# SAFMC
# Citizen Science Program:
## *Pilot Project*

**Engagement**: recruit and train fishermen volunteers as citizen scientists to provide supplementary data on scamp discards using a mobile app

**Data**: discard data (length, depth, images)

**Use**: consideration for use in 2019 stock assessment



PC: Greg McFall, GRNMS

# Pilot Project:
## *Applicability for Citizen Science*

Fishermen recognize the importance of understanding discards in stock assessments and have expressed interest in providing information that would reduce assessment uncertainty.

- Addresses a need identified by fishermen and scientists
- Fills a known data gap for difficult or expensive to access information
- Data desired are relatively simple to collect
- Data do not require costly equipment or specialized skills to collect
- Project is scalable -
  - Take place over a wide geographic area
  - Include fishermen from all sectors
  - Provide useful information within a short period of time with minimal start-up lag

# Pilot Project:
## *Characterizing Scamp Discards*

**Project Components**

| Volunteers | Project/Topics Management | Data Management | Finance/ Funding | Communication/ Outreach |
|---|---|---|---|---|
| • Fishermen to collect data<br>• Assessment of skills - existing/ needed<br>• Expectations for project<br>• Motivations to participate | • Oversight of fishermen volunteers<br>• Managing project planning<br>• Working with partners<br>• Data standards/ policies | • Database needs<br>• QA.QC<br>• Data sharing<br>• Data access<br>• Analysis | • Support for mobile app development<br>• Support for fishermen training<br>• Support for database development | • Training materials for fishermen<br>• Sharing project updates/results<br>• Evaluation<br>• How data are used by Council |

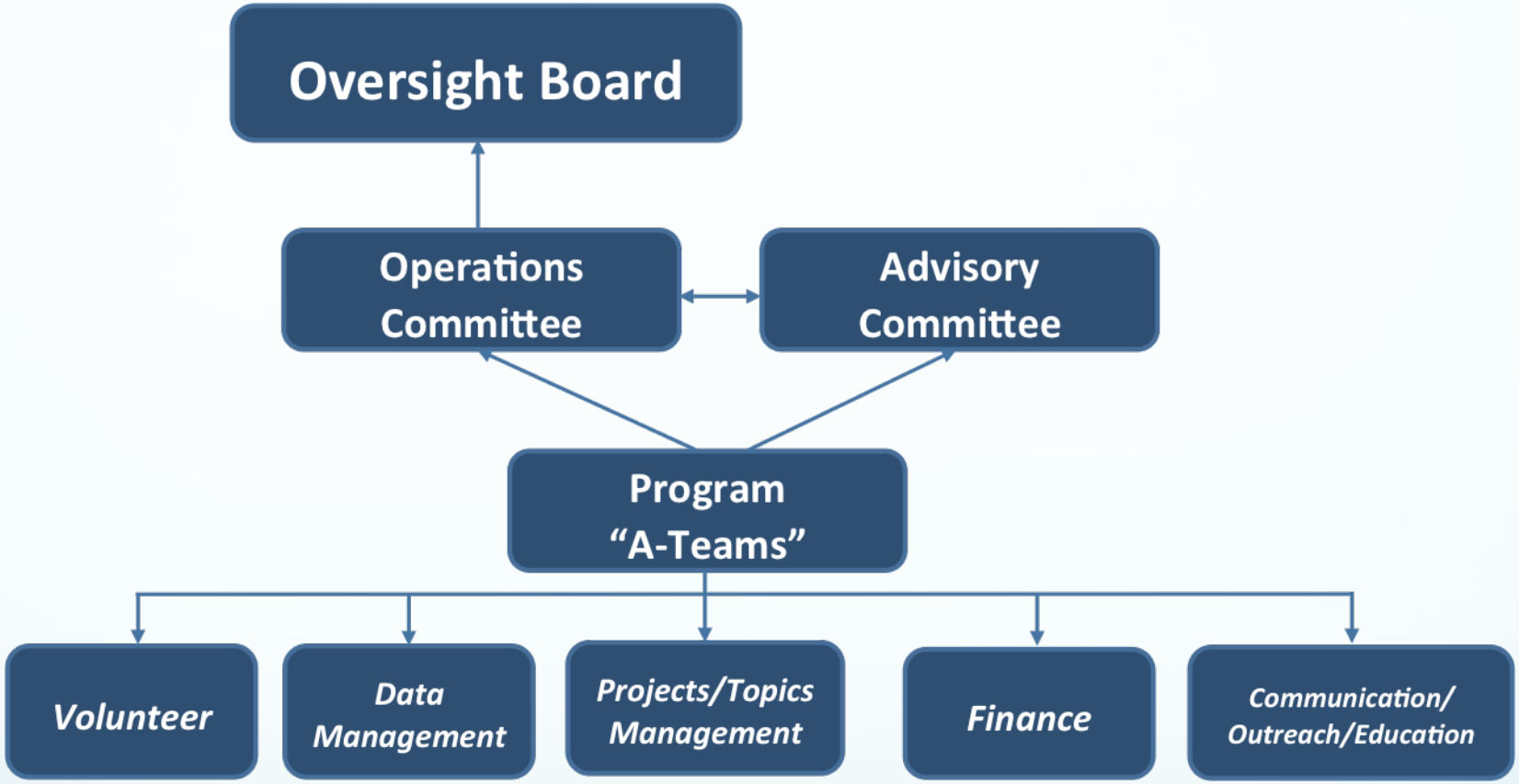
# Pilot Project:
## *Partners & Next Steps*

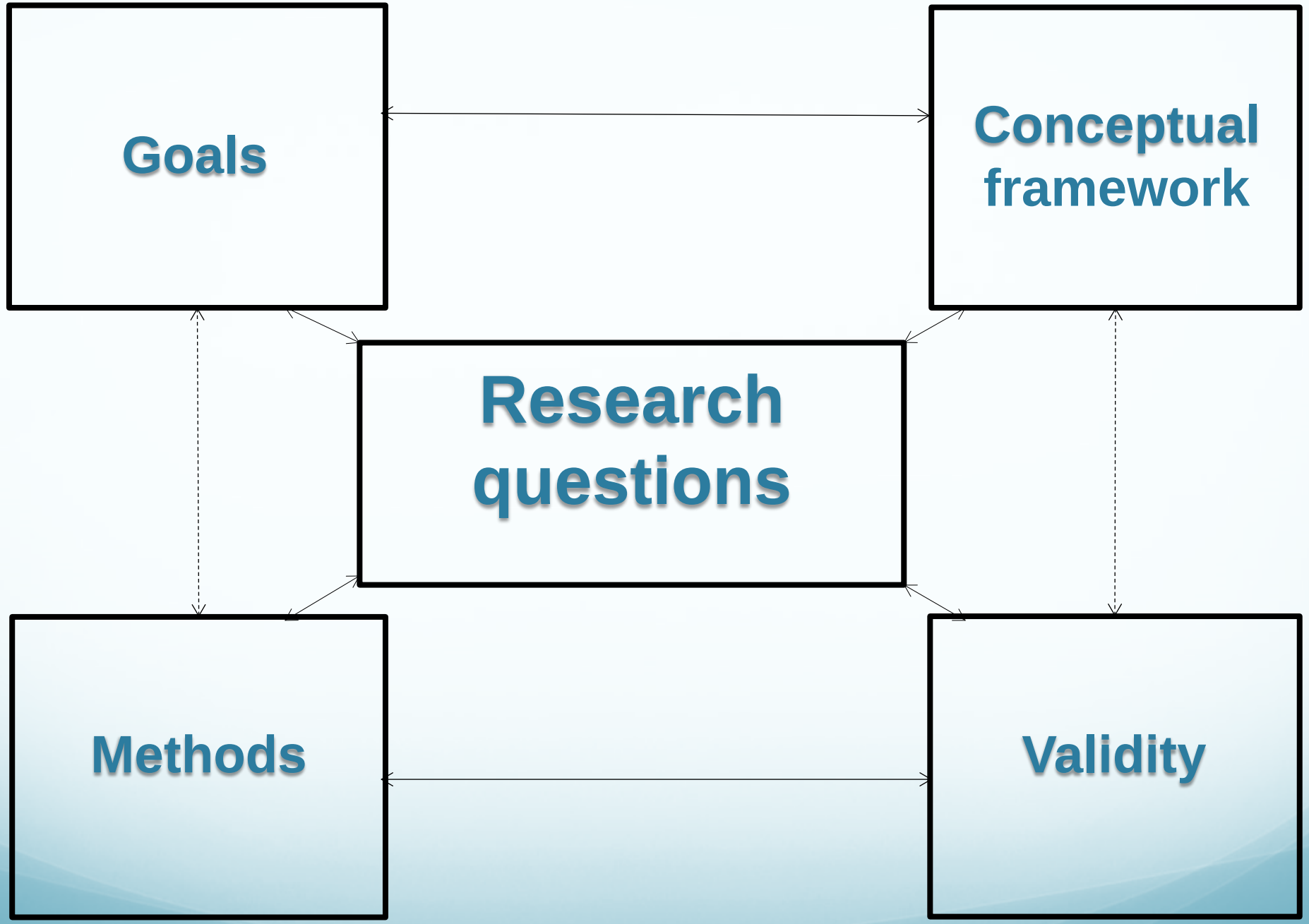
- Project run through Citizen Science Association
  - *Finalize subcontracts with ACCSP (data partner)/Harbor Light Software (app developer)*
- Assemble Project Planning/Design Team – *fishermen, assessment scientist, outreach, manager, technical staff, others as needed*
- A-Team input – Develop draft plans for
  - Volunteer recruitment (Communication)
  - Volunteer training (Volunteers)
  - Data standards/management (Data)
  - Others?

# Researching the Role of Program Infrastructure in Guiding Effective Development of a Scamp Discard Citizen Science Project

Jennifer Shirk
Citizen Science Association


Participant engagement
Identify goals
Science
Policy/action
Participants
Establish capacity
Staff
Volunteers
Partners
Design/ refine
Question/protocol
Training
Infrastructure
Manage
Participation
Data
Expectations
Apply & adapt
Research/action
Determine effectiveness
Transparency
Sustainability/accountability


Oversight Board
Operations Committee
Advisory Committee
Program "A-Teams"
Volunteer
Data Management
Projects/Topics Management
Finance
Communication/ Outreach/Education


Goals
Conceptual framework
Research questions
Methods
Validity

# Research Questions

- ***What can we learn from the roll-out of the SAFMC Citizen Science Program that can inform the development of citizen science across Councils and management settings?***
- What happens when framework recommendations are enacted as a **program** for citizen science project development?
- How does the program-first approach lend itself to a successful **project**?

# Goals

- Inform theory and practice of citizen science program development
- “Ground reference” utility of framework components
- Provide evidence to inform program development by other organizations
- Support program refinement
- Support project evaluation

# Methods

- Observations of Citizen Science Program Action Teams (participation on regular calls)
- Review of key documents produced and activities undertaken
- Interviews with key partners and Action Team leaders

# Conceptual Framework

- Citizen science intentional design
- Actionable research
- Critical appreciative inquiry
- Coproduction of knowledge

# Validity

- Inviting and interpreting input from key stakeholders on summary of findings
- Seeking correspondence and identifying/interpreting conflict among insights from interviews, observations, and other sources of data