

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	
Priority Initiative 2: Agriculture											
2.1	Develop a game plan for potential increased efficiencies or nutrient reductions with fertilizer applications		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				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 4 th qtr 2021 with initial focus in the Yellow Creek watershed.
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			Funding for staff for plan entry	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	Soil Conservation and Water Quality Plans (102,000 total acres) Core Nitrogen Nutrient Management (76,000 total acres) Core Phosphorus Nutrient Management (22,000 total acres) Barnyard Runoff Controls (9 new acres)	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 State Reimb Program	NRCS DEP	Full BMP implementation dollars (~\$2.0 million)	2021: EQIP, CEG, etc. have proven popular in the county. CAP implementation funds were able to be provided to 3 farms to assist with stretching monies (all funding streams) further overall. Implementation of compliance practices are the priority when considering ag BMPs (barnyard controls, HUAs, prescribed grazing, etc.)

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)	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.
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)	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.

2.6	Promote and assist implementation of improved animal unit practices in priority areas	<p>Manure Storage Facilities – 30,000 AUs</p> <p>Dairy Precision Feeding – 14,000 Dairy Cow AUs</p> <p>Manure Transport out of Bedford County – 2,000 dry tons/year</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	Local experts and agencies	EQIP	NRCS	Full BMP implementation dollars (~\$3.6 million)	2021: Manure storage is lumped in with compliance practices and generally a practice 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)	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)						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.
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	<p>Limited definition of cover crops and what would count as a reduction</p> <p>Addition of cover crops approach allowing fall nutrients and spring harvest would be ideal and incorporate additional acres.*</p>	<p>BMP Quick Reference Guide</p> <p>Local experts and agencies</p>				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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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).