Action #	Description	Performance Target(s)	Responsible Party(ies) and Partnerships	Geographic Location	Expected Timeline	Potential Implementation Challenges or Recommendations	Resources Available		Resources Needed		Progress to Date
							Technical	**Financial**	**Technical**	**Financial**	
			Buffers Action Team								
Priority Initiative 1: Buffer Implementation											
1.1		<mark>1 stellar buffer demonstration of 1-2 acres in every township (60 total),</mark> <mark>and full buffer goal implementation</mark>	Municipalities, Lancaster's buffer action team, Lancaster County Clean Water Consortium	All municipal partners	2018-2025 NEXT STEPS: List of names (both public and private buffers) acquired to identify which municipality owned buffers exist and where gaps need addressed	With stormwater fees on the horizon, prepare to incentivize Ag and buffers with stormwater exemptions. (Financial and technical support from municipalities as we all wade through new MS4 flexibility); Not enough boots on the ground to find willing land-owners, train municipal staff, and organize plantings; Financial and technical support from municipalities as we all wade through new MS4 flexibility; CREP is no longer available for municipalities (example given at public meeting where they used to get support to use CREP dollars and trees for available lands but that has stopped)	Public works staff employed to maintain projects		Signage to explain the value of a buffer at every project	Dollars specifically set aside to address extreme weather events for buffer repairs so teams aren't spending general funds	The Collaborative Mapping Tool (CMT) added a strong ability to identify and target opportunity areas. The catchment prioritization efforts currently underway will further target very specific locations to allocate limited resources for buffer implementation. A large number of opportunity areas have been identified, but multiple landowners and stakeholders tied with limited capital and human resources for implementation and long-term maintenance has resulted in a slower implementation rate than originally desired or planned. Several municipalities have incorporated buffer requirements as part of the land development process.
							Some municipalities already have a buffer that could serve as a demonstration project		More boots on the ground (planning, planting, maintenance)	Estimates: $4,000 per acre (source: EQIP) plus 20% for pre- and post-project work (willing landowner contact, monitoring, etc.) done by boots on the ground staff	
							COG's, source water collaboratives, and Lancaster County Clean Water Consortium can work as coordinating leadership groups to get groups of municipalities done		Willing municipalities		
							Grant money available for implem., will assist with overall MS4 permit compliance and public education		Consistent professional development for municipal and conservation staff so messaging is the same		
							Existing partner support for consistent signage across the county		Mapping point person/group to show progress spatially so the public can see where their dollars are going		
							Non-municipal partners currently installing buffers (Farmland Trust, ACB, CBF, PSU, Stroud, Conservancy, LCCD)				

#	Objective	Metric	Partners	Geographic Priority	Timeline	Challenges	Data/Resources	Funding Sources	Outreach/Access	Dollars	Status
1.2	Create and maintain an online map of buffer miles to show progress across the county (Community engagement and public education)		Lancaster's buffer team, Buffer specialist provided by Focus Lancaster NFWF grant, DEP	All areas but priority watersheds first	Online map published by 12/2020	This allows us to adjust our efforts if we realize there is a specific area where buffers are disappearing at a detrimental rate; Consistent and timely reporting of projects; CREP data is private; Lidar frequency is limiting; Data Management Action Team lead online mapping tool development	We can model the reporting after CBF's K10 initiative (online GIS map); use Chesapeake Conservancy buffer gap opportunity maps to determine available next places to work in priority watersheds Alliance for the Chesapeake Bay has an "Adopt a Buffer" program starting if awarded Growing Greener grant PSU GIS specialist; county GIS team; Lancaster County Conservancy's GIS specialists; tree canopy report at the County	Private found. support for Chesapeake Conservancy's ability to work in Lancaster County	Access to Practice Keeper or a shared map with the option for partners to add their own GIS layers so specialists can integrate projects with other efforts to show an accurate spatial image of work happening Mapping point person/group to show progress spatially so the public can see where their dollars are going PennDOT support	Dollars to pay for map creation; consistent way of reporting buffer implementation (acres, feet, etc.) Growing Greener grant so the Alliance for the Chesapeake Bay can run an "Adopt a Buffer" program as a way to engage local businesses Estimates: $7,000 per ArcGIS license Staff person at the District or staff time from another partner with GIS staff like the Conservancy	The platform (CMT) has been developed. Currently wading through and finalizing operational and end user details. Alignment with multiple platforms may prove difficult, but achievable.
1.3	Directed and strategic landowner outreach for immediate implementation – Ag projects will get top priority and all projects will be combined with other types of restoration projects as often as possible (streamside, floodplain, wetland, dam removal, etc)	Forest buffer – 6,000 acres (both urban and ag settings) Forest buffer narrow - 100 acres	All partners across Lancaster County, Lancaster's buffer team, Lancaster Conservancy	Ag projects get top priority, specifically if a project will limit livestock access to streams; Pequea Watershed, Octoraro Watershed, Chiques watershed, and Cocalico watershed because the data is available, municipal partners are already participating, and/or the loading is the highest	Implemented or process started for implementation by 2025 Use the charter document for more specific timeline/a Gannt chart approach (Buffer AT is the lead for annual goals)	Time; Not enough boots on the ground to find willing land owners and organize plantings; CREP acre cap for the state; No Farm Bill means a closed door for CREP; Financial and technical support from municipalities as we all wade through new MS4 flexibility; Outreach to the plain sect community can be sensitive; USACE issue permit for development on wetlands so the easement is held by USACE with different language (federal level)	Chesapeake Conservancy's buffer gap analysis ReLeaf Report WSI's list of priority landowners 2019 planting schedule from buffer team members (see Appendix) CBF's K10 campaign Plain sect outreach is happening in specific communities REAP credits Municipal leaders	NFWF Private foundations CREP	Plain sect outreach Staff to do landowner outreach, plant, and maintain PennDOT support	Non-federal income-replacing incentive Dollars specifically set aside to address extreme weather events for buffer repair so teams aren't spending general funds	The catchment prioritization efforts currently underway will further target very specific locations to allocate limited resources for buffer implementation. Limited human and capital resources provides a bottleneck with strategic landowner outreach activities.

Priority Initiative 1: Buffer Strategy and Regulation

2.1	We will examine how high-quality template language from existing ordinances can help make required buffers the norm across the county (look at Warwick Township and East Cocalico as examples) We will hold a meeting of all municipalities who currently have ordinances with buffer requirements with the intention of getting all municipalities to adopt similar requirements	All implemented projects as a result of this Priority Initiative will be counted in reductions outlined in 1.1 or 1.3	LCWP and Consortium, Lancaster's buffer team, Kate Gonick and the Lancaster County Conservancy	All of Lancaster County Buffering headwaters is the priority so we can protect source water and preserve pristine areas	2019-2025 Include session at MS4orum about ordinances (2020 or 2021)	Example recommendation: All headwater streams be required to have a 35-50 foot buffer; all new developments must include buffers, landowner maintenance, and signage; Financial and technical support from municipalities as we all wade through new MS4 flexibility; Outreach to the plain sect community can be sensitive; USACE issue permit for development on wetlands so the easement is held by USACE with different language (federal level)	Report from PSU coming Willing and experienced municipal staff Consortium can offer workshops or events		A collection of common language that has been well-received by municipal boards Peer-to-peer stories and outreach from municipal officials, developers, and landowners that show how buffers make economic sense for both parties Municipal and Partners staff time to collate the ordinances and strategize how to get language options out to municipalities (potential PSU intern can finalize this part of the project as this work has already begun)		Several municipalities have incorporated buffer requirements as part of the land development process in their ordinances. There is significant pushback from most municipalities to incorporate required buffers language in ordinances. However, efforts and messaging continue to improve understanding and buy-in for establishing buffer requirements.
2.2	Create a Lancaster County Buffer Program (BEST)	All implemented projects as a result of this Priority Initiative will be counted in reductions outlined in 1.1 or 1.3	Lancaster buffer team, LCWP, Lancaster County Conservancy, Lancaster County Clean Water Consortium	Across the county, priority watersheds TBD	2019 BEST documentation to be completed by end of 2020	Have an organized effort (not an official County project) that complements CREP and coordinates a care establishment program; This group will oversee the buffer work across the county; Financial and technical support from municipalities as we all wade through new MS4 flexibility; Outreach to the plain sect community can be sensitive; USACE issue permit for development on wetlands so the easement is held by	Lamonte Garber, Ashley Spotts Program to be modeled after the CREP program but creating alternatives based on the limitations identified in CREP		Township outreach to monitor township-held easements and buffer ordinances NGO's currently installing buffers (Farmland Trust, Alliance, CBF, PSU, Stroud, Conservancy, LCCD) with approximately 2-3 staff now, we need 3x that at every organization - add 20% to the cost of a project	Dollars for the incentive part of the program Dollars for 3x the staff currently working on buffers - approx. $1 million because current boots on the ground are doing every angle of buffer strategy, outreach, planning, planting, maintenance, and more - An opportunity exists to have staff be more specialized so we can all be more efficient.	Framework for team and program has been established. Group in early stages of efforts, but successful in facilitating actions necessary to meet objectives. Limited human and capital resources is a factor restricting BMP implementation rates.

#	Initiative	Goal/Metric	Lead	Location	Timeline	Focus/Notes	Partners	Funding Partners	Needs	Dollars	Status/Progress
						USACE with different language (federal level); Boots on the ground now are doing every role in every phase of buffers - we need 3x our current capacity at every organization	Township solicitors meeting to speak to them all at once				
							LCWP buffer specialist				
2.3	Create a coordinated outreach campaign for public lands and semi-public lands to be required to have forested buffers	60% of churches, schools, libraries, municipalities, parks, will have buffers All implemented projects as a result of this Priority Initiative will be counted in reductions outlined in 1.1 or 1.3	LCWP	Across the county	2025	Focus on public health and flood control; Feedback loop: getting landowners all the right resources; Coordination of all partners outreach efforts	Alliance for the Chesapeake Bay		Point person to work with at Council of Churches, real estate associations, builders associations, authorities associations, libraries, school districts etc		Efforts associated with this activity have been limited thus far. Anticipate measurable progress as Action 2.1. and 2.2 progress further ahead (this action is considered a successor to 2.1 and 2.2)
							DCNR		Marketing materials for each audience		
							Existing success stories to be the examples we need		Calendar of events so we don't duplicate		
							Groundwater and source water collaboratives		NGO's currently installing buffers (Farmland Trust, Alliance, CBF, PSU, Stroud, Conservancy, LCCD) with approximately 2-3 staff now, we need 3x that at every organization		
2.4	Increase the presence of buffers in marketing and events of Water Week	All implemented projects as a result of this Priority Initiative will be counted in reductions outlined in 1.1 or 1.3	LCWP, Conservancy, Consortium	Across the county	On-going	Limited participation in Water Week events - have to make sure we're not only "preaching to the choir" Use email addresses of event participants for	Amazing staff who organize Water Week	Private foundations, corporate sponsors of Water Week	More marketing materials and a way to get them to each audience	Dollars for more marketing materials and a way to get them to each audience (estimate: $60,000)	Messaging and outreach efforts remain strong and continuous. Expansion of audiences outside normal or industry-related audiences is an on-going effort and will require repetitive messaging.

					invitations to future workshops Continuous and effective engagement plan would be helpful	Hundreds of participants		More public participation	Incentives for landowners to install buffers even after Water Week	

Phase 3 Watershed Implementation Plan (WIP) Planning and Progress Template

Each county-based local area will use this template to identify:

1. Inputs – These are both existing and needed resources, public and private, to implement the identified priority initiative. These include both technical and financial resources, such as personnel, supplies, equipment and funding.

2. Process – what is each partner able to do where and by when. These are the action items listed under each priority initiative.

3. Outputs and outcomes – both short and long-term. These are the priority initiatives identified by each county. The performance targets are the intermediate indicators that will measure progress.

4. Implementation challenges – any potential issues or roadblocks to implementation that could impede outputs and outcomes.

Asterisk: Place an asterisk next to the action number(s) for action items that appear in both the County Planning and Progress Template and the Programmatic Recommendations Template.

For each Priority Initiative or Program Element: Use the fields, as defined below, to identify the inputs and the process that will be followed to achieve each priority initiative. This is the "who, what, where, when and how" of the plan:

Description = What. This may include programs that address prevention, education, or as specific as planned BMP installations that will address the Priority Initiative. A programmatic or policy effort will require some ability to quantify the anticipated benefits which will allow calculation of the associated nutrient reductions.

Performance Target = How. This is an extension of the Description above. The Performance Target details the unique BMPs that will result from implementation of the Priority Initiative and serves as a benchmark to track progress in addressing the Priority Initiative. Performance Targets may be spread across multiple Responsible Parties, Geographies, and Timelines based on the specifics of the Initiative.

Responsible Party(ies) = Who. This is/are the key partner(s) who will implement the action items though outreach, assistance or funding, and who will be responsible for delivering the identified programs or practices.

Geographic Location = Where. This field identifies the geographic range of the planned implementation. This could extend to the entire county or down to a small watershed, based on the scale of the Priority Initiative, range of the Responsible Party, or planned funding/resources. *NOTE: Resource limitations alone should not limit potential implementation as additional funding may become available in the future.*

Expected Timeline = When. Provide the expected completion date for the planned activity. This should be a reasonable expectation, based on knowledge and experience, that will aid in tracking progress toward addressing the Priority Initiative.

Resources Available: Technical & Funding = This field will note technical and financial resources secured/available to implement the program (Description). This is the total of the resources identified in the County Resources Inventory Template below allocated to the priority initiative as a whole; or, if available, to each action.

Resources Needed: Technical & Funding = This field will note technical and financial resources needed/outstanding to implement the program (Description). This is the total of the additional resources projected and identified as needed in the County Resources Inventory Template below allocated to the priority initiative as a whole; or, if possible, to each action.

Potential Implementation Challenges/Issues = This field will note challenges and issues that may delay program implementation (Description).