

Phase 3 Watershed Implementation Plan (WIP) Annual Progress Update – Berks County

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 # Green Yellow Red	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	Reason for Change
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Priority Initiative 1: Little Swatara												
1.1	Upper Little Swatara (ULS) 319 Plan Development and Implementation	Summer 2022 for 319 Plan	Upper Little Swatara (ULS) 319 Plan Steering Committee, Center for Watershed Protection (CWP), BCCD, NRCS, Ag Technical Service Providers (TSPs)	Upper Little Swatara (ULS) catchments	Mid 2021-mid 2022 for plan development followed by implement.	Carry over identified 319 plan opportunities and initiatives into the Berks Bay Action Plan (BBAP) and Catchment Targeting inventories	CWP, BCCD, BerksNature, County, local engineers/ consultants, TSPs	Growing Greener (GG) (funding secured for 319 Plan develop.)		BMP implement. funding (as noted under Action 3.1 for implement. challenges and recom.)	2025: The two projects called out in the approved plan remain in the queue to leverage 319 funding. Anticipate moving forward in spring 2026 based on the passing of the state budget. Other improvements have already been completed on one project site with CAP and EQIP funds. 2024: The ULS 319 Plan was approved by the EPA over the summer. Two projects proposed by the plan selected for and the basis of current grant applications. Received \$900k NFWF award will be used for other projects to be determined in the near future based on EPA input. 2023: 319 Plan modelling process is complete. Center for Watershed Protection is currently developing an implementation schedule and outreach strategy to finish up the plan for review by EPA. Awarded \$104,000 CAP Implementation Grant for BMP implementation. 2022: Awarded \$277,000 CAP Implementation Grant for BMP installation which includes projects in Upper Little Swatara. Awarded \$277,000 CAP Implementation Grant for BMP installation (projects lined up for Spring 2023 implementation)	
						BBAP participation with 319 plan steering committee						
						"Leaning" on 319 Plan development as the driver for BBAP implementation in the ULS catchments						

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1.2	One-on-one farmer engagements via Catchment Management Database (CMD) prioritization	Engagements list for each catchment per Action 3.1	CWP, BCCD, NRCS, TSPs	All catchments	On-going with inherent tie to Actions 1.1 and 3.1	Augmented messaging and outreach combining 319 plan goals and objectives with BBAP action items and goals	CWP, BCCD, TSPs; additional person hired by BCCD for on-the-ground verifications	\$30k verifications funds being applied toward efforts			<p>2025: Current plan is to continue individual engagements after completion of the two identified projects based on previous outreach and farmer needs; and combined with objectives of the 319 plan to pursue additional projects on a year-by-year basis (and based on available funding streams incl. 319, CAP, ACAP, and GG funds).</p> <p>2024: Ag parcel lists generated via CMD efforts used as one of multiple guidance documents for outreach and one-on-one engagements.</p> <p>2023: Ag parcels lists for initial watersheds generated for cross-reference with PK data and potential one-on-one engagements.</p>	
1.3	One-on-one municipal engagements	Engagements list for each catchment per Action 3.1	CWP, County	All catchments	On-going with inherent tie to Actions 1.1 and 3.1	Augmented messaging and outreach combining 319 plan goals and objectives with BBAP action items and goals	BCCD, County, local engineers/consultants				<p>2025: Holding pattern until new MS4 permit and PRP (VMP) requirements are issued.</p> <p>2024: Currently in holding pattern until release of next MS4 permit to determine possible pathways for urban/suburban BMP implementation efforts and tracking.</p> <p>2023: Field surveys conducted for potential unreported urban-suburban BMPs. BMP implementation rates updated to reflect encountered BMPs. Minimal non-ag BMPs encountered. Potential opportunities outlined.</p> <p>2022: Currently working with the Berks County Planning Commission/GIS to prioritize catchments for verifications and capture non-ag BMPs.</p>	

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											Coordinating with Berks Ag Preservation for additional verifications for ag BMPs.	
1.4	Explore partnerships with Lebanon and Schuylkill counties for regional efforts		County, BCCD	Catchments within shared watersheds	On-going	<p>Watershed-based, multi-entity, collaborative grant applications are viewed favorable with conventional funding organizations (NFWF, etc.)</p> <p>Lower Little Swatara identified as a priority watershed in the Lebanon CAP.</p>		NFWF Small Watershed Grant (SWG), Most Effective Basins Funding (MEBF), Ches. Bay Trust (CBT), Growing Greener (GG)			<p>2025: Administrative and operational collaboration in lieu of projects occurred in 2025 to assist one another with possible approaches, staff retention efforts, and related considerations.</p> <p>2024: Crosskill projects pursued independently by Lebanon and Berks, bit coordination efforts revealed more appropriate entity to engage individual farms.</p> <p>2023: Crosskill CMD efforts within both Berks and Lebanon completed.</p> <p>Coordination for farms straddling both counties conducted as needed.</p> <p>2022: Contacting LCCD and possibly CBF to coordinate. Initial efforts underway in Crosskill Creek watershed (shared with Lebanon) where a partnership may be applicable.</p>	

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Priority Initiative 2: Conestoga-Cocalico												
2.1	Upper Conestoga (UC) 319 Plan development and implementation	Summer 2023 for 319 plan (dependent on securing funding)	UC 319 Plan Steering Committee, Chesapeake Bay Found. (CBF), Berks County Conservation District (BCCD), NRCS, Ag Technical Service Providers (TSPs)	Upper Conestoga catchments	2022-2023 for plan development followed by implement.	Carry over identified 319 plan opportunities and initiatives into the Berks Bay Action Plan (BBAP) and Catchment Targeting inventories	CBF, BCCD, BerksNature, County, local engineers/ consultants, TSPs, Lancaster Farmland Trust (LFT)	Growing Greener (GG) (CBF applying for 319 plan develop. Funds)		BMP implement. Funding (as noted under Action 3.1 for implement. Challenges and recom.)	2025: 319 plan completed and approved; awaiting funding assistance streams to open up (state budget) for potential project options. 2024: Plan has been completed. \$500k from various funding streams have been identified for project implementation as identified in the plan. However, overall guiding strategies and focus areas are currently being re-reviewed due to the fact roughly 16 miles of streams have been recently de-listed. 2023: 319 efforts led by CBF underway. BCCD is currently a participant in the Upper Conestoga WIP Steering Committee. Monthly meetings with the Steering Committee are occurring. 2022: Plan development in very	
						BBAP participation with 319 plan steering committee						
						"Leaning" on 319 plan development for BBAP implementation in the UC catchments						
		Engagements list for each catchment per Action 3.1	CBF, BCCD, NRCS, TSPs	All catchments	On-going with inherent tie to Actions 2.1 and 3.1	Augmented messaging and outreach combining 319 plan goals and objectives with BBAP action items and goals	CBF, BCCD, TSPs			Funding for expanded engagements as noted under Action 3.1	2025: Currently planning to continue engagements based on previous outreach and farmer needs combined	

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2.2	One-on-one farmer engagements via Catchment Management Database (CMD) prioritization					Conduct Cocalico-based efforts in conjunction with Upper Conestoga efforts					with objectives of the 319 plan to pursue additional projects on a year-by-year basis (and based on available funding streams incl. 319, CAP, ACAP, and GG funds). Most streams have been de-listed however; which may limit or remove prioritization of certain potential projects. 2024: One-on-one engagements continue as an extension of 319 plan development and identified farmers for BMP implementation. 2023: CMD prioritization to follow 319 plan development and help guide one-on- one engagements. 2022: This effort is primarily in a holding	
2.3	One-on-one municipal engagements	Engagements list for each catchment per Action 3.1	CBF, County	Municipalities in all catchments	On-going with inherent tie to Actions 2.1 and 3.1	Augmented messaging and outreach combining 319 plan goals and objectives with BBAP action items and goals Conduct Cocalico-based efforts in conjunction with Upper Conestoga efforts	BCCD, County, local engineers/ consultants				2025: Awaiting next MS4 permit and PRP (VMP) requirements to guide outreach efforts. 2024: Concerted efforts were attempted with several municipalities to gauge receptiveness or identify potential immediate opportunities. However, in a holding pattern until the "new" MS4 permit is released. 2023: Effort in early stages and will follow shortly after primary steering committee meetings. 2022: This effort in a holding pattern until 319 plan development is in full swing. It is anticipated the plan will be complete mid-2023.	

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Priority Initiative 3: Coordination												
3.1	Catchments Assessments and Prioritization	TBD for each individual catchment	Berks County Conservation District (BCCD), Berks County Planning Commission (BCPC)/GIS, 319 plan comm., local municipalities, County GIS, Ag Preserve. Board, NRCS	All areas (all catchments to be analyzed and prioritized)	Funding assisted timeline: 27 total catchment groups: 2021-4, 2022-18, 2023- 4	Upper Little Swatara and Upper Conestoga efforts will result in prioritization info, opportunities identification, etc. for catchments in these areas	Catchment Management Database (CMD), County GIS, USGS SPARROW, Practice Keeper (PK)	NFWF SWG/ INSRG programs; \$30k verifications funding		Berks Bay Action Plan (BBAP) implement. activities associated with assessments, engage., data entry, etc. that drive long-term BMP imp. would occur 2021-2030 without funding	2025: Priorities based on 319 plan objectives; and receptiveness and communications with farmers from previous engagements. MS4 engagements limited as awaiting new MS4 permit. Proposed DEP tool for identification of ag-impaired streams may play a role with future prioritization efforts beyond 2026. 2024: Efforts are still on- going. Limited resources have pushed percieved overall timelines back approximately two years relative to initial assumptions. This ia an acceptable trade-off due to more than anticipated level of implementation within catchments already assessed. 2023: Initial CMD data generated and ag parcel lists for PK data reference and identification of opportunities. 2022: \$30,000 implementation grant obtained for physical BMP verifications and entry of data into Practice Keeper. Completed a practice verification run (test run) of 1 watershed (5 catchments). Overall process being fine- tuned for remaining catchments based on results of the test run (actions to be finalized include identification of exact data entry repsponibilities (PK vs. PK partner portal, transfer of info, etc.).	
		See timeline for annual targets of assessments; each catchment will have an identified BMP acreage from the BMP targets identified in Actions 3.2 – 3.5	Analyses order will follow “worst-to-first” hierarchy based on Catchment Management Database (CMD) mass and incremental loading scores.	Existing funding timeline: 27 total catchment groups, 6/ year (2022-2026)	Action Teams (Ats) will provide additional focus on areas outside of 319 Plan(s) efforts							
		Game plan by late 2021			GIS overlay analyses of individual catchments to outline engagements, opportunities, etc. (“game plan” for each catchment)							
					Results of these analyses are intended to outline specific BMP implementation actions. Implementation actions will only be realized with additional funding and permitting flexibility across all considerations.*							
		<i>Soil Conservation and WQ Plans – 17,237 acres</i>	BCCD, NRCS, Ag Technical Service Providers (TSPs),	All areas with emphasis provided	On-going with inherent tie to Action 3.1 and	Broad slate of BMP types across ag industry and based on individual farm conservation	Farm survey, NRCS, TSPs, BCCD, Ag	REAP, CEG, EQIP, RCPP, MEBF, State	2 persons: PK manage. and BMP	\$120,000/yr for additional personnel (2	2025: Efforts on-going with CAP, ACAP, 319, NFWF, ACB, and GG	Several Performance Targets adjusted and updated due to a combination of increased

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		<i>Animal Waste Management Systems – 10,520 animal units</i> <i>Manure Transport out of Berks County – 2,011 dry tons/year</i> <i>Mortality Composting – 3 systems</i> <i>Manure Incorporation – 500 acres</i>				<p>particular BMP will provide a strong basis for future buy-in</p> <p>350 inspections occurring annually (with NRCS visiting ~500 farms/year), these efforts and knowledge will streamline Action 3.1 activities for farms in targeted catchments; added persons would augment these visits for verifications</p>					County & LSI have begun verifications in 1 watershed (5 catchments). Received \$30,000 Implementation Grant for BMP verification & data entry into Practice Keeper.	
3.3	Promote and monitor urban/developed BMP implementation	<i>Runoff Reduction Performance Standards – 115 acres</i> <i>Wet Ponds & Wetlands - 4,000 acres</i> <i>Extended Dry Ponds – 10 acres</i> <i>Infiltration Practices – 5 acres</i> <i>Vegetated Open Channels – 56 acres</i> <i>Advanced IDD&E Control – 140 acres treated</i> <i>Conservation Landscaping – 24 acres</i> <i>Urban Tree Canopy – 2 acres</i> <i>Urban Forest Planting – 4 acres</i> <i>Urban Nutrient Management – 650 acres</i> <i>Conv. Septic Denitrification – 75 systems</i>	Local municipalities, local watershed groups, BerksNature, Alliance for the Chesapeake Bay (ACB), County GIS, developers	Developed and semi-rural areas (all catchments)	On-going with inherent tie to Action 3.1	<p>Significant reconciliation of numbers is necessary (to be completed via catchment analyses)</p> <p>Individual municipal engagements via one-on-one engagements and as part of the catchment prioritization processes will be key for “buy-in” and establishing individual municipal needs.</p> <p>Identify needs and assistance channels for compliant MS4 programs (specifically MCM #3 and education/outreach channels) by individual muni.</p> <p>Modify implementation rates in 2023 after catchment targeting inventories generated.</p> <p>319 plan efforts will focus on ag, Coord. AT will focus on complementing efforts for developed areas in applicable catchments.</p> <p>Track developments by catchments (to track impervious)</p> <p>Separate database may need to be considered for capturing all</p>	Local engineers, DEP, County, MS4 group, County GIS, Clean Water Academy, EPA, ACB	GG, NFWF, CBT, DCNR, Keystone, developers, municipal, PennVEST		<p>Capital Cost: ~\$19.9 million (includes ~\$8,000 for conservation landscaping, ~\$6.3 million for SWM facilities, and ~\$5.7 million for septic systems)</p> <p>Costs are based on if full slate of BMPs are required), current high-level assumption is 60%-75% of the proposed BMPs are already implemented but not captured through an appropriate reporting mechanisms</p>	<p>2025: BMP Imp. Scenario represents field investigative numbers for extent of probable BMP implementation that exists. Currently assuming new MS4 permit annual reporting requirements will capture existing BMP data.</p> <p>2024: We anticipate revising these targets/numbers in 2025 based on field assessments and captured data.</p> <p>2023: Field surveys conducted late 2022 and early-to-mid 2023 to gauge level of existing BMPs in place and opportunities. Implementation rates revised to reflect encountered BMPs and potential opportunity levels.</p> <p>2022: Implement. is occurring. However, data capture and reporting processes are still under development and/or being finalized. One item under consideration/ review is the implementation of a title block requirements for land development plans that are through</p>	Several Performance Targets adjusted and updated due to a combination of increased knowledge/awareness of actual BMPs in the ground, actual thresholds for maximum level of implementation that can occur, and level of reported implementation.

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		Wetland Conservation – 15 acres									2022, numbers for 2023 will be better understood at the end of the year. 2022: Approximately 108 acres of farmland preserved thus far in 2022.	
3.6	Data Management	Action 3.1 established processes by fall of 2021 to dictate data management tasks and activities	County, BCCD	All areas	Ongoing; game plan by late summer/ early fall 2021 (tied to Catchment Targeting Action 3.1)	House the master CMD and related attributes and inventory at County GIS Final game plan for Catchment Targeting Initiative will dictate layers and attributes table Ag information stored in PK at BCCD	PK, FieldDoc, County GIS			Dependent on PK manager funding noted under Action 3.2	2025: Continued use of PK for ag and some natural-sector BMP data management. Still assuming new MS4 permit will improve BMP data management processes for urban/suburban sector. 2024: PK has evolved into the primary repository for data and information. It is anticipated the "new" MS4 permit will improve data management guidance for municipalities. 2023: Catchment Targeting Initiative underway. Approach dictated by handling individual watersheds before moving on to the next one. Staff changes and/or rollovers for data entry continue to pose challenges and create "go-stop-go" actions with efforts, but is manageable. 2022: Developed and implemented game plan for Catchment Targeting initiative along with Berks County Planning Commission, BCCD & Ag Preservation. Coded yellow as final details	
		Master list of plan(s) overlays as part of Action 3.1 established assessment processes game plan	County, BCCD, CWP, CBF	All areas/ catchments	On-going with master list established as part of Action 3.1	Ensure efforts do not conflict and/or align with other efforts; alignment protocols built into Catchment Targeting processes. Push/pull applicable information/data from 319 plan(s) development processes	MS4 PRPs, Comp Plan, Source Water Protection (SWP) program, and related local plans				2025: No known conflicts exist or are anticipated. New MS4 permit and a revised model ordinance may be better aligned with BBAP efforts. 2024: No known conflicts arose during this past year or are foreseen in	

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3.7	Programs/plans alignment as part of assessment process					Action 3.1 assessments include plan/data overlays during desktop analysis portion of activities (intent is to potentially match BMP opps. With previous plan(s) objectives)					the near future. 2023: No conflicting goals, objectives, etc. encountered amongst various plans. 2022: Primary focus is centered around the BMPs called for in the Hazard Mitigation Plan against the BMPs called for in the BBAP.	
3.8	BMP Reporting Reconciliation		BCCD, local municipalities, local watershed groups, County, CWP, CBF, TSPs	All areas	On-going; tied to Catchment Targeting and 319 plan(s) development findings, and Action 3.6 for data manage	Ensure centralized platform (County GIS) appropriately captures and displays individual catchment needs, captured unreported BMPs, etc. and aligns with reporting processes Will require "boots-on-the-ground" verifications	Local engineers/ consultants, TSPs, BCCD	\$30k verifications funding		Dependent on PK funding noted under Action 3.2 for ag related BMPs reconcile. and data entry Dependent on funding outlined under Action 3.1 for catchment targeting	2025: Process in place for ag sector. Asume process will develop out upon release and activation of the new MS4 permit for the urban/suburban sector. 2024: As uncaptured BMPs are encountered during one-on-one engagements, the information is uploaded and/or updated in PK. As the process becomes more natural, we anticipate updating this action to "green." 2023: Ag BMP reconciliation fully developed out, and a component of PK data maagement efforts. Urban-suburban still TBD. 2022: Process is essentially in place as a result of the Catchment Targeting approach. However, urban/suburban BMP reconciliation still needs final details flushed out.	

