# Phase 3 Watershed Implementation Plan (WIP) Annual Progress Update – Montour County Agriculture Priority Initiative 1- Planning, Manure Management, and Fertilizer Application

Action # Green Yellow Red	Description	Performance Target(s)	Responsible Party(ies) and Partnerships	Geographic Location	Expected Timeline	Potential Implementation Challenges or Recommendations	Resources <u>/</u>	<u>Available</u>	Resource	es <u>Needed</u>	Annual Progress to Date (2022) *add new 2022 progress above the existing 2021 progress. Date each entry
							Technical	Financial	Technical	Financial	
1.1	Develop Basic Manure Management Plans Core N	Develop 24,000 acres worth of plans for farmers.	MCCD Staff, Farmers, Penn State Extension	Countywide	2021-2025	New operations coming in and lack of cooperation.	Nutrient Management Planners	N/A	Additional Staff	\$50,000	7/2022- 342 Manure Management Plans were developed since 2011 (16) MMPs were developed since March 2021-August 2022
1.2	Develop Ag Erosion and Sedimentation Plans	Develop 18,000 acres of Ag E&S plans for farmers.	MCCD Staff & Farmers	Countywide	2021-2025	Landowners that do not farm getting Ag E&S plans completed.	Conservation Planners	N/A	Advertisemen t to landowners.	\$25,000	7/2022- 214 Conservation Plans have been completed 41 plans have been developed from Jan 2021 to August 2022.
1.3	Expanded Nutrient Management Planning focusing on 4R's especially focusing on legume and manure N availability and the reduction of N Fertilizer.	Develop 10,000 acres worth of nutrient management plans for farmers.	MCCD Staff, Farmers, Penn State Extension, NRCS	Countywide	2021-2025	Convincing farmers that they are overapplying fertilizers.	Nutrient Management Planners	N/A	Training for farmers and staff about nutrients and how they affect crops and soil.	\$10,000	7/2022- Plans are continuing to be developed for operations. There are 6 nutrient management plans 3 CAFOs and 2 CAOs.
1.4	Demonstration Plots & Field Days	Compare yields for reduced fertilizer applications on a test plot of 5 acres.	MCCD Staff & Farmers	Countywide	2022-2024	The willingness of landowners and farmers to test a new idea.	Agronomy knowledge, MCCD Staff	N/A	Organization of field days	\$5,000	Test plots of biological microbes were planted to see the effects on crops and soil health. Soil Health meeting field day 8/16/2022
1.5	Barnyard Runoff Controls	Install 3 acres of barnyard runoff control BMPs.	NRCS, MCCD Staff, Farmers	Countywide	2021-2023	None	Engineering and Inspection	\$756,000	1 Engineer for design	\$1,000,000	There are 3 planned for construction for 2023.
1.6	Manure Storage	Install 5 acres of manure storage BMPs.	NRCS, MCCD Staff & Farmers	Countywide	2021-2023	None	Engineering and Inspection	\$200,000	1 Engineer for design	\$1,000,000	There are 2 planned for construction in 2023.
1.7	Conversion of Cropland to Pasture	Establish 200 new acres of pastureland.	NRCS, MCCD Staff & Farmers	Countywide	2022-2024	Some landowners are unwilling to give up cropland and convert it to pasture.	Grazing Specialist	\$108,000	None	\$500,000	7/2022- So far, 43.72 acres have been converted from cropland to pasture in the County.
1.8	Watering Systems	Install 1 acre of watering system BMPs.	NRCS, MCCD Staff & Farmers	Countywide	2022-2024	None	Engineering and Inspection	\$20,000	1 Engineer for design	\$100,000	7/2022- We installed 27.82 acres of Watering Systems

1.9	Stabilization of Animal Walkways and Travel Lanes	Install 1 acre of walkway and travel lanes BMPs.	NRCS, MCCD Staff & Farmers	Countywide	2022-2024	None	Engineering and Inspection	\$64,000	1 Engineer for design	\$500,000	We have 1 planned for construction in 2023 through CAP.
1.10	Work with Plain Sect Farmers on Plan Implementation	Install 24,000 acres of BMPs.	MCCD Staff Amish and Mennonite Farmers	Countywide	2023-2025	These farmers do not accept cost share from the government.	Engineering and Inspection	N/A	1 Engineer for design	TBD	7/2022- We have written a few plans for Amish and Mennonite farmers in this past year, we hope to expand in the future to figure out a way to implement projects and overcome the hurdle of funding.
1.11	Milk House Waste Systems	Install 2 milk house waste system BMPs	Farmers	Chillisquaque Creek Watershed	2023-2025	Plain Sect does not accept cost share from the government.	Engineering and Inspection	N/A	1 Engineer for design	TBD	Only 1 Operation Needs Milkhouse Waste System. We only have 3 non Amish Dairy Farms left in the County
1.12	Establish Funding/Staff support to the Agricultural Community	Write plans and continue installation of BMPs for planned implementation. Establish demo plots and plan field days.	MCCD, DEP and NRCS	Countywide	2022-2024	Limited funding available.	MCCD Staff	N/A	2 Technicians and 1 Engineer	\$250,000 per year	7/2022- We have continued to support the Agricultural community by writing plans and implementing projects and providing education opportunities. We hope to obtain more funding for the agricultural community to implement more projects.
1.13	Chesapeake Bay Inspection Program	Collect data on admin complete plans and review records for manure application rates (70 per year).	MCCD	Countywide	2021-2025	Limited time for staff.	Bay Staff	\$65,500	None	\$150,000 per year	7/2022- Inspections have been conducted ahead of schedule and landowners are complying. 76 inspections were done from 2021-2022. 26 Inspection were conducted since July 1, 2022
1.14	Seek funding options for BMP Implementation	Utilize Growing Greener, REAP and EQUIP	MCCD and NRCS	Countywide	2021-2023	Limited funding is available.	MCCD Staff	\$1,000,000	None	\$500,000	7/2022- Applied for Growing Greener Grant for Bogart Barnyard Manure Storage Project in 2022. CAP funds received for Bogart Fencing Project and pollinator program. We applied for CAP funding for Ag projects October 2022. ACAP funding will be utilized for AG projects in 2023.

# Phase 3 Watershed Implementation Plan (WIP) Annual Progress Update – Montour County Agriculture Priority Initiative 2- Soil Health

	Green - action has I	been completed or is movin	g forward as planned	Yellow - action	has encountered n	ninor obstacles Red - a	action has not beer	n taken or has e	encountered a serio	us barrier	
Action # Green Yellow Red	Description	Performance Target(s)	Responsible Party(ies) and Partnerships	Geographic Location	Expected Timeline	Potential Implementation Challenges or Recommendations	Resources	<u>Available</u>	Resource	s <u>Needed</u>	Annual Progress to Date (2022) *add new 2022 progress above the existing 2021 progress. Date each entry
							Technical	Financial	Technical	Financial	
2.1	Promote the Importance of Soil Health	Educating farmers on the importance of soil health to lead to increased cover crops and no-till practices.	NRCS, MCCD Staff, Farmers, and Farm Bureau	Countywide	2022-2024	Lack of interest among the farming community.	Staff with soil health and no-till knowledge	Grant	1 person with soil health and no-till knowledge	\$5,000	7/2022- In a joint effort, the Montour, Luzerne, and Columbia County Districts have teamed up to hold a soil health field day 8/16/2022.
2.2	Plant cover crops and provide incentive payments	Install cover crops on 6,000 acres of farmland	NRCS, MCCD Staff & Farmers	Countywide	2022-2024	Flexibility to pay for single species cover crops.	Staff with soil health and no-till knowledge	Grant	1 person with soil health and no-till knowledge	20,000- 45,000/year	7/2022- The cover crop program continues as planned with the hopes of attracting more farmers. We have 1000 acres available for signup. We have 700 acres signed up in 2022.
2.3	Educate and work with Plain Sect farmers on cover crops	Install cover crops on 6,000 acres of farmland	NRCS, MCCD Staff & Amish and Mennonite Farmers	Anthony, Derry, Limestone Townships	2023-2025	Travel and getting farmers to meetings is limited. They will not accept cost share from government.	Staff with soil health and no-till knowledge	Grant	1 person with soil health and no-till knowledge	\$5,000	7/2022-We are having signups for cover crop programs and have 1000 acres available
2.4	Planting legume cover crops for next year's corn crop to reduce N fertilizer applications	Reduce nitrogen fertilizer applications on 4,000 acres of farmland	NRCS, MCCD Staff & Farmers	Countywide	2021-2025	Lack of research on amounts of Nitrogen available from cover crops.	Staff with soil health and no-till knowledge	Grant	1 person with soil health and no-till knowledge	\$5,000	7/2022- 1000 acre cover crop signup on going

## Phase 3 Watershed Implementation Plan (WIP) Annual Progress Update – Montour County Agriculture Priority Initiative 3- Buffers

	Green - action has b	g forward as planned	Yellow - action	has encountered	minor obstacles Red - a	action has not beer	n taken or has e	encountered a serio	us barrier		
Action # Green Yellow Red	Description	Performance Target(s)	Responsible Party(ies) and Partnerships	Geographic Location	Expected Timeline	Potential Implementation Challenges or Recommendations	Resources <u>í</u>	<u>Available</u>	Resource	es <u>Needed</u>	Annual Progress to Date (2022) *add new 2022 progress above the existing 2021 progress. Date each entry
							Technical	Financial	Technical	Financial	
3.1*	Increase Buffers on streams and roadside ditches	Install 165 acres of buffers on farms.	MCCD, DEP, NPC, NRCS, CREP, Pheasants forever	Countywide	2021-2024	Landowners' willingness to give up cropland as a buffer.	Botanists Arborists Biologists	As Needed	Botanists Arborists Biologists	\$200,000	We have 1.3 acres of buffer established on the Bogart Farm
3.2*	Provide an incentives-based program for buffers	Provide incentives for farmers to install buffers on farms.	DEP, PDA, FDA, MCCD	Countywide	2022-2024	Landowners' willingness to trust the program and give up cropland.	N/A	None	Land developer	\$50,000	12/2022- None applied for yet.
3.3*	Utilize CREP Program for buffers and rental payments	Install buffers on farms with the use of the CREP program.	NRCS	Countywide	2022-2024	Landowners' concerns about the CREP program and the loss of cropland.	Biologist	None	Biologist	\$300,000	12/2022- NRCS will not share information on CREP signups.
3.4 *	Partnership with Private Sector for education and buffer establishment	Install buffers on farms and educate landowners in workshops.	MCCD, Private Sector	Countywide	2021-2023	Landowners' willingness to convert cropland to buffer.	Biologists Botanists and Arborists	None	Biologists Botanists and Arborists	\$25,000	12/2022-No activity
3.5	Educate landowners maintenance of buffers	Control and monitor invasive species in acreage of buffers.	NRCS, MCCD Staff, Private Sector	Countywide	2022-2024	Landowners' willingness to cooperate and properly maintain buffers.	Invasive species knowledge and pesticide certification.	None	Field Days	\$5,000	12/2022-No activity.
3.6*	Mandatory Buffer Ordinance	Install buffers as a result of a mandatory ordinance.	Townships, MCCD	Countywide	2023-2025	Enforcement of the ordinance in the county and guilt of telling landowners how to manage their land.	County Planning and Zoning to adopt an ordinance.	None	Ordinance developer and enforcement	N/A	12/2022-No activity
3.7	Grass hay strips along streams	Install 20 acres of hay buffers along streams on farms.	MCD, NRCS	Countywide	2022-2024	Landowner willingness to install buffer.	Crop Consulting	None	Crop Consulting	N/A	12/2022-
3.8	Streambank fencing	Keep cattle out/ limit access to 20 acres of the stream.	MCCD, NPC	Countywide	2022-2025	Plain Sect & Funding from the government.	Project planner	\$100,000	Fence contractor	\$50,000	Bogart Project complete on October. Raup project completed summer 2022.

## Phase 3 Watershed Implementation Plan (WIP) Annual Progress Update – Montour County Agriculture Priority Initiative 4- Reporting and Tracking

	Green - action has b	peen completed or is moving	g forward as planned	Yellow - action	has encountered r	minor obstacles Red - a	action has not been	taken or has e	encountered a serio	ous barrier	
Action # Green Yellow Red	Description	Performance Target(s)	Responsible Party(ies) and Partnerships	Geographic Location	Expected Timeline	Potential Implementation Challenges or Recommendations	Resources <u>&amp;</u>	<u>Available</u>	Resource	es <u>Needed</u>	Annual Progress to Date (2022) *add new 2022 progress above the existing 2021 progress. Date each entry
							Technical	Financial	Technical	Financial	
4.1	Use Practice Keeper and Field Doc to track results	Track results for CAP with plans and maps	MCCD	Countywide	2021-2025	Unknown projects completed by landowners are difficult to track.	Staff to record plans and track results	N/A	Additional Staff to manage records	\$60,000	7/2022- We continue to use Practice Keeper to track plans, inspections, BMPs, etc. We have not used Field Doc yet.
4.2	Track results to evaluate progress with load reductions	Reduce Nitrogen and phosphorus loading	MCCD	Countywide	2021-2025	Unknown projects completed by landowners are difficult to track.	Staff to track results	N/A	Additional staff to manage records	\$60,000	7/2022- We have been tracking projects, plans, BMP verifications to count towards load reductions.
4.3	GIS Mapping for tracking project	Draw maps to show progress in each watershed	MCCD Interns	Countywide	2022-2024	Access to GIS mapping software.	Inters have GIS experience	N/A	GIS Software	Funding to purchase GIS software	7/2022- We have not obtained access to GIS software.
4.4	Verify manure application records	Ensure farmers are following their plans	MCCD	Countywide	2021-2025	Will be very time- consuming.	Staff to complete inspections	N/A	None	None	7/2022- We have verified some records along with inspections/ plans, but there is still more work to be done.

## Phase 3 Watershed Implementation Plan (WIP) Annual Progress Update – Montour County Agriculture Priority Initiative 5- AgLand Preservation and Cropland Retirement

Action # Green Yellow Red	Description	Performance Target(s)	Responsible Party(ies) and Partnerships	Geographic Location	Expected Timeline	Potential Implementation Challenges or Recommendations	Resources <u>/</u>	<u>Available</u>	Resource	es <u>Needed</u>	Annual Progress to Date (2022) *add new 2022 progress above the existing 2021 progress. Date each entry
							Technical	Financial	Technical	Financial	
5.1	Solar Panel development will take cropland out of production	Transition 6,000 acres of cropland into solar panels	Landowners and Energy Suppliers	Countywide	2021-2025	Loss of cropland and stormwater management	None	None	None	N/A	7/2022- The Solar Farm project was delayed.
5.2	Stormwater management on solar farms	Install 6,000 acres of stormwater management	MCCD, County Planning, Municipalities	Countywide	Ongoing	Maintenance and implementation	Engineers	None	Engineers	\$500,000	7/2022- The Solar Farm project was delayed.
5.3	Implement Ag Land Preservation Program	Protect 200 acres of farmland from development	PDA, MCCD, Montour County Commissioners	Countywide	2021-2025	Limited funding	Soil knowledge & legal advice	50,000	None	\$500,000	7/2022- Gary Hertzler Farm 52 acres will be preserved this year.

# Phase 3 Watershed Implementation Plan (WIP) Annual Progress Update – Montour County Partnerships Priority Initiative 1- Partners

Action #		peen completed or is moving	Responsible	Yellow - action Geographic	Expected	Potential Implementation					Annual Progress to Date (2022)
Green Yellow Red	Description	Performance Target(s)	Party(ies) and Partnerships	Location	Timeline	Challenges or Recommendations	Resources <u>A</u>	<u>Available</u>	Resource	es <u>Needed</u>	*add new 2022 progress above the existing 2021 progress.  Date each entry
							Technical	Financial	Technical	Financial	
1.1	Have Penn DOT involved in various practices	Implement additional cover crop services and practices such as street sweeping	Penn DOT	Countywide	2022-2025	Lack of willingness or time to participate in the implementation	Street Workers	N/A	Designers	N/A	7/2022- We have not worked with Penn DOT much because we did not have the opportunity this year, We hope to include them in some future projects.
1.2	Work with NRCS on their programs in the county	Implement programs such as EQIP and CREP	NRCS	Countywide	Present- 2025	Farmer's lack of trust in CREP	NRCS Workers	N/A	Additional Programs	N/A	7/2022- We have worked with NRCS, but their updated privacy policy makes it difficult to gather information from them.
1.3	Work with the PA Game Commission in the county	Plant food plots and partner with farmers	PA Game Commission	Liberty and Mahoning Township	2022-2024	Not abundant State Game Lands in the county and a lack of knowledge of projects	Game Commission Officers	N/A	More partnerships with them in the county	None	7/2022- We have not had an opportunity or need to work with the PA Game commission in the past year, but we hope to work alongside them in the future.
1.4	Continue to work with PA Fish and Boat Commission in the county	Implement stream projects that include fish habitat structures	PA Fish and Boat, MCCD	Countywide	2022-2025	Lack of knowledge of their existing and additional projects	Project planning, project implementati on	Varies	N/A	N/A	7/2022- We continue to work with PA Fish and Boat on the Design, Permitting, and Implementation of our stream projects.
1.5	Continue to work with US Fish and Wildlife in the county	Implement wetland construction and stream projects	US Fish and Wildlife, MCCD	Countywide	2022-2024	Lack of knowledge of their existing and additional projects	Project planning, implementati on, and upkeep	Varies	None	None	7/2022- We continue to work with US Fish and Wildlife on our wetland projects. Over 50 acres of wetlands constructed since 2009. 3 acres of wetlands planned for summer on the Pentz Farm,
1.6	Continue to work with NPC	Continue working relationship with NPC which includes installing buffers, fish habitat, and tree plantings	NPC MCCD	Countywide	2022-2025	None	Buffer planting, fish habitat designers and implementers	N/A	None	None	7/2022- We continue to work with NPC through our partnership on projects throughout the county.
1.7	Have County Workers involved in implementation practices	Help implement, fund, organize and monitor implementation of CAP practices	Commissioners Zoning Planning Grounds Crew	Countywide	2022-2024	Lack of time or willingness to participate in implementation	Additional help to implement practices	N/A	Additional help to implement practices	N/A	We worked with Municipal and Borough Officials.  Danville Borough on pollinator plantings and Valley  Township on Bioswale and Fish Habitat for MS4.

	Wo	ork with MARC on	MARC, MCCD,	Countywide	2022-2025	None	Help to	N/A	Help to	N/A	7/2022- We have talked and met with MARC to discuss
	Involve Montour pub	blic education, use	County				educate the		implement		potential projects and community events. We discussed
1.0	Area Recreation of	f natural lands in					public		practices		the removal of fallen trees on Chillisquaque Creek.
1.8	Commission (MARC) Mor	ontour County, and									
	in various activities t	through the GIS									
	SO	oftware program									

#### Phase 3 Watershed Implementation Plan (WIP) Annual Progress Update – Montour County Stormwater Priority Initiative 1- Stream Restoration

	Green - action has l	been completed or is movin	ng forward as planned	Yellow - action	has encountered n	ninor obstacles Red - a	action has not been	n taken or has e	encountered a serie	ous barrier	
Action # Green Yellow Red	Description	Performance Target(s)	Responsible Party(ies) and Partnerships	Geographic Location	Expected Timeline	Potential Implementation Challenges or Recommendations	Resources <u>,</u>	<u>Available</u>	Resourc	es <u>Needed</u>	Annual Progress to Date (2022) *add new 2022 progress above the existing 2021 progress. Date each entry
							Technical	Financial	Technical	Financial	
1.1	Continue to Install fish habitat structures on Ag Impaired Streams and reconnection of the floodplain where possible	Reduce erosion on streambanks with the instillation of structures on 20,000 linear feet of streams.	MCCD Staff, PA Fish& Boat, DEP, NPC	Chillisquque creek and Mahoning creek watersheds.	2021-2025	Obtaining funding to meet demand of fish habitat structures and eroding streams.	Design and Installation	Varies	None	\$75,000/ year	7/2022- We have continued to implement fish habitat structures in streams. This year we have completed 3 projects and we have more scheduled for next year.  Simas Project 200 linear ft , Raup Project 550 liner ft and Fineline Homes 425 linear ft.
1.2	Continue to monitor macroinvertebrates on Chillisquaque Creek	Track progress of stream health and disclose existing macro assessment data to DEP	Mike Bilger, MCCD Staff	Chillisquaque Creek Watershed	2021-2022	Finding a funding source.	Biologist with knowledge to ID macroinverte brates	None	Mike Bilger	\$2,500/ year	7/2022- We monitored the Chillisquaque Creek with Mike Bilger in the Spring of 2022.
1.3	Continue to monitor macroinvertebrates and wild brook trout on Limestone Run	Track progress of stream health. Disclose existing macro assessment data to DEP	Susquehanna University/NPC MCCD Staff	Limestone Run Watershed	2022-2024	Finding a funding source.	Biologists with knowledge to ID Fish and macroinverte brates	N/A	Tracking of stream health.	\$2,500 / year	7/2022- Interns did sampling of macroinvertebrates on Limestone Run and we hope to track data for many more years to come.
1.4	Organize Community Fallen Tree Removal Program where trees have fallen due to flooding and are creating bank erosion	Reduce erosion on streambanks by clearing brush from the stream.	MCCD Staff and Anthony and Derry Townships	Anthony and Derry Townships	2022-2025	Finding a funding source and dealing with limited resources.	Tree removal	None	Tree removal service.	\$20,000 / Year	7/2022- There has been discussion on this topic with MARC, but no decisions or progress has been made. NO funding source.
1.5	Submit macro data for DEP review	Update integrated report yearly	DEP and MCCD	Chilly Watershed Limestone Run	2021-2025	None	Data	None	None	None	7/2022- We have the Macro data and have talked to DEP officials about the numbers. It has not been officially submitted for review.

## Phase 3 Watershed Implementation Plan (WIP) Annual Progress Update – Montour County Stormwater Priority Initiative 2- Flooding, Wetlands, and Stormwater BMPs

	Green - action has I	been completed or is movin	g forward as planned	Yellow - action I	has encountered n	ninor obstacles Red - a	ction has not bee	n taken or has e	encountered a serio	ous barrier	
Action # Green Yellow Red	Description	Performance Target(s)	Responsible mance Target(s) Party(ies) and Partnerships	Geographic Location	Expected Timeline	Potential Implementation Challenges or Recommendations	Resources	<u>Available</u>	Resource	es <u>Needed</u>	Annual Progress to Date (2022) *add new 2022 progress above the existing 2021 progress. Date each entry
							Technical	Financial	Technical	Financial	
2.1	Continue to restore and preserve wetlands	Increase infiltration and reduce runoff for 80 wetland acres	USF&W Service MCCD Staff Blue Acres Engineering	Countywide	2022-2024	Mark Roberts retirement from USF&W	Design and permitting	\$150,000	None	\$100,000 per year	7/2022- We have a 5 acre wetland on the Pence Farm lined up for 2023
2.2	Educate landowners on the impacts of stormwater on streams and methods to control stormwater	Promote stormwater management through workshops and meetings to lessen the impact on streams	MS4, MCCD, Municipalities	Countywide	2022-2024	Generating landowner interest and meeting attendance	Engineering, Hydrology	None	Engineering, Hydrology	\$20,000 per year	7/2022- Mahoning Township has slowed the progress of a potential growing greener grant to fund projects in the watershed. An assessment has been completed but not funding was sought.
2.3	Promote the installation of infiltration basins for private residences	Encourage provide landowners to install basins and other stormwater control methods	MCCD, MS4, Municipalities	Countywide	2022-2025	Landowner willingness to consider an infiltration basin	Engineering Hydrology	None	Engineering, Hydrology	\$5,000	Assessment of watershed was completed by township engineers and CAP funding was applied for through CAP.
2.4	Seek funding for and construction of infiltrations basins for landowners	Obtain funding to construct basins and other stormwater management practices	MCCD	Countywide	2022-2024	Landowners paying a match contribution	Sizing basins and design	None	Sizing basins and design	\$10,000 per year	CAP funding applied for 8 infiltration basins in Blizzard Run Watershed.
2.5*	Update and Enforce Act 167 plan	Create a plan that addresses stormwater runoff and model ordinance for homeowners	County planning, townships, MCCD and DEP	Countywide	2022-2024	There is no funding available.	Act 167 planning	N/A	Act 167 Plan development	\$300,000	7/2022 No funding available for updates
2.6	Continue to work with MS4 on stormwater BMP implementation	Reduce stormwater runoff and assist townships with plan implementation including bio- retention areas, rain gardens, and buffers	Townships, county planning, DEP and MCCD	Valley township and Mahoning township	2021-2025	None	Stormwater design	N/A	Engineer to design BMP structures.	None	7/2022- MCCD staff attended MS4 meeting with Valley Township to help assist them with requirements. Bioswale to be completed in 2023. Stream project for 425 linear feet for Fineline Homes completed for MS4 project in Valley Twp in July.

2.7*	Hazard mitigation and floodplain management	Limit impacts of flooding in developed areas	Townships and county planning office	Countywide	Ongoing	Enforcement and lack of knowledge of floodplain ordinances	Some ordinance knowledge.	N/A	Knowledge of floodplain ordinances	1 million	7/2022- We cannot report on the progress of the Planning office and the townships.
2.8	Prevent dumping near streams and roadside ditches.	Provide harsher punishments for those found dumping or littering near streams and roadside ditches.		Countywide	2023 and beyond	Lack of time and resources to develop new laws with stricter punishments.	Litter laws in place	N/A	Stricter Punishments for dumping and littering.	\$500,000	7/2022- We have not worked on this initiative yet but soon we hope to work with law enforcement and communities and try to reduce the amount of illegal dumping throughout the county.

## Phase 3 Watershed Implementation Plan (WIP) Annual Progress Update – Montour County Stormwater Priority Initiative 3- BMPs in Developed and Urban Areas

Action											
# Green Yellow Red	Description	Performance Target(s)	Responsible Party(ies) and Partnerships	Geographic Location	Expected Timeline	Potential Implementation Challenges or Recommendations	Resources <u>/</u>	Availabl <u>e</u>	Resource	es <u>Needed</u>	Annual Progress to Date (2022) *add new 2022 progress above the existing 2021 progress.  Date each entry
							Technical	Financial	Technical	Financial	
3.1	Educate landowners on the importance and purpose of buffers	Install buffers in urban areas and educate landowners on the importance of buffers	MCCD	Urban Areas	2022-2024	Lack of interest among landowners in urban areas	Agronomist, Biologist, Botanist	None	Agronomist, Biologist, Botanist	\$5,000 / Year	7/2022- We have spoken with landowners about buffers but We hope to have more public events and notifications about this topic in the coming years.
3.2	Develop a strategy to make buffers visually attractive to landowners by using pollinator mixes and flowering trees and shrubs	Develop appealing buffer designs and present them to landowners	MCCD, Private Sector	Urban Areas	2022-2024	Lack of public interest and knowledge of buffers	Buffer designs and education materials	None	Buffer designs and education materials	\$5,000/ Year	7/2022- We have attracted landowners with a pollinator mix we provided to increase buffers and habitat . 9.25 acres committed.
3.3*	Develop an incentive-based buffer Program that pays for buffer establishment and maintenance	Give landowners an incentive to establish and maintain buffers on their property	MCCD/DEP	Urban Areas	2022-2024	Lack of a funding source for these programs	Buffer planting groups	None	Develop incentive program	\$50,000/ year	7/2022- We developed a pollinator program that provides landowners with seeds at no cost, and we have been using the Keystone 10 Million Trees Program, we just have to focus implementation more on buffers in the future.
3.4	Mandatory Stream Buffer Program	Develop an ordinance to implement stream buffers	County Planning, MCCD, Municipalities	Urban Areas	2022-2024	Adoption of the ordinance and cooperation from landowners	Zoning	None	Program developer	\$25,000 / year	7/2022- We have not had the chance to develop an ordinance or talk with the county about this.
3.5	Plant Buffers	Install buffers in urban areas	Private Sector	Urban Areas	2021-2025	Landowner willingness to participate	Agronomist, Biologist, Botanist	None	Planting, plans, and design developer	\$10,000/ year	7/2022- Landowners and farmers have been willing to plant meadows, buffer strips, and stream buffers.
3.6*	Nutrient application reduction on lawns	Reduce fertilizer applications on lawns	Private landowners	Urban Areas	2022-2025	Lack of interest from homeowners	Nutrient requirements for lawns	None	Nutrient/ lawn specialist	TBD	7/2022- We have provided landowners who take place in the buffer program with Urban Nutrient Management plans to help them monitor the nutrients on their lawns.
3.7	Conservation landscaping	Reduced storm water runoff from yards by using conservation methods in landscaping	Private landowners, master gardener, Penn State Extension	Urban Areas	2023-2025	Lack of interest from homeowners to change landscaping and some county	Botany and landscaping knowledge	None	Botany and landscaping knowledge.	TBD	7/2022- We have not looked into this idea much but we hope to use some conservation landscaping at our office to promote the idea to locals.

						ordinances do not support overgrown vegetation					
3.8	Continue dirt and gravel roads in low volume road program	Reduce sediment from dirt and gravel roads	Dirt and Gravel Roads Program and MCCD	Countywide	2021-2025	Limited amount of dirt and gravel roads left	Engineering and road resurfacing	\$140,000 per year	Engineering and road resurfacing	\$50,000	7/2022- The program is continuing to implement projects.
3.9	Establish an educator position	Establish a position for an environmental educator to inform the public about BMPs and more	County, MCCD, MARC	Countywide	2022 and beyond	Limited funding	Information to the public through MARC and the MCCD	N/A	Constant information through teaching and handouts	\$70,000	7/2022- Not enough funding or time to organize this position.