COMMISSION ON MARINE RESOURCES

COMMISSION MEETING

Tuesday, September 15, 2015
10:00 a.m.
Jackson County Board of Supervisors Board Room
2915 Canty Street
Pascagoula, Mississippi 39568

Commission Members:

Richard Gollott, Chairman

Shelby Drummond, Vice Chairman

Steve Bosarge

Ron Harmon

Also Present:

Jamie M. Miller, Executive Director DMR
Sandy Chestnut, Esq., Assistant Attorney General

COMMISSIONER GOLLOTT: Good morning everyone. I would like to welcome y'all to our September meeting.

At this time, I would like to call the meeting to order and ask Jamie Miller to lead us in the Pledge of Allegiance.

(Whereupon, the Pledge of Allegiance was recited.)

COMMISSIONER GOLLOTT: We need an approval of the last meeting's minutes, or any adjustments thereto.

Do I have a motion?

COMMISSIONER DRUMMOND: So moved, Mr. Chairman.

COMMISSIONER GOLLOTT: Do we have a second?

COMMISSIONER BOSARGE: So seconded.

COMMISSIONER GOLLOTT: We have a motion and a second.

All those in favor say aye.

(All in favor.)

COMMISSIONER GOLLOTT: Opposed?

(None opposed.)

COMMISSIONER GOLLOTT: Motion carries.

Next, we have approval of the agenda.

Do we have any modifications?

(No response.)

COMMISSIONER GOLLOTT: With no modifications, do we have a motion to accept?

COMMISSIONER DRUMMOND: So moved, Mr. Chairman.

COMMISSIONER GOLLOTT: Do we have a second?

COMMISSIONER BOSARGE: Seconded.

COMMISSIONER GOLLOTT: We have a motion and a second.

All those in favor say aye.

(All in favor.)

COMMISSIONER GOLLOTT: Opposed?

(None opposed.)

COMMISSIONER GOLLOTT: Motion carries.

Next is the Executive Director's report.

JAMIE MILLER: Mr. Chairman, I have no report.

COMMISSIONER GOLLOTT: At this time, I would like to recognize Senator Brice Wiggins. Thank you very much for coming today, sir.

BRICEE WIGGINS: Thank you, and I just wanted to say I appreciate your road show. I know this is something that you have been doing. I think it is a great thing for the Coast and for the citizens down here, and I appreciate you coming here and I welcome you to Pascagoula and the Supervisor's room here. I appreciate everything that is going on.

Actually, as I told, I think, Chief Davis, when I'm not getting a lot of calls, that means y'all are doing something right.

I know we have put in a lot of transparency and other things like that.

Mr. Harmon, this is my first meeting, since you came before the senate and were confirmed.

In the legislative session, we all know that the BP money is coming down. Keep your eyes on that, and I'm open to working with y'all on any comments and anything because that is going to be an issue coming up in the legislative session in January.

I don't make every meeting, but I'm happy to answer any questions, if anybody has any.

COMMISSIONER GOLLOTT: Thank you, Brice.

BRICE WIGGINS: Thank you.

COMMISSIONER GOLLOTT: Next we have Marine Patrol.

RUSTY PITTMAN: Good morning Mr. Chairman, Commissioners, Director Miller and Ms. Chestnut.

You have in front of you the report for this past month.

If you will notice under crab violations, we've had some complaints coming in from the public on over-the-limit recreational crab pots in Back Bay. We did set up some officers back there and we did catch one running over the limit with recreational pots. Matter of fact, they let him go ahead and run them. When they stopped him, he

had fourteen that he had run, by the time they stopped him. The also had one without the recreational crab license.

On page two, you will notice the number of citations for fisheries broken down. One thing that is not added in there is that we started the courtesy citations in June, and, from June until now, we have written two hundred and twenty-nine courtesy citations. If you were to add those in there, that would bring that total way up.

We also had a hundred and forty-six verbal warnings, during that time period, too, for the year to date.

Boating accident with fatality, we have one. This individual fell off his boat north of I-10 behind the Shed. We assisted the Department of Wildlife and Jackson County on the recovery of him, our dive team did.

We did have five boating accidents without injuries.

On our JEA report, we had a total of seven patrols, ninety-five man hours, fifty-one contacts. We also had one outreach event and five hours of outreach man hours.

That's it.

COMMISSIONER DRUMMOND: Rusty, "Disregard of

Traffic Device", under "Miscellaneous Violations", was that running a red light?

RUSTY PITTMAN: Running a red light.

COMMISSIONER DRUMMOND: It seems to me that the enforcement division is getting a lot more traffic violations than normal.

Are they?

RUSTY PITTMAN: It did pick up a little bit this past month. What you are going to have, especially at nighttime, when these officers are going from boat ramp to boat ramp, or harbor to harbor, they run across these, and they will make a stop and enforce the law.

Of course, there are a couple at the bottom that, too, if you notice, Marijuana arrests. Those were incidents at boat ramps and fishing piers where the people were fishing and, when they approached them to check their license, they had the Marijuana with them.

COMMISSIONER DRUMMOND: Thank you, Rusty.

RUSTY PITTMAN: Yes, sir.

COMMISSIONER GOLLOTT: Anyone else?

(No response.)

COMMISSIONER GOLLOTT: Thank you, Rusty.

RUSTY PITTMAN: Thank you.

COMMISSIONER GOLLOTT: Next up is Marine Fisheries, Joe Jewel.

JOE JEWELL: Good morning Commissioners, Director Miller and Counselor Chestnut.

Also, we would like to welcome Senator Wiggins. We always appreciate our elected officials, when they are able to attend our meetings.

I would like to update the Commission on some of the things that Marine Fisheries has been involved in here recently.

Marine Fisheries, from January to date, has successfully completed just over four hundred and fifty dives without incident, or accidents, with the vast majority of those dives occurring in shellfish, as you will later learn in our presentation.

Artificial Reefs has assisted in two juvenile red snapper releases. Just over three thousand individual red snapper were released.

To date, we have deployed just over six thousand tons of concrete culverts on our fish havens.

Seafood Technology has, now, certified sixty-seven facilities, and that's up from our high just before Katrina of eighty-five.

The Shrimp and Crab Bureau has removed just under a hundred derelict crab traps. In the history of our program of derelict crab trap removal, we have removed just over nineteen thousand traps out of the environment.

The Finfish Program is currently actively monitoring the red snapper season. As you are aware, the Federal red snapper season opened on June 1st and, for private recs, ran through June 10th. It was a ten-day season. For the charter-for-hire industry, it ran from June 1st through July 15th.

The State of Mississippi has a season. The state season ran from July 16th and continued to run through October the 31st.

We are still actively monitoring the program through our mandatory red snapper program. As you are well aware, it has three portals that the fishermen can access the mandatory requirements. They can call in on our app, they can call in on a phone line, or they access it via our web page.

Commissioner Bosarge, as you pointed out, we have made some adjustments to the program along the way. We have taken an additional step, through our PR office. We have put out the big feather banners at a lot of our ramps.

COMMISSIONER BOSARGE: I've seen them. They look nice.

JOE JEWELL: We have five in Jackson County, we have three in Harrison County, and two in Hancock County. We are going to make some adjustments as necessary.

We have the actual place cards that we give with all the licenses. We have those around all the boat ramps and marinas and most of the marine shops and Walmart where we sell licenses. We are trying to do our due diligence and make all the participants aware of the mandatory requirements.

We had our quarterly awards program for Marine Fisheries. I just want to let the Commission know that Mr. Charlie Robinson was announced as the employee of the quarter.

We had four leadership awards for Marine Fisheries, and those went to Mr. Jason Saucier, Mr. Travis Williams, Ms. Jennifer Herbig and Ms. Sally Richards for their outstanding achievements for this past quarter.

I want to update the Commission on a couple of regulations that went into effect and their impacts that will take place here shortly.

Title 22 Part 1, those were the mandatory reduction in dredge weight requirements, from a hundred and forty pounds down to a hundred and fifteen pounds. That went into effect August 1st.

The Commission had an additional requirement that we notify all of the licensed harvest fishermen.

On file, we have a hundred and thirty-two resident dredging licenses and sixty-five resident tonging

licenses, but there are a lot of crossover between those that hold dual licenses.

I want to update the Commission that we have sent out just over three hundred notifications to the commercial fishermen, letting them know that the mandatory requirements went in place August the 1st.

We also have changes that went into effect to Title 22 Part 7, and these are scheduled to go into effect October the 1st, next month.

The commercial red drum quota will increase from fifty thousand to sixty thousand, and the second active commercial spotted seatrout season currently goes from July through September, and it will extend by one month and go July through October.

I want to update the Commission on the quota, the commercial quota.

For flounder, the commercial quota is seventy-four thousand. The current quota for flounder is twenty thousand three hundred and thirty-seven, or we are right at twenty-seven and a half percent of the quota captured.

Spotted seatrout, the current quota is fifty thousand. The current landed quota is twenty-six thousand four hundred and eighty-three, or about fifty-three percent.

The red drum, we closed the season on September

the 6th. The red drum current quota is fifty thousand pounds. Our actual landings, right now, is forty-seven thousand nine hundred and sixty-seven pounds. With a couple more dealers that are about to report, we are anticipating just over fifty thousand pounds. We closed the season this past Sunday.

With that being said, before we get into the actual part of the agenda, this is the time of the year, this month and next month, we usually give the Commission an update on the oyster season.

I mentioned earlier in my comments that we have done just over four hundred and fifty dives, and most of those have to do with our square meter dive program for the shellfish program.

Last year about this time, I reported to the Commission we had done about a hundred and fifty and a hundred and sixty dives and some dredge tows to give the Commission some scientific data for the opening of the shellfish season. At that time, that was some of the most intensive diving, square meter sampling that we had done.

This year, we have done over four hundred and fifty dives. That almost quadruples the number of dives that we have done, in support of data collection for the opening of this year's oyster season, and we are still actively accumulating data for the Commission to consider,

when we open this year's oyster season.

In advance of getting into the active agenda, I want to let the Commission know that this year we are going to approach it in three segments.

The first segment, Mr. Scott Gordon will present to the Commission what we do. The presentation that he will give this morning is going to show how we accumulate the data and the process that we go about gathering that data and analyzing that data.

Right after that, Dr. Kelly Lucas will give a presentation. It is sort of the rationale by which we take that data and make decisions from it.

Then, sort of the third part, since we are actively still accumulating that data -- we still have a little way to go -- at our October meeting which, I think, is going to be in Hancock County, we will present to you the presentation that the Commission is most familiar with where we give you all of that data with which you formulate a decision as to how and when we are going to open the season.

With that being said, we are going to move right into the agenda. As you know, last Commission meeting, we had two Notice of Intents that we approved to move forward for final adoption by the Commission.

First up is Title 22 Part 18. Mr. Jason Saucier

will present the presentation on the Scientific Collection Permit.

JASON SAUCIER: Good morning Commissioners, Director Miller, Ms. Chestnut.

As Joe mentioned, I'm presenting to you for final adoption amendments to Title 22 Part 18. Those are the Rules and Regulations pertaining to Special Collection Permits in the State of Mississippi.

CMR passed the Notice of Intent, on August 18th. Public notice was issued via the MDMR website, on the 20th of August. Legal notice was also submitted and issued in the Sun Herald, beginning on August 22nd.

Public comment period was from August 19th through September 14th, and, to date, we have no public comments.

I will, now, read into the public record all proposed amendments. These are the same amendments that we went over last month, with the Notice of Intent. So please bear with me. Sections 106 and 107 are new paragraphs.

Chapter 2 Section 106:

"It is the public policy of this state to favor the preservation of the natural state of the coastal wetlands and their ecosystems and to prevent the despoliation and destruction of them, pursuant to

Mississippi Code 49-27-3."

Chapter 2 Section 107:

"The MCMR is vested with authority to adopt, modify, or repeal rules, or regulations, to utilize, manage, conserve, preserve and protect the flora, fauna, tidelands, coastal wetlands, coastal preserves, marine waters and any other matter pertaining to the marine resources under its jurisdiction, pursuant to Mississippi Code 49-15-304."

Chapter 3 Section 106, I will just focus on the areas where we having changes in marine waters and we are adding state managed areas. It shall read:

"All MDMR Special Permits are valid only in the marine waters and state managed areas under the territorial jurisdiction of the MDMR."

We are precluding the word "highway" from Interstate 10. So it shall read, "South of Interstate 10."

The sentence, "All state managed areas include those parcels acquired and managed by the MDMR's Coastal Preserves Program" will be added.

Chapter 3 Section 107:

"The MDMR Marine Patrol Office, area code 228-523-4134, must be notified twenty-four hours in advance of the start of any research activity."

That is just an update with the correct phone number.

We are changing the title of Chapter 4 to read:

"Chapter 4 MDMR Scientific Research Permit."

Section 100:

"For the purpose of this permit, scientific research is defined as any research, monitoring, restoration, or collection, activity having potential direct, or indirect, impact to state-managed natural resources. When making the initial request in writing for a MDMR Scientific Research Permit, the applicant must include the following information on a form provided by the MDMR."

Moving down to Section 100.02:

"Names of all persons that will be conducting field research activities."

Section 100.03:

"Registration and/or documentation numbers of all vehicles, or vessels, that will be involved in research activities and name of vessels if applicable."

Section 100.04:

"A general description of all activities which will be conducted, including a schedule of activities, research methods, number and size of all gear to be used, and frequency of activity by gear type."

Section 100.05:

"A map showing the geographical location of the research activities, with each location identified by coordinates."

Section 101:

"A complete written report of all research activities must be submitted to the MDMR within thirty days following the expiration date of the permit."

Section 102:

"None of the samples collected under the authority of a MDMR Scientific Research Permit are to be sold, bartered, traded, or consumed. Only applicants who can demonstrate a specific need for retaining samples as an integral part of the project will be authorized to retain samples."

Moving on to Chapter 5 Section 101:

"Applicants must be tax-exempt organizations under Section 501(C) of the United States Internal Revenue Code and have on file with the State Tax Commission a tax-exempt letter issued by the United States Internal Revenue Service. Each Application received will be reviewed by Office of Marine Fisheries personnel and a recommendation will be made to the Executive Direct, or his designee."

Moving on to Section 104:

"The Executive Director will determine the total

number of oysters the permittee will be allowed to harvest under the conditions of the permit."

Moving on to Chapter 6 Section 100:

"When making the initial request in writing for a Marine Brook Stock Collection Permit."

That change is just to correct the language.

Moving on to Section 101:

"The MDMR Office of Marine Fisheries, within thirty days following the expiration date of the permit."

Section 102:

"None of the finfish, or shellfish, collected under the authority of a Marine Brood Stock Collection Permit are to be sold, bartered, traded, or consumed."

Chapter 7 Section 101:

"A complete written report of all harvest activities must be submitted to the MDMR Office of Marine Fisheries within thirty days."

What is required is a motion from you to proceed with final adoption of Title 22 Part 18 amendments.

COMMISSIONER GOLLOTT: Thank you.

Do we have a motion on this item, or questions?

COMMISSIONER BOSARGE: It all looks good to me.

I'll make a motion to proceed with final adoption of Title 22 Part 18 amendments.

COMMISSIONER GOLLOTT: We have a motion.

Do we have a second?

COMMISSIONER DRUMMOND: I second the motion, Mr. Chairman.

COMMISSIONER GOLLOTT: We have a motion and a second.

All those in favor say aye.

(All in favor.)

COMMISSIONER GOLLOTT: Opposed?

(None opposed.)

COMMISSIONER GOLLOTT: Motion carries.

JASON SAUCIER: Thank you.

JOE JEWELL: Next on the agenda is final adoption of recommendation, by Mr. Rick Burris, for changes to shrimping in Mississippi.

RICK BURRIS: Good morning Commissioners, Director Miller, Ms. Chestnut.

As Joe said, this will be final adoption for the amendment to Title 22 Part 2, Rules and Regulations for Shrimping in the State of Mississippi.

On August the 18th, CMR passed the Notice of Intent. We filed that with the Secretary of State on the same day. It was published on our website, a public notice, on August the 20th, and in the Sun Herald legals, on August the 22nd.

Public comment period was August the 19th through

September the 14th, and, to date, no public comments have been received.

For the convenience of the Commission, I will read into the record the changes. You will remember that anything underlined is added to the regulation and anything struck through will be removed from the regulation, and I will start reading where the changes are made.

Chapter 4 Closure Areas Section 101:

"For the purpose of this section only, the portion of the Intracoastal Waterway that extends from a point south of Long Beach to a point south of Point Clear is described as follows:

"Begin at Marianne Channel Lighted Buoy 1 located approximately three miles north of West Point on Cat Island, thence extending southwesterly to Light 4P, thence southwesterly to Pass Marianne Wreck Light WR8A, thence southwesterly to Light 15P at the northernmost point of Merrill Coquille, thence southwesterly to Light 17P, thence southwesterly to St. Joseph Island Light 22, then westerly to Lighthouse Point and continuing westward following the meandering of the shoreline to the boundary line of the state."

What will be required by the Commission is a motion to proceed with final adoption of Title 22 Part 2.

COMMISSIONER GOLLOTT: Do we have any discussion, or any questions, on it?

COMMISSIONER BOSARGE: I will make the motion to proceed with final adoption of Title 22 Part 2 amendment of ICW boundary.

COMMISSIONER GOLLOTT: We have a motion.

Do we have a second?

COMMISSIONER HARMON: I'll second that motion, Mr. Chairman.

COMMISSIONER GOLLOTT: We have a motion and a second.

All those in favor say aye.

(All in favor.)

COMMISSIONER GOLLOTT: Opposed?

(None opposed.)

COMMISSIONER GOLLOTT: Motion carries.

RICK BURRIS: Thank you.

JOE JEWELL: As I mentioned earlier in my comments, Mr. Scott Gordon is going to give an oyster sampling update. This will be the first segment, in our three-part segment for the oyster season.

SCOTT GORDON: Good morning Chairman Gollott, Commissioners, Director Miller, Ms. Chestnut and Senator Wiggins.

They had asked that I do a shellfish sampling

update, and what I wanted to cover here are some of the methodologies that we use:

One minute dredge tows. Square meter dives. Shell Budget. Fecal coliform water sampling, being a portion of our sanitary surveys, in addition to our shoreline surveys. HAB monitoring. Our vibrio management plan, and some special projects.

These maps that we have right here show our sampling locations for our one minute dredge tows and our square meter samples.

All of the light blue dots, those are our square meter water sample stations, and the blue dots are also square meter sample stations, in addition to being one minute dredge tow sampling stations (indicating map).

We have two hundred and twenty-two stations this year. Sixty-four one minute dredge tow locations and two hundred and twenty-two dive sample locations.

We do replicate square meter samples at each location. That's where the four hundred and forty-four square meter dive samples came from. That's a total of five hundred and eight total samples collected.

To put this in a little bit of perspective, the State of Louisiana, they have about one hundred sites. They do five replicas at each site. So they are getting us for the number of samples, but that is for the entire

State of Louisiana.

Mississippi, in the past, we've had seventy-five stations. So it has typically taken about one hundred and fifty samples. As you can see, we have really kicked it up.

One of the things that we've done to figure out the number of samples that we should have in each area was based on our previous sampling data, and we looked at the variability between samples. That's why some of these areas are going to be at a higher density than others.

The box at the lower left, that's kind of an overview map showing the Henderson Point, the Pass Christian complex, the Pass Marianne, the Telegraph, and, then, at the lower left is going to be the St. Joe Reef area.

A total of sixty-four one minute dredge tow samples were collected, on a total of ten boat trips. The physical parameters that we are collecting are the salinity, oxygen, the air and water temperature, and the Secchi depth.

The Secchi, for those of you who aren't familiar, is a little small black-and-white shaped disk that we lower in the water until it disappears out of sight, and, then, pull it back up until it reappears. It is letting you know how far the light can penetrate into

the water.

Wind speed and direction, depth, tidal stage, sea conditions, and bottom type.

We are also routinely collecting the length frequency of live oysters, mortality, and cluster data.

We are making notes and counting predators and competitors such as oyster drills, hooked mussels and stone crabs.

On the bottom right side of the slide it shows the time period. There are the dates that we went out and did the one minute dredge tows. That was a total of ten boat trips, collecting the sixty-four one minute dredge tows.

On this next slide are some representative photographs of some of our one minute dredge tows. We use a small sample dredge. It is pulled at these locations for a one minute period of time, and, then, we measure everything that is in there, and they are collecting some of the water data.

Some of you may recall, in the past, we did this map that kind of quantified what we were seeing in our one minute dredge tows and overlaid it on the maps.

This is the sample that we did in 2010. If it's clear, we had no data. If it was red, we found nothing at that site. The pinkish color, one to twenty. The next

color, light blue, twenty-one to forty. Darker blue, forty-one to fifty. The green was fifty-one and over. You can see, in 2010, this is what we had (indicating map).

The next time we did this was in 2013, and, as you can see, we are not having the oyster densities in these areas like we had in the previous sample (indicating map).

The next slide shows 2014, and, again, some areas have a few oysters in them, but the areas are getting larger where we have low numbers, or none.

This is what we had in our samples this year. As you can note on there, there is no light blue, or dark blue, or green, in any of our samples. This is not, initially, very encouraging for us.

Square meter dive sampling. As I said, a total of four hundred and forty-four square meter dive samples were collected over eighteen boat trips.

Now, we received a lot of help from the other bureaus. We have divers in the other bureaus and this counts towards their time in diving, and we are happy to be able to put them to work where they can stay brushed up on their diving techniques.

Physical parameters. Again, it the same as we are collecting with the one minute dredge tows, the length

frequency of the live oysters, mortality and cluster data, and the predators, too, but we also use the square meter sampling as part of our Shell Budget modeling.

This is the boat that we use primarily for the dive samples. It was purchased after Hurricane Katrina, and it's a twin diesel jet drive boat. So it's very safe for driving and a good stable platform for us to use (indicating photograph).

Here are some additional samples of them preparing to dive, or diving in the water, and also the people working up the samples. Sometimes we can work up small samples inside the lab. If it's a larger sample amount, we will do that outside and, sometimes, even on the boat (indicating photographs).

Again, these are some photographs of the sampling. In the top middle, you see that hitting the water. That's one of our quad rafts. That's actually half of a square meter. When they put that down, the diver will collect everything that is within there, and, then, they will flip it over to the next side and collect that. It makes it a little easier for them to handle the sample.

Everything that they collect is put in these mesh bags, and we have a float that helps bring that up to the surface (indicating photograph).

In this photograph, you can see a pretty good view just before the square meter has hit the surface.

These locations are random to begin with, but, when they get there on the boat, they throw it off in a random location. So that's where it falls.

These photographs are more of the dive sampling where he is handing off the sample collected in the bag to one of the people onboard the boat.

Next is a video of them sampling on one of the square meters, and I thought it was pretty interesting for you to see. This is under less than optimum conditions, but not as bad as what it could be. I believe this was off the Henderson Point area.

What he is doing is feeling around within that grid and picking up every oyster that he finds in there, and, then, if it's the Shell Budget sampling, they are also taking all available culture material out of that area, and, if there are any predators, oyster drills, or anything like that, he is collecting them, as well, he or she.

There are a lot of folks that don't like to do this type of diving, especially if you get on the St. Joe area where it's black. You can't see your hands in front of your face. It takes some special people to do that.

With the number of dives that we have done, I am

very appreciative for the hard work that they do.

This is the Standard Oyster Resource Management Protocol. I showed this to the Commission last year. The State of Florida is using something similar. We are looking at adapting this for Mississippi's use. I have taken some of the categories off of there, but it shows you the breakdown.

Whenever you can look at the number of market-size oysters that you get average per square meter, how does that relate?

If you can look at the left column, it shows the number of oysters that you would find per square meter. On the very first one, zero point one legal size oysters per square meter, that equates to, if you look on the right-hand side, about one-and-a-half sacks per acre (indicating slide).

If you get down to the green category where we have the two legal size oysters per square meter, that would translate into twenty-nine point four sacks per acre, approximately (indicating slide).

It's just a good gauge to be able to have some kind of relative feel on what does this mean, these numbers.

For Henderson Point, we have shown, from the square meter sample, an average of zero point seven market

oysters per square meter.

Pass Christian, two point two.

Pass Christian Tonging, zero point one.

Pass Marianne, zero.

Telegraph, zero.

St. Joe, zero point eight.

Like we did with the one minute dredge tow mapping, we wanted to look at our reef areas using the square meter sample data, the number of market oysters per square meter, and these are the results that we came out with. It runs the full gamut, and, as you can see, the majority of our reef areas are in that lowest category.

Here is a typical oyster that was picked up in one of our samples off of Henderson Point. This really shows some oyster drill damage where the conch, or the oyster drill, will actually drill through the shell of the oyster and consume the oyster inside ((indicating photograph).

The one on the right-hand side, I've got arrows showing three of the drill locations that would have killed all three of those oysters, and those oysters are either spat size, or seed size.

The whole overall oyster that all of these small oysters are set to, is one of the valves of the oyster that is serving as cultch material for all of these

others. I haven't really gone through and counted all of these, but we have them from probably just a few days, or a week, old spat all the way up to maybe a month, or so, of seed size oysters.

The big white section in the very center, that is an oyster that is gapping over what we call a box on a small size. We have seen a lot of mortality on this.

The oyster that is on the right-hand side, the three arrows, the left most arrow, just below that there is a small little animal attached to that, that a lot of folks would look at and think, well, that's another spat, but it's not a spat. It's a slipper shell, or capitula. Sometimes folks will look at that and they can mistake it for a spat.

The spats have a little black line going through them. I like to call it a razor stripe because they are growing very fast, at this size.

The Shell Budget. This is the first year we are working with a Shell Budget. It's a sustainability model that was used for the last three years in select Louisiana shellfish areas, by the Louisiana Department of Wildlife and Fisheries, in conjunction with Dr. Thomas Soniat of the University of New Orleans and Dr. Eric Powell of the University of Southern Mississippi Gulf Coast Research Laboratory.

The model is to help us predict the amount of cultch material, such as shell, limestone, crushed concrete, et cetera, anything that oysters can attach to that can be removed, or harvested, from the reef to achieve management goals for the area.

We are trying to figure out how much material can come out of the water, while still maintaining our management objectives.

Again, the Shell Budget sampling is based on our square meter samples that we are collecting. We get a lot of the same information that we do with the others, but we are also looking at the amount of live shell and available cultch, the brown shell, and the amount of dead shell and unavailable cultch, the black shell. We are looking at the amount of live and dead oysters. Also, we are getting length frequency of live and dead oysters, and, again, the predators and the physical parameters and, also, the historical population data for each reef.

This is a pretty detailed model. It's another tool that we want to be able to use to be able to provide the Commission with the information that is necessary for y'all to make the right decision.

These are some of the sort of things that we would be collecting. It's very similar to our regular square meter sampling (indicating slide).

The top center picture for those of you that aren't aware, that is an oyster driller, or conch.

I was kind of encouraged by one of the fishermen I spoke to yesterday that said, "What's this with these conchs that have the crabs in them?"

I said, "What do you mean with the crabs in them?"

He said, "There's a crab living in the shell."

I said, "That's a good thing. That's a hermit crab. I prefer to see these shells occupied by a hermit crabs which means oyster drills aren't in them and eating the oysters."

We've got the computer screen up here. A lot of this information is now being entered directly on the laptop computers on the boat on the water.

This is our fecal coliform water sampling, sanitary survey and shoreline surveys. Again, I've got a time line at the bottom. This is one of the things that we are constantly doing year round.

We have had five hundred and sixty-one fecal coliform water samples collected, between May 1st and September 10th, as well as one oyster tissue sample. A total of forty-seven boat trips were required to collect these samples.

An updated sanitary survey is being completed

for the oyster growing waters of Area 4 Cat Island.

No new pollution sources, or potential pollution sources, were identified, after an infield investigation of Areas one, two and six.

Also, an infield marina dilution analysis of Areas one and two was conducted, mapping any new actual, or potential, pollution sources to the surrounding oyster growing areas.

This is required by the Interstate Shellfish Sanitation Conference, that we conduct these sanitary and shoreline surveys.

Of course, the thing that most people think about is our fecal coliform sampling, but we do some ground proofing, driving around these areas and seeing if we have any new houses, or do we have any new industry, that may potentially adversely affect the growing areas, and we have to do an annual update of that.

When they are doing the fecal coliform water sampling, typically, they are going to start early in the morning before the sun gets up, before the weather conditions deteriorate. Even if it is going to be bad weather throughout the day, usually, if they can get out there early enough in the morning, they are able to collect the water samples.

Also, sometimes, when they are sampling some of

these areas, they are pretty long trips. If they leave out of Long Beach Harbor and they are sampling areas one, two and three which goes all the way over to the Gulfport ship channel and all the way over to the mouth of the Pearl River, that's about an eighty-one, or an eighty-two, mile round trip. Oftentimes, they will do that maybe two times, or more, per week.

I haven't checked with Marine Patrol, or anybody else, to see if they have put that many miles on a boat, but I would venture a bet that we probably put more miles on this boat than any other one that we have.

This a current map of our harvest zones, basically, going state line to state line, and it shows the different conditions, or the classifications, of the growing waters.

If you notice around Cat Island and also Ship Island to Deer Island, we've got that colored as a proposed classification that is under review. I'm very hopeful that we are going to be able to upwardly classify these areas.

Mr. Chairman, if you would pay attention to the Deer Island area, that is inside Biloxi Bay.

When was the last time inside Biloxi Bay was open for direct harvest?

COMMISSIONER GOLLOTT: It's been a number of

years, and I know where you are going with this.

Let me say that I'm very disappointed. We have been putting a lot effort, for the last three years, in the west end of the Sound. It looks like, to me, we need to change directions.

Let me say this. One of the things that I was pushing for, when I was in the oyster business -- that's been a long time ago, and it's becoming very clear to me that that was the right direction then -- is to open an onshore depuration plant, say, in Pascagoula where we could open the Pascagoula Reef and Graveline and harvest directly, and go to a depuration plant on the river. Our fishermen could do this. Oysters can be depurated in two weeks, approved and sold.

It looks like to me we need to put our efforts in an area that has a lot more fresh water, that kills drills and get rid of some of that stuff. Either that, or around St. Joe, or somewhere, put more effort into where we are getting a lot more fresh water, or try to introduce more fresh water to these reefs. We've got to do something.

SCOTT GORDON: I agree with you. With some of the salinity changes that we have seen, I'm hoping that it is not going to be a long-term issue, but I try to be a realist, as well. I think we probably will focus more of

our efforts to the north and to the west, but, with this Biloxi Bay area that I'm hoping we can get, in the near future, reclassified as conditionally approved, we can do some work in there.

I've been here over thirty years, and that area has not been open for direct harvest in that length of time.

COMMISSIONER GOLLOTT: I understand the channel has been dredged into Graveline.

Would it be possible to relay some of those oysters out of Graveline and out of Pascagoula and put on this area and let them depurate?

SCOTT GORDON: Well, that is certainly one possibility we could consider.

COMMISSIONER DRUMMOND: Scott, are you still sampling eastern Jackson County?

SCOTT GORDON: Yes, sir. We are sampling all of the areas, now. We are getting them at least twice a month.

COMMISSIONER DRUMMOND: Just water samples. Right?

SCOTT GORDON: Yes, sir.

COMMISSIONER DRUMMOND: So you're not looking at the oysters over here?

JOE JEWELL: Like I mentioned earlier in the

presentation, we are actively sampling the major reef areas for that decision matrix that we will present next month.

We are moving, now, off the major reef areas into the areas, like, St. Stanislaus, and this week we are going to start moving over into the Pascagoula-Graveline area.

We are going to present that information next month at the October Commission meeting.

COMMISSIONER DRUMMOND: You are going to take me with you, Scott, when you come over here?

SCOTT GORDON: Yes, sir. You can see pelicans soaking their toes, again.

Our harmful algal bloom monitoring, that is required by the Model Ordinance of the National Shellfish Sanitation Program, and that is to monitor productive oyster reefs for harmful algal species. Most commonly, people think of Red Tide.

No harmful algal blooms have been detected on our reefs.

Sampling is conducted at two stations twice a month. Those station locations are in the lower left-hand corner of the screen. We have one of them near shore and one offshore.

Six to ten samples are collected for reported

fish kills, or even jubilees, and upon reports of unusual water discoloration. The data is shared with the NOAA Phytoplankton Monitoring Network.

Also, if we were to receive reports of adjacent states having any red tide activity, or harmful algal bloom activity, we would step up our sampling.

We have a close relationship with the Finfish Bureau and, if they notice any discolorations of water in their aerial surveys, we can ID those locations and go out and get a water sample and have it analyzed to see what is causing that.

Our Vibrio Management Plan. Mississippi's Vibrio Management Plan has been updated in accordance with the Interstate Shellfish Sanitation Conference, National Shellfish Sanitation Program Model Ordinance. That is something we have to do every year.

Special projects that we have worked on are the basket dredge-bag dredge comparison, the cable versus chain comparison, and dermo sampling with Dr. Thomas Soniat with the University of New Orleans, He has come over and done three sampling trips, since May. Then, additional weather station installations.

The weather stations. This is a map of where we have weather stations installed, or where they are being installed, right now. We have one in Pearl River County

that is right off the Pearl River. We've got one at the Waveland Wastewater plant. We've got one up at the Mississippi State Forestry Commission on County Farm Road in Harrison County.

We are trying to get up an operational weather station at Red Creek Wildlife Management Area headquarters in Stone County, and, then, at the Hancock County Emergency Operations Center near the Kiln.

Once we get these things up and operational, we want to have them online so the public will have access to the weather data that is involved with that. I think much more importantly, we hope this to be part of the weather station coverage throughout the entire state of Mississippi. Emergency operations, FEMA and MEMA, they would like to be able to tap into this information.

I believe all of our bureaus would be able to use this information to monitor rainfall information, sunlight, and things like that so we can do some long-term population trends with it.

The picture in the lower left corner is of a trip we took to a few of the reef areas. Commissioner Zimmerman went out with us, but there were also some congressional staffers that had been looking at all of the Gulf States.

We are continuing our sampling and, as Joe

Jewell said, we will be investigating some other areas for any possibilities.

COMMISSIONER DRUMMOND: Do you get a lot of stone crabs?

SCOTT GORDON: We don't get a lot of those, but we do and we keep up with those, if we collect those in the samples.

COMMISSIONER DRUMMOND: And they are oyster predators?

SCOTT GORDON: Yes, they are.

COMMISSIONER DRUMMOND: I didn't know that.

COMMISSIONER BOSARGE: Scott, I have one question, or comment. I appreciate all the effort that you are going through to provide us with more information because we've got some tough decisions to make.

Maybe this is Dr. Lucas' presentation, but, at one point, we had talked about mapping the entire Sound to determine where we have oysters and where we don't.

Is that still at ongoing, or upcoming, project?

SCOTT GORDON: Yes, but there are some areas that I think just intuitively you don't need to look at. If they are far away from any other water source, I think it would be kind of futile to look at those because the salinity is going to be so high that there is no way oysters will be able to survive in that.

COMMISSIONER BOSARGE: I guess maybe I was looking more at the eastern part of the State where it has been years since we have done any cultivating, or commercial harvesting, to determine what is there and where it is.

SCOTT GORDON: I think Dr. Lucas, in her presentation, she has some maps showing some locations of the historic reef areas.

We have gone back to some things way back, showing some islands and reefs and keys that we had no idea of. This was the State of West Florida, back at that time, or the territory of West Florida.

We are trying to get this information, as much as we can, to be complete to be able to reach our million sacks by 2025.

COMMISSIONER BOSARGE: We've got some tough decisions. Thank you.

SCOTT GORDON: Thank you.

JOE JEWELL: You heard Scott talk about sort of our methodology and what we do and a little bit on how we do.

Dr. Lucas is going to talk a little bit as to our rationale, why we do what we do.

KELLY LUCAS: Before I get started, Commissioner Bosarge, I will address your questions.

Through several of the restore-related things, benefit habitat mapping has been suggested over and over again, whether it's hard substrate, whether it's mud, whether it's sand. That has been suggested. It has also been recommended by the Governor's Oyster Council. There are many people looking at ways to get that funded.

Good morning Commissioners, Director Miller, Ms. Chestnut.

Thank you, Senator Wiggins for being here today.

To begin with, I think this was a late agenda item. So y'all don't have a presentation in your booklets, but you do have one on the screen in front of you.

If you would like a hard copy of the presentation, once we're done, Crystal Matta, if y'all will let her know, she will be glad to send you a copy of it.

To begin with, like Joe said, I'm going to provide our rationale for the oyster-management approach. To go through that, I'm going to walk us through how we currently manage oysters. I'm going to talk about where we're going and I'm going to talk about our plans to get there.

What you are looking at here on your screen is the eastern Mississippi Sound and it's a map of the

eastern Mississippi Sound. You have the legend there that shows pink being current oysters and the hatch marks are historic oyster reefs.

For the purpose of this map, the definition of historic oyster reef is going to be oyster reefs that have not been harvested in five years, or greater. It doesn't mean that there is no resource available. Certainly there are probably limited resources and we plan to go out and investigate it, but those areas have not been open to harvest, and they are listed as historic on these maps.

This, of course, is the western Mississippi Sound, again, with the same scheme. You have the pink being your current reefs that we harvest from and the hatched marks being historic oyster reefs where we haven't harvested oysters in five years, or greater.

This is nothing new. We have discussed this, at least the past couple of years I've been here and beforehand. You heard Commissioner Drummond mention the eastern Mississippi Sound and Commissioner Bosarge mentioned it. You have heard Commissioner Gollott mention Graveline Bay. So we know this.

We also know that the oyster resource is in decline, and this is part of what prompted the Governor to issue an executive order to create the Governor's Oyster Council because we know this and we need all hands on deck

to help solve this problem.

Through the Governor's Oyster Council, all the group, each committee mentioned several of the threats there are to oysters. If oysters don't grow in that area, there is a reason they don't grow in that area, either the environmental conditions have changed, such as water quality, or sedimentation, water quantity, not enough fresh water, substrate removal, harvesting, predation, disease and, even in the case of just pure habitat loss from a hurricane, or extreme episodic event, where the whole reef gets buried, or it gets completely scoured up.

We know this, and the mandate of the Governor's Oyster Council was to provide a report that provided us some actions, some management goals to work with the oyster industry, to give us some recommendations, some things to move forward to where we think we are moving in a positive direction and getting to that one million sacks by 2025.

The Governor's report was published in June of this year. The quotes that you see pulled out to the right-hand side of your screen are eleven, or twelve, quotes throughout the book with the page numbers, and each of these quotes is telling us that we need to focus on developing a sustainable management program for oysters.

Some of them are making suggestions about

setting hard quotas. Some of them are saying things about stock assessments, assessing the health. Some of them look directly at the Shell Budget model, or at another no net change model. They all indicate that they want us to find a way to help manage these reefs sustainably into the future.

What is our current management?

How do we currently manage?

What have we been looking at?

Well, we go out each year and we provide this annual estimate of abundance. We do all these samples, whether they are dive samples, or dredge tows, and we get an estimate of what we feel are on the reefs we are going to harvest from.

We take that number and we say, okay, there is X amount on the reef, and, if we leave so much of a percent, then, we should have a healthy population on that reef, and, then, we go back and we look at historical harvest and some of the same similarities that have happened over time, some professional judgment, and we recommend these sack limits, in order to prolong harvest, or to see how long harvest can go.

Then, what we do is we monitor the catch per unit effort through the season. What we are looking at there is we are waiting for a point when you start to see

that dip and you think you've captured what you can capture because it is slowing down, and you recommend closing the season.

The problem with this method is there is no biological reference point. We have no way to measure sustainability because we do not have a biological reference point, when we use this method.

What is a biological reference point?

It's a management goal. What you are looking at is just a value that represents the status of the stock, or the population of the stock that is out there.

Typically, how you see it given to you and the value you see are two types; either it's abundance, or a bottom mass level, or it's a fishing mortality, or the level of fishing mortality.

If somebody was going to say I'm going to harvest sustainably under this method, they would say something like, we're going to harvest at this level so that we leave this much abundance, in order for that to continue to reproduce, and that would be how they told you that was measuring sustainability. That's what your management goal would be.

The problem with that is oysters don't lend themselves to easy reference. They have a lot of inner annual variability, in terms of their abundance. They

can't swim out of the way. Environmental conditions affect them greatly. They aren't long-lived species, by any means.

What they do have is they also produce their own habitat. They produce shell. They produce the habitat in which they grow.

When the Governor's Oyster Council started talking, some of these recommendations were already floating around about sustainability.

Our team, all the employees, Shellfish Bureau, all hands on deck, we got together and we started discussing this, with people up the eastern coast and throughout the Gulf. We discussed it with fisheries managers. We talked to academics. We talked to practitioners. We talked to people who manage their own reefs. We talked to everybody.

We talked about two reference points that kind of came out in common. One of them was abundance where the goal here would be the harvest and the natural mortality can't exceed the recruitment into the market size oyster fishery, and we talked about substrate where shell loss cannot exceed natural plus replaced shell.

When we talked to fisheries managers, we were trying to see how they managed and how it worked for them.

Up in Delaware Bay, they ended up with something

where they use abundance and they do set a hard target rate. They have so many oyster fishermen. There is a catch-share program. They open the season. Those oyster fishermen go out, until their quota is reached. That's how they do it.

They have another extreme down in Virginia where they decided they just can't really control effort. They will open an area and they will say, we're going to close it down, when you've reached X, and, then, we're going to close that reef down, and we're not going to open it again for three to five years. We are just going to move on to the next reef because we can't control the effort on those reefs. It's kind of a crop rotation scheme.

Throughout the Gulf, all of us manage pretty much in similar fashions, in terms of looking at the abundance and trying to monitor catch per unit effort. That's typically what most of the fisheries experts said.

Louisiana, however, was different. Several years ago, they started testing the Shell Budget model. They found it to be useful, and they have continued to roll it over to additional reefs.

There are a lot of things, as fishery managers, we cannot control. We cannot control mother nature, and we cannot control some of the upstream things that happen to produce water flow, and those are important things.

The two things we can control are fishing mortality and the substrate removal.

We ask ourselves how much stock can we remove, without impacting sustainability?

We do this by going out and doing these samples to measure this annual abundance and to get an estimate of the stock that is out there.

We also want to know how much shell can we remove, with no net loss of reef shell?

This has required a little bit of additional sampling that you heard Scott mention to you, in terms of calculating the amount of shell that was on the reef, or the amount of cultch that was on the reef, and kind of assessing the quality of that cultch, as well.

We calculated something for you and we actually did this for the Governor's Oyster Council.

A Mississippi sack of oysters, when they come off the reef, has roughly cost you about four dollars and forty cents to put that amount of shell back on the reef. That's not the cost of just buying the shell. That's the cost throughout the entire process and, of course, that changes as the market changes.

We all know how hard shell is to come by. Every time we've done a cultch plant, we put a preference on shell, and most times don't even receive a small amount of

shell. The shell kind of leaves the system here.

In the Shell Budget model, a sustainable harvest looks like no net loss of reef shell. In other words, the loss of shell from removing your live oysters and your cultch by harvesting, in combination with the loss of the natural shell that occurs on the reef in general, must equal any gains from shell growth. That would be what sustainable harvest looks like, under the Shell Budget model.

The model is housed at UNO. Dr. Thomas Soniat has allowed us to access the robust version of this model, and there is also another model on line that you can kind of walk through and it shows you how it works. It's kind of a simplistic model, but there is a robust model on the back end that we can enter this information into, all the information that Scott mentioned you.

What happens, after you enter this information, is it gives you a number, or an amount that you can remove, without affecting the sustainability of that reef, or causing that reef to shrink any.

The harvest estimates are generated by reefs, or aggregates of reefs. It does provide a biological reference point so that you can measure sustainability, and it aids to stop harvest when that target is reached. It also helps us to conserve shell and conserve habitat.

The plan is to work these numbers through the system and use the information that the Shellfish Bureau has been given and put it into this model to help us manage in the future.

Doing this because sustainability and harvest, it's the benchmark. It's the way you should go. It helps you sell your product, as well.

The Governor's Oyster Council, all these people that got together, this was their recommendation for us to try to manage this resource as sustainably as possible, in order to help with the restoration and the resiliency of the oyster industry.

If you have any questions, I will be happy to address them.

COMMISSIONER DRUMMOND: What was the four dollars and forty cents?

KELLY LUCAS: If you take a sack of oysters off the reef, that is the amount that it would cost you to put the same amount of reef shell back on the reef.

COMMISSIONER DRUMMOND: It's expensive.

KELLY LUCAS: It is expensive.

COMMISSIONER GOLLOTT: In the last three years, haven't we put a lot of shell material out, a lot more than what we have harvested off of these reefs in the west end?

KELLY LUCAS: We haven't put shell. Now, we have put cultch material into the reef, yes, but not shell. There is a value in having shell and having the ability of the oysters to grow vertically as well and create that habitat that they need to get above the sedimentation levels (indicating).

COMMISSIONER GOLLOTT: Are you finding that sedimentation on the Pass Marianne and Telegraph and those reefs?

KELLY LUCAS: If I got to look at some of the video data and talk to some of the divers that are down there, but, typically, anytime a boat, or wave, or whatever, is going to kick up sediment, and, when you have those thin layers, like a mono kind of thin layer where there is not really a lot of vertical relief, the sedimentation can just sit.

If you're an oyster spat, if you're a teeny tiny little thing, one little speck of sand is like a mountain to you. I mean, it's in your way, and you are not going to settle there (indicating).

COMMISSIONER BOSARGE: Can you back up one slide?

KELLY LUCAS: Yes, he can. I can't.

COMMISSIONER BOSARGE: I didn't quite take in everything, when you said sustainable harvest. I was

wanting to read that, again.

KELLY LUCAS: It's a no net loss of shell is how you measure the sustainability.

COMMISSIONER BOSARGE: That is going to be tough.

KELLY LUCAS: It is, but they produce their own shell. Essentially, you've got a replacement rate going on. As long as you are equal to what you have put out there, or what you plan on putting out there, and what is being removed, that shell growth would be equal. That's going to be your equation.

COMMISSIONER BOSARGE: In any of the sampling we have done, are we seeing any of the cultch material we have been putting out?

Is that coming up in the samples?

KELLY LUCAS: When we went out with the group that Scott Gordon mentioned, we did. You would see it on the limestone, anything that is down there, but, yes, you can see it coming up with the limestone.

COMMISSIONER BOSARGE: Good.

COMMISSIONER DRUMMOND: Kelly, this management scheme, is it a proven scheme?

Has it been tried before?

KELLY LUCAS: It has been tried in Louisiana. Like I said, they tested it and they continue to roll it

out to additional reefs just because it is intensive kind of sampling.

COMMISSIONER DRUMMOND: Has it been tried on the east coast, Chesapeake Bay?

KELLY LUCAS: No. On the east coast, they tend to try to use the abundance, in terms of recruitment, and a lot of that comes down to the fact that, in some of their areas, they are more recruitment limited, than we are, typically, in the Gulf of Mexico, especially the fact that we typically have two spat sets a year, and that is not something that occurs on the eastern coast.

COMMISSIONER DRUMMOND: Sounds good.

COMMISSIONER GOLLOTT: Are you saying they depend on relaying more?

KELLY LUCAS: In some areas. In Delaware, they have a relay scheme where they know upriver they have some slower growth of oysters and they will set a target to relay from, but they don't relay more than that reef can replace. In that case, they do it like a Shell Budget model type situation where they only take off the amount which that reef can replace. That's where your no net loss comes in, on the east coast.

COMMISSIONER DRUMMOND: Kelly, what about oyster aquaculture?

KELLY LUCAS: We are looking at oyster

aquaculture. That was one of the recommendations, in the Governor's Oyster Council, and we are looking at that.

COMMISSIONER DRUMMOND: It was quite impressive, that scheme they've got over in Alabama.

KELLY LUCAS: It is. It's a great way and it's an additional way. If you're doing off-bottom aquaculture in the Sound, you can do it in areas where there is higher salinity because it's off the bottom and you don't have the predation.

COMMISSIONER DRUMMOND: They were really clean.

KELLY LUCAS: I know, and the half shell market is a growing market. If you've ever been to these raw bars, you may pay three dollars an oyster.

COMMISSIONER DRUMMOND: It's just probably too expensive to do it, right now.

KELLY LUCAS: We're looking into it. We are taking three areas. We are running the samples for those areas to make sure the water quality and the bottom is good, and, then, we are working the permits. It is really the permits that take the longest time.

COMMISSIONER GOLLOTT: Kelly, have we thought about onshore depuration?

Do you have an opinion on that?

KELLY LUCAS: That was one of the suggestions, in the Oyster Council book. I think that is one of the

methods that could be valuable. Like you said, if it's a water quality issue and there is a way to depurate these oysters and improve that condition, it's great.

I also noticed, when we took the trip to Maryland, one of the companies had a patent. They put the oysters in a salinity bath and they market them to different markets.

They may put one of the oysters in a salinity of, like, twenty-three to twenty-five parts, and they leave them there for a couple of days to soak up that salinity, and, then, they market those oysters as being one thing, and they take another batch of oysters from the same reef and they put it in a bath of, like, thirty parts per thousand, and, then, they market those oysters under a different name. It certainly can affect the quality of the oyster, by doing different mechanisms that you are speaking of.

COMMISSIONER GOLLOTT: Thank you.

COMMISSIONER DRUMMOND: Thank you, Kelly.

JOE JEWELL: I know there are a lot of questions and we presented a lot of materials here today. I encourage y'all to look through the presentations and if, between here and the next Commission meeting, y'all have any questions, contact Director Miller, myself, Dr. Lucas, or the staff, and we would be glad to answer any questions

that you have.

I think, at our October meeting, we will have the presentation that y'all are more familiar with. We will have all the complete data, and you will be able to make a better and a more informed decision, at that time.

COMMISSIONER BOSARGE: Is this information going to be entered into the model, and, then, that will be presented at the next meeting?

JOE JEWELL: We hope to have most of that. Like I said, we had the scaled-down model where we have been manipulating the data. We now have access to the robust model, like Dr. Lucas explained, and we are currently entering that data. It's a complex process by which we do that, but we hope to have that data available at the October meeting.

COMMISSIONER BOSARGE: If we, as a Commission, should decide to have a little workshop before the next meeting, is that a possibility?

JOE JEWELL: I think so. I think we absolutely could. We do have some data entered into the model, and we could provide that data to the Commission and update the Commission on how the model works, the inputs and the outputs. We would be glad to do that.

COMMISSIONER BOSARGE: All right.

JOE JEWELL: Thank you.

COMMISSIONER GOLLOTT: Next we have Mr. Jan Boyd.

JAN BOYD: Good morning Mr. Chairman, Commissioners, Director Miller, Ms. Chestnut.

Coastal Resources Management has two action items for your consideration this morning. Willa Brantley will be presenting both of those.

WILLA BRANTLEY: Good morning. We have two requests for modifications to permits issued recently.

The first one is a modification request by the Jackson County Board of Supervisors. This is located on Simmons Bayou in Ocean Springs. It's in the General Use District, and Seymour Engineering is their agent.

They will be maintenance dredging within an existing navigation channel, two thousand two hundred and seventy-five feet in length by thirty feet in width.

The existing depth ranges from zero feet currently to five feet, and they are going to a proposed depth of five feet.

They are removing approximately fifty-six hundred cubic yards of material, and they are requesting a ten-year maintenance dredging permit so that if any storms come in, they can go back to that five foot depth.

The material will be taken to a beneficial use site.

This is the area showing Simmons Bayou. It will come up that main channel and go around the curve and go that main channel that is to the south of that little oxbow area (indicating map).

This is just showing the neighborhood. I-10 is to the north, Government Street runs along there, and Beachview is over to the east (indicating aerial view).

There is the exact path that the dredging will take (indicating map).

Decision factors. The project will serve a higher public purpose. It will restore safe navigational depths and provide public access to and use of the waterway.

It is an allowable use within the General Use District.

We don't expect any precedent setting effects. There are similar projects that have been approved.

There will be a temporary increase in turbidity, during dredging, and a loss of benthic organisms, as usual, with our dredging projects.

Best management practices will be used, during all stages of the dredging, to reduce any adverse impacts.

No alternative sites were considered. Since this is maintenance dredging, they are following the path of the existing channel and no new areas will be dredged.

It does require a waterfront location, and the project will not change the location of the navigation channels and should not affect any of the natural scenic qualities.

It was put on public notice in the Sun Herald and the Mississippi Press, as required, and no public comments were received.

DEQ is reviewing the project.

Archives and History submitted no comments on this project.

Secretary of State has stated that the project will require a tidelands lease.

Wildlife, Fisheries and Parks asks that best management practices be utilized.

Our recommendation is that the Commission approve the permit to be valid for ten years, with the following conditions:

Anytime the county needs to come in and do any maintenance dredging back to those permitted dimensions, they would notify DMR when they are going to do the dredging and how many cubic yards would be removed.

They also need to have the beneficial use site approved by DMR, prior to commencement of dredging operations.

We are waiting on clearance by DEQ.

Are there any questions?

COMMISSIONER DRUMMOND: I'll make a motion, Mr. Chairman.

COMMISSIONER GOLLOTT: To approve it?

COMMISSIONER DRUMMOND: To approve Jackson County's dredging project.

COMMISSIONER GOLLOTT: Do we have a second?

COMMISSIONER BOSARGE: I'll second it.

COMMISSIONER GOLLOTT: We have a motion and a second.

Any discussion?

COMMISSIONER BOSARGE: Yes. I have a question.

About how long do they think it is going to take to do this project?

WILLA BRANTLEY: I really don't know. They didn't say. I think they are dredging, right now, in the area, and they expect to just keep on going with this new area.

COMMISSIONER GOLLOTT: We have a motion and a second.

All those in favor say aye.

(All in favor.)

COMMISSIONER GOLLOTT: Opposed?

(None opposed.)

COMMISSIONER GOLLOTT: Motion carries.

WILLA BRANTLEY: Our next modification request comes from the Hancock County Board of Supervisors.

It's located waterward of the existing seawall from just north of Lakeshore Drive to the existing sand beach, and it's on Beach Boulevard in Bay St. Louis.

It's in the General Use District, and their agent is Compton Engineering.

Here's a map. The two blue boxes point to the end points of where the sidewalk will be put in (indicating).

They will be filling a total of zero point five five acres for the pedestrian pathway, and they have requested a variance to Chapter VIII, Section 2, Part 111.0.1 of the Mississippi Coastal Program which states that filling of coastal wetlands is discouraged.

You will remember that even though this is sand beach, it qualifies, by the statute, as coastal wetlands, and that's why we have to do a permit.

This is a diagram showing where the sidewalk will be, in relation to the seawall (indicating).

Next is a photo of the area. There is a sidewalk in place. This will be widening that sidewalk.

The project does serve a higher public purpose, by providing a safe place for pedestrians and cyclists to travel along Beach Boulevard and by improving traffic

flow.

It is allowable within the General Use District.

Again, they have requested a variance to the Coastal Program. They have justified it under Chapter VIII, Section 2, Part 1.E.2.c.iii, by stating that no feasible alternative sites are available. There is a significant public benefit in the activity and a public hearing was held on August 27, 2015.

Similar projects have been approved. We don't expect any precedent setting effects with this project.

The area where the proposed pathway will be constructed has already been filled with sand for the purpose of beach nourishment and creation. We are not filling any water bottoms. However, we are going from sand which is permeable to an impermeable concrete surface.

The full extent of the project. There are no plans for development beyond the already described regulated activities.

They did consider one alternative design and the no-action alternative. They looked at going north of Beach Boulevard, but this would require them to obtain some property that is held by private parties. It also would involve working around utility lines, and there were some vegetated wetlands on the north side of the road that

they wanted to avoid.

They will be using best management practices to avoid adverse impacts.

They did not look at any alternative sites because it is very site specific to provide a walkway in that location.

It does not require a waterfront location for a pedestrian pathway, in general. However, since the purpose of this walkway is to provide safe access to a heavily traveled area of the beach, in this instance, it does require a waterfront location.

We don't expect this to affect the coastal wetlands viewshed, and it will actually improve public access to the shore.

Public notice was published in the Sun Herald and the Sea Coast Echo as required. We received no public comments from that.

DEQ and Archives and History are reviewing the project. We don't have any comments from them so far.

The Secretary of State has stated that the project will require a tidelands lease.

Wildlife, Fisheries and Parks recommended that best management practices be utilized.

We held a public hearing, on August 27th, at the Hancock County Board of Supervisors Board Room and no one

attended and no comments were submitted.

Based upon department review and evaluation, we recommend that the Commission approve the applicant's request, with the following conditions:

That they execute a tidelands lease with the Secretary of State's office.

That we receive clearance from DEQ for the project.

COMMISSIONER DRUMMOND: It does require a tidelands lease?

WILLA BRANTLEY: Secretary of State said it does. I believe it will be exempt. So they won't owe any fee on it.

COMMISSIONER DRUMMOND: Who pays for it, Bay St. Louis?

WILLA BRANTLEY: No. I think it doesn't have a fee. It's just the paperwork.

COMMISSIONER DRUMMOND: Okay.

COMMISSIONER GOLLOTT: Do we have a motion?

COMMISSIONER BOSARGE: I'll make a motion to accept the staff's recommendations.

COMMISSIONER DRUMMOND: I'll second the motion, Mr. Chairman.

COMMISSIONER GOLLOTT: We have a motion and a second.

Any more discussion?

(No response.)

COMMISSIONER GOLLOTT: All those in favor say aye.

(All in favor.)

COMMISSIONER GOLLOTT: Opposed?

(None opposed.)

COMMISSIONER GOLLOTT: Motion carries.

WILLA BRANTLEY: Thank you. That's all we have.

COMMISSIONER GOLLOTT: Thank you.

Next we have Finance, Joe Spraggins.

JOE SPRAGGINS: Good morning Commissioners, Director Miller, Ms. Chestnut.

If you look at that slide, you can see that we have received about five million dollars, a little over five million dollars so far in the budget and, in that, two million and something has come from the State.

We have about three point three million left in the budget, as we speak, right now, that has come in this year.

Any questions on that slide?

(No response.)

JOE SPRAGGINS: On the next slide, looking across, ninety-one point nine percent left in Operating Budget and ninety-seven point five in Tidelands. Ninety-

three point six percent total.

We have only spent a little over two million dollars out of the thirty-two million allocated.

Any questions?

(No response.)

COMMISSIONER GOLLOTT: Thank you, Mr. Spraggins.

Next we have Office of Restoration, George Ramseur.

GEORGE RAMSEUR: Good morning Commissioners, Director Miller, Counselor Chestnut.

I guess this is the second presentation from this office, since we were assembled a couple of years ago. Our primary duties are the growing and coordination of recreation activities, within DMR and within our partner agencies like DEQ and the Corps, as well as with outside funding opportunities like BP. We also manage the CIAP and Heritage Programs which we reported on, on a cold day last winter in Bay St. Louis.

Today we are going to fucus primarily on restoration.

Why are we talking about that?

This is actually an older map from Kyle Schmidt at DEQ in the nineties, basically showing land loss along the Sound and the Mississippi Coast in red and some gains in green.

One thing I want to point out is most of the green is manmade gain, and most of the red represents habitat loss, marshes and other features that help support our fisheries and recreation.

One of the more dramatic examples of this kind of Coastal change is the land loss over near Point St. Joe and, here, we see that twenty-three feet per year was an average between the fifties and the late sixties. The average up through about 2010 was thirty-one feet per year, but we are pretty sure the rate is exceeding that in many places in Hancock County, at this point.

More to the point, since we are in Jackson County today, once again, this map indicates conditions up to about 1990, although we realize that since that period of time, we probably lost a couple thousand more acres in Coastal Mississippi.

This shows, once again, the shoreline losses and habitat losses in red and some gains.

You can see that Singing River Island is a gain and, of course, a lot of that is manmade, although the Corps has recently started a four hundred and twenty-five acre beneficial use project surrounding that.

One of the most powerful tools for addressing land loss, in a situation like this, is beneficial use of dredge materials and you-all have no doubt heard something

about this program, such as through Willa's presentation, in reference to dredge materials going to beneficial use, and there have been other references in Commission meetings in the past.

What I want to sort of re-present is that this is actually the second version of the master plan for beneficial use, and the slogan out to the side, in my interpretation, basically says that when you've got the ground washing out from under you, you need to step up with what tools you have and try to address it.

Now, I'm going to give a broad and sort of historical overview of the Beneficial Use Program.

The Beneficial Use Program is actually in the Office of Coastal Resources Management, and it is now being managed by Jared Harris.

Jared has been running the program for about six months. I handed it off to him, having worked with it from Katrina up until Jared picked it up, and he is doing a great job with administrating the program and giving a lot of detailed attention to it that it really needed, after functioning for about four, or five, years.

This is a list of program fundamentals. I'm not going to read through every one of them, but it basically centers around the fact that this is an ongoing trend.

Every morning, when we wake up, we've got more

water and less land than we had when we went to sleep.

The total losses are somewhere around ten thousand acres for Coastal Mississippi, since the fifties. We see no reason to expect that trend to reduce. It's worse in Hancock County because we have subsidence, or what I like to say is Hancock County is being dragged down with Louisiana.

We dredge quite a bit in Mississippi, enough to fill the Superdome once, or twice, a year usually, and that's enough to build back more than we are losing annually, by most calculations. We figure two hundred acres a year kind of average loss. We could easily build back a thousand acres a year, in some cases. It depends on the location.

Sort of the last item I added on there is that we are finding out on a lot of these projects the beneficial use, rather than being an expense, can actually be done for less money than hauling dredge material out in the ocean and throwing it away. That's another reason BU is a very economic tool.

This is a time line and I'm not going to be able to read that very well off the screen, but I just want to give you sort of the history of the program, as it exists up to this point.

Essentially, it came together in February of

2002. DMR and the Mobile Corps have been co-chairs of the effort, since that time.

Now, in September of 2002, there was a cooperative agreement put together to do the Deer Island Beneficial Use Site, between the Port of Biloxi, DMR and the Corps, and, then, they also produced the original Beneficial Use Master Plan, in September of 2002.

Construction was started on the Deer Island Project, the first BU site, October of 2002, and a sand dike was put out there and completed, in March of 2003. Material, at that point, could be placed behind the dike, but that fill was not complete until right before Katrina.

Right after the Deer Island dike was completed, the next major step in the program was the permitting of a smaller twenty-eight acre site at Greenwood Island.

We will have pictures of all these sites in just a minute.

The original Beneficial Use legislation was passed in June of 2005, and, then, as I mentioned, in August of 2005 right before Katrina, the Deer Island fill, in other words, the pumping of dredge material into the site was completed. Then, we had Katrina, August 29th of 2005.

Now, along with many other aspects of the agency, the BU program kind of got washed into the weeds

for a while after Katrina.

We really had the reconstitution of the program, in June of 2007, with the first meeting of what we call the BUG, or the Beneficial Use Group.

One of the first major accomplishments of the BUG was to advise the legislation and, actually, in July of 2010, when that became effective, beneficial use is required in most circumstances for quantities over twenty-five hundred cubic yards.

Also, about July of 2010, the original Deer Island BU site that was started back in 2002 was transferred to MDMR control which means that we could then put material into it.

The next major step in program was in March of 2011. The Greenwood project was transferred over to MDMR so we could also use that site in our BU program.

In September of 2011, the first expansion of the Deer Island BU series was permitted. We call that DIMR2.

In October 2012, we revised the Master Plan, and that was the cover I showed you on the earlier slide. It still is a pretty good comprehensive view of this program, where it's going.

We no longer have printed copies of that plan, but it can be emailed, or I can print copies. If you-all are interested in seeing that, please let me know and I

will get one to you.

The next major step was in February of 2013. The permit to do the initial restoration project north of Round Island was issued.

I don't have any points on the time line since then, and I'm probably going to let Jared help with a lot of that stuff, when we get to that point.

The main thing is we have been implementing the second Deer Island project, doing some work on the first one that the Corps built, as well as filling out Greenwood Island and working on Round Island.

You have probably seen this picture before and I won't spend a lot of time on it, but the BU sites are on the east end on the top. The first site is sort of triangular shaped and the newer site is just up a little bit and is a bit more irregular. The Corps project on the west tip and also on the south shore are clearly visible, but the main thing is Deer Island has been built back to its roughly 1850 extent, at this point.

This is an example of how we can do a lot of manipulation of coastal lands, habitats and marshes, and, through that, we can have some chance of affecting salinities, water qualities and other issues which are obviously important for other matters, like, fisheries (indicating photograph).

Here is a closeup showing the first site built by the Corps, shaped like a triangle on the right, and, then, the newer site just to its northwest. We are still pumping material into that, as we speak. It is coming out of Davis and Simmons bayous. Other material went in there earlier out of Ocean Springs Harbor and some other locations (indicating photograph).

So you can see what this looks like at ground level, this is the first site, DIMR1. It was filled out by us, in 2013, and this just shows some white pelicans taking off from one of the interior ponds. It is a nice-looking site. We are still working to get some of the hydrology right on it, but it is going to be a big benefit to fisheries and other ecological concerns in the future (indicating photograph).

This is Greenwood Island. It's a smaller site. It's right to the west of Bayou Casotte. It is partially filled, at this point. Over on the east side are some mounds that were pumped in and are vegetating very well. You probably can't tell that, in this shot, but we are now working on filling in the west end. This has been a good place to experiment with the placement of small dredge portions (indicating photograph).

Here is a closeup of the east end of Greenwood. This is all vegetated in naturally. The idea was to pump

material into mounds so you have tidal flow throughout the project (indicating photograph).

This is the Round Island Project. Round Island is washing away rapidly. The natural island, in the lower part of the picture, has probably got another fifteen years left in it, based on the rates we have calculated. We are soaring up on the north shoal which was probably an island maybe three hundred years ago, and this is the result of placement of material that came out of VETERANS Halter in the last couple of years (indicating photograph).

Right now, it's just a seventeen acre sand island, that round feature, but it was the largest shorebird rookery in Mississippi this year and it is still housing thousands of pelicans and other species (indicating photograph).

This is a closeup showing what was really just a pumped sand pile with developing vegetation, pools and other features, and, then, you can see some dikes that were extended, when the amount of material coming out of Halter was calculated to be originally about three times what ultimately came out. In part, the way this project is, now, is the result of some adaptation to delays and a reduced amount of sediment coming out of the dredge project (indicating photograph).

This slide really gets to the main purpose of this presentation which is that we would really like to get all you Commissioners out to one, or all, of these sites, at some point in the near future.

I spoke with Commissioner Bosarge earlier, and he was good enough to get us out in July. Here is Ali Leggett in the front with one of the residents of the island, at the time (indicating photograph).

We will be contacting you, in the near future, to see if you can get out and have a visit on one of these sites.

Round Island is due to expand probably in about a year, and we would really like everybody to have both a ground view, and, then, looks as the project expands into the future.

Any questions?

COMMISSIONER GOLLOTT: Yes, George.

I've had numerous people ask me why don't we put rocks on the east end of Deer Island where we built that end to keep it from eroding again.

Do you have an answer for that?

GEORGE RAMSEUR: Yes, I do. In general, we are trying to use sand as containment, or protection, for all of these projects.

Coming from an ecological standpoint, we don't

really have any native rock shorelines in Mississippi, but, also, you get a variety of habitat benefits out of the sand and you, also, get some human benefits, including recreation. If somebody is not watching when they are doing in a boat, it's a lot better for them to come up on sand than it is for them to come up on a hard structure.

Rock is easier in a way. I mean, it gives you a defined bit of protection, but it is also more expensive. You can rebuild a sand dike a bunch of times, before you get to the price point on a rock dike.

It's been a judgment call. Most of our permits have a provision that we can use rock, or hard structure, if we need to, but, at this point, we are really working on using sand where possible.

COMMISSIONER GOLLOTT: Thank you.

COMMISSIONER DRUMMOND: George, what is going on with Round Island, now?

GEORGE RAMSEUR: Well, at this point, both DEQ and the Corps have become very interested in helping us finish the existing permit on that project.

The round section you saw on the photograph is just about seventeen acres, but we actually have a permit to build about two hundred acres out there.

Now, there is proposed expansion dredging in the Pascagoula channel which could generate about a million

yards of new cut material which is especially valuable. It's not the stuff that washed into the channel. This is brand new dirt being dug to deepen and widen the channel, and the Corps, DEQ, us, nobody wants to take that material out and throw it away.

Round Island is really the only permitted site big enough to accommodate that much material. At the same time, it gets it all built out, and we can start developing the habitat, mostly marsh, on the inside.

We would build the dike must bigger than the sort of washed over one you saw in the picture, and, then, pump the material into the inside. It should give us maybe a hundred and fifty acres of marsh in the interior, with little bayous and pools in there.

COMMISSIONER DRUMMOND: Thank you.

COMMISSIONER GOLLOTT: One more question.

I had heard that when they dredge the Gulfport channel, they are going to pipe it over to the Louisiana marsh.

Wouldn't we be better off keeping that material in Mississippi and using it?

GEORGE RAMSEUR: I'm glad you asked that question. I decided that is probably going to be a full discussion maybe in the next Commission meeting, but we will be glad to go into it.

The Biloxi marsh is basically what we are looking at there. Canvassing all our guys in Fisheries and looking at the dynamics, Biloxi marsh, it is in Louisiana, but it is one of the biggest bangs for the buck for us because apparently what I understand is happening is that as the Biloxi marsh breaks up, it is allowing fresh water out of Lake Borgne to shunt into the Chandelier Sound, rather than keeping it on course and into our area.

I'm just looking at some of the oyster drill stuff that Scott had. I don't know that there is a direct relation, but we've got things like that, that we know, on a large scale, are affecting the balance of fresh water and salinity in the western sound.

Gulfport, I think before, pumped material down to Chandelier in water that was basically too deep to help that situation much.

The plan is to try barging it down and pumping it into an area of marsh that settled out, similar to what they do in Texas and western Louisiana, and see if we can build a couple thousand acres of marsh back, in the middle of that complex.

COMMISSIONER GOLLOTT: Thank you. I appreciate it.

COMMISSIONER BOSARGE: I have a comment.

We talk about these projects and, until you have the opportunity to go out and actually see it, that's when it really rings home. I appreciate the opportunity to get to go out and to look and see what is going on, on Round Island, and what we can do. To see the habitat, that was unreal, and I encourage any of the other Commissioners, if you have a chance, go because the hands on really shows you what we are doing.

With the proposed deepening and widening of the Pascagoula Ship Channel, do you think all of that material will be able to be used, in other words, it will be suitable?

GEORGE RAMSEUR: It should be. Of course, we have a suitability testing program for beneficial use, and some material from up in Casotte in certain areas has been marginally over limits on some things, but, of course, this will all be tested and assessed, but we are not expecting material from out in the channel to have an issue.

More importantly, most of this, being newly cut material, new cut material is generally clean. There is not really any compounds we know of that float through the water, and, then, are able to get into the substrate. It is the best kind of material we could possibly get for a project.

COMMISSIONER BOSARGE: That will be great because, like you say, Round Island is deteriorating at an alarming rate.

GEORGE RAMSEUR: Right. If we don't build it, it is not going to be there.

COMMISSIONER BOSARGE: Thank you.

COMMISSIONER GOLLOTT: George, we look forward to the next meeting, when you give your presentation.

GEORGE RAMSEUR: We will talk about Biloxi Marsh and have some maps, in your packet.

COMMISSIONER GOLLOTT: Anyone else?

(No response.)

COMMISSIONER GOLLOTT: Thank you, sir.

GEORGE RAMSEUR: Thank you.

COMMISSIONER GOLLOTT: Next we have Melissa, Public Affairs.

MELISSA SCALLAN: Good morning Commissioners, Director Miller, Ms. Chestnut.

The Mississippi Department of Marine Resources was mentioned seventy-seven times in local, state and national media, since the last Commission meeting.

Some of the items we got the most attention for was the ground breaking of the Marine Education Center at GCRL, the opening of the Charnley-Norwood House for tours and Marine Patrol's involvement last week in helping to

put the fire out at Cat Island.

I want to take a moment to introduce you to the new member of our Public Affairs team, Charmaine Schmermund.

Charmaine joined us last week. She is going to be our Events Coordinator. She spent eight years at USM in Long Beach, in the Public Relations office there. She is going to be a great asset to us, we believe. Say hello to her, whenever you get a moment.

Jill Zednick, a Biologist in the Office of Marine Fisheries, set a bowfishing record for a flounder. You may have seen this on the news. She caught a flounder that weighed six point four four pounds, while she was on a bowfishing charter in Jackson County. She only began bowfishing in April. We were impressed with Jill.

I mentioned the ground breaking of the Marine Education Center. Director Miller participated in that, along with Governor Phil Bryant and USM President Rodney Bennett. The center is scheduled to open in about eighteen months, we hope.

Our Chief of Marine Patrol, Keith Davis, has been selected to be a member of the 2015-2016 class of Leadership Gulf Coast. He was one of thirty-eight people selected for this class which represents local businesses and community leaders. This is the twenty-sixth year for

Leadership Gulf Coast.

Several agency employees participated in the luncheon honoring first responders at Jones Park in Gulfport, on August 28th. They had about two thousand people who attended and, of course, the speaker was Former President George W. Bush. Governor Phil Bryant spoke, also, as well as Former Governor Haley Barbour.

Marine Patrol conducted three boat-and-water safety classes in August and had sixty-four students. So far, in fiscal year 2016, they have had seven classes with a hundred and thirty-two students which is about double what they did during the same time period last year.

Marine Patrol officers participated in several outreach events, including the CCA Kids Fishing Rodeo and the Excel By Five Kids Safety Day.

Any questions?

(No response.)

MELISSA SCALLAN: Thank you.

COMMISSIONER GOLLOTT: Thank you, Melissa.

Do we have any other business to come before this Commission?

(No response.)

COMMISSIONER GOLLOTT: Public comments?

(No response.)

COMMISSIONER GOLLOTT: With no public comments,

do we have a motion to adjourn?

COMMISSIONER DRUMMOND: I make a motion we adjourn, Mr. Chairman.

COMMISSIONER GOLLOTT: We have a motion.

Do we have a second?

COMMISSIONER BOSARGE: I'll second it.

COMMISSIONER GOLLOTT: We have a motion and a second.

All those in favor say aye.

(All in favor.)

COMMISSIONER GOLLOTT: Motion carries. We are adjourned.

(Whereupon, at 12:01 o'clock, p.m., the September 15, 2015, meeting of the Commission on Marine Resources was concluded.)

C E R T I F I C A T E

I, Lucille Morgan, Certified Shorthand Reporter, do hereby certify that the above and foregoing is a true and correct transcript of the September 15, 2015, meeting of the Commission on Marine Resources, as taken by me at the time and place heretofore stated in the aforementioned matter in shorthand, with electronic verification, and later reduced to typewritten form to the best of my skill and ability; and, further, that I am not a relative, employee, or agent, of any of the parties thereto, nor financially interested in the cause.

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