## SMALL Failure Management of North Carolina's shrimp fishery defies science.

North Carolina has the largest and most productive estuarine system of any state on the east coast. Estuarinedependent species account for more than 90 percent of the state's commercial fisheries landings and over 60 percent of the recreational harvest. The success and viability of these fisheries requires protection of important habitat areas on which these species rely for survival. North Carolina's existing nursery program provides important protections to larval and early juvenile populations that inhabit shallow, protected habitat areas. Later stage juveniles—those juveniles that have not yet reached adulthood and therefore have not spawned—lose habitat protection once they move into the sounds and ocean waters and are exposed to shrimp trawls and other fishing gear.

## North Carolina is the **only** state on the Atlantic and Gulf coasts that permits extensive trawling in inshore estuarine waters.

Shrimp trawl bycatch is the leading source of waste and finfish mortality in the state, and the fisheries most impacted by shrimp trawl bycatch are collapsing. On average, largescale trawls catch four pounds of juvenile finfish for every pound of shrimp harvested. The highest levels of bycatch in North Carolina are found in the Pamlico Sound, which is a highly productive nursery area for several species of finfish, including Atlantic croaker, spot, weakfish, and southern flounder, and other invertebrates such as blue crabs and horseshoe crabs. The majority of non-targeted fish caught as bycatch are juveniles that, as a result, die before they ever have the opportunity to spawn and reproduce.

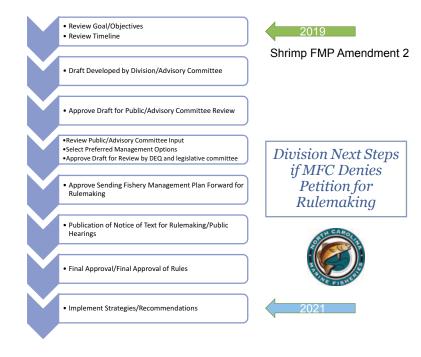
Over the past five years, the North Carolina Wildlife Federation has been intensely involved in shrimp trawl management to reduce bycatch and protect essential habitats, through two formal petitions for rulemaking. The Federation has provided numerous comments and technical suggestions to N.C. Division of Marine Fisheries (DMF) and the Marine Fisheries Commission (MFC) since its original Petition for Rulemaking was submitted to the MFC in November 2016.

In February 2017, the MFC granted the petition for rulemaking submitted to it by the Federation. However, the MFC failed to follow through on its obligations to initiate the rulemaking process at that time. In May 2019, the Federation submitted a second, narrower petition for rulemaking that we hoped the MFC could readily adopt and implement to support a productive shrimp trawl fishery and rebuild and conserve depleted finfish populations. The measures proposed in the petition were designed to achieve these goals by managing: (1) the areas open to shrimping; (2) the appropriate times when shrimp may be taken; and (3) the gear used to take shrimp. Taken together, these measures would ensure that shrimp trawling was conducted in a responsible manner that minimizes the bycatch of juvenile finfish species from estuarine waters. At its August 2019 meeting, the MFC discussed the Federation's second, more narrowed rulemaking petition, and voted to deny the petition. The MFC's primary stated justification for the denial was that it could better address the measures proposed during the forthcoming Shrimp Fisheries Management Plan (FMP) review process. Upon review and audit of the meeting discussions, the opposition by those commissioners —who eventually ended up voting against the petition—focused on process, timeframes, and additional public, stakeholder input exhaustively deferring to the FMP process. One commissioner made the final comments prior to a vote to reject the petition. The Commissioner pointed out that the MFC very specifically required the FMP planning process to address the major tenets of the discussion in February 2019, calling it a mandate for the

> MFC to consider the petition requests. He further commented that the FMP process invites broader review of all the important components more

easily. Other comments in support of rejection indicated the FMP process would be quicker and raised concerns over economic data. Most critically, there was no discussion of the scientific basis upon which the petition was filed.

Almost two years later, the MFC has now voted to send out draft Amendment 2 for public comment. This has not been the timely process that the MFC promised, or at least used as subterfuge, in denying our petitioning. Draft Amendment 2 both ignores several strategies proposed in the Petition and is inconsistent with the DMF's earlier positions on key proposals within the Petition. This draft plan raises serious concerns regarding science-based management and options that truly provide any progress towards meeting the goals of the FMP.



Currently, DMF's Draft Amendment 2 fails to provide options that achieve similar protections for the resource and industry as would have been provided by the measures proposed in the Federation's rulemaking petition. Additionally, the document itself is technically deficient, and much of the document's discussion of different management options appears to ignore best management practices, the best available science, and the precautionary principle. For example, the science on which DMF relies for its decision to not consider designating new nursery areas in the FMP process has been challenged and refuted by scientific reviews. The best science indicates that the occurrence of large concentrations of juvenile fishes vulnerable to shrimp trawls should be the sole criteria for protection in North Carolina. Other states without inshore shrimping (i.e., all other states) may be able to be more selective in their nursery designations, but the new, questionable criteria put forth by DMF do not fit the situation in North Carolina. Furthermore, while Draft Amendment 2 purports to present a suite of management options for consideration, from maintaining the status quo to completely closing the Pamlico Sound and other inshore habitats to shrimp trawling, DMF does not indicate

which of these options it is seriously considering for recommendation to the MFC.

Given the options provided in Draft Amendment 2, the Federation supports the total closure option as long as corridors in the Atlantic Ocean around inlets are included to greatly enhance the survival to offshore overwintering and spawning areas, thereby improving population biomass and sustainable fisheries yield. In the absence of a complete closure of the Pamlico Sound to shrimp trawling, or the adoption of the management measures detailed in the Federation's petitions for rulemaking, we would support a combination of management options listed in Draft Amendment 2 that may work together to reduce bycatch.

The Federation hopes that DMF will recommend management actions to better protect all inshore waters from trawling, rather than continue to unnecessarily delay protections. But history doesn't give us a ton of confidence this will occur. This is one more reason we believe that the management of marine fisheries would be best served under the authority of the N.C. Wildlife Resources Commission.

## My Dream of Abundant Waters by Rocky Carter



My dad was Cherokee Indian. He started taking me fishing when I was a little boy. We lived at the dead end of a dirt road, near High Point, and as a kid, I was free to roam the woods and sneak into ponds. The great outdoors was my entire world.

That world changed when I was 10 years old. We were visiting our rich cousins in Georgia. We knew they were rich because they had a basement instead of a crawl

space. I slept in their "dungeon" that night, and on the nightstand was a fishing magazine. Up until that moment, I thought there were 3 kinds of fish: bass, bream, and catfish. In my experience, none of those grew to more than a foot long. An article in that magazine told of tunas and marlins that weighed over 1,000 pounds. There were pictures of these giants.

At this point in my life, I have been fortunate to fish in 12 different states, and ironically, 12 countries. For my first 50 years, the very essence of fishing for me was honing my skills to catch game fish. Every day I fished, and every cast I made, was filled with hope.

Over the years, I've listened to the old-timers tell stories about how abundant our coastal waters were, especially in the 1960s and '70s. Now, I'm an old-timer. My hair is white. I have gout, an aching back, and sometimes I just don't have that pep in my step. And now, I fish more for fellowship. I've experienced, firsthand, declining fish stocks. But I still have my dreams. Thankfully, our generation is the first generation to recognize the need for conservation and preservation. Today, more than ever, we recognize the effect our footprint has had on our resources. But there still exists a perception that "there is enough fish for everybody." That is no longer true. Ignoring the facts does not change the facts. Science shows declining stocks in most coastal species. The reasons are many—years of coastal development, destruction of habitat, and the netting of juvenile finfish among them. Yet the options for our response are limited. Immediate measures must be taken. Fishery management is not about allocations or redistribution. It's about preserving what we have and managing for sustainability. Why would we not allow existing stocks to repopulate our sounds, our bays, our estuaries, and our oceans? Simply let these fish spawn.

Many of you have heard the old saying, "recognizing a problem is half of solving it." For fishery management in North Carolina, that is not turning out to be true. It is the proverbial hot potato in Raleigh that legislators don't want to hold.

Our stocks have suffered. No one group or organization is to blame. Everyone is doing what they love to do and need to do, which is to catch fish. With pressure coming from nets, trawlers, and technology, it is no wonder our fisheries are dwindling. Immediate measures have to be taken or our current fisheries will go the way of river herring.

I have an amazing, wonderful daughter. She is now 16 years old. Some day she may have a son or a daughter who loves to fish. I want her to tell her children that their grandfather educated himself on the issues facing our fisheries and tried to educate others. I want her to tell her children, "Your grandfather fought hard so that you might fish in abundant waters."

That's my dream, and always has been: A dream of abundant waters once again, not for me, but for you, your children, and your grandchildren.