DETERMINATION OF COMMERCIAL FISHERY FAILURES
AFFECTING THE STATE OF NORTH CAROLINA

Between September 5 and September 16, 1999, the State of North Carolina was impacted directly by Hurricane Dennis and then Hurricane Floyd. Both storms caused significant physical damage to the nearshore marine environment and caused a severe decrease in salinity and temperature in coastal waters from torrential rains. These impacts directly affected commercial fishing in the waters off North Carolina. The North Carolina Division of Marine Fisheries contacted the National Marine Fisheries Service (NMFS) Southeast Regional Office, seeking a determination of commercial fishery failure from the Secretary of Commerce and authorization of financial assistance pursuant to Section 312(a) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA).

Section 312(a) of the MSA, 16 U.S.C. 1861a, authorizes the Secretary of Commerce at his discretion or at the request of a Governor to determine whether there is a commercial fishery failure due to a fishery resource disaster as a result of:

(A) natural causes;
(B) man-made causes beyond the control of fishery managers to mitigate through conservation and management measures; or
(C) undetermined causes.

Finding of a fishery resource disaster

The North Carolina Division of Marine Fisheries provided the following information based upon historic data on landings to support the finding that a fishery resource disaster has occurred. The white shrimp fishery will lose approximately 4.5 million pounds of shrimp from displacement or death due to low salinity and lower temperatures. The blue crab fishery will lose about 3 million pounds of crabs due to death or displacement from low salinity. In addition, approximately 80,000 crab traps valued at $2 million were destroyed or lost during the storms. An estimated 100,000 bushels of oysters and scallops will be lost because beds were destroyed or silted over from intense wave action. The inshore flounder fishery will lose up to 75,000 pounds of flounder due to flounder displacement from low salinity waters. It is estimated that the commercial snapper/grouper fishery will lose 550,000 pounds of snapper and grouper due to
these species moving out of nearshore waters where the salinity is greatly reduced. And due to the closure of numerous inlets and displacement of target species, it is estimated that the headboat and charterboat operators will lose approximately 1500 trips (10 trips per boat for 150 boats).

Therefore, I find that a fishery resource disaster occurred that significantly reduced the number of commercially harvestable white shrimp, blue crabs, oysters and scallops, inshore flounder, and snapper and grouper in waters off North Carolina.

**Cause of the fishery resource disaster**

The fishery resource disaster is due to Hurricanes Dennis and Floyd which are natural causes. Hurricane Dennis lashed the North Carolina coast for several days before making landfall near Cape Hatteras on September 5, 1999. Hurricane Dennis dumped 16 to 18 inches of rain on coastal areas of North Carolina and up to 75 miles inland. Hurricane Floyd, a strong Category 4 storm packing 135 mile-an-hour winds, struck North Carolina on September 15, 1999, between Wilmington and Topsail Island. Up to 24 inches of rain fell in the path of this hurricane, and high winds and rain affected the State more than 100 miles inland. The high winds from both storms caused a large surge and violent breaking waves in the nearshore area. The intense rainfall caused the salinity of marine waters to approach zero. The effects of the hurricanes continue as flooding from rains further inland moves to the coastal areas. This flooding is the worst on record for North Carolina. The effects from the heavy rains and flooding can be detected up to 4 miles offshore at the present time.

**Extent of the commercial fishery failure**

Commercial fishery failures occurred as the result of severe losses in several fisheries from the effects of Hurricanes Dennis and Floyd. The losses include 4.5 million pounds of white shrimp with a value of $8 million; $3 million in lost revenue from the death or displacement of 3 million pounds of blue crab; $2 million worth of crab traps; 100,000 bushels of oysters and scallops valued at $2.5 million; 75,000 pounds of flounder worth $1.5 million; 550,000 pounds of snapper and grouper valued at $500,000; and 1500 charter boat trips worth $1.5 million. The total loss of $19 million in commercial fishery revenues constitutes a commercial fishery failure.
Determination

Based on this information, under Section 312(a) of the Magnuson-Stevens Fishery Conservation and Management Act, I have determined that in September 1999 the State of North Carolina suffered commercial fishery failures due to a fishery resource disaster as a result of natural causes.

Penelope D. Dalton
Assistant Administrator for Fisheries

SEP 20 1999
Date