

1.6 STREAM HEALTH WORKPLAN

CREATED: [DATE]

JULY 2027 – JUNE 2030

UPDATED: [DATE]

[Workplans should describe the major activities that will be collaboratively undertaken by Chesapeake Bay Program partners to make progress towards Outcome or Target attainment. Workplans should not provide an onerous detailing of the specific steps required; rather, they should succinctly describe the major actions that will be implemented over the next three years.]

[The Workplan should include Management Approaches and related Workplan action(s) that describe and seek to address “how signatories, other state and federal agencies, local governments, Indigenous representatives, nonprofit and private partners are engaged; where actions, tools, financial support and technical assistance are needed to empower local governments and others to do their part; and what steps are necessary to facilitate greater participation in achieving the Outcome.” In instances where specific approaches or actions are not planned, a narrative description should be included at the end of the Workplan to describe how partnership meetings related to the Outcome and its Target(s) will incorporate consideration of these topics.]

MANAGEMENT APPROACH 1.6.1: WATERSHED-WIDE STREAM HEALTH METRICS

Narrative Summary: The definition of stream health and ecological integrity for this outcome uses a watershed-wide metric, the Chessie BIBI, to measure the changes in stream health and function over time. This Management Strategy proposes a definition of stream health that provides a common framework for additional reporting and tracking incremental improvements in stream health using multi-metric indicators.

Identify an appropriate suite of metrics to measure the multiple facets of stream health to complement, but not replace, the Bay-wide Chessie BIBI.

- Develop metrics/composite indices from routinely collected, non-biological data to measure changes in certain stream functions to assess regional changes and trends.
- Collaborate with the Healthy Landscapes Goal Team to identify marginal streams where restoration activity in-stream or in the watershed may improve stream functions and health. Once identified, work with the partnership and funders to develop incentives to build on existing efforts to target beneficial restoration activity.
- Bring together jurisdictional biological stressor identification approaches and thresholds for comparison. Identify overlaps between the approaches and explore the possibility of Chesapeake Watershed-wide BSID.
- Investigate use of eDNA as an additional biological indicator of stream health.

Expected Impact on Outcome and Target Attainment: [1-2 brief sentences that directly relate this Management Approach to making progress towards the Outcome and/or its Target(s)]

DESCRIPTION OF ACTIVITIES

Activity Number	Lead Signatory and Participating Partners	Actions	Resource Needed, Committed, and Potential Sources to Fill Gaps	Target Date	Performance Targets and Deliverables	Status Activity Completion
[Goal #, Outcome #, Management Approach #, Activity #]	Lead: [Name and organization of lead. If multiple teams or workgroups are participating, list multiple leads] Signatories: [name signatory partners or partner agencies who will participate] Other Partners: [list non-signatory partners who will participate]	[describe the major actions]	Needed: [how much money or other support will be needed to complete this action] Committed: [how much money or other support is committed to complete this action] Filling Gaps: [how will the partnership fill gaps between resources needed and committed]	[timeline to complete]	[list performance targets and deliverables]	[not started/ongoing / completed]
[Goal #, Outcome #, Management Approach #, Activity #]	Lead: [Name and organization of lead. If multiple teams or workgroups are participating, list multiple leads] Signatories: [name signatory partners or partner agencies who will participate] Other Partners: [list non-signatory partners who will participate]	[describe the major actions]	Needed: [how much money or other support will be needed to complete this action] Committed: [how much money or other support is committed to complete this action] Filling Gaps: [how will the partnership fill gaps between resources needed and committed]	[timeline to complete]	[list performance targets and deliverables]	[not started/ongoing / completed]
[Goal #, Outcome #, Management Approach #, Activity #]	Lead: [Name and organization of lead. If multiple teams or workgroups are participating, list multiple leads] Signatories: [name signatory partners or partner agencies who will participate] Other Partners: [list non-signatory partners who will participate]	[describe the major actions]	Needed: [how much money or other support will be needed to complete this action] Committed: [how much money or other support is committed to complete this action] Filling Gaps: [how will the partnership fill gaps between resources needed and committed]	[timeline to complete]	[list performance targets and deliverables]	[not started/ongoing / completed]

	participating, list multiple leads] Signatories: [name signatory partners or partner agencies who will participate] Other Partners: [list non-signatory partners who will participate]		Committed: [how much money or other support is committed to complete this action] Filling Gaps: [how will the partnership fill gaps between resources needed and committed]			
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MANAGEMENT APPROACH 1.6.2: FUNDING AND TECHNICAL RESOURCES

Narrative Summary: The provision of adequate funding and technical resources for watershed management practice implementation is necessary to support comprehensive ecosystem and biological improvements, in addition to nutrient and sediment reductions.

- Explore partnerships to provide training to jurisdictions and other entities related to improving stream health and habitat, including BMP design, implementation and cost-effectiveness analysis.
- Continue collaborating with the Chesapeake Bay Trust's Pooled Monitoring program, and partner with other organizations such as the Chesapeake Monitoring Cooperative, for researchers to inform watershed best management practices that demonstrate stream and riparian ecosystem improvement.
- Establish an on-going stream restoration monitoring consortium and data clearinghouse within the CBP to share project data.
- Develop monitoring guidance for stream restoration projects to standardize pre-and post-restoration data collection and reporting.
- Support the continued scientific research and analysis of key topics, including:
 - Information on the co-benefits of BMPs
 - How much upland retrofit implementation is needed to optimize stream functional improvement when stream restoration and stormwater retrofits are installed as part of an integrated restoration plan
 - Investigate the effects and implications of changing environmental conditions, population growth and continued landscape development on stream health, including various metrics associated with healthy streams and future potential
 - Effects and trade-offs of stream restoration BMPs

Expected Impact on Outcome and Target Attainment:

DESCRIPTION OF ACTIVITIES

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[Goal #, Outcome #, Management Approach #, Activity #]	Lead: Signatories: Other Partners:		Needed: Committed: Filling Gaps:			

MANAGEMENT APPROACH 1.6.3: ACTIVE AND ENGAGED PARTICIPATION

Narrative Summary: Active and engaged participation by local communities with federal and state partners is central to Bay watershed restoration. Improvements to stream health and function will rely upon significant investments by local communities, municipal, county governments and watershed groups, to implement restoration and conservation actions. Ongoing coordination with stream health stakeholders (e.g., state and federal stream and wetland regulatory authorities, natural resource agencies, local governments, non-profit organizations, watershed BMP practitioners, researchers and local communities) needs to be improved to identify and remove barriers to improving stream health.

The SHWG should work with CBP partners, including the Engaged Communities Goal Team, to enhance the information available for local governments, organizations and landowners to support beneficial watershed best management practices to improve local stream health.

- Engage with local governments and other entities to inform landowners, as well as the general public, of beneficial stream and riparian best management practices and maintenance practices.
 - This includes individual homeowner practices (e.g. rain barrels, lawn care) and their impact on the community, the streams in their own backyards and public places.
- Provide research or documentation that identifies the nexus between improving stream health and broader public welfare

Expected Impact on Outcome and Target Attainment:

DESCRIPTION OF ACTIVITIES

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[Goal #, Outcome #, Management Approach #, Activity #]	Lead: Signatories: Other Partners:		Needed: Committed: Filling Gaps:			
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MANAGEMENT APPROACH 1.6.4: HOLISTIC STREAM RESTORATION BEST MANAGEMENT PRACTICE DESIGN

Narrative Summary: Develop and promote holistic Stream Restoration Best Management Practice design guidelines that identify the level of degradation and improvement of stream biology and key stressors/factors limiting potential biological improvement.

- Develop case studies to document biological response in stream with various management interventions, and include consideration of watershed influences, such as where in the watershed the project is located, source of stressors, and nearness to donor reaches.
- Discuss with other CBP Goal Teams how to recognize stream biological function improvement or maintenance of high quality aquatic life as credits towards meeting the Bay TMDL and other agreement outcomes.
- Develop improved stream restoration guidance for biological improvements or maintenance of higher quality systems.
- Develop design guidelines to include greater consideration of resource tradeoffs and other Chesapeake Bay Agreement goals and outcomes.

Expected Impact on Outcome and Target Attainment:

DESCRIPTION OF ACTIVITIES

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