Fish Assessment Report

August 1, 2011

NOAA FISHERIES SERVICE

FY2011 Quarter 3 (April–June)

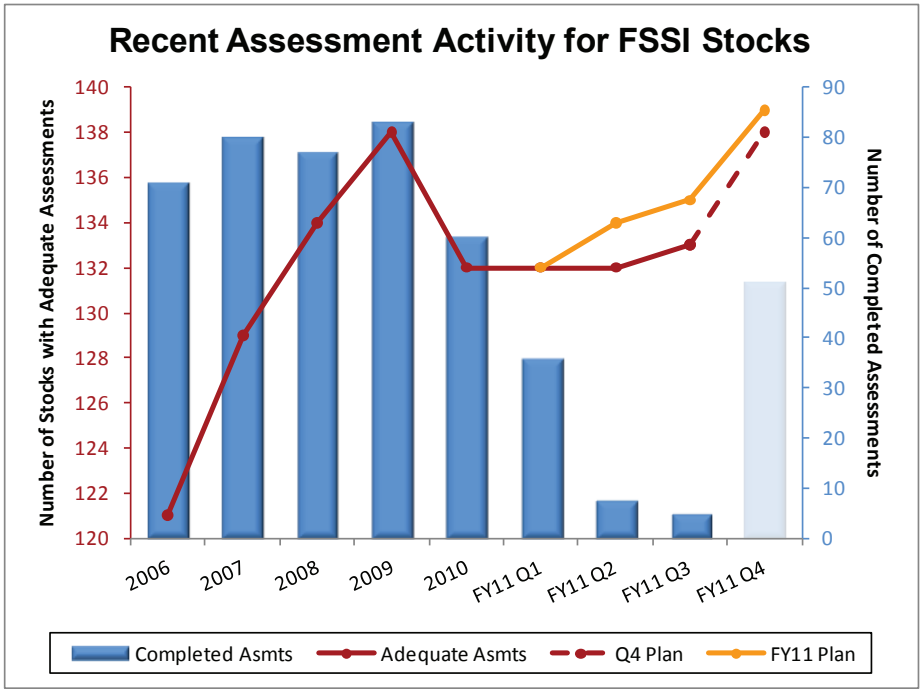
Number of FSSI Stocks with Adequate Assessments = 133

Assessment Summary

This report summarizes the efforts of NOAA Fisheries to provide stock assessment advice in support of fishery status determinations, setting annual catch limits, and management of sustainable fisheries. NOAA Fisheries tracks the number of Fish Stock Sustainability Index (FSSI) stocks with adequate assessments on an annual and quarterly basis. Adequate assessments are conducted at Level 3 or higher, validated by a regional review, and have been updated within the past five years.

The fiscal year began in October 2010 with 132 out of the 230 FSSI stocks having adequate stock assessments. The target number of stocks with adequate assessments at the end of FY2011 is 139, for a projected net increase of seven stocks with adequate assessments. This increase is expected to be achieved through a combination of new assessments for stocks that have never before been assessed, upgrades to assessments for stocks previously assessed, and updates of assessments for stocks that have recently expired or are set to expire at the end of FY2011.

A large number of assessments (36 total) was completed for FSSI stocks in the first quarter of FY2011 (October – December, 2010), mostly on stocks in the Alaska Region (Appendix A). Many of these assessments were updates to existing stock assessments, and there was no net change to the number of stocks with adequate assessments in Quarter 1. Assessments completed in the first quarter included a benchmark assessment for the overfished South Atlantic stock of red snapper and annual/biannual assessments of Alaska stocks necessary for the management of stocks in the Bering Sea, Aleutian Islands, and Gulf of Alaska. Several of these Alaskan assessments were conducted at the highest level possible (Level 5), incorporating ecosystem information such as environmental variables.



Quarter 2 (January – March, 2011) concluded with a total of eight FSSI stock assessments completed. The number of stocks with adequate assessments was again 132 (Appendix A). One stock assessment (black sea bass – Southern Atlantic Coast) scheduled to be completed in the second quarter was postponed until Quarter 4 so additional analyses could be conducted. Additionally, the assessment of longfin inshore squid on the Atlantic Coast did not meet the requirements for adequacy as expected. However, the second quarter did have a significant assessment achievement – the assessment of Pacific hake was upgraded to a "next generation" assessment by incorporating ecosystem considerations into the assessment model.

At the end of Quarter 3, the number of stocks with adequate stock assessments is 133 (Appendix A). A total of five stock assessments of FSSI stocks was completed in the third quarter, all of them adequate (i.e. Level 3 or above). Third quarter stock assessment activity included a new assessment for Gulf of Mexico yellowedge grouper, a stock that had never before been assessed and previously had unknown overfishing and overfished status determinations.

A large number of stock assessments is planned for FSSI stocks in the final quarter of the fiscal year (Appendix A), including a handful of assessments that are projected to increase the overall number of stocks with adequate assessments. For a complete listing of the assessment status of all FSSI stocks, please see Appendix B.

Summary of Changes to Assessment Adequacy for FSSI Stocks Through Quarter 3

Fishery Council	Fishery Management Plan	Stock Name and Area	Adequate?		Change	Notes on Last Asmt*
			Previous	Current		
MAFMC	Atlantic Mackerel, Squid and Butterfish	Longfin inshore squid – Georges Bank / Cape Hatteras	No	No	0	Asmt did not meet adequacy requirements
GMFMC	Reef Fish Resources of the Gulf of Mexico	Greater amberjack – Gulf of Mexico	Yes	Yes	0	New asmt completed before previous asmt expired
GMFMC	Reef Fish Resources of the Gulf of Mexico	Yellowedge grouper – Gulf of Mexico	No	Yes	+1	New adequate assessment

*asmt = assessment

Background

Fish stock assessments provide the technical information needed to support determination of a stock's status and to forecast the level of acceptable biological catch (ABC) that would prevent overfishing. The amount of data available to conduct stock assessments varies tremendously across the 500+ managed stocks and even within the 230 FSSI stocks. Generally, a minimally adequate assessment can be conducted where there is good information on the level of annual catch over time and there is an indicator of the degree of change in stock abundance over time (Level 3, see box below). Any assessment needs to be updated periodically to track natural fluctuations and to provide timely management advice. For the purposes of this report, five years is used as a nominal window beyond which the adequacy of an assessment is considered to have expired. In reality, many important stocks are updated more frequently. All assessments must deal with various shortcomings in the available data and all assessments have uncertainty in their findings. Thus, assessments are expected to be validated by a regional review system before being considered as the best scientific information available regarding the status of the stock.

Assessment Levels (as defined in the *Stock Assessment Improvement Plan* [2001])

Level 0 – None; although some data may have been collected on this stock, these data have not been examined beyond simple time series plots or tabulations of catch

Level 1 – Index only; catch per unit of effort from commercial, recreational, or survey vessel data, or a onetime estimate of absolute abundance

Level 2 – Simple equilibrium models applied to life history information

Level 3 – Equilibrium and non-equilibrium production models aggregated both spatially and over age and size

Level 4 – Size / age / stage structure models

Level 5 – Assessment models incorporating ecosystem considerations (environmental variables, multispecies information, habitat) and spatial and seasonal considerations in addition to Levels 3 and 4