



Schuylkill County, Pennsylvania – 2013 Hazard Mitigation Plan Update
Appendix C

APPENDIX C

MUNICIPAL PROJECTS

Problem Area ID	Municipality	Hazard	Location	Problem Description	Potential Mitigation Action	Range of Costs*	Timeframe for Implementation (short term 1-2 years; medium term 3-5 years; long term 5-10 years)
-	Ashland Borough	All Hazards	N/A (not mapped)				
AUB001	Auburn Borough	Flooding	Market Street	The stormwater inlet on Market Street at the railroad surcharges and floods road.	Construct additional stormwater inlet(s) on Market Street / move inlet to opposite of the road.	\$50,000	Short term
BAR001	Barry Township	Flooding	Lincoln Road	Streambank erosion is threatening the roadway at Lincoln Road.	Conduct stream stabilization to restore stream.	\$100,000	Short term
BAR002	Barry Township	Flooding	Black Creek Road	Streambank erosion is threatening the roadway at Black Creek Road.	Conduct stream stabilization to restore stream.	\$100,000	Short term
BAR003	Barry Township	Flooding	Post Road	An undersized bridge/culvert causes roadway overtopping at Post Road during flood events.	Replace the undersized structure with a larger opening to convey flood flows.	\$1,000,000	Medium Term
BAR004	Barry Township	Flooding	State Route 4004	An undersized bridge/culvert causes roadway overtopping at State Route 4004 during flood events.	Replace the undersized structure with a larger opening to convey flood flows.	\$1,000,000	Medium Term
BAR005	Barry Township	Flooding	Derr Road	An undersized bridge/culvert causes roadway overtopping at Derr Road during flood events.	Replace the undersized structure with a larger opening to convey flood flows.	\$1,000,000	Medium Term
BAR006	Barry Township	Flooding	Rosies Road	An undersized bridge/culvert causes roadway overtopping at Rosies Road during flood events.	Replace the undersized structure with a larger opening to convey flood flows.	\$1,000,000	Medium Term
BAR007	Barry Township	Flooding	Maplewood Road	An undersized bridge/culvert causes roadway overtopping at Maplewood Road during flood events.	Replace the undersized structure with a larger opening to convey flood flows.	\$1,000,000	Medium Term
BAR008	Barry Township	Flooding	Fishing Road	An undersized bridge/culvert causes roadway overtopping at Fishing Road during flood events.	Replace the undersized structure with a larger opening to convey flood flows.	\$1,000,000	Medium Term
BAR009	Barry Township	Flooding	Middle Road	An undersized bridge/culvert causes roadway overtopping at Middle Road during flood events.	Replace the undersized structure with a larger opening to convey flood flows.	\$1,000,000	Medium Term
BAR010	Barry Township	Flooding	Hill Road	An undersized bridge/culvert causes roadway overtopping at Hill Road during flood events.	Replace the undersized structure with a larger opening to convey flood flows.	\$1,000,000	Medium Term
BAR011	Barry Township	Transportation	Weishample Road	Frequent fog and low visibility occurs on Weishample Road.	Improve signage and install flashing lights.	\$25,000	Short term
BAR012	Barry Township	Landslide	Hill Road	Hillside washouts occur on Hill Road, resulting in debris and mud accumulation on the roadway.	Construct roadside barriers to catch debris.	\$100,000	Medium Term
BAR013	Barry Township	Landslide	Hill Road	Hillside washouts occur on Hill Road, resulting in debris and mud accumulation on the roadway.	Construct roadside barriers to catch debris.	\$100,000	Medium Term
BAR014	Barry Township	Winter Weather	N/A (not mapped)	The following roads experience snow drifting: Hill Road, Weishample Road, Middle Road, Orchard Road, Fishing Road, Maplewood Road, Hinkle Road, Beurys Road	Improve roadway plowing and salting operations.	\$50,000	Short term
BLY001	Blythe Township	Flooding	State Route 209/Trolley Street	Roads and homes flood near State Route 209 and Trolley Street.	Remove fallen trees and debris from the River in East Norwegian Township, and remove properties from floodplain as applicable.	Perform Cost Assessment	Long Term
-	Branch Township	All Hazards	N/A (not mapped)				
BUT001	Butler Township	Flooding	Laurel Street	Laurel Street does not have an adequate storm drainage system.	Improve stormwater drainage facilities.	\$100,000	Medium Term
BUT002	Butler Township	Flooding	Walnick Drive	The bridge at Walnick Drive was washed out.	Replace structure with larger opening to convey flood flows.	\$1,000,000	Medium Term
BUT003	Butler Township	Flooding	Turnpike Road	Roads and homes flood near Turnpike Road.	Remove properties from floodplain.	Perform Cost Assessment	Long Term
BUT004	Butler Township	Flooding	Malones Road	An undersized bridge/culvert causes roadway overtopping at Malones Road during flood events.	Replace structure with larger opening to convey flood flows.	\$1,000,000	Medium Term
BUT005	Butler Township	Flooding	Creek Road	Roads and homes flood near Creek Road.	Remove properties from floodplain.	Perform Cost Assessment	Long Term
BUT006	Butler Township	Flooding	Runge Road	The cross-pipe at Runge Road is damaged.	Replace the damaged pipe with an improved/larger structure to convey flood flows.	\$100,000	Medium Term
BUT007	Butler Township	Flooding	Barry Road	Roads and homes flood near Barry Road.	Remove properties from floodplain.	Perform Cost Assessment	Long Term
CAS001	Cass Township	Flooding	Valley Road	The Township's Municipal Building floods due to the existing water main that crosses the culvert opening which catches large debris and causes a backwater effect.	Coordinate with Minersville Water Authority to investigate lowering the elevation of the water main, or opening up the culvert and extending the channel closer to Valley Road.	\$1,000,000	Long Term
CAS002	Cass Township	Flooding	Valley Road	Valley Road floods periodically due to the undersized pipe.	Replace the existing pipe with a larger pipe to better convey flows.	\$250,000	Medium Term
CAS003	Cass Township	Flooding	Oak Lane/Valley Road	Houses on Oak Lane and Valley Road that lie in the wide floodplain are flooded by the River.	Consider demolishing and acquiring these structures and maintain the floodplain as open space in perpetuity.	Perform Cost Assessment	Long Term
CAS004	Cass Township	Flooding	Valley Road	The Oak Hill Mine discharge floods Valley Road	Work with PENNDOT to increase culvert capacity.	\$1,000,000	Medium Term
CAS005	Cass Township	Flooding	Oak Lane	Stream sedimentation and debris clog the channel at Oak Lane.	Remove sediment and debris from stream to improve channel flow.	\$50,000	Short term
CAS006	Cass Township	Flooding	Valley Road	Roadway overtopping occurs due to the undersized channels and cross-pipes on Valley Road.	Work with PENNDOT to increase culvert capacity.	\$1,000,000	Medium Term
CAS007	Cass Township	Flooding	Valley Road	Roadway overtopping occurs due to the undersized channels and culverts on Valley Road.	Work with PENNDOT to increase culvert capacity.	\$1,000,000	Medium Term
CAS008	Cass Township	Winter Weather	Schaeffer Hill Road	Standing water on Schaeffer Hill Road and icing of the roadway are major issues.	Continue to improve roadway drainage facilities on Schaeffer Hill Road.	\$100,000	Medium Term
CAS009	Cass Township	Flooding	Field Road	The stream channel and culvert on Field Road are damaged.	The existing stream channel has been regraded; the pipe under the Minersville Area School District should be evaluated and cleaned.	\$50,000	Medium Term
CAS010	Cass Township	Winter Weather	Low Road	Poor drainage roadway icing are major issues on Low Road.	Examine and improve roadway drainage facilities on Low Road.	\$100,000	Medium Term
CAS012	Cass Township	Winter Weather	Flag Lane/Condors Lane	The damaged drainage system results in roadway icing.	Improve roadway drainage facilities on Flag Lane and Condors Lane.	\$100,000	Medium Term
CAS013	Cass Township	Flooding	Line Avenue	The culvert on Line Avenue has failed.	Replace culvert on Live Avenue to prevent flooding.	\$1,000,000	Medium Term
CAS014	Cass Township	All Hazards	Forestville Fire Co.	The Township's Fire Company does not have back-up generator to assist during emergencies.	Designate the Forestville Fire Company as EOC and purchase an emergency backup generator.	\$25,000	Short term
CAS015	Cass Township	Flooding	Woodside Road	Woodside Road has flooded in the past.	Repair/improve the drainage channel on Woodside Road.	\$100,000	Short term
CAS016	Cass Township	Flooding	Woodside Road	The drainage channel on Woodside Road is damaged.	Repair/improve the drainage channel on Woodside Road.	\$100,000	Short term
CAS017	Cass Township	Flooding	Mulberry Lane	The drainage channel on Mulberry Lane has deeply eroded.	Evaluate and design a proper sized drainage channel from Mulberry Lane to the drainage channel outlet.	\$100,000	Medium Term
CAS018	Cass Township	Winter Weather	White Lane	Poor drainage and roadway icing are major issues on White Lane.	Remove existing trees located within Right of Way and examine; Examine and improve roadway drainage facilities on White Lane.	\$100,000	Medium Term
CAS019	Cass Township	Flooding	Thomaston Road	Poor drainage system and an undersized culvert exist on Thomaston Road.	Improve roadway drainage facilities and replace the culvert on Thomaston Road.	\$1,000,000	Medium Term

Problem Area ID	Municipality	Hazard	Location	Problem Description	Potential Mitigation Action	Range of Costs*	Timeframe for Implementation (short term 1-2 years; medium term 3-5 years; long term 5-10 years)
CAS020	Cass Township	Flooding	Haze Road	There is some damage to the streambank on Haze Road.	Work with the Conservation District to pursue stream stabilization on Haze Road.	\$100,000	Short term
CAS021	Cass Township	Flooding	Valley Road	There is some damage to the streambank on Valley Road.	Work with the Conservation District to pursue stream stabilization on Valley Road.	\$100,000	Short term
CAS022	Cass Township	Flooding	Valley Road	There is some damage to the streambank on Wagner Run.	Work with the Conservation District to pursue stream stabilization on Wagner Run.	\$100,000	Short term
CAS023	Cass Township	Dam Failure	Minersville	The hazardous material containment pond in Minersville poses a potential contamination threat should the pond breach.	Work with the dam owner to update/improve Emergency Action Plan for the dam.	\$25,000	Short term
CAS024	Cass Township	Dam Failure	Crystal Reservoir	The hazardous material containment pond at Crystal Reservoir poses a potential contamination threat should the pond breach.	Work with the dam owner to update/improve Emergency Action Plan for the dam.	\$25,000	Short term
CAS025	Cass Township	All Hazards	Clover Fire Co.	The EOC needs to be upgraded and lacks a backup generator.	Designate the Clover Fire Company as EOC and purchase an emergency backup generator.	\$25,000	Short term
CAS026	Cass Township	All Hazards	South Cass Fire Co.	The EOC needs to be upgraded and lacks a backup generator.	Designate the South Cass Fire Company as EOC and purchase an emergency backup generator.	\$25,000	Short term
CAS027	Cass Township	Winter Weather	State Route 901	There are several areas of roadway icing on State Route 901.	Work with PENNDOT to maintain and improve roadway drainage facilities on State Route 901; better coordination with PENNDOT and SCEMA during winter weather conditions.	\$100,000	Medium Term
CAS028	Cass Township	Winter Weather	Minersville High School	The evacuation protocols at Minersville High School are in need of reevaluation.	Improve evacuation plans/routes and provide educational/outreach materials to schools.	\$25,000	Short term
COA001	Coaldale Borough	Flooding	E. Phillips Street	E. Phillips Street floods from time to time.	Conduct an engineering study to investigate the feasibility of a floodwall/levee at E. Phillips Street.	\$80,000	Short term
COA002	Coaldale Borough	Winter Storms/Wind	St. Luke's Hospital	Winter storms/wind have caused damage to St. Luke's Hospital	Ensure St. Luke's Hospital meets International Building Code specifications for wind and snow loadings.	Perform Cost Assessment	Long Term
COA003	Coaldale Borough	Flooding	Wastewater Treatment Plant	The Borough's wastewater treatment plant is impacted by flooding.	Construct floodwall/levee at the Borough's wastewater treatment plant to alleviate flooding.	\$1,000,000	Long Term
COA004	Coaldale Borough	All Hazards	Fire Company	The Borough's fire department is inadequate to service the needs of the residents.	Upgrade the Borough's fire company building and acquire an emergency back-up generator.	\$250,000	Short term
COA005	Coaldale Borough	All Hazards	Borough Hall	Borough residents are not kept abreast of issues related to natural hazards.	Improve community outreach to Borough residents. Work closely with the County to obtain and distribute materials on what to do before, during, and after a disaster. Also develop a community outreach strategy to include educational seminars, outreach booths at local fairs, mailings, etc.	In-kind hours	Short term
COA006	Coaldale Borough	Flooding	Greenwood Street	There is a flooding issue on Greenwood Street.	Conduct an engineering study to investigate the feasibility of a floodwall/levee at Greenwood Street.	\$80,000	Short term
COA007	Coaldale Borough	Flooding	Moser Avenue	The storm sewer/culvert on Moser Avenue is undersized.	Improve roadway drainage facilities and replace the culvert on Moser Avenue.	\$1,000,000	Medium Term
COA008	Coaldale Borough	Flooding	SR 209 near Panther Creek	The sedimentation in Panther Creek floods State Route 209.	Remove sediment and debris from Panther Creek to reduce the risk of flooding on State Route 209.	\$50,000	Short term
CRE001	Cressona Borough	Transportation	All of Borough (not mapped)	Traffic jams regularly occur due to oversize trucks on Borough roads leading to evacuation concerns during emergencies.	Disallow oversize trucks on Borough roads and designate new routes for oversize trucks.	\$25,000	Short term
CRE002	Cressona Borough	All Hazards	All of Borough (not mapped)	The EOC needs to be upgraded and lacks a backup generator.	Designate a new location for the EOC and purchase an emergency back-up generator.	\$25,000	Short term
CRE003	Cressona Borough	Flooding	Throughout Borough (not mapped)	Panther Valley Creek and Beaver Creek are filled with sediment	Remove sediment and debris from Panther Valley Creek and Beaver Creek.	\$50,000	Short term
DLB001	Deer Lake Borough	Flooding	Dreherstown Road	The bridge on Dreherstown Road is damaged.	Replace bridge/culvert on Dreherstown Road.	\$1,000,000	Medium Term
DLB002	Deer Lake Borough	Flooding	State Route 61	The culvert at SR61 is undersized and causes flooding.	Replace culvert on SR61 to prevent flooding.	\$1,000,000	Medium Term
DLB003	Deer Lake Borough	Flooding	Dreherstown Road at Spruce Street	Excessive storm water from West Brunswick Twp. roadway on Dreherstown road during heavy downfall enters storm water drains and storm pipes causing flooding on streets in Deer Lake and private property.	Construct new storm pipes along Dreherstown Road to Lakefront Drive and properly discharge stormwater to Pine Creek.	\$100,000	Short term
DLB004	Deer Lake Borough	Flooding	Rt. 61 between Coal Mt. Road and Lakefront Drive	Storm water overflow from Coal Mt. Road and Rt. 61 berm runs onto real estate and adjoining streets connected to Deer Lake Borough. Damage of private property and erosion of borough streets result from this flooding.	Channel storm water through drains and storm water pipes from Coal Mt. road to Lake front Drive to avoid flooding on borough streets and private property.	\$100,000	Short term
DEL001	Delano Township	Flooding	Fire Company	The drainage channel near the Township's Fire Company is undersized.	Enlarge drainage channel near the Township's Fire Company.	\$100,000	Short term
EBT001	East Brunswick Township	Flooding	Cold Run Road	Cold Run Creek floods roadway (Cold Run Road)	Construct floodwall/levee to alleviate flooding on Cold Run Road.	\$1,000,000	Long Term
EBT002	East Brunswick Township	Flooding	Old Country Lane	Cold Run Creek floods roadway (Old Country Lane)	Construct floodwall/levee to alleviate flooding on Old Country Lane.	\$1,000,000	Long Term
EBT003	East Brunswick Township	Flooding	Rauschs Road/Bridge	The Little Schuylkill River floods Rauschs Bridge.	Replace Rauschs Bridge to alleviate flooding of the Little Schuylkill River.	\$1,000,000	Medium Term
EBT005	East Brunswick Township	Flooding	Pine Valley Road	Indian Run floods roadway; damaged pipe	Construct floodwall/levee and replace pipe on Indian Run to alleviate flooding.	\$1,000,000	Long Term
EBT006	East Brunswick Township	Flooding	Laurel Road	Cross-pipes on Laurel Road and Beechnut Road are damaged.	Replace cross-pipes on Laurel Road and Beechnut Road with larger pipes to alleviate flooding.	\$250,000	Medium Term
EBT008	East Brunswick Township	Flooding	Wild Turkey Lane	Wild Turkey Bridge is in disrepair.	Replace the Wild Turkey Bridge bridge/culvert.	\$1,000,000	Medium Term
EBT010	East Brunswick Township	Winter Weather	State Route 443	State Route 443 ices due to the steep hills.	Improve roadway drainage facilities on State Route 443.	\$100,000	Medium Term
EBT011	East Brunswick Township	Wildfire	Near State Game Lands	The Township has experienced a loss of over 100 acres of agriculture land due to tree farm fire.	Develop buffer zones around tree farms to prevent the spread of wildfires.	\$50,000	Short term
EBT012	East Brunswick Township	All Hazards	N/A (not mapped)	Single EOC not adequate; need a 2nd EOC.	Improve Township Building for use as a 2nd EOC.	\$50,000	Short term
ENT001	East Norwegian Township	Flooding	N/A (not mapped)	Fallen trees and debris create backwater flooding on the River.	Remove fallen trees and debris from the River.	\$50,000	Short term
EUT001	East Union Township	Flooding	N/A (not mapped)	The following roads experience flooding during rainfall events: Foose Lane, Trailer Road, Girard Manor Road, Dombroski Lane.	Conduct an engineering study to identify causes of flooding and design drainage improvements for the roads that flood.	\$50,000	Short term

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ELD001	Eldred Township	Flooding	All of Township (not mapped)	Bridges in the Township are filled with debris.	Remove debris from bridges throughout the Township.	\$50,000	Short term
FT001	Foster Township	Flooding	Pleasant Road	Heavy Rain events cause water to overtop and washout the roadway.	Replace existing culvert which experiences overtopping/flooding.	\$200,000	Medium term
FT002	Foster Township	Flooding	SR 901	Poor Drainage causes ponding on roadway and icing in the winter.	Replace/update stormwater system that is prone to flooding along SR 901.	\$200,000	Medium term
FT003	Foster Township	Flooding	Mt Pleasant Storm Detention Basin	Potential Exist for Pond to overtop and flood the roadway and property.	Lower spillway to reduce potential downstream flooding/damage in the event of a Conduct a study to designate new evacuation/detour routes to serve as a bypass to the Borough.	\$500,000	Long Term
FRB003	Frackville Borough	All Hazards	All of Borough (not mapped)	Evacuation routes from situations on I-81 and SR 61 traverse the Borough and block local traffic.	Determine sheltering needs during emergency situations; retrofit older homes to meet current fire prevention standards per the International Building Code.	\$50,000	Short term
FRB004	Frackville Borough	Structure Fires	All of Borough (not mapped)	Older homes are prone to structural fires; this has resulted in the displacement of residents.	Perform Cost Assessment		Long Term
FRA001	Frailey Township	Flooding	State Route 125	There is debris blocking the bridge on State Route 125.	Remove debris from the bridge on State Route 125.	\$25,000	Short term
FRA002	Frailey Township	Flooding	Maple Street	An undersized stormwater pipe is causing flooding on Maple Street.	Replace the pipe on Maple Street with a larger structure to alleviate flooding.	\$250,000	Medium Term
FRA003	Frailey Township	Flooding	Fountain Mountain Road	The stormwater drainage channels along Fountain Mountain Road is undersized, causing roadway flooding.	Increase the capacity of the drainage channels along Fountain Mountain Road.	\$100,000	Medium Term
FRA004	Frailey Township	Flooding	Middlecreek Road	Poor stormwater drainage is causing roadway washouts on Middlecreek Road.	Increase the capacity of the drainage channels along Middlecreek Road.	\$100,000	Medium Term
FRA005	Frailey Township	All Hazards	Township EOC	The Township EOC does not have an emergency back-up generator.	Purchase a emergency back-up generator for the EOC.	\$25,000	Short term
GIL001	Gilberton Borough	Flooding	Mahanoy Creek in Borough	There is a lot of debris and sediment in Mahanoy Creek.	Remove sediment and debris from Mahanoy Creek.	\$50,000	Short term
GIL002	Gilberton Borough	Flooding	All of Borough (not mapped)	The Borough's drainage systems are inadequate.	Conduct an engineering study to improve stormwater drainage facilities throughout the Borough.	\$80,000	Short term
GIR001	Girardville Borough	Flooding	Ogden Street	Ogden Street is located in the floodplain and frequently floods.	Consider demolition and acquisition of properties in floodplain and maintain them as open space in perpetuity.	Perform Cost Assessment	Long Term
GIR002	Girardville Borough	Mine Subsidence	Entire Borough	Past mining activities; subsidence possible	Install monitoring systems to detect ground movements	\$100,000	Medium Term
GOR001	Gordon Borough	Flooding	SW of LR 4007	There is a lot of debris in Rattling Run channel.	Remove sediment and debris from stream.	\$50,000	Short term
GOR002	Gordon Borough	Flooding	Gordon Park	Debris and sediment have reduced the stream capacity of Little Mahanoy Creek.	Remove sediment and debris from stream.	\$50,000	Short term
GOR003	Gordon Borough	Flooding	McKnight Street	The bridge on McKnight Street is undersized and the drainage system is inadequate.	Replace the bridge on McKnight Street and improve stormwater drainage facilities.	\$1,000,000	Medium Term
GOR004	Gordon Borough	Flooding	Charles Street	There is blockage in the box culvert.	Remove debris from culvert to enhance flow.	\$25,000	Short term
GOR005	Gordon Borough	Flooding	Rattling Run	The rip-rap streambanks are in poor condition.	Repair rip-raps to restore the condition of the streambanks.	\$100,000	Short term
HEG001	Hegins Township	Flooding	Wood Lane	The bridge on Wood Lane is undersized bridge and often floods the roadway.	Replace the bridge/culvert on Wood Lane to alleviate flooding.	\$1,000,000	Medium Term
HEG002	Hegins Township	Flooding	Trap Club Road	The bridge on Trap Club Road is damaged and often floods the roadway.	Replace the bridge/culvert on Trap Club Road to alleviate flooding.	\$1,000,000	Medium Term
HEG003	Hegins Township	Flooding	E. Mountain Road	Deep Creek floods roadway (E. Mountain Road).	Conduct a study to determine the feasibility of constructing a floodwall/levee on East Mountain Road.	\$80,000	Short term
HEG004	Hegins Township	Flooding	Forrest Drive	The bridge on Forest Drive is undersized bridge and often floods the roadway.	Replace the bridge/culvert on Forest Drive to alleviate flooding.	\$1,000,000	Medium Term
HEG005	Hegins Township	Flooding	E. Mountain Road	The bridge on E. Mountain Road is undersized bridge and often floods the roadway.	Replace the bridge/culvert on E. Mountain Road to alleviate flooding.	\$1,000,000	Medium Term
HEG006	Hegins Township	Flooding	Church Road	The bridge on Church Road is undersized bridge and often floods the roadway.	Replace the bridge/culvert on Church Road to alleviate flooding.	\$1,000,000	Medium Term
HEG007	Hegins Township	Flooding	Old Mill Road	The bridge on Forest Drive is undersized bridge and often floods the roadway.	Replace the bridge/culvert on Forest Drive to alleviate flooding.	\$1,000,000	Medium Term
HEG008	Hegins Township	Flooding	Dell Road	There is an undersized culverts/bridge on Dell Road that floods the roadway.	Replace the bridge/culvert on Dell Road to alleviate flooding.	\$1,000,000	Medium Term
HEG009	Hegins Township	Flooding	Fountain Road	There is an undersized bridge on Fountain Road that floods the roadway.	Replace the bridge/culvert on Fountain Road to alleviate flooding.	\$1,000,000	Medium Term
HEG010	Hegins Township	Flooding	Fountain Road	Roadway washouts occur on Fountain Road.	Improve roadway drainage facilities on Fountain Road.	\$100,000	Medium Term
HEG011	Hegins Township	Flooding	Pine Drive	There is an undersized bridge on Pine Drive that floods the roadway.	Replace the bridge/culvert on Pine Drive to alleviate flooding.	\$1,000,000	Medium Term
HEG012	Hegins Township	Flooding	Brook Lane	The bridge on Brook Lane has washed out and needs replacement.	Replace the bridge/culvert on Brook Lane to alleviate flooding.	\$1,000,000	Medium Term
HEG013	Hegins Township	Flooding	Pine Drive	Pine Drive is in the floodplain and floods frequently.	Conduct a study to determine the feasibility of constructing a floodwall/levee on Pine Drive.	\$80,000	Short term
HEG014	Hegins Township	Flooding	Grove Drive	There is an undersized bridge on Grove Drive that floods the roadway.	Replace the bridge/culvert on Grove Drive to alleviate flooding.	\$1,000,000	Medium Term
HEG015	Hegins Township	Flooding	Broad Street	There is an undersized bridge on Broad Street that floods the roadway.	Replace the bridge/culvert on Broad Street to alleviate flooding.	\$1,000,000	Medium Term
HEG016	Hegins Township	Flooding	Gap School Road	The undersized bridges on Gap School Road flood the road and homes.	Replace the bridge/culvert on Gap School Road to alleviate flooding.	\$1,000,000	Medium Term
HEG017	Hegins Township	Flooding	Bear Valley Road	Roadway washouts occur on Bear Valley Road.	Improve roadway drainage facilities on Bear Valley Road.	\$100,000	Medium Term
HEG018	Hegins Township	Winter Weather	State Route 25	There is standing water on State Route 25, which causes icing in the wintertime.	Improve roadway drainage facilities on State Route 25.	\$100,000	Medium Term
HEG019	Hegins Township	Winter Weather	State Route 25	There is standing water on State Route 25, which causes icing in the wintertime.	Improve roadway drainage facilities on State Route 25.	\$100,000	Medium Term
HEG020	Hegins Township	Transportation	State Route 125	Truck accidents occur on State Route 125 due to sharp turn at bottom of hill.	Improve signage/flashing lights on State Route 125.	\$25,000	Short term
HEG021	Hegins Township	Transportation	Grove Drive	Trucks miss turns at State Route 125 and Grove Drive.	Improve signage/flashing lights on Grove Drive.	\$25,000	Short term
HEG022	Hegins Township	Transportation	SR 25 and SR 125	Accidents occur at the SR25/SR125 intersection.	Improve signage/flashing lights on State Routes 25 and 125.	\$25,000	Short term
HEG023	Hegins Township	Winter Weather	N/A (not mapped)	The following roads experience snow drifting: Valley Road, Bridge Road, Harvest Lane, Orchard Road, Dell Road, Farm Lane, Park Road, Grove Drive, Broad Street, Gap School Road, E. Mountain Road, W. Mountain Road, Forest Drive, Church Road, Spring Lane, Old Mill Road	Improve roadway plowing/salting services on various roads within the Township to address snow drive after a snowstorm and improve road conditions.	\$50,000	Short term
HUB001	Hubley Township	Flooding	Church Road	Church Road experiences frequent overtopping from flooding.	Conduct a study to determine the feasibility of constructing a floodwall/levee on Church Road.	\$80,000	Short term
HUB002	Hubley Township	Flooding	Honeymoon Trail Road	Honeymoon Trail road experiences frequent overtopping from flooding.	Conduct a study to determine the feasibility of constructing a floodwall/levee on Honeymoon Trail Road.	\$80,000	Short term
HUB003	Hubley Township	Winter Weather	E. Main Street	East Main Street experiences snow drifting.	Purchase plows and salting equipment.	\$250,000	Short term
HUB004	Hubley Township	Winter Weather	Fearnot Road	Snow drifts on roadway	Purchase plows and salting equipment.	\$250,000	Short term
HUB005	Hubley Township	Winter Weather	Quaker Drive	Poor drainage roadway icing are major issues on Quaker Drive.	Examine and improve roadway drainage facilities on Quaker Drive.	\$100,000	Medium Term
HUB006	Hubley Township	Winter Weather	Church Road	Poor drainage roadway icing are major issues on Church Road.	Examine and improve roadway drainage facilities on Church Road.	\$100,000	Medium Term
HUB007	Hubley Township	Winter Weather	Kushwa Road	Poor drainage roadway icing are major issues on Kushwa Road.	Examine and improve roadway drainage facilities on Kushwa Road.	\$100,000	Medium Term
HUB008	Hubley Township	Transportation	Fear Not Road	Vehicular accidents occur on Fear Not Road due to a sharp turn and poor signage.	Improve signage/flashing lights on Fear Not Road.	\$25,000	Short term
HUB009	Hubley Township	Flooding	Pine Creek Road	Pine Creek Road is in danger of washing out to due streambank erosion.	Conduct stream stabilization to restore stream.	\$100,000	Short term
HUB010	Hubley Township	Flooding	Quaker Drive	There is an undersized bridge/culvert on Quaker Drive that floods the roadway.	Replace the bridge/culvert on Quaker Drive to alleviate flooding.	\$1,000,000	Medium Term

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HUB011	Hubley Township	Flooding	Honeymoon Trail Road	There is an undersized bridge/culvert on Honeymoon Trail Drive that floods the roadway.	Replace the bridge/culvert on Honeymoon Trail Drive to alleviate flooding.	\$1,000,000	Medium Term
HUB012	Hubley Township	Flooding	Church Road	There is an undersized bridge/culvert on Church Road that floods the roadway.	Replace the bridge/culvert on Church Road to alleviate flooding.	\$1,000,000	Medium Term
HUB013	Hubley Township	Flooding	W. Mountain Road	There is an undersized bridge/culvert on W. Mountain Road that floods the roadway.	Replace the bridge/culvert on W. Mountain Road to alleviate flooding.	\$1,000,000	Medium Term
HUB014	Hubley Township	Flooding	Township Road 880	There is an undersized bridge/culvert on Township Road 880 that floods the roadway.	Replace the bridge/culvert on Township Road 880 to alleviate flooding.	\$1,000,000	Medium Term
HUB015	Hubley Township	Flooding	Deep Creek Road	There is an undersized bridge/culvert on Deep Creek Road that floods the roadway.	Replace the bridge/culvert on Deep Creek Road to alleviate flooding.	\$1,000,000	Medium Term
HUB016	Hubley Township	Flooding	Mahantongo Street	There is an undersized bridge/culvert on Mahantongo Street that floods the roadway.	Replace the bridge/culvert on Mahantongo Street to alleviate flooding.	\$1,000,000	Medium Term
HUB017	Hubley Township	Flooding	Mill Road	There is an undersized bridge/culvert on Mill Road that floods the roadway.	Replace the bridge/culvert on Mill Road to alleviate flooding.	\$1,000,000	Medium Term
HUB018	Hubley Township	Flooding	Fear Not Road	There is an undersized bridge/culvert on Fear Not Road that floods the roadway.	Replace the bridge/culvert on Fear Not Road to alleviate flooding.	\$1,000,000	Medium Term
HUB019	Hubley Township	Flooding	Fear Not Road	There is an undersized bridge/culvert on Fear Not Road Drive that floods the roadway.	Replace the bridge/culvert on Fear Not Road to alleviate flooding.	\$1,000,000	Medium Term
HUB020	Hubley Township	Flooding	State Route 25	There is an undersized bridge/culvert on State Route 25 that floods the roadway.	Replace the bridge/culvert on State Route 25 to alleviate flooding.	\$1,000,000	Medium Term
KLI001	Kline Township	Winter Weather	All of Township (not mapped)	The Township is in a more northerly climate and receives more extreme snowfall than the rest of the County.	Purchase snow removal and salting equipment and designate emergency snow routes throughout Township.	\$250,000	Short term
KLI002	Kline Township	Flooding	All of Township (not mapped)	The Township's stormwater drainage systems are inadequate.	Conduct an engineering study to improve stormwater drainage facilities throughout the Township.	\$80,000	Short term
-	Landingville Borough	All Hazards	N/A (not mapped)				
MCB001	Mahanoy City Borough	Flooding	Mahanoy Creek	Flooding during high rain events.	Elevate the embankment or install flood wall.	\$300,000	Long Term
MCB002	Mahanoy City Borough	Flooding	E. Railroad Street	Flooding during high rain events.	Upgrade 84" CMP conveying North mahnoy Creek from E. Vine St. and W. Railroac	\$3,800,000	Long Term
MCB003	Mahanoy City Borough	Flooding	W. Vine Street	Water Fills Channel causing hazard.	Fill in abandoned channel for Old North Mahanoy Creek between W. Vine St. and \	\$800,000	Long Term
MCB004	Mahanoy City Borough	Flooding	E. Market St.	Debris clogs existing culvert	Add Trash Rack near 1400 Block of E. Market St.	\$50,000	Medium term
MCB005	Mahanoy City Borough	Flooding	Entire Borough	Borough wide Flooding	Create Act 167 Plan	\$30,000	Medium term
MAT001	Mahanoy Township	Flooding	Wiggans SR54	Culvert Backs up causing flooding	Replace or Repair Culvet	\$58,000	Medium Term
MAT002	Mahanoy Township	Flooding	Robinson Road at Park Place	Poor Drainage causes ponding on roadway and icing in the winter.	Construct Stormwater Drainage Improvements	\$50,000	Medium Term
MAT003	Mahanoy Township	Flooding	Colesback Rd	Poor Drainage causes ponding on roadway and icing in the winter.	Construct Stormwater Drainage Improvements	\$20,000	Medium Term
MAT004	Mahanoy Township	Flooding	White Owl Dr	Poor Drainage causes ponding on roadway and icing in the winter.	Construct Stormwater Drainage Improvements	\$20,000	Medium Term
MAT005	Mahanoy Township	Flooding	Buck Mountain Rd.	Poor Drainage causes ponding on roadway and icing in the winter.	Construct Stormwater Drainage Improvements	\$20,000	Medium Term
MAT006	Mahanoy Township	Flooding	New Boston, Back St.	Poor Drainage causes ponding on roadway and icing in the winter.	Construct Stormwater Drainage Improvements	\$20,000	Medium Term
MAT007	Mahanoy Township	Flooding	Water Company Road to New Boston	Poor Drainage causes ponding on roadway and icing in the winter.	Construct Stormwater Drainage Improvements	\$20,000	Medium Term
MAT008	Mahanoy Township	Flooding	Roosevelt Dr. New Boston	Poor Drainage causes ponding on roadway and icing in the winter.	Construct Stormwater Drainage Improvements	\$150,000	Medium Term
MAT009	Mahanoy Township	Flooding	Park Place Rd. at Meyers Crossing	Poor Drainage causes ponding on roadway and icing in the winter.	Construct Stormwater Drainage Improvements	\$20,000	Medium Term
MAT010	Mahanoy Township	Flooding	Park Place Rd. At Schoemakers	Poor Drainage causes ponding on roadway and icing in the winter.	Construct Stormwater Drainage Improvements	\$20,000	Medium Term
MAT011	Mahanoy Township	Flooding	Roosevelt Dr. near Morea	Poor Drainage causes ponding on roadway and icing in the winter.	Construct Stormwater Drainage Improvements	\$20,000	Medium Term
MAT012	Mahanoy Township	Flooding	Roosevelt Dr. Morea	Poor Drainage causes ponding on roadway and icing in the winter.	Construct Stormwater Drainage Improvements	\$20,000	Medium Term
MAT013	Mahanoy Township	Flooding	Bridge Number 1 at Park Place		Provide additional reinforcement	\$20,000	Medium term
MCD004	McAdoo Borough	Flooding	South Madison Street	The flood control project has not been properly maintained in the vicinity of South Madison Street.	Implement routine maintenance of flood control project.	\$25,000	Short term
MCD005	McAdoo Borough	Flooding	W. Sherman Street	The flood control project has not been properly maintained in the vicinity of W. Sherman Street.	Implement routine maintenance of flood control project.	\$25,000	Short term
MCD006	McAdoo Borough	Winter Weather	All of Borough (not mapped)	The Borough is in a more northerly climate and receives more extreme snowfall than the rest of the County.	Purchase snow removal and salting equipment and designate emergency snow routes throughout Borough.	\$250,000	Short term
-	Mechanicsville Borough	All Hazards	N/A (not mapped)				
MID001	Middleport Borough	Flooding	Lincoln Street and Washington Street	Lincoln Street and Washington Street experience frequent overtopping from flooding.	Conduct a study to determine the feasibility of constructing a floodwall/levee on Lincoln Street and Washington Street.	\$80,000	Short term
MID002	Middleport Borough	Flooding	Main Street	Main Street experiences frequent overtopping from flooding.	Conduct a study to determine the feasibility of constructing a floodwall/levee on Main Street.	\$80,000	Short term
-	Minersville Borough	All Hazards	N/A (not mapped)				
-	Mount Carbon Borough	All Hazards	N/A (not mapped)				
-	New Castle Township	All Hazards	N/A (not mapped)				
-	New Philadelphia Borough	All Hazards	N/A (not mapped)				
NRB001	New Ringgold Borough	Flooding	West of Railroad	Little Schuylkill River floods Borough.	Conduct a study to determine the feasibility of constructing a floodwall/levee to protect the Borough.	\$80,000	Short term
NRB002	New Ringgold Borough	Hazardous Material	Railroad	Railroad accident would bisect Borough and prevent evacuation during an emergency.	Evaluate potential alternate evacuation routes for Borough egress.	\$25,000	Short term
NRB003	New Ringgold Borough	Flooding/Hazardous Material	Sewage Treatment Plant (not mapped)	Flooding issues result in chlorine releases at the Wastewater Treatment Plant (WWTP).	Conduct a study to investigate solutions to protect WWTP from flooding.	\$80,000	Short term
NMT001	North Manheim Township	Flooding	Green Tree Drive	There is an undersized bridge/culvert on Green Tree Drive that floods the roadway.	Replace the bridge/culvert on Green Tree Drive to alleviate flooding.	\$1,000,000	Medium Term
NMT002	North Manheim Township	Flooding	River Street/Mengle Street	River Street and Mengle Street experience overtopping from flooding.	Conduct a study to determine the feasibility of constructing a floodwall/levee on River Street and Mengle Street.	\$80,000	Short term
NMT003	North Manheim Township	Flooding	Antique Lane	There is an undersized bridge/culvert on Antique Lane that floods the roadway.	Replace the bridge/culvert on Antique Lane to alleviate flooding.	\$1,000,000	Medium Term
NMT004	North Manheim Township	Flooding	Briar Road	Briar Road experiences frequent overtopping from flooding.	Conduct a study to determine the feasibility of constructing a floodwall/levee on Briar Road.	\$80,000	Short term
NMT005	North Manheim Township	Flooding	Berry Road	There is an undersized bridge/culvert on Berry Road that floods the roadway.	Replace the bridge/culvert on Berry Road to alleviate flooding.	\$1,000,000	Medium Term
NMT006	North Manheim Township	Flooding	Old Mill Road	The pond near Old Mill Road overflows during rainfall events and floods Old Mill Road.	Construct embankment and spillway to regulate pond outflows.	\$250,000	Medium Term
NMT007	North Manheim Township	Flooding	Ridge Road	Ridge Road does not have an adequate stormwater drainage system.	Conduct an engineering study to design and improve stormwater drainage facilities on Ridge Road.	\$80,000	Short term

Problem Area ID	Municipality	Hazard	Location	Problem Description	Potential Mitigation Action	Range of Costs*	Timeframe for Implementation (short term 1-2 years; medium term 3-5 years; long term 5-10 years)
NMT008	North Manheim Township	Flooding	Seven Stars Road	Seven Stars Road does not have an adequate stormwater drainage system.	Conduct an engineering study to design and improve stormwater drainage facilities on Seven Stars Road.	\$80,000	Short term
NMT009	North Manheim Township	Flooding	Hemlock Drive	Hemlock Drive does not have an adequate stormwater drainage system.	Conduct an engineering study to design and improve stormwater drainage facilities on Hemlock Drive.	\$80,000	Short term
NMT010	North Manheim Township	Wind Events	Township-wide (not mapped)	A tornado touched down in the Township and caused widespread damage.	Ensure buildings in the Township meet International Building Code specifications for wind loadings.	Perform Cost Assessment	Long Term
NUT001	North Union Township	Flooding	Trout Lane	There is an undersized bridge/culvert on Trout Lane that floods the roadway.	Replace the bridge/culvert on Trout Lane to alleviate flooding.	\$1,000,000	Medium Term
NUT002	North Union Township	Flooding	Millers Road	There is an undersized bridge/culvert on Millers Road that floods the roadway.	Replace the bridge/culvert on Millers Road to alleviate flooding.	\$1,000,000	Medium Term
NUT003	North Union Township	Flooding	Labensberg Road	There is an undersized bridge/culvert on Labensberg Road that floods the roadway.	Replace the bridge/culvert on Labensberg Road to alleviate flooding.	\$1,000,000	Medium Term
-	Norwegian Township	All Hazards	N/A (not mapped)				
ORW001	Orwigsburg Borough	Flooding	Ridge Road	There is an undersized bridge/culvert on Ridge Road that floods the roadway.	Replace the bridge/culvert on Ridge Road to alleviate flooding.	\$1,000,000	Medium Term
ORW002	Orwigsburg Borough	Flooding	Long Avenue	Long Avenue is in danger of washing out to due streambank erosion.	Conduct stream stabilization to restore stream.	\$100,000	Short term
ORW003	Orwigsburg Borough	Flooding	W. Market Street	There is an undersized bridge/culvert on W. Market Street that floods the roadway.	Replace the bridge/culvert on W. Market Street to alleviate flooding.	\$1,000,000	Medium Term
ORW004	Orwigsburg Borough	Flooding	Decatur Street	Decatur Street does not have an adequate stormwater drainage system.	Conduct an engineering study to design and improve stormwater drainage facilities on Decatur Street.	\$80,000	Short term
ORW005	Orwigsburg Borough	Flooding	S. Wayne Street	S. Wayne Street does not have an adequate stormwater drainage system.	Conduct an engineering study to design and improve stormwater drainage facilities on S. Wayne Street.	\$80,000	Short term
-	Palo Alto Borough	All Hazards	N/A (not mapped)				
PGB001	Pine Grove Borough	Flooding	S. Tulpehocken Street	S. Tulpehocken Street does not have an adequate stormwater drainage system.	Conduct an engineering study to design and improve stormwater drainage facilities on S. Tulpehocken Street.	\$80,000	Short term
PGB002	Pine Grove Borough	Flooding	Parallel Road and W. Mill Street	Parallel Road and W. Mill Street have inadequate storm sewer, which worsen flooding and prevent egress from Borough.	Conduct an engineering study to design and improve stormwater drainage facilities on Parallel Road and W. Mill Street.	\$80,000	Short term
PGB003	Pine Grove Borough	Flooding	State Route 895	Swatara Creek floods State Route 895.	Conduct a study to determine the feasibility of constructing a floodwall/levee on State Route 895.	\$80,000	Short term
PGB004	Pine Grove Borough	Flooding	E. Mill Street and Birds Hill Road	Swatara Creek floods E. Mill Street and Birds Hill Road.	Conduct a study to determine the feasibility of constructing a floodwall/levee on E. Mill Street and Birds Hill Road.	\$80,000	Short term
PGB005	Pine Grove Borough	Flooding	E. Pottsville Street	Swatara Creek floods E. Pottsville Street.	Conduct a study to determine the feasibility of constructing a floodwall/levee on E. Pottsville Street.	\$80,000	Short term
PGB006	Pine Grove Borough	All Hazards	Borough Hall	Borough does not have an adequate Emergency Operations Center (EOC).	Acquire the necessary equipment, and designate Borough Hall as the EOC.	Perform Cost Assessment	Short term
PGB007	Pine Grove Borough	Flooding	N. Tulpehocken Street	Swatara Creek floods businesses on N. Tulpehocken Street.	Conduct a study to determine the feasibility of constructing a floodwall/levee on N. Tulpehocken Street.	\$80,000	Short term
PGB008	Pine Grove Borough	Hazardous Material	North portion of Borough (not mapped)	Oil and methane pipelines traverse the northern portion of the Borough, posing a potential contamination threat to wells.	Implement regular testing of groundwater wells.	\$50,000	Medium Term
PGB009	Pine Grove Borough	All Hazards	All of Borough (not mapped)	Evacuation routes from situations on I-81 traverse Borough and block local traffic.	Designate new evacuation/detour routes to bypass borough.	\$25,000	Short term
PGT001	Pine Grove Township	Flooding	State Route 443 at I-81	Portion of I-81 washed out during Tropical Storm Lee (2011).	Repair roadway and construct flood protection system.	\$1,000,000	Long Term
PGT002	Pine Grove Township	Flooding	State Route 645 at Swatara Creek	Flooding frequently occurs at the confluence of Swatara Creek and Little Swatara Creek, and floods State Route 645.	Consider removing flooded properties from the floodplain.	Perform Cost Assessment	Long Term
PGT003	Pine Grove Township	Flooding	Mexico Road	A pipe failed on Mexico Road, and portions of the roadway are washed out.	Replace the failed pipe on Mexico Road with a larger structure.	\$100,000	Medium Term
PGT004	Pine Grove Township	Winter Storm	Sweet Arrow Lake Road	Poor drainage roadway icing are major issues on Sweet Arrow Lake Road.	Examine and improve roadway drainage facilities on Sweet Arrow Lake Road.	\$100,000	Medium Term
PGT005	Pine Grove Township	Flooding	2 1/2 Mile Road	2 1/2 Mile Road experiences flooding and portions of the roadway are washed out.	Conduct a study to determine the feasibility of constructing a floodwall/levee on 2 1/2 Mile Road.	\$80,000	Short term
PGT006	Pine Grove Township	Flooding	Swopes Valley Road	Swopes Valley Road experiences flooding and portions of the roadway are washed out.	Conduct a study to determine the feasibility of constructing a floodwall/levee on Swopes Valley Road.	\$80,000	Short term
PGT007	Pine Grove Township	Flooding	Old Forge Road	There is an undersized bridge/culvert on Old Forge Road that floods the roadway.	Replace the bridge/culvert on Old Forge Road to alleviate flooding.	\$1,000,000	Medium Term
PGT008	Pine Grove Township	Flooding	Oak Grove Road	There is an undersized bridge/culvert on Oak Grove Road that floods the roadway.	Replace the bridge/culvert on Oak Grove Road to alleviate flooding.	\$1,000,000	Medium Term
PCB001	Port Carbon Borough	Flooding	Wood Street	A drainage pipe on Wood Street is damaged and undersized.	Replace the damaged pipe on Wood Street with a larger structure.	\$100,000	Medium Term
PCB002	Port Carbon Borough	Flooding	5th Street	5th Street does not have an adequate stormwater drainage system.	Conduct an engineering study to design and improve stormwater drainage facilities on 5th Street.	\$80,000	Short term
PCB003	Port Carbon Borough	Flooding	Mill Creek	Sediment is built up in Mill Creek and has reduced the stream capacity.	Remove sediment and debris from stream.	\$50,000	Short term
PCB004	Port Carbon Borough	Flooding	Main Street	Main Street does not have an adequate stormwater drainage system.	Conduct an engineering study to design and improve stormwater drainage facilities on Main Street.	\$80,000	Short term
PCB005	Port Carbon Borough	Flooding	Lillian Street	Lillian Street does not have an adequate stormwater drainage system.	Conduct an engineering study to design and improve stormwater drainage facilities on Lillian Street.	\$80,000	Short term
PCB006	Port Carbon Borough	Flooding	4th Street	4th Street does not have an adequate stormwater drainage system.	Conduct an engineering study to design and improve stormwater drainage facilities on 4th Street.	\$80,000	Short term
PCL001	Port Clinton Borough	Flooding	State Route 61	There is streambank damage on Rattling Run near State Route 61.	Implement FEMA/PEMA funded flood protection project on Rattling Run (ongoing).	N/A (already funded)	Short term
PCL002	Port Clinton Borough	Wildfire	NE portion of Borough	A forest fire resulted from a fallen power line in the northeastern area of the Borough.	Work with local emergency officials to develop/improve early warning system to monitor and contain forest fires.	\$50,000	Short term
PCL003	Port Clinton Borough	Wildfire	SE portion of Borough	A forest fire started in West Brunswick Township and spread to the southeastern area of the Borough.	Work with local emergency officials to develop/improve early warning system to monitor and contain forest fires.	\$50,000	Short term
POR001	Porter Township	Flooding	Evangel Park Road	The bridge/culvert at Evangel Park Road is undersized and causes roadway overtopping during flood events.	Replace the undersized structure with a larger opening to convey flood flows.	\$1,000,000	Medium Term
POR002	Porter Township	Flooding	Kalmia Road	The bridge/culvert at Kalmia Road is undersized and causes roadway overtopping during flood events.	Replace the undersized structure with a larger opening to convey flood flows.	\$1,000,000	Medium Term
POR003	Porter Township	Flooding	Kalmia Road	The bridge/culvert at Kalmia Road is undersized and causes roadway overtopping during flood events.	Replace the undersized structure with a larger opening to convey flood flows.	\$1,000,000	Medium Term

Problem Area ID	Municipality	Hazard	Location	Problem Description	Potential Mitigation Action	Range of Costs*	Timeframe for Implementation (short term 1-2 years; medium term 3-5 years; long term 5-10 years)
POR004	Porter Township	Flooding	Mt Eagle Trail	The bridge/culvert at Mt Eagle Trail is undersized and causes roadway overtopping during flood events.	Replace the undersized structure with a larger opening to convey flood flows.	\$1,000,000	Medium Term
POR005	Porter Township	Flooding	Greenwood Road	The bridge/culvert at Greenwood Road is undersized and causes roadway overtopping during flood events.	Replace the undersized structure with a larger opening to convey flood flows.	\$1,000,000	Medium Term
POR006	Porter Township	Flooding	Greenland Road	Greenland Road does not have a stormwater drainage system which causes flooding of the roadway.	Conduct an engineering study to design and construct a stormwater drainage system on Greenland Road.	\$80,000	Short term
POR007	Porter Township	Landslide	Porter Road	Uncontrolled runoff from the hillsides along Porter Road is causing roadway washouts.	Conduct an engineering study to design and construct stormwater interception/control facilities along Porter Road.	\$80,000	Short term
POR008	Porter Township	Flooding	Grand Avenue	The culvert at Grand Avenue is collapsing.	Replace the collapsing culvert on Grand Avenue with a larger structure to convey flood flows.	\$1,000,000	Medium Term
POR009	Porter Township	Flooding	N 6th Street	N 6th Street does not have an adequate stormwater drainage system.	Conduct an engineering study to design and construct improvements to the stormwater drainage system on N 6th Street.	\$80,000	Short term
POR010	Porter Township	Winter Weather	State Route 209	State Route 209 experiences icing from 12th Street to Terry Street.	Improve roadway plowing and salting operations.	\$50,000	Short term
POR011	Porter Township	Landslide	Main Street	Uncontrolled runoff from the hillsides along Main Street is causing roadway washouts.	Conduct an engineering study to design and construct stormwater interception/control facilities along Main Street.	\$80,000	Short term
-	Pottsville City	All Hazards	N/A (not mapped)				
REI001	Reilly Township	Flooding	Near State Route 209	Muddy Branch is filled with coal silt discharging from abandoned mines, which has reduced the stream capacity.	Remove sediment and debris from Muddy Branch.	\$50,000	Short term
REI002	Reilly Township	Flooding	N/A (not mapped)	Township does not have an Act 167 Stormwater Management Ordinance.	Implement an Act 167 Stormwater Management Ordinance.	\$25,000	Short term
RIN001	Ringtown Borough	Flooding	Wastewater Treatment Plant	Flooding causes overflow issues at the Wastewater Treatment Plant (WWTP).	Conduct an engineering study to investigate potential structural projects to protect WWTP from flooding.	\$80,000	Short term
RIN002	Ringtown Borough	All Hazards	N/A (not mapped)	Borough residents are not kept abreast of issues related to natural hazards.	Establish an early warning/emergency communications system.	\$25,000	Short term
RIN003	Ringtown Borough	Drought/Winter Weather	N/A (not mapped)	Extended power outages occur at the Water Treatment Plant.	Install emergency backup generator at the water treatment plant.	\$100,000	Short term
RUS001	Rush Township	Flooding	All of Township (not mapped)	Township does not have adequate stormwater drainage systems.	Conduct an engineering study to design stormwater drainage facilities throughout Township.	\$80,000	Short term
RYT001	Ryan Township	Flooding	Barnesville Drive and Williams Street	Barnesville Drive and Williams Street experience overtopping from flooding.	Conduct a study to determine the feasibility of constructing a floodwall/levee on Barnesville Drive and Williams Street.	\$80,000	Short term
RYT002	Ryan Township	Flooding	State Road and Hamilton Street	A culvert blocked with debris backs up and floods State Road and Hamilton Street.	Remove debris blockage from culvert at State Road and Hamilton Street.	\$25,000	Short term
RYT003	Ryan Township	Flooding	Ridge Road	There is an undersized bridge/culvert on Ridge Road that floods the roadway.	Replace the bridge/culvert on Ridge Road to alleviate flooding.	\$1,000,000	Medium Term
RYT004	Ryan Township	Dam Failure	Lakewood Park Estates	Lakewood Park Estates is located within the Hosensock Flood Control Dam Release Zone.	Update/Improve Emergency Action Plan for the Hosensock Flood Control Dam.	\$25,000	Short term
RYT005	Ryan Township	All Hazards	State Route 54	The communication mainline that traverses the Township is vulnerable to damage.	Work with utility company to develop immediate response program in the event of line damage.	In-kind hours	Short term
RYT006	Ryan Township	Flooding	Back Road	There is an undersized bridge/culvert on Back Road that floods the roadway.	Replace the bridge/culvert on Back Road to alleviate flooding.	\$1,000,000	Medium Term
RYT007	Ryan Township	Flooding	Church St/Tuscarora Mountain Dr	Streambank erosion is threatening roadways at Church Street and Tuscarora Mountain Drive.	Conduct stream stabilization to restore stream.	\$100,000	Short term
SCB001	Saint Clair Borough	Flooding	Thwing Street	Debris is blocking the Thwing Street Bridge.	Remove flood debris from the Thwing Street Bridge.	\$25,000	Short term
SCB002	Saint Clair Borough	Flooding	Wade Road	Poor drainage on the road shoulder of Wade Road is causing roadway flooding.	Conduct an engineering study to design and construct improvements to the stormwater drainage system on Wade Road.	\$80,000	Short term
SCB003	Saint Clair Borough	Flooding	S Mill Street	The floodwalls along Mill Creek near S Mill Street are failing and collapsing in places due to past floods.	Repair the floodwalls and install rock protection along Mill Creek.	\$250,000	Medium Term
SCB004	Saint Clair Borough	Flooding	Lawton Street	The bridge at Lawton Street is structurally deficient.	Repair/Replace the bridge at Lawton Street.	\$1,000,000	Medium Term
SCB005	Saint Clair Borough	Flooding	Carroll Street	The bridge at Carroll Street is structurally deficient.	Repair/Replace the bridge at Carroll Street.	\$1,000,000	Medium Term
SCB006	Saint Clair Borough	Flooding	Franklin Street	The bridge at Franklin Street is structurally deficient.	Repair/Replace the bridge at Franklin Street.	\$1,000,000	Medium Term
SCB007	Saint Clair Borough	Flooding	E Hancock Street	Residences along E Hancock St and Prior Ave experience flooding from Hancock St during periods of heavy, prolonged rains.	Re-grade shoulder areas to insure surface flow enters existing pipe & inlet network; rock-line shoulder swale as needed to avoid inlet debris.	\$50,000	Medium Term
SCB008	Saint Clair Borough	Flooding	Lawton Street	Heavy rains cause swale to erode, which then causes debris deposits on roadway.	Rock-line swale and re-grade as necessary to ensure surface flow enters existing drainage network.	\$50,000	Medium Term
SCB009	Saint Clair Borough	Wildfire	Southward Playground	Brush fires occur annually in the vicinity of the Southward Playground.	Clear out dead, dried scrub brush and trees to reduce fire hazard.	\$10,000	Short term
SCB010	Saint Clair Borough	Flooding	Quirin Property near Wade Rd	The existing swale repeatedly fills up with debris, causing flooding of private property and the roadway.	Remove debris, rock-line banks, and replace the downstream pipe.	\$100,000	Medium Term
SCB011	Saint Clair Borough	Flooding	Mill Creek near Lawton St	Debris is blocking Mill Creek near Lawton Street.	Remove debris from Mill Creek near Lawton Street.	\$25,000	Short term
SCB012	Saint Clair Borough	Dam Failure	All of Borough	The Borough is located downstream of 3 dams, placing the Borough at risk in the event of a dam failure.	Work with dam owners to ensure up-to-date Emergency Action Plans are in place for the dams upstream of the Borough.	In-kind hours	Short term
SHB001	Schuylkill Haven Borough	Flooding	St. Charles/St. James Streets	St. Charles Street and St. James Street are located in the floodplain.	Remove properties from the floodplain along St. Charles Street and St. James Street.	Perform Cost Assessment	Long Term
SHB002	Schuylkill Haven Borough	Flooding	Columbia Street	There is debris restricting flow under the Columbia Street Bridge.	Remove debris from the Columbia Street Bridge.	\$25,000	Short term
SHB003	Schuylkill Haven Borough	Flooding	Island Park	Sediment and debris in the River causes more frequent flooding of the Island Park area.	Remove sediment and debris from the River.	\$100,000	Medium Term
SHB004	Schuylkill Haven Borough	Landslide	Railroad Street	The retaining wall on Railroad Street is failing.	Repair the retaining wall on Railroad Street.	\$250,000	Medium Term
SHB005	Schuylkill Haven Borough	Flooding	Garfield Avenue	The retaining wall along the stream on Garfield Avenue is failing.	Repair the retaining wall on Garfield Avenue.	\$250,000	Medium Term
SHB006	Schuylkill Haven Borough	Landslide	St. John Street	The retaining wall on St. John Street is failing.	Repair the retaining wall on St. John Street.	\$250,000	Medium Term
-	Schuylkill Township	All Hazards	N/A (not mapped)				
SHEN001	Shenandoah Borough	Flooding	SR 924 and Washington Street Intersection	The existing storm drainage is inadequate and causes flooding of the intersection	Replacement and/or addition of new inlets and adequately sized pipe	\$50,000	Short term

Problem Area ID	Municipality	Hazard	Location	Problem Description	Potential Mitigation Action	Range of Costs*	Timeframe for Implementation (short term 1-2 years; medium term 3-5 years; long term 5-10 years)
SHEN002	Shenandoah Borough	Flooding	Wastewater Treatment Plant	The Borough has a combined storm and sanitary system. During major storm events, the treatment plant floods and has caused damage to the treatment plant.	Storm separation projects	\$50,000 - \$5,000,000 (based on scope of separation project)	Short to Long Term
-	South Manheim Township	All Hazards	N/A (not mapped)				
TAM001	Tamaqua Borough	Flooding	Ghares Lane	Poor drainage and debris accumulation on the unnamed stream entering the H.D. Buehler Memorial Pool and Community Park property causes flooding.	Install a trash rack on the unnamed stream entering the park, and upgrade the storm drainage system.	\$66,000	Short term
TAM002	Tamaqua Borough	Flooding	Wabash Creek west of Tamaqua	Wabash Creek floods properties in the Borough.	Continue to pursue the 1980 U.S. Army Corps of Engineers recommendation of building a stream diversion of Wabash Creek directly to the Little Schuylkill River.	Perform Cost Assessment	Long Term
TAM003	Tamaqua Borough	Flooding	Unnamed Stream northwest of Tamaqua	The unnamed stream contributes to flooding of the Wabash Creek.	Continue to pursue the 1980 U.S. Army Corps of Engineers recommendation of building a dry dam on the unnamed stream to alleviate flooding of the Wabash Creek.	Perform Cost Assessment	Long Term
TAM004	Tamaqua Borough	Flooding	Wabash Creek Culvert	Flooding has caused scouring and minor collapse of the Wabash Creek Culvert.	Repair the Wabash Creek Culvert and improve scour protection.	\$552,000	Medium Term
TAM005	Tamaqua Borough	Flooding	Wabash Creek Culvert near Tamaqua Public Library	A section of the Wabash Creek Culvert is damaged due to flooding.	Replace the damaged section of the Wabash Creek Culvert.	\$1,000,000	Medium Term
TCB001	Tower City Borough	Flooding	Colliery Ave and Grand Ave	The drainage system on Colliery Avenue and Grand Avenue is inadequate.	Improve roadway drainage facilities on Colliery Avenue and Grant Avenue.	\$100,000	Medium Term
TCB002	Tower City Borough	Flooding	4th Street Bridge	The 4th Street Bridge is undersized.	Replace the undersized bridge on 4th Street.	\$1,000,000	Medium Term
TCB003	Tower City Borough	Flooding	Hand Street	No culverts under the road on Hand Street to convey flood flows.	Construct culverts on Hand Street to improve flow.	\$1,000,000	Medium Term
TCB004	Tower City Borough	Flooding	Grand Ave and 2nd St	The drainage system on Grand Avenue and 2nd Street is inadequate.	Conduct an engineering study to improve stormwater drainage facilities on Grant Avenue and 2nd Street.	\$80,000	Short term
TCB005	Tower City Borough	Flooding	Grand Ave and 7th St	The drainage system on Grand Avenue and 7th Street is inadequate.	Conduct an engineering study to improve stormwater drainage facilities on Grant Avenue and 7th Street.	\$80,000	Short term
TCB006	Tower City Borough	Flooding	All of Borough (not mapped)	There is a need for Borough-wide debris removal and storm drainage upgrade.	Conduct an effort to remove sediment and debris from streams throughout the Borough.	\$250,000	Short term
TCB007	Tower City Borough	All Hazards	N/A (not mapped)	The Borough does not have an emergency alert notification system.	Establish an early warning/emergency communications system within the Borough.	\$50,000	Short term
TCB008	Tower City Borough	Winter Weather	N/A (not mapped)	The snow and ice removal equipment needs to be upgraded.	Upgrade snow and ice removal equipment for the Borough.	\$250,000	Short term
TCB009	Tower City Borough	All Hazards	N/A (not mapped)	The Borough building does not have emergency generator or radio equipment.	Purchase an emergency backup generator and radio equipment for the Borough building.	\$50,000	Short term
TRB001	Tremont Borough	Flooding	Good Spring Creek	There is a need for a flood control system on Good Spring Creek.	Conduct a study to determine the feasibility of constructing a floodwall/levee on Gold Spring Creek.	\$80,000	Short term
TRB002	Tremont Borough	Flooding	Pine Street	Debris and trees are blocking the bridge on Pine Street.	Remove debris and sediment from bridges on Pine Street.	\$25,000	Short term
TRB003	Tremont Borough	Flooding	Goodsprings Alley	The bridge on Goodsprings Alley is undersized.	Replace bridge on Goodsprings Alley.	\$1,000,000	Medium Term
TRB004	Tremont Borough	Flooding	Line Street	Debris is blocking bridge on Line Street.	Remove debris and sediment from bridge on Line Street.	\$25,000	Short term
TRB005	Tremont Borough	Flooding	Chestnut Alley	The streambank on Middle Creek is collapsing.	Conduct stream stabilization to restore Middle Creek.	\$100,000	Short term
TRB006	Tremont Borough	Flooding	South of Line Street	There is sediment and debris in the stream south of Line Street.	Remove sediment and debris from stream south of Line Street.	\$50,000	Short term
TRB007	Tremont Borough	Flooding	2nd Street to Line Street	Poplar Creek floods; the culverts from 2nd Street to Line Street are undersized.	Replace culverts from 2nd Street to Line Street.	\$1,000,000	Medium Term
TRB008	Tremont Borough	Flooding	Clay Street to Washington Street	The storm conveyance system from Clay Street to Washington Street is inadequate.	Improve stormwater drainage facilities from Clay Street to Washington Street.	\$100,000	Medium Term
TRB009	Tremont Borough	Flooding	Middlecreek Road to Clay Street	The drainage system from Middlecreek Road to Clay Street is inadequate.	Improve stormwater drainage facilities from Middlecreek Road to Clay Street.	\$100,000	Medium Term
TRB010	Tremont Borough	Transportation	All of Borough (not mapped)	Railroad crossings throughout Borough are old and damaged	Repair railroad crossing throughout Borough.	\$1,000,000	Long Term
TRT001	Tremont Township	Landslide	Rausch Creek Road	Rocks fall from steep face on to Rausch Creek Road making it hazardous for vehicles.	Construct roadside barriers on Rausch Creek Road to catch debris.	\$100,000	Medium Term
TRT002	Tremont Township	Flooding	State Route 4011	There is overbank flooding along roadway on State Route 4011.	Conduct a study to determine the feasibility of constructing a floodwall/levee on State Route 4011.	\$80,000	Short term
TRT003	Tremont Township	Flooding	Camp Road	The bridge on Camp Road has failed.	Replace bridge on Camp Road.	\$1,000,000	Medium Term
TRT004	Tremont Township	Flooding	Molleystown Road	The guardrail along Molleystown Road is failing from flood washouts.	Conduct a study to determine the feasibility of constructing a floodwall/levee on Molleystown Road.	\$80,000	Short term
-	Union Township	All Hazards	N/A (not mapped)				
UMT001	Upper Mahantango Township	Flooding	Spain Road	The bridge over Pine Creek is filled with debris.	Remove sediment and debris from bridge on Spain Road.	\$25,000	Short term
UMT002	Upper Mahantango Township	Flooding	Town of Klingerstown	There is debris at the bridges, Pine and Mahantango Creeks.	Remove sediment and debris from bridges on Pine and Mahantango Creek.	\$25,000	Short term
UMT003	Upper Mahantango Township	All Hazards	Town of Klingerstown (not mapped)	The Fire Company does not have an emergency generator.	Purchase an emergency backup generator for the Township's Fire Company.	\$25,000	Short term
UMT004	Upper Mahantango Township	All Hazards	All of Township (not mapped)	The Township does not have an early warning system.	Establish an early warning/emergency communications system for the Township.	\$50,000	Short term
WAL001	Walker Township	Flooding	Village of Reynolds	Village of Reynolds floods periodically.	Remove structures from floodplain and acquire and preserve land as open space in perpetuity.	Perform Cost Assessment	Long Term
WAL002	Walker Township	Flooding	Wildcat Road	The cross-pipe on Wildcat Road is damaged.	Replace pipe with larger structure on Wildcat Road.	\$100,000	Medium Term
WAL003	Walker Township	Flooding	Wildcat Road	The cross-pipe on Wildcat Road is damaged.	Replace pipe with larger structure on Wildcat Road.	\$100,000	Medium Term
WAL004	Walker Township	Flooding	Wildcat Road	The cross-pipe on Wildcat Road is damaged.	Replace pipe with larger structure on Wildcat Road.	\$100,000	Medium Term
WAL005	Walker Township	Flooding	Valley Road	Two 48" culverts on Valley Road are failing, thereby blocking the flow, and flooding the roadway.	Replace culverts on Valley Road to alleviate flooding.	\$1,000,000	Medium Term
WAL006	Walker Township	Winter Weather	Valley Road	Snowdrifting occurs along one mile on Valley Road.	Render roadway plowing/salting services immediately after a snow event to improve road conditions.	\$10,000	Short term
WAL007	Walker Township	Winter Weather	Valley Road	Snowdrifting occurs along one mile on Valley Road.	Render roadway plowing/salting services immediately after a snow event to improve road conditions.	\$10,000	Short term
WAS001	Washington Township	Flooding	Trophy Drive	The bridge at Trophy Drive is filled with debris.	Remove sediment and debris from bridge on Trophy Drive.	\$25,000	Short term
WAS002	Washington Township	Flooding	Covered Bridge Road	The bridge at Covered Bridge Road filled with debris.	Remove sediment and debris from bridge on Covered Bridge Road.	\$25,000	Short term

Problem Area ID	Municipality	Hazard	Location	Problem Description	Potential Mitigation Action	Range of Costs*	Timeframe for Implementation (short term 1-2 years; medium term 3-5 years; long term 5-10 years)
WAS003	Washington Township	All Hazards	Municipal Building	The EOC does not have high speed internet service.	Provide for high speed internet services at the Emergency Operations Center in the Township's municipal building.	\$10,000	Short term
-	Wayne Township	All Hazards	N/A (not mapped)				
WBT001	West Brunswick Township	Flooding	River Road	Pine Creek floods the roadway making it impassable.	Restore the flood carrying capacity to Pine Creek.	\$80,000	Short term
WBT002	West Brunswick Township	Flooding	Fork Mountain Road	Pine Creek floods the roadway making it impassable.	Restore the flood carrying capacity to Pine Creek.	\$80,000	Short term
WBT003	West Brunswick Township	Flooding	Dogwood Lane	Pine Creek floods Dogwood Lane and has caused the roadway to close.	Restore the flood carrying capacity to Pine Creek.	\$80,000	Short term
WBT004	West Brunswick Township	Flooding	Frisbee Road	Pine Creek floods the bridge/roadway on Frisbee Road.	Replace the bridge/culvert on Frisbee Road to alleviate flooding.	\$1,000,000	Medium Term
WBT005	West Brunswick Township	Flooding	Grist Mill Road	Grist Mill Road has resulted in closure due to flooding.	Restore the flood carrying capacity to Pine Creek.	\$80,000	Short term
WBT006	West Brunswick Township	All Hazards	N/A (not mapped)	Early warning and evacuation procedures need improvements.	Improve communications systems and procedures for emergency early warnings and evacuations.	\$25,000	Short term
WMT001	West Mahanoy Township	Flooding	All of Township (not mapped)	West Mahanoy Township does not have any stormwater drainage systems.	Conduct an engineering study to improve stormwater drainage facilities throughout the Township.	\$80,000	Short term
WPT001	West Penn Township	Flooding	Dorset Road	Lizard Creek floods roadway due to the undersized bridge on Dorset Road.	Replace the bridge/culvert on Dorset Road to alleviate flooding.	\$1,000,000	Medium Term
WPT002	West Penn Township	Flooding	Retreat Road	Lizard Creek floods roadway due to the undersized pipe on Retreat Road.	Replace the bridge/culvert on Retreat Road to alleviate flooding.	\$1,000,000	Medium Term
WPT003	West Penn Township	Flooding	Blue Mountain Dr. and Kepners Road	Indian Run floods Blue Mountain Dr. and Kepners Road due to undersized pipes on these roads.	Replace pipes on Blue Mountain Drive and Kepners Road to alleviate flooding.	\$100,000	Medium Term
WPT004	West Penn Township	Flooding	State Route 309	Lizard Creek floods State Route 309.	Conduct a study to determine the feasibility of constructing a floodwall/levee on State Route 309.	\$80,000	Short term
WPT005	West Penn Township	Flooding	Ridge Road	Lizard Creek floods Ridge Road.	Conduct a study to determine the feasibility of constructing a floodwall/levee on Ridge Road.	\$80,000	Short term
WPT006	West Penn Township	Flooding	Lime Kiln Drive	Lime Kiln Drive floods due to an undersized pipe.	Replace the pipe on Lime Kiln Road to alleviate flooding.	\$100,000	Medium Term
WPT007	West Penn Township	Flooding	Ash Circle	Two undersized pipes on Ash Circle cause the roadway to flood.	Replace pipes on Ash Circle Road to alleviate flooding.	\$100,000	Medium Term
WPT008	West Penn Township	Flooding	School Drive	An undersized bridge on School Drive causes the roadway to flood.	Replace bridge on School Drive to alleviate flooding.	\$1,000,000	Medium Term
WPT009	West Penn Township	Flooding	School Drive	An undersized bridge on School Drive causes the roadway to flood.	Replace bridge with larger structure on School Drive to alleviate flooding.	\$1,000,000	Medium Term
WPT010	West Penn Township	Flooding	Mahoning Creek near SR 443	Mahoning Creek near SR 443 is a flood zone.	Remove structures from floodplain and acquire and preserve land as open space in perpetuity.	Perform Cost Assessment	Long Term
WPT011	West Penn Township	Flooding	Berry Road	Berry Road has flooded in the past.	Conduct a study to determine the feasibility of constructing a floodwall/levee on Barry Road.	\$80,000	Short term
WPT012	West Penn Township	Flooding	Saint Peters Road	An undersized bridge on Saint Peters Road causes the roadway to flood.	Replace the bridge/culvert on Saint Peters to alleviate flooding.	\$1,000,000	Medium Term
WPT013	West Penn Township	Flooding	Saint Peters Road	An undersized bridge on Saint Peters Road causes the roadway to flood.	Replace the bridge/culvert on Saint Peters to alleviate flooding.	\$1,000,000	Medium Term
WPT014	West Penn Township	Flooding	Dairy Road	An undersized bridge on Dairy Road causes the roadway to flood.	Replace bridge with larger structure on Dairy Road.	\$1,000,000	Medium Term
WPT015	West Penn Township	Flooding	Wash Creek Road	An undersized bridge on Wash Creek Road causes the roadway to flood.	Replace bridge with larger structure on Wash Creek Road.	\$1,000,000	Medium Term
WPT016	West Penn Township	Flooding	Golf Road	An undersized bridge on Golf Road causes the roadway to flood.	Replace bridge with larger structure on Golf Road.	\$1,000,000	Medium Term
WPT017	West Penn Township	Flooding	Mush Dahl Road	An undersized bridge on Mush Dahl Road causes the roadway to flood.	Replace bridge with larger structure on Mush Dahl Road.	\$1,000,000	Medium Term
WPT018	West Penn Township	Flooding	Mush Dahl Road	An undersized bridge on Mush Dahl Road causes the roadway to flood.	Replace bridge with larger structure Mush Dahl Road.	\$1,000,000	Medium Term
WPT019	West Penn Township	Flooding	First Street	An undersized bridge on First Street causes the roadway to flood.	Replace the bridge/culvert on First Street to alleviate flooding.	\$1,000,000	Medium Term
WPT020	West Penn Township	Flooding	N. Hilltop Drive	An undersized bridge on North Hilltop Drive causes the roadway to flood.	Replace bridge with larger structure on North Hilltop Drive.	\$1,000,000	Medium Term
WPT021	West Penn Township	Winter Weather	State Route 895	State Route 895 ices in the winter due to poor drainage.	Improve roadway drainage facilities on State Route 895.	\$100,000	Medium Term
WPT022	West Penn Township	Winter Weather	Mush Dahl Road at SR309	Mush Dahl Road at State Route 309 Ices from spring seeps.	Improve roadway drainage facilities on Mush Dahl Road at State Route 309.	\$100,000	Medium Term
WPT023	West Penn Township	Winter Weather	State Route 309	State Route 895 ices in the winter due to poor drainage.	Improve roadway drainage facilities on State Route 895.	\$100,000	Medium Term
WPT024	West Penn Township	Winter Weather	State Route 309	State Route 895 ices in the winter due to poor drainage.	Improve roadway drainage facilities on State Route 895.	\$100,000	Medium Term

***Note on Range of Costs:**

Order of magnitude costs presented here do not reflect an engineer's estimate of probable cost.

These costs were developed based on the type of proposed mitigation project (e.g. a bridge replacement project may be on the order of magnitude of \$1 million, whereas a drainage improvement project may be on the order of magnitude of \$100,000).

Actual project costs will vary from the estimates presented here, and this is only to be used as an aid in determining approximate financial needs for project types.