Hurricane Impact on North Carolina

Hurricane Florence made landfall in Wrightsville Beach, North Carolina on September 14, 2018 as an intense Category 1 hurricane. The wind strength fluctuated throughout its life cycle, causing the storm to range from a tropical storm to a Category 4 hurricane. Although the hurricane had weakened upon arrival at the North Carolina coast, it was moving at an incredibly slow pace. Rainfall reached upwards of 36 inches and a storm surge of 11 feet occurred in many coastal towns. Major flooding ensued throughout most of the state and access to many areas were completely cut off. Flooding and wind damage caused widespread devastation and resulted in 15 casualties in North Carolina (NHC 2019).

The North Carolina fishing community suffered dramatically from the effects of Hurricane Florence. An economic study was conducted by NOAA Fisheries, in accordance with the North Carolina Division of Marine Fisheries (NCDMF) and North Carolina Sea Grant, to estimate the damages and losses the industry experienced (Appendix A). Results showed that Hurricane Florence directly and indirectly caused $38 million in damages, $56.5 million in lost revenue, and 3,500 job losses to commercial fishing operations, seafood processors and dealers, aquaculture operations, for-hire businesses, and bait and tackle shops. Fishing piers were also assessed, but not included in the final totals.

The commercial fishing industry sustained structural damages to docks and facilities, as well as damages to, and loss of, fishing gear. Flood waters rendered many waterbodies unfishable due to marine debris, poor water quality, and dangerous conditions. Due to the poor water quality, seafood dealers also suffered losses as demand for local seafood dropped significantly. In some areas, transportation of product from seafood dealers to the public became impossible with roads blocked by downed trees and flooding. Central and southern North Carolina encountered most of the destruction and loss inflicted on the commercial fishing industry.

The recreational fishing industry suffered from the loss of revenue more than damages because the public was unable to access the coast to be able to purchase bait and tackle, visit piers, or hire fishing charters. Hotels and rental facilities were inaccessible, damaged, or occupied by local residents whose homes had been destroyed or contractors working on repairs, so non-residents were not able to vacation on the coast. Like the commercial fishing industry, the for-hire fleet was unable to use many waterbodies for fishing due to flooding and boat ramp/dock damage. Substantial pier damage also occurred in central and southern North Carolina.

State Response – Commercial Fishing Relief

In response to the economic and environmental devastation of Hurricane Florence to the state’s marine fisheries, the state of North Carolina initiated swift action to assist affected parties. The NC General Assembly ordered a special session in the fall of 2018 to respond to Hurricane Florence and
approve disaster funding. The first bill, Session Law 2018-136, was passed on October 16, 2018 and focused on immediate assistance across affected industries in North Carolina including $1.6 million allocated to commercial fishery assistance. This assistance was combined with Session Law 2018-138, passed on December 3, 2018, which provided additional disaster assistance that included another $10 million for commercial fishery assistance. In all, a total of $11.6 million in state-issued funds were provided to the commercial fishing industry for disaster relief.

Guidance on how to use these funds was outlined in Session Law 2018-138. Specifically, the money was directed to be allocated as reimbursement payments to commercial fishermen from lost landings revenue between September and November 2018. Those holding a Standard Commercial Fishing License, a Retired Standard Commercial Fishing License, or a North Carolina Resident Shellfish License during any or all of this time period, and who were residents of North Carolina, were eligible to apply for assistance. Reimbursement amounts were determined by comparing 2018 landings during those months to average landings for the same 3-month time period from the three years prior.

After generating an expected loss value for each commercial fisherman, information on how to apply to receive assistance was distributed to these individuals in two mailings. These mailings explained the program, asked if the individual/business wanted to participate, and provided the participant’s landings, based on current trip ticket records, to approve or dispute. The first round of mailings covered September 2018 losses, while the second mailing focused on October and November. Once these data were validated, reimbursement checks were distributed in three rounds until all relief funds were exhausted. In all, 1,176 commercial fishermen received checks; September landings contributed to 31% of funds, 37% covered October landings, and 32% covered November landings. Monies from this program was able to compensate commercial fishermen for 86-92% of their estimated loss in revenue based on trip ticket data. For more information on the state-level relief response, including the dispute process and disbursement by county, please refer to the North Carolina Hurricane Florence Commercial Fishery Assistance Program Final Report included in Appendix B.

The North Carolina Department of Agriculture and Consumer Services (NCDA&CS) also created the Hurricane Florence Agricultural Disaster Program of 2018 from money appropriated by Session Law 2018-138, (NCDA&CS 2019). This program allocated $240 million to agriculture assistance, and included relief to state aquaculture operations, since growing and harvesting of shellfish closely relates to farming practices. An application process was used, and direct payments were made to fishermen that showed a loss of planted cultch and seed and/or a loss in harvest. NCDA&CS was able to cover roughly 20% of each approved applicant’s total losses.

Federal Assistance Request and Assessment

In tandem with the passing of North Carolina’s two state-relief bills for Hurricane Florence, Governor Roy Cooper submitted a letter on November 1, 2018 to the United States Secretary of Commerce requesting the declaration of a federal fishery resources disaster and for subsequent assistance to be granted. The Secretary approved this request a month later on December 6, 2018 by declaring a commercial fishery failure due to Hurricane Florence and prompting a federal damage assessment by the National Oceanic and Atmospheric Administration (NOAA).

NOAA’s Hurricane Florence Fisheries Damage Assessment was finalized in September 2019 and assessed the losses to North Carolina in terms of total damages and revenue losses (NOAA 2019; Table
1). This analysis considered losses to all major levels of the state’s fishing industry, including commercial fishing, seafood processing and dealing, aquaculture, for-hire operations, and bait and tackle shops. In all, NOAA estimated a loss of $38 million in damages to North Carolina, along with another $56.5 million in revenue losses.

Following this federal analysis, NCDMF received a notification from NOAA in March 2020 that $7,728,000 in federal funds will be made available to North Carolina for fishery disaster assistance. Guidance was provided on the range of ways the money can be used, with a focus on uses that restore the fishery, protect from future failures, and provide assistance to those affected by this failure. The following project narrative and spending plan outlines NCDMF’s vision for the optimal use of these funds based on NOAA’s guidance.

**Use of Assistance**

The goal of this federal assistance package by NCDMF is to provide relief support to affected stakeholder groups that have yet to receive any direct economic assistance related to the Hurricane Florence fishery disaster. In the state relief response, the assistance package was disbursed in the form of direct payments to commercial fishermen and shellfish growing operations. In order to help provide economic relief to other affected stakeholder groups, this proposal will consider commercial fishermen and shellfish growing operations adequately compensated from the impacts of Hurricane Florence and will not be considered in the following analysis.

There are a number of other fishing industry groups that were significantly impacted by Hurricane Florence and would benefit from economic assistance. These groups can be broken out into four categories: seafood processors and dealers, for-hire fishing businesses, bait and tackle shops, and ocean fishing piers (Table 1). In terms of total loss, seafood processors and dealers experienced the greatest impact at over $30 million, while for-hire and bait and tackle businesses both lost over $10 million. Lastly, 75% of the state’s 19 licensed ocean fishing piers reported losses, totaling nearly $2 million in damages. While this industry was omitted from NOAA’s formal damage assessment, NCDMF recognizes these losses as another significant impact to the state’s fishing industry, and therefore will be considered for federal relief funds. With that, this combination of economic impact across these four user groups, totaling $58.5 million, will be the focus of NCDMF’s relief assistance from this federal package.

Table 1: Estimated Damages from Hurricane Florence by NOAA and Total Participation of Fishing Operations and Fishing-Related Businesses Not Addressed by State-Level Disaster Relief.

<table>
<thead>
<tr>
<th>Operation/Business Type</th>
<th>Total Damages Estimate¹</th>
<th>Total Revenue Loss Estimate¹</th>
<th>Number of Licensed Participants or Businesses during Sept.-Nov. 2018²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seafood Processors and Dealers</td>
<td>$12.9 million</td>
<td>$20 million</td>
<td>683 Dealers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Processors to be determined by application</td>
</tr>
<tr>
<td>For-Hire Fishing Businesses</td>
<td>$4.6 million</td>
<td>$8.1 million</td>
<td>844</td>
</tr>
</tbody>
</table>
### Operation/Business Type

<table>
<thead>
<tr>
<th>Operation/Business Type</th>
<th>Total Damages Estimate¹</th>
<th>Total Revenue Loss Estimate¹</th>
<th>Number of Licensed Participants or Businesses during Sept.-Nov. 2018²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bait and Tackle Shops</td>
<td>$0.4 million</td>
<td>$10.6 million</td>
<td>To be determined by application</td>
</tr>
<tr>
<td>Ocean Fishing Piers</td>
<td>$1.4 million</td>
<td>$0.5 million</td>
<td>19</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$19.3 million</strong></td>
<td><strong>$39.2 million</strong></td>
<td>--</td>
</tr>
</tbody>
</table>

¹Estimates generated from NOAA Hurricane Florence Fisheries Damage Assessment

²Generated from NCDMF License and Statistics Section data

3. **Approach (Projects)**

**Project Justification**

NCDMF has determined that direct payments to affected seafood dealers and processors, bait and tackle shops, for-hire businesses, and ocean fishing piers would be the optimal use of these funds. The proposed distribution of funds to these entities is influenced by the guidance provided by NOAA, the stated goals of these funds, the stakeholders in North Carolina that are still in need of assistance, and the amount of money provided for relief assistance. While the state’s commercial fishermen and shellfish growers received direct payments in 2019 to recover losses from Hurricane Florence, these other industry groups have not been given any direct assistance, despite notable losses.

A primary driver for this approach is the fact that losses in revenue are more than twice the losses from storm damage for these remaining user groups. Revenue loss is due to a combination of the inability to operate during this time, lack of product to sell, and lack of demand from consumers; the demand from consumers includes commercial seafood and recreational expenditure demands. While this revenue loss has economic impacts on employee wages and spending in the economy at-large, it also incurs considerable losses and impacts on the infrastructure of these businesses. The lost revenue, amidst a time of damage losses as well, represents critical funds needed to maintain, restore, and upkeep durable components of each enterprise. This can range from industry-specific needs such as vessels, refrigerators, and processing equipment, to more generic needs like business signage, point-of-sale software, and building upkeep. However, the individual effects of Hurricane Florence on each of these businesses is impossible to determine without detailed and costly auditing, which would leave many disparate, yet critical, needs of these businesses ignored by structured, program-based relief. For this reason, NCDMF believes the best way to provide assistance to these businesses that is both impactful now and into the future is with direct, open payments that can be spent as needed. This economic input will allow each business to make the decisions that are most beneficial to them, and in turn update, upgrade, and repair the components of their business that would be most affected if another fishery disaster were to occur.

There are additional structural and practical determinations for why direct payments are the best use of these funds. While NCDMF and other agencies in charge of marine resources are frequently engaging in projects to improve coastal and fishery resilience, the size of the current relief funds available to NC are not great enough to engage in projects that would benefit all of the stakeholder groups in need. While these funds would be able to support a small number of common resiliency projects, like shoreline stabilization and habitat enhancement, the impacts of these discrete projects
would provide minimal or no resiliency for each entity affected by Hurricane Florence. Additionally, state-level projects are not equipped to provide assistance to certain affected groups in this proposal. Specifically, resiliency projects for the for-hire fishing industry are extremely difficult to implement and would not support the group as much as direct payments. These stakeholders could potentially benefit from broad actions, such as a realignment to smaller vessel sizes, or substantial port improvements (Savolainen and Kazmierczak 2015), but again the scale of these relief funds would not adequately support such projects. In all, the sheer number of those in need, across such a broad range of fishery activities, does not align with projects that would cap at $7,728,000. By redirecting these funds into direct payments, each individual stakeholder or business will be able to address their own needs, and take ownership over their own small pool of recovery funds that will allow their business to be more resilient in the face of future fishery disasters.

Ultimately, NCDMF believes direct payments will most greatly impact the individual needs of each business in relation to their recovery from Hurricane Florence. These stakeholders learned what components of their businesses are most susceptible to natural disasters, and how best to improve their operations to be more resilient to such events in the future. NCDMF views direct payments as the most efficient mechanism to provide relief to commercial seafood dealers, processors, for-hire businesses, bait and tackle shops, and ocean fishing piers, as they each experienced the economic devastation of Hurricane Florence, and understand how federal relief funds could best be used to recover and prepare themselves for the future.

Project Overview

The North Carolina Division of Marine Fisheries (NCDMF) will administer federal fishery disaster funds to stakeholders as direct payments supporting fishing and community resiliency as described above and in the Expected Benefits section of this proposal. The designated funds per project are based on the NOAA Fisheries Hurricane Florence Fisheries Damage Assessment (“NOAA Assessment”; NOAA 2019) report issued in September 2019 and follow-up personal communication with NOAA staff regarding damages to ocean fishing piers that were not listed in the report.

The North Carolina General Assembly allocated $11.6 million to provide direct assistance to these two stakeholder groups for loss of income. Therefore, even though the NOAA Assessment included commercial fishing and aquaculture operations, the federal fishery disaster funds will not be used to provide further assistance to those stakeholders. This allows more of the limited federal fishery disaster funds to be allocated to the other stakeholders identified in the NOAA Assessment who were not included in the state’s program.

A total of $7,728,000 of federal fishery disaster funds has been designated to North Carolina. NCDMF will use $7,528,000 to provide direct assistance to stakeholders to support more resiliency within communities and industries. Direct assistance will be provided to seafood processors and dealers, the for-hire industry, bait-and-tackle businesses, and ocean fishing piers. According to the NOAA Assessment, these businesses accounted for over $58.4 million in damages and lost revenue. The $7.5 million of direct assessment represents 12.8% of the total losses incurred by these businesses. Providing direct assessment is important and critical for these industries to continue business and consistent in how the state funds were distributed to the other stakeholders. This process will allow for consistency in how stakeholders were supported for their losses due to Hurricane Florence. Table 2
reflects how funds will be distributed per project. The remaining $200,000 will be used to fund administrative support and supplies to facilitate this project.

Table 2. Allocation of funds per operation/business category based on damages outlined in NOAA Fisheries Hurricane Florence Fisheries Damage Assessment (NOAA 2019).

<table>
<thead>
<tr>
<th>Operation/Business Type Category</th>
<th>Vessel/Facility Damages ($ in millions)(^1)</th>
<th>Revenue Losses ($ in millions)(^1)</th>
<th>Total (Damages and Revenue $ in millions)</th>
<th>Percent %</th>
<th>Final $ Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seafood Processors and Dealers</td>
<td>12.9</td>
<td>20</td>
<td>32.9</td>
<td>56%</td>
<td>4,215,680</td>
</tr>
<tr>
<td>For-Hire Businesses</td>
<td>4.6</td>
<td>8.1</td>
<td>12.7</td>
<td>22%</td>
<td>1,656,160</td>
</tr>
<tr>
<td>Bait and Tackle</td>
<td>0.4</td>
<td>10.6</td>
<td>11.0</td>
<td>19%</td>
<td>1,430,320</td>
</tr>
<tr>
<td>Ocean Fishing Piers</td>
<td>1.3</td>
<td>0.5</td>
<td>1.8</td>
<td>3%</td>
<td>225,840</td>
</tr>
<tr>
<td>Total</td>
<td>19.2</td>
<td>39.2</td>
<td>58.4</td>
<td>100%</td>
<td>7,528,000</td>
</tr>
</tbody>
</table>

\(^1\)Estimates generated from NOAA Hurricane Florence Fisheries Damage Assessment

Stakeholder Input

Prior to this proposal submission, the NCDMF received stakeholder input during a during May 2020. Due to the current COVID19 State of Emergency at both state and federal levels, the NCDMF was unable to hold in-person public meetings but did seek public comment via internet on-line forms. The draft proposal, Federal Fishery Disaster declaration, NOAA Assessment, and March 17, 2020 letter outlining the amount of funds available to North Carolina and objectives of the federal funds was posted on the NCDMF’s website. These comments will be considered during development of this proposal.

Once approved by NOAA Fisheries, projects will be communicated to the eligible stakeholders through a variety of outreach outlets before any project is initiated.

Distribution of Funds

Applicants will be allowed to apply for funds under one of the following categories only and cannot apply for multiple categories. The rationale for this requirement is due to the limited amount of funds. The demonstrated need will far exceed the funds. The scope of this project will cover North Carolina residents who participate in North Carolina’s fishing industries, as outlined in this proposal.

Seafood Dealers and Processors - $4,215,680

NCDMF had 683 licensed fish dealers in FY19. Fiscal year (FY) runs from July to June; therefore, FY2019 included July 1, 2018 through June 30, 2019, which covers the period in which Hurricane Florence directly affected the fishing industry. According to the NC Seafood Directory, there are an estimated 38 seafood processors and 98 wholesalers/distributors in North Carolina, but most of these businesses overlap (NCDA&CS 2020). Many of the seafood processors, wholesalers, and distributors own a state fish dealer license, even though it is not required, so all of these operations will be included with the licensed seafood dealers during the distribution of relief money.
Seafood dealers who buy their product from other licensed seafood dealers are not required to be licensed by the NCDMF and are not required to complete trip tickets. Processors, wholesalers, and distributors who purchase from licensed fish dealers are critical infrastructure to the seafood chain. They provide outlets to larger markets, provide value-added processing, and provide employment to local residents, as well as an important tax base at the local, state, and national levels. These businesses also suffered damage to infrastructure and equipment, incurred job losses, and had lost revenue. Providing assistance will allow these businesses to reinvest in their business through improvements to infrastructure, equipment, and other business-specific components that will allow them to be more resilient during future storms.

An application process will be developed, allowing all seafood dealers and processors that felt economically affected by Hurricane Florence to apply for potential assistance. The application process will require applicants to provide supporting materials that may include documentation of revenue loss, documentation of facility and equipment damage, and/or other supporting information. These requests will be reviewed by NCDMF and will be deemed eligible or not eligible. Eligibility criteria has not been established yet, but may include requirements such as ownership of a valid NCDMF Dealer License for all or part of the period from September 1, 2018 to November 30, 2018, purchase data from trip tickets, state business registration information, supporting purchasing or payroll documentation, etc. Distribution of funds to eligible applicants may be equal to or based on the percentage of losses claimed by the applicant. Due to the level of funding, the determination of how to allocate this portion of the funds may be driven once all applications are received. In addition, the division may reserve a small amount of funds for potential claim disputes.

Data from the North Carolina Trip Ticket Program (NCTTP) will be used to validate any claimed losses from licensed fish dealers. The NCTTP is mandated through North Carolina law and requires all licensed fishermen selling their fish to go through a North Carolina licensed fish dealer. The fish dealer completes a trip ticket for each trip. These trip tickets are submitted to the NCDMF monthly. Data collected on trip tickets include species landed by market grade and condition (e.g., whole, gutted, carcass), gear type used, waterbody where the commercial fishing occurred, license information for the fish dealer, commercial fisher, and commercial fishing vessel, the state and landing date of the trip, crew size, and the quantity landed for each species. For processors that do not also carry a fish dealer’s license, applications will be reviewed based on available documentation and evidence, with assistance allocations made at the discretion of NCDMF.

**For-Hire Operations - $1,656,160**

North Carolina had 844 for-hire licenses issued during FY19. To be considered a for-hire operation, there are a range of license options available to fishermen. Some purchase a blanket or non-blanket for-hire vessel license. A U.S. Coast Guard (USCG) operator’s license is not required although all operators of the for-hire vessel must be properly licensed by the USCG. The Blanket For-Hire Vessel Coastal Recreational Fishing License (CRFL) covers the recreational fishing license requirements for all anglers aboard the vessel when fishing in coastal waters but not joint or inland waters. The Non-Blanket For-Hire Vessel License does not cover the licensing requirements of passengers so each angler 16 years or older must hold a valid CRFL. Both licenses are available for 6 or fewer passengers or more than 6 passengers.
Alternatively, individuals can purchase a Blanket For-Hire Captain’s CRFL. This license allows individuals licensed by the USCG to carry passengers on any vessel licensed in NC as a for-hire vessel. This license can also be used in conjunction with a Commercial Fishing Vessel Registration holding a for-hire endorsement. Only individuals holding a USCG license to carry passengers are eligible to apply. This license covers the recreational fishing license requirements for all anglers aboard the vessel in coastal waters.

NCDMF does not have a census level data collection program (i.e., logbook or vessel reports) for these licensed stakeholders, so affected persons will need to apply for assistance and provide supporting documentation demonstrating losses. The application process will require applicants to provide supporting documentation that may include documentation of revenue loss, documentation of vessel, dock damage, and/or equipment damage, or other supporting information. These requests will be reviewed by NCDMF and will be deemed eligible or not eligible. Eligibility criteria has not been established yet, but may include requirements such as ownership of a valid NCDMF for-hire license (blanket or non-blanket vessel license or a Blanket For-Hire Captain’s CRFL) for all or part of the period from September 1, 2018 to November 30, 2018, residency in North Carolina during the affected time period, possession of receipt books that support revenue loss, etc.

Distribution of funds to eligible applicants may be equal to or based on the percentage of losses claimed by the applicant. A method for determining funding allocations could be based on the number of lost trips documented by the applicant. Each trip would have a value assigned by NCDMF based on a survey of average for-hire trip costs (i.e., half-day, full day, overnight, inshore guide, offshore charter, offshore headboat). The most up-to-date estimates of for-hire fees can be found through a NOAA study which profiles the Southeast for-hire industry collectively (Souza and Liese 2019). Additionally, validation of trip characteristics from applications can be conducted with estimates from the annual NCDMF for-hire telephone survey. According to this data, the three years prior to Hurricane Florence demonstrated that roughly half of all for-hire trips occur offshore (>3 miles from shore), while the remaining trips are equally distributed between inshore and state ocean (<=3 miles from shore; Table 3). Due to the level of funding, the determination of how to allocate this portion of the funds may be driven once all applications are received. In addition, NCDMF may reserve a small amount of funds for potential claim disputes.

Table 3. Distribution of for-hire fishing trips by geographic mode using estimates from the NCDMF annual for-hire telephone survey.

<table>
<thead>
<tr>
<th>Trip Type</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>3-Year Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inland Trips</td>
<td>17%</td>
<td>25%</td>
<td>28%</td>
<td>24%</td>
</tr>
<tr>
<td>State Ocean Trips (&lt;=3 miles from shore)</td>
<td>25%</td>
<td>26%</td>
<td>23%</td>
<td>25%</td>
</tr>
<tr>
<td>Offshore Ocean Trips (&gt;3 miles from shore)</td>
<td>58%</td>
<td>49%</td>
<td>48%</td>
<td>51%</td>
</tr>
</tbody>
</table>

Bait and Tackle Businesses - $1,430,320

The number of businesses that supply equipment and bait to the recreational fishing industry is unknown; these enterprises also operate throughout the entire state, not just on the coast. However, in
considering those shops affected by Hurricane Florence, economic impacts occurred in the form of physical damage to their business from wind and flooding, as well as loss of revenue from decreased recreational effort. This decreased effort is the result of multiple factors, such as deteriorated fishing conditions, inaccessibility to some fishing areas (i.e., damaged fish structures, closed boat ramps, closed beach access) and damage or closure to other infrastructure supporting recreational fishing, such as hotels and restaurants.

Bait and tackle businesses supply equipment to not only individual anglers but also to for-hire businesses and other recreational fishing enterprises. Additionally, many bait and tackle shops in the state are also licensed to sell Coastal Recreational Fishing Licenses (CRFL) in the state, and changes in license sales can help demonstrate loss of demand from recreational anglers. According to NCDMF CRFL sales data, 344 bait and tackle businesses reported a decrease in CRFL sales revenue when comparing September/October 2017 and 2018. The average revenue loss in CRFL sales was $646, with a minimum loss of $5 and a maximum of $30,190. These values only represent the losses from license sales but provide a clear example of the strong decrease in demand for recreational marine fishing after Hurricane Florence. Just as there were notable losses in license sales, there were also likely higher losses in complimentary goods, notably the bait and tackle that is also sold in these shops. With this, this data clearly demonstrates the strong impact Hurricane Florence had on tourism and recreational fishing demand, which significantly impacted not only these businesses, but also the communities they exist in and the individuals employed by this industry.

To provide assistance to these businesses, the NCDMF will develop an application process allowing these stakeholders to apply for potential assistance. The application process will require applicants to provide supporting documentation that may include documentation of revenue loss, documentation of facility and equipment damage, or other supporting information. These requests will be reviewed by NCDMF and will be deemed eligible or not eligible. Eligibility criteria has not been established yet, but may include requirements such as proof of residency in North Carolina for the business, sales/budget documents, NC business certifications, etc. Distribution of funds to eligible applicants may be equal to or based on the percentage of losses claimed by the applicant. Due to level of funding, the determination of how to allocate this portion of the funds may be driven once all applications are received. In addition, the division may reserve a small amount of funds for potential claim disputes.

Ocean Fishing Piers - $225,840

North Carolina had 19 licensed ocean fishing piers in FY19. Many suffered damage due to Hurricane Florence and some were closed for the rest of the year due to damage, the public being unable to access the piers due to beach closures and curfews, and damage to other supporting infrastructure such as hotels and restaurants. This led to a decrease in effort and access on ocean fishing piers, which is reflected in a reduction in total recreational effort from shore-based structures, which decreased by more than 4 million trips from 2017 to 2018 (Table 4). Ocean fishing piers are extremely valuable to the recreational fishing community by providing access to anglers who do not have vessels and have had a long-term cultural significance to the state. According to the most recent study of ocean fishing pier users in North Carolina, these sites provide recreational fishing access to a broad and diverse range of the North Carolina population, underscoring their importance. According to Hadley (2012), nearly two-thirds of all pier users are North Carolina residents, while participation is well-distributed across key demographic categories, such as race, age, income, and education.
North Carolina has required ocean fishing piers to keep a logbook on the number of anglers since 2012. The NDCMF will develop an application process allowing these stakeholders to apply for potential assistance. These requests will be reviewed by NCDMF and will be deemed eligible or not eligible. Eligibility criteria has not been established yet, but may include requirements such as ownership of a valid NCDMF Ocean Fishing Pier License for all or part of the period from September 1, 2018 to November 30, 2018, as well as operational data, such as number of anglers from pier logbooks. In addition, other supporting documentation demonstrating pier damage may be submitted. Criteria for acceptable supporting documents will be determined during the application development. Distribution of funds may be equal to or based on the percentage of losses claimed by the applicant. Due to the level of funding, the determination of how to allocate this portion of the funds may be driven by the number of applicants and the reduction in anglers per pier. In addition, the division may reserve a small amount of funds for potential claim disputes.

Table 4. Total estimated recreational fishing trips from shore-based structures by year. Data is generated from MRIP surveys, and includes recreational trips occurring on ocean fishing piers.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Estimated Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>8,516,390</td>
</tr>
<tr>
<td>2016</td>
<td>5,970,329</td>
</tr>
<tr>
<td>2017</td>
<td>9,512,489</td>
</tr>
<tr>
<td>2018</td>
<td>5,317,495</td>
</tr>
<tr>
<td>2019</td>
<td>6,021,580</td>
</tr>
</tbody>
</table>

4. Expected Benefits

While commercial fishing license holders received financial relief from the effects of Hurricane Florence, all other stakeholders in the fishing industry have yet to receive any public assistance. This is particularly impactful on North Carolina’s seafood dealers and processors, as well as for-hire businesses and ocean fishing piers. In order to ensure key stakeholders are not left behind and forced to recover from Hurricane Florence on their own, these federal monies must be directed into these groups to provide economic relief and an opportunity to improve resiliency in the face of future catastrophes.

As stated earlier, direct payments to each of these groups is the optimal use of this federal assistance package and will provide the greatest overall benefit to each stakeholder, as well as the state overall. Given the amount of assistance available, direct payments best ensure each affected entity will have economic assistance to address losses from Hurricane Florence. Additionally, this will allow each recipient to strategically address the components of their business that they identified as the least resilient to the impacts of Hurricane Florence and would best benefit from improvements with relief assistance. Under this strategy, funds can be allocated in a variety of small, impactful ways across a range of businesses, rather than bundled into a small number of potential projects.

With this, there are a number of state-led resiliency projects that would also assist in overall resiliency to the state’s fishery industries. However, NCDMF believes the total assistance being awarded is only enough to identify select projects that would improve resiliency in specific regions, or within
specific industries. Ultimately, these improvements could provide strong, lasting impacts to the state. However, NCDMF’s goal for these relief funds is to ensure each affected stakeholder across these industries is given an opportunity to recover from Hurricane Florence and become more resilient in the face of future storms. With that goal in mind, and given the magnitude of assistance presented, direct payments are the ideal strategy to address recovery and resiliency across the entire state, and within such a diverse range of fishing industries. This belief highlights the key benefit of this assistance plan; assistance to as many affected individuals and enterprises as possible to ensure each is better prepared for devastating storm events in the future.

Additionally, it is important to focus on NOAA’s impact assessment when determining how to disperse funds, which demonstrated that more than two-thirds of all economic loss from Hurricane Florence to these specific industries came in form of revenue loss, rather than damages (Table 1). While loss from damages only represents tangible, physical storm impacts, revenue loss comes from a myriad of convoluted factors. Among these can be loss of demand, inability to remain open, upstream economic impacts (such as lack of seafood to process), as well as an inability to accrue revenue due to damages to key business infrastructure. On top of this, lost revenue represents a significant gap in cash flow that could be used to address loss from damages, which likely worsened physical conditions. With all of this in mind, large-scale project-based uses of these funds would likely not address the main source of loss from revenues. By implementing direct payments, both damages and revenue loss can be addressed by stakeholders in ways that are most strategic to each business. This flexibility and autonomy create a much more dynamic use of federal assistance, so that each dollar can be spent most effectively as possible for each business, thereby boosting resiliency in a multitude of small ways all across North Carolina’s coast.

With all this being acknowledged, the expected benefits of direct payments to each of these groups are tangible improvements to business infrastructure or processes that were affected by Hurricane Florence, which would in turn lead to significantly higher resiliency for each of these businesses in the future. While the economic impacts of Hurricane Florence can broadly be defined as either damage or lost revenue, the nature of these impacts vary dramatically across all these businesses. By providing direct payments that are tied to federal relief assistance, each of these stakeholders can strategically identify which aspects of their business were most affected from storm impacts, and direct funds towards improving those. In short, these direct payments are intended to target the most vulnerable, and least resilient, parts of each business, thereby significantly increasing the preparedness and resiliency of these industries moving forward. By putting relief money directly into the hands of these stakeholders, NCDMF is empowering them to make the decisions they deem most impactful towards preparing for a more resilient future.

### 5. Milestone Schedule

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6. **Geographic Location**

   The location and scope of this project will cover all of North Carolina residents who participate in North Carolina’s fishing industries, as outlined in this proposal. The project will be administered from the NCDMF Headquarters Office in Morehead City, NC.
NCDMF will hire two temporaries to carry out the duties of this program. One will be an administrative assistant position at ~$15/hour to assist by providing telephone support, preparing application packages, mailing and receiving packages, and other general office support functions this program will perform. The other temporary position will be more specialized at ~$25/hour to assist with data analysis, verifying information provided by applicants. We expect to have some flexibility in how
the wages will be assigned to allow us to hire the skills set needed to carry out the requirements on this project.

NCDMF will also provide in-kind support to this project. In-kind support will be provided by Trip Ticket Staff (administrative assistance, biologists, biologist supervisor, technicians), Administrative and Maintenance Services staff (business and budge officers), and Department of Environmental Quality (DEQ) Financial Services Division. Oversight of the project will be provided by NCDMF Director and Deputy Directory along with DEQ Secretary’s Office, Office of General Counsel, and DEQ Auditor,

8. Appendices

Appendix 1: NC Hurricane Florence Economic Assistance Program Final Report

Appendix 2: NOAA Fisheries Hurricane Florence Damage Assessment

9. References


NORTH CAROLINA HURRICANE FLORENCE COMMERCIAL FISHERY ASSISTANCE PROGRAM

FINAL REPORT

August 2019
North Carolina Hurricane Florence Commercial Fishery Assistance Program

A.J. Bianchi, B.N. Salmon, S.A. McInerny, and M.J. Taggart

2019

North Carolina Division of Marine Fisheries
3441 Arendell Street
P.O. Box 769
Morehead City, NC 28557

This document may be cited as:
ABSTRACT

Hurricane Florence made landfall in North Carolina on September 14th, 2018. With its landfall, Hurricane Florence brought record breaking levels of rainfall to eastern North Carolina, historic storm surge levels, and high winds which caused extensive property damage to the area. After the storm, the North Carolina General Assembly passed two session laws (2018-136 and 2018-138) which allocated a total of $11.6 million of aid for the commercial fishing industry. Eligibility requirements to receive aid were defined in Session Law 2018-138. Based on these requirements, the North Carolina Trip Ticket Program distributed aid to eligible commercial fishermen based on their potential losses due to Hurricane Florence in September, October, and November 2018 compared to their average landings in September, October, and November of 2015 to 2017. Distribution of aid occurred in two phases, losses that were incurred during September and losses that were incurred during October and November combined. The distribution of funds occurred over multiple check writes as late responders and disputes were processed and approved. In total, 1,176 participants across 39 different counties received aid. Carteret County had the highest number of fishermen that received aid (246 participants), while those in Dare County received the highest amount of aid (over $2.3 million).
ACKNOWLEDGEMENTS

The completion of this report could not have been accomplished without the cumulative teamwork of the North Carolina Division of Marine Fisheries Trip Ticket Program staff. We wish to thank our diligent staff for their excellent work, including:

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Shirley Trollinger
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Amy Robinson

Finally, a special thanks to the commercial fishing industry for their support and patience during this program.
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INTRODUCTION

HURRICANE FLORENCE

The hurricane season in 2018 was above normal and featured 15 named tropical cyclones, eight of which developed into hurricanes, with two of those hurricanes strengthening to major hurricanes (Category 3 or higher on the Saffir-Simpson Scale; National Hurricane Center 2018). Hurricane Florence developed as a tropical wave off the coast of Africa on August 31, 2018 before moving across the Atlantic. By September 4th it was upgraded to a hurricane. As Hurricane Florence moved across the Atlantic, it went through several transitions. It reached major hurricane strength before weakening to tropical storm strength only to strengthen once again into a Category 4 hurricane. As Hurricane Florence approached the coast of North Carolina, shallow waters and a weak eyewall resulted in an overall weakening of the hurricane just before landfall. On September 14, 2018 Hurricane Florence made landfall in North Carolina around Wrightsville Beach ranked at the upper end of a Category 1 hurricane (Figure 1; National Hurricane Center 2019).

Hurricane Florence set new rainfall records in North Carolina, surpassing those previously set by Hurricane Floyd in 1999 and Hurricane Matthew in 2016. Rainfall totals in Elizabethtown, NC reached nearly 36 inches, the highest recorded amount throughout the duration of Hurricane Florence. Other notable rainfall amounts included 34 inches in Swansboro, nearly 27 inches in Wilmington, 25 inches in Jacksonville and Newport, 21 inches in Morehead City, and almost 17 inches in New Bern. This increased rainfall compounded with record-breaking storm surge generated by Hurricane Florence resulted in devastating impacts. Storm surge levels reached nine to eleven feet over much of coastal North Carolina. The hardest hit communities included New Bern, Newport, Belhaven, Oriental, North Topsail Beach, Jacksonville, and Down East Carteret County. Maximum wind gusts reached 106 miles per hour at Cape Lookout and 105 miles per hour in Wilmington (National Weather Service 2019). Damages from wind and rain were widespread across the entire state of North Carolina. A total of 15 fatalities occurred as a direct result of Hurricane Florence, of which 11 were due to freshwater flooding and 4 resulted from wind (National Hurricane Center 2019).

Hurricane Florence resulted in historic rainfall totals across many parts of the state because it was an extremely slow-moving system. Eastern North Carolina was already experiencing an above average rainfall prior to Hurricane Florence’s arrival. With the ground already saturated, additional rainfall from Hurricane Florence caused substantial sewer flooding, wastewater treatment plant flooding, and agricultural runoff. Anticipating increased levels of bacteria in runoff, widespread closures of shellfish harvest areas along the entire coast occurred just prior to landfall. Proclamation PA-105-2018 issued on September 13, 2018 closed all coastal waters to shell fishing in Brunswick, New Hanover, Pender, Onslow, Carteret, Craven, Pamlico, Beaufort, Hyde, and Dare Counties. In the month and a half following Hurricane Florence, fourteen proclamations were issued to re-open coastal waters. All coastal waters were completely re-opened to shell fishing by October 27, 2018 after 43 days (Appendix A).
GOALS AND OBJECTIVES

The North Carolina Division of Marine Fisheries (NCDMF) reached out to commercial seafood dealers in late September and early October 2018 to determine the initial impacts of Hurricane Florence. Commercial port agents of the NCDMF called seafood dealers to inquire about preliminary damages and losses they incurred from the storm and encouraged dealers to report damages and losses with their monthly data submissions. Preliminary estimates ranged from minor flooding that caused a few thousand dollars-worth of damages to estimates of over $600,000 due to damaged infrastructure and loss of seafood product.

In October 2018, a special session of the North Carolina General Assembly convened to discuss relief efforts for Hurricane Florence. As a result, North Carolina Session Law 2018-136 was signed on October 16, 2018. This law allotted $1.6 million dollars of relief funds to the North Carolina commercial fishing industry to be distributed by the Division of Marine Fisheries. An additional special session was convened in December 2018 where North Carolina Session Law 2018-138 was approved and signed. This law added another $10 million dollars to relief monies for the North Carolina commercial fishing industry.

The goal of the Hurricane Florence Fishery Assistance Program was to disperse funds to the commercial fishing industry. There were three primary objectives:

1. Establish eligibility criteria based on the guidance provided in Session Law
2. Validate trip ticket landings for eligible commercial fishermen
3. Determine and distribute final assistance award amounts

ELIGIBILITY

ELIGIBILITY REQUIREMENTS

Session Law 2018-138 was specific about several factors that would determine eligibility for the Hurricane Florence Commercial Fishing Assistance Program. Based on these requirements, eligible fishermen included “persons holding a Standard Commercial Fishing License, a Retired Standard Commercial Fishing License, or a North Carolina Resident Shellfish License for all or part of the period from September 1, 2018, through November 30, 2018” (S.L. 2018-138). Funds would be used to reimburse these fishermen for “reductions in landings demonstrated from trip ticket data or other verified landing compared with average landings over a prior comparable period determined by the Division of Marine Fisheries” (S.L. 2018-138). The NCDMF, with agreement from the Department of Environmental Quality, chose 2015–2017 as the period to use.
for calculating average landings. This period was chosen because it represented a set of recent years containing a non-hurricane year (2015), a year affected by a hurricane (2016; Hurricane Matthew), and then a year with potential indirect effects from the previous year’s storm (2017). The $1.6 million allocated by Session Law 2018-136 did not have guidance on how to disperse the money as stated in Session Law 2018-138 for the additional $10 million that was later allocated so the same set of criteria was used for the entire $11.6 million dollars of relief funds.

In addition to the eligibility requirements set forth in Session Law 2018-138, to be eligible for assistance under this program, fishermen had to be a North Carolina resident and had to have an established history of commercial landings during September, October, and/or November in the years of 2015, 2016, and/or 2017. Traditional summer flounder trips (trips that landed 1,000 pounds or more) were also excluded because these trips occur in out of state waters and this fishery was likely not impacted by Hurricane Florence.

ESTIMATING LOSS
Data from the North Carolina Trip Ticket Program (NCTTP) was used to estimate the losses commercial fishermen experienced due to Hurricane Florence. The NCTTP is mandated through North Carolina General Statute and thus all North Carolina seafood dealers are required to fill out trip tickets and submit them monthly to NCDMF. Completed trip tickets must be sent to the NCTTP by the 10th of the following month (e.g., all January trip tickets would be due on February 10th). North Carolina seafood dealers can only purchase seafood from properly licensed commercial fishermen and commercial fishermen can only sell to properly licensed seafood dealers. The NCTTP operates using trip ticket forms that are filled out by seafood dealers after each trip is completed by a commercial fisherman. Seafood dealers can complete paper trip ticket forms or can choose to report their data electronically with a specially designed trip ticket software program. The paper forms and the trip ticket software program are free of charge and are distributed upon request or requirement.

Data collected on trip ticket forms include species landed by market grade and condition (e.g., whole, gutted, carcass), gear type used, waterbody where the commercial fishing occurred, license information for the seafood dealer, commercial fisherman name and license number, commercial fishing vessel, the start and landing date of the trip, crew size, and the quantity landed for each species. Since the trip ticket program started in 1994, there have been a few modifications to these forms. For example, the starting date of a trip and the crew size fields were not added to trip tickets until 1999. The NCTTP has also added new gear codes over time primarily based on the needs of the commercial fishery and fisheries management biologists. Paper trip ticket forms take NCTTP staff longer to process than electronically submitted data. It generally takes close to a month to process paper trip ticket forms. To help distribute aid as quickly as possible, NCTTP staff put a priority on getting paper tickets processed for September, October, and November of 2018 to make the data available for the assistance program.
MAILINGS

Two separate mailings were sent during the program: one covered the information for potential losses in September 2018 and another covered the information for potential losses in October and November 2018. Each mailing was composed of a package that included an introductory letter explaining the Hurricane Florence Commercial Fishing Assistance program, a response form that indicated if the fisherman wanted to participate in the program and/or if they had concerns about their landings data, a summarized printout of landings data that covered the years of 2015-2018 by month for September-November for review and validation, and a Substitute W-9 form (Appendix B). The mailings were sent via certified mail through the United States Postal Service which required participants to sign for their letter, providing proof of receipt. Commercial fishermen who received mailings were given three weeks to review their packages and return the completed response form indicating their decision to participate or opt out of the program and a completed Substitute W-9 if they did choose to participate.

Mailings for the September disbursement phase consisted of all eligible fishermen under the program regardless of registered loss. The October-November disbursement phase was amended, and mailings were only sent to eligible fishermen who registered a loss during the two months. Commercial fishermen who participated in the first disbursement phase for September were not required to send in an additional Substitute W-9 form.

COMMERCIAL LANDINGS VALIDATION

Once loss was determined, commercial landings needed to be validated to ensure loss estimates were accurate. A summarized printout of landings data that covered the years of 2015-2018 by month for September-November was included in the packets that were sent out to commercial fishermen. Fishermen who had concerns with their landings data were instructed to submit any missing trip tickets or provide receipts to document and acknowledge any discrepancies. If the fisherman and dealer agreed about a discrepancy, the data was corrected. During the initial mailing of September information, some commercial fishermen misunderstood the information provided on their summarized landings report. Therefore, slight modifications were made for the second mailings based on feedback received. For the second mailing, additional information and explanations were included to help clarify the summarized landings and the data were organized in a different format.

DISBURSEMENT

TIMELINE

Disbursement occurred across three main phases. The first phase covered the month of September alone and occurred over multiple check writes between January 31st and May 13th, 2019. The second phase which occurred between April 3rd and May 13th, 2019 combined the months of October and November to save on time and postage and ensure all eligible fishermen received aid as soon as possible. The third and final phase covered the months of September–November and
was sent out to exhaust the remaining funds from the assistance program. Checks for the final phase were sent out June 12th, 2019 and no subsequent check writes were necessary. Based on the average value from 2015–2017 by month for September (31% of total average value), October (37%) and November (32%), the $11.6 million allocated by the state can be split into three phases of disbursement, after a $250,000 set aside for administrative costs. The initial breakdown of funding by month to be distributed was as follows:

- **September**: $3,518,500
- **October**: $4,199,500
- **November**: $3,632,000

One final disbursement phase was sent to exhaust any remaining funds and used Sept-Nov to calculate totals.

**SEPTEMBER DISBURSEMENT PHASE**
Commercial fishermen who were residents of North Carolina and held a valid, current Standard or Retired Standard Commercial Fishing License or a Shellfish License for North Carolina Residents without a Standard Commercial Fishing License during the months of September–November 2018 were eligible for compensation under this program if they had landings in September between 2015 and 2017. Ex-vessel value was used to determine the economic loss of each fisherman’s landings and is an estimated average value paid to the fisherman by the dealer based on species and market grade. Ex-vessel value for September 2018 was compared to the average ex-vessel value from 2015–2017 for each fisherman who had a prior landings history in 2015, 2016, or 2017. 2018 ex-vessel values were based on 2017 prices since 2018 prices were not available during this program. The loss in value per fisherman was compared to the total loss over all fishermen to determine each fisherman’s percentage of the total lost value from landings due to Hurricane Florence. Monies allocated to each fisherman were based on this percentage.

During the September disbursement phase, 1,782 certified letters with return-receipt were mailed in December 2018 to eligible commercial fishermen for the month of September. The letters explained the program, asked commercial fishermen to verify their September landings data, and to reply if they wanted to participate in the program or not. Out of the 1,782 participants that were sent letters, only 1,425 of them had losses in landings value. A total of 1,603 participants signed for receipt of their certified letter: 879 indicated they wanted to participate with no dispute (697 of those had losses), 89 indicated they did not want to participate in the program, and 34 indicated they wanted to participate but disputed the accuracy of some of the data. An additional six disputes arose from fishermen that did not originally receive a certified letter. Late responses were accepted and 46 fishermen that responded late indicated they wished to participate in the program.

Of the $3.5 million set aside for the September disbursement phase, $300,000 was held in reserve for fishermen with losses who did not respond by the deadline or fishermen waiting on disputes to be resolved. A total of $3,216,699.94 was distributed to eligible fishermen during the first round of assistance for September and covered 85.54% of all losses incurred. A minimum amount of
Hurricane Florence Commercial Fishery Assistance Program

$50 was set for any participant who showed a loss of $50 or less. A total of 664 checks were cut on January 31, 2019 totaling $3,216,699.94. Multiple check writes ensued due to disputes and late responders. This included a second check write on February 18, 2019 with nine checks totaling $42,943.31. The third and fourth check writes are combined, due to confidential information, and included five checks distributed on March 19, 2019 totaling $21,524.72. A fifth check write occurred on April 24, 2019 with four checks totaling $3,046.42. Late deliveries and most undeliverable packages occurred because of increase USPS mail traffic as the holiday season approached and continued displacement of fishermen from their homes after the hurricane. A total of 46 eligible fishermen submitted response packets late and their checks were processed on May 13, 2019 in a sixth and final check write totaling $282,363.34 in aid. The total number of checks sent out across all subsequent check writes for September was 728 totaling $3,566,577.73. The average check amount for September was $4,905.88.

SEPTEMBER DISPUTE CATEGORIZATION
The September disbursement phase resulted in a total of 40 disputes, all of which were resolved. The majority of disputes (17 disputes; 42.5%) were due to a misunderstanding either from the letter recipient indicating they both “agreed to participate with no dispute” and “agreed to participate but disputed their landings” by mistake on the response form (indicating no grounds for a dispute) or because the recipient thought the attached September landings were representative of the entire year as opposed to just one month. Eleven of the disputes (27.5%) were related to some form of missing data. The following is a breakdown of the disputes involving missing data.

Two disputes were due to a lack of properly completed trip tickets for sales to a dealer. Another two disputes resulted from missing trip tickets which were not provided by the dealer. Two disputes were due to a dealer clicking ‘Purchase Only’ in the electronic trip ticket program causing the data to go to the Federal Government but not to the state. This happens when the fisherman is also a dealer so has already filled out trip tickets but then sold his catch to another dealer. If the catch requires a federal dealer permit, the second buying dealer is still required to report to the federal government. In these cases, there was no original dealer (fisherman was not a dealer) so the tickets were categorized incorrectly and were never received by NCDMF. Four disputes resulted from non-reporting or late submissions of trip tickets/landings. The last dispute was due to no response from a fisherman after a request for a dispute of landings. The remaining twelve disputes were due to a variety of reasons including:

- **Duplicate Landings**: copies of the same landings sent in by both the license holder (as a fisherman dealer) and dealer were entered
- **Entry Error**: landings were entered incorrectly, or records did not match between license holders and dealers
- **Death**: the death of a license holder which involved the transference of the license to another individual
- **Military Deployment**: a license holder who was deployed or on military orders during one or all the years analyzed for the program, resulting in no landings
- **Partnerships**: license holders who worked together may have had landings listed under only one partner’s license instead of being split between both partners.
- **Transfers**: late transfers of licenses to family members or other license holders which resulted in landings under different names
- **Unknown**: either the license holder was unwilling to cooperate or could not be contacted after the initial dispute

**OCTOBER/NOVEMBER DISBURSEMENT PHASE**

Commercial fishermen who were residents of North Carolina and held a valid, current Standard or Retired Standard Commercial Fishing License or a Shellfish License for North Carolina Residents without a Standard Commercial Fishing License during the months of September–November 2018 were eligible for compensation under this program if they had landings in October or November between 2015 and 2017. Ex-vessel value was used to determine the economic loss of each fisherman’s landings and is an estimated average value paid to the fisherman by the dealer based on species and market grade. Ex-vessel value for October and November 2018 was compared to the average ex-vessel value from 2015–2017 for each fisherman who had a prior landings history in 2015, 2016, or 2017. Ex-vessel values for 2018 were based on 2017 prices since 2018 prices were not available during this program. The loss in value per fisherman was compared to the total loss over all fishermen to determine each fisherman’s percentage of the total lost value from landings due to Hurricane Florence. Monies allocated to each fisherman were based on this percentage.

During the October-November disbursement phase, 1,829 certified letters with return-receipt were mailed to eligible commercial fishermen for the months of October and/or November. All of these eligible fishermen had losses in landings value. The letters asked commercial fishermen to verify their October and/or November landings data and to reply whether they wanted to participate in the program. A total of 1,729 participants signed for receipt of their certified letter: 1,011 indicated they wanted to participate with no dispute, 126 declined to participate in the program, 27 indicated they wanted to participate but disputed the landings, and 48 participants responded late. Of the late responses, 32 indicated they would like to participate in the program and 16 indicated they would not like to participate.

Of the $7,831,500 million slated for the combined October-November disbursement phase, $600,000 ($300,000 for each month) was held in reserve for fishermen with losses who did not respond by the deadline or fishermen waiting on the disputes to be resolved. A remaining balance of $7,231,500 was distributed to 1,001 eligible fishermen on April 4, 2019, during the first round of assistance distribution for October and November. A minimum amount of $50 was set for any participant who showed a loss of $50 or less. A total of eight checks were held back from the initial check write due to pending disputes or missing information and were processed in a second check write totaling $45,476.09 on April 24, 2019. The continued displacement of fishermen from their homes after the hurricane resulted in many late deliveries or undeliverable packages. A total of 32 checks were processed in a third and final check write for all the late responses occurred on
Hurricane Florence Commercial Fishery Assistance Program

May 13, 2019 and totaled $179,049.90 in aid. The total number of checks sent out across all subsequent check writes for the October and November was 1,041 totaling $7,456,025.99 and covered 91.76% of all losses incurred. The average check amount for October and November was $7,163.71.

OCTOBER/NOVEMBER DISPUTE CATEGORIZATION

The October-November disbursement phase resulted in a total of 30 disputes, all of which were resolved. The majority of disputes were either due to a misunderstanding (9 disputes; 30%) or some form of missing data (8 disputes; 27%). Misunderstandings resulted either from the letter recipient indicating they both “agreed to participate with no dispute” and “agreed to participate but disputed their landings” by mistake on the response form (indicating no grounds for a dispute) or because the recipient thought the attached October-November landings were representative of the entire year as opposed to just one month. Disputes involving missing data were varied and the following is a breakdown of the disputes.

Four disputes resulted from missing trip tickets which were not provided by the dealer; two of these instances were because landings were recorded under the wrong license number. One dispute was due to missing dock tickets which needed to be provided by the dealer while another dispute resulted from a dealer who was uncooperative and did not provide copies of trip tickets for license holders who sold to them. Another dispute was due to landings reported under the license number for an individual as opposed to the fishing company and the last dispute was due to an error between a license holder mistaken as a dealer which resulted in trip tickets not being generated. The remaining thirteen disputes were due to a variety of reasons, including:

- **Death**: the death of a license holder which involved the transference of the license to another individual
- **Duplicate Landings**: copies of the same landings sent in by both the license holder and dealer were entered
- **Military Deployment**: a license holder who was deployed or on military orders during one or all the months analyzed for the program, resulting in no landings
- **Non-Reporting**: an individual who holds a license for fishing and dealing who fails to fill out trip tickets for their own landings
- **Partnerships**: license holders who worked together may have had landings listed under another license
- **Transfers**: late transfers of licenses to family members or other license holders which resulted in landings under different names
- **Dealer Report Error**: dealers who had issues properly filling out trip tickets ranging from reporting the wrong license number to entering the wrong species code

FINAL DISBURSEMENT PHASE

By May 20, 2019, both phases of the assistance program were complete, and checks were distributed to eligible participants. On June 12, 2019, remaining funds in the amount of $450,000 dollars were distributed to all fishermen that chose to participate in one of the disbursement phases.
Hurricane Florence Commercial Fishery Assistance Program

(a total of 1,176 participants), bringing a close to the program and marking the final distribution of funds that Governor Cooper signed into law for commercial fishing relief after Hurricane Florence at $11,472,603.72 (Table 1). During the final disbursement, a minimum amount of $20 was set for any participant who showed a loss of $20 or less. The average check amount was $382.65 and 3.52% of each individual fisherman’s losses were covered.

**SUMMARY**

After the completion of both phases of the Hurricane Florence Commercial Fishery Assistance Program, aid totaling $11,472,603.72 was distributed to eligible fishermen across the State of North Carolina. The funds were distributed to fishermen in 39 counties and 1,176 total participants (Table 1). Dare County received the most funding from the program ($2.3 million) which was distributed to 161 fishermen residing within the county. Fishermen in Carteret County received the second highest amount of funding with roughly $1.7 million distributed amongst 246 participants. Based on statewide ex-vessel values for 2018, landings from September–November compared to the statewide average ex-vessel value for the same months in 2015–2017, the initial estimated net loss to the commercial fishing industry in North Carolina after Hurricane Florence was about $9 million; however, the total loss across fishermen that qualified for the program and sustained lost commercial fishing income in those months in 2018 based on trip ticket data was estimated at almost $15 million. The money allocated to the Hurricane Florence Commercial Fishing Assistance Program allowed fishermen to be compensated for around 77% of their average revenue from commercial fishing between September and November.

An analysis of the NCTTP data for the months of September to November for participants who received aid showed that Hurricane Florence had a negative impact on several commercial fisheries including the blue crab pot, shrimp trawl, ocean gill net, flounder pound net, oyster, and hard clam fisheries (Figures 2 and 3). Most of these fisheries are based in estuarine waters (except for ocean gill net) and tend to be highly productive during the late summer and fall months. The 2018 landings in the blue crab pot and shrimp fisheries declined by nearly 50% compared to the average of 2015–2017. The hard clam fishery was impacted more severely, with over a 70% reduction. The oyster, flounder pound net, and ocean gill net fisheries showed reductions of 25% to 35% in landings when compared to the average landings from 2015–2017.

**FEDERAL FISHERY DISASTER RELIEF**

On November 1, 2018, North Carolina Governor Roy Cooper submitted a letter to the United States Secretary of Commerce, Wilbur Ross, requesting a federal fishery resources disaster declaration and federal aid be granted to North Carolina to help the state recover from the effects of Hurricane Florence (Appendix C). Included in this request was around $20 million in fisheries disaster assistance through the National Oceanic and Atmospheric Administration (NOAA).

On December 6, 2018, Secretary Ross granted Governor Cooper’s request determining that North Carolina had experienced a commercial fishery failure due to Hurricane Florence. This determination was needed before Congress could appropriate disaster relief funds to the State.
Federal funds are made available to states experiencing a fishery failure under the Magnuson-Stevens Fishery Conservation and Management Act and the Interjurisdictional Fisheries Act.

Through collaboration with NCDMF, NOAA staff produced an economic report outlining the damages sustained to commercial fishermen, seafood dealers, for-hire fishermen, and bait and tackle stores within North Carolina as a result of Hurricane Florence. This report will inform Congress on how much to allocate to North Carolina for disaster relief.

On June 6, 2019, House Resolution 2157 was signed into law allocating $150 million for commercial fishery failures due to Hurricanes Florence and Michael, and Typhoons Yutu and Mangkhut. It is unclear what portion of that money will be distributed to North Carolina and NCDMF is still waiting to receive the completed economic impact report from NOAA. Once money is designated to North Carolina for disaster relief, the State will be required to submit a proposal defining how it plans to spend the allocated funds. The proposals must be submitted to and approved by NOAA before any money can be disbursed. The NCDMF plans to reach out to stakeholders to determine the best way to allocate and distribute federal funds to affected user groups that have been approved for assistance.
LITERATURE CITED


### TABLES

Table 1. Total check counts and amounts by county for the Hurricane Florence Assistance Program in dollars.

<table>
<thead>
<tr>
<th>Mailing County</th>
<th>Total Number of Participants</th>
<th>Total Amount Paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beaufort</td>
<td>77</td>
<td>$904,898.46</td>
</tr>
<tr>
<td>Bertie</td>
<td>2</td>
<td>***</td>
</tr>
<tr>
<td>Brunswick</td>
<td>87</td>
<td>$339,468.93</td>
</tr>
<tr>
<td>Camden</td>
<td>25</td>
<td>$663,635.07</td>
</tr>
<tr>
<td>Carteret</td>
<td>246</td>
<td>$1,743,520.16</td>
</tr>
<tr>
<td>Chatham</td>
<td>1</td>
<td>***</td>
</tr>
<tr>
<td>Chowan</td>
<td>8</td>
<td>$12,679.69</td>
</tr>
<tr>
<td>Columbus</td>
<td>3</td>
<td>$7,282.43</td>
</tr>
<tr>
<td>Craven</td>
<td>23</td>
<td>$438,427.65</td>
</tr>
<tr>
<td>Currituck</td>
<td>31</td>
<td>$221,524.92</td>
</tr>
<tr>
<td>Dare</td>
<td>161</td>
<td>$2,305,882.11</td>
</tr>
<tr>
<td>Duplin</td>
<td>3</td>
<td>$1,483.92</td>
</tr>
<tr>
<td>Durham</td>
<td>1</td>
<td>***</td>
</tr>
<tr>
<td>Edgecombe</td>
<td>1</td>
<td>***</td>
</tr>
<tr>
<td>Forsyth</td>
<td>3</td>
<td>$18,429.19</td>
</tr>
<tr>
<td>Greene</td>
<td>1</td>
<td>***</td>
</tr>
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<td>Hoke</td>
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</tr>
<tr>
<td>Hyde</td>
<td>69</td>
<td>1,318,951.38</td>
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<tr>
<td>Iredell</td>
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<td>***</td>
</tr>
<tr>
<td>Johnston</td>
<td>1</td>
<td>***</td>
</tr>
<tr>
<td>Jones</td>
<td>2</td>
<td>***</td>
</tr>
<tr>
<td>Lenoir</td>
<td>1</td>
<td>***</td>
</tr>
<tr>
<td>Martin</td>
<td>1</td>
<td>***</td>
</tr>
<tr>
<td>Mecklenburg</td>
<td>1</td>
<td>***</td>
</tr>
<tr>
<td>Montgomery</td>
<td>2</td>
<td>***</td>
</tr>
<tr>
<td>New Hanover</td>
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<td>$247,324.06</td>
</tr>
<tr>
<td>Onslow</td>
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<tr>
<td>Pamlico</td>
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<td>Pasquotank</td>
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<td>Pender</td>
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<tr>
<td>Perquimans</td>
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<td>$130,119.15</td>
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<tr>
<td>Pitt</td>
<td>10</td>
<td>$72,533.32</td>
</tr>
<tr>
<td>Randolph</td>
<td>1</td>
<td>***</td>
</tr>
<tr>
<td>Tyrrell</td>
<td>25</td>
<td>$301,105.00</td>
</tr>
<tr>
<td>Union</td>
<td>1</td>
<td>***</td>
</tr>
<tr>
<td>Wake</td>
<td>4</td>
<td>$1,744.26</td>
</tr>
<tr>
<td>Washington</td>
<td>8</td>
<td>$26,588.90</td>
</tr>
<tr>
<td>Wayne</td>
<td>4</td>
<td>$1,580.43</td>
</tr>
<tr>
<td>Wilson</td>
<td>2</td>
<td>***</td>
</tr>
<tr>
<td>Grand total</td>
<td>1,176</td>
<td>$11,472,603.72</td>
</tr>
</tbody>
</table>
Figure 1. Trajectory of Hurricane Florence before landfall (National Hurricane Center 2019).
Figure 2. Average landings (2015–2017) for September through November compared to 2018 landings for participants who received aid for the blue crab pot, shrimp, ocean gill net, and flounder pound net fisheries.
Figure 3. Average landings (2015–2017) for September through November compared to 2018 landings for participants who received aid for the oyster and hard clam fisheries.
APPENDIX

APPENDIX A: SHELLFISHING PROCLAMATIONS

PA-105-2018- CLOSURE: Brunswick/ New Hanover/ Pender/ Onslow/ Carteret/ Craven/ Pamlico/ Beaufort/ Hyde/ Dare Counties. Temporary closures will take effect at sunrise on Thursday, September 13, 2018.

PA-106-2018- OPENING: Hyde/ Dare Counties. Temporary closures will return to the status in existence immediately prior to September 13, 2018, taking effect at sunrise on Saturday, September 29, 2018.

PA-107-2018- OPENING: Carteret County. Temporary closures will return to the status in existence immediately prior to September 13, 2018, taking effect at sunrise on Thursday, October 4, 2018.

PA-108-2018- OPENING: Carteret County. Temporary closures will return to the status in existence immediately prior to September 13, 2018, taking effect at sunrise on Wednesday, October 23, 2018.

PA-109-2018- OPENING: Carteret/ Pamlico/ Hyde/ Dare Counties. Temporary closures will return to the status in existence immediately prior to September 13, 2018, taking effect at sunrise on Friday, October 5, 2018.

PA-110-2018- OPENING: Carteret/ Onslow Counties. Temporary closures will return to the status in existence immediately prior to September 13, 2018, taking effect at sunrise on Saturday, October 6, 2018.

PA-111-2018- OPENING: New Hanover/ Pender/ Onslow/ Carteret Counties. Temporary closures will return to the status in existence immediately prior to September 13, 2018, taking effect at sunrise on Wednesday, October 10, 2018.

PA-112-2018- OPENING: Pamlico/ Beaufort/ Hyde/ Dare Counties. Temporary closures will return to the status in existence immediately prior to September 13, 2018, taking effect at sunrise on Thursday, October 11, 2018.

PA-113-2018- OPENING: Brunswick/ Carteret Counties. Temporary closures will return to the status in existence immediately prior to September 13, 2018, taking effect at sunrise on Wednesday, October 17, 2018.

PA-114-2018- OPENING: Onslow/ Carteret Counties. Temporary closures will return to the status in existence immediately prior to September 13, 2018, taking effect at sunrise on Thursday, October 18, 2018.

PA-115-2018- OPENING: Onslow/ Pamlico Counties. Temporary closures will return to the status in existence immediately prior to September 13, 2018, taking effect at sunrise on Friday, October 19, 2018.

PA-116-2018- OPENING: Onslow/ Carteret Counties. Temporary closures will return to the status in existence immediately prior to September 13, 2018, taking effect at sunrise on Saturday, October 20, 2018.

PA-117-2018- OPENING: New Hanover/ Pamlico Counties. Temporary closures will return to the status in existence immediately prior to September 13, 2018, taking effect at sunrise on Wednesday, October 24, 2018.

PA-119-2018- OPENING: Brunswick County. Temporary closures will return to the status in existence immediately prior to September 13, 2018, taking effect at sunrise on Friday, October 26, 2018.
PA-120-2018- OPENING: New Hanover County. Temporary closures will return to the status in existence immediately prior to September 13, 2018, taking effect at sunrise on Saturday, October 27, 2018.

**For more detailed information about shellfishing closures and proclamations, visit the NCDMF Shellfish Sanitation website:** http://portal.ncdenr.org/web-mf/proclamations-polluted-areas
December 11, 2018

Participant ID#
Name
Mailing Address
City, State, Zip Code

Dear Commercial Fisherman,

As you may know, under recently enacted state law, commercial fishing assistance is being made available to commercial fishermen and shellfish harvesters for income losses due to harvest reductions sustained from Hurricane Florence. Commercial fishermen who are residents of North Carolina who held a valid, current Standard or Retired Standard Commercial Fishing License, or a Shellfish License for North Carolina Residents without a Standard Commercial Fishing License, during the month of September 2018 are eligible for compensation under this program.

A detailed report of your September landings for 2015–2018 is enclosed. You are eligible for compensation based on these amounts.

Please complete the enclosed response form verifying your correct mailing address and phone number. Also, please complete and enclose the attached State of North Carolina Substitute W-9 Form if you are participating in the program. Failure to return to the Division of Marine Fisheries a completed and signed response form and W-9 by January 4, 2019 shall be considered a decision not to participate in the Hurricane Florence commercial fishing assistance program. If our records are in error, please provide copies of relevant North Carolina trip tickets to document your landings along with your response form.

To ensure that all funds available for assistance are disbursed to eligible program participants, no funds will be disbursed until the Division of Marine Fisheries resolves all landings disputes submitted in this program. The total amount of funds designated for individual assistance will be divided proportionally by percent among eligible licensed fishermen who elect to participate in the program, ultimately with the goal of exhausting all assistance.

Please complete the attached response form and W-9 form, and return it by January 4, 2019 in the enclosed self-addressed postage paid envelope. If you have any questions, please call Brandi Salmon at the Division of Marine Fisheries in Morehead City, NC at 1-800-682-2632 (toll-free in NC only) or (252) 726-7021.

Sincerely,

Stephen W. Murphey
Director

State of North Carolina | Division of Marine Fisheries
3446 Arendell Street | P.O. Box 769 | Morehead City, North Carolina 28557
252-726-9020
Form 2: Response form where the participant indicated their decision for the September phase.

Hurricane Florence Commercial Fishing Assistance Program
Response Form

Participant ID#
NAME
MAILING ADDRESS
CITY, STATE, ZIP CODE

Please check the appropriate box.

☐ I want to receive compensation from the Hurricane Florence commercial fishing assistance program and agree that my 2015–2018 landings for September, on record with the North Carolina Division of Marine Fisheries Trip Ticket Program, are accurate. I have included a completed State Of North Carolina Substitute W-9 Form.

☐ I want to participate in the Hurricane Florence commercial fishing assistance program but dispute the accuracy of my 2015–2018 landings for September as determined by North Carolina Division of Marine Fisheries. Enclosed are copies of North Carolina Trip Tickets to verify my landings and a completed State Of North Carolina Substitute W-9 Form.

☐ I do not want to participate in the Hurricane Florence commercial fishing assistance program.

Is the above mailing address your preferred mailing address? Yes ☐ No ☐
If not, make the corrections to your mailing address above.

Phone Numbers: Daytime Number: (__)________________________
Nighttime Number: (__)________________________

I verify that all information recorded above is true, accurate, and complete.

Signature: _______________________________ Date: ________

State of North Carolina | Division of Marine Fisheries
3441 Arendell Street | P.O. Box 769 | Morehead City, North Carolina 28557
252-726-7021
Form 3: Informational letter explaining the program to the participant for the October-November phase.

February 25, 2019

Dear Aaron Abbott,

Under recently enacted state law, commercial fishing assistance is being made available to commercial fishermen and shellfish harvesters for income losses due to harvest reductions sustained from Hurricane Florence. Commercial fishermen who are residents of North Carolina who held a valid, current Standard or Retired Standard Commercial Fishing License, or a Shellfish License for North Carolina Residents without a Standard Commercial Fishing License, during the months of October and/or November 2018 are eligible for compensation under this program.

A detailed report of your October and/or November landings for 2015–2018 is enclosed. You may be eligible for compensation based on these amounts.

Please complete the enclosed response form verifying your correct mailing address and phone number. Also, please complete and enclose the attached State of North Carolina Substitute W-9 Form if you are participating in the program. Failure to return to the Division of Marine Fisheries a completed and signed response form and W-9 by March 15th, 2019 shall be considered a decision not to participate in the Hurricane Florence commercial fishing assistance program. Please note, if you have already filled out a W-9 Form as part of this program you are not required to complete another W-9 form but still must send in your response form if you want to participate. If our landings records are in error, please provide copies of relevant North Carolina trip tickets to document your landings along with your response form.

The Division of Marine Fisheries will attempt to resolve all landings disputes submitted in this program before funds are disbursed. The total amount of funds designated for individual assistance will be divided proportionally by percent among eligible licensed fishermen who elect to participate in the program, ultimately with the goal of exhausting all assistance.

Please complete the attached response form and W-9 form (if applicable) and return it by March 15th, 2019 in the enclosed self-addressed postage paid envelope. If you have any questions, please call Brandi Salmon at the Division of Marine Fisheries in Morehead City, NC at 1-800-682-2632 (toll-free in NC only) or (252) 726-7021.

Sincerely,

Stephan W. Murphey
Director
Form 4: Response form where the participant indicates their decision for the October-November phase.

Hurricane Florence Commercial Fishing Assistance Program
Response Form

Participant ID#
FIRST MIDDLE LAST NAME
ADDRESS
CITY, STATE ZIP CODE

Please check the appropriate box.
NOTE: If you already filled out a W-9 form for September then you do not need to send another.

☐ I want to receive compensation from the Hurricane Florence commercial fishing assistance program and agree that my 2015–2018 landings for October and/or November, on record with the North Carolina Division of Marine Fisheries Trip Ticket Program, are accurate. I have included a completed State Of North Carolina Substitute W-9 Form.

☐ I want to participate in the Hurricane Florence commercial fishing assistance program but dispute the accuracy of my 2015–2018 landings for October and/or November as determined by North Carolina Division of Marine Fisheries. Enclosed are copies of North Carolina Trip Tickets to verify my landings and a completed State Of North Carolina Substitute W-9 Form.

☐ I do not want to participate in the Hurricane Florence commercial fishing assistance program.

Is the above mailing address your preferred mailing address? Yes ___ No ___
If not, make the corrections to your mailing address above.

Phone Numbers: Daytime Number: (___)________________________
Nighttime Number: (___)________________________

I verify that all information recorded above is true, accurate, and complete.

Signature: ____________________________________________ Date: ____________
June 11, 2019

Dear Sir/Ma’am,

Over the past several months, the state of North Carolina distributed over $11 million to commercial fishermen and shellfish harvesters to compensate for income losses due to harvest reductions sustained from Hurricane Florence. You are receiving this letter and one final check as a result of your participation in the Hurricane Florence Commercial Fishing Assistance Program. The fishing assistance program is coming to a close and the enclosed check to you, along with checks to other participating fishermen, represents the final disbursements which exhaust the original $11.6 million in state funding.

As with the disbursements for September and October/November, this check is based on each fisherman’s loss compared to the total loss across all participants in the program. Losses used in the calculation include September through November 2018. Thank you for participating in the Hurricane Florence Commercial Fishing Assistance Program and we thank you for your patience while this program was under way. If you have any questions, please call Brandi Salmon at the Division of Marine Fisheries in Morehead City, NC at 1-800-682-2652 (toll-free in NC only) or (252) 726-7021.

Sincerely,

[Signature]

Stephen W. Murphey
Director

Form 5: Informational letter explaining the program to the participant for the final disbursement phase.
**Form 6:** IRS W-9 form that participants were required to fill out to participate.

### Form W-9: Request for Taxpayer Identification Number and Certification

<table>
<thead>
<tr>
<th>Identification Number and Certification</th>
<th>Give Form to the requestor. Do not send to the IRS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.</td>
<td></td>
</tr>
<tr>
<td>Business name/disregarded entity name, if different from above</td>
<td></td>
</tr>
</tbody>
</table>

3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only one of the following seven boxes:

- Individual/sole proprietor or single-member LLC
- C Corporation
- S Corporation
- Partnership
- Trust/estate
- Limited liability company

Exempt payee code (if any)
Exemption from FATCA reporting code (if any)

Address (number, street, and apt. or suite no.). See instructions.
City, state, and ZIP code

Requester’s name and address (optional)

**Part I: Taxpayer Identification Number (TIN)**

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see How to get a TIN, later.

**Social security number**

**Or**

**Employer identification number**

**Part II: Certification**

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

**Future developments.** For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

**General Instructions**

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following:

- Form 1099-INT (interest earned or paid)
Office of the Governor
State of North Carolina

Roy Cooper
Governor

20301 Mail Service Center
Raleigh, N.C. 27699-0301

November 1, 2018

Mr. Wilbur Ross, Secretary
U.S. Department of Commerce
1401 Constitution Avenue NW
Washington, D.C. 20230

Dear Secretary Ross:

Hurricane Florence struck North Carolina on September 14, 2018. The powerful storm stalled over the Wilmington area resulting in unprecedented continuous rainfall for almost four consecutive days. Some coastal areas withstood the brunt of an implausible 20 plus inches of rainfall. Coupled with a strong storm surge, the storm caused historic and widespread flooding overwhelming significant portions of the North Carolina estuarine and ocean coastline.

This was the storm of a lifetime for many coastal communities. The damaging economic impact to the state’s fisheries was, and continues to be, significant. While state appropriations will begin to afford some limited initial relief, much more is needed. Federal fisheries disaster assistance can provide the means to a longer-term recovery that North Carolinian fishermen so desperately need. Therefore, I respectfully request that you declare a federal fisheries resources disaster as outlined in the Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. §§ 1861a and 1864, and the Interjurisdictional Fisheries Act, 16 U.S.C. § 4107.

Fisheries are an essential part of local coastal markets and contribute considerably to North Carolina’s economy. Behind North Carolina’s fragile strand of barrier islands lie shallow waters where the land and sea gradually merge forming estuaries, brackish swamps and mud flats that serve as nursery areas for shrimp, crabs, finfish and shellfish. Traditionally ranked in the top-10 seafood producing states, North Carolina has over 4,000 miles of shoreline and 2.9 million acres of marine ocean and estuarine waters. Latest estimates show that more than 6,000 licensed commercial fishermen and 1 million licensed recreational anglers enjoy the bounty of the state’s marine resources.

Location: The State Capitol Building, Raleigh, N.C. 27602
Phone: 919-814-2000
The scale of harm to recreational and commercial fisheries along the North Carolina coast from Hurricane Florence is devastating and puts those fisheries at clear risk of failure. Lost income from compromised fishing grounds, damaged or destroyed gear and vessels, power outages and other infrastructure disruptions have all further combined to amplify the impact. Water quality issues resulting from record rainfall run-off compounded the devastation causing suspension of shellfish harvesting in many affected areas. Serious disruption affecting future production in the harvestable biomass is anticipated.

Local recovery efforts are underway but additional resources and funding are desperately needed. State fishery managers are evaluating landing and other data to assess estimated revenue declines and evidence of economic harm. The State of North Carolina stands ready to provide any information that you need to assist you in your determination to declare a federal fishery resources disaster. I appreciate your timely consideration to this urgent request.

With kind regards, I am

Very truly yours,

[Signature]

Roy Cooper

RAC/sm
December 6, 2018

The Honorable Roy Cooper  
Governor of North Carolina  
Raleigh, NC  27699  

Dear Governor Cooper:

Thank you for your letter requesting a commercial fishery failure due to a fishery resource disaster caused by Hurricane Florence. Based on the National Oceanic and Atmospheric Administration’s National Marine Fisheries Service’s (NMFS) initial understanding of impacts due to Hurricane Florence on North Carolina fisheries under Section 312(a) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) and Section 308(b) of the Interjurisdictional Fisheries Act (IFA), I have determined that a commercial fishery failure due to a fishery resource disaster has occurred.

We will work with you and your communities to further estimate and assess Hurricane Florence’s impacts on your state’s fisheries and associated processing infrastructure. We will use these assessments to evaluate the need for fishery disaster assistance that cannot be met through other existing Federal relief programs.

This determination provides the basis for Congress to appropriate disaster relief funding under both the IFA and MSA. Should Congress appropriate funds for disaster assistance, NMFS will work with your state to develop a spend plan to assist with the recovery of North Carolina’s fishing industry and fishing communities. Additionally, eligible businesses and other entities in North Carolina may be able to access other loan/funding programs within the Department of Commerce (e.g., Economic Development Administration grants) or through other Federal relief programs (e.g., Small Business Administration loans).

If you have any further questions, please contact Michael Platt, Jr., Assistant Secretary for Legislative and Intergovernmental Affairs, at (202) 482-3663.

Sincerely,

Wilbur Ross
Hurricane Florence made landfall near Wrightsville Beach, NC on September 14th, 2018 as a Category 1 storm. The storm moved at a very slow speed, punishing sections of the coast over a day of hurricane or tropical storm winds of 90+ mph. The storm also dropped nearly three feet of rain over a four day period causing widespread flooding. Total damages were estimated to be $24 billion. 53 deaths were also attributed to the storm. (https://www.ncdc.noaa.gov/billions/events.pdf)

This Study
NOAA Fisheries, working with the North Carolina Division of Marine Fisheries and North Carolina Sea Grant, conducted a rapid appraisal of damage from Hurricane Florence through field, online and phone surveys throughout the state’s coast. A total of 934 businesses and individuals (out of 1,784 contacted) participated in the surveys. These estimates are extrapolated from information collected from respondents. Approximately a third of vessel owners reported damage to their vessels or gear, while land-located businesses such as seafood dealers (65%) and aquaculture operations (90%) were more likely to be impacted. Total estimated damages to vessels and businesses were approximately $38 million, with estimated lost revenues of $56.5 million.

Commercial and Recreational Fisheries
Commercial and recreational fisheries are an important economic driver of many North Carolina coastal communities. In 2017, North Carolina’s commercial fishing and seafood industry and recreational fishing sector had revenues of $373 million and directly employed 7,500 workers statewide.

Estimated Damages to Fishing Operations and Fishing-Related Businesses

<table>
<thead>
<tr>
<th>Operation / Business Type</th>
<th>Vessel / Facilities Damages*</th>
<th>Immediate Job Losses</th>
<th>Total Revenue Losses*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% Damaged</td>
<td>Total Damages</td>
<td></td>
</tr>
<tr>
<td>Commercial and Fishing Operations</td>
<td>38%</td>
<td>$18.8 million</td>
<td>2,933</td>
</tr>
<tr>
<td>Seafood Processors and Dealers</td>
<td>65%</td>
<td>$12.9 million</td>
<td>211</td>
</tr>
<tr>
<td>Aquaculture Operations</td>
<td>90%</td>
<td>$2.3 million</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>For-Hire &amp; Recreational Fishing Businesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>For-Hire Businesses</td>
</tr>
<tr>
<td>Bait and Tackle Shops</td>
</tr>
</tbody>
</table>

Total Estimated Damages* and Job Losses $38.0 million 3,500 $56.5 million

*Damage estimates do not reflect disaster relief businesses and individuals may have received from private insurance, disaster programs administered by other Federal agencies such as FEMA, SBA, and HUD, the State, or other nongovernmental entities.
Commercial Fishing and Seafood Businesses

The North Carolina commercial and seafood industry had revenues of $257 million in 2017 and directly employed 3,100 workers. The local commercial fishery sector, excluding dealers and processors, had revenues of $97 million and employed 2,100 workers.

Damages by Operation / Business Type

<table>
<thead>
<tr>
<th>Type</th>
<th>Summary</th>
<th>Estimated Damages**</th>
</tr>
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<tbody>
<tr>
<td>Commercial Fishing Operations</td>
<td>Commercial fishing operations were disrupted by the storm. The average commercial fisherman's loss was approximately $1,850 to vessels and gear with another $1,000 worth of damage to facilities. Fishermen in the ocean-adjacent counties from Carteret south were more likely (14%) to suffer damages than those in other areas (9%). It also took over a month for these areas to regain normal salinity and water clarity, leading to a halt in shellfish harvesting and most other inshore fisheries. The state's commercial landings records indicate a drop of $9.2 million in value in the three months after the storm in comparison to “normal” fall landings.</td>
<td>Vessels and Gear $10.8 M Facilities $6.0 M</td>
</tr>
<tr>
<td>Seafood Dealers and Processors</td>
<td>Seafood dealers in southern North Carolina, which experienced the brunt of the storm winds, incurred the most facility and equipment damage. Floodwaters repeatedly disrupted supply lines.</td>
<td>Facilities $5.1 M Seafood $3.4 M Equipment $2.0 M Pier / Dock $2.5 M</td>
</tr>
<tr>
<td>Aquaculture Operations</td>
<td>Aquaculture operations were surveyed statewide. As with the commercial fishing sector, the heavily polluted floodwaters from Florence's catastrophic rainfall led to near total losses of shellfish aquaculture products. Over half ($4.4 million) of the product loss was in Carteret County, which had the largest (25) number of affected operations.</td>
<td>Facilities $2.3 M Product $8.5 M</td>
</tr>
</tbody>
</table>

**M = million
For-Hire and Recreational Fishing Businesses

Saltwater anglers in North Carolina spent $1.5 billion on fishing trips, which directly supported 15,000 jobs. For-hire operations alone employed 800 workers.

The bait and tackle businesses and for-hire operations in North Carolina had combined revenues of $248 million and employed 4,700 workers in 2017.

![Image of damaged docks](damaged-docks-in-sea-level-north-carolina-photo-north-carolina-fisheries-association)

### Damages by Operation / Business Type

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<th>Estimated Damages**</th>
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| **For-Hire Businesses**     | Charter boat captains reported more losses from lost sales ($6.1 million) than physical damages ($4.6 million). The average charter captain reported almost $10,000 in unfulfilled and cancelled charters, as housing shortages made it difficult for clients to stay overnight along much of the coast. Water quality issues also made it difficult to fish for popular inshore gamefish like red drum. | Vessels and Gear $2.0 M  
Facilities $2.6 M |
| **Bait and Tackle Shops**   | Damage to bait and tackle shops was minimal, and reported losses were often covered by insurance.                                                                                                         | Facilities $0.2 M             |
| **Fishing Piers and Related Businesses** | Some 80% of the state's fishing piers suffered structural damage, with nearly all of the major damage (85%) coming from area below the Outer Banks. Piers reported over a half million dollars in lost sales, with the only completely unaffected facilities located north of Hatteras Island. | Bait and Seafood $0.0 M  
Equipment $0.1 M  
Pier / Dock $0.0 M |

**M = million**
Hurricane Florence estimated damages to North Carolina shellfish aquaculture operations.
Map: NOAA National Centers for Coastal Ocean Science and Coastal Aquaculture Siting and Sustainability

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>SHELLFISH OPERATIONS</th>
<th>FARM ACREAGE</th>
<th>PROPERTY DAMAGE</th>
<th>PRODUCT LOSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beaufort, Dare &amp; Hyde</td>
<td>5</td>
<td>24</td>
<td>$4,000</td>
<td>$119,300</td>
</tr>
<tr>
<td>Carteret</td>
<td>25</td>
<td>79</td>
<td>$414,100</td>
<td>$4,364,950</td>
</tr>
<tr>
<td>New Hanover</td>
<td>4</td>
<td>13</td>
<td>$21,800</td>
<td>$516,750</td>
</tr>
<tr>
<td>Onslow</td>
<td>13</td>
<td>71</td>
<td>$11,000</td>
<td>$654,200</td>
</tr>
<tr>
<td>Pamlico</td>
<td>4</td>
<td>34</td>
<td>$1,808,000</td>
<td>$2,470,000</td>
</tr>
<tr>
<td>Pender</td>
<td>6</td>
<td>18</td>
<td>$16,500</td>
<td>$221,475</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>62</strong></td>
<td><strong>263</strong></td>
<td><strong>$2,279,400</strong></td>
<td><strong>$3,466,015</strong></td>
</tr>
</tbody>
</table>

Crab traps waiting for the return of cleaner waters.
Photo: North Carolina Fisheries Association/Gary Cannon

Fish house damage in Sea Level, North Carolina.
Photo: North Carolina Fisheries Association