

Fish Stock Sustainability Index (FSSI)

2011 Quarter 2 Update through June 30, 2011

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:

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}) 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

2011 Quarter 2 Score = 585.5 (April 1, 2011 to June 30, 2011)

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: 43 Not Overfished: 134	177	88.5	115	Determine the "overfished" status for the remaining 53 stocks	26.5
2. "Overfishing" status is known Overfishing: 39 Not subject to overfishing: 155	194	97	115	Determine the "overfishing" status for the remaining 36 stocks	18
3. Overfishing is not occurring (for stocks with known "overfishing" status)	155	155	230	End overfishing on the 39 stocks subject to overfishing. Ensure the 36 stocks (see #2 above) are not subject to overfishing.	75
4. Stock biomass is above the "overfished" level defined for the stock (for stocks with a known "overfished" status and that are "not overfished")	134	134	230	Increase the biomass above the overfished level for the 43 overfished stocks. Ensure the biomass for the 53 stocks (see #1 above) is above the overfished level.	96
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)	111	111	230	For the 43 overfished stocks and the 23 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} .	119
TOTAL		585.5	920		334.5

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 April 1, 2011 through June 30, 2011

Overview of overfishing status of FSSI stocks through June 30, 2011

- 194 stocks or stock complexes are known with respect to their overfishing status. Of these:
 - 155 stocks or stock complexes are not subject to overfishing.
 - 39 stocks or stock complexes have a fishing mortality rate that exceeds the overfishing threshold (i.e., is subject to overfishing).
- 36 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, 2011

- 177 stocks or stock complexes are known with respect to their overfished status. Of these:
 - 134 stocks or stock complexes are not overfished (4 of these stocks are approaching an overfished condition).
 - 43 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

Stock	Region	Previous Status	Current Status	Previous Total FSSI Score	Current Total FSSI Score
Longnose skate - Pacific Coast	PFMC	Overfishing – Unknown	Not Subject to Overfishing	2.5	4
Bigeye tuna - Pacific	PFMC/ WPFMC	B/Bmsy<80%*	B/Bmsy>80%	2	3
TOTAL FSSI SCORE				583	585.5

*Although B/Bmsy was previously greater than 80%, this stock did not get a point for stock size being at a sustainable level. This was done at the discretion of NMFS, due to among other factors, a lack of International cooperation. The Pacific-wide stock, based on assessments of the Central Western Pacific and Eastern Tropical Pacific stocks, were recently assessed again, and it is estimated that biomass continues to be greater than 80%. Additionally, a conservation resolution was recently adopted at the IATTC meetings, which will extend for 3 years (2011-2013). Due to these recent events, NMFS has revised its position and the stock will receive an additional point for B/Bmsy>80%.

Overview of overfishing status of non-FSSI stocks through June 30, 2011

- 62³ stocks or stock complexes are known with respect to their overfishing status. Of these:
 - 60 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).
- 242 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 Alaska Region –
 - The Bering Sea/Aleutian Islands Other Species Complex has been further divided into the major taxonomic groups (this complex no longer exists):
 - Bering Sea/Aleutian Islands Skate Complex is not subject to overfishing.
 - Bering Sea/Aleutian Islands Octopus Complex is unknown with respect to the overfishing status.
 - Bering Sea/Aleutian Islands Shark Complex is unknown with respect to the overfishing status.
 - Bering Sea/Aleutian Islands Sculpin Complex is unknown with respect to the overfishing status.
 - The Gulf of Alaska Other Species Complex has been further divided into the major taxonomic groups (this complex no longer exists):
 - Gulf of Alaska Octopus Complex is unknown with respect to the overfishing status.
 - Gulf of Alaska Shark Complex is unknown with respect to the overfishing status.
 - Gulf of Alaska Sculpin Complex is unknown with respect to the overfishing status.
- In the Highly Migratory Species Division –
 - Scalloped hammerhead – Atlantic is subject to overfishing (was previously listed as part of the Large Coastal Shark Complex, which is unknown; this stock is now assessed individually).
- There are no changes to any of the other Regions.

³ This number includes Pacific halibut, which is managed by the International Pacific Halibut Commission.

Overview of overfished status of non-FSSI stocks through June 30, 2011

- 30³ stocks or stock complexes are known with respect to their overfished status. Of these:
 - 24 stocks or stock complexes are not overfished (1 of these stocks is approaching an overfished condition).
 - 6 stocks are overfished.
- 274 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 Alaska Region –
 - The Bering Sea/Aleutian Islands Other Species Complex has been further divided into the major taxonomic groups (this complex no longer exists):
 - Bering Sea/Aleutian Islands Skate Complex is not overfished.
 - Bering Sea/Aleutian Islands Octopus Complex is undefined with respect to the overfished status.
 - Bering Sea/Aleutian Islands Shark Complex is undefined with respect to the overfished status.
 - Bering Sea/Aleutian Islands Sculpin Complex is undefined with respect to the overfished status.
 - The Gulf of Alaska Other Species Complex has been further divided into the major taxonomic groups (this complex no longer exists):
 - Bering Sea/Aleutian Islands Octopus Complex is undefined with respect to the overfished status.
 - Bering Sea/Aleutian Islands Shark Complex is undefined with respect to the overfished status.
 - Bering Sea/Aleutian Islands Sculpin Complex is undefined with respect to the overfished status.
- In the Highly Migratory Species Division –
 - Scalloped hammerhead – Atlantic is overfished (was previously listed as part of the Large Coastal Shark Complex, which is unknown; this stock is now assessed individually).
- 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>