# Fish Stock Sustainability Index (FSSI)

# 2006 Quarter 4 Update through December 31, 2006

## **Overview**

The FSSI is a performance measure for the sustainability of 230 U.S. fish stocks<sup>1</sup> 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>	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**

**2006 Quarter 4 Score = 506.5** (October 1, 2006 to December 31, 2006)

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>	# Stocks	Current Points	<u>Total</u> <u>Points</u> <u>Possible</u>	Actions that Can Increase the Score	Potential Points to Gain
1. "Overfished" status is known Overfished: 46 Not Overfished: 116	162	81	115	Determine the "overfished" status for the remaining 68 stocks	34
2. "Overfishing" status is known Overfishing: 46 Not subject to overfishing: 133	179	89.5	115	Determine the "overfishing" status for the remaining 51 stocks	25.5
3. Overfishing is not occurring (for stocks with known "overfishing" status)	133	133	230	End overfishing on the 46 stocks subject to overfishing. Ensure the 51 stocks (see #2 above) are not subject to overfishing.	97
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 46 overfished stocks. Ensure the biomass for the 68 stocks (see #1 above) is above the overfished level.	114
5. Stock biomass is at or above 80% of B <sub>MSY</sub> (this point is in addition to the point awarded for being above the "overfished" level, criteria #4)	87	87	230	For the 46 overfished stocks and the 29 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 68 stocks (see #1 above) is at or above 80% of $B_{MSY}$ .	143
TOTAL	230	506.5	920		413.5

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> Stocks rebuilding from a previously overfished condition are not awarded the fourth point until they reach B<sub>MSY</sub>, 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.