

BIENNIAL STRATEGY REVIEW SYSTEM

Chesapeake Bay Program



Logic and Action Plan: Pre-Quarterly Progress Meeting

Healthy Watersheds – 2018-2019

[NOTE: make sure to edit **pre-** or **post-** in the text above, to tell the reader whether this logic and action plan is in preparation for your quarterly progress meeting or has been updated based on discussion at the quarterly progress meeting.]

Long-term Target: (the metric for success of Outcome)

Two-year Target: (increment of metric for success)

Instructions: 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.

Additional instructions for completing or updating your logic and action plan can be found on [ChesapeakeDecisions](#).

Factor	Current Efforts	Gap	Actions	Metrics	Expected Response and Application	Learn/Adapt
<i>What is impacting our ability to achieve our outcome?</i>	<i>What current efforts are addressing this factor?</i>	<i>What further efforts or information are needed to fully address this factor?</i>	<i>What actions are essential (to help fill this gap) to achieve our outcome?</i>	<i>What will we measure or observe to determine progress in filling identified gap?</i>	<i>How and when do we expect these actions to address the identified gap? How might that affect our work going forward?</i>	<i>What did we learn from taking this action? How will this lesson impact our work?</i>
Scientific and Technical Understanding: locating healthy waters and watersheds	Individual jurisdictional efforts to monitor, assess, and determine watershed health	Need continued assessments to determine if state-identified healthy waters and watersheds are still healthy and if additional waters and watersheds	1.1 Continue gathering inventory of healthy watersheds			

		have become healthy Lack of funding for increased monitoring for unassessed waters				
Scientific and Technical Understanding: determining healthy watershed vulnerabilities	Develop and apply tools or methods that integrate various inputs to characterize watershed vulnerability to future high-level risks.	Need more information on watershed condition, urban growth proximity/pressure, energy development trends, water demand forecasts, invasive species threats, upstream activities, land ownership type, future transportation infrastructure plans, climate change, sea level rise, and other factors.	1.2 (1, 2, 3, 4, 8) Develop vulnerability information			
Scientific and Technical Understanding: information to prioritize healthy watershed protection	Collaborate with other goal teams to compile information on state and federal land protection priorities and determine overlap with high-risk healthy watersheds for additional protective measures when appropriate.	Need to understand which healthy watersheds are vulnerable and why. Be able to communicate those vulnerabilities to stakeholders to help prioritize protection.	1.3 (1, 2) Prioritize protection			
Scientific and Technical Understanding: further technical	Efforts to utilize assessment information and incorporate newly	Need to complete vulnerability assessment and framework to	1.4 (1, 2, 3, 4, 5, 7) Maintain and expand assessment activities and information			

assessment activities	available information	determine additional needs Need additional state capacity			
Population Growth	Phase 6 Land Change model outputs related to conversion of natural lands to development	Understand how conversion of natural lands to development puts pressure on healthy watersheds	1.2 (3, 8) Develop vulnerability information		
Public and Landowner Engagement	Both outreach and education aimed at key stakeholders related to the resources and tools available. Outreach efforts focused on 1) the importance and value of local waters, and 2) the tools that are available to protect local waters Developing WIP III informational resources	The values associated with maintaining healthy watersheds have too often not been adequately or consistently conveyed to local communities. Communication and outreach with landowners to ensure they are participating in practices that maintain and protect high quality waters on or adjacent to their property	2.1 (1, 2) Outreach, including: effectively conveying information on the status of healthy watersheds to local stakeholders 2.2 (1, 2) Identify the various tools that may be used, primarily by local governments, to protect healthy watersheds 3.2 (2, 3) Implement new or improve existing policy/programs/research 4.1 Provide a valued forum for mutual learning and exploration 4.2 (1, 2) Develop information resources and support communications		
Legislative Engagement	GIT funding project 2018 Developing WIP III informational resources	Enhancements are needed for scientific, technical, and policy tools, and for approaches to engage and	2.1 (1, 2, 3) Outreach, including: effectively conveying information on the status of healthy watersheds to local stakeholders		

		involve local jurisdictions in protection efforts. Inclusion of healthy watersheds in Phase III WIPs			
Federal Government Agency Engagement	Continued communication with NOAA, USFS, NPS, USFWS and others.	Need engagement from federal agencies other than EPA in order to fully protect healthy watersheds	3.2 (1, 4, 5) Implement new or improve existing policy/programs/research 4.2 (1, 2) Develop information resources and support communications		
State Government Agency Engagement	State leadership on federal regulatory programs, primarily the Clean Water Act (CWA) Section 303, antidegradation, and CWA Section 319 program funds are closely tied to Healthy Watersheds	States have taken different approaches to define and identify healthy watersheds, and likewise have different plans to improve their assessment and monitoring over time. Need active participation from all states/jurisdictions in the MHWGIT	3.2 (2, 3, 5) Implement new or improve existing policy/programs/research 4.1 Provide a valued forum for mutual learning and exploration		
Local Government Agency Engagement	Work related to quantifying and reducing the rate of conversion of natural lands to development. Direct coordination with local stakeholders to get relevant data, information and tools into the	Need to understand how to package materials in effective manner and how to get those materials to the correct audience/ outreach and communication with local decision makers.	2.1 (1, 2) Outreach, including: effectively conveying information on the status of healthy watersheds to local stakeholders 2.2 (1) Identify the various tools that may be used, primarily by local governments, to protect healthy watersheds		

	hands of managers on the ground.					
				3.2 (2, 3, 5) Implement new or improve existing policy/programs/research		
Partner Coordination	Cross-management strategy coordination, alignment for multiple benefits, analysis and data products at a Bay-wide scale, and access to/connection to federal agencies	The usage of existing tools is not universal, even within states. Furthermore, some tools are underdeveloped, poorly supported, and unsuited for widespread sharing and/or integration.		1.2 (1, 3) Develop vulnerability information		
				2.1 (1, 2) Outreach, including: effectively conveying information on the status of healthy watersheds to local stakeholders		
				3.2 (2, 3, 5) Implement new or improve existing policy/programs/research		
				4.1 Provide a valued forum for mutual learning and exploration		
				4.2 (1, 2) Develop information resources and support communications		
				4.3 Promote the science		
Use Conflict	Efforts to integrate living resources priorities with TMDL implementation efforts	Competing resources going to other environmental management and assessments such as the TMDL		2.1 (1, 2, 3) Outreach, including: effectively conveying information on the status of healthy watersheds to local stakeholders		

Funding and Finances	Efforts to create incentives for land conservation in State-identified HW.	Need more financial resources so that states and local governments can monitor and manage healthy watersheds; need a way to incentivize and credit conservation	2.3 (1, 2) Leverage Funding			
			3.2 (3, 5) Implement new or improve existing policy/programs/research			

ACTIONS – 2018-2019

Action #	Description	Performance Target(s)	Responsible Party (or Parties)	Geographic Location	Expected Timeline
Management Approach 1: Tracking Healthy Waters and Watersheds					
1.1	Continue gathering inventory of healthy watersheds	Tetra Tech, MHWGIT State Data Leads, and MHWGIT and CBPO GIS Staff will continue to compile data on State-identified Healthy Waters and Watersheds and update the master list and map of State-identified Healthy Waters and Watersheds	MHWGIT State Leads, CBPO GIS Team, Tetra Tech	Bay-wide	Ongoing
1.2	Develop vulnerability information	<ol style="list-style-type: none"> Tetra Tech will work with jurisdictions to identify management needs in tracking the vulnerability of healthy watersheds, so that information will be useful to target state management efforts in healthy watersheds Develop and implement a methodology to establish climate related goals and baselines for individual Chesapeake Bay Agreement Management Strategies such as the Healthy Watersheds Management Strategy Forecast land development scenarios Utilize sea level rise/storm surge assessments Incorporate Energy Development Trends research into vulnerability assessment Incorporate resiliency study 	<ol style="list-style-type: none"> MHWGIT, CBPO GIS Team, Tetra Tech STAR, Climate Resiliency WG CBPO USGS USACOE MHWGIT, CBPO GIS Team MHWGIT, CBPO GIS Team USFWS, MHWGIT, 	<ol style="list-style-type: none"> Bay-wide Bay-wide Bay-wide Bay-wide PA and NY Bay-wide Bay-wide State Identified Healthy Watersheds 	<ol style="list-style-type: none"> July 2018 September 2018 December 2018 May 2019 May 2019 2018-2019 2018-2019 May 2018

ACTIONS – 2018-2019

Action #	Description	Performance Target(s)	Responsible Party (or Parties)	Geographic Location	Expected Timeline
		<ul style="list-style-type: none"> 7. Incorporate Resource Conservation Opportunity Areas 8. Quantify impact of land conversion on healthy watersheds and habitats 	<ul style="list-style-type: none"> CBPO GIS Team 8. CBPO USGS, Land Use WG 		
1.3	Prioritize protection	<ul style="list-style-type: none"> 1. Assess protected status of healthy watersheds 2. Compile and publish bi-annual Chesapeake Bay Protected Lands Dataset 	<ul style="list-style-type: none"> 1. MHWGIT 2. CBPO GIS Team, NPS 	<ul style="list-style-type: none"> 1. Bay-wide 2. Bay-wide 	<ul style="list-style-type: none"> 1. Ongoing 2. Ongoing
1.4	Maintain and expand assessment activities and information	<ul style="list-style-type: none"> 1. Work with STAR to determine current and future monitoring needs and outline gaps 2. Continue to work on: healthy watershed metrics, analyses of protocol for determining status of each watershed, assessments of watershed protection priority, and exploring a method to track marginally healthy watersheds 3. Monitor high resolution imagery processing and work with LUWG to determine how data can be incorporated into a healthy watershed tracking framework 4. Track forest cover and provide regular updates on forest gain/loss 5. Conduct GIS assessments to identify key high value brook trout habitat to conserve and those areas that are considered marginal and in need of restoration 6. USACE, NFWF, and state partners will conduct the Chesapeake Bay Comprehensive Water Resources and Restoration Plan to identify project opportunities for ecosystem restoration and other USACE mission areas utilizing 	<ul style="list-style-type: none"> 1. MHWGIT, STAR 2. MHWGIT 3. CBPO GIS Team, Land Use WG 4. USFS 5. CBP GIS Team, HWGIT, TU 6. USACE, NFWF 7. FWG 	<ul style="list-style-type: none"> 1. Bay-wide 2. NA 3. Bay-wide 4. Bay-wide 5. Bay-wide 6. Bay-wide 7. Bay-wide 	<ul style="list-style-type: none"> 1. June 2018 2. Ongoing 3. 2018-2019 4. 2018-2019 5. 2018-2019 6. May 2018 7. May 2019

ACTIONS – 2018-2019

Action #	Description	Performance Target(s)	Responsible Party (or Parties)	Geographic Location	Expected Timeline
		<p>healthy watershed inventories, land cover datasets, and other data</p> <p>7. Expand assessment activities and information for forests and forest conservation</p>			
Management Approach 2: Local Leadership – strengthen local commitment and capacity to protect their healthy watersheds					
2.1	Outreach, including: effectively conveying information on the status of healthy watersheds to local stakeholders	<ol style="list-style-type: none"> 1. Work collectively to improve outreach strategies, and better "get the word out" across multiple Management Strategies to determine the best approaches and methods for reaching key stakeholders 2. Healthy Watershed Fact sheet templates for WIP developers and implementers 3. Healthy Watersheds TMDL Forest Study Phase 3: VA staff will work with a pilot locality to review and revise Comprehensive Plans and ordinances to establish policies, incentives, and standards that promote and facilitate conservation of high conservation value forests that will result in TMDL progress 	<ol style="list-style-type: none"> 1. MHWGIT, LGAC 2. MHWGIT 3. MHWGIT, VADOF 	<ol style="list-style-type: none"> 1. Bay-wide 2. NA 3. VADOF (and related contractors) 	<ol style="list-style-type: none"> 1. Ongoing 2. March 2018 3. December 2019
2.2	Identify the various tools that may be used, primarily by local governments, to protect healthy watersheds	<ol style="list-style-type: none"> 1. Gather, summarize and placed on the Chesapeake Bay Program website or other locations as determined in the Local Leadership Management Strategy approach for improving transfer of knowledge to locals, existing studies and reports on the costs, benefits and effectiveness of both local and state level land use policy options, incentives and planning tools 2. Healthy Watersheds TMDL Forest Study Phase 3: A VA pilot locality will implement various planning tools for incentivizing forestland retention 	<ol style="list-style-type: none"> 1. MHWGIT 2. MHWGIT, VA DOF 	<ol style="list-style-type: none"> 1. Bay-wide 2. VA (DOF) and related contractors 	<ol style="list-style-type: none"> 1. December 2019 2. 2019

ACTIONS – 2018-2019

Action #	Description	Performance Target(s)	Responsible Party (or Parties)	Geographic Location	Expected Timeline
2.3	Leverage Funding	<ol style="list-style-type: none"> Incorporate healthy watershed protection into the RFPs and scoring tools used to award federal and state water quality grants. Healthy Watersheds TMDL Forest Study Phase 3: incentivize private capital markets to invest in conservation and the offset future growth and development 	<ol style="list-style-type: none"> MHWGIT MHWGIT, VA DOF 	<ol style="list-style-type: none"> Bay-wide NA 	<ol style="list-style-type: none"> Ongoing 2019
Management Approach 3: Federal and State Leadership					
3.1	Leverage Funding				
3.2	Implement new or improve existing policy/programs/research	<ol style="list-style-type: none"> Engage with federal agencies other than EPA (such as FERC and DOT) to leverage opportunities within those agencies so that they can set the stage for state and local governments to further healthy watershed protection Healthy Watersheds TMDL Forest Study Phase 3: Creation of a training program and guidebook that leads communities through the process of revising and establishing policies, incentives, and standards that promote and facilitate conservation of high conservation value forests Healthy Watersheds TMDL Forest Study Phase 3: develop a model to monetize forestland retention and other conserved land values in the TMDL 6.0 model Continue integrating healthy watershed protection into EPA water programs. Thus far EPA has made progress on integrating protection in the 319 	<ol style="list-style-type: none"> MHWGIT MHWGIT, VA DOF MHWGIT, VA DOF EPA HWP EPA 	<ol style="list-style-type: none"> Bay-wide Bay-wide Bay-wide NA NA 	<ol style="list-style-type: none"> January 2019 2019 2019 2018-2019 2018-2019

ACTIONS – 2018-2019

Action #	Description	Performance Target(s)	Responsible Party (or Parties)	Geographic Location	Expected Timeline
		<p>program, 303(d) program and into source water protection</p> <p>5. Share information on newly launched Healthy Watersheds Consortium Grant and annual opportunities for states and others to submit proposals for sub-grants</p>			
Management Approach 4: Support State-based Efforts					
4.1	Provide a valued forum for mutual learning and exploration	Continue meeting 2-4 times a year and at meetings continue hosting Case Study presentations related to healthy watershed protection/tracking	1. MHWGIT	1. NA	1. Ongoing
4.2	Develop information resources and support communications	<p>1. Provide messages and resources to CBP Communications staff</p> <p>2. Share presentations, slides, pictures, graphics, to help partner agency staff prepare presentations, reports, etc. with effective healthy watersheds messages</p>	<p>1. MHWGIT</p> <p>2. MHWGIT</p>	<p>1. NA</p> <p>2. NA</p>	<p>1. Ongoing</p> <p>2. Ongoing</p>
4.3	Promote the science	Continue to work with the Chesapeake Bay Program and partners to quantify and incorporate conservation practices into the Chesapeake watershed modeling efforts and to explore how land use protections might be used to quantify future pollutant load reduction incentives for land conservation	1. MHWGIT	1. Bay-wide	1. Ongoing