

Forage Action Team Meeting Minutes

June 6, 2017

<http://www.chesapeakebay.net/calendar/event/25233/>

Participants

Bruce Vogt	Chris Moore	Ed Houde	Emilie Franke
Geoff Smith	Jim Uphoff	Kara Skipper	Marian Norris
Marty Gary	Mary Fabrizio	Nancy Butowski	Pat Campfield
Ryan Woodland	Tom Ihde		

Background

Forage Action Team Role

The Forage Action Team is responsible for advancing the Forage Outcome under the Chesapeake Bay Program to “Continually improve the Partnership’s capacity to understand the role of forage fish populations in the Chesapeake Bay. By 2016, develop a strategy for assessing the forage fish base available as food for predatory species in the Chesapeake Bay.”

Forage Action Team Efforts

- The University of Maryland Center for Environmental Science Chesapeake Biological Laboratory (UMCES-CBL) developed a report on [forage indicators and predator consumption profiles in the Chesapeake Bay](#).
- The Forage Action Team convened quarterly meetings in [June 2016](#), [September 2016](#), and [February 2017](#).
- Chesapeake Bay Program developed and produced a [video on forage in the Chesapeake Bay](#).
- Collaborated with an undergraduate student to [test forage sampling gear](#) in different habitats.
- Working with the Habitat Goal Implementation Team (GIT) to develop a pilot study to determine if forage monitoring can be incorporated into citizen monitoring of submerged aquatic vegetation (SAV).
- Provided public comment support the Mid-Atlantic Fishery Management Council (MAFMC) [forage amendment](#).



Click the image above to see the forage video produced by the Chesapeake Bay Program and narrated by forage expert Dr. Ed Houde.

June 6th Meeting Goals

- To introduce the team to the Chesapeake Bay Program’s Strategy Review System and identify how we can use this opportunity to further advance our work under the Forage Outcome.
 - To review and approve a strategy for the Forage Action Team that pulls together our foundational science, priorities and efforts.
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Strategy Review System

What is the Strategy Review System?

- The Strategy Review System (SRS) is a system developed by the Chesapeake Bay Program (CBP) to conduct a biennial review of the 31 outcomes under the 2014 Chesapeake Watershed Agreement. The reviews will occur over two-years with 3-6 related outcomes presenting at each quarterly meeting.
- Workgroups and Action Teams will perform a self-evaluation of their progress, identifying successes, challenges, and new developments in policy, fiscal, and scientific areas that impact their outcome using a guided process designed by the Chesapeake Bay Program.
- Teams will present an overview of their self-evaluation at a designated CBP Management Board meeting within the 2-year period and adaptively manage based on feedback from their team and the Management Board.

How does the SRS impact the Forage Action Team?

- The SRS provides a great opportunity to evaluate the successes and challenges from our first year of our workplan implementation. These lessons learned can be used to improve our strategy and adapt our efforts to better address factors impacting forage.
- In order to get the most out of the SRS, the Forage Action Team met as a full team on June 6 to review our workplan and to begin prepare the materials provided by the CBP to guide our self-evaluation and presentation to the Management Board.
- The Forage Action Team will present to the Management Board on August 10, highlighting one or two key messages learned from our self-evaluation and requesting support from the Management Board as we adaptively manage to achieve our outcome.
- The Forage Action Team will develop a new 2-year workplan within 90 days of receiving feedback from the Management Board.

Actions

- Bruce, Emilie and Kara will fill out the preparatory materials for the Strategy Review System.
 - Draft SRS materials will be sent out to the Forage Action Team for review and edits.
 - Sean Corson, Sustainable Fisheries GIT Chair, will present to the Chesapeake Bay Program Management Board to inform about Forage Outcome progress, challenges, and needs.
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Building off Forage Progress

Next Steps

- Work more closely with the Fish Habitat Action Team
 - Connect with shorelines and impervious surface focus
- Identify where the Management Board can directly impact forage species
- Select indicators to represent progress/forage health
 - Adaptive management framework requires a measure of progress
 - Consider having two indicators:
 - Indicator that measures progress
 - Indicator that measures increase in understanding

Actions

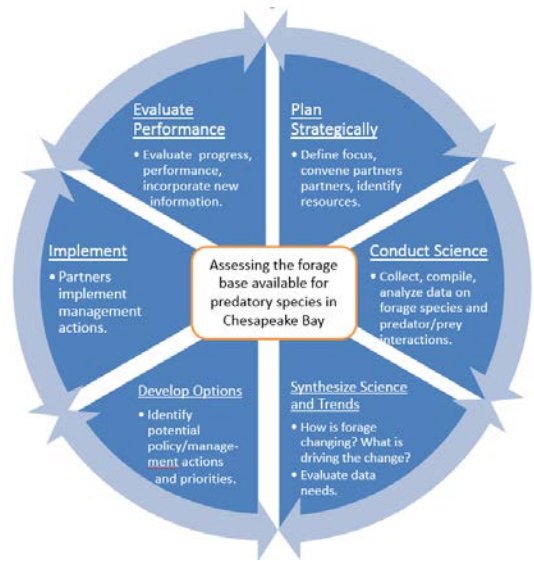
- Forage Action Team will look for opportunities to connect forage with fish habitat.
- Forage Action Team will consider adding "Select indicator(s) to measure progress and understanding" in the next two-year workplan.

- Bruce and Kara will analyze where Management Board members can potentially influence or impact forage species or factors influencing forage species.

Forage Strategy

Strategy Development

- The Forage Outcome calls for the development of a strategy to guide our actions.
- Originally designed strategy was in a different format and focused on capturing our intended process for continuing our progress and building on our existing research.
- Recommendations from the team to improve strategy development:
 - Revise to include more explicit language about evaluation
 - Demonstrate feedback process (double-sided arrows)
 - Indicate incremental growth in the strategy or the description of the strategy
 - Determine if bullets are necessary, consider keeping content at a high level
- Recommendations from the team to utilize this strategy:
 - Identify potential management actions
 - Allow for the possibility that current management/condition may be acceptable
 - Share data with Coastal Zone Management
 - Determine what information would be most useful to non-fisheries audience
- Striped Bass Example:
 - Introduces the ecosystem based management approach to managers
 - Use existing information to see where changes in fish habitat will impact forage
- Management Needs:
 - Forage Action Team expressed a strong need to have fisheries manager input on expectations, science needs, and potential management options
 - Consider comprehensive planning (planning and zoning) as management decisions
 - Identify what fisheries managers capabilities regarding forage
 - Partition management options into 1) fishery management, and 2) ecosystem management
 - Define adequate forage
 - Establish the habitat requirements for forage species
 - Communicate STAC Fish Habitat Workshop results when available next year



Revised Forage Strategy – 6/27/17 version

Actions:

- Emilie will revise the strategy according to feedback compiled from the discussion
- Bruce and Kara will explore a focused meeting with fishery managers:
 - Explain our capacity with forage actions/decisions
 - Request questions/needs from managers
 - Consider bringing information to citizen board members in Virginia

Forage Workplan

Strategy Review System Preview

- Progress:
 - STAC Forage Workshop and Workshop Report
 - Identified important forage and provided recommendations
 - UMCES Study on Forage Indicators and Predator Consumption Profiles
 - Found changes in consumption over time depending on forage availability
 - Maryland DNR developed striped bass indicators
 - Striped bass indicators included a standardized index of bass-to-major forage
 - UMCES Study on environmental drivers of forage population trends
 - Identified a “Portfolio Effect”, where the diversity of forage allows for a more stable predator base despite highly variable population trends
 - Developed a forage video to engage and inform Chesapeake community about the importance of forage
 - Chesapeake Bay Program videographer worked with experts to develop a short (~4 minute) video that educates viewers about forage in the Chesapeake Bay
 - Conducted a small-scale study to develop cost-efficient and effective benthic sampling gear for citizen monitoring efforts
 - Study found that benthic core abundance results remained statistically significant in gravel and sand substrate for a reasonable cost
 - Working with Watershed and Riverkeeper Groups to develop a citizen monitoring forage sampling protocol to gain information on forage in nearshore habitats.
 - Pilot study is ongoing and will commence this summer into fall
- Challenges
 - Need to establish expectations for sustainable forage populations (from fishery managers)
 - For ecosystem, including human, avian, fish predators
 - Lack of zooplankton monitoring data
 - Lack of sufficient monitoring data for forage species Baywide (especially invertebrates)
 - Lack of predator diet data from tributaries and shallow waters
 - Need to develop an analysis on the relationship between forage species with shoreline condition

Actions

- Bruce, Emilie and Kara will use input from the Forage Action Team’s discussion to continue filling out the preparatory materials for the Strategy Review System.