Management Strategies and Work Plans Dashboard from CBP Website

General Background: Since the signing of the Watershed Agreement in June 2014, our Goal Implementation Teams have been crafting "management strategies" that describe the steps necessary to achieve the Agreement's Vision. These management strategies offer insight into the Bay Program partners' proposals for reaching each outcome by 2025, as well as how we will monitor, assess and report progress toward abundant life, clean waters, engaged communities, conserved lands and climate change resilience. The strategies provide broad, overarching direction and will be further supported by two-year work plans summarizing the specific commitments, short-term actions and resources required for success.

Black Duck Outcome: Local Engagement

Local government has a direct role in achieving the black duck outcome. Specifically, local officials' decisions about land use, which are reflected in both planning and permitting, will impact the availability of habitat and food sources for migratory and nesting black ducks. Many of the activities that might be contemplated for black ducks, including creation of nesting islands, building impoundments, or other work in freshwater wetlands or salt marsh would require permitting and in many cases obtaining the necessary permits could be challenging. It is recommended that conservation organizations, local governments and other resource agencies and permitting authorities work collaboratively in order to plan and develop the types of habitats needed to meet black duck resource needs. In addition, local governments may assist in achieving this outcome by adopting regulations that affect the ability and efficiency of habitat conservation for black ducks or assisting in any of the activities listed in the management approach below.

Local governments, watershed associations, nonprofits or anyone working in the watershed should be aware of encroaching land use and where potential development intersects with known migration pathways or priority wintering or breeding habitat for black ducks. They can incorporate this knowledge into landscape-scale planning efforts to increase conservation prospects for those landscapes. This knowledge can also be used in public outreach activities and communications to increase awareness and public interest.

Black Duck: Management Approach 4: Ensure appropriate planning tools and technical support are available at the local level.				
Key Actions Supporting Management Approach	**Performance Target(s)** *Identify incremental steps to achieve Key Action.*	**Participating Entity** *Identify responsible partner for each step.*	**Geographic Location**	**Timeline** *Identify completion date (month & year) for each step)*
7. Keep local officials engaged and informed. (use Cross-GIT coordinator to figure out how/if that is reflected in Local Leadership Workplan.) - healthy watersheds?	Communicate with Local Leadership Workgroup to discuss extension program or inclusion of decision support tool into LLW's content.	Conservation organizations, local governments, state agencies, etc.	Entire Chesapeake Bay watershed, and throughout the ACJV	August 2016
8. Review regulations and permitting processes regarding wetland protection, restoration, and management to streamline planning and development of conservation actions.		Conservation organizations, local governments, state agencies, etc.	Entire Chesapeake Bay watershed, and throughout the ACJV	Ongoing
9. Evaluate the effects of possible hybridization and disease transmission from captive-bred released waterfowl. Track predator management programs that may benefit wintering or breeding black duck populations.		USFWS, State Agencies, DU, etc.		Ongoing
10. The Chesapeake Bay Commission will work collaboratively with the Bay Program partners to identify legislative, budgetary and policy needs to advance the goals of the Chesapeake Watershed Agreement. We will, in turn, pursue action within our member state General Assemblies and the United States Congress. See CBC Resolution #14-1 for additional information.		CBC	Chesapeake Bay Watershed	Ongoing

Brook Trout Outcome: Local Engagement
Engaging the community in tree plantings, water quality, habitat, and macro-invertebrate monitoring. Being able to articulate the community/watershed wide benefits of brook trout from a recreational and economic perspective is also important for local buy-in.

Brook Trout Management Approach 1: Identify and Communicate Priority Focal Areas for Brook Trout Conservation					
Key Actions Supporting Management Approach	**Performance Target(s)** *Identify incremental steps to achieve Key Action.*	**Participating Entity** *Identify responsible partner for each step.*	**Geographic Location**	**Timeline** *Identify completion date (month & year) for each step)*	**Factors Influencing and/or Gap** *Identify related factor or gap in Management Strategy*
Communicate "best of the best" patches in context of local conservation planning	Map overlay with 'healthy watersheds map' and accompanying 'story map' that highlights successful local watershed efforts	CBP GIS team, Local Government Advisory Committee, Maintain Healthy Watersheds GIT, Upper Gunpowder Watershed Conservancy	MD, VA, PA, NY, WV	Summer 2016	Decision-maker awareness

Stream Health Outcome: Local government
Responsible for implementation of BMPs to include stream restoration projects as part of the WIPs

Stream Health - Management Approach 3: Active and engaged participation by local communities with Federal and State partners is central to Bay restoration (see Management Strategy for full Approach).					
Key Actions Supporting Management Approach	**Performance Target(s)** *Identify incremental steps to achieve Key Action.*	**Participating Entity** *Identify responsible partner for each step.*	**Geographic Location**	**Timeline** *completion date (month & year) for each step)*	**Factors Influencing and/or Gap** *Identify related factor or gap in Management Strategy*
Develop a "Stream Restoration Permit Committee" of the Stream Health Work Group that brings practitioners, regulators and the regulated community together to resolve issues and find common ground to identify actions to streamline the stream restoration project permit review process	1. Identify members of the Stream Health Work Group to form the Committee 2. Develop meeting schedule 3. Review latest synopsis of permit issues, recommendations and actions. 4. Provide recommendations to Stream Health Work Group (and Bay Program Partnership) on priority actions to streamline stream restoration project permit review process	Committee: US ACE (North Atlantic Division, Baltimore, Norfolk), EPA, MDE, VA DEQ, VMRC, Anne Arundel County, Fairfax County, PA DEP, DC DOEE, Trout Unlimited, Other jurisdictional representatives (DE, WV, NY)	Chesapeake Bay Watershed	January 2016 - ongoing	Information needs to support innovative, effective design approaches to identify restoration potential and success for different land uses, stream types, and current and future site constraints, causes of impairment/stressors
7. Work with federal, state governments to develop streamlined process to evaluate WIPs, MS4 restoration plans or other relevant site analyses as sufficient documentation for alternative site analysis in support of stream restoration	1. Convene Stream Health Restoration Permit Committee 2. Develop case study permit examples 3. Review criteria and guidance for site selection alternatives analysis 4. Review example WIPs and other watershed or site level analyses to provide information needs for site alternative analysis 5. Recommend guidance for using WIPs, or other documentation to satisfy site alternatives analysis requirement for permits 6. Identify steps to implement recommended guidance	Stream Restoration Permit Committee, MDE*, MD DNR, DOEE, VADEQ interested *MDE (performance targets may differ as per 9/14/15 letter to MD Counties from MDE)	Maryland, Virginia, District of Columbia (interested) And other Chesapeake Bay jurisdictions pending	January 2016 – June 2016	Information needs to support innovative, effective design approaches to identify restoration potential and success for different land uses, stream types, and current and future site constraints, causes of impairment/ stressors
8. Establish minimum stability monitoring requirements for restoration projects	1. Convene Stream Health Restoration Permit Committee 2. Identify minimum stability monitoring assessment parameters and standards 3. Document how higher level performance monitoring assessment parameters (i.e., water quality and biology) will be assessed 4. Recommend guidance for minimum stability monitoring and incorporate into BMP Verification Guidance 5. Identify steps to implement recommended guidance and coordinate with Key Action 4 in development of practicable metrics as relevant	South River Federation with interest from FWS, MDE, Severn River Keeper, VA DEQ, DOEE interest to participate, USGS	Chesapeake Bay Watershed	July 2016 – March 2017	Sufficiency of data to demonstrate effectiveness of stream restoration practices

Diversity Outcome: Local Engagement
The Bay watershed's state and local governments, watershed associations, nonprofits and private sector entities provide important support for increasing the engagement of diverse communities.

Diversity, Management Approach 3: Promote Environmental Justice				
Key Action Supporting Management Approach	**Performance Target(s)** *Identify incremental steps to achieve Key Action.*	**Participating Entity** *Identify responsible partner for each step.*	**Geographic Location**	**Timeline** *Identify completion date (month & year) for each step)*
Key Action 4: Work with local governments in the watershed to explore how the Bay Program can inform or help local decision makers maximize benefits and minimize adverse impacts from restoration project planning, siting and funding processes.	a. DAT to work with LGAC and Local Leadership Team to explore opportunities to work with local leaders on these issues.	DAT LGAC MD Department of Natural Resources Local Leadership Team	PA, MD, DC, DE, VA	1

Healthy Watersheds Outcome: Local Engagement

While state, federal, and regional partners can provide important support for healthy watersheds protection, local governments, watershed associations, nonprofits, and private sector entities also play key roles. Private land trusts, nature preserves, conservation organizations, and other non-governmental entities can often move quickly to protect targeted and available lands through direct purchase or acquisition of easements, development rights, or other means. These organizations often partner with local, state, and federal agencies, and typically provide a sustained level of real-world focus for localized efforts to protect healthy waters and watersheds. Local governments also have the ability to protect sources of drinking water and preserve lands valued highly by the public as nature preserves, parks, greenways, recreational areas, and wildlife habitat. Local tools for healthy watershed protection include planning (comprehensive, park and recreation, transportation, economic development, water resources, etc.); official maps; land use regulations including sub-division and land development and zoning; land and easement purchases; post construction stormwater management and mitigation requirements; and a variety of other tools.

Healthy Watersheds: Management Approach 2 - Local Leadership - Strengthen local commitment and capacity to protect their healthy watersheds

Key Actions Supporting Management Approach	Performance Target(s) *Identify incremental steps to achieve Key Action.*	Participating Entity *Identify responsible partner for each step.*	Geographic Location	Timeline *Identify completion date (month & year) for each step*	Factors Influencing and/or Gap *Identify related factor or gap in Management Strategy*
Key Action 1: Outreach, including: effectively conveying information on the status of healthy watersheds to local stakeholders	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	Maintain Healthy Watersheds GIT in coordination with Local Goverment Advisory Committee (LGAC), Local Leadership workgroup, HW GIT and others	Chesapeake Bay Watershed	January 2016 - May 2016	Local Leadership: Local commitment and capacity to protect healthy watersheds
	Presentations about watershed protection at community events and meetings	DOEE	DC	current -	
	Work with schools on watershed restoration education and implementation projects	DOEE	DC	current -	
	Partner with NGOs to coordinate protection and communication efforts (This goal is not S.M.A.R.T. yet)	DNR, MDE, MDP	Statewide		
	Develop and implement communications to local communities to support integration of healthy watershed protection into local comprehensive plans.	DNR, MDE, MDP	Statewide	Jan 2017	
	Develop and implement outreach to communities to support directing some pollution reduction/mitigation activities (E.g. preservation, riparian buffer initiatives, reforstation, etc.) planned for large-scale TMDL development watersheds that contain healthy (sub)watersheds.	MDE	At least one of the following: Upper Choptank, Upper Chester, Patuxent River Middle, Patuxent River Lower, Gwynns Falls, Lower CHoptank, Marshyhope Creek	Jan 2022	

Healthy Watersheds: Management Approach 2 - Local Leadership - Strengthen local commitment and capacity to protect their healthy watersheds

Key Actions Supporting Management Approach	Performance Target(s) *Identify incremental steps to achieve Key Action.*	Participating Entity *Identify responsible partner for each step.*	Geographic Location	Timeline *Identify completion date (month & year) for each step)*	Factors Influencing and/or Gap *Identify related factor or gap in Management Strategy*
Key Action 2: Identify the various tools that may be used, primarily by local governments, to protect healthy watersheds	Maintain Healthy Watersheds GIT through Land Use Options and Local Leadership Management Strategies	Chesapeake Bay Watershed and other areas that serve as models	Chesapeake Bay Watershed and other areas that serve as models	January 2016 - December 2017	Local Leadership: Local commitment and capacity to protect healthy watersheds
	MDE	Statewide	Statewide	Jan 2018	Local Leadership: Local commitment and capacity to protect healthy watersheds
	DNR	Statewide	Statewide	Jan 2016	Local Leadership: Local commitment and capacity to protect healthy watersheds
	Add healthy watershed protection as a factor in growth offset policies.	DNR, MDE, MDP	Statewide	Jan 2017	Local Leadership: Local commitment and capacity to protect healthy watersheds
	Support local green space planning and protection by incorporating conservation methods into other planning efforts (ex.- State Planning Board, county comprehensive plans, and local zoning ordinances)	PA DCNR, DEP, State Planning Board, local governments	Bay-wide	Ongoing	Local Leadership: Local commitment and capacity to protect healthy watersheds
	Healthy Watersheds TMDL Pilot Project Forestland Retention Study (Rappahanock River Basin) - Phase 2	TBD	VA and PA	2015-2016	Local Leadership: Local commitment and capacity to protect healthy watersheds
Key Action 3: Leverage Funding	Use FWS grant programs like North American Wetlands Conservation Act grants, National Coastal Wetlands Conservation grants, and Section 6 Endangered Species Recovery Land Acquisition grants to leverage non-federal funds	FWS	Chesapeake Bay Watershed	FY2016	Federal and State leadership: provide scientific, technical and policy tools to identify and protect healthy watersheds
	Incorporate healthy watershed protection into the RFPs and scoring tools used to award federal and state water quality grants.	DNR, MDE	Statewide	Jan 2017	Federal and State leadership: provide scientific, technical and policy tools to identify and protect healthy watersheds
	Assist with the leverage of funding. Also, incentivize riparian and in-stream restoration projects, while engraining staff into the local community in an effort to change mindsets for the benefit of cold water resources.	Trout Unlimited	Various locations	Ongoing	Federal and State leadership: provide scientific, technical and policy tools to identify and protect healthy watersheds
	Establish Healthy Watersheds Initiative as special funding category in Growing Greener (Environmental Stewardship) funding. Entities may apply for funding of projects directed at curtailing threats to waters designated as Exceptional Value, High Quality, and Class A Wild Trout.	PA DEP	Bay-wide	Ongoing	Federal and State leadership: provide scientific, technical and policy tools to identify and protect healthy watersheds

The Urban Tree Canopy outcome: Local Engagement

[This] outcome will only be achieved through the efforts of local governments and their urban forestry partners working to plant, protect, and maintain the community's tree canopy. Local governments play a primary role in achieving UTC goals by establishing and enforcing supportive policies and ordinances, providing funding and staffing, building partnerships with non-profit and private entities, and tracking progress in meeting goals. Nongovernmental urban forestry partners, watershed groups, and other conservation organizations often provide critical support to local governments in planting and maintaining trees, engaging volunteers, and building public support. Because community governance varies significantly across the watershed in structure, policy, and capacity, the Strategy recognizes that flexible, locally adapted approaches are needed to support UTC goals. The rest of the sections of this Strategy identify key needs and management approaches related to local engagement, which will be detailed more fully when the first 2 Year Workplan is developed. These efforts will be closely coordinated with the Chesapeake Bay Local Leadership Strategy/Workgroup, the Local Government Advisory Committee, and the Diversity Action Team.

Urban Tree Canopy: Management Approach 3: Increase Technical Capacity and Knowledge

Key Actions Supporting Management Approach	Performance Target(s) *Identify incremental steps to achieve Key Action.*	Participating Entity *Identify responsible partner for each step.*	Geographic Location	Timeline *Identify completion date (month & year) for each step)*
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 govts and urban forestry partners on training/TA needs, in coordination with Local Leadership Workgroup efforts	USFS/Forestry Workgroup	CB-Wide	Fall 2016
2. Support the development of Baywide high resolution UTC data updated regularly (e.g. every 5 years) to track progress/net gain	Bay-wide data to be completed by CBP partnership by Summer 2016 – give input during this process Develop mechanism for making new Tree Canopy data accessible to state and local users	2. USGS FWG	CB-Wide	Summer 2016 Summer 2017
3. Work with states to develop user- riendly tracking and verification systems for groups to report urban tree planting to the Chesapeake Bay model for BMP credit, in alignment with Chesapeake Bay Program Forestry BMP Verification Guidance	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	Forestry Workgroup/ Jurisdictions	CB-Wide	Fall 2016
4. Provide guidance and standards/best practices for tree planting and maintenance to mprove long-term survival	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 Compile info from state and local partners on what standards they are currently using; assess and make recommendations on actions to enhance	USFS/Forestry Workgroup	CB-Wide	Summer 2017

Urban Tree Canopy: Management Approach 4: Expand Community Outreach and Education

Key Actions Supporting Management Approach	Performance Target(s) *Identify incremental steps to achieve Key Action.*	Participating Entity *Identify responsible partner for each step.*	Geographic Location	Timeline *Identify completion date (month & year) for each step)*
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	CAC	CB-Wide	Ongoing
2. Use online tools/webinars/listserves 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)	Develop Chesapeake Tree Canopy Network website and listserve to serve as resource hub and community of practice Use input from survey (3.1.1 above) to develop schedule of webinar/training/ tools to be developed	Alliance for the Chesapeake Bay, USFS USFS/FWG	CB-Wide	Fall 2017
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	CB-Wide	Spring 2017
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.)	Pursue a workshop and case studies on community outreach strategies for Tree Canopy; emphasis on diversity/ environmental justice opportunities [GIT Funding proposal, other avenues] Coordinate with CBPO Green Schools/ Environmental Literacy partners to develop a School Tree Canopy Initiative	USFS/FWG DAT USFS/FWG Education Workgroup	CB-Wide	Summer 2017
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 govt, and nonprofits on tree canopy-utility issues and opportunities	USFS/FWG	CB-Wide	Fall 2017
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.	DoD	DoD installations where applicable	2016-2017
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.	Include fruit and nut trees and food forests in regional and local tree canopy goals and initiatives Pursue development of K-12 student- centered experiences and curricula that embed orchard ecosystems in STEM programs Plant orchards and orchard ecosystems at K-12 schools and institutions of higher learning Work with neighborhood associations, district planners and other civic groups to create publically accessible and managed orchards	Local universities and colleges Local school systems	CB-Wide	Ongoing

Land use metrics and methods development outcomes: Local Engagement
To assist in quantifying impacts on communities, the Land Use Workgroup will work with the Local Government Advisory Committee (LGAC) to identify local governments interested in participating in quantifying the impacts of land use change on communities and the environment. Local government stakeholders are needed to advise the Chesapeake Bay Program on the development of the methodology and local level metrics, and in quantifying potential impacts.

Land Use Metrics and Methods: Management Approach 2: Quantify the impacts of land conversion on water quality, healthy watersheds, and communities

Description of work/ project.	Performance Target(s) *Identify incremental steps to achieve Key Action.*	Participating Entity *Identify responsible partner for each step.*	Geographic Location	Timeline *Identify completion date (month & year) for each step)*	Factors Influencing and/or Gap *Identify related factor or gap in Management Strategy*
Quantify impact of land conversion on: **1. Water Quality (Explaining changes in nutrient and sediment that relate to monitored and modeled land conversion)**	Work with USGS to explain change in water quality related to major source sectors (urban, agriculture)	USGS and LUWG (State Geological Surveys?)	Chesapeake Bay Watershed	Dec-17	Report: Findings and Recommendations, LUWG Presentation
	Work with CBPO to interpret Phase 6 sensitivity of water quality to land conversion	CBPO, USGS, and LUWG	Chesapeake Bay Watershed		Report: Findings and Recommendations, LUWG Presentation
Quantify impact of land conversion on: **2. Healthy Watersheds and Habitats**	Vulnerability to land conversions, both historical and future projections	CBPO, USGS, and LUWG	State-identified healthy watersheds	Dec-17	Report: Findings and Recommendations, LUWG Presentation
	Impact (relates to tracking health)			TBD	Report: Findings and Recommendations, LUWG Presentation
Quantify impact of land conversion on: 3. Communities	Set up an Action Team to define the metrics and assess the impacts to communities	LUWG, in coordination with LGAC	Chesapeake Bay Watershed Counties	TBD	Goal Statement, Meeting Minutes and Action items.
	Work with Healthy Watersheds GIT and Land Use Options Evaluation Management Strategy team to link the results of land use methods and metrics analyses and results to determine how best to assist communities in reducing the rate of conversion (the Land Use Options Goal)	Communications team, and other CBP identified partners	Chesapeake Bay Watershed	TBD	Work Plan with meetings schedule, anticipated outcomes. White paper with analysis results and action plan.

Land Use Metrics and Methods: Management Approach 3: Communicate Results to public, elected officials, and to the Bay Program

Description of work/project.	Performance Target(s) *Identify incremental steps to achieve Key Action.*	Participating Entity *Identify responsible partner for each step.*	Geographic Location	Timeline *Identify completion date (month & year) for each step)*	Factors Influencing and/or Gap *Identify related factor or gap in Management Strategy*
Link the results of the Land Use Methods and Metrics outcome and the Land Use Options Evaluation Workplan	Work with Healthy Watersheds GIT and Land Use Options Evaluation Management Strategy team to link the results of land use methods and metrics analyses and results to determine how best to assist communities in improving the character and reducing the rate of conversion (the Land Use Options Goal)	Communications team, and other CBP identified partners	N/A		Action plan/ meeting schedule with anticipated outcomes, Synthesis document with recommendations for local, county and state interactions.
Chesapeake Bay Land Change Website	Launch Phase 6 land use data website	USGS and CBPO (Web Team)		Dec-15	Beta web site
	Testing, refinement, expansion	USGS and CBPO (Web Team)		Dec-17	Published web site
	Develop land change forecasts	USGS and LUWG		Summer 2016	Field tested web site with land change forecast data.
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)	Work with GIT to consider policy changes or legislative actions identified by the GIT.	CBC	PA, MD, VA	Ongoing	

Land Use Options Evaluation Outcome: Local Engagement

Local governments (including regional councils of governments) and nongovernmental organizations also will have a significant role. This outcome specifically calls for the direct involvement of local governments. Local government's specific role in achieving this outcome is to assist the Bay Program with evaluating policy options, incentives and planning tools. While not called for specifically, local government should be consulted in developing strategies to support efforts to reduce the rate of conversion. In addition, the advice, guidance

Land Use Options: Management Approach 2: Gather, summarize and place 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".					
Description of work/project.	**Performance Target(s)** *Identify incremental steps to achieve Key Action.*	**Participating Entity** *Identify responsible partner for each step.*	**Geographic Location**	**Timeline** *Identify completion date (month & year) for each step*	**Factors Influencing and/or Gap** *Identify related factor or gap in Management Strategy*
Conduct a detailed scope of work that includes important considerations, examples, estimated hours, and initial cost estimates to complete this management approach.	Applied for GIT FY '14 funding	HW GIT		early 2015	
	Contract awarded to Tetra Tech	CBT and HW GIT Staff		Mid-2015	Technical Challenges
	Finalized draft report	Tetra Tech, HW GIT Staff and Vice Chair		Late - 2015	
Integrate the results of GIT FY '15 Funding project, "Evaluation of land use policy options, incentives and planning tools..." into an agreed upon location to assist in outreach on this topic to local and state land use officials	Review results and evaluate next steps	HW GIT Staff and Vice Chair	N/A		Political and Educational Challenge; Also, ability to engage Local Governments
Link the results of the Land Use Methods and Metrics outcome to the Land Use Options Evaluation Workplan	Work with local leadership group and LGAC to review results and determine the best outreach mechanism	HW GIT Staff and Vice Chair, Local Leadership group, LGAC, CAC			
	Work with Healthy Watersheds GIT and Land Use Options Evaluation Management Strategy team to link the results of land use methods and metrics analyses and results to determine how best to assist communities in reducing the rate of conversion (the Land Use Options Goal)	HWGIT, CAC, LGAC, CBP Communications team, and other CBP identified partners	N/A		cross outcome collaboration; technical challenges
Explore the development and implementation of a methodology to establish climate related goals and baselines for individual Chesapeake Bay Agreement Management Strategies such as the Land Use Options Evaluation Management Strategy.	Compile existing climate change vulnerability research and data, including available assessment products and tools.	STAR; Climate Resiliency Workgroup	Watershed	Dec-17	Vulnerability of the watershed
	Work with the Climate Resiliency Workgroup to refine Climate Resiliency Analysis Decision Making matrix and recommend implementation process for applying matrix analysis and decision-making process to other Management Strategies such as the Land Use Options Evaluation Management Strategy.	Climate Resiliency Workgroup	Watershed	Dec-17	Cross-cutting programmatic gap

Toxic Contaminant Research Outcome: Local Engagement
Most of the actions to plan and complete the actual research are expected to be the responsibility of federal, state and academic entities. Local governments and NGOs have been helpful in identifying priorities within the research strategy, including NGOs from Baltimore Harbor, the Elizabeth River, and the Anacostia River. Increasing the awareness of the impacts of toxic contaminants, especially safe consumption of fish and shellfish, will be carried out with local governments and organizations and will be targeted towards areas with diverse and underrepresented populations in the bay watershed.

2017 WIP, 2025 WIP and Water Quality Standards Attainment & Monitoring Outcomes:
Approaches Targeted to Local Participation
Much of the implementation of the pollution reduction practices, as articulated in the Bay TMDL and the WIPs, will be carried out at the local level. This includes municipalities, counties, soil and water conservation districts and local private sector groups and individuals. Therefore, management approaches should be designed to include timely dialogue with the responsible local agencies and other partners, taking into consideration funding and technical support required by these local partners.
The CBP partnership is currently exploring how to express programmatic and implementation goals at the local level in the Phase 6 modeling tools (including CAST/MAST/VAST/BayFAST) as part of the midpoint assessment.
The collection of refined land use and land cover data from the local jurisdictions for incorporation into the Phase 6 modeling tools is intended to improve the representation of urban, agricultural, federal and natural lands at the local scale.
Recent investments by the CBP in Citizen Science will help inform management and decision-makers with monitoring assessments, including the effects of management activities. The expansion of Citizen Science will provide key data for evaluating the work of the management strategies to understand the progress we are making, what gaps remain, and what steps are needed to fill those gaps.
Cross-Outcome Collaboration and Multiple Benefits
n State and local jurisdictions could target the implementation of actions that not only result in water quality benefits, but address other impairments (e.g. bacteria or toxic contaminants), environmental problems (e.g. threatened or endangered species), safety concerns (e.g. flooding, infrastructure) and 2014 Agreement Outcomes (e.g. wetlands, forest buffers) as well. The CBP partnership is currently exploring the development of an optimization tool for TMDL implementation purposes, but this tool could potentially capture a broader range of ecosystem benefits beyond water quality to help inform decision making in our restoration efforts.

Climate Resiliency Outcomes: Local Governments. Local governments should be prepared for a range of possible future conditions with respect to climate change impacts to better anticipate, prepare, recover, and adapt to them over time. Local governments can serve as partners with state and federal regulators and funders in identifying and undertaking implementation opportunities. Local governments, school districts and other public institutions can provide locations for pilot projects that support the monitoring and assessment objectives and can serve as a venue for showcasing successful projects throughout the watershed.

Climate Resiliency Outcomes: Local Governments Local governments should be prepared for a range of possible future conditions with respect to climate change impacts to better anticipate, prepare, recover, and adapt to them over time. Local governments can serve as partners with state and federal regulators and funders in identifying and undertaking implementation opportunities. Local governments, school districts and other public institutions can provide locations for pilot projects that support the monitoring and assessment objectives and can serve as a venue for showcasing successful projects throughout the watershed.

Protected Lands Outcome: Local Engagement
On-the-ground efforts of local governments and local land trusts are vital to achieving the Protected Lands outcome. Local governance varies significantly across the watershed in structure, policy, and capacity, and this Strategy recognizes that flexible, locally adapted approaches are needed to achieve the two million acre goal. Following sections of this Strategy identify key needs and management strategies related to local engagement, which will be detailed more fully when the Biennial Workplan is developed. These efforts will be closely coordinated with the Local Government Advisory Committee, the Diversity Action Team, and local organizations engaged in the Chesapeake Conservation Partnership.

Citizen Stewardship Outcome: Local Engagement Increasing the number and diversity of citizen stewards will require leadership on behalf of both nonprofit organizations and local governments.

Environmental Literacy Outcomes. Local Engagement While states have the primary responsibility to advance the Chesapeake Bay Program's environmental literacy efforts, this work is done in partnership with local education agencies or school districts. In most watershed jurisdictions, local education agencies are responsible for defining their own curriculums and implementation strategies to support state standards and priorities.

Fish Passage Outcome: Local Engagement
Local governments, non-profits and watershed associations are engaged in identifying potential dam removal projects, providing information on fish passage alternatives, and organizing community events related to the dam removal projects. A number of non-profits are listed above who serve a critical role in the fish passage strategy by serving as project managers for dam removal projects, grant applicants and stewards of fish passage funding, and technical assistance for a wide variety of fish passage tasks. Technical assistance includes development of the Chesapeake Bay Fish Passage Tool and development of technical scope of work for feasibility, design and construction of dam removal and fish passage projects.

Riparian Forest Buffer Outcome: Local Participation
Local Government Advisory Council; Soil and Water Conservation Districts; Anne Arundel County; Arlington County; Prince Georges County; Cumberland, MD; Fairfax County; Annapolis, MD; Baltimore County.