⁷ A reserve may serve as lead reserve for more than one collaborative research proposal, but they are unlikely to receive funding for more than one collaborative research project that they are leading if those proposals involve fewer than three reserves. A reserve may be the lead reserve on more than one collaborative research award this year if the additional project involves three or more reserves. This criterion will be applied to proposals submitted to this RFP independent of other Science Collaborative funding opportunities.



¹⁶ See section on <u>Reserve Engagement</u> for additional details. Managers of participating reserves will have an opportunity to share any concerns via a proposal assessment form. If concerns are not easily addressed, they could affect the selection process for full proposals.

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. To conduct the environmental compliance review, NOAA will need 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. If you have it, detailed site maps and latitude/longitude information only should be included in Appendix J. Please note that information for NOAA to conduct the environmental compliance review is NOT a required element of your proposal at this stage. If you do provide the information, include it in Appendix J. If you do not provide this information in your proposal and it is recommended for funding, NOAA will contact you to obtain the information required for the environmental compliance reviews.

Questions regarding this requirement should be directed to Doug George (Phone: 510-637-3796, Email: douglas.george@noaa.gov).

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 http://nerrssciencecollaborative.org/research.

Q&A Webinar: The Science Collaborative will host a question and answer webinar on **March 18 at 4:00 pm EDT**.

To register, go to: https://attendee.gotowebinar.com/register/1121644110063785229

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 http://nerrssciencecollaborative.org/research.

Email: The Science Collaborative will accept and reply to written questions regarding this request for proposals through April 13, 2021. Questions should be submitted to nerrs-info@umich.edu.

Phone: The Science Collaborative team is also available to discuss questions over the phone. We suggest emailing us at nerrs-info@umich.edu to set up a time or leaving a voice message for Maeghan Brass (734-763-0727) or Lynn Vaccaro (734-763-0056).

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

