

Amanda Nichols: Hi everyone. This is Amanda Nichols with the National Sea Grant Law Center. We're just going to wait about a minute more. Well, actually it's 1:00 right now so we'll go ahead and get started. My name is Amanda Nichols. I'm with the National Sea Grant Law Center. We would just like to thank everyone for joining us today on our webinar. Let me pull up a little bit of introductory information for you all here to begin with.

Amanda Nichols: This is the webinar entitled Permitting and User Conflicts. You're going to have two presenters today. Elizabeth Andrews and Angela King both from the Virginia Coastal Policy Center at William and Mary Law School. And before they get started I'd just like to give you all a little bit of introductory information about the project that's making this webinar series possible. In 2017 the National Sea Grant Law Center and several project partners began work on a project entitled Overcoming Impediments to Shellfish Aquaculture. Those other project partners besides the National Sea Grant Law Center are the Virginia Coastal and Policy Center at William and Mary Law School, the Rhode Island Sea Grant Legal Program at Roger Williams University School of Law, the Carl Vinson Institute of Government at the University of Georgia, and the California Sea Grant Program.

Amanda Nichols: In the course of embarking on this project each project member created one or more case studies that have to do with current legal barriers to shellfish aquaculture. Those case studies have been completed and are posted at the link you can see on the screen there and their individual capacities and as a joint document. If you have any interest in looking at those. And the webinar series is a function of the outreach portion of the project and that's what you're going to be experiencing here today.

Amanda Nichols: With that I'm going to stop sharing my screen and hand it over to ... Angela, is Elizabeth on or would you like to go first?

E. Andrews: She's here. So, did that work? Can you see my screen?

Amanda Nichols: Yes, it worked and right before you start just to everyone else we are going to be taking questions at the end. So, if you have any questions please put them in the chat box that you can access by clicking down there on the bottom of the screen. And we will address them at the end and also please make sure that your microphones are muted so that we can't hear you. And with that, take it away, Angela if you're going to present Elizabeth's information too. All right. Thanks.

E. Andrews: Hi, this is Elizabeth and thank you everyone for signing in. We are excited that this many folks wanted to hear about this. I'll be presenting the first part and Angela will present the second part, because we actually have two different projects to talk about. We have talked about these somewhat in the past at Aquaculture America Conferences etc. So, some people who signed in may have heard part of this before, but we're excited that some new folks will get to hear about it as well.

E. Andrews: Hi, that means we [inaudible 00:03:02]

Angela King: Well, maybe.

E. Andrews: Yeah, that works. So, just to give you a little bit of background first about Virginia and the Chesapeake Bay and oysters. It's an extremely important industry in Virginia and has been traditionally. And we've had troubles with the oyster almost dying out here, the native oyster - the Eastern Oyster. And it was once so plentiful the natural reefs were actually navigational hazards that were talked about when John Smith came.

E. Andrews: Why is it not advancing?

Angela King: Try to click that arrow.

E. Andrews: Sorry, we're having some technical difficulties on our end. There we go. Thank you. John Smith actually said that the oysters lay as thick as stones when he came in 1608. So, that's where we started from.

Speaker 4: Like hold it. That's why when I was coughing and sneezing it just hurt.

E. Andrews: Hello? Something just came in, but I don't know who that was. But, the native Virginia oyster is very susceptible to two different diseases, which almost wiped out our native population. And on the right side of the slide you'll see our shallow draft sailboats that were used. The dead rise it was called was used for harvesting oysters for generations.

E. Andrews: So, at one point there was a push to introduce the ariakensis oyster because they are more resistant to those diseases, but the state pursued sterile triploids instead and our Virginia Institute of Marine Science and Virginia Marine Resources Commission have worked together on that over the years. This is to give you an example. These are leases in Virginia by size. The Virginia Marine Resources Commission is the state agency that administers those and this was as of the time of our study in 2018. But it gives you a sense of where most of our leases lie in the sense of size. 0-5 acres, 5-10, and 10-50 are the vast majority of them.

E. Andrews: And then by type we do love the bathing rent exempt lease, but we do have regular [inaudible 00:05:09] bay bathing. So, a multiple [inaudible 00:05:12] are available.

E. Andrews: And then in 2013-2017 the active shellfish harvesting on the leases that was reported showed that about 75% of the leases report using shellfish intensive aquaculture practices on leases that begin within 100 feet of shoreline. And that's important because that is what kind of sets the stage for why we need to look at user conflicts. About 93% of the leases reporting intensive aquaculture

harvest are on leases that begin within 500 feet of the shoreline. So, that's why this issue comes to people's attention so readily.

E. Andrews: The leases are survey plotted, marked, signed, recorded. And we have hear a chart to show you the difference between our riparian leases and our regular leases. At the time property owner with a minimal of 205 linear feet along the tidal waterway when we began our project up to half an acre, little less than 105 feet wide no more than 210 feet out, from mean low water or the middle of the channel. A riparian lease can prevent the regular leases from occurring in the area right offshore and does not create oyster farming obligations for the property owner.

E. Andrews: No lease term tied to the property versus a regular lease you have to be a Virginia resident, a political subdivision of the Commonwealth, or a corporation with Virginia residents. And they lease 60% of the stock. You have 250 acres with a set term, renewable. Public notice requirements that the applicant covers the cost for and the rent being \$1.50 per acre per year is something that really surprises many people. It's been the same for decades now. But that's intentional by the state to try to encourage this industry.

E. Andrews: Working waterfronts there are many threats to working waterfronts in Virginia as in other communities and we had a Virginia working waterfront master plan in 2016 that was the first one that's happened here in Virginia. As you can see there are an array of threats to those working waterfronts that are covered by that report. Changing global economy. Increasing regulations. Water quality. And habitat. An aging workforce. The one that we're focusing on here in this case study primarily is the land and water use conflicts that occur, because of near shore aquaculture and the riparian owners.

E. Andrews: So, just a really brief overview here from a seminal case here in Virginia with the extent of the riparian owner's title in the Virginia's tidal waters is the mean low water mark. By an act of the legislative assembly of Virginia in 1679, by the way many state's aren't as lucky as we are to have so many years of case law, but 1679 it was declared that every man's right by virtue of his patent extends into the rivers or creeks so far as the low water mark. And then memorialized in our Virginia code is that mean low water mark delineation.

E. Andrews: So, as I mentioned Virginia Marine Resources Commission, the VMRC, regulates our bottomlands and the commission is authorized to issue permits for all reasonable uses of the state owned bottomlands. And anyone who wishes to take or catch oysters or clams, other than by a scrape or dredge, has to apply to the commission for a license. And they handle the leasing of the general oyster planting grounds. So, they are definitely the regulator of our bottomlands.

E. Andrews: So, what are the reasons why we undertook this National Sea Grant Law Center project? We often hear the legal and permitting issues serve as impediments to aquaculture development. And there is a variety of legal conflicts that may arise

as states seek to encourage the expansion of the aquaculture industry. Regulatory landscape can be confusing to people who are trying to get into the business or even if there are a lot of changes to folks who are already in the business. And so the goal was to create a toolbox. When we set out we wanted to create this toolbox of resources that identify common issues and associated solutions that could be used by all.

E. Andrews: So, with that background under your belt the first case study was about the Lynnhaven River in Virginia Beach, which truly is an evolving response to local use conflicts. And here you can see on a map where the Lynnhaven River is. Virginia Beach is on the far eastern side of the state of Virginia. It's a big tourism draw in our state for it's beautiful beaches. And many people like to come and retire to Virginia Beach. We've had a big increase in population over the years, which unfortunately also sets the stage for conflicts as people purchase land and build big houses along the waterfront.

E. Andrews: It's about 64 square miles of land and water in that watershed. Nearly 150 miles of shoreline. Half of the city's population resides there. Almost 4,500 private waterfront homes. There are public access areas and marinas, boat launch facilities, and waterfront restaurants. Lots of water dependent uses there. First Landing State Park, a very historic site where the colonists first landed hence the name. And a lovely big beachfront park as well. And it's historically been a productive oyster tributary, but over time the water quality degraded and the first shellfish condemnation occurred in 1930. By 1971 the entire river had been closed to shellfish and then harvesting. And in 1998 it was listed as impaired under the Clean Water Act on the impaired waters list section 303D list.

E. Andrews: As you can see on the right hand side, all of that correlates with the growth in population in that area. As the people arrived the water quality went down as is too often the case. And we have, though, had quite a turnaround between citizen groups, Lynnhaven River Now is a nonprofit that really is focused on improving water quality. And with our Department of Environmental Quality imposing a TMDL, the water quality has improved to the point that about 50% of the Lynnhaven is now open for shellfish aquaculture which is a true success story.

E. Andrews: President Taft is pictured on the right. You might be wondering why is he there? It's because he ate so many Lynnhaven oysters one time, that he announced that he felt like he turned into an oyster. And was a true destination. People came down from Washington DC and would vacation there in that area and dine on lovely Virginia oysters.

E. Andrews: So, unfortunately too often it ended up in this situation that the riparian owners, who were concerned about property owners were pitted against the commercial watermen in their economic concerns. And riparian owners have expressed over time their interests in protecting their safety, and their water access, and their property values. And they're concerned about visual pollution

from nearshore cages, and privacy as people come close to shore to harvest and their family members down on the beaches. All of those concerns have been aired in that area.

E. Andrews: Commercial watermen, on the other hand, are using a natural resource to make a living in a manner that has been very much encouraged by the state of Virginia. Earlier we talked about \$1.50 as the leasing fee. And oysters improve water quality and so the watermen raise the point that they are using a natural resource, they're doing what the state has tried to encourage, and by the way it's helpful to the environment as well.

E. Andrews: So, to give you a little background on the key statues and regulations at play, which we cover in our case study, is as I mentioned earlier the price per acre, and the duration of the leases and renewal, \$1.50 an acre for 10 years for a regular lease. There are notification procedures that were in place at the start of this case study that very progressively call for posting at the courthouse door and at least two other spots for at least 60 days and publish for four weeks in a newspaper. Of course times have changed and we'll talk more about that in a moment. So, you need to look at other ways to publicize things now.

E. Andrews: In some instances a general permit for temporary protective enclosures is required in our regulations. For cages exceeding 12 inches from the bottom and there is a notice procedure in that instance. So in the Lynnhaven River, however, the authorization of shellfish aquaculture structures there is no notice procedure in place for cages that are less than 12 inches from the bottom and that's what was primarily used in the Lynnhaven. And so, some of the complaints heard from citizens were, "We didn't know. There was no notice procedure."

E. Andrews: So, 2016 in response to this situation, a senator filed a bill in the state legislature to send until July 1, 2017 the assignment or transfer of general oyster grounds by the Virginia Marine Resources Commission in the Lynnhaven River. So, a very specific bill for time frame and for location, and another senate bill to increase the annual rent from \$1.50 an acre to \$5,000 per acre to lease the planting grounds within 1,000 feet of shoreline residences. Obviously, responding to complaints heard by residents, but the legislator at the time said that he was attempting to get people's attention to the issue by filing that bill and he was madly successful I have to say. \$5,000 was quite a jump. But he withdrew the bills in exchange for the Virginia Marine Resources Commission imposing a moratorium on its own volition on new leases in the Lynnhaven River, and creating a task force.

E. Andrews: A task force brought various stakeholders together to meet about this issue and try to come to come consensus recommendations. The only recommendations on which they had consensus were the ones saying there should be a notice procedure for all cages and there should be a use plan for leases, riparian rights

for oyster ground leases and to raise awareness of this issue, because they really felt like public awareness needed to be addressed.

E. Andrews: Unfortunately then it went to the Virginia Marine Resources Commission and they voted for the status quo, no changes whatsoever. And I say unfortunately because that just resulted in more legislation. In fact, the then commissioner of the VMRC after that meeting said, "Well, I guess we left it for the legislature to handle," is what he said in the newspaper article. And I think he was exactly correct because that's what happened the following year showing that if possible resolving these issues at the local level is better than during a very quick legislative session, because there was first a bill, a senate bill that was introduced to direct the Virginia Marine Resources Commission to determine whether for certain oyster planning grounds that application for assignment, transfer, or renewal of a lease also requires a ground use plan to be approved by the VMRC. And that died.

E. Andrews: And a house side bill was introduced to reduce from 205 feet to 105 feet the shorefront that makes a land owner eligible to apply for riparian planting grounds and that was left in the house appropriations committee and a companion billed to that on the senate side passed the house, but was once again left in the house appropriations committee where many bills go to die.

E. Andrews: Same year there was a house bill to require posting of a notice of an application to lease oyster grounds for 30 days on the VMRC website and notify by mail the locality in which the grounds are located. The notification has to go to the holders of adjoining leases and riparian owners within 200 feet. And that actually did pass as did its companion bill. So, we've come into the 21st century. Now we are actually using a website for notification as well.

E. Andrews: And so, here is where it resides in the Virginia code today requiring the VMRC to post the notice for 30 days on its website and notify by mail holders of adjoining leases and riparian owners within 200 feet. And the bill reduced from four weeks to two weeks the period during which the Commission is required to publish weekly notice of the application in a newspaper. And required all forms of notice to invite written comments with the applicant bearing the cost of the notice.

E. Andrews: And the next bill authorizes there's a senate side bill authorizing localities to create working waterfront development areas to incentivize the use of these areas to encourage various uses including aquaculture uses, providing for regulatory flexibility in special zoning. And that too passed. So, that too is a success largely laid by the groundwork done in developing Virginia's first working waterfront master plan. Again, bringing together many stakeholders to make recommendations including the planning district commission's lease posted in all areas.

E. Andrews: In 2017 and 18 there was more legislation. First there was a house side bill that provided that certain oyster ground leaseholders in the Lynnhaven specifically are subject to the conduct of approved municipal dredging projects to restore the existing navigational channels. Because one thing that's happened over time as this river has gotten so built out along its shores there's been a lot of construction, a lot of sediment going in the water and therefore it needed dredging to maintain the navigational channels. It was approved with an expiration date of July 1, 2019. So, just for a short period of time, a couple years.

E. Andrews: And then there was a house side bill that provided that the transfer or assignment of an oyster lease may be made to any county, municipality, or political subdivision because the law provides for such a transfer only to residents and certain firms or corporations. Localities could apply for leases, but they couldn't have one transferred to them. That died in subcommittee.

E. Andrews: And then in 2018 another attempt to reduce from 205 feet to 105 feet the shorefront required for a riparian planting ground assignment and that died again. And this is all to show you that there are certain attempts that are made repeatedly on certain topics, but if they're introduced during a legislative session without a stakeholder group behind them to work out differences then they often fail.

E. Andrews: So, what happened was we had a new administration come in. They realized that this had been a series of attempted bills that had failed to pass, they wanted to bring everyone together. So, they created in 2018 a clam and oyster aquaculture work group that resulted in legislation. One on the house side extended the sunset date from 2019 to 2035 for the allowance of those municipal dredging projects in the prior bill I mentioned. And when such a project is proposed for lease grounds used as oyster planting grounds then the Virginia Marine Resources commissioner shall review the project to ensure that it avoids affecting those grounds to the maximum extent practical.

E. Andrews: So, you can see how they're trying to take into account multiple viewpoints and needs in this bill. And if so then the commissioner shall notify any leaseholder within the footprint of that proposed navigation channel and request a response within 60 days. So, making sure that citizens surrounding that area know about it and having the opportunity to respond.

E. Andrews: The locality has to pay back the lessee for the use of the ground by coming to a voluntary agreement or entering into mediation if their agreement occurs within 90 days. If the lessee refuses mediation or can't come to an agreement with the locality within nine months then a court shall determine and order fair compensation. So, they really worked through many provisions in this bill in this work group so it passed the legislature.

E. Andrews: And on the senate side there was a bill that authorized the Virginia Marine Resources commissioner rather than the riparian owner, an important

distinction, to decide which area within a riparian owner's waters shall be assigned for planting oysters and removes the \$1.50 fee for such an assignment. And it changes various provisions related to oyster planting practice. Including it increased the application fee for an assignment or general or riparian oyster planting grounds, authorized the VMRC commissioner to consider the public benefits and impacts of shellfish aquaculture, or whether a transfer or renewal of an oyster planting lease is in the public interest, which is an important provision.

E. Andrews: Directing the VMRC to adopt regulations related to license renewal fees. And they have indeed they have a committee looking at that right now. And increasing the application fee for a transfer of an oyster planting lease which is \$300 for a lease of less than 5 acres, 500 for a lease of 5-25, and 1,000 for a lease of more than 25. So, that was approved. That also passed the legislature. Again, because it was the product of a stakeholders group where everyone came to the table and discussed.

E. Andrews: So, we'll talk a minute more in a minute about the lessons learned from that whole thing, but Angela's going to talk to you about the other case study

Angela King: Hello, everyone. My name's Angela King and I'm the assistant director at VCPC. And as Elizabeth just mentioned in addition to the new legislation there was also language that expanded the factors which VMRC was to consider when approving, renewing, or transferring an oyster aquaculture lease. And this past spring VMRC formed the aquaculture management advisory committee to provide ongoing advisory assistance to VMRC staff and address some of these management issues that came up during the 2018 work group.

Angela King: The advisory committee is comprised of industry, non profit, and academic representatives, and chaired by VMRC's deputy commissioner. And as Elizabeth mentioned currently they are looking at the lease renewal fees as well as determining an appropriate interpretation of beneficial years to reflect the goals of the current legislation.

Angela King: So, given this changing landscape it's important that those interested in starting or expanding an aquaculture operation have a good understanding of what it is that they need to do. Based on the feedback that we collected when we were first developing these case studies via interviews with aquaculture specialists, regulators, industry representatives, scientists, and nonprofit organizations involving restoration work. It was determined that one way to assist individuals with navigating this process would be to create some easy to use guidance materials.

Angela King: So, although our regulatory framework here in Virginia is very business friendly there are a variety of requirements to take into account and a lot of recent changes. And while there are existing guidance materials a lot of them have not been updated in decades. So, after receiving feedback from project partners we

decided that rather than creating your traditional hard copy guidance document that this how to guide should be electronically available so that it's easier to update and easier for everyone to access.

Angela King: Initially the idea was to create an interactive flowchart that mapped out the necessary steps to establish an operation. And the idea being users would work their way through a series of questions such as whether they plan to use this shellfish for personal consumption or commercial purposes, whether they would cultivate shellfish on bottomlands leased from the state, whether they would utilize protective equipment such as cages. And then it would be interactive in the sense that at different decision points there would be hyperlinked PDFs available of one-page summaries to expand on some of the more complex topics.

Angela King: But as discussions evolved about the interactive tool we're now instead working on a website that will have clickable buttons directing users to additional information. And we have grouped the information into six main buckets. In addition to the homepage we'll also have information covering how to get started, how to attain grounds, general requirements that apply across the board regardless of your decisions regarding year end operations. Then a section that focuses specifically on the different types of gear you could choose to use and how that impacts your license and permit requirements. A little bit about local government considerations, and also a page that will cover other assistance and resources.

Angela King: So, I'll walk through each of these in a little bit more detail. The homepage will summarize general information about relevant state laws, about the Virginia Marine Resources Commission, which is the regulatory agency, and agency regulations related to aquaculture. There'll be a mix of text and photos here and then a grid system will be used to display those six topical areas.

Angela King: The page about getting started will include information that's very general about planning for and starting a business. The focus here is really on informing the individual about administrative and financial aspects of running their business. Users will be directed to resources regarding whether or not they should form a formal business entity and how they should plan for the operation of their business. This page will include links to many resources, that the marine advisory program at VIMS has already developed including a planning overview, fact sheets on risk management and marketing, reports of sales trends within the state, and how one can create a realistic budget depending on the size of operation they want to undertake.

Angela King: Ultimately the goal with this section is to encourage the individual to really think long term about their interest in aquaculture in order to effectively plan for a successful business. And identify key elements of how they plan to move forward. What product they will use. How much of it they will produce. How

they'll produce it. How much it will cost to produce. Who they will sell to and how long it will take them to be profitable.

Angela King: The second section on attaining grounds will provide the user with information regarding their procedure, cost, and timeframe for obtaining shellfish planting grounds. Generally in Virginia the state owns submerged lands channelward to mean low water line and has established a leasing program for some of these state owned bottomlands. This page will summarize the two main types of leases that are available through VMRC, which are riparian leases and regular leases. There will be links to the relevant application forms, explanations of the types of information that needs to be provided, links to existing mapping tools that can help the individual identify grounds that are available for leasing, and also cover some of the state level considerations that need to be taken into account. Such as the existence of submerged aquatic vegetation and shellfish condemnation zones.

Angela King: And in addition just summarizing how one can attain grounds through VMRC. This page will also provide detail regarding how to obtain grounds from an existing leaseholder. Either through a transfer of that lease or by subleasing grounds from them.

Angela King: The general requirements page is meant to identify those items which apply across the board to any aquaculture operation. So, the information we're trying to cover here is not dependent on the type of gear that the individual is using rather it focuses on items that everyone regardless of how they're structuring their operation will be required to do. For example, in order to obtain any type of shellfish permit or license there's a mandatory training that the individual must take. So, this page will briefly describe that training and link to it. It is a training that's available online and takes approximately 45 minutes to complete.

Angela King: Another example of a general requirement is the payment of an oyster resource user fee, which supports the state's oyster replenishment program. This is another requirement that doesn't depend on how you're actually carrying out your operation. It's simply whether or not you're involved in the harvesting of oysters for commercial purpose.

Angela King: Now on the gear and operations page there will be some brief descriptions and photographs of the different types of gear that you can use in your aquaculture operation. There will also be links to resources for constructing your own gear or obtaining it from someone else. And the information on this page will serve to show the user how his or her choice of gear impacts the necessary permits or licenses that they need to obtain for their business.

Angela King: For example, if the individual plans to lease grounds from VMRC and grow oysters in cages that exceed 12 inches in height or are suspended within the water column then the individual will need to complete a joint permit application before doing so. However, if the individual plans to use their lease

grounds to grow oysters in cages that are no more than 12 inches in height then no joint permit is required.

Angela King: Another example would be if the individual wanted to handle oysters within their caged operation outside of the times designated by agency regulations then they would need to obtain a cage aquaculture husbandry permit. So, this section really seeks to identify situations beyond those general requirements and connect gear and operational choices to the resulting permit and license requirement.

Angela King: The assistance and resources page is meant to direct users to information regarding industry associations, and conferences or other educational events where they can learn more about the industry and get involved. It will also identify potential sources of funding for aquaculture business.

Angela King: And then the local government considerations page might not be of interest to all users of the website. The focus here is really on local considerations such as zoning that would come into play when there's a land-based aspect to the aquaculture operation. So, while localities have brought authority over land use decisions within their boundaries the focus here is on what uses are permitted where, what types of building requirements might apply, and items of that nature.

Angela King: So, currently we're working to finalize the content for the interactive tool. I'm going to try to pull up a template maybe so that you can see what it looks like. All right, so hopefully everyone can see that. This is an idea of the direction that we're heading. Virginia Sea Grant Communications staff have designed this template and are working with us to incorporate our research and information into it. It's still a work in progress, but you can see it's a basic website that identifies the different subject areas that we just walked through. There's a mix of text and photos and users will be able to gather some basic information from the landing page before selecting a specific topic area that they'd like to learn more about.

Angela King: We have filled in some of the information on the assistance and resources page. I don't know if it's going to open.

E. Andrews: Oh, there you go.

Angela King: Okay. So, this is an idea of how it'll look when it's more filled in, more complete. As you can see we have some resources regarding funding programs here with links to either additional information or the application if it's available and contact information where they can gather more detail. There's also links to conferences that take place where they can learn more about aquaculture or get connected to others in the industry. And then membership programs, watermen associations which they can join.

Angela King: As far as next steps we planned to solicit feedback from many of the same groups that led us to the development of this tool. We want to be sure that we're covering relevant information and providing it in an organized and easy to understand manner. And we're continuing to have conversations with our partners regarding this project and completion of this website.

Angela King: All right. So, as these case studies have progressed we just want to point out some final observations before opening it up to your feedback and questions. First, in order to maintain open communication and build trust and ensure balanced representation it's really important to include all relevant stakeholders in these discussions, which is what we've tried to do as we're developing this tool. And although there has been legislative action in recent years here in Virginia it's important that sufficient time is taken to research and discuss these issues, given that our legislative session is so short.

Angela King: And a third lessons learned is that it's important to have public outreach and educational components so that even if those that aren't directly involved with aquaculture will have a better understanding of the history and operation of the industry here in Virginia.

Angela King: And with that we will open it up to your feedback and questions.

Amanda Nichols: Thanks, Angela and Elizabeth. And just like I said at the beginning, if you have any questions please put them in a chat box and I will be happy to relay them or Elizabeth and Angela can also see them themselves. We'll just wait a couple of minutes for that. Again, well I don't think I mentioned this at the beginning, but this whole webinar is being recorded. And the recording will be published on the National Sea Grant Law Center's website. So, if you want to go back to anything or watch it again for any reason you will have that opportunity as well.

E. Andrews: If there's anyone who didn't quite hear everything we're happy to repeat something because we did, of course, have the garden lawn crew come by mowing the lawn in the middle.

Angela King: Yes.

E. Andrews: So, if there was anything you couldn't hear please let us know. We'll be glad to repeat it. I will add that the portion of the tool that talks about local requirements was actually as Angela noted it may not be of interest to everyone but it was something that our partners mentioned. That they do get questions on that periodically and they thought it would be very helpful, because so many people don't even realize that there are local requirements that can come into play.

Amanda Nichols: All right, Angela and Elizabeth, it looks like there is one question coming in. David asks, "Does Virginia have a state aquaculture coordinator? And if so, in what agency are they?"

- E. Andrews: Well, our Virginia Marine Resources Commission has a full staff it deals with aquaculture permitting and leasing and all of that. I don't think there's one person, per se, but they do have a staff that deals with all those kinds of questions. And in addition over at the Virginia Institute of Marine Sciences house the marine advisory service folks and they do answer questions as well from the public. And did, in fact, give us feedback and input on the development of this tool.
- Angela King: And I'm seeing a question from Kim about whether or not the shellfish growers of Virginia were involved in this process? And they have been involved. They were one of the stakeholders that we interviewed before we developed the case studies. And we're continuing to have conversations with them as the website gets developed.
- Angela King: It looks like Rick is asking if the website's accessible for viewing. At this time it's not, but if any of you are interested in looking at the website once we have it more filled in and providing us with feedback, it'd be great if you can send me an email and I can send it out to you when it is ready.
- Amanda Nichols: Elizabeth and Angela, just one quick thing. David has a follow up question that he chatted me privately in response to his state aquaculture coordinator question. He would like to know if that same agency that permits also promotes?
- E. Andrews: If it's the same agency that the permit also promotes?
- Amanda Nichols: His question, David, if you'd like to put it in the general chat so they could see it that would be great as well. His original question was whether Virginia has a state aquaculture coordinator. And if so, in what agency? And his current question is ... verbatim it say, same agency that permits also promotes?
- E. Andrews: Oh, I see. Yeah.
- Angela King: And so I think the way to separate those two out is that VMRC is in charge of the permitting and then Elizabeth had mentioned the Marine Advisory Program at VIMS. They are more involved with the marketing and promotion side of things. Sorry.
- E. Andrews: Right. Yeah. So, that's why we went to both to get feedback for the website, because they do both interact so much with industry representatives and can get feedback on what would be helpful.
- Angela King: And I'm going to send my email address out through the group chat in case anyone is interested in receiving a link to the website as it gets developed and is interested in providing feedback.

E. Andrews: And I think Kim noted, and she was absolutely right, the Virginia Marine Products Board separately promotes Virginia seafood if that is also what your question's about, David.

Amanda Nichols: And there was another questions y'all may have missed just a little bit earlier. It says, "I may have missed this. Is there an online tool that details the environmental conditions in potential lease areas, eelgrass or other conflicts, bottom type current/waves?"

E. Andrews: So, the Virginia Marine Resources Commission does have the ability. They show the various leases that are out there today. And VIMS, the Virginia Institute of Marine Science works with them to provide a SAV areas including eelgrass. And what was the third or other conflict? Bottom types, currents, and waves? And currents and waves, I don't think that's out there yet.

Angela King: And I don't think there's ... yeah, I don't think there's one online tool that covers all of these items that David's listed. There's also Department of Health has mapping tools online regarding shellfish condemnation areas. And we will provide links to any of those existing tools within the website we're developing.

E. Andrews: Well, one of the goals of this development of this tool really is to be a bit of one stop shopping-ish for people that are interested in getting in the industry so that they can find out where they can go for additional information if they have various questions.

Amanda Nichols: Great. If anyone has anymore questions keep bringing them in, but if Angela and Elizabeth, if you want to stop sharing your screen then I'll put up a little bit of last minute information on our end while we just answer these last few questions.

Angela King: It looks like David is more sharing some information for people. I lost it. [inaudible 00:42:33] David says that the New York Bio Extraction Initiative is developing a GIS based siting tool for aquaculture with multiple layers.

E. Andrews: Yeah, do it like that. That's very helpful, yeah.

Angela King: And then Rick is asking what the role of the Army Corps of Engineers has been. They were not one of the agencies that we reached out to when we were developing this tool, but we can share it with them to review as we develop the content for the guide. The main way they would come in is with the joint permit application.

E. Andrews: As we share information about the joint permit application on the website tool of course we'll have them review that as well.

Amanda Nichols: It looks like just one more question came in about whether there's a contact person or developer website for that effort?

Angela King: Yeah, and I think this is for the New York Bio Extraction Initiative. I can't answer that, but maybe David Burn can.

Amanda Nichols: Well, great. If anyone has any last minute questions keep sending them, but just in the meantime a little bit of a shameless plug for our next and last webinar in the series. It's going to be presented on September 4th by the California Sea Grant Program and regards the certification of shellfish growing waters in the EEZ. You can sign up for that just like you did for this webinar on the National Sea Grant Law Center's website. Oops, sorry about that. And here is the contact information if you have any questions or comments that haven't been addressed today or about the project in general. Please feel free to contact us and we'll do the best to either direct your questions or answer them directly.

Amanda Nichols: And if that's everything I'd just like to thank everyone for joining us and again the webinar will be posted on the National Sea Grant Law Center's website. Everybody have a great day. Thanks.