APALACHICOLA BAY SYSTEM INITIATIVE COMMUNITY ADVISORY BOARD



PHASE V MEETING 1 — 1 FEBRUARY 2023

FACILITATOR'S SUMMARY REPORT

APPROVED UNANIMOUSLY 12 APRIL 2023

APALACHICOLA NATIONAL ESTUARINE RESEARCH RESERVE EASTPOINT, FLORIDA



PROCESS DESIGN, MEETING FACILITATION, AND REPORTING BY JEFF A. BLAIR

APALACHICOLA BAY SYSTEM INITIATIVE COMMUNITY ADVISORY BOARD FEBRUARY 1, 2023 FACILITATOR'S MEETING SUMMARY REPORT

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Florida Peninsula – From Space



APALACHICOLA BAY SYSTEM INITIATIVE COMMUNITY ADVISORY BOARD FEBRUARY 1, 2023 FACILITATOR'S MEETING SUMMARY REPORT



Oyster Boats – Eastpoint, Florida

OVERVIEW OF THE APALACHICOLA BAY SYSTEM INITIATIVE COMMUNITY ADVISORY BOARD'S WEDNESDAY, FEBRUARY 1, 2023 ACTIONS

I. MEETING SUMMARY AND OVERVIEW

At the February 1, 2023 meeting conducted at the Apalachicola National Estuarine Research Reserve (ANERR) in Eastpoint, Florida the Apalachicola Bay System Initiative (ABSI) Community Advisory Board (CAB): received an overview of the updated Project Workplan-Schedule; received updates on ABSI Science and Data, and FWC's NFWF funded restoration project; received reports and updates from the CAB Successor Group Subcommittee, Restoration Funding Working Group, and Community Outreach Subcommittee. In addition the CAB participated in a review of the ABSI Restoration and Management Plan Framework, and a briefing on the CAB Strategies Acceptability Ranking and Evaluation Worksheet Process. Specific activities included: providing the Community Outreach Subcommittee with feedback on ABSI outreach and messaging strategies; and reviewing and discussing Fisheries (Socioecological) Model simulation results. Specific CAB action included voting unanimously to approve proposed language in the Plan Framework to clarify the CAB's feedback to FWC on the Bay closure to more accurately reflect the CAB's actual role in the process. Finally, the CAB was given a homework assignment to review the CAB's Restoration and Management Plan Framework and identify specific strategies they would like to discuss and evaluate further at the April 12, 2023 meeting.

(Attachment 8 — Glossary of ABSI Project Terms and Definitions)

II. WELCOME AND INTRODUCTIONS

Jeff Blair, ABSI CAB Facilitator, opened the meeting at 8:30 AM and welcomed all participants. Jeff reported that Mike O'Connell resigned from the CAB due to health reasons and that Mike expressed his strong support and appreciation for ABSI and the work of the CAB. The CAB members thanked Mike for his service and expressed best wishes for his health.

SOCIAL SCIENCE SURVEY

The ABSI CAB members are participating in a Social Science Survey that is conducted at the beginning of each meeting to gauge participants' perspectives and attitudes regarding science and data, and stakeholder relationships throughout the ABSI CAB process. Ed Camp, University of Florida, is conducting the Survey that was first administered during the October 2020 meeting and will be continued throughout the duration of the ABSI CAB process. An online Social Science Survey was offered for the February 2023 CAB meeting.

III. ABSI CAB MEETING PARTICIPATION

The following CAB members participated in the Wednesday, February 1, 2023 meeting conducted inperson at the Apalachicola National Estuarine Research Reserve in Eastpoint, Florida:

Georgia Ackerman, Ottice Amison, Mike Allen, David Barber, Frank Gidus, Anita Grove, Chad Hanson, Jenna Harper, Shannon Hartsfield, Becca Hatchell, Gayle Johnson, Katie Konchar, Erik Lovestrand, Chuck Marks, Portia Sapp, Steve Rash, Devin Resko, and Chad Taylor.

* Members who participated virtually are italicized.

(18 of 21 members participated — 86%).

Absent CAB Members:

Alex Reed, Paul Thurman, and TJ Ward.

PROJECT TEAM MEMBERS PARTICIPATING

Jeff Blair, Ross Ellington, Madelein Mahood, and Joel Trexler.

(Attachment 2 — Meeting Participation)

MEETING FACILITATION

Meetings are facilitated and meeting reports prepared by Jeff Blair of Facilitated Solutions, LLC. Information at: <u>http://facilitatedsolutions.org</u>.



PROJECT WEBPAGE

Information on the Apalachicola Bay System Initiative project and the Community Advisory Board, including agenda packets, meeting reports, draft Plan frameworks, and related documents may be found at the ABSI CAB Webpage. Located at the following URL:

https://marinelab.fsu.edu/the-apalachicola-bay-system-initiative/

IV. AGENDA REVIEW AND APPROVAL

The ABSI CAB voted unanimously to approve the agenda for the 1 February 2023 meeting as amended. Following are the key agenda items approved for consideration:

- ✓ To Approve Regular Procedural Topics (Meeting Agenda and Summary Report)
- ✓ To Review Updated Workplan and Meeting Schedule
- ✓ To Receive Science and Data Collection, and Restoration Updates
- ✓ To Receive Reports from RFWG, Community Outreach, and CAB Successor Group
- ✓ To Review CAB Restoration and Management Plan Framework and ABSI Objectives
- ✓ <u>To Discuss and Provide Feedback on ABSI Outreach and Messaging Strategies</u>
- ✓ <u>To Review the Strategies Evaluation Worksheet Process</u>
- ✓ <u>To Discuss and Approve Proposed Language to Clarify the CAB's Comment on the Bay Closure</u> <u>from the Plan Framework</u>
- ✓ To Review Fisheries Model Scenario Simulation Results and Acceptability Rate Scenarios as Needed
- ✓ To Identify and Agree on the Next Suite of Scenarios, New Scenarios, and Combinations for Modeling
- ✓ To Identify Next Steps: Information, Presentations, Assignments, Agenda Items for Next Meeting

Amendments to the Posted Agenda:

- To Discuss and Provide Feedback on ABSI Outreach and Messaging Strategies
- <u>To Review the Strategies Evaluation Worksheet Process</u>
- <u>To Discuss and Approve Proposed Language to Clarify the CAB's Comment on the Bay Closure from</u> <u>the Plan Framework</u>

(Attachment 3 — 1 February 2023 ABSI CAB Agenda)

V. APPROVAL OF THE 30 NOVEMBER 2022 CAB MEETING FACILITATOR'S SUMMARY REPORT

The ABSI CAB voted unanimously to approve the 30 November 2022 CAB Meeting Facilitator Summary Reports as presented.

Amendments: None

VI. REVIEW OF UPDATED PROJECT WORKPLAN AND SCHEDULE

Jeff Blair provided the CAB with a review of the updated Project Workplan and Schedule and answered members' questions. The 1 February 2023 meeting represented the CAB's first meeting of the final Phase of the Project, Phase V.

The CAB is currently evaluating the best combination of strategies (scenarios) predicted to achieve restoration and management objectives for the Bay using decision support tools including predictive models coupled with available and emerging data, research, and stakeholder knowledge. The strategies are being evaluated with the overarching goal of restoring oyster reefs to a level that can sustainably provide needed ecosystem services for the Bay, and concurrently provide for a sustainable and economically viable level of commercial oyster harvesting.

During the course of the project the CAB's agency representatives will vet the strategies under consideration with restoration and management agencies to gauge support and feasibility for implementation. The CAB will evaluate the priority and efficacy of strategies and associated actions and identify conceptual and general in scope restoration and management approaches for inclusion in the *Apalachicola Bay System Ecosystem-Based Adaptive Management and Restoration Plan.*

Phase V focuses on the evaluation and final selection of conceptual and general in scope restoration and management approaches from the Plan Framework, public engagement, and planning for funding restoration projects and the CAB Successor Group. The CAB process will conclude with the 29 November 2023 meeting, when the CAB will adopt their final package of recommendations proposed for inclusion in the *Apalachicola Bay System Ecosystem-Based Adaptive Management and Restoration Plan*.

Jeff reported as follows:

- At the February 1, 2023 meeting the CAB continued the process of evaluating a range of strategies towards the goal of determining the best combination to achieve restoration and management objectives for the Bay using decision support tools including predictive models generally, and the Fisheries (Socioecological) Model specifically, coupled with available and emerging data and research, and stakeholder knowledge.
- The Community Outreach Committee will continue to communicate and meet with community stakeholders providing them with information and updates regarding the purpose and progress of the Apalachicola Bay System Initiative including Op-Eds, rack cards, social media posts/texts, ABSI newsletters, and the ABSI website. The CAB's draft recommendations and results of ABSI experiments will continue to be vetted with the larger ABS community through multiple formats, including online via the ABSI website, and in-person public workshops. In addition, the Community Outreach Committee is in the process of evaluating and enhancing their ABSI outreach and messaging strategies.
- The CAB is conducting planning for transitioning to a Successor Group whose role will be to organize a group of key stakeholders committed to working collaboratively for the long-term once the CAB process is complete. The CAB Successor Group will continue providing input to natural resource management agencies with the goal of ensuring the Apalachicola Bay System is effectively monitored, and adaptively managed with the support of the Community. The CAB is scheduled to finalize their recommendations for the *Apalachicola Bay System Ecosystem-Based Adaptive Management and Restoration Plan* at the 29 November 2023 meeting, and the CAB Successor Group is anticipated to formally convene in early 2024.
- In addition, the FSU ABSI Project Team continues to work with the Restoration Funding Working Group to seek resources and political, governmental, and organizational support for the CAB's priority recommendations.

Jeff noted that the Project Team would keep the CAB updated and share additional information as it becomes available.

*The Draft Restoration and Management Plan Framework is available at the following URL: <u>https://marinelab.fsu.edu/absi/cab/</u>

(Attachment 4 — Workplan, Schedule, and Project Flowchart)

VII. PROJECT RELEVANT UPDATES AND BRIEFINGS PRESENTATIONS

ABSI SCIENCE AND DATA COLLECTION UPDATE

Sandra Brooke, FSUCML Faculty and ABSI Principal Investigator, provided the CAB with an update on ABSI science and data collection. A science and data update is provided at all CAB meetings.

Presentations are available on the project webpage: <u>https://marinelab.fsu.edu/absi/cab/</u>.

Summary and Overview of Presentation

The 1 February 2023 Science and Data Collection update was focused on updates including the 2022 Annual Report, development of a public interactive tool, development of an analytical model for managing data, tonging survey results, oyster survival and growth experiments, and restoration experiments and the associated monitoring of the results. Sandra reported as follows:

ABSI overarching goals are:

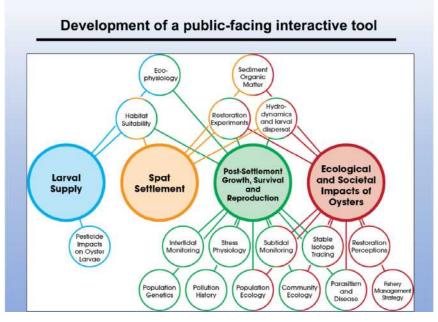
- Understand why the Apalachicola Bay oyster populations have not recovered and identify restoration approaches that will inform larger efforts.
- Determine whether loss of oyster populations is causing a decline in overall ecosystem health.
- Work with local stakeholders to develop a science-based restoration and management plan for Apalachicola Bay.



Development of a Public-Facing Interactive Tool

- The Tool focuses on four main components that drive the system:
 - Larval supply
 - Spat settlement
 - Post-settlement growth, survival, and reproduction
 - Ecological and societal impacts of oysters

Interactive Tool



• Each project (small circles) links to a different webpage with information on that project. The Habitat Suitability project was selected and presented as an example

Habitat Suitability Models

Environmental Project - Adam Alfasso, Sandra Brooke

- Which areas are currently most likely to support oyster recruitment, growth and survival?
- How will these areas change under future climate scenarios?
- What substrate types are most conducive to oyster population development?
- How do seasonal environmental regimes affect habitat suitability patterns?
- How do seasonal variations in larval dispersal impact habitat suitability patterns?
- Is population connectivity an important variable for habitat suitability?
- Which areas within Apalachicola would be optimal for sanctuary (protected) reefs?

Working Toward an Analytical Model

- The data collected by ABSI will be used to develop a series of analytical models. In preparation for data use ABSI is in the process of:
 - Developing data management plan
 - o Implementing data QAQC
 - o Merging data streams into user-friendly master database(s)
 - Master database(s) provide the means to build quantitative models and test hypotheses

Tonging Surveys

Goals of the Tonging Surveys

- Understand oyster population status across the Bay.
- Identify regions that are doing well/poorly.
- Identify substrates that are doing well/poorly.

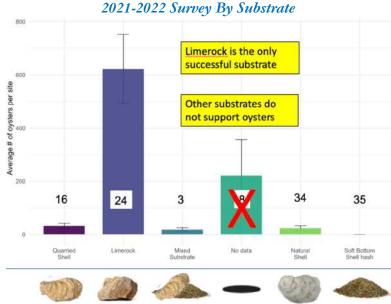
Survey Rounds

• Round 1 (2020/21): 154 sites

- Round 2 (2021-22): 121 sites
- Round 3 (2023): >200 sites

At Each Survey Site

- 6 tong samples around boat
- Type, volume, weight of substrate recorded
- Oysters counted and measured
- Boxes counted by size (spat, seed, market)
- Predators counted



Limerock Is Not Toxic

- Limerock is not the same as quicklime.
- Limerock = Calcium Carbonate
- Oyster Shell = Calcium Carbonate
- Quicklime = Calcium Oxide

Oyster Survival and Growth

1. Experimental Approach

- Cages with seed oysters deployed on ABSI restoration reefs on Jan 27, 2023
- Cages deployed on shell reefs
- 5 cages on Dry Bar
- 5 cages on Peanut Ridge
- 50 seed oysters (~31mm) per cage
- Number of live and dead will be counted and measured monthly
- Survivorship and growth curves compared across sites.

2. Analytical Approach

- Use existing data from FWC and FDEP to model survival and growth.
- Initiated in response to suggestions from Science Advisory Board meeting in December 2022.



Summary of Questions, Responses, and Comments:

- Q) Why not use natural shell?
- A) SB/JT: Natural shell reefs have deteriorated and there isn't enough available for full scale restoration.
- A clear distinction that has to be made is that there is insufficient material in the Bay for oysters to settle on.
- Previously restored reefs were productive but were quickly depleted when opened (2016).
- This scenario will be replicated if new sites are opened. They will be quickly harvested.
- SB: The grid system used for the tonging surveys is not being used like Alabama's, but it permits a structured system for sampling.
- Protocol allows for systematic sampling of oysters in each substrate type.
- Q) Is this a new grid system?
- A) SB: Yes, this will allow multi-year sampling of each site for longitudinal data.
- Q) Other entities are sampling using different techniques; will there be an effort to standardize the protocol?
- A) SB: This will be up to them.
- There is a real advantage to standardized sampling techniques.
- SB: Understood; we'd like to move in this direction.
- SB: Oyster survival and growth results: there is decent spat fall but most don't make it to adults.
- Q) What are the bottlenecks?

- SB: We are conducting experiments using hatchery seed oysters placed in cages and deployed on the 5 shell reefs of our restoration experiment at two sites (Dry Bar, Peanut Ridge). We will follow survival and growth over time. Creating a survival curve was recommended by the ABSI SAB.
- SB: Prior observations show that oyster do well in cages.
- Q) Do cages exclude drills?
- A) SB: Small drills and small blue crabs get in.
- Q) Why are you using 31 mm seed?
- A) SB: This is primarily logistical.
- SB: I would like to see EC model what happens if you take away the requirement that oysters must create their own habitat. If we provide a stable durable platform, habitat will always be available and populations won't be so dependent on there being enough oysters to make the reefs.
- Q) Are these treatments scalable?
- A) SB: Yes. Ideally, major restoration would be followed by regular maintenance. The initial investment would be to lay a "stable" and durable foundation.
- Q) Where did the material go?
- A) SB: Sinks, dissolves, and spread by currents.
- Q) Are there any lessons learned from other restoration approaches?
- A) SB: Our approach may be novel for the Gulf of Mexico.
- FWC has done similar experiments but the reefs were not as high.
- Texas has used non-tongable structures; elevation is key.

FWC (NFWF Phase 2) RESTORATION PROJECT UPDATE

Devon Resko, FWC Division of Marine Fisheries Management, provided the CAB with an update on the FWC restoration project funded by the National Fish and Wildlife Foundation (NFWF). Devon reported:

Summary and Overview of Update

Program Overview

- \$20M agreement with National Fish and Wildlife Foundation (NFWF)
- Restoration activities in Apalachicola Bay
- Revised oyster management strategies for Apalachicola Bay & Suwannee Sound
- NFWF has expressed concerns over moving forward with large scale restoration
- Large number of unknowns still present
- FWC will perform a restoration pilot study
- Utilizing pilot study, FWC will have more data to construct and perform larger restoration activity

Apalachicola Bay Oyster Restoration Pilot Study

- NFWF expressed desire for FWC to test multiple treatments
- Reef height
- Material size
- FSU ABSI's willingness to have a complimentary study increases scientific scope of work done in Apalachicola Bay.
- Provides more data to assist in future, larger restoration activities
- FWC submitted pilot study "one pager" scope of work to NFWF in early December '22

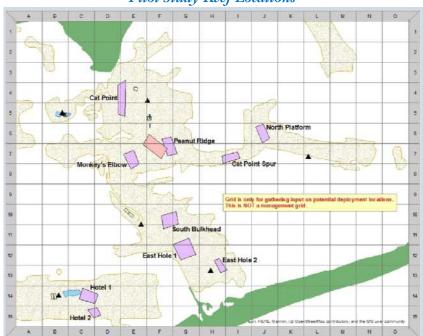
- Met with NFWF in late December, requested additional information, revised submission deadline:
 - Mid-January: Preliminary construction plan, monitoring/sampling methods, budget for NFWF review.
 - Mid-February: FWC addressed comments from NFWF, final documents for NFWF committee review and approval.

Pilot Study Details

- Reef height treatments: 1 ft (low) and 2 ft (high)
- Material size: 6" (small) & 12" (large) FL limestone
- Location: East side of Apalachicola Bay
- Reef size: 1.0 acre
- Replicates: 5-7
- Monitoring criteria: 1) density of live oysters/m², 2) size classes, and 3) cultch weight and/or volume
- Monitoring effort: *Before, After, Control* design for shell budget, diver-excavated sampling, environmental monitoring equipment
- Cost: \$6.97 M for scientifically-sound study that produces ~24 acres of treated oyster habitat

Pilot Study Details - Reef Locations

- Bay is a complex body of water
- Location: East side of Apalachicola Bay, near current oyster populations
- Replicates: 5-7
- Approximately 24 acres for restoration
- Important to control for ecological conditions
- Main steps in choosing sites for pilot study:
 - o Map all recent restoration work, mapping data from University of New Hampshire
 - o FWRI will select potential locations to ground truth
 - o Listen to recommendations from local stakeholders on historically productive areas



Pilot Study Reef Locations

Next Steps

- Continue internal, external refinement of pilot study
- FWC will submit final documents to NFWF for approval later this month
- Continue drafting of competitive solicitation for contractor
- Goal is to have contractor, material in water Summer 2023

FWC Outreach and Engagement

- Franklin County Board of County Commissioners (BOCC)
 - Program update Dec. 6th
 - Continued engagement
- Rep. Jason Shoaf on FWC boat to see sites.
- Future engagement
 - o FCBOCC
 - o Seafood Work and Waterman's Association (SWWA)

Summary of Questions, Responses, and Comments:

(Note initials are only used to identify ABSI Team members, presenters, and state agency representatives)

- Q) What is the source of the limerock?
- A) DR: Unclear at this point; FWRI is working on this.
- Q) What about Kentucky limerock?
- A) DR: We are looking at using Florida rock.
- Q) What is the status of the \$20M?
- A) DR: that is the total available for the restoration project.
- Q) Why not build-up up on existing sites?
- A) SB/DR: The areas are so degraded; the current approach could serve as a foundation for further efforts. You need good substrate to work off of.
- Q) What if NFWF does not approve the pilot study?
- A) DR: That is very unlikely; there is no indication they would deny the pilot. We met in January and they had minor comment and were supportive. However, if necessary we could go back to the drawing board.
- SB: NFWF still has large resources available; if NFWF2 is successful then it would be reasonable to go back to NFWF for additional funds.
- DR: NFWF2 could be a blue print for even larger scale restoration projects.
- Q) Where does the \$7M for the Pilot Project fit in?
- A) DR: It comes out of the \$20M total?
- Q) If shell is layered on limerock will it blow?
- SB: It's not clear.
- Q) What about mixing large lime rock and shell?
- A) SB: Something to think about but very hard to implement.
- You could put webbing on top to keep it together.
- There is no way you are going to put 18" of rocks on historic bars; you'll need to put the rock around the bars. At low tide the 18' height would be exposed.
- DR: We will not put rocks on historical bars.
- At low tide historical bars are 2' from the surface; you can't put large rocks in these areas.

- Q) Is that because it creates navigation problems?
- A) A lot of historical reefs are in 6' of water!
- DR: FWRI will groundtruth feasibility of sites.
- Q) JB to DR: Will there be any opportunities to discuss location for the Pilot with the community?
- A) DR: Yes there will be opportunities.
- JH: We (ANERR) have highly accurate recent bathymetric data (and 15 years ago data); why don't we look for sites that have degraded and set these as targets.
- Q) JHL What about permitting, and are there any limitations on locations?
- A) DR: Navigation concerns have to be considered.
- A) PS: The FDACS permit is restricted to existing habitat.
- Experiments may show that a one size fits all strategy may not work.
- Pew is working with ABSI to look at shelling programs throughout the State to identify best practices which could be implemented. Will require long term investment from somewhere.

VIII. WORKING GROUP AND SUBCOMMITTEE UPDATES AND REPORTS

A. CAB SUCCESSOR GROUP SUBCOMMITTEE

Shannon Hartsfield and Anita Grove reported that to date the Subcommittee has discussed the type of members needed (stakeholder representation), and Committee membership, tasks, and assignments, and the structure, format, and key issues for the Subcommittee. In addition, the Subcommittee is collecting ideas and information for use once they are convened at the conclusion of the ABSI CAB process.

The CAB Successor Group will be ready to convene when the CAB completes their work on the Apalachicola Bay System Ecosystem-Based Adaptive Management and Restoration Plan. The Successor Group's role will be to organize a group of key stakeholders committed to working collaboratively for the long-term, once the CAB process is complete, and to ensure that the Plan is implemented, monitored, and adaptively managed over time and has the support of the Community. Of note, the CAB Successor Group is anticipated to formally convene in early 2024 subsequent to the CAB's adoption of their recommendations in November 2023.

Anita and Shannon reported as follows for the 1 February 2023 CAB meeting update on the ABSI CAB Successor Group:

- The Committee met on 8 December 2022.
- They reviewed their purpose.
- They added several new members and discussed the Group's organizational structure.
- They felt they need to focus geographically on Apalachicola Bay.
- We need to talk together about what has happened in the past and extract best practices from previous groups; this will help to define potential members.
- Meeting with agencies creates constructive discourse among all stakeholders.
- It would be good to have representation from FWC on the Successor Group.
- There is a grant application in the works to fund staffing for the Successor Group.

Summary of Questions, Responses, and Comments:

(Note initials are only used to identify ABSI Team members, presenters, and state agency representatives)

- I thought we might be doing this much earlier than now.
- Q) When will the Group start-up?
- A) The Successor Group will evolve from the CAB, and the structure will be worked out in the next few months. We plan to be fully operational January 2024.

(Attachment 10 — Stakeholder Resources in Support of ABSI) (Attachment 11 — Proposed Leads, Partners, and Resources for Strategies)

B. RESTORATION FUNDING WORKING GROUP

Overview. The ABSI proposal contemplates a 15-year commitment from FSU, 10 years beyond the 5 years of funding provided by Triumph Gulf Coast, Inc. The Restoration Funding Working Group (RFWG) will be a team of local, state, private, and NGO stakeholders focused on developing plans for long-term funding of the broader effort; the goal at the end of the 5-year ABSI period is to have a funding pipeline for restoration secured. Joel Trexler, RFWG Lead, previously reported that the RFWG has met several times, has broad representation, has identified the specific strategies and related actions that would require funding, agreed to a charge, are mapping actions with potential funding sources and approximate funding amounts needed, and understand that it is critical to identify gaps in funding and work to fill the gaps before the Plan is final. In addition, there are potential funding sources for some CAB recommended actions.

Joel reported as follows for the 1 February 2023 CAB meeting update on the RFWG:

- They plan to identify sources and drafting proposals for funding the Successor Group.
- ABSI funding ends June 2024.
- Initially the RFWG is seeking administrative funding for the Successor Group.
- The RFWG submitted a proposal for funding from NOAA NERR to support the Successor Group.
- This would be bridge funding primarily to administer the Successor Group until recurring funding is attained.
- Draft proposal has been prepared; letters will be solicited from ANERR, FWC and FCC.
- Proposal due 2/17/2024.
- Successor Group has approved the proposal concept.

Summary of Questions, Responses, and Comments:

(Note initials are only used to identify ABSI Team members, presenters, and state agency representatives)

- First time funding has been potentially available to support such groups.
- Q) NERR program is very competitive so what happens if it is not funded, and if it does get funded what happens afterwards when the funding ends?
- A) JT: ABSI has a little flexibility but there are a number of potential places we can seek funding from.
- The Riparian County Stakeholder Coalition is a six-county group including local elected officials that and could provide a letter of support for NERR proposal.
- JT: I will follow up with you on this.

C. COMMUNITY OUTREACH SUBCOMMITTEE

Subcommittee Charge:

- To work with ABSI leadership to inform the public of who we are and what we are doing.
- To create outreach and community engagement strategies that attract stakeholders and the public to actively inform the public about the Apalachicola Bay System Initiative's goals and actions.
- To measure effectiveness of these strategies through direct participation in achieving actions (as well as web analytics and media stories).

Chad Hanson reported that the Community Outreach Subcommittee (COC) has been active and they are working on a variety of initiatives. For 1 February 2023 update Chad provided a presentation on the Subcommittee's Outreach and Messaging Strategies.

Presentations are available on the project webpage: <u>https://marinelab.fsu.edu/absi/cab/</u>.

Chad requested feedback on the Subcommittee's Outreach and Messaging Strategies as follow:

Committee's Main Struggles

- Communicating what ABSI is and does relative to FWC and management.
- Most people really (or only) want to know when and how the Bay is going to be open for oyster harvest.
- Engaging stakeholders and the public on the specific aspects of the Plan, research, restoration, and long-term management.

The Community Advisory Board

- Comprised of several different stakeholders:
 - o Watermen/Oystermen
 - Seafood dealers
 - o Members of FSU's Apalachicola Bay System Initiative
 - State Agencies (FWC, FDACS, NFWF, etc.)
 - Non-profit organizations
 - o Local Government (Franklin County Commission, Apalachicola City Commission)
 - o Local Citizens
- All members of the CAB need to help communicate
 - 1) The difference between
 - ABSI (science and research)
 - FWC (management and policy)
 - 2) Current status and data of the oysters and the Bay ecosystem.
 - 3) How to get involved/where current ABSI info can be found.

What Has Been Done

- Print Media
 - Op-Eds (*The Wakulla News, The Wakulla Sun, The Apalachicola Times, SGI Newsletter*) and Rack Cards in local businesses and libraries
- Online Media
 - Social media posts/texts (on the FSUCML social pages), ABSI newsletters (from the FSUCML), ABSI Website
- In-Person Outreach

- ABSI PI (Dr. Sandra Brooke) has presented to the Franklin County Commission (4x), Apalachicola City Commission (2x), Eastpoint Civic Club (1x), SGI Civic Club (1x).
- Oystermen workshops (4x) at ANERR to gain feedback on restoration and management strategies
- Community Workshop was held at Eastpoint Fire House in Fall of 2022, and ABSI has held booths at the Florida Seafood Festival (3x), Carrabelle River Walk, FSUCML Open House, FSU Day at the Capitol (2x), Oceans Day at the Capitol (2x), Sopchoppy Oyster and Mullet Fest, and Sopchoppy Worm Gruntin' Festival

• Virtual Outreach

o ABSI PI has presented in ANERR's SciCafé series (3x) and WFSU Perspectives radio show

What Are the Information Gaps

- People don't know about ABSI
- People don't know about the management plan being formulated by the CAB to then provide to FWC
- People don't think the Bay needs to be studied further
- There's oysters out there now why do we even need to conduct studies when the Bay is coming back?
- Can you, the members of the CAB, think of any other gaps?

Where Would We Like to Go?

What Would We Like to Happen?

- What is realistic? What is an achievable goal?
 - To successfully communicate goals of ABSI versus the goals of FWC
 - Showcase that both parties work together on the CAB
 - To convey the current status of the Bay ecosystem and oyster populations
 - o To explain when restoration will start and what will be done
 - To successfully reach the community our internet-social media isn't reaching people and inperson events are not well attended...what do we do?
- Where is there room to create small wins?
 - Debunk myths and misconceptions spread throughout community (in-person and on Facebook).
 - Shift negative community perspective of FSU and ABSI.
 - Develop community understanding for the "slow" approach and deliberate planning effort to restore oysters reefs and create an oyster population that can support a **sustainable** fishery.

How Do We Get There?

- What are the shared values of the stakeholders?
 - What do we all have in common?
- What has worked in the past?
- What hasn't worked in the past?
- Who is our TARGET audience?
- What are the new strategies/means of messaging?

What Are the Best Tactics?

- Who are the "spokespeople" of the community? Who are the leaders that are good at disseminating information?
- How are messages best communicated?
- What type of language is most efficient and beneficial to communicate?

Are We There Yet?

How Do We Measure Progress?

- No, we aren't there...YET!
- Progress is measured by:
 - o Oystermen/watermen getting involved in planning and restoration experiments.
 - o Local attendance of CAB meetings/ABSI events increases.
 - The current status of the Bay and timeline for restoration is clear and established.
 - o Negative feedback and public discourse is reduced and neutralized.

Summary of Questions, Responses, and Comments:

(Note initials are only used to identify ABSI Team members and partners, presenters, and state agency representatives)

- Use Facebook!
- AG noted she has been posting ABSI news on 10 different community sites; we need a strategy for getting the message to the community; we need a professional communicator.
- Most of the FC community believes that ABSI and FWC are out to "get" the seafood community. Current sentiment is very negative. Makes communication very difficult.
- Need to communicate that to be able to have a sustainable oyster harvest in Bay you'll have to put substrate in.
- This is not the first time the fishery collapsed (1985-1986) and subsequently putting material back restored the fishery. Local community does not understand why the Bay has to be studied. Why not put material in and start fishing. All the community is seeing is scientists spending money.
- If we don't start soon, much of the coastal property will be bought up. We are losing heritage and waterfront. We need to start a limited fishery to keep a subset of oystermen engaged.
- If we show restoration progress, this can be communicated.
- Q) What is killing the oysters?
- A) SB: in 1985, the habitat was present. Now we cannot find habitat, just sand, gravel, and oyster hash. Salinity may play a role but when a system collapses then it is usually is not just one factor.
- All of the information about ABSI is out there. Is it our responsibility to spoon feed the population? Just restore the Bay!
- After 1985, shelling was done at the periphery of reefs but the reefs came back naturally. This is not the case NOW. Only in 2013 has shell been put directly on the reefs.
- AG: We need to have a professional communicator frame and communicate the message to the community.
- The message is already out there if someone is interested.
- We need to take oystermen out there and show them how depleted most areas are. This might promote getting the message out. We should take out some of the older and respected ones.
- We should do it on a Saturday.
- This really needs to be done!
- Q) Why can't you put live oysters in the Bay?
- A) SB: you can; we are doing spat on shell as part of the experiments.
- You should make video of the oystermen you take out to see the reefs.
- Q) SB: how would we show a video?
- A) Share the video on Facebook.
- Since there are oysters in locations such as pilings, shorelines, and intertidal areas there is a perception that the Bay is loaded.

- It would be a good idea to have people with stature out on the Bay to see the actual situation.
- AG's plea for support is valid; professional support for the communications effort is important.

(Attachment 12 — ABSI Overarching Message Initial Ideas)

IX. CAB RESTORATION AND MANAGEMENT PLAN FRAMEWORK AND ABSI Objectives Review, and Strategies Evaluation Worksheet Process Review

A) CAB RESTORATION AND MANAGEMENT PLAN FRAMEWORK

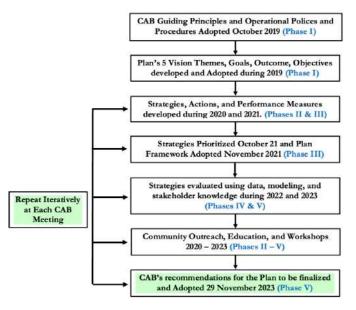
Jeff Blair reviewed the ABSI CAB Plan Development Chronology, and the ABSI CAB's Restoration and Management Plan Framework and answered members' questions.

Presentations are available on the project webpage: https://marinelab.fsu.edu/absi/cab/.

Summary and Overview:

Community Advisory Board Process To Date

- Phase I (2019). Standing up and Organization of the ABSI CAB —May 2019 Dec. 2019 (Assessment, Questionnaire, and 2 CAB Meetings). Status Complete
- Phase II (2020). Scoping of Issues, Identification of Performance Measures & Strategies Jan. 2020 Dec. 2020 (7 CAB Meeting and 1 Oystermen's Workshop). Status – Complete
- Phase III (2021). Building Consensus on CAB Recommendations for the ABS Ecosystem-Based Adaptive Management and Restoration Plan Adoption of Final Draft Management and Restoration Plan Framework for Phase IV Evaluation Jan. 2021 Nov. 2021 (7 CAB Meeting and 2 Oystermen's Workshops). Status Complete
- Phase IV (2022). Evaluation of Draft Adaptive Management and Restoration Plan Framework's Restoration and Management Strategies, Restoration and Funding Planning — Dec. 2021 – Dec. 2022 (6 CAB Meetings, 2 Public Workshops). Status – Complete
- CAB Phase V (2023). Evaluation and Finalization of Recommendations for Inclusion in the ABS Ecosystem-Based Adaptive Management and Restoration Plan, Restoration and Funding Planning. Status – Initiated January 2023.



ABSI Plan Development Overview

- Management and Restoration *Plan Framework*. Comprised of Five Goals and associated Visions, Outcomes, Objectives, Prioritized Strategies, Actions, Roles, and Performance Measures and Estuarine Metrics.
- Each of the Strategies and Actions was consensus tested for acceptability during multiple meetings held in 2020 and 2021.
- The Strategies were prioritized by the CAB 19 October 2021.
- The CAB voted unanimously at adopt the *Plan Framework* 16 November 2021.
- The Plan Framework represents the CAB's recommendations for inclusion in the *Apalachicola Bay System Ecosystem-Based Adaptive Management and Restoration Plan.*
- The CAB will vote to adopt their final package of consensus recommendations for inclusion in the *Plan* during the 29 November 2023 meeting.

The Final CAB Meetings - 2023:

- The CAB will evaluate potential strategies and scenarios in the context of their adopted prioritization criteria and performance measures, fisheries model results, and stakeholder knowledge.
- The CAB will use data from ABSI experiments and research, stakeholders' knowledge, and Ed Camp's Fisheries Model to inform the evaluation of strategies.
- The ABSI Project Team's commitment is to be transparent and realistically manage expectations, and to clarify where appropriate what the implications, requirements, and trade-offs are for any given package of recommendations.
- The Fisheries Model does not have the detail (spatial resolution and scaling) to provide specifics as to the exact locations, size, spatial configuration, and locations for oyster reef restoration or the specific details for proposed management strategies.
- The Model will assist the CAB to evaluate proposed strategies and scenarios (combinations of strategies) at the level of how they **perform relative to each other** (e.g., x strategy performs better than y strategy, and a combination of x and y perform better than z).
- The final package of recommendations developed from the *Plan Framework* will provide decisionmakers with the CAB's package of strategies predicted to provide the best approach for a successful and sustainable oyster reef restoration along with some level of sustainable wild oyster fishery.
- For the CAB's recommendations to have the best chance for broad support, funding, and implementation, the recommendations should balance predicted outcomes socially, politically, culturally, and economically based on an analysis of sustainable harvest potential (jobs), environmental, and ecosystem services, including but not limited to creating habitat and the resultant food source for hundreds of species including commercially valuable fish, water quality, shore protection, and storm protection, as well as other benefits including but not limited to recreational activities and tourism.
- The CAB's final package of recommendations will be **conceptual and general in scope** (e.g., large scale initial restoration, using durable cultch on good substrate with an oyster shell overlay, ongoing restoration, and an oyster repletion program) with the understanding that decision-makers (i.e., FWC, DEP, FDACS) can chose to implement all, part, or none of these recommendations.
- FWC and other decision-makers will need to work with stakeholders, especially the Franklin County oystermen and seafood industry along with the CAB Successor Group to refine and implement the CAB's recommendations.
- The CAB successor group will work with decision-makers to provide stakeholder input on management and restoration of oyster resources.

Restoration and Management Plan Framework Overview

- Section I: CAB ABSI Plan Prioritized Strategies
 - Goal A: A Healthy and Productive Bay Ecosystem [4 Objectives, 8 Strategies, and 19 Actions]
 - Goal B: Sustainable Management of Oyster Resources [2 Objectives, 13 Strategies, and 48 Actions]
 - **Goal C:** Ecosystem-Based Adaptive Management and Restoration Plan Supported by Apalachicola Bay System Stakeholders [2 Objectives, 4 Strategies, and 15 Actions]
 - Goal D: An Engaged Stakeholder Community and Informed Public [2 Objectives, 3 Strategies, and 6 Actions]
- Section II: Strategies to be Referred to Other Programs or Entities
 - Goal E (Outside of ABSI Scope): A Thriving Economy Connected to a Restored Apalachicola Bay System [4 Objectives, 10 Strategies, and 1 Action] (Lead: CAB Successor Group)
 - Additional Strategies Outside of the ABSI Scope [5 Strategies and 1 Action] (Lead: CAB Successor Group)

Each of the Five Goal Areas Includes:

- Vision Theme
- Goal Statement
- Desired Outcome
- Objectives
- Strategies
- Actions

*The Draft Restoration and Management Plan Framework is available at the following URL: <u>https://marinelab.fsu.edu/absi/cab/</u>

Summary of Questions, Responses, and Comments:

(Note initials are only used to identify ABSI Team members and partners, presenters, and state agency representatives)

- The Community Outreach Subcommittee has been trying to summarize the strategies into a more digestible communication vehicle.
- JB: Need to cross-reference the Plan Framework with the strategies that Ed Camp is modeling.

B) STRATEGIES EVALUATION WORKSHEET PROCESS REVIEW

Jeff Blair reviewed the process the CAB will be using for refining and finalizing the ABSI CAB Plan recommendations.

Summary and Overview:

- The CAB will evaluate strategies using a Strategies Evaluation Worksheet consistent with the Consensus Building Procedures unanimously adopted 30 October 2019.
- During the meetings, CAB members will be asked to develop and rank strategies (options) using a 4-Point acceptability ranking scale. Once ranked for acceptability, strategies with $a \ge 3.0$ average ranking (75%) will be considered preliminary consensus recommendations for inclusion in the package of recommendations for the *Apalachicola Bay System Ecosystem-Based Adaptive Management and Restoration Plan* (*Plan*).

The following scale will be utilized for the ranking exercises:

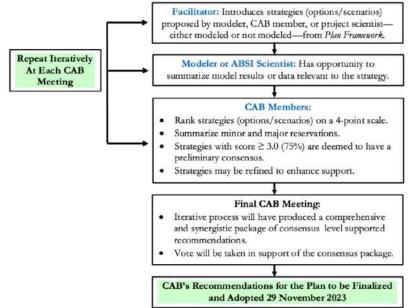
ACCEPTABILITY	4 = Acceptable,	3 = Acceptable, I agree with	2 = Not Acceptable, I don't	1 = Not
RANKING SCALE	I agree	minor reservations	agree unless major reservations	Acceptable
	740.0		addressed	

- CAB members should be prepared to state their minor and major reservations when asked, and to offer proposed refinements to the strategy to address their concerns. If a CAB member is not able to offer refinements to make the strategy acceptable (4) or acceptable with minor reservations (3) they should rate the strategy with a 1 (not acceptable).
- This is an iterative process (the issues/strategies agreed to at each meeting serve as the starting point for the next, and no recommendation is final until the last meeting), and at any point during the process any strategy may be reevaluated and re-ranked at the request of any CAB or ABSI Team member.
- The status of a ranked strategy will not be final until the final CAB meeting, when a vote will be taken on the entire package of consensus ranked recommendations for submittal to the FSUCML. The CAB will finalize their recommendations for the *Apalachicola Bay System Ecosystem-Based Adaptive Management and Restoration Plan* at the 29 November 2023 meeting.

Criteria for Evaluation Strategies

CRITERIA TO CONSIDER FOR PROPOSING AND EVALUATING STRATEGIES AND RECOMMENDATIONS			
CRITERIA	EXPLANATION		
IMPORTANCE	Is this proposed strategy critically important to achieving the goals of the Adaptive Management and Restoration Plan?		
TIMELY	Will things get worse if the proposed strategy is not implemented?		
FEASIBLE/ PRACTICAL	Is it likely that the proposed strategy will be successful in achieving the relevant goals of the Adaptive Management and Restoration Plan?		
RESOURCES	Are there resources available, or likely to become available for implementing the proposed strategy? Is implementation of the proposed strategy cost effective?		
COMMITMENT	Is there commitment from the stakeholders and regulators regarding implementation of the proposed strategy?		

Consensus Solutions Strategies Evaluation Process



Presentations are available on the project webpage: <u>https://marinelab.fsu.edu/absi/cab/</u>.

Summary of Questions, Responses, and Comments:

(Note initials are only used to identify ABSI Team members and partners, presenters, and state agency representatives)

• There were no questions or comments.

C) CLARIFICATION OF CAB COMMENT ON BAY CLOSURE FOR THE CAB'S PLAN FRAMEWORK

Jeff Blair explained that in reviewing the Plan Framework the ABSI Leadership Team realized that the original language for this section was misleading and implied that the CAB had a significant influence on FWC's decision to close the oyster fishery. This was not the case; the CAB simply indicated support for the closure, which FWC was considering at the time.

Following is the language proposed to clarify the CAB's role and action regarding the issue:

Disclaimer. While reviewing the CAB Plan Framework, the ABSI leadership realized that the original language for this section was misleading and implied that the CAB had a significant influence on FWC's decision to close the oyster fishery. This was not the case; the CAB simply indicated support for the closure, which FWC was considering at the time.

Closing the Apalachicola Bay to Wild Oyster Harvest. At the March 11, 2020 ABSI CAB meeting, the CAB's FWC representative reported that FWC was considering closing the Apalachicola Bay to wild oyster harvest (commercial and recreational). As part of this process, FWC solicited input from various stakeholder groups and requested that the CAB provide their perspective. The CAB discussed the issue and unanimously supported a Bay closure as proposed by FWC.

The closure of the Apalachicola Bay recreational and commercial wild oyster harvest went into effect on August 1, 2020 via Executive Order pending approval of final rules. At the December 16, 2020 meeting the FWC approved the final rules to suspend all wild oyster harvest and to prohibit on-the-water possession of wild oyster harvesting equipment (tongs) from Apalachicola Bay through December 31, 2025. The oyster fishery closed area has well-defined boundaries (set by FWC in consultation with FDACS) and contained within the Apalachicola Bay System as defined in FWC's Rule 68B-27, F.A.C.

Summary of Questions, Responses, and Comments:

(Note initials are only used to identify ABSI Team members and partners, presenters, and state agency representatives)

- Q) JT: are we going to insert a note clarifying why the language was revised?
- A) JB: Yes, the disclaimer will be included as well as the date of the approved revision.

CAB Action: The Facilitator tested whether the CAB supported the proposed clarification language regarding the CAB's feedback on Closing the Bay to oyster harvesting. The CAB unanimously voted to support the proposed language for inclusion in the Restoration and Management Plan Framework,

X. REVIEW AND DISCUSSION OF MODELED SCENARIOS

Background. Based on Ed Camp's recommendations regarding what is currently feasible to model, at the 27 July 2022 meeting the CAB agreed to the following initial scenarios for simulation by the Fisheries (Socioecological) Model:

- An Active harvest management scenario similar to the Alabama approach using monitoring and an oyster abundance minimum density threshold.
- Different management strategies under a range of different assumptions to see what works best.

Scenarios Modeled for the 18 October 2022 Meeting:

- Depensation (decreasing population growth capacity as oyster density decreases because each generation fails to generate enough shell to sustain recruitment of the next generation), Collapse, Restoration.
- Restoration and Sustainable Fishing.
- Alternative Fisheries Management Approaches.

Scenarios Modeled for the 30 November 2022 Meeting:

- Incorporating a summer oyster fishery closure of June-August for modeled scenarios.
- Ongoing shelling and restoration (Oyster Repletion Program) of specific oyster reefs for harvesting.
- A combination of management strategies including but not limited to: active management, an open fishery, and limited entry.

Ongoing Model Development Improvement Goals

- A Sensitivity Analysis was run changing the slope of the Depensation Curve (Standard Deviation) to compare impacts (shell dynamics oyster simulations relationships) and determine thresholds for restoration and management decision making.
- Work on improving model scaling.
- Work on making the model spatially explicit.
- Stochasticity—adding randomness (events) to the model to simulate unpredictable events such as the weather.

Key Assumptions Used in Modeling Scenarios

- The simulation model is scaled to a portion of an oyster bar (in this case a portion of Cat Point).
- Habitat is the key driver and depensation exists; fewer oysters are getting large because habitat has declined below a critical minimum level.
- Biggest uncertainty with modeling assumptions is if the decline is from some factor unrelated to habitat (e.g., predators, parasites, diseases, etc.).
- Effort is capped at 1500 trips/month.
- Simulations include a 3-month closure from June August, with no stochasticity (randomness).
- Fishing effort can be controlled effectively, but this will be highly dependent on enforcement and public cooperation.

Facilitator's Summary of Key Modeling Issues, Assumptions, and Take-Home Points Regarding Modeling Results to Date

- Adding stochasticity (randomness, random events) to the model would be interesting, but likely will provide marginal additional useful information as the model is currently able to provide enough information to make relative comparisons between scenarios/strategies sufficient to select the best approaches for management and restoration decisions.
- The Fisheries Model does not have the detail (spatial resolution and scaling) to provide specifics as to the exact locations, size, spatial configuration, and locations for oyster reef restoration or the specific details for proposed management strategies.

- The Model will assist the CAB to evaluate proposed strategies and scenarios (combinations of strategies) at the level of how they perform **relative to each other** (e.g., x strategy performs better than y strategy, and a combination of x and y perform better than z).
- Preliminary Model results suggest that extensive initial restoration to a threshold level, plus ongoing restoration including oyster repletion, and fishing on locations based on a threshold oyster abundance level perform best.
- Significant funding will be required to achieve sufficient and sustainable habitat restoration, and FWC management and enforcement will be required to ensure a viable wild oyster fishery.
- An initial oyster-reef restoration sufficient to achieve the predicted threshold for sustainability (a successful restoration) using cultch that has been demonstrated to remain in place and not degrade in the near-term would be required, and then an ongoing oyster shell repletion regime ranging from yearly to every 3 years.
- Ongoing restoration (annual triennial) would be required.
- Preliminary model results predict a minimum threshold level for initial restoration of oyster reefs would be approximately 33% 35% of the pre-collapse level of oyster reefs. This is the predicted level required to jump start oyster growth.
- Restored oyster reefs require some time to establish themselves before harvesting to provide oysters with the time they need to reach market size.
- All options will need to have a cost-benefit analysis conducted including evaluating the ecological, ecosystem, socio-cultural, socio-economic, and political considerations.
- Recuring funding will be required to support ongoing shelling and restoration (Oyster Repletion Program) of specific oyster reefs using shell as the cultch applied on top of restored reefs intended for sustainable harvesting.
- Enforcement will be critical to successful restoration and the establishment and maintenance of a sustainable wild oyster fishery.

For the 1 February 2023 meeting Ed Camp reported as follows:

Summary and Overview of Presentation

The presentation is available on the project webpage: <u>https://marinelab.fsu.edu/absi/cab/</u>.

TABLE OF TERMS FOR STRATEGIES MODELED		
Management Category	Broad category of management option. Levels are limited entry (LE),	
	open access (OA), and active harvest management (AHM).	
Level	Meaning depends on the Management Category. LE is percent pre-	
	collapse effort, OA has no levels, and AHM is percent legal oysters	
	harvested.	
Environmental Scenario	Deterministic (Determ.): Means no randomness. M inc. stands for a	
	15% increase in natural mortality for a 5-year period 5 years after	
	restoration.	
Restoration Scenario	Single Large is a single large restoration event (33% of initial habitat).	
	Semi-ann. is additional restoration every other year at lower levels (5%	
	of initial habitat).	
Oyster Population	Category describing what happens to the oyster populations over time.	
Profit	A scale of how much revenue (across the fishery) is predicted to be	
	generated, where 0 is effectively no harvest and 8 is a lot. The numbers	

	are linear, so "4" is twice as much as 2.	
Limited Entry	Management in which the total amount of effort would be regulated,	
	likely by regulating the number of entrants into the fishery (though rare,	
	it's possible to have unlimited numbers of fishers but only a certain	
	number of "fisher days"). Expressed as a percent of "pre-collapse"	
	effort. E.g., 10% means only 10% of the fishing trips that happened	
	before the collapse. Size, bag, and season limits still apply.	
Open Access	Status quo management: size, bag, and seasonal limits but no limit on	
	the number of fishers, fisher days, or the amount of oysters harvested.	
Active Harvest Management	The total amount of harvest would be limited (e.g., 10-90% of the legal-	
	sized oysters), but the number of fishers would not be. Size, bag, and	
	season limits would still apply.	

TABLE OF STRATEGIES MODELED					
Management Category	Level	Environmental Scenario	Restoration Scenario	Oyster Population	Profit
Limited Entry	10%	Deterministic	Single Large (S.L.)	Sustained	1
Limited Entry	20%	Deterministic	Single Large	Sustained	2
Limited Entry	40%	Deterministic	Single Large	Sustained	4
Limited Entry	60%	Deterministic	Single Large	Sustained	6
Limited Entry	80%	Deterministic	Single Large	Short-term sustained	7
Limited Entry	100%	Deterministic	Single Large	Declining	7
Limited Entry	10%	Deterministic Natural Mortality Included	Single Large	Sustained	1
Limited Entry	20%	Determ. M inc.	Single Large	Sustained	2
Limited Entry	40%	Determ. M inc.	Single Large	Collapsed	0
Limited Entry	60%	Determ. M inc.	Single Large	Collapsed	0
Limited Entry	80%	Determ. M inc.	Single Large	Collapsed	0
Limited Entry	100%	Determ. M inc.	Single Large	Collapsed	0
Limited Entry	10%	Determ.	S.L. + semi-ann.	Sustained	1
Limited Entry	20%	Determ.	S.L. + semi-ann.	Sustained	2
Limited Entry	40%	Determ.	S.L. + semi-ann.	Sustained	4
Limited Entry	60%	Determ.	S.L. + semi-ann.	Sustained	6
Limited Entry	80%	Determ.	S.L. + semi-ann.	Sustained	7
Limited Entry	100%	Determ.	S.L. + semi-ann.	Sustained	8
Limited Entry	10%	Determ. M inc.	S.L. + semi-ann.	Sustained	1
Limited Entry	20%	Determ. M inc.	S.L. + semi-ann.	Sustained	2
Limited Entry	40%	Determ. M inc.	S.L. + semi-ann.	Sustained	4
Limited Entry	60%	Determ. M inc.	S.L. + semi-ann.	Collapsed	0
Limited Entry	80%	Determ. M inc.	S.L. + semi-ann.	Collapsed	0

Limited Entry	100%	Determ. M inc.	S.L. + semi-ann.	Collapsed	0
Open Access	-	Determ.	Single Large	Collapsed	0
Open Access	-	Determ. M inc.	Single Large	Collapsed	0
Open Access	-	Determ.	S.L. + semi-ann.	Sustained*	4
Open Access	-	Determ. M inc.	S.L. + semi-ann.	Collapsed	0
Active Harvest	10	Determ.	Single Large	Sustained	3
Active Harvest	20	Determ.	Single Large	Sustained	5
Active Harvest	30	Determ.	Single Large	Sustained	6
Active Harvest	50	Determ.	Single Large	Sustained	7
Active Harvest	70	Determ.	Single Large	Short-term sustained	7
Active Harvest	90	Determ.	Single Large	Short-term sustained	7
Active Harvest	10	Determ. M inc.	Single Large	Sustained	3
Active Harvest	20	Determ. M inc.	Single Large	Sustained	5
Active Harvest	30	Determ. M inc.	Single Large	Collapsed	0
Active Harvest	50	Determ. M inc.	Single Large	Collapsed	0
Active Harvest	70	Determ. M inc.	Single Large	Collapsed	0
Active Harvest	90	Determ. M inc.	Single Large	Collapsed	0
Active Harvest	10	Determ.	S.L. + semi-ann.	Sustained	4
Active Harvest	20	Determ.	S.L. + semi-ann.	Sustained	5
Active Harvest	30	Determ.	S.L. + semi-ann.	Sustained	6
Active Harvest	50	Determ.	S.L. + semi-ann.	Sustained	7.5
Active Harvest	70	Determ.	S.L. + semi-ann.	Sustained	8
Active Harvest	90	Determ.	S.L. + semi-ann.	Sustained	8
Active Harvest	10	Determ. M inc.	S.L. + semi-ann.	Sustained	3
Active Harvest	20	Determ. M inc.	S.L. + semi-ann.	Sustained	5
Active Harvest	30	Determ. M inc.	S.L. + semi-ann.	Sustained	6
Active Harvest	50	Determ. M inc.	S.L. + semi-ann.	Sustained	7
Active Harvest	70	Determ. M inc.	S.L. + semi-ann.	Sustained	7.5
Active Harvest	90	Determ. M inc.	S.L. + semi-ann.	Collapsed	0

Summary of Questions, Responses, and Comments

(Note initials are only used to identify ABSI Team members and partners, presenters, and state agency representatives)

- EC: The column for Profit/Fisher is a function of the number harvesters with limited entry.
- Q) What does the asterisk on *Sustained for the Scenario #28 mean?
- A) EC: Bioeconomic model says the scenario can be sustained only if there is a cap or limit on the number of harvesters.

- MA: Stated he likes the spreadsheet. The summary reveals that there is going to have to be a different management system than used in the past for the Bay. What is the appetite for pursuing a new management strategy?
- JB: Exploring these alternative management scenarios and determining their viability is exactly what the CAB will be doing in upcoming meetings.
- Q) How is semiannual restoration defined?
- A) EC: As 1/6^{th.} of the original restoration.
- EC: The model results indicate that if you are going to have open access, continuous restoration will be needed. The materials would have to be deposited directly onto existing reefs.
- EC: Also, with open access, it pushes profit down.
- A) Could you take 100 acres and see how many fishers could be sustained?
- A) EC: It is possible but tricky. I don't know how much material would have to be deposited to make the evaluation.
- A) Could you use the FWC numbers from their restored sites?
- A) EC: Yes, but it will be difficult and the confidence levels would be low,
- JB: You could make a specific set of assumptions to run the simulations.
- EC: I can try but you'll have to make many hypotheticals limiting greatly the utility. I am also concerned about how results might be used to justify opinions.
- Q) What is the bag limit used in the scenarios?
- A) EC: 5 bags.
- EC: Limited entry results: if you restore every year, the system is sustainable assuming something bad doesn't happen (this would be a government subsidized fishery).
- EC: Open harvest results: the system would collapse except under one scenario.
- EC: Active harvest management results: does a little bit better than limited entry but is still sensitive to changes in M (natural mortality).
- EC: Active harvest management will work without continuous restoration.
- Q) What is the Suwannee Sound bag limit?
- A) EC: 20 bags with no limit on the number of people harvesting.
- EC: Stochasticity is randomness in recruitment. A random event may produce a collapse in what would otherwise have been a sustainable scenario.
- EC: If depensation is occurring, a more conservative management approach might be prudent (due to randomness).
- EC: Commented that if stochasticity and mortality are going to happen then larger steady state populations are needed; are we willing to accept this?
- EC: How do we obtain the political and social will to implement more sustainable management practices?
- Q) This approach is not taking into account impacts on ecosystem services (including finfish). Wouldn't this greatly increase the value for creating and funding sustainable oyster reefs?
- A) EC: Has student that examined trends in finfish recruitment. Data have shown no decline in finfish populations post collapse of the Bay. I can provide data on changes in fishing revenue. However, the impact on water quality has not been taken into account.
- Should look species by species comparing reef-associated species vs. others.
- DR: FWC is discussing strategies. Everything is on the table at this point.
- SB: Define the goal: ecosystem restoration? fishery restoration?

- ABSI must develop community support for the recommendations that will be given to FWC.
- Q) Will the Bay be opened up 1/1/26 no matter what?
- DR: FWC management is waiting on results of pilot project to provide the foundation for a decision. Will take into account opinions and recommendation of stakeholders. FWC will use ABSI results as well. We are reviewing different types of strategies for opening.
- 90% of oysters from Louisiana come from leases. They use specific types of materials. This could provide insights for ABSI.
- Q) What about restarting the DACS shelling program?
- PS: Yes, we did have a shelling program, but the funding base was removed.
- AG: The shelling program was a big loss financially.

XI. IDENTIFICATION OF NEXT SUITE OF SCENARIOS FOR MODEL SIMULATIONS

Next Suite of Scenarios for Simulation With the Fisheries (Socioecological) Model:

The CAB agreed that the ABSI Project Team would review the *Restoration and Management Plan Framework* and create a table cross-referencing the strategies in the *Plan Framework* that have been modeled, and recommend which additional strategies would benefit from modeling. In addition, the CAB was requested to review the Plan Framework and identify any strategies they would like to have modeled. The ABSI Project Team will meet with Ed Camp to discuss proposed strategies to model and the best approach for communicating the results to the CAB.

Future Scenarios to Simulate:

- Restoration approaches using data from the restoration projects and the restoration experiments and pilot projects (specific locations, size, height/spatial configurations, type of cultch material, density of cultch, etc.).
- Adaptive Management Scenario: Expand the model spatially to provide for grided areas to model simulations with some areas fished and other areas protected, and evaluate the impacts on habitat and oyster abundance for fished and protected areas. [*Note:* Ed would require FWC support to simulate this approach]

When the Model Can Be Extended to a Spatially Explicit Platform, Evaluate:

- Opening and closing specific oyster bars and potentially even parts of specific oyster bars based on the metrics for sustainability of the resource (e.g., oyster density).
- Different scenarios with the Bay wide-open and various areas of the Bay closed.
- Develop and maintain one area of the Bay (e.g., Cat Point) for high intensity commercial oyster harvesting, and the rest of the Bay will be set aside as protected areas (MPA/Sanctuaries) to provide ecosystem services such as water filtration and marine species habitat, and also to provide brood stock/spat source for the system.
- Adaptive Management approach where updated periodic oyster population evaluations are being conducted and used as the metric for how much and when harvesting is allowed.
- Total Allowable Catch (TAC) as a component of a limited entry and/or minimum density active managed scenarios.
- Seasonal closures.

• Consider the size, spatial configuration, and amount and location for oyster reef habitat restoration initiatives.

Much of the above will require adding some larval transport and dispersal assumptions to spatially explicit modeling.

Scenarios Approved by the CAB for Modeling and Evaluation:

- Limited Entry Fishery Number of entrants would vary with harvest level and process developed in consultation with stakeholders.
- Bay-wide summer harvest closure (June-August).
- All legal and FDACS approved harvest areas would be open during harvest season.
- Monday-Friday harvest week with daily bag limits.
- Recreational harvest limit with same season and gear as commercial harvest.
- Establish/enforce 5% undersize oyster limit for harvesters and dealers.
- Implement stock-based temporary harvest closures, informed by regular stock assessments.
- Implement annual stock assessment in collaboration with fishers to establish sustainable level of harvest for the season.
- Establish permanent closed areas (broodstock reefs).
- Evaluate cost-effectiveness of an ongoing shelling and restoration (Oyster Repletion Program) of specific oyster reefs for harvesting.
- Work with FWC Law Enforcement to develop strategies and penalties for violation of regulations.

(Attachment 7 — Glossary of Modeling Terms) (Attachment 9 — Prioritized Restoration and Management Strategies)

XII. PUBLIC COMMENT

The facilitator invited members of the public to provide comments.

Public Comments:

• There were no public comments offered.

XIII. NEXT MEETING OVERVIEW AND ISSUES

The 12 April 2023 meeting will focus on ABSI science and data collection and decision support tools updates, FWC NFWF Stage 2 restoration update, sub-committee reports, evaluation of Plan Framework strategies using the Strategies Evaluation Worksheet, the review and discussion of model simulation results for priority Fisheries Management (Goal B) scenarios (combinations of strategies/options), and agreement on the next suite of scenarios for model simulations.

CAB HOMEWORK ASSIGNMENT

• CAB members were requested to review the CAB's approved Goal A (Habitat) and Goal B (Management) Strategies from the *Plan Framework* and identify any they would like the CAB to discuss further and/or as potential candidates for modeling.

- The CAB members were requested to send their feedback to Jeff Blair by Friday, February 24, 2023 via email: <u>facilitatedsolutionsjb@gmail.com</u>.
- Jeff will add the strategies requested for further evaluation to the CAB's Strategies Evaluation Worksheet for the 12 April 2023 CAB meeting.

NEXT STEPS AND AGENDA ITEMS

- Review of updated Workplan and Meeting Schedule.
- Science and data collection, and Restoration updates.
- Subcommittees and Working Group updates.
- Review and discussion of ABSI CAB's Plan Framework Strategies for Goals A & B
- Review and discussion of Fisheries (Socioecological) model simulation results for draft priority Fisheries Management (Goal B) and Restoration (Goal A) strategies using Strategies Evaluation Worksheet.
- Agreement on next suite of scenarios for Fisheries Model simulations.
- Public Comment.

MEETING CHAT COMMENTS

Meeting participants were able to provide comments during the meeting through the on-line Chat function. The results are compiled and included as *Attachment 5* of this Summary Report.

(Attachment 5 — Meeting Zoom Chat Summary)

MEETING EVALUATION AND ONLINE SURVEY RESULTS

The CAB members were requested to complete a meeting evaluation. The results are compiled and included as *Attachment 6* of this Summary Report.

(Attachment 6 — Meeting Zoom Poll and Written Evaluation Results)

ADJOURNMENT

The Facilitator thanked CAB members, ABSI Project Team members, and the public for their participation, and adjourned the meeting at 2:30 PM on Wednesday, February 1, 2023.

ATTACHMENT 1 Key To Common Project Abbreviations

ABBREVIATION	DEFINITION
ABS	Apalachicola Bay System
ABSI	Apalachicola Bay System Initiative
ACFS	Apalachicola-Chattahoochee-Flint Stakeholders
ANERR	Apalachicola National Estuarine Research Reserve
CAB	Community Advisory Board (ABSI)
County	Franklin County
DACS or FDACS	Florida Department of Agriculture and Consumer Services
DEP or FDEP	Florida Department of Environmental Protection
DOH or FDOH	Florida Department of Health
EPA	U.S. Environmental Protection Agency
FDOT	Florida Department of Transportation
FSU	Florida State University
FSUCML	Florida State University Coastal and Marine Laboratory
FWC	Florida Fish and Wildlife Conservation Commission
FWRI	FWC Fish and Wildlife Research Institute
NGO	Non-Governmental Organization
NOAA	National Oceanic and Atmospheric Administration
NRCS	Natural Resource Conservation Service
NWFWMD	Northwest Florida Water Management District
Plan	Apalachicola Bay System Ecosystem-Based Adaptive Management and Restoration Plan
RESTORE	Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast Act of 2012
RCSG	Riparian County Stakeholder Coalition
RPC	Regional Planning Council
SAB	Science Advisory Board (ABSI)
SAV	Submerged Aquatic Vegetation
TNC	The Nature Conservancy
TRIUMPH	Triumph Gulf Coast, Inc.
UF	University of Florida
UWF	University of West Florida

ATTACHMENT 2 MEETING PARTICIPATION LIST

MEMBER	AFFILIATION			
AGRICULTURE/ACF STAKEHOLDERS/RIPARIAN COUNTIES				
1. Chad Taylor	Riparian County Stakeholder Coalition/ACF Stakeholders/Agriculture			
BUSIN	ESS/REAL ESTATE/ECONOMIC DEVELOPMENT/TOURISM			
2. Chuck Marks	Business (Insurance Industry)			
	ENVIRONMENTAL/CITIZEN GROUPS			
3. Georgia Ackerman	Apalachicola Riverkeeper			
4. Chad Hanson	The Pew Charitable Trusts			
5. Katie Konchar	The Nature Conservancy (TNC)			
	LOCAL GOVERNMENT			
6. Ottice Amison	Franklin County Commissioner			
7. Anita Grove	Apalachicola City Commissioner			
	RECREATIONAL FISHING			
8. Frank Gidus	CCA Florida			
	SEAFOOD INDUSTRY			
9. David Barber	Barber's Seafood			
10. Shannon Hartsfield	Seafood Management Assistance, Resource Recovery Team and Oysterman			
11. Gayle Johnson	Apalachicola Oyster Company			
12. Steve Rash	Water Street Seafood			
13. TJ Ward	Buddy Ward & Sons Seafood			
STATE GOVERNMENT				
14. Jenna Harper#	ANERR/DEP			
15. Becca Hatchell	FWC Division of Habitat and Species Conservation			
16. Alex Reed	FDEP Office of Resilience & Coastal Protection			
17. Devin Resko	FWC Division of Marine Fisheries Management			
18. Portia Sapp	FDACS Division of Aquaculture			
19. Paul Thurman	NWFWMD			
	UNIVERSITY/RESEARCHERS/SCIENTISTS			
20. Mike Allen	Scientist: Director of UF/IFAS Nature Coast Biological Station (NCBS)			
21. Erik Lovestrand	UF/IFAS/Florida Sea Grant/Franklin County Extension			
The names of CAB members attending the meeting are indicated in bold font.				
CAB members who participated virtually are indicated in red font and italicized.				
* Members whose designated alternates participated for them.				

PROJECT TEAM AND CAB FACILITATOR			
FLORIDA STATE UNIVERSITY			
Sandra Brooke	Marine Biologist		
Ross Ellington	Professor Emeritus of Biological Science		
Madelein Mahood	Outreach and Education		
Joel Trexler	FSUCML Director		
FACILITATED SOLUTIONS, LLC			
Jeff Blair Community Advisory Board Facilitator			
The names of Project Team members participating in the meeting are indicated in bold font.			
*Team members who participated virtually are indicated in red font and italicized.			

ALTERNATES FOR CAB MEMBERS		
Alternate CAB Member		
The names of CAB member's alternates participating in the meeting are indicated in bold font.		

MEMBERS OF THE PUBLIC		
1. Josh Breithaupt	Florida State University Coastal and Marine Lab (FSU)	
2. Fabio Caltabellota	Florida State University Coastal and Marine Lab (FSU)	
3. Ed Camp	University of Florida (UF)	
4. Kennedy Hanson	ANERR	
5. Melanie Humble	DEP	
6. Ophelie Jacobson	WUFT News	
7. Ken Jones	Riparian County Stakeholder Coalition	
8. Kellie Keys	FSU	
9. Steve Leitman	FSU	
10. Betsy Mansfield	Florida State University Coastal and Marine Lab (FSU)	
11. Tara Stewart Merrill	Florida State University Coastal and Marine Lab (FSU)	
12. Kent Smith	FWC	
13. Shag Willis	Citizen	
*The names of members of the public attending virtually are italicized.		

ATTACHMENT 3

1 FEBRUARY 2023 MEETING AGENDA

ABSI COMMUNITY ADVISORY BOARD MEETING OBJECTIVES

- ✓ To Approve Regular Procedural Topics (Meeting Agenda and Summary Report)
- ✓ To Review Updated Workplan and Meeting Schedule
- \checkmark To Receive Science and Data Collection, and Restoration Updates
- ✓ To Receive Reports from RFWG, Community Outreach, and CAB Successor Group
- ✓ To Review CAB Restoration and Management Plan Framework and ABSI Objectives and Process
- ✓ To Review Fisheries Model Scenario Simulation Results and Acceptability Rate Scenarios as Needed
- ✓ To Identify and Agree on the Next Suite of Scenarios, New Scenarios, and Combinations for Modeling
- ✓ To Identify Next Steps: Information, Presentations, Assignments, Agenda Items for Next Meeting

ABSI COMMUNITY ADVISORY BOARD AGENDA

All Agenda Times—Including Public Comment and Adjournment—Are Approximate and Subject to Change

1)	8:30am	WELCOME AND ROLL CALL
2)	8:35	SOCIAL SCIENCE SURVEY
3)	8:40	AGENDA REVIEW AND MEETING OBJECTIVES
4)	8:45	APPROVAL OF FACILITATOR'S CAB SUMMARY REPORT (November 30, 2022)
5)	8:50	REVIEW OF UPDATED PROJECT MEETING SCHEDULE AND WORKPLAN
6)	9:00	SCIENCE AND DATA COLLECTION, AND RESTORATION UPDATES
		ABSI Science and Data Collection Update. Sandra Brooke, FSUCML (25)
		• FWC (NFWF Phase 2) Restoration Project Update. Devin Resko, FWC (10)
7)	9:35	WORKING GROUP AND SUBCOMMITTEE UPDATES
		Successor Group Subcommittee Update. Anita Grove and Shannon Hartsfield (Pending)
		Restoration Funding Working Group Update. Joel Trexler (5)
		• Community Outreach Subcommittee Update and Discussion on ABSI Outreach and Messaging Strategies.
		Chad Hanson (30)
8)	9:50	REVIEW OF CAB'S RESTORATION AND MANAGEMENT PLAN FRAMEWORK AND ABSI
		OBJECTIVES & STRATEGIES EVALUATION WORKSHEET PROCESS REVIEW AND CLARIFY
		CAB COMMENT ON BAY CLOSURE IN PLAN FRAMEWORK
~10:15am BREAD		BREAK
9)	10:30	OVERVIEW, DISCUSSION, AND ACCEPTABILITY RATING OF THE RESULTS OF SCENARIOS
		(STRATEGIES) SIMULATED (MODELED) WITH THE FISHERIES MODEL
~12:00pm I		LUNCH — ON CAMPUS
	12:30	OVERVIEW, DISCUSSION, AND ACCEPTABILITY RATING OF THE RESULTS OF SCENARIOS
		SIMULATED WITH THE FISHERIES MODEL — CONTINUED
10)	1:10	IDENTIFICATION OF SCENARIOS FOR NEXT ROUND OF MODELING INCLUDING:
		COMBINATIONS OF SCENARIOS, NEW SCENARIOS, AND ANY SCENARIOS TO BE
		REMOVED FROM FURTHER EVALUATION
11)	~2:10pm	PUBLIC COMMENT — THREE MINUTES PER PERSON
12)	~2:25	ACTION ITEMS AND AGENDA ITEMS FOR NEXT MEETING (April 12, 2023)
		 Review of Action Items and Assignments from Meeting
		• Identify Agenda Items, Presentations, and Information Needs for Next Meeting
		Complete Meeting Evaluation
~2	2:30pm	ADJOURN

WORKPLAN, SCHEDULE, AND PROJECT FLOWCHART AND MAP

UPDATED AS OF THE 1 FEBRUARY 2023 CAB MEETING

PHASE I (2019) — STANDING UP AND ORGANIZATION OF THE ABSI CAB

May 2019 – December 2019 (Assessment Process, Questionnaire, and 2 CAB Meetings) — Status Complete

PHASE II (2020) — SCOPING OF ISSUES, IDENTIFICATION OF

PERFORMANCE MEASURES AND STRATEGIES

Jan. 2020 – Dec. 2020 (7 CAB Meeting & 1 Oystermen's Workshop) – Status Complete

PHASE III (2021) — BUILDING CONSENSUS ON CAB RECOMMENDATIONS FOR THE ABS ECOSYSTEM-BASED ADAPTIVE MANAGEMENT AND RESTORATION PLAN

Adoption of Final Draft Management and Restoration Plan Framework for Phase IV and V Evaluation

Jan. 2021 – Nov. 2021 (7 CAB Meeting & 2 Oystermen's Workshops) — Status Complete

PHASE IV (2022) — EVALUATION OF DRAFT ADAPTIVE MANAGEMENT AND RESTORATION PLAN FRAMEWORK'S RESTORATION AND MANAGEMENT STRATEGIES, RESTORATION AND FUNDING PLANNING

Dec. 2021 – Dec. 2022 (6 CAB Meetings, 1 Oystermen's Workshops, and 1 Community Workshop) — Status Complete

PHASE V (2023) — EVALUATION AND FINALIZATION OF RECOMMENDATIONS FOR INCLUSION IN THE APALACHICOLA BAY SYSTEM ECOSYSTEM-BASED ADAPTIVE MANAGEMENT AND RESTORATION PLAN, RESTORATION AND FUNDING PLANNING

Jan. 2023 – Dec. 2023 (6 CAB Meetings, 3 Community Workshops) — Status Initiated

COMMUNITY ADVISORY BOARD (CAB). The CAB initiated Phase V in January of 2023 and is currently evaluating the best combination of strategies predicted to achieve restoration and management objectives for the Bay using decision support tools including predictive models coupled with available and emerging data, research, and stakeholder knowledge. The strategies are being evaluated with the overarching goal of restoring oyster reefs to a level that can sustainably provide needed ecosystem services for the System, and concurrently provide for a sustainable and economically viable level of commercial oyster harvesting.

During the course of the project the CAB will vet their recommendations with restoration and management agencies to gauge support and feasibility for implementation. The CAB will evaluate the priority and efficacy of strategies and associated actions and identify conceptual and general in scope restoration and management approaches for inclusion in the Apalachicola Bay System Ecosystem-Based Adaptive Management and Restoration Plan (Plan).

Phase V focuses on the evaluation and finalization of recommendations for inclusion in the Plan, and restoration projects and funding planning. The CAB will vote to approve their package of consensus recommendations during their 29 November 2023 meeting. *Status: Initiated*

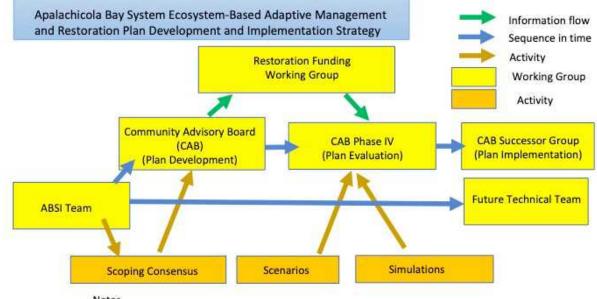
1. COMMUNITY OUTREACH SUBCOMMITTEE - PUBLIC ENGAGEMENT. The CAB working through the Community Outreach Subcommittee initiated a community feedback initiative by providing information and seeking community input on the Plan Framework. The CAB will vet the results of their prioritized strategies with the larger ABS community through multiple forums including questionnaires administered through a variety of methods including Facebook, online via the ABSI website, and direct mailings. In addition, community workshops will be conducted at appropriate times to provide the Community with information on ABSI and solicit community input. *Status: Initiated*

- 2. **RESTORATION FUNDING WORKING GROUP (RFWG).** Initiated in late 2021 the Restoration Funding Working Group's role is to seek resources and political, governmental, and organizational support for the CAB's priority recommendations. *Status: Initiated*
- 3. CAB SUCCESSOR GROUP. The CAB Successor Group will be ready to convene when the CAB completes their work on the Apalachicola Bay System Ecosystem-Based Adaptive Management and Restoration Plan. The Successor Group's role will be to organize a group of key stakeholders committed to working collaboratively for the long-term, once the CAB process is complete and to ensure that the Plan is implemented, monitored, and adaptively managed over time and has the support of the Community. The CAB Successor Group process will formally initiate January 2024. *Status: Conducting Organizational and Planning Meetings. Formal Convening Pending CAB Approval of Recommendations for Plan on 29 November 2023.*

ABS	SI CAB PHASE V MEET	TINGS SCHEDULE AND WORKPLAN — 2023
Meeting 1. ANERR 8:30am	Feb. 1, 2023 • Fisheries Model Simulation Results & Scenarios Refinements • Review of Plan Framework Strategies	Initiation of Phase V of ABSI. ABSI science and data collection and restoration project updates. Sub-committee reports and public engagement initiative update. Review of Plan Framework and Strategies Evaluation Worksheet process summary. Review and discussion of Fisheries Model simulation results for revised priority Habitat Restoration (Goal A) and Fisheries Management (Goal B) scenarios. Agreement on next suite of scenarios for model simulations. Public comment.
Meeting 2. ANERR 8:30am	 April 12, 2023 Fisheries Model Simulation Results & Scenarios Refinements Evaluation of Plan Framework Strategies 	ABSI science and data collection and restoration project updates. Sub-committee reports and public engagement initiative update. Evaluation of Plan Framework strategies using the Strategies Evaluation Worksheet Process. Review and discussion of Fisheries Model simulation results for CAB priority Habitat Restoration (Goal A) and Fisheries Management (Goal B) strategies. Agreement on next suite of strategies for model simulations. Public comment. Community Input on ABSI Restoration Experiments, FWC
Workshop 1	ANERR 6:00pm – 8:00pm	Restoration Project, and CAB's evaluation of Plan Framework Restoration and Management Strategies for the Plan.
Meeting 3. ANERR 8:30am	 May 31, 2023 Fisheries Model Simulation Results & Scenarios Refinements Evaluation of Plan Framework Strategies 	ABSI science and data collection and restoration project updates. Sub-committee reports and public engagement initiative update. Evaluation of Community Workshop input. Evaluation of Plan Framework strategies using the Strategies Evaluation Worksheet Process. Review and discussion of Fisheries Model simulation results for CAB priority Habitat Restoration (Goal A) and Fisheries Management (Goal B) strategies. Agreement on next suite of strategies for model simulations. Public comment.
Meeting 4. ANERR 8:30am	July 26, 2023 • Fisheries model simulation results & scenarios refinements	ABSI science and data collection and restoration project updates. Sub-committee reports and public engagement initiative update. Evaluation of Plan Framework strategies using the Strategies Evaluation Worksheet Process. Review

Community Workshop 2	 Evaluation of Plan Framework Strategies July 26, 2023 ANERR 6:00pm – 8:00pm 	 and discussion of Fisheries Model simulation results for CAB priority Habitat Restoration (Goal A) and Fisheries Management (Goal B) strategies. Agreement on next suite of strategies for model simulations. Public comment. Community Input on the CAB's recommendations for the Apalachicola Bay System Ecosystem-Based Adaptive Management and Restoration Plan.
Meeting 5. ANERR 8:30am	 Sept. 27, 2023 Fisheries Model Simulation Results & Scenarios Refinements Evaluation of Plan Framework Strategies 	ABSI science and data collection and restoration project updates. Sub-committee reports and public engagement initiative update. Evaluation of Community Workshop input. Evaluation of Plan Framework strategies using the Strategies Evaluation Worksheet Process. Review and discussion of Fisheries Model simulation results for CAB priority Habitat Restoration (Goal A) and Fisheries Management (Goal B) strategies. Agreement on next suite of strategies for model simulations. Public comment.
Community Workshop 3	October 24, 2023 ANERR 6:00pm – 8:00pm	Community Input on the CAB's recommendations for the Apalachicola Bay System Ecosystem-Based Adaptive Management and Restoration Plan.
Meeting 6. ANERR 8:30am	Nov. 29, 2023 • Adopt Final CAB Recommendations for ABS Plan	ABSI science and data collection and restoration project updates. Sub-committee reports and public engagement initiative update. Review and discussion of Community Workshop input. Finalize and adopt recommendations for strategies and actions (components) for inclusion in the Apalachicola Bay System Ecosystem-Based Adaptive Management and Restoration Plan (Plan) and submit to FSUCML. Public comment.

ABSI CAB PROCESS FLOWCHART AND PROJECT AREA MAP



Notes

1. Yellow boxes are groups of people. Blue arrows connecting yellow boxes indicate some or all of the people in one group may comprise the next group in time sequence



ABSI Project Area Map

ATTACHMENT 5 MEETING CHAT SUMMARY (ZOOM)

MEETING CHAT-1 FEBRUARY 2023

08:46:17 Georgia Ackerman I Apalachicola Riverkeeper: Good Morning all!

09:36:11 Ed Camp: Lone Cabbage Reef restored large rock with shell on top of it.

09:37:59 Becca Hatchell (FWC): West Bay, St. Andrew Bay as well.

10:12:16 Maddie Mahood: ANERR Tech is currently working on the internet issue!!

10:18:01 **Maddie Mahood:** Thanks for your patience everyone!! The zoom kept crashing on the ANERR laptop – we are going to try to reconfigure it at the break to avoid this from happening again.

10:36:23 Maddie Mahood: See everyone in 10! Thanks!

10:47:10 Maddie Mahood: Working on more internet issues again, folks! Thanks!

10:49:01 Maddie Mahood: ANERR – you are muted.

11:52:31 Georgia Ackerman I Apalachicola Riverkeeper: Aye

12:06:02 Maddie Mahood: See everyone around 12:30! ^(c) Thanks!

12:42:37 Maddie Mahood: Hi, we are getting ready to start again ©

12:50:07 Georgia Ackerman I Apalachicola Riverkeeper: You're loud and clear online.

12:50:48 Georgia Ackerman I Apalachicola Riverkeeper: Jeff hold that mic closer.

01:12:26 **Michael Allen:** Thanks Ed, this is a very insightful analysis. So the stakeholders and FWC would need to fully engage in an alternate management structure for the future (e.g., limited entry, active harvest mgmt, or the perpetual restoration option). Unless that process is taken in earnest, it looks like the likelihood of success here is very low. I think we should be up front about that and then see how willing they and the oystermen are in starting a different management structure.

02:27:17 **Maddie Mahood:** Thank you everyone for a great meeting! Please answer the following questions, feel free to DM me directly. Thanks!

- 1. What do you think worked well using the Zoom platform for the meeting?
- 2. How could the virtual format be improved for future meetings?

02:28:43 **Maddie Mahood**: And again, apologies for the wifi/audio connectivity problems :) This will hopefully not happen next time!

MEETING EVALUATION RESULTS (ZOOM POLL AND WRITTEN POLL RESULTS)

CAB Members used a 5-point polling scale where a 1 meant "Strongly Disagree" and a 5 meant "Strongly Agree." The evaluation summary reflects average rating scores and comments from respondents participating virtually.

There were 10 hard copy end of meeting survey questions (Evaluations) completed, and 3 completed virtually.

1.) The meeting objectives were clearly communicated at the beginning

Average Rating of 5	5. Strongly Agree	4. Agree	3. Neutral	2. Disagree	1. Strongly Disagree
4.6	9	3	1	0	0

2.) The meeting objectives were met.

Average Rating of 5	5. Strongly Agree	4. Agree	3. Neutral	2. Disagree	1. Strongly Disagree
4.2	5	6	1	1	0

3.) The presentations were effective and informative.

Average Rating of 5	5. Strongly Agree	4. Agree	3. Neutral	2. Disagree	1. Strongly Disagree
4.6	9	3	1	0	0

4.) The facilitation of the meeting was effective for achieving the stated objectives

Average Rating of 5	5. Strongly Agree	4. Agree	3. Neutral	2. Disagree	1. Strongly Disagree
4.3	6	6	0	1	0

5.) Follow-up actions were clearly summarized at the end of the meeting

				0	
Average Rating of 5	5. Strongly Agree	4. Agree	3. Neutral	2. Disagree	1. Strongly Disagree
4.0	6	6	2	0	0

6.) The facilitator accurately documented CAB Member input

Average Rating of 5	5. Strongly Agree	4. Agree	3. Neutral	2. Disagree	1. Strongly Disagree
4.4	7	5	0	1	0

7.) The meeting was the appropriate length of time.

Average Rating of 5	5. Strongly Agree	4. Agree	3. Neutral	2. Disagree	1. Strongly Disagree
4.0	4	7	0	2	0

8.) CAB Members had the opportunity to participate and be heard.

Average Rating of 5	5. Strongly Agree	4. Agree	3. Neutral	2. Disagree	1. Strongly Disagree
4.8	10	3	0	0	0

Open Ended Survey Questions – In Person Participants

- Better connection, dropping of meeting made it difficult but that is just part of technology.
- Kudos to Kennedy for handling the Zoom issues well.
- Zoom was a little tough today.

Open Ended Survey Questions – Virtual Responses

• None were offered.

ATTACHMENT 7 GLOSSARY OF MODELING TERMS

Assumptions – A description of the world that is accepted as true and is based on common knowledge or theory but not on proof.

Baseline - Model output that is used as a starting point for comparison with other sets of model output.

Calibration – Process of adjusting model inputs or parameters to obtain optimal agreement between model output and observations (data).

Circulation/Hydrodynamic Model – A mathematical tool that calculates water currents and water properties (like salinity and temperature).

Data Gap – The lack of data or information necessary for a given scientific study.

Data Set - A collection of observations or measurements.

Deviation – The difference between a data point and a model prediction.

Fishery-Dependent Data – Data collected directly on a fish or fishery from commercial or sport fishermen and seafood dealers.

Fishery-Independent Data – Characteristic of information (e.g. stock abundance, index) or an activity (e.g. research vessel survey) obtained or undertaken independently of the activity of the fishing sector.

Hypothesis – An idea that can be tested.

Larval Transport - The movement of oyster larvae in the water.

Model – A series of mathematical equations that describes, with great simplification, how a part of the world works.

Model Output/Model Result – A solution or a set of solutions obtained from a model simulation.

Performance Measure/Metric – A number used to indicate the effectiveness of an option for achieving a desired outcome.

Population Dynamics – The growth, death, and reproduction of individuals over time that leads to increase, decrease, persistence or extinction of a population.

Simulations – Repeated runs of a model using different inputs (e.g., different options).

Uncertainty – A way to represent how likely model predictions are given the inherent variability in the environment and the difference between model output and observations.

Validation – Comparison of model output with a set of independent data to determine the degree of confidence in model results.

Water Quality – Describes the physical, chemical, biological, and aesthetic characteristics of water and is a measure used to determine the suitability of water for a specific purpose (e.g., drinking, fishing, swimming, etc.).

GLOSSARY OF ABSI PROJECT TERMS AND DEFINITIONS

APALACHICOLA BAY SYSTEM: Consists of six bays: Apalachicola Bay, East Bay, St Vincent Sound, East and West St George Sound, and Alligator Harbor comprising a total of 155,374 acres (62,879 Ha). Confined to Franklin County and ending to the north at river mile zero (0). Important considerations include riverine and offshore inputs to the ABS as well as the reciprocal influences of outputs from the ABS to the Gulf of Mexico.

APALACHICOLA BAY SYSTEM, HEALTHY:

A healthy ecosystem is one in which material and energy flows are balanced through interacting biological, physical, and chemical processes (involving microorganisms, plants, animals, sunlight, air, water) that conserve diversity, support fully functional evolutionary and ecological processes, and sustain a range of ecological and ecosystem services.

ECOSYSTEM SERVICES: The direct and indirect contributions of ecosystems to human wellbeing. These services include **provisioning services** (food, raw materials, fresh water, medicinal resources), **regulating services** (climate, air quality, carbon sequestration & storage, moderation of extreme events, waste water treatment, erosion prevention & maintenance of soil fertility), **habitat or supporting services** (habitat for all species, maintenance of genetic diversity), and **cultural services** (recreation for mental & physical health; tourism; aesthetic appreciation and inspiration for culture, art & design; spiritual experience & sense of place).

ESTUARINE METRICS: These are variables that can be measured and used to assess the benefits or impacts of the different upstream management and climate scenarios that influence freshwater flow into the ABS.

GOAL: A goal is a statement of the project's purpose to move towards the vision expressed in fairly broad language.

GUIDING PRINCIPLES: The Community Advisory Board's Guiding Principles reflect the broad values and philosophy that guides the operation of the Community Advisory Board and the behavior of its members throughout its process and in all circumstances regardless of changes in its goals, strategies or membership.

OBJECTIVE: Objectives describe in concrete terms how to accomplish the goal to achieve the vision within a specific timeframe and with available resources. (E.g., by 2023, the State of Florida will have approved a stakeholder developed Ecosystem-Based Adaptive Management and Restoration Plan for the Apalachicola Bay System.")

OUTCOME: Outcomes describe the expected result at the end of the project period – what is hoped to be achieved when the goal is accomplished. (*E.g., an ecologically, and economically viable, healthy and sustainable Apalachicola Bay System oyster fishery and ecosystem*)

OYSTER RESOURCES: Sources of oysters that provide natural and cultural benefits to humans. These sources can come from the wild or from aquaculture (see ecosystem services). The responsible management of oyster resources for present-day needs and future generations requires integrated approaches that are place-based, embrace systems thinking, and incorporate the social, economic, and environmental considerations of sustainability.

PERFORMANCE MEASURES: The regular measurement of outcomes and results, which generates reliable data on the effectiveness, efficiency, and sustainability of programs and plans.

RESTORATION: The process of establishing or re-establishing a habitat that in time can come to closely resemble a natural condition in terms of structure and function.

STAKEHOLDERS: All interest groups whether public, private or non-governmental organizations who have an interest or concern in the success of a project and can affect or be affected by the outcome of any decision or activity of the project. For purposes of the Apalachicola Bay System Initiative, stakeholders include but are not limited to agriculture, silviculture, business, real estate, economic development, tourism, environmental, citizen groups, recreational fishing, commercial seafood industry, regional groups (i.e., ACF Stakeholders, and Riparian Counties), local government, state government, federal government, universities, and research interests.

STRATEGY: A method, action, plan of action, or policy that can be tested to determine whether it solves a problem and helps to achieve objectives and goals in the context of bringing about a desired future for the Apalachicola Bay System.

VISION: An idealized view of where or what the stakeholders would like the oyster resource and ecosystem to be in the future.

VISION THEMES: The related key topical issue area strategies that characterize the desirable future for the oyster resource and ecosystem. The Vision Themes establish a framework for goals and objectives. They are not ordered by priority.

PRIORITY OF RESTORATION (GOAL A) AND MANAGEMENT STRATEGIES (GOAL B) A COMPONENT OF THE ABSI PLAN FRAMEWORK — ADOPTED 16 NOVEMBER 2021

PRIORITY OF STRATEGIES BY GOAL AREA

All strategies within each Priority Level (1-3) are of equal priority and will be implemented based on a logical sequencing

IMPLEMENTED BASED ON A LOGICAL SEQUENCING				
Priority 1 Strategies (Prioritization rankir	ng from 10 to 8) = Important To Do Now			
GOAL A (RESTORATION)	GOAL B (MANAGEMENT)			
 Restore and create reef structures suitable for sustained oyster settlement that enhance ecosystem services in designated restoration areas. (#1 – 9.6) (#1 overall rank for Goal A – 9.6 mean/average) Use experimental evidence and habitat suitability analyses to determine the most suitable substrate (e.g., limestone, granite, spat-on-shell, artificial structures) for restoring, enhancing, and/or developing new reef structures that will increase productivity in the Apalachicola Bay oyster ecosystem. (#2 - 8.7) Determine area (acres or km²) of oyster reefs that currently support live oysters as well as the area needed to ensure sufficient spat production that will support sustainability of oyster reefs and sustainability of a wild oyster fishery throughout the ABS. (#3 - 8.6) 	 Evaluate a suite of management approaches that in combination achieve the goal of maintaining a sustainable wild oyster fishery as measured in relation to relevant performance metrics for determining success. (#1 – 9.3) (#1 overall rank for Goal B – 9.3 mean/average) Recommend specific criteria and/or conditions, with related performance measures for the reopening of Apalachicola Bay to limited wild oyster harvesting. (#2 – 9.0) Conduct an oyster stock assessment for the ABS with periodic updates. (#3 – 8.8) 			
 4.)[^] Develop criteria for restoring specific reefs or reef systems damaged by environmental conditions or natural disasters. (#4 – 8.2) 5.)[^] Identify monitoring needs for assessing the health of oyster populations (including disease), and detecting changes in environmental conditions and habitat quality 	 4.) Manage the commercial oyster industry and recreational oyster fishing to provide for sustainable spat production and the recovery of oyster populations. (#4 – 8.75) 5.) Work with FWC Law Enforcement to develop enforcement strategies and appropriate penalties sufficient to deter harvest or sale of undersized oysters as 			
(for oysters and other reef-associated species) over time. $(#4 - 8.2)$	well as violations that harm wild or leased oyster reefs and other natural resources, and that will support restoration efforts in the ABS. ($\#5 - 8.6$)			
[^] Priority #4 and #5 above received the same ranking.	6.) Evaluate the development of a policy that would require setting sustainable harvest goals and placing limitations on or a complete closure to harvesting based on the results of data (e.g., stock assessment) collected and evaluated under a comprehensive monitoring program designed to sustainably manage the resource. $(\#6 - 8.5)$			
	7.) Restore and create reef structures suitable in size, location, and substrate type for healthy and sustainable oyster settlement and production, and harvesting. (#7 $-$ 8.3)			
Priority 2 Strategies (Prioritization ranking from	m 7 to 5) = Important But Less Time Sensitive			
GOAL A	GOAL B			

6.) Develop ecosystem models that forecast future	8.) Recommend policies and actions that retain and
environmental conditions and oyster population status.	recycle shell for habitat replenishment in the ABS. (#8 -
environmental conditions and oyster population status. (#6 – 7.2) 7.) Assess existing ecosystem services metrics used for other oyster studies and develop a list of ABSI specific metrics to assess change over time. (#7 – 6.7)	recycle shell for habitat replenishment in the ABS. (#8 – 7.7) 9.) Use decision-support tools to develop a system of potential closed areas that are well defined in terms of size, location, and longevity and include rotational and seasonal harvest areas, as well as long-term closed areas in strategic locations to provide habitat for year-round protection for brood stock and enhanced spawning opportunities. (#9 – 7.6) 10.) Use ecological quantitative modeling and other decision support tools to evaluate strategies and actions, and define performance criteria for an oyster population that can sustain a pre-determined level of wild oyster harvest, with a stipulated number of harvesters (limited entry), and protocols to ensure sustainability. (#10 – 7.5) 11.) Work with FDACS to ensure that oyster aquaculture practices and locations in the Bay are compatible with the goals and strategies for restoration and management of the ecosystem and are compatible with a wild fisheries and the important cultural role of a working waterfront and seafood industry. (#11 – 6.8) 12.) Investigate oyster shell and oyster relay programs to move both cultch and live oysters to more favorable habitat (relay programs are recommended to only be used for restoration experiments). (#12 – 5.9) 13)* Assess the effectiveness of an oyster repletion program for maintaining a sustainable wild oyster harvest in Apalachicola Bay. Specific areas would receive regular cultching and/or deployment of hatchery spat-on-shell
	and would be subject to the same fishery management regulations as non-supplemented areas.
	* This Strategy was not ranked.
Priority 3 Strategies (Prioritization ranking	from 4 to 1) = As Time and Resources Allow
GOAL A	GOAL B
8.) Seagrass and other SAV, and wetland and riparian habitat should be restored concurrently on appropriate substrate/bottom to work synergistically with oyster habitat restoration to enhance restoration of the ABS. $(\#8 - 4.73)$	
Strategies Approved for E	valuation But Not Ranked
GOAL A	GOAL B
	Assess the effectiveness of a shell repletion program (put-and-take) fishery for maintaining a sustainable wild oyster harvest in Apalachicola Bay. Specific areas would receive regular cultching and/or deployment of hatchery spat-on-shell and would be subject to the same fishery management regulations as non-supplemented areas.

STAKEHOLDER RESOURCES IN SUPPORT OF ABSI

STAKEHOLDER RESOURCES AVAILABLE AND COLLABORATION INITIATIVES IN SUPPORT OF ABSI — UPDATED 16 NOVEMBER 2021

ORGANIZATION	RESOURCES AVAILABLE AND COLLABORATION INITIATIVES		
Riparian County Stakeholder Coalition (RCSC)	 Staff assistance (Ken Jones, coordinator and engineer). Request funds from the 6 RCSC counties for funding specific stipulated projects. Established working stakeholder relationships including working with the Apalachicola-Chattahoochee-Flint Stakeholders (ACFS) group on a Sustainable Water Management Plan for the equitable distribution of water to the Basin. Collaborating with the ABSI on water flow metrics development in the Basin. Working with stakeholders including Tri-Rivers Commission on 		
Florida Fish and Wildlife Conservation Commission (FWC)	 Noting whit stateholders including Th lavers commission on navigation issues for the tri-rivers region (ACF). Implementing Bay oyster restoration project funded by NFWF. Potential funding for future smaller restoration projects. Restoration design and monitoring assistance. Collaborating with the ABSI on water flow metrics development in the Basin. Science, data, and research support. 		
City of Apalachicola	 Committed to serving on the ABSI CAB for at least 4 more years to help guide the development of the Bay Management Plan. Help with convening the CAB Successor Group that will help oversee the implementation of the Bay Management Plan. Agree to uphold current local regulations that help ensure Apalachicola Bay is free of pollution and allows commercial fishermen to use city boat ramps to access the water. 		
Apalachicola Riverkeeper	 Nimble and can move fast to take action as needed. Assist with public outreach initiatives including meeting with and educating stakeholders on issues. Provide field trips to take stakeholders and decision-makers to see locations and issues in the field. Social media support and communications. Assist with collaborative initiatives such as working and coordinating with existing partners including Apalachicola-Chattahoochee-Flint Stakeholders (ACFS) and the Riparian County Stakeholder Coalition (RCSC). Working on watershed restoration initiatives including the current Apalachicola River Slough Restoration project that also includes collaborating with ANERR and other stakeholders. Share science and data with stakeholders. 		
Florida Department of Agriculture and Consumer Services (FDACS)	• Assist with collaboration and communication between stakeholders. Staff assistance.		

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	Field office and laboratory support.
	• Provide data and research including water quality sampling data and
	monitoring.
The Pew Charitable Trusts	• Working on various management plans across the Region.
	• Working with National Estuarine Research Reserves (NERR) across the Country
	• Resources including staffing, funding, research, and data.
	• Committed to funding the facilitation of ABSI for initial part of Phase IV.
	• Committed to the development of a broader state-wide oyster management plan.
	• Committed to staying involved in the development and implementation of the ABS Plan.
	• Staff to assist with communication, analysis of data and issues, social media and blogs.
	• Committed to working and communicating with other stakeholders including The Nature Conservancy (TNC).
	• Pew has an extensive network of stakeholder partners and a national presence.
	• Assist with funding for projects and in identifying other funding sources.
	• Funding of economic assistance initiatives such as purchasing farm- raised oysters for restoration projects.
Water Street Seafood	Operational oyster processing house.
	• Water-side facilities and dock to assist with the project.
	• Can provide oyster shells at market price or donate on a limited basis. Have experienced staff that could assist.
Apalachicola National Estuarine	Research and monitoring support.
Research Reserve (ANERR)	• Education, outreach, and training support.
	Education to local schools.
	• Opportunities working with the Conservation Corps of the
	Forgotten Coast.
	Aquaculture education grants.
	Relationships and working with agencies.
	 Working with partner agencies to receive NOAA funding.
	 Mapping support from existing coastal mapping program, and that could be potentially developed into a single state-wide GIS layer.
	courd be potentially developed into a single state-wide G15 layer.

ABSI STRATEGIES — LEADS, PARTNERS, AND RESOURCES TABLE

STRATEGIES AND ACTIONS WITH PROPOSED LEADS, PARTNERS, AND RESOURCES

The following table is for illustrative purposes, and discussion and completion of this table is planned for Phase V of the CAB process.

GOAL A: ECOLOGICAL/RESTORATION	LEAD/PARTNERS	RESOURCES
PRIORITY 1 STRATEGIES/ACTIONS		
Strategy 1.) Restore and create reef structures suitable for sustained oyster settlement that enhance ecosystem services in designated restoration areas.	Lead: FWC/FWRI Partners: FSU, UF, local Gov., FDOT, NGOs, coastal property owners, CAB Successor Group	Student help from universities (FSU/UF)
Action 1-A.): Design and implement projects to achieve multiple ecosystem service targets (e.g., commercial and recreational fishing, shoreline protection).	Same as above and oystermen	Same as above
GOAL B: SUSTAINABLE MANAGEMENT	LEAD/PARTNERS	RESOURCES
PRIORITY 1 STRATEGIES/ACTIONS		
Strategy 1.) Evaluate a suite of management approaches that in combination achieve the goal of maintaining a sustainable wild oyster fishery as measured in relation to relevant performance metrics for determining success.	Lead: FSU/UF Partners: FWC, stakeholders	Student help from universities (FSU/UF)
GOAL C: MANAGEMENT & RESTORATION PLAN	LEAD/PARTNERS	RESOURCES
PRIORITY 1 STRATEGIES / ACTIONS		
Strategy 1.) The ABSI Team and the CAB will continue to have an open and transparent process for the development of the Plan with many opportunities for stakeholder engagement and input in a variety of forums (e.g., workshops, online, public/ government meetings) for generating awareness and support while incorporating any changes the CAB deems appropriate and necessary to fulfill the goals and objectives.	Lead: FSU Partners: CAB, CAB sub- committee, other stakeholders	Initiated
GOAL D: ENGAGED STAKEHOLDER COMMUNITY PRIORITY 1 STRATEGIES/ACTIONS	LEAD/PARTNERS	RESOURCES
Strategy 1.) Develop a Community Advisory Board (CAB) for the ABS Initiative that provides critical information and perspective to the ABSI leadership and whose members recognize the importance of their role as ambassadors for the initiative.	Lead: CAB Community Outreach Subcommittee Partners: FSU, CAB, CAB Successor Group, ABS stakeholders	Initiated
GOAL E: THRIVING ECONOMY	LEAD/PARTNERS	RESOURCES
PRIORITY 1 STRATEGIES/ACTIONS		
Strategy 1.) Engage commercial fishermen in the restoration of the bay and encourage future participation in restoration such as monitoring, shell recycling, shelling, and relaying.	Lead: CAB Successor Group Partners: Stakeholder groups, Chamber of Commerce, local government	TBD

ATTACHMENT 12 ABSI Overarching Message Initial Ideas

ABSI OVERARCHING MESSAGE INITIAL IDEAS

Initial ideas for an overarching message that would resonate with the ABS Community and solicit action toward implementation of the Plan.

At the 19 October 2021 meeting CAB was asked to report their ideas for crafting an overarching message with aspirational goals that would resonate with the ABS Community toward fostering support and action toward implementation of the Plan. A rallying call to energize people around implementation of the ABSI Plan. Following are the preliminary comments:

- Keep the message simple and clear: "restoring the Apalachicola Bay oyster fishery." Need to focus message on restoring the oyster fishery with all of the economic benefits and cultural components. Oysters are the lifeblood of Franklin County. "Restore the Bay." Franklin County is known for oysters.
- Money was given to restore the fishery, so it is important to emphasize the central feature of oyster restoration in the effort.
- "Bringing back Apalachicola Bay oysters."
- Broaden focus to include other species such as shrimp and reef fish. Highlight the connection of the abundance of seafood to the health of the Bay. Include the importance of the health of the Bay to recreational activities.
- Broaden the message to make it less oyster-centric. Need to take in (engage) people outside of the Bay.
- Message should resonate with all communities.
- "A healthy Bay = abundant oysters and a thriving community." Broaden the message out.
- "Take care of Bay and it will take care of us." The health of the Bay is good for all of use. Message should convey why it is important to restore the health of the Bay.
- Communicate the habitat and ecosystem services component of the role of oysters and the role in having thriving fisheries and economy.
- Oysters critical to the local Community; the message should not be "diluted" by inclusion of other species and elements.
- Need several messages for different audiences targeted to them.
- The local vs. outside target audiences issue complicates the discussion. Need more discussion.
- This issue needs additional discussion between stakeholders.