

## Status of Stocks 2014

Annual Report to Congress on the Status of U.S. Fisheries

# Overfishing and Overfished Numbers Hit All-Time Lows

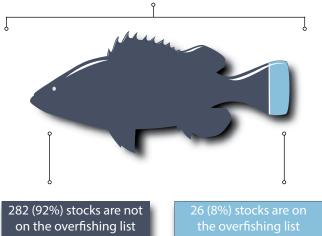
NOAA Fisheries is pleased to present the 2014 Report to Congress on the Status of U.S. Fisheries, as required by the Magnuson-Stevens Fishery Conservation and Management Act (MSA). As a result of the combined efforts of NOAA Fisheries, the regional fishery management councils (councils), and all our partners, the number of stocks listed as subject to overfishing or overfished continues to decline and is at an all-time low.



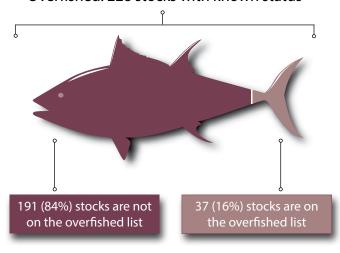


# Status Listings Overfishing & Overfished Lists

Overfishing: 308 stocks with known status:



#### Overfished: 228 stocks with known status



## The Year in Review

2013

 $20\overline{14}$ 

By the end of 2014, just 26 stocks were on the overfishing list and 37 stocks were on the overfished list. Both lists are at all-time lows. The number of stocks rebuilt since 2000 increased to 37.

NOAA Fisheries tracks 469 managed stocks and stock complexes in 46 fishery management plans, or FMPs. In 2014, six stocks were removed from the overfishing list and four were added. Two stocks came off the overfished list, and no new ones were added. Specific changes to the status of our nation's managed marine fish stocks in 2014 include:













### Removed

## Overfishing List

Added

Snowy grouper - Southern Atlantic Coast Albacore - North Atlantic Haddock - Gulf of Maine Gag grouper - South Atlantic Gulf of Mexico Jacks Complex Bluefin tuna - Western Atlantic Greater amberjack - Gulf of Mexico Gray triggerfish - Gulf of Mexico Puerto Rico Scups and Porgies Complex Puerto Rico Wrasses Complex<sup>1</sup>

#### Removed<sup>2</sup>

## Overfished List

Added

Albacore - North Atlantic Gag grouper - Gulf of Mexico NO stocks added.

#### Rebuilt List

Gag grouper - Gulf of Mexico Golden tilefish - Mid-Atlantic Coast Butterfish - Gulf of Maine to Cape Hatteras

- 1. This complex was formerly listed as unknown and the council now has the infomation needed to manage it.
- 2. The Caribbean grouper unit 4 complex, previously listed as overfished, was consolidated with other groupers into a single complex. The status of this consolidated complex is unknown.

Details on all managed stocks available online: www.fisheries.noaa.gov/sfa/fisheries\_eco/status\_of\_fisheries



## **Continual Progress**

#### **Ending Overfishing**

In 2007, Congress enacted a requirement to use annual catch limits (ACLs) to end and prevent overfishing. The use of ACLs has been successful to date and stock assessments show that the number of stocks subject to overfishing continues to decline. Of the 41 stocks listed as subject to overfishing in 2007, only 10 domestic and four international stocks are still on the overfishing list. NOAA Fisheries has limited ability to control overfishing of international stocks because they are fished in international waters and they are exempt from ACL requirements. An additional 12 stocks have been added to the overfishing list since 2007, half as a result of first-time stock assessments. NOAA Fisheries and the councils are actively monitoring how well the ACLs control catch and are working to prevent further overfishing.

#### **Improving Stocks - Rebuilding Fisheries**

When a stock is determined to be overfished, the relevant council must implement a rebuilding plan. A typical rebuilding plan allows fishing to continue, but at a reduced level so that the stock will increase to its target level and can produce the maximum sustainable yield (MSY)—the largest long-term average catch that can be taken from a stock under prevailing environmental and fishery conditions.

Forty-six stocks and stock complexes are currently under rebuilding plans. NOAA Fisheries monitors rebuilding stocks to ensure they increase in abundance to their target level that supports MSY, and makes adjustments to plans if needed. Thirteen of the rebuilding stocks are no longer overfished and continue to rebuild toward their target. Current information on fishing mortality and biomass trends for stocks in rebuilding plans is available online: www.fisheries.noaa.gov/sfa/fisheries\_eco/status\_of\_fisheries.

### What is ecosystem-based fishery management?

Ecosystem-based fishery management is central to our mission to sustainably manage fisheries. Ecosystem-based fishery management is an approach to fisheries management that is informed by science to protect and sustain diverse and productive ecosystems and the benefits they provide. It is an integrated approach, incorporating the entire ecosystem, including humans, into resource management decisions, and is guided by adaptive management.

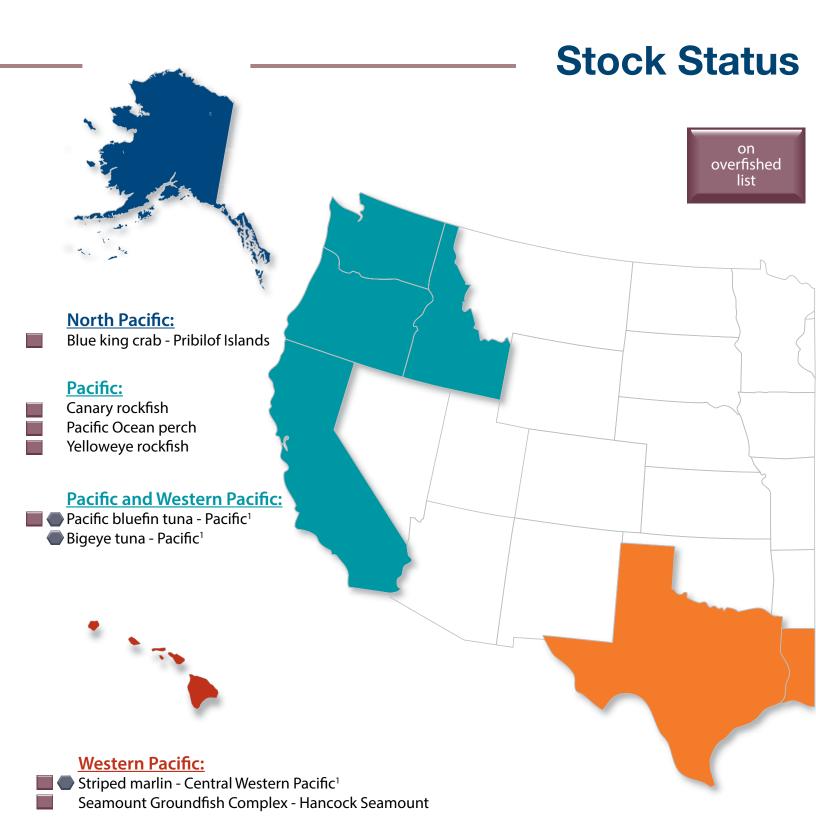
Ecosystem-based fisheries management strengthens our ability to understand and address complex ecosystem

interactions in decisions we make about:

- How many fish to catch
- Where and when to catch them
- Who can catch them

This approach helps us end overfishing and rebuild stocks for the long term benefit of the nation by helping us respond to, anticipate, and manage impacts to fisheries from various components of the ecosystem.

All fishery management councils are implementing ecosystem-based fisheries management in some form within their fisheries.

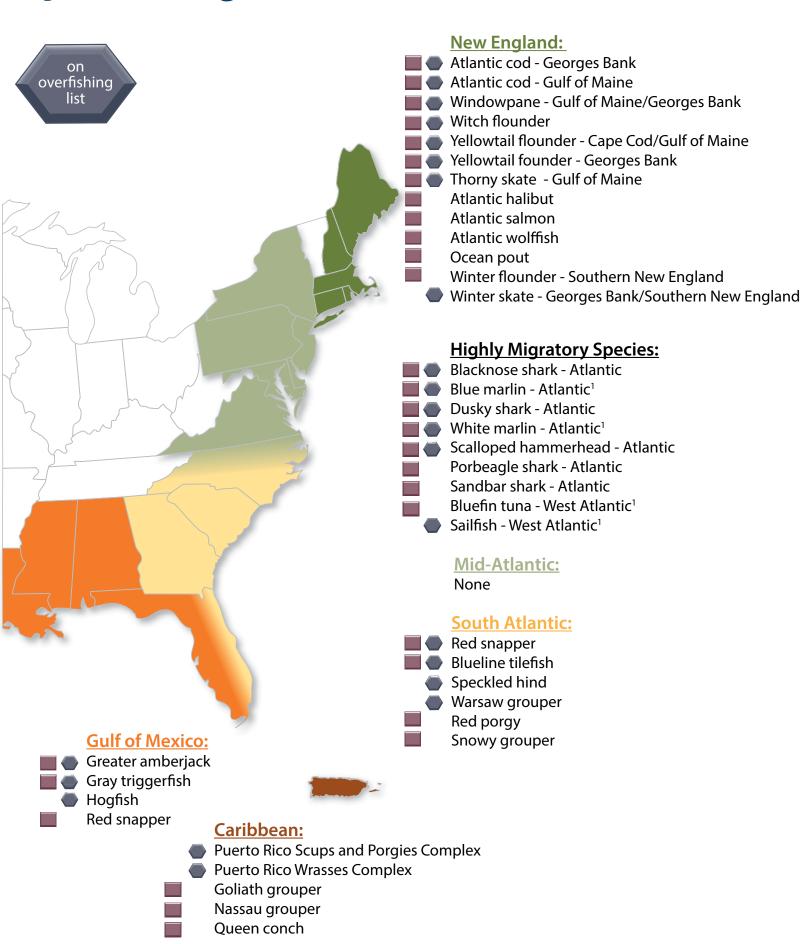


The U.S. is the world leader in sustainable fisheries management.



Click here for more information on sustainable seafood.

## by U.S. Region



## Overfishing & Overfished

This report focuses upon these two important concepts in fishery management. But just what do they mean? Here are some of the main concepts covered in this report:

Maximum sustainable yield, or MSY, is the largest long-term average catch that can be taken from a stock under prevailing environmental and fishery conditions.

A stock that is subject to **overfishing** has a harvest rate higher than the rate that produces its MSY.

A stock that is **overfished** has a population size that is too low and that would jeopardize the stock's ability to produce its MSY.

A **rebuilt** stock is one that was previously overfished and that has increased in abundance to the target population size that supports its MSY.

#### What's the difference?

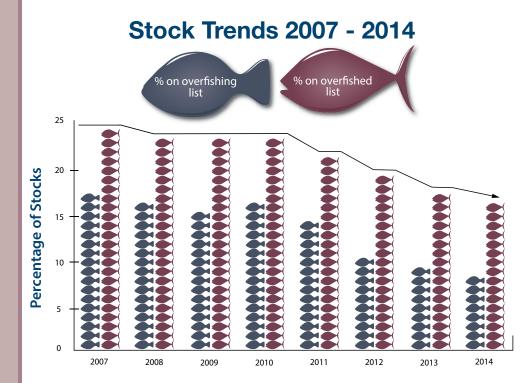
As a harvest rate, overfishing is a direct result of fishing activities. Allowed to continue unchecked, overfishing is associated with many negative outcomes, including a depleted population. Current management practices—such as annual catch limits and accountability measures—reduce the likelihood of this happening.

As a population size, overfished can be the result of many factors, including overfishing, and also habitat degradation, pollution, climate change, and disease. While overfishing is sometimes the main cause of an overfished stock, these other factors can also play a role and may affect the stock's ability to rebuild.

## The Science Behind Stock Status

The MSA requires that FMPs specify objective and measurable criteria, or reference points, for determining when a stock is subject to overfishing or overfished. A scientific analysis of the abundance and composition of a fish stock, called a stock assessment, evaluates the stock against those reference points. A stock assessment typically undergoes peer review by independent scientists before it is accepted as the best scientific information available. Generally, we use stock assessments and the reference points to determine if a stock is subject to overfishing or overfished.

Information from the stock assessment is also used by the councils to recommend the annual catch limit (ACL) for the stock. ACLs are designed to end and prevent overfishing. While catch limits are set annually, assessments are usually done less frequently. NOAA Fisheries generally uses the stock assessment to determine if the catch limit ended or prevented overfishing. Sometimes, a stock will remain on the overfishing list until an assessment demonstrates it is no longer subject to overfishing, even if catch stays below its ACL. This can cause a delay in removing stocks from the overfishing list, several years after the implementation of ACLs.







### Gag Grouper



Gulf of Mexico



Management measures include revised catch limits, minimum fish sizes, and area management.



The 2013 commercial harvest of nearly 1.2 million pounds of South Atlantic and Gulf of Mexico gag was valued at \$4.7 million.



As a result of rebuilding, we can consider increasing the annual catch limits for this stock.



#### Golden Tilefish



Mid-Atlantic Coast



Management measures include gear restrictions and annual catch limits allocated to individual fishermen.



Total U.S. landings valued at over \$7.8 million in 2012. Expected to increase with improved stock health.



As a result of rebuilding, fishermen and dealers can expect a more predictable fishery and provide a steady supply of seafood to consumers.



#### **Butterfish**



Gulf of Maine to Cape Hatteras



Sustained
management and
improved science
that considers shifting
environmental
conditions, including
climate change.



The latest assessment shows the stock able to support a substantial fishery.



The Mid-Atlantic Fishery Management Council increased annual catch limits to roughly 20,000 metric tons.

Seafood companies are working to develop new markets, both here and in Japan.

Read more about the status of our stocks and how NOAA Fisheries helps ensure sustainable fisheries.

NOAA Fisheries Home Page: www.fisheries.noaa.gov

Stock status updates - See the latest quarterly update and supporting documents: <a href="www.fisheries.noaa.gov/sfa/fisheries">www.fisheries.noaa.gov/sfa/fisheries</a> eco/status of fisheries

# Managing Sustainably in a Changing World

U.S. fisheries play an important role in the nation's economy. Fisheries provide opportunities for commercial, recreational, and subsistence fishing, and sustainable seafood for the nation. NOAA Fisheries reports in the 2012 Fisheries Economics of the United States that commercial and recreational fisheries contribute \$199 billion per year to the U.S. economy and support 1.7 million jobs. The MSA provides a strong science-based approach to realize these benefits by ending overfishing and rebuilding stocks. Stocks at target and rebuilt levels also contribute to an overall healthy ecosystem and increase the resilience of our fisheries in the context of changing ocean conditions and complex ecosystem interactions.

The progress we have made in 2014 to end overfishing and rebuild stocks demonstrates that our science-based approach to determining stock status and managing for sustainability is working. To strengthen the management process that guides our actions to end and prevent overfishing, we recently proposed revisions to guidelines that assist the eight councils and NOAA Fisheries in developing rebuilding plans, setting annual catch limits, and developing effective fishery management plans. The proposed revisions set the stage to further improve fisheries management to ensure our stocks are sustained for future generations.

Fishery management decisions incorporate complex ecosystem information. Anticipating and responding to those interactions and changes to our ocean ecosystems will be a particular challenge in the future. NOAA Fisheries and the councils are already implementing measures to address issues related to minimizing bycatch, addressing forage fish, and protecting habitat.



However, NOAA Fisheries also recognizes the particular and timely need to strengthen the resilience of our fisheries to climate change impacts and to strengthen our use of ecosystem-based fisheries management approaches. The draft NOAA Fisheries Climate Science Strategy will improve the production and use of climate-related information in fisheries management decisions. The strategy proposes steps the agency should take to increase the production, delivery, and use of climate-related information to marine and coastal resource managers, resource users, and others at regional and national scales.

These efforts are just two examples of how NOAA Fisheries is looking to the future to ensure the long-term sustainability of our fisheries and the communities that depend on them. We look forward to working with Congress, the councils, our state partners, and other stakeholders to build on these efforts and identify other opportunities to further strengthen the long-term biological and economic sustainability of our nation's fisheries.

U.S. Secretary of Commerce Penny Pritzker

Administrator of National Oceanic and Atmospheric Administration and Undersecretary of Commerce Kathryn D. Sullivan, Ph.D.

Acting Assistant Administrator for Fisheries Eileen Sobeck





