

Stephanie Otts:

Good afternoon everyone. Welcome to our second webinar on the State Marine Aquaculture Policy Dashboard. My name is Stephanie Otts. I'm the director of the National Sea Grant Law Center. We're so glad to see everyone here this afternoon. I'll be kicking the webinar off with a bit of background information, but I am joined by a lot of other individuals who have been either involved with the Dashboard or the State Marine Aquaculture Coordination Network to talk about their experiences with the Dashboard. So I'll let them more fully introduce themselves later. But we have Zach Harrison from North Carolina, Division of Marine Fisheries, and Lindsay Campbell from Texas Parks and Wildlife. I think I got it wrong. I probably messed it up, but again, welcome.

Just for those who might be new that are not familiar with us, the National Sea Grant Law Center is one of 34 sea grant programs across the country. We were established in 2002 to conduct legal research, education, and outreach for the Sea Grant Network, and their stakeholders. We're hosted at the University of Mississippi School of Law. And so if you're interested in the work that we do or our other research projects beyond aquaculture, I encourage you to visit our website, all of the information is on there. So we do have everyone muted right now to cut down on background noise. So please stay on mute. If you have a question during the webinar, feel free to place your question in the chat. If we see it and we're able to answer it in real time, we will. But we have time dedicated at the end for Q&A.

Depending on the size of the group, if it's pretty small, you may be able to come off mute during the Q&A to ask your question, but use the chat at any time. And we are recording this webinar so that it is available for later viewing for people who registered for the webinar that might not have been able to attend today or for colleagues that you think might be interested later on. So information about accessing the recording will go out later this week. And you can private chat with Lauren Fremin with the National Sea Grant Law Center if you have technical issues, we might not be able to solve them, but we'll do our best to help you out. And I want to acknowledge our project partner in this project at Florida State. And so Sarah Lester's on the call. So Sarah, do you want to give a little introduction?

Sarah Lester:

Yeah, sure. So my lab at Florida State University in the Department of Biological Science includes a number of people that have been actively working on research related to marine aquaculture and in particular state level policy and aquaculture. Most recently the team includes myself, Dr. Bess, Ruff, a postdoctoral researcher, Hayley Lemoine, a PhD student, and then Dr. Rebecca Gentry, a former postdoc in my lab and still post collaborator. In addition to some of the state level policy research that will connect to some of what's shared today, we've also conducted research on global patterns of aquaculture expansion and social perceptions of aquaculture.

Stephanie Otts:

Thanks, Sarah. And the contact information for social media and the website are on the slides as well.

Sarah Lester:

Thank you.

Stephanie Otts:

Yep. Okay. And then finally, before we get to the background of the webinar today, we want to thank our project funder, Builders Initiative for supporting the development of the State Marine Aquaculture Policy Dashboard and to be so supportive of this aquaculture policy research. So for those that may not have been able to attend our previous webinars, just wanted to give a very broad overview of the dashboard. We're not going to do a walkthrough today because we don't have time to do that, but on some later slides, there are some resources that can help you out if you are new to the dashboard. And the QR code

will take you to the dashboard with the caveat that the dashboard doesn't work on every single mobile device. So if you are trying to look at it on your phone and you get an error message, you may need to go to your web browser for that.

And it would be very hard to look at the dashboard on a mobile device anyway. It would be so tiny that it really is meant to be used on a web browser where you have more room to look at it. But the State Marine Aquaculture Policy Dashboard is a data visualization tool that enables users to interact with a wide range of state marine aquaculture policy data and to kind of visualize comparisons across the country or to do deep dives into particular policy attributes. And there's several different components of the dashboard depending on how you want to look at the information and what you feel comfortable with in viewing data of this sort.

The scope of the dashboard is for the 23 marine coastal states, and we think that the dashboard is very valuable because it includes consistent data for these 23 coastal states. And so the team went through and cleaned up some data to make it somewhat standardized across the marine coastal states. It has been reviewed and vetted by state agency contacts for accuracy, and there are plans to do annual updates of the data in the dashboard to ensure that it stays current and accurate. At this time this is kind of the current scope of the dashboard, although we have been exploring opportunities to expand the data to other places such as the territories like Puerto Rico, the Virgin Islands, other places with that. We did not include the Great Lakes in the dashboard because it really is a very different aquaculture environment with freshwater than if the marine coastal aquaculture that we're looking at in this dashboard.

So there are 40 marine aquaculture policy attributes across nine categories. And so this is just a screenshot of the broad categories. And within each of these categories, there are more refined policy attributes for things like leases and permit terms or whether there are pilot programs or how the state deals with right to farm laws. Some of this we're going to talk about later on in the webinar as well, but there's lots to explore within the dashboard. So if you're new to the dashboard, I strongly encourage you to start with our resources. We have developed a user guide that walks through the different components of the dashboard and what components are most useful for the type of user that you might be, what information you might be looking for.

There is also a video walkthrough that again goes through each component of the dashboard in more detail and provides highlights of how those interactive features work and which components you might want to use depending on what information you're looking for. So with that very brief background, I'm going to turn it over to our other presenters to just talk about their experience using the dashboard, how it's worked for them or what they're using it for. And so I'm going to stop my share and first up it's going to be Lindsay Campbell.

Lindsay Campbell:

Okay, thanks Stephanie. And I'm going to start with my sharing. So I just have a quick presentation of how I use this dashboard and oh, I'm sorry. I guess I should introduce myself more. Dr. Lindsay Glass Campbell. I'm with the Coastal Fisheries Division of Texas Parks and Wildlife Department, and we oversee the permitting and implementation of the Cultivated Oyster Mariculture program. Oyster aquaculture, as I might be more familiar with, this is new to Texas. East Coast y'all have been there, done that. So when the program was being implemented and designed, there was a looking at the other states what they had, but so we have all floating off bottom gear. Currently, we are up to 10 fully approved grow out locations and three nursery hatchery sites. And this is our third year of harvest for the program. And so I use the policy dashboard really as a quick general reference if I need to, hey, what are the other states doing in biosecurity or do they have a size limit and links to really the regulation so you can get into that deep dive and to also the websites and documents from those states.

So how I generally use it is through the navigate to the supporting data table because I guess while a lot of people are visual, sometimes maybe I'm not or I just want to see those actual, okay, so there are

requirements. What are those requirements? I'm going to go to the actual website in a second, but one thing that I like is that I can see, oh, who is the lead agency on these? And it'll list it and also if possible give their website and then you can click on that and get a link and kind of get that connection there if you don't already know who's there. And then other things you can look over for BMPs and such. So let me just come here. So you're in the policy dashboard and maybe I wanted to look at the siting tools or the more specific divisions in there. And I see, oh, okay, so there are siting tools, but what may or may not. So going over to the data table.

Now, you kind of have to orient yourself when viewing this. And what I like is that there's this metadata tab that has more explanation on each of those attributes, definitions, and then if there's any sort of qualifier on that. So if ever in here and I'm like, wait, what does that mean? You can go over to that and then it's by state and that way you can compare across states. So this comprehensive legislation, yes or no, how many states have that? And I'll mainly pick on Texas since that's where I'm from or where I'm at but you have here. Recently I was doing a dive for our agency and our state regulation into fees. So I came and looked at the... You can go down and these are nicely grouped by topic type. So you can go to okay, leasing information. Now some of these they do differentiate. So in Texas you have your permit, you permit the activity through TPWE, but you also have to get a surface lease from our general land office. So it does differentiate in that and some of our costs.

However, one thing that we've noticed at, and I think Zach's going to get into this, our SMACN group is some of those terms of, okay, is a permit in a lease, a lease a permit. Some states those are together. Some states those are different, but this can help you find that in there. And then for this lease, so here the aquaculture, hey, I want to see what their lease application looks like. So it takes you to that particular state's website. So there's nice direct links there. The other thing that I really use this is that the team really worked with our state agencies to make sure the information here was updated and correct. I worked with them for Texas. There were some, especially when you search some of our older laws, some of our agencies may not have the best updated websites or being in search engine, so they really check these through us. So this is kind of some of the best sourced information. And then if something changes, I can get with the team and they can update this website.

So like I said, I think the visualization is great for a lot of people and that overview, but what I found most valuable is this inner deep dive that I could look at and compare and then get those links to. And I might be stepping on Zach's presentation next, but one thing that I kind of use in coordination is that policy dashboard and our SMACN. So these state inventories are more in the nitty-gritty and things that aren't just your straight policy. And a lot of us in management know that there are on the books regulations code and then the implementation of that you may have several different types of documentation, biosecurity or permitting provisions that may or may not be on the web. And then we gather things together. And within the SMACN group, one thing that within the SMACN versus the policy dashboard is kind of these flow charts but one thing within the policy dashboard links to websites where this is our permitting flow chart for Texas can link to these things.

And this is just some of the things that SMACN does. And again, I think Zach's going to go over, but they really work together for our purposes. And like I said, even though I'm part of that SMACN group, I can also pull these policies together. If I get a request from my upper management, how many other states allow non-native rootstock or how many other states have best management policies on the books? And look in here and quickly find and source that or send people who are asking those questions to this policy dashboard. If maybe I can't turn around a quick answer and I'm like, oh, hey, I'm tied up here. Come look at this. I see that. A lot in the chat and I didn't know if those were questions.

Stephanie Otts:

No, yeah, so there's a lot of questions in the chat just about accessing the dashboard. So I don't think I saw any questions directly for you. But as we're transitioning to Zach's presentation, if anyone has a question for Lindsay, you can put it in the chat and also we'll, oh yeah. So what is SMACN? So the SMACN and

Zach's going to talk more about that is the State Marine Aquaculture Coordination Network. And so that's an effort being organized by state aquaculture managers to create a networking forum, to have a place to talk about aquaculture programs. And so the National Sea Grant Law Center has been involved in that in part to help align the dashboard work with what SMACN is doing and as well as providing some research support. Great. Okay. Zach, we'll turn it over to you.

Zach Harrison:

Hey, yeah, I'm Zach Harrison. I'm Habitat Enhancement second chief for North Carolina Marine Fisheries. And I'm on the SMACN leadership team as we just kind of mentioned. And so SMACN has really been working hand in hand with this policy dashboard and policy database and it's really a really helpful tool to kind of extend what we're working on. And just as a brief, I know Lindsay touched on this a bit, but SMACN is really regulators of marine and estuarine aquaculture getting together and trying to develop kind of an inventory database of what the aspects of aquaculture looks like in each state and more of what is industry. And so it's a great question. Right now we have most pretty much the entire east and gulf coast participating. In SMACN and we're actively working to kind of expand beyond that. But that's what we have regional meetings.

And so let me briefly show you some of the information that we've kind of compiled with that. And so we have our state inventories, which is based off of that NOAA information that had been happening of states previously, but it was 400 pages and tough to keep up with. So with what we've gotten, we can pull together some figures like this that you just saw briefly. So looking at which states do federal permitting and different methods or the lease term lengths. And so these are obviously more kind of attributes about those states. And then we can look at things like the lease review timelines. And so these are going to be continually changing a bit, but for states such as myself that there is some potential legislation about setting time limits or trying to get to how we evaluate that timeline and the things that slow it down and some other aspects like leases and acreage.

So here we have in blue you have the acres leased and then in the yellow, we have the count of leases. So we can start to compare some of these and you can really pull apart or start to pull apart which states are more developed and which states are up and coming like Texas, which is starting to grow rapidly but certainly has not quite the head start as some of our other, especially northern and kind of mid-Atlantic coastal states. And then if we compare pieces like budget, this is a big piece that we can try and use to justify how states compare and what they're able to use versus what your own state has. And then compare these together like looking at the ratio of staff to leases. And so when you have, again, you keep in mind the fact that Texas is up and coming and building, so you have really, when you get to those more populated ones we saw that were over here, you got Virginia, North Carolina were not too bad in there, Florida, Georgia.

And when you compare those, those are obviously much lower ratio of staff to leases and we can look at those kind of funding pieces as well. But the next step for that is really bridging these two together. So we have the policy database that's been developed, and so we're working on the SMACN side of this inventory database to really get different visualization tools and be able to tie these pieces. So one of the ways we're doing that is actually by developing and trying to look at geographic displays of this data. So here we have some of the data pulled out of the inventory as a bit of a demo. And so here we have in blue just the amount of acres in these states. And so the darker the blue, the more acres that have been leased, and then we can start to stack these to get some ideas.

So we have the size of the dot is the number of leases, which may be teeny tiny for some of those, but you can see some of them are quite a bit bigger. And then if we take these, the next step with that policy database is we've clicked on here and you can actually see the number of acres, the total number of leases, and then we have this view for the leasing requirements. And you click on that and that will actually bring you over to the policy database. And here we have just a moment, state wifi so give it a second. We have the link to the policy database. And so if I need to look at, obviously I know North Carolina's well

enough, but if I need to look at that, I can click directly to get to those general statutes so I can figure out what I need to know about how North Carolina compares in things like leasing requirements.

And then we can start to stack some of these. So here we're going to add budget that actually shades it a little bit green, so the more green it is, the higher the budget. And then we can add another piece like staff, which is the size of the square here. So here we have all four of these pieces evaluated together and can kind of start to make some geographic conclusions or at least inferences, sorry, not conclusions, but we can start to look at those pieces a little more. And then we can also look at things like these species that are allowed. So we have oysters, and this is the states that allow oysters to be cultured in coastal waters, we have clams. And so if we want to click down here in Virginia, or sorry, Florida, we have clams, we can click on this again and get us to our species reference.

And so that will get us to back to the policy dashboard to see where kind native species requirements are. We click through here, we get to the Florida BMPs, and we can look through that pretty easily knowing we're looking for species and native species. So that's a quick way that we can bridge those gaps so that when we're looking at this data visually, we can start to see, okay, what are the differences in species allowances and those other kind of more qualitative values that we get out of the SMACN inventory. And then bridge that over to the policy, which for our state is really useful.

Even right now we're looking at the idea of Florida has restrictions on genetic origin of seed coming in. So they have a split of gulf and Atlantic that they have to abide by, but we don't have anything like that. And being able to explore what the use and safety is out of that, splitting that genetic origin is a big deal for us to determine. And that way we can easily get to this and look up what those regulations are in Florida and try and determine other states that might have that. And so that's the next steps with the SMACN and tying these pieces together as we've really worked hand-in-hand in a lot of this.

Stephanie Otts:

Thanks Zach. No, great. And so you can see that they're using map visualization similar to the policy dashboard. And so again, most likely would be you need both. And so the policy dashboard gives the high level overview of the state policy, it can help identify gaps between states or among regions. And as Lindsay says, it's a good way to say how many states are doing X. And then if you're also looking at, you can integrate some information related to state staffing and number of permits that then when you look at the policies there are some connections there as well.

So good. So we're going to circle back to... Does anyone have questions for Zach? I see some questions in the chat, we might be able to answer some. I'll start to go through them. Yeah. Okay. So one of the questions was is there a way to explore aquatic animal health regulations? So that is not currently part of the dashboard attributes. At Aquaculture America I did have some conversations with a representative from USDA about those type of regulations because USDA is also working on a similar kind of mapping tool for some of their regulations. And so the project team, the law center and Florida State have been keeping track of suggestions for information that it would be useful to include. And that is one of them.

So someone said I was in a meeting today, are the profiles for each aquaculture producing state current? So Terri, I don't know if you mean economic profiles. Our policy data for the dashboard is as current as we could get it earlier this year, and we will be doing a update this fall with the state agency contacts to update that. So the SMACN inventory demo is not public at this time. So that's a work product that network has been working on. So it is a separate initiative from the dashboard. And so Zach, I think one of the questions was for you maybe. Are any of those metrics related proportionally to culturable submerged lands per state or just binned to get the color coding that you did?

Zach Harrison:

As of right now, they're just binned to get the color coding. Most of it either was just binned by amount for things like leases or acreage or presence absence as just a demo as it'll take quite a bit more to take the entire inventory database and start to do that visually. So we haven't gotten quite that far.

Stephanie Otts:

Good, thanks. Okay. All right. So I'm going to go back to my screen share. I can get to it. And...

Audience Member:

Excuse me, Stephanie, did you say that the resource that Zach was demonstrating is not live at all? I understand it's not part of the dashboard, but Zach, weren't you clicking on something that we can all look at?

Zach Harrison:

It's in my GIS profile, so it's certainly something I could share just that little piece. But because it's just a couple of demo pieces taken out of that, it's not something that we're broadcasting out. It's not quite ready to be sent out.

Audience Member:

Right. Thank you.

Stephanie Otts:

Good, thanks. Yeah, and you can keep the questions coming in the chat and we will continue to answer them as we see them. But thanks Lindsay and Zach sharing your experiences and how you're using the information in the dashboard to help enhance the work that you're doing. And then as we're starting to kind of transition into the second half of the webinar, the project team wanted to take some time to talk about how we are now using the data in the dashboard and the data visualization tools to facilitate some research on particular issues that are of interest to aquaculture managers and others.

And so the first set of deliverables that we've been working on related to this are a series of policy briefs that we will be putting out in just a few weeks. We're kind of in the final stages of the design. And so we have been working on three topical deep dives, so looking at pilot permit programs, active use requirements, and right to farm laws. And so we thought for today's webinar that we would take a few minutes for each of the researcher authors to share the high level takeaways from this research and give a little preview of these documents that will be coming out soon. So first up is pilot frameworks, which has been led by Bess Ruff.

Bess Ruff:

Awesome. Thanks Steph. So my name is Bess. I've been the postdoctoral researcher on this project for the last two years, and I've taken a particular interest in looking at pilot programs in the coastal states. So when I refer to pilot programs, I'm talking about the trialing of farming activities on a temporary basis to assess commercial feasibility. So this would exclude research and educational pilot farming, which I know a lot of states have. So if you look at the map on the slide, you can see that states like South Carolina and Virginia, which are shown in sort of the neon green color, these have regulatory mechanisms that de facto enable mariculture on a trial basis. But we actually found that there were only two states that have a formalized regulatory pathway for pilot ventures. So these would be Maine and Rhode Island, which are shown in the dark blue.

So our interest in pilot frameworks is that they have the potential to be an important tool for reducing barriers to mariculture development, including things like providing a simpler, cheaper and less time-

consuming permitting process. So farmers can go through a pilot framework or a pilot permitting process while they're still trying to figure out logistics on their end and a business model that works and that they can scale commercially. Pilot frameworks also have the potential to improve social license within coastal communities. They can provide opportunities for more locals to participate in the industry and also create more points of social contact of people becoming more familiar with the mariculture industry. And then they can also generate opportunities for expanding industry sustainability. So for example, on a small scale, farmers can trial innovating culture methods and trying out systems like restorative aquaculture or polyculture methods. So given these potential benefits, we came up with some key considerations and recommendations for states that are considering developing pilot frameworks within their own jurisdiction.

So thinking about things like creating pathways for pilot permits to be converted into commercial leases or licenses. This would be so that pilot farmers wouldn't have to start from scratch with a commercial application and there would be some advantage or benefit to them having already trialed their operations. Another consideration would be including provisions for trialing new species and culture gear. And this would be with the objective of fostering industry diversification and resilience. Obviously we would want those provisions to work within the existing environmental and biosecurity regulations, but having some sort of mechanism whereby people can try new things that could benefit the industry in the long run.

And then lastly, thinking about including financial and educational incentives to support the success of trial farms. Because the whole intent is having people figure out what works for them, what can be scaled commercially, and having the best opportunity to achieve those objectives can be a good long-term benefit to the development of the industry in coastal states. So yeah, so that's my brief overview of pilot frameworks. I'm happy to answer any questions in the chat or at the end of this presentation. And then Hayley Lemoine is going to take over with active use requirements.

Hayley Lemoine:

So I'm Hayley, I'm the graduate student on this project, and I led the active use requirement policy brief. So active use requirements, which are sometimes called proof of use or use it and lose it rules require that farmers prove they're actively cultivating the area that they're leasing or permitting for aquaculture in order to maintain their lease or permit as a requirement of those. And we found that most states use active use requirements, 19 of 23 coastal states have some form of an active use requirement. And when we were going through the different active use requirements, we noted that most of these states have provisions that include both a time restriction and an activity threshold. So time restrictions are the frequency with which a farmer has to demonstrate active use. So as an example, Alaska grants farmers five years to prove active use, whereas North Carolina's rule doesn't stipulate a specific timeframe, but does require utilization on a continuing basis.

Activity thresholds are the level of farming that must be demonstrated. So just like the time rule, this can vary from a very specific volume in this case of seed planted or product harvested. For example, Texas in the cultivated oyster permit that Lindsay was talking about earlier, Texas requires 10,000 oyster seed per acre to be planted. The activity thresholds can also have just a general stipulation with no specific threshold. And an example of that would be in Connecticut, Connecticut requires that farmers simply demonstrate "a good faith effort." There's no volumetric association with that. We do suggest that these rules be really flexible so that they are both feasible for farmers to achieve and also modifiable in instances of good cause failures like a major hurricane. And then other considerations that states need to think about when they're designing active use requirements are if different species should have different standards, what evidence farmers might need to prove active use and how these rules will be enforced. And that's it for me.

Stephanie Otts:

Great. Thanks Hayley. And then the last one we wanted to highlight was aquaculture and the right to farm, which is being led by Amy Kraitchman, the National Sea Law Center's Current Ocean and Coastal Law fellow. So Amy, I'll turn it over to you.

Amy Kraitchman:

All right. Hi, I'm Amy. I'm the fellow. And right to farm statutes are legal protections for farmers who are facing nuisance lawsuits. And so when certain provisions are met, farmers can use it as a defense if they're facing lawsuits from neighbors regarding odors, noise, dust, things like commonly associated with their farming operations. Every state in the country has a right to farm statute, but their scope of liability and the specific provisions needed to be met in order to use the protection vary by state. So I'm going to kind of just talk about it broadly, but obviously if you're a farmer, you want to look at your own state's statute in order to kind of determine how you get the protection and if it applies to you. It started off as mainly for land-based farming, but most states have expanded it to include other types of agriculture, aquaculture and specifically marine aquaculture.

It's not universally seen as a protected type of agriculture. We found that about 17 out of 23 coastal states reference aquaculture in some way in their statute. But the way they did it is really broad. And so for farmers looking to determine if they're covered under their statute, you look to your definition section and in there you'll see references to aquaculture fish aquatic environments. We've identified that as aquaculture being covered, but there's still a lot of ambiguity and uncertainty about what types of aquaculture are covered and to the extent that they're covered. And so we identified in our research that there's two main ways to kind of address this ambiguity, especially in coastal states where you may have freshwater aquaculture and saltwater aquaculture going on at the same time. And the best way we've identified is legislative reform. And so that can occur in two different ways.

You can just amend your existing statute to include more clarity of what type of aquaculture is covered. So for example, Arkansas covers both controlled freshwater and saltwater environments, so it's clear what they're intending to do. Or another option we found, which works really well for states where their aquaculture may be managed under a separate agency than other agriculture operations is to create a completely separate aquaculture right to farm statute. So New Jersey in 2023 has passed their own shellfish right to farm statute. So that's managed by an agency that's familiar with shellfish operation and provides a similar protection as their other right to farm statute. And then the other option that we identified, which is not as certain and provides a bit more risk involved, is to seek clarity from the court system. So if you wait around and see if you get a nuisance lawsuit, you can try to raise a right to farm defense if you're an aquaculture farmer. But there's a lot of uncertainty about that, and it kind of leaves everything in limbo until that situation arises. So in our research, we definitely recommend the legislative reform option.

Stephanie Otts:

Great. Thanks Amy. Great. Okay. All right. So yeah, we've kind of reached the point where we wanted to open it up for questions. I do see that there are some, we're trying to respond in the chat to questions that we've seen related to the different attributes, and there are some responses. So if you ask a question, I encourage you to check the chat to see if someone responded. But yeah, open it up here for a minute or two to see if there are any other questions that people have about the dashboard, about the work in general, or some of the preview related to the policy brief. And then we have one more slide and request and we'll be wrapping up.

All right, well, I don't see any other questions coming in. We do have, let me see, one more question. Oh, so are the policy briefs written up at all? Yes, the policy briefs are drafted. They are written, we are just finalizing the graphic design for the three policy briefs and expect them to be released shortly here in the next couple of weeks. And they'll be available on the National Sea Grant Law Center's project page, and we'll distribute them through a variety of channels through the law Center and Florida State. Yeah, just as



we wrap up the webinar, we would love some feedback from users. I know many of folks on the webinar today may be new to the dashboard.

You might not have explored it very much, but if you have had a chance to use the dashboard or if you take some time after the webinar to explore it, we have created a Google form that would allow you to give us some feedback on what parts of the dashboard that you use the most. Things that might help you be better able to use the dashboard like what kind of training resources or other tutorials that might be provided that could make it a better user experience, and just other things in general that you might be looking for from the dashboard.

So Lauren has put the link to the Google form in the chat, but we will also be including it in the email that is sent to everyone who registered for the webinar when the recording is available. And yes, someone asked about the dashboard link. So yeah, we will repost the direct link to the dashboard. Maybe Lauren, maybe if you could do that for me. And there is a question about can you share thoughts on how updates would, should happen? Yeah, so the way that the project team has, so this is another integration of the project team with the State Marine Aquaculture Coordination Network. So there are planned annual updates for the data in the Marine Aquaculture Policy Dashboard. And prior to the dashboard launch, the project team created a Google Sheets spreadsheet that had all of the state information. And that is how we facilitated the review of the data with the state aquaculture coordinators.

And so we will be using that process moving forward. And the annual reviews are timed to coincide with the State Marine Aquaculture Policy. I mean State Coordinators Network meeting so that they can either do some of the data review during the meeting or during the planning processes that happen up towards that meeting because SMACN also does webinars and there's other opportunities with the project team to provide overviews of the data review process and what's happening. So the data will be reviewed and updated annually by working with the State Aquaculture Coordinator contacts in each state. And then if major changes happen to a state program, as Lindsay said, agencies can reach out to us and we can update the data as needed. So that's how that works. Okay. All right. Well, I think, I don't see any other questions. I'm going to stop my share and we'll get that link for Dylan who's asking it. But if there are no other questions, we appreciate everyone being here and stay tuned for the recording and other information as we get it sent out. So thank you.

Audience Member:

Thank you.

Stephanie Otts:

Thank you. Thanks everyone.