Biennial Strategy Review System: Logic Table and Work Plan

Instructions: The following Logic Table should be used to articulate, document, and examine the reasoning behind your work toward an Outcome. Your reasoning—or logic—should be based on the Partnership's adaptive management decision framework. This table allows you to indicate the status of your management actions and denote which actions have or will play the biggest role in making progress.

Some Management Strategies and Work Plans will not immediately or easily fit into this analytical format. However, **all GITs should complete columns one through four** to bring consistency to and heighten the utility of these guiding documents. The remaining columns are recommended for those who are able to complete them. If you have any questions as you are completing this table, please contact SRS Team Coordinator Laura Free (free.laura@epa.gov).

The instructions below should be used to complete the table. An example table is available on the GIT 6 webpage under "Projects and Resources".

1. For the first round of strategic review (2017-2018): Use your existing Work Plan actions to complete the **Work Plan Actions** section first. Make sure to number each of the actions under a high-level Management Approach, as these numbers will provide a link between the work plan and the logic table above it. Use color to indicate the status of your actions: a green row indicates an action has been completed or is moving forward as planned; a yellow row indicates an action has encountered minor obstacles; and a red row indicates an action has not been taken or has encountered a serious barrier.
2. **Required:** In the column labeled **Factor**, list the significant factors (both positive and negative) that will or could affect your progress toward an Outcome. The most effective method to ensure logic flow is to list all your factors and then complete each row for each factor. Consult our Guide to Influencing Factors (Appendix B of the Quarterly Progress Meeting Guide on the GIT 6 webpage under "Projects and Resources") to ensure your list is reasonably comprehensive and has considered human and natural systems. Include any factors that were not mentioned in your original Management Strategy or Work Plan but should be addressed in any revised course of action. If an unmanageable factor significantly impacts your outcome (e.g., climate change), you might choose to list it here and describe how you are tracking (but not managing) that factor.
3. **Required:** In the column labeled **Current Efforts**, use keywords to describe existing programs or current efforts that other organizations are taking that happen to support your work to manage an influencing factor but would take place even without the influence or coordination of the Chesapeake Bay Program. You may also include current efforts by the Chesapeake Bay Program. Many of these current efforts may already be identified in your Management Strategy; you may choose to link the keywords used in this table to your Management Strategy document for additional context. You may also choose to include some of these efforts as actions in your work plan; if you do, please include the action's number and hyperlink.
4. **Required:** In the column labeled **Gap**, list any existing gap(s) left by those programs that may already be in place to address an influencing factor. These gaps should help determine the actions that should be taken by the Chesapeake Bay Program through the collective efforts of Goal Implementation Teams, Workgroups, and internal support teams like STAR, or the actions that should be taken by individual partners to support our collective work (e.g., a presentation of scientific findings by a federal agency to a Chesapeake Bay Program workgroup). These gaps may already be listed in your Management Strategy.
5. **Required:** In the column labeled **Actions**, list the number that corresponds to the action(s) you are taking to fill identified gaps in managing influencing factors. Include on a separate line those approaches and/or actions that may not be linked to an influencing factor. To help identify the action number, you may also include a few key words. Emphasize critical actions in **bold**.
6. **Optional:** In the column labeled **Metric**, describe any metric(s) or observation(s) that will be used to determine whether your management actions have achieved the intended result.
7. **Optional:** In the column labeled **Expected Response and Application**, briefly describe the expected effects and future application of your management actions. Include the timing and magnitude of any expected changes, whether these changes have occurred, and how these changes will influence your next steps
8. **Optional:** In the column labeled **Learn/Adapt**, describe what you learned from taking an action and how this lesson will impact your work plan or Management Strategy going forward.

Tree Canopy Logic Table and Work Plan

Long-term Target: (the metric for success of Outcome): 2400 new acres of Tree Canopy by 2025
Two-year Target: (increment of metric for success): 410 acres

KEY: Use the following colors to indicate whether a Metric and Expected Response have been identified	
Metric	Specific metrics have not been identified
	Metrics have been identified
Expected Response	No timeline for progress for this action has been specified
	Timeline has been specified

Factor	Current Efforts	Gap	Actions (critical in bold)	Metrics	Expected Response and Application	Learn/Adapt
What is impacting our ability to achieve our outcome?	*What current efforts are addressing this factor?*	*What further efforts or information are needed to fully address this factor?*	*What actions are essential to achieve our outcome?*	*Optional: Do we have a measure of progress? How do we know if we have achieved the intended result?*	*Optional: What effects do we expect to see as a result of this action, when, and what is the anticipated application of these changes?*	*Optional: What did we learn from taking this action? How will this lesson impact our work?*
Funding and Finances	Tree Canopy Funding Strategy project is addressing actions 1.2, 1.3 and will be complete Dec. 2018 (UMD Environmental Finance Center, Alliance for Chesapeake Bay, Metro Washington COG, Forestry Workgroup partners)	Funding (federal, state, local) to support tree canopy efforts (both planting and preservation) is still primary need cited by partners; need to work with jurisdictions and funding partners to incorporate and act on findings from TC Funding Strategy Project (1.2 and 1.3)	1.2, 1.3, 1.4, 1.5			
Federal and State Government Agency Engagement	State forestry agencies and USFS are main entities engaged and	More engagement with other state agencies (water quality, etc.) and other federal partner	1.1, 1.4, 1.5, 2.1, 2.3, 3.3, 4.6			

Factor	Current Efforts	Gap	Actions (critical in bold)	Metrics	Expected Response and Application	Learn/Adapt
What is impacting our ability to achieve our outcome?	*What current efforts are addressing this factor?*	*What further efforts or information are needed to fully address this factor?*	*What actions are essential to achieve our outcome?*	*Optional: Do we have a measure of progress? How do we know if we have achieved the intended result?*	*Optional: What effects do we expect to see as a result of this action, when, and what is the anticipated application of these changes?*	*Optional: What did we learn from taking this action? How will this lesson impact our work?*
	coordinating through Forestry Workgroup	agencies needed next cycle, especially around tree canopy as stormwater/MS4/WIP strategy				
Local Government Agency Engagement	Some local engagement occurring through Chesapeake Tree Canopy Network, TC Funding Project, and state WIP planning	Need to ramp up local engagement for tree canopy implementation and tracking through WIP/TMDL process and through TC network capacity building efforts	1.3, 2.1, 2.3, 3.1, 4.4, 4.5, 4.7			
Legislative Engagement at State and Local Level: Policies and Ordinances	Some tree ordinance resource sharing through Chesapeake Tree Canopy Network website has occurred	More partnership focus needed to assess and help strengthen local ordinances/policies for tree canopy planting/preservation and capacity for their implementation and/or enforcement (2.1, 2.3)	2.1,2.3			
Partner Coordination	Mostly occurring through Forestry Workgroup partners	Within jurisdictions, need greater collaboration with state and local water quality/stormwater programs and NGO efforts; at CBP need greater collaboration with related outcomes/workgroups (local leadership,	1.4, 2.3, 3.1, 4.1, 4.4			

Factor	Current Efforts	Gap	Actions (critical in bold)	Metrics	Expected Response and Application	Learn/Adapt
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		diversity, stewardship, schools, climate etc.)				
Scientific and Technical Understanding: Technical Capacity and Knowledge	CBP tree canopy data now widely available and a variety of resources/tools through the Chesapeake Tree Canopy Network website	Need user-friendly tree tracking tool for reporting BMP progress; Need to get data, BMP information, training and resources out to more partners (e.g. local governments, NGOs, stormwater managers, etc.)	2.2, 3.1, 3.2, 3.3, 3.4			
Public and Landowner Engagement: Education and Outreach	Chesapeake Tree Canopy Network is ready platform for sharing education/outreach resources; Tree Canopy & Environmental Justice project (2017 workshop, 2019 case study/web resources available)	Need to continue and build on Tree Canopy and Environmental Justice project to reach high need/opportunity communities; Increase collaboration with CBP Green Schools efforts	4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7			
Environmental Factors Challenging Tree Canopy progress: Population Growth (Development)**; Climate Change** (storms, drought, etc.) **Biota** (pests, invasive species, etc.)	Most of these factors are difficult to manage with existing programs, though information resources and technical assistance providers within states are helpful	Needs more attention in future workplans, weaving in new strategic focus to integrate and address these factors into 2.1, 3.1, 3.4 and other actions TBD	2.1, 3.1, 3.4			

Factor	Current Efforts	Gap	Actions (critical in bold)	Metrics	Expected Response and Application	Learn/Adapt
What is impacting our ability to achieve our outcome?	*What current efforts are addressing this factor?*	*What further efforts or information are needed to fully address this factor?*	*What actions are essential to achieve our outcome?*	*Optional: Do we have a measure of progress? How do we know if we have achieved the intended result?*	*Optional: What effects do we expect to see as a result of this action, when, and what is the anticipated application of these changes?*	*Optional: What did we learn from taking this action? How will this lesson impact our work?*
Habitat Condition (poor soils, utility/infrastructure conflicts, etc. impacting urban tree plantings)						

WORK PLAN ACTIONS						
Green - action has been completed or is moving forward as planned Yellow - action has encountered minor obstacles Red - action has not been taken or has encountered a serious barrier						
Action #	**Description**	**Performance Target(s)**	**Responsible Party (or Parties)**	**Geographic Location**	**Expected Timeline**	
1.1	Implement state programs and grants to incentivize tree canopy progress	1. DE – Implement state grant programs to assist communities with tree canopy expansion 2. DC – (1) Increase tree canopy through street tree and other public property plantings (2) Increase tree canopy on private properties through incentive programs, such as River smart Homes 3. MD – (1) Continue implementing existing statewide urban and community forestry programs (Forest Conservation Act, Reforestation Law, and Roadside Tree Law) to maintain the net urban tree canopy statewide (2) Continue implementing existing homeowner tree planting assistance	1. DE FS, DNREC-CBIG 2. DDOT, DOEE 3. MD FS, MHA, local governments 4. PA DCNR, PSU 5. VA DOF, VA Urban Forest Council, Tree Steward Coordinator 6. WVDEP, WVDOF,	1. DE 2. DC 3. MD 4. PA 5. VA 6. WV	1. Ongoing 2. Ongoing 3. Ongoing 4. Ongoing 5. Ongoing 6. Ongoing	

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		programs such as the Marylanders Plant Trees coupon program and Lawn to Woodland program 4. PA – (1) Increase tree canopy through TreeVitalize tree planting grants (2) Engage colleges and universities around the state in completing i-Tree Streets inventories, with communities developing management plan as match (TreeVitalize grants) (3) Provide inventory and i-Tree training; assist communities with UTC assessments when high resolution data is available and use with inventory data to create management plans 5. VA – (1) Increase tree canopy on public and private properties through grants and incentive programs, such as Virginia Trees for Clean Water and Richmond Urban Tree Canopy Initiative (2) Greater development of the Virginia Tree Stewards which promote good tree care and increase tree planning in their areas of influence 6. WV – Increase tree canopy through Project CommuniTree grants and partnerships 7. NY - Implement state grant programs (such as NYS DEC's Urban and Community Forestry Grant Program) to assist communities with tree canopy expansion	Cacapon Institute		
1.2	Assess and summarize federal, state, local and private funding opportunities available to support local UTC implementation, including	1. Develop project proposal and seek funding to complete the assessment through grant sources and/or partnership opportunities	1. USFS/FWG 2. USFS/FWG	1. Bay-wide 2. Bay-wide	1. Summer 2016 2. Summer 2016

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	riparian forest buffers in developed areas	2. Provide list/links to available funding sources in each state on Chesapeake Tree Canopy Network website (see 4.2a below)			
1.3	Provide guidance/case studies/best practices for local governments and partner organizations on how to strengthen funding and partnerships for UTC	1. Collect case study/best practices in conjunction with #2 and make summaries available on website	1. USFS/FWG	1. Bay-wide	1. Fall 2017
1.4	Explore options for expanding UTC funding for diverse Chesapeake communities through leveraging federal, state, and private resources (e.g. work with Bay Funders Network)	1. Initial meeting with Bay Funders Network to discuss challenges and opportunities for UTC funding 2. Form a federal Tree Canopy team to identify and strengthen federal contributions to the tree canopy outcome	1. USFS 2. UFS, EPA, NPS, DOD, FWS, USGS	1. Bay-wide 2. Bay-wide	1. Spring 2016 2. Spring 2016
1.5	Work collaboratively with Bay Program partners to identify, legislative, budgetary, and policy needs to advance the goals of the Chesapeake Bay Agreement. We will in turn pursue action within our member state General Assemblies and the United States Congress (per CBC Resolution #14-1).	1. Work with GIT to consider policy changes or legislative actions identified by the GIT	1. CBC	1. PA, MD, VA	1. Ongoing
2.1	Review state and local policies in place to support urban tree canopy and provide recommendations on best practices, model ordinances, etc. for Bay jurisdictions (e.g. Annapolis tree canopy legislation and volunteer program cited as a model)	1. Develop project proposal and seek funding to complete the assessment through grant sources and/or partnership opportunities 2. Post resources and case studies on policy/ordinances on Chesapeake Tree Canopy Network Website	1. USFS/FWG 2. USFS/FWG	1. Bay-wide 2. Bay-wide	1. Summer 2016 2. Fall 2017

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2.2	Support efforts to credit/incentivize tree canopy protection in addition to planting in the TMDL framework	1. Work with Urban Tree Canopy Expert Panel, Stormwater Workgroup, and other CBPO stakeholders to get tree canopy land use, loading rate and BMP recommendations incorporated into Phase 6 model 2. Work with Chesapeake Stormwater Network to provide guidance/training to stormwater professionals on integrating tree canopy into standards/specifications, etc.	1. USFS/FWG 2. USFS/FWG	1. Bay-wide 2. Bay-wide	1. Summer 2016 2. Fall 2017
2.3	Work with stormwater program managers (federal/state/local) to better integrate urban tree canopy and riparian buffer goals with TMDL/WIP implementation and MS4 programs	1. Work with TMDL/WIP coordinators in each state to get tree canopy targets into 2 Year Milestones 2. Hold a meeting in each state with urban forestry and stormwater managers to identify opportunities for better integration	1. USFS/FWG, jurisdictions, EPA 2. USFS/FWG, jurisdictions, EPA	1. Bay-wide 2. Bay-wide	1. Fall 2015 2. Spring 2017
3.1	Provide guidance, training, and technical assistance to help local governments and partners develop robust urban tree canopy implementation programs (see also state action plans)	1. Develop a survey/assessment to get input from local governments and urban forestry partners on training/TA needs, in coordination with Local Leadership Workgroup efforts	1. USFS/FWG	1. Bay-wide	1. Fall 2016
3.2	Support the development of Bay-wide high resolution UTC data updated regularly (e.g. every 5 years) to track progress/net gain	1. Bay-wide data to be completed by CBP partnership by Summer 2016 – give input during this process 2. Develop mechanism for making new Tree Canopy data accessible to state and local users	1. USGS LUWG, FWG 2. USGS, FWG	1. Bay-wide 2. Bay-wide	1. Summer 2016 2. Summer 2017
3.3	Work with states to develop user-friendly tracking and verification systems for groups to report urban tree planting to the Chesapeake Bay	1. Develop tree planting tracking process in each state in alignment with Forestry BMP Verification Guidance; engage and train initial group of local partners in providing data	1. FWG, jurisdictions	1. Bay-wide	1. Fall 2016

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	model for BMP credit, in alignment with Chesapeake Bay Program Forestry BMP Verification Guidance				
3.4	Provide guidance and standards/best practices for tree planting and maintenance to improve long-term survival	1. Compile national model standards/best practices including Tree Owner's Manual, ISA, Urban Tree Growth and Longevity Working Group; post to Chesapeake Tree Canopy Network website 2. Compile info from state and local partners on what standards they are currently using; assess and make recommendations on actions to enhance	1. USFS/FWG 2. USFS/FWG	1. Bay-wide 2. Bay-wide	1. Spring 2016 2. Summer 2017
4.1	Work with the Diversity Action Team and solicit guidance from LGAC and others to facilitate greater local participation, including representation of underserved and underrepresented communities	1. Work with DAT, Local Leadership Workgroup, Citizen Stewardship Team, LGAC, CAC and other partners to integrate Tree Canopy opportunities into their other Strategy workplan efforts; develop list of joint actions	1. FWG, DAT, LLWG, GIT5, LGAC, CAC	1. Bay-wide	1. Ongoing
4.2	Use online tools/webinars/list serves to support ongoing training and information sharing in the urban forestry community of practice (e.g. a "Chesapeake Tree Canopy" group within the existing Chesapeake Network tools)	1. Develop Chesapeake Tree Canopy Network website and list serve to serve as resource hub and community of practice 2. Use input from survey (3.1.1 above) to develop schedule of webinar/training/ tools to be developed	1. ACB 2. USFS/FWG	1. Bay-wide 2. Bay-wide	1. Spring 2016 2. Fall 2017
4.3	Develop and pilot social marketing and other innovative outreach methods to broaden community engagement in urban tree canopy implementation	1. Make social marketing/ outreach resources available on Chesapeake Tree Canopy Network website 2. See 4.4.1	1. USFS/FWG 2. USFS/FWG	1. Bay-wide 2. Bay-wide	1. Spring 2017 2. Spring 2017
4.4	Develop communication and outreach strategies targeted to	1. Pursue a workshop and case studies on community outreach strategies for Tree	1. USFS/FWG, DAT	1. Bay-wide	1. Fall 2017

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	diverse audiences, focusing on areas with greatest need and opportunity (e.g. low canopy/underserved communities; schools, faith-based, and other civic organizations; homeowner associations; etc.)	Canopy; emphasis on diversity/ environmental justice opportunities [GIT Funding proposal, other avenues]			
		2. Coordinate with CBPO Green Schools/Environmental Literacy partners to develop a School Tree Canopy Initiative	2. USFS/FWG, Education WG	2. Bay-wide	2. Summer 2017
4.5	Continue and increase coordination between local agencies, non-profits, and utilities intended to protect property from and assist homeowners with maintaining over hanging tree limbs threatening property and human health	1. Hold workshop with representatives from utilities, states, local government, and nonprofits on tree canopy-utility issues and opportunities	1. USFS/FWG	1. Bay-wide	1. Fall 2017
4.6	Continue to increase and promote the number of Arbor Day events and UTC education programs on DoD installations for military community awareness	1. Host Arbor Day/Tree Planting events at select DoD installations, integrating the importance of UTC	1. DOD	1. DOD installations	1. 2016-2017
4.7	Develop educational resources that expand the awareness, appreciation, planting and stewardship of fruit and nut trees within educational institutions, under-served communities, parks and other public lands	1. Include fruit and nut trees and food forests in regional and local tree canopy goals and initiatives 2. Pursue development of K-12 student-centered experiences and curricula that embed orchard ecosystems in STEM programs 3. Plant orchards and orchard ecosystems at K-12 schools and institutions of higher learning 4. Work with neighborhood associations, district planners and other civic groups to create publically accessible and managed orchards	USFS/FWG, local tree planting organizations and forestry boards, local nature centers, local planning boards, universities and colleges, local school systems	1. Bay-wide	1. Ongoing

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