# APALACHICOLA BAY SYSTEM INITIATIVE

# COMMUNITY ADVISORY BOARD

# OYSTERMEN'S WORKSHOP II
# SUMMARY REPORT

## APALACHICOLA NATIONAL ESTUARINE RESEARCH RESERVE AND VIRTUAL VIA ZOOM

**APRIL 15, 2021**


CONSENSUS CENTER

**FACILITATED AND SUMMARIZED BY JEFF A. BLAIR**

# Apalachicola Bay System Initiative Community Advisory Board

## April 15, 2021 Oystermen's Workshop II
## Facilitator's Workshop Summary Report

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# APALACHICOLA BAY SYSTEM INITIATIVE COMMUNITY ADVISORY BOARD
# APRIL 12, 2021 OYSTERMEN'S WORKSHOP II FACILITATOR'S SUMMARY REPORT


## OVERVIEW OF OYSTERMEN'S WORKSHOP II

## THURSDAY, APRIL 14, 2021

### I. WORKSHOP SUMMARY AND OVERVIEW

At the April 15, 2021 Oystermen's Workshop the Apalachicola Bay System Initiative (ABSI) Community Advisory Board (CAB) conducted the second in a series of Oystermen workshops for the purpose of seeking oystermen's feedback on a variety of possible management approaches as well as ultimately on the draft Apalachicola Bay System Ecosystem-Based Adaptive Management and Restoration Plan. The Workshop was conducted at the Apalachicola National Estuarine Research Reserve for invited oystermen, and virtually for all other participants.

During the Workshop the Oystermen: were provided an overview of the Project Workplan and Schedule; received an update and provided feedback on an ABSI restoration experiment; received an update and provided feedback on a FWC restoration project; and, provided feedback and input on a suite of possible management approaches.

## II. Welcome and Participation

Jeff Blair, ABSI CAB Facilitator, opened the Workshop at 2:00 PM and welcomed all participants.

## III. Workshop Participation

The following Apalachicola Bay oystermen participated in the Thursday, April 15, 2021 Workshop:

- Rickey Banks
- Ronnie Gilbert
- Shannon Hartsfield
- Brett Lolley
- Roger Mathis
- Coy Shiver
- Wayne Williams

### Project Team Members Participating

Sandra Brooke, and Madelein Mahood.

*(Attachment 1—Workshop Participation)*

### Workshop Facilitation

Meetings and workshops are facilitated and reported on by Jeff Blair from the FCRC Consensus Center at Florida State University. Information at: http://consensus.fsu.edu/

FCRC CONSENSUS CENTER

### Project Webpage

Information on the Apalachicola Bay System Initiative project and the Community Advisory Board, including agenda packets, meeting reports, and related documents may be found at the ABSI CAB Webpage. Located at the following URL:
https://marinelab.fsu.edu/the-apalachicola-bay-system-initiative/

## IV. Workshop Objectives

Jeff Blair reviewed the Workshop objectives as follows:

- To Receive an Update on the Project Workplan and Schedule
- To Provide Update and Receive Oystermen's Feedback on ABSI Restoration Experiment
- To Provide Update and Receive Oystermen's Feedback on FWC Restoration Project
- To Receive Oystermen's Feedback on Management Alternatives
- To Review Next Steps

*(Attachment 2—Workshop Agenda)*

## V. REVIEW OF UPDATED PROJECT WORKPLAN AND SCHEDULE

Jeff Blair provided the participants with a review of the updated Project Workplan and Schedule and answered participants' questions. Jeff noted that the CAB plans to conduct 1 or 2 additional oystermen's workshops during 2021. Jeff reported that the next oystermen's workshop will likely be in June or July of 2021, and the next CAB meeting is April 21, 2021.

- Jeff explained that the ABSI process calls for the CAB to deliver their consensus recommendations for the Apalachicola Bay System Ecosystem-Based Adaptive Management and Restoration Plan (Plan) in the form of Goals, Objectives, Strategies, and Actions on November 17, 2021 and for this to complete Phase III of the project. The next phase (Phase IV) of the project will be initiated in early 2022 and during this Phase the CAB will use project decision support tools including modeling to evaluate the CAB's recommendations relative to specific performance measures and expected outcomes for enhancing the health of the Apalachicola Bay System. In addition, the CAB will focus on transitioning to a Successor Group whose role will be to organize a group of key stakeholders committed to working collaboratively for the long-term and once the CAB process is complete to ensure that the Plan is implemented, monitored, and adaptively managed over time and supported by the Community. In addition during Phase IV, FSU will convene a small Restoration Partners Working Group to seek resources and political and governmental support for the CAB's priority recommendations.

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

*(Attachment 3—Workplan and Schedule)*

## VI. UPDATE AND FEEDBACK ON ABSI RESTORATION EXPERIMENT

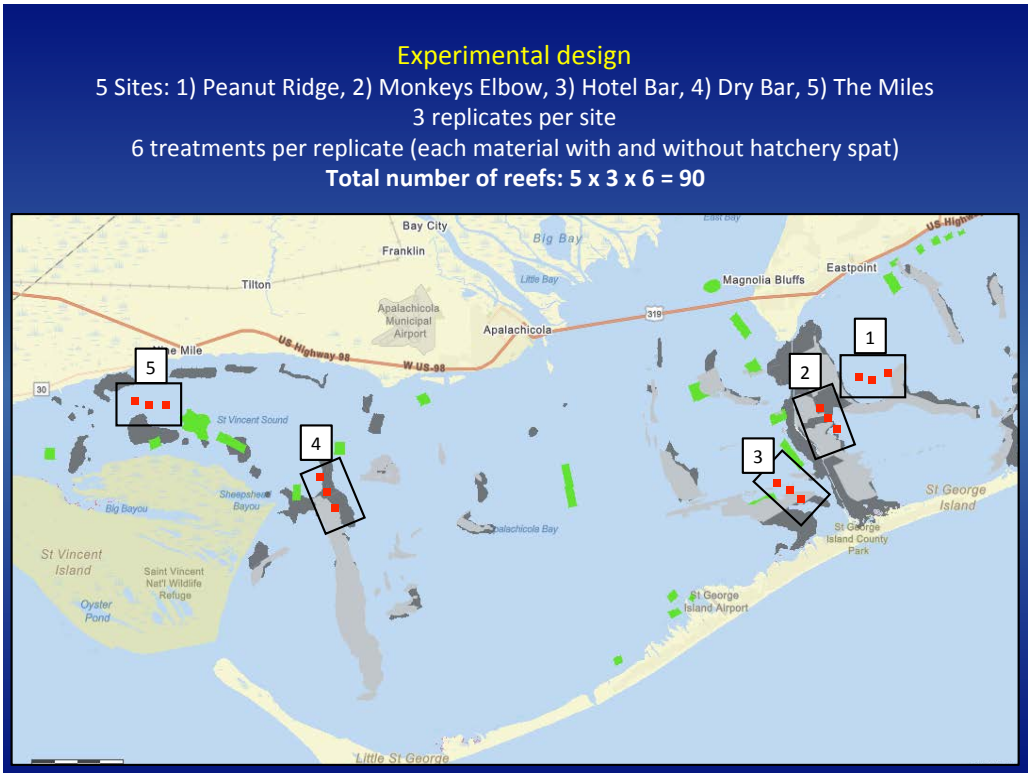
Sandra Brooke, FSUCML Faculty and ABSI Principal Investigator, provided the participants with an update on a FSU ABSI restoration experiment. Sandra reported:

### ABSI Restoration Experiment

- Fishery closure provides opportunity to test materials without fishing impacts
  - **Material types:** granite, limestone rock, fossilized shell, shell
  - **Material size:** large (12"), medium (8"), small (<4"), shell
  - **Reef footprint:** large (acres), medium (< 100 $ft^2$), small (<50 $ft^2$)
  - **Reef height:** low (<1ft), medium (1-3 ft), high (3-4 ft)
  - **'Seeding the reef':** Add spat on shell to half the experiment

### Materials

- Shell and limerock
  - Natural oyster shell – good for spat settlement, can be harvested with tongs
  - Small limerock (4") creates mound, small spaces, many layers, can easily be harvested with tongs
  - Medium limerock (6-8") – creates stable structure, medium spaces, few layers, good for habitat development, can be harvested once oysters develop




*Location of Experimental Restoration Sites*

**Experimental Design**

- **Single Replicate**
  - 120 ft x 120 ft footprint
  - Plots laid out to minimize flow interference
- **Reef Size**
  - 20 x 20 x 1.5 ft (~24 $yd^3$)
- **Materials**
  - Shell
  - Small (4") limerock
  - Medium (6-8") limerock
- **Treatments**
  - 2 reefs per material
  - 1 reef with spat on shell
- **Total Number of Sites and Amount of Material**
  - 5 sites x 3 replicates x 6 reefs
  - = 90 reefs x 22 $yd^3$
  - **= ~2,000 $yd^3$ material**

**Logistics**

- Target time for deployment – before first peak spat set (May 8 or 15)
- Oystermen will be employed to deploy materials from their vessels
- Materials need to be 'staged' in different locations for reloading
- Materials need to be placed within specified areas

- GPS coordinates and material data need to be collected
- Experiments need to be marked so they can be easily located for monitoring and as a warning for vessels.

**Oystermen Feedback**

***Consensus from the oystermen for the project design, material, and locations with one location change.***

- The oystermen expressed support for using the same material as was used in the 2017 restoration project.
- A preference was expressed for using osyter shell for cultch, but given the absence of sufficient shell there was strong support for using the Kentucky Blue hard limestone #4 since it is durable and tongable.
- There was a request to switch one of the experimental reef sites from Hotel Bar to East Hole, and Sandra indicated they would make the change as requested.

Sandra posed the following questions regarding the restoration experiment:

**How many oystermen should be used to deploy materials using their own vessels?**

- It was noted that it would take 1,000 trips to deploy 2,000 yd3, at ~2 yards per boat trip.
- It was also noted that it is important to be ready to deploy before the first peak spat set (May 8 or 15).
- The oystermen indicated that until they met and determined how many were willing to complete the paperwork with FSU it was hard to accurately predict. However, they thought 50 boats was a realistic estimate.
- There were logistical issues noted that will have to be resolved such as working on a weekend to maximize participation since many oystermen now have other jobs, and many boats are in need of repair since they have not been used for several years.

**How long will it take?**

- The oystermen felt 2-3 days was feasible with 50 boats as long as they were not limited and allowed to make as many loads a day as there were capable of.
- Sandra noted that even if it took a week that would work for meeting the schedule, but the less time the better.

**Should be media be used, and if so, who and when?**

- The oystermen agreed that publicity was good, and that waiting until the second day of deployment was a good idea so that the kinks in the process could be worked out on day one.

## VII. Update and Feedback on FWC Restoration Project

Alan Peirce, FWC Division of Marine Fisheries Management, provided the participants with an update on an FWC restoration project. Alan reported:

- FWC's Fish and Wildlife Research Institute (FWRI) has a 4-5 acre restoration project planned for June 2021.

- FWC plans to have a much larger restoration deployment of 40 – 50 acres in late summer or early fall of 2021.
- FWC plans to vet the location with the oystermen and all community stakeholders to seek support and agreement from the community.
- It will be critical to coordinate and communicate with all other restoration efforts to ensure they don't interfere with each other and that they leverage the combined benefits from all of the restoration efforts.
- The material used will be Kentucky Blue hard limestone) #4 size limerock (same as used in the 2017 restoration).
- FWC has contracted with a large experienced contractor out of MS and they have worked extensively in the Gulf and Chesapeake Bay.
- They have the capacity to deploy a large number of barges.
- There was concern expressed about deploying heavy barges in shallow water damaging the reefs and Alan explained that the material would be offloaded to smaller crafts for shallow conditions and they would coordinate with the oystermen on ensuring that the reefs are not damaged and the material is placed in the right locations.
- The oystermen expressed that they should take the contractor out on the water and familiarize them with the specific conditions and best locations and heights for deployment of material.
- Alan noted that the contractor would be in the area in late May or early June to work on the FWRI project and that would be a good time to meet.
- The planned area for the restoration is the east side of the Bay and specifically Cat Point Bar since it is in good condition to receive the material and has good spatfall.
- The oystermen agreed with the location and material and felt it was critical to implement restoration project soon while the Bay is closed and there will be sufficient time for the oysters to develop and build up the reefs.
- Alan noted that FWC is contemplating doing ~50 acres twice per year to increase the opportunity to catch good spatsets and spread out the benefits of the restoration projects.

## VIII. Oystermen's Feedback on Possible Management Approaches

The oystermen were led in a facilitated discussion on a suite of potential management approaches. Participants were asked to respond to each management approach from their observations, experience and stakeholder perspectives. The oystermen were asked to give their opinion on a range of management approaches for creating a sustainable wild oyster fishery. Following are the management approaches and associated oystermen's perspectives.

*Oystermen Discussing Restoration and Management Approaches*

Following are the management approaches discussed with the oystermen's associated comments:

**Summer fishing closures**

*Consensus from the oystermen for this approach.*

- All agreed that summer closures are a good idea and they support this.
- They expressed that the entire Bay should be open in exchange for summer closures to distribute the effort.
- It was noted that during the open season many days are already missed to harvesting due to water quality closures from rain events, and other weather conditions.

**Managing harvest areas to prevent the concentration of effort in specific locations**

*Consensus from the oystermen for this approach.*

- The oystermen support this and believe the tradeoff for already closed areas, and the proposed summer closure as well as other weather related closures during harvest seasons should allow all of the Bay to be open for harvesting during the open season.

**Rotational closures (e.g. summer bars vs. winter bars, partial bar closures)**

*Not supported by the oystermen.*

- There was not support for this since there are already many closed areas in the Bay, and frequent forced closures during harvest seasons from rain events impacting water quality, and rough weather preventing harvesters from going out.

**Permanent refuge non-harvest (no fishing) areas**

*Not supported by the oystermen.*

- They felt there are enough permanently closed areas in the Bay already (i.e., jetties, state park, ANERR).
- There are also other areas that are usually closed anyway due to poor water quality.

- There may be areas that have oysters but not marketable oysters that might be considered for closure if needed for bloodstock/spawn production or for cleaning the areas with poor water quality.

**Stock-based temporary closures** (establish a density threshold (TBD) that when reached the reef is closed until the density increases back to a sustainable harvest level)

*Consensus from the oystermen for this approach.*

- The oystermen expressed support for this, but noted that FWC needs to have a presence and enforce the closures when the threshold level is reached.
- Would prevent collapses like we have seen in the past.
- When the threshold level of 300 bushels/acre is reached then the bar/reef should be closed to harvesting until it achieves a higher oyster density and is again sustainable for harvesting.

**Managing oyster reef harvest with a metric (e.g., 300 bushels per acre)**

*Consensus from the oystermen for this approach.*

- The oystermen expressed support for this, but noted that FWC needs to have a presence and enforce the closures when the threshold level is reached.
- When the threshold level of 300 bushels/acre is reached then the bar/reef should be closed to harvesting until it achieves a higher oyster density and is again sustainable for harvesting.

**Daily harvest limits vs. fishery or individual quotas**

**Consensus from the oystermen for daily harvest limits.**

- A strong preference was expressed for a daily harvest limit over individual quotas.

**Limited entry fishery**

*There was not consensus for this approach, but receptivity if it was done correctly and adaptively.*

- There was mixed support for this option. All agreed it would be difficult to fairly implement a limited entry program.
- Some expressed that they prefer to have a bag limit and not a limit on how many people can harvest.
- There was some support for an adaptive limited entry program that would allow entry based on the density of oysters available for harvest in the Bay, and entry could be increased if the System could support/sustain it based on an established sustainable level of harvest metric.
- Family members of current harvesters would need to be allowed to enter in the fishery.
- Need to address how to allow commercial fishermen to retain their Restricted Species (RS) licenses since the Bay has collapsed and it is not possible to qualify using the current requirements for harvest of RS.

**Elimination of the 'buffer' (undersized) oysters for seafood dealers**

*Consensus from the oystermen for this approach.*

- There was agreement among the oystermen that the buffer should be eliminated.
- It should be illegal for dealers since it is illegal for harvesters.
- If dealers don't buy undersized oysters then harvesters would not bring them in.
- Selling undersize oysters is robbing next season's harvest and contributes to depleting and not sustaining the resource.

- All agreed that consistent and fair enforcement and a strong FWC presence is needed and would drastically cut down on illegal harvesting, buying, and selling of undersized oysters.

**Implement annual fisheries dependent and independent stock assessments**

- It was unclear what the intent of this approach was and it was not discussed in detail pending clarification of the intent for this approach.
- The assessments are a good idea, but prior threshold densities seemed arbitrary.

**Reduced bag limits**

***There was not consensus for this approach, but receptivity if it was done correctly and the limit allowed an oystermen to make a living. This should be evaluated in relation to a limited entry approach.***

- There is support for this in concept based on the density of harvestable oysters in the Bay.
- It was noted that they need 6-7 bags/day not 3 to make a living at harvesting oysters.
- This will need to be evaluated in relation to limited entry, stock based closures, and managing reefs with a metric (e.g., 300 bushels/acre as the threshold for closure).

**Bag tags**

***There was not consensus for this approach, but receptivity if it was done correctly and the limit allowed an oystermen to make a living.***

- Good idea in concept, but there needs to be a bag limit that is sufficient to make a living (e.g., 6-7 bags/day).

**Relaying oysters from intertidal to subtidal locations within the Bay as a management strategy**

***Consensus from the oystermen for this approach if oysters were moved and relocated in the same general area, with a small layer applied over healthy reefs.***

- Previous efforts have not been successful.
- Think this hurt the Coon Bars.
- It would be useful if you were moving and relocating oysters from the same general area using a small layer over existing functioning reefs to give them a boost.
- Needs to be done by experienced oystermen who know how and where to move them to.
- As an example it would make sense to use the west side of Cat Point Bar since it is doing well, and move oysters to East Hole and add rock, and then move a small layer of oysters from the west side to the top of East Hole.

**5-day work-week**

***Consensus from the oystermen for this approach.***

- Strong support for a 5-day work-week with M-F open for harvesting.

**Enforcement – Identify what is needed from FWC Law Enforcement.**

***Consensus from the oystermen for a stronger presence of law enforcement, with consistent, fair, and practical enforcement, and collaboration and communication between oystermen and FWC law enforcement.***

- There was agreement that a stronger and more consistent presence of law enforcement is needed to provide a deterrent to bad actors in the fishery from harvesters to dealers.
- The existing laws need to be enforced fairly and consistently.
- There has been a history of unequal enforcement and this creates resentments.
- Law enforcement officers working in the Bay should understand the oyster fishery and how to interpret and enforce the regulations fairly and based on and understanding of real world practices for harvesting (e.g. how to correctly measure oysters, size limits, bag limits, etc.).
- An example of not understanding the goal of a law and how to interpret it in a practical way is how the bag size is enforced. Harvesters should be allowed to weigh their bags on their boats and return any overages to the reefs where they were harvested. All bags should come in off the water at 60# and harvester should not be cited for processing oysters. When bags are brought in to the dealer they have to weigh them and make sure they weigh 60# meanwhile extra oysters end up harvested and not left on the reefs.
- The penalties should be adjusted to create a tiered system so intentional violators receive progressively increasing penalties for violations, suspending their licenses for longer periods of time until they lose their license permanently. This should not be used for minor unintentional infractions, but for those who purposely abuse the fishery.
- The FWC should work closely with harvesters on how to fairly and consistently enforce regulations and to learn the practical on the water constraints for how oysters are actually harvested.
- All agreed that consistent law enforcement presence is needed to act as an effective deterrent to poaching and illegal activity.
- It was expressed that with fewer harvesters still in the fishery enforcement should be easier to do.

**Additional oystermen proposed management approaches**

**Water Quality Issues/Studies**

- It was expressed that water quality is a big issue and impacts the health and viability of the oyster reefs.
- Sandra noted that FSU is doing water quality research and is taking sediment cores and sediment samples to test for pesticides and heavy metals.
- Oystermen noted that runoff from crushed lime roads is getting into the Bay, and that FWC has lime roads on their property along the Apalachicola Bay and it is contributing to the runoff problem.
- The oystermen expressed that water quality is a big issue that will need to be mitigated.
- Another issue is that pulses of water are needed at certain times of the year to flush the System and provide nutrients for the oysters.
- It was expressed that when there was navigation maintained on the River, and the USACE maintained the channel by dredging, that the Bay System was healthier. In addition, the USACE allowed periodic water pulses to help keep the navigation channels flushed.
- There was support for using spat on shell to kickstart restoration of the reefs/bars.
- One oystermen indicated that doing restoration experiments on some of the inshore reefs (e.g., Dry Bar, Cat Point Bar, East Hole) would be a good idea to help them get back to producing. Many of

these areas are not good for marketable oysters but would provide good areas for bloodstock/spawn for the System.

- It was noted that extreme weather is changing the bottom and actually moving the cultch material to different locations.
- It was observed that there is a lot of loose shell dispersed in Dry Bar and it would be good to collect and use the shell for restoration.

**Research**

- Bars are eroding over time and reef height has significantly decreased over time. Research is being conducted to determine by how much over how long, and what the optimum reef heights are for restoration based on historic data for good harvest years.
- Reef quality has also been impacted by storms and storms have been more frequent in recent years.
- Additional water quality research is being conducted and will need to be evaluated.

**Oystermen Question to Sandra**

The question was asked what are the odds of getting the wild harvest oyster fishery back in 4-5 years. Sandra expressed that if we can add sufficient material, and there are no major storms to bury reefs and disperse the material used for restoration, and we have good rainfall, that with all of these caveats and uncertainties, there is a chance to re-establish the System to harvestable levels in some locations.

*(Attachment 4—Oystermen's Input Incorporated Into Draft Plan)*

## IX. NEXT STEPS

Jeff Blair noted that there would be additional oystermen's workshops during 2021, and the next workshop is tentatively planned for June or July. The workshops will provide additional opportunities for an invited group of oystermen to provide feedback on a suite of possible management approaches that the CAB is evaluating, and on the draft Management and Restoration Plan. The workshops will be for invited oystermen only and take place at the Apalachicola National Estuarine Research Reserve (ANERR). CDC and FSU social distancing and mask wearing requirements will be in force during the workshop. The workshop will also be conducted virtually and CAB members and the public are invited to observe the workshops via the Zoom link posted to the project webpage. The workshop agenda and summary report will also be posted to the project webpage as follows: https://marinelab.fsu.edu/absi/cab/.

The next CAB meeting is scheduled for April 21, 2021 and will focus on discussing restoration and management options, on any revisions to the Plan Framework (Goals, Objectives, Strategies, and Actions), and on prioritization of strategies for each of the Plan's Goal areas (A – E). The April meeting will be conducted as a virtual meeting via webinar.

## ADJOURNMENT

The Facilitator thanked the oystermen, virtual participants, and ABSI Project Team members for their participation, and adjourned the Workshop at 4:20 PM on Thursday, April 15, 2021.

# ATTACHMENT 1
# WORKSHOP PARTICIPATION LIST

| OYSTERMEN PARTICIPATING IN WORKSHOP | |
|---|---|
| Rickey Banks | Oysterman and Recreational Fishing Guide |
| Ronnie Gilbert | Oysterman |
| Shannon Hartsfield | Franklin County Seafood Workers Association, Oysterman, and CAB Member |
| Brett Lolley | Oysterman, and Brett's Remodeling LLC |
| Roger Mathis | Oysterman, R.D.'s Seafood, and CAB Member |
| Coy Shiver | Oysterman, and Captain Coy's Guide Fishing |
| Wayne Williams | Oysterman |

| CAB MEMBER* | AFFILIATION |
|---|---|
| **Agriculture/ACF Stakeholders/Riparian Counties** | |
| **1. Chad Taylor** | Riparian Counties Stakeholder Group/ACFS/Agriculture |
| **Business/Real Estate/Economic Development/Tourism** | |
| 2. Chuck Marks | Acentria Insurance |
| 3. Mike O'Connell | SGI Civic Club/SGI 2025 Vision |
| 4. John Solomon | Apalachicola Chamber of Commerce |
| **Environmental/Citizen** | |
| **5. Georgia Ackerman** | Apalachicola Riverkeeper |
| 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** | |
| 10. Chip Bailey | Peregrine Charters |
| 11. Frank Gidus | CCA Florida |
| **Seafood Industry** | |
| **12. Shannon Hartsfield** | Franklin County Seafood Workers Association and Oysterman |
| **13. Roger Mathis** | Oysterman and R.D.'s Seafood |
| 14. Steve Rash | Water Street Seafood |
| 15. Denita Sassor | Outlaw Oyster Company, Aquaculture |
| 16. TJ Ward | Buddy Ward & Sons Seafood |
| **State Government** | |
| 17. Jim Estes [**Alen Peirce**] | FWC Division of Marine Fisheries Management |
| **18. Jenna Harper** | ANERR/DEP |
| 19. Alex Reed | FDEP Office of Resilience & Coastal Protection |
| **20. Portia Sapp** | FDACS Division of Aquaculture |
| 21. Paul Thurman | NWFWMD |
| **University/Researchers** | |
| 22. Tom Frazer | UF/DEP Governor's Science Advisor |
| 23. Erik Lovestrand | UF/IFAS/Florida Sea Grant Franklin County |

| |
|---|
| **The names of CAB members participating in the Workshop are indicated in bold font.* |

| PROJECT TEAM AND FACILITATORS | |
|---|---|
| **FLORIDA STATE UNIVERSITY** | |
| **Sandra Brooke** | Marine Biologist |
| **Ross Ellington** | Professor Emeritus of Biological Science |
| **Madelein Mahood** | Outreach and Education |
| Joel Trexler | FSUCML Director |
| **FCRC CONSENSUS CENTER, FLORIDA STATE UNIVERSITY** | |
| **Jeff Blair** | Community Advisory Board Facilitator |
| **The names of Project Team members participating in the Workshop are indicated in bold font.* | |

| MEMBERS OF THE PUBLIC | |
|---|---|
| Doug Alderson | Apalachicola Riverkeeper |
| Rauri O'Rourke | Senator Marco Rubio's Office |
| Carrie Jones | FDACS |
| Marcy Cockrell | FDACS |
| Katie Davis | FDACS |
| Jessica Holley | Florida House of Representatives |
| Elizabeth Hughes | Florida House of Representatives |
| Katie Wallace | |
| Jetton | |
| Kennedy Hanson | ANERR |

## ATTACHMENT 2
## APRIL 15, 2021 WORKSHOP AGENDA

| WORKSHOP OBJECTIVES | | |
|---|---|---|
| ✓ To Provide Project Updates<br>✓ To Provide Update and Receive Oystermen's Feedback on ABSI Restoration Experiment<br>✓ To Provide Update and Receive Oystermen's Feedback on FWC Restoration Project<br>✓ To Receive Oystermen's Feedback on Potential Management Alternatives | | |
| **ABSI OYSTERMEN'S WORKSHOP—APRIL 15, 2021** | | |
| *All Agenda Times—Including Public Comment and Adjournment—Are Approximate and Subject to Change* | | |
| **1.)** | **2:00 PM** | **WELCOME AND REVIEW OF PARTICIPATION GUIDELINES** |
| **2.)** | **2:05** | **REVIEW OF WORKSHOP OBJECTIVES AND INTRODUCTIONS** |
| **3.)** | **2:10** | **REVIEW OF UPDATED PROJECT MEETING SCHEDULE AND WORK PLAN** |
| **4.)** | **2:15** | **UPDATE AND OYSTERMEN'S FEEDBACK ON ABSI RESTORATION EXPERIMENT** |
| **5.)** | | **UPDATE AND OYSTERMEN'S FEEDBACK ON FWC RESTORATION PROJECT** |
| **6.)** | | **OYSTERMEN'S FEEDBACK ON POTENTIAL MANAGEMENT APPROACHES**<br>• Worksheet on Page 7 |
| **7.)** | **4:55** | **NEXT STEPS**<br>• Next Oystermen's Workshop (Tentatively Planned for June or July 2021) |
| *~5:00 PM* | | *ADJOURN* |

# ATTACHMENT 3
# WORKPLAN AND SCHEDULE

| UPDATED AS OF THE FEBRUARY 24, 2021 CAB MEETING | | |
|---|---|---|
| **PHASE I—STANDING UP AND ORGANIZATION OF THE ABSI CAB** | | |
| **ABSI Assessment Process** | May- Aug. 2019<br><br>Report Sept. 2019 | Assessment report based on interviews of over 60 stakeholders and agency personnel (May – August 2019) summarized key challenges and 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 Questionnaire** | Sept. 2019 | Questionnaire report on the CAB members' views on successful short and long-term outcomes and on critical ABSI challenges and issues. |
| **Meeting I.** Eastpointe FL | Oct. 30, 2019 | Scoping and organizational meeting, review and refinement of overall 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.** Eastpointe FL | Dec. 18, 2019 | Member-requested presentations on Apalachicola River Slough 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.** Eastpointe FL | Jan. 8, 2020 | Member-requested presentations on Oyster Ecology, Hydrologic 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 ABSI ISSUES, IDENTIFICATION OF PERFORMANCE MEASURES & STRATEGIES** | | |
| **Meeting IV.** Eastpointe FL | Mar. 11, 2020 | Member-requested presentations on current status of Apalachicola Bay, 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 Management and Restoration Plan goals, outcomes, and objectives. Identification of initial draft strategies and related performance measures. Public comment. |
| **Meeting V.** Virtual Meeting | May 22, 2020 | Member-requested presentations on FWC Overview of Oyster Management, FWRI Oyster Monitoring and Restoration Effects in Apalachicola Bay, MK Ranch Hydrologic Restoration, and TNC Lake Wimico project. Identification and evaluation of preliminary strategies and performance measures to achieve each of the five goals and objectives. Public comment. |
| **CAB Strategies** | June 2020 | CAB Worksheet to identify potential strategies for each of the five goals. |
| **Meeting VI.** Virtual Meeting | July 16, 2020 | Member-requested presentations. Decision support tools update & demonstration. Review and evaluation of the preliminary strategies by CAB member for Plan Goal. Public Comment. |
| **Meeting VII.** Virtual Meeting | Sept. 9, 2020 | Member-requested presentations. Identification, evaluation and refinement of objectives, strategies and performance measures for Goals A-E. Public Comment. |
| **Meeting VIII.** Virtual Meeting | Oct. 15, 2020 | Member-requested presentations. Review of strategies and identification, and evaluation of actions steps to achieve strategies. Evaluation of Performance Measures and categories. Public Comment. |
| **Meeting IX.** | Nov. 12, 2020 | Member-requested presentations. Agreement on Apalachicola Bay System |

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| Virtual Meeting | | Ecosystem-Based Adaptive Management and Restoration Plan (Plan) framework. Public engagement on the Plan strategy discussion. Discussion of strategies and action steps to achieve Goals. Discussion of ecological and management goals. Public comment. |
| **Oystermen's Workshop #1** | Dec. 2, 2020 | Overview of Project Scope, Purpose, and Status, and Oystermen's input on restoration experiment, suitable habitat for restoration, and management and restoration alternatives. |
| **PHASE III—BUILDING CONSENSUS ON CAB RECOMMENDATIONS FOR THE ABS ECOSYSTEM-BASED ADAPTIVE MANAGEMENT AND RESTORATION PLAN** | | |
| **Meeting X.** Virtual Meeting | Jan. 13, 2021 | Member-requested presentations. Sub-committee reports. Discussion of estuarine metrics and restoration goals. Public comment. |
| **Meeting XI.** | **Feb. 24, 2021** | Member-requested presentations. Sub-committee reports. Review and approval of revised Draft Plan Framework. Discussion of management goals. Public comment. |
| **Oystermen's Workshop #2** | April 15, 2021 | Oystermen's review and comments on draft Management approaches and Plan Framework (Strategies and Actions for Goals and Objectives) |
| **Meeting XII.** | April 21, 2021 | Member-requested presentations. Sub-committee reports. Discussion of estuarine metrics. Discussion and approval of revised Plan Framework and Performance Measures. Discussion of restoration and management goals. Prioritization of strategies. Public comment. |
| **Oystermen's Workshop #3** | ***Tentatively June/July*** | Review draft Plan Framework (Goals, Objectives, Strategies, Actions) with Oystermen, and Oystermen's input. |
| **Meeting XIII.** | June 16, 2021 | Review and agreement on Draft Plan Framework (Goals, Objectives, Strategies, Actions) relative to goals and objectives. Presentation on modeling scenarios for potential restoration locations. Public comment. |
| **Meeting XIV.** | Aug. 18, 2021 | Continue review and consensus testing of Draft Plan and implementation strategies and actions, and agreement on Draft Plan for public comment. Public comment. |
| **Public Workshop and/or Oystermen's Workshop #4 Date TBD** | | ***Schedule & format dependent on status of the COVID-19 pandemic.*** Review and public comments on Revised Draft ABS Ecosystem-Based Adaptive Management Plan and implementation strategies. |
| **Meeting XV.** | Oct. 20, 2021 | Review of public comment, agreement on recommendations for inclusion in the Plan. Public comment. |
| **Meeting XVI.** | Nov. 17, 2021 | Complete Phase III of project. Final CAB approval of Management and Restoration recommendations for the Plan. Briefing on Phase IV of the ABSI CAB. Public Comment. |
| **PHASE IV—RESTORATION PROJECT SELECTIONS AND IMPLEMENTATION/FUNDING PLANNING** | | |
| Tentatively January 2022 | | • CAB continues with some new members and works on identifying the best combination of strategies that will achieve restoration objectives for the Bay using decision support tools and available data, and prioritization of specific restoration projects.<br>• Restoration Partners Working Group continues work to seek resources and political support for CAB's priority recommendations.<br>• Successor Group is organized and ready to convene when the CAB completes their work on the Apalachicola Bay System Ecosystem-Based Adaptive Management and Restoration Plan. The Successor Group's role will be to organize a group of key stakeholders committed to working collaboratively for the long-term and once the CAB process is complete to ensure that the Plan is implemented, monitored, and adaptively managed over time and supported by the Community. |

## ATTACHMENT 4
## ABSI STRATEGIES AND ACTIONS RESPONSIVE TO OYSTERMEN'S COMMENTS REVIEWED DURING APRIL 15, 2021 OYSTERMEN'S WORKSHOP

### OVERARCHING APPROACHES

**Approach 2.)** Include commercial fishermen in discussions of and to help work on restoration design and implementation (locations, size, total coverage, clutching, etc.), establishment of permanent closed areas, shell recycling, shelling, oyster relaying, mentoring, and workforce entry development, etc.

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

**Strategy 5.)** 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.

- *Action 5-A.):* Continue monitoring intertidal and begin monitoring sub-tidal reefs monthly and bi-annually using same protocols as FWC sub-tidal monitoring. Adjust to add metrics as needed. Data will be shared between FWC and ABSI.
- *Action 5-B.):* Continue monitoring intertidal and begin monitoring sub-tidal habitats using same protocols as FWC. Data will be shared between FWC and ABSI.
- *Action 5-C.):* Conduct 'spot-checks' at a large number (TBD) of different locations in the Bay to supplement the more intensive monitoring data. Document volume of rock/shell/oysters, number of spat, medium and market sized live oysters and boxes together with environmental data.
- *Action 5-D.):* Collect long term in situ environmental data using ABSI instruments and integrate ANERR environmental and nutrient data as correlates with oyster metrics.
- *Action 5-E):* Generate health indicators for ABSI using monitoring data, and other ecological factors (e.g. oyster-associated communities and structural complexity).

**Strategy 8.)** Seagrass and other SAV, and wetland and riparian habitat should be restored concurrently to work synergistically with oyster habitat restoration to enhance restoration of the ABS.

### GOAL B—SUSTAINABLE MANAGEMENT OF OYSTER RESOURCES

**Strategy 4.)** *Action 4-A.):* Engage local stakeholders in determining total coverage (how much to protect), placement (where to protect), and size (how large) of all types of potential closed areas using gridded maps as well as distributions of selected fishery and ecologically important species.

**Strategy 5.)** Manage the commercial oyster industry and recreational oyster fishing to provide for sustainable spat production and spawning and the recovery of oyster populations.

- *Action 5-A.):* Evaluate management scenarios (e.g., seasonal (summer) closure to wild harvesting, rotational closures, 5-day work weeks, non-harvested spawning reefs (permanent closures), limited entry, transferable license program, closures based on stock levels (stock assessment), reduced bag limits, bag tags, relaying oysters to better habitat, additional enforcement presence, manage harvest areas to prevent the concentration of effort in specific locations.
- *Action 5-B.):* Evaluate existing allowable and minimally destructive alternative gear type options and harvest methods, including the use of experimental gear for wild oyster harvesting.

**Strategy 6.)** Restore and create reef structures suitable for sustained oyster settlement and production for harvesting.

- *Action 6-A.):* Include oystermen in discussions to evaluate cultching techniques and materials for growing oysters (e.g., historical non-traditional, trees), adding spat on shell or other substrates.
- *Action 6-B.*): Include oystermen in discussions on spatial configuration of reefs (height, width, contours, etc.), locations (existing reefs and hard bottom), use of larger rock to protect restored reefs from siltation and sedimentation from prevailing currents and storms.
- *Action 6-C.):* Design and implement projects to achieve oyster fishery production targets.
- *Action 6-D.):* Design projects that include both fished and non-fished reefs.

**Strategy 8.)** Investigate oyster shell and oyster relay programs to move both cultch and live oysters to more favorable habitat.

- *Action 8-A.):* Use model and mapping information on larval source areas and environmental conditions to inform the potential programs.
- *Action 8-B.):* Research similar relay programs in other areas as potential models and cautionary tales.

**Strategy 11.)** Work with FWC Law Enforcement to develop 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.

- *Action 11-A.):* Develop strategies to increase FWC enforcement presence and number of checkpoints.
- *Action 11-B.):* Develop strategies to ensure uniformity in the harvestable and marketable size of oysters.
- *Action 11-C.):* Develop strategies to potentially limit oyster harvest to periods outside of peak spawning season.
- *Action 11-D.):* Develop standards for a potential limited entry fishery.
- *Action 11-E.):* Propose strategies to FWC and FDACs for implementation.
- *Action 11-F.):* Convene an Oyster Advisory Board within FWC to review and make recommendations on management and enforcement of the oyster fishery once wild oyster harvesting resumes in Apalachicola Bay.

**GOAL D—AN ENGAGED STAKEHOLDER COMMUNITY AND INFORMED PUBLIC**

**Strategy 2.)** *Action 2-B.):* Define what makes a successful shell recycling program, and work with local groups, businesses and other stakeholders to help initiate its development.

**GOAL E—THRIVING ECONOMY CONNECTED TO A RESTORED ABS**

**Strategy 4.)** Work with oystermen and other community stakeholders to promote post-recovery Apalachicola oysters.

**Strategy 9.)** Engage commercial fishermen in the restoration of the bay and encourage future participation in restoration such as monitoring, shell recycling, shelling, and relaying.

**STRATEGIES TO REFER TO OTHER ENTITIES**

**Strategy 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.

**Strategy 5.)** Work with State legislators and state agencies to develop funding strategies, and incentives for involving local watermen, seafood dealers, restaurants, aquaculture operations, and private citizens in oyster reef restoration efforts that will increase the viability of oyster resources.
*Action 5-A.):* Identify source of shell, or other restoration material.