



York County Hazard Mitigation Plan Update

York County at Pleasant Valley Road
2401 Pleasant Valley Road, York 17402

Housekeeping



- Meeting is being recorded
- Exits/Restrooms
- *Please Sign in!!*
 - In-Person- Sign-In Sheet
 - Virtual- Enter name, municipality(s), organization and email in the chat
- Questions are welcome at anytime!
 - If joining us online, please raise your hand

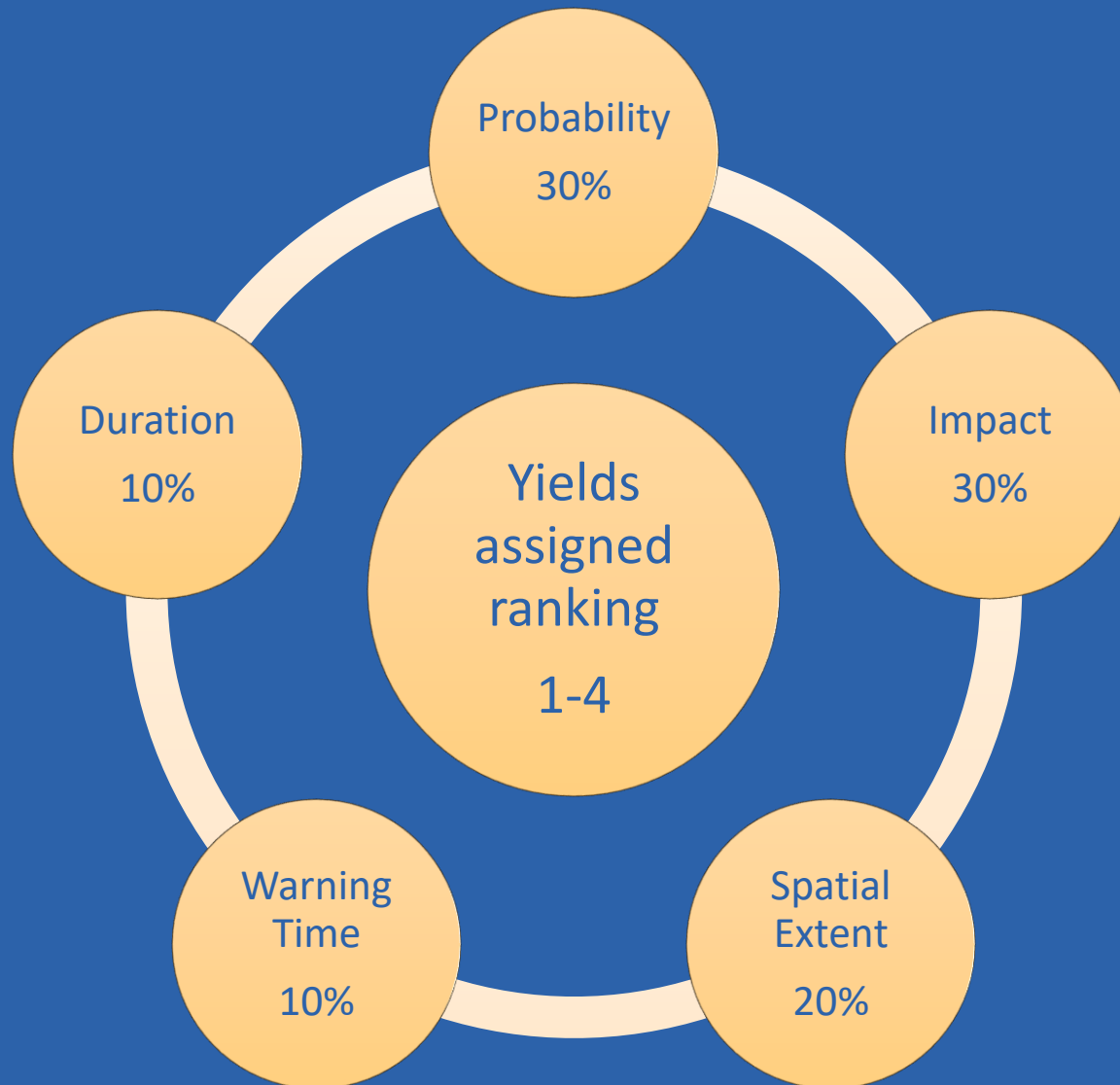
Today's Agenda – Public Meeting #3

- Recap from July 21, 2023 Public Meeting #2
- Hazard Risk Factor Rankings
- Municipal Risk Factor Rankings
- Future Development Vulnerability
- Mitigation Goals and Objectives
- Existing Mitigation Action Review
- New Mitigation Actions and Action Rankings
- Plan Maintenance and Adoption Process

Recap from July 21st meeting

- Survey 2- Hazard Identification and Prioritization
 - Hazard risks, changes, Plan priorities, strengths, and weaknesses, and familiarity, best way to communicate
- Hazard Profiles
 - Changes and additions to descriptions
- Survey 3- Municipal Capability Assessment
 - Planning/Regulatory, Administrative/Technical, Financial, and Education/Outreach Capabilities
- Mitigation Actions and Survey

County Hazard Risk Ranking Criteria



High Risk Hazards (≥ 2.5)

Hazard risk	Hazard	Risk Assessment Category					Risk Factor
		Probability	Impact	Spatial Extent	Warning Time	Duration	
HIGH	Substance Use Disorder	3.6	2.9	3.1	2.6	3.0	3.1
	Pandemic/ Infectious Disease	2.5	2.9	4.0	1.0	4.0	2.9
	Flood/Flash Flood/Ice Jam	3.2	2.8	2.8	2.4	2.2	2.8
	Extreme Temperatures	3.2	2.6	4.0	1.0	3.0	2.7
	Transportation Incidents	3.3	1.8	1.9	3.7	1.4	2.7
	Nuclear/Radiological Incidents	1.3	2.6	3.5	2.6	3.7	2.6
	Radon Exposure	3.0	3.1	2.9	1.6	3.8	2.6
	Winter Storm	2.9	1.9	3.8	1.5	2.9	2.6
	Drought	2.6	1.6	3.6	1.0	4.0	2.5
	Hurricanes/Tropical Storms/Nor' Easters	2.5	2.3	3.7	1.2	2.5	2.5

Moderate Risk Hazards (2.0-2.4)

Hazard risk	Hazard	Risk Assessment Category					Risk Factor
		Probability	Impact	Spatial Extent	Warning Time	Duration	
MODERATE	Dam Failure	1.5	2.9	2.8	2.8	2.6	2.4
	Invasive Species	2.6	1.4	3.6	1.0	4.0	2.4
	Urban Fire and Explosion	2.7	2.3	1.7	2.5	1.6	2.4
	Hazardous Materials	2.4	1.9	1.7	3.7	2.2	2.3
	Subsidence/Sinkhole	2.5	1.8	1.7	3.7	2.6	2.3
	Terrorism/Cyberterrorism	2.2	1.6	2.6	3.7	2.7	2.3
	Tornado/Windstorm	2.5	2.4	2.3	2.8	1.4	2.3
	Lightning Strike	3.1	1.6	1.5	3.7	1.1	2.2
	Mass Food/Animal Feed Contamination	1.7	1.9	2.8	2.4	3.2	2.2
	Hailstorms	2.3	1.6	2.2	3.0	1.0	2.0
	Wildfire	2.0	1.8	1.8	2.9	2.4	2.0

Low Risk Hazards (<2.0)

Hazard risk	Hazard	Risk Assessment Category					Risk Factor
		Probability	Impact	Spatial Extent	Warning Time	Duration	
LOW	Levee Failure	1.2	2.1	2.1	2.3	2.9	1.9
	Civil Disturbance	1.3	1.9	1.7	2.9	1.6	1.8
	Earthquake	1.6	1.2	2.4	4.0	1.0	1.8
	Landslide	1.3	1.6	1.4	3.6	1.1	1.6

Municipal Risk Factors

- Asked to rank hazards based on SEVERITY and FREQUENCY – high, moderate or low for both
- 63 municipalities

Table 4.4.2-2: Hazard Risk Matrix

Severity	High	Moderate	High	High
	Moderate	Low	Moderate	High
	Low	Low	Low	Moderate
	Ranking	Low	Moderate	High
	Frequency			

County/Municipal Risk Comparison

Table 4.4.2-2: Calculated Countywide Risk Factor by Hazard and Comparative Jurisdictional Risk*

Municipality	Identified Hazard and Corresponding Countywide Risk Factor																								
	Substance Use Disorder	Pandemic and Infectious Disease	Flood/Flash Flood/Ice Jam	Extreme Temperature	Transportation Incidents	Nuclear/Radiological Incidents	Radon Exposure	Winter Storm	Drought	Hurricanes, Tropical Storms, Nor'easters	Dam Failure	Invasive Species	Urban Fire and Explosion	Hazardous Materials	Subsidence/Sinkhole	Terrorism/Cyberterrorism	Tornado/Windstorm	Lightning Strike	Mass Food/Animal Feed Contamination	Hailstorms	Wildfire	Levee Failure	Civil Disturbance	Earthquake	Landslide
York County	3.1	2.9	2.8	2.7	2.7	2.6	2.6	2.6	2.5	2.5	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.2	2.2	2.0	2.0	1.9	1.8	1.8	1.6
Carroll Township	=	↓	↓	=	=	↓	↓	=	↓	=	↓	↓	=	=	=	↓	=	↓	↓	=	=	=	=	=	=
Manchester Township	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	=	↓	↓	↓	=	=	=	=
Codorus Township	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	=	=	=	=
Conewago Township																									
Crossroads Borough																									
Dallastown Borough	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	=	=	=	=
Delta Borough	=	=	↓	=	=	=	↓	=	=	↓	↓	=	↑	↑	↓	↑	=	↓	↓	=	↑	=	=	=	=
Dillsburg Borough	=	↓	↓	=	↓	↓	↓	=	↓	=	↓	↓	↓	=	↓	↓	=	↓	↓	↓	=	=	=	=	=
Dover Borough																									
Dover Township	↓	↓	=	↓	↓	↓	↓	↓	↓	=	=	↓	=	=	=	↓	↓	↑	↓	↓	=	=	=	=	=
East Hopewell Township	↓	↓	=	↓	=	↓	↓	↓	↓	↓	=	=	↓	=	↓	↓	↑	↓	↓	↓	=	=	↑	=	=
East Manchester Township	↓	↓	=	=	=	=	↓	↓	↓	=	=	=	↓	↓	↓	↓	↓	↓	↓	↓	=	=	=	↑	=
East Prospect Borough	=	↓	↓	↓	=	↓	↓	↓	↓	=	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	=	=	=	=
Fairview Township	↓	↓	↓	↓	=	↓	↓	↓	↓	=	=	↓	↓	=	=	=	=	↓	↓	↓	=	=	=	=	=
Fawn Grove Borough	=	=	↓	↓	↓	↓	↓	↓	↓	=	=	↓	↑	↓	↓	=	=	↓	↓	↓	=	=	=	↑	=
Fawn Township	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	=	=	=	=
Helton Borough	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	=	=	=	=

Future Development Vulnerability

MAP 60
2040 PROJECTION - CURRENT TREND SCENARIO

ADDITIONAL BUILDINGS: 27,736
ADDITIONAL DWELLING UNITS: 43,855
ADDITIONAL POPULATION (DUx2.51persons per HH): 110,076
ADDITIONAL NON-RESIDENTIAL FLOOR AREA: 38,487,112sqft
ADDITIONAL JOBS (FLOOR AREA/880sq ft per employee): 43,735

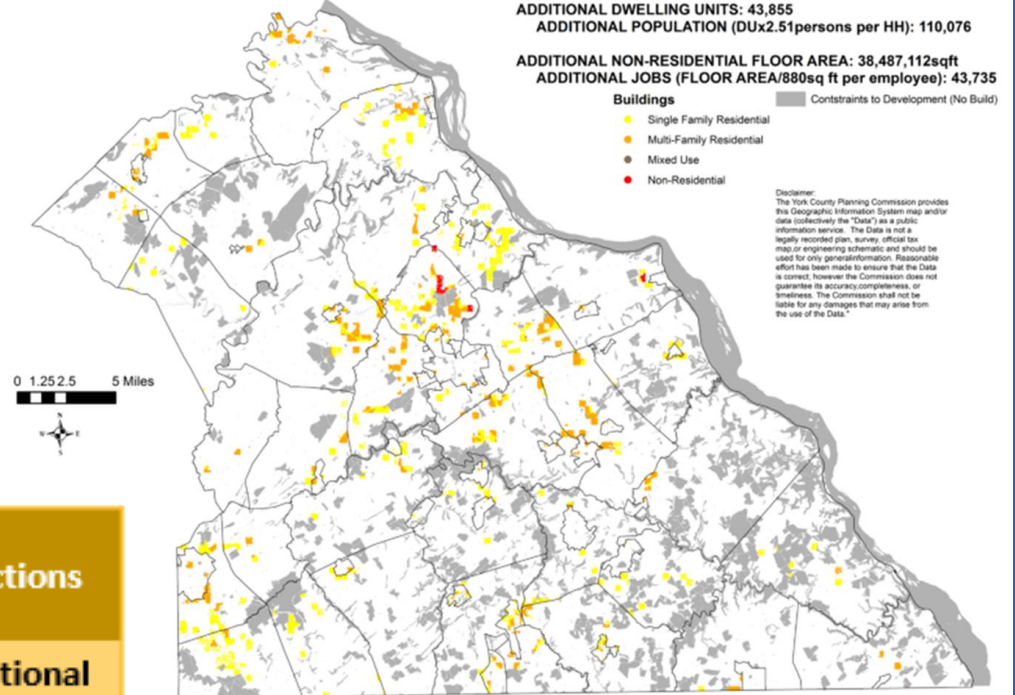


Table 4.4.3-1: Population and Dwelling Unit Projections 2021-2030

Municipality	2021 Population US Census	2030 YCPC Projected Population	Additional Dwelling Units 2021-2030
Carroll Township	6,769	8,007	489
Chanceford Township	5,951	7,314	539
Codorus Township	3,889	4,304	164
Conewago Township	8,444	10,158	677
Crossroads Borough	497	520	9

Goals and Objectives

- Goal 1-*Updated to reflect new hazards and terminology*
 - Reduce the possibility of injury or death to County residents and potential losses or damages to critical facilities, infrastructure, and property that could result from the occurrence of drought, earthquake, extreme temperature, flood/flash flood/ice jam, hailstorm, hurricane/tropical storm/nor'easter, invasive species, landslide, lightning strike, pandemic and infectious disease, radon exposure, subsidence/sinkhole, tornado/ windstorm, wildfire, winter storm, civil disturbance, dam failure, hazardous materials, levee failure, mass food/animal feed contamination, nuclear/radiological incidents, substance use disorder, terrorism/cyberterrorism, transportation incidents, and urban fires/explosions.

Review of 2018 ACTIONS

- Sent out form asking municipalities to review existing actions and reply with updated information in the form of Action ID Worksheet and Ranking.
 - **If no new information received or no information to support keeping action, it was then removed.**

130 Actions

→ 34 action items removed

↓
96 action items retained

2024 Hazard Mitigation Actions

- 88 new projects identified through County, municipalities, stakeholders, and Pollution Reduction Plan
 - New Actions-Flooded Roadway Study, opioid crisis, lithium battery disposal, EMA hazard mitigation planner, safe streets/roads, high hazard dams exercise, working with high hazard dam owners, historic structure flood mitigation, weather radar gaps, Regional Transportation Operation Plan, damaged bridge replacement, stormwater retrofits, floodplain/stream restorations, dam rehabilitation, secure buildings and computer systems, Environmental Justice Communities, and climate change to name a few.
- 184 Actions Total

2024 Hazard Mitigation Actions

- Information for each action included Plan-
 - Municipal Name
 - Mitigation Action Description
 - Type-
 - Local Plans/Ordinances, Structure/Infrastructure, Natural Systems Protection, Education and Awareness
 - Hazard(s) Addressed
 - Estimated Cost
 - Potential Funding Source
 - Lead Agency/Department
 - Implementation Schedule



Mitigation Action Prioritization

MULTI-OBJECTIVE MITIGATION ACTION PRIORITIZATION METHOD		
Mitigation Action Ranking Criteria	Criteria Description	Weight Value
Effectiveness	The extent to which an action reduces the vulnerability of people and property.	20%
Efficiency	The extent to which time, effort, and cost is well used as a means of reducing vulnerability.	30%
Multi-Hazard Mitigation	The action reduces vulnerability for more than one hazard.	20%
Addresses High Risk Hazard	The action reduces vulnerability for people and property from a hazard(s) identified as high risk.	15%
Addresses Critical Communications/Critical Facilities	The action pertains to the maintenance of critical functions and structures such as transportation, supply chain management, data circuits, etc.	15%

Prioritization Category	Prioritization Score
High	2.5 - 3.0
Medium	1.9 - 2.4
Low	0 - 1.8

Example Ranking Scores

Table 6.4-2 York County Multi-Objective Mitigation Action Prioritization Rankings

Action #	Mitigation Action	Effectiveness (20%)	Efficiency (30%)	Multi-Hazard (20%)	Mitigation	Addresses Hazard (15%)	High Risk	Addresses Critical Communications Facilities (15%)	Total Score
1	Address the flooded roadway segments identified as part of the York County Flooded Roadway Study	3.0	3.0		3.0		3.0	3.0	3.0
2	Continue to collect and identify flooded roadway segments to be addressed as part of future road improvement projects	2.0	2.0		2.0		3.0	2.0	2.2
3	Remediate the opioid crisis through investments in prevention, treatment, recovery services, support to families, and harm reduction	3.0	3.0		0.0		3.0	0.0	2.0
4	Continue support for PA Department of Drug and Alcohol Programs Prescription Drug Take Back Program	2.0	2.0		0.0		3.0	0.0	1.5
5	Plan for Lithium Battery Disposal and Recycling	2.0	3.0		0.0		0.0	0.0	1.3

Plan Maintenance

Continuous Engagement

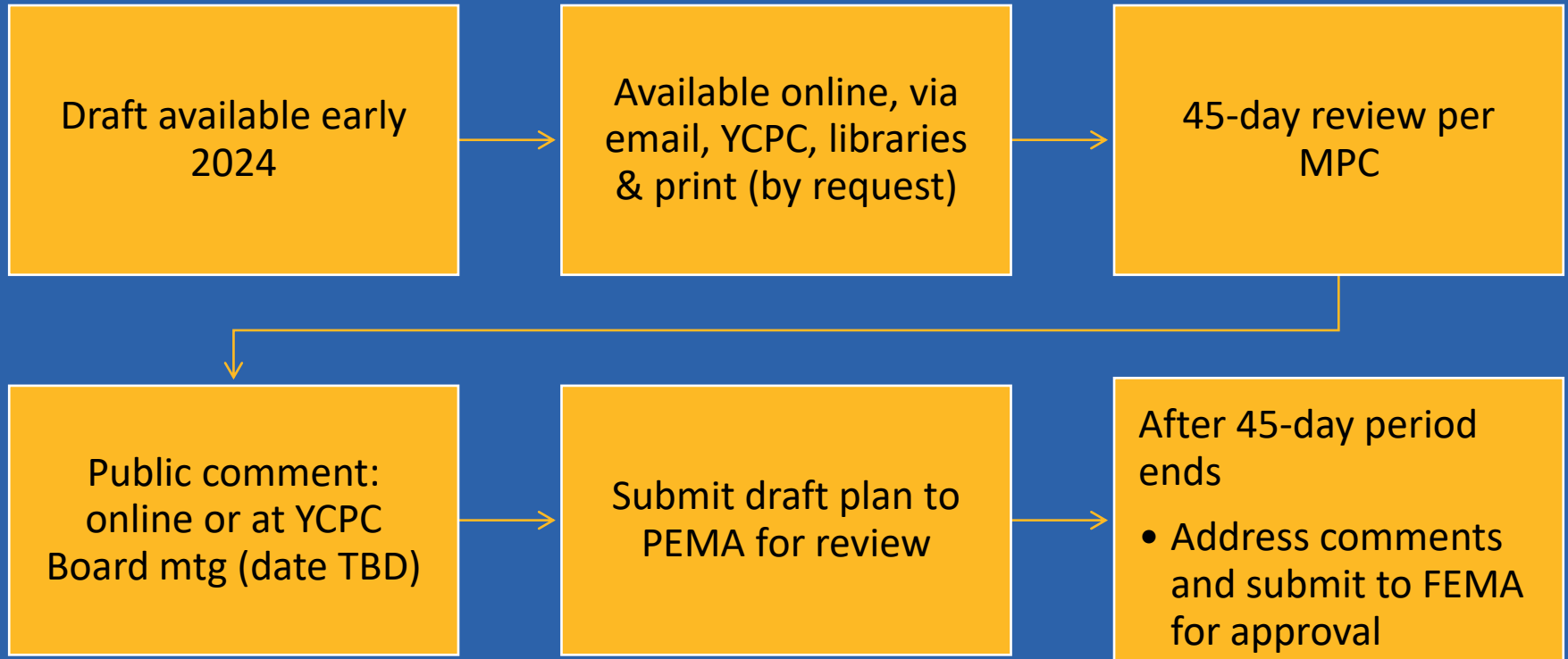
- Training, social media, participation in local projects, notification of grants, website, Hazard Mitigation Viewer mapping application

Annual Plan Review

- Goals, priorities, actions, implementation
- Public comment period and meeting
- Direct outreach to municipalities for completed projects, actions, comments
- Submit status of actions, comments, projects to PEMA & FEMA

Other actions?

Plan Review timeline



At anytime, check www.yorkhazmit.org for project status and updates.

PLAN ADOPTION

- Receive FEMA approval pending adoption.
- Recommendation from YCPC Board for adoption to York County Commissioners.
- Public Hearing as part of York County Commissioners meeting for additional comment.
- Adoption by resolution at next York County Commissioners meeting.
- Municipalities then adopt by resolution.
 - Submit copy of resolution to YCPC for submission to PEMA and FEMA.
 - Municipalities should then receive notification from FEMA of approval.

Municipal Participation

- FEMA requires participation by municipality for Plan to be approved and cover individual municipality
- November Meeting- They defined participation as attendance at one meeting and participation in one outreach effort
- Currently 24 municipalities may not meet these requirements (excludes this meeting and NFIP)
- 21 municipalities have not participated in a public meeting
- 3 municipalities have not participated
- Will send out list after meeting
- Can still fill out NFIP survey and one public meeting remaining

In closing...

- Questions?
- Contact information:

Roy Livergood
Senior Planner

yorkhazmit@ycpc.org

717-771-9870 x1756

