

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

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Action #	Description	Performance Target(s)	Responsible Party(s) and Partnerships	Geographic Location	Expected Timeline	Potential Implementation Challenges or	Resources Available		Resources Needed		Annual Progress to Date (2021 to 2023)
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Priority Initiative 1: County Programmatic Initiatives											
1.1A	Implement County Comprehensive Plan policies and actions	Development directed to established growth areas; limited development and protection of natural resources in established rural areas Develop a process to calibrate the land use changes on the landscape to long-term land use change prediction in CAST Catalogue annual ordinance updates Catalogue actions that occur at municipal level	CCPC, CCPD, municipalities	Cumberland County	Ongoing	Need to level the municipal knowledge base on the interplay between land use and water quality, updating local plans and ordinances, growth areas not consistent with Census Urbanized Areas and their contributing storm sewersheds, limited resources to address diverse needs from east to west	Education, outreach GIS analysis for long-term land use prediction Ordinance and action cataloguing	N/A	Local planning coordination	N/A	2023 - 26 ordinance reviews were conducted by CCPD in the first half of 2023; significant submissions included Comprehensive Plans for North Middleton Township and Perry County, a new zoning ordinance for Southampton Township, the Borough of Camp Hill, and the Borough of New Cumberland. An amendment of planned center, storage depot and drop lots in Silver Spring Township, and a redevelopment overlay district in Middlesex Township. 2022 - 26 ordinance reviews were conducted by CCPD in the first half of 2022; significant submissions included comprehensive plans for Dickinson Township, Lower Frankford Township, and North Middleton Township which were completed or are nearing completion with county planning guidance. South Middleton Township completed a new comprehensive plan and future land use map. Updates to zoning ordinances for Southampton Township and East Pennsboro Township are underway. One rezoning with significant land use impacts in Middlesex Township was for approximately 200 acres of prime farmland to be rezoned from Residential Farm to Village Center to provide for a residential mixed use development known as neighborhood design development. 2021 – 26 ordinance reviews were conducted by CCPD in the first half of 2021. Three significant rezoning requests were submitted to the county Planning Commission to rezone a total of 250 acres in two municipalities from Agriculture to Industrial use. Two of the rezoning requests were recommended for disapproval by county and municipal planning commissions, and the third has been postponed. We'll need to work with the Chesapeake Bay Office Technical Team to see if the County's long-term land use layer can be used to calibrate CAST in addition to the existing land use data sets that are developed by the County GIS department. This is not a time sensitive item, but the County is willing to work with Technical Team on data compatibility.
1.1B	Implement Cumberland Plans Program (CPP)	Countywide municipal comp plan and ordinance conformance with 2017 comp plan vision Encourage municipalities to review their ordinances through this program to address topics such as resource overlay districts, required parking reductions, climate mitigation, warehouse landscaping and lawn reduction	CCPC, CCPD, municipalities	Cumberland County	Ongoing	Municipal investment in reviewing/updating comp plans and ordinances	Education, outreach, ordinance review, comp plan review	\$100k (county grant 50%, municipal 50% match)	Local planning coordination	N/A	2023 - No update. 2022 - The green infrastructure best practices background research is complete. Pending interest from municipalities, it will be advanced into a manual/website/online tool kit. 2021 – A review of riparian buffer standards in municipalities throughout the county, and research on best practices on green infrastructure and conservation landscaping measures is currently underway. Planning grants awarded in the last round include a Zoning Ordinance update for Newville, Newburg and New Cumberland Boroughs, and an ordinance Codification for Mt. Holly Springs Borough. County Planning staff and Planning Commission have been involved with these updates and have provided thorough review of the new standards.
1.1C	Model ordinances (SWM)	Ag E&S/AM plan local requirement (plans need to exist, local muni doesn't review) – trigger mechanism (building permit); collect by muni, pass onto CD for input into Practice Keeper – stormwater permits for ag engineers – boilerplate BMP design options	CCPD, CCCD, municipalities	Start with select municipalities where stormwater fees exist (Monroe Twp, Silver Spring Twp, Upper/Lower Allen Twp)	Ongoing	Municipalities understanding the value of these actions, provide support on data sharing to keep the paperwork burden low, opportunity reduce review time if boilerplate BMP designs are widely adopted by practitioners	Receive plans if submitted through SBD/LD process	N/A	Plan review capacity	\$100,000 per year Practice Keeper data input/management \$60,000 per year Building Permit Approval Process Update/Training Boilerplate BMP design development Variable based on municipalities	2022 - Existing data management tools (Practice Keeper and FieldDoc) are still not equipped to manage the anticipated data results from this effort. Given the time we have to work through the process through 2025, this effort could pair up with the next MS4 permit rather than being a County-led effort. 2021 – Cumberland County needs FieldDoc to be established to have a place to store urban/suburban BMP data before we conduct municipal outreach and solicit BMP information. Further, if PracticeKeeper will continue to be restricted in terms of users, to pursue this initiative with an outcome of additional reported plans and BMPs, we would need a module to be built in FieldDoc to house the data or additional data input support with a PracticeKeeper license. Since there are several complexities to the initiative, including potential model ordinance development, mechanisms for municipalities to share information with County Planning/Conservation District, and the potential for boiler plate BMP design templates, the ongoing timeline is appropriate so we can focus our efforts where there can be the most benefit to CAP goals.

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1.2A	Implement County Farmland Preservation Program	Total preservation farm goal 30,000 acres by 2030 900 ac/year to reach commissioners' goal	CCPD, PDA, municipalities	Ag land use area that fits farmland preservation criteria	2020-2025	Operator/landowner acceptance, additional staff capacity	Overall program management Easement purchase	\$750,000 PER YEAR	Program management support Easement purchase	\$2,250,000 PER YEAR (PRESERVATION) + \$60,000 per year for staff	<p>2023 - The county secured \$3,964,968 for farmland preservation in 2023. County commissioners certified a total of \$1,516,361, which includes general fund contribution of \$850,000, Silver Spring Township contribution of \$540,857, Clean and Green rollback interest and private donations totaling \$125,504. The \$1,516,361 was used to leverage an additional \$2,323,759 in state funding. This funding will allow the county to preserve 1,050 acres of prime farmland in 2023.</p> <p>2022 - \$3.6M in state and county funding was made available to the farmland preservation program. \$665,000 is federal funding was requested through the NRCS RCPP but notice of grant award remains pending. The Agricultural Land Preservation Board expects to preserve approximately 1130 acres on 12 farms through the 2022 round of selections, exceeding the annual goal of 900 acres/year. Total farmland preserved/pending preservation between 1992-2022 is 24,122 acres on 220 farms. A workshop on Agricultural Security Areas will be held September 21 to better assist municipalities with administering their programs and to increase acreage entering the ASA.</p> <p>Work is underway with Lancaster Farmland Trust to review existing conservation plans on preserved farms and prioritize updates to conservation plans. The plans will subsequently be updated and BMPs will be selected for implementation with funding from National Fish and Wildlife Foundation.</p> <p>2021 – \$3.4M in state and county funding was made available to the farmland preservation program. Silver Spring Township is expected to partner on two joint easements bringing supplemental funding into the program. Additionally, the County intends to apply for Federal RCPP funding in the fall to bring in additional funding. The Agricultural Land Preservation Board expects to preserve approximately 1200 acres on 10 farms through the 2021 round of selections, exceeding the annual goal of 900 acres/year. Total farmland preserved between 1992-2021 is 23,137 acres on 209 farms.</p> <p>An informational workshop will be held on September 14 to recruit potential applicants to the program. Information on conservation planning and BMPs will be provided at that meeting.</p> <p>In Spring of 2021, the Planning Department was able to hire a part-time staff person to add additional capacity to the program.</p>
1.2B	Implement County Farmland Preservation WQ Project Shovel Readiness	<p>Hire a shared contract employee with NRCS (soil conservationist) to perform planning activities on preserved farms that comply with NRCS standards</p> <p>Pre-inspection form data improvements</p> <p>Review inspection results to identify farms that could utilize technical assistance on planning or BMPs. Direct those farmers to programs/partners, as needed.</p>	CCPD, NRCS, LFT, TeamAg	Countywide	Annual contract (Oct 1 – Sept 30)	<p>50% match to NRCS contribution, training, onboarding time, planner certification, human resources to get projects to a shovel ready status - the NFWF grant is a great start, but not enough</p>	Staff training	N/A	N/A	\$20,000 PER YEAR \$20,000 PER YEAR	<p>2023 - Conservation planning development and entry into Practicekeeper is ongoing. In the first half of 2023, 23 plans were prepared and 55 outreach visits have occurred.</p> <p>2022 - Additional planning capacity exists under the NFWF INSR grant award so the need for a shared NRCS plan writer isn't needed. Also, the pre-inspection form data sheets have been updated to collect more information on the status of plans. The new PACD Plan Reimbursement program will be an avenue for new plans to be written for the county's preserved farms.</p> <p>CCPD continues to advance a NFWF INSR grant that targets ag BMP implementation on preserved farmland.</p> <p>2021 – The opportunity to partner with NRCS on a shared conservation planner was determined not feasible at this time. Instead, we are moving in a different direction because a NFWF INSR grant was awarded in July 2021 to advance work under this goal. Tasks to include inventory existing conservation plans, prioritize planning needs, outreach with landowners to update plans and advance BMP implementation. Funding for plan writing is also included.</p> <p>During the 2021 inspection process, conservation planning data was requested from all farmers. Numerous updated plans were received during the inspection cycle and logged into internal databases. As needed and/or requested, landowners were referred to the Conservation District for conservation planning and BMP assistance.</p> <p>The pre-inspection data form will be updated for the 2022 inspection cycle to enhance conservation data reporting.</p>

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1.2F	Implement the Cumberland County Local Climate Action Plan	Public participation – plan development (survey, meetings) Green infrastructure policy recommendations County facility energy efficiency results	Carlisle Borough, other municipalities, CCPD, educational institutions – Dickinson College and Shippensburg University, Wilson Engineering Services, PADEP, Solar Work Group, South Mountain Partnership	Countywide	Ongoing	Plan development during COVID, public support of the initiative, municipal role to be determined	Plan development team	TBD	TBD	TBD	<p>2023 - Implementation of the Cumberland County Climate Action Plan continues with a grant award to install two charging stations and convert a pilot group of 8 county fleet vehicles to electric. The county is working with DEP and local municipalities to apply for further work of a shared energy manager for municipal fleet electrification and energy efficiency improvements.</p> <p>2022 - The plan is complete and in one of the surveys, over 70% of responses indicated that “improved air quality” or “improved water quality” as a strong motivator. Climate reduction opportunities were identified with respect to transportation infrastructure stormwater BMPs and native landscaping standards implementation. The Climate Action Plan was adopted in January 2022 and work commenced with a Shared Energy Manager, Wilson Engineering Services. Wilson facilitated meetings with warehouse developers and solar industry representatives to discuss siting considerations for roof mounted solar arrays in new commercial and industrial development planning and retrofits of existing sites. DEP has been a partner in these discussions and plans to share findings with municipalities and facilitate broader adoption of land use policies to promote alternative energy development in developed sites is underway. Green infrastructure guide will be in development Q4 2022 – Q1 2023. A model ordinance for solar development is being updated through the Solar Work Group and South Mountain Partnership with a focus on conserving regional landscape resources.</p> <p>2021 – The plan development team is continuing with the development of the Climate Action Plan, including stakeholder engagement, and is on track to finalize the plan in 2021.</p>
1.2G	Implement Return on Environment (ROE) Reports	Utilize data as part of clean water communications Help Penn Township carry out recommendations and landowner outreach training Identify priority areas for implementation and assess municipal	CCPD, CCCD, Penn Township, South Mountain Partnership, Audubon, Ag Land Preservation Board	Countywide and Penn Township	2021	Implementation partner need	Overall planning guidance	N/A	Distill data down to layperson language Boilerplate BMP design and ordinance amendment	Project budget as landowners have interest	<p>2022 - The local municipal champion for the implementation of the plan passed away and it has not been taken up by a new champion, to date.</p> <p>2021 – Penn Township had a Return on Environment report created and an implementation plan prepared under a grant. Implementation methods preferred by the municipality include voluntary stormwater management and conservation measures that homeowners can take as opposed to ordinance changes to require preservation standards. Staff involved with the county WIP team supported development of this plan. Communication of the results of the plan could be moved forward by the Township and the County is ready to support their efforts.</p>
1.3A	Countywide Water Quality Credit Offset Pilot	Demonstrate measurable success of a pilot project area where MS4s and non-MS4s can collaborate on sediment and nutrient goals	Lower Allen Township, South Middleton Township, MS4 Workgroup, Homebuilder Association, Chesapeake Bay Foundation (policy/advocacy)	MS4 watershed HUC12	2023-2025	DEP acceptance of approach	Engineering/ MS4 permit requirement coordination Project opportunity ideas	N/A	For implementation, if the pilot works, 1 FT MS4 Coordinator, 1 PT ag Coordinator Project design and construction	\$150,000 per year Unknown until concept is developed and cost-savings are calculated	<p>2023 - Monroe Township continues to be a likely location for this pilot but the County is waiting on the Township to initiate the discussion with prospective landowners should the Township need an alternative to address their MS4 credit needs.</p> <p>2022 - An analysis was provided to Monroe Township for their consideration. We will extend the timeframe on this initiative.</p> <p>2021 – Planning staff and HRG had a discussion with the Monroe Township engineer to brainstorm pilot project areas that would be potential candidates for a more cost effective and local water quality beneficial approach to implementing their MS4 Pollutant Reduction Plan (PRP). Candidate locations have been identified and HRG is on track to complete preliminary calculations as a first step toward a pilot project where BMP(s) would be placed on an agriculture property outside the Urbanized Area for PRP implementation credit. Upon confirmation that there is benefit (cost reduction compared to an urban BMP and comparable sediment reduction credit to the urban BMP) and future DEP acceptance of the proposal, Monroe Township would pursue a conversation with the landowner to see if next steps of the project can proceed.</p>
1.3B	Countywide Stream Restoration Bundling Pilot	Bundle stream restoration design and construction activities to more cost effectively meet MS4 requirements	MS4 Workgroup	MS4 watershed HUC12 scale	2022-2025	Municipality acceptance of approach, technical capacity of private sector to handle glut of stream restoration projects toward end of MS4 permit cycle, opportunity for more efficient permitting reviews rather than one application package per project	Review PRPs for logical bundling packages	N/A	Engineering/construction	Assume \$2,000,000 project budget scale	<p>2023 - Since the PRP deadline stands, this concept is on hold.</p> <p>2022 - Conversations have not been prompted with the MS4 workgroup to date. If the MS4 permit is extended and municipalities have more time to complete their PRPs, the opportunity will be offered.</p> <p>2021 – This initiative is slated to start in 2022.</p>
1.4	Water Quality Communication Plan	Develop messages and audience; execute plan and distribute messaging through staff	County Communications Department	Countywide	2020-2025	Staff bandwidth, consistency (type and frequency of messages)	Communications Plan Assistance Developed by county staff with input from internal planning team	\$5,000 (tabling materials, brochures) - NFWF INSR Grant	N/A	N/A	<p>2023 - Communication materials continue to be developed and circulated as needed. Meetings with stakeholder groups also occur frequently, and the county is working to implement a county dashboard with GIS that will show past, present, and future projects.</p> <p>2022 - Communication materials including educational flyers and testimonial videos continue to be developed as needed by the Communications Department.</p> <p>2021 – County Planning staff, Communications staff, and HRG have met nearly monthly to discuss the communications needs for CAP implementation. Communications staff developed a communications plan and the team finalized social media, website, and print materials for various programs that support CAP goals. The NFWF INSR grant award includes budget for the tabling materials and brochures previously indicated as a resource need.</p>

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1.5A	Chesapeake Bay Technical Inspection/ Plan Data Gathering	Collect data regarding existing farm plans and implementation progress 50 farms per year --> 200 farms through 2025	CCCD	Ag land use area	2021-2025	Farmer knowledge of the location and contents of their plan, obtaining copies of existing plans to determine if they are up to date	Site visits and plan reviews	\$200,000	N/A	N/A	2023 - With the addition of a new Bay Tech in 2022, 101 Bay inspections were completed for the 2022-2023 reporting year. 2022 - We have added another Bay tech and increased our inspections from 50 to 100 per year. 2021 – The Chesapeake Bay Agricultural Inspection Program is on schedule for 2021 and plan information is being entered into PracticeKeeper as part of the program workflow. There are inequalities across the Bay counties in terms of the inspections occurring in places like Cumberland as opposed to DEP’s inspections in counties that don’t participate in the Chesapeake Bay Ag Inspection Program. Transitioning from working with the farmer to being the regulatory agency is a significant challenge, especially when other counties haven’t had any Phase 1 inspections.
1.5B	Other Plan Data Gathering	Collect data regarding existing farm plans and implementation progress ~45 farms per year --> 170 farms through 2025	CCCD, LFT, Ag Consultants, NRCS	Ag land use area	2021-2025	Farmer knowledge of the location and contents of their plan, obtaining copies of existing plans to determine if they are up to date	50 farm visits per year Existing plans data sharing Request/review plans as part of farm support	N/A	Existing plan data	Could need financial assistance after 2021	2023 - Through the process of Bay Inspections and Lancaster Farmland Trust outreach as part of a NFWF INSR grant, 40 Conservation plans have been verified and entered into PracticeKeeper. Sixty BMP instances have also been entered as a part of those plans as implemented. Additional plans may be discovered as part of a NFWF Small Watersheds Grant through Capital RC&D that will begin outreach in fall 2023. 2022 - We are getting plans from inspections and BMP verification. we will be doing 100 inspections per year and will try to get as many BMPs verified and entered into PracticeKeeper as time permits. 2021 – Conservation District staff are continuing to review operations so that plan gathering is inherent to communication with landowners (i.e., PSNT field work and CEG program interest).
Priority Initiative 2: Achieve New Pollutant Reductions											
2.1A	Existing BMP cataloguing (quantity and location) for select BMPs, expanding on general recommendations provided in QAPP BMPs = forest buffers, urban forest buffers, grass buffers, urban grass buffers, wet ponds and wetlands, fencing	Expand use of existing buffer layer with urban hydrology layer R&D into distinguishing ag, pasture, and turf covers from grassed buffers Manual digitizing where leaf-off <1 ft resolution imagery is available to capture ag BMPs that are visible Back check with staff field views where required Add data to Practice Keeper or another batch upload option (FieldDoc)	Lead - Chesapeake Conservancy Stakeholder peer review - PSU, USGS, Farm Bureau, PDA, LFT, EPA	Cumberland County	2022 - select cataloguing 2023 - continued remote sensing data set development, field verifications	EPA acceptance of the approach, further refine guidance in QAPP so that counties can accomplish this or so that the state can take the burden off of counties, utilize the approach to catalogue existing BMPs and do on the ground verification where required for reporting purposes, this is an accelerated BMP catch up approach while we continue to provide support to farmers on planning and BMP installs, reduce the amount of interruption of government entities to compliant farm operations	Precision Conservation Tools General methodology outline BMP field backcheck	N/A	Further GIS and data processing/method refinement	\$94,000 (2021) – assume similar annual budget while R&D continues on expanded BMP list	2023 - Through the Chesapeake Conservancy remote sensing analysis, 26 manure storage units were verified with 48 BMP's in total (Grassed waterways, Riparian buffers, barnyard controls). BMP verification is integrated into the workload of District staff, and additional funding is available through a NFWF SWG in collaboration with Capital RC&D. That grant outreach will begin early this fall. 2022 - In December of 2021, Cumberland County was awarded \$30,000 to conduct BMP Verification. Cumberland County elected to use some of the money on the remote sensing analysis focusing on six priority BMPs including: Barnyard Runoff Controls, Animal Waste Management Systems, Forest Buffers, Grassed Waterways, Streambank Exclusion Fencing and wet ponds/detention basins. Remote sensing data analysis performed by the Chesapeake Conservancy is being finalized in August of 2022 and results are provided in an online ArcGIS Portal. Qualified staff will begin field verification efforts to verify the remotely identified practices. A BMP Verification Quick Guide is being developed by HRG to assist with field verification efforts. 2021 – Funding for the initial BMP cataloguing project has not been obtained. HRG and Chesapeake Conservancy are working on a white paper that outlines the need for more remote sensing work to be done, specifically, by taking next steps with the NRCS PA BMP Remote Sensing Pilot Project (Potomac River Basin) process and findings. By taking this step, the initiative is behind schedule and not yet funded, but we hope to build momentum toward a successful outcome, including buy-in from EPA/Bay Program.
2.1B	Identify future ag/urban project opportunities using automated means	BMP opportunity analysis – ag conservation, land retirement, alternative crop, forest conservation, stream restoration Back check with staff field views Batch upload to FieldDoc to calculate credit opportunity	Lead - Chesapeake Conservancy Stakeholder peer review - PSU, USGS, Farm Bureau, PDA, MS4s	Cumberland County	2023 – cataloguing 2024 – batch upload processing and field views 2025 – implementation focus	Different data set scales/precision	Precision Conservation Tools Batch upload processing BMP field backcheck	N/A	Further GIS and data processing/method refinement	\$44,000 (2021)	2023 - No progress to date. This is a relevant topic that requires additional technical assistance funding similar to the BMP Verification funding that was appended to the Coordinator grant in 2022. 2022 - No progress to date. 2021 - See 2.1A for progress as this initiative is a companion initiative.
2.1C	Improve continuous data collection on urban non-structural practices	Add development-related BMPs to CAST/FieldDoc so that as land use data sets are updated, there are accompanying BMPs	NonMS4s/MS4/muni engineers, MS4 Workgroup, Conservation District, Southampton Township?	Urban/suburban landscape	2023-2025	Coordination/training for municipal staff, FieldDoc batch opportunity, non-MS4 engagement, difficulty obtaining past information (MS4s typically have databases from 2003-present)	Reporting platform	N/A	Training Municipal data input	N/A Assume \$5000 administrative cost per municipality per year and 7 developing municipalities à \$35,000 per year	2023 - No progress to date 2022 - Phase 1 of the BMP verification remote sensing analysis includes analyzing Cumberland County for Wet Ponds and Detention Basins. These BMPs will need field verified. Additionally, PA DEP has updated FieldDoc to allow for additional reporting of urban practices. 2021 - The CAP team discussed the existing Act 167 Plans and resulting model ordinances with key local stakeholders, and the need for urban BMP reporting was also discussed. Since the County records plans that are as-builts, it is possible to go back through the plans and capture BMPs for reporting in FieldDoc. Going back to 2010 is an option since that’s when operation and maintenance agreements started to be required.

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2.1D	Implement a documentation program for commercial and homeowner nutrient applications in developed lands	Support fertilizer legislation where legislation requires reporting, be the data clearinghouse	Cumberland County TBD, Center for Water Quality Excellence	Countywide	TBD	Education of responsible parties, receiving timely information, training on reporting system	TBD	TBD	TBD	TBD	<p>2022 - On July 11, Governor Wolf signed SB 251, a bipartisan bill sponsored by Senator Gene Yaw (R) and Senator Carolyn Comitta (D), into law. Pennsylvania now has a law governing turfgrass fertilizer application dates, practices, rates, and type of fertilizer used. We are uncertain on how documentation and crediting will occur with the new bill.</p> <p>2021 - This initiative is being pursued by legislators. HRG has coordinated with the Chesapeake Bay Commission staff on the topic and receives periodic updates.</p>
2.2A	Additional Technical Assistance to Serve Farm Operators	Hire 1 new in-house engineer/planner	CCCD, NRCS	Cumberland County	2021-2025	Funding, expertise in labor pool, limited compliance activities by DEP, lack of funding for staff to assist the ag community in a pro-active way	Plan development and BMP design, field verification, troubleshooting	\$200,000 per year	1 engineer, 1 planner, 2 technicians	\$350,000 per year	<p>2023 - The contracted ag engineer hired in 2022 continues to perform the majority of the projects in the county. CCCD staff has also been reassigned in a way that allows one employee to focus on CEG and ACAP projects.</p> <p>2022 - CCCD hired a third party ag engineer to provide technical assistance for CEG- and CAP-funded projects. Additional capacity, in-house or contracted, is needed to scale up implementation efforts.</p> <p>2021 - Funding and operational capacity does not exist for additional in-house County staff. The County is pursuing another technician for the Chesapeake Bay Agricultural Inspection Program, funded by PADEP, but they will not have capacity or skill set to fulfill this technical assistance need. HRG has drafted a white paper that outlines this challenge and a potential solution to develop more agricultural work force on the short- and long-term. Most support provided to landowners occurs because the Conservation District staff approached them. Conservation District staff also rely on NRCS to provide networking opportunities for those that apply for EQIP who don't meet the criteria or when the annual budget is exhausted.</p>
2.2B	Additional Technical Assistance to Serve Farm Operators	RFP an on-call contractor to assist with plan and BMP implementation backlog (design, construction)	CCCD, consultants	Mount Rock Spring Creek Watershed	2021-2023	Funding, expertise in labor pool, limited compliance activities by DEP. Lack of funding for staff to assist the ag community in a pro-active way. Schedule lag between interested landowner, connection with consultant to do the work, consultant delivering the plan, follow up with CCCD staff who can assist with plan implementation, design/permitting, construction during schedule that works for landowner	N/A	N/A	1 engineer, 1 planner, 2 technicians	Assume 10 project opportunities in watershed – budget \$1.8 million	<p>2023- Foundations for Pennsylvania Watersheds was awarded a Growing Greener grant in early 2023 to assist farmers with design, planning, and permitting related to ag BMPs. That funding, along with ACAP funding, will be used to enhance the private TSP capacity to assist farmers with BMP needs.</p> <p>2022 - Funding doesn't exist currently for this arrangement for Cumberland County. A multi-county Growing Greener grant was submitted by the Foundation for Pennsylvania Watersheds in spring 2022.</p> <p>2021 - The current on-call consultant to support the CEG program is serving the TSP engineering need. Staff, NRCS, and the private sector continue to serve landowners, as the landowner chooses. A significant barrier to success includes the need for non-Conservation District staff to be authorized users of PracticeKeeper. This critical authorization will scale up efforts for BMP reporting to support CAP goals.</p>
2.3	Additional nutrient management (NM) and agriculture erosion and sediment (E&S) plan development	560 new/updated plans developed and added to Practice Keeper (ag pres program, Bay Technician progress, other outreach) Soil and Conservation Plans - 58,000 acres Core N - 49,800 acres Core P - 43,300 acres N Placement - 17,000 acres N Rate - 17,800 acres N Timing - 15,200 acres P Placement - 17,000 acres P Rate - 17,000 acres P Timing - 17,000 acres	CCCD, TeamAg, Private Consultants, County Farm Bureau	Cumberland County	2021-2022 2023-2025	Landowner interest, funding	Plan development	\$6,000 per plan	Administrative (enter information into PK) Plan updates after reimbursement program expires	N/A Assume 20 plans per year (\$40,000 per year)	<p>2023 - CCCD has encouraged farmers to participate in the PACD Plan Reimbursement Program with positive responses. CCCD Staff continues to encourage all farmers to have plans written or updated and has developed a list of qualified plan writers serving the county.</p> <p>2022 - If the program is determined to not be administratively burdensome, CCCD will use the PACD Plan Reimbursement Program to connect farmers with the technical and financial resources needed to get plans written/updated. Otherwise, goals are expected to be met through Bay visits, partner projects, BMP verification, and projects funded through CAP/CEG/ ACAP.</p> <p>2021 - County land preservation staff have started utilizing the annual inspections to ask about the status of their plans (current accuracy and implementation).</p>
2.4	Public/private Farm BMP sponsorship program	Utilize REAP program to leverage funding, sponsor farmers who perform BMPs and pay them cash from tax rebates that corporation receives from funding the program	CAEDC, Giant Foods/Ahold, LFT, SCC, The Nature Conservancy, Chesapeake Bay Foundation, PennAg, Capital RC&D	Cumberland County	2024-2025	Corporate interest	Initial coordination	N/A	N/A	N/A	<p>2023 - No progress made.</p> <p>2022 - No progress. The list of potential funding partners was completed and is now static. As our group analyzes the new funding programs coming from State and Federal sources, we'll revisit this list for match/partner opportunities.</p> <p>2021 - No progress made.</p>

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2.5	Low and no-till cover crop and tillage BMPs	<p>Increase existing County program by 40% by leveraging existing County cost share program, transect survey, more detailed questionnaire information regarding BMP implementation versus cost share coverage</p> <p>Continue fundraising so that program can continue to expand</p> <p>Conservation Tillage - 12,800 ac High Residue Tillage - 60,400 ac Low Residue Tillage - 13,000 ac</p> <p>Traditional Cover Crops - 36,900 ac Traditional Cover Crops with Fall Nutrients - 4,000 ac Commodity Cover Crops - 750 ac</p>	CCCD, NFWF, Capital RC&D	Ag lands in County	2023-2025	Landowner interest, BMP verification (annual) and paperwork	Means/methods assistance Transect Survey	\$54,600 \$27,300	N/A	\$27,300 every other year	<p>2023 - 9100 acres were enrolled in the program this year, with 4200 acres incentivized by the county through various sources.</p> <p>2022 - 7500 acres were incentivized this winter, the highest annual total yet, supporting 65 farm operations. Multiple funding sources were used, which have now been spent. Cumberland anticipates utilizing the block grant for cover crop incentives in future years.</p> <p>2021 – Cover crop incentive signups increased from 400 acres in the 2018-2019 growing season to an average of 1400 acres in the 2019-2020 and 2020-2021 seasons. Additional outreach has increased participation (Farm Bureau newsletter articles, word of mouth, post card mailer, Bay inspection visits). The Bay Technician signed up every acre that the farmer planted, not just the acres that were cost shared.</p>
2.6	4R Practice Education and Implementation	<p>Transition manure management plans to nutrient management plans and incentivize implementation</p> <p>Increase existing 4R practice (N rate and timing) adoption by 6,000 acres</p>	4R Alliance, Capital RC&D, CBF	Priority HUC	2021-2022	Landowner interest, BMP verification (annual)	Educational support	\$45,000	Cost share recommendations/equipment/software	\$50,000	<p>2022 - No progress made.</p> <p>2021 – 4R Alliance staff turnover has reduced communication with the County team. Outreach restrictions due to COVID have also made having workshops to garner landowner interest more challenging. We look to 2022 with respect to progress on this initiative.</p>
2.7	Conservation Landscape/Turf to Meadow Conversion/Watershed Forestry Initiative	<p>Promote new program and enable three large tract landowners' participation (20 acres of conversion per property, 60 acres total; assume 190 acres occur in Cumberland through other initiatives) - prioritize promotion based on 2022-2025 grant award announcements</p> <p>Address weed ordinance changes in target municipalities so that conservation landscape can be adopted by landowners (Lawn Conversion Committee)</p>	Alliance for the Bay, CCPC, DCNR, Western PA Conservancy, CBF, Pheasants Forever, Audubon, Master Watershed Stewards, Lower Allen Township, South Middleton Township	Urban/suburban landscape in Cumberland County	Ongoing	Landowner education and acceptance	Planting plan assistance	\$50,000 for lawn conversion (forest or meadow)	N/A	\$5,000 per acre (forest), \$3,700 per acre (meadow) Lawn Conversion PLUS Program \$300,000 (budget for all forest)	<p>2023 - One project was completed that included 2 acres of landscape conversion with no-mow lawn seed and 725 trees and shrubs. The county has additional landscape conversion project targets that may be prioritized now for CAP funding since ACAP is a large funding source for ag projects. DCNR partnership continues to discuss project targets and funding opportunities.</p> <p>2022 - A project is on target for completion this spring that can serve as a demonstration project. Otherwise, the Lawn Conversion committee continues to meet and make progress on advancing many initiatives. Multiple funding applications were submitted by partners to Growing Greener and NFWF this spring that will help advance training, project development, and implementation goals.</p> <p>2021 – Cumberland County is working with the DCNR Lawn Conversion program to act on leads that they receive that they cannot fund due to DCNR's limited funding for conservation landscaping. Project leads are moving through the vetting process with a goal to implement a project in the Spring 2022.</p>

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2.8A	Riparian buffer and re-forestation BMPs	Partner with Chesapeake Bay Foundation to plant 100,000 trees (portion of 500,000 trees that will be RFPed for growers) 17 acres - 2 farms per year – forest buffers with fenced pasture 43 acres - 3 farms per year – grass buffer with fenced pasture 50 riparian forest acres – CREP CLEAR 30 renewal, CBF, Alliance for the Bay support/lead 42 acres – grass buffers 155 acres – urban forest buffer (19 stream miles) – 5 miles per year (22 acres in PRPs) 250 acres – urban forest planting – target one large landowner in urbanized area	CBF, CCCD, Alliance for the Bay, CCWA, YBWA, Mountain Creek Trout Club & Conservation Society, Cumberland Valley Trout Unlimited, LFT, Pheasants Forever	Cumberland County	2022 – line up landowners 2023-2025 – implementation	Landowner partnerships, landowner education, volunteer acceptance of grass buffer plantings, grass buffer maintenance guide for farmers, routine site visits to confirm buffers are thriving, invasive species removal during establishment	In-kind, annual tree sale efforts Buffer my Stream/Prime Prospects data set Landowner outreach, buffer design, planting plan, 10 Million Trees tree supplies Landowner outreach/education Implementation – planting	CREP	Parcel-specific BMP recommendation and contact info Implementation – design, equipment, materials	\$50,000 \$2.8 M budget	2023 - With CBF's INSR funding, four buffers will be implemented in the fall of 2023. 2022 - Chesapeake Bay Foundation was awarded an NFWF INSR grant including funding for riparian buffers (non-agricultural) and for building the workforce for implementation of riparian buffers. The Foundation also has funding for buffer bonus dollars where they pick up the NRCS cost share and the cost for installation of a buffer. Phase 1 of BMP verification will identify potential hits for grassed waterways and forest buffers implemented in the past 10 years. These potential BMPs will need field verified but provide a great opportunity to identify BMPs not currently reported. 2021 – This initiative is slated to start in 2022, though community tree plantings occurred this year (CCWA did plant trees this spring at the Vincent DiFilippo Nature Preserve and Willow Mill Park. VDNP planted 3 acres with 720 trees and shrubs through CBF. Willow Mill project planted 265 trees. YBWA also had a tree planting in South Middleton Township.)
2.8B	Wetland restoration implementation on marginal production ag land	48 acres implemented by 2025, currently programmed and likely no more because of the lead time needed to get the projects planned and funded	NRCS	Cumberland County	2025	If additional landowner interest, it takes years to get NRCS funding → would need to identify an alternative funding source; bog turtle habitat co-benefit may assist us with funding opportunities/technical assistance	Design, permit, construction	TBD	N/A	N/A	2023 - The 20 acres of restoration that began in 2022 has been completed. 2022 - Project goals are on track by the lead implementer. Restoration began on 20 acres. 2021 – NRCS completed the restoration of 14 acres of wetlands on agricultural land this year and have protected through a permanent easement another 20 acres of adjacent forestland that includes wetlands. The remaining restoration amount listed will be completed next year on another farm. NRCS covers all restoration costs as part of their program.
2.8C	Non-urban stream restoration	4,000 feet restored with floodplain restoration scope that includes water quality credits associated with Stream Restoration Expert Panel – Protocol 3	CBF, CCWA, YBWA, Mountain Creek Trout Club & Conservation Society, Cumberland Valley Trout Unlimited, American Rivers	Mount Rock Spring Creek Watershed	2021 – identify qualifying project locations 2022 – funding solicitation 2023-2025 – design/permit/construction pending funding award	Design/permit/construction cycle seems to work in two-year increments	Habitat structures	N/A	Design, permit, construction services	Assume \$450/LF - \$1.8 M for total project delivery, not O&M	2023 - Two stream restoration projects (Barnitz Church, Woodcreek Development) totaling over 1,600 linear feet were completed with block grant funding. An additional project in Silver Spring Twp. utilizing stormwater fees and other non-CAP sources (Breneman-Birx) is expected to be completed this fall. Several projects still exist for 2024 construction and restoration. 2022 - Project prospects: Mountain Creek (working with CCCD, PA F&BC, early estimate \$2M) and Letort (working with CCCD, LRA, CPC; no estimate yet). Projects completed: Wittlinger Preserve in Boiling Springs, Allenberry, Yellow Breeches at Barnitz Church, Letort Falls. 2021 – Project updates provided for 2021 Construction: CVTU – Wittlinger Nature Preserve Project starting on August 9 (upstream from lake at Boiling Springs) Phase 3 & Phase 4. DCNR – King's Gap State Park – Irishtown Gap project working with PA Council of Trout Unlimited, phases 3 & 4. CCCD/USFWS—Allenberry—unsure of contracting status at DEP. Depends on contracting if part of this project will happen this year. Several messages have been left and no response as of today. Mountain Creek Trout Club and Conservation Society—unsure if PAFBC is constructing this year or next year. 500-1,000 ft—unsure of final plans. 2021 Funding applied for: CCCD/PAFBC—3 sites identified and included with PA FBC Habitat Expansion GG Grant, totaling 1440 feet of stream; CVTU/PAFBC—1 site—confluence of Letort/Conodoguinet, LF to be determined
2.8D	Operation and Maintenance Performance	Pair up MWS volunteers w/ new buffers to incentivize landowner acceptance Utilize new Riparian Rangers group	Volunteer group, contractor, Master Watershed Stewards, CBF	Cumberland County	2023-2025	Volunteer training, liability, materials/equipment funding	Technical guidance Volunteer maintenance labor	N/A	N/A	N/A	2023 - The Riparian Rangers tend to 9 sites in the county with 10-12 active members. A second RR training is planned for early 2024. 2022 - A new Riparian Rangers group has formed and will be used to tackle O&M for existing and future riparian buffers. 2021 – The CAP Team worked with MWS volunteers on prospecting for new BMP areas, MWS volunteers worked together on buffer/tree planting maintenance, and the MWS coordinator shares project leads with MWS volunteers to advance.

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2.9	Implement more prescribed grazing measures	40 acres per year – new and newly reported (160 acres total)	NRCS, Capital RC&D, CCCD	Cumberland County – landowners who raise horses, dairy, beef	2025	Not widely adopted today, existing funding through Capital RC&D that can be used to kickstart efforts	Landowner education	Crop to grazing conversion funding	N/A	1 grazing plan per year (\$4000 each) - \$20,000 total planning budget 3000 LF of fencing per year – Assume \$4.50/LF - \$13,500 per project or \$67,500 total project budget	2023 - Capital RC&D had their grant extension approved and outreach will begin in the fall of 2023. Prescribed grazing will be a focus BMP of this grant. Three fencing projects using block grant funds will be completed in the fall of 2023 that will be enable three operations to increase their prescribed grazing capacity. 2022 - Capital RC&D has a technical assistance grant that has been requested for an extension through the end of 2023. Should that occur, the program will continue to be promoted to support our BMP goal. 2021 – 36 acres are either planned for or will be funded within the last two grant rounds. A field day for small ruminant grazing is planned for Fall 2021, which will help promote the program.
2.10	Animal waste management BMP implementation for livestock	Goal = 40% of farms with livestock have appropriately sized waste management (~18,500 AUs or about 100 farms, 25 farms per year newly reported or newly constructed)	CCD, SCC, NRCS, CEG Program, LFT	Livestock farms	2021-2025	Current capacity through NRCS and CCCD implements about 5 projects per year; Time to get through planning, design, and construction; outreach to smaller farms that likely need the assistance; match cash value for small farms; readiness to plan/implement projects when outreach efforts yields willing landowners	Project implementation – 2 farms/year Project implementation – 3 farms/year	TBD	Design, permit, construction services	Assume 5 projects per year, \$440,000 each, \$2,200,000 per year (construction and technical assistance), \$6.6 M total (2023-2025)	2023 - Three waste storage units were completed in 2023. Two via CEG and one via block grant funding. Two additional waste storage projects using ACAP are set to begin in the fall of 2023. 2022 - Projects continue to be implemented through CEG and the block grant. Many EQIP-funded projects have been put on hold due to increased project costs. Those projects might shift over to the CEG, block grant, or new ACAP programs. Remote sensing has identified potential systems that need to be field verified and will be subsequently reported. 2021 – Projects are being implemented through the CEG program and EQIP. As the Bay tech visits include farms with these BMPs, they are being reported.
2.11	Implement more barnyard runoff control/loafing lot management/ag stormwater management	40 acres of treated area, assuming we map 200 more and build 20 more (5 farms per year)	CCCD, Chesapeake Conservancy, LFT	Livestock farms	2021-2025	Mapping challenges, typical logistics regarding landowner buy-in and project development/funding	N/A	\$1,568,000 per year, \$7.84 M total \$316,250 3 farms leaky barnyards	Consultant for program management and project delivery	\$219,000 per year, \$1.1 M total	2023 - Four animal heavy use area projects were completed in 2023 with five more scheduled for construction in late 2023. CEG, CAP, NRCS and ACAP are the funding sources for these projects. 2022 - Projects continue to be implemented through CEG and the block grant. Many EQIP-funded projects have been put on hold due to increased project costs. Those projects might shift over to the CEG, block grant, or new ACAP programs. Remote sensing has identified potential systems that need to be field verified and will be subsequently reported. 2021 – Projects are being implemented through the CEG program and EQIP. As the Bay tech visits include farms with these BMPs, they are being reported.
2.12	Manure treatment technology	Track Dickinson College digester/composting project for dry ton treatment	CCCD, Dickinson College	Central Cumberland County	2023	What if project doesn't complete/operate according to design specifications when fully implemented?	Facility operation	Operational budget	N/A	N/A	2023 - The digester at Dickinson College Farm was completed in mid-2023 with CEG funding. Another digester (Central Valley) is scheduled for completion in late 2023. The county helped fund the reception pit for this project, but not the digester itself. 2022 - Construction will hopefully begin fall 22/spring 23. 2021 – The project is on track for implementation, construction starting Fall 2021/Winter 2022.
2.13A	Implement the Cold Water Conservation Plan for Letort Spring Headwaters	Complete habitat study	Cumberland Valley Trout Unlimited, CCCD	Letort Spring Watershed	2021	Connect goals of conservation plan to CAP goals	Plan writing	\$5,000	N/A	N/A	2022 - Plan was accepted in August 2021 2021 – Public Meeting #2 held 6/26/2021. Final plan to be sent to PA Coldwater Heritage Partnership by 8/6/2021 for final review.
2.13B	Implement the Cold Water Conservation Plan for Letort Spring Headwaters	Implement recommended BMPs from plan and habitat study	Cumberland Valley Trout Unlimited, CCCD	Letort Spring Watershed	2022-2025		Designs for habitat restoration	Average \$8,000 per year per project		\$ Match	2023 - No progress this year due to some District staff change. Letort Regional Authority and CVTU are working together to develop an action plan. 2022 - CPC property work has been on-going to remove invasive plants and plant natives. Downstream of CPC property (Vince's Meadow area) owned by CVTU and the adjacent parcels owned by Letort Regional Authority would like to do similar work. Possible wetland restoration/riparian buffer work and could potentially be part of a project proposal this Fall. Opportunities also exist for the property upstream of CPC property (Otto's meadow) owned by CVTU. 2021 – This initiative is slated to start in 2022. CCCD will contact habitat specialists in Fall 2021 to start looking at priority restoration sites. Once several sites are picked, we will have a meeting with agency personnel (DEP/Army Corps/PAFBC) for permitting course of action(s).

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2.14	MS4-related Pollutant Reduction Plan Implementation	Plan implementation by end of current permit term Stay up to date with MS4 Workgroup on their successes and needs	Cumberland County MS4 municipalities	Urbanized planning area	2025	Municipal capacity to implement plans (technical, financial)	Municipal engineer design/permit, construction readiness	Unknown value	N/A	N/A	2023 - Same status as 2022. 2022 - Outreach to MS4s indicates that fundraising continues and many are on track to implement their plans by 2023. 2021 – MS4 communities continue to work through the implementation of their PRPs. COVID related delays on construction have held up the schedule to some extent. It was also difficult to set up meetings with private landowners to discuss easement agreements and gaining access to properties.
2.15	Wet Pond/Wetland Installation	Identify 1 large property owner from University of Vermont restorable wetland layer to install and preserve a 300-acre wetland	Wildlife for Everyone?	Priority watershed (ag or non-ag)	ID landowner (2023) Funding (2024) Design/permit (2025) Construction (2025-2026)	Landowner participation, permitting, funding	GIS mapping Outreach	N/A	Design, permitting, construction	\$1,000,000	2023 - HRG is underway with creating a master plan for the Mount Holly Marsh Preserve and creating a cost estimate based upon the feedback received from stakeholders. County staff will be reviewing in July for August finalization. The preserve includes a stream/wetland complex that is in need of restoration in addition to recreational improvements. The timeline of this project will likely extend beyond 2026. 2022 - The Mount Holly Marsh Preserve is a potential county-owned site for this BMP, though the primary goal of the project is stream restoration/legacy sediment removal. We continue to need another partner/landowner to come forward to take the lead. 2021 - The CAP team would benefit from a partner organization taking the lead on this initiative. The schedule will need to be extended to insert the step of identifying a lead organization before or in parallel with identifying some candidate landowners.
2.16	Impervious surface reduction project	Identify a blighted area that could be converted to a park (3-acre area) Report 15 acres reduced through PRP implementation	Cumberland County Housing and Redevelopment Authority and municipalities	Carlisle Borough?, river-bordering Boroughs?, Newville and connect to Cumberland Valley Rail Trail?	ID landowner (2023) Funding (2024) Design/permit (2025) Construction (2025-2026)	To enhance buy-in and identify co-benefits to water quality, will need municipalities to define project priorities for the blighted property designations. Would need to do outreach/build support ahead of parcel targeting.	Mapping	?	Design, permit, construction	\$3,000,000	2023 - No progress. One municipal MS4 coordinator who showed interest is no longer in his role. CAP partners will meet with the County Blighted Properties Review Board in 2024 to identify possible locations for impervious surface reduction. Partners will also discuss possible reductions in Carlisle Borough. 2022 - No progress has been made to date but municipal outreach has been identified as a specific goal for 2023 to see if anyone is interested. 2021 – No progress has been made to date due to team capacity. It is also not a high priority due to low nitrogen reduction potential and high anticipated capital cost.
2.17	Continue dirt and gravel road program	Restore 0.75-mile per year, 19,800-feet overall	CCCD	County Wide	2025	Continue D&G Road program funding	Education, technical assistance, project oversight	\$225,000 per year	N/A	N/A	2023: LVR project in West Pennsboro Township. Phase 1 complete - moved bank back to alleviate flooding concerns. Phase 2 to occur in spring 2024 - raise the road and insert culverts under road. LVR culvert replacement project in Lower Mifflin Twp. Thirty-inch culvert replaced with 11-foot aluminum box culvert completed August 2023. Bridgewater Road, Lower Mifflin Township, project to improve multiple problem areas will possibly begin late 2023. 2022 - We currently have 2 active projects with LVR: both drainage improvements: Penn Township, Beetem Hollow Road, Trib to YB: estimated to install 2000 ft 6" perforated underdrain, one cross pipe, and 175 ft x 20 ft wide French Mattress--Grant: \$78,772.15, Twp In-Kind: \$42,900, Total Project Value: \$121,672.15. Linear Road footage: 2,289 ft. North Newton Township, Oakville Road, Trib to Conodoguinet: underdrain on both sides of the road, about 600 ft and one cross pipe replaced. DGR, Dickinson Township, Cold Springs Road, Trib to Mountain Creek: will have one project (completed before Sept. 30) for Driving Surface Aggregate (DSA) on 4,250 ft--this will finish out Cold Springs South. Prospective projects for 2023 are in various stages of design/permitting. 2021 – Two culverts were replaced with the low volume roads program. The dirt and gravel road program will repair 4200 feet of road including drainage and surfacing.
2.18	Utilize stormwater fee credit programs (where they exist) to collect existing farm BMP information	Catalogue farm BMP information collected by municipalities with stormwater fees	Silver Spring Township	Silver Spring Township	2021	Policy is new so education to farming community will be key	Plan review/Township staff training Data Collection Practice Keeper input	N/A	N/A	N/A	2022 - Any plans received through this program will be reviewed for Township stormwater policy needs and entered into PracticeKeeper. 2021 – Stormwater fee credit program for farms in Silver Spring Township has started and site visits are planned for 2021/2022 to verify credit eligibility. Sharing data for PracticeKeeper input will be a challenge due to privacy concerns.

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Priority Initiative 3: Monitoring, Verifying, Researching, Educating, and Training											
3.1A	Enhanced local monitoring program	CAST-21 acknowledgement of our data	ALLARM/Dickinson College,	Countywide	Ongoing	Consistent data collection, QAQC continuation	Sample collection	N/A	Sample Collection for new sites	N/A	2023 - The Chesapeake Monitoring Cooperative (CMC) is continuing development of their Community-Based Restoration Monitoring Protocol which targets restoration projects and assesses their short- and long-term impacts over time. This protocol
3.1B	Enhanced local monitoring program – Mount Rock Spring Creek Watershed	Set up HUC-12 level watershed monitoring program in focus watershed so that as BMPs are installed, we can monitor water quality changes	ALLARM/Dickinson College, Shippensburg University, CCWA, CVTU	Mount Rock Spring Creek Watershed	Ongoing	Consistent data collection, QAQC continuation	\$30,000 intern salary budget QAQC	N/A	N/A	\$10,000 EQUIPMENT -2021	2023 - Same status as 2022. 2022 - This initiative continues to be in the workplan under the 2021 NFWF INSR grant. 2021 – See Initiative 3.1A for update on expanded monitoring. Should additional BMP installations occur at scale in the Mount Rock Spring Creek watershed as a result of the 2021 NFWF INSR award, the CMC protocol will be utilized by ALLARM for enhanced BMP monitoring.
3.2A	Continue farm decision-maker trips to showcase BMPs that work	Two trips per year, increase participation by 10% each year	CBF, CCCD, NRCS, Cumberland County Farm Bureau	Cumberland County	Fall and Spring of each year	Promotion to increase participation each year, expand logistics/# of local and Bay trips to allow for increased participation, consider alternative transportation options to canoes if it helps to scale up the initiative	N/A	Trip coordination and field facilitation	N/A	\$2000 per year to expand resources	2022 - This program has not picked up post-COVID and needs a supplemental funding source from CBF. Educational trips will continue to be a communications strategy. 2021 – A summer trip occurred in July that included a few local farmers on the ag action team and County staff as a “thank you” for participating in the development of the CAP.
3.2B	Farm outreach town halls	Three per year, increase participation by 10% each year, sign farmers up for plans and project site visits	CBF, CCCD, NRCS, Cumberland County Farm Bureau, LFT	Cumberland County	Winter, Spring, Fall of each year	Promotion to increase participation each year	Coordination	\$7,000	N/A	\$7,000	2022 - This program has not picked up post-COVID and needs a supplemental funding source from CBF. Educational trips will continue to be a communications strategy. 2021 – Due to COVID restrictions, no progress in 2021.
3.3	Utilize Restoration Reports for landowner outreach	Assist with development of Restoration Reports Train outreach team members on it	South Mountain Partnership, Chesapeake Conservancy, CCWA, YBWA, Mountain Creek Trout Club & Conservation Society, Cumberland Valley Trout Unlimited	Cumberland County	2021	Relevance for target landowners – guide the process to the targeted audiences	Background data to support development of Restoration Reports	~\$2000	Consulting support to build out Restoration Reports for Cumberland County landowners	\$10,000	2022 - No update and the tool continues to be available for use. 2021 – The Restoration Reports website went live in July 2021. Clean Water Cumberland promotes the use of it on social media and the project website.
3.4	Enhance the capacity of local watershed associations for short-term success and long-term sustainability	Share each other’s social media content When developing water quality projects, include them in the scoping/funding process When we utilize/obtain funding for outreach, reserve some for partner promotional items (hats, shirts, etc.) Encourage project implementation on the watershed level so that these partners enhance their relationships with non-peers with a co-benefit of diversifying their membership	CCWA, YBWA, Mountain Creek Trout Club & Conservation Society, Cumberland Valley Trout Unlimited, Big Spring Watershed Association, Letort Regional Authority, Friends of Opossum Lake, Middle Spring Watershed Association, POWR	Countywide	Ongoing	Continued coordination among a lot of active groups, keep project leads list active so that watershed approach to grant applications can be developed well in advance of submittal deadlines	Social media shares Project development support	Limited match	N/A	\$5000 per organization to produce promotional materials (hats, shirts, stickers) for members	2023 - All watershed organizations have attended multiple different public outreach events and have hosted multiple creek clean up events. BSWA constructed an educational sign along the Big Spring Creek. LRA is working on extending the LeTort trail and manage invasive species. LRA is also working with CVTU to create a LeTort Action Plan. CVTU has helped with the implementation of BMPs along the Yellow Breeches creek. MCTCACS has completed restoration efforts at Veterans park and they are working with private land owners to do manual removal of log jams and creek clean ups. MCTCACS and BSWA has been connected with POWR. 2022- CWCA is supporting a grant to DEP for portage site at Heishman’s Mill on Conodoguinet about 5 miles west of Carlisle. 2021 – CCWA Commemorative Booklet grant for printing copies has been secured. Also looking at printing bookmarks to promote CCWA—unsure of funding source. Secured Rain to Drain, Slow the Flow Kits (CCCD through PA DEP Educational Grant) and borrowing Freddy the Fish for education at Carlisle Farmers Market on August 4. Several Creek Cleanups occurred on the Conodoguinet. Tree Plantings occurred in the spring. YBWA looking at getting stickers to promote YBWA. Annual Creek Cleanup held in July 2021. Tree planting in spring 2021. Cumberland/ Franklin CD/Adams CD held Tri-County Watershed Meeting in March 2021. BSWA working with MWS to tackle invasive plants along Big Spring. MSWA is looking to expand to several tributaries close to them. Several Creek cleanups this past spring.
3.5	Conservation Excellence Grant Planning Tool	Develop a spreadsheet decision tool or web-based “Turbo Tax” like tool so a practitioner or farmer can decide what the right mix of grant/loan/tax credits is for their farm based on their income statement, balance sheet, and other factors to be determined	Penn State Extension, State Conservation Commission, PENNVEST, Ag Choice Farm Credit	Cumberland	2021	Success of program so that it can be expanded to other counties, support Center for Water Quality Excellence so that funding can be simpler for landowners	Farm Business Advising Financial Service Support Private Sector Banking Support	N/A	Coding/programming	N/A	2022 - Additional funding sources for farm projects continue to come online and HRG has started serving as a “filter” regarding which programs are best for which project. 2021 – There is currently more funding available than interested farmers, so this initiative has not proceeded. We still believe that a decision-making tool would be helpful to be integrated into CAP implementation so that practitioners can get up to speed faster. The current approach of field staff needing to have significant knowledge of BMPs and the myriad of funding options in order to be effective with landowners slows down our progress because of the time it takes for staff to “get up to speed” and develop relationships with landowners.