



Citizen Science

Citizen Science Program Update

SAFMC Habitat & Ecosystem AP
April 2024

Program Activities



CitSci Research Priorities



CitSci Project Idea Portal



Project Updates



SciFish Platform



Citizen Science Advisory Panels

CitSci Research Priorities



Guide the projects the Program develops and supports



Narrow focus from many data needs to tangible ideas important to South Atlantic fishermen, scientists, managers



Share with other groups interested in developing or collaborating on citsci projects

SAFMC Citizen Science Research Priorities 2023-2025



Citizen Science

Topic	Data Needed	Potential Outcome
Age Sampling	Otolith & fin clip (future) collection	Characterize the age of catches
Discard Information	Length, depth, quantity, discard reason, devices used, terminal gear, disposition	Characterize the size of discards, Improved discard removal estimates
Genetic Sampling	Fin clips	Stock identification, Species ID, Ageing (still developing)
Fishing Infrastructure	GPS location and details of fishing-related infrastructure	Baseline for fishing-related infrastructure, help better define communities for social analysis
Historical Fishing Photos	Digitized images	Species and length compositions, improved historical information
Fishery Oral Histories & Historic Logbooks	Fishermen interviews, digitized logbooks	Improved understanding of changes in fishery over time
Oceanographic & Environmental Conditions	Various environmental data including bottom temperature and weather	Database of climate and changing conditions, fishery patterns
Shifting, Rare or Data Limited Species Observations	Point observations of data limited or rarely encountered species; length info for data limited species	Baseline for species shift, increased information for data limited species
Observations in Managed Areas	Species, length, depth, videos, photos, effort, edge effects	Species composition, occurrence of spawning, info on compliance
Movement & Migration	Species, location, length, tag details, supporting existing tagging programs	Movement and migratory patterns
Shark & Mammal Depredation	Observations of depredation, location, species, photo, DNA swab	Document depredation observations
Habitat Characterization	Photos, videos - focused on EFH	Ground truth bathymetry data
Spiny Lobster Data	Catch, effort, length, sex, presence of eggs, presence/absence	Characterize fishery in FL and GA north (more data limited)



Share a project idea via
the Citizen Science
Project Idea Portal!



Ideas will be used to update the
Citizen Science Research Priorities &
to help connect fishermen and
scientists with similar research
interests



SMILE Project

- Partner with divers to collect length info on data limited species
- Laser-mounted Olympus underwater cameras
- Field testing in FL Keys
- Data analysis underway for first field season





FISHstory





Gathering New Photos

- Goal: Collect historic fishing photos from across the South Atlantic region from the 1940s – 1980s for the FISHstory project



In 2023, 6 scanning events were held via Council related meetings



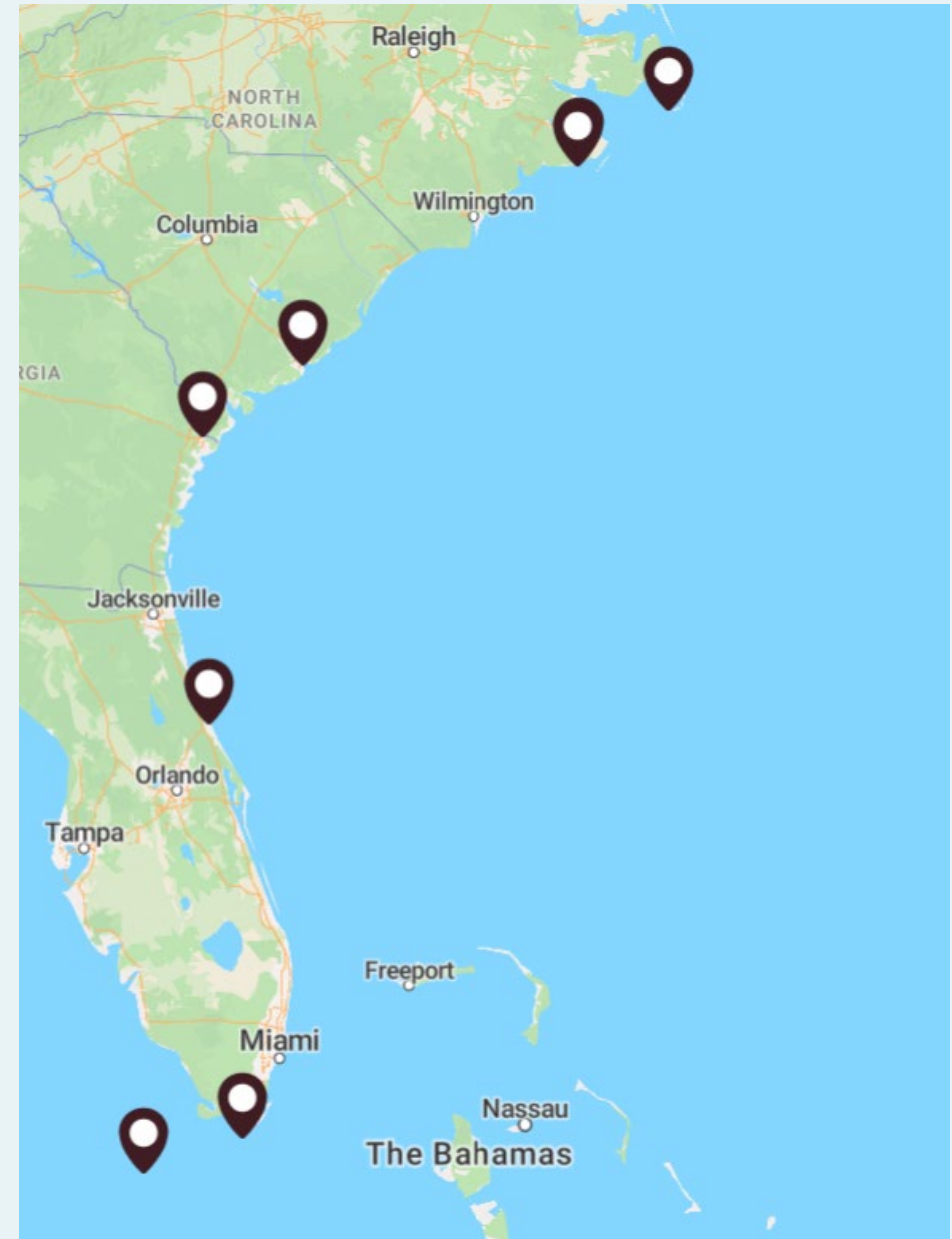
AP & Council members helped connect us to others in their communities



Members of the public reached out after seeing information via Council communication channels



FISHstory Photo Locations



FISHstory: Photos for Analyses

Photo Description	Good	Better
Photo Type	Picture taken at the end of a trip displaying harvested catch with anglers	Fish hanging on leaderboard
Photo Date	Year	Month & Day
Photo Location	State	City & Dock
Photo Background	Photo provider name & contact	Vessel name & captain name



Good

Picture taken at end of trip displaying harvest with anglers

Year

State

Photo provider name & contact

Better

Fish hanging on leaderboard

Month

City & dock

Vessel name & captain name



Good

Picture taken at end of trip displaying harvest with anglers

Year

State

Photo provider name & contact

Better

Fish hanging on leaderboard

Month

City & dock

Vessel name & captain name



Good

Picture taken at end of trip displaying harvest with anglers

Year

State

Photo provider name & contact

Better

Fish hanging on leaderboard

Month

City & dock

Vessel name & captain name

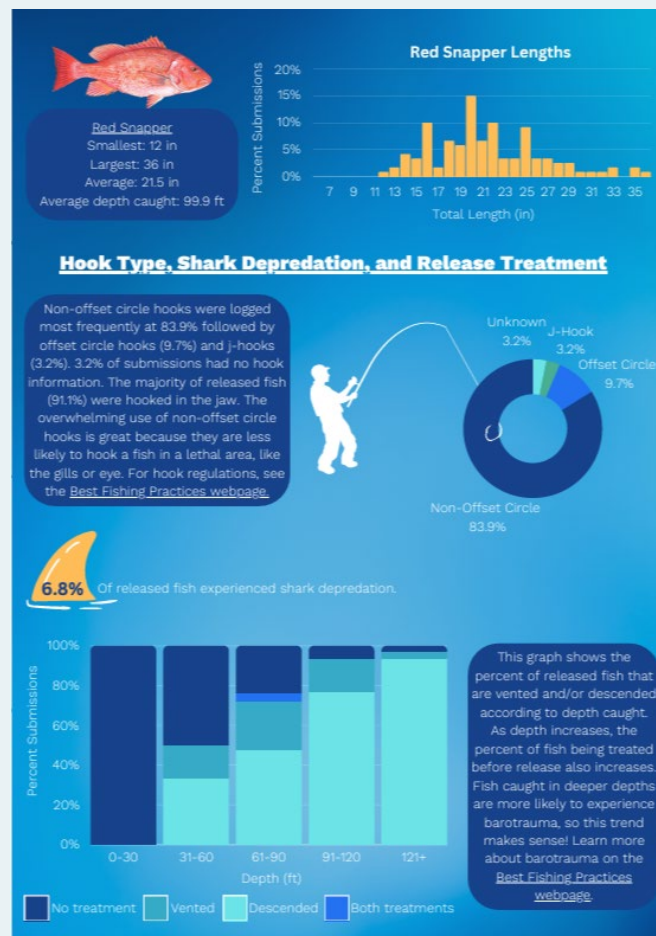
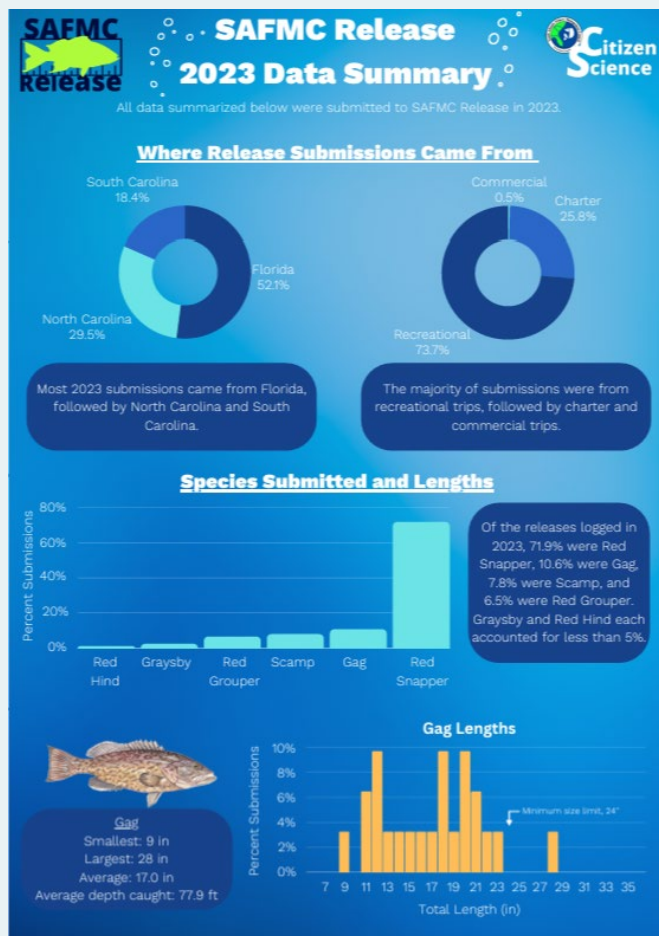


SAFMC Release





2023 Data Summary



Summary includes:

- Release submissions by state & fishing sector
- Species submitted
- Length compositions
- Release treatment by depth
- Shark depredation
- Hook type & location
- 2023 Participant Recognition Milestones



SciFish Platform

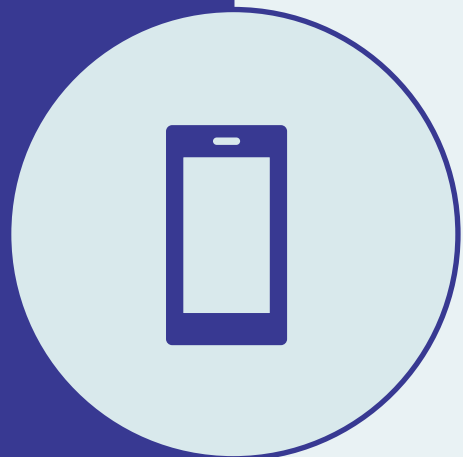
<https://www.accsp.org/what-we-do/scifish/>



SciFish Platform

Develop for ACCSP partners:

- ✓ citizen science mobile application and
- ✓ menu-driven project builder interface to
- ✓ easily create a customizable application by selecting specific data fields
- ✓ without need to develop stand-alone applications for each new project or data need





SciFish Development Drivers



Reduce costs
needed to develop
individual
applications



Reduce time to
create
applications
from ground up



Increase
consistency in
data fields and
structure



SciFish Administration & Oversight



Administration
through ACCSP

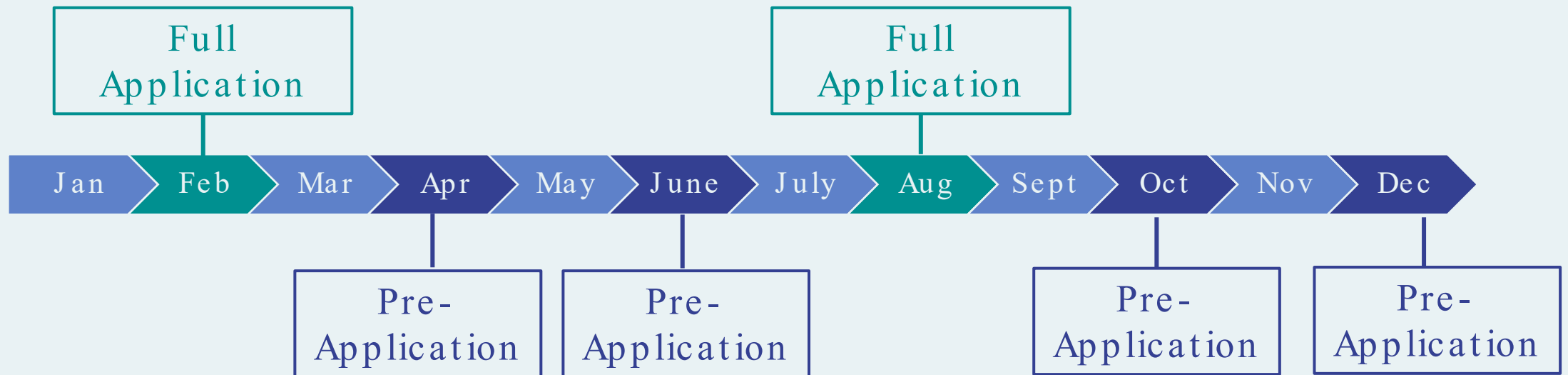


Primary oversight by:
SciFish Advisory Panel
(SAP)



SciFish Project Development

*Multi-step Application Process**



*Projects must have ACCSP partner as PI or be sponsored by an ACCSP partner



SciFish Application Topics

Full Application Only

COLLABORATORS

GOALS

RESEARCH
QUESTIONS OR
DATA GAPS

DATA USE

DATA
MANAGEMENT
PLAN

METHODS

DATA FIELDS

ANTICIPATED
OUTCOME

VOLUNTEER
TRAINING PLAN

COMMUNICATION
PLAN

TIMELINE

BUDGET

EVALUATION

RISK



SciFish Application Review Criteria

Pre-Application

INCLUDES ALL
REQUIRED SECTIONS

ADDRESSES HOW
DATA WILL BE USED
IN ASSESSMENT
AND/OR
MANAGEMENT

PROJECT IS A GOOD
FIT FOR CITIZEN
SCIENCE

Full Application

ADDRESSES DATA GAP
FOR ASSESSMENT
AND/OR MANAGEMENT

DATA MANAGEMENT
PLAN

ANTICIPATED DATA
USE & OUTCOMES OF
VALUE TO PARTNERS /
INDUSTRY

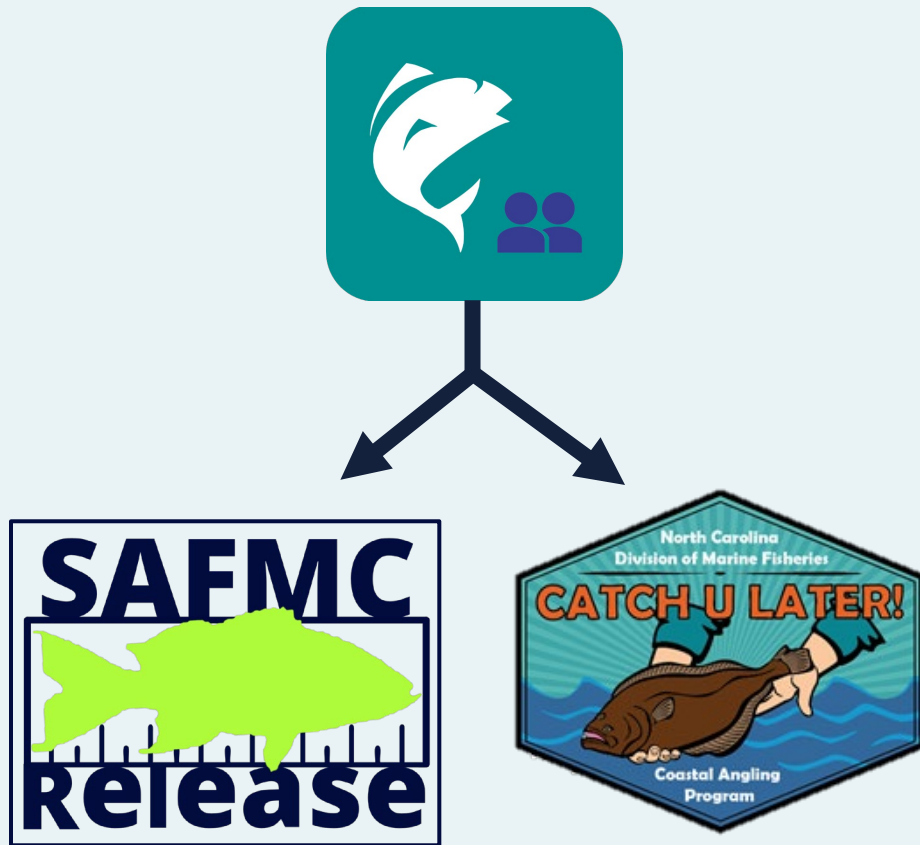
VOLUNTEER
QUALIFICATIONS &
TRAINING

EVALUATION METRICS

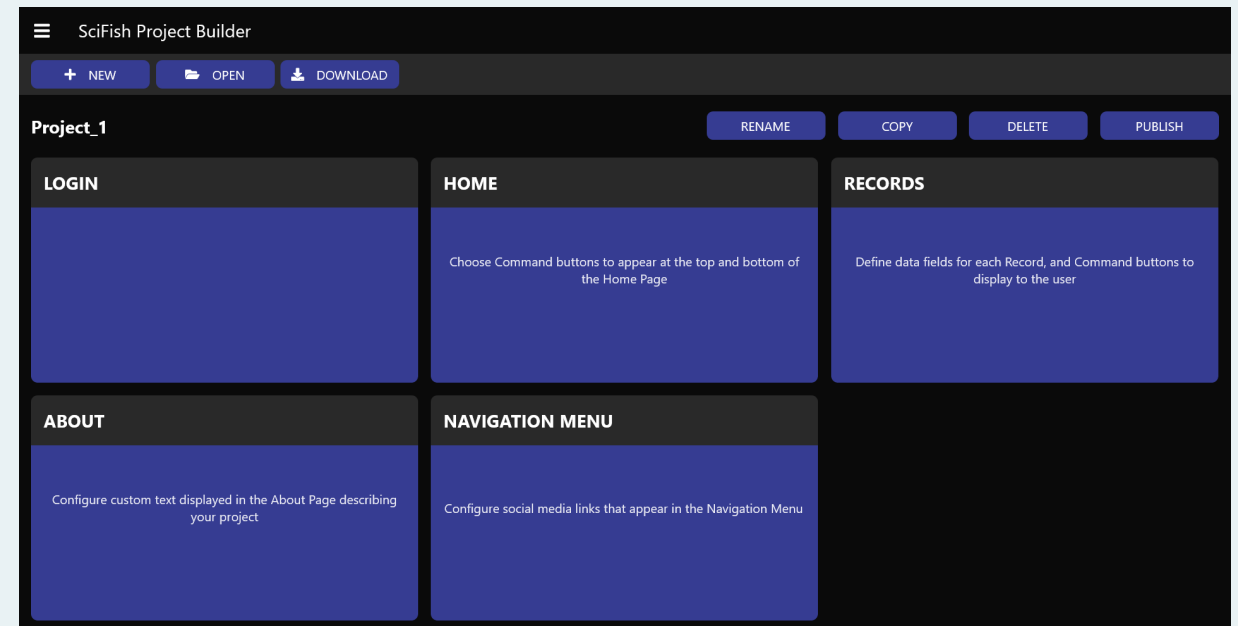
TECHNICAL
MERIT/METHODOLOGY

PARTICIPANT
ENGAGEMENT

SciFish Platform Development



SciFish Project Builder



[ACCSP SciFish Builder.mp4](#)



Building a Project in SciFish: Current Fields

Biological sample collected	Gear	Line Cut	Release Disposition
Comment	Hook location	Location	Species
Date	Hook type	Number of fish	Time
Depth	Hours fished	Number of people fishing	Trip type
Descending device usage	Info collected in other survey	Photo	Venting
Fish tag number	Length	Predation	
Fish tag color	Length type	Primary target species	



SciFish: Account Creation

Option 1: 'Manager Approval' - currently in place

- PI's create SciFish project accounts for users
- SAFIS Account – SciFish access

Option 2: 'Auto-Approval' – under development

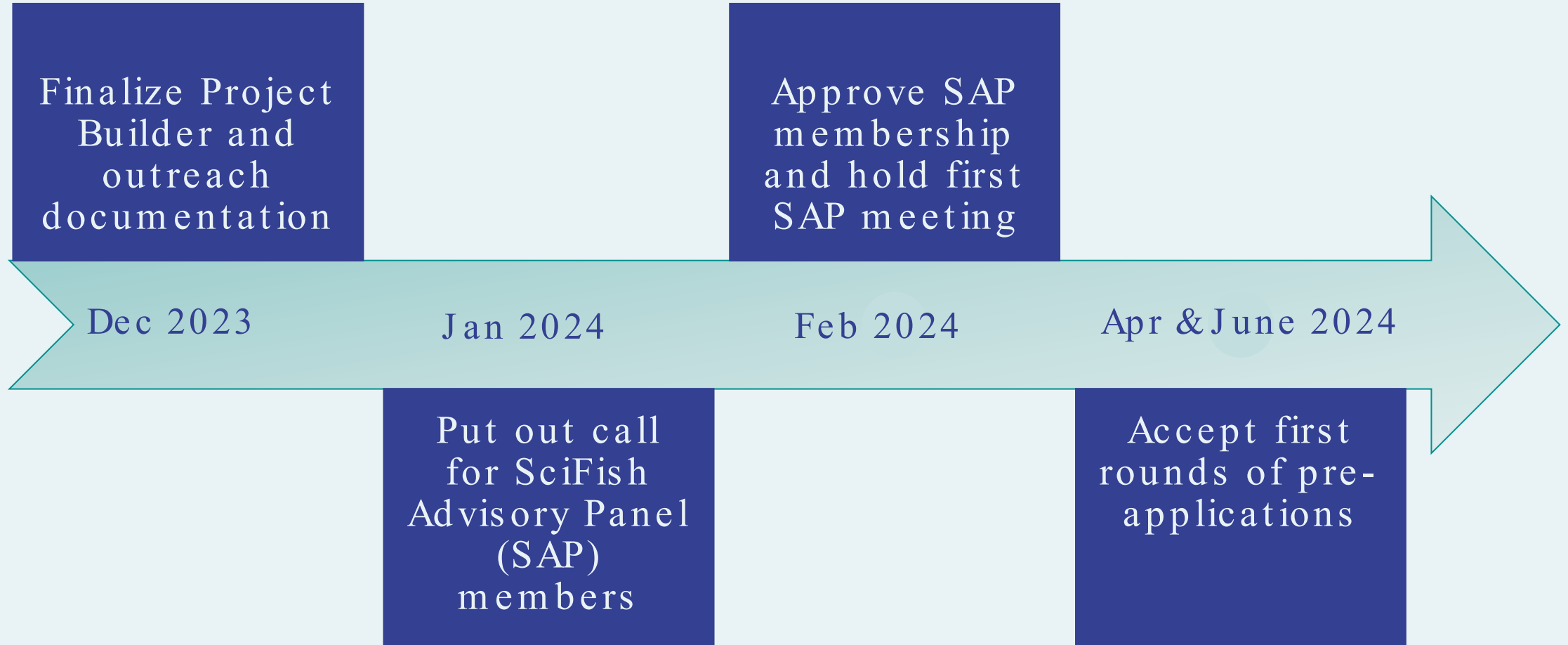
- Users create SciFish project accounts
- 'Auto-approval' Non-SAFIS account – SciFish access



PI's choose an account type at the onset of a project & can't switch account types during the life of that project



SciFish: Proposed Rollout



Citizen Science Advisory Panels

- Participants members of the [CitSci Pool](#) and/or be a member of another Council AP



Operations Committee

Programmatic guidance

3-5 year terms

Meet 2 times per year

Appointments will be made in
Dec 2023



Projects Advisory Committee

Research priorities, volunteer
engagement, etc.

Members of other Council APs

Term dependent on AP tenure

Meet 1 time per year



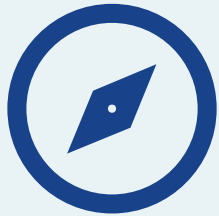
Ad-hoc Committees

Typically serve as review for
program components

Currently no active ad-hoc
committees

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Current Habitat AP
representation

Casey Knight

Others interested?

Keep up with projects & the Program!
safmc.net/citizen-science-program/



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