SAFMC CITIZEN SCIENCE PROGRAM
INITIAL EVALUATION PLAN

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Evaluating the SAFMC citizen science program will require determining whether its mission, vision, and goals are being realized after a set period of time. Because many of the program's goals will take years to accomplish, overall evaluation results will not be evident for many years. However, a comprehensive program evaluation needs to begin as a program begins, because baseline data must be collected against which change over time can be measured. Therefore, it's important to begin the process of evaluating the SAFMC citizen science program now.

In fact, we already have begun, because the first step in evaluation is developing measurable goals and objectives that support a program's mission and vision. Therefore, over the past year we have refined the program's four goals and developed measurable objectives for each. As a reminder, the program goals are:

- Design, implement, and sustain a program framework to guide the development of projects that support fishery management decision making.
- Facilitate development of individual projects to address specific research priorities.
- Ensure that data collected by projects are accessible, robust, and fit for purpose.
- Foster mutual learning, collaboration, and program engagement.

The first two goals are well under way. We have developed a program framework that already is guiding the development of two projects, SAFMC Scamp Release and FISHstory, both of which are targeted toward specific research priorities. We also have been working on goal 3 by collaboratively designing the projects to ensure that their data will be useful. Evaluating whether these three goals are being fully achieved will require ongoing evaluations of each project, which also are under way.

The fourth goal will be much harder to measure, however. To determine whether the program is fostering mutual learning, collaboration, and engagement, and to learn whether it is supporting the program's vision of advancing science and increasing trust, we will need baseline information on the knowledge, attitudes, collaborations, engagement, and trust levels of the various stakeholders. The baseline data can be compared with information about these attributes after the stakeholders have engaged with the program for at least a year and probably longer.

Specific questions that program evaluation should seek to answer are:

- Is the citizen science program enhancing the decision-making process by helping to increase trust and transparency among fishermen, scientists, and managers?
- Is the program empowering constituents to become more engaged in the science and management process, and do they feel that their concerns are being taken into account?
- Is the program changing managers' perception of how citizen science data can be used?

- Is the program increasing scientists' willingness to learn from and work with constituents?
- Is the program increasing constituent awareness and understanding of the scientific process?
    - Do participants in the program understand the concept of 'best scientific information available'?
    - Do participants understand the goal of a stock assessment?
    - Do participants understand the role of a fisheries management council?

I propose to collect baseline information to answer these questions in three stages. First will be interviews, conducted either on the telephone or by Zoom, with 12 members of the fishing community "ecosystem," including at least one individual in each of the following audiences:

- People catching fish - including individual fishermen and organized recreational and commercial fishing groups
    - 3 sectors: commercial, for-hire (include charter and headboat), and private recreational
- Scientists
    - Assessment specialists
    - Government biologist/researcher
    - Academic/researcher
- Managers
    - Federal (e.g., NOAA Fisheries)
    - Regional (Councils, Commissions)
    - State

Individuals to be interviewed will be selected by the program staff with help from the Citizen Science Operations Committee. All interviews will be transcribed and annotated. The results will first be compiled into a report. The interviews will seek to understand not so much the individual knowledge and attitudes of the interviewees, but rather the kinds of questions that we need to ask of a broader sample of the fishing community. Thus, the report will be on the current status of knowledge, understanding, and attitudes of the fishing community as described by the interviewees. This phase will take approximately 4-6 months.

The second phase will be to use the information in the report to develop a survey of the wider community on these same issues that can be administered online with Survey Monkey or a similar program. Some of the questions on the survey will be asked of all respondents, including demographic questions so that we can examine which variables may impact their responses, such as age, avidity, and history with the SAFMC. Other questions will use "logic" so that they are tailored to specific audience subcategories. The survey will be pilot tested with the individuals interviewed and also with about a dozen new individuals to ensure that it is clear,

comprehensive, and yields the kinds of information whose change we wish to measure over time. We'll also need to ensure that it can be completed in under ten minutes. Then the survey will be revised into a format ready for implementation. This phase will take approximately 2-3 months.

The third phase will be to implement the survey and analyze the results and to write a full report on the findings, which will include baseline data that can be used to measure change over time among individuals participating in or affected by the program. Lists of names to whom the survey can be sent will be compiled in consultation with program staff.

Costs:

Phase one: $5,000

- Development of interview questions
- Setting up interviews
- Conducting 12 interviews
- Analyzing 12 interviews
- Writing report on issues identified by interviewees

Phase two: $2,500

- Survey development
- Pilot testing
- Survey revision

Phase three: $5,000

- Collection of names/lists for survey deployment
- Implementation and administration of survey
- Analysis of data and writing report of baseline information