

Clarion County Section 1
Action Plan Report 2016

GOAL #1 (Preventive Measures)

Attempt to reduce the current and future risk of damage from natural hazards in Clarion County

Objective 1.1: Clarion County and municipalities will attempt to reduce the current and future risk of damage in Clarion County by directing new development away from high hazard areas, by reviewing existing regulations to ensure adequacy in reducing the amount of future development in identified hazard areas and maintaining compliances with State and Federal regulations.

- Action 1.1.1: Municipal officials will review regulations pertaining to their jurisdiction to ensure that adequate regulations are in place to reduce future development in high hazard areas in their jurisdiction. Planning department to review Subdivision and Land Development Ordinance.
- Action 1.1.2: Maintain repetitive loss information from PA DCED to use for mitigation projects.
- Action 1.1.3: All jurisdictions will be compliant with NFIP and maintain compliance.
- Action 1.1.4: Attempt to collect data on all future incidents to help determine the impact of hazards on each jurisdiction.
- Action 1.1.5: Municipal officials will attempt to acquire or encourage residents to elevate the homes that are located in flood prone areas.

2016 Actions

All appropriate incidents were entered into the data base.

Planning Department is currently updating the Subdivision and Land Development Ordinance, should be completed in the first quarter of 2017.

Objective 1.2: Review all comprehensive plans to ensure that designated growth areas are not in hazard areas.

- Action 1.2.1: Planning department and applicable municipal officials to review their comprehensive plans to ensure that designated growth areas are not in high hazard areas identified in this plan.

2016 Actions

Plans were reviewed for this action.

Clarion Borough has begun the completion of a new Comprehensive Plan. No future planned Designated Growth Areas will be situated within high hazard areas. Hazard areas will be identified, mapped and presented within the new Comprehensive Plan.

Objective 1.3: Review and enforcement of the building codes.

- Action 1.3.1: Municipal officials will review the statewide Uniform Construction Code to ensure the enforcement of these codes as a minimum standard.

2016 Actions

All Thirty-four municipalities have a codes enforcement officer or have a company to enforce building codes.

Objective 1.4: Review all capital improvement plans to ensure that infrastructure improvements are not directed towards hazardous areas.

- Action 1.4.1: Municipal officials will review their capital improvement plans to ensure that programmed infrastructure improvements are not in high hazard areas.

2016 Actions

Plans were reviewed for this action. Clarion County will not approve Community Development Block Grant projects if they are in a high hazard area.

Objective 1.5: Evaluate and update existing floodplain ordinances to meet or exceed the NFIP standards.

- Action 1.5.1: Applicable municipalities will review and update their floodplain ordinances to be sure that they are in full compliance with the NFIP (see Appendix O).

2016 Actions

The 30 municipalities required to have adopted ordinances have filed them with the Clarion County Department of Planning and Development. Four municipalities do not have flood plains.

Objective 1.6: Improve the enforcement of existing floodplain regulations.

- Action 1.6.1: For Clarion County OES to arrange with PEMA/FEMA/DCED to hold training sessions with the County and the municipalities on the National Flood Insurance Program (NFIP) requirements.

2016 Actions

Will continue to work with PEMA/FEMA/DCED to hold training session(s)

Objective 1.7: Recommend that flood insurance policies remain affordable through county and municipal government programs.

- Action 1.7.1: County OES to arrange with PEMA/FEMA/DCED to conduct training on the completion of the Flood Plain Certification Forms and Community Rating System (CRS) to municipalities and other identified agencies.

2016 Actions

Will continue to work with PEMA/FEMA/DCED to hold training session(s)

Objective 1.8: Evaluate existing shelters to determine adequacy for current and future populations.

- Action 1.8.1: Ensure that all shelters within Clarion County have adequate emergency power resources. By working with the American Red Cross towards upgrading all shelter resources.
- Action 1.8.2: Develop adequate emergency shelter and evacuation plans for animals (domestic pets and livestock) by establishing a committee representative of all areas of the County that will include veterinarians, pet store owners, the Humane Society, animal shelters and other interested parties to work on animal-specific evacuation and sheltering needs.

2016 Actions

Red Cross is maintaining up to date information on all shelter sites. There are two agencies in Clarion County that have adequate emergency shelters for small animals. Clarion County will request assistance from adjacent counties when required.

GOAL #2 (Property Protection)

Reduce the potential impact of natural disasters on public and private property.

Objective 2.1: Encourage municipal participation in the National Flood Insurance Program and encourage property owners to purchase flood insurance.

- Action 2.1.1: County Planning and PEMA to conduct outreach efforts to educate municipalities about the NFIP and its requirements.
- Action 2.1.2: County to obtain updated information on the number of NFIP policyholders in Clarion County and its municipalities from PEMA and FEMA.

2016 Actions

Will continue to work with PEMA/FEMA/DCED to hold outreach session(s)

County maintains updated information on the number of NFIP policyholders in Clarion County. This information is obtained from PEMA and FEMA.

Objective 2.2: Protect Clarion County's most vulnerable populations, buildings and critical facilities through the implementation of cost-effective and technically feasible mitigation projects.

- Action 2.2.1: OES to work with municipalities and the Mapping & GIS Department to maintain information on the number, location and the County Assessment Office to maintain the assessed value of all repetitive loss properties and structures within the 100-year floodplain throughout the County in order to plan future mitigation activities.
- Action 2.2.2: When funds become available for hazard mitigation projects, the County recommends that the municipalities hold a series of public meetings with the owners of repetitive loss properties in high risk areas. These meetings will also be used to identify high-risk properties in the unincorporated areas of the County and to determine potential participation in future acquisition and relocation projects.

2016 Actions

We have all repetitive loss properties identified and assessed.

No residents/businesses have shown interested in acquisition.

GOAL #3 (Emergency Services Measures)

Improve upon the protection of the citizens of Clarion County from all natural hazards.

Objective 3.1: Ensure adequate training and resources for emergency organizations and personnel.

- Action 3.1.1: Clarion County CERT Trainers to teach Community Emergency Response Team (CERT) classes to interested citizens in Clarion County to assist first responders at specified emergencies throughout the county.
- Action 3.1.2: OES to work with the Clarion Fire Chiefs, Clarion EMS Services and the Sheriff's Department to increase the number of trained citizen emergency responders by meeting with groups of potential volunteers to attempt to increase the number of trained responders for all County Fire Departments, Emergency Medical Services, Law Enforcement, etc. All areas of Clarion County will benefit.
- Action 3.1.3: OES to conduct annual tabletop or functional disaster exercises with local law enforcement, emergency managers, county and local officials, and other disaster response agencies. Types of exercises may include: Weather Exercise, Hazardous Materials Spill Exercise, Bio-Terrorism Exercise, etc.
- Action 3.1.4: OES to provide information about local, regional, state, and federal training opportunities to fire departments, law enforcement agencies, EMS companies, and other emergency responders. Develop a list of training opportunities that are available and to distribute the list to all local emergency responders. Training should include preparedness to respond to natural occurring hazards as well as man-made and technological hazards.
- Action 3.1.5: Continue to conduct National Weather Service Storm Spotter classes by partnering with the National Weather Service to provide training (basics I and II) to people throughout Clarion County on Storm Spotting in the areas of Flooding, High Winds.
- Action 3.1.6: OES to work with Clarion County Fire, EMS, Law Enforcement, Municipalities, Schools, Health Care and Public Works to increase the number of Responders trained in the National Incident Management System and identify individual responders that need to be trained in Incident Management courses including ICS 100, 200, 300, 700 and 800.
- Action 3.1.7: Municipal officials will ensure adequate training for emergency services (EMA, EMS, Fire and Law enforcement). This includes officers and other personnel.
- Action 3.1.8: Municipal and county officials will work with state representatives to ensure adequate training programs (EMT and Paramedic) for emergency medical services personnel are held within the county.

2016 Actions

County public safety agencies are actively seeking volunteers. Sheriff's Department taught 19 Neighborhood Watch/Gun Safety programs.

Clarion County OES in cooperation with Butler Community College and their preferred partner program; was able to offer all fire academy classes to emergency service companies in the county.

Clarion County participated in the State-wide weather exercise, which includes municipalities, schools, day care facilities, public safety agencies and health care facilities.

OES distributes training announcements to appropriate emergency response agencies.

The Clarion County Local Emergency Planning Committee provided 5 hazard materials courses for public safety agencies, business and industries.

The County OES distributes letters annually to municipalities providing information on how to get training for the National Incident Management System and offered our assistance to help with this training.

East Brady Borough Secretary/Treasurer, Susan Buechele, has Advanced EMA Certification. All maintenance staff are certified firefighters and have the necessary training. We are working toward training our Council Members.

Objective 3.2: Improve emergency preparedness in Clarion County and its municipalities.

- Action 3.2.1: Maintain the Clarion County Emergency Operations Plan (EOP) and update annually or when necessary based on the recommendations of the PEMA and FEMA. Include participation from all municipalities in the update process by ensuring that their EOPs are reviewed and updated annually.
- Action 3.2.2: Clarion County will attempt to collect data from all incidents and use this information for mitigation efforts and plan updates.
- Action 3.2.3: All agencies (county, municipalities, schools, health care, fire, EMS, law enforcement and public works) will become NIMS compliant and maintain compliance.

2016 Actions

The Clarion County EOP was revised this year. All 34 municipalities have adopted the County plan as their own.

The County is using the CAD system in our 9-1-1 dispatch center to track incidents and collect data. Incidents not found in the CAD system were entered into the established data base.

The county and all municipalities filed NIMS annual reports

Objective 3.3: Improve coordination and communication among disaster response organizations, local, and county governments.

- Action 3.3.1: Clarion County will use the OES web site and Knowledge Center a resource and incident management program, to improve coordination/communications.

2016 Actions

Clarion County and Clarion Office of Emergency Services web sites are operational and we continue to update information.

In Knowledge Center, we continue to add additional information and maintain current information. This system is used for everyday incidents, exercises and planned events.

Clarion County Office of Emergency Services continues to update and add infrastructure to the County Public Safety Communications System.

Objective 3.4: Evaluate cost-effective ways of augmenting existing broadcast and communication systems to monitor warning information continuously and to disseminate appropriate warnings.

- Action 3.4.1: Research the possibility of installing Emergency Alert Warning Sirens and equipment to reach all populated areas throughout the County.

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2016 Actions

Currently there is still no funding available for Clarion County to install a County-wide siren system or a reverse 9-1-1 notification system. We are using other systems currently in the County.

Clarion County maintains the Integrated Public Alert and Warning System (IPAWS). This system allows the county to send alert and warning messages via Emergency Alert System, Cellular Telephones, I-Pads/Tablets, NOAA radio and the Internet.

GOAL #4 (Structural Projects)

Reduce or redirect the impact of natural disasters (especially floods) away from at risk population areas

Objective 4.1: Research possible mitigation projects to reduce flooding, reduce/eliminate sewage leakage and inflow/infiltration problems. Some projects may include reservoirs, levees, floodwalls, diversions, channel modification and storm sewers.

- Action 4.1.1: Continue to review Hazard Mitigation Questionnaires and post-disaster reviews submitted by the municipalities.
- Action 4.1.2: Continue to produce and submit Hazard Mitigation Project Opportunity Forms for high-risk structures/areas (especially post-disaster).

2016 Actions

The municipalities have submitted projects for funding this year. They will continue to seek funding from other sources as well. There were no declared disasters this year in Clarion County, however; we will continue to work at mitigation projects.

Clarion Borough appointed a Stormwater Authority, the Borough has in 2016 begun to identify and map existing stormwater infrastructure problems and related issues within its borders. It is the intent of Clarion Borough that this information be eventually developed into prioritized projects.

The following are mitigation projects not currently in our plan, however; were completed or are in process of completion with other funding sources:

Beaver Township:

* Replaced culvert pipe and reconstructed tail drain on Cropps Corners Road. Total cost: \$10,000

* Replaced asphalt deck on Eagle Furnace Bridge over Canoe Creek with a concert deck. Total cost: \$11,000

Clarion Borough:

* The Borough completed three major stormwater infrastructure repair projects. These included: re-construction and installation of two new concrete stormwater inlets in the Toby Street / North Third Avenue area, replacement of approximately 23-feet of deteriorated stormwater piping across South Street at the South Street / South Sixth Avenue intersection (inlet to inlet) and replacement of approximately 62 feet of deteriorated stormwater piping across Wood Street at the Wood Street / South Second Avenue intersection (inlet to inlet). These projects could not be deferred and had to be completed as quickly as possible. Borough funding financed the projects.

East Brady Borough:

* Replace sections of storm water drains in the borough, as needed and as funds permit, to control flooding issues.

Hawthorn Borough:

* Replaced all Borough sewer lines. Currently replacing all water lines and fire hydrants.

Highland Township:

* Storm water management project on Mc Cleary Road replaced 1,100 feet of pipe with larger pipe, replaced collection boxes and added additional collection boxes, added additional laterals.

Rimersburg Borough:

* Replaced storm drains along Mill Alley.

Sligo Borough:

* Installed 2 new storm water inlets and headwalls on Miller Street and Shamrock Drive

St. Petersburg Borough:

* Replaced 560 feet of 4" water line and updated water control systems on the finished water side. Total cost: \$30,000.

Strattanville Borough:

* Replaced storm drain along 1st Street.

Objective 4.2: Gather information on any structures previously studied that may have design information that could possibly be implemented to reduce flood hazards.

- o Action 4.2.1: Work with the United States Army Corp of Engineers (USACE) and other agencies on structural projects.

Past Action

After discussions with the United States Army Corp of Engineers there are no present or past projects that can be implemented to reduce flood hazards.

GOAL #5 (Natural Resource Protection)

Protect existing natural resources and open space, including parks and wetlands, within the floodplain and watershed to improve their flood control function.

Objective 5.1: Protect Clarion County's natural resources through the implementation of cost-effective and technically feasible mitigation projects.

- Action 5.1.1: Work with DEP, conservation agencies, park and recreation organizations, wildlife groups and other appropriate agencies to collect information of the number and location of natural resource areas throughout the County. **Completed**
- Action 5.1.2: County to develop a database in existing GIS system of all natural resource areas including maps to be used in future mitigation activities. **Completed**
- Action 5.1.3: When funds become available for mitigation projects, the County plans to hold meetings to identify high-risk properties in the County and to determine potential participation in future acquisition and relocation projects.

Objective 5.2: Protect Clarion County’s natural resources through the implementation of recreation planning and storm water management planning.

- Action 5.2.1: Planning Department to consider creating and implementing a County Recreation Plan and complete the (Storm Water Management Plan **Completed**).
- Action 5.2.2: Penn DOT to investigate the possibility of wetland protection of approximately 50 acres in Clarion County. Wetland protected area is approximately 153.69 acres. **Completed**
- Action 5.2.3: County to work with DEP, conservation agencies, etc., to research avenues for restoring degraded natural resources and open space to improve their flood control functions.
- Action 5.2.4: All municipalities adopt the County Storm Water Management Ordinance. **Completed**

GOAL #6 (Public Information Program)

Protect public health, safety and welfare by increasing the public awareness of existing and potential hazards and by fostering both individual and public responsibility in mitigating risks due to those hazards.

Objective 6.1: Maintain and distribute public awareness materials about natural hazard risks, preparedness, and mitigation.

- Action 6.1.1: Create a “How To” Mitigation display for use at public events that would include information and pictures like that contained in FEMA’s publications: Retrofitting for Homeowners Guide, Elevating Your Flood Prone Home, Elevating Residential Structures, and Information on the NFIP.
- Action 6.1.2: Planning to work with the Clarion Cooperative Extension to develop Animals in Disaster Displays that will be used at 4-H Clubs, Agricultural Fair, in Veterinarians Offices and other places that animal owners may gather. The display will have information about preparing animals for disasters by making a disaster plan and a disaster supply kit for each animal. The display will encourage animal owners to decide ahead of time where animals will be sheltered.
- Action 6.1.3: County to develop a Business Continuity Planning Display. The display will be designed to raise the awareness level of WHY it is important to have a Business Continuity

Plan, how to develop a plan, and will encourage businesses to make sure that their plan fits in with the County's plan. This display will be appropriate for use at local Chamber of Commerce meetings and activities, civic group gatherings such as the Rotary Club, and other business-related gatherings.

- Action 6.1.4: Maintain displays for children's programs that teach safety. Examples of information to be used would be similar to that on the FEMA for Kids CD and/or the Sparky Fire Safety Program.
- Action 6.1.5: Continue to utilize the media for the distribution and publication of hazard information by sending news releases and public service series to local newspapers, radio and TV stations about pre-disaster information.
- Action 6.1.6: Continue to work with non-governmental organizations to promote mitigation education and awareness by creating a public speaking series on hazard related topics such as types of natural disasters and risks, how to develop a family disaster plan and disaster supply kit, sheltering in place, how to develop a business continuity plan, simple types of mitigation projects for homeowners and businesses, etc. These speaking engagements will be offered to boys and girls clubs, scouting organizations, family centers, civic groups such as Rotary and Kiwanis Clubs, the Chamber of Commerce, Church and interfaith groups, etc.
- Action 6.1.7: Work with Red Cross to ensure that a citizen's disaster course is held on a frequent basis. The American Red Cross will hold a variety of courses, including: Adult and Child CPR, Basic First Aid, Introduction to Disaster Services, Mass Care, Shelter Operations and others at the Red Cross Office and at other locations throughout the County.
- Action 6.1.8: Maintain the County website to provide hazard related information that is easily accessible. The County OES website to provide information about disaster preparedness and related activities. The plan is to expand and update the website as needed and as appropriate in a timely manner to benefit all County residents.
- Action 6.1.9: Continue to work with the Clarion County school districts through the Riverview Intermediate Unit #6 and the Clarion University to promote hazard mitigation education and awareness, provide information on emergency alert systems and discuss ways to better integrate mitigation into the curriculum such as science, math and other subjects.
- Action 6.1.10: Make available public information material on earthquakes.

2016 Actions

We are maintaining displays at public events and in the Courthouse. These displays include information for mitigation and pre and post emergencies.

Continue to work with agencies to provide information on preparing animals for disasters by making a disaster plan and a disaster supply kit for each animal.

We are still working with the Chambers of Business & Industry and Clarion County Economic Development Corporation to identify all business in the County to include contact information. We have been attending meetings to provide information on business continuity planning.

We are presenting child programs across the County which includes emergency preparedness, fire safety and 9-1-1 programs. For the year, there were 8 programs attended by children and adults. There is a display used for these programs and a display used for public events. The County has distributed news releases for various emergencies and pre-emergency events (i.e. winter weather preparation, flooding, summer storms).

When requested we have made a presentation for groups on natural disasters and risks, how to develop a family disaster plan and disaster supply kit, sheltering in place, how to develop a business continuity plan, simple types of mitigation projects for homeowners and businesses.

Red Cross provides classes when requested anywhere in the County.

Clarion County and Clarion County OES websites provide pre-emergency and emergency information. We also have added links to private, state and federal informational sites. We continue working with the Clarion County school districts and private schools on emergency management issues.

Public information materials for earthquakes are in the courthouse, available in displays during special events and will be placed on the Clarion County and Clarion County OES websites.

Objective 6.2: Target owners of properties within identified hazard areas for additional outreach regarding mitigation and disaster preparedness.

- Action 6.2.1: Continue working with representatives from NFIP to hold a local course on the National Flood Insurance Program (NFIP) for realtors, bankers, insurers and property owners to be attended from all areas of Clarion County.
- Action 6.2.2: Establish all-hazard resource centers to be located in the County Courthouse, Chamber of Commerce, municipalities, local libraries and senior centers. The centers will act as a repository for information on local hazard identification, preparedness, and mitigation strategies for use by citizens, realtors, and lenders. Centers would display information about the National Flood Insurance Program, Flood Insurance Rate Maps, books about mitigation for homeowners, the Are You Ready Guide, Protecting Building Utilities from Flood Damage, Seeking Shelter from the Storm Books, etc.
- Action 6.2.3: Municipalities will distribute letters to property owners or renters within the 100-year floodplain regarding potential flood hazards. The content of the letters may include the following information: the local flood hazard, flood safety, flood insurance information, property protection measures, the natural and beneficial functions of the local floodplain, a map of the local flood hazard area, information about NOAA Weather radios used for local weather warnings, floodplain development permit requirements and substantial improvement/damage requirements. (Clarion County Commissioners sent letters in 2010 and 2013.)
- Action 6.2.4: Mapping & GIS Department and Assessment Office to continue collecting and updating information for structures within the 100-year floodplain and structures that are not in the floodplain, but are prone to flooding. This information will include map number, assessed value and structure type.
- Action 6.2.5: Encourage County residents to investigate the need to purchase subsidence insurance from the State.

2016 Actions

We have a display used for public events as well as one setup in the Courthouse. These displays include information for mitigation and pre and post emergencies. Public information materials were provided to municipalities.

Information on subsidence insurance is available in all display locations. The County and State distributed new releases to radio, TV and other news media regarding the need for residents to purchase subsidence insurance. These were in our papers, radio and TV.

Clarion County Section 2 Project Status Report 2016

Project Number	Municipality and Specific Locations, if any	Type (acquisition, relocation, elevation, retrofitting, safe rooms, utility protection, water/sewer, roads/bridges, storm water mgmt., localized flood control for critical facilities, etc.)	Description of Problem and Project	Est. Cost	Rank	Status
16-00-01	Clarion County	Miscellaneous	Identifying residents with special needs as defined by FEMA in case of emergency. Develop a program to identify residents within the county that have special needs. This would include developing the form, processes used to collect information, maintaining information and implementing information during times of emergencies.	\$10,000	High	Working on funding
16-00-02	Clarion County	Miscellaneous	Obtain elevations of the first floor of living area for those structures within the County that are within the 2014 FEMA 100-year flood zone. The flood zone will be defined by a GIS shape file provided by the County. Elevations of the first floor of living area will be obtained using Global Positioning System (GPS) Surveys. Elevations of the GPS points will be accurate to one foot.	Based on the requirements for Flood Plain Certification Forms this project is no longer needed. We have address Flood Plain Certification Forms in project 16-00-05.		
16-00-03	County, Municipalities and University	Miscellaneous	Setup and maintain public information materials for hazard awareness/mitigation and emergency preparation at all locations.		High	Completed
16-00-04	County, Municipalities and University	Miscellaneous	No backup power for emergency shelters, municipalities and some water/sewage plants in the county. Purchase an emergency generator mounted on a trailer that can be used where needed.		High	Completed
16-00-05	County and Municipalities	Miscellaneous	Assist residents with completion of Flood Plain Certification Forms.	\$40,000	High	Working on funding
16-01-01	Ashland Township	Miscellaneous	Identifying residents within the Township that have special needs in case of emergency. Complete a survey of all Township residents to identify those with special needs.	\$500	High	Working on funding

16-02-01	Beaver Township	Storm Water Management	The current configuration of Beaver Creek, north of the house causes erosion of the stream channel at the bend in the stream and causes debris to accumulate which leads to over flow of the channel inundating the house with flood waters. Alter the configuration of Beaver Creek immediately north of the house to eliminate the abrupt change in the direction of the stream and reduce the likelihood of flooding.	\$40,000	Med	Working on funding
16-02-02	Beaver Township	Bridge Project	Replace Canoe Furnace Bridge over Canoe Creek on Route 4005	Unknown	Low	Completed
16-02-03	Beaver Township	Bridge Project	Replace Huckleberry Ridge Bridge over I - 80	\$1 - 2.5 M	High	Planned for 2017-18
16-02-04	Beaver Township	Bridge Project	Replace Tippecanoe Bridge over Canoe Creek		High	Planned for 2017
16-03-01	Brady Township	Miscellaneous	Identifying residents within the Township that have special needs in case of emergency. Complete a survey of all Township residents to identify those with special needs.	\$200	High	Working on funding
16-04-01	Callensburg Borough	Miscellaneous	No backup power for emergency shelter in the Borough. Install emergency generator at shelter.	\$35,000	High	Working on funding
16-04-02	Callensburg Borough	Storm Water Management	Flooding along Jackson Street, replace 220 feet of drain pipe and clean debris from ditch.	\$3,100	Med	Completed
16-05-01	Clarion Borough	Miscellaneous	Unable to provide emergency warnings to public during special events (one event is a national homeland security event and draws attendance for one day of 250,000). Project would entail installing amplifiers, system controls, outdoor speakers, and several thousand feet of wire, all necessary connections and weather proofing fittings plus significant installation and labor costs. Project completion would require permits, as well as cooperation of local utilities and municipal authorities to use existing street lights and utility poles for mounting speakers.	\$30,000	High	Working on funding

16-05-02	Clarion Borough	Storm Water Management	During heavy to severe rain events the inlet becomes overloaded, with excess water ponding at the South Street/Center Place intersection and flowing at the surface south along the Center Place corridor. This project proposes to replace the existing storm sewer piping in the Center Place corridor (various sizes up to 42 inches) with new 48-inch HDPE smooth bore pipe from the South Street/Center Place intersection to the outfall point, approximately 2,160 feet. Up to twelve new inlets (either replacements or newly added) would be installed. Center Place would be restored, graded for effective storm water drainage to its inlets, and re-paved. The outfall point in Clarion Township would be rehabilitated and/or upgraded as part of the project.	\$1.5 Million	High	Completed
16-05-03	Clarion Borough	Storm Water Management	During heavy to severe rain events the inlets become overloaded, with excess water ponding along Greenville Ave. This project would replace deteriorated 18-24-inch corrugated metal storm sewer piping (CMP) along both sides of Greenville Avenue from Payne Street south to Corbett Street, approximately 1,000 feet. The replacement piping would be 18-24 inch HDPE storm sewer piping (smooth bore). Approximately nine concrete inlets and tops would also be replaced. Project restoration would require road base re-installation and asphalt paving, replacement concrete curbing, and re-installation of affected sidewalks.	1 Million	High	Working on funding
16-05-04	Clarion Borough	Storm Water Management	Collapsed metal piping and deteriorated inlets are causing flooding issues around the Borough. These issues pop up at different times and are immediate emergency situations. Typically, these projects involve 150 feet or less of replacement piping (mostly from one inlet to the next) and an inlet box replacement. Concrete curbing, sidewalks, and pavement restoration are almost always involved.	\$75,000	High	5% Complete Working on additional funding

16-05-05	Clarion Borough	Storm Water Management	Storm flooding around the Borough. Storm Sewer System Study and Evaluation Project, completion of this project would give the Borough a solid, accurate, base of information from which to plan and prioritize future storm sewer system projects. The important data to be gathered includes: exact location, size (bore), and depth of all storm sewer piping, the material from which it is made (metal, plastic, concrete, etc.), and its current physical condition. The location, material, and condition of all inlets would also be determined. Real-time functioning data of the system would be gathered to help answer capacity and possible improvement questions.	\$750,000	High	Working on funding
16-06-01	Clarion Township	Miscellaneous	Identifying residents within the Township that have special needs in case of emergency. Complete a survey of all Township residents to identify those with special needs in case of emergency.	\$300	High	Completed
16-06-02	Clarion Township	Storm Water Management	Install new drainage pipe at the end of Water Run Road. Currently working with Engineers on this project.	unknown	High	Completed
16-06-03	Clarion Township	Bridge Rehabilitation Project	Route 322 over Interstate 80 Day Bridge Rehabilitation Project.	\$2.5 M	High	Completed
16-06-04	Clarion Township	Storm Water Management	Drainage system along Rt. 68 is failing. Work with PENNDOT to resolve issue.	\$500,000-\$750,000	High	50% complete Scheduled for 2018-19
16-06-05	Clarion Township	Bridge Rehabilitation Project	Potter Road bridge over I 80 needs replaced.	\$1.8 M	High	Completed
16-07-01	East Brady Boro.	Storm Water Management	Water runoff on 5 th Street is causing a severe problem and hazard to pedestrians along 5 th Street. It is undermining the roadway and washing yards out along 5 th Street. Install 2 catch basins on 5th Street with approximately 200' of 18" HDPE pipe, then cross 5th Street and install 400' of 18' HDPE pipe along Purdum Street and tie existing storm drain. Two additional catch basins need installed on Purdum Street (4 catch basins, 600' of HDPE pipe, stone and asphalt).	\$72,500	Med	Working on funding

16-07-02	East Brady Boro.	Storm Water Management	Brady St. & Route 68 end wall of 48" culvert, located under a house at 326 Kellys Way, is failing. Failure would lead to loss of the house and closure of Route 68. Route 68 closures will affect travel between Armstrong and Clarion Counties, also causing issues with emergency response.	\$1,486,200	High	Working on funding
16-07-03	East Brady Boro.	Storm Water Management	1 st , 2 nd and 3 rd Avenues have no drainage to river. Flooding of this area including electrical transfer station and Borough recreation areas. Install catch basins and pipes.	\$288,100	Med	Working on funding
16-07-04	East Brady Boro.	Storm Water Management	3 rd through 6 th Streets has no infrastructure or unconstructed path to river. Results in flooding of Prudum St. and surrounding homes. Install catch basins and pipes.	\$370,600	Med	Working on funding
16-07-05	East Brady Boro.	Storm Water Management	1 st through 3 rd Streets has no infrastructure or unconstructed path to river. Results in flooding of various streets and surrounding homes. Install catch basins and pipes.	\$609,700	Med	Working on funding
16-07-06	East Brady Boro.	Storm Water Management	Streets surrounding Clarion Street have no infrastructure or unconstructed path to river. Results in flooding of various streets and surrounding homes. Install catch basins and pipes.	\$332,980	Med	Working on funding
16-08-01	Elk Township	Miscellaneous	Install Natural Gas Generator at EOC	\$10,000	Med	Working on funding
16-08-02	Elk Township	Land Acquisition / Relocation of Trailers	Land acquisition of entire Brownie Trailer Court property and relocation of trailers to another court not in flood plain. One death has already occurred due to a flood in 1996.	\$1,000,000	High	Working on funding
16-08-03	Elk Township	Acquisition	Acquisition of both structures (Tarp Shop & Shippen Inn). Both are business; however, Shippen Inn is also a residential structure.	\$600,000	Med	Working on funding
16-08-04	Elk Township	Bridge Replacement	Replace bridge on Route 322 over Deer Creek		Med	Completed
16-09-01	Farmington Township	Storm Water Management	Install drain and catch basin on Piscataqua Drive.	\$15,750	Med	Working on funding
16-10-01	Foxburg Borough	Demolition	North Palmer Ave. - House is condemned. Demolish house to prevent injuries and protect the community.	\$20,000	Low	Waiting for grant approval
16-10-02	Foxburg Borough	Demolition	North Palmer Ave. - House is condemned. Demolish house to prevent injuries and protect the community.	\$20,000	Low	Waiting for grant approval
16-10-03	Foxburg Borough	Demolition	North Palmer Ave - House is condemned. Demolish house to prevent injuries and protect the community.	\$20,000	Low	Completed

16-12-01	Highland Township	Miscellaneous	Identifying residents within the Township that have special needs in case of emergency. Complete a survey of all Township residents to identify those with special needs.	\$400	High	Working on funding
16-12-02	Highland Township	Storm Water Management	Double Sealcoat approximately 700ft of very steep Kinbahe Road that is now dirt. This road constantly washes out taking the road surface into Little Toby Creek resulting in constant expense to the Township.	\$3,000	Med	Planned for 2017
16-12-03	Highland Township	Storm Water Management	Widen road surface of Highland Drive for approximately 800 ft. to create more room for a ditch line and to remove several very large trees that are on township right of way. This road washes out from all nearby fields directing the runoff down this section of Highland Drive. This road now has heavy use from the public accessing land belonging to the Dept. of Conservation & Natural Resources	\$40,000	Med	Planned for 2017
16-13-01	Knox Borough	Storm Water Management	Storm water backs up on Houston Ave and N. Main St. causing inflow and infiltration in sewage system. Water on Houston Ave. gets as high as a foot and is located directly between Keystone High School and the Elementary School. Improve storm water drainage.	\$200,000	Med	Working on funding
16-14-01	Knox Township	Road Project	Licking Drive - bridge is too small and floods regularly Replace bridge with larger structure	\$490,000	Low	Working on funding
16-14-02	Knox Township	Storm Water Management	Hearst Road - flood waters scour around bridge when debris collects on bridge at Washington Road. Clean upstream channel	\$27,000	Low	Working on funding
16-14-03	Knox Township	Storm Water Management	Fairview Drive - roadway collects sheet flow that channels downhill flooding areas at base of hill. Install cross drains, clear exit ditches, re-crown road and re-grade ditch line	\$31,000	Low	Working on funding
16-15-01	Licking Township	Bridge replacement	Route 58 bridge replacement over the Clarion River.	\$5-\$10M	High	Planned for 2017-18
16-16-01	Limestone Township	Acquisition	Village of Kingsville - repetitive flooding Acquisition of structure and demolish	\$55,000	High	Working on funding
16-16-02	Limestone Township	Retrofitting	Village of Kingsville - repetitive flooded (basements) purchase sumps for structures	\$500	Low	Working on funding
16-16-03	Limestone Township	Retrofitting	Houses in water shed - Repetitive flooded (basements) purchase sumps for structures	\$2,000	Low	Working on funding

16-16-04	Limestone Township	Road Project	Thompson Road - flooding do to undersized pipe Replace existing under drain with 36" pipe and raise the road surface 24"	\$10,000	Low	80 % Complete Working on funding
16-16-05	Limestone Township	Road Project	Curtinbottom Road - flooding due to undersized pipe Replace existing under drain with 2-4' pipes and raise the road surface 24" for 100' on each side of the pipes	\$10,000	Low	80 % Complete Working on funding
16-16-06	Limestone Township	Bridge Project	Curll Road - bridge damaged by flooding Replace bridge	\$1,500,000	Med	Working on funding
16-16-07	Limestone Township	Road Project	Deer Hollow Road - flooding due to undersized pipes Remove current under drain pipes and replace with an Arch pipe or a box culvert	\$500,000	Med	Working on funding
16-16-08	Limestone Township	Road Project	Spring Road - flooding do to undersized pipe Replace existing under drain with 6' pipe and raise the road surface 36"	\$14,000	Low	70 % Complete Working on funding
16-16-09	Limestone Township	Road Project	Lenwood Road - flooding do to undersized pipe Replace existing under drain with 6' pipe and raise the road surface 36"	\$14,000	Low	80 % Complete Working on funding
16-16-10	Limestone Township	Road Project	Fenstermaker Road - Flooding due to undersized pipe Replace pipes with Arch Pipe 5'x30'x13' and raise road surface 12"-16" for a distance of 100' each side of the under drain	\$35,000	Low	85 % Complete Working on funding
16-16-11	Limestone Township	Road Project	Kemmer Road - Road surface subject to flooding Raise the road surface 36" for a distance of 100' each side of the under drain	\$12,000	Low	85 % Complete Working on funding
16-16-12	Limestone Township	Miscellaneous	No backup power for emergency shelter in the Township. Install emergency generator at shelter including building.	\$32,000	High	Working on funding
16-16-13	Limestone Township	Bridge Project	Replace bridge on Forest Dr. over Piney Creek	\$1.8 M	High	Completed
16-17-01	Madison Township	Storm Water Management	Buildup of debris in Wildcat Creek. Clear debris, remove vegetation and dredge at outflow into Redbank Creek in Lawsonham.	unknown	Low	Working on funding
16-17-02	Madison Township	Storm Water Management	Clear debris along Friar Point Road tributary stream. Debris buildup causes flooding of a home located nearby.	\$2,500	High	Working on funding
16-17-03	Madison Township	Bridge Project	Replace Wildcat Run Bridge No. 2 on Route 861	\$1.3 M	High	Completed
16-17-04	Madison Township	Bridge Project	Replace Diamond No. 1 bridge on Route 861	\$1.1 M	High	Completed

Section 2 Project Status Report 2016 -7

16-19-01	Monroe Township	Storm Water Management	Pennsy Road - culverts are too small and become obstructed with debris easily, this cause flooding and road damage. Replace two small culverts with one arched culvert.	\$50,000	Med	Working on funding
16-19-02	Monroe Township	Bridge, drainage and road project	Replace bridge, upgrade drainage and widen road on Route 68	\$1-5 M	Med	Planned for 2018-19
16-20-01	New Bethlehem Boro	Miscellaneous	No backup power for emergency shelter in the Borough. Install emergency generator at shelter including building.	\$32,000	High	Working on funding
16-20-02	New Bethlehem Boro	Miscellaneous	Identify Special Needs Population	\$800	High	20% complete Working on funding
16-20-03	New Bethlehem Boro	Storm Water Management	Clean Storm drains in the borough and flush debris to reduce the back up of storm water.	unknown	Med	65 % complete Done by Boro employees
16-20-04	New Bethlehem Boro	Miscellaneous	Repair retaining wall along Wood Street. Retaining wall is failing. Work in conjunction with PENNDOT on this project.	unknown	Med	Planned for 2018
16-20-05	New Bethlehem Boro	Miscellaneous	The single stage fire siren on the Borough Building is old, often fails to work in extremely cold weather and causes damaging vibrations to the 1903 Building. It is within sound range of the multi-function siren on the Fire Hall. Remove and replace it with a new digital multi-function siren closer to the Borough western boundary so that it could sound fire, tornado, flood and other warnings that could be heard also by South Bethlehem residents who are served by our Fire Department.	\$40,000	Med	Working on funding
16-21-01	Paint Township	Bridge / Miscellaneous	Doe Run Bridge - bridge catches debris scours at wing walls. Clean channel up and down stream, repair scour holes, regrade and stabilize tail ditches to bridge.	\$35,000	Low	Working on funding
16-21-02	Paint Township	Bridge / Miscellaneous	Hearst Road - bridge catches debris, backs up water on road. Install new bridge with greater clear span opening.	\$35,000	Low	Working on funding
16-21-03	Paint Township	Storm Water Management	Poor drainage leading to sheet flow and erosion damage to roads. Replace undersized and damaged culvert pipes, add new locations where needed, reshape and stabilize ditches throughout the township.	\$200,000	Low	Working on funding
16-21-04	Paint Township	Storm Water Management	Marianne Estates - flooding during heavy rains. Install adequate drainage to Marianne Estates in form of storm water system.	\$2,000,000	Med	Working on funding

16-21-05	Paint Township	Miscellaneous	Township municipal sewer, storm water system and industrial sites have in recent years added deep manholes, dry & wet wells, equipment housing, etc. These areas are critical to access in emergency. The VFD should have the proper tools (confined space gear).	\$14,000	Low	Completed
16-22-01	Perry Township	Storm Water Management	Flooding of Stephens Road. Elevate Road above Stream Grade.	\$100,000	Low	20% Complete Working on funding
16-23-01	Piney Township	Storm Water Management	Flooding of Campbell Road caused by debris in Little Licking Creek between Campbell Road and Logue Road Clean creek channel from Campbell Road to Logue Road	\$30,000	Low	Working on funding
16-23-02	Piney Township	Miscellaneous	Install backup generator at the Township EOC.	\$10,000	Med	Working on funding
16-23-03	Piney Township	Bridge Project	Route 68 bridge replacement over Licking Creek.	\$1M-\$5M	High	Completed
16-23-04	Piney Township	Bridge Project	Route 68 bridge replacement over Craggs Run.	\$1M-\$5M	High	Completed
16-23-05	Piney Township	Miscellaneous	Siren to notify residents of hazards		Low	Working on funding
16-24-01	Porter Township	Miscellaneous	No backup power for Township Building which is used for EOC. Install a generator to provide backup power.	\$4,000	High	Working on funding
16-24-03	Porter Township	Road Project	Stewart Road - flooding caused by excessive water runoff over flowing current drains. Replace current piping with either larger or more pipes.	\$5,000	Low	Working on funding
16-25-01	Redbank Township	Storm Water Management	Piney Creek - flooding during heavy rains Clear vegetation from approximately 3 miles of Pine Creek	\$100,000	Low	Working on funding
16-25-02	Redbank Township	Bridge Project	Replace bridge over Piney Creek on Route 2001	Unknown	Low	Completed
16-26-01	Richland Township	Miscellaneous	Identifying residents within the Township that have special needs in case of emergency. Complete a survey of all Township residents to identify those with special needs.	\$300	High	Completed On going
16-26-02	Richland Township	Bridge Project	Replace bridge over Turkey Run on Master Road	\$1 - \$2.5 M	Low	Scheduled for 2017-18
16-26-03	Richland Township	Storm Water Management	Replace drainage pipes, ditching and grading on Chestnut Ridge Rd., Grassey Flats and Jones Roads	\$8,000	Med	60% Completed
16-26-04	Richland Township	Bridge Project	Repair bridge on Turkey Run Road	\$7,000	High	Working on funding

16-27-01	Rimersburg Borough	Miscellaneous	Install backup generator (50KW) at the water pump station along Route 68 near East Brady Borough. The water plant provides water for 4 municipalities.	\$50,000	High	Working on funding
16-28-01	Salem Township	Miscellaneous	Identifying residents within the Township that have special needs in case of emergency. Complete a survey of all Township residents to identify those with special needs.	\$500	High	Completed On going
16-28-02	Salem Township	Storm Water Management	Replace drainage pipes, ditching and grading on Township Roads	\$15,000	High	50% Completed
16-28-03	Salem Township	Miscellaneous	No backup power for Township Building which is used for EOC. Install a generator to provide backup power.	\$35,000	High	Working on funding
16-29-01	Shippenville Borough	Bridge Project	Replace Bridge on route 208 over Deer Creek.	\$1M-\$5M	High	Completed
16-29-02	Shippenville Borough	Storm Water Management	Upgrade and repair exiting storm water facilities and pipes in various locations in the Borough. Locations currently prone to flooding during heavy rain events. The project would also map and inventory the assets to identify additional areas that contribute to hazardous conditions.	1 million	High	Working on funding
16-29-03	Shippenville Borough	Miscellaneous	Vegetation control would identify and evaluate hazardous trees within the Borough limits, remove or trim trees within right of ways to correct the hazard. Possible extension of the project would be to work with private owners to correct hazards to private structures.	\$90,00	High	Working on funding
16-30-01	Sligo Borough	Storm Water Management	Licking Creek - exceeding banks during heavy rains Remove debris and dredge Licking & Little Licking Creeks	unknown	High	Working on funding
16-30-02	Sligo Borough	Storm Water Management	Licking Creek - Drain clearing and cleaning along Colerain St.	unknown	med	Working on funding
16-30-03	Sligo Borough	Bridge Project	Replace Bridge on Route 58 over Anderson Run.	\$1M-\$5M	High	Completed
16-31-01	St. Petersburg Boro.	Miscellaneous	No backup power for emergency shelter in the Borough. Install emergency generator at shelter.	\$10,000	High	Working on funding
16-31-02	St. Petersburg Boro.	Miscellaneous	Work with DEP to close open mine shafts	Unknown	High	Working with DEP
16-32-01	Strattanville Borough	Storm Water Management	Route 322 - flooding caused by excessive water runoff over flowing current drains. Replace deficient piping with larger pipes, add new inlets & catch basins, repave road and add shoulder.	\$1.4 M	High	Completed

16-32-02	Strattanville Borough	Miscellaneous	No backup power for emergency shelter in the Borough. Install emergency generator at shelter.	\$10,000	High	Working on funding
16-33-01	Toby Township	Storm Water Management	Replace drainage pipes, ditching and grading on Township Roads	\$15,000	High	Ongoing
16-34-01	Washington Twp.	Bridge Project	Dempsytown Road - Bridge too small, road and bridge floods, enlarge bridge	\$510,000	Low	Working on funding
16-34-02	Washington Twp.	Bridge Project	Eisenman Road - 2 Bridges are too small, roads and bridges flood, Enlarge both bridges	\$260,000 each	Low	Working on funding

**Clarion County Section 3
Plan Evaluation Report 2016**

1. Evaluate the goals and objectives to ensure they address current and expected conditions

Response: The goals and objectives were reviewed by the Hazard Mitigation Team at our annual meeting. We determined that the goals and objectives as stated in the plan address current and expected conditions. Goals #5 Natural Resource Protection – Same as last year with 4 out of 7 actions have been completed and half of one other action is completed. Actions 5.1.3 and 5.2.3 are ongoing actions.

2. Determine if the nature or magnitude of risk has changed

Response: The Hazard Mitigation Team at our annual meeting determined there were no changes to our risks as addressed in the current plan at this time.

3. Evaluate whether the current resources are adequate for implementing the plan

Response: County and municipal resources are not adequate for implementing all action items and projects stated in the plan. Lack of funding is the biggest issue.

4. Document any implementation problems such as technical, political, legal, or coordination issues with other agencies

Response: Due to economic issues at all levels of government most projects could not be completed due to lack of funding. Some municipalities were able to obtain funding to complete or partially complete projects. There were also monies found to complete additional projects.

We need PEMA to engage state agencies to participate in planning meetings and assist with completing projects/action items.

5. Discuss whether the outcomes have occurred as expected

Response: Based on current economic conditions the outcomes for projects was as expected.

6. Document agency and other partner participation

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Response: Section 4 of this report contains a list of participating jurisdictions/agencies. There were no public comments received in regards to the annual plan review.

Clarion County Section 4
Participating Jurisdictions/Agencies 2016

Jurisdiction/Agencies	YES	NO	2015
Clarion County Agencies	Yes		Yes
Ashland Township	Yes		Yes
Beaver Township	Yes		Yes
Brady Township	Yes		Yes
Callensburg Borough	Yes		Yes
Clarion Borough	Yes		Yes
Clarion Township	Yes		Yes
East Brady Borough	Yes		Yes
Elk Township	Yes		Yes
Farmington Township	Yes		Yes
Foxburg Borough	Yes		Yes
Hawthorn Borough	Yes		Yes
Highland Township	Yes		Yes
Knox Borough	Yes		Yes
Knox Township	Yes		Yes
Licking Township	Yes		Yes
Limestone Township	Yes		Yes
Madison Township	Yes		Yes
Millcreek Township	Yes		Yes
Monroe Township	Yes		Yes
New Bethlehem Borough	Yes		Yes
Paint Township	Yes		Yes
Perry Township	Yes		Yes
Piney Township	Yes		Yes
Porter Township	Yes		Yes
Redbank Township	Yes		Yes
Richland Township	Yes		Yes
Rimersburg Borough	Yes		Yes
Salem Township	Yes		Yes
Shippenville Borough	Yes		Yes
Sligo Borough	Yes		Yes
St. Petersburg Borough	Yes		Yes
Strattanville Borough	Yes		Yes
Toby Township	Yes		Yes
Washington Township	Yes		Yes
Clarion University	Yes		Yes
Clarion County Schools	Yes		Yes
Pa. Department of Environmental Protection		No	No
Pennsylvania Dept. of Transportation	Yes		Yes
Pennsylvania Dept. of Health		No	N/A