



Stock Status Of Important Coastal Fisheries In North Carolina 2010

Species and Stock	Status					
	Viable	Recovering	Concern	Depleted	Unknown	Comments
Bass, Black Sea						
North of Hatteras						The stock is not overfished and overfishing is not occurring. However, this is a data-poor stock and there is significant uncertainty associated with the natural mortality estimate, the model input parameters, and managing a protogynous species (i.e., individuals change sex from female to male).
South of Hatteras						The stock is under a federally managed rebuilding plan which went into place in 2006. The rebuilding plan should end overfishing and rebuild the stock by 2017.
Bass, Striped						
Albemarle Sound and Roanoke River						The N.C Estuarine Striped Bass FMP is currently being reviewed. The Advisory Committee for the Albemarle/Roanoke stock has been appointed and is holding meetings. The approved, outside peer-reviewed stock assessment with data through 2008, indicates the stock is not undergoing overfishing and overall biomass is high.

<p>Atlantic Ocean Migratory Stock</p>					<p>Based on results of the 2009 update stock assessment, Atlantic coast striped bass are not overfished and overfishing is not occurring.</p> <p>The model estimates that the resource remains at a high level with female spawning stock biomass well above the target level. While biomass estimates have remained relatively stable from the continued growth of previous strong cohorts, stock abundance has declined since 2004, although there was a small increase from 2007 to 2008.</p>
<p>Central/Southern</p>					<p>Stocks are much lower than historical levels. Despite stocking efforts, there are few mature fish on the spawning grounds. Analysis of data collected on the spawning grounds indicates that the stock is being overfished. The N.C. Marine Fisheries Commission approved the FMP in May 2004. The two unresolved issues remaining from the 2004 FMP, large mesh gill net discards and recreational creel limits, were addressed in 2008 through proclamation and regulation. A revision of the N.C. Estuarine Striped Bass FMP is currently underway.</p>
<p>Bluefish</p>					<p>The Atlantic stock of bluefish is not overfished and is not experiencing overfishing. The Bluefish Technical Monitoring Committee continues to work on improving and refining bluefish age data and the bluefish stock assessment.</p>
<p>Catfishes (A)</p>					<p>Independent and dependent sampling began March 2004 to fulfill data/research needs for up coming FMP.</p>

Croaker, Atlantic						A benchmark stock assessment was conducted in 2010. The ASMFC cautionary trigger exercise was not performed in 2009 since a stock assessment was scheduled for the following year. In North Carolina commercial landings have increased 5.9% from 2008, but are still below the 10-year average. This is a recruitment-driven stock where abundance fluctuates in response to large year classes.
Dolphin						SAFMC plan approved in 2004.
Drum, Red						Overfishing is not occurring. A new stock assessment completed in 2009 by the Atlantic States Marine Fisheries Commission continues to indicate that current regulations have been successful.
Eel, American						Current stock status for American eel is poorly understood due to limited and non-uniform data collection efforts across its range. Reliable indices of abundance of this species are scarce. Stock status is still unknown.
Flounder, Southern						Stock is overfished and overfishing is occurring based on the 2009 stock assessment. A North Carolina FMP was approved and management measures implemented in 2005. Development of Amendment 1 to the FMP is currently underway.
Flounder, Summer						Overfishing is no longer occurring and no longer overfished.
Grouper, Gag						The stock is not overfished but overfishing is occurring. The federally managed plan is restricting harvest to end overfishing. The current regulations should enable biomass of the stock to rebuild above the biomass at MSY.

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Herring, River (A)						
Albemarle Sound						The N.C. Marine Fisheries Commission implemented a no-harvest provision for commercial and recreational fisheries in joint and coastal waters of the state, beginning with the 2007 season. Current research is being conducted by the NCDMF in the Albemarle Sound area to re-evaluate spawning habitat, expand juvenile sampling, and monitor the Chowan River adult spawning stock. Amendment 2 to the ASMFC Shad and River Herring FMP prohibits commercial and recreational fisheries from state waters coast wide beginning January 1st, 2012 unless sustainability is demonstrated through a state-specific management plan that must be developed and submitted by January 1, 2010.
Other Areas						No current sampling program.
Kingfishes (A)						The recently completed FMP indicated a healthy age structure in the stock along with increasing trends in fishery independent and dependent abundance indices.
Mackerel, King						Based on the 2008 stock assessment, the South Atlantic king mackerel stock is not overfished. It is uncertain whether overfishing is occurring; however, if it is, it is occurring at a low level.
Mackerel, Spanish						The Spanish mackerel stock in the South Atlantic is not undergoing overfishing; however, the 2008 stock assessment model and underlying data are insufficient to make a determination on whether or not the stock is overfished.

<p>Menhaden, Atlantic</p>					<p>Based on the 2010 benchmark stock assessment, Atlantic menhaden are not overfished nor is it experiencing overfishing but shows signs of concern. The ASMFC Atlantic menhaden board has tasked the Technical Committee to develop alternative reference points.</p>
<p>Monkfish</p>					<p>Based on revised biomass reference points, NMFS no longer considers the Northern or Southern stocks overfished. The biomass indexes for both stocks are above the minimum biomass threshold and biomass target index.</p>
<p>Mullet, Striped</p>					<p>The stock is not overfished. Landings for 2009 were within management threshold limits. Historically, the commercial fishery has had sustained landings similar to current levels.</p>
<p>Perch, White</p>					<p>Independent and dependent sampling began March 2004 to fulfill data/research needs for up coming FMP.</p>
<p>Perch, Yellow</p>					<p>Significant increase in effort and landings since 1991. Fish are targeted during the winter and early spring during spawning within specific river systems.</p>
<p>Reef Fish (B)</p>					<p>Of the 73 species (including black sea bass south of Cape Hatteras) in the SAFMC unit, 17 are considered overfished.</p>

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Scup						The 2009 updated assessment indicates that the stock is not considered overfished and is not currently experiencing overfishing. Greatly improved recruitment and low fishing mortality rates have occurred since 1998. This stock is no longer considered a data-poor stock.
Shad, American						The 2007 ASMFC coast-wide stock assessment concluded that the Albemarle Sound area stocks were stable, but well below historical levels and the stock status of the other systems in North Carolina were unknown. The assessment also indicated that the majority of stocks along the east coast are at all-time lows and continue to decline despite current management efforts. In response to the 2007 stock assessment ASMFC approved Amendment 3 to the Shad and River Herring FMP in February 2010, which requires states to close commercial and recreational American shad fisheries that are not sustainable by January 1, 2013.
Shad, Hickory						Although commercial landings increased significantly in 2009, they still remain slightly below the 10-year average. The two Amendments to the Shad and River Herring FMP that have recently been approved by the ASMFC do not directly address hickory shad. The NCDMF has not conducted any directed sampling since 1993.

Sharks					The ASMFC has developed a Coastal Shark FMP. Recent assessment results indicate great uncertainty about the various shark species, their current status is of concern because of the overfished status of sandbar shark, shortfin mako shark, and blacknose shark.
Spiny Dogfish					Spiny dogfish are currently managed under the joint MAFMC and NEFMC FMP in federal waters (3-200 miles) and the ASMFC Spiny Dogfish Interstate FMP in state waters (0-3 miles). The 2009 Transboundary Resource Assessment Committee (TRAC) assessment update indicates that the spiny dogfish stock is considered to be rebuilt.
Spot					Although recreational landings decreased in 2009 and the commercial catch increased from a historic low in 2008, the juvenile abundance index decreased. Commercial landings in 2009 remain less than half of 2004 landings.
Spotted Seatrout					The 2009 N.C. spotted seatrout stock assessment indicated that the stock in North Carolina and Virginia has been overfished and overfishing has been occurring throughout the entire 18-year time series (Jensen 2009). Cold stun events appear to have a large influence on population dynamics with winter cold shock cited as a primary factor in local and coastwide declines.
Sturgeon, Atlantic					ASMFC is responsible for managing this species and considers the stocks to be depleted along the Atlantic coast. Coast-wide prohibition on possession.

Weakfish					<p>The weakfish stock along the Atlantic coast is currently at a level of low abundance. Coast-wide landings are at their lowest levels on record. The most recent assessment indicates that the cause is likely due to factors other than fishing mortality. ASMFC has set strict harvest limits in response to the decline in an effort to aid in stock recovery.</p>
Shellfish and Crustaceans					
Clam, Hard					<p>Based on the best available indicators, harvest levels in most areas appeared relatively constant in recent years. Amendment 1 of the FMP was completed in 2008. Data limitations prevent DMF from conducting a hard clam stock assessment and calculating sustainable harvest.</p>
Oyster, Eastern					<p>Concern status due to long-term decline caused by over harvesting and habitat disturbances. Sampling data shows DERMO has declined in recent years and commercial landings have shown some improvement. Recreational landings are unknown.</p>
Scallop, Bay					<p>Fishery-independent sampling occurred for the first time in areas south of Bogue Sound and showed improvements in some areas in 2009. Target indexes were established from fishery-independent data collected before the red tide event in 1984 and 1985 in Core, Back, and Bogue sounds to determine re-opening the fisheries. Environmental disturbances and predation may still limit the spawning stocks to maintain the population in some areas.</p>

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Crab, Blue						<p>Blue crabs continue to support North Carolina's most valuable commercial fishery; topping the list for overall pounds harvested. Landings for 2009 declined slightly, but are still above low levels observed in 2005-2007. Again, the Albemarle Sound area accounted for the majority of the landings (67%). Significantly reduced landings of hard blue crabs for 2000-2002 and 2004-2007, following the historically record high landings observed during 1996-1999, have caused increased industry concern for the health of the resource and fishery. Harvests from the Pamlico/Core sounds and tributaries continue to remain significantly below historical contribution levels.</p>
Shrimp(C)						<p>Shrimp are the second-most valuable commercial fishery in North Carolina. There are three species — brown, pink and white — that contribute to the landings. Shrimp are an annual crop and the stocks are considered viable. In 2009 there were 5.4 million pounds of shrimp landed which was worth 8.5 million dollars. This was less than the ten-year average, but it is common for annual crops to have large fluctuations in their abundance.</p>
Totals	10	4	11	6	8	

(A) Catfishes includes 5 species, Kingfishes (Sea Mullet) includes 3 species, and there are two species of river herring. (B)The reef fish group includes about 75 species, while there are more than 40 species of sharks. Within these groups, individual species range from Viable to Overfished. The status indicated is for the group as a whole. (C)Shrimp consists of 3 species - brown, pink, and white.