SAFMC Citizen Science Program Planning & Evaluation
<mark>**6/19/2020 - DRAFT**</mark>

Vision Statement: Produce data that will support and improve fisheries management.

Mission Statement: Improve information for fisheries management through collaborative science.

GOAL 1: Design, implement, and sustain a program framework to guide the development of projects that support fishery management decision making.

Draft Objectives
- Objective 1.1: Establish organizational infrastructure to provide program administration and oversight.
  - Create a Council Citizen Science Committee to provide overall program direction and authority.
  - Create a Citizen Science Program Advisory Panel to advise program policies related to scientific goals and integrity and operational processes.
  - Create a Citizen Science Operations Committee to develop and review program policies, procedures, goals, and objectives.
  - Create a Citizen Science Projects Advisory Committee to identify research needs across fishery management plans, assist with volunteer engagement strategies, and serve as outreach ambassadors for the Program.
  - Appoint a Citizen Science Advisory Panel Pool with broad interest and expertise in areas of program development.
  - Assign Action Teams as needed from the Citizen Science Advisory Panel pool to assist in development of program framework and resources.

- Objective 1.2: Develop program procedures, policies, and tools.
  - Create program Standard Operating Procedures and Practices (SOPPs).
  - Establish and maintain a citizen science research needs prioritization process that includes bi-annual review.
  - Create a Citizen Science Project Endorsement Program.
  - Develop support resources (best practices, templates, etc.) to assist in development of citizen science projects.
  - Produce Citizen Science Program communication and outreach plans to include routine program communication, program website, social media development, program support resources, and annual report.
  - Develop program evaluation process.

- Objective 1.3: Create a funding strategy that is adaptable to changing circumstances and needs.
  - Develop and regularly review an inventory of project and program funding opportunities (i.e. requests for proposals).
  - Generate a matrix of funding models (e.g. public-private partnerships, crowdfunding) for program and project needs.

GOAL 2: Facilitate development of individual projects to address specific research priorities.

Draft Objectives
- Objective 2.1: Publish and broadly disseminate the SAFMC's citizen science research priorities.
  - Post priorities to the program webpage, social media, and external outlets (citizen science listservs, etc.).
  - Share priorities with Council Advisory Panels, SSC, and SEP.
  - Distribute priorities to Program partners (State Sea Grant, state and federal agencies, etc.) via an annual report.

- Objective 2.2: Implement the SAFMC's Citizen Science Project Endorsement Program.
  - Develop a launch strategy to announce and promote the Program.
  - Publish endorsement criteria and process on Program webpage.
  - Establish an ad-hoc review committee to evaluate endorsement applications.

- Objective 2.3: Provide project support resources (best practices, templates, etc.) and project development guidance.
  - Publish resources on the program webpage.
  - Review and update support resources, as needed.
  - Distribute resources to program partners annually via Council communication outlets (e.g. newsletter, social media).
  - Provide project development guidance via webinars, YouTube videos, virtual 'office hours', etc.

- Objective 2.4: Encourage collaboration by diverse teams of stakeholders (scientists, fishermen, managers, etc.) to develop projects.
  - Require internal Council citizen science projects to use a Design Team with diverse expertise during project development and implementation.
  - Help identify and connect stakeholders for project development (e.g. matchmaking).
  - Develop and implement a Citizen Science Project Idea Portal.

GOAL 3: Ensure that data collected by projects are accessible, robust, and fit for purpose.

Draft Objectives
- Objective 3.1: Implement program guidelines that address data management, standards, quality, and accessibility.
    - o Ensure project support resources include clear data guidelines.
    - o Share data guidelines with all projects the Program supports and/or endorses.
    - o Develop minimum data standards that projects must meet to be supported/endorsed by the program.
    - o Develop draft data accessibility agreements and incorporate into project resources available online.

- Objective 3.2: Review project results to determine if data meet project and/or Program needs.
    - o Develop and implement a process to review project results.
    - o Share summary results of review with the Citizen Science Committee to publicly highlight how data meet Council needs.
    - o Develop an adaptive process to help projects produce data   that address project and/or Program goals.

- Objective 3.3: Document the contribution of citizen science projects and data to specific SAFMC research priorities and science and management decision making.
    - o Develop and maintain project inventory that includes, project research priority and how/if data have been used in science and management.
    - o Distribute summary of project inventory highlighting data usage in annual report.

GOAL 4: Foster mutual learning, collaboration, and program engagement.

Draft Objectives
- Objective 4.1: Promote opportunities for learning among diverse constituents.
  - Support and encourage development of projects on a range of research priorities.
  - Utilize ideas collected via the Project Idea Portal & matchmaking service to promote mutual learning.
  - Host open discussion (e.g. webinars) with interested stakeholders to share project results, lessons learned, what stakeholders/project participants have learned from each other, etc.

- Objective 4.2: Foster existing partnerships and develop new partnerships to support both program and project goals.
  - Create partnership development best practices.
  - Encourage clear lines of communication between partners.
  - Conduct informal reviews/evaluations of partnerships.
  - Explore broader citizen science platforms (e.g. Scistarter) for partnerships that help connect volunteers to projects.

- Objective 4.3: Strive to enhance trust among scientists, managers, and fishermen.
  - Encourage transparent communication among stakeholders.
  - Manage expectations for programmatic and project level activities.
  - Develop a method to evaluate trust among Program participants.
  - Ensure best practice guidelines address building trust among project participants.

- Objective 4.4: Engage new categories of stakeholders that are not typically involved in the Council process.
  - Identify approaches to promote the program and individual projects outside of the Council's normal communication methods.
  - Develop a mechanism to track engagement across stakeholder categories.

- Objective 4.5: Develop Citizen Science Program volunteer engagement (recruitment, training, retention) strategies, products, and activities using best practices outlined by the Citizen Science Action Teams.
  - Develop communication tools (e.g. Citizen Science Corner in SAFMC newsletter, #CitSciFri, annual report) to maintain volunteer awareness of program and project activities.
  - Develop a method and approach to better understand the interests, capacity, and expectations of potential volunteers.
  - Design and implement a volunteer recognition program.
  - Compile available resources on volunteer engagement.
  - Develop a matrix for determining what type of volunteer training and delivery approach is needed for different levels of projects.
  - Develop a list of potential and appropriate volunteer incentives.
  - Identify appropriate options for the program to share project data results and present data visualizations to volunteers.

DRAFT INDICATORS OF SUCCESS

Outputs:

- Organizational infrastructure was developed to include (insert infrastructure components here) and met, as needed.
- SOPPS adopted by Council and updated as needed.
- Research Priorities updated every two years using process identified in SOPPS.
- Number of policies and procedures that have been created and have been used # times to create # of projects and # of research priorities.
- Number of downloads of the SOPPS and/or other project support resources
- Number of external funding sources/partners (i.e. non-SAFMC budget -- whether FIS, Sea Grant, NGO, etc.)
- Number of citizen science projects that have been developed.
- Number of citizen science proposals submitted.
- Number of stakeholders involved in development of citizen science projects. Stakeholders are from number of different organizations such as (list affiliations).
- ==Number of research priorities that have been addressed through projects.==
- Citizen science projects have contributed to (insert type of decision-making component) and used to make management decisions for # species/complex.
- Number of projects have been evaluated for effectiveness. Effectiveness is shown by (insert measure showing how the project has been effective in management decisions).
- Number of new partnerships that were created. Partners include (list of partner organizations or types of partners).
- Number of partners that continue to be part of the program. Partners include (list of partner organizations or types of partners).
- ==Number of times Program is approached for an endorsement letter.==
- Number of new stakeholders that were engaged. These stakeholders come from # of different organizations including (list affiliations).
- Number of volunteers who were recruited for the program.
- Number of volunteers who were trained through the program. Number of projects volunteers participated in.
- Number of volunteers retained in the program. Number of projects volunteers participated in.
- Number of people reached through communication and outreach plan. Number of people who were engaged or responded to communication and outreach plan by (list type of engagement).
- Number of visits to Program webpages.
- Number of presentations and/or requests for presentations.
- Citizen Science Corner article included in quarterly newsletters, number of views.
- Citizen Science Program Annual Report completed and distributed, number of views/downloads.
- Number of ideas submitted through Project Idea Portal.
- Number of matchmaking successes (e.g. connecting stakeholders/groups for project development).