

Fish Stock Sustainability Index (FSSI)

2009 Quarter 2 Update through June 30, 2009

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 overfishing is ended and stocks rebuilt 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

2009 Quarter 2 Score = 562 (April 1, 2009 to June 30, 2009)

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: 131 | 174 | 87 | 115 | Determine the "overfished" status for the remaining 56 stocks | 28 |
| 2. "Overfishing" status is known Overfishing: 39 Not subject to overfishing: 149 | 188 | 94 | 115 | Determine the "overfishing" status for the remaining 42 stocks | 21 |
| 3. Overfishing is not occurring (for stocks with known "overfishing" status) | 149 | 149 | 230 | End overfishing on the 39 stocks subject to overfishing. Ensure the 42 stocks (see #2 above) are not subject to overfishing. | 81 |
| 4. Stock biomass is above the "overfished" level defined for the stock (for stocks with a known "overfished" status and that are "not overfished") | 131 | 131 | 230 | Increase the biomass above the overfished level for the 43 overfished stocks. Ensure the biomass for the 56 stocks (see #1 above) is above the overfished level. | 99 |
| 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) | 101 | 101 | 230 | For the 43 overfished stocks and the 30 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 56 stocks (see #1 above) is at or above 80% of B_{MSY} . | 129 |
| TOTAL | | 562 | 920 | | 358 |

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, 2009 through June 30, 2009

NOTE: The results of the Groundfish Assessment Review Meeting III (GARM III, published September 2008) are not included in this quarterly update. The new reference points must be adopted through an amendment to the Northeast Multispecies FMP before the results can be reported. The unofficial results of the GARM are footnoted, along with the official current status in the stock status table. As soon as the FMP is amended, the results will be incorporated in the quarterly update.

Overview of overfishing status of FSSI stocks through June 30, 2009

- 188 stocks or stock complexes are known with respect to their overfishing status. Of these:
 - 149 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).
- 42 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, 2009

- 174 stocks or stock complexes are known with respect to their overfished status. Of these:
 - 131 stocks or stock complexes are not overfished (4 of these stocks are approaching an overfished condition).
 - 43 stocks or stock complexes are overfished.
- 56 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> |
|--|---------------|---|-----------------------------------|----------------------------------|---------------------------------|
| Black sea bass – Mid-Atlantic Coast | NE | Not Overfished – Rebuilding Not Subject to Overfishing | Rebuilt Subject to Overfishing | 3 | 3 |
| Thorny skate – Gulf of Maine | NE | Subject to Overfishing | Not Subject to Overfishing | 1 | 2 |
| Winter skate - Georges Bank/Southern New England | NE | Overfished | Not Overfished – Rebuilding | 2 | 3 |
| Splitnose rockfish - Pacific Coast | NW | Overfished – Unknown | Not Overfished B/Bmsy > 80% | 1.5 | 4 |
| Canary rockfish - Pacific Coast | NW | Not Overfished – Rebuilding | Overfished | 3 | 2 |
| Darkblotched rockfish - Pacific Coast | NW | Overfished | Not Overfished – Rebuilding | 2 | 3 |
| TOTAL FSSI SCORE | | | | 557.5 | 562 |

Overview of overfishing status of non-FSSI stocks through June 30, 2009

- 57³ stocks or stock complexes are known with respect to their overfishing status. Of these:
 - 56 stocks or stock complexes are not subject to overfishing.
 - 1 stock has a fishing mortality rate that exceeds the overfishing threshold (i.e., is subject to overfishing).
- 232 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**
- There are no changes to any of the Regions.

Overview of overfished status of non-FSSI stocks through June 30, 2009

- 26³ stocks or stock complexes are known with respect to their overfished status. Of these:
 - 23 stocks or stock complexes are not overfished (1 of these stocks are approaching an overfished condition).
 - 3 stocks are overfished.
- 263 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 Northwest Region –
 - Coho salmon - Washington Coast: Queets – is now overfished.
 - Coho salmon - Washington Coast: Western Strait of Juan de Fuca – is now 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>

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