Forage Workplan Kick Off Meeting Minutes
Monday, June 27, 2016, 2:00 pm – 3:00pm
Materials: http://www.chesapeakebay.net/calendar/event/24156/

Participants:

Bill Goldsborough	Jim Price	Marty Gary
Bruce Vogt	Jim Uphoff	Matt Ogburn
Carlos Lozano	Kara Skipper	Patrick Campfield
Charles Poukish	Katie May Laumann	Rob O'Reilly
Ed Houde	Luke Argleben	Tom Ihde
Emilie Franke	Lynn Fegley	Will Parson

Workplan Background:

The Chesapeake Bay Program (CBP) is working to achieve the 31 outcomes outlined in the 2014 Watershed Agreement. The Sustainable Fisheries Goal Implementation Team (SFGIT) is responsible for the sustainable fisheries goal in the Agreement and associated five outcomes: Blue Crab Abundance, Blue Crab Management, Oyster Restoration, Forage, and Fish Habitat (joint with the Vital Habitats GIT).

In 2015, Management Strategies were finalized for each outcome and outlined the approaches and high-level actions that will be taken to achieve each outcome by the year 2025, including monitoring, assessment and reporting of progress. Workgroups developed workplans to support the management strategies by summarizing specific commitments and near-term actions for each individual outcome. The 2016-17 workplans, including the Forage Workplan were finalized in April 2016.

It is the role of the Forage Action Team to implement the actions outlined in the Forage workplan and develop methods for monitoring individual actions to ensure completion within the two year period. This meeting is intended to provide an update on in-progress actions from this workplan, inform the team of near-term actions and designate a plan for monitoring the implementation of future actions.

Progress Updates:

Forage Outreach Efforts: Tom Ihde and Bruce Vogt presented the forage outcome to the Management Board, highlighting the cyclical relationship between the Bay Program partnership and forage research in the Chesapeake Bay. The Bay Program has directly supported work that has contributed to the forage outcome through the Scientific and Technical Advisory Committee (STAC) Forage Workshop, a GIT-funded study which evaluated forage indicators and predator consumption profiles, and an ongoing GIT-funded study that will investigate drivers of forage trends.

Will Parson, the videographer for the Chesapeake Bay Program (CBP) is working with Tom Ihde and other forage experts to develop a forage video for the Bay 101 video series. This video will capture the basics of forage in the Chesapeake Bay and answer essential questions for the viewer, such as what constitutes forage, why forage is important, and what poses a threat to forage in the Bay. The short video intends to utilize an expert interview, seine survey footage, and video of predator diet analysis to intrigue the viewers to learn more. Additional planning and shooting will continue throughout the year.

Action: Send details for the forage video to the Forage Action Team (initial details are located at the end of this document).

Drivers of Forage Trends Study: The University of Maryland Center for Environmental Science – Chesapeake Biological Laboratory (UMCES-CBL) is investigating drivers of forage population trends in the Chesapeake Bay. The UMCES-CBL team is currently acquiring a broad range of fisheries, benthic, and environmental datasets and collaborating with the Virginia Institute of Marine Science (VIMS) to ensure full data access at desired temporal and spatial resolution. Future steps include running analyses after complete data acquisition and reviewing preliminary results. Ed Houde noted that the second year of the study will address spatial distribution in a regional-sense.

Action: Emilie will send out the final report for the GIT-funded study on Forage Indicators and Predator Consumption Profiles. The presentation of the study results is available here.

Identify Shared Efforts/Priorities with MAFMC: Rich Seagraves, Mid-Atlantic Fisheries Management Council (MAFMC) presented on MAFMC's ecosystem approach to fisheries management to the full SFGIT at the June 2016 meeting. This presentation included MAFMC's efforts towards addressing forage including their unmanaged forage amendment. The SFGIT Executive Committee agreed to further discuss connections between these MAFMC efforts and the SFGIT's work on forage in the Bay. At this time, the GIT has determined the overlaps between MAFMC's unmanaged forage list and the Bay forage list – bay anchovy and Atlantic silversides. From here, the SFGIT Executive Committee will revisit the topic on their July conference call and determine the next steps for engagement with MAFMC.

Refine forage/Nutritional Indicators for Striped Bass: Jim Uphoff is working with his team at Maryland Department of Natural Resources (MD DNR) to develop striped bass forage indicators from striped bass health monitoring, relative abundance, natural mortality, fall diet studies and forage relative abundance in surveys. The results of the 3-year study are included in the 2015 annual report (starting on page 156). It was noted that although upper Bay Striped Bass feed on a wide range of prey: Atlantic Menhaden, Bay Anchovy, Spot and Blue Crab have consistently accounted for most diet biomass and were the focus of the analysis. MD DNR is working to integrate already existing data and bioenergetics studies with their results to narrow results to five indicators. The next steps will be for the Biological Ecological Reference Point Group to review the model and indicators.

Action: Jim Uphoff will share the annual report links with the Forage Action Team (available here).

Near-Term Workplan Actions:

Identify near-term priority species across the resource management agencies:

- Potomac River Fisheries Commission's (PRFC) Fin Fish Advisory Committee and Commission expressed interest in approaching forage prioritization based on predator requirements, with a focus on Striped Bass.
    - It was also noted that Striped Bass have gradually changed distribution in the Bay. The suggested cause is the reduction in forage including benthic invertebrates in the lower Bay.
    - Forage Action team members expressed interest in additional spatial scale analysis of forage in relation to predators. It was recommended that the team reach out to Tom Parham.
- Virginia Marine Resources Commission (VMRC) related that there are energetic considerations with non-resident striped bass and production that should be reviewed before prioritizing forage based on a predator approach. VMRC is reviewing alosines and undergoing data collection at VIMS.
- Jim Uphoff suggested that there should be a transition period from single species management to ecosystem management, by selecting a predator species and targeting the forage from that species. He emphasized that more species can be added throughout the process to aid in developing a more comprehensive forage approach.
- Matt Ogburn suggested considering forage species such as Menhaden, alosines, and soft clams as a possible starting point.

Action: The Forage GIT will reach out to Tom Parham in MD DNR's Tidewater Ecosystem Services. Further discussions are needed to establish a plan moving forward: Jim Uphoff, Katie May, Rob, and Marty offered to join this call. This meeting will have a focus on determining an approach for prioritization. The call will take place after the September quarterly meeting.

Monitoring and Tracking Workplan Actions

The Forage Action team agreed to meet on a quarterly basis to monitor workplan actions and report progress. The next meeting will take place in September.

Bay 101 Forage Video:

Key Messages:

1. Define forage fish and illustrate some of the common species (both vertebrate and invertebrate)
2. Illustrate the importance of forage fish as food for predators
3. Illustrate shoreline habitat and the impact of development on forage fish (and their predators)

Potential Footage:

- Interview with forage expert
- Maryland Seine Survey
- VIMS diet sample lab (TBD)
- ChesMMAP survey
- Striped bass fishing
- Living and hardened shorelines

Interview Questions:

1. What is forage?
2. Why is forage important?
3. What is a food web?
4. Has forage in the Chesapeake Bay changed over time?
5. What are threats to forage?
6. What can be done to protect forage?