

**PROGRAM ANNOUNCEMENT FOR FY 2021  
STRATEGIC ENVIRONMENTAL RESEARCH AND DEVELOPMENT  
PROGRAM (SERDP)**

**SERDP Exploratory Development (SEED) Federal Proposal Instructions**

Reference: Call for FY 2021 SERDP SEED Proposals, Memorandum to the  
SERDP Executive Working Group Members dated *October 24, 2019*

**NOTE:** These instructions are for the preparation and submittal of proposals in response to the SERDP SEED Statements of Need.

To submit a proposal in response to a SERDP Core Statement of Need, use the Core instructions found on the [SERDP website](#).

## **1. INTRODUCTION**

The Strategic Environmental Research and Development Program (SERDP) is the Department of Defense's (DoD) environmental research and development program, planned and executed in partnership with the Department of Energy and the Environmental Protection Agency. SERDP's role is to fund research and development that addresses environmental issues relevant to the management and mission of the DoD. SERDP-supported efforts lead to the development and application of innovative environmental technologies or methods that improve the environmental performance of DoD, support the long-term sustainability of DoD's installations and ranges, and significantly reduce current and future environmental liabilities. Within its broad areas of interest, the Program focuses on Environmental Restoration, Munitions Response, Resource Conservation and Resiliency, and Weapons Systems and Platforms. SERDP funds research and development programs in basic and applied research and advanced technology development.

### **1.1. GENERAL INFORMATION FOR PROPOSERS**

The SERDP Exploratory Development (SEED) Solicitation is a means for researchers to test proof of concept during an effort of approximately one year. These projects will be funded at a level not to exceed \$250,000 in total cost. Successful SEED projects may lead to more extensive follow-on research or development efforts.

SERDP is seeking proposals responding to Statements of Need (SONs) for projects to be funded in fiscal year (FY) 2021. SONs may be found on the [SERDP website](#).

This Call for Proposals (CFP) is for Federal organizations. Private sector organizations should refer to the FY21 Broad Agency Announcement (BAA) located on the [SERDP website](#).

Based on an evaluation of the written full proposal, SERDP will notify each proposer as to whether SERDP wishes to make an award. SERDP reserves the right to select for award any, all, or none of the proposals received. SERDP also reserves the right to select a portion of the work proposed

in any single proposal for award. There is no commitment by SERDP to make any awards, nor to be responsible for any money expended by the proposer before an award is made.

The SEED Solicitation will be managed by the SERDP office. General SERDP procedural questions may be referred to the SERDP office at 571-372-6565. For technical information regarding a SON, contact the individual listed in the SON.

**1.2. EVALUATION SCHEDULE**

<b>DATE</b>	<b>ACTIVITY</b>
October 24, 2019	CFP Released
<b>March 5, 2020; 2:00 p.m. Eastern Time</b>	<b>SEED Proposals Due to SERDP</b>
July – August 2020	Proposers Notified
March – April 2021	Anticipated Awards

## 2. PROPOSAL INSTRUCTIONS

### 2.1. PROPOSAL LENGTH AND FORMAT

SEED proposals shall contain four (4) sections, as described below: Abstract, Technical Section, Cost Section, and Appendices. Proposals shall be prepared in accordance with the following:

- The Technical Section of the proposal should be no longer than ten (10) pages.
- Proposals should be prepared in no less than 11- point size, any font.
- All margins (top, bottom, left and right) should not be less than 1 inch.
- Pages should be numbered.
- Proposals should use the underlined headers provided in the Proposal Format below. These headers correspond directly to the evaluation criteria provided in this Program Announcement that will be used to review, evaluate, and select proposals.
- Tabs, table of contents, and other elements not prescribed in the guidance below are neither required nor desired.

Your proposal will be submitted on-line via the SERDP and ESTCP Management System (SEMS) website. No hard copies are required. **Proposals must be submitted prior to 2:00 p.m. Eastern Time on March 5, 2020.**

Complete submittal instructions can be found in Section 3 of this document.

### 2.2. ABSTRACT

In one (1) page or less, provide a brief summary of the information found in the proposal using the headers listed below:

- **System Generated Proposal Number:** Generated by the SERDP and ESTCP Management System (SEMS) when the proposal details are entered and saved in the system as outlined in Section 3 below.
- Proposal Title
- Lead Principal Investigator
- Lead Organization
- Objective: A brief description of the environmental problem to be addressed, emphasizing its relevance and importance to DoD, followed by a concise objective of the proposed project. Summarize what the project will accomplish and how the result will be applied to the problem.
- Technical Approach: A concise summary of the science or technology (e.g., the chemical process that will be evaluated or the science behind a new sensor that will be developed, etc.) and a brief description of the methods (e.g., modeling, laboratory experiments, field work, etc.).

- **Benefits:** A brief description of the expected benefits to DoD and the scientific community.

This abstract is **not** part of the 10-page restriction for the Technical Section of the proposal.

Note: For successful proposers, the abstract will be the basis for the project overview to be posted on the SERDP website. As such, it should be a stand-alone summary that is professionally written and edited.

### **2.3. TECHNICAL SECTION**

The technical section shall be no more than ten (10) pages in length. Submit a detailed description of the research to be undertaken using the outline below.

1. **SERDP Relevance:** Provide a brief statement describing how the proposed research project responds to the SEED SON.
2. **Technical Objective:** State concisely the research objective. Outline specific technical questions to be answered by the research. Specifically, address how achieving the objectives of this project results in risk reduction or acquisition of the data necessary to develop a complete proposal for a more extensive follow-on project.
3. **Technical Approach (Background, Tasks, and Schedule):** Outline the research activities for which SERDP will provide support. Articulate specific technical goals, and methods of the proposed project. While some allowance is made for encountering the problems and vagaries that are part of research, the proposer is expected to meet the provisions and milestones specified in this section. This section should be the primary focus of the proposal.
  - a. **Background:** Demonstrate a thorough understanding of the problem and knowledge of the state of the science. Frame the proposed research in terms of current gaps in understanding or data. Articulate the hypothesis that the project will investigate. Cite relevant literature references.
  - b. **Tasks:** Delineate the technical approach into hypothesis-driven tasks that clearly identify how the objectives of the proposed project will be addressed. For each task, provide details about the experimental design and methodology. If the methodology is new or unusual, describe it in sufficient detail for evaluation.
  - c. **Schedule:** Provide a project schedule that illustrates the timeline for each task and major deliverables in the form of a Gantt chart. Ensure that all required deliverables are included in the Gantt chart. Required deliverables are found in the reporting guidelines on the [SERDP website](#).
4. **Research Team:** Identify the Principal Investigator(s) (PI) and the key co-performers and their respective organizations. Provide a short explanation regarding each key person's commitment of time to this research in person (months or years) and identify other personnel committed, such as number of graduate students, if any.
5. **Cooperative Development:** Identify government or non-government organizations that will be contributing direct funding or in-kind resources to the research effort. Describe existing or prospective joint sponsorship of any portion of the project. Where possible,

provide estimates in dollars or level of effort equivalents of these in-kind resources. In the absence of agreements among sponsors for joint support, the proposal should be structured so that the research can be carried out without the resources of any other sponsor. In an appendix to the proposal, provide letter(s) of support for any contributing efforts.

6. Transition Potential: Discuss how the proposed work will provide critical data or proof of concept. To the extent possible, outline objectives for follow-on research and the future development path if the SEED project is successful.

## 2.4. COST SECTION

The cost section of the full proposal is an estimate of the total project cost. The required SEED cost section template can be found on the [SERDP website](#). The cost sheet for the lead organization should reflect the entire project cost. Separate cost sheets are required for each co-performer or sub-contractor whose costs exceed \$25,000. An accompanying narrative is permitted if necessary, but not required. Cost sections in formats other than this template will not be accepted.

SEED projects will be funded at a level not to exceed \$250,000 in total cost and approximately one year in duration. For planning purposes, proposers should assume a project initiation date of March 1, 2021 or later, and that the full effort will be funded in a single increment.

1. Labor Costs: Show the projected labor rates in units of hourly rate or annual salary to be charged by the PI(s), associates and assistants. Indicate in a footnote the units you are using. In the 'Units' column, indicate the number of hours or the fraction of annual salary to be charged. The total column is the amount per year to be paid to each performer on the project. Labor costs should be unburdened.
2. Indirect Charge #1: Indicate burden or fringe rate applied to salaries and the total cost per year. Provide an explanation in a footnote of what is included in this indirect charge.
3. Indirect Charge #2: Indicate other relevant indirect charges such as G&A. Provide an explanation in a footnote of what is included in this indirect charge and to which cost elements it will be applied.
4. Major Equipment: Provide an itemized list using the second tab of the cost spreadsheet template on the [SERDP website](#) of permanent equipment, if any, to be acquired in support of the project, showing the cost for each item. Permanent equipment is any article of non-expendable tangible property having a useful life of more than two years and an acquisition cost of \$5,000 or more per unit.
5. Materials, Supplies and Consumables: Provide the total estimated cost of expendable equipment and supplies.
6. Subcontracts and Government Partners: For any co-performer or subcontract totaling \$25,000 or more, provide a breakout of the tasks and associated costs in a separate cost estimate using the cost spreadsheet template on the [SERDP website](#). Government partners will be provided a separate allocation of funds directly based upon this separate estimate. The lead organization should plan to manage all sub-contracts to non-government partners.
7. Travel Costs: Estimate total travel costs. List the number of trips, destinations and

purposes for all proposed travel. For trips where the specific destination has not yet been determined, budget for a representative location and indicate your assumptions as a footnote. For planning purposes, SERDP will support attendance at one domestic technical meeting. SERDP intends to sponsor an annual technical Symposium in the Washington, D.C. area that investigators are expected to attend. In the event the Symposium is not held, investigators may attend an appropriate meeting of their choice at comparable cost. In addition, PI are required to give a presentation in or near Arlington, VA at the conclusion of the project.

8. **Publication and Report Costs:** Estimate the costs of publishing and reporting results, including the direct charges for clerical preparation, page or illustration charges, and distribution. The SERDP reporting requirements are located on the [SERDP website](#).
9. **Fixed Fee:** Eligible organizations shall list the fixed fee, if any, applied to the project. Indicate in a footnote the cost elements included in the basis for the fixed fee.
10. **Cost by Task Summary Table:** A total cost matrix with breakout of cost per task must be included. The template is in the third tab of the cost spreadsheet template found on the [SERDP website](#). These numbers must match those on the main cost spreadsheet.

## 2.5. APPENDICES

Appendices to the proposal include:

1. *Required:* Abbreviated Curriculum Vitae (CV): CVs (3 pages or less per CV) for each PI involved with the project that provide their relevant research experience and publications. Include the full mailing addresses, phone numbers, and email addresses for each PI listed.
2. *Required:* List of Acronyms: Provide a complete list of acronyms used in your proposal and their definitions. List the proposal number at the top of the page.
3. *Required, if literature is cited:* Literature Citations: Provide literature citations for any material cited in the technical section or the supporting technical data.
4. *Optional:* Supporting Technical Data: (limited to 5 pages) Data sheets, charts, referenced research extracts.
5. *Optional:* Existing Support: If the PI is funded by other programs to conduct research that overlaps or parallels the current proposal, provide a brief description of that support (½ page per relevant effort).
6. *Optional:* Letters Supporting Collaborative Efforts: If you are providing letters of support, they must be included in your proposal. See 'Cooperative Development' in the Technical Section format.

Appendices are not part of the 10-page restriction for the Technical Section of the proposal.

### 3. SUBMITTAL

Proposals are submitted via the SERDP and ESTCP Management System (SEMS). No electronic mail, faxed, or hard copy proposals will be accepted. **Proposals must be submitted prior to 2:00 p.m. Eastern Time on March 5, 2020.**

Complete all steps below in order to submit a proposal.

- Create a single PDF file that contains all required sections outlined in the proposal guidance.
- Log in to [SEMS](#).
- Enter all required proposal details into SEMS. Proposal details may be saved and edited prior to final submission.
- Download or print the “Proposal Details” page. This must be signed by an individual with the authority to commit the lead organization to execute the proposed work. The document may be electronically or hand-signed. Ensure all information on the signed summary matches the proposal file.
- Upload the signed “Proposal Details” page.
- Add the system-generated proposal number, project title, lead PI name and organization to first page of proposal as instructed in Section 2.2 above.
- Upload the final proposal file.
- Submit the proposal. Only proposals that have been submitted will be considered. Proposals with a “Saved” status will not be reviewed.

Once the proposal has been submitted, SEMS will display an on-line confirmation message and will send an email notification to the proposer. It is the sole responsibility of the proposer to make certain the proposal is properly received by SERDP.

The proposer may continue to modify proposal details and upload revised proposal files until the due date. Prior versions of the proposal will be over-written and **only the last version uploaded** will remain in the system. Ensure the proposal details entered into the system match the contents of the proposal file. It is recommended that proposals are uploaded as early as possible prior to the deadline, to ensure a successful and timely submission.

For proposal upload questions, contact the SERDP Office at 571-372-6565.

#### **4. EVALUATION FACTORS FOR SEED PROPOSALS**

The following evaluation factors will be the sole basis for reviewing proposals pursuant to these SONs. Relevance is evaluated on a pass/fail basis. Technical Merit is more important than Transition Potential.

##### SERDP RELEVANCE (PASS/FAIL)

Proposal reviewers will assess whether the proposal (1) responds to the DoD environmental requirement as described in the SON, and (2) falls within the SERDP mission to support basic and applied research or advanced technology development. SERDP Relevance is a threshold review and if the proposal is not determined to be relevant, no further evaluation of the proposal will be made.

##### TECHNICAL MERIT

The overall scientific and technical merit of the proposal must be clearly identifiable. The evaluation will consider the proposed approach and its substantiation by calculations, test data, and references. Emphasis will be placed on the proposer's demonstration of a thorough understanding of the environmental problem. The proposer must demonstrate the ability to execute the work by providing a comprehensive, logical, orderly, and concise plan that indicates major tasks, milestones, critical paths, go/no-go decision points and key events, leading to the completion of the project in the proposed time frame. Strong consideration will be given to innovation; however, the degree of risk associated with individual proposals will be weighed against potential benefits. The proposal should clearly articulate how the research will advance the state of the science.

##### TRANSITION POTENTIAL

The transition potential of the proposed research product(s) is demonstrated by the proposer's clear identification of how the proposed work will provide the critical proof of concept and an identification of the future development path if the SEED project is successful.

## **5. REQUIREMENTS FOR PROPOSALS SELECTED FOR FUNDING**

Proposals selected for funding may require revision following the funding selection process and prior to receipt of funding. Common revisions include adjustments to schedule, task structure, funding profile, or specification of required deliverables. Revisions to a proposal are considered part of the proposal process and the associated costs are to be borne by the proposer.