

Committee Reports



MEMORANDUM

TO: N.C. Marine Fisheries Commission
Sea Turtle Advisory Committee

FROM: Chris Batsavage
Jacob Boyd

DATE: February 8, 2013

SUBJECT: Sea Turtle Advisory Committee Meeting

draft

The Marine Fisheries Commission (MFC) Sea Turtle Advisory Committee (AC) met on Thursday, November 29, 2012 at 6 p.m. at the North Carolina Division of Marine Fisheries Central District Office located at 5285 Highway 70 West, Morehead City, NC. The following attended:

Advisers: Bob Lorenz—chair, Jean Beasley, Matthew Godfrey, David Pearson, Bill Barker, Adam Tyler, Andy Read, and Craig Harms

Staff: Jessica Marlies (phone), Scott Conklin (phone), Chris Batsavage, Jacob Boyd, John McConnaughey, Dean Nelson, Laura Lee, and Ray Mroch

Public: Ainsley Smith, Michelle Nowlin, and Sara McNulty (phone)

MFC: Chris Elkins

Bob Lorenz, serving as chair, called the meeting to order. He then informed the committee of the attendance policy for the advisory committee members.

MODIFICATIONS TO THE AGENDA

There were no modifications to the agenda.

APPROVAL OF MINUTES

Matthew Godfrey asked staff to remove an incorrect sentence about strandings.

Jean Beasley motioned to approve the modified minutes of the July 26, 2012 Sea Turtle Advisory Committee and was seconded by Andy Read— motion passes.

PUBLIC COMMENT

No public comment during the public comment period.

2013 MEETING SCHEDULE

Chris Batsavage reviewed the 2013 meeting schedule for the Sea Turtle AC. In an attempt to give AC members more time to plan for meetings and to increase attendance, the division has scheduled 2013 meetings for all of the ACs. The 2013 Sea Turtle AC meetings will be held on Thursday night at 6 p.m. at the North Carolina Division of Marine Fisheries Central District Office on the following dates:

March 21

June 20

September 26

December 5

These meetings could be rescheduled if the majority of AC members could not attend and if the alternate date does not conflict with other scheduled meetings.

David Pearson asked if these meetings will be held right before MFC business meetings. Batsavage responded that will fall between MFC business meetings, but there are other committees that advise the MFC, so those meeting schedules were also taken into consideration.

Andy Read said the AC needs to start thinking of topics to discuss in 2013, such as the decision from National Marine Fisheries Service (NMFS) regarding the Sea Turtle Incidental Take Permit (ITP) application.

OBSERVER PROGRAM UPDATE

Jacob Boyd went over the handout showing the number of large mesh gill net trips, the number of observer trips and the percent coverage through October 2012. Since July 1, there were a total of 568 observed trips with 8.4% coverage statewide and 13% coverage outside of Management Unit A (Albemarle, Currituck and upper Croatan and Roanoke sounds). Management Unit D1 (Lower Core Sound, Back Sound, and North River) reopened on October 15 and has been two observed interactions (one live green and one live loggerhead). The Sea Turtle Lawsuit Settlement Agreement exemption line in Management Unit A moved back to the HWY 158 bridge (lower Currituck Sound) and North of Alligator River in early October due to unusually high sea turtle abundance (4 reported, 2 observed). The exemption line was moved back to the HWY 264 bridges in Croatan and Roanoke sounds after a month of no sea turtle observations and lower water temperatures.

Dr. Read asked about the reason for the unusually high sea turtle abundance in Albemarle Sound. Boyd replied that the division is not sure because the salinity in Management Unit A was normal this summer and fall.

Adam Tyler asked if the new inlet on Hatteras Island south of Oregon Inlet is allowing more sea turtles to enter the sounds and Boyd said that could be but cannot say for sure.

Lorenz asked how the reported sea turtle interactions from the Observer Program relate to the N.C. Wildlife Resources Commission's (WRC) weekly sea turtle stranding report, and Boyd responded that interactions from the Observer Program are included in the weekly sea turtle stranding report.

PAMLICO SOUND GILL NET RESTRICTED AREA (PSGNRA) UPDATE

Boyd gave the AC and overview of the PSGNRA this fall. The typical opening day of September 1 was delayed to September 15 as suggested by the MFC to avoid sea turtle interactions and to allow the fishery to occur during peak abundance of southern flounder. However, the PSGNRA was closed on September 26, 2012 due to observed sea turtle interactions (two live green and one dead Kemp's ridley). After examination of the remaining three-year cumulative takes allowed from the PSGNRA ITP issued in 2008, the PSGNRA was re-opened on October 15 under more stringent restrictions. Overnight soak times and four day fishing weeks were implemented to allow the fishery to continue while reducing the likelihood of sea turtle interactions. The PSGNRA remained open for the rest of the fishing season with few sea turtle interactions and much reduced fishing effort.

Dr. Read asked if there is any way to tease out the effect of the 4-night fishing week on sea turtle interactions, and Boyd responded that is difficult to do because of other factors such as fishing effort and sea turtle abundance in Pamlico Sound after October 15.

Tyler stated that most of the fishermen in Management Unit D1 avoided known sea turtle hotspots on their own to avoid an early closure. Jean Beasley said that is the kind of action that is needed from the fishermen.

Dr. Read asked Tyler how the hotspots in Management Unit D1 were identified, and Tyler replied that the fishermen looked at maps created by the division that show the locations of observed sea turtle interactions and avoided fishing the waters behind Core Banks because sea turtles are commonly found there.

SEA TURTLE ITP APPLICATION UPDATE

Batsavage updated the AC on the timeline of events associated with completing the ITP application and submitting it to NMFS on September 6, 2012. He explained that NMFS gave the division a very short timeline to submit the ITP application and was requesting information from the ITP before the deadline. He also reminded the AC that the public comment period for ITP application on the Federal Register closes on November 30, 2012.

Boyd explained that the current ITP application is organized differently than the previous revision, and NMFS was very pleased with this version overall. The division used different

models to determine the best fitting model to estimate turtle interactions for each species. The models incorporated data from the Observer Program's alternative platform sampling and estimated takes were based on 2010 fishing effort because it is very unlikely that fishing effort will ever increase to pre-2010 levels under the Settlement Agreement or ITP. There are 196 fewer requested sea turtle takes in this application compared to the previous revision.

Lorenz noted in this ITP application that in addition to less requested takes, gill net fishing effort and sea turtle gill net mortalities are much less compared to pre-2010 levels, and observer coverage is good.

Beasley urged all AC members to submit comments on the ITP application if they have not done so already. She disagrees with the requested duration of the permit (10 years). Boyd explained that flexibility exists to revise the permit during the 10-year period, and a 10-year period prevents the division from having to develop a new ITP application once we receive the permit to avoid any time lapse between permits.

Tyler asked if NMFS can revoke the ITP during the 10-year period, and Boyd replied that they can if the division is not fulfilling the requirements of the permit. Tyler then responded that he supports the 10-year period because NMFS can revoke the permit.

Michelle Nowlin from the Duke Environmental Law and Policy Clinic voiced her concern that the AC was not consulted in the development of the latest revision of the ITP application because it was inconsistent with why the AC was formed under the Settlement Agreement. Nowlin also asked if unused sea turtle takes from one year will carry over to the following year and Boyd replied said no. Boyd also reiterated that the tight deadline for submitting the ITP application to NMFS precluded more involvement with the AC.

Dr. Read stated that involving the AC in the development of the ITP application could have been beneficial, and he is disappointed by the lost opportunity.

Beasley stated that not involving the AC in the development of the ITP application violates the Settlement Agreement and warned the division against this happening again.

Jessica Marlies reminded the AC that information from the ITP application were vetted through the AC, but she understands the AC's frustration over not being more involved in the development.

Bill Barker asked Beasley what an appropriate time period for the ITP should be if 10 years was too long, and she said no longer than 5 years.

SOUTHERN FLOUNDER FISHERY MANAGEMENT PLAN (FMP) MANAGEMENT MEASURES AND HOW THEY RELATE TO THE SETTLEMENT AGREEMENT

Batsavage reviewed the commercial fishery management measures for Amendment 1 to the Southern Flounder FMP selected by the MFC at their November business meeting. A subset of the Settlement Agreement management measures were selected as management measures to achieve sustainable harvest for southern flounder in the commercial fishery. Those specific management measures apply to unattended estuarine gill nets 4 inches stretched mesh and greater and are as follows:

- Four-night fishing weeks from the Highway 64/264 bridges in Croatan and Roanoke sounds to north of Beaufort
- Five-night fishing weeks from south of Beaufort to the South Carolina state line
- 2,000-yard maximum yardage limit from the Highway 64/264 bridges in Croatan and Roanoke sounds to north of Beaufort
- 1,000-yard maximum yardage limit from south of Beaufort to the South Carolina state line
- 3,000-yard maximum yardage limit for areas exempted from the Settlement Agreement

These management measures cannot be relaxed without an amendment to the Southern Flounder FMP, but they can become more restrictive for protected species management purposes. The other Settlement Agreement management measures are not part of the Southern Flounder FMP so they could be modified, if appropriate.

Dr. Read asked if the large reductions in commercial southern flounder harvest were largely a result of the four and five-night fishing weeks and overnight soak times, and Batsavage said that the four and five-night fishing weeks accounted for the majority of the calculated harvest reductions followed by the maximum yardage limits.

OTHER BUSINESS

Lorenz brought up topics the AC has discussed in past meetings to see if further discussion was needed. The first topic was liability issues of observers on commercial fishing vessels.

Marlies explained the various liability rules regarding inspectors (i.e. observers) in North Carolina, and the exemptions in place. The commercial fishing industry is not different than other regulated industries in terms of liability, and there are no liability exemptions for the commercial fishing industry. The observers do have training, which decreases the chance of an incident happening.

Tyler responded that fishermen are still at risk for liability if an observer gets injured on a commercial fishing vessel. Marlies said yes, but no more than any other industry in North Carolina. Batsavage added that observers are instructed to not go on an observer trip if the vessel or the weather conditions are determined to be unsafe.

Beasley requested the AC to look at all sea turtle interactions in North Carolina, not just from the estuarine gill net fishery.

David Pearson motioned for a state database that includes all sea turtle interactions and was seconded by Adam Tyler—motion passes.

Dr. Read asked if the AC could get information on the division's outlook on funding the Observer Program to meet the obligations of the Settlement Agreement and an ITP.

Beasley urged the AC to lobby the General Assembly for adequate funding for the Observer Program.

Tyler would like to see information on how the division is spending money allocated to the Observer Program.

Batsavage said he will prepare an Observer Program budget presentation for the meeting in March.

Lorenz asked Batsavage about the exemption to the Settlement Agreement when water temperatures are below 55 degrees Fahrenheit. Batsavage said that exemption is in place for the gill net fishery for American and hickory shad when the commercial season is open (January 1-April 14). He also brought up the point of minimum observer coverage requirements in the Settlement Agreement during the winter months when sea turtles are not present in estuarine waters. Removing this requirement during the winter months from the Settlement Agreement would save money for the Observer Program and allow more observer coverage for times and locations when fishing effort and sea turtle abundance is higher.

No motions were made by the AC to address this issue

NEXT MEETING

The next meeting will be held on Thursday March 21, 2013.

The meeting adjourned at approximately 8:30 p.m.

Cc:	Catherine Blum	Kristy Long	Meredith Wilson
	Dick Brame	Dee Lupton	District Managers
	Frank Crawley	Jessica Marlies	Committee Staff Members
	Louis Daniel	Scott Conklin	Marine Patrol Captains
	Jess Hawkins	Nancy Marlette	Section Chiefs
	Allen Jernigan	Michelle Nowlin	

MEMORANDUM

TO: N.C. Marine Fisheries Commission
Bay Scallop Fishery Management Plan Advisory Committee
Dr. Louis Daniel

FROM: Trish Murphey
Tina Moore

DATE: December 12, 2012

SUBJECT: MFC Bay Scallop Fishery Management Plan Advisory Committee Meeting
Minutes

The Marine Fisheries Commission (MFC) Bay Scallop Advisory Committee (AC) met on December 10, 2012 at 12:30 p.m., at the N.C. Division of Marine Fisheries Central District Office located at 5285 Highway 70 W in Morehead City, NC. The following attended:

Advisers: Bert Speicher, Troy Alphin, Dennis Spitsbergen, Gene Ballance, Stephen Fegley, Ami Wilbur

Staff: Tina Moore, Trish Murphey, Sergeant Dean Nelson, Nancy Fish, Catherine Blum, David Skinner, Lauren Morris,

Public: Maurice Mann

Bay Scallop Co-lead, Tina Moore, called the meeting to order and introduced DMF staff to the committee. There were no modifications to the agenda

PUBLIC COMMENT

Maurice Mann. I am here to listen to what everyone else had to say and have no comment at this time.

The committee members introduced themselves and spoke a little about themselves and why they are serving on the AC.

Nancy Fish and Catherine Blum presented an orientation PowerPoint, explaining the FMP process. Fish discussed the Fishery Reform Act, the MFC and its duties, and the DMF's mission. Blum presented how an FMP is developed and the process of developing rules for the FMP. Stephen Fegley asked if the rules will come back to the AC if recommendations change. Blum explained the rule review process and that they would come back to the AC should there be any major changes in management strategy recommendations. Fish explained that the FMPs are developed by the DMF with the advice from the AC. She explained that the AC assists the DMF with the development of the FMP and that their recommendations are advice and that the

MFC selects the final management measures. Fish then went through some AC fundamentals, meeting etiquette, and public participation.

The MFC chair selects the AC co-chairs, so the group discussed who they would like as co-chairs. The group recommended Stephen Fegley and Amy Wilbur as co-chairs.

Moore then led the group through the Bay Scallop FMP timeline. She explained that the majority of the AC's time will be concentrated on step 4 which is to draft/revise and review sections and issues in the FMP and to establish AC positions. This would occur from January through August of 2013. Moore also talked about the Public Information Brochure (PIB), its purpose and that it will be reviewed by the MFC before going to the public.

Moore told the group that this will be the third round for the Bay Scallop FMP. The first FMP was completed in 2007. We had Amendment 1 in 2010 where opening the season based on progressive triggers was implemented and now we are starting on the five year review of the first FMP and will be Amendment 2. The Plan Development Team (PDT) has started writing and updating sections of the plan with the last five years of data. Moore also discussed the different sections that will be in the plan, including some discussion of protected resources that will also be included. The final end date after public review and the MFC selection of final management measures is November 2014, following review by the Department Secretary and the Joint Legislative Committee on Governmental Operations. Rule development will also take place with any rules becoming affective April 2015.

Moore discussed the goals and objectives of the plan. They have not changed since the last plan. She explained that these will go to the MFC for approval. Wilbur asked if there could be a place for aquaculture in the objectives and if it could be made clearer. Fegley commented that sometimes there is conflict between aquaculture and fisheries. He suggested addressing hatchery to market versus hatchery for enhancement. The group suggested that we make a new objective #5; to investigate methods and implications in bay scallop aquaculture.

Dennis Spitsbergen asked about why restoration was part of objective #2 concerning habitat and water quality. He was concerned about whether that meant that seagrass would be planted and restored. He really did not think that worked very well. Trish Murphey explained that restoration is probably more from a Coastal Habitat Protection Plan perspective in that by improving habitat and water quality near places where seagrass beds used to be, then those seagrass beds may be restored.

Moore then went through a list of issues that have already been discussed by the PDT. This list included the progressive triggers, with emphasis on areas south of Bogue Sound and walking or treading impacts on seagrass beds. She brought the AC up to date on the 2013 season in that the Bogue Sound area and areas south of Bogue Sound season will open on January 28, 2013 and remain open until April 1, 2013. The commercial fishery harvest is allowed on Mondays and Wednesdays, 10-bushel personal limits, not to exceed 20 bushels in an operation and the recreational fishery will open Thursdays through Sundays with a 1-bushel limit. Core Sound and Back Sound did not meet the trigger and we will not know about Pamlico Sound until samples are taken in January. Spitsbergen asked if the opening was through proclamation. Moore explained that it was.

Moore explained an issue with aquaculture, that you cannot harvest scallops off of leases outside of the scallop season or above the daily harvest limit. Another issue that will be discussed will be stock enhancement. She also listed the FMP sections that have been updated or are currently being updated.

Spitsbergen asked about research on treading in seagrass. Moore explained that there had been some work comparing dredging and hand harvest but it was not specifically looking at impacts of treading while hand harvesting. Murphey explained that the study showed that there was displacement of seagrass caused by dredging while displacement did not occur from hand harvest. The concern about displacement is the loss of juvenile scallops. The study also showed that juvenile scallops tended to emigrate away from areas disturbed by dredging and that was also a concern due to the potential loss to predation.

Moore then led the group in discussion of future meeting times and dates. The group preferred to meet during the day and 12:30 was acceptable by everyone. Future tentative meeting dates are: January 14, February 4, March 18, April 15, May 13, June 24, July 15, and August 12. Agenda items for the next meeting will include review of the life history section, the commercial fishery section, the stock status and discussion of any more potential issues.

Spitsbergen asked if it might be possible to revisit the allowance of dredging earlier than at the first of March, if abundances are high. Moore explained that we could. Spitsbergen also discussed his work on gonad development and whether or not the spring spawn has impacts on abundances. Fegley commented that he has done some work on the spring spawn. Murphey requested if Fegley would be willing to present his findings to the AC. Fegley indicated he would send his latest research paper from 2009 to the AC. Moore also requested Wilbur to update the group on her hatchery work. Wilbur explained that some of the methodology has been somewhat haphazard but have been successful in rearing seed but not as successful at getting them to market size.

The group adjourned by consensus. The next meeting is scheduled for January 14, 2013 at 12:30 at the Central District Office.

TM/lm

Cc:	Catherine Blum	Jess Hawkins	Kathy Rawls
	Dick Brame	Allen Jernigan	District Managers
	Frank Crawley	Amanda Little	Committee Staff Members
	Louis Daniel	Dee Lupton	Marine Patrol Captains
	Chris Elkins	Nancy Marlette	Section Chiefs

MEMORANDUM

TO: N.C. Marine Fisheries Commission
Bay Scallop Fishery Management Plan Advisory Committee
Dr. Louis Daniel

FROM: Tina Moore
Trish Murphey

DATE: January 18, 2013

SUBJECT: MFC Bay Scallop Fishery Management Plan Advisory Committee Meeting
Minutes

The Marine Fisheries Commission (MFC) Bay Scallop Advisory Committee (AC) met on January 14, 2013 at 12:30 p.m., at the N.C. Division of Marine Fisheries Central District Office located at 5285 Highway 70 W in Morehead City, NC. The following attended:

Advisers: Bert Speicher, Troy Alphin, Dennis Spitsbergen, Gene Ballance (via phone), Stephen Fegley, Ami Wilbur

Staff: Tina Moore, Trish Murphey, Sergeant Dean Nelson, David Taylor, Jessi Baker, Kevin Brown, Clay Caroon, John Hadley, Catherine Blum (via phone)

Public: Maurice Mann, David Kielmeier

Bay Scallop co-chair, Stephen Fegley, called the meeting to order. There were no modifications to the agenda

APPROVAL OF THE MINUTES

A motion was made by Bert Speicher and seconded by Ami Wilbur to approve the minutes from the meeting on December 10, 2012. Dennis Spitsbergen questioned the April 2015 final FMP date. Tina Moore explained that the date is correct and that the rule making process is the reason for such a long time period to finalize a plan. Fegley noted the closing date for the bay scallop season should be 2013, not 2012 and also wanted a sentence added that he had sent his latest research paper in 2009 to the AC as requested. These items were modified or added to the minutes. **The motion passed without dissent.**

PUBLIC COMMENT

Maurice Mann. We often have bad weather this time of year and fishermen are limited to only two days a week to scallop during the open season. Because of the bad weather I think you should allow people to pull two scallop drags at a time if the weather is bad and it is hard to see the bottom.

Fegley asked staff if this committee had any input on this season. Staff explained that the proclamation for this season had already gone out and followed the Bay Scallop Amendment 1.

The Marine Fisheries Commission could make changes, however what is in place comes from Amendment 1.

David Kielmeier. Commented that he is a member of the MFC Southern Advisory Committee and was attending because he was interested in bay scallops. He understands that the indices have been low and that the Bogue Sound trigger is at the lowest level. However he is upbeat about the bay scallops and thinks that Mr. Mann makes a good point about weather, but that the division is moving in the right direction.

STATUS OF THE STOCK

Tina Moore and Trish Murphey presented an overview of the status of the stock, first the background of the life history and then stock status of bay scallops. Moore presented information on the bay scallop species distribution along the U.S., habitat preferences, growth, reproductive biology, and predation and algal bloom impacts to the bay scallop stock in North Carolina.

The group discussed the cow nose ray predation. Spitsbergen asked if rays are seen in the spring. Mann commented that rays come through Bogue Sound and Adams Creek in April. Murphey explained that the spring migrations of rays are usually not a problem, because the scallops are too small for the rays. Moore explained that Virginia has done some work on addressing ray predation and creating a market for rays as food and bait, but with limited success. Eugene Ballance added that they will see the rays come through Ocracoke by April 30th and will see rays in the summer in Pamlico Sound.

Ami Wilbur had comments on the draft Status on the Stock and pointed out on page 5, about the ability of bay scallops to swim, and on page 6, about the appearance of ribs on spat.

Troy Aphin asked if anyone knew if *Polydora* sp. was an issue in bay scallops. Fegley explained that in his sampling, he had seen about a 10% infestation. Wilbur mentioned a new parasite found in the gills of bay scallops taken near Wilmington. The parasite has not been identified and has been sent to a parasitologist for further identification.

Murphey presented the information on the stock status in North Carolina. She provided an overview of the stock along the Atlantic seaboard and impacts of brown tide in the north and impacts of red tide in North Carolina during the 1980s. The present stock status for bay scallops are concerned because there is no stock assessment and they are so easily impacted by environmental conditions, making them more vulnerable to overharvest. She explained the progressive trigger management strategy that is currently in place and stock identification. She also provided research needs.

Dennis Spitsbergen asked how many stations are sampled to produce the index. Moore responded four set stations in Bogue Sound, two each in Back and Core sounds and several additional stations in each area that are not calculated in the index but to make sure we are not missing the scallops in each basin. Aphin asked if DMF sampled in New River too. Moore replied New River, Topsail Sound since 2009 and also Pamlico Sound since 2008. Fegley added that it would be best to show the precision of the sampling estimates. Spitsbergen added there is

not much exchange between the sounds. Ami Wilbur added one of her students looked at a new genome fingerprinting method and found regional groupings of scallops. Alphin responded that we need more information on bay scallops in the southern part of the state because it is a very different functioning system. Fegley added that while it is important to know how many stocks are in NC why do you need to confirm the different genetic stocks since we already pursue regional management. Alphin stated that it appears we have a threshold that may be more a matter of patchiness and that a measure of evenness may be more appropriate, but was not sure mathematically how to determine this.

STATUS OF THE FISHERIES

Moore provided an overview of the status of the fisheries. She began with the history of the fishery along the Atlantic coast and in North Carolina, and the use of the shucking machine. Spitsbergen asked about the different shucking machines and their locations. This led to a little discussion about calico scallops because the shucking machines were really intended to shuck calicos but were also used on bay scallops. Moore discussed management of the bay scallop fishery before the 2007 FMP and the current management strategies from the 2007 FMP and the Amendment 1. Moore also discussed how little information there is on the recreational fishery, but there is now a new shellfish survey which will be sampling recreational bay scallop fishermen for the first time. She also discussed protected resources and that there are no known occurrences of interactions in the bay scallop fishery.

Fegley asked about what data are being collected through the recreational survey. Moore explained that numbers harvested and shell height will be collected. Fegley asked about effort data being collected on the recreational fishery. These data are needed in order to manage it properly. Other information that is needed are how many scallops are in a bushel. John Hadley said he would talk with staff and provide an update on the information that is being collected on the recreational fishery this season. Fegley stated that he will present information in March to the AC on what he has collected on the spring spawn of bay scallops.

Fegley stated that he has a real concern with how bay scallops are currently managed because of one fundamental flaw. The fishery is open in January through April when two cohorts are out there, the cohort getting ready to die and is taken in the fisheries and the cohort that will be growing in to the next season. The fisheries could be having a substantial mortality on juveniles that would produce the next year's harvest. Some methods of harvest may be more deleterious than we think. Another aspect that he sees is that we do not know a lot about is the abundance of filamentous algae in these sounds and their effects on bay scallop survival. Fegley stated the algae in his opinion is thicker, lasting longer, and occurring in more areas than in the past. Fegley suggested that this is an issue and we need to know more about what information is available on this topic. Alphin also suggested that the impacts of clam hand harvest in grassbeds could impact bay scallop survival. Moore stated that rakes are allowed to be used in grassbeds so long as they are no wider than 12-inches and no heavier than 6 pounds in weight. Murphey stated that clam hand harvest more often occurs in sandier bottoms and not as much in grassbeds. Sergeant Dean Nelson said, as an officer in the field, he does not see as many people raking for clams as in the past because they are not worth much more than 12 cent per clam. Fegley added that in some states clams are worth up to 30 cents each and if that price were to go up in NC then more people would rake in grassbeds to get more. Moore added that our data would not be fine

enough to determine how many clams are taken from grassbeds that we only collect the information to the waterbody.

PLAN AGENDA ITEMS FOR THE NEXT MEETING

Moore reviewed the agenda items for the next few meetings. The next meeting of the AC will include an overview of the socioeconomic factors of the bay scallop fishery. We will discuss the issue of treading versus dredging impacts to bay scallops which will require an AC recommendation and review of the public information brochure. Moore explained to the group that Wilbur and Fegley have agreed to provide presentations on their work at the meeting in March.

Moore reviewed the current issues in development. The list of issues include: bay scallop management, impacts of treading on seagrass while harvesting bay scallops, allow leaseholders to harvest bay scallops outside of the commercial season and harvest limits, stock enhancement, and the PDT will discuss further where to go with the issue brought forward today on the impacts of filamentous algae on bay scallops. An information paper was written regarding the use of detergents to smooth waters and discussed among DMF staff. David Taylor was asked to update the AC further on the division's findings. Taylor said that the October, 2010 motion by the Habitat and Water Quality AC to ban detergent use had been dealt with at the November, 2010 MFC meeting at which the MFC directed the division to make fishermen aware that the use of detergents is unlawful according to a Division of Water Quality (DWQ) permit requirement to put pollutants into the water. It was made clear that the division had no authority to charge anyone under MFC rules and that the Marine Patrol Officer could just photograph the person using detergents while fishing and serve as witnesses if DWQ chose to prosecute. No harvest of bay scallops has occurred since then. Taylor explained that DWQ was the proper agency to deal further with detergent use prohibition if they wished and that the latest information from DWQ on DAWN detergent was that it contained no antimicrobial agents and was not harmful. So for purposes of this amendment, we would not address it further.

The items that will go out to the MFC at their meeting in late February include: goals and objectives, timeline, and the public information brochure to receive their input on the list of issues. The public information brochure will then be sent out to the public for input and also the MFC advisory committees to finalize the list of issues by March.

Spitsbergen moved to end the meeting and Alphin seconded the motion. The motion passed without dissent. The next meeting is scheduled for February 4, 2013 at 12:30 at the Central District Office.

TM/lm

Cc:	Catherine Blum	Jess Hawkins	Kathy Rawls
	Dick Brame	Allen Jernigan	District Managers
	Frank Crawley	Amanda Little	Committee Staff Members
	Louis Daniel	Dee Lupton	Marine Patrol Captains
	Chris Elkins	Nancy Marlette	Section Chiefs

MEMORANDUM

TO: N.C. Marine Fisheries Commission
Bay Scallop Fishery Management Plan Advisory Committee
Dr. Louis Daniel

FROM: Tina Moore
Trish Murphey

DATE: February 4, 2013

SUBJECT: MFC Bay Scallop Fishery Management Plan Advisory Committee Meeting
Minutes

DRAFT

The Marine Fisheries Commission (MFC) Bay Scallop Advisory Committee (AC) met on February 4, 2013 at 12:30 p.m., at the N.C. Division of Marine Fisheries Central District Office located at 5285 Highway 70 W in Morehead City, NC. The following attended:

Advisers: Bert Speicher, Troy Alphin, Dennis Spitsbergen, Stephen Fegley, Ami Wilbur

Staff: Tina Moore, Trish Murphey, Sergeant Dean Nelson, David Taylor, Kevin Brown, John Hadley, David Skinner

MFC: Chris Elkins

Public: No one from the public was in attendance

Bay Scallop co-chair, Ami Wilbur, called the meeting to order. There were no modifications to the agenda.

APPROVAL OF THE MINUTES

A motion was made by Stephen Fegley and seconded by Troy Alphin to approve the minutes from the meeting on January 14, 2013. The motion passed without dissent.

PUBLIC COMMENT

No comments.

SOCIOECONOMIC ASPECTS OF THE BAY SCALLOP FISHERY

John Hadley presented information on the socioeconomic aspects of the bay scallop fishery. All of the value information is for commercial harvest. The highest values on a nominal and inflation adjusted basis were seen in the late 1970's and early 1980's. The highest ex-vessel value was seen in 1980. There has been an increasing trend in the nominal price per pound, with the highest nominal price per pound in 2010. When you adjust the value to inflation, the price has remained within a range over the past decade. Supply is not sensitive to price which may be due to substitutes for NC caught scallops, both domestic and imported is setting the price of bay scallops. There is a solid demand from consumers for scallops.

Scallop dredges were once the more dominant gear used and then it switched to hand harvest methods because of management changes. In the 1990s the majority of the commercial harvest came from Core Sound and then in the 2000's you see a shift to Bogue Sound until the prohibited take period in 2006. This fishery is easy for participants to enter because the low cost of the gear. The number of participants and dealers mirrors one another. On a per person basis there was low value, meaning it was a form of supplemental income for most in months when other fisheries were inactive. Certification for processing was required from 1968 through 1993 and the number of operations declined through this time period. Most of the processing operations were located in Carteret County. Processing scallops usually involved family members of the fishermen close to the area of harvest. The most recent year with substantial bay scallops commercial landings was 2009. Fegley asked for further clarification on dealer information provided within the document. Spitsbergen noted that cost should be included also for hand harvest on page 4. Hadley indicated he would add further information to these parts. Spitsbergen asked if DMF had any idea how many scallops were going home or to friends rather than sold by commercial fishermen? Hadley replied that only seafood sold to licensed dealers could be tracked.

RECREATIONAL FIELD AND MAIL SURVEYS

Stephen Fegley stated the recreational fishery is an odd fishery that we have very little information on at this time and it may compete with the commercial fishery. We are not sure what the management interest is in this fishery. Hadley replied that this is the first year we will be collecting information on the recreational fishery and as we gain confidence in the information it will help define what kind of fishery it is. We hope the recreational survey identifies how much of the resource is going to recreational harvesters. Also, provide more information on the resource allocation to the two user groups. Fegley asked whether the IMPLAN model was used for recreational harvest. Hadley explained the IMPLAN model is only used for commercial harvest. Bert Speicher asked who is the survey mailed to? Hadley responded there is no recreational shellfish license, so the sampling universe for the mail survey is coming from the recreational angler license group who answered yes that they harvest shellfish when they update their license each year. We will also have an in the field intercept survey too as the recreational harvest is occurring. So there are two methods for gaining recreational harvest information, the mail out survey to anglers who identified harvesting shellfish and then the direct field intercepts as the fishery is occurring. This is the first year the survey and intercepts are administered to the recreational bay scallop fishery. Right now it is gaining information on catch, effort, and demographics, but it is missing information on expenditures (i.e.: travel costs). Fegley asked if there is a reporting requirement for recreational license holders wishing to renew their license? Hadley responded no, but there is a great deal of effort that goes into gathering recreational catch and effort through the MRIP survey. Tina Moore added that we do have an optional logbook on our website for recreational harvesters to use, but it is not required.

IMPACTS OF TREADING ON SUBMERGED AQUATIC VEGETATION WHILE HARVESTING BAY SCALLOPS ISSUE PAPER

Trish Murphey identified this issue was brought up through public comments received during development of Amendment 1, that walking on grassbeds was more detrimental to the habitat than using scallop dredges. Bay scallops are managed heavily in NC; scallop dredges are toothless and can weigh no more than 50 pounds. Scallop dredges work well in grassbeds and

are considered a low impact gear according to the Coastal Habitat Protection Plan. Murphey summarized several studies on scallop dredge and other mechanical harvest gear impacts on grassbeds. Thayer and Stuart (1974) and Fonseca et al. (1984) found that scallop dredges decrease seagrass densities. Peterson et al. (1987) and Hsaio et al. (1987) found mechanical clam harvesting gear is the most disruptive to grassbeds which may impact scallop densities. The Bishop et al. (2005) paper is the most recent study which looks at both hand harvest and scallop dredge impacts on grassbeds. In her study hand harvesters were six times more efficient at removing scallops from an area than dredges and there was more displacement of grass from dredges than hand harvest methods but the grass came back after one month in the dredged areas. There was also displacement of the juvenile scallops in the dredged areas and they were less abundant in these areas later. Fegley proceeded to comment that there is a mis-characterization of the analysis in which he was the third author of the publication. There is no significant difference between control 2, the light kicking and hand harvest. Murphey requested to continue her presentation and then we could better discuss the literature. Murphey continued with the presentation. Propeller scarring in grassbeds is the main part of the issue for using scallop dredges. The logic behind allowing dredges at a later time period during the harvest season after hand harvest has removed scallops from the shallower waters is to protect seagrass beds from prop scarring by getting the dredges to work in the deeper water areas.

Proof of concept field sampling was conducted by DMF with input from Pete Peterson and Mark Fonseca to look at the impacts of different tread times on a grassbed in soft-clay sand bottom. Four, one meter square quadrats were established in early February in 2011 in the grassbed and left for a month. One quadrat was a control (no treading), and the other three as treatments with 5-minutes, 10-minutes, and 15 minutes of walking within. Core samples of the bottom were removed just outside of each quadrat before the treatments were applied. Then core samples of the bottom were taken inside each quadrat two weeks and one month after the application of the treatment. Grass species were identified, shoots were counted, and the blade height measured in each of the core samples from the bottom to look at the effects of the different treading time periods on the grasses. A two-way ANOVA was used to examine shoot height and the blades. No trends were apparent because of the low sample size and variability of the data. Treading did not appear to have any impacts on shoot height over time in any of the treatments. Shoot counts showed no trend for tread levels of ten minutes or less but there was some evidence that 15 minutes of treading may have decreased shoot count, but due to low sample size more data are needed to make sure this trend was not due to random chance. The take home message is that there may be some evidence of treading impacts at the 15-minute treatment but more thorough study needs to be conducted and is likely worth pursuing further. Also we should consider the facts that grassbeds are fairly resilient and other user groups walk on grassbeds for other purposes besides harvesting bay scallops. So the Plan Development Team chose the *status quo* (manage fishing gear based on densities) management option until more information can determine impacts of treading on grassbeds as well as displacement of scallops.

Stephen Fegley began the discussion by noting that we need to be cognizant of the public record and implications these papers promote. Also Bishop's study likely would not have been published in any other journal except in Fishery Bulletin and her analysis of a six-fold increase in harvest from hand methods over dredges is quite high. It should be noted there is no single study on the effects of gears on bay scallops. In all these studies there has been no standardization and

nothing about the penetrability of the gear to the bottom type and impacts to juveniles. We also need to be careful with a proof of concept because people will interpret these results when in reality it needs much more sampling. The two-way ANOVA is not the appropriate approach but it is likely moot due to the low sample size anyways. On page 5 it identifies a Figure 9 when there is not a Figure 9, that will need to be fixed. And the per unit efficiency will also depend on time. There are also costs associated with time. Bishop also stretches a bit in the paper about grass thickness. We found if the grassbed is really thick and you take the thatch out it may make it better for the grass growth. But then you also have to consider thinning, the grassbeds often allow more predators into the beds when they are thinner and increases predation on the juvenile bay scallops. I believe *status quo* is where we need to go due to lack of information, but we have to be very careful what we say since we allow fishing activity over next year's crop. Spitsbergen commented that the six-fold efficiency of hand harvest over dredge harvest seems questionable and suggested adding in the timing of Bishop's work to the issue paper. Was it during the regular open harvest season? Murphey responded it occurred in February through March and that information will be added to the paper. Troy Alphin also noted that there are two types of seagrasses; eel grass and shoal grass. Shoal grass is more predominant in the southern parts of the state, like Core Sound, and dies back in the winter, while eel grass is a more northern grass. We may want to look at different openings for different areas based on grass abundance. Alphin further stated that something is going on with the juveniles whether it is caused by re-suspension, predation, patchiness of grass, using the edge versus the interior of a grass patch. Maybe we should consider further partitioning of the bays. Allow harvest in only a portion of the bays in designated areas and consider rotation of harvest within these smaller areas. Fegley stated then expand on regional management based on biological differences. Moore mentioned that the harvest management issue paper will get into the harvest management options like rotational area openings. Also the 2007 FMP issue paper on harvest management considered rotational area openings so you could review the original paper for now until we present the updated version of this issue in a few meetings from now.

A motion made by Troy Alphin to table discussion of this issue until we discuss bay scallop management strategies. The motion was seconded by Stephen Fegley. Ami Wilbur stated that this issue paper is specifically about the impacts of treading on grassbeds. Fegley commented that there is not enough information on treading impacts to grassbeds to alter the recommendation. **The motion failed with a vote of 5 against and 0 for.**

A motion made by Stephen Fegley and seconded by Troy Alphin moved to allow existing bay scallop harvest methods subject to population estimates, harvest conditions, perceived harvest impacts, and regional considerations. The motion passed without dissent.

PUBLIC INFORMATION BROCHURE

Moore indicated the committee received a draft of the Public Information Brochure, which includes the additional objective suggested by this group. The goals and objectives will go to the Marine Fisheries Commission for their approval, so these could still be modified. The Marine Fisheries Commission will also be presented with the list of issues that we have compiled so far and given the opportunity to provide their input on the list. The Public Information Brochure will then be distributed to the public, regional advisory committees and the shellfish advisory committee to gain further input. This input process should be completed in March.

FURTHER DISCUSSION ON THE LIST OF ISSUES

Moore identified the list of issues which include: 1. Bay Scallop Harvest Management; 2. Impacts of Treading on Submerged Aquatic Vegetation While Harvesting Bay Scallops; 3. Consider Exemptions for Leaseholders Growing Bay Scallops; and 4. Stock Enhancement. The item at the last meeting regarding impacts of filamentous algae on bay scallops has not been discussed further by the Plan Development Team yet. It may be best to incorporate as much of the literature we can find on this issue in the environmental factors section and add research recommendations there since it is likely going to need more investigation for any determination of management options.

PLAN AGENDA ITEMS FOR THE NEXT MEETING

Moore reviewed the agenda items for the next meeting. Dr. Fegley and Dr. Wilbur have agreed to present information on their work. The mail out deadline for any items you wish to include to the other committee members is March 1, 2013. The Plan Development Team should have the environmental factors section ready for your review also. Sergeant Nelson asked Dr. Fegley if harvesters are always walking on next year’s crop? Fegley answered that most juveniles are no longer attached to the grass by January and hiding on the bottom inside the grassbed. You can only avoid walking in the grassbeds if the adults have moved outside of the grass areas. Protection for spawning as well as the survival of the juveniles is imperative. Moore mentioned the summer harvest time period is still in rule, to allow harvest before cownose rays migrate through the system. This time period was opened in a small area for two years without much harvest. Fegley stated that would be the worst time to allow harvest before the spawning period. Moore said it will be included in the management issue paper for further consideration.

Wilbur moved to end the meeting and Fegley seconded the motion. The motion passed without dissent. The next meeting is scheduled for March 18, 2013 at 12:30 p.m. and the Central District Office

TM/lm

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|-----|----------------|----------------|-------------------------|
| Cc: | Catherine Blum | Jess Hawkins | Kathy Rawls |
| | Dick Brame | Allen Jernigan | District Managers |
| | Frank Crawley | Amanda Little | Committee Staff Members |
| | Louis Daniel | Dee Lupton | Marine Patrol Captains |
| | Chris Elkins | Nancy Marlette | Section Chiefs |

MEMORANDUM

TO: N.C. Marine Fisheries Commission
River Herring Fishery Management Plan Advisory Committee

FROM: Kathy Rawls
Amy Larimer

DATE: February 13, 2013

SUBJECT: River Herring Fishery Management Plan Advisory Committee Meeting

draft

The River Herring Fishery Management Plan (FMP) Advisory Committee (AC) met on Thursday January 24, 2013, at 6 p.m., at the Edenton National Fish Hatchery located at 1102 West Queen St., Edenton, N.C. The following attended:

Advisers: Terry Pratt, Riley Williams, Sara Winslow, Dr. Roger Rulifson and Ronnie Smith Dossey Pruden and Gregory Biggs were not present and had excused absences.

Staff: Kathy Rawls, Amy Larimer, Cynthia Rountree, Tyler McGuire, Nancy Fish, Catherine Blum, Will Smith, Laura Lee, Mike Marshall, Ray Mroch, Beth Egbert Lee Paramore

Public: Arthur Everett, Hubert Vick, Edward Barlow, W.M. Pittman, Darrell Williams, Phillip Bowen, Charles Lanier, Billy Sorie, Carlton Miles, Gene Finch, Sammy Roebuck, Phil Deloach, Henry Barnes, Richard Rlythe, David Harrison, Brad Outland, Freddie Outland, Glen Larils, Roger Coffie, Jerry Burger, Donald White, Elizabeth Gleed

Kathy Rawls, Division of Marine Fisheries (DMF) staff and co-lead of the River Herring FMP, serving as chair, called the meeting to order. Rawls informed the AC members that the Marine Fisheries Commission (MFC) Chair would appoint co-chairs to the AC prior to their next meeting.

Rawls welcomed the AC and the members of the public and thanked them for their willingness to be involved in the plan development process.

MODIFICATIONS TO THE AGENDA

Rawls asked the AC members if they would agree to modify the agenda to allow the public comment to be moved to the end of the meeting agenda. The AC agreed and none of the public members had any objections and expressed an interest in hearing the presentations prior to making their comments.

Committee members and DMF staff introduced themselves and the group began reviewing agenda items.

FMP Process Orientation

Nancy Fish, MFC liaison, and Catherine Blum, the FMP and rules coordinator, jointly presented an orientation to the committee which included brief overviews of the commission and division's mission statements and authorities; Fisheries Reform Act; FMP process; rules adoption; the committee's role; meeting guidelines; attendance requirement; and public participation.

Review of DMF and WRC River Herring Data

Amy Larimer, the DMF river herring biologist and co-lead on the FMP presented the DMF river herring data and trends in that data. Larimer's presentation included information on the life history, the anadromous juvenile survey, the independent gill net survey, the Chowan River Pound Net Survey and the Discretionary River Herring Harvest Season.

Terry Pratt commented that the discretionary river herring harvest season was only four days and that weather and harvest during those days was not representative of what was out there. Rawls commented that the intent of the discretionary season was to provide local product for the local festivals and to provide biological data. It is very likely that most of the fish harvested during that season were being used for personal consumption. Pratt further indicated that pound nets in the Chowan River have been set in the same places for many years and that the river herring could be migrating up the middle of the river past these nets. Rawls responded that although this could happen to a certain extent during migration up the Chowan River, division data as well as the stock assessment results continue to show a depleted stock status.

Kevin Dockendorf, a biologist with NC Wildlife Resources Commission (WRC), presented river herring electrofishing data. Dockendorf reviewed the sampling sites, methods, fish work-up and relative abundance data. He reviewed the trends in abundance for each system sampled. The WRC conducted samples in Catherine Creek on the Chowan River, Chicod Creek on the Tar River, Core Creek on the Neuse River and Town Creek on the Cape Fear River. Dockendorf also gave a brief overview of the 2012 blueback herring pilot stocking program. Sara Winslow asked if there was any monitoring after the blueback herring were stocked. Dockendorf explained that WRC staff had worked with academia and other agencies to obtain fin clips for genetic analysis. Winslow asked if the increase seen in WRC data in Catherine Creek was seen in DMF spawning area survey data. Rawls the division could provide that information.

Pratt asked if there was any testing to determine whether water temperature patterns dictate which creeks the fish return to. Dockendorf explained the program intends to answer these questions and look at the stock structure genetically. He will be presenting the WRC pilot stocking program and their genetic work at the next AC meeting. Dr. Rulifson also commented

that otolith microchemistry work was being conducted that could help determine the natal streams of these individuals.

Will Smith, a DMF stock assessment scientist, presented the results of the North Carolina section of the Atlantic States Marine Fisheries Commission (ASMFC) Coastwide River Herring Stock Assessment, which is a peer reviewed benchmark assessment with data from 1972-2009. Smith focused on the model structure, inputs, outputs, the biological reference points and the stock recovery indicators identified in the 2007 plan. The stock remains at historically low levels and below all reference points, further indicating that no stock recovery indicators have been reached. There was a question from a member of the public regarding data collected since 2009. Rawls responded that the ASMFC conducted the assessment using data through 2009 but that adding one or two years of data would not change the stock status from depleted. Winslow also pointed out the 2005 stock assessment projected 11-21 years recovery period and that it is too soon following the implementation of the moratorium to see significant increases in population abundance.

There were additional comments from members of the public about the role of foreign trawlers in the depletion of the state's river herring population. Rawls commented that many factors such as overfishing, habitat loss, and poor water quality have contributed to the decline of the river herring population along the entire east coast. She further commented that having a depleted stock status made it impossible to justify a fishery. She pointed out the requirements of the ASMFC Amendment II to the Interstate FMP for Shad and River Herring. The state's are required to prove their fisheries are sustainable in order to keep them open and that North Carolina does not currently have sustainable river herring stocks.

FMP Timeline

Rawls reviewed the timeline, noting the start dates, presentation of the draft FMP to the commission; the public comment period for the draft plan; the ending dates; and effective dates for any rules developed in the plan. Rawls also explained that due to the fact this is a joint plan with DMF and WRC that some of the completion dates will differ slightly for WRC.

Goal and Objectives

Rawls began by reminding the AC that this FMP was different from any other state plan due to the current moratorium on the fishery and the depleted stock status. She advised the committee that this FMP would focus on monitoring, restoration and research needs and would not involve discussions about seasons, with the exception of the research set aside issue paper, or harvest limits etc.

Rawls stated the goals and objectives of the FMP and there were no comments or recommended edits from the AC.

Rulifson asked about the possible listing of river herring under the Endangered Species Act and how that would affect our FMP. Rawls indicated that the PDT had discussed this at length and agreed to move forward with development of the FMP with this possibility being taken into consideration throughout the process. Rawls commented that an endangered listing for river herring would likely affect every aspect of the FMP and the current sampling programs that DMF and WRC have in place.

List of Issues

Rawls reminded the AC that issues were the type of items that were used to manage fisheries and if the division is recommending a change in management it has to develop an issue paper regarding that change. Also, it is better to identify issues earlier in the process.

Rawls reviewed the Discretionary River Herring Set-Aside Season and advised the AC that the PDT would be developing an issue paper with an option to close this season and eliminate the Discretionary Herring Permit.

Rawls advised the AC that WRC has adopted a rule that becomes effective August 1, 2013 prohibiting the possession of river herring greater than 6 inches while boating or fishing in inland waters. She informed the AC that the PDT would be developing an issue paper that would have an option to mirror this rule.

Rawls reviewed the commercial hook and line issue. She informed the committee that the MFC directed DMF staff to investigate commercial hook and line fisheries in all of the state's plans. This issue is included to inform the MFC that it was discussed during the FMP amendment and that there would be no request for a commercial hook and line fishery for river herring.

Rawls reviewed the issue of relocating the Albemarle Sound/Chowan River Herring Management Area designation from subchapter .03J to .03R of the MFC rulebook. This is an administrative change only.

Rawls asked for comments or additional issues from the AC members. Riley Williams asked for clarification on the WRC rule and specifically if you cannot possess river herring for bait. Rawls explained that this was the WRC rule that will become effective August 1, 2013. The issue came from fishermen abusing the current bait allowance with a receipt. Williams asked about the reasoning behind the six inch provision. Rawls explained that was to allow fishermen to cast net small river herring in the reservoirs and use those for bait.

A member of the public asked how river herring became depleted. Rawls explained overfishing, habitat loss and water quality degradation all played a key role along the east coast. Rulifson asked the person what they thought was the cause and was told the foreign trawlers. Winslow commented the foreign fleets contributed to overfishing in the early 70's, but since that time requirements of territorial waters, permits, etc. have reduced that problem. She also commented

that overfishing in the early 70's, along with water quality and habitat issues have had an adverse effect on the stocks that they have not been able to recover from. Rawls reminded the group that there is a considerable amount of work being done at the ASMFC and Mid Atlantic Fishery Management Council level to address bycatch issues in various high volume trawl fisheries. She also reminded the group that the depletion in the river herring stocks is a coastwide problem and not just a problem for North Carolina. Ronnie Smith stated that if river herring are declared endangered that would prompt a closure for the entire east coast.

A member of the public asked if recreational fishermen being allowed a small take allowance would do any damage to the stock. Rawls commented that with the current depleted status of the stock any removals can potentially be a concern. There was some additional discussion with members of the public regarding recreational take of river herring. Dockendorf explained the importance of allowing these fish to return to spawn in order to facilitate stock recovery. At this time during the discussions all members of the public (except one) left the meeting. Winslow asked about the WRC rule prohibiting possession of river herring while fishing or boating being out of sync with the FMP process. Blum commented that the timing of the different rule cycles was an issue and that we would have conflicting rules once the WRC rules becomes effective.

Mike Marshall, the plan mentor suggested adding aquaculture to the list of issues that will be addressed in the FMP. He advised the AC that the division was addressing aquaculture in the revision of all of the state's plans.

Plan Agenda Items for Next Meeting and Future Meeting Dates

Rawls discussed future meeting dates and days with the AC. She indicated she would like to set up at least one meeting/month through July. The AC had no recommendations on times or dates. Rawls will set meetings up with the MFC staff for 6 p.m. in the Edenton or surrounding area.

Rawls indicated that the next meeting the AC would receive presentations on the remainder of DMF's river herring sampling programs, the FMP update and any sections or issues that may be ready at that time. She also advised they would be receiving a presentation on WRC's stocking and genetics work. Rulifson also volunteered to make a presentation on the otolith micro-chemistry work that he and his staff were conducting. Rawls indicated she would try to set something up for the week of March 18th.

PUBLIC COMMENT

Rawls indicated that it was unfortunate that all of the members of the public had left prior to the public comment period. She discussed the process and selection of the management options and

that the ultimate decisions regarding those were made by the MFC. There will be additional opportunities for the public to comment on the management options and other issues in the FMP.

Rulifson asked if a closure of the Discretionary Harvest Season would be effective this coming season. Rawls indicated that any rules or recommended management changes from the FMP would not go into effect until April 1, 2015 unless there were recommendations from the MFC for interim management measures. She explained the director could issue a proclamation to eliminate that season this year as an interim management measure, but would likely not take that action without being directed by the MFC. Rulifson indicated that an endangered listing may change that season as well.

Winslow asked if the AC members could get copies of all of the Fishery Resource Grant documents of the river herring work that has been done in North Carolina since the 2007 FMP. Rawls indicated that DMF staff could do that and develop a list of this research. Rawls also indicated that at the next meeting we would discuss some of the various research in the FMP update. Riley Williams asked if the spawning area survey data would be presented. Rawls indicated that the AC would receive a presentation on that and other DMF river herring work at their next AC meeting.

Meeting adjourned.

Cc: Catherine Blum
Dick Brame
Frank Crawley
Louis Daniel
Jess Hawkins

Allen Jernigan
Dee Lupton
Nancy Marlette
Meredith Wilson
District Managers

Committee Staff Members
Marine Patrol Captains
Section Chiefs

MEMORANDUM

TO: N.C. Marine Fisheries Commission
Shrimp Fishery Management Plan Advisory Committee
Dr. Louis Daniel

FROM: Trish Murphey
Chris Stewart

DATE: February 7, 2013

SUBJECT: MFC Shrimp Fishery Management Plan Advisory Committee Meeting Minutes

DRAFT

The Marine Fisheries Commission (MFC) Shrimp Advisory Committee (AC) met on February 5, 2013 at 6:00 p.m., at the N.C. Division of Marine Fisheries Central District Office located at 5285 Highway 70 W in Morehead City, NC. The following attended:

Advisers: Joe Albea, Julian Anderson, Frank Brown, Nancy Edens, P.D. Mason, Steve Parrish, Kenny Rustick, Scott Whitley

Staff: Steve Anthony, Chris Bennett, Catherine Blum, Kevin Brown, John Hadley, Rex Lanier, Trish Murphey, Dean Nelson, Patricia Smith, Chris Stewart, David Taylor, Tom Wadsworth, Derris Warren, Katy West

MFC: Chris Elkins

Public:

Trish Murphey called the meeting to order and welcomed everyone to the advisory committee's (AC) first meeting. She introduced herself and the other Shrimp Fishery Management Plan (FMP) co-lead, Chris Stewart. She then clarified to the public and the AC that there has been some misinformation about the purpose of this AC meeting. She explained that this meeting is to orient the new AC and to review the FMP. There will be no management decisions made at this meeting. She explained that the next meeting will be about gear research done by the division and research by the federal government done on bycatch reduction devices (BRDs) and turtle excluder devices (TEDs).

Murphey then gave a brief history on the shrimp FMP revision, the public input on that revision, the decision to recommend to the MFC to amend this plan based on that public input. She reviewed the MFC's motion to "Amend the Shrimp FMP but limit the scope of the amendment to bycatch issues in the commercial and recreational fisheries", and provides guidance for the AC.

MODIFICATIONS TO THE AGENDA

Murphey reviewed the agenda and asked the AC if the members had a preference on receiving public comment at the beginning or the end of the meeting. Initially, the AC decided by consensus

to receive comments right away. A member of the public voiced a concern about the ability to provide comments without hearing the presentations. Kenny Rustic made a motion to receive public comments at the end of the meeting; P.D. Mason seconded the motion. The motion passed with general consent. The public comment period was moved to the last item on the agenda. There were no more modifications to the agenda.

INTRODUCTION OF ADVISORY COMMITTEEMEMEBERS AND STAFF

Murphey asked each AC member to introduce themselves. Each member did so and also provided a little about their background.

ORIENTATION THROUGH THE FISHERY MANAGEMENT PLAN PROCESS

Catherine Blum, the FMP Rules Coordinator presented an orientation to the committee which included brief overviews of the commission and division's mission statements and authorities; Fisheries Reform Act; FMP process; rules adoption; the committee's role; meeting guidelines; attendance requirement; and public participation. Steve Parrish asked of how much of the 2.5 million acres of coastal waters, how much is opened to shrimping. Blum said she will provide him a division fact sheet on trawling in North Carolina. Murphey and Stewart stated they thought there was between 45 and 48 percent of the waters were closed to shrimping (later confirmed to be 45%). Rustic stated that probably about 10% of open waters are able to be trawled.

OVERVIEW OF THE TIMELINE

Murphey provided an overview of the timeline for the Shrimp FMP. She said the AC is currently on steps 5-7: which are to orient the AC and discuss issues and the goal and objectives; to present the timeline and goals and objectives to MFC; to draft and review informational and issue papers and establish DMF/AC positions. Murphey explained that the bulk of the AC's work will occur between now and August of this year. After management recommendations from the AC and the Division have been made, the amendment will be presented to the MFC for approval for public comment and other various approval and review steps. The final plan is scheduled to be approved in Nov. 2014 with any implementing rules scheduled to become effective April 1, 2015. There were no questions or comments about the timeline.

OVERVIEW OFH THE SHRIMP FMP

The final presentation was given by Stewart and Murphey who provided an overview of the Draft 2 revision and the management actions taken in the original FMP in 2006 also included within this updated plan. Stewart reviewed sections of the plan, including the goal and objectives, effort and landings, bycatch information such as the landed catch, impacts on non-target species, a timeline of the Division's efforts to reduce and quantify bycatch and ways bycatch are managed. Murphey presented information on protected resources and environmental factors affecting the shrimp fishery; management strategies; gear restrictions; and research recommendations. Frank Brown asked Stewart if undersized bycatch can be sold. Stewart said no and that all bycatch must be of legal size to be sold. There were no other questions or comments about the presentation.

NEXT MEETING AND MEETING DATES FOR THE FUTURE

The AC discussed its meeting schedule and Murphey guided the AC in tentatively scheduling one meeting per month between March and August. The AC requested the meeting day, time and location be varied so as to accommodate various AC members' schedules and so the fishing public can attend. Ms. Murphey said she would confirm venue availability for the meetings and provide additional information about the meeting schedule at the AC's next meeting. The next meeting is tentatively scheduled for Wed., March 20th at 6:00 p.m. at the Craven County Cooperative Extension Office in New Bern.

PUBLIC COMMENT

Richard Wade: said there are limited data in black and white about bycatch and that much of the data are estimated. He cautioned the group about developing rules for bycatch without good data and that it will affect people's livelihoods and the livelihoods of entire communities. He urged the AC and Division to make sure the data are correct. He said don't ask commercial fishermen to help collect data and then use it against them. Mr. Wade gave an example of commercial fishermen cooperating with data collection for weakfish that later contributed to the flynet closure south of Cape Hatteras. Mr. Wade also said commercial fishermen are required to complete trip tickets, but data from recreational fishermen is only by word of mouth.

Tommy Lewis said he attended the public meeting in New Bern last fall about this FMP and he did not see any evidence that said trawling in the estuaries is affecting bycatch and it is not hurting the stock status. He asked how it got calculated that millions of fish are being caught as bycatch. He said if you close an area to trawling the area dies. Mr. Lewis said a lot of this is social and commercial fishermen are just not wanted in the water. He commented about the amount of red drum bycatch in the shrimp fishery by providing his personal experience that in 31 years of commercial fishing he had only caught one juvenile red drum.

Isaac Willis said he is a 35-year-old commercial fisherman, but there are not many young fishermen left; you cannot make a living anymore. He said there are a lot of rules that have been placed on the commercial fishermen in recent years and urged the group to have the data correct since they are putting commercial fishermen out of business. He implored the group to know what it is doing before piling more rules on the commercial fishermen.

Tim Hergenrader said this AC has more potential to have a positive impact than any other AC and they have a chance to make meaningful reductions in bycatch. He said he hopes the group can come to grips with its decisions. He asked for clarification that there is a 90-foot maximum headrope length in the rivers, but not Pamlico Sound. Stewart confirmed that. Mr. Hergenrader said he recalled a MFC commissioner describing his use of four, 55-foot headropes simultaneously. Mr. Hergenrader said that much gear is detrimental. He referred to a federal study of bycatch that focused on three species of juvenile fish being killed: spot, croaker and weakfish. He said he is not advocating doing away with the commercial shrimp industry, but rather reducing the headrope length. He advised leaving the small trawlers, but eliminating the large trawlers in inside waters. He wished the AC good luck.

James Gillikin referred to a figure given by staff in one of the presentations about North Carolina ranking seventh among east coast states in pounds of fish landed commercially. He stated that North Carolina used to be first. He asked for clarification that shrimp landings declined last year and Stewart said they declined by about 13 percent. He gave the group specific examples of the decline and attrition in his business and number of vessels operated and said other commercial fishermen have had the same experience. He indicated that rising fuel costs have had a huge impact on commercial fishermen. Mr. Gillikin said in the late 1980s, the majority of the N.C. shrimping fleet was off the coast of Florida calico scalloping. Data from that time period was used against the commercial fishermen that mischaracterized the flynet fishing activity occurring then. He said the data can only come from fishermen. He said he fears he will see the end of commercial fishing. There once were six fish houses on Harkers Island and now there are none. He said the group has not yet mentioned the affects from global warming either. He reported his recent experience of going 62 miles offshore of New Jersey to find the flounder. He said N.C. fishermen will catch the fish; however, they are not trying to kill small fish or turtles. He said if regulations for Pamlico Sound are changed there will be no more N.C. shrimp. He urged the group to get it right this time, try to help the commercial fishermen, and do not shut them down. Later, following other public comments about attrition of the commercial industry, he reminded the group that commercial fishermen are not eligible for unemployment or other handouts; this is their whole life. If commercial fishermen aren't working, then we don't get paid.

Gerry Smith said he is old and remembers a lot of events. He has been a commercial fisherman for over 60 years and remembers his grandparents talking about the development of a shrimp market in the 1930s when shrimp were considered a nuisance since there was no way to sell them. He also remembers all the way up to the 1990s when net bans became a hot issue. Mr. Smith said he served on the Joint Legislative Commission on Seafood and Aquaculture for many years until that group was dissolved. But, he remembers when Bob Lucas, former MFC chairman in the 1990s said there too many nets and too many fishermen. Mr. Smith said this was at a time when there were about 10,000 commercial licenses. He asked the group if we are any better off, 16 years later. He answered his question and said no, things are worse. He said there are assumptions about the fate of the commercial industry and said the AC just does not understand or care.

Adam Tyler said his comments had already been covered by other speakers.

Birdie Potter said most of her comments had already been covered by other speakers, but she wanted to say a few things about the social impact on commercial fishermen and the supporting businesses and markets. She said she cannot imagine the AC wants to see those communities disappear. She said other speakers seem to want all of the trawlers out of the water, but commercial fishermen have done everything they can, like use fish and turtle excluder devices, to show they care about the habitat and the fishery more than anyone else. She said the commercial fishermen need to make a living.

Denny McCuiston stated the importance of the fact we are experiencing the worst economic times he can remember in his 64 years. There are no opportunities for other jobs; an out-of-work shrimper is not going to find other income. He acknowledged that other states have changed their fishery management plans, but there were a lot better economic circumstances in place when those changes happened; there were other fishing opportunities then too. Now, the federal government

has destroyed those chances. He said the only reason the shrimp industry is still around is because the federal government has not gotten involved in it. Mr. McCuiston said he served on the last Shrimp FMP AC and that the group does not need to do this again.

Sandra Gaskill said she is a commercial fisherman from Harkers Island. She said she initially served on the Crustacean AC in 2007, but stepped down so another commercial fisherman could take her place. She said if bycatch was a big problem in 2007 they would have stopped trawling in Pamlico Sound then. She said no two drags from a trawler are the same and that sometimes you have a load of fish and other times you do not have any. She described a time when an observer on board their vessel told them not to touch the culling table and said the observer's delay caused those fish to become dead discards. She said when the fish are too thick her husband stays home because you cannot trawl then. She said when that happens you cannot even sink net south of Cape Hatteras anymore. Ms. Gaskill referred to a figure given by staff in one of the presentations about North Carolina having 1.9 million recreational fishermen. She said that has to be considered for bycatch too. She expressed concern about the amount of recreational gear that goes in the water, like cast nets and hook-and-line gear. She said if you add all of them together you get a lot of bycatch. She told the AC to be fair.

Wayne Teeter said he is a commercial fisherman from Ocracoke. He said the cormorants that winter in eastern North Carolina eat seven pounds of fish per day to survive, not thrive. He said the pelicans and seagulls take fish away from the cormorants and then the cormorants get even more fish. Mr. Teeter said everything that eats fish is protected except us. The birds eat millions of pounds of juvenile finfish per year, but the birds are still protected.

Ted Smith said the regulations have run all the young fishermen away. He said he was squeezed out in the 1990s and he does not know of one younger commercial shrimper who operated last summer. He said that is your reduction; just wait it out. Mr. Smith said the commercial fishermen have not killed all of the fish; you just have to know where the fish are, because they are out there.

Hearing no further public comments, Steve Parrish made a motion to adjourn; Joe Albea seconded the motion. The motion passed by general consent. The meeting adjourned at 8:21 p.m. The next meeting is scheduled for March 20, 2013 at 6:00 p.m. at the Craven County Cooperative Extension Office in New Bern.

TM/lm

Cc: Catherine Blum
Dick Brame
Frank Crawley
Louis Daniel
Chris Elkins

Jess Hawkins
Allen Jernigan
Amanda Little
Dee Lupton
Nancy Marlette

Kathy Rawls
District Managers
Committee Staff Members
Marine Patrol Captains
Section Chiefs |

MEMORANDUM:

To: N.C. Marine Fisheries Commission
Coastal Recreational Fishing License Advisory Committee
Louis Daniel

From: Marine Fisheries Commission Office
Randy Gregory

Subject: Coastal Recreational Fishing License Advisory Committee Meeting

Date: November 29, 2012

draft

The Marine Fisheries Commission (MFC) Coastal Recreational Fishing License Advisory Committee (AC) met on November 29, 2012 at 11 a.m., at the N.C. District of Marine Fisheries (DMF) Central District Office in Morehead City. The following attended:

MFC: Chris Elkin

Advisers: Larry Stephenson, Galen Maxwell, Frank Tursi, Ron McPherson, Ken Compton, Bo Nowell (via conference phone) and Frank Folb (via conference phone)

Staff: Randy Gregory, Tiffany Frazier, Craig Hardy and Don Hesselman

Public: W.C. Lanier

Chris Medlin, Scott Inge, Dick Brame and Jay Kavanagh were absent.

Ron McPherson served as chair for the meeting. He called the meeting to order.

MODIFICATIONS TO THE AGENDA

None

APPROVAL OF MINUTES

Frank Folb moved to approve the April 13, 2012 minutes. Ken Compton seconded. The motion passed unanimously.

PUBLIC COMMENT

None

PRESENTATION AND DISCUSSION OF 2013 CRFL GRANT “PEOPLE” PROPOSALS

The committee had a discussion concerning the MFC directive for the committee to only make recommendations for the “People” proposals. The committee felt they should have oversight in making recommendations for all CRFL projects and that was original intent of the committee. Commissioner Chris Elkins commented that reviewing all of the proposals was a great deal of

work and the Committee may not have the expertise to review all of the proposals for “Fish” and “Habitat.”

Frank Tursi moved to recommend the CRFL Advisory Committee retain oversight of the “Fish and Habitat” as well as the “People” CRFL proposals. Larry Stephenson seconded. The motion passed unanimously.

Tiffany Frazier reported on the amount in the available (\$3,439,963) the 2013 CRFL proposals. DMF received 34 proposals requesting \$4,960,951 for first year funding. The committee decided to review and make recommendations for the 9 “People” proposals and then rank the recommended proposals after reviewing them all. Committee comments regarding the proposals are bulleted before each motion.

P-004 Jacksonville/Onslow Boating Access Area (construction)

Larry Stephenson moved to recommend proposal P-004 for funding. Galen Maxwell seconded. The motion passed 5 to 2.

P-007 Coastal Ecology Education Center (part of Hatteras Island Ocean Center), Partnering with Dare County

- Committee had concerns about the benefit for future fishing opportunities.

Ken Compton moved to not recommend proposal P-007 for funding. Larry Stephenson seconded. The motion passed unanimously.

P-009 Vandemere Waterfront Park Initiative (land acquisition)

- Committee had concerns with the amount of funding requested and recommended the town apply for the amount needed for the boat ramp area.

Ken Compton moved to not recommend proposal P-009 for funding. Frank Tursi seconded. The motion passed unanimously.

P-012 Carolina Beach Ocean-to-sound Access Park

- Committee had concerns about the future of this project and funding for the pier construction.

Ken Compton moved to not recommend proposal P-012 for funding. Larry Stephenson seconded. The motion passed unanimously.

P-013 North Carolina Maritime Museum Education Program and Exhibit Enhancement and Enrichment Project

Bo Nowell moved to not recommend proposal P-013 for funding. Ken Compton seconded. The motion passed unanimously.

P-014 Enhanced Artificial Reef web page for all ocean and estuarine water locations and printed Regional Artificial guides

Ken Compton moved to recommend proposal P-014 for funding. Galen Maxwell seconded. The motion passed unanimously.

P-015 NC Coastal Recreational Fishing Digest

Ken Compton moved to recommend proposal P-015 for funding. Larry Stephenson seconded. The motion passed unanimously.

P-016 Reprint NC Coastal Recreational Angler's Guide

Ken Compton moved to recommend proposal P-016 for funding. Frank Tursi seconded. The motion passed unanimously.

P-017 Cape Fear Wildlife Foundation's Expo "Kids Gone Wild" and Scavenger Hunt

- Committee had concerns that funding may be used for other aspects of the program not related to CRFL funding objectives.

Ken Compton moved to not recommend proposal P-017 for funding. Larry Stephenson seconded. The motion passed unanimously.

Larry Stephenson moved to rank the proposals recommended for funding by the committee as P-014, P-004, P-016 and P-015 (highest to lowest). Galen Maxwell seconded. The motion passed unanimously.

Ron McPherson announced that the NC Sea Grant was holding a Marine Recreational Fishing Forum in Raleigh on February 16, 2013 and encouraged everyone to attend.

Meeting adjourned.

MEMORANDUM

DRAFT

To: Marine Fisheries Commission
Wildlife Resources Commission
Gordon Myers

From: Tiffany Frazier

Subject: MFC/WRC Coastal Recreational Fishing License Committee Meeting

Date: Dec. 4, 2012

The Marine Fisheries Commission (MFC) and the Wildlife Resources Commission (WRC) Joint Coastal Recreational Fishing License (CRFL) Committee met at the N.C. Department of Environment and Natural Resources Regional Office Conference Room in Washington, NC on Dec. 4, 2012. The following attended:

Committee Members: MFC – Kelly Darden, Chris Elkins, Joe Shute
WRC - Ray White, Joe Barker, Mitch St. Clair
DMF – Dr. Louis Daniel, Chair

Staff: WRC – Gordon Myers, Mallory Martin, Bob Curry, Chad Thomas, Christian Waters, Keith Ashley, Kevin Dockendorf, Kyle Briggs, and Bennett Wynne
DMF - Dee Lupton, Suzanne Guthrie, Mike Marshall, Don Hesselman, Craig Hardy, Randy Gregory, Anne Deaton, Katy West, Jason Rock, and Tiffany Frazier

APPROVAL OF AGENDA AND MINUTES

Louis Daniel, Director of the N.C. Division of Marine Fisheries (DMF), called the meeting to order. Daniel noted that Anna Beckwith was attending the South Atlantic Fisheries Management Council, meeting and Kelly Darden would attend in her absence.

The meeting agenda was approved by consensus with no modifications.

The minutes from the April 16, 2012 meeting were approved by consensus with no modifications.

UPDATES

The committee received updates on the CRFL sales report, the status of the Marine Resources Fund, future obligations and current projects.

Ray White requested the sales report as of Dec. 2012 since the report as of Oct. 2012 only captures a 10-month period. His request was for the full 12-month period of the Number of Licenses Sold by County in 2012 so the commissioners can see if the sales are increasing and/or decreasing compared to 2008, 2009, 2010, and 2011.

**Status of Funds in the Marine Resources Fund
And Future Obligations as of 6/30/2012**

Source	Net Funds (\$)
FY 2007	\$2,592,912
FY 2008	4,215,401
FY 2009	4,392,507
FY 2010	4,378,770
FY 2011	4,514,387
FY 2012	4,378,884
Total	24,472,861
Actual spending through 6/30/2012	
FY 2008	608,751
FY 2009	1,281,245
FY 2010	1,740,114
FY 2011	4,773,350
FY 2012	4,381,767
Paid to WRC for Implementation	821,516
Total	13,606,743
FY 2013 Obligations	
DMF Projects:	
FY13 Five-Year Plan	2,217,354
Oyster Reef Creation no cost extension (NCE)	750,519
Mark Recapture Striped Bass NCE	1,096
Saltwater Fishing Digest NCE	26,860
Oyster Shell Critical Habitat NCE	35,000
WRC Projects:	
Swansboro Boating Access NCE	350,000
Hatteras Boat Access NCE	250,000
2012 RFP Projects Funded for FY13	1,990,345
Multi-Year Projects Approved for FY13 Funding	784,786
NCE carried over from previous RFP projects	776,448
Finished projects. Final Payment disbursed 8/15/12	243,746
Total	7,426,155
Total Spent & Obligations	21,032,898
Balance minus obligations as of 6/30/2012	\$3,439,963

REVIEW/APPROVE 2013 PROPOSALS

The committee then considered proposals that had been submitted for the 2013 CRFL grant cycle. The proposals were divided into three categories – people, fish and habitat.

PEOPLE PROPOSALS

By consensus, the committee approved funding for the following “People” proposals:

- **P-004 Jacksonville Boating Access Area - \$650,000**
One year grant that provides much needed boating and fishing access in Onslow County.
- **P-014 Enhanced Artificial Reef Web Page - \$120,000**
Multi-year grant for a web-based and hand-held Reef Guide to provide coastal reef fishing guides for ocean, inshore and estuarine waters, including fishing access to oyster sanctuaries.
- **P-015 Recreational Fishing Digest - \$30,500**
Multi-year grant for a publication to provide saltwater anglers with easy access to recreational size and creel limits.
- **P-016 Angler’s Guide - \$76,500**
One year grant to publish a guide to provide educational opportunities regarding ethical angling and fisheries management to anglers.

Motion by Ray White to approve funding as indicated for grant proposals P-004, P-014, P-015, and P-016, seconded by Joe Shute – motion passed unanimously.

The committee discussed project P-009, The Town of Vandemere’s Waterfront Park Initiative, a multi-year grant to purchase of eight acres of property to construct a boating access area and a waterfront park totaling **\$333,333**.

Although staff did not recommend funding, Joe Barker stated that there is an opportunity to get a great piece of property. Barker wanted to discuss committing to the project even though some parts of it are outside of the CRFL funding guidelines (i.e., a ballpark). Gordon Myers, Executive Director of N.C. Wildlife Resources Commission, recommended the committee funding the project with the following conditions:

In order to ensure alignment of purposes associated with the use of receipts from the Marine Resources Fund, Myers recommends conditional commitment to funding this acquisition over a three-year period in accordance with the following specific conditions:

1. *Grant award amount should be based on an appraisal procured through the State Property Office. WRC has operating funds they use to go through their liaison at State Property Office to obtain an appraisal.*
2. *Prior to closing (slated for Aug.2013), WRC will execute a long-term agreement between the Town of Vandemere and the state (WRC).*
 - a. *Agreement should narrowly define allowable uses of the property to include recreational public boating and fishing related activities.*
 - b. *Agreement should also provide a pathway for other compatible uses subject to review and approval of the Joint CRFL Committee.*

- *Incentivizes incorporation of other compatible use grant sources such as Coastal Areas Management Act and Parks and Recreation Trust Fund.*
- *Process is consistent with other CRFL grants receiving multi-year agreements including position funding.*

Myers recommends funding the full \$1,005,000 over the three-year time period consistent with the terms of the option to purchase which is \$333,333 at closing and a promissory note of \$666,667 over the next two years. Mitch St. Clair voiced this amount is tentative with the condition of the appraisal. Joe Shute asked the compatible uses for the full eight acres. Myers stated that this body has to define those terms, recommending staff work with the town and bring the revised proposal back through the committee via conference call to ensure the use of funds are used consistent with the permissible uses of the Marine Resources Fund.

Motion by Joe Barker to approve funding P-009 for \$1,005,000 over the next three years, contingent on the italicized list voiced by Gordon Myers and a revised proposal to be discussed during the spring Joint CRFL Committee meeting in April 2013, seconded by Joe Shute - motion passed unanimously.

FISH PROPOSALS

By consensus the committee approved funding for the following “Fish” proposals:

- **F-008 Beaufort Bridgenet Survey- \$41,500**
Multi-year grant to process a five-year backlog of unsorted samples and to incorporate the resulting larval abundance data into the existing dataset, which would subsequently be made available for inclusion in stock assessments.
- **F-010 Mark Recapture Study of Cape Fear Striped Bass- \$36,035**
Multi-year grant to research the sustainability of the Cape Fear River striped bass population.
- **F-011 Sources of Mortality and Movements of Weakfish Tagged in NC- \$116,646**
Multi-year grant to gather data to provide increased understanding of factors affecting weakfish stocks.
- **F-012 NC Red Drum Cooperative Tagging Program- \$12,000**
Multi-year grant to continue red drum tagging for determining exploitation rates.
- **F-013 Assessing Critical Habitat of Anadromous Fishes Using Telemetry Techniques - \$273,644**
Multi-year grant to identify critical spawning habitat, map migration routes and spawning grounds and potentially improve fishery-independent surveys for these species.

Motion by Mitch St. Clair to approve funding as indicated for grant proposals F-008, F-010, F-011, F-012 and F-013, seconded by Kelly Darden – motion passed unanimously.

HABITAT PROPOSALS

By consensus the committee approved funding for the following “Habitat” proposals:

- **H-001 Investigating Salinity Fluxes on Natural and Restored Habitat Bottom - \$111,988**
 Multi-year grant to study salinity regimes to inform managers on best locations for habitat enhancement projects including artificial fishing reefs and oyster sanctuary reefs.
- **H-006 FerryMon: NC DOT Based Automated Monitoring-\$143,742**
 Multi-year grant to continue the long term, continuous water quality monitoring in the Pamlico Sound.
- **H-008 Comparing the Use of Nominated SHA and Non-SHA Coastal Marsh Habitats-\$97,368**
 Multi-year grant to examine fish use in western Pamlico Sound wetlands dominated by wind-driven tides and the link between fish productivity and habitat condition. It will verify the condition of some Strategic Habitat Areas (SHA) in the region.
- **H-009 Incorporating Stakeholder Knowledge of the Status and Value of Coastal Habitats-\$30,365**
 Multi-year grant to use a series of socioeconomic surveys of NC residents to collect ecologically relevant data on the perceived health of and threats to coastal habitats and fisheries.
- **H-010 Trends in Fish Utilization of Low vs. High Relief-\$96,324**
 Multi-year grant to investigate fish utilization of artificial structures both near shore and offshore and evaluate the benefit of relief off the bottom of these structures.
- **H-011 “There’s Something Fishy about Salt Marsh, Oyster Reef, and Seagrass Habitat”-\$50,121**
 Multi-year grant to target habitat education strategies that are important to improve the public’s understanding of the fish habitat relationship and foster environmental stewardship.
- **H-015 Development of a Comprehensive Salinity Database-\$72,415**
 Multi-year grant to develop a salinity database for North Carolina with sufficiently high spatial and temporal resolution to simultaneously examine salinity effects on critical fish habitat.
- **H-017 Oyster Shell Recycling Program (Phase 2)-\$32,000**
 One year grant to continue collection of discarded oyster shells and provide public awareness of the program while soliciting more partnerships.
- **H-019 Effects of Landscape Setting on the Function of Seagrass Meadows-\$105,754**
 Multi-year grant to examine how differing habitat landscape settings and seasonal changes in submerged aquatic vegetation affects fish use, fish health due to diet and competition among species.
- **H-020 Promoting Responsible Boating Practice and Awareness of SAV-\$3,200**
 One year grant to develop and post boating signs at boat ramps throughout coastal NC to education and encourage responsible boating while protecting submerged aquatic vegetation in our estuarine waters.

Motion by Mitch St. Clair to approve funding as indicated for grant proposals H-001, H-006, H-008, H-009, H-010, H-011, H-015, H-017, H-019, and H-020 seconded by Chris Elkins – motion passed unanimously.

Daniel expressed the committee has agreed to funding 20 proposals in year one totaling \$2,433,435 leaving an unobligated balance in the Marine Resources Fund of approximately \$1 million (\$1,006,528).

OTHER BUSINESS

Staff updated the committee on the status of on-going/previously funded CRFL projects from 2007-2012 with division status reports, grantees semi-annual progress reports and technical monitor reviews.

Staff also presented the exit survey results from the symposium held in May 2012.

Chris Elkins asked about the status of the CRFL strategic plan. Daniel explained that staff will be working on the new strategic plan in our spring meeting. In particular, we want to focus on the priority research needs for the Fish management goal of the CRFL strategic plan that has direct application for management of recreational fisheries.

The meeting adjourned at 1:41 p.m.

Cc:	Catherine Blum	Allen Jernigan	Committee Staff Members
	Dick Brame	Dee Lupton	Marine Patrol Captains
	Frank Crawley	Nancy Marlette	Section Chiefs
	Louis Daniel	Meredith Wilson	
	Jess Hawkins	District Managers	