Introduction: "The time has come," the Walrus said, "to talk of other things."

Stephanie Otts: This is a podcast not about shoes and ships and sealing wax, but about the who, what, where, why, and how of shellfish aquaculture, including the many different legal challenges that can arise. We're the National Sea Grant Law Center and we invite you to sit down and get ready for a wave of knowledge. Hi, I'm Stephanie. I'm the Director of the National Sea Grant Law Center.

Cathy Janasie: Hi, I'm Cathy. I'm a Senior Research Counsel at the National Sea Grant Law Center.

Amanda Nichols: And I'm Amanda. I'm the Ocean and Coastal Law Fellow with the National Sea Grant Law Center.

Stephanie Otts: You're listening to Law on the Half Shell.

Cathy Janasie: Today we're going to be talking about local opposition to shellfish aquaculture, with a focus on zoning conflicts in particular. We've spent some time in this podcast series talking about aquaculture in the context of federal and state law. However, with the commercial aquaculture industry rapidly growing in size and popularity in the United States, shellfish farmers often encounter barriers outside of the federal and state permitting and leasing process.

Cathy Janasie: Although town councils and seafood eaters may be happy to support the aquaculture industry as a whole, a farm's neighbors may not always feel the same way. Local laws regulating shellfish aquaculture vary from state to state and town to town and can pose real challenges for shellfish farmers.

Stephanie Otts: Amanda, let's say you own some coastal property, very jealous by the way, and would like to start a small shellfish farm. You apply for your permit from the state, which you receive without any problems. You purchase your gear, get it all set up and start operations. Next thing you know, your next door neighbor has filed a complaint with the town council claiming you don't have the right to farm shellfish. What in the world is going on?

Amanda Nichols: Well, I don't know Stephanie, but I can tell you that I'd be pretty angry.

Stephanie Otts: I'm sure you would be. Unfortunately, this can be a pretty common scenario for aquaculture farmers, especially farmers operating in areas where aquaculture is an emerging industry. Private property owners are not necessarily free to do anything they want with their property, although down here in the South we sometimes disagree with that. Local governments are responsible for ensuring the health, safety, and welfare of their citizens. One way they do this is through zoning. If someone starts an aquaculture operation on property that isn't zoned for that type of agricultural activity, neighbors may be able to shut it down.

Amanda Nichols: Zoning is a legislative process through which a local government determines what types of activities can take place on the various parcels of land within their town. Zoning ordinances regulate what land can be used for as well as the structures that can be built upon it and zoning codes are made up of those ordinances. Before zoning became common practice, someone could open a factory right next to a house or school. People who wanted to challenge the offending land uses had to bring a challenge in court with the ultimate decision left up to a judge.

Amanda Nichols: However, as buildings became higher and numbers of factories and warehouses in metropolitan areas increased throughout the early 20th century, citizens demanded that cities initiate more uniform systems of regulation. A little bit of a fun fact, New York City was actually the first US city to come up with its own comprehensive zoning code in 1916. It was adopted primarily to stop massive buildings from preventing light and air from reaching the busy streets below. It's a problem we don't typically have down here.

Cathy Janasie: And zoning doesn't just impact skyscrapers in New York. It can have far reaching impacts on shellfish aquaculture. The first of these has to do with what types of zoning districts a city or town chooses to allow as well as where are those districts are located. This decision can either pave the way for shellfish aquaculture or cut off the possibility that the farm can be located in a certain area.

Cathy Janasie: Typically municipalities create districts based on what uses they think certain areas of land should be used for. These districts are fixed by law with reference to a map, and each district is assigned a different land use category; such as commercial, residential, industrial or agricultural use. Cities may choose to include other types of districts for the use in special circumstances as well, such as historic districts and waterfront districts. After cities establish what districts they'll have, they have to decide what uses will be permitted in those districts.

Cathy Janasie: If a proposed use conforms with the district type as well as any applicable zoning ordinances, the city will permit the use. For example, farming would always be a permitted use in a district that have been zoned for agriculture. Single family homes are always permitted in residential zones. A McDonald's, which is a commercial use however, may not be permitted in a residential neighborhood. Cities can also choose to allow special or different uses in certain circumstances and some districts are mixed use - for instance, allowing both residential and commercial uses.

Stephanie Otts: So returning to our hypothetical, Amanda, what is your property zone for?

Amanda Nichols: Well, I believe it's residential.

Stephanie Otts: And do you know whether agriculture is permitted in the residential area?

Amanda Nichols: I believe so, yeah.

Stephanie Otts: But it's aquaculture agriculture?

Amanda Nichols: Of course it is, isn't it?

Stephanie Otts: Not necessarily. In Virginia, one property owner fought several court battles arguing that he should be allowed to operate his small commercial aquaculture business from his residential property. His property was zoned rural/residential and crop livestock farming was a permitted use in this zone. As such, the property owner believed oyster aquaculture would be allowed. The County zoning administrator disagreed and asserted that the property owner needed a special use permit to continue aquaculture operation.

Stephanie Otts: The Supreme Court of Virginia ultimately agreed with the County zoning administrator. The court looked to the County's definition of livestock, which referred to non-human vertebrate animals. As shellfish are not vertebrates, the court determined that the shellfish farmers aquaculture activities weren't a permitted agricultural use within the zone.

Amanda Nichols: Well, that's pretty confusing and complicated.

Stephanie Otts: Unfortunately, these local issues often can be, Amanda. Despite oysters being scientifically classified as animals, the language of local codes and ordinances controls, and may lead to some counterintuitive rule levels.

Amanda Nichols: Local ordinances can impact aquaculture operations in different ways. For example, a city may pass a shoreline development ordinance that restricts commercial development near protected shorelines. Such an ordinance might limit possible siting locations for shellfish farmers wishing to operate in the area. On the other hand, a town might adopt helpful legislation such as an ordinance creating a zone that provides protections for water dependent uses, such as aquaculture.

Amanda Nichols: Shellfish farmers who violate zoning ordinances can face serious legal consequences. Cities can impose civil penalties and require that farmers remove illegal structures or additions, oftentimes at a significant cost. Offenders can also be charged criminally, risking additional fines or even imprisonment. Furthermore, violations can cause a city to refuse to issue permits to the offender in the future.

Amanda Nichols: Shellfish farmers do have some recourse, however. Property owners subjected to unfavorable zoning decisions can appeal or seek some form of waiver that would make a violating use allowable. In many circumstances, subjects of such zoning decisions can also file lawsuits if they are unsatisfied by the administrative appeal and waiver process.

Stephanie Otts: Back to our hypothetical again, if your neighbor does not think your aquaculture operations should be allowed, what can he or she do?

Cathy Janasie: Actually, Stephanie, neighboring land owners may also challenged shellfish farming activities if disputes can't be resolved informally. This type of retaliation is often called a "not in my backyard" or NIMBY dispute. Zoning related NIMBY disputes often challenge zoning decisions based on the argument that an offending use negatively impacts the objecting party's property.

Cathy Janasie: NIMBY participants are most often residential property owners who object to uses they believe will negatively impact their homes. In considering these protests, cities try to balance what is best for the public as a whole with the desires of residential property owners. An example of this occurred in Virginia in mid-2018 when the owners of an oyster aquaculture business, Island Seafood, requested to have their off-water residential lot rezoned to a waterfront business in order to have storage and work space for equipment use in harvesting oysters.

Cathy Janasie: Although the owners intended to keep their equipment out of the sight of the public, many neighbors voiced objections to the rezoning arguing that using the lot for business could have negative impacts on the residential area; including increased traffic, decreased property values, and a negative impact on tourism. These complaints delayed the city planning commission's decision, although it eventually decided to approve Island Seafood's rezoning requests in August 2018.

Stephanie Otts: Keeping with the Virginia theme that seems to be emerging in this episode, another example of community opposition to shellfish aquaculture can be seen with the Lynnhaven River in Virginia. The Lynnhaven River is the largest tidal estuary in Virginia and is located entirely within the city of Virginia Beach. Historically, the Lynnhaven was a bountiful oyster producing tributary, but water quality concerns started to take a toll as early as 1930, when the state division of shellfish sanitation closed a section of the river to shellfish harvesting due to high levels of fecal coliform bacteria.

Stephanie Otts: Water quality has since improved over the years after regulators took action and local citizens banded together. However, resulting increases in Virginia Beach's population along the waterfront, coupled with the growth of nearshore aquaculture operations as the Lynnhaven River reopened to shellfish harvesting, have led to conflicts concerning the use of the river. These growing conflicts have led to the development of aquaculture related legislative proposals and oyster ground lease limitation measures, among other things.

Stephanie Otts: Though slow, state shellfish farmers have been making progress in coexisting with local land owners around the Lynnhaven river. Wrapping up our hypothetical, what if your neighbors are not concerned with your aquaculture

operations effect on their property, but rather on the potential effects on an imperiled native species?

Cathy Janasie: Local conflicts involving species listed on the Endangered Species Act, known as the ESA, can leave interested parties similarly dissatisfied, as we have seen on the coast of New Jersey. So the lower Delaware Bay shoreline in Cape May County at the southern tip of New Jersey serves as the center of a recovering oyster aquaculture industry with historic roots. Structural aquaculture in the area uses gear to contain seed oysters as they are raised for cultivation purposes. And these structures, including rebar racks, mesh bags, cages, and floats, all need permits from the US Army Corps of Engineers and the state of New Jersey.

Cathy Janasie: To promote the development of oyster aquaculture in New Jersey, the state developed an aquaculture development zone or, ADZ, in the mid 2000's. The ADZ is intended to ease permitting burdens on potential oyster farms and locate farms in areas with the fewest conflicts. The ADZ is meant to streamline the permitting process for farmers as the New Jersey Bureau of Shellfisheries obtains the necessary permits from the Corps and relevant state agencies on behalf of the individual growers.

Amanda Nichols: In addition to being home to an oyster industry, Delaware Bay is an important stopover location for migratory shorebirds including the Red Knot. The Red Knot, which actually weighs less than a cup of coffee, is a master of long distance aviation. On wingspans of just 20 inches, Red Knots fly more than 9300 miles from south to north every Spring and repeat the trip in reverse every Autumn, making this bird one of the longest distance migrants in the animal kingdom.

Amanda Nichols: Due to its declining populations, the Red Knot was listed as an endangered species under the Endangered Species Act in 2015. This listing decision significantly impacted the oyster industry in New Jersey due to concerns about how structural oyster aquaculture would affect the Red Knot and a major Knot food source, horseshoe crab eggs. As required by the ESA, the consultation process under Section 7 of the Act was triggered by the issuance of permits by the Corps to the state of New Jersey for structural aquaculture in ADC areas. The resulting biological opinion, or Bi-Op for short, considered the potential impacts on the threatened Red Knot by the Corps permits.

Stephanie Otts: The Bi-Op requires certain actions that aquaculture farmers must take, known as conservation measures, to reduce the potential harm of oyster farming on the Red Knot population. Among other things, the conservation measures limit gear placement, farm work hours, and access to all farms and have resulted in the closure of one farm site and the targeted relocation of a second.

Stephanie Otts: The oyster industry in New Jersey is concerned that these measures are not necessary to protect the birds and will ruin the industry. The industry asserts

that the oyster farms and Red Knot interactions are minimal as the farms occur along less than a mile from the roughly 100 mile Delaware Bay shoreline that Red Knots frequent. Furthermore, buffers around farms are in place to enhance Red Knot protections. However, several nongovernmental organizations petitioned state and federal agencies to stop aquaculture growth and curtail existing activities further, out of concern that farm gear and activities may disturb Red Knots along lower Bay beaches during the birds annual spring migration.

Amanda Nichols: Gosh, that's a lot of things for shellfish farmers to think about. Is there anyone they can turn to to help?

Stephanie Otts: Well, most states are trying to expand opportunities for shellfish farming due to both the economic and environmental benefits that we've covered a lot during this series. And state agencies with authority over coastal resources are a good place to start for information. State Sea Grant programs also have a number of educational and training resources available, including fact sheets and toolkits on the permitting process.

Amanda Nichols: Well, that's it for us. We've reached the end of our series on the who, what, where, why, and how of shellfish aquaculture. We hope you've enjoyed the journey and learned a lot on the way. Although legal issues aren't often at the forefront of most of our minds when we think of shellfish aquaculture, we hope you've seen just how prevalent and impactful they can be.

Amanda Nichols: If you'd like to learn more about the legal issues discussed in this series, we encourage you to visit the National Sea Grant Law Center's website at nsglc.olemiss.edu. We have lots of reports, articles, and other resources that explore these topics in more detail. As we used to always hear on NBC, the more you know...

Stephanie Otts: This podcast is a production of the National Sea Grant Law Center at the University of Mississippi School of Law. It is made possible in part by funding from the NOAA National Sea Grant College Program. The statements, findings, conclusions and recommendations are those of the speakers and do not necessarily reflect the views of NOAA or the US Department of Commerce. Editing and production assistance was provided by Kerrigan Herret, a senior journalism student at the University of Mississippi. Thanks for listening.