

Biennial Strategy Review System: Logic Table and Work Plan

Tree Canopy Logic Table and Work Plan

Tree Canopy Outcome: Continually increase urban tree canopy capacity to provide air quality, water quality and habitat benefits throughout the watershed. Expand urban tree canopy by 2,400 acres by 2025.

Factor	Current Efforts	Gap	Actions (critical in bold)
<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 achieve our outcome?</i>
Funding and Finances	Tree Canopy Financing Guide project is addressing actions 1.2, 1.3 and will be complete May 2019 (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 Financing Guide (1.3)	1.1 , 1.3 , 1.4 ,
Federal and State Government Agency Engagement	State forestry agencies and USFS are main entities engaged and coordinating through Forestry Workgroup	More engagement with other state agencies (water quality, etc.) and other federal partner agencies needed next cycle, especially around tree canopy as stormwater/MS4/WIP strategy	1.1 , 1.4 , 2.1 , 2.3 , 3.3 , 4.6
Local Government Agency Engagement	Some local engagement occurring through Chesapeake Tree Canopy Network, UTC Funding Project, and state WIP planning	Need to ramp up local engagement for tree canopy implementation and tracking through WIP/TMDL process and through UTC 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, diversity, stewardship, schools, climate etc.)	1.4 , 2.3 , 3.1 , 4.1 , 4.4
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.)	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

Factor	Current Efforts	Gap	Actions (critical in bold)
<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 achieve our outcome?</i>
<p>Environmental Factors Challenging Tree Canopy progress: Population Growth (Development); Climate Change (storms, drought, etc.) Biota (pests, invasive species, etc.) Habitat Condition (poor soils, utility/infrastructure conflicts, etc. impacting urban tree plantings)</p>	<p>Most of these factors are difficult to manage with existing programs, though information resources and technical assistance providers within states are helpful</p>	<p>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</p>	<p>2.1, 3.1, 3.4</p>

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
Management Approach 1: Bolster Funding and Partnerships					
1.1	Implement state programs and grants to incentivize tree canopy progress	<ol style="list-style-type: none"> 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) Implement statewide urban and community forestry programs (Forest Conservation Act, Reforestation Law, and Roadside Tree Law) to maintain the net urban tree canopy statewide (2) Increase tree canopy through homeowner tree planting assistance programs such as the Marylanders Plant Trees coupon program and Lawn to Woodland program 4. PA – (1) Increase tree canopy through TreeVitalize tree planting, Urban Riparian Buffer, and Community Forestry Management grants (2) Engage Youth Conservation Corp to conduct inventories (3) Provide inventory and i-Tree training; assist communities with UTC assessments when high resolution 	<ol style="list-style-type: none"> 1. DE FS, DNREC 2. DDOT, DOEE 3. MD FS, MSHA, local governments 4. PA DCNR, PSU 5. VA DOF, VA Urban Forest Council, Tree Steward Coordinator 6. WVDEP, WVDOF, Cacapon Institute 7. NYSDEC, Upper Susquehanna Coalition 	<ol style="list-style-type: none"> 1. DE 2. DC 3. MD 4. PA 5. VA 6. WV 	<ol style="list-style-type: none"> 1. Ongoing 2. Ongoing 3. Ongoing 4. Ongoing 5. Ongoing 6. Ongoing

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
		<p>data is available and use with inventory data to create management plans (4) Continue to support PA Tree Map (5) Turf to Trees/Pollinator Habitat Pilot project</p> <p>5. VA – (1) Increase tree canopy on public and private properties through grants and incentive programs, such as Virginia Trees for Clean Water and when funds are available, Richmond Urban Tree Canopy Initiative (2) Continued development of the Virginia Tree Stewards which promote good tree care and increase tree planting in their areas of influence (3) The VA U&CF grant will include the opportunity to apply for urban tree canopy assessments</p> <p>6. WV – Increase tree canopy through WV Project CommuniTree and Bay Trees grants and partnerships. Encourage municipalities to adopt TC goals and plans. Promote Mountaineer Treeways, Project Learning Tree, and US Forest Service Green Schools</p> <p>7. NY - Implement state grant programs (such as NYSDEC’s Urban and Community Forestry Grant Program and Trees for Tributaries</p>			

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
		Program) to assist communities with tree canopy expansion			
1.3	Provide guidance/case studies/best practices for local governments and partner organizations on how to strengthen funding and partnerships for UTC	1. Disseminate and provide training in the new Financing Urban Tree Canopy Programs guide (at UTC Summit 2.0 and plugging into workshops/meetings in each state)	1. Alliance for the CB/USFS/FWG/LLWG/CBP Communications, Environmental Finance Center	1. Bay-wide	1. Summit completed Jan. 2020; ongoing
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. Convene a funding/policy solutions roundtable in conjunction with UTC Summit 2.0 (see Action 3.1), engaging cross-sector partners with interest in tree co-benefits (public health, stormwater, etc.) 2. Use roundtable findings and state-level strategy meetings to develop a set of funding/policy recommendations for EC Council meeting 2020	USFS/FWG, with support from CBC, State leadership, ngos, etc.	1. Bay-wide 2. Bay-wide	1. Delayed due to COVID 2. Delayed due to COVID
Management Approach 2: Strengthen Policy and Ordinances					
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	1. Covered in actions 1.3 and 1.4 above 2. Develop and promote delivery of a training module based on CWP's Forest-Friendly Codes and Ordinances Worksheet, Conservation Toolkit (Healthy Watersheds GIT) and other resources (at UTC Summit 2.0 and plugging into workshops/meetings in each state)	1. USFS/FWG 2. USFS/FWG/LLWG Center for Watershed Protection	1. Bay-wide 2. Bay-wide	1. 1.4 delayed due to COVID 2. Summit completed Jan. 2020; ongoing

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
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	<ol style="list-style-type: none"> Collaborate with Chesapeake Stormwater Network (CSN) to promote and expand use of urban tree BMPs by local stormwater managers and engineers Coordinate with state TMDL/WIP and Stormwater Program Managers to encourage more urban tree BMPs in WIP implementation 	<ol style="list-style-type: none"> USFS/CSN FWG/WQGIT/USWG 	<ol style="list-style-type: none"> Bay-wide Bay-wide 	<ol style="list-style-type: none"> Completed webinars; ongoing More work needed
Management Approach 3: Increase Technical Capacity and Knowledge					
3.1	Provide guidance, training, and technical assistance to help local governments and partners develop robust urban tree canopy implementation programs	<ol style="list-style-type: none"> Convene UTC Summit 2.0 to provide training in the latest tools, guidance and resources to urban forestry practitioners and cross-sector partners (e.g. planners, engineers, local officials, etc.) Support GIT-funded Turf to Buffers training development and pilot in Virginia 	<ol style="list-style-type: none"> USFS/FWG/LLWG Virginia Dept. of Forestry/ Contractor/ partners 	<ol style="list-style-type: none"> Bay-wide Virginia 	<ol style="list-style-type: none"> Completed Jan 2020 Completed Summer 2020
3.2	Support the development of Bay-wide high resolution UTC data updated regularly (e.g. every 5 years) to track progress/net gain	<ol style="list-style-type: none"> Support development of tree canopy data and analysis as part of the next update of high resolution Land Cover data Continue to develop and refine Tree Canopy Indicator data for reporting progress 	<ol style="list-style-type: none"> USGS/FWG USFS/FWG 	<ol style="list-style-type: none"> Bay-wide Bay-wide 	<ol style="list-style-type: none"> Ongoing Ongoing
3.3	Work with states to develop user-friendly tracking and verification systems for groups to report urban tree planting	<ol style="list-style-type: none"> Develop proposal and pursue funding to support jurisdictions needs for a Tree Tracking tool to capture urban tree BMPs 	<ol style="list-style-type: none"> USFS/FWG FWG-states 	<ol style="list-style-type: none"> Bay-wide 	<ol style="list-style-type: none"> Action modified; states pursuing individual tracking approaches More work needed

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
	to the Chesapeake Bay model for BMP credit, in alignment with Chesapeake Bay Program Forestry BMP Verification Guidance	implemented by local and ngo partners 2. Build and train network of local partners reporting urban tree BMPs to the CBP model			
3.4	Provide guidance and standards/best practices for tree planting and maintenance to improve long-term survival	1. Grow the network of “tree stewards” through new training programs in Maryland and Delaware and expansion of existing programs in other Bay states (USFS grant to Alliance for Chesapeake Bay and DE Forest Service)	1. ACB/USFS/ DE, MD, PA, VA	1. Bay-wide	1. New programs launched in MD and DE Fall 2020; ongoing
Management Approach 4: Expand Community Outreach and Education					
4.1	Work with the Diversity Workgroup and solicit guidance from LGAC and others to facilitate greater local participation, including representation of underserved and underrepresented communities	1. Work with Diversity Workgroup, Local Leadership Workgroup, Citizen Stewardship Team, LGAC, CAC and other partners to integrate Tree Canopy opportunities into other Strategy workplan efforts	1. FWG, DWG, 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. Maintain and strengthen the Chesapeake Tree Canopy Network and e-newsletter as our primary hub for resources and communication	1. ACB/USFS/FWG/ CBP Website Team	1. Bay-wide	1. Ongoing

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
4.3	Develop and pilot social marketing and other innovative outreach methods to broaden community engagement in urban tree canopy implementation	<ol style="list-style-type: none"> 1. Work with CBP Communication Team on a strategic Communication Plan for increasing tree canopy efforts across the watershed 2. Develop messaging materials to support the Plan, with latest research on tree canopy co-benefits and cost-effectiveness 3. Begin implementing Communication Plan through targeted outreach to groups representing co-benefits (e.g. public health) 	1. USFS/FWG/CBP Communications/ LLWG	<ol style="list-style-type: none"> 1. Bay-wide 2. Bay-wide 	<ol style="list-style-type: none"> 1. Developed proposal, pursuing funding 2. Awaiting #1 3. Awaiting #1 and 2
4.4	Develop communication and outreach strategies targeted to 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.)	<ol style="list-style-type: none"> 1. Collaborate with Local Leadership Workgroup on Tree Canopy module for watershed curriculum for local officials 2. Complete tree canopy-environmental justice-community engagement case studies and pilot projects in Anacostia and disseminate findings broadly 3. Coordinate with GIT-5 project about BMPs on school properties regarding tree canopy opportunities 	<ol style="list-style-type: none"> 1. USFS/FWG, LLWG, Communications WG 2. MWCOG/USFS/ partners 3. Cacapon Institute/ GIT5/ contractor 	<ol style="list-style-type: none"> 1. Bay-wide 2. Bay-wide 3. Bay-wide 	<ol style="list-style-type: none"> 1. On track for completion 2021 2. Completed Fall 2020 3. Completed draft Trees & Schools Resource Guide to complement GIT-5 project
4.6	Continue to increase and promote the number of Arbor Day events and UTC education programs on DoD installations for	1. Host Arbor Day/Tree Planting events at select DoD installations,	1. DOD	1. DOD installations	1. Ongoing

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
	military community awareness				
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. Compile and feature resources and community stories (food forest, urban orchards) on Chesapeake Tree Canopy Network website	1. USFS/FWG, CBP Communications WG	1. Bay-wide	1. Plan to complete in 2021

Acronym Guide:

ACB	Alliance for the Chesapeake Bay
BMP	Best Management Practice
CAC	Citizen Advisory Committee (Chesapeake Bay Program)
CBC	Chesapeake Bay Commission
CBP	Chesapeake Bay Program
CSN	Chesapeake Stormwater Network
CWP	Center for Watershed Protection
DDOT	District Dept. of Transportation-Urban Forestry Division
DEFS	Delaware Forest Service
DNREC	Delaware Dept. of Natural Resources and Environmental Conservation
DOD	U.S. Department of Defense
DOEE	District Dept. of Energy and Environment
DWG	Diversity Workgroup (Chesapeake Bay Program)
FWG	Forestry Workgroup (Chesapeake Bay Program)
GIT	Goal Implementation Team (Chesapeake Bay Program)
GIT5	Stewardship Goal Implementation Team (Chesapeake Bay Program)
LGAC	Local Government Advisory Committee (Chesapeake Bay Program)
LLWG	Local Leadership Workgroup (Chesapeake Bay Program)
MD FS	Maryland Forest Service
MHA	Maryland State Highway Administration
MWCOG	Metropolitan Washington Council of Governments
NYSDEC	New York Department of Environment and Conservation
PA DCNR	Pennsylvania Dept. of Conservation and Natural Resources (Bureau of Forestry)
PSU	Penn State University (Urban Forestry Extension)
TMDL	Total Maximum Daily Load
USFS	USDA Forest Service
USWG	Urban Stormwater Workgroup (Chesapeake Bay Program)
UTC	Urban Tree Canopy
VA DOF	Virginia Dept. of Forestry
WIP	Watershed Implementation Plan
WQGIT	Water Quality Goal Implementation Team (Chesapeake Bay Program)
WV DOF	West Virginia Division of Forestry
WVDEP	West Virginia Dept. of Environmental Protection