BIENNIAL STRATEGY REVIEW SYSTEM Chesapeake Bay Program

Narrative Analysis



[FISH HABITAT, AUGUST 12TH, 2021]

THE NARRATIVE ANALYSIS SUMMARIZES THE FINDINGS OF THE LOGIC AND ACTION PLAN AND SERVES AS THE BRIDGE BETWEEN THE LOGIC AND ACTION PLAN AND THE QUARTERLY PROGRESS MEETING PRESENTATION. BASED ON WHAT YOU LEARNED OVER THE PAST TWO YEARS FROM YOUR SUCCESSES AND CHALLENGES, YOU WILL DESCRIBE WHETHER THE PARTNERSHIP SHOULD MAKE ADAPTATIONS OR CHANGE COURSE.

USE YOUR COMPLETED PRE-QUARTERLY LOGIC AND ACTION PLAN TO ANSWER THE QUESTIONS BELOW. AFTER THE QUARTERLY PROGRESS MEETING, YOUR RESPONSES TO THESE QUESTIONS WILL GUIDE YOUR UPDATES TO YOUR LOGIC AND ACTION PLAN. ADDITIONAL GUIDANCE CAN BE FOUND ON CHESAPEAKEDECISIONS.

1. EXAMINE YOUR RED/YELLOW/GREEN ANALYSIS OF YOUR MANAGEMENT ACTIONS. WHAT LESSONS HAVE YOU LEARNED OVER THE PAST TWO YEARS OF IMPLEMENTATION?

The outcome reads: "Continually improve effectiveness of fish habitat conservation and restoration efforts by identifying and characterizing critical spawning, nursery and forage areas within the Bay and tributaries for important fish and shellfish, and use existing and new tools to integrate information and conduct assessments to inform restoration and conservation efforts." Based on the "stop-light" analysis, it is fair to say that the Fish Habitat Action Team is on an expected trajectory to meet management actions. Most actions are complete, or on track, with most of the slight delays connected to Covid-19 restrictions.

Although there were no major action plan delays, it was clear that the team's most effective and "championed" projects are one's with a clearly outlined agency or contractor overseeing the project. Good examples of this are the GIT-funded shoreline behavior change project, the regional fish habitat assessment, and suite of NCBO-funded habitat utilization projects. Other projects focused on communications and local engagement required more "shepherding" from the workgroup chair and staffer(s), and received less engagement from the Action Team membership. This was a lesson about the importance of analyzing team capacity and alignment of expertise. This will be discussed in further detail in response to question number five.

2. REGARDLESS OF HOW SUCCESSFUL YOUR SHORT-TERM PROGRESS HAS BEEN OVER THE PAST TWO YEARS, INDICATE WHETHER WE ARE MAKING PROGRESS AT A RATE THAT IS NECESSARY TO ACHIEVE THE OUTCOME

YOU ARE WORKING TOWARD.

Yes we are making progress at a rate that is necessary to achieve the fish habitat outcome. We will continue to build on the fish habitat assessment underway in the tidal and nontidal portions of the watershed. We will ensure the results of the assessment are provided to tidal fishery managers to inform ecosystem based fishery management. Results will also be available to target restoration and conservation in tidal and non-tidal portions of the watershed.

This assessment will provide baseline information for fish habitat condition, which could be used to develop an indicator or a suite of indicators in the future. We have identified several priority stressors: shoreline hardening, impervious surfaces, and forest buffer loss. These stressors could potentially be monitored over time as a combined metric of progress for future outcomes.

Since the outcome is about improving our assessment and characterization techniques, making tangible steps toward an assessment tool demonstrates progress.

The outcome language also mentions "characterizing critical habitat." The FHAT is connected to a number of ongoing projects quantifying species-specific habitat suitability. While not moving towards a specific quantifiable goal, it is fair to say that these efforts are advancinging our understanding of habitat stressors and the living resource response. For example one project is developing an estuarine hypoxia index for summer flounder and another has quantified a link between suitable area of habitat and abundance of bay anchovy. These habitat suitability products can be used as indicators to track changes through time and identify boundary conditions (good and bad years).

3. WHAT SCIENTIFIC, FISCAL AND POLICY-RELATED DEVELOPMENTS WILL INFLUENCE YOUR WORK OVER THE NEXT TWO YEARS?

There are a number of initiatives throughout the Bay Program partnership focused on observing environmental factors and increasing monitoring capacity that can greatly impact our ability to quantify fish habitat condition. An example would be recent hypoxia and acoustic telemetry monitoring taking hold across the partnership. Other species-specific projects, such as the GIT-funded Striped bass Habitat Suitability Index, will be useful to build off of in this next iteration of work plan development. More generally, an increased regional focus on climate resilience/adaptation and ecosystem-based fisheries management highlights the holistic importance of identifying/quantifying fish habitat and better understanding the connection between habitat condition and living resources.

At the Federal level the Biden administration has put a priority on climate change, conservation, and ecosystem based fishery management. Each of these priorities include fish habitat considerations.

There is also a focus on increasing cross-GIT collaboration in the context of assessment integration and data visualization tools. Developments on the Healthy Watershed Assessment and broader cross-GIT mapping initiative provide opportunities for the FHAT to connect assessment work to broader watershed/land use work.

4. BASED ON YOUR RESPONSE TO THE QUESTIONS ABOVE, HOW WILL YOUR WORK CHANGE OVER THE NEXT TWO YEARS?

NOAA and USGS will continue meeting to determine the regional assessment scope (e.g. how freshwater and tidal parts fit together, specific end products). The regional assessment project will

require one or more pilot projects at identified priority areas, informed by lessons learned through the current metadata inventory. It is unclear where the financial resources will come from to complete pilots and the larger regional assessment. Informing the final products of a regional assessment will greatly benefit from leveraging stakeholder guidance surveys, initially conducted through the STAC workshop and now through more extensive surveys being conducted by NOAA Oxford Lab. Results of the NOAA Oxford Lab surveys will be considered to inform the assessment.

Outside the continued focus on regional assessment tools, our members have prioritized more work that will help to quantify habitat condition and help inform fisheries management. As mentioned above, an increased regional focus on ecosystem-based fisheries management connects nicely to the FHAT's interests. Continued interest in regional assessment tools and habitat characterization projects could drive the group towards developing metrics or developing an indicator to monitor outcome progress.

5. WHAT, IF ANY, ACTIONS CAN THE MANAGEMENT BOARD TAKE TO HELP ENSURE SUCCESS IN ACHIEVING YOUR OUTCOME?

An ongoing issue for the Fish Habitat outcome is the jurisdictional capacity and alignment with the actions of the Fish Habitat Team. The FHAT requests that jurisdiction Management Board members meet with their with their respective jurisdictional fish habitat member(s) and other habitat experts as necessary to:

- Review the current FHAT priorities provided in the survey questions below (forest buffers, impervious surfaces, natural shorelines, and ecosystem based fisheries management),
- Select the ones important to you, and describe the specific information and/or needs your jurisdiction has for each,
- Use the survey to identify other tidal or nontidal priorities that affect fish habitat in your jurisdiction and communicate it back to the team coordinator, and
- Identify who in your jurisdiction can serve as a member of the FHAT to support the priorities you provided. With such a broad outcome it may be that additional or different expertise is needed from the jurisdiction to focus on that priority.

To facilitate this conversation, here is a list of jurisdictional fish habitat team members:

Jurisdiction	MD	DE	VA	PA	wv	NY	DC
Team member	Margaret McGinty, Department of Natural Resources	Edna Setzar, Department of Natural Resources and Environmental Control	Donna Bilkovic, Virginia Institute of Marine Science Clinton Morgeson, Department of Wildlife Resources	Geoff Smith, Fish and Boat Commission			Bryan King, Dept. of Energy and Environment
Interested party	Tom Parham Department of Natural Resources		Bob Greenlee, Department of Wildlife Resources	Tyler Neimond, Fish and Boat Commission			

Interested party	Marek Topolski, Department of Natural Resources		Mike Bednarski, Department of Wildlife Resources		
Interested party	Dave Secor, University of Maryland Center for Environmental Science	Johnny Moore, Department of Natural Resources and Environmental Control	Mary C. Fabrizio, Virginia Institute of Marine Science		
Interested party	Ed Houde, University of Maryland Center for Environmental Science		Pat Geer, Virginia Marine Resources Commission		
Interested party	Ryan Woodland, University of Maryland Center for Environmental Science		Carl Hershner, Virginia Institute of Marine Science		
Interested party			Eric Brittle, Department of Wildlife Resources		
Interested party			Troy Hartley, Virginia Institute of Marine Science		
Interested party			Troy Tuckey, Virginia Institute of Marine Science		

Survey questions and guidance: The request is for Management Board representatives to set up a meeting with their current FHAT representatives and other habitat experts as needed to answer the questions. Having a clearer sense of priorities and related information needs will help guide the next work plan development and ensure FHAT has the appropriate jurisdictional points of contact on the team to implement the work plan.

Jurisdiction Which of the current FHAT focal areas listed below are priorities fo your jurisdiction? You can select more than one. For each selection please indicate specific information or science needs. • Land use (impervious)	research needs to improve habitat	Indicate who is the lead in your jurisdiction for the priorities you identified under questions 1 and 2. (Name, agency, program, contact
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	surface and shoreline development) Forest buffers Ecosystem based fishery management	and Indicate if it is tidal or nontidal.	information)
PA			
DE			
MD			
VA			
WV			
NY			
DC			