Stephanie Otts:
Good afternoon, everyone. Thanks for joining us here for our third webinar in the 2022 National Sea Grant Law Center webinar series. My name is Stephanie Otts. I’m the director of the National Sea Grant Law Center. It's great to see everyone today. So excited to have our presentations from fellows with the Center for Water Policy at the University of Wisconsin-Milwaukee. So before I turn it over to our speakers today, just wanted to mention that we are recording the webinar today and we will be posting it on the National Sea Grant Law Center's website as soon as we can get it up for future viewing and we'll share that with all participants and registrations as well as on social media. We have everyone muted right now to cut down on background noise. Please ask questions in the chat throughout the presentation, and then there will also be time for Q&A at the end.

Stephanie Otts:
And so with that, I'm very excited to turn it over to Melissa Scanlan to give us a little bit of about introductions and backgrounds for today's webinar.

Melissa Scanlan:
Thanks, Stephanie. Hi everyone. I'm Melissa Scanlan. I am a professor at UW Milwaukee School of Freshwater Sciences and the director of the Center for Water Policy. Last year at this time, Jen Hauxwell at the Wisconsin Sea Grant partnered with us and Sarah and Misbah, who you'll hear from, were just a twinkle in our eye. We were interviewing candidates for this new fellowship that we were creating that was the partnership between the Center for Water Policy and the Wisconsin Sea Grant, and Sarah and Misbah are the first people who we've hired to hold this position, the Sea Grant UW Water Science Policy fellowship, and they are here to talk about their work experience with us over the past academic year.

Melissa Scanlan:
Sarah Martinez graduated from the University of Utah Law School and Misbah Husain graduated from Boston College Law School. That tells you that kind of some of their academic credentials, but it doesn't tell you too much about them. I don't want to take up too much time here, but I do want to say they're just ... It's been such a pleasure to be able to work with them over the course of their fellowship. They're both such creative thinkers and incredibly dedicated to pursuing research interests and figuring out connections between water policy and environmental justice issues and I have been so impressed with the work that they've been able to do over the course of this year.

Melissa Scanlan:
Now you may not know anything about the Center for Water Policy, so let me just briefly let you know that we are a center that is within the School of Freshwater Sciences. So we are trying to link water science and economics and social sciences to the formation of water policy and we work on a state level, a national level, and we could be working on an international level. Our mission is broad enough to encompass all of that with a focus on fresh water and we have a special interest because of our location in the Great Lakes, so some of the projects you may hear about today involve the Great Lakes.

Melissa Scanlan:
With that, I'm going to turn it first to Sarah, so she can talk about her fellowship experience and then she'll pass it over to Misbah Husain.
Sarah Martinez:
Thank you so much for that lovely introduction, Melissa. I'm going to go ahead and share my screen right quick. Alrighty.

Sarah Martinez:
Okay. So hi, everyone. As Melissa said, my name is Sarah Martinez. I'm a Texas native. I graduated from the University of Utah Law School before coming and spending my last year with the University of Wisconsin Milwaukee Center for Water Policy and today I want to talk about two of the projects I've worked on over the course of the last year and end with sort of a sense of gratitude for all the relationships that I've created through these projects and at the Center, which is why I've titled my presentation today, Connection and Community. So I'll go ahead and get started. Let me make this a little smaller so I can actually see my presentation. Okay.

Sarah Martinez:
So first I'm going to provide a little bit of an overview of the projects I worked on this year, what they were, and some of the findings that we came to. I'll also be reviewing some of the work products I completed during my time here, which were plenty, and like I said, I'll be finishing off with just talking about how cultivating community was so important to this experience and how I will take that with me going forward.

Sarah Martinez:
Oops. All right. So my two projects, the two biggest projects I worked on this past year were the Milwaukee Estuary Area of Concern and the latter project was something I've called the Barriers to Blue Space Access project. And I'll be reviewing both of those interns, starting with the Area of Concern. So I was not familiar with what an area of concern was when I first came to the Center, but it is an area designated by the EPA where there is significant impairment of beneficial uses as a result of human activity at the local level and the Milwaukee Estuary spans about 10 miles of river, more or less, stretching from Lake Michigan up somewhat into and north of Milwaukee. It was dubbed an area of concern in the 1980s and the project to dredge and clean up the waterways already underway. The project will ultimately take northwards of $400 million to complete.

Sarah Martinez:
So there's two kinds of things to note when I'm talking about this project. One is something we call the DMMF and the other is the Public Trust Doctrine. And so currently the preferred alternative for where to house all of this sediment is a new facility called a dredged materials management facility, or DMMF. These are containment facilities, and they're really common along ... in the Great Lakes because they often hold sediment that's dredged for mostly navigation purposes, but also for this current purpose, which is to clean a polluted waterway. Let's see. And in this case, the DMMF that they're going to build will actually hold the sediment contaminated with heavy metals, PAHs, and PCBs, two of which are carcinogenic. So it was kind of a big project when you're thinking about it that way.

Sarah Martinez:
The other thing to note about this project and a legal doctrine I spent a lot of time getting to know is the public trust doctrine. And so in Wisconsin, the state constitution imposes a duty on and gives authority to the state to act as trustee of the state's waters. Once that was constitutionalized, Wisconsin went
ahead and expanded those public rights to the right to recreation, the right to enjoy scenic beauty, and the right to protected shoreland amongst other types of rights. So those are two things to note and the issues I was working with ... So the lake bed that these organizations want to build this facility on is public property and the common law public trust doctrine applies. So the issue I worked on had to do with understanding what the obligations of the state were, investigating how they might meet this obligation or how they should strive to meet that obligation, and presenting that information to both policy makers and the public at large so that the community could better be informed of the process and of their public rights.

Sarah Martinez:
As it stands today, the Port of Milwaukee will be managing that facility in perpetuity once it’s complete and the goal as of now, and as I understand it, is to expand on harbor facilities and expand tourism specifically, so that's why you're looking at a cruise ship there on the left side of your screen, and determining as of right now whether that meets their public trust obligation is really hard to say. So we've boiled it down in an upcoming Law Review article that will be published online with Sea Grant that the purpose of this newly created land will need to be clarified in order to really fully assess whether it meets those obligations. But ideally, it'll look something like on the screen, something like the picture on your screen here on the right where there’s a beautiful blend of nature and the urban setting so that we can ensure that the public can enjoy these public rights that they actually have and properly exercise those.

Sarah Martinez:
So turning now to my second project, I was looking at systemic barriers to blue space. This project is near and dear to my heart. It’s what I’m currently working on right now and it began as a literature review trying to answer the questions on your screen here that I’ll read aloud. So I was trying to figure out what the academic literature says about disadvantaged community's access to and use of water, recreation, and fishing, and what it says about systemic racism or economic inequality presenting any barriers for those communities to access and use water based recreation.

Sarah Martinez:
I've sort of boiled these down into four separate areas. I will look at ... I've been looking at the benefits of blue space access. I looked at the historical struggle of accessing these blue spaces and from there I reviewed academic literature, demonstrating the current barriers to accessing those as well as legal tools to alleviate some of those barriers and ensure that all disadvantaged communities have equal access to and enjoyment of their blue spaces. The goal of this project, my goal of this project, was to bring attention to longstanding history of racially diverse communities and their ties to blue spaces and connecting that with the intentional displacement of these communities away from blue space, or the lack of access to these spaces.

Sarah Martinez:
So I’ll start first with the benefits of blue space. There are plenty, there are several. I've boiled that down into four different categories, social, health, economic, and environmental. Some social benefits include providing spaces for teamwork and leadership through sport, or also cultivating a sense of stewardship. There are studies out there that demonstrate more access to and time spent in blue spaces and in nature generally results in more pro environmental behaviors and attitudes. So that is a benefit of cultivating these spaces in our neighborhoods.
Sarah Martinez:

Some health benefits include lower prevalence of obesity and obesity related disease, lower prevalence of high blood pressure, as well as the alleviation of several mental illnesses, including anxiety and depression. The economic benefits were really baffling to me. I don't understand that much about economics, but this was very enlightening. So investment in green and blue infrastructure, so investment in places like on your screen here, that is the, I believe it's the Detroit Riverwalk, I could be totally wrong on that, but they've shown to yield really large financial returns, which is a huge positive and a huge benefit to creating these types of blue spaces. And then finally, some environmental benefits include creating these spaces sustainably has the potential to restore really natural ecosystem services, as well as promote resiliency in some of these places, which will be really important in the Great Lakes region as climate change continues, which Misbah will talk a little bit more about later.

Sarah Martinez:

The other thing that I discovered as I was conducting this research was the historical struggle of accessing these spaces. I grew up in Texas where I really didn't ... I don't remember learning a ton of this stuff, so it was really eye opening for me, but historically it's more or less well documented that most if not all disadvantaged communities are not so privileged to have unfettered, safe, and equitable access to green and blue space, and on your picture is during the time of legal segregation, when even beaches were segregated between white and black.

Sarah Martinez:

And as part of this research, I uncovered a lot of the connection focusing on the black experience, starting from slavery and going kind of all the way through the 1960s and 70s and looking at racist land use and housing and how those created ... How those sort of began this historical struggle to accessing some of these spaces.

Sarah Martinez:

Moving on to some of the barriers. So after I understood a little bit of the history I wanted to see how has that reflected in the academic literature. Do they match? The literature did demonstrate several barriers that may discourage disadvantaged communities from visiting blue spaces. These include safety and discrimination, the impacts of racist land use and housing proximity issues, and then lack of transportation issues. So those last three sort of fall in line with each other and sort of flow together. Some of the safety and discrimination issues were often seen in a pool setting where black people were not able to enjoy the pool setting in the same way that white people were and that sort of thing so it was really heavy research, but really good to know.

Sarah Martinez:

So after I sort of reviewed all of this and saw this all demonstrated academically and statistically, I wanted to see how can we alleviate some of this? How can we alleviate what is essentially an environmental injustice? And there are potentially several tools that can help alleviate that, including some federal constitutional provisions like the Public Accommodation Provision or the First Amendment. I've been looking at funding opportunities to expand access or create more access points so that it's easier for disadvantaged communities to enjoy places like the beach or a lake. I've also looked at the Civil Rights Act and what that can do for blue space access. The public trust doctrine, again it's been a common theme in all of my projects, as well as looking a little bit more forward towards some more systemic solutions like NEPA and the upcoming Environmental Justice For All Act of 2022. So
I’m excited to do a little bit more research in how these all will potentially provide solutions and create more access for disadvantaged communities in blue spaces.

Sarah Martinez:
So now I just want to turn to some of the work product I've created as part of both of these projects. For the first project regarding the area of concern, I actually ... It was a massive team effort to create this webinar where we cultivated a diverse group of panelists and had really interesting discussion around the idea of lake bed fill, actually filling ground from the lake bed up and creating new land and investigating what public rights the public has in those newly created lands.

Sarah Martinez:
So on your screen are just two graphics I created in promotion of those two ... Or of that event, which had over 200 participants. So it was a really informative and just an amazing growing experience for me personally. As part of that event and research, Melissa Scanlan and I did a radio interview, which was a first for me. That was an incredible experience, very nerve wracking but awesome, and they transcribed our conversation and also published that on their website, which you can find here at that title, Cultivating Conversation. I also published a blog post with the State Bar of Wisconsin Environmental Loss Section, which has now been archived in ... I forget where it is. I will send out a link after this, but that was also ... I'm no stranger to writing blog posts, but it was so well received, which I'm very grateful for, but those were both firsts for me, more or less so it's been an incredible experience engaging with the media as a new lawyer.

Sarah Martinez:
A big part of being a Policy Fellow, Legal Policy Fellow, is writing policy briefs. In law school, you don't get a ton of experience with that, so I was so grateful for the opportunity to write my first policy brief with the Center, published on our website and you can see the first page here. It was a painstaking process, but ultimately we're both very happy, we're all very happy with how it turned out. I did a lot of research for this and so I'm hoping that it was helpful to not only policy makers who read it, but also to the community at large.

Sarah Martinez:
The larger sort of work products that have come out of this year have been two law review articles. The Area of Concern law review article will be published, like I said, with Sea Grant hopefully this summer. I believe it's this summer, and the title is Great Lakes Restoration and the Public Trust Doctrine: Milwaukee's Restoration Obstacles and Opportunities. That will chronicle all of the information I've gone over and more about the project going on here in Milwaukee and in Lake Michigan.

Sarah Martinez:
The other project I've been working on, and the one I'm working on currently, is a new law review article that I've titled Racism in the Water: Liberty and Access for All in Outdoor Recreation, which will chronicle all of the information I just went over in terms of systemic barriers to blue space access in which I review everything I talked about and more so it's been a lot of hard work and it's been a lot of research, but all so awesome.
Finally, I just want to end with cultivating community. As part of both of these projects, I had the extreme privilege of working with really incredible people, not only within my team, Melissa, Marilyn, and Misbah, who all I believe are here today, but also with other organizations and leaders of other organizations. Cheryl Nenn from Milwaukee Riverkeeper was really helpful in the early research of the Area of Concern. We talked a lot with attorneys and retired attorneys from the Wisconsin Department of Natural Resources. We partnered with both Wisconsin's Greenfire and the Environmental Law Section of the Wisconsin State Bar to promote our public rights in Milwaukee's Fresh Coast Event and through that, I was able to have the opportunity to create relationships in both of those organizations and learn a lot about marketing and it was just such a wonderful experience to get to know all of these attorneys and create relationships and I hope to take those going forward with me and all the lessons learned as well.

Sarah Martinez:
So thank you guys for sticking with me today and reviewing some of my research. I'm very excited for the article to come out and hopefully the other one will be published, but that's a little bit of what it was like for me as a Fellow with the Center for Water Policy this past year. So thank you so much.

Stephanie Otts:
Thank you, Sarah. Thanks so much, and that was great. In the interest of time, we're going to move to our second speaker, Misbah, but please you can use comments in the chat and then we can also circle back at the end if there are follow up questions and so Misbah, it's over to you now.

Misbah Husain:
All right. Thank you so much. Just give me a moment, please, to share my screen. All right. Can I get a thumbs up if that's showing up properly? Yes. Okay. Wonderful. Wonderful. Okay. So again, thank you to everyone who could make it here and thank you to all the folks at the Sea Grant Law Center for inviting Sarah and I to share about our work. It's an awesome opportunity and we hope that you'll find it interesting.

Misbah Husain:
So the subject of our talk today was Climate Change, Disadvantaged Communities, and Flooding, all topics which I was very fortunate enough to work on during my year as a fellow, but cramming a year's worth of projects into 15 minutes is a bit of a tall order so rather than going in depth into every project I've worked on, I thought it would be best to build towards a more detailed discussion of one of my more recent projects and that is a law review article that I co-authored with our director, Melissa Scanlan, on the subject of disadvantaged communities and water infrastructure funding. This is a cool project that I think is really a culmination of a lot of the research and themes that I explored earlier on in the year and a good showcase of our work.

Misbah Husain:
So what I'm going to be doing today is giving you a little bit of context before going into that discussion. So I'll start by talking about climate change, of course, and its impact on our water resources, particularly its increase of our flood risk. I'll then talk about some of the equity issues that are involved with that increased flood risk, and then I'll pivot to talking about the substance of the article and our recent developments in water infrastructure funding, and really framing that as an opportunity to address some of those equity issues. So I'll give an overview of our federal programs for water
infrastructure funding. I'll talk about what is even meant by that term, disadvantaged communities, and I'll give an example of how one state, Wisconsin, is implementing its own funding programs. Okay. So a lot to cover so I'll dive right in and start with climate change.

Misbah Husain:
Climate change is ubiquitous, right? It affects every region on the planet and of course by the same token, every region on the United States and when we're talking about its impact on water, we are seeing an increase in polarization, or an increase in extremes, and this is depicted on this map here. So this is a map showing changes in rainfall in the U.S. across the last century and green means there's been a substantial increase in that rainfall. So places in the Northeast, the Great Lakes are substantially wetter than before whereas places like the Southwest are substantially drier than before. So both of these phenomenon are driven by the same kind of processes and they both are uniquely harmful to human communities in their own ways.

Misbah Husain:
So consider the drought in California, wildfires up and down the West coast, and of course the increased hurricanes and flooding events that we're seeing along the Gulf coast, but being in Milwaukee, we care especially about what's going on in the Great Lakes region and in the Great Lakes, we are seeing fluctuations in our lake levels, kinds that are more intense and more frequent than ever before. Climate change essentially is disrupting the natural processes of precipitation and evaporation that control the lake levels at any given time. And so here's a diagram from the Army Corps of Engineers and really what I'd love for you to pay attention to is that section that I've circled on the right there.

Misbah Husain:
This diagram shows changing lake levels on Lakes Michigan and Huron over the past century, from 1920 to 2020, and those two stars that are there indicate record lows in 2014 and record highs in 2020, values, which had never been seen in the history of record keeping and these record lows and highs occurred only about six, seven years apart from one another, which is amazing because in history, normally this type of transition from a low to high would take decades to occur, not just within a span of six, seven years. So something very dramatic is happening.

Misbah Husain:
Both low levels and high levels have effects for our communities, but I'd like to focus on what happens when you have high water levels and high water levels means more flooding, more erosion, more stress on our infrastructure and property and so this is an image of a highway adjacent to the lake shore, which has experienced an unprecedented amount of erosion beneath it, leading to the eventual collapse of the highway itself. You can imagine something like this is quite expensive to repair and address and also could be very threatening to our welfare of our communities. We have other effects, things like waste water systems backing up because of flooding and risking cross contamination between our waste water and drinking water systems, all sorts of health effects which I won't go into now given the time, but just know that this is a major concern for our wellbeing and it's not just the Great Lakes, it's not just the coasts or the lake shores. All over the country and different research projects we learned that the flood risk is increasing nationwide.
And so one of our other projects was focused on looking at flooding and looking at national flood insurance as a key tool to address this increased flood risk and really the way national flood insurance works is that insurance is provided based on classifications of an area as a high risk flood zone, low risk flood zone, what have you. All of these classifications are done based on maps that are developed by FEMA, right, the federal agency FEMA, and what we were surprised to learn was that majority of FEMA's flood maps are pretty out of date. This map shows the average age of FEMA maps for different regions. Blue is better. Blue means the flood map is less than five years old, but you can see just how little blue there is on this map. Majority of the flood maps in the country are older than five years and thus may not accurately reflect the flood risk that a region is experiencing, especially when you consider how much climate change is affecting this level of risk.

Misbah Husain:
More concerning, I would say, is the fact that this unmapped flood risk is concentrated in communities of color, low income communities. Take a look at this map here, which I got from the New York Times, okay. This is showing Chicago and I've circled the African American ... The majority African American suburb of Englewood in Chicago neighborhood. Excuse me. On the left, you have a map using FEMA's flood map data depicting where the floodplain is, a high risk floodplain. Well, on the right, we have a map using actual flood risk data and incorporating some of the changes from our climate. The areas shaded in blue are considered within the hundred year floodplain. You'll notice on the left none of the properties in Englewood are considered to be within the floodplain, but on the right, incorporating actual risk, almost a third of the properties are within that floodplain and this is concerning because that means almost a third of the properties in Englewood may not necessarily have access to the greatest protections or insurance coverage available in the event of a flood. So this is a huge shortcoming that unfortunately disproportionately affects certain communities, right, and that was something that really concerned us. The burdens of these water challenges are inequitably distributed.

Misbah Husain:
So when we heard about the passage of the bipartisan infrastructure bill, or also known as the Infrastructure Investment and Jobs Act, we were excited because we saw this as an opportunity to actually deliver aid that was needed towards those communities that really have kind of fallen through the cracks, as it were. So let me explain a little bit about that program, okay.

Misbah Husain:
So the Infrastructure Investment and Jobs Act, or the Infrastructure Law passed at the end of last year and was really a historic piece of legislation, the single largest investment in our nation's infrastructure ever, right, and the same is true for the water infrastructure funding made available under it. Now there are two major programs for water infrastructure development through this law, the Drinking Water State Revolving Funds and the Clean Water State Revolving Funds, and these funds together received something around $43.5 billion through this infrastructure law so that alone was amazing but again, like I said, we were excited by this opportunity to deliver funding to those communities who really needed it the most and early on in Biden's presidency there was an executive order that he issued, which established a federal policy called the Justice 40 Initiative and this is a federal policy to ensure that 40% of the net benefit of federal funding would go towards these disadvantaged communities, right, communities that have been marginalized and historically struggled to access this funding. So that was the thing that really piqued our interest and got us looking into the subject in the first place.
Misbah Husain:
Let me explain those two major programs that were funded here. The Drinking Water State Revolving Fund, or SRF for short, is a program meant to fund drinking water infrastructure. And examples of this might include water treatment facilities, rehabilitating contaminated wells or replacing lead service lines, right, something really the public cared a lot about and was paying attention to, especially following the Flint water crisis. The Clean Water SRF on the other hand is for the development of waste water and storm water infrastructure and addressing the kind of pollution that we call nonpoint source pollution. The pollution that is coming from many, many different source at once, for example. Examples of projects that might be funded through this fund include waste water treatment facilities, or collection basins for storm water, or even green infrastructure projects like rain gardens, all to help deal with excess runoff and water from flooding.

Misbah Husain:
Both of these programs, their purposes are different, but they function essentially the same way. The federal government allocates funds to states, territories and tribes for developing their own financial assistance program. So states will not give this money as a grant. Remember it’s called a revolving fund and what that means is states will primarily give out low interest subsidized loans to recipients to fund water infrastructure projects and the recipients will then pay back interest and principal on those loans which the states will then use to fund further projects so that's how these SRFs generally work.

Misbah Husain:
States have some flexibility to design their own unique programs. They can define things like the application process or who gets priority, which projects get priority, excuse me, but they still must follow certain requirements for their programs and one of the key ones is that they have to provide what’s called an additional subsidy, which I'll explain in just a moment. States also have to submit a yearly Intended Use Plan to the EPA, which describe the structure of their programs and different types of criteria they use, which again is very important and I will explain in just a couple of moments, but let me first turn to that additional subsidy requirement, because this is really where those disadvantaged communities could get a lot of support.

Misbah Husain:
This requirement says that almost half, 49%, of the annual funding that is given to a state for its SRF has to be used for disadvantaged communities, given to those disadvantaged communities in the form of an additional subsidy. That means principal forgiveness, right, a grant or some kind of debt restructuring that reduces the original principal amount. It can't be a low interest or even a zero interest loan and this makes sense, because say you have a water system that's very poor, a lot of rate payers who are low income, maybe a small number of rate payers, like 15 households, served by this water system. A water system like this, the issue is not paying back the interest on a loan. Heck, the issue is the loan amount itself and that principal. That is the huge obstacle to taking on a new project and so this requirement is really targeted at addressing that obstacle and removing that hurdle for these communities so it's very, very important.

Misbah Husain:
Now, you have to be a disadvantaged community to get this funding, this best form of funding, but what is a disadvantaged community? Well, when I say this, we commonly understand many factors contribute to how disadvantaged a community might be. Things like how close they are to pollution, language
isolation, the level of educational attainment or income or housing cost burden for a different community, and many more things besides that, this is just a small handful, but none of those things are kind of enshrined in the Infrastructure Law itself. There's no explicit definition given in the law, rather states are allowed to develop their own unique definitions and criteria for this term, right, so essentially they get to decide who is eligible for this financial assistance and a common metric that is used in these definitions is median household income or MHI.

Misbah Husain:
So a state might say if there's a community that's median household income is below like 80%, a certain threshold percentage of the state's median household income, then it would be considered disadvantaged and eligible for assistance. The advantage of this is that it's a very simple calculation. Even attorneys like myself could do it, but a con is it can hide and mask the true need. Say you have a household where everybody is working, it's a working poor household, and the cost of living in that area is very, very high. Even though their income might put them above this level, they may still struggle to afford their basic needs and so looking at this metric alone might mask a true need and lead to skipping over of some communities that could really benefit from funding and this is a sentiment that even the EPA who allocates this funding has expressed.

Misbah Husain:
In March of this year, they issued this very large memorandum explaining and advising how states would best interpret this term "disadvantaged communities" and implement this funding. It's something we go into more in depth in the article, but two highlights from the memo are that they recommend incorporating much more than just MHI, right, much more than just unemployment data, population data to get the full picture and make sure no one is getting skipped over who can need it. It also allows states or says that it's legal for states to have a carve out definition. So if there's a small community within a larger unit, like a city for example, that smaller community would be eligible, but because they're wrapped into this larger one, they're ineligible. It allows states to structure definitions to allow for these carve outs so that small community could still receive targeted aid, right, so that's the EPA's position here.

Misbah Husain:
Let me very quickly, with the last couple minutes I have, talk about Wisconsin and how they implement this funding. They have something called an Environmental Loans Program, and of course they have a Drinking Water and Clean Water program within that. Now to be a disadvantaged community, as defined by Wisconsin, you have to be below 80% of the state's median household income, which is unsurprising. What is surprising is that you also have to have a population for your community of less than 10,000 and in effect, this population limit prevents majority of cities and towns within the state from accessing this ideal form of principal forgiveness and financial assistance. Two cities in the state, for example, Milwaukee and Racine have the majority of the state's racial diversity and economic diversity, but their populations are well over 10,000 so no community within them would be eligible for this advanced form of principle forgiveness and using a mapping tool provided by the federal government, we discovered that 45% of the census tracks within Milwaukee County would be considered disadvantaged based on the metrics used by the federal government for that tool. So having a population limit like this might exclude potentially a huge amount of eligible communities.

Misbah Husain:
Now, the advantage here is that the state agency that administers these funds, the WDNR, Department of Natural Resources, they could change this criteria through a rule making process or even by including the criteria change in that IUP that they submit to the EPA and similar types of solutions might be used by other states. So that's Wisconsin's definition and some of the fallout from that.

Misbah Husain:
So with that, I want to actually talk about my experience very briefly at the center. It's been amazing. I've gotten a chance to work on so many different projects, and it's been such a great time with this core team, and I've really enjoyed interacting with so many different folks. We've worked with academics, people from the government, NGOs. It's been really, really neat and special and so I just wanted to say that I'm so grateful to have had this opportunity and also have this chance to share it with all of you so thank you all, again, for being patient and listening to me and yeah, if there's any questions, I'd be happy to do my best to answer them.

Stephanie Otts:
Great. Great. Thank you so much. So yeah, we have plenty of time for questions and as people are thinking and maybe putting them in the chat, I just want to say that at the National Sea Grant Law Center, we've had a fellowship program for a long time, and it was one, I was so excited to see these other legal fellowship opportunities kind of popping up related to Sea Grant and so, yeah, part of this webinar was just my own interest to know what the fellows were up to this year and it's great to see the type of projects, the diversity of projects that you've all been working on and so, yeah. So please, if you have a question, you can put it in the chat. We also have a fairly small group, so we probably can bring people off of mute so if you want to raise your hand and ask a question, we can do that as well. So we'll give people a chance to think.

Melissa Scanlan:
While we're waiting for questions, Stephanie, do you want to tell us a little bit about what the fellows, the legal fellows, do in your office as a comparison point?

Stephanie Otts:
Yeah, so our fellows ... So our fellowships are hired. I think we maybe treat them more similar to staff attorneys and so they come in to existing projects that the National Sea Grant Law Center kind of already has going on, but they do very traditional legal research to answer questions. So the National Sea Grant Law Center, we have what we call our advisory service so any Sea Grant program in the network can ask us a question and so for instance, our current fellow, Olivia Deans, took the lead on an advisory request from Maine Sea Grant, where they were interested in the history, their legislative history, around shellfish management in Maine because there was some new legislation coming forth and some of the ideas seemed like they were new but turns out they were ... Had been enacted years ago and so she developed like a timeline of legislative changes to their management regime, but our fellows also get the opportunity to present their research at conferences, write law review and journal articles and so it's just a great way to get energetic, knowledgeable, enthusiastic, recent law graduates kind of into your program that can really help to enhance the work that you're doing and kind of get a couple more hands and minds on these issues.

Melissa Scanlan:
Absolutely. That sounds great. It sounds like one difference between yours and ours is that because I'm on the faculty and have teaching responsibilities, I'm able to create some opportunities for our fellows to do guest teaching and get to experience that piece of it as well, but otherwise it sounds really similar.

Stephanie Otts:
Yeah. It does seem like the structure, that's right. Like we don't have as kind of a close of connect. Well, we're connected to a law school and we teach, but not as faculty and so it's not as easy for us to get our kind of fellows like into that aspect of it, but yeah, I think the structure's the same. Good. Okay.

Stephanie Otts:
All right. Well, I don't see any questions, which is ... I mean, your presentations were so great. You probably answered everything for everyone, but so I just, again ... Oh, I think one just popped up. Oh, yeah. Sarah. So there is one in the chat for you just, I think trying to make connections, but the question is, "Did you find the term blue space to be common in the literature or is that like what you've just taken to referring to it?"

Sarah Martinez:
Yeah. Thank you so much for that question. So blue space is what I decided to call it. It historically was referred to specifically by whatever blue space was experiencing racial violence at the time, whether that was the beach or a lake or a pool and then in the academic literature, looking at statistical correlation between whatever happened historically and seeing if that had any kind of effect, they would refer to it very differently, varying between studies. So for my article's sake, I've decided to term all of manmade and natural blue space as blue space and so that was a decision that I made early on just for the sake of the article and for the sake of minimizing confusion going forward but yeah, that was my ... That was just my choice.

Stephanie Otts:
Okay, great. Thanks. Okay. Well, we'll just give it maybe another 30 seconds to see if anyone else has questions and as we're waiting, I'll just remind everyone that we have been recording the webinar. We are going to follow up and get that posted, and we'll let everyone know when the recording is available so that you can share it with your colleagues and others who might be interested. Thanks, Sarah, for putting your email in the chat and as Sarah mentioned, we also ... The National Sea Grant Law Center publishes the Sea Grant Law and Policy Journal and so we're working on getting Sarah's article kind of through the publication process, but that'd also be a shout out for anyone who's on the webinar that might be interested in publishing. You're welcome to reach out to us with your research.

Stephanie Otts:
And so with that, again, I want to thank Melissa, Sarah, and Misbah for joining us and sharing more about the Center and their Fellows program, along with the Wisconsin Sea Grant connections that are there. And so, yeah. So, thanks everyone for joining us and stay tuned for our next webinar later this year.

Sarah Martinez:
Thank you so much.
Melissa Scanlan:
Thank you. Appreciate you hosting us, Stephanie.

Stephanie Otts:
Thanks.

Melissa Scanlan:
Take care.

Misbah Husain:
Thank you.

Stephanie Otts:
Take care.