

Options/Recommendations to STAR 2010 Bay Barometer Changes Blue Crab Abundance Indicator

Indicator/Index Change:

Revise blue crab abundance target/indicator

Justification for Change(s):

The current means of displaying Blue Crab abundance does not explain how the species is managed, nor does it show the balance between harvest percentage and overall population. The revision to the blue crab abundance target is being driven by the Executive Order 13508 strategy which calls out blue crab abundance as a baywide environmental outcome. Each outcome in the EO requires an indicator to evaluate success in achieving the outcome. The specific blue crab environmental outcome described in the strategy was developed in close coordination with Maryland, Virginia and Potomac River Fisheries Commission to emphasize continuation and enhancement of the science-based approach currently underway to revise the interim population rebuilding target of (200 million adult age +1 blue crabs) through the blue crab benchmark stock assessment. This assessment will be completed in spring/summer 2011 and results from this assessment will alter the new target abundance and harvest levels. The management decisions based on this new data will be taken directly from the resulting control rule, which will make for an easy explanation to the public via the Bay Barometer.

Background:

- Please refer to the existing [blue crab abundance](#) indicator
- Fisheries GIT has recommended changes due to improved blue crab information
- The Fisheries GIT presented initial work related to a revised measure to the Management Board (MB) on January 19, 2010. Please refer to [Attachment C: Goal Implementation Team Proposals](#), pages 9 and 13 (top two charts related to Blue Crab Health, not the Program Progress Index that appears under those charts *See Below*)

Recommendation(s) from:

Bruce Vogt and Adam Davis

Recommendation(s):

- Instead of reporting “x% of Goal Achieved,” the Sustainable Fisheries GIT proposes to use the control rule for Blue Crabs.
 - The control rule is an accurate representation of stock health (in terms of abundance) and it also explains how the species is handled from a management standpoint.
 - The Fisheries GIT will also develop this metric further to show how other factors such as habitat and interspecies relationships will be considered in management decision making over the next few years as Ecosystem-Based Fisheries Management (EBFM) advances (see example blue crab dashboard below).



Blue Crab Fishery Management

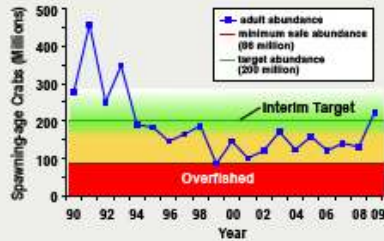
GIT-1
Produced January 10, 2010

Performance Indicators

GOAL Sustainable blue crab fishery managed from an ecosystem perspective.

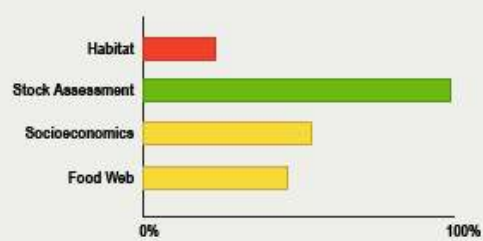
Blue Crab Health

Health of Stock Abundance*



*Abundance depends upon harvest and crab reproductive success. Target depends upon social goals for Chesapeake Bay which need to be clarified.

Health of System Index of EBFM 2009*



*The IEBFM includes factors both within and outside of management control (e.g. environmental variables). Note: Graph for illustration only.

Program Progress Index (Tracks GIT Goals)

