Agenda Data Collection Committee

Gulf of Mexico Fishery Management Council

Perdido Beach Resort Orange Beach, Alabama

Monday, January 25, 2016 9:15 am – 10:45 am

- I. Adoption of Agenda (Tab F, No. 1) Stunz
- II. Approval of Minutes (Tab F, No. 2) Stunz
- III. Action Guide and Next Steps (Tab F, No. 3) Froeschke
- IV. Transition Considerations for Charter Vessel Electronic Reporting (Tab F, No. 4)- Ponwith
- V. Final Action Generic Electronic Charter Vessel Reporting Amendment (**Tab F, No. 5**)
 - a. Review Webinar and Written Comments Received (Tab F, No. 5a) Muehlstein
 - b. Review Document Froeschke
 - c. Committee Recommendations Stunz
- VI. Other Business Stunz

Members:

Greg Stunz, Chair
Ed Swindell, V. Chair
Roy Crabtree/Jack McGovern
Dave Donaldson
Johnny Greene
Jamie Miller/Kelly Lucas
Randy Pausina/Myron Fischer
Robin Riechers/Lance Robinson
David Walker
Roy Williams

Staff: John Froeschke

| 1 | GULF OF MEXICO FISHERY MANAGEMENT COUNCIL |
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| 3 | DATA COLLECTION COMMITTEE |
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| 5 6 | Hilton Galveston Island Resort Galveston, Texas |
| 7 | October 5, 2015 |
| 8 | October 5, 2015 |
| 9 | VOTING MEMBERS |
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| 11 | Doug BoydTexas |
| 12 | Roy CrabtreeNMFS, SERO, St. Petersburg, Florida |
| 13 | Dave Donaldson |
| 14 | Myron Fischer (designee for Randy Pausina)Louisiana |
| 15 | Greg StunzTexas |
| 16 | David WalkerAlabama |
| 17 | |
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| 20 | Martha Bademan (designee for Nick Wiley)Florida |
| 21 | Leann BosargeMississippi |
| 22 | Jason Brand |
| 23 | Pamela DanaFlorida |
| 24 | Dale DiazMississippi |
| 25 | Kelly Lucas (designee for Jamie Miller)Mississippi |
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| 27 28 | Lance Robinson (designee for Robin Riechers) |
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| 29 30 | Roy WilliamsFlorida |
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| 35 | John FroeschkeFishery Biologist/Statistician |
| 36 | Doug GregoryExecutive Director |
| 37 | Ava LasseterAnthropologist |
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 The Data Collection Committee of the Gulf of Mexico Fishery Management Council convened at the Hilton Galveston Island Resort, Galveston, Texas, Monday afternoon, October 5, 2015, and was called to order at 2:50 p.m. by Chairman Johnny Greene.

ADOPTION OF AGENDA APPROVAL OF MINUTES ACTION GUIDE AND NEXT STEPS

CHAIRMAN JOHNNY GREENE: I would like to call the Data Collection Committee together. All members are present. You have an agenda that has been presented to you. Are there any changes to the agenda? Seeing none, the agenda will be adopted as written.

Approval of the Minutes, is there any changes, additions, or deletions? Seeing none, the minutes will be approved as written. Next up is the Action Guide, Tab F, Number 3. It is available for your review. With that, we will move on into the Public Hearing Draft for Joint Electronic Charter Vessel Reporting Amendment, which is Tab F, Number 4(a), and Dr. Froeschke.

PUBLIC HEARING DRAFT - JOINT ELECTRONIC CHARTER VESSEL REPORTING AMENDMENT

DR. JOHN FROESCHKE: Thanks. What I would like to do is start and refer you to Tab F, Number 4(b), which is the South Atlantic Committee report from their Data Collection at their most recent September meeting.

If you've had a chance to look at that and refer to page 3,

1 there is a motion on there and their motion is to, and it's 2 referring this document, develop separate to а 3 vessel/headboat reporting amendment for the South Atlantic short, area of jurisdiction. In what recommending is splitting this document into Gulf and South Atlantic, two separate documents instead of one joint.

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At the Reef Fish AP that was just held last month, they made a similar motion and that's in the Reef Fish AP Report, Tab B-11, It essentially suggests the same thing. on page 7. rationale is that, to date, the preferred alternatives that the Gulf Council has selected are very different from the vision of the South Atlantic Council and it didn't seem as if we were on the path to a reconciliation in that regard and they felt that they could proceed faster in the absence of the Gulf Council.

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I wanted to open that up for discussion and solicit your input on that, if you prefer to proceed in that way, and then we can talk about some other stuff.

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Okay. Thank you, Dr. Froeschke. CHAIRMAN GREENE: like the South Atlantic wants a divorce. Is there any comments or items that the -- Dr. Ponwith.

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DR. BONNIE PONWITH: Thank you, Mr. Chair. Certainly I can empathize that it's easier to customize something new on a council-by-council basis than it is to create something that meets the needs of both sides. I get that.

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I will say, strictly from a science standpoint, and so this is no reflection on the management aspects, but from a science standpoint, that having one unified methodology that's uniform across a broad geography is, in general, going to give you a stronger, more statically reliable result than partitioning and it certainly is also true that you gain economic efficiencies having one program carried out across both the Gulf and the South Atlantic region.

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Another might be the math behind how you make adjustments for reporting error and things like that and so, again, I am certainly emphatic to the fact that it is easier to go separate

routes on this, but I just want to raise to your attention that there could be some loss of economies of scale in terms of the finances and some statistical implications as well. Thank you.

CHAIRMAN GREENE: Thank you, Dr. Ponwith. Dr. Stunz.

 DR. GREG STUNZ: Yes and Bonnie's points are loud and clear and I happen to agree 100 percent, but, in looking through some of the documents and what they proposed and what we discussed last time, it seems like there were some major points of discussion that we just couldn't agree upon.

For example, whether it was reporting before you reach the dock and there were certain other things like that that just didn't seem like -- Each council or each group want very different things and so it didn't seem like we were going to be able to come together on that, even though it would obviously make sense to have one broad thing and it would be a lot better from a scientific perspective. I don't know if we're ready to compromise. It doesn't sound the South Atlantic is and so it doesn't seem like there's much we can do here.

CHAIRMAN GREENE: Okay. Thank you. Any other discussion? Okay, seeing none, I guess we'll take that into consideration. Dr. Froeschke.

DR. FROESCHKE: So am I to infer that you're going to propose a motion to separate and give us some guidance on how you would like us to proceed?

CHAIRMAN GREENE: Dr. Crabtree.

DR. ROY CRABTREE: I mean I've been, of course, on both of the councils and it's pretty apparent to me that where the South Atlantic is going is weekly reporting and it's not -- Where we're going is trip-based reporting and so, given that we're going to have different approaches to this and that's because we have different needs. Ours is being geared towards red snapper tracking and things and weekly reporting is not going to work very well for that.

Given that we're heading down different directions, there doesn't seem to be, to me, much gain by keeping this together and so I will make the motion that we agree with the South Atlantic and separate the amendment in two.

DR. STUNZ: I will second that.

DR. CRABTREE: Two separate amendments.

CHAIRMAN GREENE: Okay. We have a motion on the floor and it's seconded by Greg. Any further discussion? Seeing none, any opposition to the motion as written? Seeing no opposition, the motion carries. Dr. Froeschke.

 DR. FROESCHKE: Thanks. What I would like to do next is after the last meeting, and we talked at the IPT level and various things, and the difficulty we face is that we don't have enough information about the proposed structure of the program, the anticipated costs and who will be administering the program and things, to complete the analysis to compare the alternatives and those sorts of things.

We developed a letter and we provided it to Dr. Ponwith and we tried to provide some specific requests for more information about what their vision and their needs are and perhaps this could facilitate discussions and provide some more information and so this letter -- I think a copy was provided to each of you today. It was sent on September 20.

I will just summarize of the ideas and then I will ask Dr. Ponwith if she could perhaps provide some guidance to us, but relating to specific hardware or software, we have in the motions that NMFS approve software or hardware. In other sectors, for example the commercial, we do have an approval process and there is approved software. I am unsure if those are the same things or we would anticipate different vendors or software specifications or anything and so it would be nice to have some discussion about that.

The costs of the program, if you recall in the technical subcommittee that led to some of this discussion last year, there was a section in there and it was provided to you all at the January 2015 council meeting. Just to summarize, the costs, sort of the recurring costs, depending on if you went with the VMS route or the non-VMS, it ranges between \$5 million to \$7 million a year in recurring costs.

In the table in the back, it's on page 124 of the document here, Tab F, Number 4(a), if you want to look at that table, but we haven't really had much discussion about those costs and if that's something that is feasible in the current constraints and if there are recurring costs or startup costs or something and industry share. Those are the kinds of things that I think are necessary for us to complete some of the economic analyses.

A couple more bullets and really regarding who would be administering the program. Is there a transition plan or a calibration plan necessary that we've talked about for other things and is the idea that this will be a complete census, as was recommended by the technical subcommittee and that we've discussed? At this point, I guess I will ask Dr. Ponwith if she can provide us some answers from her view.

DR. PONWITH: Thank you. These are all very good questions and I can certainly recognize that answers to those would make the development of this or the economic analysis of this easier. In some of them, it's a chicken-and-egg scenario. As the amendment evolves, answers to how the management is going to be carried out influences answers on what the costs would be associated with the science or the data collection.

I see the answer to several of these being iterative and so really, for this type of a shift, from a sampling program that we have in place now to a census-based, self-reported data collection that's ground-truthed with dockside sampling, that shift really requires almost like a program management approach to be able to pull it off.

The piece that the council is responsible for and has made some laudable progress on is the regulatory piece and that is to cut the regulations that guide the requirements for submitting these data.

 The second piece is the technical piece and that is mathematically how you take the data that you would create with this type of reporting and convert it into management advice with respect to that ACL.

There are many, many components to this technical piece. It includes what hardware you use and what software you use and the algorithms behind making corrections to self-reported data if the intercepts show that the data we're seeing on the docks are different than what's being reported electronically.

 There are going to have to be correction factors and the math behind those correction factors has to be devised and then the next piece is the calibration piece. You know we've got a time series of landings and we want to be able to calibrate that time series of landings against the data in the way it comes to us using this new technique, to be able to reconcile the historic time series with the new. So that calibration is pretty much a requirement, particularly because, in many cases, the time series is an important input for stock assessment.

Then, of course, the last piece is the financial piece and that is how do we work in the collective to determine what the costs of shifting from one model to the other model is and then how do we, in the long term, keep that data stream going once it goes operational.

Again, the regulatory piece, the technical piece, the calibration piece, and the financial piece. If we don't orchestrate the timing of the development of each of those components, we don't have a program. Basically, if you create this amendment and it gets passed and none of the work has been done on any of the other components, you don't have a program. You have a regulation with nothing underneath it.

Going to the questions that you've asked, these, I think, are the right questions. I think getting answers to these questions will be iterative and may take some time going back and forth to be able to get at.

Right now, the last bullet is, is it the intent of the science program that this is a complete census? A lot of the technical questions of how this runs is going to require close, close collaboration with MRIP, because, as you know, the current method for collecting these data is through MRIP.

From a science perspective, I can only use science, either estimates or census data, coming out of the new method that is at least of the same quality as MRIP or superior. To get at that, we're going to have to have MRIP as key players and so whether the -- Whatever the role is of the Science Center, it's going to have to be in extremely close collaboration with MRIP.

Right now, MRIP is funded to do this data collection and I am not. I don't collect the charter-for-hire data. They have a funded program and it's a matter of how do we resource creating a new program while that program continues, to be able to see how the two of them perform against one another to compare those numbers. I think that's another imperative, getting at that calibration piece.

You ask if the program will be administered through the headboat survey. The headboat survey right now is sized for the headboat fleet and so the way the headboat program is staff and sized, it's not capable of taking on a brand new program. It's possible with augmentation that that could be done, but, there again, it gets back to the question of do you have the collectors of the data now as it stands and continue to collect

those data or do you find additional resources to be able to incorporate that into the headboat program and I don't know the answer to that, but it's something that we have to explore together in the collective to get at.

Costs to the industry is another question and if indeed you are talking about some geospatial-referenced, at-sea reporting, that is the more expensive approach, but it certainly creates checks and balances and creates, in my mind, a superior product at the end and more readily usable in real time, or in near real time, under those circumstances.

I believe that the South Atlantic asked a similar question of Dr. Crabtree's shop and of my shop and the answer that came back is, right now, the resources available for being able to fund hardware for anything other than VMS is limited, out of the VMS pot.

Now, I think there is talk about the notion of using VMS to georeference those reports, but it's a nuanced question of whether that qualifies as VMS for the use of that pool and that's something that we would have to look into.

I think the short answer to that question is it's realistic to expect that there would be offset of a large portion of the costs for the hardware and the data transmission requirements from the fleet, but, again, I think we need to look into this a little more deeply from the standpoint of the VMS, which is different in the Gulf than it is in the South Atlantic, and get a more definitive answer.

We are consulting with Headquarters on the questions that are posed. I think you're asking the exact right questions to be able to round out the amendment. We don't have the answers for you yet, but we will be back to you with a letter when we do.

CHAIRMAN GREENE: Thank you, Bonnie. I have a question and I will get you in a second, but, Bonnie, is there not other regions within your agency that have done similar work? I have read about Alaska and Alaska fishery managers celebrate milestone for interagency e-landings systems and isn't their information already out there that could potentially be used that wouldn't have to be so invented as we go?

Is there other technologies that are being used in other regions that we could piggyback on and potentially use? I know there's some talk in the Northeast region as well.

DR. PONWITH: The answer to that is absolutely. We have made great strides in electronic reporting and one example is right here in our very own region and that is electronic reporting for the commercial dealers. In my mind, that has been a very successful program and has yielded some extremely high benefits in terms of our knowledge of the current state of landings relative to ACLs.

We can certainly take what we've learned from that process and we can take what we've learned from transitioning to electronic reporting for the headboats and absolutely go out to other regions to glean information from them and make the transition to this lighter work, but the work still has to be done.

CHAIRMAN GREENE: Thank you. Dr. Stunz.

DR. STUNZ: Thank you, Mr. Chair, and this is really a question for Dr. Froeschke, maybe, or maybe you, Mr. Chair. The last meeting, we passed a motion to form this technical committee to sort of move the ball down the road a little bit in terms of developing a reference document or just sort of address some of the issues and main concerns.

 I know, Bonnie, you were gone the last meeting, but it was somewhat of a loose document, but at least start talking about what are some of the main issues. A lot of it is specified here in this letter, but there was also a lot of moving parts, John, because the South Atlantic was tied to it at that point and now, after this last motion, maybe not. Where are we with that or do we need to -- Do we need another motion like that or are you good with what you've got to proceed or what do we need to do to sort of keep it on the burner?

DR. FROESCHKE: The discussions that we had is that, in order to bring back additional information, they needed some information on -- We provided, the technical subcommittee, and I say "we" because I was on it, but, in that capacity, they provided the information before and they never really got feedback. They recommended a census and certain other aspects and we haven't really gotten information of okay, we want to proceed and now there's additional questions or these additional questions -- It's hard for them to comment, because I don't feel like we have -- There's not enough pieces in place to really answer these questions and so, from the IPT, we're kind of stuck.

I understand it's a chicken-and-egg and, in the past, what we've done with dealer reporting and the headboat, the last time we modified this, is the science part was in place and we were

following with regulations.

 What I am fearing now is that if we were to just develop these regulations that, one, you can't really -- You can't analyze the alternatives, because you don't know how the data will be used and so it's hard to say if one way will be better than another, but the bigger fear is developing a program with regulations that doesn't meet the needs of the science and so we're trying to facilitate this dialogue and I think, for various reasons, we're stuck at the moment. Anything that you all can think of to help us move forward, we would be appreciative of.

CHAIRMAN GREENE: Okay. Anybody else? I do know that there is -- Is there somebody else that wants to speak? Go ahead.

 EXECUTIVE DIRECTOR DOUG GREGORY: If I may, to follow up what John was saying, is we just can't go any further with this document and so it seems like we need to just put it on the shelf until the funding becomes available or something and we can get leadership on the Center on where we're going with this and I agree that it doesn't make sense for two or three regions within one Center to do different competing data collection systems.

When we get going down that road, then we can back it up with regulations. I mean we want this really badly, but we're just stymied right now, as John said. We can't move forward and we certainly can't go to the public without some of these answers, because we have nothing specific to tell the public what we're going to implement.

CHAIRMAN GREENE: Okay. Anyone else? Well, I have a comment, or maybe a question. Bonnie, there is a lot of desire in the Gulf for this type of program and there has also been a fair amount of money that has been put forth for this program to move on and there are currently VMS units being installed on charter boats now and how is that going to play out moving forward?

DR. PONWITH: If the council cuts a regulation that requires VMS, then there is a portion of the vessels who would already be outfitted and those costs would be offset and so there is -- That puts you partway down the road in terms of managing the costs.

Right now, the program that's underway is a voluntary program and, if I understand the council's intent, the intent is for it to be a mandatory program going forward. From a science perspective exclusively, that would be my recommendation, that

if you're going to make it -- The whole goal here is you've got a program that exists that generates estimates for you.

If you supplant that with something, you have to supplant it with something that's better and so if you create a census program and that census is mandatory and there are some teeth in it and you have good dockside validation, you could end up with a product that is superior from the current product, mostly because you would have it faster and it would enable you to be more limber in your decision making.

The current program, again, gets you partway down the road in terms of the percentage of vessels who would have to participate once this went mandatory and that would already have VMS onboard.

There would still be additional costs that you would have to find solutions for and that would be sort of the technical aspects, developing the mathematical systems to handle the data on an operational scale from that point going forward and generating the algorithms and all of that.

That work would have to be done and I think we could create some categories of what type of startup costs there might be in the amendment, the way it looks right now, and, in collaboration, look at what the long-range operational costs on the agency side and on the industry side could look like. That's something we can do, but it would take collaboration to do that.

CHAIRMAN GREENE: So, just to be clear, there was a bunch of money that was set aside to put units on these boats and was there monies also set aside to help you come up with the information and develop the programs and protocols to accept the information?

DR. PONWITH: The study right now includes, for this voluntary program, includes absorbing that information. How close that is being carried out to the system that would be in place or be required to be in place to handle the data with the expectations that your amendment has, I don't know and I would have to take a look at comparing those protocols against what the current amendment, in its current shape, are to really be able to do an analysis to see how close those are.

At the very least though, everything we learn from this is going to be valuable and, secondarily, we've got a pilot that's happening for the charter-for-hire fleet in South Carolina.

Again, they're creating algorithms to be able to ingest those data electronically and do whatever correction factors have to have happen based on differences between patterns they're seeing in self-reported versus patterns they're seeing in the dockside. Everything we learn from that can be put into practice for how you would carry this out at the operational scale.

CHAIRMAN GREENE: Okay. Any further discussion? Dr. Froeschke.

DR. FROESCHKE: I guess, circling back to the three tiers, the council regulatory bit and the technical bit and the financial, it would seem to me that, as incomplete as the document might be, we're far ahead on that regard in comparison to the other two and so if we do nothing else, will those other two parts catch up on their own or is there some action that we should be taking to facilitate those additional pieces?

CHAIRMAN GREENE: Mr. Gregory.

EXECUTIVE DIRECTOR GREGORY: John, were you asking that of Dr. Ponwith specifically or was that just a generic question?

DR. FROESCHKE: I guess, but at this point, I am just pleading for help from anyone that can help. I am just not sure what to do. I mean if we do nothing on the document, will the rest of it fall into place on its own and at such time as we have the other aspects, we can finish the document and do it or is there some other way that's better?

DR. PONWITH: Well, one of the things that got us to this point was the creation of that technical advisory group that put together the white paper on if you're going to do it, here are some things that you should be taking into consideration.

One thing that's making this challenging is you're right that the regulation is preceding the technical aspects and that does make it more challenging.

One thing that could happen is to pull together a very small technical group from the Center, from MRIP, from the region, and from the council to make sure that we're synchronized on the regulatory side and on the technical side and that there's some interchange back and forth, so that if you get a jam where you can't do an analysis that you need to do, because you need an answer, you can be in communication with the technical group so that they can tell you, well, we need to know how you want this done or what end product you want to be able to tell you technically how it would be done.

 Basically, it takes that iterative process and makes it more flexible and more limber in getting that information back and forth to be able to narrow down on both how you do it, from a technical standpoint and from a regulatory standpoint.

CHAIRMAN GREENE: Dr. Crabtree.

DR. CRABTREE: I think if you set this aside and stop working on it, I am not convinced we will get there. If you wait until there is money put in a budget somewhere to pay for all of this -- I mean we work on continuing resolutions and things and you need -- We've got a lot of problems with red snapper and if you see solutions to put them in place, you need to put your plan amendment together to put those solutions in place and then if it turns out there is no money and we can't do it, then okay, but I mean I wouldn't sit around waiting on that, because the chances that Congress is going to appropriate a big slug of money for this until you can tell them here is what we want to do, I don't think it's going to happen,

If this is what you guys want, you need to figure out, in as much detail what you want out of this and what you're going to use it for, and keep plowing ahead on this.

If there are specific questions about it, then ask them, but I don't think you need to worry about what specifically the software is. Someone in the agency will have to figure that out, but we do need to figure out what we want reported and what we want to know and what we're going to use it for and we want it on a trip basis or do you want it to have VMS?

 I would suggest you operate on the assumption that the industry is going to have to pay for a lot of this and they're likely to have to buy whatever hardware there is and they're going to have to pay, probably, to have it installed and they're going to have to pay a monthly fee for the services of it.

Now, that may not happen, because Congress might appropriate some funds for it. If this is a VMS unit, then there may be some money in the VMS pool, but I mean we don't have a budget right now and I don't know if we're going to have a budget until after the presidential election and so I think you just need to figure out what you want to do with it and move forward with it and if there's no money to pay for it, maybe the agency can't approve it and we can't implement it, but at least we'll have a program here that we said we need this to fix red snapper and the next time folks from the Hill come saying why don't you guys

fix red snapper, you can say, well, here's a piece of that fix and help us get it done. That's my take on it.

CHAIRMAN GREENE: Thank you. Dr. Lucas.

DR. KELLY LUCAS: Thanks. I am not on your committee, but, to Roy's point and I guess to this document, but when I read this document, it doesn't say we're solving a red snapper problem. Everybody else keeps trying to solve a red snapper problem and it says that this is all federally-permitted vessels.

Then we start getting wrapped around how to solve one problem and so I mean is the purpose wrong? Is this not a data collection for everybody? Is it one thing? What problems are we trying to solve?

DR. PONWITH: I can say, from my understanding of what I've heard and from the IPT involvement in this, is this is shifting the federally-permitted charter-for-hire fleet from a sampling regime for estimating what their effort and what their landings are to a self-reported census and those data will benefit the ACL monitoring for all species that they harvest, but, first and foremost, among those will be red snapper.

CHAIRMAN GREENE: Dr. Lucas.

 DR. LUCAS: Again to that point, though, so it's just federally and so plenty of the states have their own charter-for-hire fleet that fish in state waters and catch, but you're only going to be solving the federal for-hire and you're going to have to marry whatever programs operate in that state on those charter-for-hire with whatever programs are operating in the federal for-hire fleet.

DR. PONWITH: To that very point, I'm glad you asked that question, because we have already had a discussion about the fact that the Gulf and the South Atlantic want different -- They have high-level philosophical differences about how this program should run and so what they want to do is split. Now, instead of one program running exactly the same throughout the region, we have two that have some very significant differences.

What we're looking at right here is the federally-permitted fleet in the charter-for-hire, but, if you look at that a little bit more closely, right now MRIP operates as the tool for estimating landings for all charter-for-hire vessels and that's what we use to understand what those landings and what those effort levels are.

 If we modify exclusively the federally-permitted charter-forhire vessels to operate under this new census approach, basically what that means is MRIP must persist, because we still have all those other ones that we need to know what their landings are, so that, particularly if we have species that are landed in both state waters and federal waters, but it's a federally-managed species, we need a system.

Instead of having just two systems for the charter-for-hire at large, we have a system in federal waters in the Gulf and then MRIP in the coastal margin and so that means we have that in the Gulf and we have that in the South Atlantic and so there are four systems that we have for the charter-for-hire fleet.

One of the things that I think makes this stronger is to say, if you're going to do this for the federal waters, is it worth, at the same time, thinking about doing this for the entire charterfor-hire fleet? I put that out there strictly from a statistical standpoint, from a science standpoint. I know that's difficult, but it certainly would give you more robust numbers for those species that are caught in both federal and state waters.

CHAIRMAN GREENE: Thank you. Dr. Stunz, I skipped over you and I'm sorry.

DR. STUNZ: To Roy's point a few comments ago, that was the intent, at least when I made the motion at the last meeting, was to do exactly what Roy was saying, to continue working on this by formation of this technical subcommittee.

At the time, of course, it was broader, because of the South Atlantic and things, but, John, maybe we just focus that in on Gulf issues and form that of the committee where it's most relevant to the Gulf and Bonnie's group, but at least to continue working within the construct of that motion and that technical subcommittee.

Now, I don't know what we need to continue doing that or how much time and effort it involves of your staff and Bonnie's staff and that's certainly something to consider, but, I think by either reworking that or just working within that framework, we can at least continue to develop some ideas and move this down the road a little further.

CHAIRMAN GREENE: John.

DR. FROESCHKE: At the last one, I think the biggest challenge to bring to this group was that we had two completely different programs in two different regions in the same document. That seems to be resolved, for our purposes.

Based the comments and things, you know on collaboratively with the Center and the Region, and, as you are that's basically the composition of the technical subcommittee and so perhaps what should be done is -- Through this discussion, we have those questions that we have posed and we need to take the document and fill out those lists of questions and get this group in a room and we'll just work through the document and come out with guidance on how to make this happen and develop, hopefully, a path forward or things that we need in order to complete the analysis to submit the document.

That's what I'm afraid of, is we want to have this document ready to go such that when an opportunity presents that perhaps we could move it forward, but we can't complete the analysis of the document until we have this stuff. I mean I don't see how it could get approved and so maybe that's the path forward for now.

DR. STUNZ: That seems reasonable to me.

CHAIRMAN GREENE: Okay. Anybody else want to weigh in? Dr Simmons.

DR. CARRIE SIMMONS: Thank you, Mr. Chairman. Just a suggestion or a question to Dr. Froeschke and Rich Malinowski. They've been working on this document and would it be appropriate to remove the headboat portion and move that forward? Is that possible to change that more rapidly under the current regime we have to a trip-level reporting requirement under the current regulations we have and then the technical subcommittee could focus on the charter vessels, federally-permitted charter vessels?

 DR. FROESCHKE: Perhaps and we had talked about that at an earlier council. One difference on the headboats is they are reporting electronically now and that would simplify it. They are not set up for trip level at this point and they have the ability to go back and report on the web at a later time. I think that would be more of a bigger step.

One small incremental step, if we wanted to do that, is one thing that's been noted is this delay between the -- The seven-

day delay between the weekend reporting and the report submission is too long and the seafood dealer -- The week ends on a Sunday and the report is due on a Tuesday and we did talk about doing something like that. That would be a modest step for the headboats only and I don't know if that's worth doing at this point or not.

CHAIRMAN GREENE: Okay. Anybody got any desire to weigh in on those items? I am kind of at a loss here. I am trying to figure out which way to lead us ahead. I guess the thing I keep coming back to is that there's a lot of money that went through Congress, millions of dollars, to make units available and for the units just to be put on a boat and there's not to be anything that comes back out of that, I think it would certainly not go over very well.

I think that the work will happen as we move forward, as we go along. I think we will uncover these items as we move forward and I think that's the way I understand this, but I think we're going to have to move ahead regardless.

I don't know if it would be prudent at this time to separate out the headboats from the for-hire or not. Bonnie, do you have an opinion either way that you could share with us on that particular item?

DR. PONWITH: Let me just say again that my -- When I speak, it's exclusively from a science standpoint, because I don't want to meddle in the management issues, but from a science standpoint, if you were going to do something for the headboat survey that made that a superior survey and it was demonstrable that this is better or more reliable or more precise or more timely, then doing that change is compelling.

If the notion were to, by incorporating headboats into this, go from a weekly report to a trip-level report, then what that gains you is knowing before they -- I will tell you from a science standpoint that what that gains you is that if they push the send button before they hit the dock, before they know whether they are going to be encountered by a dockside port sampler or not, it gives us the ability to look at what was reported into the electronic database and compare it to what was seen by boots on the dock and then get one-to-one matching on how close those two numbers were to one another and then use that as the reporting error correction factor to give you what your final landings were.

When vessels go out and report at the end of the week and

vessels are encountered by dockside samplers while they are returning, you basically are comparing an average. This is what the average person coming back said they caught compared to what the average person coming back actually landed and comparing those averages and it can be done, but it's just not as tight of a validation methodology and you would have to construct your confidence intervals on those estimates accordingly.

Those are the differences. Again, if you have a strong desire to have the headboat survey benefit from that level of precision, that's what you would gain by incorporating it into this.

CHAIRMAN GREENE: Does anybody else care to speak? Okay. Just as a follow-up to that, we just went through two years of the Headboat Collaborative Program and I believe there were issues where the fish were not as big as what they were initially forecasted to be and it worked out to where those fishermen were allowed more days to fish, working on an average.

Those type of things have already been dealt with, to a degree, and so I think there's a big advantage here, because when you can get down to where you're saying, hey, these fish don't weigh nine pounds and they're only 4.5 pounds, obviously that's twice as many opportunities.

There is a lot of advantages to doing this and moving forward and I don't think there's a lot of opposition to stop that from happening, but you know it just -- A comment that we're probably going to hear tomorrow is everybody here in the for-hire industry that will probably get up and speak is probably going to be in favor of it. I know they're willing to pay the monthly cost and do whatever they have to do.

I think that we need to continue it forward. John, I am trying to help you with as much information as I can and I don't know if I am walking you in circles in the fog here or if I'm leading you in any particular direction, but if any other committee members or any other members at the table wish to weigh in. Go ahead, David.

MR. DAVID WALKER: I would just like to -- I am sitting here taking a few notes and listening and we've got an opportunity to get superior data. I heard that twice and we need to explore science together and work collectively to create the checks and balances for more reliable, more real-time data. I think that's what everyone wants and I don't see any reason we shouldn't continue working on this and we have the opportunity here to

make things better.

You've heard Johnny say that and they found out that the headboat pilot program fish were smaller and I mean there's just so many things and here's an opportunity for this council and everyone to work together and go in the right direction and this better data is what I hear everyone always asking for and so let's get together. Doug can talk with the council staff and he can work with Bonnie and we can all work together and we can figure out a way to get this amendment rolling.

CHAIRMAN GREENE: Mr. Williams.

MR. ROY WILLIAMS: I was going to say I see some advantage in picking up Carrie's suggestion and trying to perhaps implement the headboat reporting a little faster than the rest of it, in the sense that we would be proceeding with a smaller and then going to a bigger universe and trying to work out the problems with this smaller group and then implement it with all the charter boats.

On the other hand, I suspect we would get a lot of feedback from the charter fishery asking us not to do that and that they find it compelling to get their reporting implemented as fast as possible and so I guess, Chairman Greene, I would ask you if you have a feeling on that, because I like the idea of what she's talking about.

It's always easier to start with a smaller set and then expand to the bigger one, but I just fear that the charter fishery is going to say no, by golly, we want reporting and that's what I've been hearing, is that we want reporting yesterday and we want to be accountable. Do you have any feeling in that regard as to how we ought to proceed?

CHAIRMAN GREENE: Well, I think you're right. I mean that's all I've heard for months and months and years and years and meeting meeting, is after meeting after that particular Obviously there is enough support for Congress to put millions of dollars' worth of VMS units in the Gulf to do something with it and so obviously there is some industry buy-in and there's also some political buy-in associated with it and so I think it would be -- This is just me personally and not as Chairman or anything else, but as a fisherman and I would like to see them stuck together at this point and continue to move on and if we see, six months from now, that there's a big reason to divide or something, then we could so at that time, but I think that the industry as a whole probably would like to stick together, but

we will certainly get a lot of public testimony on this and we can certainly talk to some other fishermen and get their ideas as well. Leann.

MS. LEANN BOSARGE: Thanks. I am not on your committee, but it sounds like there's some questions that John has that this working group or technical subcommittee, whatever it was, has some questions that they need answered in order for this document to move forward.

 We seem to be ahead of schedule and I mean this committee isn't scheduled to adjourn until 4:30 and can we go through the list of questions and give you some feedback, while we have the council and the Center and NMFS sitting here?

DR. FROESCHKE: Please do. That was one of the things that I sort of thought maybe we could brainstorm, is if we want to convene the technical subcommittee. Last time, we agreed to do that, but we didn't really develop a charge and so perhaps we could develop these lists now.

I mean my vision is that we would sort of set this financial bit aside for now and that's the guidance I am understanding and proceed as if the best-case scenario and do it and develop a list of things that we need to do to complete the analyses of the document.

MS. BOSARGE: Well, I am not on your committee, but I would love to hear the discussion.

CHAIRMAN GREENE: Dr. Crabtree.

DR. CRABTREE: I think, John, if there are questions, give us specific questions and we will do the best we can to come up with answers and guidance.

DR. FROESCHKE: Okay. Question one is who is in charge, I guess? Is MRIP going to administer this program? That's the guidance I am understanding and the headboats right now are through the headboat survey and if we go to a single program, it didn't sound like the headboat is capable of absorbing them in and so would they all shift to MRIP?

DR. PONWITH: That is definitely a question that needs to be resolved. To get to that answer, the Center will absolutely have to work side-by-side with MRIP on the charter side, because right now MRIP owns those protocols and MRIP has the resources to monitor the charter fleet and how we would transition from

that scenario to the self-reporting census is something that has to be discussed.

The Center would have to discuss that with MRIP, but it would have to be in heavy consultation with the council, to make sure, again, whatever technical changes were contemplated to get to an answer to that question aligned with what your expectations were from a management standpoint.

I don't have an answer to that. It is something that would have to be discussed and having input from the council to help in that discussion would be beneficial, in the form of like a technical representative.

CHAIRMAN GREENE: Thank you. Mr. Swindell, did you have a comment?

MR. ED SWINDELL: I am not on the committee either, but in listening to all this, there are many systems that are available to go aboard vessels and to go on ships and on trucks and the European Union has an electronic logbook system, to where vessels have to report to them on a regular basis on the fish they catch and where they land it and what they do with it and put it on another boat or whatever.

I mean all those systems are available, but it's just what Bonnie has to do with it once you get the information and what information we're going to have to gather. As far as electronic systems, tugboats up and down the river all have electronic reporting systems that monitor their vessel operations that they report on constantly and I mean the systems are available for you to do this, but it's just a matter of -- To me, Bonnie, if I'm correct, it's getting the group together and just what information do you really want to get and what are you going to do with it when you get it and how are you going to collect it.

DR. PONWITH: That's a pretty accurate assessment. You know we've had this conversation over and over again of hey, I have this app on my phone and I push the button and you know how many fish that I caught.

In a way, that's the easiest piece. That's the easiest piece. You push the button and the answer is forty-two. It's the fact that you're shifting mathematically from one kind of a data collection and the math infrastructure it takes to catch those data and convert them to a product and the math is different for a sampling program from a census program.

It's just a matter of getting the infrastructure up to be able to accept that different kind of data and turn that into a reliable product in the kind of timeliness constraints that you're looking for. That's the piece that has to happen and that's part of that technical piece, the software piece.

CHAIRMAN GREENE: Thank you. Go ahead and was it to that point?

DR. FROESCHKE: No, but if you want to continue down this, I have more questions. I don't know if that's the way you want to go or not.

CHAIRMAN GREENE: We're going to get to them.

DR. LUCAS: Mine was to the point of Bonnie and to John. So the question is -- I mean we've constantly asked the Science Center about your resources and your ability to accept and process the data and how quickly you can do it. From what I heard you say, we need to ask MRIP -- They are the ones that we need to be talking to about how quickly they can accept the data and turn the data around and provide the data to you and so definitely they're a missing link here.

DR. PONWITH: You're almost correct. What I would say is that's a discussion that would be probably best held with MRIP and the Center in conjunction with one another, to reach sort of a shared notion of -- You know, currently you do this and currently I do this and if we merged them and created something new, who is in charge of this and how would you finance the transition from the current process to this new process that's different from both?

CHAIRMAN GREENE: To that point?

DR. LUCAS: To that point, currently we receive data from MRIP. I mean we just finished the second wave and we got it sometime at the end of August or something like that, but not all the states in the Gulf are even participating in MRIP and their timing affects that as well and so how would you -- You're going to ask MRIP how they're going to deal with the states that aren't currently utilizing the MRIP system for this collection?

DR. PONWITH: So that is certainly one of the questions and that's why we need to make sure that we have strong dialogue between federal scientists, the council managers, and our state partners in this.

CHAIRMAN GREENE: Okay. One more question and then we'll go

back to Dr. Froeschke. Mr. Boyd.

 MR. DOUG BOYD: A question for John. John, you've got a working group that was put together at the last meeting. I can't remember exactly what we called it that you established, but is MRIP a part of that group? If they are, you already have the charge to call the group together, don't you, that you need to make that kind of decision, based on what Bonnie just said?

DR. FROESCHKE: Yes and no. The group that we would have would be the technical subcommittee. That's the only one and that's sort of been a long-standing group, well since at least a year-and-a-half ago. That does include MRIP.

Prior to this meeting, in which we decided to go from a joint document to a split, that was sort of the dominating question, if you will, is how do you proceed with two different programs? For better or worse, that seems to be resolved and so now we have this other list of issues and so I do think that it would be a more focused discussion for this group to convene and go through the document with a little bit of understanding and just remove the financial component for the time being and say, based on what we're planning to do, what problems do you see and how could you help us get the information we need to complete the analysis, such that we could complete the document and submit it, such that when or if funds are available the science is done and we could implement the program. That's my understanding.

MR. BOYD: If you're going to call that group together and you're going to have this discussion between MRIP and the Science Center, do you need a motion from this committee in order to do that or do you feel that you can just go ahead and do it under your current charge?

DR. FROESCHKE: I feel like we've -- It seems to me we have the motion that was made at the last council meeting and what we didn't have earlier was this charge and that's something that it seems like we're kind of working out and maybe we could sort of formalize this in the committee report and come up with a charge for the meeting, or at least a process about how to do that.

That was the problem that we had, is reaching out to some of the members. There wasn't enough dialogue, based on what we had already done, to move forward and it seems like we have something now, or at least assuming X, Y, and Z, how can we proceed? We didn't really have that before.

MR. BOYD: Okay. Thank you.

CHAIRMAN GREENE: Okay, John, what other questions would you like answered?

DR. FROESCHKE: One question is this idea of best science and things and how are these data going to be used? For example, to compare, in the alternatives, a weekly submission rate versus a trip level, on one hand, the validation part benefits a trip level as well document and we've discussed that a lot.

 If the data are only going to be used on a weekly basis, the benefits of trip level are only the validation and not the increased frequency of it, but we haven't really gotten much feedback on it, but that's how it's been used and so I'm hoping maybe we can talk about that.

CHAIRMAN GREENE: Bonnie.

DR. PONWITH: That's an interesting question and I've spent a lot of time thinking about this periodicity question and so I've already explained what you would gain statistically from having trip-level submission.

You go out fishing and you push the send button before you get to the dock and then you get sampled when you get to the dock. Are those two data records identical or are they not identical? If they're different, the difference creates a correction factor for a reporting error and that reporting error is applied to all of the self-reported data and that gives you a corrected landings.

What I can envision, I think one of the most pressing desires for daily reporting, is for ACL monitoring, because right now one of the things we all struggle with is the fact that the MRIP as a sampling program generates an estimate forty-five days after the end of a two-month wave, which for a very short fishing season could be well after the season needs to close and so you have to close it based on projections and what you think is going to happen, as opposed to using real-time data.

The question is you wouldn't be able to use dockside-validated data for real-time, because it takes time to collect those data and get those data into a system, but what you could do is incentivize extremely accurate reporting by if the dockside validation that you do at the end of the year or at the end of some period of time matches very, very close to the self-reported data, the benefit that you gain is a level of comfort with using those self-reported data for actually closing down

the fishery, monitoring the progress toward an ACL and closing down that fishery, based on real-time, in-season data.

If you see that people's ability to accurately report is hampered by the fact that that could end up closing the fishery and you see the landings numbers that are self-reported quite a bit lower than the dockside, then you run into a situation where you could essentially overshoot your ACLs and, in that situation, that's when accountability measures kick in the following year.

 Nobody wants accountability measures to kick in the following year and so, in a sense, that really incentivizes having those two types of observations, the self-reported and the actual dockside sampling, to be as close to identical as possible.

CHAIRMAN GREENE: Okay. I had skipped over Mr. Fischer. I'm sorry. I apologize, Mr. Fischer.

MR. MYRON FISCHER: Thank you, Mr. Chairman. Mine was a minute ago question, but it was to ask John if he could supply us with the makeup of the technical subcommittee. If we're going to split away from the South Atlantic on this, I would like to possibly review who is on this committee at some future time. I would like to see who is on it and make certain it's people who have our concerns in mind.

CHAIRMAN GREENE: Okay. Mr. Diaz.

 MR. DALE DIAZ: This is kind of to Dr. Ponwith's discussion a minute ago and this is to help me get this straightened out in my mind, Dr. Ponwith. You talked about correction factors and what I am going to call the Cadillac program and that's where people report before they get to the dock and so we've got that really good validation step right there.

Then the next level down program I am going to call like the Pontiac program and that's where people go out today, but they've got to report by noon tomorrow. I mean could we actually come up with some correction factors that would be acceptable with that type of program and still get to the same endpoint that you got to, where we could use that for in-season monitoring? Kind of tell me what you think the pros and cons are and how much you think we would be giving up if we went to the second-tier program. Thank you.

DR. PONWITH: Dockside sampling, just for locking this notion down, will have to happen, regardless of whether you push the

send button while you're still at sea or whether you can come home and sit at your computer at home and type that information the same day, the next day, or a week later.

You have to dockside validate the self-reported data to groundtruth those reports with what we're seeing on the docks. The real difference is that one could reasonably hypothesize that people might report more accurately if they didn't know whether they were going to be sampled or not at the dock and so what we were seeking by the hit the send button at sea, that real-time reporting, is basically incentivizing the absolutely most accurate reporting as possible.

You asked the question of can we still use in-season -- Can we benefit from the timeliness of electronic reporting in-season, even if we don't require them to report while they're still at sea and the answer is scaled by the accuracy of those reports.

If people are reporting accurately, as measured by comparing those reports against the dockside sampling, regardless of whether that happens the next day or a month later, if those reports are accurate, it builds a level of confidence in using that as a reliable mechanism for using in-season information.

 If the delta between the self-reported data and what the port samplers are seeing on the docks are profoundly different and those differences fluctuate over time and, in other words, they're different and they're not stable, then it creates some risk associated with using those data in-season for monitoring your ACL.

Then you would have to take a look at are those risks bigger than using a projection of when they're going to need to be closed? If the answer is no, those risks are smaller than a projection, you could still end up using those data and you would have to build buffers. That's kind of -- I know it's a long answer, but it's kind of a decision tree that steps you through how you would use each type of data, depending upon the decisions you make.

This is actually a very good example of why I can't tell you how much it would cost or how you would set it up, is because the direction you go with the management needs, what data do you want and how do you want to use them, influences how you would set up the science to do that.

CHAIRMAN GREENE: Okay. I've got a couple of people on the list. Greg, Kelly, and then Kevin.

DR. STUNZ: Thank you, Mr. Chairman. Just one thing, maybe sort of a point of clarification, is it seems like we're talking about we'll have this one self-reported system and then the MRIP or whatever we're currently using for states and I don't really see that at all.

 I mean I would suggest the systems run concurrently the first few years, just to see where we are, so we don't have this issue that Bonnie brought up of overrunning the ACLs. We still have the system going that we've got and it may turn out the self-reported data is not working so good or it may turn out it's working really, really well and then we could gradually, I guess, shift over and so I wanted to make that point.

Then also that a system like this would just supplement what we're already capturing in terms of data, in addition to what MRIP -- There was a little bit of discussion about at what level and Dale's Cadillac version, which of course I support, is the best way, but then there's some saying for many fisheries we don't necessarily need that level of trip level.

Well, if we capture the data at the trip level, it's very easy just to begin to report that at weekly or monthly intervals for other species that we don't need that level of resolution and so I think there's the sort of two points, but, overall, I mean I think we can run this alongside our current MRIP and it would be very informative to see how well we're doing with this self-reported data.

CHAIRMAN GREENE: Thank you. Kelly.

DR. LUCAS: I would also, and, Bonnie, this may be something you can speak to also, but it's the electronic monitoring system is not necessarily the only way to get that. Clearly we have seen, and get ready for this, Myron, your compliment here, but Louisiana was able to implement their LA Creel. MRIP has accepted their LA Creel as an accurate program and they are able to monitor real time during the season to determine whether they have fished their quota or not.

Many states do this on many different levels, but I am pointing out to Louisiana, because MRIP has already accepted their data and so they're able to show whether they can keep their season open or whether they need to close their season and they did this without electronic monitoring.

Now, certainly electronic monitoring is a way to do it, but it

may not be the only way and so is it the most cost-effective way would also be a consideration that we need to consider.

DR. PONWITH: That's a very good question, because up until this point, we've been talking about landings. We've been talking about the catch piece. The piece we haven't really talked that much about is effort and my understanding is that the electronic monitoring is our way of ground-truthing effort.

You know what vessels are at sea exercising some sort of activity that is or resembles fishing versus being docked in a port somewhere and so the generation of landings information, that effort piece is very, very important.

It's particularly important for a sampling regime, because, of course, the math is you need effort and you need catch per unit effort and when you multiply those two together, you get total landings. With the census, again, the math is different, but it will be important to know whether the fleet is fishing or what proportion of the fleet is fishing versus not.

CHAIRMAN GREENE: Kevin.

MR. KEVIN ANSON: Thank you, Mr. Chair. I'm not on your committee, but just to a point that Dale brought up earlier about the Cadillac versus the Pontiac and there is some subtleties there as to how you might want to approach it when you look at those two programs.

One thing to consider, and Bonnie kind of touched upon it, is the complexities for the validation component, at least on the catch portion of those two programs. This might be considered a souped-up Pontiac, but as you have a larger time window that they can report versus when you validate, and we experienced this in the Alabama mandatory reporting program, is that you could get confusion, if you will, among what trip is being reported and what trip is being validated.

It's something in the weeds at this point that the technical folks will have to deal with, but I just wanted to let you be aware as you might be thinking of leaning toward one way or the other for the reporting, is that it is a little bit more complex as you open up that window from the time that the trip is actually made and the time that the report occurs.

CHAIRMAN GREENE: Roy.

DR. CRABTREE: Just to Kelly's comments about LA Creel, it is in

the process of MRIP certification, but it has not been certified by the program yet. There have been a whole series of reviews conducted and comments have been provided to Louisiana and I think they've all been pretty favorable and I suspect it will be certified, but it hasn't happened yet.

They are running MRIP this year alongside the LA Creel survey, to see what sorts of differences there are. There will need to be calibrations and all of those kinds of things at some point, but that's still an ongoing process.

CHAIRMAN GREENE: Okay. Thank you. Mr. Fischer.

MR. FISCHER: Thank you. That's correct, Roy, and we've had Steve Turner and others from the Center review it and everything seems to be favorable, but what I wanted to do is make a different point. Whatever type of program we build, let's keep in mind that we need a scalable program.

We may find out that this is too intense and we don't want a program that we have to abandon the entire thing. If it's weekly reporting is sufficient, then let's build a program that will accordion in and out, and that's got a little bit of Cajun, but that's not far across the border right here, and so something that will accordion in and out and something very scalable that we can work with on different levels.

 CHAIRMAN GREENE: I am going to make a comment and then I'm going to turn it back to Dr. Froeschke, but, Dr. Crabtree, would you like to go ahead? One thing I do know about is fishermen and I can talk about the low-rider Chevrolet pick-up truck version of this plan.

If I think somebody on the water is catching fish and they are not reporting them, I will drop a dime on you in a hurry. It is kind of the two kids fighting over ice cream and you just throw both of them in the trash because they're fighting over something they got that they probably could have had, but I can tell you one thing, that if there is 1,250 charter boats in the Gulf and somebody thinks they are getting something from somebody else, somebody in enforcement is going to know about it pretty quick.

This is a pretty simple deal. If I know, just like when I fill out that card in the back of the room to speak and give public comment, that when I hit send that there is some type of attachment to the end of it that is going to have a permanent or something else tied to it, this problem is solved. We're done

and we can move on to the next one. With that, Dr. Froeschke.

DR. FROESCHKE: I am going to swing for the fences here and the question, I guess, or the problem kind of in the letter is how would we structure the transition plan? Is this something that we would include in the document?

 My understanding of this, and please correct me if I'm wrong, but under what we have now, if we were to do this, we would transition the charter MRIP to I'm calling it the new MRIP, whatever that ends up to be, and we would have the Texas program would go to the new MRIP and we would have the LA Creel, assuming that goes forward to the new MRIP, and we would still have the state charter that would exist under the current MRIP.

That would be a lot of different things to coalesce under a single umbrella and who needs to take charge of figuring out a process? Is that something that we would do in the amendment or is that something we would seek guidance from the technical subcommittee or is that something we would wait for the Science Center?

DR. PONWITH: Because so much of those steps are dependent on the science, the transition of the science, I would certainly like to take those first steps with the technical group and have discussions and then take what they learn from their discussions of how would you stage this out and then take those results and hand it to the IPT and the council that way.

The thing you don't want to do is handcuff you scientifically by putting something in the amendment and by basically regulating the science. You don't want to regulate the science and you want the science to be a tool for helping you regulate the fishery and so that's how I would do it if I were king.

CHAIRMAN GREENE: Dr. Crabtree.

DR. CRABTREE: I think you need to be more focused on the regulatory requirements of this. What are you going to require these vessels to do? Now, it could be that you put this requirement in place and the data is terrible and it never gets certified by MRIP, because of all kinds of reporting problems and things.

Maybe we could address those and I don't know, but if you want certainty as to whether this is going to work or not, then we need to start talking pilot studies to test it all out, but some of that is going on with this project funded through NFWF, but

my sense of this council has been you didn't want to wait for that and you wanted to move forward with requiring this.

If you want to move quickly and require this now, you're taking a certain amount of risk, because you don't know for sure how this program is going to work, but I mean we've made some decisions in the amendment already and we've got preferreds that we want trip-level reporting and we want trip-level reporting for charter boats and for headboats.

I am assuming we want to try and sometime use this for tracking ACLs and all those kinds of things, but I don't know that you need to get into the transition plans and calibrations and those kinds of things. It seems to me we have transition plans and we've done calibrations and so that's out there, but I don't know that that needs to be in the document.

At some point this program will have to go in place and there will have to be some determinations made about the quality of the data. If the data is very high quality, then presumably it will be used, but if we have terrible compliance and we have reason to think that the numbers aren't matching up with what we're seeing at the dock and we've got all sorts of problems, those will have to be fixed before the data is going to be used and how fixable some of those things are, I don't know, but if we try right now to get so in the weeds of this, I don't know that we'll get there.

 Remember back when we put the IFQ program together for red snapper and there were all kinds of technical decisions about what kind of software are we going to use and how is it actually going to work and who is going to keep the data and we didn't get into any of that. We just got into the requirements of the program and what information do we need reported and how often do we need it and that was it. The details got worked out later by the folks who are going to use the data and so I don't know, John, but that's my take on it.

CHAIRMAN GREENE: John and then Kelly.

DR. FROESCHKE: Okay. Let me take a different approach then. Sticking to the regulatory requirements, I guess instead of worrying about the calibration, if the various -- Since there are these various entities, if one or more of them does not participate, do we -- Is this something that's going to be required as part of the regulatory and, if not, where does that leave us?

DR. CRABTREE: What entities are you referring to?

DR. FROESCHKE: For example, if Texas decided they didn't want to participate in this.

DR. CRABTREE: This is a program requiring federally-permitted for-hire vessels to report and that's it. Whether Texas does something with their survey or not doesn't seem relevant to me. That's our authority and that's what we can do.

Now, how big of a problem is that, because you're going to have state-water vessels and all those kinds of catches? I don't know, but this is what we have authority to do.

CHAIRMAN GREENE: Kelly.

DR. LUCAS: Roy, to your point, and I guess this is something that we've all -- It keeps coming up, but nobody says it. What are you going to use the data for? I mean are you using it for in-season monitoring, like is being suggested, and what level of detail do you need for the in-season monitoring? Are people just using it to get a better accurate catch, because we know that we're not estimating that correctly? I mean I think if you answer some of those questions that it helps you develop a program.

DR. CRABTREE: Well, I think your intent has been to use it for in-season monitoring, right? That's what I am gathering from you. Now, will it work? I don't know until we put it in place, but that's been pretty clear to me and it's been clear to me this partly came out of sector separation and the desire to track a lot of these red snapper quotas when we have a specific quota for the for-hire vessels. I think that's what we've been talking about and if I'm wrong, let me know.

CHAIRMAN GREENE: Bonnie.

DR. PONWITH: Just to that point, this is an example of the chicken and the egg and I don't want to beat that dead horse more, but the fact is that until the council has absolute clarity what desired outcome they are shooting for, it makes answering the questions about how do you get there from here very, very difficult.

I think that that would be the -- If we were going to spend the rest of the afternoon on one question, that's the question to ask. Are you trying to come up with a system that you can use for monitoring your progress toward an ACL within season instead

of using pre-season projections about how long the season is going to last or is it to create catch records on a boat-by-boat basis? The answer to that question is actually very important in determining the design and even what data fields we record in the process.

CHAIRMAN GREENE: Kelly.

DR. LUCAS: To that point, it wouldn't just be the in-season monitoring, but it's which species and which level do you need? Like if you're going to real-time monitor on a day-to-day basis to determine to close red snapper and everybody is reporting on that level, does that carry forward to all the other species that are being represented in the charter-for-hire that you were imposing this on?

CHAIRMAN GREENE: Roy.

DR. CRABTREE: I think the answer is we want these vessels to report everything they catch and we want them to report what their discards are, right? At least there is no mystery to me about what we want. We want real-time data on everything they're catching and everything they're discarding and we want to be able to go on the website and punch a button and see that number pop up as of right now. Now, can any of that happen? Will it work? I don't know, but I think that's what we've been talking about, right?

CHAIRMAN GREENE: Well, I mean that was certainly my understanding as all this has moved forward, because it doesn't -- Operating a charter boat, it doesn't take me any difference to mark down how many triggerfish I caught as opposed to bliners as opposed to anything else.

 It's one of those things and we can do as many species as you want or as few and it doesn't really matter, but if we're out there collecting the data, even if you can't use it, but if people get in the habit of doing it and you need it down the road, it's there and so it's one of those things. Yes, ma'am, Dr. Lucas.

DR. LUCAS: Then the other question would be not only that, in terms of you want it for every species and for all these details or whatever, but if we can't respond that quickly to that amount of data, if we can't respond management-wise that quickly to it and if we can't respond from a resource perspective, both staff time and money and everything else, then do you really need it that detailed if you can't meet those other requirements?

DR. CRABTREE: The do you need it is kind of something you need to think about and we've had this discussion. Do you want to manage, essentially, this fishery the same way we manage commercial fisheries, which is real-time monitoring and we close you when you hit it and you're only going to get a few days' notice to it?

Now, I have always come at the position with recreational fisheries and charter fisheries that they want stability from year to year. They want to know when they can fish. This is not going in that direction and this is going opposite of that direction.

Now, is that going to work for them and is that what they really want? I don't know. I come to these meetings, like all of you do, and I hear charter boat fisherman after charter boat fisherman tell us that's what they want and so okay, I guess that is what they want, but they're going to be booking trips not knowing if they're going to be open or not.

If you want to get to stability as your goal, then you don't need real-time data, because you're going to try to set a season and not change it very often. I don't have the answers to those questions and those are questions you are going to have to decide, but it does seem to me that we've -- My sense from the council has been that you want real-time data and that's the path you're going on.

Maybe I am wrong about that, but it seems to me that's the tradeoff. Do you want stability or do you want real-time data? Real-time data is going to be expensive and it's going to cost these charter boats a lot of money and time and it's going to put a lot of burden on the Center to track it and all that stuff.

If we go down that path and at the end of the day decide that, well, we would rather just have a stable season and not change it that often, I think that's an important decision to make.

CHAIRMAN GREENE: Mr. Anson.

 MR. ANSON: To Roy's point, as I recall some of the discussion that led up to this and where we are today, it was to that very point. It was that real-time data was going to be worth something and it was going to be something that we could use to try to get some of the 20 percent buffer that was currently taken away.

Yes, there is the chance that you set a season up in advance, based on what you think will happen, but as you go through the season and the weather might be a lot better than you anticipated, based on your historical information that you used to formulate a season, and then as you get close to that and the weather is good and you might come in and say, seven days before the end of the season, that we have to shut it down and you have some trips out there that won't get taken and they will have to be cancelled, that's some of the pain, I guess, that you get with trying to extend out the number of days beyond the current situation, which is to take the 20 percent right off the top.

DR. PONWITH: That is an excellent observation and so that creates the question of do you want to continue the way we're going now, which is you use a projection that is generated preseason to give you an advanced notice and based on what we know right now your season will be X number of days, and then have a system that allows you to fine-tune that as the season goes along, so that if this year is an atypical year you've got some signals to be able to tell you we're probably below or we're probably high and fine-tune that pre-season closure date decision.

That is technically possible and it could be done in a way that's less onerous than the daily sampling, where you say no, our sampling is going to be based on how many we caught yesterday plus how many we caught today and when we see ourselves hitting it, it's over.

That's why, philosophically, this is a T in the road, and knowing how you want to manage your recreational fishery and how you want the charter landings to inform that is really important, because that helps us make sure we design the system that meets that desired outcome.

CHAIRMAN GREENE: Kelly.

 DR. LUCAS: Just kind of to what Roy said about stability and electronic reporting, the State of Mississippi has a mandatory electronic reporting just for red snapper. We started the program basically because we didn't feel -- We recognized MRIP had limitations in the fact that it cannot capture short seasons. It just can't.

 Just in this year, where I've got MRIP saying that our private recreational fishermen caught zero fish, although I know exactly what they caught, because they are under mandatory reporting.

In that case, I would argue it was going to give them a lot more fishing days, you know depending on which way you went, because you all said that -- NOAA was estimating that they caught zero and so, according to them, they can fish 365 days a year, because they're not catching any fish.

I think we may determine, just from the electronic data in general, that we're not really estimating effort right to begin with and that's even to notice that Alabama's data was less than what was reported by MRIP.

 I don't know what lead time charter-for-hire necessarily needs, but I think with some of the electronic reporting and looking at it that you might can give them a little bit better projection than two days before you close.

CHAIRMAN GREENE: Mara or Roy or somebody down there I saw.

DR. CRABTREE: Just bear in mind when we're talking about a season that's all of ten or eleven days now that there's not going to be a lot of lag time. I mean if we had LA Creel, it's about a two-week turnaround. It wouldn't be real time and we couldn't use it to track catches and so even if we had everything LA Creel, we would still be putting the whole federal season out by projections.

The other complication to all of this is we have Amendment 41 and Amendment 42 in the pipe somewhere, which could fundamentally change the way we manage these fisheries and it could completely change what we want to do with the data reporting.

So I mean we've got a lot of things going on that need to be decided and I understand there is concerns about the buffer, but this is only part of the buffer and we're going to have to have a lot more predictability and coordination with the states or the buffer is not going to go away, because we have fishing patterns and seasons changing after the fishery is already closed and so there is an awful lot of things here that need to change and this is just one little piece of it, but I mean there are just so many wheels going around right now and I think that's part of what is getting us all wrapped around the axle on this.

CHAIRMAN GREENE: Mr. Fischer.

47 MR. FISCHER: Thank you, Mr. Chairman. When we built the LA 48 Creel system, it is very scalable and, fortunately for

management, we only have about a hundred charter permits, of which they're not all active. We have the ability to shrink the amount of days on turnaround of data for the charter industry.

Now, on the private industry, we have upwards of 20,000 people in our offshore permit system and so that has a little more difficulty in it, but, when it comes to push, the ten days we have to get the data out, we can shrink it back, because instead of a two-month wave, we are using a one-week time period and we're starting our calls on Monday, Tuesday, and Wednesday and so we can get a quicker turnaround.

It may be difficult to get very instantaneous, like before you get to the dock type of sampling, but we do have a very scalable system that we can test it to its extremes.

CHAIRMAN GREENE: Okay. Anyone else? Mr. Swindell.

MR. SWINDELL: Thank you, Mr. Chairman. I was just reading through the white paper that was published, NOAA's white paper, in February of 2013 and one of the things they say is there are seventeen federal fisheries out there that are using vessel monitoring systems.

It seems to me like we ought to be able to get some real-time information from them, some way or another, that we could more quickly design and get a better handle on just what we want to do, because they have been through already a lot of the ups and downs of what information you need to have and how you're going to get it and what you're going to do with it.

It looks like most of these are in the Northeast and Alaska and so is there not some way we can't get some of this, Mr. Chairman?

CHAIRMAN GREENE: I would think so, but I certainly would defer to someone else on that. Anyone else want to weigh in? Dr. Froeschke, any other silver-bullet questions you've got?

DR. FROESCHKE: No, I think I'll stop while I'm ahead. I guess the -- We have put the membership of the technical subcommittee up there on the board and if you all wanted to review that and then we talked about we could draft some charge for the meeting and have it ready for you to review at the full council and then the last thing is Carrie wanted to go over the AP recommendations from the Reef Fish AP very quickly.

CHAIRMAN GREENE: Do you want to do that now, Dr. Simmons?

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REEF FISH AP RECOMMENDATIONS

DR. SIMMONS: Thank you, Mr. Chairman. The Reef Fish AP met over a day-and-a-half meeting in September and they reviewed several items and this was one of the ones they reviewed, and it's Tab B, Number 11, and made recommendations on.

 We had very good attendance. Twenty out of twenty-three people attended and Mr. Boyd was our council representative and, later on, Martin Fisher, Captain Martin Fisher, is going to be here to help answer questions during Reef Fish on other items that we covered.

For this particular item, I just want to go through the motions that the AP made regarding this amendment. This starts on page 6 of the document. By a vote of sixteen to thirteen with one abstention, the AP recommends in Action 1 that Alternative 4 be the preferred alternative, which is the council's current preferred alternative.

They talked about trip-level reporting and said that it would improve validation routines and recall bias and they expected it to improve accuracy and confidence in these data, facilitating its use in science and management.

Next, by a voice vote of seventeen to three, the AP recommends adopting Preferred Alternative 2, which is also the council's preferred alternative, which would require headboats to submit fishing records for trip level via electronic reporting.

 They talked about the various reporting methods currently and the differences in effort and landings estimates for charter vessels compared to headboats and then, after more discussion, they talked a little bit about VMS and a motion was made that failed and that's at the end of the report if anybody is interested in that, but the one that was passed was a vote of sixteen to two and the AP recommends in Action 3 to adopt Alternative 2 as the preferred alternative, which would require federally-permitted for-hire vessels to use a NMFS-approved electronic device that automatically records vessel location at specified time intervals for later transmission. They selected the two subalternatives for both headboats and charter vessels.

We talked about a lot of these concerns that this committee has spent a lot of time discussing today and the council as well regarding the economic analysis, social analysis, et cetera.

Then John already went through the last motion that was made about separating the amendment and so I guess, just in summary, we will move forward on the committee's recommendation and we will draft a charge.

Our understanding is the committee wants to move forward with this and maybe we will talk to the IPT about how the language should be crafted as far as the intent, so that it's clear to the public that this is the council's intent and then when the funding comes or when that becomes available, it's a little bit more clear that this is what the council's desire is and whether that's able to be accomplished or not, so there's not serious repercussions from that. I think that was one of staff's major concerns and we just probably need to bring that out a little bit more in the document.

CHAIRMAN GREENE: Dr. Crabtree.

DR. CRABTREE: So the technical subcommittee -- The list I was looking at, this is one that includes a number of South Atlantic folks as well as Gulf, right?

DR. FROESCHKE: It includes one South Atlantic staff as well as some state folks that have participated in pilot programs that happen to be located in the South Atlantic.

DR. CRABTREE: If we're going to proceed separately, should we repopulate the technical subcommittee, do you think, or should we leave it as is? Should we repopulate it to make it Gulffocused or is that a bad idea? I don't know.

DR. FROESCHKE: I don't know either. We were looking at it and I don't have a consensus. Mike Errigo is the only -- He is a South Atlantic staff member and the rest of them I don't know and however you think is best is certainly fine with me.

CHAIRMAN GREENE: Okay. Council members, do you have any preference on populating the subcommittee? Dr. Stunz.

DR. STUNZ: It seems to me that it should be populated by people with a Gulf interest, since we're going in that direction. Now, I am not saying that someone from the Southeast might not have expertise that is relevant to that and we don't want to exclude that level of knowledge, but you know it's sort of our deal at this point, it seems like.

CHAIRMAN GREENE: Okay. I believe they're getting the list back up on the board so we can look at that and decide what to do

from here. They've got the list up on the board and, Dr. Stunz, I think you make a good point about your comment earlier and so if you want to go through that, that's fine. Mr. Fischer, did you have a comment?

MR. FISCHER: I believe there's probably about four Atlantic people on this technical committee and we probably do have some expertise in the Gulf. I think the states of Louisiana, Mississippi, and Alabama would like to possibly have input on the direction this committee is going, if they have anyone qualified, and I would hope we do.

CHAIRMAN GREENE: So what was the criteria for the initial technical subcommittee that we used to populate this? Does anyone know?

MR. DAVE DONALDSON: Johnny, at least for the Gulf states, I think a request went out to each of the five states if they wanted to include a member on this particular group and Florida and Texas were the only two that volunteered, if my recollection is -- I don't know about the Science Center and MRIP and whatnot, but at least with the Gulf states that's how those folks were selected.

 CHAIRMAN GREENE: Okay. Well, it seems to me that we would just remove the South Atlantic people from this list and then just go forward with it from there, I believe that's what may be the simplest thing to do, rather than having to just stop everything and start all over again, but does anybody have any feelings one way or the other? Dr. Stunz.

DR. STUNZ: I think that's a good move, Mr. Chairman, unless Dr. Froeschke or maybe Bonnie or Roy has some key people from their groups that aren't on this list that they see would add value to it.

CHAIRMAN GREENE: Okay. Thank you. Lieutenant Commander Brand

LCDR JASON BRAND: Thank you, Mr. Chair. There may be a possibility where we may want to have Coast Guard involved, just for some -- Some devices may offer some safety at sea type of items, where we may be able to provide some input on that, but if it's going to be only considering the technical data -- I am not sure what the charge is and whether or not you may want to consider input from safety or life at sea issues or even potentially some enforcement benefits.

CHAIRMAN GREENE: Okay. I think staff is going to work on the

charge, but I certainly concur there are some items with safety at sea that may be very big-ticket items and so I think the intent is just to remove the South Atlantic people and then when we get the charge, Lieutenant Commander Brand, we'll come back and see if it's something that you feel that we should put someone else on there and I can't imagine that anyone would have any issues with that at all. With that being said, are you clear with what we're doing?

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DR. FROESCHKE: Sort of. I am taking that Mike Errigo from the South Atlantic would be removed and Eric Hiltz -- The way we did this before, you developed this and we sent out a letter to the various entities, MRIP and the Science Center and things, and they appointed someone from their staff to man the committee, if you will, and so that's how we got to where we are and Eric Hiltz, he was brought on, and Doug Mumford, based on the reason of, hey, these folks have experience with this for X, Y, Z reasons. Eric Hiltz, Doug Mumford, and Mike Errigo, keep or leave?

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CHAIRMAN GREENE: Well, being that we're already five minutes past our scheduled time, maybe we will just pick this back up at council, if you so desire. I don't know if you want to continue on, Chairman Anson, or what you would like to do. It's your call. I certainly don't want to cut anybody off, but --

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MR. ANSON: If you think you can wrap this up in a few minutes, then I would say go ahead and get it knocked out.

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CHAIRMAN GREENE: All right. Mr. Fischer.

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MR. FISCHER: I know Dave had his hand up before me and I would recognize him if he had something.

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MR. DONALDSON: Go ahead.

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MR. FISCHER: Okay. I will make a motion to -- It might be an awkward motion and I am not prepared, but to remove the South Atlantic members from those states, meaning South Carolina -- The names that were discussed and obviously they're not on the screen and I don't know these people.

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What I would like to see is, once again, give the opportunity --- If this is going to be statewide and going to need state Gulf-wide cooperation, Ι mean and going to need state would like to cooperation to work, we see someone Mississippi, Louisiana, and Alabama on this committee, because you're going to need buy-in from all the states.

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CHAIRMAN GREENE: Okay. Is that your motion that you --

 MR. FISCHER: Right and so we have someone from the Atlantic Commission, the South Atlantic, South Carolina, and North Carolina. I believe those four come to mind. It could offer the states that are not represented to forward names and we could take this up as soon as full council.

10 MR. DONALDSON: I would also recommend Mike Cahall from ACCSP be removed.

CHAIRMAN GREENE: Okay, Mr. Fischer, does your motion read as 14 you wish?

 MR. FISCHER: It should be four of them, if I'm not mistaken. Greg Bray is Gulf States. Then, to that, have the three Gulf states not represented have the opportunities to submit names for approval and if we move on it, we could probably have that for full council in a couple of days. Not to leave it openended, we could just remove these now and bring up adding membership during full council.

CHAIRMAN GREENE: Okay, Mr. Fischer, does that motion read as 25 you wish?

MR. FISCHER: Yes.

CHAIRMAN GREENE: Is there a second to this motion?

31 MR. DONALDSON: Second.

33 CHAIRMAN GREENE: There is a second for the motion. Is there 34 any opposition to this motion? Seeing none, the motion carries. 35 With that, I will turn back to Dr. Froeschke.

37 DR. FROESCHKE: I am done.

CHAIRMAN GREENE: Me too. Okay. We had no other business and this concludes the Data Collection Committee.

42 (Whereupon, the meeting adjourned at 4:40 p.m., October 5, 43 2015.)

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Back Tab F, No. 3

Data Collection Committee: Action Schedule for Tab F

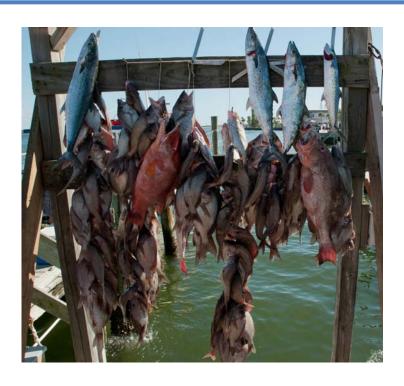
Agenda items: IV and V

Timeline status: Final Draft

Council input and next steps:

Staff will review the Final Draft of Electronic Charter Vessel and Headboat Reporting Amendment, public hearing and written comments. The Committee will receive a presentation on electronic reporting from the SEFSC. The Committee is expected to determine whether to recommend to the Council to take final action. However, if the Council takes final action, formal transmittal of this amendment would be delayed until the codified text is available. The codified text will be submitted to Council for review at a later date, once more information on the electronic data collection program is available.

Modifications to Charter Vessel and Headboat Reporting Requirements



Generic Amendment to the Reef Fish Resources of the Gulf of Mexico and Coastal Migratory Pelagic Resources of the Gulf of Mexico and Atlantic Region January 2016





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ENVIRONMENTAL ASSESSMENT COVER SHEET

Name of Action

Modifications to Charter Vessel and Headboat Reporting Requirements

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Type of Action

| () Administrative | () Legislative |
|-------------------|----------------|
| () Draft | () Final |

Summary/Abstract

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ABBREVIATIONS USED IN THIS DOCUMENT

ACL Annual Catch Limit

ACCSP Atlantic Coastal Cooperative Statistics Program

AM Accountability Measure

Council Gulf of Mexico Fishery Management Council

CMP Coastal Migratory Pelagic Resources in the Gulf of Mexico and Atlantic Region

EA Environmental Assessment
EEZ Exclusive Economic Zone
EFH Essential Fish Habitat

EIS Environmental Impact Statement

ELog Electronic Logbook
EJ Environmental Justice

E.O. Executive Order

FMP Fishery Management Plan

Gulf of Mexico

Gulf Council Gulf of Mexico Fishery Management Council

HAPC Habitat Areas of Particular Concern MMPA Marine Mammal Protection Act

MRIP Marine Recreational Information Program

NEPA National Environmental Policy Act NMFS National Marine Fisheries Service

NOAA National Oceanic and Atmospheric Administration

NOS National Ocean Service
OLE Office of Law Enforcement

OY Optimum Yield

RA Regional Administrator

RF Reef Fish

RIR Regulatory Impact Review Secretary Secretary of Commerce

SEDAR Southeast Data Assessment and Review SEFSC Southeast Fisheries Science Center

SMZ Special Management Zone
SRD Science and Research Director
SRHS Southeast Region Headboat Survey

USCG United States Coast Guard

VTR Vessel Trip Report

CHAPTER 1. INTRODUCTION

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) requires the National Marine Fisheries Service (NMFS) and regional fishery management councils to end overfishing, rebuild overfished stocks, and achieve, on a continuing basis, the optimum yield (OY) from federally managed fish stocks. These mandates are intended to ensure fishery resources are managed for the greatest overall benefit to the nation, particularly with respect to providing food production, recreational opportunities, and protecting marine ecosystems.

Accurate fisheries information about catch, effort, and discards is necessary to achieve OY from federally managed fish stocks. The for-hire component of the recreational sector (i.e., charter vessels and headboats) harvests a substantial proportion of the annual catch limit (ACL) for several federally managed fish species in the Gulf of Mexico (Gulf). This amendment affects for-hire vessel reporting requirements for species managed in the Fishery Management Plans (FMPs) for Reef Fish Resources of the Gulf of Mexico (Reef Fish) and Coastal Migratory Pelagic (CMP) Resources in the Gulf of Mexico and Atlantic Region (Figure 1.1.1).

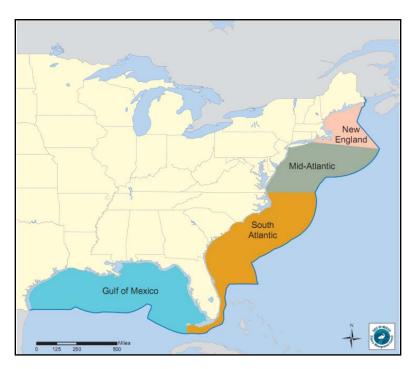


Figure 1.1.1. Jurisdictional boundaries of the Gulf (blue), South Atlantic (orange), Mid-Atlantic (MAFMC; green), and New England (NEFMC; peach) Fishery Management Councils.

1.1 Background

The Gulf of Mexico Fishery Management Council (Council) is considering alternatives that would require electronic reporting of fisheries information from for-hire vessels harvesting Reef Fish and Coastal Migratory Pelagic (CMP) species. The Council recognizes that improved data reporting in these fisheries could reduce the likelihood that ACLs are exceeded and accountability measures are triggered. Additional data elements could also be collected using this technology that may improve estimates of discard and bycatch mortality.

The harvest from for-hire (i.e., charter vessels and headboats) vessels contributes to recreational landings that count towards recreational ACLs. The default system to estimate effort in the for-hire fleet is the MRIP For-Hire survey. This is a voluntary dockside intercept survey of landings and discards. In addition to this dockside survey, fishing effort is calculated based on a monthly phone sample of 10% of for-hire vessels operating in west Florida, Alabama, Mississippi, and Louisiana. Texas Parks and Wildlife Department conducts their own creel survey to estimate private and charter landings in Texas.

A subset of for-hire vessels that generally meet the criteria of a headboat (see below) are selected by the Science and Research Director to report fisheries data via the Southeast Regional Headboat Survey (SRHS) administered by the Southeast Fisheries Science Center. This program focuses on the larger capacity for-hire vessels and collects vessel specific information about catch and effort. For the purpose of the document, **headboats** are federally permitted for-hire vessels that participate in the SRHS and **charter vessels** are federally permitted for-hire vessels that **do not** participate in the SRHS. This distinction is necessary as the generally accepted description of charter vessels:

"A charter vessel is less than 100 gross tons (90.8 metric tons) that meets the requirements of the U.S. Coast Guard to carry six or fewer passengers on a for-hire trip and that engages in charter fishing at any time during the calendar year. 50 C.F.R. § 622.2"

And headboats:

"Headboats are generally defined as vessels that hold a valid Certificate of Inspection issued by the U.S. Coast Guard to carry more than six passengers for hire. However, the SRHS includes only large capacity vessels that sell passage to recreational anglers primarily as headboats (i.e., charges by the "head"). Currently, a vessel is selected by the Science and Research Director (SRD) to participate in the SRHS if it meets all, or a combination of, these criteria:

- 1) Vessel licensed to carry ≥ 15 passengers.
- 2) Vessel fishes in the exclusive economic zone (EEZ) or state and adjoining waters for federally managed species.
- 3) Vessel charges primarily per angler (i.e., by the "head").

These definitions do not adequately capture or describe all vessels participating in the for-hire fishery. For example, the definitions noted above rely heavily on passenger capacity and payment method. In practice, some vessels with passenger capacity > 6 may operate as a charter vessel or headboat.

The number of Gulf headboats surveyed in the SRHS by state between 2010 and 2015 is provided in **Table 1.1.1**.

Table 1.1.1. Total number of headboats in the Gulf participating in the SRHS 2010-2015. These totals include both federally permitted and state permitted vessels participating in the survey.

| Year | AL | FL | LA | MS | TX | Total |
|------|----|----|----|----|----|-------|
| 2010 | 7 | 38 | 4 | 3 | 16 | 68 |
| 2011 | 8 | 35 | 4 | 5 | 17 | 69 |
| 2012 | 9 | 34 | 4 | 5 | 16 | 68 |
| 2013 | 9 | 36 | 3 | 5 | 16 | 69 |
| 2014 | 9 | 37 | 2 | 5 | 16 | 69 |
| 2015 | 9 | 37 | 2 | 5 | 16 | 69 |

Source: NMFS, SRHS

The current for-hire data collection and monitoring system (MRIP) is calculated in six, two-month 'waves' per year for all Gulf states except Texas. Texas reports data in two activity periods (high and low). This current combination of data collection and monitoring systems could be improved to assist with in-season monitoring of stocks with short recreational seasons. Increasing the reporting frequency along with enhanced data collection and validation could improve upon quota monitoring, stock assessments, and catch and discard estimates. The proposed changes are expected to reduce uncertainty in catch (i.e., landings and discards) and effort data for this component of the recreational sector increasing the likelihood that OY will be achieved and ACL overages will be avoided.

Gulf of Mexico Fishery Management Council

- Responsible for conservation and management of fish stocks
- Consists of 17 voting members: 11 appointed by the Secretary of Commerce; 1 representative from each of the 5 Gulf states, the Southeast Regional Director of National Marine Fisheries Service (NMFS); and 4 non-voting members
- Responsible for developing fishery management plans and amendments, and recommends actions to NMFS for implementation

National Marine Fisheries Service

- Responsible for data needed by the Councils for management
- Responsible for conservation and management of fish stocks
- Approves, disapproves, or partially approves Council recommendations
- Implements regulations

1.2 Purpose and Need

The *purpose* is to improve accuracy and timeliness of landings, discards, effort and socio-economic data of federally permitted for-hire vessels participating in Gulf Reef Fish and CMP fisheries.

The *need* for this action is to improve management and monitoring of Gulf Reef Fish and CMP fisheries.

1.3 History of Management

Gulf Reef Fish

The following amendments to the FMP for the Reef Fish Resources of the Gulf of Mexico contained actions that pertained to the for-hire sector including permit and reporting requirements.

Amendment 11 (1996) to the Reef Fish FMP (implemented in 1996) required that charter vessels and headboats fishing in the Gulf exclusive economic zone (EEZ) have federal permits when fishing.

Amendment 20 (2002) established a three-year moratorium on the issuance of charter vessel or headboat (for-hire) permits for the reef fish and coastal migratory pelagics in the EEZ of the Gulf. National Marine Fisheries Service promulgated the charter moratorium regulations (67 FR, 43558, June 28, 2002) to implement Amendment 14 to the CMP FMP and Reef Fish FMP and Amendment 20 to the Reef Fish FMP. However, after reviewing the administrative record, NMFS determined that the amendments contained an error that did not correctly reflect the actions approved by the Council. Thus, the regulations implementing the amendments also contained this error, and not all persons entitled to receive charter vessel/headboat (for-hire) permits under the moratorium approved by the Council would be able to receive permits under the promulgated regulations.

Emergency Rule (2002)

The regulations promulgated under the charter vessel moratorium (67 FR 43558, June 28, 2002), also require all charter vessel/headboat operators in the Gulf EEZ have a valid limited access "moratorium permit," as opposed to the prior open access charter/headboat reef fish permit, beginning December 26, 2002. If these limited access permits had not been issued prior to this date, all legal fishing activities conducted by the recreational for-hire sector in the Gulf EEZ would have closed. Cessation of these fishing operations would have resulted in severe social and economic disruption to the for-hire sector and those coastal communities dependent on these fisheries. To ensure that no qualified participants in the fisheries were wrongfully excluded under the moratorium, due to an error in the rule, and to fully comply with Magnuson-Stevens Act requirements, NMFS promulgated an emergency rule (67 FR 77193, December 17, 2002) that extended certain permit-related deadlines contained in the final rule implementing the charter vessel/headboat permit moratorium for reef fish and

coastal migratory pelagic fish in the Gulf. The emergency rule: 1) deferred the date for having a "moratorium permit" aboard vessels operating in these fisheries until June 16, 2003; 2) automatically extended the expiration date of valid or renewable "open access" permits for these fisheries until June 16, 2003; 3) extended the deadline for issuance of "moratorium permits" to no later than June 6, 2003; and 4) extended the deadline for resolution of appeals to February 18, 2003, or 30 days after an oral hearing, if applicable. Additionally, the emergency rule allowed those persons who were ineligible under the promulgated regulations to receive their open access charter vessel/headboat permits until they could obtain a new permit under the revised moratorium eligibility criteria approved by the Council.

Amendment 25 (2006) established a limited access system on charter/headboat reef fish and CMP permits. Permits are renewable and transferable in the same manner as currently prescribed for such permits. The Council will have periodic review at least every 10 years on the effectiveness of the limited access system.

Amendment 30B (2009) required that all vessels with federal commercial or on charter/headboat reef fish permits comply with federal reef fish regulations, if those regulations are more strict than state regulations, when fishing in state waters.

Amendment 34 (2012) addressed crew size limits for dually permitted vessels. Dually permitted vessels are vessels with both a charter/headboat reef fish permit and a commercial reef fish permit. The amendment eliminated the earned income qualification requirement for the renewal of commercial reef fish permits and increased the maximum crew size, when operating as a commercial vessel, from three to four.

Framework Action (2013) modified the frequency of headboat reporting to a weekly basis (or at intervals shorter than a week if notified by the SRD) via electronic reporting, with reports due by 11:59 p.m., local time, the Sunday following a reporting week. If no fishing activity occurs during a reporting week, an electronic report so stating must be submitted for that week

CMP Fishery

The following amendments to the FMP for the CMP of the Gulf of Mexico and Atlantic contained actions that pertained to the for-hire sector including permit and reporting requirements.

Amendment 2 (1987) to the CMP FMP required that charter vessels and headboats fishing in the EEZ of the Gulf or Atlantic for coastal migratory pelagic species have federal permits.

Amendment 14 (2002) to the CMP FMP established a 3-year moratorium on the issuance of charter vessel and head boat permits unless sooner replace by a comprehensive effort limitation system. The control date for eligibility was established as March 29, 2001. Also includes other provisions for eligibility, application, appeals, and transferability.

Amendment 17 (2006) established a limited access system on charter/headboat reef fish and CMP permits. Permits are renewable and transferable in the same manner as currently prescribed

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CHAPTER 2. MANAGEMENT ALTERNATIVES

2.1 Action 1: Modify Frequency and Mechanism of Data Reporting for Charter Vessels

Action 1 applies to federally permitted for-hire vessels that *do not* participate in the Southeast Regional Headboat Survey (SRHS).

Alternative 1 (No Action). The owner or operator of a charter vessel for which a charter/headboat reef fish or charter/headboat Atlantic CMP permit has been issued, or whose vessel fishes for or lands such reef fish or CMP fish species in or from state waters adjoining the applicable Gulf or Gulf exclusive economic zone (EEZ), and who is selected to report by the Science and Research Director (SRD) must maintain a fishing record for each trip, or a portion of such trips as specified by the SRD, on forms provided by the SRD. Completed fishing records must be submitted to the SRD weekly, postmarked no later than 7 days after the end of each week (Sunday). Information to be reported is indicated on the form and its accompanying instructions.

Alternative 2. Require that federally permitted charter vessels submit fishing records to the SRD weekly or at intervals shorter than a week if notified by the SRD via electronic reporting (via NMFS approved hardware/software). Weekly = Tuesday following each fishing week.

Alternative 3. Require that federally permitted charter vessels submit fishing records to the SRD daily via electronic reporting via electronic reporting (via NMFS approved hardware/software). Daily = by noon of the following day.

Preferred Alternative 4. Require that federally permitted charter vessels submit fishing records to the SRD for each trip via electronic reporting (via NMFS approved hardware/software) prior to arriving at the dock.

Note: It is the intent of the Gulf of Mexico Fishery Management Council (Council) that during catastrophic conditions the use of paper forms for basic required reporting may be authorized by the Regional Administrator (RA) through publication of timely notice. During catastrophic conditions, the RA also has the authority to waive or modify reporting time requirements. An electronic report not received within the time specified is delinquent. A delinquent report automatically results in a prohibition on harvesting or possessing the applicable species by the permit holder, regardless of any additional notification to the delinquent permit owner and operator by NMFS. This prohibition is applicable until all required and delinquent reports have been submitted and received by NMFS according to the reporting requirements. If no fishing activity took place during a reporting period, the permit holder would be required to submit an electronic report stating that no fishing activity occurred and this report must be submitted at the same time interval specified in the regulations (local time). A preliminary list of data elements for charter vessels participating in the Marine Recreational Information Program (MRIP) For-Hire Survey is shown in Table 2.1.1.

Discussion

Charter vessels are operationally defined as for-hire vessels that carry six or fewer passengers that also meets the requirements of U.S. Coast Guard (USCG). To date, none of these vessels have been selected by the SRD to submit fishing records as described in **Alternative 1**. Rather, these vessels have been monitored through the MRIP For-Hire Survey (measures effort) and the MRIP Dockside Intercept Survey (measures catch). The MRIP For-Hire Survey includes charter vessels operating in the Gulf from Louisiana through the west coast of Florida. Charter vessel operators are required to report all trips taken during selected weeks (effort only) whenever they are selected to participate in the survey. Charter vessel operators are contacted by telephone (a weekly sample of 10% of the fleet) to collect these data (**Table 2.1.1**). Catch data are collected in a separate, voluntary Dockside Intercept Survey of anglers. Adjustment factors for active charter vessels that are not in the sample frame (new to fleet, no contact information known, etc.) are produced from field intercept survey questions and applied to the raw effort estimate.

Table 2.1.1. Required data reporting elements for charter vessels participating in MRIP For-Hire Survey.

| Reporting Elements | | | | |
|----------------------------------|--|--|--|--|
| Area fished | | | | |
| Number of anglers who fished | | | | |
| Hours of actual fishing activity | | | | |
| Method of fishing | | | | |
| Target species (if any) | | | | |

To enforce the mandatory reporting requirement for federally permitted charter vessels in the telephone component of the For-Hire Survey, permit holders who refuse to participate in the survey are notified by letter of their obligation to report as a condition for permit renewal. However, if a charter vessel operator cannot be contacted after five attempts for a selected week, the final interview status is "unsuccessful contact". It is impossible to identify permit holders who are deliberately evading the survey. Telephone contact rates vary by wave (i.e., MRIP 2-month sample period), state, and region, and the percent of selected vessels that are unable to be contacted by phone is quite high in some strata. Charter vessel catch and effort in Texas are monitored by the Texas Parks and Wildlife Department's Coastal Creel Survey. This is a field-intercept survey of boat-based fishing, including for-hire vessels. This survey estimates fishing effort and catch (harvest only) on a seasonal (high-use and low-use) basis.

Alternative 2 would require federally permitted charter vessels participating in the Gulf reef fish or Gulf and South Atlantic CMP fisheries to submit fishing records weekly or at intervals shorter than a week via electronic reporting (via NMFS approved hardware/software). Alternative 2 could improve fishery dependent data in several ways. For example, fishery data would be available for inclusion into the science and management process faster, potentially reducing the likelihood of exceeding annual catch limits (ACLs). Alternative 2 could also improve data accuracy as reports would be completed shortly after each trip, potentially reducing problems associated with recall errors. However, Alternative 2 would reduce the flexibility of timing for report preparation by charter vessel operators and this burden could be cumbersome during peak season when the number of trips taken, the number of passengers carried, and catch are greatest.

Alternative 3 would require charter vessels participating in the subject fisheries to submit a report for each day. As with Alternative 2, this report would be submitted electronically and received by NMFS (due noon the following day). Alternative 3 could further reduce the likelihood of exceeding ACLs with reduced recall error compared to Alternative 1 and Alternative 2. However, Alternative 3 would add additional burden and reduced flexibility compared to Alternatives 1 and 2.

Preferred Alternative 4 would require federally permitted charter vessels participating in the subject fisheries to submit a report for each trip. This report would need to be submitted electronically and received by NMFS prior to the vessel returning to the dock. If more than one trip occurred on a single day, an electronic report would need to be submitted before the vessel returns to the dock at the end of each trip. Charter vessel operators would need to have a NMFSapproved electronic device on their vessel to submit the report prior to reaching the dock. This would add technological complexity to the reporting protocol; however, it would greatly improve law enforcement's ability to validate self-reported catch data with the actual landings. **Preferred** Alternative 4 provides additional rigor to trip validation of catch and effort that is not possible with Alternatives 1-3 by requiring reports to be submitted prior to arriving at the dock. In Preferred Alternative 4, the catch can actually be verified as reported by an enforcement agent when the vessel arrives at the dock, reducing the likelihood of misreporting. However, **Preferred Alternative 4** offers charter vessel operators the least flexibility in how and when they prepare and submit their fishing reports and could be burdensome during periods of peak activity or inclement weather. Preferred Alternative 4 should improve data quality and accuracy, improve stakeholder confidence, and reduce uncertainty associated with these data when used in science or management applications.

2.2 Action 2: Modify Frequency and Mechanism of Data Reporting for Headboats

Action 2 applies to federally permitted for-hire vessels that participate in the Southeast Regional Headboat Survey (SRHS).

Alternative 1 (No Action). The owner or operator of a headboat for which a charter/headboat reef fish or charter/headboat Atlantic CMP permit has been issued, or whose vessel fishes for or lands such reef fish or CMP species in or from state waters adjoining the applicable Gulf EEZ and who is selected to report by the SRD must submit an electronic fishing record for each trip of all fish harvested via the Southeast Region Headboat Survey (SRHS). Electronic fishing records must be submitted at weekly intervals (or intervals shorter than a week if notified by the SRD) by 11:59 p.m., local time, the Sunday following a reporting week. If no fishing activity occurred during a reporting week, an electronic report stating so must be submitted for that reporting week by 11:59 p.m., local time, the Sunday following a reporting week.

During catastrophic conditions, the use of paper forms for basic required functions may be authorized by the RA by publication of timely notice. During catastrophic conditions, the RA also has the authority to waive or modify reporting time requirements.

When an electronic report is not received within the time specified, it is delinquent. A delinquent report automatically results in a prohibition on harvesting or possessing the applicable species, regardless of any additional notification to the delinquent owner and operator by NMFS. This prohibition is applicable until all required and delinquent reports have been submitted and received by NMFS according to the reporting requirements.

Alternative 2. Require that headboats submit fishing records to the SRD weekly or at intervals shorter than a week if notified by the SRD via electronic reporting (via NMFS approved hardware/software). Weekly = Tuesday following each fishing week.

Alternative 3. Require that headboats submit fishing records to the SRD daily via electronic reporting (via NMFS approved hardware/software). Daily = by noon of the following day.

Preferred Alternative 4. Require that headboats submit fishing records to the SRD for each trip via electronic reporting (via NMFS approved hardware/software) prior to arriving at the dock.

Discussion

Historically, headboats reported fishing information using paper forms. Beginning January 1, 2013, headboat owners/operators have been required to submit electronic reports. Headboat operators are required to report 100% of their vessel trips, regardless of whether the trips occur in the EEZ or in state waters. The current reporting requirements place the responsibility for submitting required information directly on the permit holder, and compliance is monitored and enforced as a condition for permit renewal. If a vessel is delinquent for any trips, an email reminder is sent to the vessel owner after the reporting week ends. If the vessel continues to be non-compliant, the NMFS Permit Office is notified to place the vessel's permit renewal on hold. In some cases, the vessel's permit is not up for renewal for several months; if a vessel in this status remains non-compliant, law enforcement is notified to prohibit this vessel from harvesting and possessing federally managed species. The obligation to report is reinforced annually via certified letter to each permit holder.

The SRHS, which is administered by the NMFS Southeast Fisheries Science Center (SEFSC), includes 69 large capacity headboats operating in the Gulf (i.e., Texas through west Florida). Vessels included in this survey are required to report catch and effort data weekly to NMFS (Table 2.2.1).

Table 2.2.1. Required data reporting elements for headboats participating in the SRHS.

| Reporting Elements |
|-----------------------------|
| Depart Date:Time |
| Return Date:Time |
| Vessel Name |
| Captain Name |
| Number of Anglers |
| Number of Paying |
| Passengers |
| Number of Crew |
| Fuel used (gallons) |
| Price per gallon (estimate) |
| Minimum depth fished |
| Maximum depth fished |
| Primary depth fished |
| Latitude/Longitude Degrees |
| Latitude/Longitude Minutes |
| Species caught |
| Number kept |
| Number released |

If selected by the SRD, **Alternative 1** requires headboats participating in Gulf reef fish or Gulf and Atlantic CMP fisheries to submit electronic reports weekly (or at intervals less than a week if requested by the SRD), due seven days after the end of each week (Sunday). This requirement was implemented through the Framework Action to modify headboat reporting requirements (GMFMC 2013).

Alternative 2 would require headboats participating in the subject fisheries to report weekly (or at intervals shorter than a week if notified by the SRD) via electronic reporting using NMFS approved hardware/software. The difference between Alternative 1 and Alternative 2 is the difference in the delay between the end of the fishing week (Sunday) and report submission.

Alternative 1 allows 7 days to prepare and submit reports while Alternative 2 would allow only 2 days. Alternative 2 could improve fishery data. Fishery data would be available to the science and management process faster, potentially reducing the likelihood of exceeding ACLs. Alternative 2 could also improve accuracy as reports would be completed sooner after each trip, reducing problems associated with recall errors. However, Alternative 2 would reduce the flexibility of headboat operators as to the timing of report preparation and this could be burdensome during peak season when the number of trips, passengers, and catch are greatest.

Alternative 3 would require headboats participating in the subject fisheries to submit a report for each day. This report would be submitted electronically and would need to be received by NMFS by noon the following day. **Alternative 3** could further reduce the likelihood of exceeding ACLs and reduce recall error compared to **Alternative 1** or **Alternative 2**. However,

Alternative 3 would add additional burden and reduced flexibility in comparison to **Alternative 1** or **Alternative 2**.

Preferred Alternative 4 would require headboats participating in the subject fisheries to submit a report for each trip. This report would need to be submitted electronically and would need to be received by NMFS prior to returning to the dock. **Preferred Alternative 4** would offer the greatest ability to prevent ACL overages and add additional rigor to trip validation of catch and effort that are not possible with **Alternatives 1-3**. In **Preferred Alternative 4**, the reported catch can be verified by an enforcement agent when the vessel arrives at the dock, reducing the likelihood of misreporting. However, **Preferred Alternative 4** offers headboat operators the least flexibility in how and when they prepare and submit their fisheries reports and could be burdensome during periods of peak activity or inclement weather. **Preferred Alternative 4** should improve data quality and accuracy, improve stakeholder confidence, and reduce uncertainty associated with these data when used in science or management applications.

2.3 Action 3: Modify Electronic Reporting Requirements to Require Vessel or Catch Location Reporting

Alternative 1 (No Action). Charter vessels participating in the MRIP For-Hire survey are required to report area fished (inshore, state, or federal waters), if selected as part of the survey. Headboats participating in the SRHS are required to report latitude and longitude of area fished (degrees and minutes only; within 1 nm² area).

Preferred Alternative 2. Require federally permitted for-hire vessels to use a NMFS approved electronic device to record vessel location at specified time intervals:

Preferred Sub-Alternative 2a. Headboat Preferred Sub-Alternative 2b. Charter vessel

The NMFS SEFSC will develop the specific details of how the system would operate and will provide the Council the opportunity to have input into the system design.

Discussion

Charter vessels that are surveyed using the MRIP For-Hire Survey (i.e., 10% weekly) are asked to report area fished (i.e., area fished, state, or federal waters) in addition to the other elements listed in Table 2.1.1. Action 3 considers changing the location reporting element for charter vessels and headboats from a self-reported system to an electronic system where location information is recorded passively by a device on board the vessel. Alternative 1 would maintain the current self-reporting systems in place (i.e., report area fished if selected in the MRIP For-Hire Survey (charter vessels) or latitude/longitude of area fished within 1 nm² area (headboats). Preferred Alternative 2 would require the use of a NMFS approved electronic device to record and later transmit specific location information (latitude/longitude). Two sub-alternatives are provided that would require use of a location reporting device for headboats (Preferred Sub-Alternative 2a) and charter vessels (Preferred Sub-Alternative 2b. Selecting Preferred Sub-Alternatives 2a-2b would enable improved accuracy, timeliness, and effort validation protocols relative to Alternative 1. They could also improve the estimates of bycatch mortality used in

stock assessments as depth fished could be determined and is a primary factor in release mortality. **Preferred Alternative 2** would allow a variety of platforms to be considered for use including GPS enabled tablets, phones, and vessel monitoring systems (VMS).

CHAPTER 3. AFFECTED ENVIRONMENT

3.1 Description of the Physical Environment

3.1.1 Reef Fish

Habitat for Reef Fish Species

The Gulf of Mexico (Gulf) has a total area of approximately 600,000 square miles (mi²) (1.5 million square kilometers (km²)), including state waters (Gore 1992). It is a semi-enclosed, oceanic basin connected to the Atlantic Ocean by the Straits of Florida and to the Caribbean Sea by the Yucatan Channel (Figure 3.1.1). Oceanographic conditions are affected by the Loop Current, discharge of freshwater into the northern Gulf, and a semi-permanent, anti-cyclonic gyre in the western Gulf. The Gulf includes both temperate and tropical waters (McEachran and Fechhelm 2005). Mean annual sea surface temperatures ranged from 73 through 83° F (23-28° C) including bays and bayous between 1982 and 2009, according to satellite-derived measurements (NODC 2012: http://accession.nodc.noaa.gov/0072888). In general, mean sea surface temperature increases from north to south with large seasonal variations in shallow waters.

Information on the habitat utilized by species in the Reef Fish complex is included in GMFMC (2011) available at:

http://www.gulfcouncil.org/docs/amendments/Final%20Generic%20ACL_AM_Amendment-September%209%202011%20v.pdf

Essential Fish Habitat for Reef Fish Species

The Environmental Impact Statement (EIS) for Essential Fish Habitat and the Fishery Management Plan (FMP) as revised in 2004 contains a description of the physical environments for reef fish species. The physical environment for reef fish has been described in detail in the EIS for the Generic Essential Fish Habitat (EFH) Amendment and is incorporated here by reference (GMFMC 2004).

Habitat Areas of Particular Concern (HAPC) for Reef Fish

Generic Amendment 3 (GMFMC 2005), is hereby incorporated by reference for addressing EFH, HAPCs, and adverse effects of fishing in the reef fish fishery. Further information describing environmental sites of special interest are discussed below.

3.1.2 Coastal Migratory Pelagics

The physical environment for coastal migratory pelagic species in this action is discussed below and in further detail in Amendment 18 (GMFMC and SAFMC 2011). Amendment 18

discusses the Gulf and South Atlantic physical habitat for CMP species, and is hereby incorporated by reference.

Essential Fish Habitat for CMP Species

The Environmental Impact Statement (EIS) for the original Essential Fish Habitat and the FMP as revised in 2004 contains a description of the physical environments for CMP species. The physical environment for CMP species has been described in detail in the EIS for the Generic Essential Fish Habitat (EFH) Amendment and is incorporated here by reference (GMFMC 2004).

Habitat Areas of Particular Concern (HAPC) for CMP Species

Generic Amendment 3 (GMFMC 2005), is hereby incorporated by reference for addressing EFH, HAPCs, and adverse effects of fishing for CMP species. Further information describing environmental sites of special interest are discussed below in Chapter 3.1.3.

3.1.3 Environmental Sites of Special Interest Relevant to Reef Fish and Coastal Migratory Pelagics (Figure 3.1)

Longline/Buoy Gear Area Closure – Permanent closure to use of these gears for reef fish harvest inshore of 20 fathoms (36.6 meters) off the Florida shelf and inshore of 50 fathoms (91.4 meters) for the remainder of the Gulf (72,300 square nautical miles (nm²) or 133,900 km². During June-August, bottom longline is prohibited inshore of 35 fathoms (64 meters) in the eastern Gulf.

Madison/Swanson and Steamboat Lumps Marine Reserves – No-take marine reserves sited on gag spawning aggregation areas where all fishing except for surface trolling during May through October is prohibited (219 nm² or 406 km²).

The Edges – No-take area closure from January 1 to April 30. All commercial and recreational fishing or possession of fish managed by the Gulf of Mexico Fishery Management Council (Council) is prohibited. The intent of the closure is to protect gag and other groupers during their respective spawning seasons. Possession is allowed when transiting the area if gear is stowed in accordance with federal regulations.

Tortugas North and South Marine Reserves – No-take marine reserves cooperatively implemented by the state of Florida, National Ocean Service (NOS), the Council, and the National Park Service (see jurisdiction on chart) (185 nm² or 343 km²). In addition, Generic Amendment 3 for addressing EFH, HAPCs, and adverse effects of fishing prohibited the use of anchors in these areas.

Individual reef areas and bank HAPCs of the northwestern Gulf including: East and West Flower Garden Banks, Stetson Bank, Sonnier Bank, MacNeil Bank, 29 Fathom, Rankin Bright Bank Geyer Bank, McGrail Bank, Bouma Bank, Rezak Sidner Bank, Alderice Bank, and

Jakkula Bank – Pristine coral areas protected by preventing use of some fishing gear that interacts with the bottom (263.2 nm² or 487.4 km²). Subsequently, some of these areas were made a marine sanctuary by NOS and this marine sanctuary is currently being revised. Bottom anchoring and the use of trawling gear, bottom longlines, buoy gear, and all traps/pots on coral reefs are prohibited in the East and West Flower Garden Banks, McGrail Bank, and on the significant coral resources on Stetson Bank.

Florida Middle Grounds HAPC – Pristine soft coral area protected from use of any fishing gear interfacing with bottom (348 nm² or 645 km²).

Pulley Ridge HAPC – A portion of the HAPC where deep-water hermatypic coral reefs are found is closed to anchoring and the use of trawling gear, bottom longlines, buoy gear, and all traps/pots (2,300 nm² or 4,260 km²).

Stressed Areas for Reef Fish – Permanent closure Gulf-wide of the near shore waters to use of fish traps, power heads, and roller trawls (i.e., "rock hopper trawls") (48,400 nm² or 89,637 km²).

Alabama Special Management Zone (SMZ) – In the Alabama SMZ, fishermen are limited to hook-and-line gear with no more than three hooks under the following scenarios: (1) fishing as a charter vessel or head boat; (2) a vessel that does not have a commercial permit for Gulf of Mexico reef fish; or (3) a vessel with such a permit fishing for Gulf of Mexico reef fish. Nonconforming gear is restricted to bag limits, or for reef fish without a bag limit, to 5% by weight of all fish aboard.

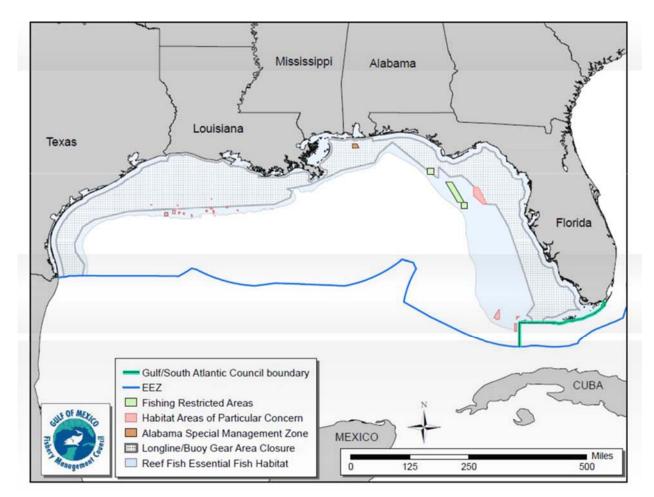


Figure 3.1. Composite map of most fishery management closed or gear restricted areas in the Gulf of Mexico.

Deepwater Horizon

The Deepwater Horizon MC252 oil spill in 2010 affected at least one-third of the Gulf area from western Louisiana east to the panhandle of Florida and south to the Campeche Bank in Mexico. The impacts of the Deepwater Horizon MC252 oil spill on the physical environment are expected to be significant and may be long-term. Oil was dispersed on the surface, and because of the heavy use of dispersants (both at the surface and at the wellhead), oil was also documented as being suspended within the water column, some even deeper than the location of the broken well head. Floating and suspended oil washed onto shore in several areas of the Gulf as were non-floating tar balls. Whereas suspended and floating oil degrades over time, tar balls are persistent in the environment and can be transported hundreds of miles.

Surface or submerged oil during the Deepwater Horizon MC252 event could have restricted the normal processes of atmospheric oxygen mixing into and replenishing oxygen concentrations in the water column, thus affecting the long-standing hypoxic zone located west of the Mississippi River on the Louisiana continental shelf. In addition, microbes in the water that break down oil and dispersant also consume oxygen, which could lead to further oxygen depletion. Zooplankton

that feed off algae could also be negatively impacted, thus allowing more of the hypoxia-fueling algae to grow.

For additional information on the Deepwater Horizon MC252 oil spill and associated closures, see:

http://sero.nmfs.noaa.gov/deepwater_horizon_oil_spill.htm.

3.2 Description of the Biological/Ecological Environment

The biological environment in the areas affected in this amendment is defined by two components (Figure 3.2.1). Each component will be described in detail in the following sections.

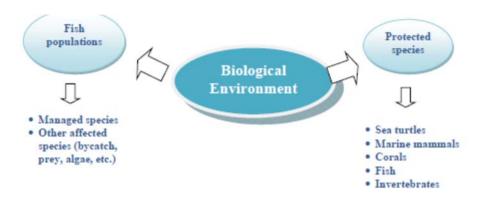


Figure 3.2.1. Two components of the biological environment described in this amendment.

3.2.1 Reef Fish

The species affected by this amendment are covered by the FMP for Reef Fish Resources. Many of the species in the Gulf of Mexico region are assessed through the Southeast Data, Assessment, and Review (SEDAR) process. A complete description of the life history characteristics of these species can be found in GMFMC (2011) available at: http://www.gulfcouncil.org/docs/amendments/Final%20Generic%20ACL_AM_Amendment-September%209%202011%20v.pdf

3.2.2 Coastal Migratory Pelagics

This action is limited CMP species in the Gulf. For further information, Amendment 18 (GMFMC and SAFMC 2011) discusses the Gulf habitat for CMP species, and is hereby incorporated by reference.

3.2.3 Protected Species

There are 28 different species of marine mammals that may occur in the Gulf. All 28 species are protected under the Marine Mammal Protection Act (MMPA) and six are also listed as endangered under the Endangered Species Act (ESA) (i.e., sperm, sei, fin, blue, humpback, and North Atlantic right whales). Other species protected under the ESA occurring in the Gulf include five sea turtle species (Kemp's ridley, loggerhead, green, leatherback, and hawksbill); two fish species (Gulf sturgeon and smalltooth sawfish); and two coral species (elkhorn, *Acropora palmata* and staghorn, *A. cervicornis*). Information on the distribution, biology, and abundance of these protected species in the Gulf are included in the final EIS to the Gulf Council's Generic EFH amendment (GMFMC, 2004), the February 2005 ESA BiOp on the reef fish fishery (NMFS 2005), and the *Acropora* Status Review (*Acropora* Biological Review Team, 2005). Marine Mammal Stock Assessment Reports and additional species information is also available on the NMFS Office of Protected Species website: http://www.nmfs.noaa.gov/pr/species/.

Because of the primary gear types used, the Gulf reef fish fishery is classified in the 2015 MMPA List of Fisheries as Category III fishery. This classification indicates the annual mortality and serious injury of a marine mammal stock resulting from the fishery is less than or equal to 1% of the potential biological removal. Dolphins are the only species documented as interacting with this fishery. Bottlenose dolphins may predate and depredate on the bait, catch, and/or released discards of the reef fish fishery.

All five species of sea turtles may be adversely affected by the Gulf reef fish fishery via incidental capture in hook-and-line gear. Incidental captures of sea turtle species occur in all commercial and recreational hook-and-line components of the reef fish fishery, but recent observer data indicate they are most frequent in the bottom longline component of the reef fish fishery. On an individual set basis, incidental captures may be relatively infrequent, but collectively, these captures sum to a high level of bycatch. Observer data indicate loggerhead sea turtles are the species most affected by the bottom longline component of the reef fish fishery and that is why a more detailed description of this species. Mortality of sea turtles caught is particularly problematic in this fishery component, because many are dead or in poor condition upon retrieval of the gear as a result of forced submergence (i.e., drowning). All sea turtles caught on hook-and-line and released alive may later succumb to that were ingested, entangling, or otherwise still attached when they were released. Sea turtle release gear and handling protocols are required to reduce the amount of gear on released animals and minimize post-release mortality.

Smalltooth sawfish are also affected by the Gulf of Mexico reef fish fishery, but to a much lesser extent than hardshell sea turtles. Smalltooth sawfish primarily occur in the Gulf off peninsular Florida. Although the long, toothed rostrum of the smalltooth sawfish causes this species to be particularly vulnerable to entanglement in fishing gear, incidental captures in the commercial and recreational hook-and-line components of the reef fish fishery are rare events. Only eight smalltooth sawfish are estimated to be incidentally caught annually, and none are expected to result in mortality (NMFS 2005). Fishermen in this fishery are required to follow smalltooth sawfish safe handling guidelines.

3.3 Description of the Economic Environment

3.3.1 Commercial Sector

The actions in this proposed amendment only pertain to the recreational for-hire sector (charter vessels and headboats). As a result a description of the economic environment for the commercial sector is not provided.

3.3.2 Recreational Sector

Angler Effort

Estimates of the Gulf charter vessel angler effort (individual angler trips regardless of trip duration or species target intent or catch success) for 2011-2014 are provided in Table 3.3.1. These estimates are derived from the Marine Recreational Information Program (MRIP). Estimates of charter vessel angler effort for additional years, and measures of directed effort for individual species, are available at http://www.st.nmfs.noaa.gov/recreational-fisheries/access-data/run-a-data-query/queries/index.

Table 3.3.1. Number of Gulf charter vessel angler trips, by state, 2011-2014¹.

| | Alabama | Florida | Louisiana | Mississippi | Total |
|---------|---------|---------|----------------------|-------------|----------------------|
| 2011 | 74,840 | 535,794 | 112,736 | 11,235 | 734,606 |
| 2012 | 58,661 | 699,102 | 114,664 | 11,491 | 883,919 |
| 2013 | 89,736 | 683,573 | 122,366 | 11,254 | 906,928 |
| 2014 | 86,736 | 693,740 | na ² | 16,242 | 796,718 |
| Average | 77,493 | 653,052 | 116,587 ³ | 12,556 | 841,818 ³ |

¹Texas information unavailable because the MRIP survey is not conducted in Texas.

Source: MRIP database, NMFS, SERO.

As noted in Table 3.3.1, the Gulf estimates do not include Texas, which is not covered by the MRIP. The effort estimates provided in Table 3.3.1 are from all charter vessels in the respective states and thus include effort from both federally permitted vessels and charter vessels that only fish in state waters. Although the MRIP data allows estimation of effort in federal waters for which respective vessels would require a federal permit (see the permits discussion below), federally permitted vessels also fish in state waters and are subject to federal regulations wherever they fish. As a result, it is not possible with available data to estimate the number of charter vessel angler trips by only federally permitted charter vessels. Therefore, the estimates provided in Table 3.3.1 exceed the angler effort on the vessels encompassed by the proposed actions in this amendment by an unknown number of trips.

²Not available; the MRIP survey was not conducted in Louisiana in 2014.

³Average of 2011-2013.

Estimates of headboat angler effort in the Gulf for 2011-2014 are provided in Table 3.3.2. These estimates are derived from the NMFS Southeast Region Headboat Survey (SRHS). Headboat angler effort is calculated as angler days, which are a standardized count of trips that result from the combination of partial-day, full-day, and multiple-day trips. The SRHS includes some vessels that do not possess a federal for-hire permit. Thus, the estimates of headboat angler days, like the estimates of effort on charter vessels, do not reflect effort for just federally permitted vessels.

Table 3.3.2. Gulf headboat angler days, by state, 2011–2014.

| | Angler Days | | | | | | | |
|---------|---|--------|-------|--------|---------|--|--|--|
| | West Florida Florida/Alabama* Mississippi/Louisiana** | | | | Total | | | |
| 2011 | 79,722 | 77,303 | 3,657 | 47,284 | 207,966 | | | |
| 2012 | 84,205 | 77,770 | 3,680 | 51,776 | 217,431 | | | |
| 2013 | 94,752 | 80,048 | 3,406 | 55,749 | 233,955 | | | |
| 2014 | 102,841 | 88,524 | 3,257 | 51,231 | 245,853 | | | |
| Average | 90,380 | 80,911 | 3,500 | 51,510 | 226,301 | | | |

Source: SRHS.

West Florida = Florida from the Dry Tortugas through the Florida Middle Grounds, Florida/Alabama = northwest Florida and Alabama.

Permits

The for-hire sector is comprised of charter vessels and headboats (party boats). Although charter vessels tend to be smaller on average than headboats, the key distinction between the two types of operations is how the fee is determined. On a charter boat trip, the fee charged is for the entire vessel regardless of how many passengers are carried, whereas the fee charged for a headboat trip is paid per individual angler.

A federal charter/headboat (for-hire) vessel permit is required for fishing in federal waters for Gulf CMP species and Gulf reef fish (RF). On October 30, 2015, there were 1,375 vessels with at least one valid (non-expired) or renewable Gulf for-hire CMP or RF permit (including historical captain permits). A renewable permit is an expired limited access permit that may not be actively fished, but is renewable for up to one year after expiration. The Gulf for-hire permits are limited access permits. Most for-hire vessels possess more than one for-hire permit. Among the 1,375 vessels with at least one Gulf for-hire permit, 1,250 had both a CMP and RF for-hire permit, 69 had only a CMP for-hire permit, and 56 had only a RF for-hire permit. Additionally, 167 of these vessels had a Gulf commercial reef fish permit. Finally, 402 of the vessels with at least one Gulf for-hire permit had at least one for-hire permit required to fish for Atlantic dolphin/wahoo, Atlantic CMP species, or South Atlantic snapper-grouper species.

Although the for-hire permit application collects information on the primary method of operation, the permit itself does not identify the permitted vessel as either a headboat or a charter

^{*}For 2013, SRHS data was reported separately for NW Florida and Alabama, but has been combined here for consistency with previous years.

^{**}Mississippi and Louisiana are combined for confidentiality purposes.

vessel and vessels may operate in both capacities. However, if a vessel meets the selection criteria (see section 1.4) used by the SRHS and is selected to report by the Science Research Director of the Southeast Fishery Science Center, it is determined to operate primarily as a headboat and is required to submit harvest and effort information to the SRHS. As of May 6, 2015, 69 Gulf headboats were registered in the SRHS (K. Fitzpatrick, NMFS SEFSC, pers. comm.).

Information on Gulf charter vessel and headboat operating characteristics is included in Savolainen et al. (2012) and is incorporated herein by reference.

Economic Value

Economic value for for-hire vessels can be measured by producer surplus (PS) per passenger trip (the amount of money that a vessel owner earns in excess of the cost of providing the trip). Estimates of the PS per for-hire passenger trip are not available. Instead, net operating revenue (NOR), which is the return used to pay all labor wages, returns to capital, and owner profits, is used as a proxy for PS. For vessels in the Gulf the estimated NOR value is \$151 (2013 dollars) per charter angler trip (Liese and Carter 2011). The estimated NOR value per headboat angler trip is \$52 (2013 dollars) (C. Liese, NMFS SEFSC, pers. comm.).

Business Activity

The desire for recreational fishing generates economic activity as consumers spend their income on various goods and services needed for recreational fishing. This spurs economic activity in the region where recreational fishing occurs. It should be noted that, in the absence of the opportunity to fish, the income would presumably be spent on other goods and services and these expenditures would similarly generate economic activity in the region where the expenditure occurs. As such, the information provided below represents a distributional analysis only.

Recreational fishing generates business activity (economic impacts). Business activity for the recreational sector is characterized in the form of full-time equivalent jobs, output (sales) impacts (gross business sales), and value-added impacts (difference between the value of goods and the cost of materials or supplies). Estimates of the business activity (economic impacts) associated with recreational charter vessel angling in 2013 are provided in Table 3.3.3. These estimates and additional details are available at http://www.st.nmfs.noaa.gov/economics/publications/feus/FEUS-2013/fisheries_economics_2013. More recent information is not available at the time.

The estimates provided in Table 3.3.2.3 include only impacts at the state level. These numbers are not additive across the region. Addition of the state-level estimates to produce a regional (or national) total could either under- or over-estimate the actual amount of total business activity because of the complex relationship between different jurisdictions and the expenditure/impact multipliers. Neither regional nor national estimates are available at this time.

Estimates of the business activity associated with headboat effort are not available. Headboat vessels are not covered in the MRIP in the Gulf. As a result, estimation of the appropriate business activity coefficients for headboat effort has not been conducted. Beginning in August

2014, socio-economic data fields were added to the SRHS electronic logbook. However, these data refer to the vessel operation and not angler expenditures, which are the basis for estimating the business activity associated with the different recreational sector modes.

Table 3.3.3. 2013 business activity (thousands of 2013 dollars) associated with charter vessel

| trips in the Gulf. | Output and val | ue added impacts | are not additive. |
|--------------------|-----------------|------------------|--------------------|
| mps in the Cuit. | Output alla fal | ac added impacts | are mot address of |

| | Alabama | Florida | Louisiana | Mississippi | Texas |
|--------------------|----------|-----------|-----------|-------------|-----------|
| Output Impact | \$52,002 | \$451,459 | \$65,729 | \$4,995 | \$103,546 |
| Value Added Impact | \$28,133 | \$274,542 | \$40,047 | \$2,440 | \$59,559 |
| Jobs | 595 | 4,222 | 593 | 63 | 985 |

Source: http://www.st.nmfs.noaa.gov/economics/publications/feus/FEUS-

2013/fisheries economics 2013

3.4 Description of the Social Environment

The proposed actions in this amendment would be expected to affect federally permitted charter and headboat fishing businesses associated with the Gulf reef fish and CMP fisheries. A description of vessels participating in the SRHS is provided in the Framework Action for Headboat Electronic Reporting Requirements (GMFMC 2013b) and is incorporated here by reference. Current reporting requirements for charter vessels is provided in Section 2.1. The reporting requirements for participants of the SRHS is provided in Section 2.2, and a list of the information collected in the survey is provided in Table 2.2.1.

A federal charter/headboat permit is required for vessels to take paying passengers to fish for reef fish and CMP species in federal waters. The federal permits do not distinguish between charter vessels and headboats; there is a charter/headboat permit for reef fish, and a charter/headboat permit for CMPs. In the Gulf, the charter/headboat permits for reef fish and CMPs are limited access; existing permits may be renewed or transferred, but no new permits are available. The respective charter/headboat historical captain permits for reef fish and CMPs are limited access and may be renewed by the permit holder. However, the historical captain permits may not be transferred and are terminated if not renewed.

A permit is valid for one year after it has been renewed or transferred. If the permit is not renewed or transferred before the end of the year it is valid, it stays in renewable status for one year; the permit may not be used for fishing, but the permit holder may still renew or transfer the permit during the year of renewable status. If the permit is not renewed or transferred by the end of the renewable period, the permit becomes void and may not be reissued. The annual application fee for these permits is \$25 for the first permit and \$10 for each additional permit.

The number of unique vessels possessing valid or renewable for-hire permits is provided in Table 3.4.1. Most federally permitted for-hire vessels that have a charter/headboat permit for reef fish also have the charter/headboat permit for CMPs (1,217 vessels). There are 32 vessels possessing a historical captain charter/headboat permit for both reef fish and CMPs. A dual-permitted vessel refers to a vessel possessing both a charter/headboat permit and a commercial

permit. Currently, there are 167 vessels possessing at least one Gulf charter/headboat permit and a commercial reef fish permit.

For the purpose of analyzing the effects from the proposed actions (Sections 4.1.3, 4.2.3, and 4.3.3), for-hire vessels may be placed in one of three broad categories: 1) charter vessels participating in the MRIP For-hire Survey; 2) headboats participating in the SRHS; and 3) dualpermitted vessels. Charter vessels participating in the MRIP For-Hire Survey are randomly selected on a weekly basis to report the elements shown in Table 2.1.1. This survey is administered by telephone and 10% of charter vessels are selected each week. To date, these vessels have not been required to maintain and submit fishing reports under any timeline, although they would be required to do so if selected by the Science and Research Director SRD). The 69 headboats currently participating in the SRHS have been required to submit trip reports electronically since January 1, 2013. The reports must be submitted at weekly intervals, with operators having seven days to submit a report for the previous fishing week. Table 2.2.1 provides the elements reported by headboats to the SRHS. Finally, dual-permitted vessels must satisfy the requirements of both the charter/headboat permit and the commercial reef fish permit, and report based on whether the vessel participates in the SRHS (headboats) or does not (charter vessels). Upon leaving port, dual-permitted vessels are required to make a trip declaration specifying whether the trip is commercial or for-hire. Vessels with a commercial reef fish permit are already required to have and use VMS, one of the location recording device platforms under consideration for all for-hire vessels (Action 3).

Table 3.4.1. Unique number of federally permitted vessels possessing valid and renewable charter/headboat permits and commercial permits in the Gulf.

| Number of Vessels | Federal Permit(s) held by vessels |
|-------------------|--|
| 1,274 | Charter/Headboat for Reef Fish |
| 1,286 | Charter/Headboat for CMP |
| 1,217 | Charter/Headboat for Reef Fish and CMP |
| 32 | Charter/Headboat Historical Captain for Reef Fish and CMP |
| 1 | Charter/Headboat Historical Captain for CMP and Charter/Headboat for Reef |
| | Fish |
| | Dual-permitted vessels |
| 161 | Charter/Headboat for Reef Fish + Commercial Reef Fish |
| 4 | Charter/Headboat Historical Captain for Reef Fish <i>and</i> CMP + Commercial Reef |
| | Fish |
| 2 | Charter/Headboat for CMP + Commercial Reef Fish |

Source: J. Dudley, SERO Permits Office, pers. comm. October 30, 2015.

For-Hire Fishing Communities

Detailed descriptions of communities engaged in the fishing industry along the Gulf coast can be found in Jepson et al. (2005) and Impact Assessment Inc. (2005a, 2005b, 2005c, 2005d, 2005e, 2005f, 2005g, and 2006) and are incorporated herein by reference. These descriptions include such elements as, but not limited to, the location of the community, history, employment,

demographics, fishing infrastructure and services, and recreational licenses held by community members.

A spatial approach enables the consideration of fishing communities and of the importance of fishery resources to those communities, as required by National Standard 8. As there are no landings data at the community level for for-hire vessels not participating in the SRHS, the number of charter vessels possessing each type of for-hire permit is provided for the Gulf region by county in Tables 3.4.2 and 3.4.3. Table 3.4.2 provides the number and type of for-hire permits held by entities in Gulf coastal counties including permits for fishing in South Atlantic waters, and Table 3.4.3 provides the number and type of for-hire permits held by entities with an address in Monroe County, which includes the Florida Keys. Because a single vessel could possess multiple permits, the total number of permits for each county does not represent the number of unique vessels. The number of South Atlantic permits held by entities in the Gulf is also included; these permits are open access.

The number of permits is a crude measure of the reliance upon for-hire recreational fishing that is general in nature and not specific to a particular fishery or stock. Ideally, additional variables quantifying the importance of recreational for-hire fishing to a community would be included (such as the amount of charter landings in a community, availability of recreational fishing related businesses and infrastructure, etc.). However, these data are not available at this time.

Table 3.4.2. Number of valid and renewable permits held by charter vessels in the Gulf of

Mexico, by coastal county as of May 28, 2015.

| Mexico, by coastal of | | of Mexico | • | | South Atlan | | | |
|-----------------------|--------------|-----------|--------------------|-----------|------------------|-----|--------------------|-------|
| | Reef Fish | СМР | HC Reef Fish | HC CMP | Dolphin Wahoo | СМР | Snapper Grouper | TOTAL |
| Texas TOTAL | 217 | 223 | 5 | 5 | 37 | 35 | 34 | 556 |
| Brazoria | 30 | 30 | 1 | 1 | 1 | 1 | 1 | 65 |
| Galveston | 36 | 36 | 1 | 1 | 6 | 5 | 6 | 91 |
| Harris | 28 | 29 | | | 5 | 4 | 5 | 71 |
| Nueces | 58 | 60 | | | 12 | 10 | 8 | 148 |
| Other Counties | 65 | 68 | 3 | 3 | 13 | 15 | 14 | 181 |
| Louisiana TOTAL | 96 | 96 | 6 | 6 | 6 | 6 | 6 | 222 |
| Jefferson | 16 | 15 | 2 | 2 | 1 | 1 | 1 | 38 |
| Lafourche | 5 | 5 | | | | | | 10 |
| Orleans | 6 | 5 | | | 1 | 1 | 1 | 14 |
| Plaquemines | 8 | 8 | | | 1 | 1 | 1 | 19 |
| St Tammany | 13 | 13 | | | | | | 26 |
| Terrebonne | 19 | 18 | 4 | 4 | | | | 45 |
| Other Parishes | 29 | 32 | 0 | 0 | 3 | 3 | 3 | 70 |
| Mississippi TOTAL | 38 | 38 | 3 | 3 | 1 | 2 | 1 | 86 |
| Harrison | 22 | 22 | 2 | 2 | 1 | 2 | 1 | 52 |
| Jackson | 10 | 10 | | | | | | 20 |
| Other Counties | 6 | 6 | 1 | 1 | | | | 14 |
| Alabama TOTAL | 120 | 115 | 2 | 2 | 20 | 28 | 26 | 313 |
| Baldwin | 81 | 79 | 2 | 2 | 15 | 19 | 19 | 217 |
| Mobile | 21 | 18 | | | 2 | 4 | 3 | 48 |
| Other Counties | 18 | 18 | 0 | 0 | 3 | 5 | 4 | 48 |
| West Florida TOTAL | 597 | 575 | 12 | 13 | 216 | 222 | 220 | 1855 |
| Bay | 77 | 74 | 1 | 1 | 23 | 23 | 22 | 221 |
| Charlotte | 11 | 13 | 1 | | 6 | 6 | 6 | 42 |
| Citrus | 15 | 14 | | | 7 | 8 | 8 | 52 |
| Collier | 51 | 53 | 3 | 3 | 30 | 28 | 30 | 198 |
| Escambia | 34 | 34 | | | 3 | 3 | 3 | 77 |
| Franklin | 16 | 16 | 1 | 1 | 4 | 5 | 5 | 48 |
| Gulf | 16 | 16 | 3 | 3 | 2 | 2 | 2 | 44 |
| Hernando | 7 | 4 | | | 9 | 9 | 9 | 38 |
| Hillsborough | 18 | 17 | | | 9 | 9 | 9 | 62 |
| Lee | 37 | 37 | | | 18 | 18 | 19 | 129 |
| Manatee | 17 | 15 | | | 4 | 4 | 4 | 44 |
| Okaloosa | 93 | 91 | 2 | 2 | 8 | 8 | 8 | 212 |
| Pasco | 11 | 8 | | 1 | 6 | 6 | 6 | 38 |
| Pinellas | 97 | 95 | 2 | 2 | 46 | 48 | 45 | 335 |

| Santa Rosa | 17 | 17 | | | 6 | 6 | 5 | 51 |
|----------------------------|-------|-------|----|----|-----|-----|-----|-------|
| Sarasota | 36 | 33 | | | 10 | 13 | 14 | 106 |
| Wakulla | 6 | 5 | | | 1 | 1 | 1 | 14 |
| Walton | 12 | 11 | | | 6 | 5 | 5 | 39 |
| Other Counties | 26 | 22 | 0 | 0 | 18 | 20 | 19 | 105 |
| TOTAL GULF (No FL Keys) | 1,068 | 1,047 | 28 | 29 | 280 | 293 | 287 | 3,032 |

Source: SERO permits office. Note: HC = Historic Captain permits. All Gulf charter/headboat permits are limited access. The South Atlantic charter/headboat permits are open access.

Table 3.4.3. Number of valid and renewable permits held by charter vessels in the Florida Keys (Monroe County) as of May 28, 2015.

| | Gulf of Mexico Charter Permits | | | | South | | | |
|-----------------------|--------------------------------|-----|--------------------|-----------|------------------|-----|--------------------|-------|
| | Reef Fish | СМР | HC Reef Fish | HC CMP | Dolphin Wahoo | СМР | Snapper Grouper | TOTAL |
| Florida Keys TOTAL | 73 | 77 | 0 | 0 | 282 | 279 | 300 | 1,011 |

Source: SERO permits office. Note: HC = Historic Captain permits.

At this time, it is not possible to examine the intensity of charter fishing activity at the community level for a specific species. However, it is likely that counties having a greater number of federal charter/headboat permits would also be the most likely to have an active forhire fleet, and would be the communities most affected by this regulatory action. In the Gulf, the counties (and respective communities) with at least 50 federal for-hire permits include: Pinellas (Clearwater, Indian Rocks Beach, Largo, Madeira Beach, St. Petersburg, Tarpon Springs, among others), Okaloosa (Destin), Bay (Panama City, Panama City Beach, and Mexico Beach), and Collier (Naples and March Island), Florida; Baldwin (Orange Beach), Alabama; the Greater Houston area including Harris, Galveston, and Brazoria counties, and Nueces (Port Aransas and Corpus Christi), Texas (Table 3.4.2 and J. Dudley, SERO Permits Office, pers. comm.). The Florida Keys also have a large number of for-hire permits, although there are more South Atlantic permits held by vessels than Gulf for-hire permits (Table 3.4.3). Further, it is not possible to determine whether for-hire vessels in the Florida Keys are actively fishing in Gulf, South Atlantic, or Florida state waters. Although these counties, and the respective communities within, have been identified as the most likely to be affected, the effects from the proposed actions are expected to result in broad social benefits by improving the accuracy and timeliness of data reporting (Sections 4.1.3, 4.2.3, and 4.3.3). It should also be noted that for-hire businesses are associated with important tourism industries in these communities.

3.4.1. Environmental Justice Considerations

Executive Order 12898 requires federal agencies conduct their programs, policies, and activities in a manner to ensure individuals or populations are not excluded from participation in, or denied the benefits of, or subjected to discrimination because of their race, color, or national origin. In addition, and specifically with respect to subsistence consumption of fish and wildlife, federal agencies are required to collect, maintain, and analyze information on the consumption patterns of populations who principally rely on fish and/or wildlife for subsistence. The main focus of Executive Order 12898 is to consider "the disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and its territories..." This executive order is generally referred to as environmental justice (EJ).

Federally permitted for-hire fishing businesses participating in the Gulf reef fish and CMP fisheries may be affected by this proposed action. This action is expected to affect the administrative procedures of federally permitted for-hire businesses by requiring the submission of electronic reports and/or increasing the frequency for which fishing reports must be submitted. Any effects from the proposed actions are expected to be minimal to non-existent in the short term and beneficial in the long term (see Sections 4.1.3, 4.2.3, and 4.3.3). No adverse effects would be expected to accrue to charter and headboat passengers, or associated businesses and communities including tribes or indigenous groups.

Information on race, ethnicity, and income status of federally permitted for-hire business owners, and the captains, crew, and other employees who work for these businesses is not available, because these data are not collected by NMFS or other agencies. Because the proposed actions affect the administrative procedures of for-hire businesses, any effects to low-income populations are unlikely, as owners of these businesses are not likely in poverty. Further, the proposed actions would not affect individuals differentially based on their race, ethnicity, or income status. Nevertheless, although no EJ concerns are expected to arise from the proposed actions, the lack of effects on EJ populations cannot be assumed.

3.5 Description of the Administrative Environment

3.5.1 Federal Fishery Management

Federal fishery management is conducted under the authority of the Magnuson-Stevens Act (16 U.S.C. 1801 et seq.), originally enacted in 1976 as the Fishery Conservation and Management Act. The Magnuson-Stevens Act claims sovereign rights and exclusive fishery management authority over most fishery resources within the U.S. EEZ, an area extending 200 nautical miles from the seaward boundary of each of the coastal states, and authority over U.S. anadromous species and continental shelf resources that occur beyond the U.S. EEZ.

Responsibility for federal fishery management decision-making is divided between the U.S. Secretary of Commerce (Secretary) and eight regional Fishery Management Councils that represent the expertise and interests of constituent states. Regional Councils are responsible for

preparing, monitoring, and revising management plans for fisheries needing management within their jurisdiction. The Secretary is responsible for collecting and providing the data necessary for the Councils to prepare fishery management plans and for promulgating regulations to implement proposed plans and amendments after ensuring that management measures are consistent with the Magnuson-Stevens Act and with other applicable laws summarized in Appendix B. In most cases, the Secretary has delegated this authority to NMFS.

The Gulf Council is responsible for conservation and management of fishery resources in federal waters of the Gulf. These waters extend from 9 to 200 nautical miles offshore from the seaward boundary of the states Florida and Texas; and from 3 to 200 nautical miles offshore from the seaward boundary of the states of Alabama, Mississippi, and Louisiana. The Gulf Council has seventeen voting members: one from NMFS; one each from the state fishery agencies of Florida, Alabama, Mississippi, Louisiana and Texas; and 11 public members appointed by the Secretary. Non-voting members include representatives of the U.S. Fish and Wildlife Service, U.S. Coast Guard, Department of State, and Gulf States Marine Fisheries Commission (GSMFC).

The Council has adopted procedures whereby the non-voting members serving on the Council committees have full voting rights at the committee level but not at the full Council level. Council members serve three-year terms and are recommended by State Governors and appointed by the Secretary from lists of nominees submitted by state governors. Appointed members may serve a maximum of three consecutive terms.

Public interests also are involved in the fishery management process through participation on Advisory Panels and through Council meetings, which, with few exceptions, are open to the public. The Councils use Scientific and Statistical Committees to review the data and science being used in assessments and fishery management plans/amendments. In addition, the regulatory process is in accordance with the Administrative Procedures Act, in the form of "notice and comment" rulemaking.

3.5.1.1 Gulf of Mexico Reporting Requirements

Currently, the owner or operator of a vessel for which a charter vessel permit for Gulf coastal migratory pelagic fish, Atlantic coastal migratory pelagic fish, Gulf reef fish, whose vessel fishes for or lands such coastal migratory pelagic fish and reef fish in or from state waters adjoining the applicable Gulf, or Atlantic exclusive economic zone (EEZ), and who is selected to report by the Science and Research Director (SRD), must maintain a fishing record for each trip, or a portion of such trips as specified by the SRD, on forms provided by the SRD. Completed records for charter vessels must be submitted to the Science and Research Director weekly, postmarked no later than 7 days after the end of each trip (Sunday). Currently, all headboats are required to submit fishing records to the Science and Research Director (SRD) weekly or at intervals shorter than a week if notified by the SRD via electronic reporting (via computer or internet). Weekly = 7 days after the end of each week (Sunday).

Table 3.5.1 summarizes the Southeast's region reporting requirements by fishery management plan. Detailed information on electronic reporting requirements and the future implementation plan for the Southeast region can be found in the NOAA Fisheries Southeast Region Electronic Monitoring and Reporting Regional Implementation Plan (NMFS 2015) and is hereby incorporated by reference.

http://sero.nmfs.noaa.gov/sustainable_fisheries/documents/pdfs/em_er_implementation_plan_southeast.pdf

Table 3.5.1. Summary of the existing monitoring tools currently implemented in commercial reef fish and coastal migratory pelagic fisheries of the Southeast Region.

| To 1 | | (| Additional ER | VMS or EM | | | | |
|---|-----------------------------------|-------------------------------|------------------------------|-----------|-------|-----------|-------------------------------------|--|
| Fishery | Dealer Electronic Reporting | Paper logbooks/ reports | Electronic logbooks/ reports | VMS | Video | Observers | Potentially Suitable? | Potentially Suitable? |
| Gulf of Mexico Reef Fish | Yes | Yes | No | Yes | No | Yes | elogbook – pilot testing in 2015 | EM for protected resource interactions; reef fish bycatch |
| Gulf of Mexico and Atlantic Coastal Migratory Pelagics | Yes | Yes | No | No | No | Yes | elogbook – pilot testing in 2015 | |

3.5.2 State Fishery Management

3.5.2.1 Gulf of Mexico States

The state governments of Louisiana, Mississippi, and Alabama have the authority to manage fisheries that occur in waters extending three nautical miles, while west Florida and Texas authority is nine nautical miles from their respective shorelines. Louisiana's marine fisheries are managed by the Louisiana Department of Wildlife and Fisheries. The Marine Resources Division of the Mississippi Department of Natural Resources regulates Mississippi's marine fisheries. Alabama's Department of Conservation and Natural Resources manages Alabama's marine fisheries. Texas' marine fisheries are managed by the Texas Department of Wildlife and Fisheries, and Florida's marine fisheries are managed by the Florida Fish and Wildlife Commission. Each Gulf of Mexico state fishery management agency has a designated seat on the Gulf Council.

The Gulf of Mexico states are also involved in the management of marine fisheries through the GSMFC in management of marine fisheries. This commission was created to coordinate state regulations and develop management plans for interstate fisheries. The GSFMC does not possess any regulatory authority.

3.5.3 Enforcement

Both the National Oceanic and Atmospheric Administration (NOAA) Fisheries Office for Enforcement (NOAA/OLE) and the United States Coast Guard (USCG) have the authority and the responsibility to enforce Gulf of Mexico and South Atlantic Council regulations. NOAA/OLE agents, who specialize in living marine resource violations, provide fisheries expertise and investigative support for the overall fisheries mission. The USCG is a multi-mission agency, which provides at-sea patrol services for the fisheries mission.

Neither NOAA/OLE nor the USCG can provide a continuous law enforcement presence in all areas due to the limited resources of NOAA/OLE and the priority tasking of the USCG. To supplement at-sea and dockside inspections of fishing vessels, NOAA entered into Cooperative Enforcement Agreements with all but one of the states in the Southeast Region (North Carolina), which granted authority to state officers to enforce the laws for which NOAA/OLE has jurisdiction. In recent years the level of involvement by the states has increased through Joint Enforcement Agreements, whereby states conduct patrols that focus on federal priorities and, in some circumstances, prosecute resultant violators through the state when a state violation has occurred.

NOAA General Counsel issued a revised Southeast Region Magnuson-Stevens Act Penalty Schedule in June 2003, which addresses all Magnuson-Stevens Act violations in the Southeast Region. In general, this Penalty Schedule increases the amount of civil administrative penalties that a violator may be subject to up to the current statutory maximum of \$120,000 per violation.

CHAPTER 4. ENVIRONMENTAL CONSEQUENCES

4.1 Action 1: Modify Frequency and Mechanism of Data Reporting for Charter Vessels

4.1.1 Direct and Indirect Effects on the Physical/Biological/Ecological Environment

The charter vessel reporting requirement is an administrative action for providing a means of collecting data from the industry, and does not directly affect the physical or biological environment, but does have an indirect effect. There would be positive indirect biological effects because having all charter vessels report electronically would make it easier to track landings in a timely manner. This would help prevent exceeding annual catch limits (ACLs), reducing the likelihood of overfishing, leading to healthier fish stocks. In addition, the data collected will be used to enhance stock assessments and in turn provide better scientific advice to fishery managers. Alternative 1 (No Action) already requires that vessels, if selected, must maintain a fishing record for each trip, or a portion of such trips as specified by the Science and Research Director (SRD), on forms provided by the SRD; however, no charter vessels have been selected by the SRD. If selected, completed fishing records must be submitted to the SRD weekly, postmarked no later than 7 days after the end of each week (Sunday). Charter vessels are currently monitored through the Marine Recreational Information Program (MRIP) For-Hire Survey (measures effort) and the MRIP dockside intercept survey (measures catch). The MRIP For-Hire Survey includes charter vessels operating in the Gulf of Mexico from Louisiana through the west coast of Florida. Charter vessel operators are required to report all trips taken during selected weeks (effort only) whenever they are selected to participate in the survey. Charter vessel operators are contacted by telephone (a weekly sample of 10% of the fleet) to collect these data (**Table 2.1.1**). Catch data are collected in a separate dockside intercept survey of anglers. Adjustment factors for active charter vessels that are not in the sample frame (new to fleet, no contact information known, etc.) are produced from field intercept survey questions and applied to the raw effort estimate. Alternative 1 (No Action) could result in adverse impacts if landings are not reported in a timely fashion and allowable harvests are exceeded. Reporting provides a method to estimate mortality, which is then used to assess the stock conditions. Stock assessment results based on data with a high degree of uncertainty are not as useful for management purposes.

Alternatives 2 and 3, and Preferred Alternative 4 could provide positive effects to the stocks by increasing the frequency and mode of reporting, which can reduce the likelihood of exceeding the ACLs, thus reducing the likelihood of overfishing. Overages of the ACLs have an adverse effect to the stock and stock conditions if not otherwise accounted for in the next year with a reduction of the ACLs by the amount of the overage. However, especially for species under a rebuilding plan simply lowering the ACL the following year may not offset the adverse impacts of the overage. For example, the reduction in spawning potential of the stock due to exceeding the ACL is not fully compensated by an equivalent harvest reduction in the next fishing year. For greater amberjack and gray triggerfish, any overages are deducted from the allowable harvest the following fishing year. Similarly, if Gulf of Mexico gag or red grouper

are in a rebuilding plan, overages are deducted from the allowable harvest the following fishing year. In these instances, the adverse effects may be mitigated. When red snapper are in the overfished status, any harvest overage will be reduced from the allowable harvest unless best scientific information available determines that an overage adjustment is not necessary.

For overfished stocks, overages may prevent achieving the rebuilding target and optimum yield.

Alternative 2 would give the option for reports to be submitted weekly or at intervals shorter than a week. Alternative 3 would require daily electronic reporting and Preferred Alternative 4 would require electronic reporting at the end of each trip prior to arriving at the dock. All of the action alternatives would require that data be submitted to the Southeast Fisheries Science Center (SEFSC) more frequently than the current requirements and electronically resulting in positive indirect biological effects. Preferred Alternative 4 would require electronic reporting for each trip, prior to arriving at the dock. Preferred Alternative 4 also provides the opportunity for dock-side validation of actual catch which would reduce uncertainty in harvest data, and provide for positive benefits. Alternatives 1-3 do not provide the opportunity for dock-side validation of harvest, and therefore would not provide as great of benefit to harvest data as Preferred Alternative 4. Preferred Alternative 4 would provide an increased frequency of reporting from the all the Alternatives (1-3), and would not be expected to result in any adverse effects to the physical, biological, or ecological environments.

Alternative 1 (No Action), Alternative 2, Alternative 3, and Preferred Alternative 4 are unlikely to result in any direct adverse impacts on protected species such as endangered or threatened whales, sea turtles, corals, or HAPCs. All alternatives including Preferred Alternative 4 would modify reporting requirements for the charter sector, but overall this would not change current fishing practices. Total harvest would still be restrained by the commercial and recreational ACLs, and accountability measures (AMs) would still be used to help prevent overfishing. It is unlikely any alternative would result in increased or modified fishing effort in the reef fish or coastal migratory pelagic fisheries; therefore, no adverse biological impacts on protected species is expected from this action.

4.1.2 Direct and Indirect Effects on the Economic Environment

Alternative 1 (no action) would maintain current reporting requirements for federally permitted charter vessels and would therefore not affect the harvest and customary uses of Gulf reef fish or coastal migratory pelagics. Consequently, Alternative 1 would not be expected to result in direct economic effects. However, Alternative 1 would continue to allow for a time lag in the collection of landings information. If the time lags result in delaying needed management measures, e.g., a timely closure of a fishery, and adversely affect fish stocks, adverse indirect economic effects would be expected to result. Additionally, the absence of logbook trip reports limits the information on which to base other management decisions (beyond the timing of quota closure) and restricts the management options available for implementation. These limitations may have economic implications for both this component of the recreational sector, the recreational sector as a whole, and the commercial sector. For example, better data would enable more accurate assessments of harvests, effort, and operational costs. This would support improved monitoring of quotas (as previously discussed), better ensuring overruns not occur, as

well as improved forecasts of the expected biological, economic, and social effects of current and proposed regulations. As part of the larger recreational sector, circumstances that limit understanding of the performance of charter vessels by extension affects understanding of the performance of the recreational sector as a whole and the expected economic effects of proposed management measures. For example, a stock assessment that is adversely affected by poor harvest or effort data from charter vessels will have harvest and management implications on all users within the recreational sector as well as the commercial sector.

Alternatives 2, 3 and Preferred Alternative 4 would require federally permitted charter vessels to submit fishing records via electronic reporting. The fishing records would be electronically submitted using NMFS approved hardware/software. Alternatives 2 and 3 would require weekly and daily submissions, respectively. Preferred Alternative 4 would require the submission of fishing records for each trip prior to returning to the docks. Because a majority of charter trips are half day trips, Preferred Alternative 4 could require several submissions in a single day. Therefore, in terms of time necessary to complete the requests and associated costs, a ranking from least to most onerous would be Alternative 2, 3, and Preferred Alternative 4. The costs expected to be borne by charter operators to acquire, operate, update and maintain the approved hardware and software are not known at this time because a list of approved hardware and software has yet to be determined. Similarly, costs expected to be borne by the Agency to administer these data collection efforts cannot be determined. If it is assumed that shortening the reporting frequency from weekly to daily reporting (or reporting for each trip) would result in marked improvements in the data collected and that these improvements would result in more effective management, then **Preferred Alternative 4** would be expected to result in the greatest economic benefits, followed by Alternative 3 then Alternative 2. However, the net economic effects expected to result from these alternatives cannot be determined at this time because the potential benefits that would be expected to result from the proposed changes and the costs of the hardware and software that would be approved by NMFS cannot be estimated at this time. Based on preliminary estimates provided by the technical sub-committee (Appendix F), approximate costs that may be incurred by NMFS and by industry are discussed here to provide preliminary reference points and support the Council's decision making. It is noted that the costs of the program will only be known once additional information relative to the contours of the electronic data collection program and the modalities of implementation of the program is available. Costs expected to be associated with the design, establishment, and administration of an electronic data collection program would be incurred either by the government (NMFS) or by for-hire operators. These costs would include start-up expenditures at the inception of the program as well as reoccurring costs. Initial software development expenditures and salaries and benefits for enforcement agents are examples of start-up and reoccurring expenditures, respectively. To approximate potential costs of the electronic data collection that will be developed and implemented, the technical sub-committee considered a program that would not require vessel monitoring systems (VMS) and an alternative program that would require VMS. Because this action does not require a data collection program with location information typically provided by VMS, cost estimates provided here exclude VMS-related costs. Costs related to VMS are discussed in Action 3. Preliminary cost estimates for a program that would not require VMS are summarized in Table 4.1.2.1. Because the Southeast Regional Office would be responsible for data collection programs in the Gulf of Mexico and in the South Atlantic, some of the costs provided here may be duplicated in the South Atlantic amendment

addressing the electronic data collection program in that region. For example, expenses for software development and hardware and database infrastructure would only be incurred once by NMFS. Expenses associated with the issuance of certified letters, salaries and benefits for filed samplers and, travel, training and equipment for field samplers are prorated based on the number of for-hire vessels operating in the Gulf. Based on estimates provided in Section 3.3, the number of for-hire vessels with a valid or renewable reef fish or CMP permit is estimated at 1,375. Therefore, costs that would be incurred on a per vessel basis are multiplied by 1,375 to obtain total costs. Detailed per vessel costs are provided in Appendix F. Overall, start-up and reoccurring costs for a Gulf electronic data collection program without vessel monitoring systems are estimated at approximately \$3.1 million. This very rough estimate does not account for calibration and comparative testing (with the existing data collection program) that would be required. Cost figures presented in this section are only included to provide an order of magnitude for costs expected to be incurred by the government and industry. As NMFS and the Council refine the contours of the data collection program to implement, it is likely that these rough estimates would be revised.

Table 4.1.2.1. Estimated start-up and reoccurring costs for an electronic data collection program

without vessel monitoring systems in the Gulf of Mexico.

| Activity | Cost Type | Estimated Expenses |
|---|--|---------------------------|
| Software Development | Start-up (gov't) | \$100,000 |
| Hardware/database infrastructure | Start-up (gov't) | \$25,000 |
| Stakeholder Outreach Workshops | Start-up (gov't) | \$30,000 |
| Certified Letters | Start-up, with period reoccurring compliance letters (gov't) | \$8,250 |
| Hardware/database maintenance | Reoccurring (gov't) | \$20,000 |
| Database manager(s) and administration | Reoccurring (gov't) | \$150,000 |
| Field Samplers – Salaries, Benefits, and Overhead | Reoccurring (gov't) | \$1,792,000 |
| Data Analyst – Salary and Benefits | Reoccurring (gov't) | \$107,500 |
| Training, Travel, and Equipment for Field Samplers | Reoccurring (gov't) | \$82,500 |
| Enforcement and Compliance Monitoring – Enforcement officer salaries, benefits, and overhead. | Reoccurring (gov't) | \$800,000 |
| | Start-up | \$163,250 |
| Total Costs (w/o VMS) | Reoccurring | \$2,952,000 |
| | TOTAL | \$3,115,250 |

Source: Data based on the technical sub-committee report (Appendix F)

4.1.3 Direct and Indirect Effects on the Social Environment

The effects that may result from this action would pertain to three changes: 1) vessels being required to submit trip reports for the first time; 2) submitting trip reports electronically, and 3) the frequency for submitting trip reports.

Under **Alternative 1** (No Action), any federally permitted charter/headboat vessel owner or operator in the Gulf is required to maintain a fishing record for each trip and submit the completed fishing records no later than seven days after the end of each week (Sunday), if selected by the SRD. Although only 69 vessels in the Gulf are currently selected and required to report (headboats selected to participate in the SRHS), the requirement for the remaining vessels to report if selected is part of the existing regulations. Additional effects would not be expected from **Alternative 1** and 10% of these vessels would continue to be randomly surveyed on a weekly basis through MRIP's For-Hire Survey. However, it is likely that these charter vessels would continue to remain unselected to submit trip reports to the SRD, which include landings information, thereby forgoing the benefits of improved fishery-dependent data.

Alternative 2, Alternative 3, and Preferred Alternative 4 would require all charter vessels to submit fishing records to the SRD. Because the requirement to report in the SRHS if selected already exists, these alternatives essentially differ from Alternative 1 by requiring all vessels to be selected to report. Also compared with Alternative 1, which requires selected vessels to submit reports on paper forms (SRHS), Alternatives 2, 3, and Preferred Alternative 4 would require the reports be submitted electronically. Under Alternative 1, only a sample of charter vessels (10% weekly) would be selected to report weekly, through the MRIP For-Hire Survey.

The requirement for electronic reporting under **Alternatives 2**, **3**, and **Preferred Alternative 4** would be expected to affect charter vessel owners and operators who do not already use computer systems in their businesses more than other charter operators. It is possible that some charter operators may not be familiar with computers or the internet, and some may be more comfortable with paper fishing records. There may also be an increased risk of errors for electronic reporting by fishermen who typically do not use computers and internet in their businesses. However, charter vessel owners and operators are likely to be familiar with computer systems, as these are businesses that must book passengers. Many charter operators advertise on the internet or offer online bookings through their websites. It is also highly likely that a majority of charter vessel owners currently have a smartphone and are capable of using applications including those for weather reports and internet access. Thus, it is possible that some negative short-term effects could result from **Alternatives 2**, **3**, and **Preferred Alternative 4** compared with **Alternative 1**, for those charter operators who must learn to use the required electronic format, at the same time they are beginning to submit trip reports for the first time.

Some direct negative effects of charter vessel reporting requirements would likely be associated with the added time and burden for operators to learn the reporting requirements and to become competent in use of the associated equipment. These added burdens would increase as the frequency of reporting increases, such that any added time and burden would be greatest under **Preferred Alternative 4** (reporting each trip before arrival at the dock), and less under **Alternative 2** (weekly reporting). These effects would be expected to be short-term, and last

until charter operators become familiar with the reporting procedure and equipment, although the time to complete the reports would continue. These short-term negative effects are expected to be minimal, and would be mitigated through long-term benefits from increased accuracy of landings information.

Further, increased frequency in reporting under Alternatives 2, 3, and Preferred Alternative 4 may have some direct negative effects on charter vessel owners and captains because businesses may need to assign additional time or staff to submit reports. The daily reporting requirement under Alternative 3 and the pre-landing daily reporting requirement under Preferred Alternative 4 would be more burdensome for charter vessels than the weekly reporting under Alternative 2. In terms of additional time and staff requirements, Alternative 1 would be the least burdensome; currently, 10% of charter vessels are randomly selected to report if called (MRIP For-Hire Survey), although these vessels could be selected by the SRD to report, in which case fishing records must be submitted 7 days after the end of each week (Sunday). Compared with Alternative 1, the burden of reporting would be greater under Alternative 2 (Tuesday, or 2 days), which would require all charter vessels to report, and greater still under Alternative 3 and Preferred Alternative 4, as the frequency of reporting increases. However, the increased burden of a higher reporting frequency, such as under Alternative 3 or Preferred Alternative 4, is expected to be primarily short-term, while operators familiarize themselves with the procedure and equipment, although the time needed to complete the reports would continue. Greater long-term benefits would be expected from more timely reporting under Alternative 3 or Preferred Alternative 4. Because Preferred Alternative 4 would require trip reports to be submitted prior to landing, this alternative would have the greatest short-term direct effects in terms of operators learning the procedure and equipment, but would also result in the greatest long-term benefits, as landings data are reported virtually in real time, and it would be possible to monitor and validate reporting compliance through random dockside inspections. Preferred Alternative 4 would be expected to result in greater direct effects on for-hire operators making more than one trip a day, as they would be required to make a report for each trip prior to landing.

Requiring all charter vessels to report electronically and more frequently (Alternative 3 and **Preferred Alternative 4**) is expected to result in broad long-term social benefits. Many charter operators, along with others in the recreational sector, support improving the collection of landings data for more timely quota monitoring. Further, requiring all charter vessels to report will result in broad social benefits by increasing the sample size of landings reports compared with MRIP's estimates. The lag time in data collection and analysis of recreational landings is currently inadequate for monitoring quotas in-season. Assuming compliance from fishery participants, more frequent and timely reporting would be expected to contribute to improved quota monitoring in the long-term, with which it will be less likely that an ACL would be exceeded, triggering any associated AMs which would negatively impact charter businesses and associated communities. Triggering AMs can have significant direct and indirect effects on charter operators and fishermen because they usually impose some restriction on harvest, during either the current or the following season. Early closures and quota overage adjustments (which in turn increase the likelihood of an earlier closure in the following year) are directly linked to the NMFS quota monitoring system and limitations in the agency's ability to close the harvest of a species quickly enough to avoid triggering AMs. Although the negative effects of AMs are

usually short-term, they may at times induce other indirect effects through changes in fishing behavior or business operations that could have long-term social effects. Some of those effects are similar to other thresholds being met and may involve switching to other species or discontinuing fishing altogether. Although the proposed reporting requirements may not prevent AMs from being triggered, these requirements would be expected to provide additional information to better forecast in-season closures and to minimize the effects of post-season AMs. Under **Alternative 1** (No Action), there would be no improvements to landings monitoring as a result of more timely reporting, and it would be more likely that AMs, such as in-season closures, would be triggered and continue to impact charter businesses, communities, and customers.

4.1.4 Direct and Indirect Effects on the Administrative Environment

Alternative 1 (No Action) would result in no increase in administrative burden on NMFS as this is the status quo of how data are currently collected. Alternatives 2, 3, and Preferred Alternative 4 would increase the administrative burden on NMFS, and to reef fish and CMP federally permitted charter vessels as they would be required to submit electronic records to the SRD. There is currently no application to accept this information, so a system would also have to be developed. In order of administrative impacts to the agency, Preferred Alternative 4 would have the highest administrative impact with trip level reporting, then Alternative 3 with daily reporting and Alternative 2 with mandatory weekly reporting. Alternative 1 (status quo) would result in no increase in administrative burden on vessel owners.

Currently, as a condition of the permit, fishermen are required to meet the reporting requirements associated with their permit (CFR 50 Section 622.5). With electronic reporting, it would be much easier to track those who are not meeting the reporting requirements of their permit and may result in a permit being invalid and the permit holder not being able to legally harvest or possess those species. **Alternatives 2** and **3**, and **Preferred Alternative 4** would be expected to provide positive benefits to law enforcement and maintaining reporting compliance.

4.2 Action 2: Modify Frequency and Mechanism of Data Reporting for Headboats

4.2.1 Direct and Indirect Effects on the Physical/Biological/Ecological Environment

The headboat vessel reporting requirement is an administrative process for providing a means of collecting data from the industry, and does not directly affect the physical or biological environments, but does have an indirect effect. **Alternative 1** (No Action) requires the owner or operator of a headboat vessel for which a charter/headboat reef fish and Atlantic CMP permit has been issued, or whose vessel fishes for or lands such reef fish or CMP fish species in or from state waters adjoining the applicable Gulf or Gulf exclusive economic zone (EEZ), and who is selected to report by the Science and Research Director (SRD) must maintain a fishing record

for each trip, or a portion of such trips as specified by the SRD, on forms provided by the SRD. Completed fishing records must be submitted to the SRD weekly, postmarked no later than 7 days after the end of each week (Sunday). Information to be reported is indicated on the form and its accompanying instructions. The Headboat Electronic Reporting Amendment (GMFMC 2013) specified that all headboats must submit an electronic fishing record for all fish harvested on each trip, via the Southeast Region Headboat Survey (SRHS), if selected by the SRD. Electronic fishing records must be submitted at weekly intervals (or intervals shorter than a week if notified by the SRD) by 11:59 p.m. local time, the Sunday following a reporting week. If no fishing activity occurred during a reporting week, an electronic report stating so must be submitted for that reporting week by 11:59 p.m. local time, the Sunday following a reporting week. The action alternatives would modify the frequency of reporting and would require that any vessel operating under as a headboat with a charter vessel/headboat permit must report electronically, not just those headboat selected by the SRD. Alternative 1 (No Action) could result in adverse impacts if landings are not reported in a timely fashion and allowable harvests are exceeded. Reporting provides a method to estimate mortality, which is then used to assess the stock conditions. Stock assessment results based on data with a high degree of uncertainty are not as useful for management purposes. Electronic reporting by all headboats including those not in the SRHS would reduce the likelihood of overages of the ACLs by providing a means for more timely reporting.

Alternatives 2 and 3, and Preferred Alternative 4 could provide positive effects to the stocks by increasing the frequency and mode of reporting, which can reduce the likelihood of exceeding the ACLs, thus reducing the likelihood of overfishing. Overages of the ACLs have an adverse effect to the stock and stock conditions if not otherwise accounted for in the next year with a reduction of the ACLs by the amount of the overage. However, especially for species under a rebuilding plan simply lowering the ACL the following year may not offset the adverse impacts of the overage. For example, the reduction in spawning potential of the stock due to exceeding the ACL is not fully compensated by an equivalent harvest reduction in the next fishing year. For greater amberjack and gray triggerfish, any overages are deducted from the allowable harvest the following fishing year. Similarly, if Gulf of Mexico gag or red grouper are in a rebuilding plan, overages are deducted from the allowable harvest the following fishing year. In these instances, the adverse effects may be mitigated. When red snapper are in the overfished status any harvest overage will be reduced from the allowable harvest, unless best scientific information available determines that an overage adjustment is not necessary.

For overfished stocks, overages may prevent achieving the rebuilding target and optimum yield.

Alternative 2 would give the option for reports to be submitted weekly or at intervals shorter than a week. Alternative 3 would require daily electronic reporting and Preferred Alternative 4 would require electronic reporting at the end of each trip prior to arriving at the dock. All of the action alternatives would require that data be submitted to the Southeast Fisheries Science Center (SEFSC) more frequently than the current requirements and electronically resulting in positive indirect biological effects. Preferred Alternative 4 would require electronic reporting for each trip, prior to arriving at the dock. Preferred Alternative 4 also provides the opportunity for dock-side validation of actual catch which would reduce uncertainty in harvest data, and provide for positive benefits. Alternatives 1-3 do not provide the opportunity for dock-side validation of harvest, and therefore would not provide as great of benefit to harvest data as Preferred Alternative 4. Preferred Alternative 4 would provide an

increased frequency of reporting from the all the **Alternatives** (1-3), and would not be expected to result in any adverse effects to the physical, biological, or ecological environments.

Alternative 1 (No Action), Alternative 2, Alternative 3, and Preferred Alternative 4 are unlikely to result in any direct adverse impacts on protected species such as endangered or threatened whales, sea turtles, corals, or HAPCs. All alternatives including Preferred Alternative 4 would modify reporting requirements for headboats, but overall this would not change current fishing practices. Total harvest would still be restrained by the commercial and recreational ACLs, and accountability measures (AMs) would still be used to help prevent overfishing. It is unlikely any alternative would result in increased or modified fishing effort in the reef fish or CMP fisheries; therefore, no adverse biological impacts on protected species would be expected from this action.

4.2.2 Direct and Indirect Effects on the Economic Environment

Alternative 1 would not affect the harvest and customary uses of Gulf reef fish or coastal migratory pelagics because it would maintain current reporting requirements for headboats. Therefore, Alternative 1 would not be expected to result in direct economic effects. However, Alternative 1 would continue to allow for a time lag in the collection of landings information. If the time lags result in delaying needed management measures, e.g., a timely closure of a fishery, and adversely affects the stock, adverse indirect economic effects would be expected to result.

Alternatives 2, 3, and **Preferred Alternative 4** would require all headboats to submit fishing records via electronic reporting at different times. The fishing records would be electronically submitted using NMFS approved hardware/software. Alternatives 2 and 3 would require weekly and daily submissions, respectively. **Preferred Alternative 4** would require the submission of fishing records for each trip prior to returning to the docks. Because most headboats predominantly run half day trips, Preferred Alternative 4 could require several submissions in a single day. Therefore, in terms of time necessary to complete the requests and associated costs to headboats, a ranking from least to most onerous would be Alternative 2, 3, and **Preferred Alternative 4**. The costs expected to be borne by headboat operators to acquire, operate, update, and maintain the approved hardware and software are not known at this time because a list of approved hardware and software has yet to be determined. However, headboat vessels in the Gulf of Mexico are already reporting data electronically. Therefore, it is assumed that at this time no additional hardware or software would be required. Although additional costs expected to be borne by the Agency to administer these data collection efforts cannot be determined, it is expected that administrative costs would increase as the volume of data collected increases. If it is assumed that shortening the reporting frequency from weekly to daily reporting (or reporting for each trip) would result in marked improvements in the data collected and that these improvements would result in more effective management, then Preferred Alternative 4 would be expected to result in the greatest economic benefits, followed by Alternative 3 then Alternative 2. Although the potential benefits that would be expected to result from the proposed changes are expected to outweigh the costs that would be incurred by the industry and NMFS, the net economic effects expected to result from these alternatives would only be quantifiable once additional information on the data collection program is available.

4.2.3 Direct and Indirect Effects on the Social Environment

This action would directly affect the 69 headboat operations that participate in the SRHS. Prior to 2013, headboats selected to report to the SRHS were required to submit paper forms monthly, on all trips taken. Since January 1, 2013, headboats have been required to submit trip reports electronically, and since March 5, 2014, the required frequency of submitting electronic fishing reports increased from monthly to a weekly basis. According to the final rule that increased the reporting frequency to a weekly basis, the time interval could be further increased to less than a week if requested by the SRD. Although that authority already exists under **Alternative 1** (No Action), it is likely that these headboats would continue to be required by the SRD to submit trip reports on a weekly basis, thereby forgoing the potential long-term benefits of more timely landings information from an increase in reporting frequency.

Additional effects would not be expected from retaining **Alternative 1**, for which headboat operators have seven days to submit their electronic report following the previous week's fishing trips. The effects of increasing the frequency of trip report submission on headboat operators would be similar to the expected effects on charter vessels, as described in Section 4.1.3, with the exception that headboats are already accustomed to maintaining trip reports and submitting the reports electronically. Increasing the frequency of reporting is likely to be less burdensome of a procedural change than learning to use the online system. In general, some negative effects would likely be associated with any added time and staff burden for headboat owners, operators, and crew to meet the increased frequency to submit reports. Comparing **Alternatives 2-4**, this burden would be less under **Alternative 2**, which provides more time to report, and greater under **Alternative 3** and **Preferred Alternative 4**, which would require the most frequent reporting.

Requiring all headboats to report more frequently (Alternative 3, and Preferred Alternative 4) is expected to result in broad social benefits by improving quota monitoring, as discussed in Section 4.1.3. Generally, headboat operators, along with many others in the recreational sector, support improving the collection of landings data for timelier quota monitoring. The lag time in data collection and analysis of recreational landings is currently inadequate for monitoring quotas in-season. Thus, the improvements to the recreational data set would benefit headboat operators and their passengers in constraining catches for species with in-season closures. Requiring headboats to submit a trip report electronically before arriving at the dock (Preferred Alternative 4) would be associated with positive direct effects by enabling trip validation using random dockside inspections, which is associated with an increase in compliance. However, this alternative would also correspond with the greatest short-term, direct negative effects, as the captain and crew of these large capacity vessels would need to complete the trip reports independent of dockside staff assistance, and submit the trip report using the NMFS-approved device while at sea.

4.2.4 Direct and Indirect Effects on the Administrative Environment

Alternative 1 (No Action) would result in no increase in administrative burden on NMFS as this is the status quo of how data are currently collected. Alternatives 2, 3, and Preferred Alternative 4 would increase the administrative burden on NMFS, and to reef fish and CMP federally permitted headboats as they would be required to submit electronic records to the SRD at a higher frequency. There is currently no application to accept this information, so a system would also have to be developed. In order of administrative impacts to the agency, Preferred Alternative 4 would have the highest administrative impact with trip level reporting, then Alternative 3 with daily reporting and Alternative 2 with mandatory weekly reporting. Alternative 1, the status quo alternative would result in no increase in administrative burden on vessel owners.

Currently, as a condition of the permit, fishermen are required to meet the reporting requirements associated with their permit (CFR 50 Section 622.5). With electronic reporting, it would be much easier to track those who are not meeting the reporting requirements of their permit and may result in a permit being invalid and the permit holder not being able to legally harvest or

| ossess those species. Alternatives 2 and 3 , and Preferred Alternative 4 would be expected to rovide positive effects to law enforcement and maintaining reporting compliance. | | | | |
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4.3 Action **3:** Modify Electronic Reporting Requirements to Require Vessel or Catch Location Reporting

4.3.1 Direct and Indirect Effects on the Physical/Biological/Ecological Environment

The requirement to report the location of area fished is an administrative process for providing a means of collecting data from the industry, and does not directly affect the biological or physical environment, but may have an indirect effect. It is expected that with more complete location information, managers will be able to make better decisions about future management.

Preferred Alternative 2 would require federally permitted for-hire vessels to have a NMFS-approved electronic device with a GPS chip and send/receive data capabilities. Assuming NMFS approves many electronic devices, this would cover many smartphones and tablet computers currently available. Software would need to be developed to produce an application that would work on these devices on several platforms. Costs could be minimized by using a system developed through ACCSP. **Preferred Alternative 2** and its **Sub-Alternatives a** and **b.** would not alter the manner in which the reef fish or CMP fishery is operated, and therefore would not be expected to result in any adverse impacts to the physical or biological environment. The **Preferred Alternatives** would be expected have positive benefits by improving the data used in stock assessments and management decision tools.

4.3.2 Direct and Indirect Effects on the Economic Environment

Alternative 1 would not affect the harvest and customary uses of Gulf reef fish or coastal migratory pelagics because it would maintain current reporting requirements for for-hire vessels and would not require for-hire vessel or catch location reporting. Therefore, Alternative 1 would not be expected to result in direct economic effects. However, Alternative 1 would continue to allow approximate landings location information. If Alternative 1 results in delaying needed management measures, e.g., a timely closure of a specific area to fishing, and adversely affects the stock, adverse indirect economic effects would be expected to result.

The sub-alternatives under **Preferred Alternative 2** would require federally permitted for-hire vessels to have a NMFS-approved electronic device with a GPS chip and send/receive data capabilities. Assuming NMFS approves a range of electronic devices, this would cover many smartphones and tablet computers currently available. Software would need to be developed to produce an application that would work on these devices on several platforms. In addition to the costs of the approved device (for vessels needing to purchase one), costs associated with **Preferred sub-alternatives a** and **b** would be those associated with the application development and recurring data transmission fees. Additional costs incurred by the agency to administer the data collection program must also be added to the costs expected to result from **Preferred sub-alternatives a** and **b**. **Excluding VMS-related costs, cost estimates for the electronic data collection program to be implemented are provided in Action 1.**

If it is determined that VMS units are required for the electronic data collection program to be implemented, additional costs would be incurred by the government and for-hire operators. These additional costs would range from the purchase and installation costs of the units to the annual service charges. Approximate additional costs that would be incurred are provided in Table 4.3.2.1 and are based on estimates provided in Appendix F. Total per vessel costs such as purchase and installation costs are computed based on per vessel costs multiplied by 1,277 vessels because out of the 1,375 charter vessels and 69 headboats in the Gulf, 167 vessels with a commercial reef fish and a for-hire permit already possess VMS units. Per vessel costs are detailed in Appendix F. Overall, VMS-related costs incurred by the government and for-hire operators are estimated to range from \$4.5 million to \$6.9 million. Therefore, total costs of an electronic data collection program with VMS are expected to range from \$7.60 million to \$10.02 million, approximately.

Table 4.3.2.1: Estimated VMS costs for an electronic data collection program in the Gulf of Mexico.

| | | \$2,937,100 (low estimate) | | |
|----------------------------|------------------------------|-----------------------------|--|--|
| VMS units (if required) | Start-up (gov't or industry) | \$4,852,600 (high estimate) | | |
| | | | | |
| VMS installation | Start un (industry) | \$255,400 (low estimate) | | |
| VIVIS HIStaliation | Start-up (industry) | \$766,200 (high estimate) | | |
| VMS personnel | Reoccurring (gov't) | \$318,000 | | |
| VMS annual service charges | Reoccurring (industry) | \$919,440 | | |
| VMS unit software | Reoccurring (gov't) | \$50,000 | | |
| Total Costs | | \$4,479,940 | | |
| Total Costs | | \$6,906,240 | | |

Source: Data based on the technical sub-committee report (Appendix F)

If the reporting of for-hire vessels' catch location results in improvements in the data collected and that these improvements result in more effective management, then **Preferred Alternative 2** – **sub-alternatives a** and **b** would be expected to result in economic benefits. Although the net economic effects expected to result from these sub-alternatives would be expected to be positive, they cannot be quantified at this time because the potential benefits that would be expected to result from the proposed changes are unknown. In addition, cost estimates for the data collection program, including the costs of the hardware and software that would be approved by NMFS are approximations. It is noted that cost figures presented in this section are only included to provide an order of magnitude for costs expected to be incurred by the government and industry. As NMFS and the Council refine the contours of the data collection program to implement, it is likely that these rough estimates would be revised.

4.3.3 Direct and Indirect Effects on the Social Environment

The effects from this action would vary based on how the preferred alternative differs from the current reporting of catch location used by each of three groups of vessels: 1) charter vessels participating in the MRIP For-Hire Survey that are not dual-permitted; 2) headboats participating

in the SRHS that are not dual-permitted; and 3) dual-permitted vessels (possess a commercial reef fish permit and a Gulf charter/headboat permit). By possessing a commercial reef fish permit, dual-permitted vessels already have VMS units that record position data.

Under **Alternative 1**, selected charter vessels report whether they fished primarily in inshore, state, or federal waters, while headboats in the SRHS are required to report latitude and longitude of area fished. Dual-permitted vessels engaged in for-hire fishing report their catch location respective to their status as charter vessels (randomly selected weekly) or headboats (required to report to SRHS). Additional effects would not be expected from **Alternative 1**, as no changes would be made to how for-hire vessel operators report their catch location.

Preferred Alternative 2 would require headboats (Preferred Option 2a) and charter vessels (Preferred Option 2b) to use an electronic device that records the vessel's location. Under Alternative 1, both charter vessels and headboats self-report with less specific location information (charter vessels) or more specific location information (headboats). Although it is not clear if charter vessels and headboats would continue to be required to self-report the fishing location after electronic catch location is implemented, Preferred Alternative 2 would provide more accurate vessel location information that would not require self-reporting of fishing location.

In general, the expected social effects would likely be associated with a financial burden on forhire operators and businesses to purchase and maintain any required equipment. An analysis of the expected economic effects is provided in Section 4.3.2 (economic effects). As noted in Section 3.4, dual-permitted vessels are already required to have VMS. Thus, for charter vessels or headboats that also hold a commercial reef fish permit, no additional burden would be expected from a requirement to purchase VMS equipment under **Preferred Options 2a** and **2b**. Charter vessels and headboats that are not dual-permitted are unlikely to have an electronic location reporting device installed that would satisfy the new requirements of **Preferred Alternative 2**, and would thus be subject to this financial burden.

There are some potential benefits to the fleet and other long-term broad social benefits from the location reporting requirements under **Preferred Alternative 2**. Recording location information on tablets, computers, phones, or VMS equipment would be expected to improve data collection, particularly for information that could be used to validate reporting data and to improve bycatch and discard estimates in stock assessments. On the other hand, there may be opposition to the required use of location reporting devices by some for-hire operators who have expressed concern with how these data may be used and who would have access to the location data. Further, it is not certain that location data would be incorporated into improving fishery information beyond the required trip reporting. The potential benefits from use of location reporting data may not be realized, in which case, the financial burden to purchase and maintain the equipment would not be mitigated by long-term benefits to the fleet.

Reporting location information under **Preferred Alternative 2** would also potentially improve data collection on fishing behavior and important fishing grounds. For example, effects on forhire vessels from a potential marine protected area could be clarified and quantified if data are available on the exact locations and time for-hire vessels spent in a particular area. VMS data

are currently being used to understand how potential closed areas would impact the rock shrimp fishery in the South Atlantic, with accurate and verifiable information on rock shrimp fishing grounds to improve analysis of potential impacts. Nevertheless, the expected indirect benefits to the fleet and to the public would be somewhat reduced by any negative direct effects from the additional short-term and long-term costs to purchase and maintain equipment necessary to meet location reporting requirements under **Preferred Alternative 2**.

4.3.4 Direct and Indirect Effects on the Administrative Environment

The requirement to report the location of area fished is an administrative process for providing a means of collecting data from the industry, and does not directly affect the physical or biological environments, but may have indirect effects. It is expected that with more complete location information, managers will be able to make better decisions about future management.

Preferred Alternative 2 would require charter/headboat federally permitted vessels to have a NMFS-approved electronic device with a GPS chip and send/receive data capabilities. Assuming NMFS approves many electronic devices, this would cover many smartphones and tablet computers currently available. Software would need to be developed to produce an application that would work on these devices on several platforms. **Preferred Alternative 2** and its **Sub-Alternatives a** and **b** would result in the greater administrative burden than Alternative 1.

4.4 Cumulative Effects Analysis

As directed by the National Environmental Policy Act (NEPA), federal agencies are mandated to assess not only the indirect and direct impacts, but the cumulative impacts of proposed actions as well. NEPA defines a cumulative impact as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time" (40 C.F.R. 1508.7). Cumulative effects can either be additive or synergistic. A synergistic effect is when the combined effects are greater than the sum of the individual effects.

4.4.1 Cumulative Biological Impacts

1. Identify the significant cumulative effects issues associated with the proposed action and define the assessment goals.

The Center for Environmental Quality cumulative effects guidance states that this step is done through three activities. The three activities and the location in the document are as follows:

I. The direct and indirect effects of the proposed actions (Section 4);

- II. Which resources, ecosystems, and human communities are affected (Section 3); and
- III. Which effects are important from a cumulative effects perspective (information revealed in this cumulative Effects Analysis (CEA)).

2. Establish the geographic scope of the analysis.

For reef fish species the immediate impact area would be the federal 200-mile limit of the Gulf of Mexico (Gulf) from Florida to Texas. The extent of boundaries also would depend upon the degree of fish immigration/emigration and larval transport, whichever has the greatest geographical range. The ranges of affected species and the essential fish habitat designation and requirements for species affected by this amendment are described in Sections 3.1 and 3.2. For the CMP species the immediate impact area reviewed in this amendment only includes the Gulf.

3. Establish the timeframe for the analysis.

NMFS has collected annual commercial landings data since the early 1950s, recreational harvest data since 1979, and in 1984 initiated a dockside interview program to collect additional data on commercial harvest. These landings data have been used to support various fishery management regimes in Gulf and South Atlantic fisheries. Landings data will continue to be collected for each federally-managed species, and that data will continue to be used to inform current and future fishery management decisions into the foreseeable future.

4. Identify the other actions affecting the resources, ecosystems, and human communities of concern (the cumulative effects to the human communities are discussed in Section 4).

Listed are other past, present, and reasonably foreseeable actions occurring in the Gulf region. These actions, when added to the proposed management measures, may result in cumulative effects on the biophysical environment.

I. Fishery-related actions affecting federally-managed species:

A. Past

The reader is referred to Sections 1.3.1 and 1.3.2 Gulf of Mexico Fishery Management Council's (Gulf Council) History of Management for past regulatory activity for reef fish and coastal migratory pelagic (CMP) species being impacted by this amendment. These include data reporting requirements for federally permitted vessels.

B. Present

The Gulf Council recently implemented annual catch limits (ACLs) and accountability measures (AMs) to prevent and correct ACL overages for all federally-managed species. Improvements in vessel reporting requirements are currently needed to improve in-season monitoring of the newly established ACLs, and to facilitate the expeditious implementation of AMs for federally-

managed species when needed. More effective in-season monitoring efforts for, Gulf reef fish, and CMP species are likely to reduce the risk of future overfishing in those fisheries and foster sustainable fishing practices.

C. Reasonably Foreseeable Future

Though several amendments to the Gulf Council's fishery management plans (FMPs) are under development or review, none are likely to contribute to or reduce the cumulative impacts of actions contained in this generic vessel reporting amendment because none of the actions would affect vessel reporting requirements.

II. Non-Council and other non-fishery related actions, including natural events affecting federally-managed species.

In terms of natural disturbances, it is difficult to determine the effect of non-Council and non-fishery related actions on stocks of Gulf Council's federally-managed fish species. Annual variability in natural conditions such as water temperature, currents, food availability, predator abundance, etc. can affect the abundance of young fish, which survive the egg and larval stages each year to become juveniles (i.e., recruitment).

Furthermore, natural factors such as storms, red tide, cold water upwelling, etc. can affect the survival of juvenile and adult fish, shrimp, crabs, and lobster; however, it is very difficult to quantify the magnitude of mortality these factors may have on a stock. Alteration of preferred habitats for commercially important southeastern marine species could affect survival at any stage in their life cycles. However, estimates of the abundance of marine species, which utilize any number of preferred habitats as well as determining the impact habitat alteration may have on these species, are difficult to ascertain.

The Gulf ecosystem include many species, some of which occupy the same habitat at the same time. Therefore, many fish species are likely to be caught and suffer some mortality when regulated since they will be incidentally caught when fishermen target other co-occurring species. Other natural events such as spawning seasons, and aggregations of fish in spawning condition can make some species especially vulnerable to targeted fishing pressure.

How global climate changes will affect managed species and the associated ecosystem is unclear. Climate change can impact marine ecosystems through ocean warming by increased thermal stratification, reduced upwelling, sea level rise, increases in wave height and frequency, loss of sea ice, and increased risk of disease in marine biota. Decreases in surface ocean pH due to absorption of anthropogenic carbon dioxide emissions may impact a wide range of organisms and ecosystems, particularly organisms that absorb calcium from surface waters, such as corals and crustaceans (IPCC 2014, and references therein).

The Deepwater Horizon MC252 oil spill event, which occurred in the Gulf on April 20, 2010, did not impact fisheries operating the Atlantic. Oil from the spill site has not been detected in the Atlantic region, and did not likely to pose a threat to the species addressed in this

amendment. The effects of Deepwater Horizon MC252 in the Gulf of Mexico is discussed in Section 3.1.1.3.

Improvements to vessel reporting requirements and the vessel permitting system for federally-permitted vessels in the Gulf and Atlantic regions are not likely to result in significant biological impacts on federally managed fish stocks managed in the southeast. However, more efficient vessel reporting would facilitate improved in-season monitoring of ACLs, which could help prevent future overfishing.

5. Characterize the resources, ecosystems, and human communities identified in scoping in terms of their response to change and capacity to withstand stress.

The species most likely to be impacted by actions in this vessel reporting amendment are federally —managed fish species in the Gulf reef fish and Atlantic CMP Species. A description of the southeast marine ecosystem and the affected species found therein is included in Section 3.1 of this document. In summary, implementing a more rigorous vessel reporting regime is likely to benefit the southeast marine ecosystem by facilitating timely corrective actions that would prevent overfishing from occurring, which is likely to promote healthy predator-prey relationships, balanced sex ratios for spawning fish populations, and prevent fishery-related habitat degradation.

A description of the communities identified through scoping for this amendment and their ability to adapt to and withstand stress resulting from the cumulative impacts of this and other fishery management actions are discussed in Section 3.4 of this document. In the long-term, actions in this amendment and others mentioned in this CEA are likely to benefit the affected communities by promoting sustainable harvest levels, which would support steady market conditions and allow fishermen who are heavily vested in federal fisheries to continue fishing into the future.

6. Characterize the stresses affecting these resources, ecosystems, and human communities and their relation to regulatory thresholds.

Issues such as climate change, the regulatory environment, manmade and natural disasters, and economic factors are all considered stressors that affect fishing resources, ecosystems, and the communities which rely on them. Global climate changes could have significant effects on Atlantic fisheries. However, the extent of these effects is not known at this time. Possible impacts include temperature changes in coastal and marine ecosystems that can influence organism metabolism and alter ecological processes such as productivity and species interactions; changes in precipitation patterns and a rise in sea level which could change the water balance of coastal ecosystems; altering patterns of wind and water circulation in the ocean environment; and influencing the productivity of critical coastal ecosystems such as wetlands, estuaries, and coral reefs (IPCC 2014; Kennedy et al. 2002).

The Gulf fisheries are heavily regulated, which impacts the human communities. The social and cultural environment is described in Section 3.4. Cumulative impacts on the socioeconomic environment are included in Section 4 of this CEA. Man-made disasters such as oil spills, and non-point source pollution are always potential stressors on the natural environment. As long as humans are utilizing resources and conducting activities in and around the areas where federal

fisheries are prosecuted, there exists a risk that some unintended harm to the resources fishery participants rely on could occur.

7. Define a baseline condition for the resources, ecosystems, and human communities.

The purpose of defining a baseline condition for the resource, ecosystems, and human communities in the area of the proposed action is to establish a point of reference for evaluating the extent and significance of expected cumulative effects. The Southeast Data, Assessment, and Review (SEDAR) assessments show trends in biomass, fishing mortality, fish weight, and fish length going back to the earliest periods of data collection. All species assessed through the SEDAR process and their assessment reports are incorporated by reference and may be found online at: http://www.sefsc.noaa.gov/sedar/. The baseline condition of the species and habitat affected by this amendment is contained in Section 3.1 and Section 3.2 of this document. The baseline condition of the communities most impacted by this amendment is contained in Section 3.4 of this document.

8. Identify the important cause-and-effect relationships between human activities and resources, ecosystems, and human communities.

Cause-and-effect relationships between fishery management regulations and resources, ecosystems, and human communities are discussed in the respective histories of management for the Gulf of Mexico in Sections 1.3 of this document.

9. Determine the magnitude and significance of cumulative effects.

Proposed management actions, as summarized in Section 2 of this document, would designate a single vessel permit for all vessels wishing to purchase federally-managed fish species, establish an electronic (except when catastrophic conditions are present) weekly reporting system for vessels to report landings information, and require the submission of "no purchase" forms in order to maintain their vessel permit. These management measures are intended to increase efficiency in the vessel permitting system as well as increase the frequency and accuracy of vessel reported data. The number of fishery-specific vessel permits would be significantly reduced and the process by which vessels would obtain and report landings would be streamlined. Building efficiency into the vessel permitting and reporting system is likely to result in improved monitoring efforts, which would result in long-term benefits to federally-managed marine species in the southeast region.

Requiring vessels to report landings on a trip-level, daily, or weekly basis would improve inseason estimations of when and if ACLs will be met, and would improve the timeliness of implementation of AMs designed to prevent overfishing from occurring. Requiring vessels to remain current on purchase reports and non-purchase reports as a requirement to continue purchasing federally-managed species is anticipated to improve reporting compliance, which would also help improve in-season monitoring efforts. Combined, these actions are likely to improve overall management of federally-managed marine species in the Gulf and the Atlantic, and help prevent overfishing from occurring. Robust fish populations and sustainable fishing practices would promote long-term ecosystem health and resilience.

10. Modify or add alternatives to avoid, minimize, or mitigate significant cumulative effects.

The cumulative effects on the biophysical environment are expected to be positive. Avoidance, minimization, and mitigation are not applicable.

11. Monitor the cumulative effects of the selected alternative and adopt management.

The effects of the proposed action are, and will continue to be, monitored through collection of data by NMFS, states, stock assessments and stock assessment updates, life history studies, and other scientific observations.

CHAPTER 5. BYCATCH PRACTICABILITY ANALYSIS

Background/Overview

The Gulf of Mexico Fishery Management Council (Gulf Council) and South Atlantic Fishery Management Council (South Atlantic Council) are required by the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) §303(a) (11) to establish a standardized bycatch reporting methodology for federal fisheries and to identify and implement conservation and management measures to the extent practicable and in the following order: 1) minimize bycatch and 2) minimize the mortality of bycatch that cannot be avoided. The Magnuson-Stevens Act defines bycatch as "fish which are harvested in a fishery, but which are not sold or kept for personal use, and includes economic discards and regulatory discards. The definition does not include fish released alive under a recreational catch-and-release fishery management program" (Magnuson-Stevens Act §3(2)). Economic discards are fish that are discarded because they are undesirable to the harvester. This category of discards generally includes certain species, sizes, and/or sexes with low or no market value.

The National Marine Fisheries Service (NMFS) outlines at 50 CFR §600.350(d) (3) (i) ten factors that should be considered in determining whether a management measure minimizes by catch or by catch mortality to the extent practicable.

Guidance provided at 50 CFR 600.350(d) (3) identifies the following ten factors to consider in determining whether a management measure minimizes bycatch or bycatch mortality to the extent practicable:

- 1. Population effects for the bycatch species.
- 2. Ecological effects due to changes in the bycatch of that species (effects on other species in the ecosystem).
- 3. Changes in the bycatch of other species of fish and the resulting population and ecosystem effects.
- 4. Effects on marine mammals and birds.
- 5. Changes in fishing, processing, disposal, and marketing costs.
- 6. Changes in fishing practices and behavior of fishermen.
- 7. Changes in research, administration, and enforcement costs and management effectiveness.
- 8. Changes in the economic, social, or cultural value of fishing activities and non-consumptive uses of fishery resources.
- 9. Changes in the distribution of benefits and costs.
- 10. Social effects.

The Councils are encouraged to adhere to the precautionary approach outlined in Article 6.5 of the Food and Agriculture Organization of the United Nations Code of Conduct for Responsible Fisheries when uncertain about these factors.

Recreational Discard Rates

For species that have a sector specific recreational allocation, no change in the amount of discards is expected as a result of the increase in recreational reporting. By having vessels report on daily or weekly basis versus the current basis, managers have the ability to close the sector in timelier manner. A season closure could result in an increase in bycatch for those fishermen that continue to fish; however, the overall level of fishing mortality would be expected to decrease. For species that have not reached their ACL, no change in discards is expected as a result of the increase in frequency of vessel reporting as these species would most likely be retained. Those species that only have a stock ACL and do not have a recreational sector ACL would be expected have an increase in the amount of discards when the ACL is reached and the season is closed.

Commercial Discard Rates

The increase in frequency of for-hire vessel reporting will not change the amount of discards for commercially managed federal species.

Sea Turtles, Smalltooth Sawfish, and Other Protected Species Bycatch

No change in sea turtle, smalltooth sawfish, or other potential protected species bycatch is expected as a result of the increase in recreational vessel reporting. The proposed action is unlikely to alter fishing in ways that would jeopardize the continued existence of any endangered or threatened species under the jurisdiction of NMFS or result in the destruction or adverse modification of critical habitat. Protected resources are discussed in Sections 3.2.1.2 and 3.2.2.2 of the Environmental Assessment (EA); the biological impacts are discussed in Sections 4.1.1, 4.2.1, and 4.3.1.

Alternatives Being Considered to Minimize Bycatch

Reductions in dead discards can be accomplished either by reducing the number of fish discarded or reducing the release mortality rate of discards. To reduce the number of discards, management measures must limit fishing effort or change the selectivity of fishing gear in such a way that reduces the harvest of sub-legal fish. To reduce the discard mortality rate, ACLs must not be exceeded or fishing seasons closed.

Practicability Analysis

Criterion 1: Population effects for the bycatch species

This amendment discusses the harvest and reporting of reef fish and CMP species, and thus the net population effects on bycatch is undeterminable. However, season closures could potentially increase the amount of bycatch. A recreational season closure resulting from landings exceeding their ACL could result in an increase in the amount of bycatch should fishers continue fishing for co- occurring species. Bycatch due to management measures such as fixed closed seasons,

in-season closures, and ACL payback conditions could result in loss of yield. However, better data reporting that prevents ACL overages and allows for a species to be closed when an ACL is reached would be expected to reduce the overall level of fishing mortality.

Criterion 2: Ecological affects due to changes in the bycatch of managed species (on other species in the ecosystem)

Relationships among species in marine ecosystems are complex and poorly understood, making the nature and magnitude of ecological effects difficult to predict. Reductions in bycatch and fishing mortality would allow stocks to increase in abundance, resulting in increased competition for prey with other predators. Consequently, it is possible that forage species and competitor species could decrease in abundance in response to in season closures resulting from ACLs being reached or exceeded. However, actions in the amendment that allow for better data reporting to prevent ACL overages and allow for a species to be closed when an ACL is reached, would be expected to reduce the overall level of fishing mortality. Thus, positive ecological effects are expected from the actions proposed in this amendment.

Criterion 3: Changes in the bycatch of other species of fish and invertebrates and the resulting population and ecosystem effects

The biological environment would benefit by the increase in the frequency of vessel reporting. Reef fish and CMP populations, and overall habitat are expected to be affected in a positive manner through this amendment. The increase in the frequency of vessel reporting would assist managers in determining when species are approaching their ACL. By managing landings below their ACL, populations would be healthier and provide for a more stable environment.

Positive impacts to the biological environment include implementing accountability measures to prevent overfishing and maintain stocks at healthy levels in a consistent and structured manner across all fishery management plans.

Criterion 4: Effects on marine mammals and birds

No effects on marine mammals and birds are expected as a result of the increase in vessel reporting. The proposed action is unlikely to alter fishing in ways that would jeopardize the continued existence of any marine mammal and bird species under the jurisdiction of NMFS or result in the destruction or adverse modification of critical habitat. Protected resources are discussed in Sections 3.2.1.2 and 3.2.2.2 of the EA; the biological impacts are discussed in Sections 4.1.1, 4.2.1, and 4.3.1.

Criterion 5: Changes in fishing, processing, disposal, and marketing costs

Reporting landings more frequently may affect costs associated with fishing operations. Implementing in-season closures would have direct impacts to fishermen. Fishermen would incur losses in revenue due to season closures and would incur greater losses in consumer surplus resulting from a seasonal closure.

Criterion 6: Changes in fishing practices and behavior of fishermen

Seasonal closures could alter angler effort, at least initially, and may affect decisions about when and where to fish. Shifts or changes in fishing locations and seasons could have an effect on fishing behavior and practices that may potentially affect the bycatch.

Criterion 7: Changes in research, administration, and enforcement costs and management effectiveness

Establishing more timely reporting requirements for vessels would be expected to increase enforcement costs and management effectiveness. The increase in the frequency of reporting would be expected to result in more opportunities for non-compliance. This may result in an increasing the burden to law enforcement.

Criterion 8: Changes in the economic, social, or cultural value of fishing activities and nonconsumptive uses of fishery resources

Economic and social effects from this proposed amendment are discussed in Section 4.1.

Criterion 9: Changes in the distribution of benefits and costs

The actions in this amendment would increase costs associated with vessel reporting to the actual vessels themselves. As a result of increasing the amount of vessel reporting, the fishing industry should benefit by not exceeding its ACLs as often, which in turns leads to closed seasons and overage paybacks.

Criterion 10: Social effects

Social effects of additional vessel permit requirements would likely be associated with any added time and financial burden for vessels and seafood businesses to meet reporting requirements that will be part of the permit responsibilities.

Conclusions

Analysis of the ten bycatch practicability factors indicates there are potential negative impacts to bycatch and bycatch mortality. However, the benefits of reducing harvest, ending overfishing, and rebuilding the stocks is estimated to outweigh the benefits of further reducing discard mortality.

The Gulf Council will need to consider the practicability of implementing the bycatch minimization measures discussed above with respect to the overall objectives of the fishery management plans, the Magnuson-Stevens Act, and the Endangered Species Act.

Bycatch is currently considered to be reduced to the extent practicable in all fisheries subject to this amendment. However, increasing the frequency of reporting may impact bycatch. The precise impacts of these limits are currently unknown, but any potential increase in bycatch is believed to be outweighed by the benefits associated with enforcing ACLs. Better vessel reporting and the ability to prohibit harvest when the ACL is met is expected to decrease the overall level of fishing mortality for a species. For species that have not reached their ACL, no change in discards is expected as a result of the increase in frequency of vessel reporting as these species would most likely be retained. Further, bycatch levels and associated implications will continue to be monitored in the future and issues will be addressed based on new information.

CHAPTER 6: LIST OF PREPARERS AND AGENCIES CONSULTED

| Name | Expertise | Responsibility | Agency |
|----------------------|---|---|------------|
| John Froeschke | Fishery biologist/statistician | Co-Team Lead - Amendment Development | GMFMC |
| Rich Malinowski | Fishery biologist | Co-Team Lead - Amendment Development | NMFS/SERO |
| Randy Blankenship | Southeast Branch Chief, Atlantic Highly Migratory Species Management Division | Reviewer | NMFS/SERO |
| Jennifer Cudney | Fish Biologist, SE Branch, Atlantic Highly Migratory Species Management Division | Reviewer | NMFS/SERO |
| Steven Atran | Fishery Biologist | Reviewer | GMFMC |
| Kenneth Brennan | Coordinator, Southeast Region Headboat Survey | Biological analyses | NMFS/SEFSC |
| Assane Diagne | Economist | Economic analyses | GMFMC |
| Nicholas Farmer | Fishery Biologist | Reviewer | NMFS/SERO |
| David Gloekner | Chief, Fisheries Monitoring Branch | Reviewer | NMFS/SEFSC |
| Stephen Holiman | Economist | Economic analyses | NMFS/SERO |
| Ava Lasseter | Anthropologist | Social analyses | GMFMC |
| Mara Levy | Attorney Advisor | Legal review | NMFS/GC |
| Carrie Simmons | Deputy Executive Director | Reviewer | GMFMC |
| Carolyn Sramek | Supervisory Management & Program Analyst | Reviewer | NMFS/SERO |
| Christina Package | Anthropologist | Reviewer | NMFS/SERO |
| Noah Silverman | Natural Resource Management Specialist | National Environmental Policy Act Review | NMFS/SERO |

NMFS = National Marine Fisheries Service

GMFMC = Gulf of Mexico Fishery Management Council

SEFSC = Southeast Fisheries Science Center

SERO = Southeast Regional Office

GC = General Counsel

CHAPTER 7. REFERENCES

GMFMC. 2004. Final environmental impact statement for the generic essential fish habitat amendment to the following fishery management plans of the Gulf of Mexico: shrimp fishery of the Gulf of Mexico, red drum fishery of the Gulf of Mexico, reef fish fishery of the Gulf of Mexico, stone crab fishery of the Gulf of Mexico, coral and coral reef fishery of the Gulf of Mexico, spiny lobster fishery of the Gulf of Mexico and South Atlantic, coastal migratory pelagic resources of the Gulf of Mexico and South Atlantic. Gulf of Mexico Fishery Management Council. Tampa, Florida.

http://www.gulfcouncil.org/Beta/GMFMCWeb/downloads/Final%20EFH%20EIS.pdf

GMFMC. 2005. Final Amendment to the FMPs for: Reef Fish (Amendment 25) and Coastal Migratory Pelagics (Amendment 17). Gulf of Mexico Fishery Management Council, 2203 North Lois Avenue, Suite 1100, Tampa, FL 33607. Available at: http://www.gulfcouncil.org/fishery_management_plans/reef_fish_management_archives.php.

GMFMC. 2011. Final Generic Annual Catch Limits/Accountability Measures Amendment for the Gulf of Mexico Fishery Management Council's Red Drum, Reef Fish, Shrimp, Coral and Coral Reefs Fishery Management Plans. Gulf of Mexico Fishery Management Council, 2203 North Lois Avenue, Suite 1100, Tampa, FL 33607. Available at: http://www.gulfcouncil.org/fishery_management_plans/generic_management_amendments.php.

GMFMC. 2013b. Framework Action to the Fishery Management Plans for Reef Fish Resources of the Gulf of Mexico and Coastal Migratory Pelagic Resources of the Gulf of Mexico and South Atlantic Headboat Electronic Reporting Requirements. Gulf of Mexico Fishery Management Council, 2203 North Lois Avenue, Suite 1100, Tampa, FL 33607. Available at: http://www.gulfcouncil.org/docs/amendments/Draft%20Electronic%20Reporting%20for%20Headboats%206-18-13.pdf

GMFMC/SAFMC. 2011. Final Amendment 18 to the Fishery Management Plan for Coastal Migratory Pelagic Resources in the Gulf of Mexico and Atlantic Region. Gulf of Mexico Fishery Management Council, 2203 North Lois Avenue, Suite 1100, Tampa, FL 33607. Available at:

http://www.gulfcouncil.org/fishery_management_plans/migratory_pelagics_management.php.

Gore, R. H. 1992. The Gulf of Mexico: A treasury of resources in the American Mediterranean. Pineapple Press. Sarasota, Florida.

Impact Assessment Inc. 2005a. Identifying communities associated with the fishing industry along the Florida Gulf coast: Volume I, Cantonment to Yankeetown. Prepared for the U.S. Department of Commerce. Contract number WC133F-03-SE-0603 National Marine Fisheries Service, Southeast Regional Office. St. Petersburg, Florida. Available at: http://sero.nmfs.noaa.gov/sf/socialsci/socialsci.htm

Impact Assessment Inc. 2005b. Identifying communities associated with the fishing industry along the Florida Gulf coast: Volume II, Archer to Treasure Island. Prepared for the U.S. Department of Commerce. Contract number WC133F-03-SE-0603 National Marine Fisheries Service, Southeast Regional Office. St. Petersburg, Florida. Available at: http://sero.nmfs.noaa.gov/sf/socialsci/socialsci.htm

Impact Assessment Inc. 2005c. Identifying communities associated with the fishing industry along the Florida Gulf coast: Volume III, Apollo Beach to Royal Palm Hammock. Prepared for the U.S. Department of Commerce. Contract number WC133F-03-SE-0603 National Marine Fisheries Service, Southeast Regional Office. St. Petersburg, Florida. Available at: http://sero.nmfs.noaa.gov/sf/socialsci/socialsci.htm

Impact Assessment Inc. 2005d. Identifying communities associated with the fishing industry in Louisiana: Volume I, Ascension Parish through Lafayette Parish Communities. Prepared for the U.S. Department of Commerce. Contract number WC133F-03-SE-0603 National Marine Fisheries Service, Southeast Regional Office. St. Petersburg, Florida. Available at: http://sero.nmfs.noaa.gov/sf/socialsci/socialsci.htm

Impact Assessment Inc. 2005e. Identifying Communities associated with the fishing industry in Louisiana: Volume II, Lafourche Parish through St. Landry Parish Communities. Prepared for the U.S. Department of Commerce. Contract number WC133F-03-SE-0603 National Marine Fisheries Service, Southeast Regional Office. St. Petersburg, Florida. Available at: - http://sero.nmfs.noaa.gov/sf/socialsci/socialsci.htm

Impact Assessment Inc. 2005f. Identifying communities associated with the fishing industry in Louisiana: Volume III, St. Martin Parish through Vermilion Parish Communities. Prepared for the U.S. Department of Commerce. Contract number WC133F-03-SE-0603 National Marine Fisheries Service, Southeast Regional Office. St. Petersburg, Florida. Available at: http://sero.nmfs.noaa.gov/sf/socialsci/socialsci.htm

Impact Assessment Inc. 2005g. Identifying communities associated with the fishing industry in Texas. Prepared for the U.S. Department of Commerce. Contract number WC133F-03-SE-0603 National Marine Fisheries Service, Southeast Regional Office. St. Petersburg, Florida. Available at: http://sero.nmfs.noaa.gov/sf/socialsci/socialsci.htm

Impact Assessment Inc. 2006. Identifying communities associated with the fishing industry in Alabama and Mississippi. Prepared for the U.S. Department of Commerce. National Marine Fisheries Service, Southeast Regional Office. St. Petersburg, Florida. Available at: http://sero.nmfs.noaa.gov/sf/socialsci/socialsci.htm

Jepson, M., K. Kitner, A. Pitchon, W. W. Perry, and B. Stoffle. 2005. Potential fishing communities in the Carolinas, Georgia, and Florida: An effort in baseline profiling and mapping. National Marine Fisheries Service, Southeast Regional Office. St. Petersburg, Florida. Available at: http://sero.nmfs.noaa.gov/sf/socialsci/pdfs/SA%20Fishing%20Community%20Report.pdf

Kennedy, V. S., R. R. Twilley, J. A. Kleypas, J. H. Cowan, Jr., S. R. Hare. 2002. Coastal and Marine Ecosystems and Global Climate Change: Potential Effects on U.S. Resources. Pew Center on Global Climate Change.

Liese, C. and D.W. Carter. 2011. Collecting Economic Data from the For-Hire Fishing Sector: Lessons from a Cost and Earnings Survey of the Southeast U.S. Charter Boat Industry. 14 p. In Beard, T. D., Jr., A. J. Loftus, and R. Arlinghaus (editors). The Angler and the Environment. American Fisheries Society, Bethesda, MD.

McEachran, J.D. and J.D. Fechhelm. 2005. Fishes of the Gulf of Mexico, Vol. 2. University of Texas Press. Austin, Texas.

NMFS. 2005. Endangered Species Act – Section 7 consultation on the continued authorization of reef fish fishing under the Gulf of Mexico reef fish fishery management plan and proposed amendment 23. February 15, 2005. National Marine Fisheries Service. St. Petersburg, Florida.

NODC 2013 World Ocean Atlas. NOAA 2013 http://catalog.data.gov/dataset/world-ocean-atlas-2013-nodc-accession-0114815

Savolainen, M.A., R. H. Caffey, and R. F. Kazmierczak, Jr. 2012. Economic and Attitudinal Perspectives of the Recreational For-hire Fishing Industry in the U.S. Gulf of Mexico. Center for Natural Resource Economics and Policy, LSU AgCenter and Louisiana Sea Grant College Program, Department of Agricultural Economics and Agribusiness, Louisiana State University, Baton Rouge, LA. 171 p. Available at: http://www.laseagrant.org/pdfs/Gulf-RFH-Survey-Final-Report-2012.pdf

APPENDIX A. OTHER APPLICABLE LAW

The Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.) provides the authority for management of stocks included in fishery management plans in federal waters of the exclusive economic zone. However, management decision-making is also affected by a number of other federal statutes designed to protect the biological and human components of U.S. fisheries, as well as the ecosystems that support those fisheries. Major laws affecting federal fishery management decision-making are summarized below.

Administrative Procedures Act

All federal rulemaking is governed under the provisions of the Administrative Procedure Act (5 U.S.C. Subchapter II), which establishes a "notice and comment" procedure to enable public participation in the rulemaking process. Under the Act, the National Marine Fisheries Service (NMFS) is required to publish notification of proposed rules in the Federal Register and to solicit, consider, and respond to public comment on those rules before they are finalized. The Act also establishes a 30-day waiting period from the time a final rule is published until it takes effect. NMFS can waive this waiting period under certain circumstances.

Coastal Zone Management Act

Section 307(c)(1) of the federal Coastal Zone Management Act of 1972 (CZMA), as amended, requires federal activities that affect any land or water use or natural resource of a state's coastal zone be conducted in a manner consistent, to the maximum extent practicable, with approved state coastal management programs. The requirements for such a consistency determination are set forth in NOAA regulations at 15 C.F.R. part 930, subpart C. According to these regulations and CZMA Section 307(c)(1), when taking an action that affects any land or water use or natural resource of a state's coastal zone, NMFS is required to provide a consistency determination to the relevant state agency at least 90 days before taking final action.

Upon submission to the Secretary, NMFS will determine if this plan amendment is consistent with the Coastal Zone Management programs of the states of Alabama, Florida, Louisiana, Mississippi, and Texas to the maximum extent possible. Their determination will then be submitted to the responsible state agencies under Section 307 of the CZMA administering approved Coastal Zone Management programs for these states.

Data Quality Act

The Data Quality Act (Public Law 106-443) effective October 1, 2002, requires the government to set standards for the quality of scientific information and statistics used and disseminated by federal agencies. Information includes any communication or representation of knowledge such as facts or data, in any medium or form, including textual, numerical, cartographic, narrative, or audiovisual forms (includes web dissemination, but not hyperlinks to information that others disseminate; does not include clearly stated opinions).

Specifically, the Act directs the Office of Management and Budget to issue government wide guidelines that "provide policy and procedural guidance to federal agencies for ensuring and maximizing the quality, objectivity, utility, and integrity of information disseminated by federal agencies." Such guidelines have been issued, directing all federal agencies to create and disseminate agency-specific standards to: (1) ensure information quality and develop a pre-dissemination review process; (2) establish administrative mechanisms allowing affected persons to seek and obtain correction of information; and (3) report periodically to Office of Management and Budget on the number and nature of complaints received.

Scientific information and data are key components of FMPs and amendments and the use of best available information is the second national standard under the Magnuson-Stevens Fishery Conservation and Management Act. To be consistent with the Act, FMPs and amendments must be based on the best information available. They should also properly reference all supporting materials and data, and be reviewed by technically competent individuals. With respect to original data generated for FMPs and amendments, it is important to ensure that the data are collected according to documented procedures or in a manner that reflects standard practices accepted by the relevant scientific and technical communities. Data will also undergo quality control prior to being used by the agency and a pre-dissemination review.

Endangered Species Act

The Endangered Species Act (ESA) of 1973, as amended, (16 U.S.C. Section 1531 et seq.) requires federal agencies use their authorities to conserve endangered and threatened species. The ESA requires NMFS, when proposing an action for managed stocks that "may affect" critical habitat or endangered or threatened species, to consult with the appropriate administrative agency (itself for most marine species, the U.S. Fish and Wildlife Service for all remaining species) to determine the potential impacts of the proposed action. Consultations are concluded informally when proposed actions may affect but are "not likely to adversely affect" endangered or threatened species or designated critical habitat. Formal consultations, including a biological opinion, are required when proposed actions may affect and are "likely to adversely affect" endangered or threatened species or adversely modify designated critical habitat. If jeopardy or adverse modification is found, the consulting agency is required to suggest reasonable and prudent alternatives. NMFS, as part of the Secretarial review process, will make a determination regarding the potential impacts of the proposed actions.

Fish and Wildlife Coordination Act

Fish and Wildlife Coordination Act of 1934 (16 U.S.C. 661-667e) provides the basic authority for the Fish and Wildlife Service's involvement in evaluating impacts to fish and wildlife from proposed water resource development projects. It also requires Federal agencies that construct, license or permit water resource development projects to first consult with the Service (and the National Marine Fisheries Service in some instances) and State fish and wildlife agency regarding the impacts on fish and wildlife resources and measures to mitigate these impacts.

The fishery management actions in the Gulf of Mexico are not likely to affect wildlife resources pertaining to water resource development as the economic exclusive zone is from the state water boundary extending to 200 nm from shore.

National Historic Preservation Act

The National Historic Preservation Act (NHPA) of 1966, (Public Law 89-665; 16 U.S.C. 470 *et seq.*) is intended to preserve historical and archaeological sites in the United States of America. Section 106 of the NHPA requires federal agencies to evaluate the impact of all federally funded or permitted projects for sites on listed on, or eligible for listing on, the National Register of Historic Places and aims to minimize damage to such places.

Typically, fishery management actions in the Gulf of Mexico are not likely to affect historic places with exception of the *U.S.S. Hatteras*, located in federal waters off Texas, which is listed in the National Register of Historic Places. The proposed actions are not likely to increase fishing activity above previous years. Thus, no additional impacts to the *U.S.S. Hatteras* would be expected.

Marine Mammal Protection Act

The Marine Mammal Protection Act (MMPA) established a moratorium, with certain exceptions, on the taking of marine mammals in U.S. waters and by U.S. citizens on the high seas, and on the importing of marine mammals and marine mammal products into the United States. Under the MMPA, the Secretary of Commerce (authority delegated to NMFS) is responsible for the conservation and management of cetaceans and pinnipeds (other than walruses). The Secretary of the Interior is responsible for walruses, sea and marine otters, polar bears, manatees, and dugongs.

Part of the responsibility that NMFS has under the MMPA involves monitoring populations of marine mammals to make sure that they stay at optimum levels. If a population falls below its optimum level, it is designated as "depleted," and a conservation plan is developed to guide research and management actions to restore the population to healthy levels.

In 1994, Congress amended the MMPA to govern the taking of marine mammals incidental to commercial fishing operations. This amendment required the preparation of stock assessments for all marine mammal stocks in waters under U.S. jurisdiction, development and implementation of take-reduction plans for stocks that may be reduced or are being maintained below their optimum sustainable population levels due to interactions with commercial fishing activities, and studies of pinniped-fishing activity interactions.

Under section 118 of the MMPA, NMFS must publish, at least annually, a List of Fisheries that places all U.S. commercial fishing activities into one of three categories based on the level of incidental serious injury and mortality of marine mammals that occurs in each fishing activity. The categorization of a fishing activity in the List of Fisheries determines whether participants in that fishing activity may be required to comply with certain provisions of the MMPA, such as registration, observer coverage, and take reduction plan requirements.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 (16 U.S.C. 703) protects migratory birds. The responsibilities of Federal agencies to protect migratory birds are set forth in Executive Order 13186. US Fish and Wildlife Service is the lead agency for migratory birds. The birds protected under this statute are many of our most common species, as well as birds listed as threatened or endangered. A memorandum of understanding (MOU) between NMFS and U.S. Fish and Wildlife Service (FWS), as required by Executive Order 13186 (66 FR 3853, January 17, 2001), is to promote the conservation of migratory bird populations. This MOU focuses on avoiding, or where impacts cannot be avoided, minimizing to the extent practicable, adverse impacts on migratory birds and strengthening migratory bird conservation through enhanced collaboration between NMFS and FWS by identifying general responsibilities of both agencies and specific areas of cooperation. Given NMFS' focus on marine resources and ecosystems, this MOU places an emphasis on seabirds, but does not exclude other taxonomic groups of migratory birds.

Typically, fishery management actions in the Gulf of Mexico are not likely to affect migratory birds. The proposed actions are not likely to change the way in which the fishery is prosecuted. Thus, no additional impacts are reasonably expected.

Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.) regulates the collection of public information by federal agencies to ensure the public is not overburdened with information requests, the federal government's information collection procedures are efficient, and federal agencies adhere to appropriate rules governing the confidentiality of such information. The Act requires NMFS to obtain approval from the Office of Management and Budget before requesting most types of fishing activity information from the public. None of the alternatives in this amendment are expected to create additional paperwork burdens.

Prime Farmlands Protection and Policy Act

The Farmland Protection and Policy Act of 1981 (7 U.S.C. 4201) was enacted to minimize the loss of prime farmland and unique farmlands as a result of Federal actions by converting these lands to nonagricultural uses. It assures that federal programs are compatible with state and local governments, and private programs and policies to protect farmland.

The fishery management actions in the Gulf of Mexico are not likely to affect farmlands as the economic exclusive zone is from the state water boundary extending to 200 nm from shore.

National Wild and Scenic Rivers System

The National Wild and Scenic Rivers System of 1968 (Public Law 90-542; 16 U.S.C. 1271 et seq.) preserves certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. The Act safeguards the

special character of these rivers, while also recognizing the potential for their appropriate use and development. It encourages river management that crosses political boundaries and promotes public participation in developing goals for river protection.

The fishery management actions in the Gulf of Mexico are not likely to affect wetland habitats as the economic exclusive zone is from the state water boundary extending to 200 nm from shore.

North American Wetlands Conservation Act

The North American Wetlands Conservation Act of 1989 (Public Law 101-233) established a wetlands habitat program, administered by the United States Fish and Wildlife Service, to protect and manage wetland habitats for migratory birds and other wetland wildlife in the United States, Mexico, and Canada.

The fishery management actions in the Gulf of Mexico are not likely to affect wetland habitats as the economic exclusive zone is from the state water boundary extending to 200 nm from shore.

Executive Orders (E.O.)

E.O. 12630: Takings

The E.O. on Government Actions and Interference with Constitutionally Protected Property Rights that became effective March 18, 1988, requires each federal agency prepare a Takings Implication Assessment for any of its administrative, regulatory, and legislative policies and actions that affect, or may affect, the use of any real or personal property. Clearance of a regulatory action must include a takings statement and, if appropriate, a Takings Implication Assessment. The NOAA Office of General Counsel will determine whether a Taking Implication Assessment is necessary for this amendment.

E.O. 12866: Regulatory Planning and Review

E.O. 12866: Regulatory Planning and Review, signed in 1993, requires federal agencies to assess the costs and benefits of their proposed regulations, including distributional impacts, and to select alternatives that maximize net benefits to society. To comply with E.O. 12866, NMFS prepares a Regulatory Impact Review (RIR) for all regulatory actions that either implement a new fishery management plan or significantly amend an existing plan. RIRs provide a comprehensive analysis of the costs and benefits to society of proposed regulatory actions, the problems and policy objectives prompting the regulatory proposals, and the major alternatives that could be used to solve the problems. The reviews also serve as the basis for the agency's determinations as to whether proposed regulations are a "significant regulatory action" under the criteria provided in E.O. 12866 and whether proposed regulations will have a significant economic impact on a substantial number of small entities in compliance with the Regulatory Flexibility Analysis. A regulation is significant if it: 1) Has an annual effect on the economy of \$100 million or more or adversely affects in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments and communities; 2) creates a serious inconsistency or otherwise

interferes with an action taken or planned by another agency; 3) materially alters the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or 4) raises novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order.

E.O. 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations

This E.O mandates that each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and its territories and possessions.

E.O. 12962: Recreational Fisheries

This E.O. requires federal agencies, in cooperation with states and tribes, to improve the quantity, function, sustainable productivity, and distribution of U.S. aquatic resources for increased recreational fishing opportunities through a variety of methods including, but not limited to, developing joint partnerships; promoting the restoration of recreational fishing areas that are limited by water quality and habitat degradation; fostering sound aquatic conservation and restoration endeavors; and evaluating the effects of federally-funded, permitted, or authorized actions on aquatic systems and recreational fisheries, and documenting those effects. Additionally, it establishes a seven-member National Recreational Fisheries Coordination Council (NRFCC) responsible for, among other things, ensuring that social and economic values of healthy aquatic systems that support recreational fisheries are considered by federal agencies in the course of their actions, sharing the latest resource information and management technologies, and reducing duplicative and cost-inefficient programs among federal agencies involved in conserving or managing recreational fisheries. The NRFCC also is responsible for developing, in cooperation with federal agencies, States and Tribes, a Recreational Fishery Resource Conservation Plan - to include a five-year agenda. Finally, the Order requires NMFS and the U.S. Fish and Wildlife Service to develop a joint agency policy for administering the ESA.

E.O. 13089: Coral Reef Protection

The E.O. on Coral Reef Protection requires federal agencies whose actions may affect U.S. coral reef ecosystems to identify those actions, utilize their programs and authorities to protect and enhance the conditions of such ecosystems, and, to the extent permitted by law, ensure actions that they authorize, fund, or carry out do not degrade the condition of that ecosystem. By definition, a U.S. coral reef ecosystem means those species, habitats, and other national resources associated with coral reefs in all maritime areas and zones subject to the jurisdiction or control of the United States (e.g., federal, state, territorial, or commonwealth waters).

Regulations are already in place to limit or reduce habitat impacts within the Flower Garden Banks National Marine Sanctuary. Additionally, NMFS approved and implemented Generic Amendment 3 for Essential Fish Habitat (GMFMC 2005), which established additional habitat

areas of particular concern (HAPCs) and gear restrictions to protect corals throughout the Gulf of Mexico. There are no implications to coral reefs by the actions proposed in this amendment.

E.O. 13132: Federalism

The E.O. on Federalism requires agencies in formulating and implementing policies, to be guided by the fundamental Federalism principles. The Order serves to guarantee the division of governmental responsibilities between the national government and the states that was intended by the framers of the Constitution. Federalism is rooted in the belief that issues not national in scope or significance are most appropriately addressed by the level of government closest to the people. This Order is relevant to FMPs and amendments given the overlapping authorities of NMFS, the states, and local authorities in managing coastal resources, including fisheries, and the need for a clear definition of responsibilities. It is important to recognize those components of the ecosystem over which fishery managers have no direct control and to develop strategies to address them in conjunction with appropriate state, tribes and local entities (international too).

In Amendment 30B, no Federalism issues were identified relative to the action to establish the 30B permit provision. Therefore, consultation with state officials under Executive Order 12612 was not necessary. In Council discussions regarding this framework action, the question of whether the 30B permit provision conflicts with state regulations has been discussed (see Section 1.1), but no determination was made that this constitutes a Federalism issue. Consequently, consultation with state officials under Executive Order 12612 remains unnecessary.

E.O. 13158: Marine Protected Areas

This E.O. requires federal agencies to consider whether their proposed action(s) will affect any area of the marine environment that has been reserved by federal, state, territorial, tribal, or local laws or regulations to provide lasting protection for part or all of the natural or cultural resource within the protected area. There are several marine protected areas, HAPCs, and gear-restricted areas in the eastern and northwestern Gulf. The existing areas are entirely within federal waters of the Gulf of Mexico. They do not affect any areas reserved by federal, state, territorial, tribal or local jurisdictions.

Essential Fish Habitat

The amended Magnuson-Stevens Fishery Conservation and Management Act included a new habitat conservation provision that requires each existing and any new FMPs to describe and identify essential fish habitat (EFH) for each federally managed species, minimize to the extent practicable impacts from fishing activities on EFH that are more than minimal and not temporary in nature, and identify other actions to encourage the conservation and enhancement of that EFH. To address these requirements the Council has, under separate action, approved an environmental impact statement (GMFMC 2004b) to address the new EFH requirements contained within the Act. Section 305(b) (2) requires federal agencies to obtain a consultation for any action that may adversely affect EFH.

These actions are not expected to change the way in which the fisheries are conducted in regard to the impact of the fisheries on the environment. The actions, considered in the context of the fisheries as a whole, will not have an adverse impact on EFH; therefore, an EFH consultation is not required.

APPENDIX B. RELEVANT FEDERAL REGULATIONS

Code of Federal Regulations: Title 50 § 622.2 Definitions and acronyms.

Charter vessel means a vessel less than 100 gross tons (90.8 mt) that is subject to the requirements of the USCG to carry six or fewer passengers for hire and that engages in charter fishing at any time during the calendar year. A charter vessel with a commercial permit, as required under § 622.4(a)(2), is considered to be operating as a charter vessel when it carries a passenger who pays a fee or when there are more than three persons aboard, including operator and crew, except for a charter vessel with a commercial vessel permit for Gulf reef fish or South Atlantic snapper-grouper. A charter vessel that has a charter vessel permit for Gulf reef fish and a commercial vessel permit for Gulf reef fish or a charter vessel permit for South Atlantic snapper-grouper and a commercial permit for South Atlantic snapper-grouper (either a South Atlantic snapper-grouper unlimited permit or a 225-lb (102.1-kg) trip limited permit for South Atlantic snapper-grouper) is considered to be operating as a charter vessel when it carries a passenger who pays a fee or when there are more than four persons aboard, including operator and crew. A charter vessel that has a charter vessel permit for Gulf reef fish, a commercial vessel permit for Gulf reef fish, and a valid Certificate of Inspection (COI) issued by the USCG to carry passengers for hire will not be considered to be operating as a charter vessel provided--

- (1) It is not carrying a passenger who pays a fee; and
- (2) When underway for more than 12 hours, that vessel meets, but does not exceed the minimum manning requirements outlined in its COI for vessels underway over 12 hours; or when underway for not more than 12 hours, that vessel meets the minimum manning requirements outlined in its COI for vessels underway for not more than 12-hours (if any), and does not exceed the minimum manning requirements outlined in its COI for vessels that are underway for more than 12 hours.

Headboat means a vessel that holds a valid Certificate of Inspection (COI) issued by the USCG to carry more than six passengers for hire.

- (1) A headboat with a commercial vessel permit, as required under this part, is considered to be operating as a headboat when it carries a passenger who pays a fee or--
- (i) In the case of persons aboard fishing for or possessing South Atlantic snapper-grouper, when there are more persons aboard than the number of crew specified in the vessel's COI; or

- (ii) In the case of persons aboard fishing for or possessing coastal migratory pelagic fish, when there are more than three persons aboard, including operator and crew.
- (2) However a vessel that has a headboat permit for Gulf reef fish, a commercial vessel permit for Gulf reef fish, and a valid COI issued by the USCG to carry passengers for hire will not be considered to be operating as a headboat provided--
 - (i) It is not carrying a passenger who pays a fee; and
- (ii) When underway for more than 12 hours, that vessel meets, but does not exceed the minimum manning requirements outlined in its COI for vessels underway over 12 hours; or when underway for not more than 12 hours, that vessel meets the minimum manning requirements outlined in its COI for vessels underway for not more than 12-hours (if any), and does not exceed the minimum manning requirements outlined in its COI for vessels that are underway for more than 12 hours.

Science and Research Director (SRD), for the purposes of this part, means the Science and Research Director, Southeast Fisheries Science Center, NMFS (see Table 1 of § 600.502 of this chapter).

SUBPART B – REEF FISH RESOURCES OF THE GULF OF **MEXICO**

§ 622.20 Permits and endorsements.

- (b) Charter vessel/headboat permits. For a person aboard a vessel that is operating as a charter vessel or headboat to fish for or possess Gulf reef fish, in or from the EEZ, a valid charter vessel/headboat permit for Gulf reef fish must have been issued to the vessel and must be on board.
- (1) Limited access system for charter vessel/headboat permits for Gulf reef fish. No applications for additional charter vessel/headboat permits for Gulf reef fish will be accepted. Existing permits may be renewed, are subject to the restrictions on transfer in paragraph (b)(1)(i) of this section, and are subject to the renewal requirements in paragraph (b)(1)(ii) of this section.
- (i) Transfer of permits--(A) Permits without a historical captain endorsement. A charter vessel/headboat permit for Gulf reef fish that does not have a historical captain endorsement is fully transferable, with or without sale of the permitted vessel.
- (B) Permits with a historical captain endorsement. charter vessel/headboat permit for Gulf reef fish that has a historical captain endorsement may only be transferred to a

vessel operated by the historical captain and is not otherwise transferable.

- (C) Procedure for permit transfer. To request that the RA transfer a charter vessel/headboat permit for Gulf reef fish, the owner of the vessel who is transferring the permit and the owner of the vessel that is to receive the transferred permit must complete the transfer information on the reverse side of the permit and return the permit and a completed application for transfer to the RA. See § 622.4(f) for additional transferrelated requirements applicable to all permits issued under this part.
- (ii) Renewal. (A) Renewal of a charter vessel/headboat permit for Gulf reef fish is contingent upon the permitted vessel and/or captain, as appropriate, being included in an active survey frame for, and, if selected to report, providing the information required in one of the approved fishing data surveys. Surveys include, but are not limited to--
- (1) NMFS' Marine Recreational Fishing Vessel Directory Telephone Survey (conducted by the Gulf States Marine Fisheries Commission);
- (2) NMFS' Southeast Headboat Survey (as required by § 622.26(b)(1));
- (3) Texas Parks and Wildlife Marine Recreational Fishing Survey; or
- (4) A data collection system that replaces one or more of the surveys in paragraph (b)(1)(ii)(A),(1),(2), or (3) of this section.
- (B) A charter vessel/headboat permit for Gulf reef fish that is not renewed or that is revoked will not be reissued. permit is considered to be not renewed when an application for renewal, as required, is not received by the RA within 1 year of the expiration date of the permit.
- (iii) Requirement to display a vessel decal. Upon renewal or transfer of a charter vessel/headboat permit for Gulf reef fish, the RA will issue the owner of the permitted vessel a vessel decal for Gulf reef fish. The vessel decal must be displayed on the port side of the deckhouse or hull and must be maintained so that it is clearly visible.
- (iv) Passenger capacity compliance requirement. A vessel operating as a charter vessel or headboat with a valid charter vessel/headboat permit for Gulf reef fish, which is carrying more passengers on board the vessel than is specified on the permit, is prohibited from harvesting or possessing the species identified on the permit.
- (2) A charter vessel or headboat may have both a charter vessel/headboat permit and a commercial vessel permit. when a vessel is operating as a charter vessel or headboat, a

person aboard must adhere to the bag limits. See the definitions of "Charter vessel" and "Headboat" in § 622.2 for an explanation of when vessels are considered to be operating as a charter vessel or headboat, respectively.

(3) If Federal regulations for Gulf reef fish in subparts A or B of this part are more restrictive than state regulations, a person aboard a charter vessel or headboat for which a charter vessel/headboat permit for Gulf reef fish has been issued must comply with such Federal regulations regardless of where the fish are harvested.

§ 622.26 Recordkeeping and reporting.

- (b) Charter vessel/headboat owners and operators--(1)
 General reporting requirement--(i) Charter vessels. The owner
 or operator of a charter vessel for which a charter
 vessel/headboat permit for Gulf reef fish has been issued, as
 required under § 622.20(b), or whose vessel fishes for or lands
 such reef fish in or from state waters adjoining the Gulf EEZ,
 who is selected to report by the SRD must maintain a fishing
 record for each trip, or a portion of such trips as specified by
 the SRD, on forms provided by the SRD and must submit such
 record as specified in paragraph (b)(2) of this section.
- (2) Reporting deadlines--(i) Charter vessels. Completed fishing records required by paragraph (b)(1)(i) of this section for charter vessels must be submitted to the SRD weekly, postmarked no later than 7 days after the end of each week (Sunday). Information to be reported is indicated on the form and its accompanying instructions.

SUBPART Q – COASTAL MIGRATORY PELAGIC RESOURCES (GULF OF MEXICO AND ATLANTIC)

§ 622.370 Permits.

(b) Charter vessel/headboat permits. (1) For a person aboard a vessel that is operating as a charter vessel or headboat to fish for or possess, in or from the EEZ, Gulf coastal migratory pelagic fish or South Atlantic coastal migratory pelagic fish, a valid charter vessel/headboat permit for Gulf coastal migratory pelagic fish or South Atlantic coastal migratory pelagic fish, respectively, must have been issued to the vessel and must be on board.

(i) See § 622.373 regarding a limited access system for charter vessel/headboat permits for Gulf coastal migratory pelagic fish.

(ii)

(ii) A charter vessel or headboat may have both a charter vessel/headboat permit and a commercial vessel permit. However, when a vessel is operating as a charter vessel or headboat, a person aboard must adhere to the bag limits. See the definitions of "Charter vessel" and "Headboat" in § 622.2 for an explanation of when vessels are considered to be operating as a charter vessel or headboat, respectively.

§ 622.374 Recordkeeping and reporting.

- (b) Charter vessel/headboat owners and operators—(1) General reporting requirement—(i) Charter vessels. The owner or operator of a charter vessel for which a charter vessel/headboat permit for Gulf coastal migratory pelagic fish has been issued, as required under § 622.370(b)(1), or whose vessel fishes for or lands Gulf or South Atlantic coastal migratory fish in or from state waters adjoining the Gulf or South Atlantic EEZ, who is selected to report by the SRD must maintain a fishing record for each trip, or a portion of such trips as specified by the SRD, on forms provided by the SRD and must submit such record as specified in paragraph (b)(2)(i) of this section.
- (2) Reporting deadlines——(i) Charter vessels. Completed fishing records required by paragraph (b)(1)(i) of this section for charter vessels must be submitted to the SRD weekly, postmarked no later than 7 days after the end of each week (Sunday). Information to be reported is indicated on the form and its accompanying instructions.

APPENDIX C

Considered but Rejected

2.4 Action 4: Amend the Gulf Reef Fish, South Atlantic Snapper Grouper, Coastal Migratory Pelagics, and Atlantic Dolphin and Wahoo Fishery Management Plans to Specify Certain Aspects of Reporting for For-Hire Vessels

Alternative 1 (No Action). There is no specified time for data to be made available to the public and to the Councils.

Alternative 2. Specify the following data flow via electronic reporting:

- a) Logbook data collected via authorized platform, ex. web, tablet, phone, or VMS application
- b) Data submitted to ACCSP or GulfFIN;
- c) Data integrated by ACCSP or GulfFIN into single composite data set;
- d) Composite data set distributed to appropriate agencies for analyses and use.

Sub-alternative 2a. Apply to charter vessels reporting.

Sub-alternative 2b. Apply to headboat reporting.

Alternative 3. Specify the following aspects of electronic reporting:

- a) NMFS and/or ACCSP develop a compliance tracking procedure that balances timeliness with available staff and funding resources.
- b) NMFS is to use validation methods developed in the Gulf of Mexico logbook pilot study as a basis to ensure that the actual logbook report is validated and standardized validation methodologies are employed among regions.
- c) NMFS is to require and maintain a comprehensive permit/email database of participants.
- d) NFMS is to include procedures for expanding estimates for non-reporting.
- e) NMFS is to allow multiple authorized applications or devices to report data as long as they meet required data and transferability standards.

Sub-alternative 3a. Apply to charter vessel reporting.

Sub-alternative 3b. Apply to headboat reporting.

Discussion

The technical subcommittee recommends a multi-faceted approach where a number of reporting platforms can be used so long as the minimum data standards and security protocols are met. Data standards would need to be developed and the subcommittee agreed that NOAA Fisheries, the GulfFIN, and ACCSP could work collaboratively to develop appropriate standards.

The subcommittee recommends this process for data storage and management:

- 1. Logbook data collected via authorized platform, ex. web, tablet, phone, or VMS application
- 2. Data submitted to ACCSP or GulfFIN;
- 3. Data integrated by ACCSP or GulfFIN into single composite data set;
- 4. Composite data set distributed to appropriate agencies for analyses and use.

This process could eliminate duplicate reporting for some participants (e.g., South Carolina headboats and charter vessels) so long as appropriate data standards are in place and the respective agencies agree to confidentiality standards, which would allow sharing and accepting one another's data for use. Elimination of duplicate reporting (e.g., separate state and federal reports) would be a substantial benefit to participants in this survey program and could mitigate any additional reporting requirements for comparison to the current MRIP survey program.

The South Atlantic Council is concerned about the extensive delays in tracking recreational catches. The current South Atlantic blueline tilefish recreational ACL versus recreational catches is currently unknown pending receipt of the first wave of MRIP data (should be available 45 days after the end of February) and any headboat catches. Part of the delay is that the Council has specified the recreational ACL in pounds and this requires the numbers of fish to be converted to pounds. This adds an unspecified period of time after the MRIP data are released for the SEFSC to apply their conversion factors and provide a catch estimate. The South Atlantic Council is considering specifying recreational ACLs in numbers of fish so that the headboat sector (and the charter vessel sector once this amendment is approved) can be tracked weekly. Specifying the recreational ACL in numbers of fish will also reduce the delay in using the MRIP data to track recreational ACLs.

Action 4 addresses the following recommendations from the Technical Sub-Committee:

- Development of compliance tracking procedures that balance timeliness with available staff and funding resources.
- Use validation methods developed in the Gulf of Mexico logbook pilot study as a basis
 to ensure that the actual logbook report is validated and standardized validation
 methodologies are employed among regions.
- Require and maintain a comprehensive permit/email database of participants.
- Include procedures for expanding estimates for non-reporting.
- Allow multiple authorized applications or devices to report data as long as they meet required data and transferability standards.

The technical subcommittee recommends building upon the validation methodology developed in the Gulf MRIP pilot study.

The technical subcommittee recommends use of an MRIP certified methodology for validation with the following elements: Gulf MRIP pilot study methodologies, including dockside validation of catch and vessel activity, and maintenance of site and vessel registries.

The technical subcommittee recommends dual survey methods (existing and new) for no less than three years. Data from the new program would not be expected to provide management advice during the first year of operation. Moreover, this would allow the possibility of an initial phase-in or limited implementation to identify and solve significant problems prior to implementation for all participants.

The technical subcommittee recommends that the Councils move forward with development of a reporting system that includes federally permitted for-hire vessels while also exploring ways to determine the impact of state permitted vessels on landings estimates of federally managed species. Long term, the subcommittee recommends that both state and federally permitted charter vessels participate in this census to include the entire fleet of charter vessels harvesting federally managed species.

Weekly electronic dealer and headboat reporting are fully implemented. However, there are still delays in having updated landings available to the public for their use in planning trips and to the Councils for monitoring ACLs. A solution, in the Atlantic, would be to have the raw weekly data fed to ACCSP and made available to the public via the ACCSP website. The "official" numbers for quota closures would continue to be the numbers maintained by NMFS and available on the NMFS website but this would provide more timely and useful updates to the public.

The result would be updated and current catch data available on a daily basis for the public, states, NMFS, and the Councils to use in monitoring ACLs and planning fishing trips.

APPENDIX D

South Carolina Logbook Report

ATTACHMENT 1



SOUTH CAROLINA HEADBOAT LOG

Section 50-5-1915 of the South Carolina Code of Laws requires all licensed headboats to maintain a trip log, copies of which must be submitted monthly to the South Carolina Department of Natural Resources. A report must be received even if no trips were made during the month. To submit a no trips report, write "No Business For (month) in the middle of a report form. (For example, No Business For January). Date and sign the report.

To fulfill both the mandatory reporting of the NMFS and the requirements of state law without an undue burden on the permit holder, South Carolina will use the existing NMFS Headboat logbook. The white copy should be mailed or faxed to the address below so it is received no later than the 10th of the month following the report month. For example, June reports should reach our office by 10 July. The yellow copy should be retained for the NMFS representative, and the pink copy should be retained for your records. Complete a separate form for each trip. Should you need more reports, attach a note to your reports or call our office.

Please mail or FAX the white copies to the:

SCDNR - Fisheries Statistics Program
P.O. Box 12559
Charleston, SC 29422-2559
TELEPHONE: (843) 953-9313
FAX: (843) 953-9362

INSTRUCTIONS

To complete a trip report, record the following information in the proper blanks:

VESSEL: Enter vessel name and SC Charterboat Permit Number.

DATE: Enter the date(s) of the trip.

DEPART TIME: Enter the time of departure from the dock.

ARRIVE TIME: Enter the time of arrival back at the dock.

OPERATOR'S LICENSE NUMBER: Enter the vessel USCG or state documentation #.

FULL DAY, 3/4 DAY, ETC .: Check the appropriate box for the length of trip.

NIGHT: Check 1st if the trip departed between 6:00PM and midnight. Check 2nd if the trip departed after

12:00 midnight.

DISTANCE FROM SHORE: Check the appropriate box.

PAY TYPE: Check the appropriate box.

LOCATION: Please enter the location code for your fishing area using the grid printed inside the flip cover.

Example: Refer to the grid and the small block marked X in grid 32-78 (lat/long). Read up or down the column to determine the letter code (C in this example). Read left or right across the row to determine the number code (1 in this example). This location code entry would be 32-78-C1. Each individual small square is 10 miles long by 10 miles wide or roughly 100 square miles.

NUMBER OF ANGLERS: Enter the number of passengers who went to fish.

NUMBER OF ANGLERS WHO FISHED: Enter the number of passengers who actually fished.

CATCH INFORMATION

SPECIES: Use blank lines to list additional species caught.

NUMBER AND WEIGHT: Enter the total number and weight (to the nearest whole pound) of all species retained in the NUMBER CAUGHT and TOTAL WEIGHT columns.

<u>NUMBER RELEASED</u>: Regardless of disposition, ALL FISH must be reported. Please enter the number of each species released in the appropriate column. DO NOT include releases in the number caught or total weight columns.

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|------------|------------------------------------|--|--------------------------|----------------------------|--------------------------|----------------|--|---------------------------|-----------------|----------------------------|--------------------------|--|--|
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| 25-27 | Fish Species | Number Caught 28-31 | Total Weight 32-37 | Released Alive 38-40 | Released Dead 1-43 | 25-27 | Fish Species | Number Caught 28-31 | Weight 32-37 | Released Alive 38.40 | Released Dead 1-43 | | |
| \vdash | CROUPERS | | | 30-40 | 143 | \vdash | SNAPPERS | | | 36-40 | 1-43 | | |
| 29 | Cag | | | | | 10 | Varnillion Snapper | | | | | | |
| 30 | Scamp | | | | | -11 | Red Snapper | | | | | | |
| 20 | Speckled Hind | _ | | | | 12 | Silk Snapper | | | | | | |
| 21 | Snowy Grouper Red Grouper | - | _ | | | 14 | Blackfin Snapper Yellowtail Snapper | + | | \vdash | \vdash | | |
| 23 | Warnaw Grouper | - | | | | 16 | Lanc Scapper | | | | | | |
| 26 | Rock Hind | | | | | 17 | Cabera Snapper | | | | | | |
| 31 | Yellowiis Grouper | | | | | 18 | Cray Seapper | | | | | | |
| 27 | Red Hind | | | | | 19 | Mutton Snapper | | | | | | |
| 39 | Yellowin Grouper | _ | | | | ┝ | | | | | $\overline{}$ | | |
| 88 | Graysby | | | | | 74 | MACKERELS View Medical | | | | | | |
| \vdash | SEA BASSES | - | | | | 56 | King Mackerel Spanish Mackerel | | | | | | |
| 33 | Black Sea Bass | | | | | | | | | | - | | |
| 34 | Bank Sea Bass (Yellow) | | | | | | JACKS | | | | | | |
| 38 | Sand Perch | - | _ | | _ | 60 | Greater Arrborjack | _ | | | | | |
| \vdash | CRUNTS | | | | | 62 | Almaco Jack | _ | | | | | |
| 50 | White Grunts | - | | | | 97 | Banded Rudderfish Blue Russer | _ | _ | | - | | |
| 51 | Torriste (Redreseth) | | | | | 57 | Rainbow Russer | _ | | | - | | |
| 54 | Bluestriped Grunt | | | | | 90 | African Pompuno | | | | | | |
| .53 | Margate | - | | | | 87 | Crevalle Jack | | | | | | |
| 35 | Podkfish | | _ | | _ | _ | | | | | | | |
| \vdash | PORGES | | | | | | TUNAS, etc. | _ | _ | | | | |
| 01 | Rad Porgy | | | | | 79 55 | Rhufish | _ | | | - | | |
| 02 | Whitebook Porgy | | | | | 117 | Dolphin | _ | | | - | | |
| 03 | Knobbad Porgy | | | , | | 133 | Wahoo | | | | | | |
| 04 | Spottail Pinfoh Jolthaud Poogy | - | | | | 116 | Little Tunny (Bonits) | | | | | | |
| 06 | Littlehead Pergy | - | | | | 126 | Blackfin Tuna | | | | | | |
| OB | Scap (Northern) | - | | | | 147 | Yellowin Tuna | _ | | | - | | |
| 83 | Piefoh | | | | | 121 | Creat Ramacuda | + | | \vdash | | | |
| | | | | | | \vdash | REEF FISHES | | | | | | |
| 230 | SHARKS Sharprone Shark | - | _ | | | 78 | Squirrelfish | | | | | | |
| - | Saudhur Shark | - | | | | 98 | Bigaye (Toro) | | | | | | |
| 231 | Blacktip Shark | | | | | 86 | Short Rigeye | , | | | | | |
| 119 | Smooth Dogfish | | | | | 80 | Hogfish (Hog Snappe | z) | | | | | |
| 250 | Nume Shark | | | | | 47 72 | Spadefish Inshore Lizardfish | | | \vdash | $\vdash \vdash \vdash$ | | |
| 232 140 | Dusky Shark | - | | | | | | | | | | | |
| 140 | Remota | | | | | | TILEFISHES | | | | | | |
| | TRICCERFISHES | | | | | 40 | Blueline Tilefish (Gra | ay) | | | | | |
| 77 | Cray Triggerfish | | | | | 44 | Sand Tilefish | | | | | | |
| 82 | Quoen Triggerfish | | | | | \vdash | OTHER FISH | + | _ | | | | |
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| 1414 Snowy Grouper | 1050 | Dolphin | | | | | 1423 | Gag | | | | |
| 1416 Red Grouper | 4710 | Wahoo | | | | | 1424 | Scamp | | | | |
| 1416 Red Grouper | 4655 | Yellowfin Tuna | | | | | 1414 | Snowy Grouper | | | | |
| 2177 White Marlin | 4658 | Blackfin Tuna | | | | | 1416 | Red Grouper | | | | |
| 2179 Bine Mariin | 3026 | Saittish | | | | | 1410 | Other Grouper | | | | |
| 1940 King Mackeral 3295 Other Porgles 3840 Sparth Mackeral 3764 Red Snapper 3764 Red Snapper 3765 Vermillion Snapper 3765 Shap Jack 3360 Black Sea Bases 3314 Spotial Printsh 3314 Spotial Printsh 3314 Spotial Printsh 3310 Spadelish 3441 White Grunt 3314 Other Grunts 3316 Spadelish 3440 Other Grunts 3460 Specify Specify 3460 Specify | 2177 | White Marlin | | | | | | (Specify) | | | | |
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| 3819 Spadelish 3441 White Grunt 9639 Amberjack 3440 Other Grunts 9870 Crevalle Jack 9870 Crevalle Jack 9870 Cobia 9870 Park Park | 4654 | Skip Jack | | | | | 3360 | Black Sea Bass | | | | |
| 0830 Amberjack | 0180 | Barracuda | | | | | 3314 | Spottail Pinfish | | | | |
| 0870 Crevalle Jack Specify | 3810 | Spadefish | | | | | 1441 | White Grunt | | | | |
| 0230 Bluefish | 0030 | Amberjack | | | | | 1440 | Other Grunts | | | | |
| 1982 Red Drum 1981 Red Control 1982 Red Control 1982 Red Control 1983 1984 | 0870 | Crevalle Jack | | | | | | (Specify) | | | | |
| 1081 Black Drum 1081 1 | 0230 | Bluefish | | | | | 4560 | Triggeriish | | | | |
| Other Fish 3447 Spotial Scatrout | 0570 | Cobia | | | | | 1082 | Red Drum | | | | |
| Specify 3446 Weaklish 1269 Florander | 4350 | Tarpon | | | | | 1081 | Black Drum | | | | |
| 1209 Flounder | | | | | | | - | _ | | | | |
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| 3483 Bonnethead Shark | | | | | шш | | | | _ | | | |
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| 3521 Spiny Doubsh | | | | | | | 3521 | Spiny Dogdish | | | | |
| 3511 Smooth Dogitsh | | | | | | | | , | | | | |
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SOUTH CAROLINA CHARTERBOAT LOG

Section 50-5-1915 of the South Carolina Code of Laws requires all permitted charter vessels to submit daily trip reports for all trips to the Marine Resources Division on a monthly basis. These reports must specify: 1) the number of persons fishing, 2) the number of hours fished, 3) the number of fish of each species caught, and 4) their total weight. Subsequent charter vessel permits will not be issued unless these requirements are met.

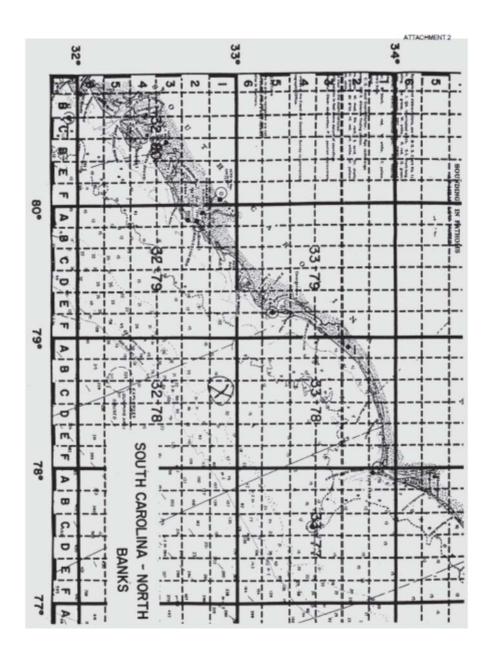
Please complete a logsheet for each trip following the instructions below. If you made two or more trips on a particular date, complete a separate report for each trip. <u>Trip reports are required even if no fish were caught.</u> Mail or FAX the white copy to the address below by the 10th of the following month. Retain the yellow copy for your records.

SCDNR - Fisheries Statistics Program
P.O. Box 12559
Charleston, SC 29422-2559
TELEPHONE - (843) 953-9313
FAX - (843) 953-9362

A report must be received even if no trips were made during the month. To submit a no trip report, write "No Business For The Month Of (month) on the middle of a report form. Date and sign the report. The Captain's Notes space may be used to record trip data such as weather, fuel, addresses, etc.

INSTRUCTIONS

- VESSEL: Enter the name of your vessel. If unnamed, enter the registration number of your boat, e.g. SC-1234-AB.
- · DATE: Enter the date of the trip.
- · PERMIT NO.: Enter your SC charter vessel permit number (number provided on your license).
- · #ANGLERS: Enter the number of persons who fished, not including crew.
- . TRIP START TIME: Enter the time the boat left the dock or landing, e.g. 11:30 AM, 1:00 PM, 3:30 PM, etc.
- HOURS FISHED: Enter the number of hours actually fished to the nearest hour, not including travel time.
- LOCATION: Enter the location code where <u>MOST</u> of your fishing took place. Refer to the map printed on
 the inside of the flip cover and the following example. If you fished in the grid marked X, Grid <u>32-78</u>, read
 up or down the column to determine the letter code (<u>C</u> here). Read left or right across the row to determine
 the number code (<u>1</u> here). The proper entry for this location is <u>32-78-C1</u>.
- TRIP START LOCATION: Enter the marina/boat landing name where this trip originates/end (i.e. where
 you pick up/drop off customers).
- · ARTIFICIAL REEF: If you fished at an artificial reef, enter the reef name in the blank.
- TARGET SPECIES: Enter the name of the species you were <u>MOST</u> interested in catching, whether any
 were caught or not. Enter <u>ANY</u> if you had no preference.
- LOCALE: Check the appropriate zone fished.
- · METHOD: Check the fishing method.
- · WATER DEPTH: Enter the shallowest water depth and deepest water depth (in feet) that were fished.
- CATCH INFORMATION: Enter the number of each species kept and their weight to the nearest
 whole pound in the appropriate spaces. Enter the number of each species released in the proper columns.
 Additional species may be added on the blank spaces or if additional space is needed, you may cross out an
 existing name and add the new species.



APPENDIX E

Southeast Region Headboat Survey Forms

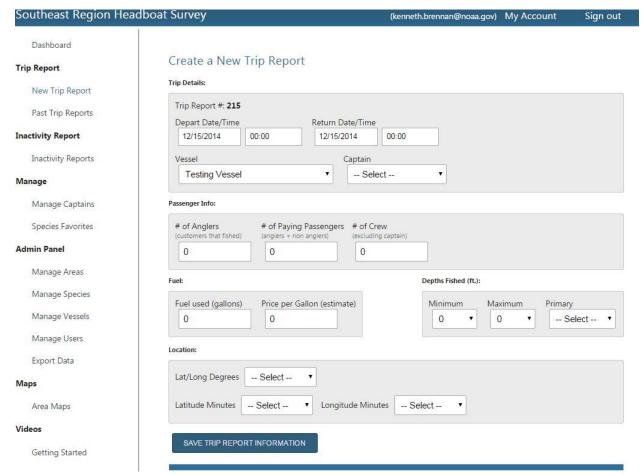


Figure D1. Example Southeast Region Headboat Survey trip report form for headboats.

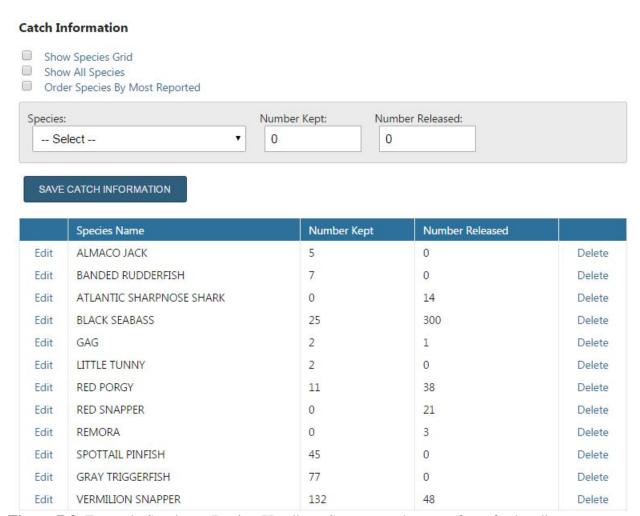


Figure D2. Example Southeast Region Headboat Survey catch report form for headboats.

APPENDIX F

Technical Subcommittee Report to the South Atlantic and Gulf of Mexico Fishery Management Councils: Recommendations for Electronic Logbook Reporting

11/26/2014

Technical Subcommittee Report to the South Atlantic and Gulf of Mexico Fishery Management Councils: Recommendations for Electronic Logbook Reporting



November 2014

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ABBREVIATIONS USED IN THIS DOCUMENT

ACCSP Atlantic Coastal Cooperative Statistics Program

EEZ Exclusive Economic Zone

FHS For-hire-survey

FWC Florida Fish and Wildlife Conservation Commission

FIN Fisheries Information Network

GulfFin Gulf of Mexico Fisheries Information Network
GMFMC Gulf of Mexico Fishery Management Council
GSMFC Gulf States Marine Fisheries Commission

GPS Global Positioning System
HMS Highly Migratory Species

MRIP Marine Recreational Information Program

NOAA National Oceanic and Atmospheric Administration

NCDENR North Carolina Department of Environment and Natural Resources

NRC National Research Council

PPS Proportional Probability Sampling

SAFMC South Atlantic Fisheries Management Council SCDNR South Carolina Department of Natural Resources

SERO Southeast Regional Office

SRHS Southeast Region Headboat Survey
SEFSC Southeast Fisheries Science Center
TPWD Texas Parks and Wildlife Department

VMS Vessel Monitoring System

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EXECUTIVE SUMMARY

Catch from recreational anglers comprises a substantial proportion of total catch for many species in the regions managed by the Gulf of Mexico and South Atlantic Fishery Management Councils. For-hire charter vessels are an important component of the recreational fishery both in terms of fishing effort and harvest. There is a need to improve data collection practices for charter vessels to address evolving needs of science and management and to capitilze on the improvements of emerging electronic reporting technologies. The Gulf of Mexico and South Atlantic Fishery Management Councils are considering changes in management for these purposes and formed a technical subcommittee to provide recomendations to implement electronic logbook reporting for charter vessels in the Gulf of Mexico and South Altantic Fishery Management Councils respective jurisdictions.

Currently, for-hire data collection programs gather information on fishing effort and catch by marine recreational anglers fishing on professionally licensed for-hire vessels (including charter, guide, and large party boats). NOAA Fisheries, in coordination with the states, ACCSP, and FINS, support regional programs to collect these statistics, with the ultimate goal of building a system of data collection programs that are responsive to regional needs and are coordinated at the national level to provide standard data elements for both regional and national assessments of fish stocks and associated fisheries management.

The technical subcommittee was formed from state and federal biologists and resource managers that have the requisite experience to develop best practices for an improved for-hire data collection program. The technical subcommitte was instructed to provide these recommendations by December 1, 2014 and this report reflects these recommendations. The group met May 27-28, 2014 and drafted initial recommendations for the Gulf of Mexico and South Atlantic Fishery Management Councils' review. This guidance has been integrated into the report to the extent practibable yet, the recommendations remain those of the technical subcommittee.

The subcommittee recommends a census style, electronic reporting system that builds upon the Gulf of Mexico electronic logbook pilot program, the electronic reporting program for headboats, and the recently implemented electronic dealer reporting program. A brief overview of the recommendations is below:

- Complete census of all participants;
- Mandatory, trip level reporting with weekly electronic submission. Give flexibility to require submission more frequently than weekly if necessary. Give flexibility to declare periods of inactivity in advance;
- Development of compliance tracking procedures that balance timeliness with available staff and funding resources;
- Implementation of accountability measures to ensure compliance;

- Use validation methods developed in the Gulf of Mexico logbook pilot study as a basis to
 ensure that the actual logbook report is validated and standardized validation
 methodologies are employed among regions;
- Minimize reporting burden to anglers by reducing (or preferably eliminating) paper reporting and eliminating duplicate reporting;
- Maintain capability for paper-based reporting during catastrophic conditions;
- Require and maintain a comprehensive permit/email database of participants;
- Develop and implement the program in close coordination with MRIP, SERO, SEFSC, HMS, state agencies, ACCSP, and GulfFIN;
- Include procedures for expanding estimates for non-reporting; and,
- Allow multiple authorized applications or devices to report data as long as they meet required data and transferability standards.

The technical subcommittee has provided these recommendations within the framework of finite fiscal and personnel resources with consideration of reporting burden and technology requirements for charter vessel operators. The recommended program should be flexible enough to accommodate changes in technology or funding availability without compromising the integrity of the long-term data series. The technical subcommittee also realizes that advances in data collection technologies will continue and the program will require evaluation, and likely subsequent improvement to meet the evolving needs of science and management.

SECTION 1. BACKGROUND

Catch from recreational anglers comprises a substantial proportion of total catch for many species in the regions managed by the Gulf of Mexico and South Atlantic Fishery Management Councils (GMFMC, SAFMC). For-hire data collection programs gather information on fishing effort and catch by marine recreational anglers fishing on professionally licensed for-hire vessels (including charter, guide, and large party boats). NOAA Fisheries, in coordination with the states, ACCSP, and FINs, supports regional programs to collect these statistics, with the ultimate goal of building a system of data collection programs that are responsive to regional needs and are coordinated at the national level to provide standard data elements for both regional and national assessments of fish stocks and associated fisheries management.

Recreational harvest from for-hire vessels in the Southeast Region are monitored through a combination of effort and dockside intercept surveys. The Marine Recreational Information Program's (MRIP) for-hire survey (FHS) and the Southeast Region Headboat Survey. The FHS estimates charter vessel catches of state and federally managed species off the U.S. Atlantic and Gulf coast states, with the exception of Texas and more recently Louisiana. The Texas Parks and Wildlife Department conducts their own creel survey to estimate private and charter landings. Since 1993, South Carolina has administered a paper-based logbook reporting program for every licensed six-pack charter operator. These data are primarily used for state management and quota monitoring for federally managed species occurs as part of the MRIP for-hire survey. North Carolina is also developing an electronic logbook system for their own use with the goal of supplanting the MRIP for-hire survey once fully operational and compatible with MRIP. In recent years, interest by constituents and the Councils has been growing to implement electronic reporting requirements in the for-hire sector. There is general distrust of MRIP landings estimates for the for-hire survey and managers and fishermen have expressed a need for more timely and accurate data to support fishery monitoring, science, and management. Additionally, the National Research Council's (NRC) review of recreational survey methods concluded that in most cases charter boats should be required to maintain logbooks of fish landed and kept. These factors led to an electronic logbook pilot study of Texas and Florida charter vessels in 2010-11 and new electronic reporting regulations for headboats in 2014. Four additional projects have also been funded by MRIP or the National Fish and Wildlife Foundation in 2014 to test new approaches for monitoring charter vessel catch and effort. The GMFMC and SAFMC have also passed motions at recent meetings expressing their interest in electronic reporting by charter vessels and they formed this technical subcommittee to develop recommendations for the Councils' consideration by December 1, 2014, on how to best achieve an electronic reporting system for charter vessels. The technical subcommittee met May 27-28, 2014 to develop recommendations to the Councils. The technical subcommittee reached consensus of several aspects on a proposed program and identified a framework for implementation.

SECTION 2. OBJECTIVES

The Councils appointed this technical subcommittee (membership list below) to develop recommendations to implement an improved data collection program to support the needs of science, fisheries management, and address stakeholder concerns about data quality and redundancy in reporting. Specifically, the technical subcommittee was charged with developing recommendations to implement electronic reporting for charter vessels in the Gulf of Mexico and US South Atlantic in support of the following objectives:

- Increasing the timeliness of catch estimates for in-season monitoring;
- Increasing the temporal (and/or spatial) precision of catch estimates for monitoring;
- Providing vessel-specific catch histories for management;
- Reducing biases associated with collection of catch statistics; and,
- Increasing stakeholder trust and buy-in associated with data collection.

SECTION 3. TECHNICAL SUBCOMMITTEE MEMBERS

3.1 Membership

- Gregg Bray GSMFC
- Ken Brennan SEFSC
- Mike Cahall ACCSP
- Mike Errigo SAFMC
- Mark Fisher TPWD
- John Froeschke GMFMC
- Eric Hiltz SCDNR
- Doug Mumford NCDENR
- Ron Salz MRIP
- Beverly Sauls FWC
- George Silva HMS
- Andy Strelcheck SERO

3.2 Timeline

- May 2014 Technical subcommittee meeting in Tampa, Florida
- June 2014 Provide meeting summary to Councils for review and guidance;
- July 2014 Technical subcommittee conference call to discuss Councils' review and guidance;
- September 2014 Technical subcommittee webinar to discuss items needed to complete the report;
- November 2014 Draft report sent to subcommittee for review;
- December 1, 2014 Provide report to Gulf and South Atlantic Councils.

SECTION 4. RECOMMENDATIONS

The technical subcommittee discussed trade offs and limitations of potential modifications to fisheries reporting in for-hire fisheries. The subcommittee agreed (by consensus) on preferred approaches for several aspects and discussed barriers to implementation of a new program. The subcommittee solicited and received preliminary input from both Councils following the May 27-28 meeting. This guidance has been integrated into the report to the extent practibable yet, the recommendations remain those of the technical subcommittee.

The subcommittee emphasized that the program should *not* be designed around a single species, and should be flexible enough to accommodate different reporting requirements for different segments of the for-hire fleet. For example, if federally permitted vessels were required to report more frequently during the recreational red snapper season, other vessels that do not participate in this fishery should be able to continue reporting at their normal frequency. Similarly, an electronic reporting system should be able to accommodate vessels already required to carry VMS units for participation in commercial fisheries without necessarily requiring all for-hire vessels to report through VMS. Although not currently required, the Gulf Council expressed interest in using VMS and hail-out, hail-in protocols to improve effort estimates. This practice certainly could improve the quality of effort estimation in the for-hire fleet, although, implemenation would not be without challenges. The cost of a VMS program both in terms of vessel equipment and agency staff/infrastructure would require additional, longterm funding (see section about costs). This may be beyond current resource availability. Rather than recommend fleet-wide implementation of VMS and hail-out, hail-in requirements, the subcommittee recommends structuring the charter fishery monitoring program such that it is scaleable and expandable as management needs, technology, and funding availability change. This recommendation would allow improved data collection in the near term building on the recently implemented electronic reporting system for southeast region headboats (i.e., weekly, electronic reporting) and the MRIP charter vessel pilot program, yet would not require full implemention of VMS to move beyond the current process.

The current survey methodology was deemed inadequate to meet the objectives posed to the group (although not necessarily the original intent of the charter vessel survey). Specifically, timeliness, bias reduction, and stakeholder buy-in could be improved with an electronic reporting system without the inherant expense and time for implementation of VMS technology in the charter fleet (of course, the introduction of new biases is possible). These improvements are necessary given the requirement to establish annual catch limits for federally managed species and close the fishery when the target harvest level has been caught each year. This requirement for in-season quota monitoring is far beyond the management needs when the original charter vessel survey was designed and implemented and the guidance herein attempts to match the data collection effort to the needs of the current and future fisheries management.

4.1 Mandatory or voluntary participation

The technical subcommittee discussed participation in any new charter vessel monitoring program. Specifically, the subcommittee considered if participation in the program by charter vessel owner/operators could be voluntary or if mandatory participation is necessary. Voluntary

reporting programs can be advantageous in that reporting burden is reduced (or absent) from participants that do not wish to participate. This would also reduce the number of reports that require processing for catch and effort estimation. However, in absence of a complete sample, estimation procedures are necessary. Estimation procedures can be accurate and robust in a welldesigned survey, however, likely at the expense of reduced timeliness. Developing estimates of total catch from a volunteer program is problematic as the proportion of participants may be highly variable through time or across the survey area and volunteer participants may not be representative of all possible participants in this survey. This pattern has been demonstrated previously (e.g., angler avidity) in other studies of volunteer programs and will bias estimates when expanded to the total sector. Voluntary programs would also require careful consideration of the characteristics of the participants and those who choose not to participate as it is impossible to compare catch patterns with participants and non-participants; and an assumption that they are identical is necessary but likely inaccurate. The subcommittee agreed that the potential for bias is too great to recommend any voluntary reporting program and suggested that any program (i.e., census or survey) require reporting from participants be mandatory if selected (e.g., Southeast Region Headboat Survey (SRHS)).

The subcommittee agreed that the potential for bias is too great to recommend any voluntary reporting program and mandatory participation is necessary for vessel/owneroperators selected. This is recommended to best achieve the overarching objectives of the proposed program.

4.2 Survey or census

Both census and statistical surveys can (and are) used to estimate catch and effort in marine fisheries. Surveys are beneficial in that a representative sample of anglers (as opposed to the entire "population" of anglers in the fishery) and their catch is used to estimate the total catch. However, management often requires these estimates over relatively small areas, short-time scales, or for rare event species. In these situations, survey estimates sometimes lack the precision necessary or desired for management decisions. The common remedy is to increase sample effort (i.e., sample size) to achieve desired precision levels, however, the necessary sample size may exceed program resources. An additional challenge of surveys is that the strata (e.g., area, time-period) require complete coverage before making an estimate. In practice, this means that surveys generally have a longer lag between the time fishing occurs and when the resulting data are available for use.

A census provides a sum of the total effort and catch by tabulating these metrics from all participants in the fishery. In theory, reporting and subsequent use of these data in management can be rapid as no additional estimation procedures are necessary and the report submission frequency can be established (e.g., weekly) to balance management needs with reporting burden on fishery participants. In practice, estimating catch and effort from a census can be challenging if some participants do not report their catch and effort data within the specified reporting periods. In this event, the census is incomplete and requires an expansion factor to calculate the total catch and effort. As with any survey design, this estimation routine requires additional time, resources, and reduces precision of the estimate. In extreme cases, expanding an incomplete census to a total estimate can be difficult or impossible if the proportion of non-compliant

participants is large or if the non-compliant participants are markedly different than those that are reporting as required. Nonetheless, this capability is essential in a real-world census and is important to consider when developing reporting requirements (frequencies and accountability measures) and minimum acceptable lag-time for use in fisheries management.

The technical subcommittee recommends the development and implementation of a electronic logbook *census* program to estimate catch and effort for southeast region charter vessels, including procedures for expanding for non-reporting. This recommendation was based in part on the inability of the current survey to meet the needs of science and management applications and the requirement of timeliness beyond which is readily achievable through a survey approach.

4.3 Reporting frequency

The subcommittee discussed how often reports need to be submitted to provide timely data for science and management. Frequent reporting has at least two benefits. Reporting as frequently as practicable reduces recall error/bias when producing catch reports. Frequent reporting also can make these data available for use sooner. Currently, the GMFMC and SAFMC require electronic reporting on a weekly basis for commercial seafood dealers and federally permitted headboat operators. Similarly, the subcommittee recommends mandatory weekly reporting, or at shorter intervals if necessary (e.g., The Gulf Council may want to require daily logbook submission during the recreational red snapper season) for a new charter vessel program. A second recommendation was that reports be due from the prior fishing week as soon as practicable. Commercial seafood dealer reports must be submitted by the Tuesday following the previous fishing week (Monday through Sunday). This was considered preferable over the headboat reporting requirements where trip reports are due one week after the end of the fishing week. The reduced lag addresses both advantages identified above.

The technical subcommittee recommends trip level reporting with weekly submission due the Tuesday following each fishing week. This would include no activity reports that could be submitted in advance if periods of inactivity are known. The technical subcommittee discussed that a daily reporting requirement may not be feasible or enforceable, however, reporting systems and user interfaces should be designed to encourage "real-time" at-sea reporting of catch and catch related data elements (e.g. fishing location, fishing method, target species).

4.4 Data collection

A variety of software applications are available for data collection and submission including web, smart phone, and tablet based technology. Web-based software provide the capability to report fisheries data after completing the trip. Smart phone or tablet technology could be used for at-sea or real time reporting of catch and effort. This approach may limit the complexity of reporting options but could provide enhanced validation methods because catch and effort data could be submitted before returning to port allowing enhanced dockside validation. Smart phone and tablet technology can also allow for data input without a current

network connection and are also capable of recording vessel positions during a trip via global positioning system (gps) (a far cheaper technology than VMS, but not in real-time).

The subcommittee recommends a multi-faceted approach where a number of reporting platforms can be used so long as the minimum data standards and security protocols are met. Data standards would need to be developed and the subcommittee agreed that NOAA Fisheries, the GulfFIN, and ACCSP could work collaboratively to develop appropriate standards.

These recommendations encompass two overarching objectives of the monitoring program: 1) Flexibility for specific regions, species, or time periods; 2) A flexible framework to allow incorportion of improved technologies as they become available. Electronic monitoring and reporting capabilities are rapidly evolving and the options available in the near-future may far exceed the current suite of tools. It is necessary to allow (and encourage) this development such that in can be leveraged effectively to meet the needs of fisheries management.

4.5 Data storage and management

The subcommittee discussed data storage and management that would be necessarily expanded from the status quo in a census based monitoring program. The ACCSP and GulfFIN expressed willingness to handle these raw data and indicated this could be accomplished with extant resources.

The subcommittee recommends this process:

- 1. Logbook data collected via authorized platform, ex. web, tablet, phone, or VMS application
- 2. Data submitted to ACCSP or GulfFIN;
- 3. Data integrated by ACCSP or GulfFIN into single composite data set;
- 4. Composite data set distributed to appropriate agencies for analyses and use.

This process could eliminate duplicate reporting for some participants so long as appropriate data standards are in place and the respective agencies agree to confidentiality standards, which would allow sharing and accepting one another's data for use. Elimination of duplicate reporting (e.g., separate state and federal reports) would be a substantial benefit to participants in this survey program and could mitigate any additional reporting requirements for comparison to the current MRIP survey program.

4.6 Validation and estimation

A successful electronic for-hire program will require adequate validation of catch and effort data and will require collaboration among state, federal, and fishery information network (FIN) programs. A census is likely to be incomplete and estimation procedures for adjusting catch estimates will need to be developed in cooperation with MRIP. The time lag necessary to expand an incomplete census to an estimate (of harvest or effort) should be built into the

timeliness need for science and management applications. The Gulf MRIP pilot program tested new validation procedures and provided guidance on improvements necessary before full implementation. The pilot program was successful in that electronic reporting was used (almost exclusively) and supported many of the goals (e.g., more timely, simplified reporting process) yet, many participants failed to submit reports within the required time frame complicating the use of these data for management. The rates of compliance increased over the length of the pilot study period and similar result would be expected with full implementation highlighting the need for validation and an estimation procedure to calculate total catch and effort.

The technical subcommittee recommends building upon the validation methodology developed in the Gulf MRIP pilot study. An overview of the proposed methodology is below.

Dockside Validation of Logbook Trip Reports (Catch and Effort)

Validation procedures are critical to assessing the accuracy and completeness of submitted logbook reports. Critical components of validation include the creation and review of a site and vessel registry, and methods to validate catch and effort of self-reported data. There is currently a MRIP funded project; *Pilot Project; Validation Methods for Headboat Logbooks*, which is testing dockside sampling methods that could be used to validate headboat logbooks. Results from this project will be available in the spring of 2015.

Site and Vessel Registry

A registry of all vessels required to report via logbooks should include detailed docking location information for each vessel. The port city and mailing address for owners of all federally permitted vessels (both active and non-active) is available from the permit frame maintained by NMFS SERO, and may be used as a starting point for indentifying where vessels are located. A regularly updated list of all active charter vessels (both federal and state permitted) with docking site information is also maintained in states where the MRIP FHS is administered. From the vessel registry, a list of all known docking locations should be generated and each site should be given a unique identification code. Information contained in the site list should also include site location descriptions, site telephone numbers, contact person at the site, GPS location coordinates, and the total number of vessels located at the site. The site registry should be used to randomly select sites for dockside validation assignments (described below).

Validation of Catch

Dockside assignments for validating harvest should be randomly selected from the site registry and stratified by region (e.g. state or sub-region within large states) using probability proportional to size (PPS) sampling with replacement, with the size measure being the number of vessels at each site. This method is used in statistical sampling designs where sample clusters (e.g. sites where charter vessels dock) differ widely with respect the number of sample units (charter vessels) contained within. PPS sampling selects sites with a higher number of vessels more frequently and prevents potential sample bias by insuring that vessels at low pressure sites do not have a higher probability for selection. Sample days should be distributed across weeks and across weekend/weekday strata, and more weight should be given towards high fishing activity periods (summer and weekends). It is recommended that the site selection program be run monthly by a regional coordinating entity, such as GSMFC, who provides draw files to local

coordinators (states or other entities). Local coordinators should report tallies for the number of completed assignments and successful interviews to the regional entity weekly.

During an assignment, field samplers should arrive at the assigned site at least one hour before half-day charter fishing trips are expected to return. For sites where overnight fishing trips take place, field staff should call or visit the site the day before the assignment to determine if overnight trips are returning and arrive on site early if necessary to intercept those vessels. Upon arrival, samplers should survey the site and attempt to locate each vessel listed on the vessel register for that site. Each vessel at the site should be recorded on an Assignment Summary Form and coded as one of the following:

- 1 = vessel in
- 2 = vessel out, charter fishing (this must be verified)
- 3 = unable to validate (vessel sold, moved to unknown location, etc.)
- 4 = vessel out, NOT charter fishing (this must be verified)
- 5 = vessel out, fishing status unknown (use when unable to verify the fishing status)

For vessels coded as 2 (out charter fishing), the field sampler should attempt to verify the expected return time and record this time on the Assignment Summary Form. As each vessel returns from fishing, the sampler should record on a separate Dockside Intercept Survey Form the vessel name, vessel ID number, and the return date and time. Samplers should first approach the vessel operator for permission to weigh and measure all harvested fish, and the sampler should then observe the harvested catch and record the total number of fish for each species, as well as length at the mid-line (mm) and weight (kg) of whole fish that can be measured. After the catch is inspected, the field sampler should then conduct an interview in person with a crew member (captain and/or mate). It is important to conduct interviews directly with vessel operators, rather than with charter vessel clients, since the purpose of the dockside validation is to measure recall error and bias in trip data recorded by vessel operators on logbook trip reports. During the in-person interview, the following information should be recorded:

- Departure date
- Departure and return time
- Number of passengers (fishing and non-fishing, not including crew)
- Number of anglers (total number of passengers that fished at any time during the trip)
- Number of crew, including captain
- Target species
- Primary area fished (crew should be asked to identify the statistical area where the majority of fishing took place during the trip using statistical maps provided)
- The minimum and maximum depths (in feet) fished for the trip
- The percent of fishing time spent fishing in federal waters, state waters, and inland waters
- Primary fishing methods (bottom fishing, drifting, trolling, spear fishing)

- Hours fished (number of hours spent with gear in the water)
- For each species released or could otherwise not be observed by the field sampler, the total number released for each disposition:
 - 1 Thrown back alive
 - 3 Eaten/plan to eat
 - 4 Used for bait/plan to use for bait
 - 5 Sold/plan to sell
 - 6 Thrown back dead/plan to throw away
 - 7 Other purpose

Samplers should remain on site until the last vessel known to be out fishing has returned (with the exception of overnight trips).

Validation of Vessel Activity and Inactivity (Effort)

Validation of vessel activity (or inactivity) is critical to determining compliance with logbook reporting requirements. Information on whether or not a vessel is in or out of port on a particular day can be matched with logbook records or hail out/hail in requirements to determine if vessel activity was accurately reported. To validate vessel activity and inactivity before reporting in the logbook reporting system, sites should be clustered into groups of sufficient size that all sites within the selected region may be visited within a 6 to 8 hour time period, including driving time. Site clusters should be selected each week within a month using simple random sampling, without replacement. For small states where all sites may be visited in a single day, sites may all be included in a single cluster that is validated each week.

During a scheduled vessel activity validation assignment, the field sampler should visit all sites within a selected vessel activity validation region and attempt to verify the fishing status for all vessels at each site within that region. The sampler should record the fishing status and time for each vessel on a Vessel Status Validation Form using the following codes:

- 1 Vessel in
- 2 Vessel out, charter fishing (must be verified)
- 3 Unable to validate
- 4 Vessel out, not charter fishing (must be verified)
- 5 Vessel out, status unknown

If possible, the sampler should verify the fishing status with someone at the dock or in the booking booth. If unable to verify the fishing status of a vessel, the sampler should use code 5.

Dockside validation will also serve the secondary, and essential, function of collecting biological samples from the for-hire fishery. These samples are necessary to characterize the

catch for use in stock assessments and to monitor the health of the stocks. If practicable, the subcommittee recommends using observers on six-pack charter vessels. Additionally, VMS in conjunction with hail-out, hail-in to improve validation could be considered to improve validation and data quality, although at the expense of additional cost and reporting burden.

The subcommittee recommends use of an MRIP certified methodology for validation with the following elements: Gulf MRIP pilot study methodologies, including dockside validation of catch and vessel activity, and maintenance of site and vessel registries.

The following additional elements should also be considered:

- At-sea observer coverage; and,
- Fine-scale discard data, depths of capture, area fished, release mortality.

If VMS and hail in/hail out requirements are implemented, methods for validation could be modified as VMS technicians could validate when trips occur through vessel position coordinates.

4.7 Accountability measures

Procedures to ensure timely and accurate reporting of data are essential to the success of any program. Late or missing reports can reduce accuracy (recall bias), increase uncertainty (e.g., requires procedure to estimate catch from missing reports), and can prevent timely use of these data for science and management. The Councils recently began requiring electronic submission of reports from commercial seafood dealers. Dealer reports and the associated problems with late or missing reports were discussed at length by the Councils. The Councils now require timely submission (weekly, with reports submitted by the Tuesday following the previous fishing week) and that seafood dealers are *only* authorized to purchase seafood if they are up to date on previous reports. A similar procedure should be developed for charter vessels requiring submission of previous reports to maintain a valid charter vessel permit and take passengers on for-hire trips. The subcommittee recognizes that accountability will be challenging and costly to implement due to the mobility, turnover and sheer number of charter vessels.

The principle objective is to encourage compliance without issuing fines and/or penalties. However, the full range of potential accountability measures should be enumerated in consultation with NOAA General Counsel through development of management regulations and penalty schedules. Similar (or identical) reporting requirements should be established between the South Atlantic and Gulf of Mexico management regions that will ease reporting burden and aid in compliance. Extensive outreach, training (as necessary), positive messaging, and industry participation in the design of the data collection system should aid in reporting compliance and meeting the goals of the program.

The subcommittee recommends accountability measures and reporting requirements similar to those implemented for commercial seafood dealers in the southeast

region (i.e., weekly submission of trip level reports, including periods of no activity due Tuesday following each week). A charter vessel owner/operator would only be authorized to harvest or possess federally managed species if previous reports have been submitted by the charter vessel owner/operator and received by NMFS (NMFS) in a timely manner. Any delinquent reports would need to be submitted and received by NMFS before a charter vessel owner/operator could harvest or possess federally managed species from the EEZ or adjacent state waters.

4.8 Calibration with existing survey

Transitioning into the proposed program will require an upstart period of at least one year to conduct outreach and ensure a high level of compliance. The subcommittee recommends dual survey methods (existing and new) for no less than three years. This overlap in survey periods will provide a basis to calibrate the new census results to the historical catch and effort data from the existing charter vessel survey. Historical catch data are critical inputs for science (e.g., stock assessments) and management (e.g., season length) and implementation of a new system without calibration would compromise the value of the historical catch information. Additionally, implementation of the new program is likely to have start-up difficulties that require modification, as such, the existing survey would not be expected to provide the best scientific information available (at least for the first year) until the new program is deemed operational.

Data from the new program would not be expected to provide management advice during the first year of operation. Moreover, this would allow the possibility of an initial phase-in or limited implementation to identify and solve significant problems prior to implementation for all participants.

4.9 Should state permitted for-hire vessels be required to participate?

The subcommittee discussed the objectives of the proposed program (i.e., improved estimates of catch both in terms of timeliness and accuracy), as well as the importance of mandating participation from state permitted for-hire vessels. The possibility of state vessels landing federally managed species in state waters does exist but the magnitude of those landings is unknown at this time, but expected to be relatively small for most federally managed species. The difficulties in establishing rules to mandate state vessel participation may be too great and should not be a barrier to developing a reporting program for federally permitted vessels. However, incorporation of state vessels into the program should be a long-term objective that would aid in timeliness and accuracy of data from the entire for-hire fleet and could simplify validation protocols that would not require distinguishing between state and federally permitted vessels.

The subcommittee recommends that the Councils move forward with development of a reporting system that includes federally permitted for-hire vessels while also exploring ways to determine the impact of state permitted vessels on landings estimates of federally managed species. Long term, the subcommittee recommends that both state and federally permitted charter vessels participate in this census to include the entire fleet of charter vessels harvesting federally managed species.

4.10 Program coordination

The subcommittee discussed that the success of the program requires a smooth and well-coordinated program throughout the region. This is to meet timeliness needs, improve accuracy (and precision), and minimize duplication of effort.

To this end, the subcommittee recommends that GulfFIN and ACCSP committees work jointly with end users (i.e., MRIP, SERO, SEFSC, HMS, and state agencies) to coordinate this new reporting program. Both quality control and quality assurance units in the program to ensure data meets required standards. A timeline for program implementation must be developed with the Councils, states, and other agencies.

4.11 Budgetary implications

The vision of the subcommittee is that the proposed census program may be funded through MRIP and incorporate MRIP certified validation and estimation procedures but operation would be decentralized from MRIP to regional and state entities through their FINs. It is expected that the census approach recommended by this subcommittee would result in additional costs for monitoring compliance and validating trip activity. Additional infrastructure and personnel may be necessary to maintain and process these data.

Electronic Logbook Costs

Cost estimates are an important component to the development of any new reporting program, and provide resource managers and scientists with a sense of how much funding is needed to support both implementation and maintenance of a program. Costs for electronic reporting may include: software development, reporting and/or monitoring hardware, monthly service fees, and personnel for data management, validation, and estimation. Costs are incurred both by the government, as well as fishermen who report these data. The following provides a summary of estimated costs for the electronic reporting program developed by the Technical Subcommittee. Cost estimates from existing programs and pilot studies, such as MRIP, the Southeast Headboat Survey, the commercial coastal logbook program, and the MRIP electronic logbook pilot study, are also provided for comparative purposes. Implementation of a new reporting program would require side-by-side comparative testing for calibration purposes, and those costs are not considered herein. Costs for observer coverage are also not included. Rather, costs are focused on the initial implementation, ongoing administration, data management, and statistical estimation of an electronic reporting program in the Gulf of Mexico and South Atlantic.

Current and Pilot Study Program Costs

The Marine Recreational Information Program (MRIP) is the primary source of charter for-hire data in the Southeast Region. MRIP collects catch and effort data from both state-licensed and

federally-permitted charter vessels from North Carolina through Mississippi. Charter vessel catch and effort data are also collected by the Louisiana Department of Fish and Wildlife and Texas Parks and Wildlife Department through creel surveys, and side-by-side comparison testing is planned for Louisiana in 2015. Annually, MRIP spends approximately \$4.3 million dollars to conduct dockside sampling and validation in the Southeast Region (North Carolina to Louisiana) for both private and charter vessels. Costs for specifically conducting charter sampling were not estimated, as those costs are difficult to estimate due to a combination of factors (survey procedures, contractual pricing, fixed costs and staffing/administrative considerations), but obviously would be less than the overall costs indicated above. An additional \$600 thousand dollars is spent conducting the for-hire telephone survey annually. A total of 3,920 charter vessels are currently included in the MRIP for-hire survey frame.

Headboat catch for 145 vessels is monitored through electronic logbooks by the SEFSC. A total of 13 federal, state, and contract personnel are involved in administering the program and monitoring fishing activity from North Carolina to Texas, including biological sampling and validation of reports of landings and effort. Costs for the program include salaries and benefits, vehicles, travel, supplies, and software development and maintenance. Total funding for the Southeast Headboat Survey is approximately \$888 thousand dollars, which equates to \$6,124 per vessel annually.

The SEFSC coastal logbook program for commercial fisheries is a paper-based logbook program, which obtains data from about 3,000 permit holders (vessels). Annually, the SEFSC spends \$775 thousand dollars for data entry, personnel, printing, storage, software maintenance, and overhead for this program. These costs do not include Trip Interview Program sampling, which is used for validation and biological sampling of commercial landings. The costs also do not include compliance enforcement.

Lastly, MRIP conducted an electronic logbook pilot study in 2011. The study included 410 vessels from the Florida Panhandle and Port Aransas, Texas. Costs for the pilot program included \$213.5 thousand dollars for start-up expenses, including a stakeholder workshop, software development, certified letters, outreach meetings, and working group meetings. Project expenses for logbook reporting and validation for one-year totaled \$385.6 thousand dollars. These expenses included salaries and overhead for a full-time coordinator, a database manager, and four field staff. Expenses were also included for travel and training expenses, equipment, printing costs, at-sea observer passenger fares, and GSMFC administrative costs. The average cost per vessel was \$1,340 for Texas vessels and \$658 for Florida vessels. Many more vessels were concentrated in a small geographic area in the Florida Panhandle, resulting in lower costs relative to Texas. In-kind contributions from NMFS and state employees were not included for many staff who served on the project team for the pilot study and conducted analyses, customer service, and database management. Therefore costs presented in the final report are less than the true costs of the project. On average, the cost per vessel as reported in the pilot study was \$911 after excluding observer passenger fares and paper-based logbook printing.

Table 1. Estimated Costs for an Electronic Logbook Program. Estimates are based on 2,555 <u>federally</u> permitted charter vessels. Headboat vessels are excluded from cost estimates, as well

as vessels already possessing a commercial reef fish permit and VMS unit.

| Activity | Cost Type | Estimated Expenses | Comments/Source |
|-------------------------|-------------|--------------------|---|
| Software Development | Start-up | \$100,000 | Costs for Web site/app |
| 20. cropment | (gov't) | ,, | development. These costs could be |
| | (50, 6) | | reduced if existing software |
| | | | applications (SE Headboat Survey |
| | | | or iSnapper) are used instead of |
| | | | any new software developed. |
| | | | However, modifications of data |
| | | | fields, data storage and data export |
| | | | procedures would be required to |
| | | | accommodate the increased |
| | | | number of vessels. |
| Hardware/database | Start-up | \$25,000 | Purchase of a server to store data. |
| infrastructure | (gov't) | | |
| Hardware/database | Reoccurring | \$20,000 | There would be reoccurring costs |
| maintenance | (gov't) | | for hardware/software and database |
| | | | maintenance. |
| Database manager(s) | Reoccurring | \$150,000 | Salaries and administrative costs |
| and administration | (gov't) | | for database management. |
| Certified Letters | Start-up, | \$15,858 | 2,643 vessels @ \$6 per letter |
| | with period | | |
| | reoccurring | | |
| | compliance | | |
| | letters | | |
| | (gov't) | | |
| Stakeholder Outreach | Start-up | \$30,000 | 15 meetings @ \$2,000 per meeting |
| Workshops | (gov't) | фа 202 000 | 52 |
| Field Samplers – | Reoccurring | \$3,392,000 | 53 port agents @ 50 vessels per |
| Salaries, Benefits, and | (gov't) | | port agent. \$64,000 for salary, |
| Overhead | | | benefits, and overhead per port |
| | | | agent – source SE Headboat |
| | | | Survey. If costs per vessel (\$658- \$1,340) from MRIP pilot study are |
| | | | used, then total costs range from |
| | | | \$1.74 to \$3.54 million. |
| Data Analyst(s) – | Reoccurring | \$215,000 | 1 Gulf and 1 South Atlantic analyst |
| Salary and Benefits | (gov't) | ψ210,000 | @ GS-13 salary + benefits |
| Training, Travel, and | Reoccurring | \$158,700 | ~\$60 per vessel – source MRIP |
| Equipment for Field | (gov't) | ψ130,700 | pilot study; costs are higher for |
| Samplers | (80, 6) | | more remote areas vs. ports with |
| - uniprois | | | large concentrations of vessels. |
| Enforcement and | Reoccurring | \$800,000 | Data timeliness is critical for a |
| Compliance Monitoring | (gov't) | , , | logbook program. Additional |
| - Enforcement officer | | | compliance monitoring and |
| salaries, benefits, and | | | enforcement for misreporting and |
| overhead. | | | non-compliance with reporting will |
| | | | be required. To properly conduct |
| | | | compliance an increase of 5 |
| | | | Enforcement Officers and 1 |
| | | | Supervisory Enforcement Officer |
| | | | are estimated to be needed. |
| | | | |

| VMS units (if required) | Start-up | \$5,750,000 (low estimate) | Currently 107 charter for-hire |
|-------------------------|-------------|--------------------------------------|--------------------------------------|
| | (gov't or | \$7,750,000 (high estimate) | vessels have a commercial reef fish |
| | industry) | (Reimbursement to fishermen for | permit and VMS unit and another |
| | | the purchase of VMS units may be | 145 vessels participate in the SE |
| | | available from NOAA Fisheries' | Headboat Survey. Approximately |
| | | Electronic Monitoring Grant Fund, | 2,500 charter for-hire vessels |
| | | but this money is currently not in | would need to obtain a VMS, if |
| | | hand and OLE would need to | required. Costs for VMS units |
| | | request funds through the budgetary | range from \$2,300 to \$3,800. Up |
| | | process) | to \$3,100 is currently authorized |
| | | | for reimbursement. |
| VMS installation | Start-up | \$500,000 (low estimate) | 2,500 vessels x \$600 for marine |
| | (industry) | \$1,500,000 (high estimate) | technician to install VMS unit. |
| | | | Installation costs range from \$200 |
| | | | to \$600 depending upon proximity |
| | | | of vessel to marine electrician. |
| VMS personnel | Reoccurring | \$530,000 | Salary and benefits for five VMS |
| | (gov't) | | technical staff (monitor 500+ |
| | | | vessels each) and one OLE |
| | | | Helpdesk person. |
| VMS annual service | Reoccurring | \$1,800,000 | \$60 per month per vessel; \$720 |
| charges | (industry) | | annually per vessel x 2,500 vessels |
| VMS unit software | Reoccurring | \$50,000 | If VMS units will report any |
| | (gov't) | | unique information, units will need |
| | | | to have initial and periodically |
| | | | updated software installed at a cost |
| | | | up to \$50,000. |
| Total Costs (w/o VMS) | | \$170,858 (Start-up) | |
| | | \$4,735,700 (Reoccurring) | |
| | | \$4,906,558 (Start-up + reoccurring) | |
| Total Costs (w/ VMS) | | \$6,420,858 (Start-up – low est.) | If VMS is required, some expenses |
| | | \$9,420,858 (Start-up – high est.) | for port sampling validation of |
| | | \$7,115,700 (Re-occurring) | fishing effort and enforcement |
| | | \$13,536,558 (Total – low est.) | compliance may be reduced. |
| | | \$16,536,558 (Total – high est.) | |

SECTION 5. CHALLENGES

5.1 Calibration with existing survey

The subcommittee recommends the use of dual survey methods (existing and new) for no less than three years. This overlap in survey periods will provide a basis to calibrate the new census results to the historical catch and effort data from the existing charter vessel survey. Historical catch data are critical inputs for science (e.g., stock assessments) and management (e.g., season length) and implementation of a new system without calibration would compromise the value of the historical catch information. Additionally, implementation of the new program is likely to have start-up difficulties that require modification, as such, the *proposed census would not be expected to provide the best scientific information available (at least for the first year)* until the new program was deemed operational.

5.2 Reporting burden

Although frequent reporting with as short as practicable lags between end of fishing period and report submission is desirable, the burden of reporting on vessel operators is an important concern. Wherever feasible, the reporting burden should be minimized. Implementation of this new program would require additional reporting burden over the status quo. To mitigate this requirement, the subcommittee recommends reducing duplicate reporting (submission of reports to multiple agencies, possibly in different formats) to ease reporting requirements. For example, charter vessels selected for the current For-Hire telephone survey should be able to submit their data electronically satisfying the submission requirements for both programs.

5.3 Compliance

Ensuring compliance is likely the biggest barrier to achieving the objectives for this program; more timely data with improved accuracy and stakeholder confidence. The MRIP Gulf logbook pilot project was negatively affected by late or missing reports from participants. In a census program, this is detrimental to both timeliness and accuracy as complete catch estimates cannot be generated with missing reports. Late reporting also affects accuracy because of recall bias (i.e., difficult to remember what was caught several weeks earlier). In addition, an incomplete census will require an estimation procedure to account for un-reported landings that requires time and adds uncertainty to the final catch and effort estimates.

Adequate accountability measures are essential to achieving high compliance rates (i.e., 100% timely reporting). The subcommittee recommended an approach similar to the accountability measures recently developed for commercial seafood dealers and headboats. Briefly, commercial seafood dealers are only authorized (i.e., possess valid permit) to purchase seafood if their weekly purchase reports have been submitted. As is the case with headboat reporting, charter boats would not be allow to harvest or possess federally managed species from the EEZ or adjacent state waters untilprevious trip (including no activity) reports have been submitted. The effectiveness of this accountability measure is dependent of the capability of law

enforcement to enforce reporting requirements. The subcommittee recommends consultation with the Office of Law Enforcement and NOAA General Counsel to explore the selection of appropriate and enforceable accountability measures.

5.4 Collaboration with states

Individual States would be tasked with data collection and validation within their collective states. State requirements vary regarding reporting of fishery data with some states (e.g., South Carolina) requiring the submission of paper-based reporting. Other states (e.g., North Carolina) are progressing rapidly toward electronic logbooks with the other states within this range. Long term, the subcommittee recommends that both state and federally permitted charter vessels participate in this census to include the entire fleet of charter vessels harvesting federally managed species. In the near-term, implementation of electronic logbook reporting for the federally permitted for-hire fleet would substantially improve the data collection program but not depend on delays and uncertainties associated with requiring similar regulations for state-permitted vessels at this time. Consideration of only federally permitted vessels would ease the implementation of this process with the caveat that a large proportion of charter vessels would not be included in the census and their catch (and effort) would have to be estimated via other means that would reduce effectiveness of the census program. However, for state-permitted vessels, requiring electronic reporting without duplicate paper reporting may require legislative changes in some states (e.g., South Carolina) and there is uncertainty if or when this could be accomplished.

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Webinar Public Hearing Summary Framework Action: Modifications to Charter Vessel and Headboat Reporting Requirements December 17, 2015

Council/Staff

Greg Stunz John Froeschke Emily Muehlstein Bernie Roy

31 Members of the public attended.

Bob Zales

The Council should not take final action on the use of VMS or electronic reporting until the many questions about the logistics of the program are answered. For example, what types of VMS would be used? What type of device could you report with? If your unit fails can you leave the dock on a scheduled trip? Commercial fishermen who are required to use VMS leave the dock on the way to make money. Charter fishermen already have their customer's payment when they leave the dock. Unit failure is much worse for charter businesses than commercial businesses because it prevents customers from taking a trip and forces captains to refund money and find a different vessel for their customers. The Government Accountability Office just finished a report on NMFS that shows that the service does not properly communicate about their data program so, fishermen don't know what the science center is going to do once the Council gives them carte blanch control of implementing a program.

Tom Adams

The for-hire sector in his area (north Florida) would vote that VMS is the least desirable system possible. If someone has a smartphone that works for reporting you'll be able to fish no matter what. He's heard of a voluntary VMS program where fishermen won't put the machines on their boats even when they're free. If you can't get it done for free on a voluntary basis then there obviously isn't much support for VMS. The SPOT tracker does the same thing as VMS for much cheaper. He doesn't even know why it's useful to collect position information. A hail-in and hail-out system is a better idea. If you put these burdens on federal captains you can't assume state charters will follow suit. This is being pushed through too fast and we don't even know what we're trying to accomplish.

Mike Miglini

People should be allowed to choose from several different devices including cellphones and a webpage so that people aren't stuck on the dock if VMS doesn't work. We should improve data reporting because federal for-hire captains have their own allocation of fish and they would like to show that they can manage their

allocation well despite the fact that there are other anglers that don't report. This would also set a good precedent and non-reporting anglers might follow suit. Requirement for reporting should be developed along with a new management plan like in Amendment 41. If the for-hire industry has better reporting they should benefit from better management as well. Even if the Council decided not to take action on this then NMFS can still move forward with data collection but reporting and management should be developed together. Reporting should be done before a vessel hits the dock. It would be better to have a system that ensures people can't mess with information and miss report.

Daryl Carpenter

The Council needs to table this or take no action on all these items. This is being pushed through way too fast. This action would give the science center the ability to implement this program in any way without input from the public. This is mostly targeted at effort validation and catch reporting. Many of the states are coming up with their own systems so electronic reporting may not be necessary. NMFS does not have the staff or infrastructure to handle the data from a program like this. The Council hasn't discussed logistics of the program and control should not be given to the Science Center. It seems like the Council is moving towards a system like what the commercial fishermen have. He won't be able to give good notice before ending a trip and law enforcement wouldn't be able to meet him when he lands. Also, he doesn't want to name a homeport because fishermen have to move marinas.

Josh Ellender

Take no action on this amendment. This is being rushed through without a real plan and giving the science center complete control is not okay. There is so much diversity in the charter fishing world ranging from a 60 ft headboats to a small center console boats all operating in different areas of the Gulf making it hard to force everyone to use the same system.

Kevin Bellington

The Council should take no action on all three actions. Additionally, there are lots of recreational anglers and it's not possible to collect data from those people. If you compare those people to the 1300 permitted for-hire vessels, the data you're collecting from this increased reporting is such a small part of the fishing pressure. Making this mandatory for just the charter boats is wasting time and effort for little reward. Even though it will be good data it's just such a small part of the fish that are harvested in the Gulf so, there is little benefit to collecting the information.

Shane Cantrell

This document isn't limited to a VMS. Dually permitted vessels should be allowed to use VMS because they already have one but, not everyone feels that way. Smartphone reporting should be an option. We're not ready for this amendment right now. You should report before landing at the dock for both charter vessels and headboats. There needs to be a variety of technology options for Action 3. The Council and NMFS needs to work together to come up with solutions. The Science

Center should not be given free reign over the logistics of the program. The fishermen should contribute to the process so they can develop a program that will work for them. Let's be sure we design a system that works for good and will fit for future management.

Mike Colby

He supports the preferred alternative for both Actions 1 and 2. The Bluefin reporting program had such low compliance because it was web-based and required the angler to go home and log catch on the computer once a trip is over. He knows that reporting after the fact doesn't work because you're not going to go home and report after trip so you may as well get it out of the way as a part of your trip. For vessel location reporting Action 3 he supports the preferred alternative. He would like the Council to discuss all the options for vessel monitoring. He is a part of the VMS electronic monitoring program to see if fishermen will use it and if it makes sense. The information coming out of that program will help to inform the Council to the feasibility of the program. There are way too many assumptions made by the fishermen about the reporting program. The Council doesn't know what the monitoring platform should be. Catch is validated from what you enter and through dockside monitoring. Effort is monitored by location and that information is best collected with a VMS because using GPS on your phone might not be valid. For-hire fishermen are not commercial fisherman and any monitoring program put on the charter industry will look much different than the commercial program because the needs of the program are different.

Modifications to Charter Vessel and Headboat Reporting Requirements

Summary of Written Comments

January 22, 2016

- The cost of electronic reporting equipment will be too much for vessel owners to bear and could put some out of business.
- Opposed to submitting reports prior to returning to the dock.
 Reporting while underway creates a safety issue as the disctraction of the crew away from watchkeeping and tending to customers is compromised. Sometimes a charter will go out and have to head back in due to
- Don't mind reporting data, but the added cost is a burden.
- Support the use of ELB and VMS to report landings inasmuch as it is the best way to streamline data collection for the CFH industry.
- Supports weekly reporting online but does not support requiring vessel or catch location reporting. Frequent reporting via electronic reporting devices is cost prohibitive.
- Opposed to electronic reporting. Has no knowledge on how to use any kind of technology, including email, but would be happy to submit a logbook.
- Professional for-hire fishermen are responsible and the Coast Guard already knows where they fish so they shouldn't have to hail out and hail in.
- Already participate in the phone surveys and anything more would be a burden – it's hard enough to make money as it is, adding the expense of electronic equipment would make it harder.
- Support if there is no cost to for-hire owners/operators.
- Need more information. Is there a cost? How much? Is there a monthly subscription fee? Etc. Many cannot afford these costs, particularly part-time CFH.
- Support Action 1, Alternative 2 as long as reporting requirements are only for days fishing occurred and the format is user-friendly. No to VMS.

- Support Act 1, Alternative 4; Action 2, Alternative 4; and Action 3, Alternative 2. The headboat pilot worked very well.
- VMS would drain the batteries on the smaller boats. The Federal Reef Fish Permit is a double-edged sword since they cannot fish in state waters when Federal waters are closed.
- Support Action 1, Alternative 2; Action 2, Alternative 2; and Action 3, Alternative 1. Consider adding an Action that requires the weighing o fish via fish kiosk weigh system.
- Implement trip limits on the Commercial sector. Also, red snapper should be closed to all anglers in June and July for spawning, and it should be opened weekends only April, May, September, and October.
- Six pack operators usually operate single handedly, making it a burden to submit reports while in transit to the dock, inasmuch as they are undertaking other responsibilities, like safety and tending to customers.
- Support No Action on all three actions. All three are too broad and only establishes a "blanket rule" that will be sent to a committee to be designed with no stakeholder or Council input.
- VMS/Electronic Reporting OR fish tags are the only way to collect real-time data for the for-hire fleet. Fish tags would be the easiest to implement.
- VMS will not work for Venice, LA captains, but electronic logbooks would.
- This is a huge opportunity to provide timely and accurate data while increasing accountability.
- Any modifications to reporting should be paired with Amendments 41 and 42.
- VMS is too much, too fast.
- Support Alternative 4 in actions 1 and 2, but No Action in Alternative 3 – No VMS.
- Support for weekly reporting via smartphone.
- There are enough regulations leave the regulations alone.
- Support electronic reporting.



Gulf of Mexico Fishery Management Council

Modifications to Charter Vessel and Headboat Reporting Requirements

Proposed Actions

- **Action 1:** Modify frequency and mechanism of data reporting for charter vessels
 - Preferred Alt. 4: Trip level, electronic reporting
- **Action 2:** Modify frequency and mechanism of data reporting for headboats
 - Preferred Alt. 4: Trip level, electronic reporting
- **Action 3:** Modify electronic reporting requirements to require vessel or catch location reporting
 - Preferred Alt. 2: Record vessel location using a NMFS approved electronic device

Timeline of Council Activities

Jan 2015: Received technical subcommittee report

Mar 2015: Initiated joint Gulf/SA amendment

Jun - Aug 2015: Amendment development

Oct 2015:

- Separated into Gulf only amendment
- Directed staff to prepare amendment for final action

Jan 2016:

Review draft Final Action document*

*Codified text could not be developed at this time without more information

Action 1: Charter vessel reporting*

Modify frequency and mechanism of data reporting for charter vessels

Preferred Alternative 4. Require that federally permitted charter vessels submit fishing records to the SRD for each trip via electronic reporting (via NMFS approved hardware/software) prior to arriving at the dock.

*Action 1 applies to federally permitted for-hire vessels that do not participate in the Southeast Regional Headboat Survey (SRHS).

Action 2: Headboat reporting*

Modify frequency and mechanism of data reporting for headboats

Preferred Alternative 4. Require that federally permitted headboats submit fishing records to the SRD for each trip via electronic reporting (via NMFS approved hardware/software) prior to arriving at the dock.

*Action 2 applies to federally permitted for-hire vessels that participate in the Southeast Regional Headboat Survey (SRHS).

Action 3: Vessel catch location reporting

Modify electronic reporting requirements to require vessel or catch location reporting

Preferred Alternative 2. Require federally permitted for-hire vessels to use a NMFS approved electronic device to record vessel location at specified time intervals:

- Preferred Sub-Alternative 2a. Headboat
- Preferred Sub-Alternative 2b. Charter vessel

Steps to implementation

NMFS/SEFSC

- Develop software/hardware requirements
- Develop data standards and data flow
- Develop transition plan
- Develop technical recommendations for implementation

GMFMC (after completion of items above)

- Complete analyses based on NMFS/SEFSC guidance
- Continue work with stakeholders
- Complete regulatory requirements

Questions?