

2008 Status of U.S. Fisheries



NATIONAL
MARINE
FISHERIES
SERVICE

Science, Service, Stewardship

A Message from James W. Balsiger, Ph.D.
NOAA's Acting Assistant Administrator for
Fisheries

Status Determination by Region

Changes in Stock Status for 2008



NATIONAL MARINE FISHERIES SERVICE

2008 REPORT TO CONGRESS

THE STATUS OF U.S. FISHERIES

As mandated by the Sustainable Fisheries Act amendment to
the Magnuson-Stevens Fishery Conservation and Management Act of 1996



May, 2009

U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Office of Sustainable Fisheries

A Message from the Acting NOAA Assistant Administrator for Fisheries

NOAA's National Marine Fisheries Service's Report on the status of the U.S. fisheries for 2008

Science – Service - Stewardship



I am pleased to present the 2008 report on the status of U.S. marine fish stocks. The report shows that three stocks are no longer subject to overfishing, three stocks have increased in biomass and are no longer overfished, and four stocks have fully rebuilt. However, four stocks have been found to be subject to overfishing and four stocks have been determined to be overfished. In all, 41 stocks are subject to overfishing and 46 stocks are overfished. Some of these stocks are managed under international agreements and action by the international community is critical to ending overfishing for these stocks.

NMFS recognizes the importance of ensuring that the fishery resources under our management are healthy and productive. The commercial seafood industry and recreational saltwater fishing provide our Nation with food, jobs, and other benefits that we want to continue for future generations when we end overfishing. We continue to work hard with the eight regional Fishery Management Councils (Councils) to achieve the goals of ending overfishing, rebuilding our fish stocks to sustainable levels, and ensuring the benefits of productive stocks for future generations.

Results

Overfishing

- 41 stocks are subject to overfishing
- 210 are not overfished
- 46 stocks are overfished
- 153 are not
- 4 are rebuilt

Much progress has been made over the past several years in increasing the sustainability of our stocks. This progress is indicated by the Fish Stock Sustainability Index (FSSI). The FSSI measures the performance of key stocks and increases as we conduct additional stock assessments, end overfishing, and rebuild stocks to the level that provides maximum sustainable yield. This index increased from 357.5 in 2000 to 555.5 in 2008.

In addition, in January 2009 we published guidance for implementing annual catch limits in all fisheries as required under the Magnuson-Stevens Fishery Conservation and Management Act. The guidance accounts for scientific uncertainty in estimating catch limits for a stock, and calls for strong accountability measures to prevent annual catch limits from being exceeded and to address such a situation quickly should it occur. We believe these guidelines lay a strong foundation for ending overfishing and allowing stocks to rebuild. This report briefly discusses the possible implications of the guidance on rebuilding.

In closing, it is important to note that the majority of our domestic assessed fish stocks are either not subject to overfishing (84%) or not overfished (77%). We appreciate the support of Congress, stakeholders, and constituencies as we work to increase our knowledge of unassessed stocks, rebuild fisheries and maintain healthy resources for the benefit of the Nation.

A handwritten signature in black ink, appearing to read "J.W. Balsiger".

James W. Balsiger, Ph.D.

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Executive Summary

The Magnuson-Stevens Fishery Conservation and Management Act requires that NOAA's National Marine Fisheries Service (NMFS) report annually to Congress and the eight Regional Fishery Management Councils (Councils) on the status of fisheries (Sec. 304(e)(1)). This report fulfills that requirement.

The information in this report was generated by the NMFS' regional offices and science centers based on the most recent stock assessments as of December 31, 2008. Status determinations are generally made during a formal review of a scientific stock assessment using the best available scientific information and status determination criteria specified in a fishery management plan.

Stocks discussed in this report are characterized under two broad categories: (1) subject to overfishing and (2) overfished. A stock that is subject to overfishing has a fishing mortality (harvest) rate above the level that provides for the maximum sustainable yield. A stock that is overfished has a biomass level below a biological threshold specified in its fishery management plan.

For 2008, NMFS reviewed 531¹ individual stocks and stock complexes and made determinations of both overfishing and overfished status for 191 stocks and complexes; an additional 68 have either an overfishing or overfished determination.

Two hundred fifty-one stocks or stock complexes have known overfishing determinations: 210 (84%) are not subject to overfishing and 41 (16%) are subject to overfishing. These percentages are a slight improvement from last year's report, in which 17% were subject to overfishing and 83% were not. This slight improvement in the percentages reflects new assessments which have added to the number of stocks with known overfishing determinations.

Summary of Changes

Subject to overfishing, 2008: 41 (16%)
Subject to overfishing, 2007: 41 (17%)

Overfished, 2008: 46 (23%)
Overfished, 2007: 45 (24%)

Three stocks are no longer subject to overfishing: *finetooth shark – Atlantic*, *Summer flounder - Mid-Atlantic Coast*, and Hawaiian Archipelago Bottomfish Multi-species Complex. Four stocks have been listed as subject to overfishing in 2008: *thorny skate - Gulf of Maine*, *pink shrimp – Gulf of Mexico*, *blacknose shark – Atlantic*, and *shortfin mako – Atlantic*.

One hundred ninety-nine stocks have known overfished determinations: 153 (77%) are not overfished² and 46 (23%) are overfished. These percentages represent a slight improvement from last year's report, in which 24% were

¹ Compare to 528 in the 2007 report: 5 Alaska scallop stocks were added; Atlantic red drum was removed, and South Atlantic and Gulf of Mexico mutton snapper stocks were combined into one stock, for a net increase of 3 stocks.

² Number includes 5 stocks that are approaching an overfished condition.

overfished and 76% were not. This slight improvement in the percentages reflects new assessments which have added to the number of stocks with known overfished determinations.

Three stocks are no longer overfished: *monkfish – North*, *monkfish – South*, and *summer flounder – Mid-Atlantic Coast*. Two stocks have become overfished: *smooth skate – Gulf of Maine* and *blacknose shark – Atlantic*. Two stocks, previously listed as unknown, have been determined to be overfished: *red snapper – South Atlantic*, and *gray triggerfish – Gulf of Mexico*.

Four stocks have fully rebuilt to 100% of their B_{MSY} levels: *monkfish – North*, *monkfish – South*, *bluefish – Atlantic Coast*, and *king mackerel – Gulf of Mexico*. Management of two additional stocks has resulted in biomass levels of at least 80% of their maximum sustainable levels: *Hawaiian Archipelago Bottomfish Multi-species Complex* and *yellowfin tuna – Western Atlantic*.

NMFS measures progress towards the sustainability of our nation's fisheries through the Fish Stock Sustainability Index (FSSI). The FSSI measures the performance of key stocks and increases as additional assessments are conducted, overfishing is ended and stocks rebuild to the level that provides maximum sustainable yield. This index increased from 357.5 in 2000 to 555.5 in 2008, see Figure 1 below. While change from one year to the next may not be dramatic, the 55% increase in the FSSI in 8 years represents significant progress in improving our knowledge of stock status and sustainably managing our fisheries. More information about the FSSI can be found at:

<http://www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm>.

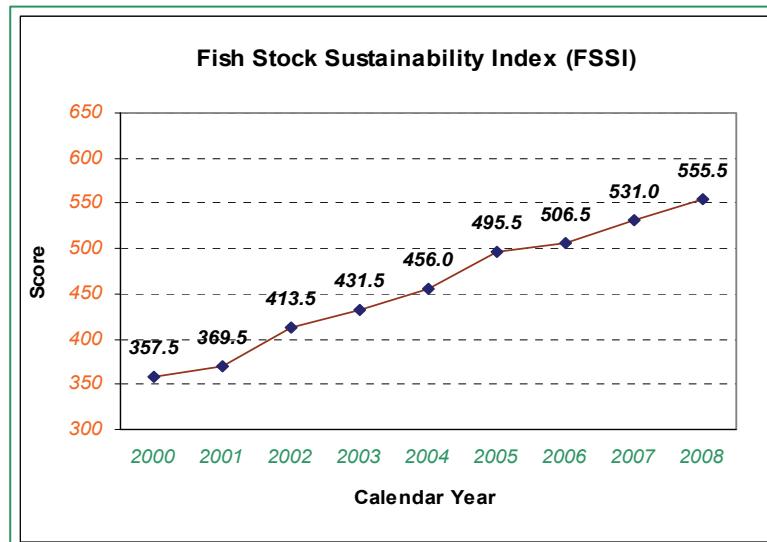


Figure 1. FSSI score, 2000-2008.

Introduction

This report describes the state of our nation's marine fisheries and the effectiveness of fisheries management under the Magnuson-Stevens Fishery Conservation and Management Act, Public Law 94-294 (MSA), as amended in 1996 by the Sustainable Fisheries Act (SFA) and again in 2007 by the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 (MSRA). The SFA emphasized the need to end overfishing, rebuild overfished stocks, and establish management plans designed to ensure biologically and economically sustainable fisheries. A stock that is subject to overfishing has a fishing mortality (harvest) rate above the level that provides for the maximum sustainable yield. A stock that is overfished has a biomass level below its prescribed biological threshold. The MSRA requires annual catch limits that end overfishing be established by 2010 for all stocks subject to overfishing and by 2011 for all other stocks.

This report fulfills the Congressional requirement in Sec. 304(e)(1) of the MSA for an annual report on the status of fisheries within each Council's geographic area of authority and to identify fisheries that are overfished or approaching a condition of being overfished.

This report lists the managed marine fish stocks in the U.S. Exclusive Economic Zone³, including stocks that straddle international boundaries and highly migratory stocks. In response to the Congressional requirement, the report categorizes stocks according to their status. The report answers four questions which help determine the effectiveness of management measures in meeting the provisions of the MSA:

1. *What stocks are subject to overfishing?*
2. *What stocks are overfished?*
3. *What stocks are approaching an overfished condition?*
4. *How do this year's determinations compare to previous years?*

Information on fishing mortality and biomass trends for rebuilding stocks, which can show if the management measures to end overfishing are working and if the biomass of the stock is rebuilding as planned, can be found at the NMFS website: <http://www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm>. Additional information on many rebuilding stocks, as well as other important fish stocks, can be found at the NMFS *FishWatch* website: <http://www.nmfs.noaa.gov/fishwatch/#>.

Using the Best Available Data

To categorize marine fish stocks for this report, NMFS reviewed each stock relative to the status determination criteria (SDC) contained in the relevant

³ The U.S. Exclusive Economic Zone generally extends from 3 to 200 miles offshore and covers more than 2 million square miles.

fishery management plan (FMP)⁴. Sometimes the SDC do not apply to an individual stock, but to a group of similar species harvested together or sharing a similar life history. These groups are referred to as stock complexes, units, or assemblages. Such groupings may be particularly useful when data are sparse or lacking because they provide a level of protection for all related stocks and allow data collection on them. In some cases, the status of a stock complex is determined using the SDC for one stock in the complex. In other cases, the SDC apply to the complex as a whole. Stock complexes are used in the Southeast, the Pacific Islands, and the Alaska Regions, as well as by the NMFS Atlantic Highly Migratory Species (HMS) division. The reporting level (stock or stock complex) is based on the level used in the assessment.

Based on a review of the best scientific information available for each stock or stock complex, relative to its SDC, NMFS determined whether an overfishing and overfished condition exists, including whether or not the stock is approaching an overfished condition. NMFS used many resources to make these determinations, including final, peer-reviewed documents such as Stock Assessment Review Committee reports and recommendations of each Council's Scientific and Statistical Committee. For species not included in a federal FMP (i.e., species managed by international agreement), the stock status determination was made in accordance with the relevant FMP or agreement. More information on the stock complexes and methodology used to include them in this report can be found in Appendix 1, located on the NMFS website, <http://www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm>.

NMFS continues to make progress in improving the scientific knowledge of marine fisheries and in the ability to use that knowledge to manage for the sustained use of these resources. NMFS is also working to increase the number of stocks that are assessed. NMFS assessed 217⁵ stock and stock complexes in 2008, 7 for the first time. In 2008, 7 additional stocks now have known overfishing determinations and 8 additional stocks now have overfished determinations. Of those, 6 are not subject to overfishing and 6 are not overfished.

This year's report is based on assessments completed as of December 31, 2008. Results from fishery stock assessments in progress on that date will be summarized in next year's report. Species or stock names used in this report now reflect accepted scientific nomenclature. These are the same stocks listed in previous reports, but the linked species and stock area name may be different from what was previously reported. The status of all 531 stocks and stock complexes is summarized in Table 1.

⁴ Some stocks in the Southeast Region have status determinations based on criteria that are not contained in the FMP because it is the best scientific information available for such data poor stocks. Alaska SDC are generally specified in the annual SAFE Report, rather than in the FMP itself.

⁵ Number includes the assessment of 19 stocks in the Northeast Multispecies FMP, results of which will not be used to make determinations until the FMP is amended to reflect the SDC recommended in the assessment. It also includes Pacific Coast Groundfish stocks for which total fishing mortality estimates were used for the first time to determine the overfishing status of the stock.

Overview of Overfishing Status

- **251** stocks or stock complexes have a known overfishing status. Of these:
 - 210 (84%) stocks or stock complexes are not subject to overfishing.
 - 41 (16%) stocks or stock complexes have a fishing mortality rate that exceeds the overfishing threshold (i.e., is subject to overfishing).
- **280** stocks or stock complexes have overfishing thresholds not defined or applicable, or are unknown with respect to their overfishing status.

Changes in Overfishing Status

- In the Northeast Region –
 - Summer flounder - Mid-Atlantic Coast is no longer subject to overfishing.
 - Thorny skate - Gulf of Maine is now subject to overfishing.
- In the Southeast Region –
 - Pink shrimp – Gulf of Mexico is now subject to overfishing⁶.
 - Red Drum – Southern Atlantic Coast was removed from the list of stocks subject to overfishing. Management authority for this stock was transferred to the ASMFC⁷ during 2008 and is no longer under federal management jurisdiction. Its status is now reported under stocks contained in non-Federal FMPs and is unchanged as subject to overfishing.
- In the Northwest Region –
 - Gopher rockfish – Northern California is not subject to overfishing (was previously unknown).
 - California scorpionfish – Southern California is not subject to overfishing (was previously unknown).
 - Starry flounder – Pacific coast is not subject to overfishing (was previously unknown).
- In the Pacific Islands Region –
 - Hawaiian Archipelago Bottomfish Multi-species Complex is no longer subject to overfishing.
- In the Alaska Region –
 - Red king crab – Norton Sound is not subject to overfishing (was previously unknown).
- In the Highly Migratory Species Division –
 - Finetooth shark – Atlantic is no longer subject to overfishing.
 - Blue shark – Atlantic is not subject to overfishing (was previously unknown).
 - Skipjack tuna – Western Atlantic is not subject to overfishing (was previously unknown).
 - Blacknose shark – Atlantic is now subject to overfishing.
 - Shortfin mako – Atlantic is subject to overfishing (was previously unknown).
- There are no changes in the other regions.

⁶ The Gulf of Mexico pink shrimp was determined to be subject to overfishing because the 2008 stock assessment estimated parent stock levels to be less than 100 million shrimp. However, this apparent decline is likely due to a reduction in fishing effort rather than a true decrease in abundance. The assessment is currently under review and the overfishing status of pink shrimp may be revised soon.

⁷ ASMFC – Atlantic States Marine Fisheries Commission

Overview of Overfished Status

- **199** stocks or stock complexes have a known overfished status. Of these:
 - 153 (77%) stocks or stock complexes are not overfished - 5 of these stocks are approaching an overfished condition.
 - 46 (23%) stocks or stock complexes are overfished.
- **332** stocks or stock complexes have overfished thresholds not defined or applicable, or are unknown with respect to their overfished status.

Changes in Overfished Status

- In the Northeast Region –
 - Summer flounder - Mid-Atlantic Coast is no longer overfished.
 - Monkfish – North is no longer overfished and is now rebuilt.
 - Monkfish – South is no longer overfished and is now rebuilt.
 - Smooth skate - Gulf of Maine is now overfished.
- In the Southeast Region –
 - Vermillion snapper – Southern Atlantic Coast is not overfished (was previously unknown).
 - Royal red shrimp (Gulf of Mexico) is not overfished (was previously unknown).
 - Red snapper – South Atlantic is overfished (was previously unknown).
 - Gray triggerfish – Gulf of Mexico is overfished (was previously unknown).
- In the Alaska Region –
 - Red king crab – Norton Sound is not overfished (was previously unknown).
 - Rougheye rockfish – Bering Sea/Aleutian Islands is not overfished (was previously unknown).
 - Rex sole – Gulf of Alaska is unknown with respect to its overfished status (was previously not overfished).
- In the Highly Migratory Species Division –
 - Blue shark – Atlantic is not overfished (was previously unknown).
 - Skipjack tuna – Western Atlantic is not overfished (was previously unknown).
 - Blacknose shark – Atlantic is now overfished.
- There are no changes in the other regions.

Changes in Approaching an Overfished Condition

The basis for determining whether a stock is approaching an overfished condition is an examination of the current stock biomass and trends in fishing effort and the conclusion that the stock is likely to become overfished within 2 years. The definition for the biomass threshold in the FMP, along with trends in fishing

effort, is the basis for determining whether a stock is approaching an overfished condition. For Pacific salmon stocks, the criteria are based on maximum sustainable yield/maximum spawner potential objectives for natural stocks or stock complexes.

- In the Highly Migratory Species Division –
 - Shortfin mako – Atlantic is approaching an overfished condition (was previously unknown).
- There are no changes in the other regions.

Biomass Levels

The Fish Stock Sustainability Index (FSSI) is a performance measure for the sustainability of 230 U.S. fish stocks selected for their importance to commercial and recreational fisheries. The FSSI establishes, as an indicator of sustainability, an 80% threshold of the current stock biomass compared to the biomass that supports the maximum sustainable yield (B/B_{MSY}). Stocks with biomass above that level are considered to be within the range of natural fluctuation around the B_{MSY} level, which is defined as a long-term average. The following stocks have biomass levels determined, in 2008, to have changed relative to this threshold.

Changes in Biomass Levels

- In the Northeast Region –
 - Monkfish – North is now rebuilt.
 - Monkfish – South is now rebuilt.
- In the Southeast Region –
 - Vermillion snapper – Southern Atlantic Coast – B/B_{MSY} is above 80% (was previously not estimated).
 - Pink Shrimp – Gulf of Mexico – B/B_{MSY} is now below 80%.
- In the Pacific Islands Region –
 - Hawaiian Archipelago Bottomfish Multi-species Complex – B/B_{MSY} is now above 80%.
- In the Alaska Region –
 - Rougheye rockfish – Gulf of Alaska – B/B_{MSY} is above 80% (was previously not estimated).
 - Red king crab – Norton Sound – B/B_{MSY} is now above 80%.
 - Southern Tanner Crab - Bering Sea – B/B_{MSY} is now below 80%.
- In the Highly Migratory Species Division –
 - Blue shark – Atlantic – B/B_{MSY} is above 80% (was previously not estimated).
 - Shortfin mako – Atlantic – B/B_{MSY} is above 80% (was previously not estimated).
 - Yellowfin tuna – Western Atlantic – B/B_{MSY} is now above 80%.
- There are no changes in the other regions.

Table 1. Description of FSSI and nonFSSI Stocks by Council, 2008.

Jurisdiction *	Stock Group	Number of Stocks	Overfishing					Overfished					Approaching Overfished Condition
			Yes	No	Not Known	Not Defined	N/A	Yes	No	Not Known	Not Defined	N/A	
NEFMC	FSSI	34	9	21	2	2	0	16	17	1	0	0	0
	NonFSSI	1	0	1	0	0	0	1	0	0	0	0	0
	Total	35	9	22	2	2	0	17	17	1	0	0	0
MAFMC	FSSI	11	1	10	0	0	0	2	8	1	0	0	0
	NonFSSI	0	0	0	0	0	0	0	0	0	0	0	0
	Total	11	1	10	0	0	0	2	8	1	0	0	0
NEFMC/ MAFMC	FSSI	3	0	3	0	0	0	0	3	0	0	0	0
	NonFSSI	0	0	0	0	0	0	0	0	0	0	0	0
	Total	3	0	3	0	0	0	0	3	0	0	0	0
SAFMC	FSSI	21	10	10	1	0	0	5	6	9	0	0	1
	NonFSSI	63	0	10	51	2	0	0	1	55	7	0	0
	Total	84	10	20	52	2	0	5	7	64	7	0	1
GMFMC	FSSI	17	5	8	4	0	0	3	6	0	8	0	0
	NonFSSI	36	0	6	29	1	0	0	1	1	34	0	0
	Total	53	5	14	33	1	0	3	7	1	42	0	0
SAFMC/ GMFMC	FSSI	10	0	10	0	0	0	0	7	2	1	0	0
	NonFSSI	3	0	1	1	1	0	0	1	1	1	0	0
	Total	13	0	11	1	1	0	0	8	3	2	0	0
CFMC	FSSI	8	4	1	3	0	0	4	0	3	0	0	1
	NonFSSI	14	1	0	13	0	0	0	0	13	0	0	1
	Total	22	5	1	16	0	0	4	0	16	0	0	2
PFMC	FSSI	48	1	33	13	1	0	4	30	11	3	0	0
	NonFSSI	120	0	17	50	0	53	0	16	51	0	53	0
	Total	168	1	50	63	1	53	4	46	62	3	53	0
WPFMC	FSSI	16	0	7	9	0	0	1	7	8	0	0	0
	NonFSSI	20	0	3	15	2	0	0	1	17	2	0	0
	Total	36	0	10	24	2	0	1	8	25	2	0	0
PFMC/ WPFMC	FSSI	6	1	2	3	0	0	0	3	3	0	0	0
	NonFSSI	4	0	0	4	0	0	0	0	4	0	0	0
	Total	10	1	2	7	0	0	0	3	7	0	0	0
NPFMC	FSSI	35	0	33	2	0	0	1	29	0	5	0	0
	NonFSSI	36	0	22	8	6	0	0	2	0	34	0	0
	Total	71	0	55	10	6	0	1	31	0	39	0	0
PFMC/ NPFMC	FSSI	0	0	0	0	0	0	0	0	0	0	0	0
	NonFSSI	1	0	1	0	0	0	0	1	0	0	0	0
	Total	1	0	1	0	0	0	0	1	0	0	0	0
HMS	FSSI	21	9	10	2	0	0	9	8	2	0	0	2
	NonFSSI	3	0	1	2	0	0	0	1	2	0	0	0
	Total	24	9	11	4	0	0	9	9	4	0	0	2
TOTAL	FSSI	230	40	148	39	3	0	45	124	40	17	0	4
	NonFSSI	301	1	62	173	12	53	1	24	144	78	53	1
	Total	531	41	210	212	15	53	46	148	184	95	53	5

* FSSI = Fish Stock Sustainability Index; NEFMC = New England Fishery Management Council; MAFMC = Mid-Atlantic Fishery Management Council; SAFMC = South Atlantic Fishery Management Council; GMFMC = Gulf of Mexico Fishery Management Council; CFMC = Caribbean Fishery Management Council; PFMC = Pacific Fishery Management Council; WPFMC = Western Pacific Fishery Management Council; NPFMC = North Pacific Fishery Management Council; HMS = Atlantic Highly Migratory Species.

Biomass and Mortality Trends in Stocks under Rebuilding Plans

Section 304(e)(7) of the MSA requires that the Secretary review any fishery management plan, plan amendment, or regulations required by this subsection at routine intervals that may not exceed two years for adequate progress toward ending overfishing and rebuilding affected fish stocks. In the 2007 report to Congress on the Status of U.S. Fisheries, NMFS presented an analysis of trends in fishing mortality (F) and biomass (B) for stocks under rebuilding plans. That analysis used the most current scientific stock assessments for 39 rebuilding stocks and presented a series of figures to illustrate the trends. The analysis, and its findings, has been updated using the most recent assessments completed since that time, where available. The results are updated and presented on the NMFS website at:

<http://www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm>.

Implementing Annual Catch Limits

In early 2009, NMFS put in place guidelines to aid the regional Councils in implementing annual catch limits (ACLs) and accountability measures (AMs) within the fisheries in their jurisdiction⁸. These guidelines will facilitate compliance with requirements of the MSA to end and prevent overfishing, rebuild overfished stocks, and achieve optimum yield. ACLs and AMs are required for stocks that are subject to overfishing by 2010, and for all other stocks by 2011. Congress provided two exceptions to the ACL requirements:

- unless otherwise provided for under an international agreement in which the United States participates, and
- shall not apply to a fishery for species that have a life cycle of approximately 1 year unless the Secretary has determined the fishery is subject to overfishing of that species

Of the 41 stocks subject to overfishing, NMFS believes that some stocks might be covered by the above exceptions. However, final determinations have not yet been made, and other stocks might also be considered under these exceptions.

⁸ The guidelines can be viewed here: <http://www.nmfs.noaa.gov/msa2007/catchlimits.htm>

Status Determinations by Region

Northeast Region⁹

Thirteen FMPs containing 49 stocks or complexes are managed by NMFS and the New England and Mid-Atlantic Fishery Management Councils: Atlantic Sea Scallop; Northeast Multispecies; Northeast Skate; Atlantic Herring; Red Crab; Monkfish; Spiny Dogfish; Summer flounder, Scup and Black Sea Bass; Atlantic Bluefish; Atlantic Surfclam and Ocean Quahog; Atlantic Mackerel, Squid, and Butterfish; Tilefish; and Atlantic Salmon. Within these FMPs, 10 stocks are subject to overfishing, 21 stocks are overfished, and no stocks are approaching an overfished condition. See Table 3.

Table 3. Northeast Region stocks that are subject to overfishing, are overfished, or are approaching an overfished condition.

Council	FMP	Overfishing	Overfished	Approaching
NEFMC	Atlantic salmon	-	Atlantic salmon*	-
	Northeast Multispecies	<i>cod - Gulf of Maine</i> <i>cod - Georges Bank</i> <i>yellowtail flounder - Georges Bank</i> <i>yellowtail flounder - Southern New England (SNE)/Mid-Atlantic (MA)</i> <i>yellowtail flounder - Cape Cod/Gulf of Maine</i> <i>white hake - Georges Bank/Gulf of Maine</i> <i>winter flounder - SNE/MA</i> <i>winter flounder - Georges Bank</i> -	<i>cod - Gulf of Maine</i> <i>cod - Georges Bank</i> <i>haddock - Gulf of Maine</i> <i>haddock - Georges Bank</i> <i>American plaice</i> <i>yellowtail flounder - Georges Bank</i> <i>yellowtail flounder - Southern New England SNE/MA</i> <i>yellowtail flounder - Cape Cod/Gulf of Maine</i> <i>white hake - Georges Bank/Gulf of Maine</i> <i>windowpane flounder - SNE/MA</i> <i>winter flounder - SNE/MA</i> <i>ocean pout</i> <i>Atlantic halibut</i>	-
	Northeast Skate	<i>thorny skate - Gulf of Maine</i> -	<i>thorny skate - Gulf of Maine</i> <i>winter skate - Georges Bank/SNE</i> <i>smooth skate - Gulf of Maine</i>	-
MAFMC	Summer flounder, Scup and Black Sea Bass	<i>scup - Atlantic coast</i>	<i>scup - Atlantic coast</i>	-
	Atlantic Mackerel, Squid, and Butterfish		<i>butterfish - Gulf of Maine/Cape Hatteras</i>	-

* No fishing is allowed in this fishery, or incidental harvest is limited to levels necessary to meet Endangered Species Act (ESA) requirements. A Final Recovery Plan for the Gulf of Maine Distinct Population Segment of Atlantic Salmon has been developed under the ESA.

⁹ Assessment results for 19 stocks in the Northeast Multispecies FMP will not be used to make determinations until the FMP is amended to reflect the SDC recommended in the assessment.

Southeast Region

Seventeen FMPs¹⁰ containing 175 stocks or complexes are managed by NMFS and the South Atlantic, Caribbean, and Gulf of Mexico Fishery Management Councils: South Atlantic Golden Crab; South Atlantic Shrimp; South Atlantic Snapper Grouper; Coral, Coral Reefs, and Live/Hard Bottom Habitats of the South Atlantic Region; Pelagic Sargassum Habitat of the South Atlantic Region; Dolphin Wahoo; Coastal Migratory Pelagics of the Gulf of Mexico and South Atlantic; Gulf of Mexico/South Atlantic Spiny Lobster; Gulf of Mexico Stone Crab; Gulf of Mexico Shrimp; Reef Fish Resources of the Gulf of Mexico; Gulf of Mexico Red Drum; Coral and Coral Reefs of the Gulf of Mexico; Reef Fish Fishery of Puerto Rico and the U.S. Virgin Islands; Spiny Lobster Fishery of Puerto Rico and the U.S. Virgin Islands; Queen Conch Resources of Puerto Rico and the U.S. Virgin Islands; and Corals and Reef Associated Invertebrates of Puerto Rico and the U.S. Virgin Islands. Within these FMPs, 20 stocks are subject to overfishing, 10 stocks are overfished, and 3 stocks are approaching an overfished condition. See Table 4.

Table 4. Southeast Region stocks that are subject to overfishing, are overfished, or are approaching an overfished condition.

Council	FMP	Overfishing	Overfished	Approaching
SAFMC	South Atlantic Snapper Grouper	<i>vermillion snapper</i> <i>red snapper</i> <i>snowy grouper</i> <i>red grouper</i> <i>black sea bass</i> <i>gag</i> <i>speckled hind</i> <i>warsaw grouper</i> <i>tilefish</i> <i>black grouper</i> <i>-</i>	<i>-</i> <i>red snapper</i> <i>snowy grouper</i> <i>-</i> <i>black sea bass</i> <i>-</i> <i>-</i> <i>-</i> <i>-</i> <i>-</i> <i>red grouper</i> <i>red porgy</i>	<i>gag</i>
	South Atlantic Shrimp	-	<i>pink shrimp</i>	
GMFMC	Reef Fish Resources of the Gulf of Mexico	<i>red snapper</i> <i>greater amberjack</i> <i>gag</i> <i>gray triggerfish</i>	<i>red snapper</i> <i>greater amberjack</i> <i>-</i> <i>gray triggerfish</i>	
	Shrimp Fishery of the Gulf of Mexico	<i>pink shrimp</i>	-	
CFMC	Reef Fish Fishery of Puerto Rico and the USVI	<i>Grouper Unit 1</i> <i>-</i> <i>Grouper Unit 4</i> <i>Snapper Unit 1</i> <i>Parrotfishes</i>	<i>Grouper Unit 1</i> <i>Grouper Unit 2</i> <i>Grouper Unit 4</i> <i>-</i> <i>-</i>	<i>-</i> <i>-</i> <i>-</i> <i>Snapper Unit 1</i> <i>Parrotfishes</i>
	Queen Conch Resources of Puerto Rico and the USVI	<i>queen conch</i>	<i>queen conch</i>	-

¹⁰ The Atlantic Coast Red Drum FMP has had management authority transferred to the ASMFC. It is no longer under federal management and its overfishing status is now reported under stocks contained in non-Federal FMPs. The stock remains subject to overfishing.

Southwest Region

Two FMPs containing 19 stocks or complexes¹¹ are managed by NMFS and the Pacific Fishery Management Council: Coastal Pelagic Species and West Coast Highly Migratory Species. Within these FMPs, 2 stocks are subject to overfishing, no stocks are overfished, and no stocks are approaching an overfished condition. See Table 5.

Table 5. Southwest Region stocks that are subject to overfishing, are overfished, or are approaching an overfished condition.

FMP	Overfishing	Overfished	Approaching
West Coast Highly Migratory Species	<i>yellowfin tuna - Eastern Tropical Pacific</i> <i>bigeye tuna - Pacific*</i>	-	

* This stock also appears in Table 7 as a stock subject to overfishing in the Pacific Islands Region's *Pelagic Fisheries of the Western Pacific Region FMP*. Each of the 10 stocks shared between these two FMPs is listed only once in the support tables as a single stock managed under both FMPs. The Southwest and the Pacific Islands Regions, along with the Pacific and Western Pacific Fishery Management Councils, are working together to end overfishing in this stock.

¹¹ Total includes 10 pelagic species shared with the Pacific Islands Region.

Northwest Region

Two FMPs containing 158 stocks or complexes are managed by NMFS and the Pacific Fishery Management Council: West Coast Salmon and Pacific Coast Groundfish. In addition, Pacific halibut is managed jointly with the Alaska Region and the International Pacific Halibut Commission. Within these FMPs, no stock is subject to overfishing, 4 stocks are overfished, and 1 stock is approaching an overfished condition. See Table 6.

Table 6. Northwest Region stocks that are subject to overfishing, are overfished, or are approaching an overfished condition.

FMP	Overfishing	Overfished	Approaching
Pacific Coast Groundfish	- - - -	<i>bocaccio</i> <i>darkblotched rockfish</i> <i>cowcod</i> <i>yelloweye rockfish</i>	

Pacific Islands Region

Five FMPs containing 45 stocks or complexes¹² are managed by NMFS and the Western Pacific Fishery Management Council: Pelagic Fisheries of the Western Pacific Region; Crustaceans Fisheries of the Western Pacific Region; Precious Coral Fisheries of the Western Pacific Region; Bottomfish and Seamount Groundfish Fisheries of the Western Pacific Region; and Coral Reef Ecosystems of the Western Pacific Region. Within these FMPs, 1 stock or stock complex is subject to overfishing, 1 stock or stock complex is overfished, and no stock or stock complexes are approaching an overfished condition. See Table 7.

Table 7. Pacific Islands Region stocks that are subject to overfishing, are overfished, or are approaching an overfished condition.

FMP	Overfishing	Overfished	Approaching
Pelagic Fisheries of the Western Pacific Region	<i>bigeye tuna – Pacific</i> *	-	
Bottomfish and Seamount Groundfish Fisheries of the Western Pacific Region	-	<i>Seamount Groundfish complex – Hancock Seamount</i> **	

* This stock also appears in Table 5 as a stock subject to overfishing in the Southwest Region's *West Coast Highly Migratory Species FMP*. Each of the 10 stocks shared between these two FMPs is listed only once in the support tables as a single stock managed under both FMPs. The Southwest and the Pacific Islands Regions, along with the Pacific and Western Pacific Fishery Management Councils, are working together to end overfishing in this stock.

** This stock complex uses pelagic armorhead as the indicator species of a three-species seamount groundfish complex that includes raftfish and alfonсин.

¹² Total includes 10 pelagic species shared with the Southwest region.

Alaska Region

Five FMPs containing 69 stocks or complexes are managed by NMFS and the North Pacific Fishery Management Council: GOA Groundfish; BSAI Groundfish; Bering Sea and Aleutian Islands King and Tanner Crab; Alaska Weathervane Scallops; and Alaska High Seas Salmon. In addition, Pacific halibut is managed jointly with the Northwest Region and the International Pacific Halibut Commission. Within these FMPs, no stocks or stock complexes are subject to overfishing, 1 stocks or stock complex is overfished, and no stocks or stock complexes are approaching an overfished condition. See Table 8.

Table 8. Alaska Region stocks that are subject to overfishing, are overfished, or are approaching an overfished condition.

FMP	Overfishing	Overfished	Approaching
BSAI King and Tanner Crab	-	<i>blue king crab - Pribilof Islands</i>	

Atlantic Highly Migratory Species

One FMP containing 23 stocks or complexes are managed by NMFS: Consolidated Atlantic Highly Migratory Species. Within this FMP, 8 stocks or stock complexes are subject to overfishing, 8 stocks or stock complexes are overfished, and 1 stock is approaching an overfished condition. See Table 9.

Table 9. Atlantic Highly Migratory stocks that are subject to overfishing, are overfished, or are approaching an overfished condition.

FMP	Overfishing	Overfished	Approaching
Atlantic Highly Migratory Species	<i>blue marlin - Atlantic</i> <i>white marlin - Atlantic</i> <i>sailfish - West Atlantic</i> <i>albacore - North Atlantic</i> <i>bluefin tuna - West Atlantic</i> - <i>dusky shark</i> <i>blacknose shark - Atlantic</i> <i>shortfin mako - Atlantic</i> <i>sandbar shark*</i>	<i>blue marlin - Atlantic</i> <i>white marlin - Atlantic</i> <i>sailfish - West Atlantic</i> <i>albacore - North Atlantic</i> <i>bluefin tuna - West Atlantic</i> <i>Porbeagle shark</i> <i>dusky shark</i> <i>blacknose shark - Atlantic</i> - <i>sandbar shark*</i>	<i>yellowfin tuna - Atlantic</i> <i>shortfin mako - Atlantic</i>

* This stock is part of the Large Coastal Shark complex, but is assessed separately.

Table 10. Comparing stocks or stock complexes with “subject to overfishing” determinations in 2007 and 2008. Stocks in **GREEN** under “2007” were removed from the list in 2008. Stocks in **RED** under “2008” were added to the list in 2008.

COUNCIL	2007	2008	COUNCIL	2007	2008
NEFMC	cod - Gulf of Maine cod - Georges Bank yellowtail flounder - Georges Bank yellowtail flounder - SNE/Mid-Atlantic yellowtail flounder - Cape Cod/Gulf of Maine White hake - Georges Bank/Gulf of Maine winter flounder - SNE/Mid-Atlantic winter flounder - Georges Bank -	cod - Gulf of Maine cod - Georges Bank yellowtail flounder - Georges Bank yellowtail flounder - SNE/Mid-Atlantic yellowtail flounder - Cape Cod/Gulf of Maine White hake - Georges Bank/Gulf of Maine winter flounder - SNE/Mid-Atlantic winter flounder - Georges Bank THORNY SKATE - GULF OF MAINE	CFMC	Queen conch Grouper Unit 1 Grouper Unit 4 parrotfishes Snapper Unit 1	Queen conch Grouper Unit 1 Grouper Unit 4 parrotfishes Snapper Unit 1
MAFMC	scup - Atlantic coast SUMMER FLOUNDER - MID-ATLANTIC COAST	scup - Atlantic coast -	PFMC	yellowfin tuna - Eastern Pacific	yellowfin tuna - Eastern Pacific
NEFMC/MAFMC	None	None	WPFMC	BOTTOMFISH MULTI-SPECIES COMPLEX - HAWAIIAN ARCHIPELAGO	-
SAFMC	vermillion snapper red snapper snowy grouper tilefish red grouper black sea bass gag speckled hind warsaw grouper black grouper RED DRUM¹³	vermillion snapper red snapper snowy grouper tilefish red grouper black sea bass gag speckled hind warsaw grouper black grouper -	PFMC/ WPFMC	bigeye tuna - Pacific	bigeye tuna - Pacific
GMFMC	red snapper greater amberjack gray triggerfish gag -	red snapper greater amberjack gray triggerfish gag PINK SHRIMP	NPFMC	None	None
SAFMC/GMFMC	None	None	HMS	blue marlin - Atlantic white marlin - Atlantic sailfish - West Atlantic albacore - North Atlantic bluefin tuna - West Atlantic sandbar shark - Atlantic FINETOOT SHARK - ATLANTIC dusky shark - Atlantic -	blue marlin - Atlantic white marlin - Atlantic sailfish - West Atlantic albacore - North Atlantic bluefin tuna - West Atlantic sandbar shark - Atlantic BLACKNOSE SHARK - ATLANTIC SHORTFIN MAKO - ATLANTIC

NEFMC = New England Fishery Management Council; MAFMC = Mid-Atlantic Fishery Management Council; SAFMC = South Atlantic Fishery Management Council; GMFMC = Gulf of Mexico Fishery Management Council; CFMC = Caribbean Fishery Management Council; PFMC = Pacific Fishery Management Council; WPFMC = Western Pacific Fishery Management Council; NPFMC = North Pacific Fishery Management Council; HMS = Atlantic Highly Migratory Species.

¹³ This stock has had management authority transferred to the ASMFC. It is no longer under federal management and its overfishing status is now reported under stocks contained in non-Federal FMPs. The stock remains subject to overfishing.

Table 11. Stocks or stock complexes with “overfished” determinations in 2007 and 2008. Stocks in **GREEN** under “2007” were removed from the list in 2008. Stocks in **RED** under “2008” were added to the list in 2008.

Council	2007	2008	Council	2007	2008
NEFMC	cod - Gulf of Maine cod - Georges Bank haddock - Gulf of Maine haddock - Georges Bank American plaice yellowtail flounder - Georges Bank yellowtail flounder - SNE/ Mid-Atlantic yellowtail flounder - Cape Cod/Gulf of Maine White hake - Georges Bank/Gulf of Maine windowpane Flounder - SNE/ Mid-Atlantic winter Flounder - SNE/ Mid-Atlantic ocean pout Atlantic halibut Thorny skate - Gulf of Maine winter skate - - Atlantic salmon	cod - Gulf of Maine cod - Georges Bank haddock - Gulf of Maine haddock - Georges Bank American plaice yellowtail flounder - Georges Bank yellowtail flounder - SNE/ Mid-Atlantic yellowtail flounder - Cape Cod/Gulf of Maine White hake - Georges Bank/Gulf of Maine windowpane Flounder - SNE/ Mid-Atlantic winter Flounder - SNE/ Mid-Atlantic ocean pout Atlantic halibut Thorny skate - Gulf of Maine winter skate SMOOTH SKATE - GULF OF MAINE Atlantic salmon	CFMC	queen conch Grouper Unit 1 Grouper Unit 2 Grouper Unit 4	queen conch Grouper Unit 1 Grouper Unit 2 Grouper Unit 4
MAFMC	butterfish scup - Atlantic coast SUMMER FLOUNDER - MID-ATLANTIC COAST	butterfish scup - Atlantic coast -	PFMC	bocaccio darkblotched rockfish cowcod yelloweye rockfish	bocaccio darkblotched rockfish cowcod yelloweye rockfish
NEFMC/ MAFMC	MONKFISH - NORTH MONKFISH - SOUTH	- -	WPFMC	Seamount Groundfish complex - Hancock Seamounts	Seamount Groundfish complex - Hancock Seamounts
SAFMC	snowy grouper black sea bass red porgy - pink shrimp*	snowy grouper black sea bass red porgy RED SNAPPER pink shrimp*	PFMC/ WPFMC	None	None
GMFMC	red snapper greater amberjack -	red snapper greater amberjack GRAY TRIGGERFISH	NPFMC	blue king crab - Pribilof Islands	blue king crab - Pribilof Islands
SAFMC/ GMFMC	None	None	HMS	blue marlin - Atlantic white marlin - Atlantic sailfish - West Atlantic albacore - North Atlantic bluefin tuna - West Atlantic sandbar shark Porbeagle shark Dusky shark -	blue marlin - Atlantic white marlin - Atlantic sailfish - West Atlantic albacore - North Atlantic bluefin tuna - West Atlantic sandbar shark Porbeagle shark Dusky shark BLACKNOSE SHARK - ATLANTIC

NEFMC = New England Fishery Management Council; MAFMC = Mid-Atlantic Fishery Management Council; SAFMC = South Atlantic Fishery Management Council; GMFMC = Gulf of Mexico Fishery Management Council; CFMC = Caribbean Fishery Management Council; PFMC = Pacific Fishery Management Council; WPFMC = Western Pacific Fishery Management Council; NPFMC = North Pacific Fishery Management Council; HMS = Atlantic Highly Migratory Species

* Pink shrimp are an annual crop. An advisory panel concluded the apparent decline in pink shrimp abundance appears to be due to environmental factors, rather than overfishing.

Stocks “Subject to Overfishing” (41) – 2008



North Pacific:

None

Pacific:

1. **Yellowfin Tuna – Eastern Pacific

Pacific and Western Pacific

1. **Bigeye Tuna – Pacific



New England:

1. Cod – Gulf of Maine
2. Cod – Georges Bank
3. Yellowtail flounder – Georges Bank
4. Yellowtail flounder – Southern New England/Middle Atlantic
5. Yellowtail flounder – Cape Cod/Gulf of Maine
6. White Hake
7. Winter Flounder – Georges Bank
8. Winter Flounder – Southern New England/Middle Atlantic
9. Thorny Skate

Mid-Atlantic:

1. Scup

Highly Migratory Species:

1. **Blue Marlin – Atlantic
2. **White Marlin – Atlantic
3. **Sailfish – West Atlantic
4. **Albacore – North Atlantic
5. **Bluefin Tuna – West Atlantic
6. Sandbar Shark
7. Dusky Shark
8. Blacknose Shark
9. Shortfin Mako – Atlantic
10. Wahoo

South Atlantic:

1. Vermilion Snapper
2. Red Snapper
3. Snowy Grouper
4. Tilefish
5. Red Grouper
6. Black Sea Bass
7. Gag
8. Black Grouper
9. Speckled Hind
10. Warsaw Grouper

Gulf of Mexico:

1. Red Snapper
2. Greater Amberjack
3. Gag
4. Gray Triggerfish
5. Pink Shrimp – Gulf of Mexico

Caribbean:

1. Snapper Unit 1
2. Grouper Unit 1
3. Grouper Unit 4
4. Queen Conch
5. *Parrotfishes

*Indicates non-FSSI stock

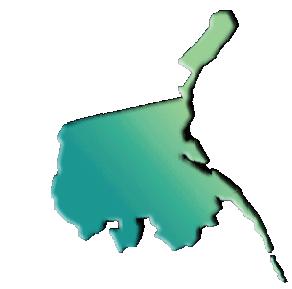
**Stock is fished by U.S. and International fleets.

Blue = Also Overfished
NOTE: This map does not include the results of GARM III. Northeast multispecies stock status is based on GARM II (assessed in 2005).



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Overfished Stocks (46) – 2008

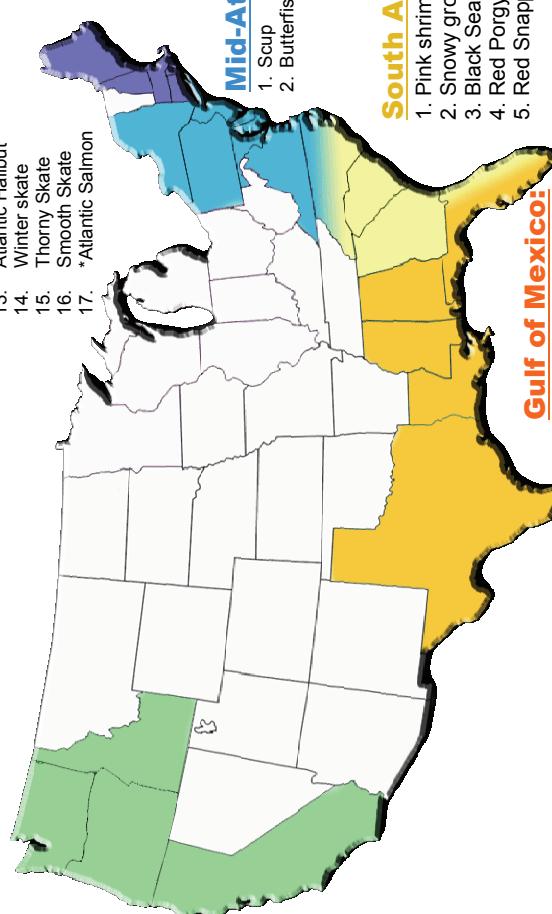


Pacific:

- 1. Blue King Crab – Pribilof Islands
- 2. Darkblotched Rockfish
- 3. Cowcod
- 4. Yelloweye Rockfish

North Pacific:

- 1. Blue King Crab – Pribilof Islands



Pacific:

- 1. Bocaccio
- 2. Darkblotched Rockfish
- 3. Cowcod
- 4. Yelloweye Rockfish

Highly Migratory

Species:

- 1. Cod – Gulf of Maine
- 2. Cod – Georges Bank
- 3. Haddock – Gulf of Maine
- 4. Haddock – Georges Bank
- 5. American Plaice
- 6. Yellowtail Flounder – Georges Bank
- 7. Yellowtail Flounder – Southern New England/Middle Atlantic
- 8. Yellowtail Flounder – Cape Cod/Gulf of Maine
- 9. White Hake
- 10. Windowpane Flounder – Southern New England/Middle Atlantic
- 11. Winter Flounder – Southern New England/Middle Atlantic
- 12. Ocean Pout
- 13. Atlantic Halibut
- 14. Winter Skate
- 15. Thorny Skate
- 16. Smooth Skate
- 17. *Atlantic Salmon

Mid-Atlantic:

- 1. Scup
- 2. Butterfish (Atlantic)

South Atlantic:

- 1. **Blue Marlin – Atlantic
- 2. **White Marlin – Atlantic
- 3. **Sailfish – West Atlantic
- 4. **Albacore – North Atlantic
- 5. **Bluefin Tuna – West Atlantic
- 6. Sandbar Shark
- 7. Porbeagle Shark
- 8. Dusky Shark
- 9. Blacknose Shark

Gulf of Mexico:

- 1. Red Snapper
- 2. Greater Amberjack
- 3. Gray Triggerfish
- 5. Red Snapper

Caribbean:

- 1. Grouper Unit 1
- 2. Grouper Unit 2
- 3. Grouper Unit 4
- 4. Queen Conch

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*Indicates non-FSSI stock

**Stock is fished by U.S. and International fleets..

NOTE: This map does not include the results of GARM III. Northeast multispecies stock status is based on GARM II (assessed in 2005).

An online version of this report is available at
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