

Lehigh County Authority, Lehigh/Northampton County Annex

Hazard Mitigation Plan Points-of-Contact

Primary:

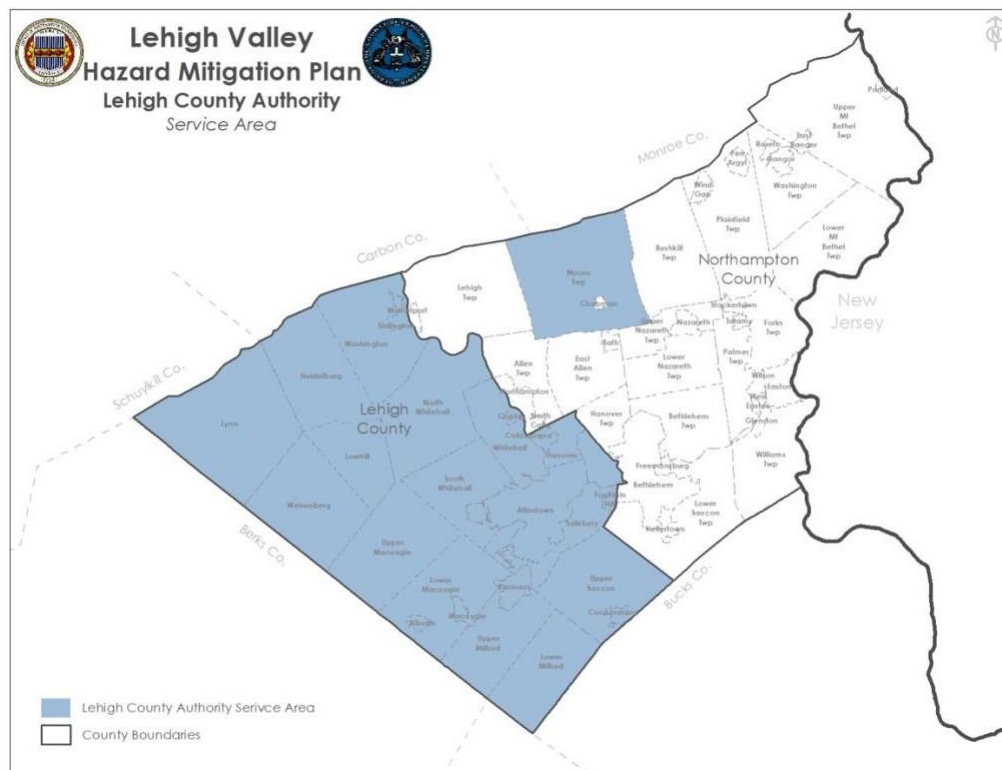
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Alternate:

N/A

Participant Profile

Lehigh County Authority (LCA) is a public water and wastewater utility committed to protecting public health and the environment by providing high-quality, safe, and reliable water and wastewater services, serving a population of approximately 270,000 people. A nonprofit, public agency, LCA was founded in 1966 by the County of Lehigh and is governed by a nine-member board of directors appointed by the County. LCA provides water service to more than 55,000 residential and commercial properties throughout Lehigh and Northampton counties, including the City of Allentown, and sewer service to about 35,000 properties, primarily in the City of Allentown. The map below shows the LCAs service area.



Municipal Participation

1. Identify stakeholders to be involved in the planning process such as, floodplain administrator, public works, emergency management, engineers, planners, etc., and include their specific role in the process. Are there any departments, sections, or other divisions of the authority that will participate?

N/A

2. Identify community stakeholders such as; neighborhood groups, religious groups, major employers/businesses, etc., that will be informed and / or involved in the planning process and describe how they will be involved. Are there any organizations, groups or people outside of the authority itself that will participate?

N/A

3. Describe how the public **will be engaged** in the current planning process (examples, newsletters, social media, etc.), **and how they were engaged** since the 2018 Hazard Mitigation Plan.

Current: Biweekly public meetings, newsletter, website

Past: N/A

Compliance with the National Flood Insurance Program (NFIP)

Topic	Identify the source of information, if different from the one listed.	Additional Comments
1. Staff Resources		
Is the Community Floodplain Administrator (FPA) or NFIP Coordinator certified?	N/A	N/A – The Lehigh County Authority is a public non-profit utility, and is not a municipality or county eligible to participate in the NFIP
Is floodplain management an auxiliary function?	N/A	N/A – The Lehigh County Authority is a public non-profit utility, and is not a municipality or county eligible to participate in the NFIP
Provide an explanation of NFIP administration services (e.g., permit review, GGIS, education or outreach, inspections, engineering capability)	N/A	N/A – The Lehigh County Authority is a public non-profit utility, and is not a municipality or county eligible to participate in the NFIP
What are the barriers to running an effective NFIP program in the community, if any?	N/A	N/A – The Lehigh County Authority is a public non-profit utility, and is not a municipality or county eligible to participate in the NFIP
2. Compliance History		
Is the community in good standing with the NFIP?	N/A	N/A – The Lehigh County Authority is a public non-profit utility, and is not a municipality or county eligible to participate in the NFIP
Are there any outstanding compliance issues (i.e., current violations)?	N/A	N/A – The Lehigh County Authority is a public non-profit utility, and is not a municipality or county eligible to participate in the NFIP
When was the most recent Community Assistance Visits (CAV) or Community Assistance Contact (CAC)?	N/A	N/A – The Lehigh County Authority is a public non-profit utility, and is not a municipality or county eligible to participate in the NFIP
Is a CAV or CAC scheduled or needed?	N/A	N/A – The Lehigh County Authority is a public non-profit utility, and is not a municipality or county eligible to participate in the NFIP
3. Regulation		
When did the community enter the NFIP?	N/A	N/A – The Lehigh County Authority is a public non-profit utility, and is not a municipality or county eligible to participate in the NFIP
Are the Flood Insurance Rate Maps (FIRMs) digital or paper? How are residents assisted with mapping?	N/A	N/A – The Lehigh County Authority is a public non-profit utility, and is not a municipality or county eligible to participate in the NFIP
Do floodplain regulations meet or exceed FEMA or State minimum requirements? If so, in what ways?	N/A	N/A – The Lehigh County Authority is a public non-profit utility, and is not a municipality or county eligible to participate in the NFIP

Compliance with the National Flood Insurance Program (NFIP) - *continued*

Topic	Identify the source of information, if different from the one listed.	Additional Comments
4. Insurance Summary		
How many NFIP policies are in the community? What is the total premium and coverage?	N/A	N/A – The Lehigh County Authority is a public non-profit utility, and is not a municipality or county eligible to participate in the NFIP
How many claims have been paid in the community? What is the total amount of paid claims? How many substantial damage claims have there been?	N/A	N/A – The Lehigh County Authority is a public non-profit utility, and is not a municipality or county eligible to participate in the NFIP
How many structures are exposed to flood risk within the community?	N/A	N/A – The Lehigh County Authority is a public non-profit utility, and is not a municipality or county eligible to participate in the NFIP
Describe any areas of flood risk with limited NFIP policy coverage	N/A	N/A – The Lehigh County Authority is a public non-profit utility, and is not a municipality or county eligible to participate in the NFIP
5. Community Rating System (CRS)		
Does the community participate in CRS?	N/A	N/A – The Lehigh County Authority is a public non-profit utility, and is not a municipality or county eligible to participate in the NFIP or CRS
If so, what is the community's CRS Class Ranking?	N/A	N/A – The Lehigh County Authority is a public non-profit utility, and is not a municipality or county eligible to participate in the NFIP or CRS
What categories and activities provide CRS points and how can the Class be improved?	N/A	N/A – The Lehigh County Authority is a public non-profit utility, and is not a municipality or county eligible to participate in the NFIP or CRS
Does the plan include CRS planning requirements?	N/A	N/A – The Lehigh County Authority is a public non-profit utility, and is not a municipality or county eligible to participate in the NFIP or CRS

Community Assets

Community assets are defined to include anything that is important to the character as well as the function of a community, and can be described in four categories, they are; people, economy, natural environment and built environment. Please identify the community assets and location under each category.

1. People

- Concentrations of vulnerable populations such as the elderly, physically or mentally disabled, non-English speaking, and the medically or chemically dependent.

N/A – The Lehigh County Authority is a non-profit entity that does not have any residents.

- Types of visiting populations where large numbers of people are concentrated such as visitors for special events and students.

N/A – The Lehigh County Authority is a non-profit entity that does not have any residents

2. Economy

- Major employers, and primary economic sectors such as agriculture and commercial centers where losses would have a severe impact on the community.

N/A – The Lehigh County Authority is a non-profit entity that does not have any residents.

3. Natural Environment

- Those areas/features that can provide protective functions that reduce the magnitude of hazard events such as wetlands or riparian areas, and other environmental features important to protect.

Source water protection plans in place.

Community Assets- *continued*

4. Built Environment

- Existing structures such as concentrations of buildings that may be more vulnerable to hazards based on location, age, construction type and/or condition of use.

Both the water and wastewater treatment plants are constructed within the flood plain.

- Infrastructure systems such as water and wastewater facilities, power utilities, transportation systems, communication systems, energy pipelines, and storage.

The water and wastewater treatment plants are constructed in the floodplain. These facilities are attached as a separate spreadsheet.

- High potential loss facilities such as dams, locations that house hazardous materials, and military and/or civilian defense installations.

N/A

- Critical facilities such as hospitals, medical facilities, police and fire stations, emergency operations centers, shelters, schools, and airports/heliports.

LCA provides critical water and/or wastewater services to many of these facilities within their service area.

- Cultural/historical resources such as museums, parks, stadiums, etc.

LCA provides critical water and/or wastewater services to many of these facilities within their service area.

Capability Assessment

Capability	✓ Regulatory ✓ Tools ✓ Programs	Status			Department / Agency Responsible	Effect on Hazard Loss Reduction: -Supports -Neutral -Hinders	Change since the 2018 Plan? + Positive - Negative	Has the 2018 Plan been integrated into the Regulatory Tool/Program ? If so, how?	How can these capabilities be expanded and improved to reduce risk?	Additional Comments
		In Place	Date Adopted or Updated	Under Development						
1. Planning & Regulatory	Comprehensive Plan	X	2023				N/A	N/A		Strategic Plan & Strategic Asset Management Plan
	Capital Improvement Plan	X	2023				N/A	N/A		
	Economic Development Plan						N/A	N/A		
	Continuity of Operations Plan	X	2023				N/A	N/A		
	Stormwater Management Plan / Ordinance						N/A	N/A		
	Open Space Management Plan (or Parks/Rec., Greenways Plan)						N/A	N/A		
	Natural Resource Protection Plan						N/A	N/A		
	Transportation Plan						N/A	N/A		
	Historic Preservation Plan						N/A	N/A		
	Floodplain Management Plan						N/A	N/A		
	Farmland Preservation						N/A	N/A		
	Evacuation Plan	X	2023				N/A	N/A		
	Disaster Recovery Plan	X	2023				N/A	N/A		
	Hazard Mitigation Plan	X	2023				N/A	N/A		
	Emergency Operations Plan	X	2023				N/A	N/A		
	Zoning Regulations						N/A	N/A		
	Floodplain Regulations						N/A	N/A		
	NFIP Participation						N/A	N/A		
	Building Code						N/A	N/A		
	Fire Code						N/A	N/A		
	Other						N/A	N/A		

Capability Assessment - *continued*

Capability	✓ Staff ✓ Personnel ✓ Resources	Yes	No	Department / Agency	Change since 2018 Plan? + Positive - Negative	How can these capabilities be expanded and improved to reduce risk?	Additional Comments
2. Administrative & Technology	Planners (with land use / land development knowledge)	X			N/A		
	Planners or engineers (with natural and / or human-caused hazards knowledge)	X			N/A		
	Engineers or professionals trained in building and / or infrastructure construction practices (including building inspectors)	X			N/A		
	Emergency Manager	X			N/A		
	Floodplain administrator / manager		X		N/A		
	Land surveyors		X		N/A		
	Staff familiar with the hazards of the community	X			N/A		
	Personnel skilled in Geographical Information Systems (GIS) and / or FEMA's HAZUS program	X			N/A		
	Grant writers or fiscal staff to handle large / complex grants	X			N/A		
	Other	X			N/A		Emergency Responders on staff
3. Financial Resources	Capital improvement programming	X			N/A		
	Community Development Block Grants (CDBG)	X			N/A		
	Special purposes taxes				N/A		
	Gas / Electricity utility fees				N/A		
	Water / Sewer fees	X			N/A		
	Stormwater utility fees				N/A		
	Development impact fees				N/A		
	General obligation, revenue, and / or special tax bonds	X			N/A		
	Partnering arrangements or intergovernmental agreements	X			N/A		
	Other				N/A		
	StormReady Certification		X		N/A		
	Natural disaster or safety-related school programs	X			N/A		

Capability Assessment - *continued*

Capability	✓ Staff ✓ Personnel ✓ Resources	Yes	No	Department / Agency	Change since the 2018 Plan? + Positive - Negative	How can these capabilities be expanded and improved to reduce risk?	Additional Comments
4. Education & Outreach	Firewise Communities Certification		X		N/A		
	StormReady Certification		X		N/A		
	Natural disaster or safety-related school programs	X			N/A		
	Ongoing public education or information programs such as, responsible water use, fire safety, household preparedness, and environmental education.	X			N/A		
	Public-private partnership initiatives addressing disaster related issues.	X			N/A		
	Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	X			N/A		
	Other				N/A		
Capability		Degree of Capability			Change since the 2018 Hazard Mitigation Plan? If so, how?	Additional Comments	
		Limited	Moderate	High			
5. Self – Assessment	Planning and Regulatory			X	N/A		
	Administrative and Technical			X	N/A		
	Financial			X	N/A		
	Education and Outreach			X	N/A		

Known or Anticipated Future Development / Redevelopment

Development / Property Name	Type of Development	Number of Structures	Location	Known Hazard Zone	Description / Status
None					

Natural & Non-Natural Event History Specific to Lehigh County Authority

Type of Event and Date(s)	FEMA Disaster # (if applicable)	Local Damage(s) or Loss(es)
2020-2021 COVID-19 Pandemic	4506DR	\$23,427.31 was received from FEMA for PPE and related materials to support the 24/7 operation of critical facilities during the COVID-19 pandemic.

2023 Mitigation Action Plan

Mitigation Action		Mitigation Technique Category	Hazard(s) Addressed	Priority (H / M / L)	Estimated Cost	Potential Funding	Lead Agency / Department	Implementation Schedule	Applies to New and/or Existing Structures
1	Pretreatment Plant Capital Improvements	14	Utility Interruption, Environmental Hazards		\$6,000,000		Lehigh County Authority	Short Term	Existing
2	Tank and Reservoir Rehabilitation	15	Utility Interruption, Environmental Hazards		\$1,000,000		Lehigh County Authority	Short Term	
3	Large Diameter Valve Replacement Project	15	Utility Interruption, Environmental Hazards		\$1,950,000		Lehigh County Authority	Short Term	
4	Spring Creek Pump Station Upgrades	16	Flood, Utility Interruption, Environmental Hazards		\$1,430,000		Lehigh County Authority	Short Term	
5	Park Pump Station Upgrade - Phase 2	16	Utility Interruption, Environmental Hazards		\$2,100,000		Lehigh County Authority	Short Term	
6	KIWWTP Redundant Power Supply	17	Utility Interruption, Environmental Hazards		\$770,000		Lehigh County Authority	Short Term	
7	WWTP Electrical Substation No. 1 Replacement	18	Utility Interruption, Environmental Hazards		\$6,800,000		Lehigh County Authority	Short Term	
8	WWTP Boiler Replacement & Solids Process HVAC Upgrade Project	18	Utility Interruption, Environmental Hazards		\$1,400,000		Lehigh County Authority	Short Term	
9	WWTP Final Clarifier 1-4 Rehabilitation	18	Utility Interruption, Environmental Hazards		\$1,800,000		Lehigh County Authority	Short Term	
10	WWTP Primary Sludge Digester Feed Line Replacement	18	Utility Interruption, Environmental Hazards		\$1,300,000		Lehigh County Authority	Short Term	
11	Upper System Pump Station & Water Main Extension	18	Utility Interruption, Environmental Hazards		\$2,150,000		Lehigh County Authority	Short Term	
12	Central Lehigh System Supply Improvements	18	Utility Interruption, Environmental Hazards		\$1,650,000		Lehigh County Authority	Short Term	

2023 Mitigation Action Plan - continued

Mitigation Action		Mitigation Technique Category	Hazard(s) Addressed	Priority (H / M / L)	Estimated Cost	Potential Funding	Lead Agency / Department	Implementation Schedule	Applies to New and/or Existing Structures
13	WFP Redundant Power Supply	17	Utility Interruption, Environmental Hazards		\$730,000		Lehigh County Authority	Short Term	
14	WFP Filter Upgrades	18	Utility Interruption, Environmental Hazards		\$5,500,000		Lehigh County Authority	Short Term	
15	Big Lehigh Intake & Transmission Upgrades	18	Utility Interruption, Environmental Hazards		\$1,120,000		Lehigh County Authority	Short Term	
16	PFAS Compliance Planning and Upgrades	27	Utility Interruption, Environmental Hazards		\$10,250,000		Lehigh County Authority	Short Term	
17	Lead Service Line Replacement Program	18	Utility Interruption, Environmental Hazards		\$55,000,000		Lehigh County Authority	Short Term	
18	Upper Western Lehigh Interceptor Pump Station & Force Main	18	Utility Interruption, Environmental Hazards		\$7,750,000		Lehigh County Authority	Short Term	
19	WLI Major Rehabilitation and Repairs	18	Utility Interruption, Environmental Hazards		\$6,975,000		Lehigh County Authority	Short Term	
20	Signatory I & I Investigation & Remediation Program	18	Utility Interruption, Environmental Hazards		\$1,500,000		Lehigh County Authority	Short Term	
21	Manhole Inspection and Sealing Program	18	Utility Interruption, Environmental Hazards		\$6,000,000		Lehigh County Authority	Short Term	
22	WWTP Wet Weather Capacity Enhancement - Main & Auxiliary Pump Station Improvements	16	Utility Interruption, Environmental Hazards		\$12,600,000		Lehigh County Authority	Short Term	
23	WWTP Wet Weather Capacity Enhancement - IPS Pump Station Upgrade & 480v MCC Replacement	16	Utility Interruption, Environmental Hazards		\$5,900,000		Lehigh County Authority	Short Term	

2023 Mitigation Action Plan - *continued*

Mitigation Action		Mitigation Technique Category	Hazard(s) Addressed	Priority (H / M / L)	Estimated Cost	Potential Funding	Lead Agency / Department	Implementation Schedule	Applies to New and/or Existing Structures
24	Source Reduction Plan - I/I Elimination Program	18	Utility Interruption, Environmental Hazards		\$23,000,000		Lehigh County Authority	Short Term	
25	WWTP Wet Weather Capacity Enhancement Project - Tertiary Bypass	16	Utility Interruption, Environmental Hazards		\$1,300,000		Lehigh County Authority	Short Term	
26	Wynnewood I & I Investigation & Remediation Program	18	Utility Interruption, Environmental Hazards		\$150,000		Lehigh County Authority	Short Term	
27	Heidelberg Heights I & I Investigation & Remediation Program	18	Utility Interruption, Environmental Hazards		\$300,000		Lehigh County Authority	Short Term	
28	Lynn Township I & I Investigation & Remediation Program	18	Utility Interruption, Environmental Hazards		\$150,000		Lehigh County Authority	Short Term	
29	North Whitehall Division Water System Supply Study and Improvements	16	Environmental Hazards / Hazardous Materials Release		\$2,000,000		Lehigh County Authority	Short Term	
30	Central Lehigh County WW Capacity Planning & Expansion	18	Utility Interruption, Environmental Hazards		\$800,000		Lehigh County Authority	Short Term	
31	Spring Creek Force Main Condition Assessment	18	Utility Interruption, Environmental Hazards		\$150,000		Lehigh County Authority	Short Term	
32	North Whitehall Township Act 537 Sewage Facilities Planning	18	Utility Interruption, Environmental Hazards		\$180,000		Lehigh County Authority	Short Term	
33	Act 537 Alternative Analyses	18	Urban Fire/Explosion		\$700,000		Lehigh County Authority	Short Term	
34	Water Main Replacement Projects	18	Utility Interruption, Environmental Hazards		\$12,100,000		Lehigh County Authority	Short Term	

2023 Mitigation Action Plan - *continued*

Mitigation Action		Mitigation Technique Category	Hazard(s) Addressed	Priority (H / M / L)	Estimated Cost	Potential Funding	Lead Agency / Department	Implementation Schedule	Applies to New and/or Existing Structures
35	Annual Water Main Replacements	18	Utility Interruption, Environmental Hazards		\$24,600,000		Lehigh County Authority	Short Term	
36	Kline's Island WWTP Wet-Weather Enhancement Projects	18	Utility Interruption, Environmental Hazards, Flooding		\$51,000,000		Lehigh County Authority	Short Term	
37	Western Lehigh Interceptor Expansion	18	Utility Interruption, Environmental Hazards, Flooding		\$98,000,000		Lehigh County Authority	Short Term	
38	Little Lehigh Relief Interceptor Expansion	18	Utility Interruption, Environmental Hazards, Flooding		\$30,000,000		Lehigh County Authority	Short Term	
39	Industrial Pretreatment Plant Capacity Expansion & Upgrade	18	Utility Interruption, Environmental Hazards, Flooding		\$148,000,000		Lehigh County Authority	Short Term	

Notes:

Estimated Costs:

- Where actual project costs have been reasonable estimated: Low = < \$10,000; Medium = \$10,000 to \$100,000; High = > \$100,000;
- Where actual project costs cannot reasonably be established at this time:
 - Low** = Possible to fund under existing budget. The project is part of, or can be part of an existing ongoing program.
 - Medium** = Could budget for under existing work plan, but would require a reapportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.
 - High** = Would require an increase in revenue via an alternative source (i.e., bonds, grants, fee increases) to implement. Existing funding levels are not adequate to cover the costs of the proposed project.

Potential Funding (FEMA HMA):

- **BRIC** = Building Resilient Infrastructure and Communities
- **FMA** = Flood Mitigation Assistance Grant Program
- **HMGP** = Hazard Mitigation Grant Program
- **HSGP** = Homeland Security Grant Program
- **EMPG** = Emergency Management Performance Grant

Implementation Schedule:

- **Short Term** = 1 to 5 years
- **Long Term** = 5 years or greater
- **DOF** = Depending on Funding

Applies to New and/or Existing Structures:

- **N/A** = Not Applicable

