

**BIENNIAL STRATEGY REVIEW SYSTEM**  
***Chesapeake Bay Program***



**Logic and Action Plan: Post - Quarterly Progress Meeting**

**Stream Health– 2020-2021**

**Long-term Target:** Continually improve stream health and function throughout the watershed. Improve health and function of 10 percent of stream miles above the 2008 baseline for the Chesapeake Bay watershed.

**Two-year Target:** Continually improve stream health and function throughout the watershed.

<b>Instructions:</b> Before your quarterly progress meeting, provide the status of individual actions in the table below using this color key.
Action has been completed or is moving forward as planned.
Action has encountered minor obstacles.
Action has not been taken or has encountered a serious barrier.

### ACTIONS – 2020-2021

Action #	Description	Performance Target (s)	Responsible Party (or Parties)	Geographic Location	Expected Timeline
<b>Management Approach 1: Identify an appropriate suite of metrics to measure the multiple facets of stream health to complement the baywide Chessie BIBI</b>					
<b>1.1</b>	Provide recommendations on reporting the Chessie BIBI metric to document improvement in stream health consistent with the Agreement Outcome	ICPRB with input from the SHWG will evaluate options to report the Chessie BIBI to demonstrate changes in stream health consistent with the Agreement Outcome.	ICPRB, USGS, Technical Advisory Group for Chessie BIBI update	Chesapeake Bay Watershed	<ul style="list-style-type: none"> <li>December 2021</li> </ul>
<b>1.2</b>	Determine and Report Progress	1. Periodically acquire and process available stream data from Bay States and District of Columbia	Bay States and DC provide data; ICRPB work with monitoring staff and EPA CBP for QA process; EPA CBP report and track	Chesapeake Bay Watershed	1. December 2019/January 2020
		2. CBP calculate and report % change in Chessie BIBI index			2. Starting January 2020, ICRPB will complete this update and report on progress
<b>1.3</b>	Identify practicable metrics which are consistent with both BMP verification guidance to credit projects	1. SHWG participate in USWG efforts to review and provide input on recommendations to verify stream restoration projects according to the adopted CBP protocols.	Suggested BMP Verification Committee, Habitat GIT, SHWG, state agencies (MD DNR Monitoring and Non-Tidal Assessment)	Chesapeake Bay Watershed	December 2019 - Expected approval of revised Stream Restoration BMP protocols by the Work Group. The protocols will then move to the Water Quality Goal

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	for N, P, and sediment load reductions as well as stream functional improvements to use in assessing overall improvement in stream health. Incorporate these recommendations into BMP Verification Plans.	<p>2. Document how performance monitoring assessment parameters will evaluate stream health to demonstrate a trajectory of expected improvements in stream functions and processes.</p> <p>3. Provide recommendations to the Habitat GIT to incorporate into BMP Verification plans.</p>	<p>Habitat GIT, Stream Health Work Group, work in conjunction with USGS</p> <p>Stream Health Work Group</p>		Team for larger approval. Expected Products by USGS regarding performance monitoring (1.3.2) expected by December 2021.
<b>Management Approach 2:</b> Provision of adequate funding and technical resources to support functional life in stream restoration projects, in addition to nutrient and sediment reductions.					
2.1	Implement pooled monitoring approach throughout Chesapeake Bay watershed	1. SHWG provide input to existing pooled monitoring research program, including topics for research and dissemination support of the effort/results	1. CBT lead on Pooled Monitoring Initiative (members include MDE, USACE, FWS, MD DNR, MD SHA). SHWG lead(s) meet with CBT two times per year.	<p>Maryland (current effort)</p> <p>District of Columbia, Virginia, and other interested jurisdictions (future, expanded effort)</p> <p>Potential other Chesapeake Bay Watershed funding</p>	<p>Ongoing, as needed, yearly updates at the yearly forum.</p> <p>See the CBT website for updates throughout the year at <a href="https://cbtrust.org/restoration-research/">https://cbtrust.org/restoration-research/</a></p>

**Commented [GJ1]:** Should discuss progress of actions with WG. Have not had many (any?) discussions at WG level on the pooled monitoring approach

**Commented [GJ2R1]:** Do we want to keep this in our workplan

### ACTIONS – 2020-2021

Action #	Description	Performance Target (s)	Responsible Party (or Parties)	Geographic Location	Expected Timeline
		2. Working with the existing pooled monitoring effort, provide input on short- and long-term funding plan. Where appropriate as determined by the existing Pooled Monitoring Initiative and the Stream Health Work Group, participate in key expansion/development efforts (e.g., proposed effort to support the MD MS4 permit monitoring requirements through the Pooled Monitoring Program).	3. Interested parties contact CBT to join pooled monitoring program. Ongoing  Build on existing programs like Maryland Stream Restoration Association/ Maryland Water Monitoring Council representative	partners/collaborators (future, expanded effort)	

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		3. Disseminate results, including but not limited to an annual forum to share ongoing research results and receive feedback for that research with the audience focus of the regulatory agencies. At this annual forum, regulatory staff and practitioners will have an opportunity to ask new questions, clarify the current state of scientific knowledge, and refine the top key restoration questions in the community for future study.	3. The Chesapeake Bay Trust's Pooled Monitoring Initiative (with help from Maryland Water Monitoring Council Stream Restoration Monitoring Sub-Committee and Maryland Stream Restoration Association)	Majority of work will take place in Maryland, but the group hopes to expand to the larger watershed.	Ongoing as monitoring projects are funded. Up to date information can be found at: <a href="https://cbtrust.org/grants/restoration-research/">https://cbtrust.org/grants/restoration-research/</a> ."
<b>Management Approach 3:</b> Active and engaged participation by local communities with Federal and State partners is central to Bay restoration (See Management Strategy for full Approach).					
3.1	Develop a "Stream Restoration Permit Committee" of the Stream Health Work Group that brings practitioners,	<ol style="list-style-type: none"> <li>1. Identify members of the Stream Health Work Group to form the Committee</li> <li>2. Develop meeting schedule</li> <li>3. Review latest synopsis of permit issues, recommendations and actions</li> </ol>	Permitting Committee: USACE (North Atlantic Division, Baltimore, Norfolk), EPA, MDE, VA DEQ, VMRC, Anne Arundel County, Fairfax County, PA DEP, DC DOEE, Trout Unlimited, Other jurisdictional representatives (DE, WV, NY)	Chesapeake Bay Watershed	<p>January 2016 – Ongoing</p> <p>Recommendations on 1-4 expected December 2021</p> <p>Implement survey by end of 2019</p> <p>Provide summary of survey results in April 2020</p>

**Commented [GJ3]:** Has not been a priority and has no action. Need to vet with workgroup about inclusion in future logic and action plans

**Commented [GJ4R3]:** Not in line with our focus of how to improve stream health and structure

### ACTIONS – 2020-2021

Action #	Description	Performance Target (s)	Responsible Party (or Parties)	Geographic Location	Expected Timeline
	regulators and the regulated community together to resolve issues and find common ground to identify actions to streamline the stream restoration project permit review process	<p>4. Provide recommendations to Stream Health Work Group (and Bay Program Partnership) on priority actions identified from the survey</p> <p>5. Determine need work with federal, state regulatory agencies and local governments to develop streamlined process to evaluate WIPs, MS4 restoration plans or other relevant site analyses as sufficient documentation for alternative site analysis in support of stream restoration permits</p>			
<b>Management Approach 4:</b> Develop and Promote holistic stream restoration design guidelines that identify the level of degradation and improvement of stream functions and key stressors/factors limiting potential uplift.					

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Action #	Description	Performance Target (s)	Responsible Party (or Parties)	Geographic Location	Expected Timeline
4.1	Collaborate with USGS as a part of their new Science Plan to investigate and define stream stressors and their management to improve stream health. This collaboration will be in order to better understand what factors lead to functional uplift and which may lead to degradation.	1. Stream Health Work Group will collaborate with USGS to conduct a literature review and survey of Bay jurisdictions to determine what stressors and drivers are most affecting stream health and responsible for causing impairment of streams consistent with state-defined 303(d) listings.	USGS will be responsible for conducting the initial review of literature on stream health stressors and will report out to the Stream Health Work Group. The SHWG membership/state representatives or referred colleague will facilitate implementation of the survey.	Chesapeake Bay Watershed	June 2021 (18 months from Jan 2020)
		2. Determine which stressors, as identified by work with USGS, can be changed through management activities, especially those management activities that align with practices identified in the new jurisdiction Watershed Implementation Plans (WIPs) to reduce nutrient and sediment delivery to the Bay	Responsible parties for phases 2 and 3 will be determined upon completion of phase 1.		Dependent on findings from approach 4.1, will begin before December 2021
		3. Following the implementation of management efforts, identify how stream health is changing and			

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		how it can be better characterized through both biological and non-biological metrics			
<b>Management Approach 5:</b> Work with CB partners to include the Enhancing Partnering, Leadership and Management GIT to enhance the capacity of local governments, organizations and landowners of beneficial stream restoration and maintenance practices.					
5.1	Provide training and education to diversity of stakeholders on stream restoration and stream health.	1. SHWG membership provide updates at meetings with upcoming training	SHWG Membership	TBD based on training needs identified	Ongoing
		2. SHWG share recent research findings at meetings			
		3. SHWG Chair(s) attend LGAC meeting at minimum one time per year to discuss stream health and restoration. Coordinate with LGAC liaison. (e.g. Phase III WIP Fact Sheets) Offer and conduct additional training upon request.			
		4. Add training schedule to SHWG calendar or meeting minutes.			

**Commented [GJ5]:** To the best of my knowledge, this has not happened

**Commented [GJ6R5]:** There haven't been any training opportunities really

**Commented [GJ7R5]:** Have a member participate in the MWMC Monitoring committee?



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Action #	Description	Performance Target (s)	Responsible Party (or Parties)	Geographic Location	Expected Timeline
5.2	Committed cooperation and coordination with other groups within the Chesapeake Bay Program to assure shared resources and information and further the goals of the Chesapeake Bay Watershed Agreement	1. Have one member of the stream health workgroup other than the staffer, attend in person or listen in on the work group meetings of other relevant work groups and goal teams	Stream Health Work Group Membership	Chesapeake Bay Watershed	Ongoing
		2. Investigate potential of the Healthy Watershed Assessment in measuring progress towards the targets of the Stream Health work group			
		3. Explore metrics of other relevant workgroups to examine the relevance to Stream Health			
		4. Identification and attempted resolution of potential conflicts between actions and recommendations of other groups within the Bay Program			

**Commented [GJ8]:** Sometimes happens but not always

**Commented [GJ9R8]:** Start including upcoming meetings for other groups  
Get a roster of who on our WG attends different meetings and have them report out on the goings on of those WGs at the beginning of each SHWG meeting