

**MOLLUSCAN SHELLFISH SUBCOMMITTEE MEETING
MINUTES**

Tuesday March 15, 2022

In-person Meeting

APPROVED BY:

COMMITTEE CHAIRMAN

On Tuesday, March 15, 2021, the Subcommittee Chair, **Evan Pettis**, called the meeting to order at approximately 8:30 a.m. The following were in attendance:

Members

Carolina Bourque, LDWF, Lafayette, LA (virtual)
Jason Rider, MDMR, Biloxi, MS
Erik Broussard, MDMR, Biloxi, MS
Portia Sapp, FDACS, Tallahassee, FL
Robert Caballero, LDWF, New Orleans, LA
Jason Herrmann, ADCNR/AMRD, Dauphin Island, AL
Evan Pettis, TPWD, Rockport, TX

Staff

Charlie Robertson, GSMFC, Ocean Springs, MS
Ali Wilhelm, GSMFC, Ocean Springs, MS
Dave Donaldson, GSMFC, Ocean Springs, MS

Others

Mario Marquez, TX Sea Grant, Palacios, TX
Tony Reisinger, TX Sea Grant, Palacios, TX
Alexis Sabine, TX Sea Grant, Corpus Christi, TX
Rusty Grice, MS-AL Sea Grant, Gulf Shores, AL
Sandra Brooke, Florida State University, Tallahassee, FL
Scott Bannon, ADCNR/MRD, Dauphin Island, AL
Sharon McBreen, The Pew Charitable Trusts
Chris Nelson, Bon Secour Fisheries, AL
Julie Lively, LA Sea Grant, Baton Rouge, LA
Christopher Mace, TPWD, Corpus Christi, TX
Zachary Olsen, TPWD, Rockport, TX
Laura Picariello, TX Sea Grant, Galveston, TX
Matt Davis, FL FWC, Eastpoint, FL (virtual)
Ryan Bradley, MS Commercial Fisheries United, Biloxi, MS (virtual)
Tomena Scholze, FL FWC, FL

Adoption of Agenda

Jason Herrmann moved and it was seconded by Portia Sapp to adopt the agenda. Motion carried unanimously.

Approval of Minutes

Portia Sapp moved and it was seconded by Jason Herrmann to approve the minutes as written for the October 12, 2021 meeting. Motion carried unanimously.

Summary of Gulf Oyster Restoration Projects Funded by DWH

Sandra Brooke, University of Florida, provided an overview and simulation of the final version of a database developed in coordination with The PEW Charitable Trusts. This database provides an inventory and synthesis of oyster restoration projects funded by Deepwater Horizon (DWH) funds. A total of 68 projects are identified and summarized; however, it has been recognized that the database likely isn't comprehensive.

Projects were categorized by types (e.g. habitat enhancement, habitat creation, research, aquaculture, etc.) to illustrate the majority of project funding that was used for habitat enhancement, research, and planning. There are 42 active projects totaling \$194M, while there are 26 completed projects totaling \$36M. Despite the large amounts of funds for these projects, restoration outcomes are not always favorable. Some causes for projects not meeting their restoration objectives include hypoxia, sedimentation, freshwater intrusion, and other environmental factors.

Some challenges were encountered while compiling this information, such as differences in reporting requirements between funding agencies and NFWF not reporting in an effective manner for the public to have access. Future needs that could improve on this effort include identifying a central location for the database and expanding its scope, establishing the database as a repository, and creating an information sharing platform that could potentially include other sources of information for environmental restoration projects.

Discussion of Hurricane Impacts to Alternative Oyster Aquaculture

Texas

Evan Pettis explained TPWD began alternative oyster culture (AOC) in the fall of 2020, and they have two active sites. To date, they have not sustained any impacts from hurricanes; however, applicants are required to submit a hurricane/tropical storm plan. Fees are collected as part of Texas' AOC program and 20% of the fees collected are set aside to help cover cleanup costs associated with abandoned gear/equipment and other damage from hurricanes. Private insurance is not required.

Louisiana

Carolina Bourque described impacts in Louisiana. They sustained large impacts to their AOC operations. Although they required applicants to have a storm plan, the impacts were so significant that all gear was lost. Currently, there are no plans, but the industry is recovering slowly.

Mississippi

Jason Rider explained MDMR has an AOC park south of Deer Island, which is exposed to high winds from the south. During Hurricane Zeta, they experienced significant equipment loss. Requirements for farmers to participate in their AOC program include liability insurance, a storm preparation plan, and tags for all equipment. There is no recovery program or fund available to assist with recovery or damages caused by storms. MDMR is experimenting with new types of equipment and setups for farmers to consider using.

Alabama

Jason Herrmann said storms do have negative effects on the AOC operators, but the larger farms are able to bounce back relatively easier. No insurance is required, but they plan to meet to discuss this, as well as ways to assist those recovering from negative impacts in the future.

Florida

Portia Sapp mentioned that their AOC industry has experienced a lot of the same things described by others. They received significant impacts from Hurricane Michael in 2018, and have just received (4 years later) funding to help farmers recover from that disaster. They do require all suspended gear to be tagged. A video was developed from a meeting with stakeholders/aquaculture industry to discuss tagging, which can be shared with the group.

Oyster Shell Recycling Program Highlights

Texas

Pettis explained that a Bill (HB51) was passed in Texas, which requires the dealers to return 30% by volume of the total quantity of oysters harvested the previous license year, or payment of a fee of \$1.32 per sack (no increase) to the department to return an equivalent amount of cultch to public reefs. Since 2018, they are due approximately 58.7k cubic yards of cultch or \$4.47M in lieu of cultch. To date, they have recovered 35.6K cubic yards of cultch and just over \$1M in fees in lieu of cultch. There are several community lead oyster recycling programs. One example, Sink Your Shucks, recovers shells twice a week from restaurants, markets, and festivals, and has recovered two million pounds of oyster shell since 2009. The Galveston Bay Foundation has managed a similar program since 2011, and has recovered 1,140 tons of oyster shell to use for reef creation, living shorelines, and volunteer-based oyster gardening.

Louisiana

Bourque told the group that there is not a state-sponsored oyster shell recycling program in Louisiana; however, they do have the Coalition to Restore Coastal Louisiana (CRCL), which has partnerships with restaurants in New Orleans to recover oyster shell. This is a relatively small operation but they do have plans to expand. The state does require 30% of any oyster shells collected by this program to be given to the state. A recent study from 2021 found that around 75% of oysters harvested in Louisiana are sold out of state, which makes it difficult for them to recover most of the shells harvested in their waters. However, many dealers and processors in Louisiana also own private leases and they will recycle the shells from their businesses and use them as cultch on their leases.

Mississippi

Rider described the oyster shell retention fee of \$0.30 per sack, which is collected by the state from oysters harvested from state waters and sold. Harvest of traditional on-bottom oysters grown on public reefs has decreased dramatically, but the growing off-bottom industry pays this tax as well. Funding has become available through RESTORE Act for Phase I of a project that is very similar to the oyster shell recovery effort described by Louisiana.

Alabama

Herrmann explained Alabama has a \$2 per sack shell fee, and it also has a fee of \$0.35 per tag that goes towards oyster restoration and monitoring projects. Since 2016, they have had an oyster shell recycling program that is managed through Alabama Coastal Foundation which recruits restaurants to the program, and carries a small cost to transport them to the agency. Currently, they have over 2,500 cubic yards of oyster shell being stored to use as a source for oyster restoration projects.

Florida

Matt Davis said Florida doesn't currently have a state-wide oyster shell recycling program. He explained that there are some programs run by small non-profits that operate in places such as

Pensacola, Apalachicola, and Tampa Bay. They mainly partner with restaurants, and function similar to the ones described in other states. **Sapp** added there is statutory language that allocates a certain percentage of shell from profitable facilities as property of the state, as long as the state has the ability to collect it. However, about 10 years ago, the program that was managed under this legislation lost half of its budget and no longer is operational.

Discussion of State Oyster Management Plans

Texas

Pettis stated they have an oyster management plan that was published in 1988, but has been updated recently. Over the last decade there have been many changes. Some recent changes have been to close environmentally sensitive bays, evaluating the use of patent tongs for use in oyster sampling and monitoring activities, and evaluating the use of bathymetric acoustic surveys to inform management and closures.

Louisiana

Bourque reported that Louisiana published an oyster strategic management plan for 2016, which can be found on the LDWF website. They are working to update rules and regulations that have been recently changed. They're also updating the landings.

Mississippi

Rider reported that they took a different approach and developed a restoration and recovery plan, which covers active projects, future funded projects, and future unfunded projects. This plan outlines 17 active projects, seven future funded projects, and six future unfunded projects, and is used to inform the public and other resource managers about how the agency plans to move forward. This plan is posted on the MDMR website.

Alabama

Herrmann presented the group with the Alabama Oyster Management Plan, which is a public document designed to outline oyster management goals and protocols followed by resource managers. This document is very extensive, and includes information on standard operating procedures, oyster restoration and monitoring, and the history of the oyster fishery in Alabama.

Florida

Sapp reported that Florida does not currently have an oyster management plan, but is working with The Nature Conservancy to develop a guidance document for regional management of estuaries, which would include oyster habitat and resources. They hope to have this finalized in the next year.

Discussion of State Oyster Restoration Plans

Texas

Pettis explained that Texas is currently developing an oyster restoration plan, and has restored over 550 acres in the last decade. They have also been working very closely with other restoration partners outside of TPWD. Currently, they are experimenting with oyster restoration design techniques to evaluate how to be more effective in their restoration practices. They have been experimenting with different densities, different cultch types, spacing of cultch mounds, mixes of cultch types (e.g. rock on top of shell, shell on top of rock, etc.), and source/sink dynamics.

Louisiana

Bourque discussed the multi-faceted oyster strategic plan drafted by LDWF and submitted to the legislature in December of 2020. The plan outlined the state's approach to increase oyster density, expand oyster resources in public seed grounds, increase resiliency of oyster resources and the industry by offering options to expand operations into AOC. LDWF received funding from the Natural Resources Damage Assessment (NRDA) to complete four brood reefs east of the Mississippi River with approximately 5,000 cubic yards of limestone (up to 18" relief) over 1-2 ½ acres of oyster habitat. These reefs will remain closed to harvest. In 2021, a 200-acre cultch plant in Sister Lake was planted with 29,500 cubic yards of limestone. In spring 2022, they plan to construct two 100-acre oyster reefs by spreading 13,500 cubic yards of cultch material over each reef. The size of the cultch for these reefs will be approximately 4 inches in diameter. They also plan to survey water bottoms in Morgan Harbor to identify new sites suitable for oyster restoration.

LDWF has a partnership with CRCL and Louisiana Sea Grant to produce hatchery-raised spat on shell, which will be deployed in public reef locations. Louisiana Sea Grant has also been contracted to work on the AOC program in Louisiana, while University of Louisiana – Lafayette is contracted to attempt to develop a strain of oysters more tolerant to lower salinities that can be used for restoration.

Mississippi

Rider discussed MDMR's restoration work in Biloxi Bay. Using NRDA/NFWF funds, they identified three 10-acre plots to deploy cultch sizes at different densities to evaluate which strategies work best for oyster restoration. Initial results indicate the larger cultch material has performed better during the recruitment phases. Additionally, they have been conducting oyster restoration on smaller areas within Biloxi Bay using MDMR funds and vessels to run small-scale tests on the success of different cultch types (e.g. limestone, crushed concrete, oyster shell).

Currently MDMR has a small-scale remote setting facility; however, they have funding available to construct a large-scale remote setting facility in the near future. In 2021, their oyster cultch planting program deployed two 50-acre cultch plants in the western Mississippi Sound on historic reefs and did some additional cultch planting on smaller areas in Biloxi Bay. They contracted with a private company to put out live seed-oysters as well, but success has been limited during the last year due to unfavorable environmental conditions.

Alabama

Herrmann said the oyster harvesters in Alabama have experienced an increase in harvest over the last few years, which can be primarily attributed to oysters harvested from oyster restoration areas dating as far back as 2015. In 2021, they harvested just over 50,000 sacks of oysters. ADCNR is using a new web-based application to manage harvest areas. Oystermen can use the app on their smart phones to see which areas are open to harvest, as well as their location while harvesting. This helps improve the accuracy of reporting harvest location and can also assist in trace back during for public health and safety. This can also aid in managing specific areas of oyster reefs based on catch rates or other observations that may be important to consider when making management decisions.

ADCNR has mapped some reefs to better understand different cultch strategies for oyster restoration. In the future, they plan to have a hatchery that could supplement restoration efforts.

Florida

Davis explained the oyster restoration plan will be folded in the larger oyster restoration management

plan. They completed a project placing crushed limestone in three 10-acre plots in Appalachicola Bay with encouraging preliminary results. The aforementioned project is a pilot for a larger NFWF-funded project that will restore up to 1,000 acres of oyster reefs in Appalachicola Bay. Part of this project will include gathering input from stakeholders on location for placement of cultch. Additionally, they have already mapped approximately 12,000 acres of bottom in the bay to identify areas where there are hard substrates suitable for oyster restoration.

They also have NRDA funding for a project to conduct mapping, monitoring, and developing habitat suitability indices to inform future restoration activities.

State Oyster Highlights for On- and Off-bottom Aquaculture

Due to time constraints, the group decided to forego further discussions on topics related to this agenda item. If any states have important issues they'd like to discuss or share with the group, they can email that information to the chairman to disseminate accordingly.

Robert Caballero provided a brief update to the group on Louisiana's aquaculture industry. They are expecting four new permits for off-bottom aquaculture. Most of their lease holders lost all of their equipment and are unable to find much of it. Louisiana Sea Grant developed flyers outlining how to prepare for hurricanes, and distributed them to appropriate industry representatives. They are investigating using the "shell-a-vator", which is a submersible floatation/lifting device developed to be used in oyster aquaculture, and may consider using this more in Louisiana. To date, insurance programs have not proven helpful in providing relief to those who experienced loss or damage to gear from the recent hurricane.

Other Business

Pettis mentioned the Gulf of Mexico Alliance (GOMA) is starting an oyster community of practice and have invited the chairman to attend their next meeting and give an update on the Molluscan Shellfish Subcommittee (MSSC). It may also be a good idea to have someone from GOMA present at the next MSSC meeting to ensure cross-coordination between the two groups to improve efficiency and avoid duplication of respective efforts.

Oyster South will take place in Biloxi, MS the first week in April 2022.

It was also brought up that upcoming meetings will be in Texas in October. For that meeting, GSMFC will encourage attendees and provide support for them to participate for the entire week of the meeting. It is also likely to be in-person only and it may be important to discuss how to change the standard operating procedures to address attendance.

With no other business to discuss, Jason Herrmann moved and it was seconded by Portia Sapp to adjourn the meeting at 12:00 p.m. Motion carried with no opposition.