



CITIZEN SCIENCE PROGRAM

DRAFT STANDARD OPERATING POLICIES & PROCEDURES

October 2018

DRAFT

SAFMC Citizen Science Program Standard Operating Policies & Procedures

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SAFMC Citizen Science Program
Standard Operating Policies & Procedures

I. Program Goals -

Vision Statement:

Produce data that will improve fisheries management

Mission Statement:

“Improve information for fisheries management through collaborative science”

Program Goals:

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

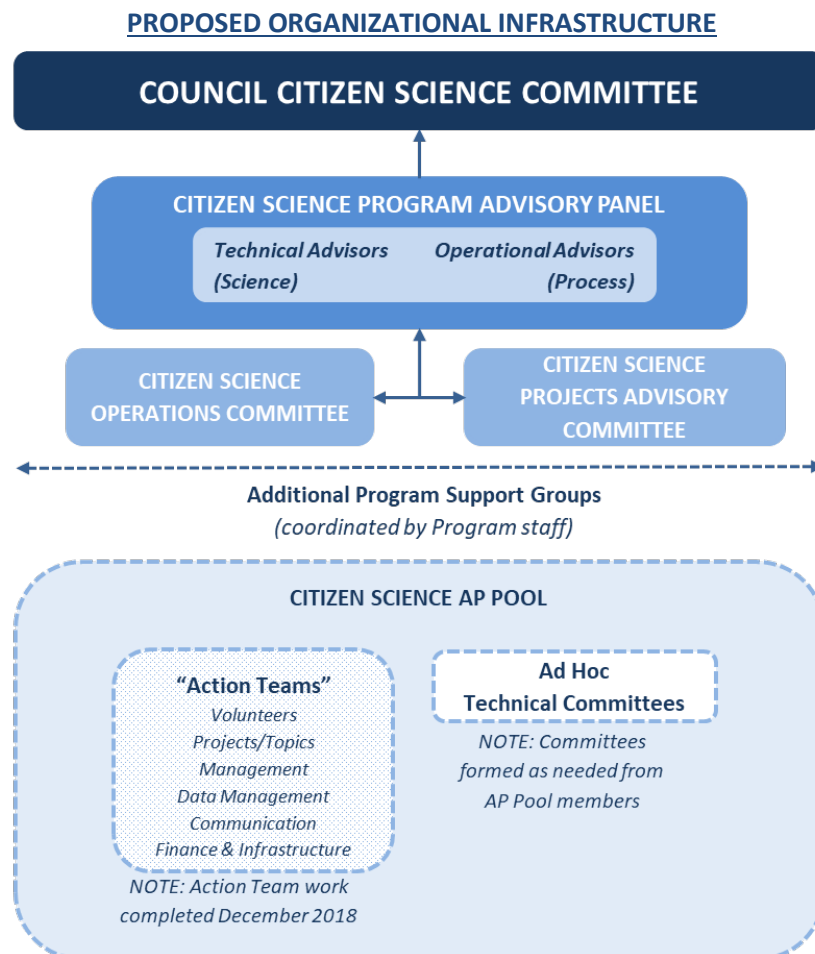
GOAL 2: Facilitate development of individual projects to address specific research priorities.

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

GOAL 4: Build partnerships that foster mutual learning, collaboration, and programmatic support.

GOAL 5: Inspire active engagement through communication about purposes, processes, and impacts.

II. Program Administration & Oversight –



a. Program Personnel/Staff

The following is a general description of primary Citizen Science Program staff and responsibilities.

- Staff: The Program supports one FTE (Program Manager) that is supervised by the Deputy Director for Science & Statistics.
- Location: The staff position is housed at the Council office.
- Position Duties: The Program Manager position manages the overall operation of the Citizen Science Program to include supporting Program administrative groups, partnership development (for Program support and project development), identifying and seeking funding for citizen science projects, and coordinating Program activities as they relates to Council priorities.

b. Council Citizen Science Committee

- Purpose - The Citizen Science Committee was established as a Council-level committee in September 2016 to support the development and oversight of the Citizen Science Program.
- Roles & Responsibilities - The Committee serves as the liaison with the Full Council and the Program Advisory Panel to help provide guidance on programmatic level decision-making on the Program's activities, operation and adoption of the biennial Citizen Science Research Priorities. The Committee also coordinates approval of the Citizen Science Program budget in conjunction with the Executive Finance Committee. As available, the Committee Chair/Vice Chair will attend webinars and in-person meetings of the other advisory committees and oversight board.
- Membership - The Citizen Science Committee is made up of Council members and is supported by the Citizen Science Program Manager as the staff lead.
- Meetings - The Committee meets as part of quarterly Council meetings at least two Council meetings per year.

c. Citizen Science Program Advisory Panel

- Purpose – Advise on program policies related to scientific goals and integrity and operational processes.
- Structure – The Program Advisory Panel would consist of two types of members – Technical Advisors and Operational Advisors – and operate as one panel. The Program Advisory Panel would report to the Council's Citizen Science Committee.
- Roles & Responsibilities - Technical advisors would develop programmatic recommendations to ensure the Program maintains overall scientific integrity. Operational advisors would develop programmatic recommendations related to fiscal support, legal issues, infrastructure, and governance. The Advisors would review the SOPPs and the supporting materials and policies for carrying out the Program components as described in

the SOPPs. The Program Advisory Panel would be led by a Chair and Vice-Chair and will be selected by the Panel.

- Membership & Eligibility – Advisors (both Technical and Operational) may include representatives from: SEFSC or other Science Centers; NOAA Headquarters (chief scientist), Sea Grant (rotating), SAFMC (Council Citizen Science Committee Chair, Citizen Science Projects Advisory Committee Chair, and SSC Chair); conservation/environmental NGO; fishery stakeholders (private, for-hire, commercial fishermen or member of the public with an interest in fisheries and citizen science); ACCSP/ASMFC; State agency; legal staff; citizen science expert; administrative executive.
- Appointments and Terms –
 - Council appointed: Fishery stakeholders (2); conservation/e-NGO (1); Sea Grant (1); Citizen Science expert (1); administrative executive (10)
 - Designees: SERO; SEFSC; NOAA Headquarters (S&T office); NOAA general counsel; ACCSP/ASMFC; Council Citizen Science Committee Chair ; Citizen Science Projects Advisory Committee Chair; SSC Chair;
 - Named individuals may designate temporary or permanent proxies
 - Terms – 3-5 years, dependent on programmatic growth
 - Meetings – Single annual in-person meetings; additional meetings via conference call or webinar as needed.
- Coordination with other administrative groups of the Program – The Program Advisory Panel receives information from Program staff, the Operations Committee, and the Citizen Science Projects Advisory Committee and makes formal recommendations to the Council Citizen Science Committee.

d. Citizen Science Operations Committee

- Purpose - Smaller group of advisors that develop program recommendations for the Program Advisory Panel to consider; specific tasks include review policies, provide program direction/multi-partner support, and advice.
- Roles & Responsibilities - Draft SOPPs and provide ongoing operational recommendations for Program Advisory Panel approval.
- Membership & Eligibility – Citizen Science Advisory Panel Pool members (5); member from SERO; member from SEFSC; member from the Council’s SSC; supported by Program staff.
- Appointments and Terms – Appointed by the Council’s Citizen Science Committee; term is 3-5 years, dependent on programmatic growth
- Coordination with other administrative groups of the Program – The Citizen Science Operations Committee would liaise with the Citizen Science Projects Advisory Committee to modify the SOPPs and program components, as needed.

e. Citizen Science Projects Advisory Committee –

- Purpose - Serve in the role of advisors similar to the Council's species specific Advisory Panels; Works in conjunction with the Citizen Science Operations Committee to develop recommendations for the Program Advisory Panel
- Roles & Responsibilities - Identify citizen science research and data needs across all the FMPs the Council manages; Assist with developing Volunteer Engagement strategies for recruiting, training, retaining, and communicating with volunteers; serve as outreach ambassadors for the Program.
- Membership & Eligibility – Chair or designee of the Council’s species Advisory Panels (Golden Crab, Shrimp/Deepwater Shrimp, Spiny Lobster, Mackerel Cobia, Snapper Grouper); Habitat & Ecosystem AP; and the Information & Education AP.
- Appointments and Terms – Designated by the existing Council’s AP policies; 2-3 years, rotating, dependent on term of the AP chair for each AP or as assigned designee. The Citizen Science Projects Advisory Committee would meet virtually two times per year.
- Coordination with other administrative groups of the Program – The Citizen Science Projects Advisory Committee coordinates with the Citizen Science Operations Committee to modify SOPPs and program components, as needed.

f. Additional Program Support Groups: *Citizen Science Advisory Panel Pool*

Citizen Science Advisory Panel (Pool) – The Citizen Science Advisory Panel (Pool) is modeled after the SEDAR Advisory Panel (Pool) and workshop panel approach. Appointments to the Citizen Science Advisory Panel Pool (CSAP Pool) will be handled by the Citizen Science Committee. The Committee will also appoint members to Action Teams and any other Ad Hoc Technical Committees from the Citizen Science AP Pool (consistent with appointments for specific SEDAR workshop panels).

- Citizen Science Action Teams** – Citizen Science Action Teams, as described in the Blueprint, were appointed to begin developing specific program recommendations. A-Teams used Terms of Reference to guide the development of recommendations for the Program in five topical areas (Volunteers, Data Management, Projects/Topics Management, Communication/Outreach/Education, and Finance & Infrastructure). Functionally, the Action Teams were considered Advisory Panels. Action Teams were not standing committees or standing APs, and only existed for the time it took to develop the Citizen Science Program as specified in the Blueprint.

Once the initial Terms of Reference for Program development were addressed by each A-Team, the A-Teams were dissolved and members returned to the general Citizen Science Advisory Panel Pool. Members of the AP Pool may be called upon to serve on any additional Ad Hoc Technical Committees that may be needed for the Program. [See Appendix A](#) for additional details about the Citizen Science AP Pool and Action Teams.

ii. Ad Hoc Citizen Science Technical Committees

- Purpose – To support areas of the program related to projects.
- Roles & Responsibilities – Member of technical committees will serve in a review capacity for process-oriented components of the Program. For example, once the Project Endorsement Program is implemented, the Program will need an Ad Hoc Technical Committee to review applications for projects that are submitted for endorsement. Additional Ad Hoc Technical Committees may be needed for these types of Program activities.
- Appointments and Terms – Members are appointed by the Council Citizen Science Committee from the Citizen Science Advisory Panel Pool. Terms are contingent on the nature of the technical committee but not to exceed one-year.

III. Program Components

a. Citizen Science Program Research Prioritization Process

[\(See Appendices B and C\)](#)

This process serves as the mechanism for establishing research priorities for the Program and how often they are reviewed and evaluated.

The three-step process involves,

Step 1: Reviewing and providing input on the Council's Biennial Research & Monitoring Plan.

Mechanism – Program staff will review and provide feedback on the plan in addition to input from the Council's SSC, SEDAR process, AP discussions and other issues that arise during FMP development.

Step 2: Developing a Citizen Science Program Research Priorities document.

Mechanism - Program staff will work with the Citizen Science Projects Advisory Committee, Operations Committee, and the Program Advisory Panel to develop a separate Citizen Science Program Research Priorities document that is informed by the Council's Research & Monitoring Plan. The draft document will be reviewed by the Councils AP's and the SSC.

Timeframe – The Citizen Science Research Priorities document will be reviewed biennially on the schedule of the Research & Monitoring Plan Review;

Review & Adoption – Council reviews and adopts biennial research priorities.

Step 3: Citizen Science Project Idea Portal

Mechanism – Develop an online form hosted on the Council's Citizen Science webpage where stakeholders can submit citizen science project ideas. The online form would be set up with a series of questions that are focused on topics related to the Citizen Science Program Research Priorities. The portal will be monitored by staff with a feedback mechanism built in to provide comments to the person submitting an idea and to help connect them with potential collaborators. Information received via the form would be compiled and considered during the next review of research priorities.

Timeframe – open year-round

b. Project Endorsement Program

[\(See Appendix D\)](#)

In the absence of internal funding for projects, the Council's Citizen Science Program (Program) should encourage development of externally-funded citizen science projects in partnership with stakeholders to support the goals of the Program. However, external projects pursued in partnership with the Council's Program need to have a mechanism in place that assures the project is designed appropriately and has the resources necessary for project success. To support development of robustly-designed projects that produce data that could be considered for use in management by the Council, the Council should develop a project endorsement program that includes specific criteria that must be met in order to receive endorsement by the Program.

Project Endorsement Criteria

Projects must meet the following criteria to be endorsed by the Council's Citizen Science Program:

- Meets the goals/objectives of the SAFMC Citizen Science Program
- Addresses one or more of the priority topics in the SAFMC Citizen Science Research Needs
- Outlines the Project Development Plan for the project
- Outlines the Data Management Plan for the project
- Outlines the Communication Plan for the project, including volunteer recruitment, sharing project results (approaches and products)
- Outlines the Volunteer Training Plan for the project
- Outlines methods for evaluating the project for the duration of the project

Application Process

Stakeholders interested in receiving endorsement for their citizen science project by the Council's Program will engage in a two-step application process, 1) Pre-application and 2) Full application. Applications will be accepted and reviewed on a quarterly basis.

Project Review Process

- Pre-application – Program staff will review the pre-application and if minimum criteria are met, the applicant will be invited to submit a full application.
- Full application - Program staff will coordinate the review process for full applications by selecting a minimum of three reviewers per application. Reviewers will use an online review form and the project review rating system to review project applications. The review process will be completed in two weeks or less.

All applications will be provided feedback and full applications will be scored and provided review feedback.

Endorsed Projects – Benefits and Terms

Projects that are endorsed by the Program will receive a letter of endorsement, project promotion through the Programs outreach and promotion activities, and use of the Program's logo. Letters of endorsement will outline the terms of the endorsement and expectations for receiving endorsement to include but not limited to, annual monitoring and progress reports on the project and notification if the scope of the project changes. Changes in project scope may warrant the project undergo a review for re-endorsement.

c. Communication/Outreach/Branding

Development of communication, outreach, and branding products and activities will primarily be the responsibility of Citizen Science Program staff. Products and activities will be informed by the best practices and policies outlined in the Communication and Training Plans developed by the Citizen Science Program Action Teams. Citizen Science Program staff will coordinate outreach and communication efforts related to citizen science activities with the Council's Outreach Team.

The following types of communication and outreach products and activities will be considered for development by the Program and updated as needed as part of an annual Plan of Work:

- Routine Program Communication – newsletter/blog/reports
- Program Website
- Program Social Media Development
- Program Support Materials – brochures, fact sheets, etc.
- Annual report of accomplishments and volunteer recognition

d. Volunteer Engagement

Development of volunteer engagement (recruitment, training, and retention) products and activities will be the primary responsibility of Citizen Science Program staff. Products and activities will be informed by the best practices and policies outlined in the Communication and Training Plans developed by the Citizen Science Program Action Teams and incorporated into an annual Plan of Work for the Program. Items to be considered for an annual Plan of Work include:

- Developing a Volunteer Recognition Program through an Ad Hoc Technical Committee
- Developing a Participant Attitude Survey for volunteers participating in projects

e. Data standards and QA/QC

The Program expects that data standards, QA/QC, and other data management and analysis considerations will be addressed by project teams for a specific project.

The Program will facilitate discussions between project PIs and data recipients to ensure data management, standards, and requirement issues are addressed.

The Program will work with the Technical Advisors of the Program Oversight Board on developing and maintaining rigorous data standards and QA/QC processes.

f. Partnership Development –
[\(See Appendix E\)](#)

The Program will pursue partnership development using the best practices outlined in the Partnership Development Plan that was prepared by the Finance & Infrastructure Action Teams. The Council Citizen Science Committee can provide input on potential partners and allow staff to pursue partnership development.

g. Project Support Guidelines

The Program may support projects that are pursued internally by the Program and projects that are developed external to the program. The Program will support internal and external projects in the following ways:

- Internal Projects – Program staff are responsible for all project coordination and management.
- External and Endorsed Projects – Projects that receive Project Endorsement through the Citizen Science Program will:
 - Develop a shared vision of how the project PI and the Program will communicate about the project;
 - Receive assistance with promotion of the project and communication of project results.

IV. Project Support & Best Practices

Projects falling under the umbrella of the Citizen Science Program should consider the best practices and templates developed by the Citizen Science Action teams during the development, implementation, and management of all aspects of a project. The following sections contain resources (information and links to the best practices and templates) for key components of a successful citizen science project.

a. Project Development Components

See [Appendix F](#) to review the Project Development Plan template to serve as a guide for helping projects develop using the Program’s standards and suggested best practices.

b. Communication/Outreach/Branding

See [Appendix G](#) to review the Communication Plan Template that serves as a guide to help projects develop a dedicated communication plan and conduct outreach for the project using suggested best practices.

c. Data Management

See [Appendices H, I, and J](#) to review suggested best practices for a Data Management Plan for projects, including templates for Data Requirements, Data Standards, and QA/QC.

d. Volunteer Management

See [Appendices K and L](#) to review suggested best practices and the template for a Volunteer Training Plan. Additional resources related to Volunteer training are also referenced in the Communication Plan template in [Appendix G](#).

e. Resources

Below are links to a list of the inventories created by the Action Teams related to Data Management Resources and Funding Opportunities.

- [Data Management Resources Inventory](#) – will be periodically updated as needed
- [Funding Opportunity Inventory](#) – will be continually updated

Once the Program initiates projects, a Volunteer Database will be maintained. The database will collect basic contact information on volunteers and their interest and skill sets for participating in different types of projects.

- Volunteer Database (from the Volunteer Interest Form entries) – will be continually updated once the Volunteer Interest Form is made active.

V. Program Evaluation/ Needs Assessment

- Purpose
 - Assessment of the program activities, status, and any modifications needed to respond to emerging needs and opportunities.
 - Elements for an evaluation rubric:
 - Stakeholder collaboration and program resources
 - Goals and objectives
 - Methods: Design and implementation of monitoring
 - Data entry, storage, analysis, and synthesis
 - Reporting and dissemination
 - Outcome evaluation and program review
- Timing of Evaluation/Assessment
 - Annual summary – timing based on a calendar year and presented to the Council Citizen Science Committee in March annually.
 - 5-year programmatic review
- Products/Outcome of Evaluation/ Assessment
 - Produce a summary report that includes volunteer recognition.

VI. Appendices

Program Component Resources

Appendix A: [Overview of Citizen Science Advisory Panel Pool](#)

Appendix B: [Citizen Science Program Research Prioritization Process](#) (from Projects/Topics A-Team)

Appendix C: [Current Citizen Science Program Research Priorities – Adopted June 2018](#) (from Projects/Topics A-Team)

Appendix D: [Project Endorsement Program](#) (from Projects/Topics A-Team)

Appendix E: [Partnership Development Plan](#) (from Finance & Infrastructure A-Team)

Project Support Resources

Appendix F: [Project Development Plan Template](#) (from Projects/Topics A-Team)

Appendix G: [Communication Plan Template](#) (from Communications A-Team)

Appendix H: [Data Management/Requirements Template](#) (from Data Management A-Team)

Appendix I: [Data Standards Template](#) (from Data Management A-Team)

Appendix J: Data QA/QC Template – *work in progress* (from Data Management A-Team)

Appendix K: [Volunteer Training Basic Orientation Best Practices](#) (from Volunteers A-Team)

Appendix L: [Volunteer Training Basic Orientation Template](#) (from Volunteers A-Team)