

Fish Stock Sustainability Index (FSSI)

2012 Quarter 2 Update through June 30, 2012

Overview

The FSSI is a performance measure for the sustainability of 230 U.S. fish stocks¹ selected for their importance to commercial and recreational fisheries. The FSSI will increase as stock status becomes known, overfishing is ended, and stocks increase to the level that provides maximum sustainable yield. **NOTE: The status of all 230 FSSI stocks will be reported until FY13, but there are now only 227 FSSI stocks due to the removal of stocks from FMPs².**

FSSI Scoring Method

The FSSI is calculated by assigning a score for each fish stock based on the five following criteria:

Criteria	Points Awarded
1. "Overfished" status is known	0.5
2. "Overfishing" status is known	0.5
3. Overfishing is not occurring (for stocks with known "overfishing" status)	1.0
4. Stock biomass is above the "overfished" level defined for the stock	1.0
5. Stock biomass is at or above 80% of the biomass that produces maximum sustainable yield (B_{MSY}) ³ (this point is in addition to the point awarded for being above the "overfished" level)	1.0

The maximum score each stock may receive is 4. The value of the FSSI is the sum of all 230 individual stock scores. The maximum total FSSI score is 920, achieved if all 230 stocks were to each receive a score of 4.

Current FSSI Score

2012 Quarter 2 Score = 600 (April 1, 2012 to June 30, 2012)

The following table summarizes the current FSSI score and where additional points can be gained to raise the score in the future.

Criteria	# Stocks	Current Points	Total Points Possible	Actions that Can Increase the Score	Potential Points to Gain
1. "Overfished" status is known Overfished: 40 Not Overfished: 137	177	88.5	115	Determine the "overfished" status for the remaining 53 stocks	26.5
2. "Overfishing" status is known Overfishing: 33 Not subject to overfishing: 160	193	96.5	115	Determine the "overfishing" status for the remaining 37 stocks	18.5
3. Overfishing is not occurring (for stocks with known "overfishing" status)	160	160	230	End overfishing on the 33 stocks subject to overfishing. Ensure the 37 stocks (see #2 above) are not subject to overfishing.	70
4. Stock biomass is above the "overfished" level defined for the stock (for stocks with a known "overfished" status and that are "not overfished")	137	137	230	Increase the biomass above the overfished level for the 40 overfished stocks. Ensure the biomass for the 53 stocks (see #1 above) is above the overfished level.	93
5. Stock biomass is at or above 80% of B_{MSY} (this point is in addition to the point awarded for being above the "overfished" level, criteria #4)	118	118	230	For the 40 overfished stocks and the 19 stocks that are not overfished (but biomass is not at or above 80% of B_{MSY}), increase biomass to at or above 80% of B_{MSY} . Ensure the biomass for the 53 stocks (see #1 above) is at or above 80% of B_{MSY} .	112
TOTAL		600	920		320

¹ The majority of species are assessed as a single stock; however, there are a few that are assessed as a stock complex, which contain a group of species with similar geographic distribution, co-occurrence in fisheries, and life history.

² Gulf of Mexico stone crab and little tunny are no longer managed under federal fishery management plans (FMPs), and Gulf of Mexico black grouper is now managed as a single stock under the South Atlantic Snapper-Grouper FMP.

³ Stocks rebuilding from a previously overfished condition are not awarded the fourth point until they reach B_{MSY} , as mandated by the Magnuson-Stevens Act. After they have been fully rebuilt, they may fluctuate within the 80% parameter and retain the score of 4 like the other non-rebuilding stocks.

Summary of Stock Status Determination Changes from April 1, 2012 through June 30, 2012

Overview of overfishing status of FSSI stocks through June 30, 2012

- 193 stocks or stock complexes are known with respect to their overfishing status. Of these:
 - 160 stocks or stock complexes are not subject to overfishing.
 - 33 stocks or stock complexes have a fishing mortality rate that exceeds the overfishing threshold (i.e., is subject to overfishing).
- 37 stocks or stock complexes have overfishing thresholds not defined or applicable, or are unknown with respect to their overfishing status.

Overview of overfished status of FSSI stocks through June 30, 2012

- 177 stocks or stock complexes are known with respect to their overfished status. Of these:
 - 137 stocks or stock complexes are not overfished (5 of these stocks are approaching an overfished condition).
 - 40 stocks or stock complexes are overfished.
- 53 stocks or stock complexes have overfished thresholds not defined or applicable, or are unknown with respect to their overfished status.

Summary of Overfishing and Overfished Changes of FSSI Stocks

<u>Stock</u>	<u>Region</u>	<u>Previous Status</u>	<u>Current Status</u>	<u>Previous Total FSSI Score</u>	<u>Current Total FSSI Score</u>
Acadian redfish - Gulf of Maine / Georges Bank	NEFMC	Not Overfished – Rebuilding	Rebuilt	3	4
Haddock - Gulf of Maine	NEFMC	Not Subject to Overfishing Not Overfished	Subject to Overfishing Approaching an Overfished Condition	4	3
Windowpane - Southern New England / Mid-Atlantic	NEFMC	Subject to Overfishing Not Overfished – Rebuilding	Not Subject to Overfishing Rebuilt	2	4
Butterfish - Gulf of Maine / Cape Hatteras	MAFMC	Overfished	Overfished – Unknown*	2	1.5
TOTAL FSSI SCORE				598.5	600

* The overfished status of butterfish is unknown, based on the fact that the last assessment was unable to estimate stock size with reasonable confidence. In addition, the previous assessment conducted in 2004, was found to have significant problems in retrospect, such that stock size estimates are highly uncertain.

Overview of overfishing status of non-FSSI stocks through June 30, 2012

- 66 stocks or stock complexes are known with respect to their overfishing status. Of these:
 - 64 stocks or stock complexes are not subject to overfishing.

- 2 stocks have a fishing mortality rate that exceeds the overfishing threshold (i.e., is subject to overfishing).
- 182 stocks or stock complexes have overfishing thresholds not defined or applicable, or are unknown with respect to their overfishing status.

Changes in overfishing status of non-FSSI stocks

- In the Northeast Region –
 - Atlantic wolffish - Gulf of Maine / Georges Bank – not subject to overfishing (overfishing status was previously unknown).

There are no other changes to the other Regions.

Overview of overfished status of non-FSSI stocks through June 30, 2012

- 42 stocks or stock complexes are known with respect to their overfished status. Of these:
 - 38 stocks or stock complexes are not overfished (1 of these stocks is approaching an overfished condition).
 - 4 stocks are overfished.
- 206 stocks or stock complexes have overfished thresholds not defined or applicable, or are unknown with respect to their overfished status.

Changes in overfished status of non-FSSI stocks

There are no changes to any of the Regions.

FSSI stock status updates are posted quarterly at:

<http://www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm#07>