SAFMC Citizen Science Program Planning Progress Update
December 2024

The SAFMC Citizen Science (CitSci) Program's vision, mission, goals, objectives, and strategies were adopted by the SAFMC in December 2020. At their October 2024 meeting, the CitSci Operations Committee reviewed the Program Planning document; an overview of the Citizen Science Program's activities under each goal and objectives; and provided recommendations for future activities.

The CitSci Operations Committee recommended continuing the CitSci Program's overall approach and its goals and objectives. The panel supported a continued focus on the objectives and strategies Program staff have concentrated on over the past 5 years and recommended additional strategies to prioritize under a few objectives. Their full meeting summary is available on the Council's website.

The information below provides an overview of the CitSci Program's activities under each goal and objective that have been conducted since 2019 and recommendations for future activities. Green plus signs identify the strategies under each objective where Program activities have occurred since 2019. Language in italics highlights recommendations for future activities to prioritize in the short term (1-3 years).

Vision Statement: Advancing science and increasing trust, one project at a time.

Mission Statement: To build and maintain a program that improves 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.	
Objective 1.1: Establish organizational infrastructure to provide program administration and oversight.	
Strategies	Citizen Science Program Activities
+ 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**.	• Have an **active CitSci Committee** that all Council members currently serve on. Typically **meets 1-2 times per year**. • Have an **active CitSci Operations Committee** that typically meets twice per year to provide programmatic guidance. New appointments/reappointments were made in December 2023 and September 2024. • Have an active **CitSci Projects Advisory Committee** that typically meets once per year to help identify research needs across FMPs and provide input on volunteer engagement and outreach activities. New

Strategies	Citizen Science Program Activities
+ 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**.	appointments/reappointments were made in December 2024. • Have an **active CitSci Pool**. Many original CitSci pool appointments have rotated off the Committee. New appointments were made in December 2023 and September 2024. • **No active ad-hoc or 'action teams' are currently appointed**. Ad-hoc groups have not been appointed since the original A-Teams worked on development of the program. • **CitSci Program Advisory Panel** has **NOT** yet **been created**. • *Explore whether CitSci Advisory Panel is needed; current structure in place may be sufficient* • *Recommend renaming advisory groups from 'Committees' to 'Advisory Panels' to help with confusion*

Objective 1.2: Develop program procedures, policies, and tools.

Strategies	Citizen Science Program Activities
+ **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**.	• **CitSci Program SOPPS** were **developed** and have been **adopted** by the Council. The Council **updated SOPPS in Dec 2020** (updated vision, mission, goals objectives). SOPPS are available on the Program webpage. • **CitSci research priorities** have been **updated** following a similar process outlined in the SOPPS in **2019, 2021, and 2023**. Current CitSci research priorities are available in the SOPPS and on the Program webpage. • Project idea portal component of process was not included in these efforts because it had not yet launched. • **CitSci Project Endorsement Program has been developed but not implemented**. In the meantime, the Program has gotten requests for letters of support for proposals.

Objective 1.3: Create a funding strategy that is adaptable to changing circumstances and needs.

Strategies	Citizen Science Program Activities
+ **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 and crowdfunding) for program and project needs.	• **CitSci Program has identified and applied to RFPs** where the Council can **receive direct funding**. Additionally, the Program has **collaborated on RFPs** where it **does not receive compensation**. • **CitSci Program** has continued work on a **MOU with ASMFC** to expand funding opportunities for the Program. **Signed MOU** in place as of **October 30, 2024**. • A **matrix of funding models** has **not been generated** for program and project

	needs.
	• An **inventory** of project and program **funding opportunities** has been **developed**. It hasn't been updated since 2022.
	• *Recommend prioritizing updating the project and program funding inventory in light of newly signed ASMFC MOU.*

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

Objective 2.1: Publish and broadly disseminate the SAFMC's citizen science research priorities.

Strategies	Citizen Science Program Activities
+ **Post priorities** to the **program webpage**, **social media**, and **external outlets** (e.g., citizen science listservs). + **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**.	• **CitSci research priorities** are **available on the Program's webpage, social media platforms, Annual Report, and South Atlantic Bite newsletter.** • **CitSci research priorities** are **included** in the **Council's overall research and monitoring plan** which is **shared** with the **SSC** and **APs** and provided to **NOAA**. • When organizations and/or individuals approach the program for **potential partnerships/collaborations**, the **CitSci research priorities** are **shared to identify possible overlapping research areas of interest**.

Objective 2.2: Implement the SAFMC's Citizen Science Project Endorsement Program.

Strategies	Citizen Science Program Activities
• **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**.	• CitSci Project Endorsement Program has not been created yet. Program has gotten requests for letters of support for proposals. • *Support holding off implementation of CitSci Project Endorsement Program at this stage of the Program; can provide support to projects more informally via letters of support.*

Objective 2.3: Provide project support resources (best practices, templates, etc.) and project development guidance.

Strategies	Citizen Science Program Activities
+ **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.	• [CitSci program and project support resources](#) are **available** on the **Program's webpage**. CitSci research priorities have been updated every two years per the SOPPS. • **Project resources** are **shared** with individuals / organizations as requested. • Program **staff presents** projects at various **workshops, seminars, meetings, and conferences** (local, national, and international). • Program **staff** have **informally provided input/advice** to organizations developing **citizen science projects**. • Program **staff led** a **collaborative effort** with multiple partners to **develop the SciFish platform's policies and procedures**, which were largely **based on the CitSci Program's SOPPS**.

Objective 2.4: Encourage collaboration by diverse teams of stakeholders (scientists, fishermen, managers, etc.) to develop projects.	
Strategies	Citizen Science Program Activities
+ **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**.	• **Four projects** have been **developed under the CitSci Program**: SAFMC Release, FISHstory, SMILE (led by REEF organization), and development of SciFish platform (now led by ASMFC/ACCSP). • **All projects** (internal and external) developed through or in collaboration with the CitSci Program have u**sed Design Teams for project design and development**. • CitSci Program helped coordinate efforts for the Dolphin Wahoo Participatory Workshops which helped lead to NOAA's Dolphin MSE. • **Citizen Science Project Idea Portal** was **launched in April 2024** via the Program webpage. 'Soft' launch was done (e.g., limited promotion via Council communication platforms). There have been limited submissions thus far. • Program **staff** have **connected** a few **organizations** and **scientists** with **similar research interests** (e.g., TNC with LGL consultants for Spawning SMZ research).

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

Objective 3.1: Implement program guidelines that address data management, standards, quality, and accessibility.

Strategies	Citizen Science Program Activities
+ Ensure **project support resources include** clear **data guidelines**. • **Share data guidelines** with **all projects** the Program supports and/or endorses. • **Develop minimum data standards** that projects must meet to be supported/endorsed by the program. • **Develop draft data accessibility agreements** and incorporate into project resources available online.	• **Data requirements documents** have been **developed** for **individual projects**. • **Minimum data standards across projects** have **NOT been developed** • **Draft accessibility agreement documents** have **not been incorporated** into the **project resources** available **online** • *Recognize it may be challenging to develop minimum data standards across all projects under the CitSci Program's umbrella due to their diversity; need standards to be flexible to support different types of projects* • *Recommend making citsci data standards resources available via the Program's webpage* • *Recommend prioritizing the development of data accessibility agreement templates and making these available on the Program webpage* • *Recommend Program be as open as possible with data accessibility*

Objective 3.2: Review project results to determine if data meet project and/or Program needs.

Strategies	Citizen Science Program Activities
+ Develop and implement a **process to review project results**. • **Share summary results of review** with the Citizen Science Committee to publicly highlight how data meet Council needs. • **Develop** an **adaptive process** to **help projects produce data** that **address project** and/or **Program goals**.	• **CitSci Program** has **not developed a formal process** to **review project results**. Annual data summaries and pilot project results have been presented at Council meetings, seminars, and conferences. • **FISHstory length methods** have been **presented to SAFMC SSC**. **REEF** will tentatively present **SMILE methodology** and preliminary data **at Spring 2025 SSC meeting**. • **Data for SAFMC Release** and **FISHstory** will be **analyzed** and **presented** at the upcoming **SEDAR 90** (South Atlantic Red Snapper) Data Workshop. **FISHstory data** are included in the **statement of work** for the **next SEDAR South Atlantic King Mackerel assessment**.

Objective 3.3: Document the contribution of citizen science projects and data to specific SAFMC research priorities and science and management decision making.

Strategies	Citizen Science Program Activities
+ **Develop and maintain project inventory** that includes, project research priority and how/if data have been used in science and management.	• **Project inventory started**. Limited CitSci project data have been considered for use thus far. SAFMC Release data were considered for use in SEDAR 68 (South Atlantic Scamp Research Track assessment) in 2020. SAFMC Release

• **Distribute summary of project inventory** highlighting data usage **in annual report**.	started in June 2019 so only limited data were available. They were not used directly in assessment, but data helped describe fishery and helped interpret trends in other data sources. FISHstory and SAFMC Release data will be considered for use in upcoming SEDAR 90 (South Atlantic Red Snapper).

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

Objective 4.1: Promote opportunities for learning among diverse constituents.

Strategies	Citizen Science Program Activities
+ 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.	• **Projects** have been **developed addressing three different CitSci research priorities**: discard information (SAFMC Release), historical photos (FISHstory), and data limited species observations (SMILE). The **projects** also **engage different audiences**: fishermen in all sectors (SAFMC Release), broader public & fishermen (FISHstory), and recreational divers (SMILE). • **Citizen Science Project Idea Portal launched in April 2024** and limited ideas have been submitted to date. • **Project results** have been **shared** with participants **via annual summaries, infographics, seminars, webinars**, etc.

Objective 4.2: Foster existing partnerships and develop new partnerships to support both program and project goals.

Strategies	Citizen Science Program Activities
• 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.	• Have **not developed partnership best practices** but have been able to **expand Program partners via projects and outreach efforts** (e.g., REEF, NC State, SEFSC, Sea Grant, Council BFP). • Program does best to **ensure honest and transparent communication between partners**. Try to ensure all collaborators are in agreement on project goals, roles, responsibilities, etc. at the start of partnership. • Have **partnered with SciStarter** and **Zooniverse** to promote FISHstory and SAFMC Release projects.

Objective 4.3: Strive to enhance trust among scientists, managers, and fishermen.

Strategies	Citizen Science Program Activities
+ 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.	• **Strive for clear communication** with project participants and stakeholders on project goals, how project data could or could not be used, and potential impacts. Try to keep **expectation management front of mind**. • **Working to build relationships with key stakeholders, organizations**, etc. via outreach efforts for projects and broader Council initiatives; go into fishing communities (e.g., tackle shop visits, seminars partnering with leaders in fishing communities, fishing expos, etc.) • Collaborate with Bonney and Sweeney Tookes et al. to gather **baseline data on stakeholders' knowledge about, attitudes, perceptions, and trust in citizen science in fisheries management**.

Objective 4.4: Engage new categories of stakeholders that are not typically involved in the Council process.	
Strategies	Citizen Science Program Activities
+ 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.	• **Working to build relationships with key stakeholders, organizations**, etc. via outreach efforts for projects and broader Council initiatives; trying to go into fishing communities (e.g., tackle shop visits, seminars partnering with leaders in fishing communities, fishing expos, fishing industry distributors, etc.) • **Collaborate with broader citizen science organization** (e.g., SciStarter, Zooniverse) • Work to get **articles / blogs in variety of media publications**
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.	
Strategies	Citizen Science Program Activities
+ **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**.	• **Share programmatic and project information** via South Atlantic Bite newsletter, #CitSciFri via social media, annual report, annual data summaries, monthly project newsletters, etc. • When feasible, have gathered **information from volunteers on how they heard about projects to help evaluate recruitment strategies** • Developed and implemented **Participant Recognition Program** (PRP) for **SAFMC Release project**; in FY25 ACCSP proposal developed options for variety of volunteer incentives through PRP to help with volunteer retention • **Project findings** have been **shared** via **webpages, annual data summaries, annual reports, social media**; **presentations/posters** at **Council** and other **agency meetings**, **workshops, seminars, and conferences** • *Recommend incorporating findings from Bonney and Sweeney Tookes et al. into the Program as resources and capacity allow* • *Recommend identifying and supporting projects that meet stakeholder needs*