

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

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(ies) and Partnerships	Geographic Location	Expected Timeline	Potential Implementation Challenges or Recommendations	Resources Available		Resources Needed		Annual Progress to Date (2022 + 2021)	Update and Justification for Change (2023)
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Priority Initiative 1: Preservation of Natural Areas												
1.1	Limit future development in current natural areas		County, Municipalities, PNA Action Team	Countywide	Late 2020 and beyond	Municipal buy-in					<p>2022: This initiative and team has merged with the Buffers initiative and team. Overall efforts are driven by taking a more holistic approach to existing conditions and areas; and outlining approaches, engagements, etc. with identified locations with what may work and what the landowner may be receptive to. 2022 efforts focused in the Yellow Creek and Bobs Creek watersheds with the assistance of WPC.</p> <p>2021: This is tied to the prioritization efforts the team is currently working through. Progress is slower than originally anticipated, but still underway. However, this is generally a central message is most outreach materials (e.g. press releases)</p>	BCPD and the CAP Coordinator initiated efforts to build an inventory of identified locations encompassing the preliminary findings of the PNA team and initial results of field surveys from CMD development where ideally the locations would remained undeveloped and/or potential improvements may be needed to improve natural areas. Intent of the inventory is to assist with one-on-one municipal engagements launched in 2023 for identifying opportunities for further development.
1.2	Promote and assist implementation of Wood and Pollinator Habitat in priority areas	<p><i>Conservation Landscaping – 150 new acres</i></p> <p><i>Urban Forest Planting – 200 new acres</i></p>	BCCD, BCPC, non-profits	Countywide with initial focus on priority catchments	Late 2020 – 2025 (and beyond)	<p>Tight timeframe for significant BMP implementation</p> <p>Long-term verification processes</p>	<p>Local consultants/ engineers</p> <p>Municipalities</p> <p>BCCD</p> <p>Non-profits (WPC, etc.)</p>	<p>NFWF, GG(DEP), EPA, DCNR</p> <p>Municipal.</p>		Full BMP implementation dollars (~\$225,000)	<p>2022: Turf-to-meadows is proving to be a popular choice and there is general receptiveness. Two “large” sites have been identified for turf-to-meadows and efforts are underway to secure two more sites that have been identified through the catchment assessment/targeting initiative (approximately 8 acres total). Promotion of turf-to-meadows has been included in one-on-one engagements that may be centered around other BMPs (e.g. Bedford Borough Park).</p>	There is general receptiveness to turf-to-meadow type of installations. Several currently proposed projects (e.g. The Green in Bedford Borough) with funding assistance applications or progressing through preliminary project development stages include meadow-type installations as part of proposed restorations.

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1.3	Promote and assist implementation of Urban Tree Canopy in priority areas	Urban Tree Canopy – 5 new acres	Municipalities	Countywide with initial focus on priority catchments	Late 2020 – 2025 (and beyond)	Build on existing urban forest areas	Local consultants/engineers Municipalities	NFWF, GG(DEP), EPA, DCNR Municipal			2021: Several demo projects were identified (and CAP funds being allocated for conservation landscaping), and there has been a general receptiveness to this approach primarily based on aesthetics. 2022: A higher focus has been afforded towards conservation/preservation of existing large-scale forested areas. 2021: This is tied to the prioritization efforts the team is currently working through. Progress is slower than originally anticipated, but still underway. The PNA Action team will most likely merge with the Buffers Action team as efforts are overlapping and this change may help streamline efforts.	See Action 1.1 Focus has afforded more towards preserving and/or improving larger scale and existing natural areas.
1.4	Promote and assist implementation of Forest, Farm, and Wetland Conservation BMPs in priority areas	Farmland Conservation – 3,900 total acres Forest Conservation – 4,000 total acres Wetland Conservation – 160 total acres	County, BCCD, Municipalities, PNA Action Team, non-profits (WPC, etc.)	Countywide with initial focus on priority catchments	Late 2020 – 2025 (and beyond)	Tight timeframe for significant BMP implementation	Local consultants/engineers Municipalities BCCD Non-profits (WPC, etc.) County	NFWF, GG(DEP), EPA, DCNR, REAP Municipal	Full BMP implementation dollars (~\$725,000)	2022: More exploratory efforts with increasing the farm preservation capabilities in the county need to be pursued. Ideas have been generated, but action is still to be taken. That said, ten farms have been preserved and a conscious effort to incorporate farm preservation as part of catchment targeting efforts is underway. 2021: This is tied to the prioritization efforts the team is currently working through.	Funding for farm preservation is a limiting factor along with resource capabilities to administer a program. While still considered a priority and/or desirable action, focus to potentially outline next steps are still one to two years away.	

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											Progress is slower than originally anticipated, but still underway.	
1.5	Explore potential for Bedford County-based preservation and conservation program		PNA Action Team, BCPC	Countywide	Game plan by late 2020 (with imp. to follow)	Resistance and/or lack of centralized program	State and local agencies and reports		Legal considerations		2022: See note 1.4 2021: This is tied to the prioritization efforts the team is currently working through. Progress is slower than originally anticipated, but still underway.	See Action 1.4.

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Priority Initiative 2: Agriculture													
2.1	Develop a game plan for potential increased efficiencies or nutrient reductions with fertilizer applications	<i>Game plan/approach defined-completed</i>	Ag Action Team, local dealers, farmers	Countywide	Game plan by early 2021	Per the county technical toolbox, the majority of nitrogen applied to agricultural land is via fertilizers (70%)	Local dealers	Penn State, BCCD			Continued verification funding	<p>2022: The one-on-one engagements approach have continued through several local champions (BCCD reps, BCCD board members, 3rd party on-the-ground specialist, CAP Coordinator, etc.). Organized engagements follow the catchment targeting/assessments approach. Primary engagements thus far have included the Evitts Creek and Yellow Creek watersheds (~35 farms). Engagements include gaining a better understanding of actual fertilizer use versus projected fertilizer use.</p> <p>2021: Primary game plan centered around “large” farmer meetings, but COVID restricted such meetings (some of the Winter meetings were cancelled). Currently relying on one-on-one engagements and personalized communications. Developing a catchment analysis approach to launch 4th qtr 2021 with initial focus in the Yellow Creek watershed.</p>	This topic can best be described as secondary or downstream of initial engagements during trust-building processes or project development processes with local farmers as of now. The topic is secondary to improved and/or restoring manure management facilities and ag practices in general.

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2.2	Implement and/or capture developed conservation plans into PracticeKeeper		BCCD, NRCS	Countywide	Plan developed by end of 2020; initial imp. In 2021	Ensures capture of implemented BMPs for long-term verification processes Potential time and resource limitations for plan entry	Local agencies, BCCD	CAP Coordinator funding, BCCD funding			2022: There is a backlog of data and information for PK entry. With the recent launch of the Partner Portal, a game plan for data entry efforts is currently being developed and projected to be completed during the last qtr of 2022. The LTVPs flowchart includes the steps and options for capture and entry of plans into PK and the PK Partner Portal. 2021: Funding for additional personnel (\$55,000/yr) is the missing piece to move this action item from yellow to green	This is an on-going effort and will be for the foreseeable future. The third-party verifier definitely helped with the overall LTVPs with identification of plans to be entered into PK, but the third-party verifier position is currently open. BCCD staff cross-referencing ag parcel lists from CMD assessments is on-going as well, and the process identifies farms for follow-up for plan checks.
2.3	Promote and assist implementation of Agricultural Compliance practices in priority areas	<i>Soil Conservation and Water Quality Plans (102,000 total acres)</i> <i>Core Nitrogen Nutrient Management (76,000 total acres)</i> <i>Core Phosphorus Nutrient Management (22,000 total acres)</i> <i>Barnyard Runoff Controls (9 new acres)</i>	Ag Action Team, BCCD, NRCS, Penn State, farmers	Contiguous agriculture land use areas, with initial focus on red-coded catchment areas (or where current initiatives are underway)	2021 – 2025 (and beyond)	Farmer resistance or buy-in Resources to write plans	Local experts and agencies	EQIP SCC Reimb Program ACAP, CAP	NRCS DEP	Full BMP implementation dollars (~\$2.0 million)	2022: EQIP, CEG, CAP implementation dollars have continued to be proven popular and useful for implementation of BMPs. A backlog of farms with needed funding assistance for BMP implementation exists and continues to expand with the catchment targeting/assessment efforts (SCWQPs were developed for ~75 farms during 2022 with identified BMP implementation needs at various levels). ACAP dollars will be the primary funding vehicle for ag BMP implementation, but CAP	Farms for BMP implementation have not been in short supply. CAP dollars have primarily assisted farmers with match requirements or where they may not fully qualify for other funding streams. Limitations have been encountered primarily with available contractors for implementation. BCCD staff have forged strong relationships with local TSPs and contractors to help manage implementation timelines from a countywide perspective.

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											<p>implementation efforts will be used as part of the decision-making processes for where to apply ACAP dollars. We currently anticipate we will ultimately exceed BRCs implementation targets in the long run.</p> <p>2021: EQIP, CEG, etc. have proven popular in the county. CAP implementation funds were able to be provided to 3 farms to assist with stretching monies (all funding streams) further overall. Implementation of compliance practices are the priority when considering ag BMPs (barnyard controls, HUAs, prescribed grazing, etc.)</p>	
2.4	Promote and assist implementation of Soil Health practices in priority areas	<p><i>High Residue Tillage Management (26,000 acres/year)</i></p> <p><i>Conservation Tillage Management (10,000 acres/year)</i></p> <p><i>Traditional Cover Crops (13,000 acres/year)</i></p> <p><i>Traditional Cover Crops with Fall Nutrients (17,000 acres/year)</i></p> <p><i>Commodity Cover Crops (1,200 acres/year)</i></p> <p><i>Prescribed Grazing (12,000 total acres)</i></p>	Ag Action Team, BCCD, NRCS, Penn State, farmers	Contiguous agriculture land use areas, with initial focus on red-coded catchment areas (or where current initiatives are underway)	2021 – 2025 (and beyond)	Farmer resistance or buy-in Modification of official definitions would be helpful	Local experts and agencies	EQIP	NRCS	Full BMP implementation dollars (~\$1.89 million)	<p>2022: Soil health practices (particularly prescribed grazing) have entered one-on-one engagement conversations where appropriate and as a result of catchment targeting/assessment efforts. Through SCWQP development during 2022, approximately 24 opportunities have been identified for improved soil health practices. These efforts will be further pursued as part of the</p>	See Action 2.3

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											<p>LTVPs and one-on-one engagements process.</p> <p>2021: There is receptiveness to soil health practices, and several farms are observed/known to implement such practices. However, compliance practices are the primary focus for initial BMPs for implementation. Catchment-to-catchment analyses are intended to inject soil health considerations as part of engagement efforts.</p>	

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2.5	Promote and assist implementation of expanded nutrient management practices in priority areas	Core Nitrogen Nutrient Management (13,000 acres)	Ag Action Team, BCCD, NRCS, Penn State, farmers	Contiguous agriculture land use areas, with initial focus on red-coded catchment areas	2021 – 2025 (and beyond)	Farmer resistance or buy-in	Local experts and agencies	EQIP	NRCS	Full BMP implementation dollars (~\$2.92 million)	<p>2022: Larger scale efforts were shelved more in favor as part of the one-on-one engagements approach and where appropriate. A higher-level focus is afforded to “what makes sense for a farmer” in lieu of pushing certain BMPs for the sake of implementing BMPs. There is a direct relationship with Action 2.1 in gaining an understanding of level of actual fertilizer use that we anticipate long-term projections for this action.</p> <p>2021: Compliance practices are the primary focus for initial BMPs for implementation. A shift after 1-2 years of continued successful compliance BMPs implementation can be realized for expanded nutrient management outreach. Plans sidelined from winter 2020-2021 due to COVID restrictions will be implemented during winter 2021-2022 (farmer meetings, etc.) to launch promotion efforts.</p>	See Action 2.1. Through CMD assessments and third-party verifier one-on-one engagements, it became apparent that effort should first focus on manure management and ag practices in general prior to expanding conversations or engagements regarding more specific nutrient management practices. That being said, development and implementation of nutrient management plans are ongoing and a part of the overall efforts.
		Core Phosphorus Nutrient Management (3,500 acres)										
		Nutrient Management-Nitrogen Rate (10,000 acres)										
		Nutrient Management-Phosphorus Rate (10,000 acres)										
		Nutrient Management-Nitrogen Placement (13,000 acres)										
		Nutrient Management-Phosphorus Placement (10,000 acres)										
		Nutrient Management-Nitrogen Timing (14,000 acres)										
Nutrient Management-Phosphorus Timing (10,000 acres)												

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2.6	Promote and assist implementation of improved animal unit practices in priority areas	Manure Storage Facilities – 30,000 AUs Dairy Precision Feeding – 14,000 Dairy Cow AUs Manure Transport out of Bedford County – 2,000 dry tons/year	Ag Action Team, BCCD, NRCS, Penn State, farmers, manure haulers/brokers, ag retail entities	Contiguous agriculture land use areas, with initial focus on red-coded catchment areas	2021 – 2025 (and beyond)	Farmer resistance or buy-in Design and engineering bottlenecks	Local experts and agencies	EQIP ACAP, CAP	NRCS TSPs (engineering)	Full BMP implementation dollars (~\$3.6 million)	2022: Manure storage coming more to the forefront as catchment targeting/assessment efforts revealed a number of facilities are either needed or upgraded. Most developed SCWQPs have identified a need of either a new or upgraded manure storage facility and most current priority projects include a manure storage facility. 2021: Manure storage is lumped in with compliance practices and generally a practice observed with other compliance BMPs implementation.	See Action 2.1. Most projects implemented or in development include animal waste or manure management improvements.
2.7	Promote and assist implementation of land retirement BMPs	Retirement to Ag Open Space – 1,200 acres	County, BCCD, landowners	Countywide (where appropriate)	2021 - 2025	Capture lands already retired				Full BMP implementation dollars (~\$203,000)	2022: No major effort to promote land retirement. However, catchment assessment/targeting efforts are revealing retired lands where we there is an agreement that lands should be captured and reported. Seven watersheds have been inventoried and reveal ~60 acres of retired lands may be uncaptured. With the creation of the Bedford County GIS department, there is consensus to develop a game plan to more accurately capture lands already retired.	CMD assessments identified substantial ag open space lands across the county. These lands may not meet the technical definition of land retirement, but they are not in operation. Lands encountered include a variety of conditions from lightly wooded to meadow-type conditions.

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2.8	Assist Riparian Buffers AT with implementation of buffers in agricultural riparian zones in priority areas		RB Action Team, Ag Action Team	Countywide	2021-2025 (and beyond)	Farmer resistance					2021: There has been no major push or outreach associated with this action. 2022: Buffers are a tough sell, but will continually be a part of conversations. A gradual shift in focus is occurring with promotion for grass buffers as there is a perception of less resistance to this approach. 2021: The primary ag demo project included implementation of riparian buffers between the crop fields and stream. That said, buffers continue to be a tough sell or there is a hesitancy to retire land in production.	Buffers continue to be a tough sell, but successes have been realized in the Yellow Creek and Bobs Creek watersheds primarily spearheaded by WPC. It is anticipated that CAP dollars will continue to be invested in buffer projects developed by WPC in conjunction with local landowners in these watersheds.
2.9	Expand implementation of cover crops (specific focus on alternative approaches that may count as reductions)		Ag Action Team	Countywide	Late 2020 – mid 2021	Limited definition of cover crops and what would count as a reduction Addition of cover crops approach allowing fall nutrients and spring harvest would be ideal and incorporate additional acres.*	BMP Quick Reference Guide Local experts and agencies			2022: Cover crops are observed across the county, but an expansion of the definition and/or what is provided reductions would increase the amount of observed BMPs implemented year-after-year. 2021: Allowance or approval of the application of fall nutrients and harvesting in the spring	Cover crops have been observed during CMD assessments and third-party verifier engagements. One hurdle still in place is the “allow fall nutrients and spring harvest” to count as this is the most prevalent cover crop approach across the county.	

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											would most likely pull in more acres (this is a programmatic recommendation).	

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Priority Initiative 3: Riparian Buffers

3.1	<p>Promote and assist implementation of buffers in agricultural riparian zones in priority areas</p>	<p>Forest Buffer (2,300 new acres) Forest Buffer with Streamside Exclusion Fencing (2,000 new acres) Grass Buffer (1,400 new acres) Grass Buffer with Streamside Exclusion Fencing (900 new acres)</p>	<p>RB Action Team, BCCD, non-profit partners, farmers</p>	<p>Contiguous agriculture land use areas, with initial focus on red-coded catchment areas</p>	<p>2021 – 2025 (and beyond)</p>	<p>Farmer resistance or buy-in</p>	<p>Local experts and agencies, non-profit partners (WPC, etc.)</p>	<p>EQIP NFWF</p>		<p>Full BMP implementation dollars (~\$2.07 million)</p>	<p>2022: Buffers a tough sell in the agricultural sector. Collectively, the team leans on WPC and its efforts to date to select farmers for implementation in the agricultural sector. This initiative and associated team has merged with the PNA initiative and team with the intent to focus on non-agricultural areas or truly open space areas that may be on a farm. An anchor project in Juniata Township (approximately 4300 LF of stream) has been identified with receptive landowners across both ag and non-ag parcels. Implementation at this location would serve as a demonstration that contiguous BMPs can be implemented in lieu of isolating improvements to single parcels.</p> <p>2021: Implementation on the ag demo project proved successful. However, buffers in general are a tough sell. The action team has developed an approach for the development and implementation of a “buffer bonus” program, and hope final details are set by the end of 2021 to improve implementation rates.</p>	<p>See Action 2.8. A project currently identified as in preliminary development along Town Creek would include buffers along the main stem and potentially up to 12 tributaries of Town Creek along an approximate 5,500 LF reach. This project is anticipated for further development in 2024.</p>
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3.2	Promote and assist implementation of buffers in non-agricultural riparian zones in priority areas	Developed Areas Riparian Forest Buffers (40 new acres) Rural Areas Forest Buffers (140 new acres)	BCCD, non-profits, municipalities	Countywide with initial focus on priority catchments	Late 2020 – 2025 (and beyond)	Tight timeframe for significant BMP implementation Long-term verification processes	Local consultants/engineers Municipalities BCPC Non-profits (WPC, ACB, etc.)	NFWF, GG(DEP), EPA, DCNR Municipal.		Full BMP implementation dollars (~\$75,000)	2022: See note for 3.1 2021: Several buffers were implemented by local partners. There is a tie to prioritization efforts being conducted by the PNA Action Team for targeting and outreach for buffer opportunities. The Buffers Action Team and Preservation of Natural Areas (PNA) Action Team plan to merge last qtr of 2021 as focus areas, tools for analysis, etc. are overlapping.	Incorporation of buffers were realized as a component of projects implementing during 2023 along Shobers Run (BJMA and TU projects).
3.3	Explore model ordinance language for requiring buffers in development projects		BCPC, RB Action Team	countywide	Game plan by late 2020 (followed by imp.)						2022: Political pushback outweighs the few champions backing this approach. Efforts have been driven more to assist receptive landowners with buffer considerations in lieu of codifying those considerations. This action will remain on the back-burner for the foreseeable future. However, it will not be removed as it is also anticipated as more buffers are implemented, a consensus may build to outline uniform implementation and maintenance needs in some form or manner. 2021: While the team has expressed a desire for movement on this action and explored options, there is	No significant changes or updates from 2022 for this action.

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											significant political pushback associated with this approach.	

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Priority Initiative 4: Point Source Pollution												
4.1	Develop or acquire more comprehensive inventory of septic systems in the county		PSP Action Team, BCPC, municipalities	Countywide	Game plan by early 2021 (followed by imp.)	Scattered information and data may take time to centralize					2022: This is on the docket to explore more in depth after the non-ag BMP database development efforts in the County GIS system are finalized. 2021: High level inventory was completed that revealed roughly 17,000 systems in the county. Status of each system is currently unknown. BCPC GIS capabilities have been expanded, and the team will explore possible next steps.	2023 witnessed a change in approaches for the PSP and Stormwater initiatives. While a high-level understanding of the number of septic systems within the county is now understood, it is apparent a countywide system to manage may be insurmountable. In turn, a one-on-one municipal engagements approach has been developed to touch on different priority initiatives to gauge receptiveness of one or more actions for implementation within an individual municipality.
4.2	Ascertain status of wastewater treatment facilities (including small treatment plants) and corresponding needs for improvements		PSP Action Team, BCPC, municipalities	Countywide	Game plan by late 2020 (followed by imp.)	Additionally determine Act 537 plan update needs	Local consultants/ engineers WWTP operators			More available 537 plan update funds*	2022: There is a general understanding of where upgrades are needed (plants, plans, etc.), the limiting factor is funding. 2021: An inventory was completed, and several areas where a major WWTP improvement is needed, a small package facility is needed, and 537 plan updates needed has been identified. Funding is the limiting factor for next steps.	Funding is the limited factor. CAP dollars were applied towards septic upgrades for a small community in Broad Top Twp. (Cypher Beach) where other funding could not be secured.

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4.3	<p>Promote and assist the implementation of septic system improvements</p>	<p><i>Septic Denitrification, Conventional – 100 systems</i></p>	<p>PSP Action Team, BCPC, municipalities</p>	<p>Countywide with initial focus on priority catchments</p>	<p>Mid 2021-2025 (and beyond)</p>	<p>Funding for improvements, homeowner resistance</p>	<p>Local consultants/engineers</p>			<p>BMP implementation dollars (~\$120,000)</p>	<p>2022: Conversion from privies to functioning septic systems or upgrades to dilapidated systems have been the primary focus (including use of CAP funds to implement these efforts-Cypher Beach).</p> <p>2021: A demo project involving implementation of a septic system has CAP funds allocated to it. A high-level inventory of systems is complete, but next steps need to be worked through during last qtr of 2021.</p>	<p>See Action 4.2</p>

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Action #	Description	Performance Target(s)	Responsible Party(ies) and Partnerships	Geographic Location	Expected Timeline	Potential Implementation Challenges or Recommendations	Resources Available		Resources Needed		Annual Progress to Date (2022 + 2021)	Update and Justification for Change (2023)
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Priority Initiative 5: Developed/Urban Stormwater												
5.1	Develop model ordinances focused on water quality and stormwater management (including countywide Act 167 Plan)		SW Action Team, BCPC, municipalities	Countywide	Game plan by early 2021 (followed by imp.)	Focus on preservation and long-term maintenance of implemented BMPs Updated SWMO(s) Floodplain management Municipal resistance	Local consultants/engineers BCPC			Ordinance development funding Countywide Act 167 plan development (\$150,000)	2022: If funding was available, there appears to be enough support and receptiveness for this effort to move forward. 2021: A countywide Act 167 plan is desired, and there is some receptiveness (but political pushback is still stronger). However, this may only move forward with funding for plan development.	The topic of a countywide Act 167 plan was visited, but lacked overall support. In lieu of proposing countywide or regional tools, a shift towards one-on-one engagements has been observed. Bedford Borough, Southampton Twp., and West Providence Twp. Have been engaged thus far in 2023. Both PSP and Stormwater actions are broached with during one-on-one engagements.
5.2	Capture unreported land development BMPs		PADEP, BCPC	Countywide	On-going	Reconciliation of toolbox quantities with on-the-ground conditions	PADEP, BCPC				2022: Non-ag BMPs are captured through the catchment targeting/assessment process. The current plan is to house the data and information in the county's GIS database, and to subsequently submit a report of these BMPs annually to DEP. It is currently anticipated the first major report would be submitted in 2023. The LTVPs ag flowchart includes a sub-flowchart reflecting data and information capture 2021: Game plan is in place, simply need to execute the first steps last qtr of 2021 to coincide with developed	A backlog of existing urban/suburban BMPs has been generated. Intent is to upload data and information into County GIS systems. However, County GIS currently has no staff on board to complete these processes. Once the position is filled, this process will be revisited.

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											catchment-to-catchment analysis approach.	
5.3	Identify regional project opportunities in select watersheds		LSI, BCCD	NFWF priority watersheds, Assessed catchments	On-going	Focus on stream restoration, streambank stabilization, dirt & gravel roads opps. Watershed-based or regional permitting structures may alleviate administrative hurdles*	BCCD, LSI, TU	GG, NFWF, CAP			2022: Large-scale opportunities have been identified (Juniata Township, Cumberland Valley Run, Yellow Creek, Shobers Run), and local entities and champions continue to monitor available funding for implementation efforts. The CAP Coordinator and watershed specialist continue to maintain a priority projects list for these opportunities as they arise. A considerable focus (e.g. Cumberland Valley Run and Shobers Run opportunities) has been an attempt to consolidate individual efforts or opportunities into singular (or combined) regional efforts. 2021: A NFWF grant was awarded for “boots-on-the-ground” efforts currently underway and supported with the using CAP coordinator funds for additional efforts, outreach, engagements, etc. Concepts and sub-watershed action plans will be delivered in October for future action.	2023 witnessed a shift from regional or county-level collaboration with the municipal sector towards one-on-one engagements for PSP and Stormwater BMP implementation. Bedford Borough, Southampton Township, and West Providence Twp. have been engaged successfully thus far. Assistance was provided to Bedford Borough for funding assistance for a stream restoration and park improvement project (still awaiting announcements of awards). Southampton has identified park, trails, and naturalized area improvements along with injection of WQ improvements tied to a flood improvement project; which is currently in preliminary development. West Providence has identified three flood-prone areas for further project development; which is underway.

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5.4	Fertilizer legislation		State			For turf grass areas Passage of legislation will provide avenues to explore reductions tied to urban nutrient management*					2022: Legislation was passed, but the Management Team is unaware how it will result in measurable or awarded reductions.	Legislation passed.
5.5	Pursue regional stream and wetland restoration projects that provide significant additional benefits and reductions	Urban Stream Restoration (30,000 new linear feet) Non-urban Stream Restoration (48,000 new linear feet) Wetland Restoration (150 acres)	TU, BCCD, WPC, watershed groups, non-profits, municipalities	Countywide	Current – 2025 (and beyond)	TU project (in Bedford) WPC projects (RB AT mostly) Tie into planned Hazard Mitigation Plan update efforts	Local consultants/ engineers Non-profits (TU, etc.)	NFWF, GG, EPA, DCNR		Full BMP implementation dollars (~\$23.5 million)	2022: TU continues to be a local leader with implementing these types of BMPs, along with WPC for several projects. TU plans to pursue and implement phase 3 of their Shobers Run project in 2023. We are currently attempting to organize remaining Shobers Run opportunities and proposed improvements into a singular effort. See note 5.3 for proposed large scale projects as well. 2021: TU is implementing projects (including CAP funds) in multiple locations. The NFWF “boots-on-the-ground” efforts have identified locations where outreach/engagement is underway and concept designs are being generated.	Shobers Run witnessed four stream and wetland improvement projects in 2023. Two other reaches along Shobers Run have been identified (including the Elks Lodge) and communications are on-going with landowners. A significant project including ~5,500 LF of Town Creek and 12 tributaries is currently in preliminary development to address flooding, stream stability, and water quality in the entire lower portion of the Town Creek watershed. WPC continues to push through Bobs Creek building on existing anchor projects and expanding improvements up and down from these anchor project locations.

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5.6	Promote and assist implementation of urban/suburban sector controls for nutrient and sediment reductions	Advanced Grey Infrastructure for IDD&E Control (250 acres treated) Impervious Surface Reduction (1 acre) Urban Nutrient Management (3,400 acres)	Municipalities	Countywide with initial focus on urban communities and priority catchments	Late 2020 – 2025 (and beyond)	Urban nutrient management is dependent on fertilizer legislation Tight timeframe for significant BMP implementation Long-term verification processes No MS4 communities in Bedford County	Local consultants/engineers Municipalities	NFWF, GG, EPA, munic.		Full BMP implementation dollars (~\$17,000)	2022: There are no MS4s. However, there are early discussions with organizing and launching several feasibility projects located in areas in or near to Bedford to ascertain improvements based on regional needs. Action 5.7 is the driver for these efforts. 2021: There are no MS4s in the county, so IDD&E controls and compliance has no regulatory driver. Urban nutrient management is dependent on the state legislation.	See Action 5.3.
5.7	Promote and assist implementation of stormwater control measures that incorporate Low Impact Development (LID) approaches	Wet Ponds and Wetlands (40 acres treated) Stormwater Performance Standards-Runoff Reduction (350 acres treated) Bioretention/Raingardens (15 acres treated) Vegetated Open Channels (10 acres treated) Filtering Practices (5 acres treated)	SW Action Team, BCPC, municipalities	Countywide with initial focus on priority catchments	Late 2020 – 2025 (and beyond)	Tight timeframe for significant BMP implementation Long-term verification processes Partially tied to capture of unreported BMPs	Local consultants/engineers	NFWF, GG(DEP), EPA, DCNR, developers		Full BMP implementation dollars (~\$600,000)	2022: The primary stormwater sector demo project has proven to be difficult to get off the ground (this has been primarily driven by a lack of capacity (number of contractors)). The demonstration project will proceed as the value of this project outweighs the cost. In-roads have been made with Bedford Borough, Bedford Township, and Everett Borough with implementation of nutrient and sediment reduction BMPs to complement proposed capital improvements. While the BMPs proposed under this action will most likely be	See Action 5.3.

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											included in these efforts, Action 5.5 is the overall driver of BMP types that are anticipated to be implemented. 2021: A demo project is planned/underway for one municipality to promote these practices. The project will bid in October 2021. Objective is to create an anchor with one municipality that others can follow. That said, a majority of municipalities in the county do not have SWMOs.	
5.8	Promote and assist implementation BMPs tied to the Dirt & Gravel Road program	Outlets only – 300 linear feet Driving Surface + Outlets – 1,000 linear feet	BCCD, BCPC, SW Action Team, municipalities	Countywide	2021 – 2025 (and beyond)	Stabilization of rural areas with WQ improvements	BCCD Local engineers	Full BMP imp. dollars (~\$1,000)			2022: Implementation continues. 2021: Popular program in Bedford County with no plans to inhibit effort.	Implementation continues.

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Priority Initiative 6: Education and Outreach												
6.1	Provide support to other action teams with development of supporting education and outreach materials		Educ. Action Team	Countywide	On-going	Consolidate existing materials (incl. CAP-specific materials developed by DEP) Build coalitions with existing partners and entities (WPC, ACB, etc.)			Material and content development	\$3,000	2022: Press releases continue to be developed and released periodically. There is a reliance on local partners (e.g. WPC) for one-on-one engagements with receptive individuals for non-ag related engagements. 2021: Press releases were issued to highlight multiple efforts (direct and indirect ties to the CAP). Team is currently developing one page outreach materials for certain BMPs to assist other teams.	Press releases continue to be developed and released periodically. There is a reliance on local partners (e.g. WPC) for one-on-one engagements with receptive individuals for non-ag related engagements.
6.2	Develop, implement, and manage a website with CAP supporting information specific to Bedford County		Educ. Action Team, CAP Coord.	Countywide	Early 2021 and beyond	Long-term website management	Website secured		Website, social media platforms development	\$8,000 (+\$2,000 annually for support)	2022: Back-up plan to update the BCCD website was the chosen approach. 2021: Development and implementation was highly dependent on the EE grant. The current back-up plan is a self-posted sub-webpage on the BCCD website with links from other county websites.	Individual webpage located within the BCCD's website has worked as an alternative to developing a new website devoted to the CAP.

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6.3	Provide oversight and guidance for the Bedford CAP Communications Plan		Educ. Action Team, CAP Coord.	Countywide	Game plan by early 2021 (followed by imp.)	Develop “re-imagined” outreach approaches and messages Determine additional needs, focus areas, etc. for improved messaging					2022: One-on-one engagements are the primary communications vehicle across all efforts. 2021: Centerpiece of the plan was a website and assistance with messaging from WWTW. One-on-one engagements, press releases, etc. continue.	Bedford County Planning Dept. initiated a one-on-one municipal engagement effort in 2023 that has led to exploring opportunities in Southampton Township and West Providence Township.
6.4	Legislator and local government engagement		Educ. Action Team, BCCD, BCPC	Countywide	On-going	Build legislator coalition for long-term support Consider assignment matrix					2022: Receptiveness to overall efforts are still limited to a handful of local supervisors (which we are okay with as this forms the foundation) including Everett Borough, Bedford Borough, and E. St. Clair Township. 2021: A few local supervisors have been receptive to efforts and appear to understand the big picture and needs. BCPC personnel continue to promote efforts and needs with commissioners.	Engaged (or receptive) municipalities has increased from one (Bedford Boro) to four through one-on-one engagements.
6.5	Organize and facilitate general engagement activities		Educ. Action Team	Countywide	Game plan by early 2021 (followed by imp.)	Bedford Fair, Farmer’s Market, Bedford Chamber, “Legislator’s Breakfast”, Home & Garden Show, etc. COVID restrictions Generate inventory and matrix for events					2022: Bedford Fair is the primary large-scale general engagement activity outside of one-on-one engagements. 2021: Several engagements have been conducted, or CAP-related messaging was involved (e.g. Bedford Fair). However, numerous events	Bedford Fair continues to serve as the primary public engagement event on an annual basis.

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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 through 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).