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**NRAC FULL PROPOSAL REVIEW FORM**

Project Code/Title: 01-Brayden: Best Management Practices (BMPs) for Oyster Aquaculture in Northern New England

Date Due:  **Dec. 9, 2022**

 Please provide the information requested below. Length and detail of responses may vary according to the nature of the proposal. We value your honest appraisal and the format allows you to be as expansive as you deem necessary (feel free to use a separate sheet if necessary). Your comments and scoring will be shared with the principal investigator but with complete anonymity.

1. **Science, Technology, and/or Extension Program Design (technical merit of all aspects of the project, 30%):** Does this proposal use top quality science and/or technology, or demonstrate extension scholarship? Is (are) the PI(s) familiar with relevant previous and contemporary investigations? Are the objectives and hypotheses explicit and clear? Is the experimental plan clear and the statistical design appropriate? Is the methodology described in the plan appropriate to meet the objectives for a research or extension project? Will this work advance understanding of the science and the contemporary problems that the industry faces? If this is an Extension-demonstration or education project do the PI(s) provide an adequate plan to evaluate the success of the effort? Are the proper metrics provided? Can the PI(s) properly assess the short-term, medium-term, long-term outcomes projected?

*Comments:*

The team proposes to develop new, modernized BMPs for oyster aquaculture in Maine and New Hampshire to help improve profitability, reduce losses and increase social license. The proposed process includes a review of current BMPs (including other agriculture sectors) , dialogue with industry and expansive communication of these BMPs. As proposed, this team has a strong likelihood of success to produce the proposed outputs. A challenge here will be assessing success (and outcomes). The team proposes a survey, which admittedly is constrained by the time period of the grant to one-year. But it’s less clear who would be asked – current license holders, pending applications, applicants who were rejected, other stakeholders, etc. This may hinge specifically on which outcome is being prioritized (e.g., increase profitability, social license improvement, etc.).

*Rating: Maximum score = 30*

 Excellent (numerical value = 30) \_\_\_\_\_\_\_

 Very Good (numerical value = 27) \_\_X\_\_\_\_

 Good (numerical value = 24) \_\_\_\_\_\_\_

 Fair (numerical value = 21) \_\_\_\_\_\_\_

 Poor (numerical value = 18) \_\_\_\_\_\_\_

1. **Industry Relevance and Probability of Success (30%):** Are the benefits and potential impacts related to industry utility such as increased farm-gate value or grower profitability? Will the project likely provide usable results that can be adopted by the industry in a timely manner? Alternatively, if it is a development effort toward a new technology, will this project’s results increase the team’s capacity to compete for external funds to support the next iteration of research and outreach needed to take the results to application? Will this project create an opportunity for information to be turned over to the industry for refinement and adoption that will eventually become self-sustaining?

*Comments:*

The team makes a case that new, improved BMPs will allow the industry to improve profitability, reduce losses and increase social license (allowing greater production). The logic of this, as well as some of the literature cited, support this. Certainly, it seems that an industry is better off with the opportunity to voluntarily adopt BMPs than not.

The probability of adoption of BMPs, both putatively and in actuality, are less clear to me. With so many certifications and programs around, how will this program of BMPs gain traction (measured through adoption and continued implementation) and produce the desired change?

*Rating: Maximum score = 30*

 Excellent (numerical value = 30) \_\_\_\_\_\_\_

 Very Good (numerical value = 27) \_\_\_\_\_\_\_

 Good (numerical value = 24) \_\_\_X\_\_\_\_

 Fair (numerical value = 21) \_\_\_\_\_\_\_

 Poor (numerical value = 18) \_\_\_\_\_\_\_

1. **Integration with Extension (20%):** Does this work identify the key stakeholders? Stakeholders include those individuals (industries and agencies) not directly involved in the project. Is the extension plan appropriately designed to reach the targeted stakeholders? How will the results of this work address the needs of key stakeholders? Will this project extend our knowledge to all stakeholders? Are the expected outputs, outcomes, and impacts clearly described? Is the budget appropriate for effective integration?

*Comments:*

Certainly there is a high inclusion of industry stakeholders in the development process. I wonder if there might be an advantage to engaging the regulatory community in the development process. Could input from opponents of aquaculture be incorporated to head these issues off?

For outreach of the produced BMPs, a broad audience of stakeholders is identified and there will be wide awareness of these BMPs.

*Rating: Maximum score = 20*

 Excellent (numerical value = 20) \_\_\_\_\_\_\_

 Very Good (numerical value = 18) \_\_\_X\_\_\_\_

 Good (numerical value = 16) \_\_\_\_\_\_\_

 Fair (numerical value = 14) \_\_\_\_\_\_\_

Poor (numerical value = 12) \_\_\_\_\_\_\_

**4. Capacity (10%):** Is (are) the principal investigator(s) and specified members of the research (extension) team qualified to conduct the research (program)? Is there industry representation as part of the team? Have the investigators clearly articulated they have adequate facilities and equipment to complete the project. Is the overall budget appropriate given the scope of the project? Is there a reasonable chance the project will be completed on-time?

*Comments:*

This is a very strong team that is capable of successfully completing the proposed work in a timely fashion. Industry representation is strong through MAA, with adequate facilities and equipment for this project. Budget is appropriate

*Rating: Maximum score = 10*

 Excellent (numerical value = 10) \_\_\_\_X\_\_\_

 Very Good (numerical value = 9) \_\_\_\_\_\_\_

 Good (numerical value = 8) \_\_\_\_\_\_\_

 Fair (numerical value = 7) \_\_\_\_\_\_\_

Poor (numerical value = 6) \_\_\_\_\_\_\_

**5. Accountability (10%):** Does the investigator and her/his team have a successful track record of previous NRAC funding being adopted by the industry? Have they leveraged NRAC funding for additional resources to solve bigger problems that can be funded by NRAC alone? Is there evidence that the investigator(s) has (have) an established record indicating a high probability of success on the proposed work? Does the PI(s) have an established record of completing projects on-time meeting the objectives laid out in previous projects? Can this project integrate or be leveraged with funding from other work of the investigator(s)? Does the investigator(s) have a track record that suggests this project will be a good investment for NRAC resources?

*Comments:*

The team is accountable and productive. They do what they say and have demonstrated that in previous projects. The lead PI has done tremendous work that will be a springboard and model for the proposed BMPs.

*Rating: Maximum score = 10*

 Excellent (numerical value = 10) \_\_X\_\_\_\_\_

 Very Good (numerical value = 9) \_\_\_\_\_\_\_

 Good (numerical value = 8) \_\_\_\_\_\_\_

 Fair (numerical value = 7) \_\_\_\_\_\_\_

 Poor (numerical value = 6) \_\_\_\_\_\_\_

Non-Applicable – First Time Applicant \_\_\_\_\_\_\_

**6*.* Total score: \_\_89\_\_\_**

 **Rating Excellent \_\_\_\_\_\_**

 **Very Good \_\_\_X\_\_**

 **Good \_\_\_\_\_\_**

 **Fair \_\_\_\_\_\_**

 **Poor \_\_\_\_\_\_**

**Final Recommendation: Must fund \_\_\_\_\_\_\_\_**

 **Fund if resources are available \_\_\_\_X\_\_\_**

 **Encourage Resubmission next year \_\_\_\_\_\_\_\_**

 **Do Not Fund \_\_\_\_\_\_\_\_**

**7. Strengths:** What are the major strengths of this proposal? If you provided a rating of excellent for any of the categories above but did not comment, would you please share why you rated a particular category as “excellent”?

The biggest strength is the team and its familiarity with the industry and success in producing outputs and outcomes. In addition, the development of the BMPs is founded in dialogue with industry members.

**8. Weaknesses:** Identify the weaknesses of this proposal. Are there any flaws (design, methodological, etc.) that might seriously compromise the scientific integrity, value and/or validity of the work? If you rated an evaluation area as fair or poor, how might that area of the proposal be improved?

No weaknesses beyond the comments above about the challenge of assessing the outcomes of BMPs being produced and available.

While not a weakness, it is worth noting the challenge of formulating BMPs that don’t cast those that don’t adopt BMPs as ‘bad actors’. For example, if power washing of gear is recommended on land, does that imply that power washing on site in the water is ‘bad’? I’m confident that this team has the expertise and understanding to address these nuances, but it would be worth addressing if funded.