

Mid-Atlantic Fishery Management Council

800 North State Street, Suite 201, Dover, DE 19901 Phone: 302-674-2331 | FAX: 302-674-5399 | www.mafmc.org Michael P. Luisi, Chairman | G. Warren Elliott, Vice Chairman Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: March 28, 2017

To: Council

From: Jason Didden

Subject: River Herring/Shad (RH/S) Progress Metrics

At the last Council Meeting, the Council passed the following motion:

"I move that the Council task the RH/S Committee, working with Council and NMFS staff to develop measurable criteria by which the Council will be better able to decide on management action."

Council staff began with a list of potential metrics provided by RH/S Committee Member Peter deFur, and then modified that list based on preliminary input from NMFS and ASMFC staff with expertise in RH/S. The modified list, still in draft form, is provided below for Committee discussion at the April 2017 Council meeting (http://www.mafmc.org/briefing/april-2017).

After receiving input from the Committee/Council, staff will further revise the list and develop recommendations for a set of metrics that could be monitored given current workload constraints.

There is a RH/S Advisory Panel (AP) webinar meeting on April 7, 2017 (http://www.mafmc.org/council-events/2017/river-herring-and-shad-advisory-panel-meeting) to provide input on the potential metrics. A summary of the AP input will be posted to the April 2017 Council meeting website as soon as possible. The 2016 Annual RH/S Progress Review (http://www.mafmc.org/s/Tab03_RHS-Review.pdf) created by staff last year will also be posted to the meeting website as additional background.

| Assessing RH/S efforts to increase/recover stocks | | | | | | | | |
|--|---|---|----------|------------|---------------------------------|--|--|--|
| | T | | | | | | | |
| **Meaures could/should be prioritized. | | | | | | | | |
| **Frequency of updating influences workload | | | | | | | | |
| Measure | 1 | 1 | ⇔ | no data | confidence (Low-to- high) | Notes | | |
| Mackerel incidental catch cap trend (standardized to effort?) | | | | | | seems feasible to report on (GARFO INFO) | | |
| Mackerel catch cap C.V. trend | | | | | | seems feasible to report on (GARFO INFO) | | |
| Atl. herring incidental catch cap trend (standardized to effort?) | | | | | | seems feasible to report on (GARFO INFO) | | |
| Atl. herring catch cap C.V. trend | | | | | | seems feasible to report on (GARFO INFO) | | |
| | | | | | | seems feasible to report on (NEFOP). This should | | |
| | | | | | | identify cause if at all possible. Based on discussions | | |
| | | | | | | with NEFOP, proposed edits to report should make this | | |
| Slippage Trends in relevant fisheries | | | | | | more explicit in the future. | | |
| Voluntary avoidance participation rate trend | | | | | | seems feasible to report on (SMAST) | | |
| Information on voluntary avoidance effectiveness | | | | | | seems feasible to report on (SMAST) | | |
| Overall RH/S incidental catch trends | | | | | | seems feasible to report on (NEFSC performs regularly) | | |
| CV of overall incidental catch trends | | | | | | seems feasible to report on (NEFSC) | | |
| Percentage of Herring/Mackerel/other relevant fisheries observed | | | | | | This may be difficult to do because SBRM observer coverage is not determined by fishery but instead by fishing fleet | | |
| Number of Runs Monitored | | | | | | seems possible, high workload | | |
| Number of Runs Monitored and data available to public | | | | | | seems possible, high workload | | |
| Percent of Monitored RH/S Runs Over Their 10-year median | | | | | | seems possible, high workload | | |
| Number of runs with sustainable harvest plans approved | | | | | | seems feasible to report on (on file with ASMFC) | | |
| Trends in commercial access to fishery (quotas, numbers of rivers | | | | | | | | |
| with approved fishing) | | | | | | seems feasible to report on (ASMFC) | | |
| Trends in recreational access to fishery (quotas, numbers of rivers with approved fishing) | | | | | | seems feasible to report on (ASMFC) | | |
| | | | | | | there are no quotas; only in some cases have | | |
| | | | | | | sustainable FMPs set a max catch. It is not by stock, | | |
| Legal catch in rivers by river/stock | | | | | | rather species | | |

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| NEFSC Trawl Abundnace Trends | | | | | | seems feasible to report on (NEFSC) | |
| NEAMAP Trawl Abundance Trends | | | | | | seems feasible (VIMS) | |
| State Trawl Abundance Trawls | | | | | | seems possible, potentially high workload, this is included in state compliance reports for select water bodies | |
| Research on stock identification | | | | | | seems possible to report on | |
| Research on RH/S bycatch run origin identification | | | | | | seems possible to report on | |
| Progress on informative stock assessment(s) | | | | | | This metric will likely only be applicable approximately every 10 years (the approximate frequency of benchmark assessments) | |
| If available, stock size trends | | | | | | seems possible to report on | |
| Establishment of targets for recovery | | | | | | seems possible to report on | |
| SSC involvement in setting caps and/or limits | | | | | | seems possible to report on | |
| Progress toward setting a biologically-based cap | | | | | | seems possible to report on | |
| 3 | | | | | | With the generalist nature of most predators, it is unlikely that changes would directly correlate with RH abundances; other influences would need to be considered (fishing, other prey, environment, etc.). | |
| Trends in predator species (EAFM) | | | | | | Major work would be required. | |
| Trends in use of EAFM for RH/S protection | | | | | | ? | |
| Trends in habitat (river miles, quality, consultations) | | | | | | seems possible, potentially high workload | |
| Mean Length Trend (only available for subset of runs/stocks) | | | | | | High workload if done outside assessment | |
| Maximum Age Trend (only available for subset of runs/stocks) | | | | | | High workload if done outside assessment | |
| Total Mortality Trend (only available for subset of runs/stocks) | | | | | | High workload if done outside assessment | |
| Canadian Trends (?) | | | | | | | |