HEALTHY WATERSHEDS, AUGUST 15, 2019

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 HWGIT previous iterations of the logic and action table scope was large, the team has found it is difficult to achieve focus on one action and support it through implementation. While many of actions have been successful, narrowing our focus within each management approach could be key to achieving more performance targets. Since the last SRS review, we have completed a BMP co-benefit fact sheet, effectively made progress on monitoring and assessment, and also worked cooperatively with others to create a mechanism for "crediting conservation", all "asks" from 2017. Continued and renewed participation from key jurisdictional members and creating a pathway to communicate resources and information to stakeholders remain obstacles.

   The Preliminary Healthy Watersheds Assessment creates a valuable set of metrics and indices that we can use to further many of the action items and gaps that have been identified. The results can be used in a variety of ways to further prioritize protection, local leadership outreach, improve programs and research, promote the science, and develop information resources for communications and potentially lead to the development of an indicator to monitor progress toward this outcome. Many of our actions are linear, we focused on the continued assessment of watershed health and methods to characterize vulnerability as a starting place. In addition, other projects have focused on gathering key resources related to policies incentives and planning tools that may be used by locals to protect and sustain healthy watersheds. With this focus on gathering of valuable tools, data and resources we are prepared to move towards the building a specific timeline with how each action feeds into the others would help in tracking progress and identifying issues and gaps in information.

   CBP GIT funding has been instrumental in filling data and information gaps related to assessing watershed health, vulnerability, understanding how to support locals in management actions that support healthy watersheds, and compiling key policies, incentives and planning tools aimed at reducing land use change of natural lands while supporting local economies. The contributing jurisdictions to the have made valuable individual progress, but the team could improve that transfer of knowledge. Open and more frequent 2-way communication with the jurisdictions and

key stakeholders is a key to achieving this outcome. We need to meet and share knowledge, to learn about common roadblocks and successes that could prove useful in other jurisdictions and to other workgroups and GITs. Achieving this outcome requires improved coordination and cooperation with other groups moving forward. Better understanding of how to utilize each other's expertise and resources continues to be a key factor in our ability to meet this outcome.

In this new version of our Logic & Action table the HWGIT has removed individual jurisdiction actions (in workplans 2015-2019) to streamline reporting and focus on actions that the Goal Team and CBP partners can collectively achieve to fill gaps. However, those individual actions remain important to stay on track with progress toward this outcome. Washington, D.C. for example doesn't have any healthy watersheds, but they completed the specific actions that further the work of the goal team in strengthening local commitment and capacity to protect and improve the watersheds in their region. The projects are all unique, but share common themes of outreach, improving on existing programs, developing information resources, and promoting the science. Sharing their work with the goal team will benefit other jurisdictions as they can learn from the work completed by Maryland, D.C., and New York, among others. Recognizing the success and involvement of these jurisdictions is not only an important component of Management Approach #4 (to support state-based efforts by encouraging and recognizing important activities within states) but showcases the value of this goal team.

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. The example graph below illustrates this concept.
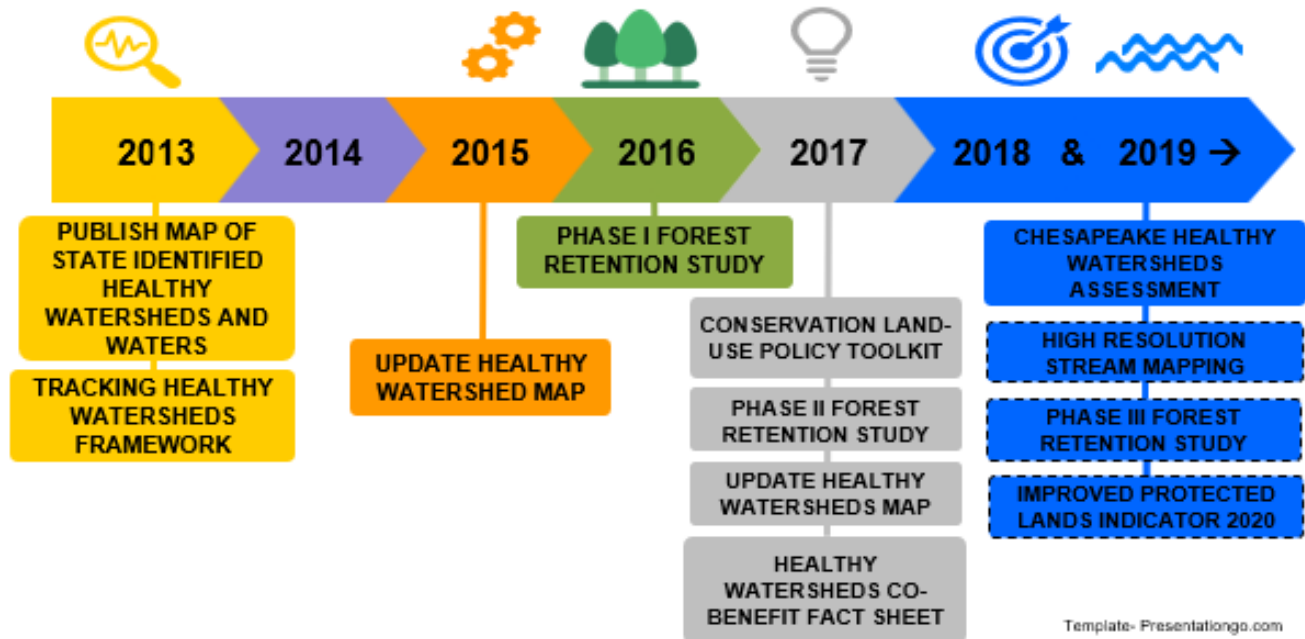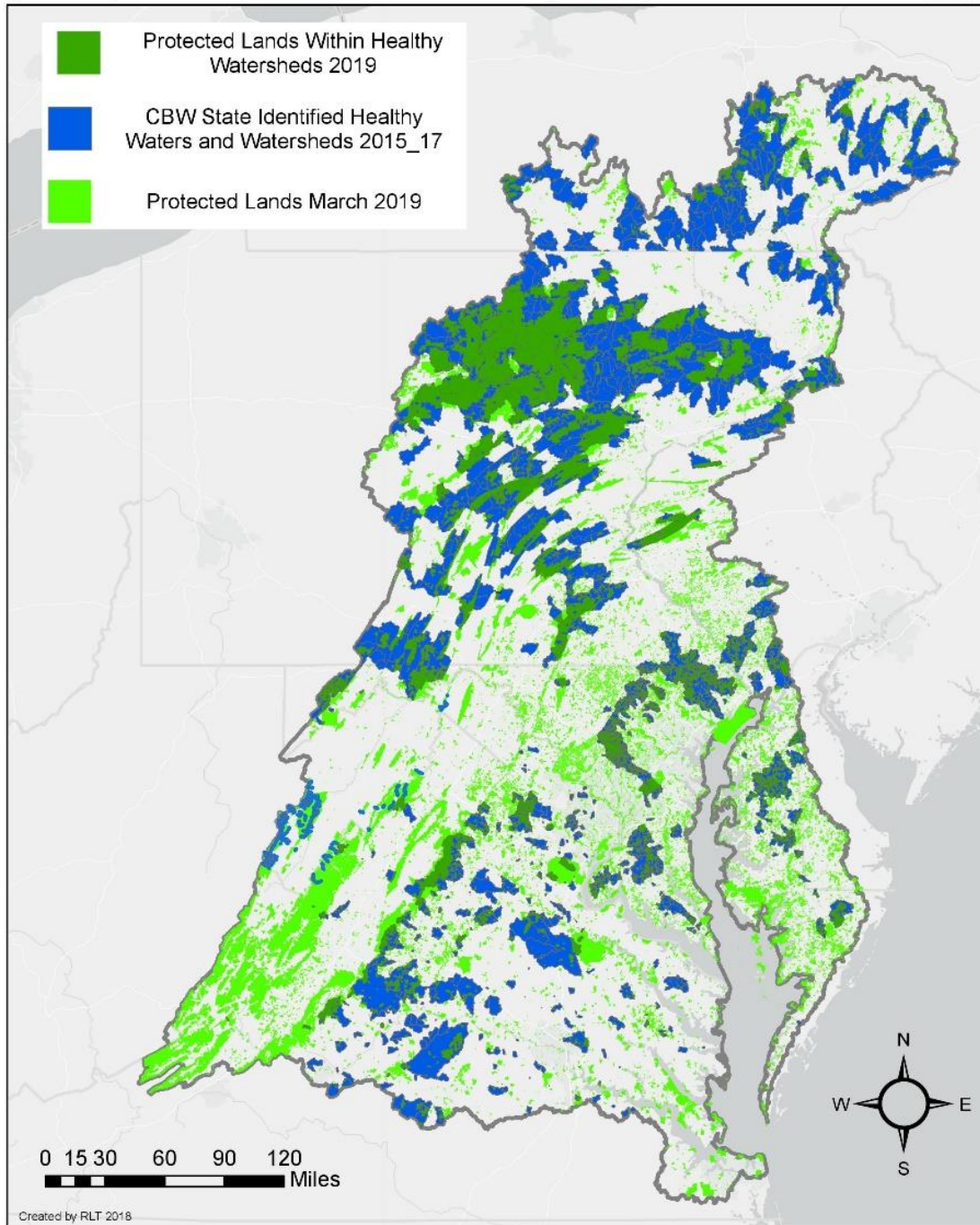

Table 1. This graphic represents identification of healthy watersheds by States, grant funded projects aimed at engaging locals in conservation prioritization, and data development that is beneficial not only to the HWGIT, but other GITs and workgroups within the program

The CHWA will inform the development of a metrics that inform a spectrum of watershed health that could be utilized towards the development of an indicator(s) for healthy watersheds goal, the HWGIT cannot yet articulate numeric progress towards goal attainment. This does not mean that the GIT has stopped progressing. We have taken great strides in completing actions and closing gaps that help move us toward outcome success and such milestones are illustrated in Table 1.

State Identified Healthy Waters and Watersheds (2017) and Protected Lands (2019)

Legend:
- Protected Lands Within Healthy Watersheds 2019
- CBW State Identified Healthy Waters and Watersheds 2015_17
- Protected Lands March 2019

0 15 30   60   90   120 Miles

Created by RLT 2018

Upon the completion of the Chesapeake Healthy Watershed Assessment, the HWGIT will be able to provide a map that illustrates generalized watershed health and perhaps more importantly the vulnerability of healthy watersheds. Please refer to [this presentation](#) for some preliminary graphics and additional details related to the Chesapeake Healthy Watershed Assessment metrics and vulnerability framework.

3. What scientific, fiscal and policy-related developments will influence your work over the next two years?

This may include information learned at the previous biennial SRS meeting or more specific information about your outcome such as an increase or decrease in funding, new programs that address gaps, and new scientific data or research. Describe how these developments are likely to impact your recommended measure(s) of progress, the factors you believe impact your ability to succeed, and newly created or filled gaps. These changes should be reflected in the first three columns of your revised logic and action plan after your quarterly progress meeting.

The Chesapeake Healthy Watersheds Assessment (September 2019) fills key data and information gaps related to watershed health and vulnerability. The HWGIT now has the necessary information and science to begin working with GIT members to develop and apply this information to meet scientific, communication and outreach needs. These developments will help achieve performance targets that were previously identified as gaps. There are many opportunities across outcomes for continued cooperation and coordination including the developing Chesapeake Bay regional fish habitat assessment, the Local Government Engagement and Communication Strategy, development of a map viewer to display healthy watersheds assessment data, integrate healthy watersheds data into watershed data dashboard, and generally expand cross-GIT activities to have a more robust vulnerability component with both climate and watershed components and work to ensure these products are leveraged across multiple outcomes.

The Healthy Watersheds TMDL Forest Study Phase 3 focused on pilot localities (Essex and Orange Counties VA) to review and revise Comprehensive Plans and ordinances to establish policies, incentives, and standards that promote and facilitate preservation of high conservation value forests and agricultural land. This project continues to serve as a key bridge that meets multiple GIT priorities including outreach, tools for locals, leveraging funding, promoting science and bridging the connection between watershed health and meeting pollution reduction goals. In addition, this work supports the land conservation outcome by providing additional incentives and pathways for increased rates of land conservation (a shared GIT "ask" from the 2017 SRS review). The key will be making sure the resources and lessons learned from this project are packaged in a way that can be useful to other locales.

There is a great deal of science and information development as a result of USGS scientists across the Chesapeake region and the Chesapeake Bay GIS team. Land use change was identified as one of the key factors affecting our ability to achieve this outcome. With advances in historic land use change information, monitoring of "hot spots of change" and other related work throughout the Bay Watershed there can be improved integration with Land use Methods and Metrics/Land use options evaluation work. Furthermore, there is improved science and diagnostic measures such as stream flow, incision, flood connectivity that combined with the risk factors identified in our healthy watersheds assessment that can better inform overall watershed health, however there is again a need to continued engagement to inform and apply this science as well as coordinate and cooperate with other outcome leads such as the Stream Health workgroup.

There is improved integration with many GITs, workgroups and partners. For example, the development of the Local Engagement Strategy and the formation of the Local Engagement

Workgroup allows the GIT to further meet communication and outreach needs related to conveying the status, location and resources to protect healthy watersheds. In addition, GIT staff have provided input on grants such as the NFWF and US Forestry Endowment Healthy Watersheds Grant aimed at targeted conservation/restoration projects within healthy watersheds. As we improve access to mapping and informational tools in consultation with our GIS, Web, and Communications teams we can continue to help inform "science-based decision making".

4. Based on your response to the questions above, how will your work change over the next two years?

Describe the adaptations that will be necessary to more efficiently achieve your outcome and explain how these changes will lead you to adjust your management strategy or the actions described in column four of your logic and action plan. Changes that the workgroup, GIT or Management Board consider significant should be reflected in your management strategy.

The work will move from gathering information to disseminating it. With successful GIT funding projects completed and nearing completion, we can leverage what we've learned from both and use the experience to promote awareness and methods of protection of healthy watersheds. The actions have already been identified in the logic and action table, but there was a gap to achieving the outcome. Now that we have information on healthy watershed vulnerability and assessments of healthy watersheds, we can use it to work with GIT members to guide the visualization and utilization of the information with the aim of filling jurisdictional a capacity gaps and inform protection, funding, restoration and policy decisions.

A variety of stream health risk factors derived from landscape metrics and the results of the Chesapeake Healthy Watersheds Assessment will help inform past, present, and future conditions. Alternative future land-use change scenarios will be generated which, when combined with changes in climate, will characterize future conditions. The findings along with data visualizations and other communication tools will help partners identify vulnerable and resilient lands and understand the factors contributing to their condition. This information will also directly inform local and regional land-use planning, restoration, and conservation decisions implemented to maintain and enhance the condition of streams, watersheds, and habitats. Strong and continued coordination with USGS scientists, Land Use WG, Local Leadership WG, LGAC, Stream Health WG, Climate WG and the CBP Creative team will be essential to success.

GIT funded projects enabled much of the progress made over the last two years-plus. The recent Chesapeake Healthy Watersheds Assessment was designed to be customizable by flexibly accommodating data from multiple sources. Moving forward, the HWGIT will implement funding to continue the watershed health and vulnerability assessment at a state-level scale in Maryland integrating more refined state data in the place of bay wide datasets to serve as a pilot for the healthy watersheds assessment implementation in other jurisdictions.

5. What, if any, actions can the Management Board take to help ensure success in achieving your outcome?

Please be as specific as possible. Do you need direct action by the Management Board? Or can the Management Board direct or facilitate action through other groups? Can you describe efforts the workgroup has already taken to address this issue? If this need is not met, how will progress toward your outcome be affected? This assistance may include support from within a Management Board member's jurisdiction or agency.

The HWGIT needs Management Board help with igniting renewed interest and engagement of GIT membership. Over the last two years the HWGIT has focused on resource development. For example, the Chesapeake Healthy Watersheds Assessment represents significant progress towards achieving our outcome. It's now vital that the HWGIT at large work together to engage key stakeholders through the sharing of new assessment and vulnerability information, data, and maps, as well communication of important messages, policies, incentives, and planning products.

The Management Board is also needed to help ensure that cross-GIT, multi-outcome and workgroup tasks, etc. related or interdependent priority issues are adequately addressed. The success of one GIT like the HWGIT is linked to the success of others such as the Climate Change workgroup, Fisheries GIT, Habitat GIT, and progress towards the Protected Lands, and Land-Use Methods and Metrics Outcomes. To make progress, the HWGIT will reach out directly to groups we need to coordinate with and ask for a representative from their group to engage (and vice versa). However, Management Board assistance would help to address a general program-wide need for a framework for improved integration among groups within the organization to share our collective resources and expertise (this challenge has also been expressed by the Brook Trout, Stream Health and Protected Lands team under this cohort).