

Through the Chesapeake Bay Watershed Agreement, the Chesapeake Bay Program has committed to...



Goal: *Stream Health*

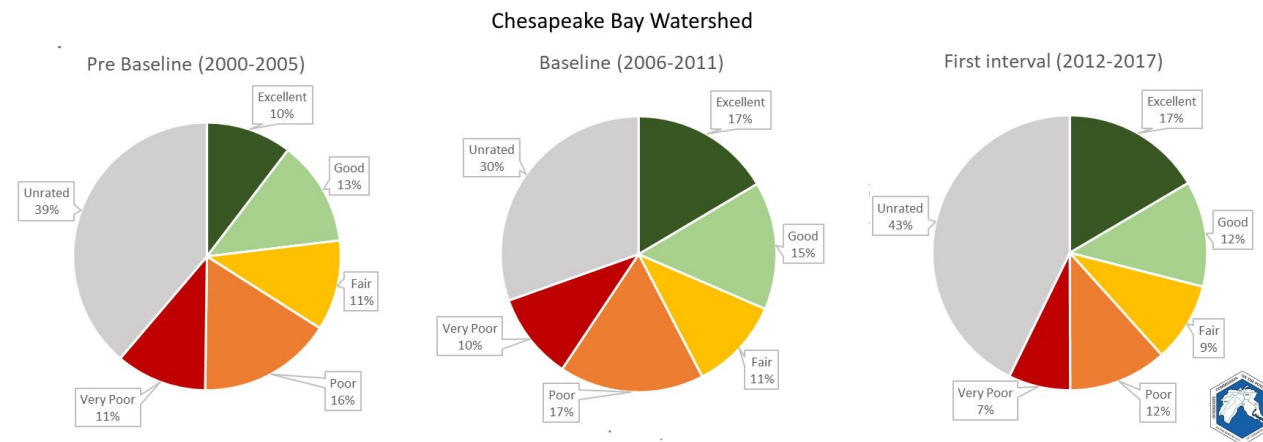
Outcome:

Continually improve stream health and function through the watershed. Improve health and function of ten percent of stream miles above the 2008 baseline for the watershed

What we've done

Chessie BIBI

- Analysis for measured and modeled data is complete
- ICPRB will release draft report soon



Area-weighted percentages of Chessie BIBI ratings in the Chesapeake Bay watershed.

<https://www.potomacriver.org/focus-areas/aquatic-life/macrobenthos/chessie-bibi-index-for-streams/>

What we've done

Management Approaches to Reduce Stressors of Stream Health

Identified the management actions that have the greatest potential to improve stream health by not only reducing nutrients and sediments but other factors that impact stream health (e.g. toxics, flow, temperature, habitat).

- 2020 GIT funded project
- Center for Watershed Protection completed report in June 2022
- Presented to SHWG at August meeting
- Report available on Chesapeake Bay Trust website

What we're doing now

Data Review and Development of Multi-Metric Stream Health Indicators

This project (Phase 3A) will begin to address the question: Following the implementation of management efforts, how is stream health changing, and how can we better characterize the response through non-biological metrics?

- 2021 GIT funded project
- Tetra Tech has completed draft framework and identified data sources
- TT and Technical Advisory Group will be meeting in late November
- Preliminary results expected in Spring 2023
- Focused on geomorphological and hydraulic parameters
- Future phases will include chemical parameters

What we're doing now

STAC Workshop

State of the science & practice of stream restoration in the Chesapeake: Lessons Learned to inform better implementation, assessment, and outcomes

- Planning is underway for early 2023 workshop

Stream Restoration Permitting Survey

- Survey is ready for distribution
- Delays due to understaffing

What we will be doing

Literature Review: Building Climate Resilience in Stream Restoration Practices

This literature review seeks to answer the questions:

How do common stream restoration techniques perform when faced with climate change?

What is the long-term resiliency of stream restoration practices?

- 2022 GIT Funded Project
- Development of Table 2 Scope of Work is underway
- RFP will be announced by CBT in early 2023

What we will be doing

DEIJ Initiatives

- Engage with under-served, under-represented communities to increase participation in stream health concerns
- Delayed due to understaffing
- May begin this work in 2023 if there is capacity

ACTIONS – 2022-2023

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	Work is underway and expected to be complete by December 2021 Draft COMPLETED 2021 Published 2022
		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	SHWG, USGS, Center for Watershed and Protection, Technical Advisory Group for CBT/GIT project “Management Approaches to Reduce Stressors of Stream Health”		Work is underway and expected to be complete by March 2022; ongoing COMPLETED 2022

ACTIONS – 2022-2023

Action #	Description	Performance Target (s)	Responsible Party (or Parties)	Geographic Location	Expected Timeline
		<ol style="list-style-type: none"> 3. Following the implementation of management efforts, identify how stream health is changing and how it can be better characterized through both biological and non-biological metrics 	<p>Responsible parties for phase 3 (Action 4.1.3) will be determined upon GIT funding and completion of phases 1 and 2.</p> <p>Tentative RPs: SHWG, USGS, and others may include ICPRB</p>		<p>December 2024; ongoing</p> <p>In Progress</p>
4.2	<p>Develop report and recommendations on the State of Science for Stream Restoration and impacts on stream health</p>	<ol style="list-style-type: none"> 1. Form Planning Committee for STAC Workshop 2. Submit request for STAC workshop on the “State of the Science” stream restoration workshop 3. Plan and execute STAC workshop on the “State of the Science” stream restoration if funded 	<p>SHWG, STAC, MWMC, MSRA, USWG, Forestry WG</p>		<p>December 2023</p> <p>In Progress</p>

Association)

Management Approach 3: 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	1. Identify members of the Stream Health Work Group to form the Committee	Permitting Committee: USACE, MDE, MDNR, VA DEQ, and Consultants	Chesapeake Bay Watershed	Form committee by April 2022 Implement survey by December 2022
		2. Develop meeting schedule			

ACTIONS – 2022-2023

Action #	Description	Performance Target (s)	Responsible Party (or Parties)	Geographic Location	Expected Timeline
	practitioners, 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	3. Develop and distribute survey			Provide summary of survey results in April 2023 In Progress
		4. Summarize survey results and provide recommendations to Stream Health Work Group (and Bay Program Partnership) on priority actions identified from the survey			

3.2	Engage with under-served, under-represented communities to increase participation in stream health concerns	<ol style="list-style-type: none"> 1. Develop a one-page plain-language document on stream health and communities, written specifically for the targeted audience to assist in communicating with those communities 2. Identify communities based on EPA's Environmental Justice Screening Tool 3. Meet with community representatives to discuss the SHWG's goals and understand and document their concerns 4. Share findings with LGAC 	SHWG, Communications Workgroup, GIT 5, GIT 6, LGAC, others	Chesapeake Bay Watershed	<p>Communication Document complete by June 2022</p> <p>Community Meetings complete by December 2023</p> <p>Not yet started</p>
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