

Stock status of important coastal fisheries in North Carolina, 2009

Species and Stock	Status					Comments
	Viable	Recovering	Concern	Depleted	Unknown	
Bass, Black Sea						
N. of Hatteras						The stock is not considered overfished but is currently experiencing overfishing. Action will need to be taken to reduce the fishing mortality. This is a data poor stock and there is significant uncertainty associated with managing a protogynous species (i.e., individuals change sex from female to male).
S. of Hatteras						Overfished south of Hatteras, based on SAFMC assessment.
Bass, Striped						
Albemarle-Roanoke						The North Carolina Estuarine Striped Bass FMP was approved in May 2004 to manage a recovered stock. Revision of the current FMP began in July 2008. Currently the stock assessment is being updated with data through 2008.
Atlantic Ocean Migratory Stock						ASMFC is currently managing under Addendum I to Amendment 6 to the Interstate Fishery Management Plan for Atlantic Striped Bass. Addendum I addresses the issue of striped bass discard mortality in all sectors of the striped bass fishery. For more information about the status of the Atlantic Coastal Migratory stocks visit the ASMFC website at www.asmfc.org .
Central/Southern						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. A management plan was approved in May 2004. The two unresolved issues remaining from the 2004 FMP, large mesh gill net discards and recreational creel limits, have been addressed through proclamation and regulation. The N.C. Estuarine Striped Bass FMP will undergo revision starting in July 2009.
Bluefish						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 the bluefish stock assessment.
Catfishes (A)						Independent and dependent sampling began March 2004 to fulfill data/research needs for up coming FMP.
Croaker, Atlantic						The previous assessment for the mid-Atlantic region showed the stock was not overfished and overfishing was not occurring. Using the ASMFC cautionary trigger for croaker to note when the most recent year's commercial or recreation landings are less than 70% of the previous two year's average landings, this trigger would have been met for the 2008 mid-Atlantic recreational harvest, but not for the commercial. However, in North Carolina commercial landings have dropped each year since 2003, with 2008 being the lowest since 1995.
Dolphin						SAFMC plan approved in 2004.
Drum, Red						The most recent stock assessment with data through 2005 indicates that overfishing is no longer occurring on the red drum stock in North Carolina. A new assessment is currently under development through the ASMFC and results will be available in the fall of 2009.
Eel, American						Current stock status for American eel is poorly understood due to limited and non-uniform stock assessment efforts and protocols across the range of the species. Reliable indices of abundance of this species are scarce. Stock status is unknown, with a coast wide assessment planned for 2009-2010.
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.

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Grouper, Gag						According to the latest stock assessment (2006) from SAFMC, gag is experiencing overfishing, but is not overfished.
Herring, River (A)						
Albemarle Sound						The MFC, through Amendment 1 of the 2007 NC River Herring FMP, 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 DMF in the Albemarle Sound area to re-evaluate spawning habitat and assess potential blockages to historical spawning areas. DMF continues to monitor the Chowan River adult spawning stock utilizing a pound net survey, and has expanded juvenile sampling in the Albemarle Sound area. Amendment 2 to the ASMFC Shad and River Herring FMP, approved in May 2009, prohibits commercial and recreational fisheries from state waters beginning January 1, 2012 unless sustainability is demonstrated through state-specific management plans. Sustainable management plans 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.
Menhaden, Atlantic						The stock is not overfished, nor is overfishing occurring. Commercial landings have decreased because there is no longer a reduction fishery in North Carolina.
Monkfish						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.
Mullet, Striped						The stock is not overfished. Landings for 2008 were within management threshold limits. Historically, the commercial fishery has had sustained landings similar to current levels.
Perch, White						Independent and dependent sampling began March 2004 to fulfill data/research needs for up coming FMP.
Perch, Yellow						Significant increase in effort and landings since 1991. Fish are targeted during the winter and early spring during spawning within specific river systems.
Reef Fish (B)						Of the 73 species (including black sea bass) in the SAFMC unit, 17 are considered overfished.
Scup						The 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						Commercial landings decreased significantly in 2007 and remain well below the 10 year average. The 2007 ASMFC coast wide stock assessment concluded that Albemarle Sound area stocks were stable, but well below historical levels and stock status of other systems in NC 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. Amendment 3 to the ASMFC Shad and River Herring FMP is being developed and deals directly with American shad.
Shad, Hickory						Although commercial landings increased significantly in 2008, they remain well below the 10-year average. No juvenile hickory shad were captured in the 2008 seine survey and only 1 was captured in 2007. Current Amendments being developed to the ASMFC Shad and River Herring FMP do not directly address hickory shad. The DMF has not conducted any directed sampling since 1993.

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Sharks						The ASMFC is developing a Coastal Shark FMP. Recent assessment results indicate great uncertainty about the various shark species, but the status is concern because of the overfished status of sandbar shark, the target species.
Spiny Dogfish						MA/NEFMC plan for federal waters and ASMFC plan for state waters. The 2006 benchmark assessment indicates that the stock is not overfished, and overfishing is not occurring. Continued decrease in female abundance, imbalance in sex ratio, and low estimates of recent recruitment are highlighted concerns for the current stock status.
Spot						Although recreational landings decreased in 2008 and the commercial catch was a historical low, the juvenile abundance index increased. The decreased commercial landings may be attributed to environmental factors, decreased fishing effort or a combination of both.
Spotted Seatrout						The stock assessment for NC's spotted seatrout (1991-2006) is currently being updated with data through 2008 and is expected to be completed in the summer of 2009. The Fishery Management Plan for spotted seatrout is currently being developed and expected to be completed by early 2010.
Sturgeon, Atlantic						ASMFC is responsible for managing this species and considers the stocks to be depleted along the Atlantic coast. Coastwide prohibition on possession.
Weakfish						The weakfish stock along the Atlantic coast is currently at a level of low abundance. Coastwide 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 landings limits in response to the decline in an effort to aid in stock recovery.
Shellfish and Crustaceans						
Clam, Hard						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.
Oyster, Eastern						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.
Scallop, Bay						Fishery independent sampling occurred for the first time in Pamlico Sound and showed improvements in Bogue, Back and Core Sounds later in 2008. Target indices 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.
Crab, Blue						Blue crabs continue to support North Carolina's most valuable commercial fishery; topping the list for overall pounds harvested. Landings for 2008 rebounded from the low levels observed in 2005-2007. However, the 2008 fishery yielded the fifth lowest landings and value during the 10-year period, 1999-2008. 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.
Shrimp(C)						Annual Stock. Abundances may be greatly affected by environmental conditions
Totals	9	5	12	6	7	

(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.