



**CREATING AN OYSTER ECOSYSTEM-BASED FISHERIES MANAGEMENT PLAN FOR
THE GREATER PENSACOLA BAY SYSTEM**

OCTOBER 4, 2019

STAKEHOLDER ASSESSMENT REPORT

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CREATING AN OYSTER ECOSYSTEM-BASED FISHERIES MANAGEMENT (EBFM) PLAN FOR THE GREATER PENSACOLA BAY SYSTEM-STAKEHOLDER ASSESSMENT REPORT

I. CONTEXT FOR THE INITIATIVE

A. CONTEXT FOR THE NATURE CONSERVANCY FLORIDA INITIATIVE

The Nature Conservancy (TNC) in Florida is interested in convening stakeholders to develop an oyster ecosystem-based fisheries management plan for the Greater Pensacola Bay System (GPBS). For the purpose of this initiative the system is defined as Escambia, Pensacola, East and Blackwater Bays in Escambia and Santa Rosa Counties. TNC has been supporting and implementing projects in the GPBS for the past several years. This effort will build on TNC's demonstrated success in oyster reef restoration and experience in facilitating collaboration among diverse stakeholders on challenging topics like fisheries management.

The goal of the initiative is that by 2022 an oyster ecosystem-based fisheries management plan (Plan) for the GPBS is approved by the stakeholders. If successful, the Plan will be offered as a model for management of oyster resources throughout Florida's estuarine systems, the Gulf of Mexico and other regions. The intent is for the Plan to be developed, owned and implemented by the community and the State, not a "TNC plan".

The Working Group and the resulting Plan will seek to address and determine the priority of multiple objectives including wild harvest, oyster aquaculture, ecosystem service outcomes (i.e., clear water, more crabs and fish, nitrogen removal), and social benefits (e.g., recreational angling opportunities, and opportunity to participate in defining credible management processes) for the GPBS.

The Plan resulting from this initiative will help to define estuary-scale goals for restoring and sustaining oysters at appropriate locations and densities in the estuary. It will work in the broader context of the Pensacola and Perdido Estuary Program that received EPA funding in 2018 as part of the Deepwater Horizon oil spill settlement. The program hired an executive director in 2019 and is organizing to develop a Comprehensive Conservation and Management Plan (CCMP) for the Estuary Program's planning region. The Working Group recommendations will likely include actions and investments to support a sustainable oyster fishery alongside fisheries for other commercially- and recreationally-valuable fish and shellfish that depend on intact oyster reef habitat.

B. FOCUS ON OYSTERS

The oyster fishery in Florida is in distress. Many bays throughout the state have experienced declines resulting from a variety of factors including, but not limited to, changes in water quality and quantity, lack of suitable substrate, and the harvesting of a resource in decline.

Oysters are unique among Florida’s fisheries and coastal habitats – they are a species, a fishery and they also create habitat (reefs) that provide a suite of valuable ecosystem services. Beyond supporting the oyster fishery and other reef dependent fisheries, oyster reefs protect shorelines and reduce erosion, improve water quality, remove nitrogen (denitrification), and provide habitat and food for a variety of birds, animals and recreationally and commercially important fish. Oyster reefs are some of the most important ‘fish making’ habitats in the world yet they are also recognized as one of the most imperiled marine habitats globally and throughout the U.S., including Florida (Beck et al 2011). The state does not have a comprehensive oyster management plan that governs management of the oyster resources as a fishery and/or habitat. Oyster restoration must be viewed as a means to restore oyster resources as both a habitat that provides a suite of ecosystem services, and as a fishery that is a local economic driver and an essential part of the cultural history of our coasts.

C. ECOSYSTEM BASED FISHERIES MANAGEMENT (EBFM)¹

Throughout the U.S. and in Florida, oysters are managed as single species with little regard to interactions among and between species, or acceptable levels of management and protection of the habitats those species depend on to survive and thrive. The Nature Conservancy Florida Chapter's project is initiating an Ecosystem Based Fisheries Management (EBFM) approach as a model for management of oysters in Florida and beyond. This management approach is gaining traction and support amongst fisheries management agencies including the Florida Fish and Wildlife Conservation Commission (FWC), and the South Atlantic and Gulf States Marine Fisheries Commissions. The Nature Conservancy is building on the state’s and fishery management councils’ recognition of the essential role that habitats play in sustaining fisheries and this initiative will test and promote the potential of EBFM.

Adoption of an EBFM approach would shift the existing management regime from unsustainable single-species management to the integration of the habitat needs of the fishery. The fisheries species’ interactions on its physical environment and other species are important factors to consider when managing a fishery. The existing management system does not adequately take into consideration oysters’ need for a healthy, suitable habitat, or the interdependence of oysters and other fisheries and plant species.

The initiative aligns with TNC’s priorities and programs such as the Gulf of Mexico Program. Importantly, the elements included in an oyster EBFM approach have been identified as priorities by the state in response to the continuing deterioration of the oyster fishery and oyster habitat. Millions of dollars from the Deepwater Horizon oil spill settlement is available

¹ NOAA Fisheries defines EBFM as a systematic approach to fisheries management in a geographically specified area that contributes to the resilience and sustainability of the ecosystem; recognizes the physical, biological, economic, and social interactions among the affected fishery-related components of the ecosystem, including humans; and seeks to optimize benefits among a diverse set of societal goals.

<https://www.fisheries.noaa.gov/topic/ecosystems#ecosystem-based-fishery-management>.

specifically for oyster habitat restoration and economic recovery of Gulf of Mexico communities. EBFM can create greater economic stability for the oyster fishery, and other commercial and recreational fishing industries dependent on healthy abundant reefs, and opportunities for economic development, while conserving ecosystem services provided by oyster reefs for humans and wildlife.

D. CHALLENGES FOR OYSTER FISHERIES MANAGEMENT

Challenges to oyster fisheries management in Florida include multiple state agency responsibility, user group conflicts (e.g., commercial vs. aquaculture, community perceptions and acceptance), illegal or ecologically incompatible fishing practices, gaps in science regarding the health and condition of a system, lack of stakeholder knowledge and/or appreciation of the ecosystem services that the habitat provides, and the importance of oyster habitat to supporting other valuable fisheries. While EBFM is not a new concept (e.g., NOAA's EBFM report to Congress in 1999) adoption of this management approach has been slow and has not yet been applied to reef dependent fisheries in Florida.

The oyster fishery in Florida is managed by two state agencies – the FWC (e.g., enforcement of shellfish regulations and habitat and species conservation) and the Department of Agriculture and Consumer Services (DACS: e.g., certification and inspection of shellfish producers and processors, established shellfish harvest areas, oversight of shellfish aquaculture). Additionally, the state must comply with federal regulations regarding sanitation of shellfish for human consumption. Although shellfish is not regulated by the Gulf of Mexico or South Atlantic Fisheries Management Councils, the fish species they regulate are dependent on oyster habitat for their life cycle (e.g., shrimp, stone crab, red drum, menhaden). In addition, the Florida Department of Environmental Protection regulates water quality and administers the Office of Resilience and Coastal Protection which oversees the Florida Coastal Management Program and the Aquatic Preserve Program, among others.

II. STAKEHOLDER ASSESSMENT

A. ROLE OF THE NATURE CONSERVANCY AND FACILITATED SOLUTIONS LLC

The Nature Conservancy has extensive experience with oyster habitat restoration in Florida, nationally and globally and is regarded as a leader in this field. This has only been possible through the valued and long-standing partnerships with federal, state and other partners. TNC recognizes that restoration alone will not recover the oyster fishery and habitat that have been lost over decades of offenses (e.g., water quality, overfishing, inadequate management) and that a comprehensive management approach is needed. After conducting studies and assessing the ecosystem, social and economic issues, and consultations with state agencies and key stakeholders TNC concluded the timing was right for convening a collaborative stakeholder process to focus on developing an oyster ecosystem-based fisheries management plan for

Escambia, Pensacola, East and Blackwater Bays in Escambia and Santa Rosa Counties. This initiative is privately funded by TNC.

TNC contracted [Facilitated Solutions, LLC](#), based in Tallahassee, to conduct a series of stakeholder interviews and meetings in the community, and to subsequently design and facilitate the meetings and Working Group process going forward. Jeff Blair and Bob Jones, principals of Facilitated Solutions, LLC are accomplished neutral facilitators with 30 years of experience working with communities on oyster and other marine fisheries issues, as well as with other natural resource and land use issues.

B. PURPOSE OF THE STAKEHOLDER ASSESSMENT

The Stakeholder Assessment purposes were to:

- Interview and meet with stakeholders reflecting key perspectives regarding the development of an oyster ecosystem-based fisheries management plan (Plan) for the Escambia, Pensacola, East and Blackwater Bays in Escambia and Santa Rosa Counties;
- Help to identify key issues and challenges as well as ideas and suggestions for addressing them;
- Assist in identifying and recommending potential participants in a Stakeholder Working Group that TNC is convening to develop recommendations on the Plan; and,
- Inform and establish the framework for the Greater Pensacola Bay System (GPBS) Oyster Stakeholder Working Group's early meetings.

C. CONDUCT OF THE STAKEHOLDER ASSESSMENT

Facilitated Solutions, LLC conducted interviews and arranged meetings with over 70 stakeholders (*See Attachment #1*) in the GPBS. The results from the Assessment have been compiled in aggregate reflecting the range of themes, issues, concerns, and possible strategies from a range of perspectives, and with no attribution for the stakeholder comments and ideas expressed in the interviews.

The interviews have informed the findings and recommendations for the composition and representation on a GPBS Stakeholder Working Group.

III. CHALLENGES, ISSUES AND STRATEGIES

A. INTRODUCTION

The 78 stakeholder interviews held by Facilitated Solutions, LLC identified a range of key challenges and issues that stakeholders believe should be addressed in the initiative and by the Stakeholder Working Group. The interviewers asked the following open-ended questions:

1. From your perspective, what are the key issues, concerns or challenges facing the development of a science and experiential based oyster ecosystem-based fisheries management plan (Plan) for the Greater Pensacola Bay System (GPBS) that considers oyster habitat, oyster and other fish production, nutrient reduction, water quality, coastal protection, and economic and recreational activities and benefits.
2. From your perspective, what are the GPBS' most challenging issues impacting oyster and other fisheries?
3. What are the GPBS' most challenging environmental issues impacting the oyster reef and other critical habitat?
4. In the context of developing the Plan, what in your view is the single most important issue that the GPBS Stakeholder Working Group should address to enhance the social and economic health of the GPBS?

Many of the fishery and habitat issues, and water and land interface challenges identified are interrelated. The challenges and issues below are listed in order of frequency mentioned in the interviews.

The Stakeholder Working Group that will be convened by TNC will need to understand the range of issues and agree on the short- and longer-term priorities for actions informed by science that can restore the health of the GPBS and the oyster reefs.

B. KEY CHALLENGES AND ISSUES

1. The Role of Oysters in a Healthy Greater Pensacola Bay System

All those interviewed acknowledged the decline in the oyster reef system, and the fisheries dependent on these reefs, with the last 8 years witnessing a collapse of the GPBS. Research on this decline suggests multiple causes from point and non-point sources, disease and pathogens, rainfall and salinity fluctuations, deterioration of reef systems and suitable substrate, and overharvesting among others. With the efforts in recent years to address reef restoration, the jury is still out. Recent efforts to farm oysters through aquaculture in the GPBS have made limited progress.

Many stakeholders suggested that efforts should be directed towards restoring and creating new oyster reef habitat and substrate; however, location, height, density, etc. should be supported by sound science and research. Recent efforts have demonstrated that getting the substrate right is a complex endeavor and will require more sophisticated habitat suitability models. Among other issues identified is the impact creating reefs may have on endangered species (e.g., the Gulf Sturgeon), securing the funding to restore and manage the reef system, building on some of the early work in creating an active oyster shell recycling program, and habitat damage resulting from the increased pressures of development.

Several suggested making the connection clearer that recreational fishing, diving, and tourism are dependent on a healthy Bay System generally, and restoration of oyster reef systems and clean water specifically.

THE ROLE OF OYSTERS IN A HEALTHY GREATER PENSACOLA BAY SYSTEM <i>Listed In order of frequency from the interview responses</i>
Oysters have declined in the system (38)
Restore and create new oyster reef habitat and substrate (29)
Manage salinity (13)
Support sustainable shelling (9)
Include aquaculture and wild oysters in the Plan (6)
Oysters enhance the fisheries (5)
Enforcement and poaching (5)

2. The Water-Land Interface for Growth, Development and Prosperity

Virtually all those interviewed indicated growth and development as a key issue impacting water quality and oyster reefs in the GPBS. Some of the infrastructure that comes with development (e.g., waste, septic and stormwater systems) plays a role in non-point runoff such as sedimentation and siltation, clay runoff from dirt roads, and leaching from septic systems.

Many stakeholders suggested that the rapid rate of growth in the GPBS in general, and in Santa Rosa County in particular, has outpaced the investment in and construction of adequate wastewater and stormwater infrastructure. In fact, the population of Santa Rosa County has increased by 53% between 1990 and 2018, while Escambia County’s population increased by 18% for the same period (Source: Bureau of Economic and Business Research, UF, 2018). Some of those interviewed indicated that general lack of enforcement and compliance with existing building and land development regulations, inadequate rules and paying for infrastructure costs, and political will compound some of the adverse impacts of development on the streams, bayous and bays in the GPBS.

Some suggested that developers and the general public don’t understand the importance of the land-water interface, and connections between activities on land such as clearing for subdivisions to the edge of wetlands, lack of sufficient stormwater control and the resultant impacts these activities can have on the uplands, wetlands, streams, bayous, bays, and estuaries in the GPBS.

THE WATER-LAND INTERFACE FOR GROWTH, DEVELOPMENT AND PROSPERITY ISSUES IDENTIFIED <i>Listed In order of frequency from the interview responses</i>
Development (65)
Sedimentation and Development (23)
Stormwater Management and Runoff (19)
Septic Systems (15)

Inadequate Regulations, Enforcement and Compliance (13)
Waste Water (7)
Roads and Runoff (7)

3. Water Quality Issues and Challenges

Clean water is job #1 in supporting and sustaining robust fisheries, and the oyster reef systems that provide ecosystem services for a healthy GPBS. Indicator species such as seagrass and oysters require clean water. One person offered the analogy that you need to put out the forest fire before you begin to plant trees. Many believe that water quality, a work in progress, has been improving over the past 10 years, but has new challenges in sustaining the progress. Another suggested the analogy of after you stop smoking the recovery of your system takes time.

Water quality is a complex issue that has a number of interacting components including non-point nutrient runoff, impacts from development including sedimentation and siltation, wastewater and septic issues, stormwater runoff, upstream agricultural runoff, fluctuating salinity levels and rainfall, and point source pollution from industry and superfund sites, eutrophication, and sea level rise and warming temperatures.

In general, several noted that efforts to cut off the nutrients and pathogens coming from stormwater, and base water flow need to be accelerated but that the Working Group should focus on what actions and projects can move the needle the most for water quality.

WATER QUALITY ISSUES IDENTIFIED <i>Listed in order of frequency from the interview responses</i>
Water Quality in General (21)
Pollution (21)
Climate Change and Sea Level Rise in the System (6)
Nutrient Loading (4)
Plastics (3)
Agriculture and Water Quality (2)

4. Public and Leadership Education and Outreach

Most stakeholders interviewed stressed the importance of public education regarding the benefits and ecosystem services provided by healthy oyster reefs, such as contributing to resilience for storm events, filtering and maintaining the water quality in the system, and historically providing a living for oystermen, and oysters for public consumption. Many suggested the need to provide education, and a message that connects with the Region’s strong quality of life values, and target communication to different parts of the public including the military bases, the real estate sector, the development sector, businesses especially the eco-tourism sector, elected and appointed public officials, the utilities sector, recreational fishing, and water sports users.

PUBLIC EDUCATION AND OUTREACH <i>Listed In order of frequency from the interview responses</i>
Public Outreach and Education (19)
Military Engagement and Support (13)
Political officials buy-in (2)
Engaging Business and Economic and Ecotourism Development (2)

5. Research and Data Gaps

The critical importance of monitoring data to map and provide the information for spatial planning that can inform habitat suitability models for oyster reefs in the GPBS was noted by many of those interviewed. Many of those interviewed suggested there was considerable data being collected, however there was little effort to target and coordinate the data needed to assess the health of the Watershed and GPBS. Some suggested it will be important to understand the assumptions, and data supporting different management plans in the initiative area. Other areas where there may be data gaps include historic oyster reef systems, substrate status and location, changing salinity levels, a hydro-dynamic model of the system, causes for the decline of the GPBS, seagrass recovery data, and ecosystem services.

WHAT ARE SOME RESEARCH AND DATA GAPS <i>Listed In order of frequency from the interview responses</i>
Monitoring data needed for spatial planning and mapping. (23)
Habitat Suitability analysis (15)
Identifying and coordinating data collection (12)
Mapping of historic reefs.(6)
Management Plans in the System (5)
How is salinity regime going to change? (5)
Pollution in the bay system (3)
Lack of information on causes of the decline. (2)
Seagrass recovery data (1)
Ecosystem services (1)

C. POTENTIAL STRATEGIES TO ADDRESS KEY CHALLENGES AND ISSUES IDENTIFIED IN THE ASSESSMENT

1. The Stakeholder Working Group Process Suggestions

Many of those interviewed underscored the importance of creating an inclusive stakeholder table and suggested adopting an adaptive management approach which sets out a vision, establishes performance measures, and monitors actions and projects using the results as the basis for learning and adapting management and restoration strategies. Others urged sequencing the issues the Working Group evaluates including first addressing mapping and habitat suitability work, and then identifying roadblocks to oyster restoration, and building support for restoration strategies, projects, and funding to support them. Some suggested

ways to frame the initiative as supporting the region’s emphasis on quality of life, supporting greater resiliency and connecting oyster restoration with things that people care about such as recreational water activities including fishing and boating.

PROCESS SUGGESTIONS FOR GPBS STAKEHOLDER WORKING GROUP <i>Listed In order of frequency from the interview responses</i>
Framing the initiative (6)
Stakeholder process suggestions (5)
The table needs to be inclusive (3)

2. Potential Strategies and Options

Those interviewed noted the timing is ripe for a Stakeholder Working Group that can embrace emerging restoration and public education technology that is available or in development. In terms of habitat restoration many pointed to living shorelines as a strategy for providing multiple ecosystem services. Some suggested the time is right for reviewing and enhancing development, and fisheries regulation, and management efforts, and to advance and incentivize best development practices. Another area is helping the public through targeted efforts to promote an understanding regarding the critical interface and connection between land and water in terms of healthy bays and Region’s overall economy.

WHAT OPTIONS SHOULD THE GPBS STAKEHOLDER WORKING GROUP CONSIDER <i>Listed In order of frequency from the interview responses</i>
Create and utilize technology (11)
Create and utilize visuals and technology to inform and educate the public (8)
Support the development of living shorelines (6)
Oyster habitat restoration (5)
Update and enhance regulation and compliance (4)
Promote best development practices (3)
Targeted public education and engagement (3)
Create a dedicated funding source (2)

IV. STAKEHOLDER ASSESSMENT PRELIMINARY FINDINGS

A. FINDINGS

Following a review and analysis of the interviews and meeting results, Facilitated Solutions, LLC offers the following preliminary findings:

Finding 1: The Nature Conservancy in Florida has committed resources, expertise and staffing to convene stakeholders to develop through a collaborative process, consensus on an Oyster

Ecosystem-Based Fisheries Management Plan for Escambia, Pensacola, East and Blackwater Bays in Escambia and Santa Rosa Counties.

Finding 2: Stakeholders agree that the health of the Greater Pensacola Bay System (GPBS) is declining, and the habitat and fisheries need urgent attention. Stakeholders believe that water quality should be enhanced, and habitat restoration efforts are needed to provide sufficient quantity and appropriately located substrate, cultch, and spat on shell to restore the oyster reef bars to a level sufficient to support a healthy fishery.

Finding 3: According to the stakeholders interviewed there are a myriad of factors impacting the GPBS that will need to be evaluated based on good science and data including overharvesting, development practices, protecting the shore-land interface, siltation and sedimentation, water quality and quantity, salinity fluctuations, nutrient loading from non-point sources, stormwater runoff, development ordinances, enforcement and practices, modification and loss of habitat, and loss of suitable substrate.

Finding 4: There is strong stakeholder support for, and interest in participating in the effort to develop an Oyster Ecosystem-Based Fisheries Management Plan for Escambia, Pensacola, East and Blackwater Bays in Escambia and Santa Rosa Counties. The only caveat is that all want to promote, and catalyze actions on the ground, and ensure there is funding to advance and implement the resulting plan.

Finding 5: Stakeholders view the initiative as timely and positive offering potential connections with estuary programs being developed across the Florida Panhandle including in the Perdido, Pensacola, and Blackwater Bay Estuary, Apalachicola Bay, St. Andrews and St Joseph Bays, Choctawhatchee Bay, and in the Suwannee Sound. In addition, connections could be made with the project to develop a Florida Oceans and Coasts strategic plan supported by the Legislature and FDEP and convened by the Florida Ocean Alliance.

Finding 6: Stakeholders agree that it is important to communicate, coordinate and share data and science as appropriate with other planned and ongoing restoration efforts. The project's objectives should provide synergy for the other efforts, with the cumulative results working to enhance the health of the GPBS. In addition, discussions should be organized to develop support for the multiple efforts.

Finding 7: There is strong stakeholder support to integrate the results of this initiative into the broader Pensacola and Perdido Bay Estuary Program that has been funded by the US EPA, has recently hired an executive director, and is organizing to produce a Comprehensive Conservation and Management Plan (CCMP), and to seek support for implementing the resulting consensus recommendations from the TNC supported initiative.

Finding 8: Water is truly the lifeblood of the coastal and bay ecosystems and economies for Escambia and Santa Rosa Counties, and their citizens and visitors have embraced a lifestyle that

relies on a healthy estuary that can support recreation, fishing, and tourism, trade, and emerging green industries.

Finding 9: The key fishery and habitat management agencies at the state and federal levels have expressed an interest and willingness to support and/or participate in the initiative.

Finding 10: There is stakeholder, and agency support for testing the ecosystem-based fisheries management approach in this initiative. The oyster fishery has collapsed in the GPBS and throughout Florida, and fishermen and other stakeholders are open to discussing alternative management options.

Finding 11: Given the increasing development pressures in both Santa Rosa and Escambia Counties, it is important to provide representation for the development community on the Stakeholder Working Group, and to address and minimize population growth impacts to the GPBS.

Finding 12: It is important to involve and engage the oystermen, commercial fisheries, and recreational fishing groups in the Stakeholder Working Group due to their on the water experience and knowledge, and because they have historically not been involved in discussions about the health of the GPBS.

Finding 13: Many stakeholders expressed the need to provide opportunities for public participation and engagement, education, and ultimately to build support for the changes that will be needed to restore and sustain the health of the GPBS, and to keep the results a living plan, and to fund the actions and projects needed to achieve the Community's vision for a healthy GPBS.

Finding 14: The Region has a long successful history of volunteering to help with keeping the GPBS' waters clean, reflected by the work of such civic organizations as Keep Pensacola Beautiful, Ocean Hour Florida, the Bream Fisherman Association, Project Greenshores, the UF/IFAS Lakewatch volunteer monitoring program, Adopt a Park and Adopt a Highway, the City of Pensacola's Save Our Waters, and Emerald Coastkeepers Inc.

Finding 15: The land-water interface is critical, and education for developers, builders and homeowners regarding appropriate ground cover, and fertilizer and lawn treatments to protect the water is critical. Education should be central in any effort.

V. STAKEHOLDER WORKING GROUP ROLE AND RECOMMENDATIONS

A. Stakeholder Working Group Role

The Stakeholder Working Group will be convened by The Nature Conservancy in Florida and will review what is known about the GPBS, identify information and data gaps, create a vision of

success for the system, identify the issues, challenges and opportunities, identify and agree to a set of performance measures, agree on the short and longer term priorities for actions informed by science for the creation of an Oyster Ecosystem-Based Fisheries Management (EBFM) Plan for the GPBS that can restore the oyster reefs and health of the bays.

In each interview and meeting the participants were asked whether there are any additional stakeholder groups or perspectives needed for an effective GPBS Oyster Stakeholder Working Group for the development of an Oyster EBFM Plan. They were also asked who in their view would be an acceptable and credible representative for their stakeholder sector's interests, including the interviewee, and who might be willing and able to participate on the GPBS Oyster Stakeholder Working Group.

As a result of the interviews the following stakeholder perspectives are represented on the Working Group to be appointed by The Nature Conservancy in Florida as convener:

- State Government (DEP, DACS, FWC, NFWFMD)
- Local Government (Escambia and Santa Rosa Counties and the City of Pensacola)
- University/Research (UWF & UF)
- Environmental/Citizen
- Business/Economic/Development/Tourism
- Seafood Industry
- Recreational Fishing

B. Stakeholder Working Group Recommendations

Following are recommendations for convening the Stakeholder Working Group:

Recommendation 1: Convene a stakeholder working group consisting of representatives from key stakeholder interests including state government, local government (City of Pensacola, Escambia County, and Santa Rosa County), university and research representatives, environmental and citizen groups, business and economic development, tourism, real estate and development, and seafood industry interests, to build consensus on an Oyster Ecosystem-Based Fisheries Management Plan for the Greater Pensacola Bay System (GPBS).

Recommendation 2: Communicate, coordinate and share science and data as appropriate with other restoration and management initiatives in the GPBS.

Recommendations 3: Ensure that there is good coordination and communication between the TNC supported initiative and the Pensacola and Perdido Bays Estuary Program, and that the recommendations are provided to the Program for their use in developing the Comprehensive Conservation and Management Plan (CCMP), for implementation as appropriate.

Recommendations 4: Ensure there is regular communication between TNC and local government representatives, including elected officials, regarding the status and direction of the Plan.

Following is the list of appointed members to the Stakeholder Working Group:

GPBS STAKEHOLDER WORKING GROUP MEMBERS	
NAME	AFFILIATION
Building/Development	
1. Shelby Johnson	Johnson Construction
2. Glen Miley	biome Consulting Group
Business/Real Estate/Economic Development/Tourism	
3. Will Dunaway	Environmental Lawyer
4. Steve Hayes	Visit Pensacola
5. Donnie McMahon	Business and Aquaculture
Environmental/Citizen	
6. Christian Wagley	Healthy Gulf
Local Government	
7. Shelley Alexander	Santa Rosa County Environmental Programs
8. Chips Kirschenfeld	Escambia County Natural Resources Management
9. Jim Trifilio	Pensacola and Perdido Bays Estuary Program
10. Keith Wilkins	Pensacola Assistant City Administrator
Recreational Fishing	
11. Chris Phillips	Hot Spot Charters
Seafood Industry	
12. Pasco Gibson	Seafood Industry/Waterman
13. Josh Neese	Aquaculture
14. Pete Nichols	Waterman/Oysters
15. Tommy Pugh	Seafood Dealer
16. Phil Rollo	Seafood Dealer
17. Calvin Sullivan	Oyster Harvester
18. William (Hub) Williamson	Oyster Harvester
State Government	
19. Beth Fugate	DEP/Aquatic Preserves
20. Mike Norberg	FWC Division of Marine Fisheries Management
21. Becky Prado	DEP Office of Resilience & Coastal Protection
22. Portia Sapp	DACS Division of Aquaculture
23. Kent Smith	FWC Division of Habitat and Species Conservation
24. Paul Thurman	NFWFMD
University/Research	
25. Jane Caffrey	UWF
26. Rick O'Conner	UF/IFAS Escambia County
27. Chris Verlinde	UF/IFAS/Sea Grant Santa Rosa County

VI. NEXT STEPS

The Nature Conservancy in Florida has appointed the Stakeholder Working Group based on this Assessment, and invited members to attend approximately 10 facilitated meetings, starting in October of 2019 and spanning the next two years. The facilitators will design and conduct a pre-meeting questionnaire of the members to prepare for the organizational meeting.

ATTACHMENT 1
STAKEHOLDER ASSESSMENT INTERVIEW PARTICIPANTS

THE NATURE CONSERVANCY IN FLORIDA INTERVIEWS CONDUCTED—MAY-SEPTEMBER 2019	
NAME	AFFILIATION
1. Kevin Claridge	DEP/Coastal Office [Tall]
2. Becky Prado	DEP/Coastal Office [Tall]
3. Portia Sapp	DACS/Aquaculture [Tall]
4. Charlie Culpepper	DACS/Aquaculture [Tall]
5. Jim Estes	FWC/Marine Fisheries
6. Katie Konchar	FWC scientist [Tall]
7. Kent Smith	FWC scientist [Tall]
8. Steve Geiger	FWC/FWRI [St. Pete]
9. Stella Wilson	NOAA NMFS [Pensacola]
10. Melanie Parker	FWC/FWRI [Appalachia]
11. Barbara Albrecht	Bream/watershed
12. Pete Nichols	Waterman oysters [Milton]
13. Chris Verlinde	UF/IFAS/SeaGrant
14. Darryl Boudreau	THE NATURE CONSERVANCY IN FLORIDA
15. Donnie McMahon	Waterman aquaculture
16. Josh Neese	Waterman aquaculture
17. Matt Deitch	UF/PSC [SRC]
18. Beth Fugate	DEP/Aquatic Preserves
19. Shawn Hamilton	DEP District Director
20. Shelley Alexander	SRC Env. Programs
21. Robert Turpin	Escambia/Marine Res.
22. Matt Posner	Escambia Co RESTORE
23. Conner Tate	Florida Institute for Human & Machine Cognition
24. David Fries	IHMC
25. Ed Camp	UF
26. Matt Chase	NOAA
27. Leslie Craig	NOAA
28. Kristal Walsh	FWC
29. Gareth Leonard	FWC
30. Jane Caffrey	UWF
31. Mike Norberg	FWC
32. Christian Wagley	Healthy Gulf
33. Katie Wilhelm	Emerald Coast/West FL RPC
34. Lee Edmiston	Retired DEP/ANEER
35. Don Imm	USFWS
36. Sean Blomquist	USFWS
37. Tom Frazer	UF/DEP Governor's Science Advisor
38. Tom Frick	DEP
39. Bruce Hagedorn	Eglin AF Natural Resources Manager

40. Rick O'Conner	IFAS SeaGrant Escambia
41. Carrie Stevenson	UF/IFAS Escambia
42. Holly Binns	Pew Charitable Trust
43. Chad Hanson	Pew Charitable Trust
44. Quint Studer	Studer Institute
45. Preston Robertson	Florida Wildlife Federation
46. Kris Kaufman	NOAA
47. Eric Bush	USACE Chief Planning & Policy
48. Will Dunaway	Environmental Attorney
49. Michael Hardy	NAS Natural Resources Manager
50. Dan Schebler	Santa Rosa County Administrator
51. Shawn Ward	Community Planning, Zoning & Dev. SRC
52. Cynthia Cannon	Senior Planner SRC
53. Keith Wilkins	Pensacola Assistant Administrator
54. Chris Verlinde	UF/IFAS [Together with waterman]
55. Pasco Gibson	Seafood industry/waterman
56. Cal Bowdenstein	Charter fishing/waterman
57. Ann Bowdenstein	Seafood industry
58. Calvin Sullivan (Gene)	Oyster harvester
59. Phil Rollo	Seafood dealer
60. Tommy Pugh	Seafood dealer
61. William Williamson (Hub)	Oyster harvester
62. Jim Trifilio	ED Perdido Pensacola Estuary Program
63. Chips Kirschenfeld	Escambia Co. Natural Resources Mgmt.
64. Andrew Drew Homer	Escambia Co. Dev. Services Manager
65. Brad Bane	Escambia Co. Env. Analyst
66. Steve Hayes	Visit Pensacola
67. Bob Cole	SRC Commissioner District 2
68. Donna Tucker	CEO SRC Chamber
69. Paul Thorpe	NFWFMD Environmental Resource Planning
70. Kathleen Coates	NFWFMD Water Resource Evaluation
71. Jerrick Saquibal	NFWFMD Hydrological Engineering
72. Paul Thurman	NFWFMD Environmental Resource Planning
73. David Peaden	HBA West Florida
74. Anthony MacWhinnie	Recreational Fishing
75. Scott Mason	Pensacola Rec. Fishing Association
76. Glen Miley	Managing Partner, Biome Consulting Group, Pensacola
77. Shelby Johnson	Johnson Construction
78. Tom Hammond	Development Engineering, Billfish Association; HBA
79. Chris Phillips	Hot Spot Charters – Recreational Fishing
80. Frank Gidus	CCA Florida Habitat and Environmental Restoration

Attachment 2
STAKEHOLDER ASSESSMENT INTERVIEW QUESTIONS

- A. Have you had any past or current formal or informal involvement in the Greater Pensacola Bay System discussions regarding planning, regulation or restoration of the oyster fishery or the Bay System? Describe the processes and your role.
- B. What part of the GPBS are you most familiar with, or have had the most experience with? (1) Upper Escambia Bay; (2) Lower Escambia Bay; (3) Pensacola Bay; (4) Blackwater Bay; or (5) East Bay?
- C. Your Agencies/Organizations Role. What role does your Agency/Organization currently play in the Greater Pensacola Bay System?
- D. What role would your Agency/Organization likely play in the development & implementation of a Oyster Ecosystem-Based Fisheries Management Plan in the GPBS?
- E. From your perspective, what are the key issues, concerns or challenges facing the development of a science and experiential based ecosystem-based oyster fisheries management plan for the Greater Pensacola Bay System that considers oyster habitat, oyster and other fish production, nutrient reduction, water quality, coastal protection, and economic and recreational activities and benefits.
 - 1. From your perspective, what are the Greater Pensacola Bay Systems' (GPBS) most challenging issues impacting oyster and other fisheries?
 - 2. What are GPBS' most challenging environmental issues impacting the oyster reef and other critical habitat?
 - 3. In the context of developing the plan, what in your view is the single most important issue that the GPBS Oyster Stakeholder Working Group should address to enhance the social and economic health of the GPBS?
 - 4. How well do you think stakeholders in the GBPS are currently working/collaborating together for the eco-socio-economic health of the System?
 - 5. What current initiatives are you aware of in the GPBS?
- 6. Do you have any suggestions or options for enhancing the oyster landings and habitat, ecosystem outcomes, and social benefits for a healthy Greater Pensacola Bay System?
- 7. What stakeholder sector do you identify/affiliate with? Are there any additional stakeholder groups or perspectives needed for an effective GPBS Oyster Stakeholder Working Group for the development of an Ecosystem-Based Oyster Fisheries Management Plan (Plan)?
- 8. Would you have any interest in being considered for membership on the GPBS Oyster Stakeholder Working Group? Who in your view would be an acceptable and credible representative for your interests that might participate on the GPBS Oyster Stakeholder Working Group? Is your stakeholder group represented by an association or organization? Name and contact information.
- 9. Who else should we talk to in order to get a complete picture of issues regarding the development of an Ecosystem-Based Oyster Fisheries Management Plan for the Greater Pensacola Bay System?

Attachment 3
ABOUT FACILITATED SOLUTIONS



JEFF A. BLAIR is retiring faculty at Florida State University, and serves as Associate Director for the FCRC Consensus Center (Center), and concurrently he is principle and owner of his consulting business **Facilitated Solutions, LLC**. He specializes in stakeholder advisory groups, visioning, workplan (strategic action plan) development and strategic planning initiatives. His work for **Facilitated Solutions, LLC** and the Center includes facilitation, process design, strategic planning, and consensus-building on complex public policy initiatives. He has worked with federal, state, local government, and private sector representatives to design and implement collaborative approaches to planning, rule making, and dispute resolution with an emphasis on public participation in the design and implementation of policy in over 185 projects and over 2200 meetings. In addition, he teaches classes and conducts trainings in various dispute resolution topics. Ongoing projects include serving as lead facilitator and conflict resolution consultant for agency stakeholder advisory councils and commissions such as DBPR's Florida Building Commission including facilitating over 67 special issue stakeholder workgroup projects for the Commission and a total of over 1,000 individual meetings for the Commission since 1999. In addition, he is currently facilitating the Apalachicola Bay System Initiative for Florida State University, the Pensacola Bay Ecosystem-Based Oyster Fisheries Management Plan for The Nature Conservancy, and the Bailey Wildlife Foundation Research Team's Coral Reef Wildlife Project. Recently completed projects include successfully facilitating to consensus a Strategic Vision Alignment Initiative for the Southeast Region of the US Fish and Wildlife Service, a strategic vision process for FSU's College of Social Sciences and Public Policy, the Suwannee River Partnership Steering Committee (FDACS, FDEP, SRWMD, and UF/IFAS), the North Florida Regional Water Supply Partnership Stakeholder Advisory Committee (SRWMD/SJRWMD/FDEP/FDACS), the Coastal SEES OysterFutures Workgroup, the Gulf of Mexico Angler Focus Group Initiative, and the For-Hire Recreational Fisheries Electronic Monitoring Assessment Process. He served as process consultant and facilitator for the Florida Department of Agriculture and Consumer Services' (FDACS) Pest Control Enforcement Advisory Council, Pesticide Review Council, FDACS Agricultural Feed, Seed and Fertilizer Advisory Council, and the Florida Coordinating Council on Mosquito Control for over ten years. He facilitated the Florida Division of Emergency Management's Flood Resistant Standards Workgroup and the Florida Emergency Notification System Vision Workshop. He has done work for the National Oceanic and Atmospheric Administration (NOAA) including the National Saltwater Recreational Fishing Summit, Deepwater BP Oil Spill Programmatic Environmental Impact Statement scoping workshops, NOAA Fisheries Chesapeake Modeling Symposium and the Gulf of Mexico Grouper Forum. Work for United States Environmental Protection Agency (USEPA) includes the National Bedbug Summit and the International Public Health Pesticides Workshop in London, England. Work for the private sector includes designing and facilitating the Recreational Boating

Stakeholders Growth Summit, and working with National Pest Management Association (NPMA), National Marine Manufacturers Association (NMMA), Association for Structural Pest Control Regulatory Officials (ASPCRO), Association of American Plant Food Control Officials (AAPFCO), Florida Green Building Coalition (FGBC), National Association of Home Builders (NAHB), and Florida Natural Gas Association (FNGA). Mr. Blair has provided facilitation, planning, and process design for numerous agencies, entities, non-profit organizations and associations since 1977. He is a Florida Supreme Court Certified Mediator, a U.S. Institute for Environmental Conflict Resolution, a National Roster of Environmental Dispute Resolution and Consensus Building Professionals qualified/approved practitioner, a qualified/approved practitioner on EPA's Environmental ADR Neutrals Roster, and is qualified as a Senior Conflict Management Specialist for the Department of Interior's Office of Collaborative Action and Dispute Resolution (CADR). He is a graduate of the University of Florida (Philosophy and Anthropology) and the Florida State University (Social Policy and Dispute Resolution).

ROBERT M. JONES is a retiring faculty at Florida State University, and serves as Director for the FCRC Consensus Center, and concurrently he is consultant and collaborator with **Facilitated Solutions, LLC**. He has served at the Director of the FCRC Consensus Center at Florida State University since 1990. His work with the Center and with Facilitated Solutions LLC has included extensive experience and expertise in designing and facilitating over 50 large consensus-building stakeholder collaboration processes from national strategic planning summits for recreational fishing and the recreational boating industry, to regional strategic planning and consensus building efforts with federal wildlife agencies and on Everglades restoration, to statewide, regional, local task forces, commissions on environmental, transportation and development issues.

He is highly respected nationally for his leadership and writing in the field of collaboration and consensus building on environmental, marine and land use issues, serving on a number of national practitioner boards and committees and is a member of the US Department of Interior, US Environmental Institute for Conflict Resolution and EPA National Rosters. He has extensive experience and expertise in designing and facilitating large consensus-building stakeholder collaboration processes from national strategic planning summits for recreational fishing and the recreational boating industry to statewide and regional task forces commissions and projects on regional visions and strategic plans.

Mr. Jones has provided consultation to public, private and non-profit organizations on assessing readiness for collaboration, engaging in strategic planning and building collaborative capacity. He has led project facilitation on Everglades restoration initiatives, endangered species, water and marine resources, and water supply, regional visioning, and military-civilian landscape and airspace planning. In the past he has also facilitated and mediated land-use, development and environmental and natural resource disputes.

He has served as the Secretariat of the Florida Civic Advance an emerging network of public, private and nonprofit organizations committed to strengthening civic life in Florida's communities. Chair of the University Network for Collaborative Governance and a member of

the Kitchen Table/Policy Consensus national board. Prior to his work with the Consensus Center, Mr. Jones was a Senior Associate for eight years at the National Institute for Dispute Resolution, in Washington D.C., where he designed and administered programs in public policy mediation and collaboration and professional education and directed a national dispute resolution research grants program. He is a graduate of University of California Davis School of Law and University of California, Berkeley.