

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

Green - action has been completed or is moving forward as planned Yellow - action has encountered minor obstacles Red - action has not been taken or has encountered a serious barrier

Action #	Description	Performance Target(s)	Responsible Party(ies) and Partnerships	Geographic Location	Expected Timeline	Potential Implementation Challenges or Recommendations	Resources Available				Resources Needed				Annual Progress to Date (2022)
							Technical	Source	Financial	Source	Technical	Suggested Source	Financial	Suggested Source	
Priority Initiative 1: Fertilizer Management															
1.1	Implement conservation and nutrient management plans	Agriculture Develop VAO NMP's on 1,000 additional acres	CCCD, Farmers, Consultants	Countywide	Ongoing	Landowners buy-in, funding	CCCD, NRCS		REAP, Growing Greener				CAP Grant	DEP	8/2022 – 7 ACT 38 operations maintain NMPs, plus 5 volunteer operations have plans written
1.1a	Review 2 Nutrient Management Plans per year	Agriculture	CCCD, SCC, consultants	Countywide	Ongoing		CCCD		SCC						8/2022 – Reviewed 3 NMPs in 2022
1.1b	Review 5 Nutrient Balance Sheets per year	Agriculture	CCCD, Consultants	Countywide	Ongoing		CCCD		SCC						8/2022 – approximately 20 nutrient balance sheets in 2022
1.1c	Write 10 Ag E&S Plans per year	Agriculture	CCCD	Countywide	Ongoing		CCCD, Interns		CBP						8/2022 – Have written 10 Ag E&S plans in 2022
1.1d	Track use of variable rate nutrient application	Agriculture	CCCD, Farm Service Agency	Countywide	Ongoing	Agreements needed with FSA to share data	CCCD, FSA				FSA				8/2022 – agreement has not been met with FSA to share this data
1.2	Expand soil testing	Agriculture	CCCD, Farmers, PASA	Countywide	Ongoing	Funding			Ed grants	PACD			CAP Grant	DEP	8/2022 – soil tests were collected as part of nutrient management planning
1.3	Increased adoption of no-till & conservation tillage	Agriculture	CCCD, Farmers	Countywide	2025	Lack of acceptance from farmers	CCCD, NRC S, Pa No-Till Alliance		REAP				CAP Grant	DEP	8/2022 – currently 1,000 acres enrolled in the soil health grant are no-tilled, plus many more acres throughout the county practice no-till but are not part of

2.3	Pesticide education for farmers and residential applicators	Agriculture 100 residents per year	CCCD, Farmers, Residents, PSU Ext.	Countywide	2025	Funding	CCCD,NRC S, PSU Ext.				Technical knowledge and outreach materials	PSU Extension, marketing consultant	\$2,500	PACD Ed. Grants	3/2022 – 40 people reached at District Ag Conference
Priority Initiative 2: Developed Stormwater															
1.1	Inventory/imp improvements for point source pollution such as WWTP, industry, septic	Identify Runoff Reduction Areas	CCCD, DEP, CMCSWP, municipalities, BU	Urban and developed areas	2025	Funding, Available staff	Data retrieval	DEP	None		Data retrieval	CCCD, DEP	\$10k/yr intern	CAP, DEP, DCED	8/2022 – municipalities are working on inventorying potential pollution reduction areas
1.2	Inventory/imp improvements for non-point source pollution such as buffer plantings, forest connectivity	Identify Runoff Reduction Areas Buffer Plantings – 25 acres Forest Plantings – 2350 acres	CCCD, DEP, municipalities, DCNR, USFWS, BU	Urban and developed areas	2025	Funding, buy in, lack of interest	Landscaping, botany	USFWS, PFBC, DCNR, NRCS, Penn State Master gardeners	10 Million Trees	CAP, DEP, DCED, DCNR, CBF, PACD	Landscaping, botany	USFWS, PFBC, DCNR, NRCS, Penn State Master gardeners	\$100k	CAP, DEP, DCED, DCNR, CBF, PACD	8/2022 – municipalities are working on inventorying potential pollution reduction areas
1.3	Inventory/imp improvements or non-point source pollution via DGLVR roads	Identify Runoff Reduction Areas DGLVR – 12 miles	CCCD, DEP, municipalities, DCNR, USFWS, TU	Urban and developed areas	2025	Funding, buy in, lack of interest	DGLVR program Stream structure construction	USFWS, PFBC, DCNR, NRCS, C-SAW	\$400k/yr	CAP, DEP, DCED, DCNR,	DGLVR program Stream structure construction	USFWS, PFBC, DCNR, NRCS, C-SAW	\$200k/yr	CAP, DEP, DCED, DCNR,	8/2022 – 5 road projects completed in 2022. Heights Road -Berwick Borough (~.1 mile), Taylor Road – Madison Township (~.65 miles), Karns Road, Benton Township (.3 miles), Gas Well Road – Cleveland Township (~.5 miles) Belles Road, Orange Township (~.5 miles)

1.4	Consider existing plan recommendations/policies such as MS4 pollution reduction plans, road salt and herbicide use	Identify Runoff Reduction Areas 60 acres	CCCD, DEP, CMCSWP, municipalities, Co. Resiliency office	Urban and developed areas	2025	Funding, MS4 permit requirements	Planning, design, construction	Co. Resiliency, Co. Planning, Penn State Ext, Private sector, municipalities C-SAW	Program funds	Co. Resiliency, Municipalities	Planning, design, construction	Co. Resiliency, Co. Planning, Penn State Ext, Private sector, municipalities C-SAW	\$100k	CAP	8/2022 – made suggestions to the new MS4 Coalition for their PRPs
1.5	Promote green infrastructure projects such as bioretention, rain gardens, downspout planters, pervious pavement	Identify Runoff Reduction Areas 100 acres	CCCD, DEP, CMCSWP, municipalities, Co. Resiliency office, Chamber	Urban and developed areas	2025	Funding, Buy in from municipalities, businesses	Contacts, Planning, design, construction	Chamber, Private sector	grants	DCED, Giant, other corporations	Contacts, Planning, design, construction	Chamber, Private sector	\$100k	CAP, DCED, Giant, other corporations	8/22 – Applied for an Env. Ed grant to install downspout planters in Berwick Borough. Bioswale and retention pond installed in Kinney Run watershed. Included a bioswale project with Hemlock Twp in our 2023 CAP Impl. Application. The bioswale will be located in an around where numerous stream projects have been completed, and the township will receive MS4 credits for the bioswale. Folk’s Butterfly Farm installed a rain garden.
1.6	Education and Outreach materials/events	Identify Runoff Reduction Areas	CCCD, CMCSWP, Watershed Groups	Urban and developed areas	2025	Volunteers to help run events, funding, develop materials	CCCD webinars, presentations, materials, venue, and	BU, CCCD, Gov agencies, private sector	Grants, program funds	DEP, PPL, PACD, volunteer groups, municipalities	CCCD webinars, materials, venue, and equipment, graphic design	BU, CCCD, Gov agencies	\$25k	DEP, PPL, PACD, volunteer groups, penn St. ext	8/2022 – completed two workshops on protecting groundwater and presented at one public event and one township

							equipment i.e.: rain barrel workshop, downspout planter demo			palities					supervisor/road crew training
2.1	Develop model ordinance template to improve water quality and sw mgmt	Revise Ordinance Requirements Impact goal: 50acres	CCCD, Co. Planning, Centre Co. CD, municipalities	County-wide	2025	Funding, Buy in	Co. Planning	Co. Plannin g, Private sector	TBD	TBD	Planning consultant		Consultant fees	Growing Greener, NFWF, CAP, DCED	8/2022 – we have made suggestions to the County Planning and municipalities, but we have not seen any ordinance changes yet
2.2	Promote low impact development/ greywater use	Revise Ordinance Requirements Impact goal: 2200 acres	CCCD, Co. Planning, municipalities, Chamber	Urban and developed areas	2025	Funding, Buy in	Co. planning	Co. plannin g, private sector	TBD	TBD	Planning consultant		Consultant fees	Growing Greener, NFWF, CAP, DCED	8/2022 – we have promoted the reuse of greywater, but it's up to municipalities to implement for their MS4 requirements. Individual landowners have been installing rain barrels throughout the county
2.3	Promote CAP practices and goals	Revise Ordinance Requirements Impact goal: 500 acres	CCCD, Co. Planning, municipalities	County-wide	2025	Funding, Buy in	Co. planning	Co. plannin g, private sector	TBD	TBD	Planning consultant		Consultant fees	Growing Greener, NFWF, CAP, DCED	8/2022 – the CCCD is always promoting BMPs and ways to reach our CAP goals
2.4	Education and Outreach	Revise Ordinance Requirements	CCCD, Co. Planning, municipalities	County-wide	2025	Funding, Buy in	CCCD, Gov agencies, stream table	CCCD, stream table	TBD	TBD	Staff to hold twp meetings/ demo	CCCD	Developing event materials	PACD, Penn State Ext	4/2022 – Attended numerous MS4 coalition meetings and made suggestions and encouraged that they revised their ordinances
Priority Initiative 3: Stream Restoration															

1.1	Wetland/Floodplain Conservation	60 acres - Wetland restoration and/or preservation	CCCD	1) Above Camp Lavigne/Gary Cook, 2) Foundryville/Glen Brook 3) Summerville, 4) ESPY, 5) Back Branch area, 6) Oville confluence, 7) above FC Cabin area, 8) Pealertown/zaners/stillwater 9) Parrs Mill area, 10) Beaver twp, 11) Mainville	2025	More technical support for delineations, funding, design work Landowner agreements	Planning, design, construction	USFWS, Land Trusts, NRCS, GG, CCCD	NRCS program	USFWS, Land Trusts, NRCS, GG NRCS program	Planning, design, construction	USFWS, Land Trusts, NRCS, GG, CCCD	\$50k	USFWS, Land Trusts, NRCS, GG NRCS program, CAP	8/2022 – 1.5 acres of wetlands installed on Bond property. Cook and Shaffner floodplain plantings (approx. 25 acres)
2.1	Riparian Buffers	1000 acres - Riparian Buffer plantings	CCCD	County-wide – where canopy is not present along waterways	2025	Maintenance, landowner cooperation	Long-term maintenance funding or labor Planning, design, construction	CBF, DCNR, PACD, GG, Private sector, CCCD	10M trees	CBF, DCNR, PACD, GG	Long-term maintenance funding or labor Planning, design, construction	CBF, DCNR, PACD, GG, Private sector, CCCD	\$50k	CBF, DCNR, PACD, GG, CAP	8/2022 – buffers planted at Arnold’s Golf course, Moore’s, Ulanoski’s, Hartzel’s – about 1.5 acres of forested or grassed/pollinator buffers
2.2	Riparian Buffers	1000 acres - No Mow zones	CCCD	County-wide – developed and roadside areas	2025	DCNR Lawn conversion, Landowner buy in, Municipality cooperation	Funding and technical assistance for pollinator enhancements, Ordinance updates	Municipalities, legal, planning, CCCD			Funding and technical assistance for pollinator enhancements, Ordinance updates	Municipalities, legal, planning, CCCD		CAP, DEP, CBF	5/2022 – A few landowners have contacted us for signs to implement no-mow zones, however townships are fighting us on ordinances and are requiring them to mow. County Housing Redevelopment FEMA properties to be planted with pollinators and become no-mow areas.
2.3	Riparian Buffers	Japanese Knotweed removal and invasive species treatments	CCCD	County-wide	2025	Need aquatic-safe treatment products, continual treatments and monitoring	Planning and labor/equipment for proper removal	CBF, DCNR, PACD, GG, Private sector, CCCD		CBF, DCNR, PACD, GG	Planning and labor/equipment for proper removal	CBF, DCNR, PACD, GG, Private sector, CCCD	\$100k	CBF, DCNR, PACD, GG, County, CAP	10/2022 – knotweed cutting at Kocher Park. Small patches of treatment, but county-wide management has not happened
3.1	Streambank Stabilization	13,000 feet - Grading banks back for floodplain access	CCCD	Throughout Fishing Creek WS, Roaring Creek WS, Chilli Creek WS	2025	Permits required	Planning, design, construction	CCCD, DEP, Private Sector	Grants and programs	GG, CAP, County	Planning, design, construction	CCCD, DEP, Private Sector	\$25k	GG, CAP, County, CBF	8/2022 – from Feb. 2022 – Aug. 2022, approximately 5000 linear feet of streambanks have

															been reconnected to floodplains
3.2	Streambank Stabilization	13,000 feet - In-stream habitat structures	CCCD	Throughout Fishing Creek WS, Roaring Creek WS, Chilli Creek WS	2025	Permits required	Planning, design, construction	GG, NPC, TU, CCCD, NRCS	Grants and programs	GG, CAP, County	Planning, design, construction	GG, NPC, TU, CCCD, NRCS	\$50k	DEP, GG, CAP,	8/2022 – from Feb. 2022 – Aug. 2022, approximately 5800 linear feet of stream structures have been installed in the county (Arnold’s, Hartzel, Kinney Run sites, Ulanoski, Rodriguez/Hough, Skeet Club, Shaffner, Bond’s). Numerous stream projects are proposed for 2023.
3.3	Streambank Stabilization	5000 ft - Livestock exclusion fencing	CCCD	County-wide – see ag BMPs	2025	Water access	Planning, design, construction	GG, NPC, TU, CCCD, NRCS	Grants and programs	GG, DEP, CAP	Planning, design, construction	GG, NPC, TU, CCCD, NRCS	\$25k	GG, DEP, CAP	8/2022 – none completed to date, but landowners are lined up for future projects
4.1	Education and Outreach	Increase landowner outreach and develop outreach handouts	CCCD	County-wide	2025	Reaching landowners, changing “traditional” views	Layout, concept	Private sector, DEP, PACD	Grants and programs	DEP EE, PACD NPS	Advertising assistance, graphic design	Private sector, DEP, PACD	\$2k	DEP EE, PACD NPS	8/2022 – Watershed organization meetings, native plant and tree sale, numerous conferences, and a watershed festival were held to promote public outreach and conservation practices
4.2	Education and Outreach	Develop StoryMapping tour(s) on website	CCCD	Online	2025	Funding for annual fees and update websites, Learning curve, drone use, showcase projects and programs	Show at conferences, fair, watershed meetings, post online	Private sector, County GIS, DEP, CCCD	Grants and programs	DEP EE, County GIS	Show at conferences, fair, watershed meetings, post online	Private sector, County GIS, DEP	Develop to promote programs and showcase projects	DEP EE, County GIS	8/2022 – lack of time and IT assistance
4.3	Education and Outreach	Stream redesignation studies	CCCD	Fishing Creek WS Briar Creek WS Roaring Creek WS	2025	Funding for more staff to monitor streams and update listings	Training, interns to monitor	DEP, PFBC	Grants and programs	DEP	Training, interns to monitor	DEP, PFBC	\$20k	DEP, CAP	8/2022 – currently implementing projects to improve stream qualities and will reassess at a later date

Priority Initiative 4: Preservation of Natural Areas															
1.1	Preserve farms through the Farmland Preservation Program	Limit Development in Ag/Natural Areas 1 farm/year or 2,200 acres	CCCD, Farm Bureau, FSA, NRCS	County-wide	2025	Funding	Legal Advice Program admin knowledge	Lawyer CCCD	\$180k/yr \$1200/acre	PDA	Legal Advice Program admin knowledge	Lawyer CCCD	Increase funding to \$400k/yr \$2000/acre	CAP	8/2022 – Faus farm and Soil Bound preserved in 2022 (approximately 185 acres)
1.2	Partner with conservancies and agencies to establish conservation easements	Limit Development in Ag/Natural Areas 1,000 acres	CCCD, NPC, DCNR, PGC,	County-wide	2025	Funding	NPC, PGC, legal	Partners, Lawyer, CCD		DCED, DCNR	NPC, PGC, legal	Partners, Lawyer, CCD	Funding to help encourage match	CAP	8/2022 – none currently, but still seeking interested landowners
1.3	Promote open space and recreation through trail development/maintenance, public stream access	Limit Development in Ag/Natural Areas Support existing and add .5 acre new each year	CCCD, DCNR, PFBC, CMVB, BU	County-wide	2025	Funding	planning	USFWS, CMVB, CCD	grants	NFWF, County Tourism	planning	planning	grants	NFWF, County Tourism	8/2022 – supporting and maintaining trails and park facilities at Kocher Park, Nature Park in North Centre Township, and Weiser State Forest
1.4	Limit sprawl through planning and zoning	Limit Development in Ag/Natural Areas 50 acres	CCCD, Co. Planning, municipalities	County-wide	2025	Funding, buy in	Co. Planning		grants	DEP, DCED, CAP	Co. Planning		grants	DEP, DCED, CAP	8/2022 – Attended numerous MS4 coalition meetings and made suggestions and encouraged that they revised their ordinances
1.5	Education and Outreach	Limit Development in Ag/Natural Areas	CCCD, municipalities, watershed groups	County-wide	2025	Funding	Presentations, webinars, handouts	CCCD	Developing event materials	DEP, PACD, CAP	Presentations, webinars, handouts, graphic designer	CCCD	\$2k	CAP, PACD	8/2022 – attended MS4 coalition meetings, watershed organizations held numerous meetings regarding these topics
2.1	Promote/assist landowners with habitat	Promote Implementation of Woodland and Pollinator Habitat	CCCD, NRCS, DCNR,	County-wide	2025	Funding	Botany, forestry, landscape	NRCS, DCNR, Penn	10 Million trees	DEP, PACD, DCNR,	Botany, forestry, landscape	NRCS, DCNR, Penn State	\$25k	DEP, PACD, DCNR, CAP	8/2022 – distributed 3500 trees through K10 Million trees,

	implementati on such as field borders, pollinator strips, bird boxes, wetland restoration, etc.	2 acres of tree plantings					design, ecology	State Ext , Private sector		CAP, CBF	design, ecology	Ext , Private sector			installed 1.5 acres of wetlands in Buckhorn, 11 acres of pollinators planted, 12 acres of field borders planted
2.2	Incentivize invasive species management removal and native replacements	Promote Implementation of Woodland and Pollinator Habitat 250 acres	CCCD, NRCS, DCNR	County-wide	2025	Funding	Botany, forestry, landscape design, ecology	DCNR, NRCS, Penn St Ext	10 Million trees	DEP, CAP, NFWF, CBF	Botany, forestry, landscape design, ecology	DCNR, NRCS, Penn St Ext	\$25k	CAP	8/2022 – 6 acres of invasive species removal and native plants and trees installed at Kocher Park
2.3	Education and outreach materials/events	Promote Implementation of Woodland and Pollinator Habitat	CCCD, NRCS, Penn State Ext	County-wide	2025	Willing landowners, funding	Botany, forestry, landscape design, ecology	Penn St Ext	Developing event materials	DEP, CAP, PACD	Botany, forestry, ecology, graphic design	NRCS, DCNR, Penn State Ext ,	\$2k	CAP	8/2022 – promote native plants and invasive species management through annual plant and tree sale, Woodcock Watch, Women in Agriculture and Conservation Conference, Ag Conference, Soil Health Field Day, and other workshops and conferences

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).