



# Aquaculture Literacy Mini-Grants Program

## REQUEST FOR PROPOSALS

### 1. WELCOME

The [North American Association for Environmental Education \(NAAEE\)](#) is pleased to offer your organization the opportunity to apply for an Aquaculture Literacy Mini-Grant. Through this mini-grants program, NAAEE supports partnerships sharing the mutual aquaculture literacy goals of the National Oceanic and Atmospheric Administration's (NOAA) Office of Education, NOAA Fisheries, and the National Sea Grant Office. These mini-grants will provide informal learning institutions (e.g., aquariums), aquaculture industry (e.g., shellfish, finfish, and seaweed farmers), and NOAA partners with support for the co-development of innovative educational experiences that explore aquaculture topics. Successful proposals will use the unique education mission of the [eeBLUE partnership](#)—a collaboration between NAAEE and [NOAA's Office of Education](#)—as a context for engagement and advancement of public aquaculture literacy.

*Aquaculture literacy* within a community builds on and supports the collective goals of environmental literacy. *Environmental literacy* is "the possession of knowledge and understanding of a wide range of environmental concepts, problems, and issues; cognitive and affective dispositions toward the environment; cognitive skills and abilities; and appropriate behavioral strategies to make sound and effective environmental decisions. It includes informed decision making individually and collectively and a willingness to act on those decisions in personal and civic life to improve the well-being of other individuals, societies and the global environment" (Hollweg et al. 2011; NOAA's [Community Resilience](#)

[Education Theory of Change, 2020](#)). Projects should implement formal or informal educational opportunities that build the collective environmental literacy necessary for communities to become more familiar with the aquaculture sector and understand related environmental topics.

From 2021-2023, the first cohort of the aquaculture literacy mini-grant program built diverse, collaborative networks in ten communities across the United States. Their [reported outcomes](#) underscored the effectiveness of small-scale grant-making and the significance of flexibility and responsiveness in meeting partners where they were. Explore more about their impactful partnerships [here](#).

In addition to managing this grant program focused on building partnerships, NAAEE is working closely with NOAA's Office of Education to support a wide range of opportunities in outreach and education through the eeBLUE partnership program. Through this mini-grant opportunity, one of many collaborative [eeBLUE efforts](#), NAAEE is committed to leveraging NOAA and NAAEE resources to increase participants' understanding and stewardship of sustainable aquaculture activities and related environmental topics. NAAEE is also interested in forging lasting partnerships between environmental education providers, aquaculture industry experts, and NOAA to achieve greater impacts at several levels. This request for proposals aims to support such partnerships by funding the development of aquaculture education programs that are responsive to the following goals of the Community of Practice for Aquaculture Literacy (CoPAL):

- Bringing aquaculture education programming to institutions and/or target audiences currently lacking resources;
- Building the capacity of environmental education providers to offer high-quality programming in informal and formal settings by matching aquaculture communication needs with existing research and
- Developing creative approaches for public engagement that promote a culture that values innovation, exploration, and community-relevant learning as a context for improving public aquaculture literacy.
- Identifying ways to integrate aquaculture topics into broader seafood communications, enhancing public understanding that wild capture fisheries and farmed seafood are intertwined.

Mini-grants will support collaborative projects that create a partnership between (1) informal learning institutions (e.g., science centers and aquariums), (2) aquaculture industry experts (e.g., shellfish farmers, researchers, or organizations), and (3) NOAA (e.g.,

NOAA aquaculture coordinators and/or Sea Grant extension agents). The total portfolio of funded projects is anticipated to reach a minimum of [4 regions](#) with approximately eight projects in 2024, encouraging but not limiting partnerships between [Coastal Ecosystem Learning Centers](#) (CELC) network members as the informal learning institution. Mini-grant activities will focus on the co-production and delivery of essential education and outreach resources to the target audiences served by understanding and discussing aquaculture topics related to their community.

Project proposals should be submitted directly to [eeBLUE@naaee.org](mailto:eeBLUE@naaee.org) by **11:59 PM (EST) on March 15th, 2024**.

## 2. ABOUT THE AQUACULTURE LITERACY MINI-GRANT PROGRAM

The Aquaculture Literacy Mini-Grants Program is a part of a partnership between the North American Association of Environmental Educators (NAAEE) and the National Oceanic and Atmospheric Administration (NOAA). Known as eeBLUE, NAAEE and NOAA's Office of Education have a 5-year partnership to increase environmental and science literacy among our partners and external networks. NAAEE supports the mutual aquaculture literacy goals of NOAA's Office of Education, NOAA Fisheries, and the National Sea Grant Office through this mini-grants program. The Aquaculture Literacy Mini-Grants Program seeks to identify opportunities to enhance aquaculture literacy across all audience groups using best practices for cultivating environmental literacy. We aim to reach this goal by supporting projects that build partnerships across (1) informal learning institutions (e.g., science centers and aquariums), (2) aquaculture industry experts (e.g., shellfish farmers, researchers, and/or organizations), and (3) NOAA (e.g., NOAA aquaculture coordinators and/or Sea Grant extension agents).

More than 50% of seafood produced globally for human consumption comes from aquaculture, and that percentage is rising. [Marine aquaculture operations](#) provide a year-round source of high-quality jobs and economic opportunities in coastal communities that augment seasonal tourism and commercial fishing. Marine aquaculture is also a resource-efficient method of increasing and diversifying U.S. seafood production that can expand and stabilize U.S. seafood supply in the face of environmental change and economic uncertainty. Some marine aquaculture, such as shellfish and seaweed aquaculture, provides environmental benefits by removing excess nutrients from our waterways.

Aquaculture is also used for species and habitat restoration and is part of a strategy to recover NOAA priority species. Yet, there are still many misperceptions about aquaculture's potential environmental impacts, quality, and safety, and there is high variability in community-specific needs for understanding aquaculture topics.

Evidence shows that support for aquaculture is associated with "its perceived benefits outweighing perceived risks, trust in scientists and the process of science, and perceived credibility of the sources providing public audiences with information" (Rickard, 2020). In the United States, the lack of widespread support and outright rejection of aquaculture as a sustainable industry in some communities indicates a need for strategic messaging to enhance aquaculture literacy (Wietzman, 2020; Rickard, 2020). U.S. public audiences' limited understanding of base-level information about aquaculture and seafood production influences how communities understand, support, and decide about aquaculture products ([Shaughnessy et al., 2023](#)). Environmental educators and Informal learning institutions provide the necessary platforms to build trusting relationships with and provide credible aquaculture information to the general public.

Aquaculture literacy (see Appendix 3) within a community is generated by familiarity with base-level information about aquaculture. This encourages consumers to take confidence in taking ownership of their aquaculture-related decisions. Success begins at the level of community engagement and requires thoughtful implementation of best practices in environmental education. This includes ensuring space for aquaculture industry voices early on and, often, in planning. A holistic inclusion of perspective provides opportunities for their valuable insights to help guide content and implementation strategies. Through this lens, we encourage applicants to consider NAAEE's [Community Engagement: Guidelines for Excellence](#) when developing their partnerships and projects.

## A. NAAEE RESOURCES FOR BEST PRACTICES IN ENVIRONMENTAL EDUCATION

The [Community Engagement: Guidelines for Excellence](#) is part of a continuing series of documents published by NAAEE as part of the National Project for Excellence in Environmental Education. The project is committed to synthesizing the best thinking about environmental education through an extensive review and discussion. It was created by environmental educators for environmental educators who want to work in partnership with communities to strengthen the underpinnings of well-being—environmental quality, social equity, shared prosperity, and the capacity to pursue these goals together. These

efforts help to create more civically engaged communities that embrace change, diversity, and new ways of working together toward a more sustainable future.

Appendix 4 provides additional information about community engagement guidelines for excellence. Applicants should review these guidelines and the additional resources available online in detail. Although many of these principles are embedded in eligibility for this request for proposals, applications should include details about how projects will succeed in advancing aquaculture literacy within a specific community based on these guidelines.

Environmental education that successfully engages communities has five characteristics in common:

1. Community Centered
2. Based on Sound Environmental Education Principles
3. Collaborative and Inclusive
4. Oriented Towards Capacity Building and Civic Action
5. A Long-Term Investment in Change

Additional resources for designing and implementing best practices in environmental education and engaging communities to enhance environmental literacy can be found in Appendix 4.

The eeBLUE Aquaculture Literacy Mini-Grants Program funded ten communities across the United States, enabling them to build diverse and collaborative networks. The program aimed to advance aquaculture literacy and empower communities to advocate for aquaculture all over the country. The grantees developed replicable and sustainable programs, which relied on the community connections they established and nurtured. As a result, they were well-positioned for lasting impact and success. For information and links to resources, please visit [here](#).

## B. AQUACULTURE LITERACY MINI-GRANT PARTNERSHIP PROJECTS

Education significantly supports NOAA's mission. The NOAA Office of Education coordinates activities across the agency and supports the integration of NOAA science into

education programs. NAAEE helps NOAA strengthen professional networks, disseminate best practices, support high-quality STEM education, and provide education and outreach for educators and other target audiences. Through the eeBLUE partnership, NOAA and NAAEE aim to create a more environmentally literate society with the knowledge, skills, and motivation to conserve our natural resources and build more resilient communities nationwide. Through this eeBLUE Aquaculture Literacy Mini-Grants request for proposals, NAAEE and NOAA seek to further reach our common environmental literacy goals by supporting best practices in environmental education to better inform society about aquaculture and related environmental topics.

In general, eeBLUE Aquaculture Literacy Mini-Grant projects should:

- Identify and support innovative ways to provide every participant with opportunities to acquire the knowledge, values, attitudes, commitment, and skills needed to understand and discuss aquaculture;
- Utilize best practices for engaging with the public on complex environmental issues to create able and confident aquaculture educators, in turn enhancing aquaculture literacy for consumers;
- Draw on NOAA assets for education ([resource collections](#), [NOAA in your state](#), and [NOAA in your backyard](#)), as well as NAAEE assets (such as [best practices for environmental education](#));
- Include opportunities for mutual sharing of expertise between and across partner disciplines (i.e., environmental education providers, NOAA staff, and aquaculture industry partners);
- Establish meaningful partnerships between informal learning institutions, aquaculture industry, and NOAA (including Sea Grant and the National Estuarine Research Reserves) partners to leverage resources and share best practices;
- Identify target audience(s) that will benefit from promoting aquaculture literacy and expanding interest in complex aquaculture topics and
- Emphasize place-based learning, maximize industry voice and empowerment, and include opportunities for participant reflection and meaning-making during proposed activities.

Applicants for an Aquaculture Literacy Mini-Grant should adapt components of the [NAAEE Community Engagement: Guidelines for Excellence](#) for implementation of activities that use NOAA science, sites, and/or expertise and align with NOAA's aquaculture priorities (see Appendices 2 and 4). Applicants must coordinate across project partners to ensure the proposed activities help meet their objectives and capacity-building needs. Projects should

create and/or implement formal or informal educational opportunities that build the collective aquaculture literacy necessary for communities to become more understanding of the aquaculture sector and more comfortable discussing related environmental topics. Projects should demonstrate how they will engage community members to build these capabilities, particularly through active learning, during the award period.

As part of the proposed project, applicants should provide opportunities for collaboration and professional development with project partners that will support the sharing of best practices for using education to enhance public aquaculture literacy. Where applicable, applicants should provide opportunities for participants (including project partners) to learn more about and connect with NOAA and NAAEE experts and resources that can help enhance aquaculture literacy. This can be planned through in-person sessions or virtually, such as chat, streaming video, or collaborative software.

Projects must be based on the established scientific evidence about current and future aquaculture efforts and should consider relevant socioeconomic and ecological factors in the targeted location(s). Scientists and subject matter experts should be recruited from appropriate project partners. Applicants should design programming that would be successful in the settings relevant to the target audience (i.e., informal learning institutions). Activities should be grounded in research-based effective practices to ensure successful implementation of audience experiences (see the guidelines in Appendix 4). Projects may be funded for all audiences and age ranges that may benefit from enhanced aquaculture literacy and should be designed to be age-appropriate for the proposed project's target audience and region.

Project models may vary based on the target audience. A typical project is expected to be implemented for up to 12 months in response to community-level needs.

All funded activities must serve an informal learning institution, aquaculture industry, and NOAA partnership. This request for proposals is intended to build capacity for informal learning institutions and the aquaculture industry, and this should be the main focus of the proposed programming. More details about eligible partnerships can be found in Appendix 3, on our [FAQ page](#), or by contacting the mini-grant support team: [eeBLUE@naaee.org](mailto:eeBLUE@naaee.org).

A letter of commitment from each partner is a required part of the application package. Letters should be no longer than one page and should make clear that the partner has support to participate from their program and institution, understands their role, and is

committed to participating for the project's duration. Potential applicants are encouraged to begin recruiting and working with project partners early in the application process. For information about potential aquaculture partners in their area, applicants can visit the NOAA Fisheries [Regional Aquaculture Coordinators](#) page and contact their region's coordinator(s). Given NOAA's existing partnership with the [Coastal Ecosystem Learning Centers \(CELC\) Network](#), priority will be given to applicants proposing to partner with CELC member institutions (see Appendix 2 for more details). Organizations demonstrating a need for the proposed resources will also be given priority.

Finally, applicants are encouraged to discuss any lingering COVID-19 impacts that may impact project implementation. In addition, NAAEE will work with funded grantees to make the necessary accommodations to offset COVID-19 impacts.

## C. PROJECT OUTCOMES

Where necessary, recipients must coordinate with NAAEE, NOAA, and their partners to plan program implementation schedules and content delivery methods. Recipients will be asked to identify any needs for technical assistance and provide updates and developed resources for inclusion on an online content-sharing portal hosted by NAAEE. NAAEE and NOAA also anticipate offering opportunities for grantees' professional development and capacity building related to best practices in enhancing aquaculture literacy. This will happen at various times during the project implementation timeline through the [Community of Practice for Aquaculture Literacy \(CoPAL\)](#) initiative (see Appendix 2).

While project evaluation for this request for proposals is not required, applicants are encouraged to discuss how the proposed project's success will be assessed and communicated. In addition, wherever possible, grantees are expected to collect and share information about lessons learned and successes towards meeting project objectives and reflect on how findings may inform decisions about future programming. This information may be quantitative and/or qualitative and may include, for example, observations of best practices, specific case studies, and a list of connections made. Applicants will be able to share insights in mid- and end-project reports and during an end-of-grants symposium.

Applicants must be aware of and adhere to any pertinent rules and policies regarding data collection for their state and/or district and/or partner sites and be prepared to address this if needed.



While grantees are not expected to report on each of these in an evaluation, aligning projects with the following anticipated program outcomes is encouraged:

Audiences served by projects will:

- Improve their understanding of aquaculture as a sustainable source of food and income;
- Gain awareness of pros, cons, and relevance of aquaculture to their own lives and communities;
- Understand that aquaculture is complementary to broader seafood conversations;
- Be more engaged and enthusiastic about learning about aquaculture and its career opportunities;
- Gain the knowledge, skills, attitudes, and motivations to participate in discussions about sustainable aquaculture;
- Be exposed to new people and places in their communities and
- Gain self-esteem and confidence to address aquaculture issues and take ownership of their aquaculture-related decisions.

Participating NOAA and aquaculture industry partners will:

- Learn how to successfully disseminate complex information and build consistency in messaging related to aquaculture;
- Learn more about the importance of environmental education in advancing aquaculture literacy;
- Have skills and confidence to incorporate environmental education standards into future programming (e.g., confidence in where to and how to utilize up-to-date, credible, information);
- Be aware of relevant NOAA resources to enhance audience experiences; and
- Increase skills and capacity to form sustained, effective, partnerships with environmental education providers and their local partners.

Informal learning institution partners will:

- Understand the goals and objective of the aquaculture literacy landscape;
- Know how to design and implement aquaculture programs appropriate to target audiences;
- Become aware of relevant NOAA resources to enhance audience experiences;
- Gain the skills necessary to integrate aquaculture topics into broader environmental and seafood conversations;

- Become able and confident stewards of aquaculture information, in turn educating the public towards aquaculture literacy; and
- Increase their skills and capacity to form sustained, effective, partnerships across disciplines.

### 3. GRANT INFORMATION

To ensure funded activities mirror the diversity of communities that benefit from aquaculture literacy, NAAEE aims to reach four [or more fisheries regions](#) through approximately eight competitively awarded Aquaculture Literacy Mini-Grants.

#### ELIGIBILITY

This solicitation is intended to promote partnerships between informal learning institutions, aquaculture industry experts, and NOAA. All funded activities must serve these partnerships. Additionally, this solicitation is intended to build capacity for informal learning institutions and the aquaculture industry, and this should be the main focus of the proposed programming. More details about eligible partnerships can be found in Appendix 3.

Prospective applicants are eligible to submit a proposal if:

- ✓ The applicant is an institution of higher education, nonprofit organization, commercial organization, state or local government agency, interstate agency, for-profit aquaculture organizations and operations, or Indian tribal government.
- ✓ The primary applicant is not a federal government agency, a foreign entity, or an individual.
- ✓ Project work is conducted by a U.S. organization in the United States or territories that can provide a valid UEI number. A UEI number is the authoritative identification number provided by the U.S. government, used to identify businesses awarded federal grants, awards, and contracts (<https://sam.gov/content/duns-uei>).
- ✓ The application must include partners that are informal learning institutions, industry, and NOAA.
- ✓ The applicant is not on the federal government's [debarred list](#).

Proposals that fail to meet the eligibility requirements outlined in this opportunity will be rejected without further review.

#### FUNDING AMOUNT

Applicants may apply for a total request of up to \$20,000. Projects should have a duration of no more than a 12-month period. Funding requested should be appropriate for the

number of sites and/or audiences to be served with the proposed program model, and applicants should justify the scale of program implementation in their proposals.

Given the modest amount of funding for this mini-grant opportunity, applicants are encouraged to minimize overhead charges to ensure the best distribution of funds to meet the partner institution/partner's programmatic needs and objectives. Applicants are encouraged to review [2 CFR §200.414 Indirect \(F&A\)](#) costs for more information about allowable indirect costs.

## GRANTEE RESPONSIBILITIES

Final awardees are required to submit interim reports, a final performance report, and financial reports to NAAEE; report forms will capture progress and metrics. The final project report will be due upon completion no later than 30 days after the award's end date. Interim reports and the final performance report must include photos and/or videos of project activities, products, and other resources for inclusion in an online learning resources portal hosted by NAAEE. Additional guidance on reporting products and resources for submission will be provided to grantees in quarter 1 of the project through a Google group and shared folder. Final awardees will also be expected to share project outcomes in an end-of-grants symposium. Additional technical support from the Aquaculture Literacy Mini-Grants team may be available if the applicant's needs are identified during project planning and implementation.

## OTHER GRANT INFORMATION

Institutions may serve as the lead PI on only one proposal for this opportunity per institution. Institutions *may* act as Co-PI or partners on other project proposals but not as the project leads. Given NOAA's existing partnership with CELC institutions, applicants are encouraged to consider [CELC member institutions](#) when searching for an educational partner (see Appendix 3). A table of definitions for required partnerships can be found in Appendix 3. For additional assistance identifying potential project partners, please contact the support team at [eeBLUE@naaee.org](mailto:eeBLUE@naaee.org). A letter of commitment from participating partners is required in the application package. It should be made clear that they have support from their institution to participate, understand their role, and are committed to participating for the project's duration.

Project budgets should adequately justify the funding requested to reach the proposed number of sites with the planned activities. Proposals should include support for all planned program activities, including travel and supplies. Matching funds are not required, nor will the proposed project be evaluated on that basis.

Notification of funding decisions is expected to be made by May 2024. Project start dates can be flexible, with the earliest project start date of June 2024.

## 4. APPLICATION PROCESS

### A. COMPETITION TIMELINE

January 9, 2024 - Request for proposals announced

January 31, 2024, 2 pm (Eastern) - Register [here](#) for the informational webinar for potential applicants

March 15, 2024- Request for proposals closes at 11:59 PM (Eastern)

March 15 to May 1, 2024 - review and selection

June 1, 2024 - Funding decisions announced (anticipated), project funds available, earliest project start date

### B. SUBMITTING YOUR PROPOSAL

Proposals must be submitted by **11:59 PM EASTERN TIME, 3/15/24**, through email to [eeBLUE@naaee.org](mailto:eeBLUE@naaee.org). A blank application template can be found on and downloaded from the [NAAEE website](#).

The proposal package must include [\[link to checklist\]](#):

- ✓ Title page [\[link to template\]](#);
- ✓ \*A detailed project description that includes objectives and expected outcomes, a description of proposed activities, identification of target audience(s) and project partners, and a plan for dissemination (maximum five pages; for more details, please see the suggested Project Description Template here [\[link to template\]](#));
- ✓ A timeline and/or milestone chart of proposed project activities and deliverables (2 pages maximum);
- ✓ A full budget table [\[link to template\]](#);
- ✓ A list of project partners and a resume/CV (2 pages maximum) of each PI and Co-PI(s); and
- ✓ Letters of commitment from all participating partners (1 page maximum).

\*The Project Description must not exceed five standard letter-sized pages, should be in 11-point or larger font, and have margins of at least 1". Each page of the project description should be numbered. Page limits include figures and other visual materials but exclude title pages, references, budget information, resumes, work plan/milestone charts, and letters of commitment. Additional materials, such as curriculum or other documents, may be submitted but may not be reviewed.

## C. REVIEW AND SELECTION PROCESS

A panel of qualified reviewers will score proposals based on how well they fulfill the criteria provided in Appendix 1 of this announcement. The additional selection factors provided in Appendix 1 may be used to ensure a diverse cohort of funded projects (considerations of geography, partners, audience, and more).

All organizations that submit a proposal will be notified whether your project is selected for funding by May 2024.

### FOR MORE INFORMATION

- ✓ Read the information and [FAQs](#) online at [https://naaee.org/programs/eeblue/aquaculture-initiative/faqs].
- ✓ Register [here](#) for the informational webinar for potential applicants
- ✓ For questions that cannot be answered through this announcement, the applicant webinar, or the FAQs, please contact the Aquaculture Literacy mini-grants team at [eeBLUE@naaee.org](mailto:eeBLUE@naaee.org).

## APPENDIX 1: Review Criteria and Selection Factors

### REVIEW CRITERIA

Proposed projects will be reviewed and scored based on the criteria below:

Importance/relevance and applicability of proposal to the program goals (30 points)

- Do the proposed activities, expected outputs, and outcomes support the goal of this RFP?

- Do the proposed activities identify innovative ways to engage a target audience with aquaculture topics?
- Do the proposed activities fill a gap and/or demonstrate the need to enhance aquaculture literacy?
- Does the proposed project support individuals' knowledge, skills, attitudes, and motivations to engage in aquaculture conversations?
- Does the applicant address NOAA's Aquaculture priorities and cite objectives?
- Does the proposed project include all project partners in the design and development of programming?
- 
- Does the applicant explain the need for implementing the program within the identified target audience?
- Does the proposed project include using NOAA assets to achieve project goals?
- Does the proposed project include using NAAEE resources to achieve project goals?
- Does the proposed project include opportunities for participants to interact with NOAA, industry, or other aquaculture subject matter experts?
- Are the project activities likely to create lasting collaborations between partners?

### Technical merit (30 points)

- Do the proposed activities engage a target audience with meaningful opportunities to understand aquaculture topics better?
- Will the proposed project build capacity for participating program partners, particularly for informal learning institutions and the aquaculture industry?
- Does the proposed project include best practices (such as project-based learning, industry voice and empowerment support, and environmental education guidelines)?
- Does the applicant demonstrate how the proposed activities address the elements of the *Community Engagement: Guidelines for Excellence*?
- Does the proposal clearly describe how the project will be executed logistically and include details sufficient to determine that it can reasonably be completed in the proposed time frame?
- Does this project increase the likelihood of ongoing inclusion of programming that supports aquaculture literacy at informal learning institution partner sites?

### Qualifications of applicants (20 points)

- Do project partners clearly identify that they have support to participate from their institution/state, understand their role, and are committed to participating for the duration of the project?
- Does the applicant have a commitment to and experience reaching the proposed target audience?
- Are letters of commitment from all project partners included?
- Do any proposed Sea Grant partnerships include a statement/indication of support from their Sea Grant Program Director?

## Project costs (10 points)

- Is the proposed budget request reasonable and justified?
- If the proposed project is part of a joint project request, does it represent two complementary but distinctly different proposals?

## Outreach and Sustainability (10 points)

- Does the applicant justify the scale of program implementation in their proposals?
- Does the applicant commit to collaborating with NAAEE and NOAA to produce content posted on NAAEE and NOAA communication platforms?
- Does the applicant demonstrate a plan for sharing lessons and best practices learned throughout the project?
- Does the applicant demonstrate how partnerships might continue past the project end date?

## ADDITIONAL SELECTION FACTORS

To ensure a diverse cohort of funded projects, NAAEE, in collaboration with NOAA, may select a proposal out of review rank order if justified based upon the following factors:

- A. Balance/distribution of funds
  - a. By geography
  - b. By type of institutions
  - c. By type of partners
  - d. By project types
  - e. By audience types
- B. Duplication of other projects funded or considered for funding by NOAA or NAAEE
- C. Applicant's prior award performance
- D. Partnerships with/participation of targeted groups

# APPENDIX 2: About our Partnerships and Programs

## ABOUT THE NORTH AMERICAN ASSOCIATION FOR ENVIRONMENTAL EDUCATION

For more than four decades, the [North American Association for Environmental Education](#) (NAAEE) has served as the professional association, champion, and backbone organization for the field of environmental education (EE), working with a diverse group of EE professionals in the United States, Canada, and Mexico to advance environmental literacy and civic engagement. NAAEE is the only national membership organization dedicated to strengthening EE and increasing the visibility and effectiveness of the field. With more than 20,000 members and supporters, including affiliations with 56 state and provincial EE organizations and members in more than 30 countries, NAAEE reaches more than a million people through programs aimed at providing the field with professional development, access to learning

networks and collaborative partnerships, tools, and resources to promote effective practice, and leadership and capacity building. NAAEE is also involved in several field-building activities and signature programs, including the Natural Start Alliance to advance environmental education in early childhood, an international E-STEM initiative to link environmental education and STEM learning, and the Global Environmental Education Partnership—a global network dedicated to building capacity at the country level (see [thegeep.org](http://thegeep.org)).

## ABOUT THE NOAA COMMUNITY OF PRACTICE FOR AQUACULTURE LITERACY (CoPAL)

Throughout 2020, NOAA's Office of Education, NOAA's Office of Aquaculture, and the National Sea Grant Office collaborated on establishing a [Community of Practice for Aquaculture Literacy \(CoPAL\)](#). This effort seeks to connect experts within the agency and across disciplines and geographic locations that share a common interest in educating the public about aquaculture. By collaborating more consistently, this community of practice allows NOAA to share best practices and leverage efforts more effectively to enhance informal and formal aquaculture education efforts. NOAA believes that establishing, convening, and supporting this community of practice will significantly contribute to the overall success of NOAA's aquaculture initiatives.

Ultimately, we hope these efforts will strengthen our and our partner's ability to communicate with the public about aquaculture and understand best practices. Using these best practices, we hope to foster dialogues supporting enhancing public aquaculture literacy. We envision the first steps to success rely on the creation of innovative approaches to aquaculture messaging that can support the success of educators and industry when discussing aquaculture-related topics. By supporting multi-sectoral collaborative projects, we believe that the co-production of knowledge will create more holistic, effective, and relevant strategies for success.

## ABOUT THE COASTAL ECOSYSTEM LEARNING CENTERS NETWORK (CELC)

The Coastal Ecosystem Learning Centers (CELC) Network is a consortium of [25 aquariums and marine science education centers](#) located in the United States, Canada, and Mexico. From youth summits to multi-institution projects, the CELC Network works together to engage the public in protecting coastal and marine ecosystems. By coordinating CELC, NOAA's Office of Education brings NOAA science, guidance, and resources to these institutions and the 20 million people they reach annually across North America.

## ABOUT THE CELC AQUACULTURE INITIATIVE

CELC's [aquaculture literacy initiative](#) connects institutions to NOAA resources to engage visitors on the science of sustainable, domestic aquaculture. Aquaculture is also of interest to many CELC institutions as a major NOAA priority. This initiative is a long-term effort to engage millions of aquarium visitors on the latest advancements in marine aquaculture and its multiple benefits.



## ABOUT NOAA'S OFFICE OF EDUCATION

[The Office of Education](#) works to advance education both within NOAA, and with the public we serve. We provide scholarships and collaborate with universities to prepare the brightest minds from diverse backgrounds in NOAA-related fields. We offer competitive grants and establish partnerships to integrate NOAA science into schools and organizations. Lastly, we help coordinate educational activities across NOAA's education community and with external partners to ensure these efforts are effective and continually improved.

[The NOAA Education Council](#), with support from the NOAA Office of Education, helps guide the NOAA education community. Members include 16 programs from the National Weather Service, NOAA Fisheries, NOAA Research, National Ocean Service, and NOAA Satellites. The council leads work toward the goals of the NOAA Education Strategic Plan and reports progress.

## ABOUT THE NOAA FISHERIES OFFICE OF AQUACULTURE

[NOAA Fisheries Office of Aquaculture](#) works to ensure that U.S. marine aquaculture grows sustainably and helps support resilient coastal communities and healthy oceans. Marine aquaculture enhances coastal resiliency, creates jobs, improves food security and human nutrition, and is a valuable tool to help rebuild some protected species and habitats. Limits to wild fisheries, environmental changes, the nutritional benefits of seafood, and trends in global seafood markets underscore the need to increase U.S. marine aquaculture production.

Our marine aquaculture vision and mission advance those of NOAA and support NOAA Fisheries' priorities. Central to our aquaculture mission is ensuring that U.S. marine aquaculture grows sustainably. We define sustainable aquaculture to encompass the "triple bottom line" of environmental, economic, and social sustainability. Marine aquaculture is part of the agency's economic and environmental resilience strategy in coastal communities and supporting healthy oceans.

Marine aquaculture operations provide a year-round source of high-quality jobs and economic opportunities in coastal communities that augment seasonal tourism and commercial fishing. Marine aquaculture is also a resource-efficient method of increasing and diversifying U.S. seafood production that can expand and stabilize U.S. seafood supply in the face of environmental change and economic uncertainty. Some marine aquaculture, such as shellfish and seaweed aquaculture, provides environmental benefits by removing excess nutrients from our waterways. Aquaculture is also used for species and habitat restoration and is part of a strategy to recover NOAA priority species.

## ABOUT eeBLUE

NAAEE and NOAA's Office of Education entered a second 5-year [eeBLUE](#) partnership to increase environmental and science literacy among NOAA's partners and external networks. Education plays a significant role in supporting NOAA's mission. NOAA's Office of Education coordinates activities across the agency and supports the integration of NOAA science into education programs. Through this partnership, NOAA and NAAEE aim to create a more environmentally literate society with the knowledge, skills, and motivation to conserve our natural resources and build more resilient communities

nationwide. NAAEE helps NOAA strengthen professional networks, disseminate best practices, support high-quality STEM education, and provide education and outreach for educators and other target audiences.

## APPENDIX 3: Definitions

### Aquaculture

The term aquaculture broadly refers to cultivating aquatic organisms in controlled aquatic environments for any commercial, recreational, or public purpose. The breeding, rearing, and harvesting of plants and animals occur in all types of water environments, including ponds, rivers, lakes, the ocean, and human-made "closed" systems on land.

### Aquaculture Literacy

Aquaculture literacy efforts build off of and support the collective goals of environmental literacy.

*Environmental literacy* is "the possession of knowledge and understanding of a wide range of environmental concepts, problems, and issues; cognitive and affective dispositions toward the environment; cognitive skills and abilities; and appropriate behavioral strategies to make sound and effective environmental decisions. It includes informed decision making individually and collectively and a willingness to act on those decisions in personal and civic life to improve the well-being of other individuals, societies and the global environment" (Hollweg et al. 2011; NOAA's [Community Resilience Education Theory of Change 2020](#)).

### Community of Practice

A community of practice is a group of people who share a common interest or passion for something they do and learn how to do it better as they interact regularly.

### Environmental Literacy

Environmental Literacy is the knowledge and understanding of a wide range of environmental concepts, problems, and issues; cognitive and affective dispositions toward the environment; cognitive skills and abilities; and appropriate behavioral strategies to make sound and effective environmental decisions. It includes informed decision-making individually and collectively and a willingness to act on those decisions in personal and civic life to improve the well-being of other individuals, societies, and the global environment (Adapted from Hollweg et al. 2011).

# NOAA Assets

Throughout NOAA's [line offices](#), there are many assets in ocean, coastal, Great Lakes, weather, and climate sciences. These assets include protected natural areas such as marine sanctuaries and estuarine research reserves; a large fleet of ocean-going ships, buoys, weather stations, and other monitoring devices; scientists; and a rich array of websites that feature data and information about research and monitoring. Additionally, NOAA summarizes [NOAA programs](#) and activities sorted by the state or territory in which they are based or focused. This list is not a comprehensive list of all NOAA assets. Please also see the [Environmental Literacy Program's Resilience Assets webpage](#).

## Eligible Partnerships

| NOAA*   | Industry   | Informal Learning Institutions  |
|---|--|---|
| Line Offices, Headquarters Offices  | Shellfish, Seaweed, and Finfish Growers/Farmers              | <a href="#">CELC Member</a> Institutions  |
| Regional Fisheries and Aquaculture Programs   | Grower Associations  | An informal learning institution that is engaging the public on coastal and marine issues.* |
| Sea Grant Programs  | Hatcheries and Hatchery Staff (including state-run)          | *Including Tribal Organizations/Centers   |
| National Estuarine Research Reserves  | Aquaculture Organizations, such as Minorities in Aquaculture |   |
| Regional Fisheries Science Centers  | Tribal Associations and Organizations                        |   |
| Scholars and Fellows  | Chefs and sustainable seafood restaurateurs                  |   |
| *Federal employees can not receive direct funding for these projects.   |  |   |
| **In addition to a commitment letter, Sea Grant partners must submit a statement/indication of support from their Program Director. |  |   |

# APPENDIX 4: Resources

## A. COMMUNITY ENGAGEMENT

Community engagement guidelines for excellence is part of a continuing series of documents published by the North American Association for Environmental Education (NAAEE) as part of the National Project for Excellence in Environmental Education. The project is committed to synthesizing the best thinking about environmental education through an extensive review and discussion. It was created by environmental educators for environmental educators who want to work in partnership with communities to strengthen the underpinnings of well-being -- environmental quality, social equity, shared prosperity, and the capacity to pursue these goals together.

Environmental education is about creating healthier communities for all -- with ecological integrity, shared prosperity, and social equity as long-term goals. Environmental educators have worked in, with, and for communities for decades. As communities have evolved, so has the field of environmental education. In creating the [Community Engagement: Guidelines for Excellence](#), NAAEE brings the field's professional standards to environmental educators' dynamic work in today's communities. These efforts help to create more civically engaged communities that embrace change, diversity, and new ways of working together toward a more sustainable future.

Environmental education that successfully engages communities has five characteristics in common:

1. Community Centered

Anchoring environmental aims within the context of community interests, issues, and capacities puts the community at the heart of environmental education.

Guidelines

- 1.1 Get to know and understand the community

- 1.2 Connect environmental education interests and capacities with community concerns, assets, and aspirations

- 1.3 Consider the appropriateness of community engagement

- 1.4 Focus on community assets and shared priorities

- 1.5 Reach beyond usual partners and program-delivery modes.

2. Based on Sound Environmental Education Principles

Environmental education engages communities in ways that rely on established principles and proven practices of the field.

Guidelines

- 2.1 Build on interests, issues, and settings familiar to the community

- 2.2 Facilitate broad accessibility

- 2.3 Use appropriate instructional strategies

- 2.4 Select, adapt, or develop effective educational materials

- 2.5 Match engagement strategies and tools to the interests, issues, and capacities of your partnership and community

3. Collaborative and Inclusive

Environmental education works in collaborative and inclusive relationships, partnerships, and coalitions.

#### Guidelines

- 3.1 Build coalitions and partnerships strategically
- 3.2 Value and incorporate diversity, equity, and inclusion
- 3.3 Plan and implement collaboratively
- 3.4 Learn from and resolve conflict

#### 4. Oriented Toward Capacity Building and Civic Action

Environmental education supports capacity building for ongoing civic engagement in community life, contributing to long-term community well-being, sustainability, and resilience.

#### Guidelines

- 4.1 Integrate environmental education with complementary communication, education, and social-change approaches
- 4.2 Support and build community capacity
- 4.3 Move toward civic action

#### 5. A Long-Term Investment in Change

Working in communities to create change is typically a long-term initiative, requiring a commitment to relationship building and an ongoing and evolving engagement process.

#### Guidelines

- 5.1 Assess individual and organizational readiness for community engagement
- 5.2 Invest in building capacity for engagement
- 5.3 Incorporate learning, improvement, and adaptation
- 5.4 Plan for long-term support and viability
- 5.5 Embrace change and celebrate progress

For additional resources, the *Community Engagement: Guidelines for Excellence* can be found [here](#). Including tools, activities, resources, and case studies for environmental education.

## B. ADDITIONAL RESOURCES:

- [Aquaculture Literacy Mini-Grant Page](#)
- [Logic Model: Aquaculture literacy community of practice](#)
- [Coastal Ecosystems Learning Centers \(CELC\) One-Pager](#)
- [CELC Aquaculture Initiative One-Pager](#)
- [Webinar about our Community of Practice efforts in 2020](#)
- [Recordings of CELC Aquaculture Education Webinars](#)
- [NOAA Office of Education Aquaculture Literacy Resources](#)
- [10-year NOAA Sea Grant Aquaculture Vision](#)
- [NOAA Fisheries' National and Regional Strategic Plans](#)
- [NOAA Education Strategic Plan](#)
- [NOAA's National Seafood Strategy](#)

- [NOAA's Community Resilience Education Theory of Change](#)
- [NOAA Aquaculture Outreach and Educational Materials](#)
- [NAAEE Resources Page](#)
- [NOAA Education Resource Collections](#)
- [NOAA in Your State and Territory](#)
- [NOAA in Your Backyard](#)
- [Environmental Literacy Program's Resilience Assets](#)