



Bonnet Carré Testimony for Senate Commerce Committee

By: Joe Spraggins, Executive Director for The Mississippi
Department of Marine Resources

Background: The Bonnet Carré flood control structure was designed to relieve flood waters north of New Orleans. The structure consists of 350 gates which must be opened individually, and discharges are diverted directly into Lake Ponchartrain. These waters then leave Lake Ponchartrain and enter the western Mississippi Sound. When completed in 1931, the frequency of operation was estimated to be every five years (It has opened four times since 2016). In 2011 the Bonnet Carré Spillway was opened for 42 days leading to large fisheries impacts for Mississippi resulting in a disaster relief grant from the National Oceanic and Atmospheric Administration (NOAA). This year's openings totaled 123 days causing unprecedented impacts ranging from fisheries loss to tourism loss and negative media perception of the Mississippi Gulf Coast. The unique chemical signature of the Mississippi River was detected along the Coast and even into Alabama state waters. The excessive fresh water caused a Blue-Green algae bloom never documented before in the Mississippi Sound. The resulting bloom was first detected on June 12 and caused beach closures and contact advisories during all summer months. Loss of confidence in recreational opportunities by our visitors and seafood consumers is a direct effect of the 2019 Bonnet Carré openings and will last for years to come.

Documented Impacts to the Mississippi Sound: The Bonnet Carré opening of 2019 introduced trillions of gallons of continental river water into the Mississippi Sound which is much different from the small coastal rivers that make the Mississippi Sound productive. The Mississippi River water creates extremely low salinities, introduces agricultural and industrial compounds, extreme nutrient loads, sediment loads and invasive species. The decreased water quality has been so extreme that it has caused human health concerns to the level of closing beaches and issuing water contact advisories that are still in effect today. Mississippi's seafood industry has seen significant impacts as well. Documented losses from the 2019 openings of the Bonnet Carré Spillway include:

- Oyster mortality estimated greater than 95% statewide
- Brown Shrimp landings down 82%
- Blue Crab landings down 52% for Hancock county
- Habitat impacts are still being documented by our scientists along with USM focusing on:
 - Benthic community shifts (all the organisms that live in the sand and mud)
 - Seagrass loss (loss of saltwater grasses because of decreased salinity)
 - Oyster reef loss (because of sediment the reefs cannot produce oysters)
- Finfish landings are still being determined (due to displacement and reproductive impacts)
- Commercial, Charter, and Recreational losses are still being determined
- Bait shop incomes are down 65% from the prior year
- Seafood processors incomes are down 62% from the prior year's summer months
- Seafood markets monthly sales are down 20% from the prior year's monthly sales
- Tourism revenue loss include:
 - Revenue Per Available Rooms is down 18% from the prior year
 - Charter trip incomes are down 27% from the prior year
 - Boat rentals down 14% from the prior year
 - Sporting goods store sales are down 35% from the prior year
 - Beach vendors are one of the groups that have been directly impacted the most because of the resulting harmful algal blooms and water contact advisories
 - \$95,000-\$256,000 losses documented by individual vendors (greater than 90% compared to the prior year)
 - Beach vendors season is from March-October of each year with no income outside of the season

Short-term Consequences: These negative impacts caused by the 2019 Bonnet Carré openings have created severe issues within our fishing fleets and tourism dependent businesses. Many of these individuals and groups are at risk of losing the ability to attain lending services that are so important for small businesses and individual fishermen and women. The culture and citizens of our state are dependent upon the Mississippi Sound and without viable incomes, I fear that our fishing fleets will move to other parts of the Gulf. In other areas of the world where fleets are displaced by disasters, they rarely return causing industrial and cultural losses. I fear this is currently happening in Mississippi, and it breaks my heart.

Long-term Consequences: Unfortunately, the long-term impacts are largely unknown and difficult to quantify because events of this magnitude have never occurred. This makes biological modeling difficult and production models almost impossible. Evidence of past events have shown of age classes of important fish species being absent and not contributing to future reproduction. It is important that these future losses are considered when evaluating the scope of this disaster. Excessive sedimentation on the oyster reefs caused great damage, and oyster mortality can take five years or longer to recover. Seagrass species shifts are currently being documented which have large influences on many important finfish species nursery ground production and viability. Introductions of invasive species from the Mississippi River Basin can displace native species and alter ecosystems for the foreseeable future.

Need for Relief: Federal legislation is the most impactful route such as Senator Wicker's Fishery Failure: Urgently Needed Disaster Declaration ACT (FUNDD). This legislation would reform NOAA's Fishery Resource Disaster Relief program, making improvements to provide fishermen with disaster relief quickly. Our specific need for relief as a state exists in three distinct forms with the first being short term assistance and last two in the form of long-term assistance for marine resource restoration and seafood promotion.

1. Short term relief is desperately needed for the direct assistance to our fishermen and small business owners to be able to retain their harvest efforts and tourism services. When someone's way of life is so drastically threatened, it is urgent that we direct our efforts into retaining them and our culture. It is difficult to envision our Gulf Coast without these incredible citizens that contribute to our culture and passion. People that visit the Mississippi Gulf Coast can go anywhere they want; our citizens, culture and nature bring these visitors here and all of that was threatened this year.
2. Long term relief is needed for restoration of our marine resources. Restoration projects ranging from oyster clutching, oyster seeding, shrimp/crab habitat recovery, and finfish stock enhancement are needed. In 2011, this type of assistance was granted and focused on oysters, and blue crab. This year's opening has had a much larger impact and similar relief grants are needed with additional focus on all our economically and recreationally important species.
3. The second-long term relief type that is needed involves seafood promotion with intent to regain consumer confidence in Mississippi Seafood. After the BP oil spill, a great Gulf wide effort was launched to revive the perception of Gulf Seafood. This unfortunate disaster will impact Mississippi seafood perception directly. International stories were done by the media showing our closed beaches and green water. Seafood markets are highly competitive on a regional level and only a long-term promotion campaign will assist in returning confidence to the public.

Thank you for inviting me to speak here today and share the events that have affected my state so drastically. I close by formally requesting the Department of Commerce grant Mississippi's request for a federal fishery disaster.