NPDES Permits and Groundwater: U.S. Supreme Court to Clarify the Issue

Also,

Escaped Invaders: The Aftermath of the Puget Sound Cooke Aquaculture Net Pen Collapse

Obstacles and Opportunities Facing Recirculating Aquaculture in the United States

While They Were Sleeping: U.S. Supreme Court Rules on Compensation for Standby Time

Mississippi River Flooding Affecting Gulf Aquaculture Operations
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CONTENTS

NPDES Permits and Groundwater: U.S. Supreme Court to Clarify the Issue ... 4

Escaped Invaders: The Aftermath of the Puget Sound Cooke Aquaculture Net Pen Collapse ................................................................. 6

Obstacles and Opportunities Facing Recirculating Aquaculture in the United States .................................................................................. 9

While They Were Sleeping: U.S. Supreme Court Rules on Compensation for Standby Time ................................................................. 12

Mississippi River Flooding Affecting Gulf Aquaculture Operations ................................................................. 13
In October, the U.S. Supreme Court will consider whether pollutants from a point source carried indirectly to navigable waters, or “waters of the United States,” via groundwater require a Clean Water Act (CWA) permit. The federal circuit courts are split on the issue. The Supreme Court granted certiorari in Hawai'i Wildlife Fund v. County of Maui, a Ninth Circuit case, to resolve the split and provide clarity on the scope of the CWA.

Hawaii Wildlife Fund
The Lahanai Wastewater Reclamation Facility in Maui County, Hawaii processes 4 million gallons of sewage each day. A portion of the treated water is discharged into four wells. Approximately 3 to 5 million gallons of treated wastewater per day are released into the groundwater via the wells. A portion of that water makes its way to the Pacific Ocean.

The CWA prohibits discharges of pollutants from a point source into navigable waters without a National Pollutant Discharge Elimination System (NPDES) permit. Under the CWA, “point source” means any “discernible, confined, and discrete conveyance...from which pollutants may be discharged.” Hawaii Wildlife Fund, an environmental group, and others filed suit claiming that the County of Maui was in violation of the CWA for discharging pollutants from the wells (a point source) into groundwater that then makes its way to the Pacific Ocean (a navigable water) without a NPDES permit. The county argued that discharges are regulated by the CWA only when pollutants are directly discharged into navigable waters. A federal district court disagreed and ruled in favor of the plaintiffs.

On appeal, the Ninth Circuit affirmed. The court held that when the pollutants are “fairly traceable” to the point source and are more than minimal amounts, the CWA applies. The court noted, “At bottom, this case is about preventing the County from doing indirectly what it cannot do directly. The County could not under the CWA build an ocean outfall to dispose of pollutants directly into the Pacific Ocean without an NPDES permit. It cannot do so indirectly either to avoid CWA liability. To hold otherwise would make a mockery of the CWA’s prohibitions.”

Fourth & Sixth Circuits
In Upstate Forever v. Kinder Morgan Energy Partners, the Fourth Circuit reached the same result as the Ninth Circuit in Hawai'i Wildlife Fund but used a different test for determining when the CWA applies to groundwater discharges. In Upstate Forever, an underground gasoline pipeline ruptured and spilled pollution into groundwater. Environmental groups brought a CWA citizen suit, alleging violation of the CWA for polluting navigable waters without a permit. The Fourth Circuit agreed that the CWA does not require a discharge directly from a point source into navigable waters in order for the discharge to constitute a violation of the CWA; however, the court did not use the “fairly traceable” standard. The court held that the CWA only covers groundwater when there is a “direct hydrological connection” between the groundwater and the navigable waters. The court found that there was a direct hydrological connection in the case under consideration and ruled in favor of the plaintiffs. The defendants, Kinder Morgan, filed an appeal to the U.S. Supreme Court; however, the Court deferred to a Solicitor General brief stating that Supreme Court review is warranted but should be delayed until the Court hears Hawai'i Wildlife Fund.

Following Upstate Forever, the Fourth Circuit heard a case on whether seepage from coal ash landfill and settling ponds would meet the “direct hydrological connection” test. The court held that a permit was not required, because the landfill and settling ponds were not point sources. The court noted that the pollutants flowed in a diffuse manner and not from a discrete conveyance, such as a pipe or similar source.

In September 2018, the Sixth Circuit also ruled on the issue. Environmental advocacy groups brought suit in two companion cases, claiming that the storage of leftover coal ash in man-made ponds violated the CWA. In contrast to the Ninth and Fourth Circuits, the Sixth Circuit rejected CWA liability for groundwater discharges. The court held that groundwater was not a point source under the CWA, and groundwater pollution could not give rise to CWA liability under the “hydrological connection” theory.
Moving Forward

Following the Supreme Court’s grant of cert in *Hawaii Wildlife Fund*, the U.S. Environmental Protection Agency (EPA) issued an Interpretive Statement on the application of the CWA to groundwater. The EPA concluded that the discharge of pollutants to groundwater is excluded from the Act’s permitting requirements, regardless of a hydrological connection between groundwater and navigable water. Despite the EPA’s recent guidance, nothing will be settled until the Supreme Court rules on the *Hawaii Wildlife Fund* case.

In its brief to the Supreme Court, Maui County argues that Congress intended to regulate pollution delivered directly from point sources to navigable waters differently than nonpoint sources, such as stormwater runoff from a parking lot. The County contends that the Ninth and Fourth Circuit tests would result in a massive expansion of the scope of NPDES permitting. In the alternative, the County suggests a “means-of-delivery” test that would limit application of the NPDES permit regulations to pollutants directly delivered to a navigable water by a point source or a series of point sources. The County asks that the Court overturn the Ninth Circuit’s ruling under either the means-of-delivery test or the EPA’s Interpretive Statement, or to simply rule that groundwater is categorically excluded from the NPDES program.

The *Hawaii Wildlife Fund* has not yet filed its brief on the merits, but is expected to do so this month. More than 20 other nonprofits, organizations, states, and governments, including the U.S. government, have filed amicus briefs. The Supreme Court is slated to hear the case in October and will likely issue a ruling in early 2020.

Endnotes

1. *Hawaii Wildlife Fund*, 886 F.3d 737 (9th Cir. 2018).
3. *Id.* §1362(14).
5. *Id.* at 752.
In August 2017, a marine aquaculture net pen near Cypress Island, Washington containing over 300,000 mature Atlantic salmon came loose from its mooring and crumpled. In the subsequent investigation, state investigators found that nearly 250,000 of the nonnative Atlantic salmon had escaped into Puget Sound. Two years later, the owner of the failed net pen, Cooke Aquaculture Pacific, LLC (Cooke) has agreed to pay a state-ordered $332,000.00 fine and is facing a Clean Water Act (CWA) lawsuit. The Washington legislature has banned new permits or permit renewals for nonnative marine finfish aquaculture statewide.

Cause and Effect
An investigation conducted by the state departments of Ecology, Fish and Wildlife, and Natural Resources revealed that the primary cause of the incident was Cooke’s failure to adequately clean the nets and mooring mechanisms at their Cypress Island site, which led to excessive biofouling by mussels and other marine organisms. The biofouling dramatically increased the drag forces of tidal currents on the net pen, which ultimately led to complete structural failure of the mooring system that anchored the pen to the seafloor. Some of Cooke’s net cleaning equipment had been inoperable for some time, and, according to the
Washington Department of Ecology (Ecology), their failure to clean the nets violated their National Pollution Discharge Elimination System (NPDES) permit.1

Cooke’s initial estimates of Atlantic salmon released were relatively low at around 4,000 fish, but based on the final number of fish recovered from the collapsed net pen, Ecology determined that a minimum of 249,959 Atlantic salmon had been released.3 Immediately after receiving notice of the incident, the Department of Fish and Wildlife (DFW) coordinated a plan with Tribal and Canadian fisheries managers to open the fishery to maximize recovery of escaped Atlantic salmon. Recreational and commercial fisherman were able to recapture approximately 57,000 Atlantic salmon. DFW examined 138 specimens of recaptured Atlantic salmon and found that every fish they examined had an empty stomach. The state investigators concluded that the stress of the unfamiliar environment outside the net pen and lack of regular feedings probably led most of the uncaptured fish to succumb to malnutrition and stress, and their conclusion was supported by the progressive decline in Atlantic salmon recovered over the weeks following the release.4 However, in November and December 2017, fishermen recovered healthy Atlantic salmon from the Skagit River, 40 miles upstream. The long-term impact of escaped Atlantic salmon on the ecosystem of Puget Sound remains unknown.

Clean Water Act Lawsuit

 Unsatisfied with the state’s decision not to prosecute Cooke, on November 13, 2017, The Wild Fish Conservancy (The Conservancy) filed a CWA lawsuit against Cooke in federal court. In its complaint, The Conservancy alleged that Cooke was aware that the Cypress Island net pen was near the end of its lifespan and was due for complete replacement, and that the pen was not aligned to minimize drag from prevailing tidal currents. The Conservancy further stated that it believes there is a reasonable likelihood that Cooke will continue to violate its NPDES permits in the future. The Conservancy seeks a declaratory judgement that Cooke has violated and continues to violate their NPDES permits and the CWA, injunctions against Cooke to stop the alleged violations and remediate environmental harm, and the maximum civil penalties authorized by the CWA.6

 Following an appeal to the Pollution Control Hearings Board, on April 24, 2019, Cooke agreed to pay the $332,000 fine ordered by Ecology. Ecology reported that $265,600 will go to an environmental project related to regional salmon enhancement or habitat restoration, and $66,400 will be paid into Ecology’s Coastal Protection Fund, which supports grants for land or water stewardship throughout Washington state. Although Cooke has agreed to pay the fine, The Conservancy’s lawsuit against Cooke will proceed. The trial is set to commence on December 2, 2019.
Legislative Response
In response to the Cypress Island net pen failure, on March 22, 2018, Washington Governor Jay Inslee signed House Bill 2957, titled “An act relating to reducing escape of nonnative finfish from marine finfish aquaculture facilities,” into law, effective June 7, 2018. The bill will phase out all nonnative marine finfish aquaculture statewide by prohibiting any new lease or use authorization, extension of an existing lease, or issuance of new NPDES permits for marine net pen aquaculture of nonnative marine finfish. Of the four leased sites where Cooke was farming Atlantic salmon at the time of the Cypress Island failure, two sites’ leases were terminated by the Department of Natural Resources soon after the release (Cypress Island and Port Angeles). The leases for the two Atlantic salmon aquaculture sites that remain in operation in the state, Hope Island and Rich Passage, are both owned by Cooke, and expire on March 22, 2022 and November 10, 2022 respectively. In the meantime, the bill directs the state departments of Ecology, Fish and Wildlife, and Natural Resources to develop new rules targeting prevention of marine finfish aquaculture product escape, along with improved plans for recapturing escaped marine finfish and eradicating nonnative species found spawning in Washington rivers.

The legislation is controversial. The original legislation approved by the Washington State House of Representatives and the Senate and presented to Governor Inslee included a provision that the legislature would revisit the issue of nonnative marine finfish aquaculture at a later date and continue to review new research and data. However, Governor Inslee vetoed the section that contained that provision, having deemed that it was unnecessary. Without the provision, the phaseout of Atlantic salmon farming in Washington, once complete, will be permanent. Some commentators have argued that concerns over Atlantic salmon interbreeding, competing for food and habitat, and transmitting disease to native salmon have not been substantiated by scientific research. Others, including representatives of area tribes, value the native salmon and their treaty fishing rights beyond those arguments, and feel that any intrusion of Atlantic salmon, even when enclosed in secure pens, represents an unacceptable disruption of the natural environment.

Conclusion
The multi-agency investigation into the causes of the Cypress Island net pen failure determined that the incident was due to Cooke’s negligence in failing to properly clean their equipment and manage biofouling. The consequences of the incident are numerous, and remain difficult to assess. The economic impact of closing down the Atlantic salmon farming operations, in terms of lost jobs, food production, and profits, can be assigned dollar values and quantified. However, the hazards escaped Atlantic salmon pose to the native salmon fishery, the impacts to American Indian tribal fishing rights, and unknown impacts to the natural environment of Puget Sound remain unquantified. As Washington’s nonnative marine finfish aquaculture industry draws to a close over the coming years and The Conservancy’s lawsuit progresses, information will continue to emerge which may have far-reaching impacts for future regulation of marine aquaculture.

Endnotes
OBSERVATIONS AND OPPORTUNITIES FACING RECYCLING AQUACULTURE IN THE UNITED STATES

Amanda Nichols

The global aquaculture industry, currently valued at over $144 billion, has consistently grown in terms of volume, surpassing wild-caught fish as the leading source of seafood in 2014. Demand factors such as global population growth and increased fish consumption have exponentially increased pressure on wild fish stocks, driving the need for marine seafood produced using more sustainable aquaculture techniques. Growing attention is being paid to recirculating aquaculture—a method of commercial aquaculture production that typically takes place indoors and functions by reusing water that has been filtered both mechanically and biologically. As the popularity of recirculating aquaculture systems (RAS) grows for culturing marine species in the United States, multiple legal considerations have begun to arise including community opposition to RAS facilities.

Background

Community opposition to recirculating aquaculture can arise due to many factors, but is most commonly discussed in relation to the siting of RAS facilities. The location in which aquaculture companies choose to site their RAS facilities is often a source of controversy among community members either due to “not in my back yard” (“nimby”) disputes or legitimate siting-related concerns. While nimby disputes contest development solely because of its proximity to neighboring property, community members may also raise legitimate concerns regarding the potential impact of new developments in their communities and neighborhoods, such as those related to improper facility siting, design, and operation. Such complaints can delay or even derail planned RAS projects. Perhaps the best current example of an RAS dispute related to siting exists in the city of Belfast, Maine—where the large, European aquaculture company, Nordic Aquafarms, is in the process of opening a major land-based salmon farm.

Nordic Aquafarms

In making its push for expansion into the United States, Nordic Aquafarms selected Belfast as a siting location due to its “abundant access to sea- and freshwater resources that provide a good match with land-based aquaculture requirements.” In order to begin the first phase of its facility’s construction in accordance with Belfast’s local laws,
however, Nordic Aquafarms had to engage in a zoning law amendment process with the town. In March 2018, the town proposed making four amendments to its local zoning ordinances that would, among other things, expand Belfast’s industrial district to include the proposed RAS site and specifically identify recirculating aquaculture as an allowed use within that industrial district. After a four-hour public meeting in April 2018, the Belfast City Council unanimously approved the ordinance amendments, despite vocal public concern over the timing of the changes and the potential negative impacts that could result.

While Belfast’s successful zoning amendment process has allowed Nordic Aquafarms to proceed with Phase 1 of its $150 million RAS project, the town’s zoning actions were met with significant backlash from local residents. Specifically, critics felt that city officials had acted “hastily and without transparency in approving the zoning change.” In a more general sense, critics also voiced concerns over what negative impacts the project might have on the local environment, including those related to water effluent and climate change. Two such critics—both residents of Belfast—filed a lawsuit against the city in county court in August 2018 alleging the city failed to follow proper municipal processes and citizen participation procedures in amending the zoning ordinances. In their complaint, the plaintiffs—who each own property bordering the site where Nordic Aquafarms plans to build its facility—argue that the city “abused its powers by approving...[the] amendments without following state statute[s] and [the] local zoning ordinance process for planning board and community involvement.” Furthermore, the complaint alleges that “[t]he city council took actions to purposely avoid any citizen participation in any planning processes related to amending the comprehensive plan to allow the proposed Nordic project.”

Belfast city officials have denied the allegations, stating that its citizens had plenty of opportunities to speak up at public meetings. The city also called the lawsuit a “typical not-in-my-backyard issue,” arguing that officials “went to great lengths to invite the public to comment,” through methods such as publishing multiple notices and mailing an informational document to neighbors, resulting in the receipt of approximately 150 to 200 comments in total. While an unfavorable ruling could have delayed Nordic Aquafarms’ procurement of important local permits or even wholly invalidated Belfast’s zoning amendments, putting the future of the RAS facility as currently sited in danger, the Waldo County Superior Court eliminated such outcomes when it granted Belfast’s motion for summary judgement on July 10, 2019. The court found that, contrary to the two plaintiffs’ claims, Belfast did not violate the law when its officials amended the city’s land use plan to allow the Nordic Aquafarms project to move forward. Specifically, the court noted that “[t]he [Belfast] City Council appropriately provided for the required citizenship participation, public notice and public hearing” as was necessary. It is not yet known whether the plaintiffs will appeal the decision.

Atlantic Sapphire
Nordic Aquafarms is not alone in pushing for the expansion of RAS in the United States. Atlantic Sapphire, a Norwegian aquaculture company, is currently in the process of building its own RAS facility in Miami, Florida that it has termed a “Bluehouse.” While the facility’s siting decision has not yet been met with legal retaliation as Nordic Aquafarms’ Maine site has, the sheer size of the Bluehouse could pose problems.

Atlantic Sapphire has advertised its facility as “an all-in-one aquaculture production facility that houses every stage of salmon, from hatching broodstock to processing of the harvest.” The construction of the facility is meant to take place in phases, where the size and scope of the Bluehouse can be “exponentially expanded” from one phase to the next. Phase one of the project will involve the construction of a
nearly 384,000 square foot facility that will grow to four million square feet by phase three. Additionally, Atlantic Sapphire issued a statement in early May that states the company plans to supply 220,000 metric tons of Atlantic salmon from the farm by 2030—constituting almost half of the current U.S. market for the fish.\textsuperscript{12}

While such expansive RAS facilities are not currently the norm in the United States, Atlantic Sapphire’s plans to construct such a massive facility in one of the most densely populated urban areas in the nation could discourage other localities from permitting the construction of any similarly large RAS facilities in the future if land availability is limited. This potential problem could be further exacerbated if the Atlantic Sapphire facility generates complications in the Miami area after construction due to things such as improper facility design or management.

**Other RAS Farms**

While some of the biggest RAS facilities currently under construction in the United States endure the negative consequences of community backlash, the domestic RAS aquaculture sector is well positioned for future growth. Even in Maine, where community opposition to Nordic Aquafarms’ Belfast farm is strong, opportunities abound. For example, Whole Oceans, a Maine-based aquaculture company, is currently on track to open a salmon farm sited in a former riverside paper mill in Bucksport, Maine. By choosing a vacant industrial building, Whole Oceans will be able to take advantage of existing infrastructure needed to proceed with RAS while also preventing the possibility that the former mill site would sit unused for years on end—a scenario in which valuable land would be wasted. State and town officials have recently praised the facility’s potential to bring jobs to the area, build on heritage industry, and improve the environmental impacts of aquaculture, among other things.\textsuperscript{13}

Nordic Aquafarms, too, is contributing to growth of the domestic industry by seeking additional sites for its operations—most recently in the Humboldt Bay Harbor District in Northern California. If successfully permitted, the RAS facility would lease 30 acres of land on the Samoa peninsula near the town of Eureka in Humboldt County, on which it would farm either Atlantic salmon or steelhead trout. In contrast to the company’s reception in Belfast, Maine, the company’s siting decision in California has garnered relatively little community pushback, with most criticism surrounding the facility’s seemingly rushed approval and its potential impacts on wild fishermen.\textsuperscript{14} Nordic Aquafarms has stated that it hopes to work with commercial fishermen, the environmental community, and other opposing groups in beginning operations in the area—hopefully preventing another situation like it faces in Maine.\textsuperscript{15}

**Conclusion**

Though the path to success for RAS facilities wishing to culture marine species in the United States is not a straight one, the industry’s long-term outlook is favorable. If RAS operators can transcend the legal obstacles facing them, such as community opposition and related lawsuits, the cultivation of marine species using recirculating systems could become an established domestic market in the future, thus enriching the aquaculture industry as a whole within the United States. However, only time will tell whether such potential success will translate into reality. Until then, those interested in RAS should take all steps necessary to educate themselves on the intricacies of the technology itself as well as how it is currently being received by U.S. regulatory bodies and consumers.\textsuperscript{16}

**Endnotes**

\begin{enumerate}
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\item For more information on the legal issues and challenges confronting RAS in the United States, please see the National Sea Grant Law Center’s report.
\end{enumerate}
In June, the U.S. Supreme Court ruled that state wage laws do not apply to workers on the Outer Continental Shelf (OCS). The case stemmed from a complaint of an offshore oil worker who sought compensation for time spent on standby. California state law allows for compensation in such situations, but federal law does not.

Background
Brian Newton, an employee of Parker Drilling Management Services, worked 14-day, 12-hour shifts on drilling platforms off the coast of California. His shifts were 12 hours per day on duty and 12 hours per day on standby. Employees were not permitted to leave the platform during standby, but they were not paid for their time. Newton filed suit alleging violations of California employment law.

Newton argued that under the Outer Continental Shelf Lands Act (OCSLA), state law applies. Parker Drilling argued that state law does not apply where the federal law has not left any gaps to be filled. A federal district court agreed with Parker Drilling, noting that the federal Fair Labor Standards Act of 1938 (FLSA) comprehensively addressed the issue.

On appeal, the Ninth Circuit reversed and ruled in favor of Newton. The appellate court found that California’s wage and hour laws were applicable under OCSLA, because they related to the subject matter at issue and were “not inconsistent” with FLSA. The U.S. Supreme Court accepted certiorari in the case.

Supreme Court
Pursuant to OCSLA, all law on the OCS is effectively federal law. The Act permits an adjacent state’s law to become federal law on the OCS “[t]o the extent that they are applicable and not inconsistent with” other federal law. The Supreme Court considered how to resolve which state laws meet this standard and should be adopted as federal law.

Newton argued that California employment law was “applicable and not inconsistent” under ordinary preemption principles. Typically, when state and federal law both address an issue, a court will perform a preemption analysis. The Supreme Court noted that the preemption analysis was not appropriate here. Under OCSLA, “federal law is the only law on the OCS and there is no overlapping state and federal jurisdiction, so the reference to ‘not inconsistent’ state laws presents only the question whether federal law has already addressed the relevant issue. If so, state law on the issue is inapplicable.”

The Court looked at whether federal law addresses the issue. In this instance, the Court noted that FLSA does address the issue of standby wages. The Court vacated the Ninth Circuit’s decision and remanded for further proceedings consistent with its opinion.

Endnotes
Over the past few months, the Mississippi River has been flooding at levels that have not been seen for 90 years, causing wide-ranging impacts. For farmers, the river flooding has delayed or prevented crop planting. In addition to these land-based impacts, freshwater diversions into the Mississippi Sound to relieve river levels have negatively affected the Sound’s natural resources. While not getting extensive media attention, oyster aquaculture producers are facing negative impacts to their crop yields similar to their land-based farming counterparts, leaving many to wonder what relief is available to these aquaculture producers.

Mississippi River Flooding
Pounding spring rains have caused the Mississippi River to flood along the mighty river’s banks. According to the National Weather Service, this year’s flooding is the longest-lasting since the Great Flood of 1927, which serves as the benchmark for Mississippi River flooding events. The 1927 flood led to the management of the Mississippi River as we know it today, spurring the federal government to enact a program for flood control led by the U.S. Army Corps of Engineers (Corps). In May 1928, Congress passed the Flood Control Act of 1928, which authorized the Corps to build and operate flood control structures along the Mississippi River.
Importantly, the Act also granted immunity to the government for its actions under the law, and courts have found that this immunity applies when the government releases floodwaters by operating one of its flood control projects.\(^4\)

Today, there are numerous flood control structures along the Mississippi’s banks, including levees, floodways, and spillways. With the 2019 floods, the Bonnet Carré Spillway, which is located about 30 miles above New Orleans, has come into the spotlight. The spillway is designed to divert some of the floodwaters from the Mississippi River into Lake Pontchartrain to protect New Orleans and other downstream communities in Louisiana, but the freshwater eventually flows into Mississippi Sound and the Gulf of Mexico. In February, the Corps opened the spillway for the 13th time in its history and kept the spillway open for 37 days until closing it in April.\(^5\) Due to continuing floodwaters, the spillway was opened again in May.\(^6\) Both of these openings were historic—it was the first time the spillway had been open in consecutive years and the first time it was opened twice in the same year.

**Gulf Resources Affected**

Along the banks of the Mississippi River, farmland has been flooded for months. In Mississippi alone, approximately 500,000 acres in the Delta are underwater, 225,000 of which is agricultural farmland.\(^7\) While much attention has been on land-based farms, the flooding has also negatively impacted the region’s shellfish aquaculture operations.

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In the Mississippi Sound, where the Bonnet Carré Spillway ultimately sends freshwater, sea life, aquaculture operations, and fisheries have been negatively impacted by increased freshwater levels. The Institute of Marine Mammal Studies (IMMS) in Gulfport, MS has tracked 129 dolphin carcasses that have washed up on Mississippi’s shores during this summer, many of which had freshwater lesions. The IMMS has also documented 154 sea turtle deaths. On top of these losses, the freshwater releases from the Bonnet Carré Spillway could be connected to losses sustained by the region’s aquaculture operations and fisheries. The Mississippi Department of Marine Resources (MDMR) has reported an oyster mortality rate of 80% this year, with the landings of blue crabs down 40% from an average of the last five years.\(^8\)

**USDA Aquaculture Programs**

With the Corps likely immune from damage caused by the release of floodwaters from the Bonnet Carré Spillway, aquaculture producers may look for relief from the U.S. Department of Agriculture (USDA). Crop insurance is generally available to growers of large commodity crops and varies by location. While there are some crop insurance plans available to certain shellfish growers, such as clam growers in Massachusetts or oyster growers in Louisiana, crop insurance is not available for many aquaculture operators.\(^9\) However, additional USDA programs apply to aquaculture operations. Growers of crops not covered by crop insurance may be able to attain disaster assistance through the Noninsured Crop Disaster Assistance Program (NAP). NAP is administered by the USDA’s Farm Service Agency (FSA) and protects against natural disasters, including flooding, that result in lower yields or crop losses, or prevented crop plantings. Crops that are eligible for NAP include commercial crops that are grown for food for which crop insurance coverage is not available, making some aquaculture operations eligible for the program.\(^10\)

However, there are some additional requirements that limit the availability of NAP coverage for aquaculture operations. For instance, the operation needs to be operated on private property that the producer leases or owns and has clearly identifiable boundaries. Moreover, the aquaculture species has to be “[k]ept in a controlled environment.” Thus, if an aquaculture producer is growing oysters offshore and leasing state-owned waterbottoms, he or she will need to check with his or her local FSA office to see if the operation is eligible for NAP coverage.

For those aquaculture operations that meet the eligibility requirements, the producer must enroll in the program by an established deadline. Notably, NAP coverage is prospective. For aquaculture, the coverage period runs from October 1-September 30 each year, and the deadline to sign up for the next year’s coverage is September 1.\(^11\) Thus, an oyster grower who had not previously enrolled in NAP for this year and who has already sustained damage to his or her oysters would not be eligible for a NAP payout and would need to talk to their local FSA agent to see what other aid may be available.\(^12\)

Finally, the Emergency Assistance for Livestock, Honeybees, and Farm-Raised Fish Program (ELAP) is also administered by the FSA and is meant to cover losses not covered by other USDA disaster assistance programs and caused by adverse weather or other conditions. For farm-raised fish, ELAP covers two specific types of losses.\(^13\) First, ELAP provides compensation for the loss of feed that has been purchased or harvested for the producer’s farm-raised fish. Second, ELAP provides compensation
for the death of farm-raised bait fish and game fish.\textsuperscript{14} All other losses are considered to be covered by NAP, and thus, not eligible for ELAP.\textsuperscript{15} Thus, this year’s losses by oyster farmers in the Gulf do not appear to be covered by ELAP.

Looking Forward

Oyster growers and fishermen in the Gulf could see additional relief from disaster declarations from either the USDA, the Department of Commerce, or the President, which could result in emergency loans or Congressionally appropriated funds.\textsuperscript{16} Mississippi Governor Phil Bryant has already asked the Secretary of Commerce to declare a fisheries disaster for the state in connection to the openings of the Bonnet Carré Spillway.\textsuperscript{17} The Governor of Louisiana has made a similar request based on the impact of the Mississippi River’s floodwaters on the fisheries of his state.\textsuperscript{18} Fisheries in the Gulf of Mexico could be in for a long summer, however, as forecasters have predicted this year’s Gulf dead zone to be “very large,” about the size of the state of Massachusetts, due to the heavy spring rains.\textsuperscript{19}

Endnotes

\begin{enumerate}
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\item 33 C.F.R. § 1437.6(d).
\item 7 C.F.R. § 1416.104(h).
\item Id. § 1416.102.
\item FARM SERV. AGENCY, \textbf{LIVESTOCK DISASTER ASSISTANCE PROGRAMS FOR 2011 AND SUBSEQUENT YEARS 1-0-178} (2011, revised 2019).
\item Disaster Assistance for Aquaculture, NOAA FISHERIES.
\item Ray Price & Renee Johnson, \textit{Mississippi Governor Asks for Federal Fisheries Disaster Declaration}, FOX8LIVE, June 7, 2019.
\item Gov Asks Feds to Declare Fisheries Disaster, APNEWS, June 17, 2019.
\item NOAA Forecasts Very Large ‘Dead Zone’ for Gulf of Mexico, NAT’L OCEANIC AND ATMOSPHERIC ADMIN., June 12, 2019.
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Littoral Events

ABA 27th Fall Conference

*Sept 11-14, 2019*
Boston, MA

For more information, visit: [https://www.americanbar.org/groups/environment_energy_resources/events_cle](https://www.americanbar.org/groups/environment_energy_resources/events_cle)

PCSGA Shellfish Conference & Tradeshow

*September 17-19, 2019*
Portland, OR

For more information, visit: [https://pcsga.org/annual-conferences](https://pcsga.org/annual-conferences)

10th Annual APIEL Conference

*September 27-29, 2019*
Knoxville, TN

For more information, visit: [https://www.apiel.org/participant-registration](https://www.apiel.org/participant-registration)