

Fish Stock Sustainability Index (FSSI)

2012 Quarter 1 Update through March 31, 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.

FSSI Scoring Method

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

<u>Criteria</u>	<u>Points Awarded</u>
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}) ² (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 1 Score = 598.5 (January 1, 2012 to March 31, 2012)

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

<u>Criteria</u>	<u># Stocks</u>	<u>Current Points</u>	<u>Total Points Possible</u>	<u>Actions that Can Increase the Score</u>	<u>Potential Points to Gain</u>
1. "Overfished" status is known Overfished: 41 Not Overfished: 137	178	89	115	Determine the "overfished" status for the remaining 52 stocks	26
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 41 overfished stocks. Ensure the biomass for the 52 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)	116	116	230	For the 41 overfished stocks and the 21 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 52 stocks (see #1 above) is at or above 80% of B_{MSY} .	114
TOTAL		598.5	920		321.5

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 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 January 1, 2012 through March 31, 2012

Overview of overfishing status of FSSI stocks through March 31, 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 March 31, 2012

- 178 stocks or stock complexes are known with respect to their overfished status. Of these:
 - 137 stocks or stock complexes are not overfished (4 of these stocks are approaching an overfished condition).
 - 41 stocks or stock complexes are overfished.
- 52 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>
Red snapper – Gulf of Mexico	GMFMC	Subject to Overfishing	Not Subject to Overfishing	1	2
Atlantic cod – Gulf of Maine	NEFMC	Not Overfished – Rebuilding	Overfished	2	1
TOTAL FSSI SCORE				598.5	598.5

Changes to the Number of Stocks contained in FMPs

- In the Southeast Region –
 - Black margate, bluestriped grunt, crevalle jack, French grunt, grass porgy, porkfish, puddingwife, Queen triggerfish, sheepshead, smallmouth grunt, Spanish grunt, tiger grouper, and yellow jack are no longer contained in the Snapper-Grouper FMP.
 - Bank sea bass, cottonwick, longspine porgy, ocean triggerfish, rock sea bass, and schoolmaster are now Ecosystem Component species in the Snapper-Grouper FMP.

Overview of overfishing status of non-FSSI stocks through March 31, 2012

- 65 stocks or stock complexes are known with respect to their overfishing status. Of these:
 - 63 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).
- 183 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 Southeast Region –
 - Tilefish – Gulf of Mexico – is not subject to overfishing (was previously unknown).

There are no changes to any of the other Regions.

Overview of overfished status of non-FSSI stocks through March 31, 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

- In the Southeast Region –
 - Tilefish – Gulf of Mexico – is not overfished (was previously undefined).
- In the Northwest Region –
 - Coho salmon - Washington Coast: Strait of Juan de Fuca is now rebuilt (was previously overfished).

There are no changes to any of the other Regions.

FSSI stock status updates are posted quarterly at:

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