

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 |
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| | | | | | | | Technical | Financial | Technical | Financial | |
| 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> |
| 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> | | <p>Full BMP implementation dollars (~\$225,000)</p> <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> <p>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.</p> | |

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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 | | | <p>2022: A higher focus has been afforded towards conservation/preservation of existing large-scale forested areas. A more detailed analysis of tools to assist landowners with preservation will be explored in 2023 as a result of the prioritization exercises of two action teams.</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. The PNA Action team will most likely merge with the Buffers Action team as efforts are overlapping and this change may help streamline efforts.</p> |
| 1.4 | Promote and assist implementation of Forest, Farm, and Wetland Conservation BMPs in priority areas | <p>Farmland Conservation – 3,900 total acres</p> <p>Forest Conservation – 4,000 total acres</p> <p>Wetland Conservation – 160 total acres</p> | 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) | <p>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. A more accurate number of potential farms and/or acreage is anticipated through the catchment assessments processes and delineation of farm parcels against previously captured data.</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.</p> |
| 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 | | <p>2022: See note 1.4</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.</p> |

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| Priority Initiative 2: Agriculture | | | | | | | | | | | |
| 2.1 | Develop a game plan for potential increased efficiencies or nutrient reductions with fertilizer applications | Game plan/approach defined-completed | 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) via the direct outreach effort and Bobs Creek supported by WPC outreach efforts. 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> |

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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 |
| 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 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 Barnyard Runoff Controls (BRCs) implementation targets in the long run through a combination of capturing previous unrecorded improvements and new improvements. 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 |

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| | | | | | | | | | | | considering ag BMPs (barnyard controls, HUAs, prescribed grazing, etc.) |
| 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 LTVPs and one-on-one engagements process. As the catchment targeting/assessment process continues through 2024 and 2025, it is anticipated a more clear picture of the full inventory of opportunities and previously uncaptured information will be realized.</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 | <p><i>Core Nitrogen Nutrient Management (13,000 acres)</i></p> <p><i>Core Phosphorus Nutrient Management (3,500 acres)</i></p> <p><i>Nutrient Management-Nitrogen Rate (10,000 acres)</i></p> <p><i>Nutrient Management-Phosphorus Rate (10,000 acres)</i></p> <p><i>Nutrient Management-Nitrogen Placement (13,000 acres)</i></p> <p><i>Nutrient Management-Phosphorus Placement (10,000 acres)</i></p> <p><i>Nutrient Management-Nitrogen Timing (14,000 acres)</i></p> <p><i>Nutrient Management-Phosphorus Timing (10,000 acres)</i></p> | 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. One-on-one engagements will continue to be pursued as a result of the catchment targeting/assessment process.</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> |
| 2.6 | Promote and assist implementation of improved animal unit practices in priority areas | <p><i>Manure Storage Facilities – 30,000 AUs</i></p> <p><i>Dairy Precision Feeding – 14,000 Dairy Cow AUs</i></p> <p><i>Manure Transport out of Bedford County – 2,000 dry tons/year</i></p> | 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) | <p>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.</p> <p>2021: Manure storage is lumped in with compliance practices and generally a practice</p> |

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| | | | | | | | | | | | observed with other compliance BMPs implementation. |
| 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. 2021: There has been no major push or outreach associated with this action. |
| 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 | | | | | 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 through engagements thus far. 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. |

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

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| Priority Initiative 3: Riparian Buffers | | | | | | | | | | | |
| 3.1 | <p style="background-color: yellow;">Promote and assist implementation of buffers in agricultural riparian zones in priority areas</p> | <p><i>Forest Buffer (2,300 new acres)</i></p> <p><i>Forest Buffer with Streamside Exclusion Fencing (2,000 new acres)</i></p> <p><i>Grass Buffer (1,400 new acres)</i></p> <p><i>Grass Buffer with Streamside Exclusion Fencing (900 new acres)</i></p> | RB Action Team, BCCD, non-profit partners, 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, non-profit partners (WPC, etc.) | EQIP NFWF | | Full BMP implementation dollars (~\$2.07 million) | <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 Preservation of Natural Areas (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> |
| 3.2 | <p style="background-color: yellow;">Promote and assist implementation of buffers in non-agricultural riparian zones in priority areas</p> | <p><i>Developed Areas Riparian Forest Buffers (40 new acres)</i></p> <p><i>Rural Areas Forest Buffers (140 new acres)</i></p> | 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) | <p>2022: See note for 3.1</p> <p>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.</p> |

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| 3.3 | <div style="background-color: red; color: black; padding: 2px;">Explore model ordinance language for requiring buffers in development projects</div> | | BCPC, RB Action Team | countywide | Game plan by late 2020 (followed by imp.) | | | | | | <p>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.</p> <p>2021: While the team has expressed a desire for movement on this action and explored options, there is significant political pushback associated with this approach.</p> |

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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 | | | | | <p>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 at some point in late 2022 or early 2023.</p> <p>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.</p> |
| 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* | <p>2022: There is a general understanding of where upgrades are needed (plants, plans, etc.), the limiting factor is funding.</p> <p>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.</p> |
| 4.3 | Promote and assist the implementation of septic system improvements | <i>Septic Denitrification, Conventional – 100 systems</i> | PSP Action Team, BCPC, municipalities | Countywide with initial focus on priority catchments | Mid 2021-2025 (and beyond) | Funding for improvements, homeowner resistance | Local consultants/ engineers | | | BMP implementation dollars (~\$120,000) | <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> |

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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. This potential action will be revisited in 2023 with the understanding DEP has allocated funds for Act 167 Plan development or updates. 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. |
| 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 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 | 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 |

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| | | | | | | administrative hurdles* | | | | | 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. |
| 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. |
| 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. |

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 (2021) |
|----------|---|--|---|--|-------------------------------|---|------------------------------|--------------------------------------|------------------|--|---|
| | | | | | | | Technical | Financial | Technical | Financial | |
| 5.6 | Promote and assist implementation of urban/suburban sector controls for nutrient and sediment reductions | <p><i>Advanced Grey Infrastructure for IDD&E Control (250 acres treated)</i></p> <p><i>Impervious Surface Reduction (1 acre)</i></p> <p><i>Urban Nutrient Management (3,400 acres)</i></p> | Municipalities | Countywide with initial focus on urban communities and priority catchments | Late 2020 – 2025 (and beyond) | <p>Urban nutrient management is dependent on fertilizer legislation</p> <p>Tight timeframe for significant BMP implementation</p> <p>Long-term verification processes</p> <p>No MS4 communities in Bedford County</p> | Local consultants/ engineers | NFWF, GG, EPA, munic. | | Full BMP implementation dollars (~\$17,000) | <p>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.</p> <p>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.</p> |
| 5.7 | Promote and assist implementation of stormwater control measures that incorporate Low Impact Development (LID) approaches | <p><i>Wet Ponds and Wetlands (40 acres treated)</i></p> <p><i>Stormwater Performance Standards-Runoff Reduction (350 acres treated)</i></p> <p><i>Bioretention/Raingardens (15 acres treated)</i></p> <p><i>Vegetated Open Channels (10 acres treated)</i></p> <p><i>Filtering Practices (5 acres treated)</i></p> | SW Action Team, BCPC, municipalities | 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>Partially tied to capture of unreported BMPs</p> | Local consultants/ engineers | NFWF, GG(DEP), EPA, DCNR, developers | | Full BMP implementation dollars (~\$600,000) | <p>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 included in these efforts, Action 5.5 is the overall driver of BMP types that are anticipated to be implemented.</p> <p>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.</p> |

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|----------|---|---|--|---------------------|--------------------------|--|-----------------------------|----------------------------------|------------------|-----------|--|
| | | | | | | | Technical | Financial | Technical | Financial | |
| 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 as four dirt & gravel road and two low volume road contracts were completed last year. A possible pilot project in rural areas of the Yellow Creek watershed have been identified to potentially use this program as the anchor for multiple improvements within a single catchment focusing on road run-off, ag practices, stream health and stability, and general stabilization. 2021: Popular program in Bedford County with no plans to inhibit effort. |

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|--|---|-----------------------|---|---------------------|--|---|---------------------|-----------|---|---|--|
| | | | | | | | Technical | Financial | Technical | Financial | |
| 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. |
| 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, and a page was added to the website in early 2022 to include CAP-related information. However, it became apparent the overall website needed updated (“make over”) and the BCCD website is currently being updated and will continue to hold CAP related data and information once the update is complete in 2023. 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. |
| 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 (farmers, municipal representatives, landowners, etc.) 2021: Centerpiece of the plan was a website and assistance with messaging from WWTW. One-on-one engagements, press releases, etc. continue. |

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|----------|---|-----------------------|---|---------------------|--|--|---------------------|-----------|------------------|-----------|--|
| | | | | | | | Technical | Financial | Technical | Financial | |
| 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 | | | | | <p>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. It is anticipated that continued development of these relationships will ultimately help build a bridge to other local government representatives.</p> <p>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.</p> |
| 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 | | | | | <p>2022: Bedford Fair is the primary large-scale general engagement activity outside of one-on-one engagements. The local team will continue to follow the one-on-one engagement approach as this has resulted in receptiveness to the CAP goals and objectives.</p> <p>2021: Several engagements have been conducted, or CAP-related messaging was involved (e.g. Bedford Fair). However, numerous events have been postponed or cannot go forward (e.g. Home and Garden Show) due to COVID restrictions.</p> |

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

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

1. Inputs – These are both existing and needed resources, public and private, to implement the identified priority initiative. These include both technical and financial resources, such as personnel, supplies, equipment and funding.
2. Process – what is each partner able to do where and by when. These are the action items listed under each priority initiative.
3. Outputs and outcomes – both short and long-term. These are the priority initiatives identified by each county. The performance targets are the intermediate indicators that will measure progress.
4. Implementation challenges – any potential issues or roadblocks to implementation that could impede outputs and outcomes.

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

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

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

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

Responsible Party(ies) = Who. This is/are the key partner(s) who will implement the action items 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).