Illinois-Indiana Sea Grant College Program Guidelines for the Project Summary and Plan of Work

Guidelines for Project Summary Form

The project summary is intended to present a concise description of the funded activity in a form useful to a variety of readers. The entire document should ideally fit on less than 2 pages.

TITLE:

Project titles should be carefully constructed to give as much information about the project as possible in not more than two lines (about 16 words or less). Longer titles may be truncated. Sea Grant programs are reviewed by various audiences, where some of these may judge the content of a program from scanning a list of titles. The title of the proposed research project should be specific and descriptive of the activity, and should minimize the mention of geographic names.

PIs and AFFILIATIONs:

For all investigators, the last name should be entered first. Please include the full first name and middle initial, e.g., Smith, Alpha B. Also insert the academic affiliation of the project leaders, (e.g., Northwestern University, Biology; University of Illinois at Urbana-Champaign, Civil Engineering). If there are more than 4 associate investigators, include additional names by stating “Additional project partners include [names here]” in the “Methodology” section.

TOPIC AREAS:

List the topic areas your project fits into (refer to the RFP for options).

FOCUS AREAS:

List all potential focus areas that the project falls in, primary focus area first: Healthy Coastal Ecosystems; Resilient Communities and Economies; Environmental Literacy and Workforce Development; Sustainable Aquaculture.

PARTNERS:

List partner organizations who are crucial to the success of the project but will not receive direct funding.

OBJECTIVES:

Objectives should preferably be stated such that it can be later determined whether or not they have in fact been accomplished. Objectives should begin with the word "To" followed by a verb stating the specific objectives and the practical ("real world") purpose of the project. In keeping with Sea Grant's mission, the most appropriate verbs are: test (the hypothesis), develop, provide, determine, isolate, characterize, identify, restore, implement. Less desirable but sometimes appropriate are: promote, conduct, analyze, apply, investigate, examine, describe. Some words, such as study, consider, continue, should not be used since failure to do these is indeterminable.
METHODOLOGY:
Methodology should be relatively brief in the abstract but expanded upon in the plan of work. Specific questions that an interested person would ask about the proposed work should be answered, such as, which heavy metals? Which pollutants? Which pathogens? What species of fish? What kind of a model?

RATIONALE:
The project rationale is a critical component of the summary, as it should explain why the proposed research is an appropriate Sea Grant project and is responsive to the particular RFP that has been issued. While the project need not promise to solve a problem fully, it should be shown that it is a logical step towards solution. Long involved background statements should be avoided, but the strongest projects typically briefly identify the potential or intended users of the research.

DATA SHARING PLAN:
Under NOAA directives, environmental data generated during projects funded by IISG must be verified and shared within 2 years of completion of the project. The full definition of environmental data can be found at [https://iiseagrant.org/research/principal-investigator-resources/](https://iiseagrant.org/research/principal-investigator-resources/). If your project will not generate environmental data, state that in this section. If your project will generate environmental data, note that a full data management plan is included with the plan of work and list a contact who will be responsible for ensuring data are verified and shared. Further description of appropriate data management plans can be found in the "Plan of Work" section.

READINESS LEVEL (RL):
You may select more than one readiness level.

RL 1: Basic research: experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts, without any particular application or use in view. Basic research can be oriented or directed towards some broad fields of general interest, with the explicit goal of a range of future applications (OECD, 2015).

RL 2: Applied research: original investigation undertaken in order to acquire new knowledge. It is, however, directed primarily towards a specific, practical aim or objective. Applied research is undertaken either to determine possible uses for the findings of basic research or to determine new methods or ways of achieving specific and predetermined objectives (OECD, 2015).

RL 3: Proof-of-concept for system, process, product, service or tool; this can be considered an early phase of experimental development; feasibility studies may be included.

RL 4: Successful evaluation of system, subsystem, process, product, service or tool in laboratory or other experimental environment; this can be considered an intermediate phase of development.

RL 5: Successful evaluation of system, subsystem process, product, service or tool in relevant environment through testing and prototyping; this can be considered the final stage of development before demonstration begins.

RL 6: Demonstration of prototype system, subsystem, process, product, service or tool in relevant or test environment (potential demonstrated).
RL 7: Prototype system, process, product, service or tool demonstrated in an operational or other relevant environment (functionality demonstrated in near-real world environment; subsystem components fully integrated into system).

RL 8: Finalized system, process, product, service or tool tested, and shown to operate or function as expected within user's environment; user training and documentation completed; operator or user approval given.

RL 9: System, process, product, service or tool deployed and used routinely.

Guidelines for Plan of Work

**REFER FIRST AND FOREMOST TO GUIDANCE IN THE RFP**

**Formatting and Page Limitations**
Pay close attention to the page limit in the RFP or instructions communicated by IISG staff: for large projects, the Plan of Work typically may not exceed 20 pages while for small projects, the Plan of Work typically may not exceed 4 pages. Use 11-point or larger font and 1.5 line spacing. This page limit does not include vitae, data management plan, or current/pending support but does include all italicized subheadings listed below. Page numbering for the Plan of Work should start with 1 and should be placed on the bottom of the page. Margins must be at least 1” and there should be no page reductions.

The proposal should be assembled so that the Plan of Work immediately follows the Project Summary Form. These documents should be submitted together as a single PDF file. The last name of the principal investigator should be in the filename.

The Plan of Work must contain the following components/information:

**Introduction**
Include a clear statement of the long-term goal(s) and supporting objectives or research questions of the proposed project. The most significant published work in the field under consideration, including the work of key project personnel on the current application, should be reviewed. The current status of research in this field of science should also be described. Preliminary data pertinent to the proposed research should be included in this section. All work cited, including that of key personnel, should be referenced.

**Rationale and Significance**
Concisely present the overall rationale, hypotheses and objectives behind the proposed research. The relationship of specific objectives to the potential long-range improvement in and sustainability of Illinois-Indiana Sea Grant and the National Sea Grant College Program, or to one or more of the research purposes, should be shown clearly. Any novel ideas or contributions that the proposed project offers should also be discussed in this section. Carefully review the RFP and demonstrate in this section how the project is responsive to the RFP.

**Research Methods**
Explicitly describe the methodology being applied to the proposed project. Relate the methodology to the defined research questions, objectives and/or hypotheses. Specifically, this section should address the following areas as appropriate:
1. A description of the investigations and/or experiments proposed in the sequence in which the investigations or experiments are to be performed;
2. Techniques to be used in carrying out the proposed project, including the feasibility of the techniques;
3. Means by which experimental data will be analyzed or interpreted;
4. Results expected;
5. Means of applying results or accomplishing technology transfer, where appropriate;
6. Pitfalls that may be encountered;
7. Limitations to proposed procedures; and
8. A tentative schedule or timeline for conducting major steps involved in these investigations and/or experiments.

In describing the research plan, fully explain any materials, procedures, situations, or activities that may be hazardous to personnel (whether or not they are directly related to a particular phase of the proposed project), along with an outline or precautions to be exercised to avoid or mitigate the effects of such hazards.

(Note: The Research Methods section should not necessarily be organized as subsections around these 8 issues. However, as appropriate these 8 issues should be addressed in the Research Methods section).

Dissemination of Results

Extension and Outreach
Research proposals that perform well through the Illinois-Indiana Sea Grant review process typically have clear and strong potential to positively affect stakeholders groups, even if impacts take several years to realize. In this section, identify potential users of the information being developed in the project and how results will be communicated to these users. Users (stakeholder groups) are not limited to the following list but might include communities, businesses, management agencies, or a particular group of individuals who live or recreate in coastal areas. Include a clear plan for integrating research results with outreach efforts. Note that IISG specialists could be approached to help with outreach plans.

Data Management Plan (where applicable) – see below. The data management plan does not count toward the 20-page limit.

References to Project Description
All references cited should be complete, including titles, and should conform to an accepted journal format.

Facilities and Equipment
Describe all facilities and major items of equipment that are available for use or assignment to the proposed project during the requested period of support. In addition, list items of nonexpendable equipment necessary to conduct and successfully conclude the proposed project.

Collaborative Arrangements
If the nature of the proposed project requires collaboration or subcontractual arrangements with other research scientists, corporations, organizations, agencies, or entities, identify the collaborator(s) and provide a full explanation of the nature of the collaboration. Evidence (i.e., letters of intent) should be provided to assure peer reviewers that the collaborators involved have agreed to render this service.
The following items do NOT count toward the page limit for the Plan of Work.

**Data Management Plan**

Submit as PDF, no smaller than 11-point font, two pages maximum. The National Oceanic and Atmospheric Administration requires that all environmental data (see full definition [https://iiseagrant.org/research/principal-investigator-resources/](https://iiseagrant.org/research/principal-investigator-resources/)) from funded projects be verified and made accessible, free of charge, or at no more than the cost of reproduction, within two years of completion of the project. To be considered for Sea Grant funds, researchers should outline how their data will be shared and maintained. The contents of the Data Management Plan (or absence thereof), and past performance regarding such plans, will be considered as part of proposal review.

**Vitae**

To assist reviewers in assessing the competence and experience of the proposed project staff, all personnel who will be involved in the proposed project must be identified clearly. Include a 2-page curriculum vitae for each principal investigator and for all senior associates and other professional personnel who expect to work on the project (including subcontractors), whether or not funds are sought for their support.

The curriculum vitae should be limited to a presentation of academic and research credentials, i.e., educational, employment and professional history, and honors and awards. Unless pertinent to the project, do not include meetings attended, seminars given, or personal data such as birth date, marital status, or community activities. NSF and NIH format is acceptable and but not required.

**Current and Pending Support**

The proposal must list any other current public or private research support (including in-house support) to which any person involved in the proposal who must submit a C.V. (described previously) has committed portions of their time, whether or not salary support for the person(s) involved is included in the budget. Non-flexible funds, including PI and support staff salaries, overhead expenses, and square foot charges for greenhouse, laboratory, and office space, may be excluded when these funds are received through a non-competitive process. Analogous information must be provided for any pending proposals, including this proposal, that are now being considered by, or that will be submitted in the near future to other possible sponsors, including other Sea Grant programs.

Concurrent submission of identical or similar proposals to other possible sponsors will not prejudice proposal review or evaluation by IISG, experts, or consultants engaged by IISG for this purpose. A proposal that duplicates or overlaps substantially with a proposal already reviewed and funded (or that will be funded) by another organization or agency, however, will not be funded under this program.

**Letters of Support**

Applicants may submit letters of support from relevant project partners. These will not count toward the total page limit. Letters from stakeholders who will use the information generated are particularly helpful through the review process.