GULF OF MEXICO FISHERY MANAGEMENT COUNCIL

HABITAT PROTECTION AND RESTORATION COMMITTEE

Renaissance New Orleans Pere Marquette New Orleans, Louisiana

January 27, 2025

VOTING MEMBERS

Michael McDermott.....Mississippi
Kevin Anson (designee for Scott Bannon).....Alabama
Kesley Banks.....Texas
Dakus Geeslin (designee for Robin Riechers).....Texas
Anthony Overton.....Alabama
Joe Spraggins.....Mississippi
Andy Strelcheck.....NMFS

NON-VOTING MEMBERS

Billy Broussard.....Louisiana
Dave Donaldson.....GSMFC
J.D. Dugas.....Louisiana
Troy Frady.....Alabama
Tom Frazer.....Florida
LT Jackson Morton.....USCG
John Sanchez.....Florida
Chris Schieble (designee for Ryan Montegut).....Louisiana
C.J. Sweetman (designee for Jessica McCawley).....Florida
Ed Walker.....Florida
Troy Williamson.....Texas

STAFF

Max Birdsong.....Social Scientist
Assane Diagne.....Economist
Matt Freeman.....Economist
John Froeschke.....Deputy Director
Beth Hager.....Administrative Officer
Lisa Hollensead.....Fishery Biologist
Sarah Gardiner.....Fishery Biologist
Mara Levy.....NOAA General Counsel
Jessica Matos.....Administrative Document Editor & IT Coordinator
Emily Muehlstein.....Public Information Officer
Ryan Rindone.....Lead Fishery Biologist/SEDAR Liaison
Bernadine Roy.....Office Manager
Carrie Simmons.....Executive Director

OTHER PARTICIPANTS

Frank Helies.....NOAA
Andrew Richard.....NOAA

Tom Roller...SAFMC
John Walter..SEFSC

- - -

TABLE OF CONTENTS

- - -

TABLE OF MOTIONS

- - -

The Habitat Protection and Restoration Committee of the Gulf of Mexico Fishery Management Council convened at The Renaissance New Orleans Pere Marquette in New Orleans, Louisiana on Monday morning, January 27, 2025, and was called to order by Chairman Michael McDermott.

ADOPTION OF AGENDA
ACTION GUIDE AND NEXT STEPS

CHAIRMAN MICHAEL MCDERMOTT: I would like to call the Habitat Protection and Restoration Committee to order. Members of the committee are myself, Dr. Banks, Mr. Anson, Mr. Osborne, Dr. Overton, Mr. Geeslin, and General Spraggins, and Mr. Strelcheck. Can I get a motion to approve the November 2024 minutes? Motion by Dr. Banks.

GENERAL JOE SPRAGGINS: Second.

CHAIRMAN MCDERMOTT: Seconded by General Spraggins. Anybody opposed to the approval of the November 2024 minutes? Not seeing any motion, the motion passes. We've got an action guide and next steps by Ms. Gardiner.

PRESENTATION: UPDATE ON EFH GENERIC AMENDMENT 5

MS. SARAH GARDINER: Thank you, Mr. Chair. I'll walk through the action guide, agenda-item-by-agenda item. So, first up this morning, we'll be receiving a presentation by myself on the Generic Amendment 5 Essential Fish Habitat Progress Update.

The council is developing a generic amendment to update EFH descriptions for managed finfish, shrimp, and spiny lobster species. Staff will provide a presentation updating the council on the progress of the amendment and review the proposed timeline. The presentation will include the proposed methods for defining EFH, which incorporate the recently contracted work completed by Dr. Bridgette Froeschke, and the council should ask questions and provide feedback to staff at this time. With that, Bernie, if you can pull up the presentation, and I'll get started on that.

This is just a progress update for the council, to kind of get a pulse check on where we're at with this amendment and what work has been completed in the past. It's been planned for the last couple of years, and so I kind of wanted to bring it back to the council so that it could be on the forefront of folks' minds as we start to bring some of this work forward in the next couple of

council meetings.

Essential fish habitat, the five-year review is a mechanism to ensure NOAA Fisheries and fishery management councils incorporate the most recent and best science available into fishery management for EFH, and so this is something that all councils do. It's required in regulations, and we should be doing it every five years.

The Gulf Council's most recent EFH was conducted in 2016, and so there's ten components of the EFH five-year review, that I'll walk through on the next slide, but each five-year review should kind of look at these amendments, or these components, and then consider whether they need modifications or updating during the five-year review.

I will note that something that's different, that our council does, is that every time we don't -- Every time we do a five-year review, it doesn't result in an amendment, and so the last two five-year reviews weren't amendment updates, but this one is warranting an amendment update, just because it's quite a bit outdated, and the most recent amendment update was in 2005, with the Generic Amendment 3.

These are the ten components of an EFH five-year review. I would say the most noteworthy component, or the one that's most utilized most often within the council, and for EFH consultations, is Component 1, which is EFH descriptions and identifications to the text and maps for species that identify where EFH exists. The other components are included in the five-year review, and we update these as well as we move through the amendment process.

EFH is most commonly used in this region for consultations with our federal agency partners for regulatory permits and civil works of the Army Corps of Engineers, consultations for BOEM, wind, oil and gas, and aquaculture development, and these consultations are used to see, you know, if these potential proposed projects would interact with any EFH for any of our species or species life stages, and so having the most updated, and most precise, information on species EFH, by life stages, does help with the consultation process, in being able to recognize the impacts that any of these proposed projects would have on potential EFH environments, which would overall benefit the stock health and condition and just have more information, and a better pulse check on where and why and what species exist in their life stages might provide better fishing opportunities, and more access, just with

more information.

This is a timeline on kind of the work that's been done so far, and so, starting in 2021, the SSC reviewed the methods that were proposed for updating the EFH and recommended more updated benthic habitat layers.

A draft document was brought to the council, in January of 2022, to review the proposed actions for Generic Amendment 5 and determine the contract work to update the benthic habitat. In 2023 and 2024, this contracted work by Dr. Froeschke was presented, and so that was at the November council meeting. She kind of brought forward all the work that her and her team had been working on to update the benthic habitat layers and compile that information.

That information is going to be used for the generic amendment, and that leads us to here, where I'm providing an update on the progress of the amendment and kind of how we plan to incorporate that information.

This was the draft purpose and mean that was brought to the council in January of 2022. I don't think it needs to be amended at this time, but the council could certainly weigh-in on that, but the purpose is to review and amend the description and identification of EFH for the Shrimp, Reef Fish, Coastal Migratory Pelagic, Spiny Lobster, and Red Drum Gulf FMPs.

The need is to consider contemporary habitat and species presence data sources, along with advances in computational modeling techniques, to update the description and identification of EFH originally adopted in EFH Generic amendment 3. All that to say we're looking at really updating this EFH texts and maps with more and better updated information to this point.

I briefly want to walk through kind of the anticipated workload on staff, and kind of maybe walk through what our timeline might look like, and so, when updating these EFH descriptions and identifications, texts, and maps, there's going to be forty species, across four different life stages, and so we'll be compiling about 120 maps for EFH.

That might take quite a bit of time, but we're hoping to use some of the information that Dr. Froeschke compiled and then previous literature reviews from the last two EFH five-year reviews to get those maps updated.

This is an example of the gag adult EFH, what that type of map would look like, and so we'll be doing this for all forty species across the four different life stages, and it would be a huge improvement compared to our current EFH definitions, which kind of are not as finite, and a little bit more broad-scaled, and so it would be helpful to be able to identify these additional regions. These maps are still under construction, but I did want to pull one up as an example, just to show folks what we're looking at for the maps that I'm going to be bringing forward.

In addition to those maps, we'll be updating these habitat attribute tables. I know this is really small. You don't really need to look at it, but this is just showing the scale of what we'll be updating for all forty species, and so this is kind of the literature review that's based off the work that was done in 2016, and then this was again updated in 2020, and so staff will be walking through this table for each of the forty species and conducting a thorough literature review, to make sure all habitat information is updated in these.

This is the forward-looking timeline. We're hoping to bring back a draft document in June, and then the SSC will review the methods, and the results, of some of the work that we're doing to compile the EFH maps and text descriptions sometime in 2025.

This is a heavier lift, and so we're anticipating that the document might have quite a few iterations to bring back towards the council, and so there's no action for the council to take, but I did want to provide just an informational update to the council on what we're going to be bringing back, kind of what that looks like, and then the potential timeline, to put it on the radar and give folks the opportunity to provide any insight or comments at this time, as we're moving through this iterative process, and, with that, I'll take any questions. Thank you.

CHAIRMAN MCDERMOTT: All right. It looks like there's no questions, and so we're going to move on to the proposed aquaculture opportunity area presentation. Mr. Strelcheck.

MR. ANDY STRELCHECK: Not a question, but mostly just a few comments. First, Sarah, thank you for the presentation. I think we're, you know, building some momentum, or continuing some momentum, on this, and so that's positive, from our vantage point.

A couple of things that I wanted to note, and so, with the kind of

work that's ongoing, right, and so, with EFH in the past, I think it's been viewed maybe that we've been overly inclusive, in terms of including everything that could be considered habitat, and now with the modeling results, right, there's going to be maybe more spacing on the maps, and more information, that shows, obviously, you know, that we're being more descriptive, with regard to the specific habitat, and so I think there's a balance there, and that's important.

I know the council focuses heavily, obviously, on the offshore environment. When we consult on essential fish habitat, I would say a bulk of the Fishery Service's work is actually on inshore and nearshore habitat, and so just don't lose sight of that, in terms of the essential fish habitat work that we're doing, and make sure that it's comprehensive, obviously, because that's where a bulk of the work continues to occur now.

I just wanted to kind of note that, and then my team's been, obviously, happy to work with you, and we'll continue to, obviously, provide, you know, input, and ideas, as we move along in this process, but I think we're making great progress on it. Thanks.

CHAIRMAN MCDERMOTT: All right. Any other questions, or comments, about the EFH? Dr. Sweetman.

DR. C.J. SWEETMAN: Thank you, Mr. Chair. I'm not on your committee, and maybe a question for you, Sarah, and so, just kind of reading the anticipated work, as it goes for EFH, am I interpreting this correctly, that we are trying to create like 120 maps, basically, for thirty-one reef fish species, CMP species, red drum, spiny lobster, and that includes egg, larvae, juvenile, and adult, and do we actually have enough information for all of that?

MS. GARDINER: Thanks for the question. Yes, you're correct in interpreting that. For some species we do. For some, that information is just not known, and so that's kind of what we're doing in the habitat attribute tables, is going through that literature review to determine if that information is known, and then are we able to turn that into a map, and so some might have all four, and I think that's what we're shooting for, but some just might be unknown.

For some species, that have not had any updated literature, or data that would show any updates to their maps, there may be no

changes, and I plan on kind of documenting those as we move through the process as well.

CHAIRMAN MCDERMOTT: All right. Any other questions, or comments, on the EFH? I don't see any, and so I guess we'll move on to this aquaculture opportunity areas presentation and Mr. Richard.

PROPOSED AQUACULTURE OPPORTUNITY AREAS (AOAs) PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT (PEIS)

MS. GARDINER: Thank you, Mr. Chair, and I'll just walk through the action guide for this. Mr. Andrew Richard, from the National Marine Fisheries Service, will provide a presentation summarizing the recent draft Aquaculture Opportunity Areas Programmatic Environmental Impact Statement document.

The AOA PEIS comment period is open until Thursday, February 20, 2025, and, following Mr. Richard's presentation, I'll provide a summary of the draft comment letter that's attached on the website for council review. The council should review the draft AOA PEIS, attached draft comment letter, and provide any additional feedback. We'll just pull up the presentation, Bernie, and thank you.

MR. ANDREW RICHARD: First off, thank you to the Habitat Protection and Restoration Committee for providing me the opportunity to present on our Draft Programmatic Environmental Impact Statement to Identify Aquaculture Opportunity Areas in the Gulf. My name is Andrew Richard. I am one of the two Regional Aquaculture Coordinators for NOAA Fisheries Southeast Regional Office, based out of St. Petersburg, Florida. I'm also the regional lead on the effort to identify aquaculture opportunity areas in the Gulf.

I'll start off by giving a little bit of an overview and a little bit of a history of the process on aquaculture opportunity areas, and then I'll discuss the Draft Programmatic Environmental Impact Statement and then provide an overview of the public review and comment period.

The executive order that directed NOAA to identify aquaculture opportunity areas was signed in May of 2020, the Executive Order Promoting American Seafood Competitiveness and Economic Growth. Under Section 7 of that executive order, it directed the Secretary of Commerce to identify geographic areas suitable for commercial aquaculture, or aquaculture opportunity areas, and then to complete a Programmatic Environmental Impact Statement to assess

the impacts of doing so.

The Gulf of Mexico, along with southern California, were first selected as the first two regions where aquaculture opportunity areas would be identified. Four of the reasons the Gulf of Mexico was selected was a history of aquaculture permitting and environmental review, as well as available spatial data, cooperation and interagency coordination across the federal agencies, also industry interest, and a long history of engagement with stakeholders on aquaculture in the Gulf.

So what is an aquaculture opportunity area? An aquaculture opportunity area, or AOAs, are defined geographic areas that have been evaluated to determine their potential suitability for commercial aquaculture development.

Aquaculture opportunity areas are potentially suitable for all types of aquaculture, finfish, shellfish, seaweed, or multispecies aquaculture, and the goal is to identify spaces in the ocean that are economically, environmentally, and socially suitable for aquaculture development.

These areas are identified using a combination of marine spatial analysis, scientific analysis, as well as extensive stakeholder engagement, and these aquaculture opportunity areas are only identified following the completion of a Final Programmatic Environmental Impact Statement and the signing of a record of decision.

Identifying aquaculture opportunity areas in the Gulf, NOAA is considering identifying a one or more aquaculture opportunity areas in federal waters of the Gulf. That Programmatic Environmental Impact Statement assesses the beneficial and adverse impacts of identifying aquaculture opportunity areas, as well as the potential impacts of future aquaculture operations sited within those areas.

Then one of the main takeaways from this process is that identifying aquaculture opportunity areas is a planning process. There's no projects that are attached to it. There's no farms that are being evaluated under this process. It's merely looking for those spaces and creating a foundation to inform future permitting and environmental decisions for aquaculture operations in the Gulf.

This is a timeline of the Gulf of Mexico aquaculture opportunity

area process. You can see, in May of 2020, the executive order was signed. Shortly after that, the Gulf of Mexico -- In August of 2020, the Gulf of Mexico was selected as one of those first two regions where aquaculture opportunity areas would be identified.

In October of 2020, there was a request for information to inform the development of the Notice of Intent for the aquaculture opportunity areas, as well as asking stakeholders to provide input on potential next regions for aquaculture opportunity areas.

During that time, we had extensive stakeholder engagement, and we were supporting the National Center for Coastal Ocean Science in the development of the Aquaculture Opportunity Atlas. We had over 200 stakeholder meetings, with stakeholders across all different sectors, including commercial and recreational fishing communities.

In November of 2020, NCCOS published the Aquaculture Opportunity Atlas for the Gulf of Mexico, and then, in June of 2022, a Notice of Intent was published to kick off the public scoping process to develop the Programmatic Environmental Impact Statement. We provided a presentation on the results of the atlas, as well as the Notice of Intent, in June of 2020, to the council, in Fort Myers.

Then we worked on publishing a public scoping summary that captured the public comments and input that we received during the public scoping process, and we published that on our website.

During that time, between then and now, we worked on preparing the Draft Programmatic Environmental Impact Statement, and that was published in November of 2024. It initiated a ninety-day public comment period that will run until February 20. Once that public comment period concludes, we'll review the comments that we received and work on preparing a Final Programmatic Environmental Impact Statement, as well as a response to comments.

Right now, we anticipate publishing a Final Programmatic Environmental Impact Statement, and those response to comments, sometime this summer, of 2025, and a record of decision soon to follow that.

Interagency coordination was a huge part of this process to develop the Programmatic Environmental Impact Statement, and we worked really closely with our federal agency partners, our cooperating agencies, the U.S. Army Corps of Engineers, the U.S. Air Force,

and the U.S. Environmental Protection Agency. We also worked with our participating agencies who had expertise in aquaculture in other industry sectors, the Bureau of Ocean Energy Management, U.S. Fish and Wildlife Service, and U.S. Coast Guard.

So the purpose and need of the Draft Programmatic Environmental Impact Statements apply a science-based approach to identifying aquaculture opportunity areas in federal waters of the Gulf, to meet the directives of the executive order to address increasing demand for seafood, facilitating long-term planning for offshore aquaculture development, and to address the interest and concerns regarding offshore aquaculture siting.

It was also to promote American seafood competitiveness, food security, economic growth, and supporting the development of domestic commercial aquaculture, while sustaining and conserving the marine resources, consistent with the applicable laws, regulations, and policies.

The proposed action is to identify locations, or aquaculture opportunity areas, that may be suitable for siting multiple future offshore aquaculture operations in federal waters of the Gulf, and to evaluate the potential impacts of identifying aquaculture opportunity areas, as well as the impacts of aquaculture operations sited within those locations.

The Draft Programmatic Environmental Impact Statement analyzes the potential impacts of identifying up to five aquaculture opportunity areas in federal waters of the Gulf, and it discusses those potential impacts.

This action does not change any of the existing permitting, authorization, consultation, environmental review process for offshore aquaculture operations in the Gulf of Mexico. As I mentioned, it's a planning effort, and so it's not a regulatory action. It doesn't change any of that.

Aquaculture operations that are sited within AOAs would undergo that permitting and environmental review process individually, once those projects are proposed. Again, this action does not propose to evaluate or authorize any individual aquaculture projects or specific aquaculture projects. Once again, it's just a planning effort, to look for spaces where aquaculture development can occur in areas that are not a conflict with natural resources or other ocean user groups.

I mentioned the Aquaculture Opportunity Atlas. That was a real key piece of the puzzle, as we're looking to identify aquaculture opportunity areas. It was published in November of 2021, and, at the time, it was the most comprehensive marine spatial planning ever conducted in U.S. federal waters.

For aquaculture opportunity areas, it considered more than 220 different data layer, and it consisted of more than 150 maps. The document was reviewed, and -- It was reviewed by the Center for Independent Experts, which brought in experts from around the world to review the document, and it really was built under comprehensive stakeholder engagement, all throughout that process, meaning the stakeholders -- To find the data that they held, and then also to make sure that were interpreting it right in the development of the Atlas, and so this was really a key effort, using this marine spatial planning in this way, and thanks to fishery stakeholders, and this is how it was carried forward for other ocean industry uses in the Gulf of Mexico.

This is just an example of how the suitability modeling within the atlas works. Traditionally, you start off with an area of interest, or you start off with a study area, which is the technical parameters where you're looking to begin your spatial analysis.

For us in the Gulf of Mexico, and for aquaculture opportunity areas, that was an area around the Gulf of Mexico in federal waters within the fifty to 150-meter isobath, all the way around the Gulf, all the way from Texas, all the way down into Florida, and so this marine spatial suitability process is a series of sub-models that are built to contain the different data layers.

Within those data layers, those areas are scored for their suitability with aquaculture development, and so areas that are not suitable receive scores of zero, and the most suitable scores of one, and it considers that data across all those different levels, and then the product of those different data layers being overlaid over top of one another shows the complexity of those ocean spaces and their potential suitability for aquaculture.

You can see, on the map there, the areas in red are areas that are not suitable for aquaculture development, and those lighter areas, lighter colors and blue areas, are areas that would be suitable.

I mentioned, you know, we had this very large area that we started off with in the Gulf of Mexico to identify aquaculture opportunity

areas, and, from that, and from the spatial suitability modeling, you received this final suitability model, and it shows the areas in red are areas that are not suitable, and so we started with a very large area, and, based on a number of different factors, like military use and natural resource considerations, you sort of winnow down the area to these very small blue areas that you can see in there that are the areas that are potentially highly suitable and areas that were carried forward as potential options for aquaculture opportunity areas.

This map is a sort of a blow up of those light blue areas, and, from those blue areas, there was a precision siting model that was run to pull forward the top nine AOA options from throughout the Gulf of Mexico and so, from that whole entire area, you end up with about 13,500 acres, nine areas, three in the western region, three in the central region and three in the eastern region, and those areas range between 2,000 and 500 acres each.

These were the preliminary alternatives that were proposed in the Notice of Intent. We asked stakeholders for feedback on if this approach seemed like a sound one, and the feedback that we received was, you know, the atlas had a lot of really great information, and those areas should be carried forward for consideration, and so, following the conclusion of that public comment period, and public scoping period, we met with our interagency partners to review those comments and then to also consider any new information, or new changes, or new data that had been developed since the atlas had been published in 2021.

After considering that information, we end up with a map similar to what you see here. The areas that are in green and orange are those that are considered in the Draft Programmatic Environmental Impact Statement. You'll see four areas that are colored in red. Those were areas that were removed from further consideration in the draft PEIS, and so the locations that were considered were W-1, W-4, W-8, C-3 and C-13.

The preferred AOA alternatives are W-1, W-4, W-8 and C-3, and so, from those 13,500 acres, we went down to 6,500 acres across four areas. As I noted, there's five areas that were considered, but only four were preferred. Area C-13 was considered in the Draft Programmatic Environmental Impact Statement. We did receive concerns and feedback related to shrimping activity that was in that area.

Following the review in the draft Programmatic Environmental

Impact Statement, we did note that, as well as some other considerations, such as a very high level of vessel traffic transiting through that area. It's the closest location to shore, and so aquaculture stakeholders were very interested in that location.

However, it received about 1,300 vessel transits through that area annually, and a lot of vessel traffic moving through that area makes it difficult to develop an aquaculture operation, where that area poses a risk navigation, as well as to fisheries in that area. It's also very close to shore, and subject to outfall from the Mississippi River, and so you have fluctuations in water quality at that location, and so that did not rise to the level as a preferred alternative within the draft.

Then you'll see the four areas, C-11, E-4, E-3 and E-1, that were removed from further consideration, and C-11, as noted by feedback received from the council, the Shrimp Advisory Panel, as well as Southern Shrimp Alliance and other shrimp fishermen in the area, and there is very high shrimping activity, and so we removed that from further consideration, and it would not become an option for aquaculture opportunity areas.

Our coordination with the Department of Defense, and the Air Force, who is a cooperating agency on the Draft Programmatic Environmental Impact Statement, noted an uptick in military activity in the eastern Gulf of Mexico, and concerns regarding fixed structures being placed in that area impacting military readiness, and so those were also removed from consideration in the draft.

These are just the technical descriptions of the alternatives. Really, the one I just want to touch upon is the no action alternative. We had a lot of confusion from stakeholders over the no action alternative, and what it meant in the process, but the no action alternative would be that no aquaculture opportunity areas are identified. We had confusion that it meant that no aquaculture would happen in the Gulf of Mexico, and so we do just like to clarify that, that aquaculture development would still occur if the no action alternative was selection.

However, operations that are sighted outside of areas that were analyzed in the draft PEIS would not benefit from the analysis that was done within that, and so Alternative 2 is a preferred alternative, W-1, a 2,000-acre area, and it would be considered, as well as the other preferred alternatives, as locations potentially suitable for all types of aquaculture for finfish,

shellfish, seaweed, as well as multispecies operations.

You have Alternative 3 is also a preferred alternative, Site W-4, and it's a 2,000-acre area off of Port Aransas and Corpus Christi Bay, and you also have Alternative 4, which is Area W-8. It's a 500-acre area located off of Freeport, Texas.

Then you have Alternative 5, a 2,000-acre area, Location AOA Option C-3. This is the furthest from shore of all the AOA options. It's about 130 kilometers off Pecan Island and Marsh Island, and so it's really far offshore, but it is a preferred alternative. Again, an area is considered potentially suitable for all types of aquaculture, and then we had Alternative 6, which is Area C-13, which, as I noted, due to a number of factors, was not a preferred alternative.

Then these are just some additional maps that show the location, their proximity to some of the closest inlets, and so you can just skip through those.

That's W-1, 2,000 acres, and W-4, a 2,000-acre site. This is W-8, a 500-acre site. C-3, a 2,000-acre site, and C-13, which is, again, not a preferred alternative, but that's the closest to shore of all the AOA options. It's about five nautical miles from shore.

The potential environmental impact, or potential environmental effects, that were analyzed in the Draft Programmatic Environmental Impact Statement include the administrative environment, physical environment, biological environment, socioeconomic environment, cultural and historical environment, as well as potential effects of climate change.

The effects of this planning effort are largely administrative in nature, and so that is where the majority of those effects are analyzed. We also analyzed the potential effects of siting aquaculture in those locations, in order to help inform the permitting and environmental review process for future aquaculture operations, and so that's why you see those physical and biological environments, and the effects that were analyzed there.

Because it's a planning process, you don't have any direct effects of those environments, but, by considering that information, it can help to inform the site selection of future aquaculture operations, as well as inform those permitting and environmental review process, and, if you look at the bottom-left corner, you can see all the different topics that were analyzed within the

document under those areas, water quality, effects from waste and non-consumed feed, acoustic disturbance, light disturbance, escapement, disease, risk, and a number of other topics.

This slide just kind of shows the different considerations that were made for commercial and recreational fishing and where those analysis of those potential effects were analyzed within the Draft Programmatic Environmental Impact Statement.

Under the socioeconomic section, commercial and recreational fishing, potential effects to those were analyzed, as well as ports and working waterfront and tourism, which, in the Gulf of Mexico, largely relates to recreational fishing opportunities, potential impacts to that.

As I mentioned, we also analyzed the potential effects of future aquaculture operations, and so effects such as FAD, escapement, disease, and a bunch of different topics were also considered there. It’s important to note the AOA alternatives avoid observed and modeled hardbottom habitats, which also limits some of those effects that could potentially be there to commercial and recreational fishing. They don't overlap with artificial reefs, oil and gas infrastructure, or HAPCs.

We also cross-referenced the fisheries data with AIS data, to capture the tracks that fishers might be taking to and from fishing activities, and it's also helpful so that the potential development for aquaculture in those areas could disrupt those transits, leading to higher costs for fishermen, and so we also cross-referenced that.

Last, but not least, I'll just acknowledge the data that was considered in the atlas, which was published in 2021, does consider fisheries data up to 2019, and 2020, for some of those instances. It's important to note that, if and when an aquaculture operation was to be proposed within an aquaculture opportunity area, part of that initial site suitability, and site planning, that an aquaculture producer would take would allow them to be able to consider new information, such as fishing, or vessel transits, oil and gas development, military activity, a myriad of different considerations that they would look at first before pursuing aquaculture development in one of those aquaculture opportunity areas, and so that would capture any sort of gap that exists between the document and current data, once they propose projects.

Last, but not least, I'll just plug that we do have some public

comment opportunities. As I noted, the public comment period is open until February 20. We do have one virtual public meeting that is still on the books, and anybody can sign up. You can visit our aquaculture opportunity website. If you just type "Gulf AOA" into Google, it's one of the first topics that will pop up, or you can scan that QR code to register. You don't have to register in advance. You have to register to access the meeting, but it's a very quick automatic process, and so, if you register today, it's going to give you the link to be able to join.

Last, but not least, comments can be provided by writing either electronically or by mail, and so you can logon to regulations.gov and type "NOAA-NMFS-2024-0135" into the search bar, and that will bring up the docket, and you can move to the Draft Programmatic Environmental Impact Statement, and you'll be able to provide comments there. You can also write in by mail, and mail comments to our Regional Office at the address listed there.

That's it, but I'm happy to answer any questions that anyone might have regarding the Draft Programmatic Environmental Impact Statement.

CHAIRMAN MCDERMOTT: Mr. Walker.

MR. ED WALKER: Thank you. I'm not on your committee here, but I do have some questions. Do you have any interest, any aquaculture operations, kind of looking at these sites, and thinking I could do this, and what would you farm that far offshore, and would it work logistically, in a place with hurricanes and stuff like that?

MR. RICHARD: Right now, I haven't been approached by any aquaculture producers who have expressed interest in those aquaculture opportunity areas in the Gulf. I know our colleagues in southern California have had a couple of reach out to some of the locations out there. They're growing seaweed and shellfish out in Southern California. You know, acknowledging, in the Gulf of Mexico, traveling forty miles offshore, with ample space inshore to grow shellfish and seaweed, it might not be a single product like that grown out there.

Now, an operation like finfish aquaculture, coupled with seaweed production, or shellfish production, could be an option, but the interest that we have right now in federal waters from aquaculture operations has historically been finfish aquaculture.

CHAIRMAN MCDERMOTT: Dr. Frazer.

DR. TOM FRAZER: Thank you, Mr. Chairman. Thanks, Andrew, for the presentation. It's kind of related to Ed's question, a little bit, but, if you go back to slide 10, and so I'm particularly interested in this Bullet 1, where it does not change existing permitting, authorization, consultation, or environmental review requirements, and so can you walk me through what the process might look like, with regard to obtaining some type of a permit to actually move forward with an aquaculture operation?

MR. RICHARD: Sure. So an aquaculture proponent, someone who's interested in developing an aquaculture project, either reaches out to me, as a Regional Aquaculture Coordinator, or sometimes they reach out to our partners at NCCOS who do the spatial mapping.

First, they express interest in a particular area that they would like to develop their aquaculture operation in, and then, typically, NCCOS will work on developing sort of a preliminary -- A real quick, high-level spatial analysis of the area, to see, you know, the different activities that are occurring in the area, mainly some of the activities that are typically within those constraint models within the atlas, and so things that would be essentially prohibit them from being able to go and develop an operation.

We're thinking shipping fairways, reserved hardbottom, other activities or other resources, that are incompatible with aquaculture development, and so an aquaculture proponent will get that preliminary spatial analysis, express interest in that, and the next thing they'll do is perform a benthic survey to look at the bottom, to determine is it suitable for the types of operations that they might want to develop, the anchorage, to make sure that there's not any hardbottom or live bottom in those areas that would prevent them from being able to develop or result in potential effects from their operation on those.

Then they collect and compile a narrative that they would submit to the permitting agencies, along with a permit application. Now, that pre-application process, typically for our projects, takes anywhere from six months to a couple years.

We do a lot of that work up front in the pre-application phase, to make sure we have all the information those applicants need to provide, not only for the permit application, but also for the consultations and authorizations from other agencies, and then so, once they submit their applications, that triggers the

responsibilities for those permitting agencies to be responsive to those permit applications.

That will also trigger the environmental review process, or NEPA, for those projects as well. Permitting agencies will determine the appropriate steps for how they will satisfy the permitting requirements for that. The Army Corps might look at different options for Section 10 permits. The EPA makes the determination on whether those projects need Environmental Protection Agency NPDES permits.

We're also, during that pre-application phase, and throughout that process, working with the Department of Defense siting clearinghouse. We've seen that be a challenge for aquaculture operations, and there a lot of activities out there in the Gulf, military activities, and so we're making sure that the aquaculture development is going to be compatible with military readiness out there as well.

That authorization process happens concurrently with the EPA and the Army Corps permitting processes, the environmental review process, and the consultations that occur during that, and, ultimately, at the end of the process, you end up with an environmental review document to support the permitting decisions of those agencies. Then the process is followed, and the public engagement things are consistent with that NEPA process.

DR. FRAZER: I appreciate all of that, and so I guess what I'm asking, a little more specifically, and so NOAA is the first point of contact here, right, and so anybody who might be interested in, you know, obtaining the appropriate permits to build out an operation would first consult with NOAA, and then NOAA would advise them what types of preliminary information that they need to generate, right, in advance of applying for a permit. Then NOAA would tell them what the various permitting agencies are that they have to work with, and then, ultimately, who signs off on that permit?

MR. RICHARD: The proponents sometimes come in from the Army Corps, or sometimes come into the EPA first, and it depends who they reach out to, but, generally, they do get directed back to us, and we act as sort of a guide through that whole permitting process. We don't have that regulatory role, and we're able to go and help support the proponents in that way, and so we help to guide them through that process.

At the end of the day, the permitting decision is the decision of the permitting agencies, when it comes to that, but we also play a role in helping to get them the information that they need to be able to make those decisions, and so, if there's a technical science question that they have, whether it's engineering questions, or questions about disease, or escapement, pollutants, things like that, we help to support that, and NCCOS plays a really big role in that, helping with development of depositional models, to show, if it was a commercial finfish farm, where the waste and uneaten feeds might settle, but also for water quality, which is really important for the issuance of those NPDES permits.

DR. FRAZER: Great. Thank you, Andrew.

CHAIRMAN MCDERMOTT: Mr. Geeslin.

MR. DAKUS GEESLIN: Thank you, Mr. Chair. Thank you, Mr. Richard, and there's a lot of information here. My question is very direct about the timeline and when you could -- At the earliest date, you would anticipate aquaculture operations being in the water.

We had an executive order in May of 2020. You have an atlas, and we've got the Draft EIS. I'm assuming the applicants also have to go through all the permitting, once they get maybe a conditional thumbs-up from NOAA that the siting works for the operation.

Then they've got to jump through all the hoops to get the other permits, incidental take permits, all this other, you know, red tape. When is the earliest you would anticipate nets, or any other operations of that sort, being in the water?

MR. RICHARD: Within an aquaculture opportunity area, it could be a couple years. Typically, it does take at least a year, to two years, to develop an Environmental Impact Statement, or a NEPA document associated with those projects, and then, generally, you have six months to a year worth of pre-application work that's done there.

The idea though behind the aquaculture opportunity areas is that we know a lot more about these spaces upfront, and one of the biggest challenges that we've seen, with other aquaculture operations proposed in other areas, are the conflicts that exist with other user groups, with other natural resources, and so the intent of aquaculture opportunity areas is to reduce that conflict and provide that information upfront, so that they get a running start.

You know, it's not anything like a programmatic permit, or anything like that, or a rubber stamp of projects in those areas, but the work in the draft PEIS provides a great foundation for aquaculture operations, and so we're hopeful that that will help to speed up the process.

Now, obviously, if it takes a couple of years for a proponent to come forward, some of that information needs to be updated, but that's work that can be done along the way, and we're definitely seeing an interest in aquaculture development in the Gulf, and, you know, with the development of this Programmatic Environmental Impact Statement, we're seeing areas that maybe weren't necessarily on the industry's radar, but, when you look at it from a perspective of regulatory efficiency, and helping to inform the process that projects would have in those permits, these look like some really potentially suitable areas for aquaculture development to occur and that to be a much easier path than projects have taken in the past.

CHAIRMAN MCDERMOTT: Dr. Simmons.

EXECUTIVE DIRECTOR CARRIE SIMMONS: Thank you, Mr. Chair. Thank you for the presentation. Mr. Richard, can you give us an update? Some time ago, I think it was Manna Farms that was looking at putting something off of Pensacola, and then it was believed like Velella-Epsilon, or something like that, was looking to do some work off of Sarasota. Can you give us a status report on where those companies may be with putting any net pens out there, and where they are and getting any type of permits from Army Corps or EPA?

MR. RICHARD: Yes. Sure. Absolutely. Just to clarify there, we do have other projects, that were started before the aquaculture opportunity area process, that are proposing projects off the coast of Florida.

The first I'll talk about is the Ocean Era Velella-Epsilon project. That's a single-cage pilot project proposed off the coast of Sarasota, Florida. It's looking to -- Initially, it was proposed to grow almaco jack, around 80,000 pounds in one production cycle, and then the cage was ultimately going to be removed. Again, it's just a pilot project.

That was initiated in 2017, and, once the permits were issued for that project, let's say 2021, in the fall of 2021, and there had

been some legal challenges for that project. Once those legal hurdles were cleared, and the Environmental Protection Agency issued a modified NPDES permit for that project, the applicants, and the proponents for that project, decided that -- Well, not decided, but the cage design that they were going to use -- The manufacturer had gone out of business, and so they proposed a similar, but slightly different, cage for their pilot project.

They also switched their species from almaco jack to red drum, and so that dropped the production amounts for that project, because the red drum grow slower than the almaco jack do, and so the applicants were providing, over the last year, updated information to inform those permit modifications that the EPA was going to need to address for that project.

It has been moving very slowly, but, right now, we've reached a point where the EPA and the Army Corps have all the information that they need to make a permitting decision on that project. We're hopeful that, potentially sometime this spring, the Army Corps and the EPA would issue permits for those projects, but, you know, that's ultimately the decision of those agencies, and so that project is moving forward, after a long time kind of standing still.

The Manna Fish Farms project is a separate project, a commercial-scale finfish aquaculture operation off of Pensacola, Florida, about twenty-three miles south, if I'm not mistaken, and they've been working through that pre-application process I've talked about, and they provided some preliminary information to the permitting team.

We're working on identifying and making sure all the information that's necessary for our permitting agency partners to be able to issue the permits there, and so they've submitted that information, and we're just confirming that the information that's necessary to move forward with the environmental review process for their project is all there, information that's necessary to do water quality modeling and different things like that, and so we anticipate that environmental review process, and the processing of those permits, to occur sometime this spring also, and so both projects are moving forward.

It does move at a pretty slow pace, but there has been some movement, and, you know, we're in regular communication with the proponents for those projects, encouraging them to come to the council, and I'm always happy to come to the council too and

present on updates to those projects, whenever anyone is interested.

CHAIRMAN MCDERMOTT: Mr. Schieble.

MR. CHRIS SCHIEBLE: Thank you, Mr. Chair, and thank you, Mr. Richard. It was a very informative presentation. I appreciate the detail, especially when it comes to the commercial and recreational fisheries consideration. I had a question and a comment.

So, looking at the data table in there, it stopped -- I guess the dataset is from 2000 to 2016 for the menhaden fishery AIS data, and I was sort of concerned with the time difference on that. We have access to that data in Louisiana, and so I looked at it, and it's still fine. There was no overlap, and so that's okay, but the other time series that are used, for the IFQ reef fish especially, and then the shrimp logbooks, both stop in 2019, and so that's six-year-old data. Is there a particular reason for that? That's my question.

Then my comment would also be to somehow have consideration for the C-13 site, in particular, that's off of South Pass in Louisiana. It's only about four-and-a half-miles out, and consider the impact potentially to recreational fisheries transiting that area. There's going to be a lot of vessel traffic heading into South Pass, and I don't know how you would track that.

I would just suggest potentially considering using satellite data, because it's really about the only thing available for looking at recreational fisheries, but potentially get on the road and look into that, because there could be some impacts to that, and so back to my question, and can you tell me why the time series stops in 2019 for most of that fisheries data, please?

MR. RICHARD: Yes, and so the National Center for Coastal Ocean Science is the agency within NOAA that developed the aquaculture opportunity analysis and did the spatial suitability modeling that's there.

At the time, that was the best available information they had to be able to run their models. Again, the atlas was published in 2021, and so there is a little bit of lag between that and the data that's considered there. Again, the updated fisheries data would definitely be something that's considered, if and when an aquaculture proponent proposes a project within any of those areas.

To your point about recreational fishing data related to the C-13 area, that was something that we also did take into consideration, acknowledging that, you know, we did capture 1,300 AIS vessel transits, and we assume that there's plenty more vessel traffic through that area that we're not capturing that way, and so that was the conservative decision, to not label that as a preferred alternative to become an aquaculture opportunity area.

That's not to say that aquaculture couldn't potentially be proposed in there, but it is definitely a challenge, with that many vessel transits through an area, both for the aquaculture operation and also for navigational safety for all those vessels that are coming in and out of there, and so closest to shore, but, you know, that's a pretty hot spot there, very close to shore.

CHAIRMAN MCDERMOTT: Mr. Strelcheck.

MR. STRELCHECK: More of a comment, but I would invite Andrew to, obviously, to weigh-in, but if you could go to the supplemental slides at the end of the presentation, and thank you, Andrew, for the presentation today. Excellent presentation. So slides, I think, 29 and 30 I would like to talk about, briefly. Sorry. It's 30 and 31.

These are supplemental slides, and Andrew didn't go through them, but this area was one of the areas that was eliminated from further consideration off of Louisiana. When you, obviously, look at a variety of factors, and marine spatial planning, it was maybe coming up as a better area, more suitable for aquaculture than others, but then you do a deep dive, and you look at our shrimp electronic logbook data, and you can see, obviously, the value of the electronic logbook program, that this would be sited right in the middle of a shrimp fairway that's high shrimping effort, right, and so we decided to, obviously, eliminate this from further consideration, based on Shrimp Advisory Panel input, and other factors, but I wanted to note that.

Then, knowing that the council is going to be commenting on our AOA process, if you can go to the next slide, and we did not select this area as preferred. This one is also off Louisiana, but, obviously, I'm interested in any sort of feedback from the council in this area.

You can see, here, using the electronic logbook shrimp data, it is kind of just outside of some moderate and high areas of shrimping

effort, but it does potentially set us up for considerable conflict with shrimp trawling, given the location, and so I just wanted to note this.

Once again, right, that, you know, here we are using marine spatial planning to de-conflict, obviously, multiple ocean uses, and this is where the electronic logbook data is providing, obviously, very valuable insights with regard to where the fisheries operating and how we can either site or not site aquaculture opportunity areas, based on those conflicts. I don't know, Andrew, if you have anything to add.

MR. RICHARD: I mean, I'll just note, with that C-11 location, that was removed for further detailed study in the draft PEIS. I think one of the questions we had, when we looked at it, is how does that sort of rise to the top as an area that could be a potential aquaculture opportunity area, and the reality is, when you're looking at multiple fisheries data layers, and all these other activities that are occurring within that given area, you can have a really high level of shrimp trawling activity, but, if there's no other fishing activity that's going on in that area, either A, because it's just not suitable or because, you know, there is shrimp trawling activity that's occurring in that area, or there's oil and gas infrastructure, which, again, is why there's fishing there, you end up with an area that can rise to the top, within that spatial analysis process, that you do have to take a deep dive and look at to consider, well, okay, well, why is that a good area, according to the spatial suitability model?

That's where the benefit of doing that Programmatic Environmental Impact Statement, or that environmental review document, can help to capture that and help to inform that decision-making process.

CHAIRMAN MCDERMOTT: Any other questions, or comments?

MS. GARDINER: Mr. Chair, I'll just walk through the draft comment letter that's attached to the website. I don't want to read it verbatim, but I do want to highlight some overview of this, and, Bernie, if you want to pull it up on the screen, you probably can.

I want to thank Mr. Richard for his effort in his presentation today. I think that was fantastic, and those that contributed to compiling the draft AOA PEIS, and there was a substantial effort in addressing the Executive Order to Address Promoting American Seafood Competitiveness and Economic Growth.

I'll read through these, just in bullet form fashion. The letter is attached on the website, if you want to read it in full, but I want to highlight that the council prioritizes those alternatives that are least likely to disrupt current fishing practices for all sectors and specifically supports the decision to remove Option C-11 as an alternative, given the overlap with the commercial shrimp fleet.

The preferred alternatives identified, three of those off the coast of Texas and one off of Louisiana, as those that would have the least amount of adverse impacts. The council supports and appreciates the efforts to directly identify impacts to commercial and recreational fishing, working waterfronts, tourism, and coastal communities, specifically highlighting the importance in considering coastal communities and stakeholders in potential aquaculture development, and recommends outreach and public engagement sessions be held prior to any future development.

In the document, there was some concern surrounding impacts to water quality, as well as the impacts of storm damage and anthropogenic damage to aquaculture infrastructure, and so the nets following hurricanes or large storms, and there's some recommendations to provide a specific waste management strategy to prevent foreseen negative impacts on the surrounding environments following aquaculture development.

Right now, there's no council action, given the planning nature of the document, but, if future aquaculture development occurs within or outside the identified sites, the council requests regular status updates and the opportunity to provide comments, and so I want to thank Mr. Richard again, and I welcome the council for any additional comments to be included in the draft comment letter, before we send it off. Thank you.

CHAIRMAN MCDERMOTT: All right. Thank you, Mr. Richard. Do we have any other business for the Habitat Protection and Restoration Committee?

EXECUTIVE DIRECTOR SIMMONS: Yes, and does the committee have any comments on the draft letter, before we send it in?

CHAIRMAN MCDERMOTT: Any comments on the letter there? Mr. Anson.

MR. KEVIN ANSON: I just wonder if the comment in the draft letter that identifies the comment about the structures, and impacts of those, I guess from hurricane damage, and I wonder, and is that

within the scope of the PEIS? Is that -- I just -- The general overview, or charge of that in the executive order, was just to identify those areas, and so to take a look at the spatial and fishing data, navigational data, all that type of stuff, just to identify areas.

I'm just wondering if that -- Looking at beyond that, or to the point where you have aquaculture operations physically in place, whether or not that was just outside the scope, and that's all, and it's just a comment.

MS. GARDINER: Thanks for the question. I think, when I was drafting it, I was thinking that would kind of fall into the category of impacts of climate change, you know, with the potential anthropogenic storms that are moving through the areas at an increased rate, and, you know, what would that impact have following aquaculture development. Whether that's within the scope of this document, or potentially for future aquaculture development and environmental statements, that’s kind of up for question, I guess.

CHAIRMAN MCDERMOTT: Mr. Anson.

MR. ANSON: Yes, and certainly that should be a consideration to the point of operations applying for permits to put them out in the Gulf, or anywhere, and that should be something that's reviewed at that time. Again, I just was thinking specifically of this letter to provide comments on the PEIS, as to whether or not that was just appropriate, because, again, I think it was just outside the scope.

CHAIRMAN MCDERMOTT: Any other comments on the letter? What about other business? Anybody got any other business?

EXECUTIVE DIRECTOR SIMMONS: Mr. Chair, it might be good if you guys have a motion approving the letter with the recommended change from Mr. Anson, and we just remove that language? Is that what you're suggesting from the letter?

MR. ANSON: Yes, and that would be my suggestion.

EXECUTIVE DIRECTOR SIMMONS: Okay.

CHAIRMAN MCDERMOTT: Mr. Anson.

MR. ANSON: I make a motion to approve the draft letter, with the

updated language.

CHAIRMAN MCDERMOTT: All right. We've got a motion to approve the council letter, with the revised language, proposed by Mr. Anson. Do we have any opposition to the motion? Can we get a second to the motion first?

DR. ANTHONY OVERTON: Second.

CHAIRMAN MCDERMOTT: It's seconded by Dr. Overton. **Have we got any opposition to the motion? I don't see any, and it passes.** All right. Any other business? I don't see any, and so we're going to turn it back over to the chair.

(Whereupon, the meeting adjourned on January 27, 2025.)

- - -