



Maryland

Maryland Sea Grant College

Proposal Guidance

Funding Period

February 1, 2020—January 31, 2022

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SUMMARY OF PROPOSAL SUBMISSION REQUIREMENTS

Principle Investigators (PI) must follow the instructions about proposal format as explained in this guidance document or risk the proposal being rejected. Details for completing all components of the proposal are in the section “**Detailed Proposal Submission Requirements**” section of these guidelines.

Full proposals must be submitted by **June 24, 2019 at 5:00 PM EDT** to <https://eseagrants.mdsq.umd.edu>.

In eSeaGrant, PIs must complete each proposal tab and attach documentation as appropriate. Tabs and documentation include:

- **Start Here** (Online Form)
- **Principal Investigator** (Online Form)
- **Co-Principal Investigators** (Online Form)
- **MDSG 90-2 Form** (Online Form)
- **Sea Grant Data Management Plan** (PDF Upload)
- **Budgets** (Online Worksheets for budget and justification)
- **Narrative Upload** (PDF Upload)
- **Reviewers and Conflicts** (PDF Upload)
- **Submission Preview** (Click to submit your proposal here)

All PIs encouraged to submit a full proposal will be provided access to eSeaGrant. PIs who submitted a pre-proposal that was not encouraged to go onward are still eligible to submit a full proposal. Please contact research@mdsg.umd.edu or call 301-405-7500 and speak with either Mike Allen or Jenna Clark to request access.

Please note, proposals selected through this competition may require modification or additional information before being forwarded to the National Sea Grant Office for funding. In particular, selected proposals will need to complete the Abbreviated Environmental Compliance Questionnaire form.

DETAILED PROPOSAL SUBMISSION GUIDELINES

SCHEDULE FOR PROPOSAL PREPARATION AND REVIEW

Request for Proposals issued	November 30, 2018
Pre-proposals due	January 30, 2019
Full proposals due	June 24, 2019 at 5 PM EDT
Final proposal selection, PIs notified	Mid-September 2019
Early October – Accepted proposal modifications, if required, due	Early October
Omnibus proposal to NOAA	November 1, 2019
Funding cycle	February 1, 2020 to January 31, 2022

PROPOSAL SUBMISSION

The full proposal should be submitted electronically on the Maryland Sea Grant website by **June 24, 2019 at 5:00 PM EDT**. The submission system shuts down automatically at that time. Adobe Acrobat is required for creating the required PDF of your full proposal.

- You must submit your proposal online at <https://eseagrant.mdsq.umd.edu>. Login to the proposal online submission system with your credentials. Click “Add Proposal” under the “2020-2021 Omnibus Research” selection and enter a title to start a new submission or click on your existing proposal “In Progress.”
- Maryland Sea Grant does not require an original signature on submitted proposals. Electronic signatures are acceptable. However, researchers should conform to the submission policies of their host institutions with regard to obtaining institutional endorsements and requirements for the signature pages.
- Maryland Sea Grant does not require hard copies of proposals be submitted to us. Your electronic submission through our website is your official submission.

MULTI-INSTITUTION PROPOSALS

Sea Grant encourages Principal Investigators to collaborate when appropriate to strengthen the proposal expertise and outcomes. Sea Grant allows PIs to either include subawards in their proposal OR to use the collaborative model where Sea Grant directly funds two institutions separately. Regardless of your choice, we must receive a separate budget sheet (see **eSeaGrant Tab: Budgets**) for each institution in each year. If the PI is including a subaward on their budget, include that subaward total on the “Other Direct Costs” line item in the budget module. Include a cover sheet in the **Narrative Upload** for each institution Sea Grant will directly fund.

PROPOSAL FORMATTING

For general text, use 12-point or greater Arial font. Captions and labels may be smaller but should be legible. **Use single spacing**, left justified only, and one hard return between paragraphs. All margins should be 1 inch. The project narrative of the proposal

should be typed continuously (that is, do not start a new page for each new section). The *References* and *Outreach plan* should each start on new pages and are not included in the 15-page single-spaced limit required for the project narrative. The first page of the project narrative should be numbered 1, and numbering should continue throughout the narrative. Please upload the documents as PDFs to eSeaGrant.

EXPLANATION FOR COMPLETING FULL PROPOSAL COMPONENTS

Complete information about the RFP can be found on the web at <http://www.mdsg.umd.edu/maryland-sea-grant-request-proposals-2018-2020>. Form templates can be downloaded from <http://www.mdsg.umd.edu/proposal-forms-and-worksheets>.

eSEAGRANT TAB: START HERE

Provide your proposal title and any keywords. The dates of your project should be 2-1-2020 to 1-31-2022. On this tab, you can also add a delegate—someone who has access to your submission—by clicking on the “Actions” dropdown box. This person must already be registered for an eSeaGrant account.

eSEAGRANT TAB: PRINCIPAL INVESTIGATOR/CO-PRINCIPAL INVESTIGATORS

Complete the requested information for the principal investigator and each co-principal investigator in the appropriate eSeaGrant form. You may only have one PI, but you may have multiple Co-PIs.

eSEAGRANT TAB: MDSG 90-2 FORM

This form, used by all Sea Grant offices, is a summary of each submitted proposal.

Project Abstract

Provide a Project Abstract of up to 300 words. This abstract must include the rationale for the project, the scientific or technical objectives and/or hypotheses to be tested, a brief summary of work, and accomplishments to be completed. This abstract may be used for public dissemination and should not include any special characters.

Focus Areas

Select a primary and secondary (optional) focus area for your proposal.

Data Sharing and Management Plan Summary

Provide a short summary of your plan as laid out in your separately uploaded document. Include what data will be collected and how/when they will be made publically available.

Funds

Provide the dollar value of requested and matched funds for years one and two. These values should match your budget worksheets.

Sea Grant Research Fellow

Check this box if you would like to participate in the separate competition to add a

research fellow to your project. This competition will take place after proposals have been selected.

DETAILS: Under a *separately funded, competitive fellowship program*, Maryland Sea Grant offers two years of support for graduate students working on Sea Grant funded projects as part of their work towards a graduate degree. Fellowships provide a stipend, tuition remission, and other benefits. Fellows are required to participate in several activities sponsored by Maryland Sea Grant that are designed to help fellows develop an understanding of the link between science and outreach. These activities will not deflect from the primary research focus of the fellowship; rather, they are designed to enhance it in a meaningful way. Funds for these students are limited. **We anticipate about 50% of funded proposals will receive a fellowship.** Do not include the cost of a Fellow in the proposed budget for your project.

PIs also have the option of including student support as a line item in their budgets and should include all associated costs incurred.

Sea Grant Classification Code

Select up to three codes that most closely match the nature of your proposal.

eSEAGRANT TAB: MDSG DATA MANAGEMENT PLAN

Proposers must complete a Data Management Plan for making environmental data and results accessible and interpretable within two years of collection. Download and fill out the “Sea Grant Data Management Plan Form” from this tab or our forms page (<http://www.mdsq.umd.edu/proposal-forms-and-worksheets>). Additional instructions are provided on the form. Storing data on local servers or external drives without public access or noting that data will be available “upon request to the PI” are no longer sufficient options. Note you will be required to list data sets created and how to access them when reporting on your project. For additional guidance, see our “Data Management and Sharing” page: <http://www.mdsq.umd.edu/data-management-and-sharing>.

eSEAGRANT TAB: BUDGETS

There are 4 tabs on the budget worksheet. Tab 1 is instructions. Tab 2, "Budget Periods," is informational only. It shows the budget years for which funding is available through this RFP. Tab 3, “Subawards,” allows you to list the institutions that will be receiving subawards from the PI’s institution.

Start with Tab 4.

Use the Budget Worksheets tab to add a budget worksheet.

- Enter a Worksheet Title (e.g., [PI Last Name] - [University] Year [1]).
- Select Indirect Cost type for your budget (On-Campus, Off-Campus, Other). Choosing "Other" will start your worksheets with 0%.
- Select Duration
- Click Save and Continue.

Lines for adding items are noted. Enter dollar values requested in the "Sea Grant Funds" column. "Grantee share" is for matching funds. When finished populating a new item, be sure to click 'Add' to the right of it. **You are required to provide COMPLETE justification for every dollar value entered on each worksheet.** To add budget justifications, select the pink dot in the Justifications column. A pop up window will appear, enter justification language here. Be sure to click 'Save' before closing.

Justifications submitted for each line, along with each line's SG and Grantee requests, appear automatically in the Justification Preview page (click [view] under 'Justification' at top-right) at the appropriate place within the justification outline. It is unnecessary (unless noted otherwise) to type formatted outline information or line totals in a justification textbox. The Justification Preview page shows justification grouped by project year.

Budget worksheets include auto-calculation of sub-total and total values, but are not automatically saved as new data are entered. We recommend you save frequently. For all budget sections you must click the ADD or SAVE button at the end of each budget line to save before you move on to the next line. Data will be lost if you click Update Worksheet before selecting ADD or SAVE. To ensure totals at the bottom of the worksheet are updated after adding new data, click the Update Worksheet button at the top of the page after you add or save a new line.

Once you edit and save a worksheet, click Back (top right) and you will return to your Budget Worksheet tab. To edit a saved budget worksheet, click the Edit button next to its listing in the Budget Worksheets tab. You can also view the justification from this table.

You must create a separate budget worksheet for each year and every institution. If your institution intends to include a subaward in your budget, you must include this amount in G. Other costs AND create the separate budget for your subaward institution.

Specific Line Item Guidance

For A. Salaries and Wages, choose the appropriate Senior Personnel (PI, Co-PI) from the drop down box or Other Personnel type. For other personnel, include the person's name or TBD in the box. Enter the individual's monthly salary in box 1 (Mo. salary), their benefit percentage as a decimal in box 2 (Benefits %), how many months charged to the proposal in box 3 (Sea grant mos. effort), how many months to be applied as match in box 4 (Grantee mos. effort). eSeaGrant will auto-calculate the total salary request and fringe based on these numbers. Add each individual to the form separately.

For G. Other Costs, choose the appropriate option from the drop down menu and then enter a very short item description in the box. Click "Add" on the right to add the line to the budget (and allow another line to be created). Include the full description and breakdown in the justification popup window. You may add up to 10 "Other Costs" lines.

For H. Indirect costs, you must enter your actual institutional rates in the "Inst. Rates"

set of boxes as a decimal. Enter the rates you are charging on this proposal in the "SG Rates" boxes. Usually these will be the same. However, if you are partially forgoing collection of indirect costs, your proposal rates may be lower. To apply indirect costs as match/cost share, click the "Waived IDC as match" box. The difference between the Inst. Rates and SG rates will be applied as additional match. Make sure the "include" check box is selected for each set of items to which the rate applies (all for MTDC, A and B for salary and fringe only, A for salary only).

Refer to our [Budget Justification Guidance](#) for examples of the minimum level of detail required in a justification response.

Once you have completed your budget, you may view the 90-4 budget form(s) using a separate tab on the left side navigation.

Cost Sharing or Matching Funds

A 50 percent match (e.g., a \$70K budget must have a match of \$35K) is sought on all Maryland Sea Grant proposals. The cumulative match at the end of each year of the grant must not fall below 50 percent of the cumulative federal request up to that point. Please contact the Maryland Sea Grant office if any questions arise about the eligibility of matching funds.

Note that it is important to specify match contributions in the budget and justification to clearly demonstrate sources and amounts. Any match contributions identified by investigators are subject to federal audit that may result in additional costs to the institution. Match may be in the form of selected "in-kind" services or additional funds from a specified institution, agency, industry, or non-federal program. No funds from federal agencies can be used as match.

eSEAGRANT TAB: BUDGET 90-4

Once you complete the budget tab, you may download or print a copy of your full budget table from the 90-4 tab. No data are entered here.

Select the drop down for "Show Full Data" to get a cumulative budget or a specific year to get annual budgets. Use the PDF Export button to get the correctly formatted form for your records.

Note that only budgets with a checked box in the "Include in 90-4" column in the Budget module, tab 4 "Budget Worksheets" will be displayed. You can uncheck individual boxes there to download budgets for separate organizations or years. Unchecking the boxes for all institutions you will issue subawards to should provide you with the correct cumulative and annual overall project budget.

eSEAGRANT TAB: NARRATIVE UPLOAD

Enter the title of your proposal and then upload the proposal narrative file (PDF only).

The narrative file must include the following components in this sequence:

- A. Signed Cover sheet
- B. Project Description (major headings), Limited to 15 pages, single-spaced
 - Title and Header Information
 - Introduction / Background / Justification
 - General Work Plan and Milestones
 - Anticipated Results and Outcomes
 - Coordination with Other Program Elements
- C. Outreach Plan, Limited to two pages, single-spaced
- D. Literature Cited
- E. Curriculum Vitae, Limited to two pages per investigator
- F. Current and Pending Support
- G. Accomplishments of Current and Previously Funded Maryland Sea Grant Projects, Limited to one page
- H. Letters of Support (Optional)

COMPONENT DESCRIPTION

- A. *Signed Cover Sheet*: Principal Investigators are responsible for routing the proposal through their institution's research administration and for obtaining all required institutional endorsements prior to submitting. You may use your own signature form or Maryland Sea Grant's template. A sample signature template is in Appendix D. If Sea Grant is funding more than one institution directly (i.e. as a collaborative proposal), please include a signed cover sheet for each institution. A separate cover sheet for a subaward institution is not necessary.
- B. *Project Description*: The project description contains the narrative and graphical components of the proposal (including the milestones chart). Your proposal should use the following headings in the order listed. A **15-page limit** applies to the narrative and includes any tables and figures. Failure to adhere to these guidelines is grounds for return without review. The project title and the name, position, and affiliation of the PI and each Co-PI should be presented at the top of the first page of text. Before formatting the proposal consult the instructions under "Full Proposal Formatting."

Introduction / Background / Justification

Background and Relevance

This is the introduction to your proposal. Readers should obtain a complete understanding of the context in which the effort is being proposed, its direct connection to questions in the original RFP, its relevance to Maryland Sea Grant, and the nature of the specific problem being addressed. This section should demonstrate your familiarity with previous and ongoing work relevant to the proposed effort.

Objectives and Description

Provide a general description of the project. State the goal(s) and/or hypothesis(es) of your proposed effort and the objectives for each year of funding.

General Work Plan and Milestones

Methodologies

This section should outline the methodologies, techniques, or actions for achieving each of the project objectives. Describe the experimental designs, techniques, and analyses to be used. Be specific. Include an explanation of how the data will be analyzed using appropriate statistical procedures. If appropriate, include a labeled site map. Provide a description of major project components and outputs. The proposed approach should be clearly outlined so that the reader can determine how the proposed objectives will be met. This section and the previous section should convince peer reviewers of your understanding of the current, state-of-the-art technologies and methodologies as well as the merit of your technical approach towards conducting your proposed research. Make sure that the research contributions of specific individuals on the team are clearly defined and integrated. If necessary, proposers may also wish to respond to peer reviewer comments from the pre-proposal either in this section or elsewhere as appropriate.

Project Milestone Chart(s)

Each proposal must include a project milestone chart that outlines each proposed year of funding. A milestone is a point at which an accomplishment is made or a decision reached with respect to executing the project. Two templates for milestone charts are available in Appendix D; however, you may develop any chart format to present your milestones. This section may include explanatory text for the chart as long as the page limit is not exceeded.

Outcomes

Anticipated Benefits and Deliverables

Describe the products, outcomes and implications of the anticipated results of the project. This section should respond to questions such as:

- What will be the immediate products, deliverables, and outcomes from the project?
- How does this research advance this field of science?
- Who will use this information or the products developed from it?
- Have you communicated with potential users? (It is strongly recommended that you do so before submitting the proposal. Letters of

- support appended to your proposal are appropriate.)
- What are the future applications of the proposed work?
 - How might the results of this research be applied to the management of Maryland's coastal environment and its resources?
 - Who is the target audience of your outreach effort?

PIs are required to track their progress and report annually on information, products, and services rendered as a result of their work. Project deliverables include academic products, outreach products, presentations, workshops, tools, etc. Some of these deliverables will be tracked as performance measures. Please review the list of Maryland Sea Grant performance measures described in Appendix E and include any applicable MDSG performance measures in this section.

Coordination with Other Program Elements

Project Leadership and Personnel

Briefly describe how the project will be managed and the role that each person (PIs, Co-PIs, other senior personnel, graduate students, etc.) will be conducting in the project. (Detailed background information on PIs and Co-PIs should be included in the curricula vitae rather than described here.)

Project Partners

List and describe the purpose/role of the project partners involved in the research or outreach components of the proposal such as industry, agencies, and/or other organizations. Letters of support from these partners are strongly encouraged.

Facilities

List all facilities and/or equipment available and/or necessary for the project.

- C. *Outreach Plan:* An essential component of Maryland Sea Grant's mission is to fund research that meets the needs of many audiences whom we serve. To that end, we require investigators to develop a **two-page maximum** outreach plan that describes how the project will engage with constituencies that may benefit from the research and describes the ways the work will help solve problems and advance public understanding in Maryland and, possibly, beyond. We strongly encourage proposals to include funding to support outreach efforts.

Please read the description of the Outreach Plan in Appendix C before completing this section. Your outreach plan should include a clear communication strategy that supports the outreach effort and address some or all of the following bullets:

- Describe the products and scientific outputs and outcomes of the proposed study that will be applicable to your outreach effort.
- Describe the non-peer end users for the products/outcomes.
- Describe the outreach mechanisms you will use to reach end peer users.
- Present a timeframe for developing and implementing this outreach plan.
- Describe the intended impact of these efforts with particular emphasis on how the impacts align with the RFP focus areas and research emphases.

D. *Literature Cited*: To achieve consistency in the final program proposal, we ask that all PIs use the Limnology and Oceanography format for their list of references. Arrange alphabetically by author's surname and do not underline titles of books.

Article citation

Fenchel, T. 1986. Protozoan filter feeding. *Prog. Protistol.* 1: 65-113.

Article citation with a DOI

De Pol-Holz, R., O. Ulloa, L. Dezileau, J. Kaiser, F. Lamy, and D. Hebbeln. 2006. Melting of the patagonian ice sheet and deglacial perturbations of the nitrogen cycle in the eastern South Pacific. *Geophys. Res. Lett.* 33: L04704, doi:10.1029/2005GL02447

Citation for a part of a book, proceedings or technical collection

Codispoti, L. A. 1983. Nitrogen in upwelling systems, p. 513-564. In E. J. Carpenter and D. G. Capone [eds.], *Nitrogen in the marine environment*. Academic.

Book citation

Stumm, W., and J. Morgan. 1981. *Aquatic chemistry*, 2nd ed. Wiley.

In text citation

When citing an author within the text of the proposal, use format shown in the following sample paragraph:

The overwhelming importance of disease was illustrated dramatically by the onset of infection by the haplosporidium *Minchinia nelsoni* (MSX) (Haskin et al. 1966), which decimated oyster populations in Delaware Bay in 1957-1958 (Haskin et al. 1965; Haskin et al. 1966, 1967). Otto et al. (1975, 1976) have stated that ...

E. *Curricula Vitae*: Provide a **two-page maximum** curriculum vitae for PIs and Co-PIs. Use the format of a National Science Foundation Biographical Sketch. An example is included in Appendix D. Explicit guidance can be found in NSF's Grant Proposal Guide:

https://www.nsf.gov/pubs/policydocs/pappg17_1/pappg_2.jsp#IIC2f.

- F. *Current and Pending Support*: This list specifies projects in which PIs and Co-PIs are currently involved that are funded by Sea Grant programs and other agencies, or are under consideration for such funding, including the proposal being submitted to this competition. The total award amount for the entire award period covered (including indirect costs) must be shown as well as the number of person-months per year to be devoted to the project, regardless of source of support. Please provide a brief explanation of any overlap between this proposal and any of those listed. Include a separate list for each PI/Co-PI. The recommended format is as follows:

Currently Funded

“Evaluation of Food Sources for Striped Bass,” U.S. Fish and Wildlife Service, Contract no. FWS 14-16-0008-2138 with the Horn Point Laboratory, UMCES; 15 June 2016 – 14 June 2018; \$52,000; 1 mo/yr.

“Copper, Striped Bass and Patapsco River System,” National Science Foundation, Office for the IDOE, Grant GX-41953 with the Horn Point Laboratory, UMCES; 6 Feb 2016 – 6 August 2018; \$80,000; 1.5 mo/yr.

Pending

“International Maritime Laws and the Atlantic Striped Bass Fishery,” National Science Foundation, Office for the IDOE; 1 May 2018 – 30 April 2019; \$150,000; 6 mo/yr.

- G. *Accomplishments of Current and Previously Funded Maryland Sea Grant Projects*: Principle Investigators who have been funded by Maryland Sea Grant since 2009 are requested to submit a **one-page maximum** summary of the accomplishments of their previous Maryland Sea Grant funded research. Information on research findings and publications, outreach efforts, and students supported as part of the research should be highlighted in the one-page summary. Details of how previous work may be relevant to the current proposal should be provided.
- H. *Letters of Support (Optional)*: Include letters of support from partners or agencies that can substantiate the need for the research or use of the results or outreach.

eSEAGRANT TAB: REVIEWERS AND CONFLICTS

Provide a list of four individuals from **outside** the Chesapeake Bay region (MD, VA, DC) that are knowledgeable and competent in your field of inquiry. Include complete addresses, e-mail, and phone number, if possible.

Following this list, provide an alphabetical list of conflicts of interest (COIs) for each of

the PIs and Co-PIs. Conflicts may include collaborators, co-editors, advisors, and advisees (include affiliations). Do not provide a separate page for each PI.

You may include the COI list as part of the reviewer list PDF, or submit the NSF COIs templates as separate files for each PI and Co-PI.

eSEAGRANT TAB: SUBMISSION PREVIEW

Review the data and filenames of your submission. Click the “Submit” button in the upper right corner to submit your proposal package. **You MUST click submit by the deadline or your proposal will not be considered, regardless of what you have already uploaded.**

APPENDIX A: FULL PROPOSAL FORMATTING

In order to produce a uniform Sea Grant proposal volume for NOAA that integrates proposals, area summaries, and program information in a consistent format to submit through grants.gov, we require that you follow the guidelines listed in this section.

TYPEFACE OR FONT

When formatting your proposal, use Arial font. The type sizes should be: Main Head, 18 point; name and title of PI, 12-point; all other text, including subheads and body text, 12-point. (Example follows this section.)

Sample, Arial Character Set (size, 12-point):

ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz
123456789= !@# \$%&*+

PROPOSAL FORMAT

Type proposals single spaced, left justified (a ragged right margin), with a full line of space between paragraphs. All margins should be 1". The body of the project narrative should be typed continuously (do not start a new page for each new heading). However, all major sections (Project narrative, Outreach plan, References, CVs, etc.) should start on a new page. Number continuously starting at 1 on the first page of the project narrative (center, bottom).

HEADINGS

Do not number the different levels of headings. Follow format of headings shown in the example on the following page, including title, authors, major headings, subheadings, etc.

LISTS

Use bullets for lists. When typing lists, indent left margin flush under first letter of each item, as shown below:

- To determine the nature and pattern of variable developmental rates seen in sibling larvae of two-parent broods.
- To begin a light and electron microscopic examination of the successive developmental stages of larvae from rapid and slow growth/developmental groups.

LATIN TERMS

Please type Latin genus and species names in italic.

FORMAT EXAMPLE

Morphological, Physiological and Biochemical Aspects of Variable Developmental and Growth Rates in Oyster Larvae

(Title in Arial Bold, 18-point)

(2 blank lines)

Jason Smith, Professor (Name, Title in Arial, 12-point)

Department of Zoology, University of Maryland (Affiliation in 12-point Arial Italic)

(1 blank line)

John Williams, Associate Professor

Department of Chemistry, University of Maryland

(5 blank lines)

INTRODUCTION / BACKGROUND / JUSTIFICATION

(Major headings should be Arial Bold, 12-point, all caps, centered)

(All major heads, subheads and rest of text should be Arial, 12-point)

(Skip 2 blank lines before each major heading and 1 blank line after)

Delay of Metamorphosis (Subhead one—use Arial Bold Italic)

Baseline Data (Subhead two—use Arial Bold)

Once the baseline data on metamorphic delay are obtained, subsequent cultures will be monitored for changes in growth rate (shell and biomass) following metamorphic competence. Pechenik . . .

Growth Rates (Subhead three—use Arial Italic)

Subsequent cultures will be monitored for changes in growth rate (shell and biomass) following metamorphic changes:

- To determine the nature and pattern of variable developmental rates seen in sibling larvae of two-parent broods.
- To begin a light and electron microscopic examination of the successive developmental stages of larvae from rapid and slow growth/developmental groups.

APPENDIX B: PROPOSAL REVIEW PROCESS

After full proposals are received, they will be sent out for external electronic peer review. In addition, a technical review panel, consisting of researchers and faculty with expertise in the disciplines represented by proposals under consideration, and an extension panel, will be convened. Based on the technical panel's own reviews, the extension panel reviews, and the external written reviews, the technical panel will recommend proposals for Maryland Sea Grant to support in 2020. Depending on funding constraints and reviewers' comments, Maryland Sea Grant may ask PIs to revise their proposed budgets and scope of work.

Maryland Sea Grant will select projects for inclusion in the 2020-2022 Maryland Sea Grant College funding request based on the following criteria:

Research Plan (40%)

- Scientific and technical merit of the proposed study
- Innovative or appropriate scientific objectives and methodologies
- Potential for successful completion of the work within the proposed budget and timeframe
- Appropriateness of budget

Relevance to Sea Grant (25%)

- Relevance, as articulated in the original RFP, as well as the goals and strategies of Maryland Sea Grant's 2018-2021 strategic plan
- Appropriateness of Maryland Sea Grant support relative to support from other sources
- Synergy with existing investments (federal, state, local) in monitoring and infrastructure

Potential Impact and Outreach (25%)

- Thoughtful, strategic outreach plans
- Opportunities to link research to non-academic impacts and outcomes

Applicants (10%)

- Principal investigators' expertise and publication record and team approach

APPENDIX C: OUTREACH PLAN INFORMATION

All full proposals must include the Outreach Plan section. Investigators are strongly encouraged to contact the Maryland Sea Grant office to discuss potential outreach approach and audiences (which could include industry, policy-makers, the broad researcher community, and the public). Discussions with Sea Grant Extension Program agents and specialists are encouraged in the early stages of proposal development. A list of Sea Grant Extension personnel can be found at: <http://www.mdsg.umd.edu/our-office>.

Why Ask About Outreach?

Sea Grant has a broad mission to contribute to the sustainable and wise use of our coastal resources. To accomplish this we use three tools: research, education, and outreach. Our outreach products are useful to society and incorporate science as the basis for the messages we convey. To ensure that the research we fund is as effective as it can be in serving our broad mission, we require investigators receiving support to demonstrate that they have a plan for translating their findings into a form that is useable by the individuals and organizations that the research intends to benefit.

What is Outreach?

In our research proposals, principal investigators must describe reasonable anticipated benefits of the research to be undertaken over short to long time scales and to various “end users” of the information or technologies developed. Since very few end users will read peer-reviewed journal articles or attend professional meetings, outreach must employ different and appropriate vehicles to convey the research findings to end-users in a readily understandable manner. Many different tools can be used provided there is a clear target audience and a logical outcome from the research effort. **Articulating a plan to get this information to end users is a vital part of successful Sea Grant proposals.**

Potential End Users

- Environmental managers
- Decision makers
- Commercial fishermen
- Environmental NGOs
- K-12 students
- Targeted groups within the general public

What is not “Outreach” (for MDSG’s purposes)?

The following are all important products of the research process, but they do not qualify as outreach to constituents or end users.

- Undergraduate and graduate education
- Peer-reviewed journal articles
- Presentations at scientific meetings

What is an Outreach Plan?

A Maryland Sea Grant outreach plan describes how specific end users will learn about

research outcomes so that they can use the information when making decisions (e.g., about coastal resources or land use policy). An outreach plan describes what methods and/or products the project team will create to communicate results as well as how the end users will get the information. In addition, the plan should predict, within reason, the impact of the research and outreach effort on the targeted end-users. For example:

- Will managers be able to make a better decision regarding a specific issue?
- Will a new method to manage a specific problem be developed and disseminated?
- Will a key group have new tools and training to address an important issue pertaining to Chesapeake Bay management?
- Will a policy or behavior of individuals change?

A general distribution of information to wide audiences in the general public (e.g., via a website) can be useful but is most likely not sufficient in and of itself. An outreach effort should lead to outcomes that can be evaluated as products of the funded project.

The following bullets form the framework for a Maryland Sea Grant Outreach Plan. They are designed to guide investigators as they develop plans and will serve as the reference for evaluating outreach efforts over the lifetime of funded projects.

- Describe the products and scientific outcomes of the proposed study that will be applicable to your outreach effort.
- Describe the non-peer end users for the products/outcomes.
- Describe the outreach mechanisms you will use to reach end peer users. Include appropriate partners and how they will be engaged.
- Present a timeframe for developing and implementing this outreach plan.
- Describe the intended impact of these efforts on end users, with particular emphasis on how those impacts align with the focus areas and research emphases outlined in the RFP.

These efforts often require funds and as such an appropriate, justified funding request should be included in the project budget.

Outreach Assistance and Examples

The key to a successful outreach effort is defining a strategy for how specific users can **learn about and make use of** the results and products of the proposed research. Below are some resources you may consult during the development of your proposal and during the implementation of your outreach plan.

- **Contact Maryland Sea Grant Extension Faculty:** Our Extension educators and specialists have a variety of expertise and are actively working with many of the groups that are potential beneficiaries of your research.
<http://www.mdsg.umd.edu/our-office>
- **Engage the Maryland Sea Grant communications team:** Maryland Sea Grant staff regularly writes and publishes online news articles and our magazine *Chesapeake Quarterly*.

- **Serve on or connect with a committee or working group:** Some researchers, as part of their research programs or service activities, are directly and actively engaged with end user communities. These groups help to inform the direction of the proposed research and provide a built-in audience for the results when they become available.
- **Partner with industry or non-governmental organizations:** Some researchers collaborate with environmental consultants or other interested constituencies to develop research questions and/or to disseminate pertinent results.
- **Involve citizens in research:** Incorporate interested volunteers or environmental groups in the collection of data.

Describing engagement with specific groups and the specific activities to be conducted related to the project being proposed is as valid an outreach plan as one that directly involves Maryland Sea Grant staff, faculty, and products. The key is defining a strategy for how specific users can learn about and make use of the products of your research.

APPENDIX D: FORMS & EXAMPLES

Signature cover sheet, milestone charts, and curriculum vitae are available as electronic templates on the web at:

<http://www.mdsg.umd.edu/proposal-forms-and-worksheets>.

The project summary (90-2), budget (90-4) and budget justification forms must be completed online using the proposal worksheet system at:

<http://ww2.mdsg.umd.edu/worksheets/>

SIGNATURE COVER SHEET

Due June 24, 2019 at 5:00 PM EDT

Proposed Title:

Amount requested:

Amount Matched:

Grant Period: February 1, 2020 – January 31, 2022

Principal Investigator:

Institution and Unit:

Telephone:

Address:

Email:

Co-Principal Investigator:

Institution and Unit:

Telephone:

Address:

Email:

Department Chair/Dean/Institutional Representative:

Institution and Unit:

Telephone:

Address:

Email:

Principal Investigator Signature/Date

Institutional Authority/Representative
Signature/Date

MULTI-YEAR MILESTONE CHART

Timetable for initiation, performance, and completion of tasks included in the program for the two-year funding period

<i>Work Plan Tasks:</i>		2020	2021	2022
1.				
2.				
3.				
4.				
5.				

YEARLY MILESTONE CHART

<i>Work Plan Tasks:</i>		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1.													
2.													
3.													
4.													
5.													
6.													
7.													
8.													
9.													
10.													

SAMPLE CURRICULUM VITAE

ADAMS, JANE M.

Professor, Department of Biology
University of Maryland
College Park, MD 20740
adams_j2@umd.edu

PROFESSIONAL PREPARATION

University of Michigan, B.S. Biology, 1986
University of Michigan, M.S. Biology, 1988
University of Washington, Ph.D. Biology, 1993

APPOINTMENTS

Professor of Biology, University of Maryland, College Park, MD, 2012-present.
Associate Professor of Biology, University of Maryland, College Park, MD, 1999-2012.
Assistant Professor of Biology, University of Maryland, College Park, MD, 1995-1999.

PRODUCTS *(NOTE: up to 10 related or other significant products)*

Adams, J.M. 2017. Pages 307-308 in Microbiology. Aquatic microbial ecology. Amer. Soc. Microbiol. Publ., Wash., D.C.

Adams, J.M. 2016. Pages 377-379 in Microbiology. Human pathogens in the environment. Amer. Soc. Microbiol. Publ., Wash., D.C.

Acceptable products must be citable and accessible including but not limited to publications, data sets, software, patents, and copyrights. Unacceptable products are unpublished documents not yet submitted for publication, invited lectures, and additional lists of products.

SYNERGISTIC ACTIVITIES

A list of up to five examples that demonstrate the broader impact of the individual's professional and scholarly activities that focuses on the integration and transfer of knowledge as well as its creation. Examples could include, among others: innovations in teaching and training (e.g., development of curricular materials and pedagogical methods); contributions to the science of learning; development and/or refinement of research tools; computation methodologies and algorithms for problem-solving; development of databases to support research and education; broadening the participation of groups underrepresented in STEM; and service to the scientific and engineering community outside of the individual's immediate organization.

Appendix E: Maryland Sea Grant Performance Measures

Cross-Cutting Performance Measures

- Economic (market and nonmarket; jobs and businesses created or sustained) impacts derived from Sea Grant activities
- Number of Sea Grant tools, technologies and information services that are used by our partners/customers to improve ecosystem-based management

Healthy Coastal Ecosystems (HCE)

- Number of resource managers who use ecosystem-based approaches in the management of land, water, and living resources as a result of Sea Grant activities
- Number of acres of coastal habitat protected, enhanced or restored as a result of Sea Grant activities

Sustainable Fisheries and Aquaculture (SFA)

- Number of fishermen, seafood processors and aquaculture industry personnel who modify their practices using knowledge gained in fisheries sustainability and seafood safety as a result of Sea Grant activities

Resilient Communities and Economies (RCE)

- Number of communities that adopt / implement sustainable economic and environmental development practices and policies as a result of Sea Grant activities
- Number of communities that adopt / implement hazard resiliency practices to prepare for and respond to / minimize coastal hazardous events as a result of Sea Grant activities

Effective Environmental Science Education (EESE)

- Number of Sea Grant products that are used to advance environmental literacy and workforce development
- Number of people engaged in Sea Grant supported informal education programs
- Number of Sea Grant-supported graduates who become employed in a job related to their degree within two years of graduation