

Fish Stock Sustainability Index (FSSI)

2007 Quarter 1 Update through March 31, 2007

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 rebuild 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

2007 Quarter 1 Score = 508.5 (January 1, 2007 to March 31, 2007)

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: 47 Not Overfished: 116 | 163 | 81.5 | 115 | Determine the "overfished" status for the remaining 67 stocks | 33.5 |
| 2. "Overfishing" status is known Overfishing: 45 Not subject to overfishing: 135 | 180 | 90 | 115 | Determine the "overfishing" status for the remaining 50 stocks | 25 |
| 3. Overfishing is not occurring (for stocks with known "overfishing" status) | 135 | 135 | 230 | End overfishing on the 45 stocks subject to overfishing. Ensure the 50 stocks (see #2 above) are not subject to overfishing. | 95 |
| 4. Stock biomass is above the "overfished" level defined for the stock (for stocks with a known "overfished" status and that are "not overfished") | 116 | 116 | 230 | Increase the biomass above the overfished level for the 47 overfished stocks. Ensure the biomass for the 67 stocks (see #1 above) is above the overfished level. | 114 |
| 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) | 86 | 86 | 230 | For the 47 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 67 stocks (see #1 above) is at or above 80% of B_{MSY} . | 144 |
| TOTAL | | 508.5 | 920 | | 411.5 |

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.



Fish Stock Sustainability Index (FSSI)

Summary of Stock Status Determination Changes from January 1, 2007 through March 31, 2007

Overview of overfishing status of FSSI stocks through March 31, 2007

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

Changes in overfishing status and/or score of FSSI stocks

- In the Northeast Region –
 - *Winter Skate* is no longer subject to overfishing - score remained at 2 (see overfished changes).
- In the Southeast Region –
 - *Goliath Grouper* is not subject to overfishing (was previously listed as unknown) – score increased from 0 to 1.5.
- There are no changes to the other regions.

Overview of overfished status of FSSI stocks through March 31, 2007

- 163 stocks or stock complexes are known with respect to their overfished status. Of these:
 - 116 stocks or stock complexes are not overfished (2 of these stocks are approaching an overfished condition).
 - 47 stocks or stock complexes are overfished.
- 67 stocks or stock complexes have overfished thresholds not defined or applicable, or are unknown with respect to their overfished status.

Changes in overfished status and/or score of FSSI stocks

- In the Northeast Region –

- *Winter Skate* is overfished - score remained at 2 (see overfishing changes).
- *Spiny Dogfish* is not overfished (was previously listed as undefined) – score increased from 1.5 to 3.
- *Silver Hake – Gulf of Maine / Northern Georges Bank* is now below 80% of maximum sustainable yield – score decreased from 4 to 3.
- *Little Skate* is now below 80% of maximum sustainable yield – score decreased from 4 to 3.
- In the Northwest Region –
 - *Pacific Whiting* is now above 80% of maximum sustainable yield – score increased from 3 to 4.
- There are no changes to the other regions.

Overview of overfishing status of non-FSSI stocks through March 31, 2007

- 61 stocks or stock complexes are known with respect to their overfishing status. Of these:
 - 59 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).
- 236 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 Northwest Region –
 - *Oregon Coastal Natural comprised of Southern, South-Central, North-Central, and Northern Oregon Stocks* is not subject to overfishing (was previously listed as N/A).
- In the Alaska Region –
 - *Pink Salmon, Sockeye Salmon, Chum Salmon, and Coho Salmon* are now listed as one stock assemblage, the *Coho Salmon Assemblage*. *Chinook Salmon* is now listed as *Eastern North Pacific Far North Migrating Chinook*. These changes have resulted in 3 fewer individual salmon listings, all of which were listed as not subject to overfishing.
- There are no changes to the other regions.

Overview of overfished status of non-FSSI stocks through March 31, 2007

- 23 stocks or stock complexes are known with respect to their overfished status. Of these:
 - 22 stocks or stock complexes are not overfished.
 - 1 stock is 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 Northwest Region –
 - *Oregon Coastal Natural* comprised of *Southern, South-Central, North-Central, and Northern Oregon Stocks* is not overfished (was previously listed as N/A).
- In the Alaska Region –
 - *Pink Salmon, Sockeye Salmon, Chum Salmon, and Coho Salmon* are now listed as one stock assemblage, the *Coho Salmon Assemblage*. *Chinook Salmon* is now listed as *Eastern North Pacific Far North Migrating Chinook*. These changes have resulted in 3 fewer individual salmon listings, all of which were listed as not overfished.
- There are no changes to the other regions.