# APALACHICOLA BAY SYSTEM INITIATIVE (ABSI) ABSI Community Advisory Board (CAB)

# MEETING VII SUMMARY REPORT

SEPTEMBER 9, 2020 VIRTUAL ZOOM MEETING

Unanimously Adopted without Changes at the October 15, 2020 CAB Meeting





FACILITATED AND SUMMARIZED BY ROBERT JONES AND JEFF BLAIR



#### APALACHICOLA BAY SYSTEM INITIATIVE (ABSI) **ABSI COMMUNITY ADVISORY BOARD (CAB) MEETING VII SUMMARY REPORT** SEPTEMBER 9, 2020

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## APALACHICOLA BAY SYSTEM INITIATIVE (ABSI) ABSI COMMUNITY ADVISORY BOARD (CAB) ZOOM MEETING VII EXECUTIVE SUMMARY September 9, 2020

Jeff Blair, FSU FCRC Consensus Center and part of the FSU Facilitation Team, welcomed the members to the 7<sup>th</sup> meeting of the Apalachicola Bay System Initiative's Community Advisory Board. He introduced the online virtual meeting guidelines and his partner member of the ABSI Facilitation Team, Bob Jones, and the FSU ABSI Team members, Felicia Coleman and Sandra Brooke. Members of the Community Advisory Board in attendance (Appendix 1) introduced themselves and the facilitators reviewed the agenda (Appendix 2) with the members which they approved. Members also approved the Facilitator Summary for the May 22, 2020 CAB Meeting V (Appendix 3) without changes. The CAB reviewed and updated the Project Meeting Schedule and Work plan (Appendix 4). The CAB agreed to add virtual meetings in October and December 2020.

The CAB heard four presentations on the role of the CAB, the Outreach and Engagement Subcommittee Report; the Apalachicola Bay Wild Oyster Harvesting Closure FWC Briefing; and a modeling update.

Felicia Coleman, FSU reviewed the ABSI mission which is "to gain insight into the root causes of decline of the Bay's ecosystem & the deterioration of oyster reefs; to develop restoration & management plans for the oyster reefs & the Bay's health." In terms of roles, she reviewed the role of the CAB in terms of a representative stakeholder board, the ABSI Team and the facilitators. Felicia also reviewed potential short and long-term economic impacts in Franklin County for the ABSI project.

Following CAB discussions at the July 2020 ABSI meeting, a subcommittee of interested CAB members and the ABSI Team met to discuss and identify outreach and community engagement strategies. The Subcommittee CAB members include: Georgia Ackerman, Anita Grove and Chad Hanson, and the ABSI Team members, Sandra Brooke, Felicia Coleman, Maddie Mahood. They suggested emphasizing that ABSI meetings, actions and plans provide opportunities for engagement, review and input. Several initiatives were identified including: producing a newsletter to be released after every CAB meeting; developing short (30 minute) seminars about ABSI as part of the regular FSUCML lecture series; developing criteria and for a recycling program as a business, and outreach and online education activities in partnerships with businesses (e,g, Weatherstem).

Jim Estes and Mike Norberg with FWC, provided an update on the rule proceeding. At the July 2020 Commission meeting, staff provided a presentation that briefly outlined oyster ecology and management in Florida; the history of Apalachicola and the Apalachicola Bay (Bay) oyster fishery; the status of the oyster population and fishery in the Bay; an update on a recently funded, large-scale restoration project (\$20 million commitment from the National Fish and Wildlife Foundation's Gulf Environmental Benefits Fund) to promote the recovery of oysters in the Bay; and a proposal to temporarily suspend all wild oyster harvest from the Bay in order to support restoration efforts and recovery of the Bay's oyster population. FWC Staff recommended "the Commission approve the proposed draft rules to support restoration by conserving existing oyster shell and adult oysters in the Bay. Specifically, staff recommended suspending all harvest of wild oysters from the Bay and prohibiting on-the-water possession of wild oyster harvesting equipment through Dec. 31, 2025. Staff

also recommended "the Commission proactively implement these conservation measures by Executive Order, effective Aug. 1, 2020." The FWC will meet next on October 7, 2020 to take action on the proposed rules and recommendations. The ABSI Team agreed to try to reschedule the October 7 CAB meeting. The FWC offered to clarify that they approached the CAB to review the concept at its March 2020 meeting. In response to a question on reopening, FWC said that based on the science regarding recovery, it may open up sooner than 5 years, and that FWC's goal is to reopen as soon as possible guided by the science.

Ed Camp noted he had invited CAB members to a modeling webinar on the evening of September 8 and it was attended by over 10 CAB members. He offered to continue the webinars in the coming months. The CAB discussed: research and data supporting the model; the ACF stakeholder modeling; modeling existing bars and substrates; addressing sustaining 2<sup>nd</sup> year oysters; address spat limited system by showing the eggs and recruitment in the system; using a habitat suitability analysis for best sites for cultch; testing data sets with watermen; effects of reef height on survival; address changes in the system and substrate and impacts on the food webs in the Bay; and the connection between the FWC and ABSI projects

The CAB has gone through an iterative process to develop its "Vision of Success" themes, starting with the September 2019 CAB Questionnaire responses. The language for vision themes, goals were reviewed and finalized, subject to future refinements, by the CAB at the January 8, 2020. The CAB discussed the goal framework and agreed to a reorganization along the following lines:

## SECTION I: CAB DRAFT ABSI STRATEGIES

Goal A: A Healthy and Productive Bay Ecosystem
Goal B: Sustainable Management of Oyster Resources
Goal <u>C</u> <del>E</del>: Science-Informed Ecosystem-Based Management and Restoration Plan Supported by
Apalachicola Bay System Stakeholders
SECTION II: STRATEGIES TO BE REFERRED TO OTHER PROGRAMS OR ENTITIES
Goal <u>D</u> <del>C</del>: A Thriving Economy Connected to a Restored Apalachicola Bay System
Goal <u>E</u> <del>D</del>: An Engaged Stakeholder Community and Informed Public
SECTION III: STRATEGIES RATED AS NOT ACHIEVING CONSENSUS
SECTION IV: PERFORMANCE MEASURES

Performance measures are the decision-support tools forecast results that CAB members will use for weighing the potential outcomes of different strategies.

SECTION V: TERMS AND DEFINITIONS AND PROJECT BOUNDARY

## SECTION I. COMMUNITY ADVISORY GROUP DRAFT ABSI STRATEGIES

The following objectives and strategies were reviewed an tentatively agreed to through the course of the meeting

## GOAL A. A HEALTHY AND PRODUCTIVE BAY ECOSYSTEM OBJECTIVES

The facilitator reviewed proposed ABSI Project Team revisions to objectives that combined a number of previous objectives to create a revised list of 5 objectives that were clarified, refined and agreed through the CAB discussion.

A1) To use observations, monitoring, experiments and modeling conducted through ABSI and related efforts to create decision support tools that can inform how disease, predation, human activities and future climate scenarios will affect the ABS ecosystem.

A2) To help establish a comprehensive monitoring plan to evaluate the health of the ABS oyster resource and its measurable ecosystem services with clearly defined performance measures and strong coordination among the various entities conducting research in the Bay.

A3) To use available and new research and decision support tools\* to identify viable strategies for restoration and management of the oyster habitat and the function of the ABS ecosystem.

A4) To define measurable ecosystem services that can be used to determine the level of change in ecological health (e.g., abundance and condition indices for oyster reef and population health) and societal benefit from Apalachicola Bay System restoration efforts with target and threshold levels identified.

A5) To enhance stakeholder and public interest in and understanding of the science conducted to support restoration efforts designed to improve the health of oyster resources and the overall health of the Bay ecosystem; and to encourage their participation in the development of the management and restoration plans for the Bay.

## **Goal A Preliminary Draft Strategies**

The facilitator reviewed proposed ABSI Project Team revisions to strategy language and combined a number of previous strategies to create a revised list of 6 strategies that were clarified, refined and agreed through the CAB discussion.

- 1. Increase productivity of the Apalachicola Bay oyster ecosystem by restoring, enhancing, and/or developing new reef structures (some of which would be maintained as non-harvest protection areas) based on experimental evidence for the most suitable substrate (e.g., granite, spat-on-shell, artificial structures) and on habitat suitability analyses using the best available scientific information coupled with the knowledge and experience of managers and stakeholders.
- 2. Develop criteria for sustaining specific reefs or reef systems damaged by environmental conditions or natural disasters that includes (1) degree of damage and potential for recovery; (2) approach for mitigating damage (e.g., physical repair, spat supplements, or some combination of both); (3) periodicity of spat addition (e.g., annually or longer); (4) specific timeline for continuing the approach (e.g., 3 years or longer). This approach is not intended to create a put-and-take fishery.
- 3. Determine area (acres or km<sup>2</sup>) of healthy oyster reefs that currently exists as well as the area needed to ensure sufficient spat production that will support sustainability of oyster reefs and sustainability of a limited entry fishery throughout the ABS.
- 4. Identify monitoring needs for assessing the health of oyster populations (including disease), and detecting changes in environmental conditions and habitat quality (for oysters and other reef-associated species) over time to understand the root causes of oyster decline.
- 5. Develop ecosystem models that forecast future environmental conditions and oyster population status. These should include the effects of climate change, such as increasing sea level and ocean acidification, salinity gradients, water temperatures, storm intensity and rainfall events, and the availability of freshwater.
- 6. Form a sub-committee within the CAB that can spearhead an outreach and community engagement effort intended to inform and educate stakeholders and the public about the research, restoration plan, and management plan developing through ABSI and focusing on a healthy ABS ecosystem. The intended audience includes Apalachicola, Franklin County, and state government,

local city, county, and state government officials, businesses and organizations, and citizens of every age, and other interested stakeholder groups.

## GOAL B. SUSTAINABLE MANAGEMENT OF OYSTER RESOURCES OBJECTIVES

The facilitator reviewed proposed ABSI Project Team revisions to objectives that combined a number previous objectives to create a revised list of 3 objectives that were clarified, refined and agreed through the CAB discussion.

B1) To develop through a transparent and inclusive process a science-based ABS oyster recovery and adaptive management plan for both commercial and recreational industries that includes: broad stakeholder and community support; a long-term, comprehensive monitoring plan that will be carried out by state agencies and their contractors; a regulatory framework that allows for rapid modifications when needed to address changing environmental conditions; and enforceable regulations that contain penalties sufficient to deter violations and harm to the resource. It is imperative that this plan be constructed with the direct involvement of entities within the State of Florida (e.g., FWC, FDACS, State Legislature) in cooperation with other relevant agencies to enhance the likelihood of its implementation.

B2) To investigate the feasibility of developing shell recycling programs that can return a significant portion of harvested oyster shell to the ABS to restore substrate for recruitment of spat and to enhance oyster population growth.

B3) To make recommendations to FDACS for oyster aquaculture best management practices that allow for the unimpeded recovery of oyster reefs, the oyster fishery, and the ecological and societal health of the ABS ecosystem while providing economic opportunities to the aquaculture industry.

## GOAL B. RECOMMENDATION

The facilitator noted that the ABSI updated the recommendation to conform with the FWC process.

**Closing the Apalachicola Bay to Wild Oyster Harvest.** At the March 11, 2020 ABSI CAB meeting, the CAB voted unanimously to recommend that the FWC immediately close Apalachicola Bay to all wild harvest of oysters (commercial and recreational). This recommendation was reviewed and accepted by FWC and the Final Rule will be addressed at the October 2020 Commission meeting. The closure to recreational and commercial harvest went into effect on August 1, 2020. 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. The CAB agreed that in subsequent meetings, it would make science-based recommendations for the criteria and performance metrics that should be met before reopening the Bay to wild oyster harvest. Under consideration are the following strategies related to closing the wild oyster fishery.

## GOAL B. PRELIMINARY DRAFT STRATEGIES

The facilitator reviewed proposed ABSI Project Team revisions to strategy language and combined a number of previous strategies to create a revised list of 7 strategies that were clarified, refined and agreed through the CAB discussion.

- 1. Recommend specific criteria and/or conditions identified with related performance measures for the reopening of Apalachicola Bay to limited wild oyster harvesting.
- 2. Incorporate scientifically derived and coordinated long-term monitoring guidelines and metrics for assessing water quality, oyster abundance, and demographics that will be implemented by FWC

and regularly reviewed by the CAB or successor group to maintain healthy and sustainable oyster and other resources.

- 3. Use the best available scientific data and decision-support tools to develop a system of 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.
- 4. Supplement shelling of oyster reefs through a recycling program combined with State legislation, that provides staff, funding strategies, and incentives for involving local watermen, restaurants, aquaculture operations, and private citizens in an effort to increase the viability of the oyster resource.
- 5. Define performance criteria (e.g. shell budget that will maintain sufficient habitat) 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.
- <u>6.</u> 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 harvest fishery and the important cultural role of a working waterfront and seafood industry.
- <u>7.</u> Propose to FWC and FDACS enforcement strategies and appropriate penalties sufficient to deter harvest or sale of undersized oysters as well as violations that harm wild or leased oyster reefs and other natural resources, and that will support restoration efforts in the ABS.

## GOAL C. A FULLY FUNDED AND SCIENCE-INFORMED ECOSYSTEM-BASED MANAGEMENT AND RESTORATION PLAN SUPPORTED BY APALACHICOLA BAY SYSTEM STAKEHOLDERS

## GOAL C OBJECTIVES

The facilitator reviewed the Project Team proposals for the two revised objectives for Goal C, and suggested all of the other previous objectives listed below are already incorporated either above, or in the objectives of Goals A and B.

C1) To establish a fully funded permanent, representative stakeholder process to monitor the long-term implementation of the ABS Management and Restoration Plan.

C2) To support efforts to identify funding sources and define mechanisms for full implementation of the ABS Management and Restoration Plan.

## GOAL C PRELIMINARY DRAFT STRATEGIES

The facilitator reviewed proposed ABSI Project Team revisions to strategy language and combined a number of previous strategies to create a revised list of 7 strategies that were clarified, refined and agreed through the CAB discussion.

## CAB Proposed Strategies During the ABSI Process:

1. The ABSI Team and the CAB will continue to have an open and transparent process for the development of the ABS Management and Restoration 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.

CAB Proposed Strategies Subsequent to the ABSI Process:

- 2. After the Plan is completed, the CAB should transition to a nonprofit 501c3 Task Force (with membership composition similar to the ABSI CAB) that is recognized by the state as a partner in overseeing the Bay Management Plan. The Task Force will explore regulatory processes and will engage with and be accountable to decision-makers and the public for the actions laid out in the management plan and the implementation thereof. It also can seek the necessary funding it needs to build the capacity of the organization, to ensure its longevity, and to hire a Director.
- 3. The Task Force should encourage FWC and other state programs as appropriate to adopt ABSI's scientifically-derived coordinated long-term monitoring guidelines and metrics for assessing water quality, oyster abundance, and demographics and to regularly review and update these guidelines and metrics to maintain a healthy and sustainable oyster harvest and ecosystem with input from the Task Force, and local, state and federal government agencies, private sector, NGOs and project partners.
- <u>4.</u> The Task Force should encourage agencies to prioritize CAB recommendations for investing more funding in the management and restoration of oyster resources.

## SECTION II. STRATEGIES OUTSIDE THE SPECIFIC SCOPE OF ABSI AND TO BE REFERRED TO OTHER PROGRAMS OR ENTITIES

These strategies will be included as recommendations in an appendix, and the CAB should identify a responsible entity to refer the recommendations to for their development, implementation, monitoring, and maintenance.

## GOAL D. A THRIVING ECONOMY CONNECTED TO A RESTORED APALACHICOLA BAY SYSTEM-- PRELIMINARY DRAFT STRATEGIES

The facilitator reviewed with the CAB the ABSI Project Team proposed combination of a number of strategies to create a revised list of 9 strategies. The facilitator reviewed and offered explanations for the ABSI Team edits and proposed deletions.

- 1. Work with existing partners (e.g., the Chamber of Commerce, Apalachee Regional Planning Council, and city and county staff) to monitor and report on the economic benefits of a restored ABS, including key economic indicators relevant to the commercial oyster fishery and associated industries in the region. This can be displayed as a dashboard that includes key economic indicators over time based on restoration efforts in the Apalachicola Bay System (ABS).
- 2. Recommend monitoring<sup>1</sup> and enforcement programs continue with appropriate metrics to measure output from and impact of harvest on oyster reefs.
- 3. Support planning tied to economic indicators that consider future conditions (climate, SLR, reduced river flow) and their effects on the ABS.
- 4. Work with oystermen and other community stakeholders to promote post-recovery Apalachicola oysters.
- 5. Develop complementary industries in wild oyster harvest and oyster aquaculture that provide new economic opportunities by building a network of experts that can help Franklin County citizens build successful programs through business training, identifying sources of funding for equipment, and developing products that will enhance and diversify local industries.

<sup>&</sup>lt;sup>1</sup> Ongoing fisheries-dependent and fisheries-independent monitoring by FWRI, coupled with ABSI complementary data based on request of watermen. Both entities are sharing data with one another which is critical for ABSI model development. (We remain unable to get FWRI data.)

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- 6. Develop new markets for selling oysters to areas within and outside of Florida in part by investing in location (Apalachicola Bay) branding.
- 7. Review land development regulations to provide flexibility while supporting and enhancing efforts to maintain and revitalize working waterfronts in Apalachicola and Eastpoint to ensure preservation of Franklin County's cultural heritage and a viable seafood industry.
- 8. Coordinate with the local business community and governing bodies (i.e., city and county commissions) to ensure that growth management plans, land use and development regulations meet strong standards that are compatible with and minimize the environmental impact of industry and business activities within the ABS and are conducive to a healthy ecosystem.
- 9. Engage commercial fishermen in the restoration of the bay and encourage future participation in restoration such as shell recycling, shelling, and relaying.

# GOAL E. AN ENGAGED STAKEHOLDER COMMUNITY AND INFORMED PUBLIC--PRELIMINARY DRAFT STRATEGIES

The facilitator reviewed with the CAB the ABSI Project Team proposed combination of a number of strategies to create a revised list of 9 strategies. The facilitator reviewed and offered explanations for the ABSI Team edits and proposed deletions.

- 1) Build community support and stewardship by educating stakeholders on the importance of maintaining healthy oyster reefs and by engaging them in the Bay restoration <u>through programs</u> such as shell recycling, shelling, and relaying initiatives.
- 2) Develop a "Bay Stewards" program to honor, reward, and provide incentives for businesses and individuals that demonstrate their stewardship of the resource.
- 3) Develop surveys <u>or other tools</u> that can be used to measure and track changes in stakeholder and public understanding of the issues important to the health and restoration of the Bay.
- 4) Provide training and financial support for new workforce entrants (particularly young entrants) interested in being employed in existing industries as well as and developing industries in new fisheries, aquaculture, and restoration science.
- 5) Engage the general public (students, residents and tourists) in learning about the history and the ecological and economic importance of the Apalachicola Bay region, including the natural resources, and lumber, cotton shipping, and fishing industries.
- 6) Build Gulf-wide mechanism for communities interested in the restoration and revitalization of fisheries to exchange best practices and lessons learned.
- 7) The Task Force should coordinate and communicate with appropriate agencies (e.g., USACE, USFWS, NWFWM, FWC), pertinent out of state user groups, and other initiatives working on both geographically-constrained and basin-wide water-flow alterations and management strategies that contribute positively to the health of the ABS based on the best available science and data.

No members of the public wished to provide comments to the ABSI Community Advisory Board The facilitators then reviewed the agenda for the 8<sup>th</sup> meeting scheduled for October 15, 2020, November 12, 2020 and December 9, 2020. The plan is to continue to identify and refine CAB strategies and actions for the goals and objectives. Members suggested possible briefing presentations updating the FWC closure of Apalachicola Bay to wild oyster harvesting, a presentation on restoration by an ABSI Science Advisory Board member, and an update on the watershed model *The members completed an online Zoom meeting evaluation and adjourned at 12:30 pm*.

## APALACHICOLA BAY SYSTEM INITIATIVE (ABSI) ABSI COMMUNITY ADVISORY BOARD (CAB) ZOOM MEETING VII SUMMARY September 9, 2020

What follows is a more detailed summary with additional data from the presentations

## I. INTRODUCTIONS AND AGENDA AND SUMMARY REVIEW

## A. INTRODUCTION

Jeff Blair, FSU FCRC Consensus Center and part of the FSU Facilitation Team, welcomed the members to the 7<sup>th</sup> meeting of the Apalachicola Bay System Initiative's Community Advisory Board. He introduced the online virtual meeting guidelines and his partner member of the ABSI Facilitation Team, Bob Jones, and the FSU ABSI Team members, Felicia Coleman and Sandra Brooke. Members of the Community Advisory Board introduced themselves (*See Appendix #1*) and the facilitators reviewed the agenda with the members which they approved (*See Appendix #2*). They also approved the Facilitator Summary for the July 2020 Meeting V without changes. The facilitator reviewed the project meeting schedule (*See Appendix #3*).

## II. ABSI PROJECT BRIEFINGS AND UPDATES

The CAB heard three presentations: The CAB's role and project scope; Apalachicola Bay Wild Oyster Harvesting Closure Briefing; and an Outreach and Community Engagement Subcommittee Report.

## A. Clarification of CAB Role and ABSI Project Scope

Felicia Coleman, FSU reviewed the ABSI mission which is "to gain insight into the root causes of decline of the Bay's ecosystem & the deterioration of oyster reefs; to develop restoration & management plans for the oyster reefs & the Bay's health." In terms of roles

- **Community Advisory Board Members** Augment Team knowledge & skills w/ their unique perspectives & skills; Make recommendations & provides key info; Play a critical role in public relations for ABSI; and Respect different perspective, work collaboratively to build consensus & seek to understand.
- Leadership Ultimate responsibility for ABSI's success & the choice of approaches to obtain it.
- **Facilitators**–Assist CAB in building consensus on actionable recommendations; and Provide procedural guidance; accurately & objectively capture key discussion points during CAB meetings.

The Leadership, guided by the facilitator's assessment report, appointed the Community Advisory Board with a broad range of stakeholder perspectives (e.g. Franklin County and City government, natural resource managers, citizens and NGOs, fisheries & aquaculture, local businesses, tourism and economic development, and researchers) and the strongest possible representative board to build consensus on recommendations for developing restoration and management plans for the system. The CAB's work was informed be Stakeholder Assessment Report (Sept 2019) FCRC CAB Questionnaire (Oct 2019) which included stakeholders' perspectives on the range of key challenges & issues facing ABS and CAB and desired long term & short-term outcomes. These two reports were used to develop the basis for the CAB's "vision of success" themes, goals, objectives and strategies. Felicia noted the current reorganization of draft ABSI goals, objectives, and strategies that will be reviewed in this meeting will include:

- Goal A: A Healthy and Productive Bay Ecosystem
- Goal B: Sustainable Management of Oyster Resources
- Goal C: Science-Informed Ecosystem-Based Management & Restoration Plan Supported by Apalachicola Bay System Stakeholders

Strategies to be referred to other programs or entities are proposed to be included in the following two goals

- Goal D: A Thriving Economy Connected to a Restored ABS
- Goal E: An Engaged Stakeholder Community and Informed Public

Felicia reviewed potential ABSI short and long-term economic impacts focused on: permanent & temporary jobs associated w/ FSUCML renovations/construction & science, possibility of leveraging substantial external research funding; positive economic outcomes from recovery of oyster reefs; research product transfer from ABSI to residents; through development of oyster recycling business (partnership with ANERR, Franklin County Promise), etc.

## CAB Comments

• Kim Wren, Joe Taylor and Anita Grove are working on an oyster recycling program out of the Reserve and Anita brought FSU/ABSI, the hatchery and Franklin's Promise under her role and job at the Reserve.

## B. CAB Outreach and Community Engagement Subcommittee Report

Felicia Coleman noted the following the July ABSI meeting a subcommittee of interested CAB members and the ABSI met to discuss outreach and community engagement strategies. She noted that all CAB members are asked to serve as community ambassadors to determine what each can do to inform people within their sphere of influence and to help ABSI connect positively to local communities, and to bridge the gap between ABSI (academia), the Franklin Co. community, & beyond

She noted that the ABSI proposal included strategies for community engagement, including: creating and convening the CAB in 2019; creating paid hatchery internships (w/ Franklin's Promise Coalition); developing a shell recycling program; public input workshops and public events showcasing ABSI; and public interface through social media & the FSUCML website.

The Subcommittee CAB members include: Georgia Ackerman, Anita Grove and Chad Hanson, and the ABSI Team members, Sandra Brooke, Felicia Coleman, Maddie Mahood.

The initiatives the Outreach Sub-Committee discussed were:

- Develop a newsletter that is produced and released after every CAB meeting (APPROVED)
- Develop short (30 minute) seminars about ABSI as part of the regular FSUCML lecture series (APPROVED)
- Approach Weatherstem (weatherstem.com) about producing online Outreach and Education activities on their website similar to ones FSUCML participated in on oysters
- Develop criteria for developing a recycling program as a business
- Provides links to articles on ABSI Website, including blogs by CAB members.
- Emphasize what ABSI meetings, actions and plans provide opportunities for engagement, review and input

CAB Comments

• Roger Mathis noted that in the community when people talk about the CAB, we are not held in high esteem. Appreciate the Subcommittee's efforts to get something out there to inform the community. He noted wasn't part of the CAB when that vote was taken in March and would have opposed the closing to harvest.

## C. Apalachicola Bay Wild Oyster Harvesting Closure Briefing

Mike Norberg and Jim Estes, FWC, provided an update on the rule proceeding. At the July 2020 Commission meeting, staff provided a presentation that briefly outlined oyster ecology and management in Florida; the history of Apalachicola and the Apalachicola Bay (Bay) oyster fishery; the status of the oyster population and fishery in the Bay; an update on a recently funded, large-scale restoration project (\$20 million commitment from the National Fish and Wildlife Foundation's Gulf Environmental Benefits Fund) to promote the recovery of oysters in the Bay; and a proposal to temporarily suspend all wild oyster harvest from the Bay in order to support restoration efforts and recovery of the Bay's oyster population.

FWC Staff recommended "the Commission approve the proposed draft rules to support restoration by conserving existing oyster shell and adult oysters in the Bay. Specifically, staff recommends suspending all harvest of wild oysters from the Bay and prohibiting on-the-water possession of wild oyster harvesting equipment through Dec. 31, 2025. "Staff also recommended "the Commission proactively implement these conservation measures by Executive Order, effective Aug. 1, 2020." The FWC will meet October 7, 2020 to take action on the proposed rules and recommendations.

FWC's website: <u>MvFWC.com/about/commission/commission-meetings/julv-2020/</u>

Florida Channel: <u>https://thefloridachannel.org/videos/7-22-20-florida-fish-wildlife-conservation-commission-part-1/</u> *Apalachicola oysters starts ~1:50:20* 

## CAB Comments and Questions

- We should consider changing the date for the October 7 ABSI CAB meting to allow members to attend both meetings. A: The FWC staff don't have any influence on when the topic will come up on the Commission's schedule. ABSI Team will look for an alternative date for the October CAB meeting.
- Done deal? A: Couldn't hurt. Commission thought well supported. Wouldn't heard.
- Has ABSI been tagged with the closing? Perception is reality and we should clarify FWC requested that the CAB consider closing and the CAB agreed unanimously with the recommendation to FWC. *A: FWC can clarify and help fix this- part of problem is it is a complicated move.*
- Is there any to open parts of the Bay up during the closure? A: Based on the science it may open up sooner than 5 years. FWC's goal is to reopen as soon as possible guided by the science.

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## D. Model Status Update

Ed Camp noted he had invited CAB members to a modeling webinar on September 8 and it was attended by over 10 CAB members. He offered to continue the webinars in the coming months.

## CAB Comments and Questions

- Will the model be informed by Andy Kane's research and data? A: Yes that research will inform the modeling as appropriate.
- Big subject in the webinar is the modeling that is being done for the ACF stakeholders.
- Will you model potential new bars or existing bars? A: We want a tool with predictability we can trust to determine the effects of putting a new bar in. Have to have model a representation of what is there now. Model represents the current state of Bay-fishing, mortality, and building a general stock assessment model, but not specific bars. We can build into the model different substrate types, making assumptions, to see what happens in the future.
- Will the model show when put material is put down will the 2<sup>nd</sup> year oysters are sustained? A: The model could show this but will not answer why.
- Are we in a spat limited system? A: Model could show if enough eggs are in the system.
- How does a habitat suitability analysis for best locations fit in the model? A: Model can handle the survival of young oysters. Habitat is important for surviving oysters. Recruiting oysters depend on habitat quality. At what thresholds are oysters surviving? We will mine historical data and supplement with empirical data. The model will not be super spatially explicit. We will have access to the work on the hydrodynamic models. We can make decisions about where and how much habitat there should be.
- Will you test data sets with watermen? A: Science combined with the experience with oystermen in the system for years/generations will be helpful.
- "Oysters settle and recruit" on fresh dead shell. Is the lower recruitment in subsequent seasons surprising? *A: Yes.*
- In the 2<sup>nd</sup> round of recruitment a critical mass of fresh dead shell is not there. Looking at effect of reef height/on survival. Threshold height that oysters can survive.
- New bars? If the system has changed, maybe the best places for oysters has changed. A: Data is being collected to support the models and to make them trustworthy
- Are the FWC project and the ABSI connected? A: ABSI is focused on learning what went wrong. We are collecting data on ecological questions and conducting experiments on height, mapping and shell, etc. FWC will execute where and how to take the restoration effort. FSU is committed to help bring in other entities to help with restoration and providing more funding.
- What comes from Apalachicola River determines whether oysters will grow. Old timers say to focus on the water for amount or quality of oysters. A. We want to understand how things have changed and repeat some of the 1990s research, but on a smaller scale. We will look at how the river influenced what was eaten in the Bay in terms of the food webs. In summary, we want to understand how things have changed and identify things we can change.

## III. ABSI COMMUNITY ADVISORY BOARD FRAMEWORK FOR REVIEW

The ABSI CAB "Vision of Success" themes were drawn from the September 2019 CAB Questionnaire responses and reviewed and rated by the Community Advisory Board at the October and December 2019 CAB meetings. The language for vision themes was reviewed and finalized by

the CAB at the January 2020 meeting. The five goal areas based on the vision themes included in the CAB framework include:

- A. A Healthy and Productive Bay Ecosystem
- B. Sustainable Management of Oyster Resources
- C. A Thriving Economy Connected to a Restored Apalachicola Bay System
- D. An Engaged Stakeholder Community and Informed Public
- E. An Ecosystem-Based Management and Restoration Plan that is Science-Based, Fully Funded and Supported by Apalachicola Bay System Stakeholders

The facilitator reviewed the overall organization that was revised by the ABSI Team following the July 2020 ABSI meeting as follows

## SECTION I: CAB DRAFT ABSI STRATEGIES

Goal A: A Healthy and Productive Bay Ecosystem

Goal B: Sustainable Management of Oyster Resources

Goal <u>C</u>  $\stackrel{}{=}$ : Science-Informed Ecosystem-Based Management and Restoration Plan Supported by Apalachicola Bay System Stakeholders

## SECTION II: STRATEGIES TO BE REFERRED TO OTHER PROGRAMS OR ENTITIES

Goal <u>D</u> C: A Thriving Economy Connected to a Restored Apalachicola Bay System

Goal <u>E</u> D: An Engaged Stakeholder Community and Informed Public

## SECTION III: STRATEGIES RATED AS NOT ACHIEVING CONSENSUS

## SECTION IV: PERFORMANCE MEASURES

Performance measures are the decision-support tools forecast results that CAB members will use for weighing the potential outcomes of different strategies.

## SECTION V: TERMS AND DEFINITIONS AND PROJECT BOUNDARY

The facilitator noted the Sections above will be reviewed and discussed at subsequent ABSI CAB meetings where they will be refined and could be combined with other categories or split into new categories as appropriate. He also noted the <u>underlined</u> strategies are being offered at this meeting for CAB discussion and consideration at this meeting by the ABSI Project Team (scientists and facilitators).

## IV. REVIEW OF OBJECTIVES AND STRATEGIES

## SECTION I COMMUNITY ADVISORY GROUP DRAFT ABSI STRATEGIES

## A. GOAL A. HEALTHY AND PRODUCTIVE BAY ECOSYSTEM

The Vision Theme, Goal and Outcomes for Goal A are included in Appendix #5. The text yellow highlights represent additions to the draft objectives and strategies suggested and agreed to by the CAB.

## GOAL A. OBJECTIVES

The facilitator noted that the following 5 Objectives (A1 - A5) are proposed by the Project Team to replace the previous A1 - A5.

A1) To use observations, monitoring, experiments and modeling conducted through ABSI and related efforts to create decision support tools that can inform how disease, predation, human activities and future climate scenarios will affect the ABS ecosystem.

[A new A1 includes the previous A1 and a combination of the previous A2, and A5]

A2) To help establish a comprehensive monitoring plan to evaluate the health of the ABS oyster resource and its measurable ecosystem services with clearly defined performance measures and strong coordination among the various entities conducting research in the Bay.

 $[A \mbox{ new A2 moved from Goal E and revised for Goal A]}$ 

A3) A5) To use available and new research and decision support tools\* to identify viable strategies for restoration and management of the oyster habitat and the function of the ABS ecosystem. \*See A1

CAB Comments

• Add to the objective "available and new research" and decision...

A4) To define measurable ecosystem services <u>that can be used to determine the level of and change</u> in ecological health (e.g., abundance and condition indices for oyster reef and population health) and <u>societal benefit</u> indicators derived from Apalachicola Bay System <u>restoration efforts</u> recovery, with target and threshold levels identified.

[The Project Team combined the previous A4 into an expanded and revised A4 above]

A5) To enhance stakeholder and public interest in and understanding of the science conducted to support restoration efforts designed to improve the health of oyster resources and the overall health of the Bay ecosystem; and to encourage their participation in the development of the management and restoration plans for the Bay.

[The Project Team proposes adding a new A5 to capture outreach to stakeholders]

## CAB Comments

• OK, Thumbs Up on the ABSI Team suggested changes to objectives and additional changes suggested by CAB members

## **Goal A Preliminary Draft Strategies**

The facilitator reviewed proposed ABSI Project Team revisions to strategy language and combined a number of strategies to create a revised list of 6 strategies as follows:

- Increase productivity of the Apalachicola Bay oyster ecosystem by restoring, enhancing, and/or developing new <u>subtidal and intertidal</u> reef structures (some of which would be maintained as nonharvest protection areas) based on experimental evidence for the most suitable substrate (e.g., granite, spat-on-shell, artificial structures) and on habitat suitability analyses using the best available scientific information coupled with the knowledge and experience of managers and stakeholders.
- 2. Develop criteria for sustaining specific reefs or reef systems damaged by environmental conditions or natural disasters that includes (1) degree of damage and potential for recovery; (2) approach for mitigating damage (e.g., physical repair, spat supplements, or some combination of both); (3) periodicity of spat addition (e.g., annually or longer); (4) specific timeline for continuing the approach (e.g., 3 years or longer). This approach is not intended to create a put-and-take fishery.

- 3. Determine area (acres or km<sup>2</sup>) of healthy oyster reefs <u>that currently exists as well as the area</u> needed to ensure sufficient spat production that will support sustainability of oyster reefs and sustainability of a limited entry fishery throughout the ABS.
- 4. Identify monitoring needs for assessing the health of oyster populations <u>(including disease)</u>, and detecting changes in environmental conditions and habitat quality (for oysters and other reef-associated species) over time <u>to understand the root causes of oyster decline</u>.
- 5. <u>Develop</u> ecosystem models that forecast future environmental conditions and oyster population status. These should include the effects of climate change, such as increasing sea level and ocean acidification, altered freshwater and salinity gradients, water temperatures, storm intensity and rainfall events, and the availability of freshwater.
- 6. Form a sub-committee within the CAB that can spearhead an outreach and community engagement effort intended to inform and educate stakeholders and the public about the research, restoration plan, and management plan developing through ABSI and focusing on a healthy ABS ecosystem. The intended audience includes Apalachicola, Franklin County, and state government, local city, county, and state government officials, businesses and organizations, and citizens of every age, and other interested stakeholder groups.

## CAB Comments

- Clarify that city and county government officials are among the intended audiences.
- Add at the end "and other interested stakeholders"
- OK Thumbs up for CAB changes.

The facilitator reviewed and offer explanations for the ABSI Team edits and proposed deletions.

CAB Comments

• OK, Thumbs Up on the ABSI Team suggested changes to the strategies and additional changes suggested by CAB members

## B. GOAL B- SUSTAINABLE MANAGEMENT OF OYSTER RESOURCES-- OBJECTIVES

The Vision Theme, Goal and Outcomes for Goal B are included in Appendix #

The facilitators reviewed with the CAB the Project Team proposals for new language for the objectives.

B1) To develop through a transparent and inclusive process a science-based ABS oyster recovery and adaptive management plan for both commercial and recreational industries that includes: broad stakeholder and community support; a long-term, comprehensive monitoring plan that will be carried out by state agencies and their contractors; a regulatory framework that allows for rapid modifications when needed to address changing environmental conditions; and enforceable regulations that contain penalties sufficient to deter violations and harm to the resource. It is imperative that this plan be constructed with the direct involvement of entities within the State of Florida (e.g., FWC, FDACS, State Legislature) in cooperation with other relevant agencies to enhance the likelihood of its implementation.

The Project Team proposes a new B1 to incorporate the key points of and replace the previous B3, and B4]

<u>B2</u> To investigate the feasibility of developing shell recycling programs that can return a significant portion of the harvested oyster shell back to the ABS to restore substrate for recruitment of spat and to enhance oyster population growth.

The Project Team proposes the new B2 above to replace the shell recycling components of the previous B1 so that it is a separate objective.

<u>B3 B5</u>) To make recommendations to FDACS for oyster aquaculture best management practices that allow for the unimpeded recovery of oysters reefs, the oyster fishery, and the ecological and societal health of the ABS ecosystem while providing economic opportunities to the aquaculture industry.

The facilitator reviewed and offer explanations for the ABSI Team edits and proposed deletions.

- The Project Team proposes to replace the shell recycling components of the previous B1 into a separate objective B2
- The Project Team proposes replace the previous B1 with a new B2
- The Project Team proposes a new B1 to incorporate the key points of and replace the previous B3, and B4.

## CAB Comments

• OK, Thumbs Up on the ABSI Team suggested changes to the Goal B objectives.

## GOAL B RECOMMENDATION

The facilitator noted that the ABSI updated the recommendation to conform with the FWC process.

**Closing the Apalachicola Bay to Wild Oyster Harvest.** At the March 11, 2020 ABSI CAB meeting, the CAB voted unanimously to recommend that the FWC immediately close Apalachicola Bay to all wild harvest of oysters (commercial and recreational). <u>This recommendation was reviewed and accepted by FWC and the Final Rule will be addressed at the October 2020 Commission meeting.</u> <u>The closure to recreational and commercial harvest went into effect on August 1, 2020.</u> The proposed oyster fishery closed area closure in Apalachicola Bay will have 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.<sup>2</sup>. The CAB agreed that in subsequent meetings, <u>they it would make science-based recommendations for the criteria and performance metrics that should be met before reopening the Bay to wild oyster harvest. Under consideration are the following strategies related to closing the wild oyster fishery.</u>

## CAB Comments

- OK, Thumbs Up on the ABSI Team suggested changes to the Goal B objectives.
- Roger Mathis again noted he joined the CAB following the March 2020 meeting, and he would have voted against the draft recommendation.

<sup>&</sup>lt;sup>2</sup> FWC's Rule 68B-27.013, F.A.C. (as modified in the proposed draft rule language presented at the July 22, 2020, commission hearing): "Apalachicola Bay" or "Bay" means all waters within St. George Sound, East Bay in Franklin County, Apalachicola Bay, St. Vincent Sound in Franklin County, and Indian Lagoon in Gulf County, including canals, channels, rivers and creeks.

## **GOAL B PRELIMINARY DRAFT STRATEGIES**

The facilitator reviewed with the CAB the proposed ABSI Project Team revised language which combined a number of strategies to create a revised list of 7 strategies. The facilitator reviewed and offered explanations for the ABSI Team edits and proposed deletions.

- 1. <u>Recommend</u> will require a well-defined and transparent rationale for why the closure is needed (prepared by the ABSI science team in consultation with the ABSI CAB for dissemination to the community), and with specific criteria and/or conditions identified with related performance measures recommended required for the reopening of Apalachicola Bay to limited wild oyster harvesting.
- 2. <u>The ABSI Plan will</u> Incorporate scientifically-derived and coordinated long-term monitoring guidelines and metrics for assessing water quality, oyster abundance, and demographics that will be implemented by FWC and regularly reviewed by the CAB or successor group to maintain healthy and sustainable oyster and other resources.

The Project Team proposes to move this strategy from Goal  $\underline{C} \neq$  and add it here to provide a strategy for Objective B1.

CAB Comments

- Need to reference the proposed group that might not be the CAB. Add "or successor group."
- 3. Use the best available scientific data and decision-support tools to develop a system of 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.
- 4. Supplement shelling of oyster reefs bars, either through a recycling program combined with or State legislation, that provides staff, funding strategies, and incentives for involving local watermen, restaurants, aquaculture operations, and private citizens in an effort to increase the viability of the oyster resource.

CAB Comments

- Waterstreet Seafood, Levins, and Barber have piles of shell (~10 acres).
- Louisiana strategy as an example.
- Storage needed. Stockpile shell now.
- Re-establish dealer program to but back shell.
- FWC implementation. Could be a stand-alone business.
- 5. Define performance criteria (e.g. shell budget that will maintain sufficient habitat) 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.
- <u>6.</u> 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 harvest fishery and the important cultural role of a working waterfront and seafood industry.

7. Propose to FWC and FDACS enforcement strategies <u>and appropriate penalties sufficient to deter</u> <u>harvest or sale of undersized oysters as well as violations that harm wild or leased oyster reefs and</u> <u>other natural resources, and</u> that will support restoration efforts in the ABS.

## CAB Comments

• OK, Thumbs Up on the ABSI Team suggested changes to the Goal B objectives.

## C. GOAL C- A FULLY FUNDED AND SCIENCE-INFORMED ECOSYSTEM-BASED MANAGEMENT AND RESTORATION PLAN SUPPORTED BY APALACHICOLA BAY SYSTEM STAKEHOLDERS--OBJECTIVES

## The Vision Theme, Goal and Outcomes for Goal C are included in Appendix #5

The facilitator reviewed the Project Team proposals for the two revised objectives for Goal C, and suggested all of the other previous objectives listed below are already incorporated either above, or in the objectives of Goals A and B.

<u>C1</u>) E5) To establish a fully funded permanent, representative stakeholder process to monitor the long-term implementation of the ABS Management and Restoration Plan.

 $\underline{C2}$ )  $\underline{E4}$ ) To support efforts to identify funding sources and define mechanisms for full implementation of the ABS Management and Restoration Plan.

## CAB Comments

• OK, Thumbs Up on the ABSI Team suggested changes to the objectives.

## GOAL C PRELIMINARY DRAFT STRATEGIES

The facilitator reviewed with ABSI Project Team combined a number of strategies to create a revised list of 4 strategies. The facilitator reviewed and offered explanations for the ABSI Team edits and proposed deletions.

## CAB Proposed Strategies During the ABSI Process:

1. The ABSI Team and the CAB will continue to have an open and transparent process for the development of the ABS Management and Restoration 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.

## CAB Proposed Strategies Subsequent to the ABSI Process:

- 2. After the Plan is completed, the CAB should transition to a nonprofit 501c3 Task Force (with membership composition similar to the ABSI CAB) that is recognized by the state as a partner in overseeing the Bay Management Plan. The Task Force will explore regulatory processes and will engage with and be accountable to decision-makers and the public for the actions laid out in the management plan and the implementation thereof. It also can seek the necessary funding it needs to build the capacity of the organization, to ensure its longevity, and to hire a Director.
- 3. <u>The Task Force should encourage FWC and other state programs as appropriate</u> to adopt ABSI's scientifically-derived coordinated long-term monitoring guidelines and metrics for assessing water

quality, oyster abundance, and demographics and to regularly review and update these guidelines and metrics to maintain a healthy and sustainable oyster harvest and ecosystem with input from the Task Force, and local, state and federal government agencies, private sector, NGOs and project partners.

## CAB Comments

- Reference other state programs, add, "and other state programs as appropriate"
- Add "and local, state and federal government agencies, private sector, NGOs and project partners.
- 4. The Task Force should encourage agencies to prioritize CAB recommendations for investing more funding in the management and restoration of oyster resources.

## CAB Comments

- Consider recommending a Task Force committee be focused on pursuing investments and funding for the plan's implementation.
- OK, Thumbs Up on the ABSI Team suggested changes to the Goal C strategies and additional changes suggested by CAB members

## SECTION II STRATEGIES OUTSIDE THE SPECIFIC SCOPE OF ABSI AND TO BE REFERRED TO OTHER PROGRAMS OR ENTITIES

The strategies that are not a part of the Ecological (Goal A), Sustainable Management of Oyster Resources (Goal B), and The Management and Restoration Plan (Goal <u>C</u> <del>E</del>) components of the Apalachicola Bay System Ecosystem-Based Management and Restoration Plan including: training, marketing, education, communication, economic development, funding, and the formation of a Task Force are being be moved to this category. They will be included as recommendations in an appendix, and the CAB should identify a responsible entity to refer the recommendations to for their development, implementation, monitoring, and maintenance.

## GOAL D. C THRIVING ECONOMY CONNECTED TO A RESTORED APALACHICOLA BAY SYSTEM

The Vision Theme, Goal and Outcomes, and Objectives for Goal D are included in Appendix #

## GOAL D. PRELIMINARY DRAFT STRATEGIES

The facilitator reviewed with the CAB the ABSI Project Team proposed combination of a number of strategies to create a revised list of 9 strategies. The facilitator reviewed and offered explanations for the ABSI Team edits and proposed deletions.

 Work with existing partners to monitor and report on the economic benefits to a restored ABS including (e.g., the Chamber of Commerce, Apalachee Regional Planning Council, and city and county staff) to monitor and report on the economic benefits of a restored ABS, including key economic indicators relevant to the commercial oyster fishery and associated industries in the region. This can be displayed as a dashboard that includes key economic indicators over time based on restoration efforts in the Apalachicola Bay System (ABS).

- 2. <u>Recommend</u> Ensure monitoring<sup>3</sup> and enforcement programs continue with appropriate metrics to measure output from and impact of harvest <u>on from</u> oyster <u>reefs</u> bars.
- 3. Support planning tied to economic indicators that consider future conditions (climate, SLR, reduced river flow) and their effects on the ABS.
- 4. Work with oystermen and other community stakeholders to promote post-recovery Apalachicola oysters.
- 5. Develop complementary industries in wild oyster harvest and oyster aquaculture that provide new economic opportunities by building a network of experts that can help Franklin County citizens build successful programs through business training, identifying sources of funding for equipment, and developing products that will enhance and diversify local industries.
- 6. <u>Develop new markets for selling oysters to areas within and outside of Florida in part by investing in location (Apalachicola Bay) branding.</u>
- 7. <u>Review land development regulations to provide flexibility while supporting and enhancing efforts</u> to maintain and revitalize working waterfronts in Apalachicola and Eastpoint to ensure preservation of Franklin County's cultural heritage and a viable seafood industry.
- 8. <u>Coordinate with the local business community and governing bodies (i.e., city and county commissions) to ensure that growth management plans, land use and development regulations meet strong standards that are compatible with and minimize the environmental impact of industry and business activities within the ABS and are conducive to a healthy ecosystem.</u>
- Engage commercial fishermen in the restoration of the bay and encourage future participation in restoration such as shell recycling, shelling, and relaying. [The Project Team proposes to move this strategy from Goal E to Goal D]

## GOAL <u>E</u> $\oplus$ An Engaged Stakeholder Community and Informed Public--Objectives

The Vision Theme, Goal and Outcomes for Goal E are included in Appendix #5

## **GOAL E OBJECTIVES**

E1) To expand coordinated outreach and education efforts originally initiated through ABSI to increase public awareness of and support for a healthy and well-managed ABS ecosystem; and to ensure that businesses, industries, non-profits, and local governments are supportive and included in these efforts.

[The Project Team proposes to combine the 2 bulleted objectives above into a new E1]

<u>E2</u>) <del>D3)</del> To measure public and stakeholder improve and enhance public</del> understanding of the issues important to <u>the</u> health and restoration of the Bay <u>through surveys</u> as measured by public and stakeholder surveys and socio-economic indicators.

<sup>&</sup>lt;sup>3</sup> Ongoing fisheries-dependent and fisheries-independent monitoring by FWRI, coupled with ABSI complementary data based on request of watermen. Both entities are sharing data with one another which is critical for ABSI model development. (We remain unable to get FWRI data.)

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## GOAL E PRELIMINARY DRAFT STRATEGIES

The facilitator reviewed with the CAB the ABSI Project Team proposed combination of a number of strategies to create a revised list of 6 strategies. The facilitator reviewed and offered explanations for the ABSI Team edits and proposed deletions.

1. Build community support and stewardship by educating stakeholders on the importance of maintaining healthy oyster reefs and by engaging them in the Bay restoration through programs such as shell recycling, shelling, and relaying initiatives.

CAB Comments

- Add "support and" to the opening
- Add "programs such as" shell...
- 2. Develop a "Bay Stewards" program to honor, reward, and provide incentives for businesses and individuals that demonstrate their stewardship of the resource.
- <u>3.</u> Develop surveys <u>or other tools</u> that can be used to measure and track changes in stakeholder and public understanding of the issues important to the health and restoration of the Bay.

CAB Comments

- Add "or other tools." Survey are only one tool.
- <u>4.</u> Provide training and financial support for new workforce entrants (particularly young entrants) interested in being employed in existing industries as well as and developing industries in new fisheries, aquaculture, and restoration science.
- 5. Engage the general public (students, residents and tourists) in learning about the history and the ecological and economic importance of the Apalachicola Bay region, including the natural resources, and lumber, cotton shipping, and fishing industries.
- <u>6.</u> Build Gulf-wide mechanism for communities interested in the restoration and revitalization of fisheries to exchange best practices and lessons learned.
- 7. The Task Force should coordinate and communicate with appropriate agencies (e.g., USACE, USFWS, NWFWMD, FWC), pertinent out of state user groups, and other initiatives working on both geographically-constrained and basin-wide water-flow alterations and management strategies that focus on solutions including reasonable changes in freshwater delivery in low water conditions through manipulation of the water control plan and actions by other user groups that fairly manage the resource and contribute positively to the health of the ABS based on the best available science and data. [Taylor] [Project Team]

## SECTION III STRATEGIES RATED AS NOT ACHIEVING CONSENSUS

None to date.

## SECTION IV PERFORMANCE MEASURES

The facilitator reviewed with the CAB Draft Performance Measures to Evaluate Strategies/Options for each goal area. Performance measures are the decision-support tools forecast results that CAB members will use for weighing the potential outcomes of different strategies.

## A.) A HEALTHY AND PRODUCTIVE OYSTER REEF ECOSYSTEM

## Related Draft Performance Measures to Evaluate Strategies/Options

- A. <u>Development of a forecasting model for salinity, temperature, nutrients (including nitrogen) and</u> organic carbon dynamics under different climate and management scenarios.
- B. Reef height (feet or meters), where "reef" means live and dead shell, as well as other restoration material.
- C. <u>Reef habitat measured in terms of height (feet or meters) and area (acres or km<sup>2</sup>), where "reef"</u> is defined as structural material suitable for oyster recruitment (e.g., live shell, dead shell, and/or restoration materials).
- D. Reef area, reef defined as above (acres or km<sup>2</sup>)
- E. Density of live oysters, new boxes and dead shell  $(\#/m^2)$
- F. Density of live oysters, including density of recruits and spawning adults  $(\#/m^2)$ .
- G. Oyster population demographics (size/frequency)
- H. Biomass of live oysters (calculated from demographic data)
- I. Amount of brood stock (abundance and biomass of mature adults)
- J. Spat settlement patterns (spatial and temporal)
- K. Oyster recruitment patterns, where recruitment is defined as survival beyond a densitydependent mortality stage (~1.4"/35mm).
- L. Incidence of oyster diseases, parasites and predators
- M. <u>Assess and manage for sustainable natural mortality rates (e.g., due to predation, parasites, disease).</u>
- N. Diversity and abundance/biomass of reef-associated species
- O. <u>Community diversity and population abundance/biomass of reef-associated taxa, including</u> (commercially or recreationally) fished populations like blue crabs, stone crabs, mullet, redfish, etc.
- P. Soft sediment community structure and associated fisheries species.
- Q. Levels of pollutants (PCB, Heavy metals etc.) in water, sediment and animal tissue
- R. Sedimentation rates
- S. Salinity regimes across the ABSI region under different climate and management scenarios.
- T. Organic carbon dynamics (food availability) under different climate and management scenarios.
- U. Water filtration rates (volume/day) and days to filter estuary volume
- V. Water clarity (visibility) changes over time
- W. Area of seagrass in the ABS region
- X. Nutrient dynamics of the ABS region
- Y. Relative proportion of nitrogen removed compared to nitrogen input
- Z. <u>Assess changes in coastal vulnerability indices (e.g., indices of shoreline erosion, which are related to changes in saltmarsh, mangrove, seagrass habitat, but also vulnerability to storms).</u>
- AA. Assess changes in shoreline erosion protection
- BB. Assess changes in salt marsh, mangrove, and/or seagrass indices.
- CC. Number of sloughs connected to the Apalachicola River (depending on flow levels).
- DD. Timing and extent of floodplain inundation.

CAB Comments

• Add "timing and extent of floodplain inundation"

## **B.) SUSTAINABLE MANAGEMENT OF OYSTER RESOURCES**

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## Related Draft Performance Measures to Evaluate Strategies/Options

- A. Total harvest in bags the oyster population can support
- B. Sustainable allowable catch in annual total biomass (kg) removed, under different management regimes.
- C. How close to a complete fishery (fraction harvested of allowable catch)
- D. Harvest (annual total biomass) by fishery type (recreational/commercial)
- E. <u>Develop models for predicting sustainable allowable catch in annual total biomass (kg) removed,</u> <u>under different management regimes. This would include calculating harvest rate and</u> <u>accounting for shell budgets.</u>
- F. Number of full-time harvesters that the fishery can support <u>under most environmental</u> <u>conditions.</u> [need to define full-time]
- G. Harvest (annual total biomass) by size category, location and gear type
- H. Timing of harvest during the fishing season [need to define]
- I. Catch per unit effort (catch per trip)
- J. Number of poaching violations and amount of captured illegal harvest (including illegal sale).
- K. Amount of harvest from rotation areas
- L. Fraction of total oyster population that is being harvested
- M. How many oysters can be harvested without a net loss of oysters.
- N. Creation of a harvest management plan that is ecologically sustainable and acceptable to stakeholders and includes plans for actions in case of unpredictable but inevitable environmental disturbances.
- O. An updated oyster fishery and aquaculture enforcement plan that is approved by fishers, farmers, distributors (fish houses), FWC Law Enforcement, and local judicial system.
- P. Number of large oysters (><u>3</u>") by location (different reefs, fished vs. closed areas, intertidal vs. subtidal).
- Q. Number of sanctuaries [moved from Goal A]
- R. Number of closed areas [moved from Goal A]
- S. Inclusion of oyster areas closed to fishing.

## C.) THE ECOSYSTEM-BASED MANAGEMENT AND RESTORATION PLAN

This is covered by the Objectives for Goal E. and the performance measures in Goals A - D that collectively make up the Apalachicola Bay System Management and Restoration Plan.

## D.) A THRIVING ECONOMY CONNECTED TO A RESTORED APALACHICOLA BAY SYSTEM

Related Draft Performance Measures to Evaluate Strategies/Options

- A. Value of harvest that meets an economic minimum for sustainability of watermen.
- B. Cost/value per bags
- C. Number of fishermen participating in the fishery
- D. Revenue per harvester (and perhaps its distribution)
- E. Travel time costs, and distance travelled
- F. Cost of management measures (e.g., restoration efforts)
- G. Revenue raised in fees/bag taxes
- H. Social benefits (value of ecosystem services)
- I. Value of harvest per day (bags per day)
- J. Performance metric for economic sustainability of the community
- K. Total economic investment versus economic benefit

- L. Socio-economic benefits Improved/enhanced recreational fishing on oyster reefs including restored reefs.
- M. Total market activity (revenue) associated with commercial sale of oysters (including aquaculture, wild harvest, and any partial-ownership methods that fall in between the two).
- N. <u>Total (amount or proportion) of jobs in Franklin County (should this include surrounding counties too?) associated with working waterfront (i.e., fishing, aquaculture, and tourism).</u>

#### E.) AN ENGAGED STAKEHOLDER COMMUNITY AND INFORMED PUBLIC

Related Draft Performance Measures to Evaluate Strategies/Options

- A. Creation of a harvest management plan that is ecologically sustainable and acceptable to stakeholders and includes an adaptive plan of actions to rapidly respond to unpredictable but inevitable environmental disturbances.
- B. An updated oyster fishery and aquaculture enforcement plan that is approved by fishers, farmers, distributors (fish houses), FWC Law Enforcement, and local judicial system.

## V. PUBLIC COMMENT AND NEXT STEPS

No members of the public wished to provide comments to the ABSI Community Advisory Board The facilitators then reviewed the agenda for the 8<sup>th</sup> meeting scheduled for October 15, 2020. The plan is to continue to identify and refine CAB strategies and actions for the goals and objectives. Members suggested possible briefing presentations updating the FWC closure of Apalachicola Bay to wild oyster harvesting, a presentation on restoration by an ABSI Science Advisory Board member, and an update on the watershed model

## APPENDICES Appendix #1 Meeting Participant List

**Bold=** Participating CAB Member and Team Member; *Italics = unable to attend* 

	ABSI COMMUNITY ADVISORY BOAH	RD MEMBERS			
NAME	AFFILIATION				
Agriculture/ACF Stakeholders/	Riparian Counties				
1. Chad Taylor	Riparian Counties Stakeholder Grou	p/ACF Stakeholders/Agric.			
Business/Real Estate/Econom	ic Development/Tourism				
2. Chuck Marks	Acentria Insurance				
3. Mike O'Connell	SGI Civic Club/SGI 2025 Vision				
4. John Solomon	Apalachicola Chamber of Commerce	e			
Environmental/Citizen	1				
5. Georgia Ackerman	Apalachicola Riverkeeper				
6. Lee Edmiston	6. Lee Edmiston Retired DEP/ANERR				
7. Chad Hanson	Pew Charitable Trusts				
Local Government					
8. Anita Grove Apalachicola City Commissioner					
9. Ricky Jones	Franklin County Commissioner				
Recreational Fishing	1				
10. Chip Bailey	10. Chip Bailey   Peregrine Charters				
11. Frank Gidus	CCA Florida				
Seafood Industry	1				
12. Shannon Hartsfield	Franklin County Seafood Workers A	Association			
13. Vance Millender	Millender & Sons Seafood				
14. Roger Mathis	Oysterman and R.D.'s Seafood				
15. Steve Rash	ash Water Street Seafood				
16. Denita Sassor   Outlaw Oyster Company, Aquaculture					
17. TJ Ward	Buddy Ward & Sons Seafood				
State Government	1				
18. Jim Estes	FWC Division of Marine Fisheries N	Ianagement			
19. Jenna Harper	ANERR/DEP				
20. Alex Reed	FDEP Office of Resilience & Coasta	al Protection			
21. Portia Sapp	FDACS Division of Aquaculture				
22. Paul Thurman	NWF Water Management District				
University/Researchers	1				
23. Tom Frazer	USF/DEP Governor's Science Advisor				
24. Erik Lovestrand	UF/IFAS/Florida Sea Grant Frankl	in County			
	FSU PROJECT TEAM AND FACILI	TATORS			
NAME	AFFILIATION				
Sandra Brooke	Marine Biologist				
Felicia Coleman	Velicia Coleman Marine Biologist				
Madelein Mahood     Public Outreach Specialist					
Jeff Blair Community Advisory Board Facilitator, FCRC Consensus Center FSU					
Robert Jones         Community Advisory Board Facilitator, FCRC Consensus Center FSU					
	FSU ABSI PARTNERS				
Ed Camp	University of Florida, Assistant P	rofessor			
Steve Leitman	Florida State University				
	MEMBERS OF THE PUBLIC				
Ken Jones, Rhumbline Consultan	ts	Anne Birch, The Nature Conservancy			
Mike Norberg, FWC Division of Marine Fisheries Management Ross Ellington, FSU					

APPENDIX #2
COMMUNITY ADVISORY BOARD AGENDA, SEPTEMBER 9, 2020

		APALACHICOLA DAY SYSTEM INITIATIVE (ABSI)				
		ABSI COMMUNITY ADVISORY BOARD (CAR)				
		ADSI COMMUNITI ADVISORI DOARD (CAD)				
		WEDNESDAV SEDTEMBED 9 2020				
		VIRTUAL MEETING VIA ZOOM WEBINAR				
	ABSI COMMUNITY ADVISORY BOARD MEETING VII ODIECTIVES					
V T		ar Drosedural Topics (Masting VII Agenda and Masting VI Support)				
	D Appiove Regul	t Briefings and Community Advisory Board Requested Presentations				
✓ Te	D Review Revised	1 Objectives and Strategies to Achieve Goals				
✓ Te	o Identify Neede	d Next Steps. Information and Presentations, and Agenda Items for Next Meeting				
	s racinity r (coac	ABSI COMMUNITY ADVISORY BOARD MEETING VII AGENDA—SEPTEMBER 9, 2020				
	All Agen	da Times—Including Public Comment and Adjournment—Are Approximate and Subject to Change				
1.)	8:30 AM	WELCOME, REVIEW OF VIRTUAL MEETING PARTICIPATION GUIDELINES, AND ROLL CALL				
2.)	8:35	AGENDA REVIEW AND MEETING OBJECTIVES				
3.)	8:40	APPROVAL OF FACILITATORS' SUMMARY REPORT (JULY 16, 2020)				
4.)	8:45	REVIEW OF PROJECT MEETING SCHEDULE AND WORKPLAN				
5.)	8:50	PROJECT BRIEFINGS AND REQUESTED PRESENTATIONS				
		Clarification of CAB Role and ABSI Project Scope—Felicia Coleman, FSU. (15 min.)				
		Apalachicola Bay Wild Oyster Harvesting Closure Briefing—Mike Norberg, FWC. (10 min.)				
		Model Status Update—Ed Camp, UF. (20 min.)				
		Outreach and Community Engagement Subcommittee Report—Felicia Coleman, FSU. (10 min.)				
	~9:45	Впеак				
6.)	10:00	A.) A HEALTHY AND PRODUCTIVE BAY ECOSYSTEM				
		Evaluation of Revised Objectives and Strategies to Achieve Goal A				
7.)	10:30	B.) SUSTAINABLE MANAGEMENT OF OYSTER RESOURCES				
		Evaluation of Revised Objectives and Strategies to Achieve Goal B				
8.)	11:00	$\underline{C}$ . $\underline{E}$ ) A Fully Funded and Science-Informed Ecosystem-Based Management and				
		RESTORATION PLAN SUPPORTED BY APALACHICOLA BAY				
		SYSTEM STAKEHOLDERS				
0)	11.20	Evaluation of Revised Objectives and Strategies to Achieve Goal E				
9.)	11:50	$\underline{D}$ , $\underline{C}$ A THRIVING ECONOMY CONNECTED TO A RESTORED ABS				
10)	11.50	Evaluation of Revised Strategies to Achieve Goal C      E D. AN ENCACED STATEGIES TO AChieve Goal C				
10.)	11:50	E. D) AN ENGAGED STAKEHOLDER COMMUNITY AND INFORMED FUBLIC				
11)	TBD	Evaluation of Revised Objectives and Strategies to Active Goal D				
11.)	TDD	If Time Allows TBD				
12)	TBD	IDENTIFICATION OF RESPONSIBLE ENTITIES FOR COALS DAND F				
12.)	TDD	If Time Allows TBD				
13)	~12.15	PUBLIC COMMENT				
13.)	12:25	NEXT STEPS AND AGENDA ITEMS FOR THE NEXT MEETING				
,		Review of the CAB Schedule of Meetings				
		Review of action items and assignments				
		• Identify agenda items and needed information and presentations for the October 7, 2020 CAR				
		meeting				
		Meeting evaluation				
~	-12:30 PM	ADIOURN				

#### APPENDIX #3

#### CAB MEETING VII, SEPTEMBER 9, 2020 ZOOM MEETING EVALUATION & CHAT SUMMARY

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 13 CAB members

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

					0
Average Rating	5.Strongly Agree	4.Agree	3.Not Sure	2.Disagree	1.Strongly Disagree
4.7 of 5	11	4	0	0	0

#### 2. The meeting objectives were met.

Average Rating	5.Strongly Agree	4.Agree	3.Not Sure	2.Disagree	1.Strongly Disagree
4.3 of 5	8	6	1	0	0

#### 3. The presentations were effective and informative.

Average Rating	5.Strongly Agree	4.Agree	3.Not Sure	2.Disagree	1.Strongly Disagree
4.4 of 5	6	9	0	0	0

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

	Ŭ			0	
Average Rating	5.Strongly Agree	4.Agree	3.Not Sure	2.Disagree	1.Strongly Disagree
4.7 of 5	10	5	0	0	0

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

Average Rating	5.Strongly Agree	4.Agree	3.Not Sure	2.Disagree	1.Strongly Disagree
4.5 of 5	7	7	1	0	0

#### 6. The facilitators accurately documented the Working Group Member input

Average Rating	5.Strongly Agree	4.Agree	3.Not Sure	2.Disagree	1.Strongly Disagree
4.7 of 5	10	5	0	0	0

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

O	11 1	0			
Average Rating	5.Strongly Agree	4.Agree	3.Not Sure	2.Disagree	1.Strongly Disagree
4.0 of 5	4	7	4	0	0

#### 8. Working Group Members had the opportunity to participate and be heard.

Average Rating	5.Strongly Agree	4.Agree	3.Not Sure	2.Disagree	1.Strongly Disagree
4.5 of 5	8	7	0	0	0

#### 9. What do you think worked well using the virtual Zoom platform for the meeting?

- Platform works well for presentations, makes interaction a challenge sometimes.
- I think we have good group discussions
- The first part is great because there is interaction.

#### 10. How could the virtual meeting format be improved for future meetings?

- General comment, Zoom makes this process challenging. I'm sure you've all discussed that.
- Could you send out calendar invites for the next few meetings? It would be good to strategize how to work around the FWC meeting next month. It would be great if we could do both.
- I am not sure the virtual format can be improved. I think we have good group discussions. I recently used Menti and Mural and these may be good options to get additional participation from members but there is a learning curve using new tools as well.

ABSI Community Advisory Board, September 9, 2020 Meeting VII Summary

• The first part is great because there is interaction. The second part seems like an effort. Wonder if we could engage members in some way.

## Other Comments (Zoom Chat)

- 9:28:49 Anita Grove: I would not let it fester. I think the CAB should clarify asap.
- 9:30:02 John Solomon: I agree with Anita We need for FWC and or CAB to make the statement. So that CAB can make a positive impact.
- 10:59:01 Georgia A Shannon H.: Maybe this [shell recycling program] could be something that NFWF might fund?
- 10:59:18 Michael Norberg: 597.010 (23) OYSTER AND CLAM SHELLS PROPERTY OF DEPARTMENT.—
- 11:00:19 **Portia Sapp:** (21) OYSTER AND CLAM SHELLS PROPERTY OF DEPARTMENT.— Except for oysters used directly in the half-shell trade, 50 percent of all shells from oysters and clams shucked commercially in the state shall be and remain the property of the department when such shells are needed and required for rehabilitation projects and planting operations, in cooperation with the Fish and Wildlife Conservation Commission, when sufficient resources and facilities exist for handling and planting such shells, and when the collection and handling of such shells is practicable and useful, except that bona fide holders of leases and grants may retain 75 percent of such shells as they produce for aquacultural purposes. Storage, transportation, and planting of shells so retained by lessees and grantees shall be carried out under the conditions of the lease agreement or with the written approval of the department and shall be

subject to such reasonable time limits as the department may fix. In the event of an accumulation of an excess.

- 11:04:35 Michael Norberg: Thanks, Portia. The reference I had was apparently outdated.
- 11:05:00 **Denita Sassor:** I was trying to raise my hand about the shells. we have several hundred thousand in a pile at our oyster house we'd gladly sell. they're mostly from Alligator Harbor, some Oyster & Skipper Bay. I know several other farmers that have shells from summer mortality, and theyd be happy to sell them also. I could be a place of dropoff for farmers and possibly coordinate help get these shells to Apalach.
- 11:52:59 Felicia Coleman: Thanks, Denita. Will be in touch about this.

## APPENDIX #4 ABSI CAB Project Schedule & Workplan

Meetings Dates are Subject to Change

UPDATED AS OF SEPTEMBER 2020			
PHASE I—STANDING UP AND ORGANIZATION OF THE ABSI CAB			
ABSI	September	Assessment report based on interviews of over 60 stakeholders and	
Assessment	2019	agency personnel (May - August 2019) summarized key challenges and	
Process		issues that should be addressed in the Apalachicola Bay System Initiative	
		(ABSI) and by its Community Advisory Board (CAB); facilitators	
		recommend members for the CAB.	
ABSI CAB	September,	Questionnaire report on the CAB members' views on successful short	
Questionnaire	2019	and long-term outcomes and on critical ABSI challenges and issues.	
Meeting I.	Oct. 30, 2019	Scoping and organizational meeting, review and refinement of overall	
Eastpointe FL		project purpose, vision and goal framework. Presentation on the ABSI	
		project's four main components: research, management, community	
		engagement, and oyster reef and bay restoration. Public comment.	
Meeting II.	Dec. 18, 2019	Member-requested presentations on Apalachicola River Slough	
Eastpointe FL		Restoration project, Oyster Fishery and Harvest Statistics, ABSI Research	
		Update, and FWC Apalachicola Bay Oyster Restoration, Phase II. Review	
		and refinement of vision themes and goal framework, and identification	
		of key topical issues to inform the drafting of objectives. Public comment	
Meeting III.	Jan. 8, 2020	Member-requested presentations on Oyster Ecology, Hydrologic	
Eastpointe FL		modeling and Oyster Population Models. Review, refinement and	
		adoption of five vision themes, goals, outcomes and objectives, and initial	
		review of draft performance measures. Public comment	
PHASE II-	-SCOPING OF AI	<b>3SI ISSUES, IDENTIFICATION OF PERFORMANCE MEASURES &amp;</b>	
	36 44 2020	STRATEGIES	
Meeting IV.	Mar. 11, 2020	Member-requested presentations on current status of Apalachicola Bay,	
Eastpointe FL		FDACS Aquaculture Leasing Program, Oyster Reef Management in	
		Apalachicola Bay, and the Chesapeake Bay Oyster Futures Consensus	
		Process. Review of Apalachicola Bay System Ecosystem-Based	
		Identification of initial draft strategies and related performance measures.	
		Dublic commont	
Monting V	May 22, 2020	Member requested presentations on EWC Overview of Overer	
Virtual Monting	May 22, 2020	Management EWRI Overer Monitoring and Restoration Effects in	
Via Wobinar		Applechicola Bay MK Banch Hydrologic Restoration and TNC Lake	
via webiliai		Winico project Identification and evaluation of preliminary strategies	
Teleconference		and performance measures to achieve each of the five goals and	
releconterence		objectives Public comment	
CAB	June 2020	CAB Worksheet to identify potential strategies for each of the five goals	
Strategies	June, 2020	of the worksheet to identify potential strategies for each of the rive goals.	
Meeting VI	July 16, 2020	Member-requested presentations Decision support tools update &	
Virtual Meeting	July 10, 2020	demonstration. Review and evaluation of the preliminary strategies by	
Via Webinar		CAB member for Plan Goal, Public Comment.	
and			
Meeting VII.	Sept. 9, 2020	Member-requested presentations. Identification evaluation and	
		refinement of objectives, strategies and performance measures for Goals	
		A-E. Public Comment.	

Virtual Meeting Via Webinar			
and			
Meeting VIII.	Oct. <u>15</u> , 2020	Member-requested presentations. Review of strategies and identification,	
Virtual Meeting		and evaluation of actions steps to achieve strategies. Evaluation of Performance Measures and categories. Public Comment.	
Meeting IX. Virtual Meeting	Nov. 12, 2020	Member-requested presentations. Evaluation and refinement of strategies and performance measures, and identification of possible action steps to achieve Goals A, B, and E, and identification of responsible entities for Goals C and D. Public Comment.	
Meeting X. Virtual Meeting	Dec. 9, 2020	Review and agreement on draft Apalachicola Bay System Ecosystem- Based Management and Restoration Plan framework and outline (Vision Themes, Goals, Outcomes, Objectives, and range of possible strategies for evaluation by the CAB). Review and refine draft strategies and actions and approve Public Workshop Draft Plan Framework. Public Comment.	
Public	TBD	Review and public comments on Vision, Goal Framework, Plan outline,	
Workshop 1		and range of possible strategies for evaluation by CAB.	
		Depending on status of the COVID-19 pandemic	
PHASE III-	-BUILDING CONS	SENSUS ON DRAFT ABS ECOSYSTEM-BASED MANAGEMENT AND	
RESTORATION	PLAN STRATEGIE	S AND RECOMMENDATIONS—TO BE EVALUATED USING DECISION-	
SUPI	PORT TOOLS REL	ATIVE TO PERFORMANCE MEASURE GOALS IN PHASE IV	
Meeting XI.	Jan. 13, 2021	Review of public comments on Draft Plan Framework and Goals, review	
		of decision-support tools scenario results and consensus rating of	
		strategies and actions, and review of related draft performance measures. Public Comment.	
Meeting XII.	Feb. <u>24</u> , 2021	Review of scenarios and consensus rating of strategies and actions using decision-support tools relative to goals and objectives. Public Comment.	
Meeting XIII.	April <u>21</u> , 2021	Review of scenarios and consensus rating of draft strategies and actions using decision-support tools relative to goals and objectives. Public Comment.	
Meeting XIV.	June <u>16</u> , 2021	Review of scenarios and consensus rating of draft strategies and actions using decision-support tools relative to goals and objectives. Public Comment.	
Meeting XV.	August <u>18,</u> 2021	Continue review and consensus testing of Draft ABS Ecosystem-Based Management and Implementation strategies and actions and agreement on Workshop Draft for public comment. Public Comment.	
Public	TBD	Review and public comments on Revised Draft ABS Ecosystem-Based	
Workshop 2		Management Plan and Implementation Plan Strategies.	
Meeting XVI.	October <u>20</u> ,	Review of public comment, agreement on the ABS Draft Ecosystem-	
	2021	Based Management and Restoration Plan strategies and actions. Public Comment.	
Meeting XVII.	November <u>17</u> , 2021	Complete Phase III of project- Management Plan delivered	
PHASE IV—PLAN IMPLEMENTATION			
	TBD	Restoration Component	

## APPENDIX #5 ABSI CAB VISION THEMES, GOALS, OUTCOMES & OBJECTIVES (AS OF MARCH 2020)

## SECTION I COMMUNITY ADVISORY GROUP DRAFT ABSI RECOMMENDATIONS

## A.) A Healthy and Productive Bay Ecosystem

*Vision Theme:* The Apalachicola Bay System, including its oyster reef resources, is sustainably managed. Water resources and affected habitats are afforded adequate protection to ensure that essential ecosystem functions are maintained and a full suite of economic opportunities are realized. *Goal:* The Apalachicola Bay System is a healthy and productive ecosystem that supports a vibrant and sustainable oyster fishery and other economically viable activities.

**Outcome:** By 2030, the Apalachicola Bay System is a healthy, productive and sustainably managed ecosystem that supports a viable oyster fishery while providing a broad suite of ecosystem services that, in turn, afford additional opportunities for sustainable economic development.

## **B.)** Sustainable Management of Oyster Resources

*Vision Theme:* A restored Apalachicola Bay System has resulted in a sustainably managed wild harvested oyster fishery while also providing opportunity also for other economically viable and complementary industries, including aquaculture. This is accomplished by working collaboratively with stakeholders to create, monitor and fund a plan that ensures that protection of the fishery and habitat, is implemented in a manner that is supported by science, data, and field and industry experience and observation, and provides fair and equitable access to the resource.

*Goal:* A productive, sustainably, and adaptively managed Apalachicola Bay System supports sustainable oyster resources.

**Outcome:** By 2030, an engaged and collaborative group of stakeholders will have contributed to and helped spearhead a fully funded science-driven plan to sustainably manage oyster resources in the Apalachicola Bay System.

## C.) An Ecosystem-Based Management and Restoration Plan that is Science-Based, Fully Funded and Supported by Apalachicola Bay System Stakeholders

*Vision Theme:* The Apalachicola Bay System Ecosystem-Based Management and Restoration Plan is science-based and developed with engagement and support from the Apalachicola Bay System stakeholders, including the State of Florida, and fully funded and informed by the best available science and other relevant socio-economic information.

*Goal:* The Apalachicola Bay System Ecosystem-Based Management and Restoration Plan is informed by the best available science, supported by the Apalachicola Bay System stakeholders, and implementation is fully funded.

**Outcome**: By 2030, the Apalachicola Bay System is a productive and sustainably managed ecosystem. A fully funded and well-executed science-based Ecosystem-Based Management and Restoration Plan that incorporates the monitoring necessary for evaluation and adaptation is unanimously broadly supported by Apalachicola Bay System stakeholders with guidance oversight from a permanent stakeholder advisory board.

## SECTION II GOAL AREAS OUTSIDE THE SPECIFIC SCOPE OF ABSI AND TO BE REFERRED TO OTHER PROGRAMS OR ENTITIES

## D.) A Thriving Economy Connected to a Restored Apalachicola Bay System

*Vision Theme:* A restored Apalachicola Bay System sustains a vibrant commercial oyster fishery, a thriving aquaculture industry and recreational and tourism-related activities and development opportunities that underpin a strong local economy and resilient coastal community.

*Goal:* The broader Apalachicola Bay Region is thriving economically as a result of a fully restored Apalachicola Bay System.

**Outcome:** By 2030, the broader Apalachicola Bay Region is thriving economically as a result of a restored Apalachicola Bay System that reflects a unique coastal cultural heritage, based on a vibrant oyster fishery, while simultaneously providing new opportunities for sustainable and responsible development, business, recreation and tourism.

## E.) An Engaged Stakeholder Community and Informed Public

*Vision Theme E:* Stakeholders of the Apalachicola Bay System are committed to working together beyond the Apalachicola Bay System Initiative to disseminate relevant information and advocate for a sustainably managed oyster-based ecosystem. In so doing, the group will facilitate innovative research, development and implementation of best management practices and serve as a hub for information exchange as well as new innovation, education and communication opportunities.

*Goal:* A productive and well-managed Apalachicola Bay System is supported by an actively engaged and informed stakeholder community and public.

**Outcome:** By 2030, stakeholders, private and nonprofit civic leaders, and the public are informed of the importance of sustaining the health of the Apalachicola Bay System and are engaged and working actively together along with elected and appointed leaders and managers to invest in and implement the plan.

#### **APPENDIX #6 ABSI CAB TERMS AND DEFINITIONS** (AS OF JULY 2020)

**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.

**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.

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

**OUTCOMES:** 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*).

**OBJECTIVES:** 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 Management and Restoration Plan for the Apalachicola Bay System."*)

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

**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.

**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).

**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). 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.

#### HEALTHY APALACHICOLA BAY SYSTEM:

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.

**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.