Minnesota Sea Grant

Research Proposal Guidelines (2018-2020)

Full proposal deadline: 5:00 PM CST, 12 April 2017

Proposal submission: Proposals should be submitted in PDF format via e-mail to: vbrady@d.umn.edu **AND** seagr@d.umn.edu. You will receive verification of proposal receipt within 1 business day.

File naming: PIlastname-proposal_2018.pdf

Electronic RFP and form templates: www.seagrant.umn.edu/projects/rfp

Contacts:
General questions, formatting: Valerie Brady, 218-726-8714, vbrady@d.umn.edu
Project budget: Peter Thibault, 218-726-6605, thiba026@d.umn.edu

General

The University of Minnesota Sea Grant College Program emphasizes excellence and competitiveness in its research program. You are encouraged to contact Research Coordinator Valerie Brady or other Minnesota Sea Grant staff to discuss research subjects, proposal preparation, priorities, outreach plans, and/or procedures. There are new and updated sections required this year; please read this guidance document carefully.

Construct your proposal so that its content and methodology satisfies both administrative and peer review. Selected proposals will be combined into one package that Minnesota Sea Grant will submit to the National Sea Grant office for approval. The package will center around the following themes as described in the RFP:

- healthy coastal ecosystems,
- environmental literacy and workforce development,
- sustainable fisheries and aquaculture,
- resilient communities and economies.

The research **MUST** also fit within our mission, which is "to facilitate interaction among the public and scientists to enhance communities, the environment and economies along Lake Superior and Minnesota's inland waters by identifying information needs, fostering research, and communicating results."

Minnesota Sea Grant-funded research must meet the following criteria:

1. It should have the immediate **or** near-term (within 10 yrs) purpose of improving the understanding, assessment, and sustainable use of coastal resources. All Sea Grant research and resulting products should include - as a major component - sustainability and stewardship of natural resources.

2. It capitalizes upon Minnesota's unique aquatic resources to address problems of regional or national concern. Projects directed solely towards solving local problems or surveys of local content are usually not funded.

3. It supports quantifiable objectives and/or hypothesis-based, peer-reviewed investigations related to oceanographic, aquatic, or Great Lakes topics and issues. Research problems relevant only to freshwater areas other than the Great Lakes or efforts that focus on monitoring are not appropriate.

Sea Grant strongly encourages collaborative links with private industry and management agencies. Industry or state agency support is desirable and contributions from these sources may be used as matching funds.

Evaluation is based on research/scientific merit, excellence of approach, relevance to timely questions, and qualifications of the investigator(s). Reviewers are asked to rate proposals on a 5-point scale (1 = poor; 5 = excellent) for the following qualities:

1. Rationale and relevance to Sea Grant's mission.
2. Research/scientific merit:
    a. Is the proposal based on quantifiable objectives or a testable hypothesis and directed toward an established goal?
    b. Is the proposed research at the forefront of its discipline?
3. Methodology:
    a. Is the project organized within a finite period of time with regular deliverables to show progress?
    b. Is the proposed time frame appropriate to the project?
    c. Are the methods appropriate?
    d. Is the budget realistic?
4. Innovativeness: Will the project use new approaches or focus on new issues?
5. Investigator qualifications: Will the research be conducted by a highly-qualified investigator?
6. User relationships:
    a. Have potential users been identified?
    b. Will the results be useful to the identified users?
    c. Is there a well-developed outreach component for effective information transfer?
    d. What specific application will users make of the results?
7. Extent of collaboration.
8. Overall rating of the proposal.

Proposals will be reviewed by experts in each field drawn from universities and agencies outside of Minnesota and Wisconsin (to help avoid perceptions of conflict of interest). These reviews, along with the proposals, will then be screened by an *ad hoc* panel of experts from outside Minnesota. **Reviews may be sought outside the Great Lakes area, and even outside North America. Therefore PIs are encouraged to provide sufficient background information to allow these reviewers to understand the proposal and its importance to Minnesota, Lake Superior or the Great Lakes.**

Funding will be awarded on the basis of quality, merit, support of Minnesota Sea Grant priorities and consistency with Minnesota Sea Grant's mission.

For those proposals selected for funding, the lead PI from each selected proposal will be asked to append a 1-2 page response to the front of the proposal to discuss, incorporate, or rebut reviewers' comments, but he/she cannot modify the proposal.

Proposal Package Checklist

Please use the following list as the preferred order of components for the PDF file that PIs need to create and submit. All templates listed can be downloaded from the RFP page on our website: www.seagrant.umn.edu/projects/rfp.

1. (**Start of PDF file**) Project summary form 90-2 (electronic template, one form for each year)
2. Budget form 90-4 (please use electronic spreadsheet template, one worksheet for each funding year, and a summary budget spreadsheet)
3. Budget justification
4. Proposal Narrative (**12 page limit** for the following components):
    a. Project title (16 word limit)
    b. Personnel list
    c. Five key words (not included in the title)
    d. Background (sufficient for reviewers from outside the Great Lakes)
    e. Hypotheses (preferred) and/or objectives
    f. Methods (detailed enough to pass scientific expert peer-review)
    g. Expected results
    h. Usefulness (describe potential users and how results will be used)
    i. Fit to Sea Grant's mission (new this year)
    j. Economic benefits (see RFP for description)
    k. Outreach plan (contact outreach staff listed in RFP for assistance; **end of 12 pg limit**)
5. Literature cited
6. Data Management Plan (please use electronic form; new this year)
7. Activity schedule form (please use electronic template)
8. Vitae (1 page per investigator; please use electronic template)

9. Letters of support from potential users of results (optional)
10. Letter of department approval for match and research (required)
11. Letters of collaboration, support, or match (**end of PDF file**)

Recommendation of Reviewers (create and send as a separate file)

12. Contact information (including email addresses) for five suggested reviewers who are NOT from Minnesota or Wisconsin.

Project Summary Form (90-2)

Fill out one Project Summary Form (www.seagrant.umn.edu/projects/rfp/) for each project year. The only things that should change are the budget amounts. Use no smaller than 10 pt font. Minnesota Sea Grant will finalize these Forms but you must fill out the following:

(2) Title: Give your project a descriptive title within two lines (less than 16 words).

(6) Initiation Date**:** Month/day/year on which Sea Grant funding for the project is proposed to begin. This date may be no earlier than February 1, 20168 but can be as late as mid-summer 2016.

(7) Completion Date: No later than January 31, 2020, to comply with NOAA guidelines. A no-cost extension may be granted if conditions warrant, but cannot be requested in the proposal.

(9) Principal Investigator (P.I.)

- Name (co-leads are not allowed; each project must have a single designated lead who will serve as the primary contact)
- Effort s/he will devote to the project in "**person-months**"
- Department affiliation and campus

(10) Co-Principal Investigator: Same as for P.I.
(11 & 12) Associate Investigator 1 & 2: Same as for P.I.

(13 & 14) Sea Grant Funds and Matching Funds

- Project year one – enter funds requested and matched for year one.
- Project year two – enter funds requested and matched for year two.

(15 & 16) Last Year's Sea Grant Funds and Last Year's Matching Funds: Enter "0".

(19) Related Projects: Number(s) and name(s) of other Sea Grant projects from which this project was derived. The intent is to build a record of continuity. We can help you look up numbers of previous projects.

(22) Objectives: In **no more than 10 lines** address the objectives of the research as related to anticipated results. Start with the word "To" followed by a verb, such as: develop, provide,

determine, isolate, characterize, identify, restore, implement. The verbs "study," "consider," and "continue" should not be used since failure to do these cannot be determined.

(23) Methodology: In **no more than 6 lines** explain the research methods or the approach to be taken. Descriptions should be clear and concise, and written such that they may be generally understood by a well-educated layperson.

(24) Rationale: In **no more than 6 lines** explain why this is an appropriate Sea Grant project. State the significance of the issue, describe why addressing/solving it is important, and identify the potential users of the information.

Note: Each Project Summary Form should print out on no more than two 8- by 11-inch pages - one page is preferable but not required.

Budget

University of Minnesota researchers, please note that proposals should NOT be routed through SPA and the Proposal Routing Form should NOT be forwarded to SPA electronically (instead, we require a letter of approval from your department; see checklist item #10). Use EGMS only as a tool for preparing your proposal budget accurately.

When preparing your budget, please remember to allocate appropriate support for outreach, data quality assurance and quality control, data backup, and data archiving, including creation of appropriate metadata. All of these are required of a Sea Grant-funded project, and all will take time and effort. Appropriate planning for these costs is essential, and lack of planning will not be accepted as an excuse for lack of compliance.

Budget Form 90-4

The Sea Grant Budget Form (www.seagrant.umn.edu/projects/rfp/) is an Excel spreadsheet that contains embedded formulas. An example budget form is also available from this same link.

Sea Grant requests researchers attempt to secure a **30% match from nonfederal sources**. Matched funds must be fully documented and are subject to audit. For most proposals, the salary (plus fringe benefits) of the investigator(s) may provide the University matching contribution. **You must attach a letter from the department approving salary match(es).** If you are part of the University of Minnesota system, unrecovered indirect charges cannot be used as match.

Instructions

Minnesota Sea Grant will finalize the 90-4 form, but you must fill out the following:

Principal Investigator (P.I.)

Duration : Number of months and the fiscal year (FY18 or FY19) for the budget.

A. Salaries and Wages

Actual numbers of personnel should be shown in the blank spaces corresponding to the categories (a., b., etc.). Total time to be spent on the project should be shown in **person-months**. In calculating the share of salaries, actual time to be spent on the project should be used.

1. Senior Personnel

a. The principal investigator is responsible for conducting the activity. S/he may be a leader of a research project, an educational project, or an extension service activity.

b. Associates are professional persons who are full-time on the faculty or staff.

2. Other Personnel

a. Professionals are non-faculty, non-staff (i.e., not members of the university) associated with the project. Professional agency personnel cannot receive Sea Grant salary funding.

b. Research associates are professional persons participating in the project who are part-time employees, or persons retained solely for the project, or staff members of participating organizations.

c. Research assistant graduate students are part or full-time students who hold at least a bachelor's degree, are enrolled in a program leading to an advanced or professional degree, and are integral to the project as research assistants. **The student is obligated to write a paper or thesis on the research as part of his/her degree requirements and to perform outreach activities in association with Sea Grant staff.** Students are eligible for tuition grants of up to 100% of tuition according to the terms of their appointments. **If you want to include a graduate research assistant, type "*RA requested" in the column. Do not fill in the amount.** If an RA is requested, funds will be awarded independently of the research funds.

d. Professional school students are students enrolled in medical, legal, and other professional schools. Typically, such students are not eligible for Sea Grant funding.

e. Pre-baccalaureate students may be employed as aides or helpers on a Sea Grant project either on salary as part-time employees or on an hourly basis. Pre-baccalaureates are undergraduate students enrolled either part or full time in a course leading to a degree, including an associated degree in the case of students in two-year programs, or a certificate in the case of some vocational students.

f. Secretarial-clerical: Allowed only under special circumstances; contact your grants office or Peter Thibault to explore this option.

g. Technical-shop is a category for technicians, shop personnel, and other persons with special but non-professional skills.

B. Fringe Benefits are 33.7% for academic, 27.4% for civil service, and 0% for undergraduates.

C. Permanent Equipment is any non-expendable equipment with a cost of more than $5,000 per unit and an expected lifetime in excess of two years. All permanent equipment must be itemized on the budget justification form.

D. Expendable Supplies and Equipment includes all supplies and any equipment costing less than $5,000.

E. Travel - Current mileage reimbursement rates are $0.535/mile. See the budget justification sheet for further details. The more detailed the better.

F. Publication Costs - Do not fill in an amount unless you anticipate large page charges for color panels. Minnesota Sea Grant will pay for reasonable page charges per publication related to a Sea Grant-supported project.

G. Other Costs - List such items as computer lab time, reimbursement for participating organizations outside the proposing institution (i.e., subcontracts), ship time, and equipment lease.

H. Indirect Costs – **Disregard IDC for all costs within the UM system;** this will be filled in later by MN Sea Grant staff. For those outside UM, IDC is capped at 25,000 of direct costs.

Budget Justification Guidelines

Salaries and Wages

- Identify key investigators, classification of personnel, brief description of responsibility on project. *If you are requesting a graduate research assistant please tell us the hourly rate for this person (salary only, we'll calculate fringe, etc.). Note that graduate research assistants can't be appointed for more than 50% effort.*
- List the time commitments such as hours or percent of time for each position.
- List total charges for each person.
- Ensure time commitments and charges appear reasonable.
- Are all individuals employees of the applicant organization? (If not, explain.)
- Is a cost of living increase built into the budget? (We suggest using 2% for year 2)
- Ensure all salary/personnel costs are allowable (e.g., no federal/state employees, legislative personnel, or secretarial/clerical staff)

Fringe Benefits

Please use the following format:

$X,XXX - Academic fringe benefits calculated at 33.7%
$X,XXX - Civil Service fringe benefits calculated at 27.4%
$X,XXX - Undergrad students fringe benefits calculated at 0%

Supplies

Explain the items to be purchased or the nature or expense, and explain how the total cost is derived. For specific items/units with a total cost of $1,500 or more, list number of items/units, cost per unit, and total cost.

Equipment

For any items of equipment whose cost exceeds $5,000, a description of the item and associated costs is required, plus a lease vs. purchase analysis, if appropriate. List each item of equipment along with a description of how it will be used in the project.

Travel

For each trip, the budget should include the destination (or conference name), estimated cost of transportation, duration, number of travelers, and per diem. Current mileage reimbursement rates are $0.535/mile. If trip details are unknown, the basis for the proposed travel charges should be explained. Explain how proposed travel is necessary to the successful completion of the project. We expect professional conference attendance by the PI and/or the Sea Grant scholar to present research results. **International travel, including travel to Canada or Mexico, should be justified in the proposal if at all possible (it will be more difficult later if not justified here).**

An example of a good travel budget justification

- Travel for PI and grad student to present research at regional academic conference. Lodging, registration and per diem estimated at $451/person = $902 ($38 per diem x 2 days = $76), ($225 registration), and ($150 lodging for 1 night); mileage $161 (300 miles x $0.535/mile). Total: $1063.
- Field work travel by PI and grad student: 10 trips, average of 250 miles RT (total 2500 miles) at $0.535/mile = $1338. Per diem: 2 people per trip x 10 trips x per diem for partial days ($38) = $760. Lodging: 2 rooms at $150/night x 10 nights = $3000. Total: $5098.

Other

- List items by type of material or nature of expense, state number of units, cost per unit, and total cost specified.
- State necessity of charges for the successful completion of the project.
- Ship time: Please use the following values to estimate ship costs when using the *R/V Blue Heron*: $4,625/24-hr day; $2,163 for a single 10-hr day. The R/V Kingfisher (trailerable) costs $500/day. (Ship costs are so low because they are being matched 50% by the Large Lakes Observatory for MNSG grantees). For *Blue Heron* details visit www.d.umn.edu/llo/facilities/blueheron.html. Contact Doug Ricketts at (218) 726-7826 for questions relating to the boat.

Contractual

- List each contract or subgrant as a separate item (**separate budget forms are required for subgrants or contracts regardless of the dollar value**).
- Describe the products/services to be acquired along with the applicability of each to the project.
- Describe how procurement will be accomplished: competitive or sole source. (Sole source requires justification as to why the proposed sole source entity is the only source capable of meeting the applicant's project needs. Note that collaborators do not require sole-source justification).

Match

Please provide evidence that you can secure at least 30% match from nonfederal sources. Describe how match will be accomplished and list total dollar value for each year. University of Minnesota researchers may NOT use unrecovered IDC for match.

Year 2 (Same format as year 1)

Proposal Narrative Formatting Requirements

Length: 12 pages (including any tables and visual materials). Does not include literature cited forms, CVs, and match and support letters. Failure to adhere to this limit will result in rejection without review. See Checklist section for fuller explanation.

Font: Times New Roman 11 pt

Page size: 8.5" x 11" or metric A4 (210mm x 297mm)

Margins:

- Page 1: 2" top
- Pages 2-12: 1" top
  1 ¼" left
  1 ¼" right
  1" bottom

Spacing:

Triple space after main title
Single space body text;
Double space between paragraphs and after headings (except 4th-order headings);

Justification:

Left justify all text (no paragraph indentation)
Exceptions: number/bulleted lists; long equations

Page numbering: Bottom center
Measurements: Metric units

Note: *Formatting guidelines may seem overly detailed, but are designed to assist Minnesota Sea Grant staff in presenting a unified proposal package to NOAA Sea Grant through grants.gov. Please comply.*

Fit to Sea Grant's Mission (new this year)

Describe the potential practical relevance of your proposal to Lake Superior, its watershed, MNSG mission, and/or our stakeholder's needs as expressed in our RFP. It is very important that you address this section well for your proposal to do well in relevancy review. Please see the section "The Minnesota Sea Grant Approach" in our RFP to better understand our mission and the types of research we will fund.

Data Management Plan (updated this year)

The America Competes Act requires the federal government to ensure that data from federally-supported research is visible, accessible, and independently understandable to general users, free of charge or at minimal cost, in a timely manner (typically no later than 2 years after the end of the project), except where limited by law, regulation, policy, or by security issues. NOAA Sea Grant programs expect such plans of all their investigators. PIs that have mechanisms in place to meet this requirement need only explain those mechanisms. In addition, the data management plan must explain how your data will be kept safe, backed up, and checked for quality throughout the project.

Using the **Proposal Data Management form** from our website (www.seagrant.umn.edu/projects/rfp/), describe your plan to keep your data safe and backed up throughout your project; your plan to quality assure and quality check your data; and your plan to make data and metadata available and interpretable. Deposition of data in standard data archives (e.g., by discipline, such as GenBank, National Oceanographic Data Center, and others), in a University archiving system (contact your University librarians for assistance), or similar options are all acceptable. If the data are to be archived in a larger-scale database or warehousing effort, please include the anticipated timeframe of data submission and contact information for the database management organization. If the data will not be archived in a national or regional database, PIs should describe plans for making the data available upon request and ensuring that the data remain available and safely archived for at least the next 10-20 years.

Failure to propose an adequate data management plan will result in proposal rejection. In addition, if funded, Minnesota Sea Grant is required to confirm compliance with the data management plan during the project, at the end, and at the 2-year post-project mark.

Activity Schedule (project timeline)

The timeline is expected to be reasonable and accurately reflect an estimation of the timing of events and activities. These activities may extend beyond the official end date of 1/31/2020. An example and a blank template are available from www.seagrant.umn.edu/projects/rfp.

Vitae

One page per investigator. Please download the template at www.seagrant.umn.edu/projects/rfp.