Cumberland County Multi-Hazard Mitigation Plan Update
Participating Jurisdiction Appendices

Appendix 11
Millville City, New Jersey

August 22, 2022

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List of Figures

List of Tables

Part 1.1: Cumberland County Multi-Hazard Mitigation Plan Update

The Cumberland County Multi-Hazard Mitigation Plan Update (CC HMPU) incorporates input from all 15 participating jurisdictions in Cumberland County, including Cumberland County and 14 separate municipalities.

The CC HMPU is an update of the Mitigation Plan for Four New Jersey Counties (NJ4 HMP) that was completed by all fifteen jurisdictions in Cumberland County along with over 70 additional jurisdictions from Camden, Gloucester, and Salem Counties. The Cumberland County portions of the NJ4 HMP were adopted by the participating jurisdictions and approved by the Federal Emergency Management Agency in 2016.

The CC HMPU has two main parts:

- Cumberland County Multi-Hazard Mitigation Plan Update, or the “Base Plan”.
- County and Municipal Appendices.

The Base Plan includes descriptions and information common to all 15 participating jurisdictions organized according to the following three focus areas:

- Planning Process
- Hazard Identification and Risk Assessment
- Mitigation Measures

The County and Municipal Appendices include specific information for these same three focus areas for each of the 15 participating jurisdictions. Detailed tabulations are included in these Municipal Appendices for critical facilities, the status of past mitigation activities, and proposed mitigation measures for each municipality.

Part 1.2: Millville City Municipal Appendix

This Municipal Appendix is focused on Millville City in Cumberland County, New Jersey.

The Millville City Municipal Working Group developed the Millville City Municipal Appendix for adoption by the Millville City Commission and subsequent approval by Region II of the Federal Emergency Management Agency.

Part 2.1: Municipal Working Group Participation

Part 2.1 includes:

- *Municipal Working Group members including positions in the community, meetings and work sessions attended, and specific contributions to the Municipal Appendix*
- *Municipal positions and organizations that were invited but were not able to participate in the plan update process*
- *Municipal positions and organizations that have been recommended by the Federal Emergency Management Agency (FEMA) as candidates for participation on Municipal Working Groups but do not exist in the municipality*

Table 11-1 identifies the Municipal Working Group members. As detailed in *Section 2: Planning Process* of the Base Plan, the Municipal Working Groups are comprised of community representatives who worked to make sure mitigation measures included in the Municipal Appendix addressed the risks faced by residents, businesses, and property owners and reflected the priorities of the community.

Municipal Working Group members reviewed briefing materials and contributed during Work Sessions and Meetings and reviewed the Preliminary Draft and Public Review Draft versions of the CC HMPU Base Plan and Appendices. The Working Group will also continue to stay involved during the implementation and maintenance of the CC HMPU.

Due to the on-going COVID-19 pandemic during the plan update process, Working Group meetings were conducted in a variety of ways including virtual meetings. However, when local conditions permitted, in-person meetings were conducted.

Note: Two members of the Working Group also participated in the development of the 2016 NJ4 HMP. These members are indicated with an (✷) following their last names.

Table 11-1: Millville City Working Group

First Name	Last Name	Department	Position	Project Kick-off Meeting[1]	Round 1 Work Session[2]	Round 2 Work Session[3]	Contribution[4]
Sherman	Taylor ✷	Office of Emergency Management (OEM)	Coordinator	☑	☑		
William	Stadnick, III ✷	OEM	Deputy Coordinator		☑	☑	Organized Working Group and Work Sessions.
Joseph	Pepitone	City Commission	Director of Public Safety				
Ashley	Udalovas	City Commission	Commissioner / Director of Public Affairs				

1 Project Kickoff Meeting was held on May 20, 2021.
2 Round 1 Work Session was held on August 24, 2021.
3 Round 2 Work Session was held on December 14, 2021.
4 Additional or unusual contributions are noted in the far-right hand column.

First Name	Last Name	Department	Position	Project Kick-off Meeting[1]	Round 1 Work Session[2]	Round 2 Work Session[3]	Contribution[4]
Michael	Santiago	City Commission	Mayor / Commissioner / Director of Public Works				
Jeanne	Parkinson	Administration	City Clerk / City Administrator		☑		
John	Wettstein	Fire Department	Captain		☑		
John	Feltes	Fire Department EMS	EMS Chief		☑		
Kelly	Soracco	Vineland City Fire Department / Emergency Medical Services	EMS Chief				
Salvador	Gioia	Department of Sewer	Superintendent		☑		
Deric	Cheesman	Department of Water	Superintendent				
Michelle	Nothaft	Engineering Department	Assistant Engineer		☑	☑	
Yazmin	Moreno	Department of Planning and Zoning	Planner Trainee		☑		
Robin	Young	Construction Department	Construction Official / Floodplain Administrator				
Eichard	Davidson	School Board	Business Administrator				
Samantha	Silvers	Housing Authority	Executive Director				
Jonathan	Merki	Chaplain program via Police Department	Lead Chaplain				
Donald	Daigle	Chamber of Commerce	President				

The following lists candidate positions and organizations within the community that were extended invitations to participate during the development of the Municipal Appendix. These positions and organizations will continue to be extended invitations to participate during subsequent plan implementation and maintenance activities.

- Business Associations (via the Chamber of Commerce)
- Community / Faith-Based Organization(s) (via Chaplain Program through the Police Department)
- Environmental Organizations
- Major Employers
- Healthcare Institutions

Part 2.2: Public Participation

Part 2.2 includes all opportunities provided to the public and interested parties in the municipality to participate during the plan update process.

Table 11-2 identifies the date, type of involvement, and location (where applicable) for all opportunities provided to the public and interested parties to participate in the development of the plan update.

Table 11-2: Public Participation

Date	Type of Involvement	Location
September 8, 2021	Preliminary Draft Municipal Appendix available for public comment.	Project Website[5]
April 11, 2022	Notice posted re: Public Review Draft Municipal Appendix review period with link to Project Website.	Township Website[6]
April 19, 2022	Public Review Draft Municipal Appendix available for public comment.	Project Website[5]

Public comments and input received for the Preliminary Draft and Public Review Draft versions of the Municipal Appendix were considered by the Municipal Working Group and incorporated into the Municipal Appendix where appropriate. In addition, the Municipal Appendix was adopted as part of a regularly scheduled public meeting (see Attachment B: Adoption Resolution).

Public education and outreach is an on-going mitigation measure included in the Municipal Appendix.[7] In addition, public participation will continue to be encouraged during subsequent plan implementation and maintenance activities.[8]

[5] http://www.millvillenj.gov/489/2022-Cumberland-County-Predisaster-Mitig
[6] See Mitigation Measure M-1 in Part 4 of the Municipal Appendix.
[7] Public education and outreach is described in *Section 4: Mitigation Measures* of the CC HMPU Base Plan.

Part 3: Hazard Identification and Risk Assessment

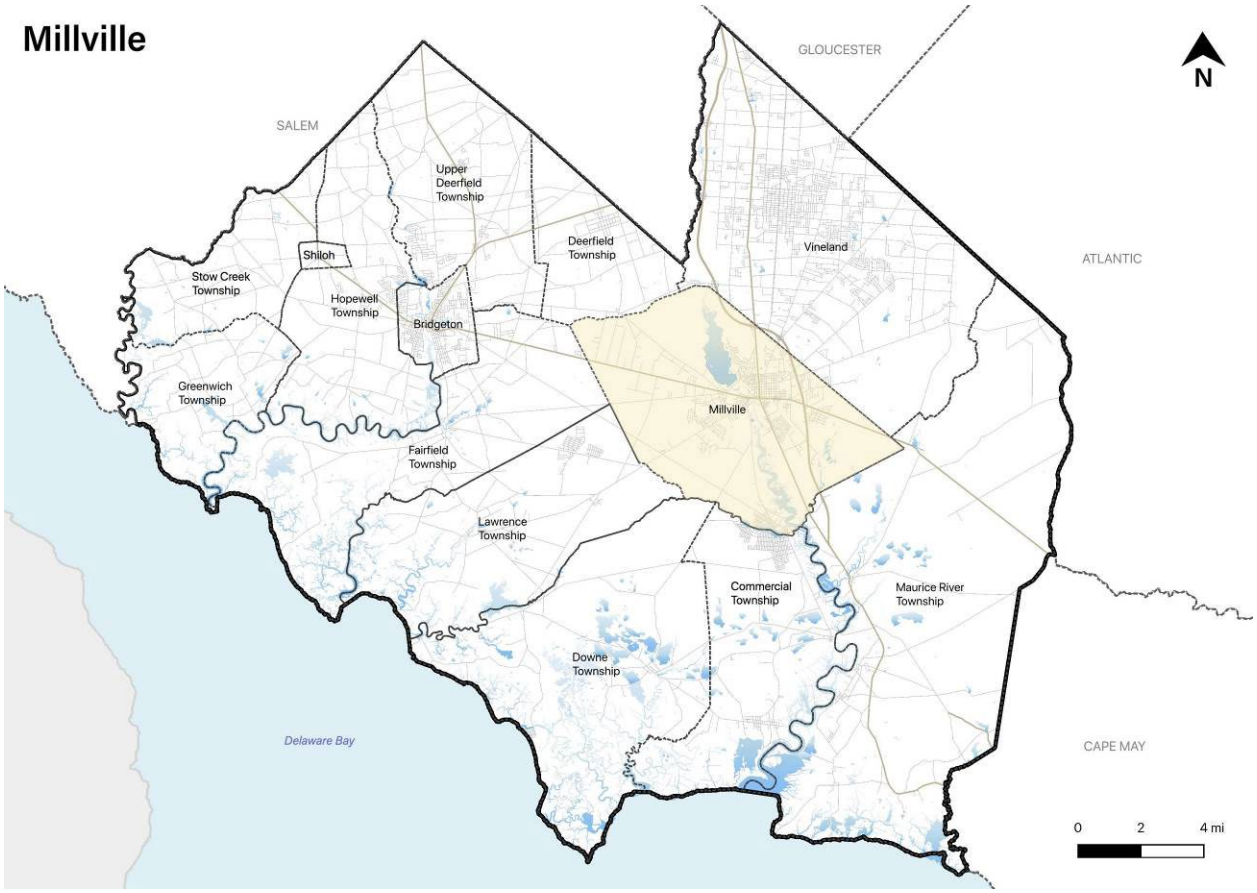
Part 3 includes seven subparts:

- *Part 3.1: Profile*
- *Part 3.2: General Building Stock*
- *Part 3.3: Critical Facilities*
- *Part 3.4: Hazard Exposure Assessment*
- *Part 3.5: Demographic Considerations*
- *Part 3.6: Observations*
- *Part 3.7: Hazard Priorities*

Part 3.1: Profile

Millville City is located in the central part of Cumberland County (See Figure 11-1).

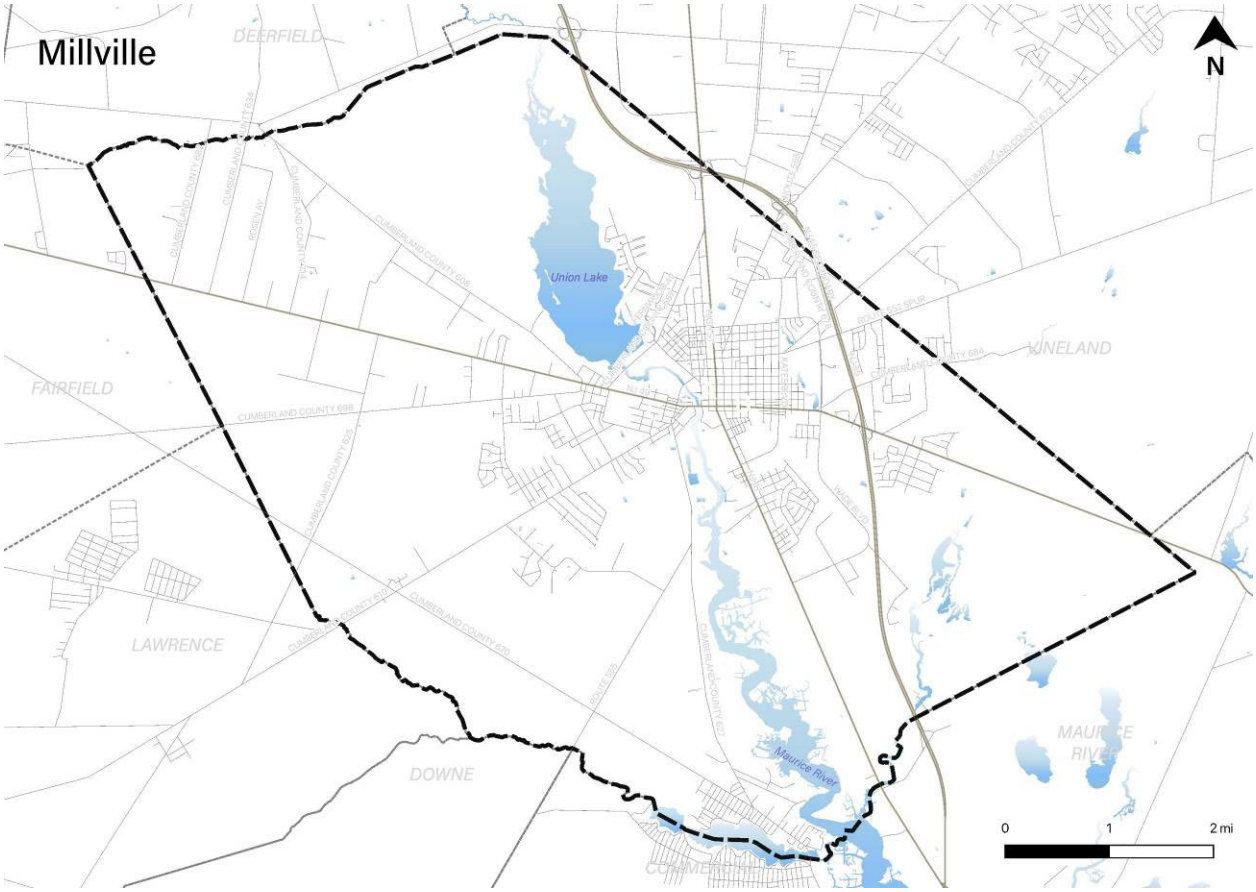
Figure 11-1: Millville City Location Map



Millville City is an inland municipality with mixed urban and suburban development and the second highest population of the fourteen municipalities in Cumberland County.

Per Figure 11-2, major water bodies include Union Lake and Maurice River. Major transportation routes include State Highway Routes 49 and 55. The land is predominately flat.

Figure 11-2: Millville City Base Map



Part 3.2: General Building Stock

As of 2015, there are 11,709 buildings in Millville City with a total assessed value of improvements of $1,383,498,200. Figure 11-3 shows the footprints of these buildings.

Figure 11-3: Millville City Building Footprints[9]

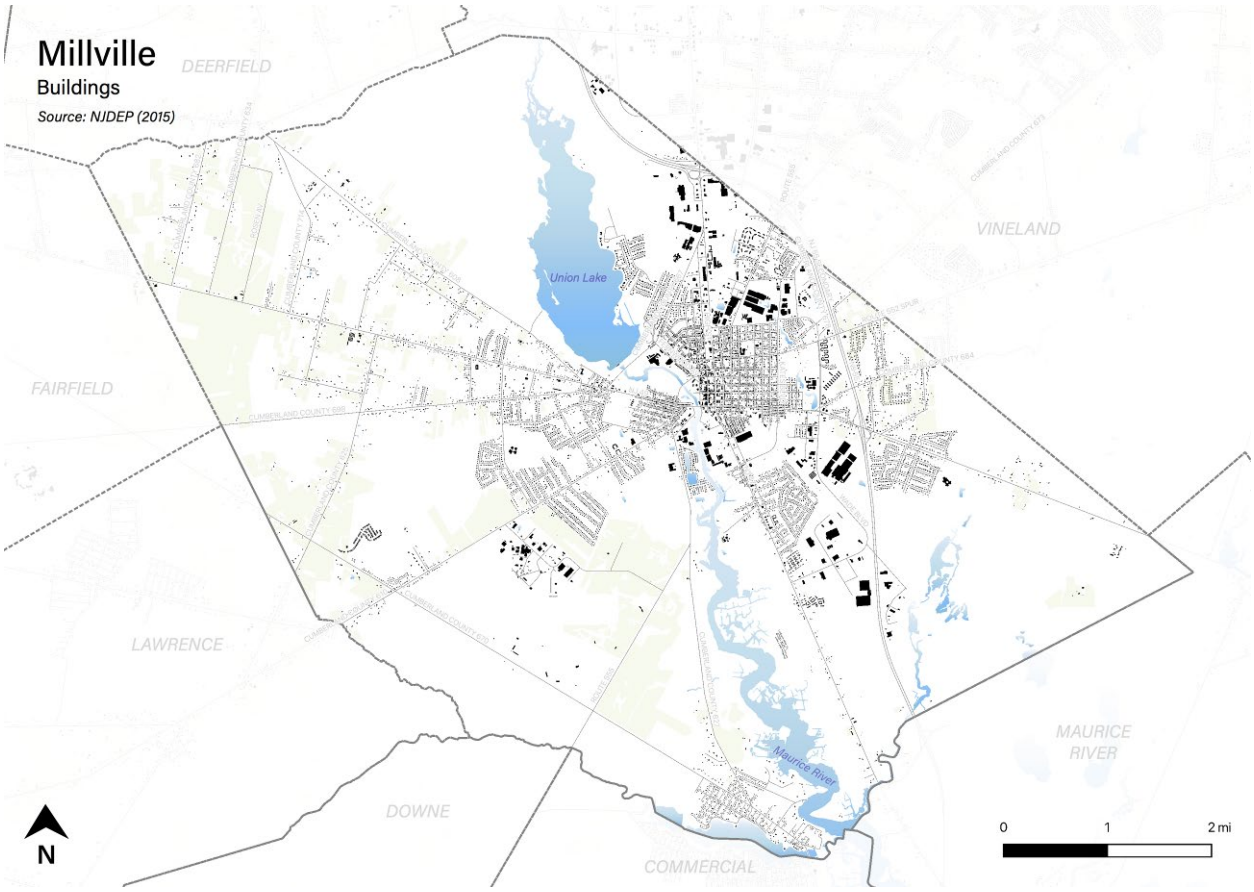


Table 11-3 shows the distribution of these structures according to land use distinctions.

Table 11-3: Millville City Buildings per Land Use Type[10]

Land Use Type	Residential	Commercial	Industrial	Other
Number of Buildings	9,299	801	166	894
% of Total	83%	7%	1%	9%

[9] Building footprint data was isolated from "Impervious Surfaces" data (2015) per https://gisdata-njdep.opendata.arcgis.com/. *Note: This (map/publication/report) was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not state-authorized or endorsed.*

[10] Land use types were isolated from MOD-IV Parcels and Tax Assessor data composite (2021) per https://njogis-newjersey.opendata.arcgis.com/documents/parcels-and-mod-iv-of-cumberland-county-nj-shp-download/about from the New Jersey Office of GIS

Part 3.3: Critical Facilities[11]

During the NJ4 HMP, the Millville City Working Group identified 71 critical facilities in Millville City. Some changes have been made to this listing, e.g., names have been changed in a few cases and some out of service facilities have been indicated.

Critical facilities are prime candidates for mitigation measures due to important functions staged from these facilities prior to, during, and after natural hazards including emergency services and housing vulnerable populations.

Table 11-4 includes current inventory information for municipal critical facilities and cross-references to related mitigation measures identified in Part 4 of the Municipal Appendix. Figure 11.4 shows the location of these critical facilities.

Table 11-4: Millville City Critical Facilities Inventory

CF #	Name	Type	Sub-Type	Address	Co-located CF #	Shelter (Y/N)	Generator (Y/N)	Comments	Mitigation Measure #
CF-1	City Hall	Municipal	Administrative Offices	12 South High Street, Millville		N	Y[12]		M-2
CF-2	Emergency Operations Center	EOC	Co-located Facilities	420 Buck Street, Millville		N	Y		M-12
CF-3	Fire Station/EMS Station 1	FireStations/EMS	Stations	420 Buck Street, Millville	CF-2	Y[13]	Y		M-12
CF-4	EMS Station 2	EMS	Stations	701 Columbia Avenue, Millville		N	N		
CF-5	Police Station	Law Enforcement Facilities	Stations	18 South High Street, Millville		N	Y		M-11
CF-6	Riggins Oil	Public Works	Fueling Stations	129 East Main Street, Millville		N/A	N[14]	Private Vendor	

[11] Critical facility definitions and considerations are described in *Section 3: Hazard Identification and Risk Assessment* of the CC HMPU Base Plan.
[12] Limited to emergency lighting.
[13] Temporary Shelter.
[14] The station at East 2nd Street and Main Street is approved for NJ Quick Connect program. In the event of a power disruption, Riggins will contact NJOEM, and a generator will be provided. Other contingency plans have been identified including pumping gas from Riggins Oil facility in Vineland and sending a tanker with fuel.

CF #	Name	Type	Sub-Type	Address	Co-located CF #	Shelter (Y/N)	Generator (Y/N)	Comments	Mitigation Measure #
CF-7	Public Works Yard	Public Works	Combined Administrative Office, Maintenance / Work Area, Equipment / Materials Storage	416 South 15th Street, Millville		N	N[15]		M-3
CF-8	Ware Avenue Water Treatment Plant	Utilities – Water	Water Treatment Plants	101 Ware Avenue, Millville		N/A	N		
CF-9	Bridgeton Pike Water Treatment Plant	Utilities – Water	Water Treatment Plants	1944 West Main Street, Millville		N/A	Y		
CF-10	Airport Plant Water Treatment Plant	Utilities – Water	Water Treatment Plants	50 Bogden Boulevard, Millville		N/A	Y		
CF-11	"E" Street Water Treatment Plant and Well #17	Utilities – Water	Combined Water Treatment Plant / Wellhead	709 "E" Street, Millville		N/A	Y		
CF-12	Geissinger Avenue Water Treatment Plant, Well #18, and Tank	Utilities – Water	Combined Water Treatment Plant / Wellhead / Water Tower	18 Geissinger Avenue, Millville		N/A	Y		
CF-13	Orange Street Tank	Utilities – Water	Water Towers	416 Orange Street, Millville		N/A	N[16]		
CF-14	Bluebird Lane Tank	Utilities – Water	Water Towers	113 Bluebird Lane, Millville		N/A	N[16]		
CF-15	Tower Road Tank	Utilities – Water	Water Towers	1500 Tower Road, Millville		N/A	N[16]		
CF-16	Coombs Road Tank	Utilities – Water	Water Towers	2000 Miller Avenue, Millville		N/A	N[16]		
CF-17	Buckshutem Road Tank	Utilities – Water	Water Towers	1801 West Buckshutem Road, Millville		N/A	N[16]		

[15] New Public Works facility will have hook-ups for portable generator, but no portable generator is currently owned by the City of Millville that is adequate to run this facility.
[16] Water tanks are equipment with hook-ups for portable back-up generators capable of providing adequate power to operate monitoring controls

CF #	Name	Type	Sub-Type	Address	Co-located CF #	Shelter (Y/N)	Generator (Y/N)	Comments	Mitigation Measure #
CF-18	Airport Well #1	Utilities – Water	Wellheads	Block 125, Lot 5, Millville		N/A		Off Leddon Street	
CF-19	Airport Well #2A	Utilities – Water	Wellheads	Block 125, Lot 5, Millville		N/A	N	On Peterson, next to Building #20	M-4
CF-20	Airport Well #4	Utilities – Water	Wellheads	Block 125, Lot 5, Millville		N/A	N	Behind big DRBA hangers	M-5
CF-21	Well #13A[17]	Utilities – Water	Wellheads	Ware Avenue, Block 461, Lot 1, Millville	CF-8	N/A	N	Along plant driveway	
CF-22	Well #14[19]	Utilities – Water	Wellheads	Ware Avenue, Block 461, Lot 1, Millville	CF-8	N/A	N	West of plant garage	
CF-23	Well #15[19]	Utilities – Water	Wellheads	Block 462, Lot 7, Millville	CF-8	N/A	N	North of Babe Ruth Ball field	
CF-24	Well #16[19]	Utilities – Water	Wellheads	Block 462, Lot 7, Millville	CF-8	N/A	N	At Municipal Building parking lot	
CF-25	Airport Taxiway Pump Station	Utilities – Wastewater	Pump Stations / Lift Stations	Leddon Street, Millville		N/A	N	Portable generator required	
CF-26	Bogden Boulevard Pump Station	Utilities – Wastewater	Pump Stations / Lift Stations	700 Bogden Boulevard, Millville		N/A	Y	Standby generator available	
CF-27	Buck Street Pump Station	Utilities – Wastewater	Pump Stations / Lift Stations	98 Buck Street, Millville		N/A	N	Portable generator required	
CF-28	Cumberland Crossing Pump Station	Utilities – Wastewater	Pump Stations / Lift Stations	2201 North 2nd Street, Millville		N/A	Y	Standby generator available	
CF-29	Dividing Creek Pump Station	Utilities – Wastewater	Pump Stations / Lift Stations	2997 Dividing Creek Road, Millville		N/A	Y	Standby generator available	
CF-30	Gorton Road Pump Station	Utilities – Wastewater	Pump Stations / Lift Stations	40 Gorton Road, Millville		N/A	N	Bypass connection available, portable generator required	

[17] Well #s 13A, 14, 15, and 16 are considered obsolete and will be replaced in operation eventually by Well #18.

CF #	Name	Type	Sub-Type	Address	Co-located CF #	Shelter (Y/N)	Generator (Y/N)	Comments	Mitigation Measure #
CF-31	High School Pump Station	Utilities – Wastewater	Pump Stations / Lift Stations	1411 East Pine Street, Millville		N/A	Y	Standby generator available	
CF-32	Ireland Avenue Pump Station	Utilities – Wastewater	Pump Stations / Lift Stations	618 Ireland Avenue, Millville		N/A	Y	Bypass connection available, standby generator available	
CF-33	JFK Boulevard Pump Station	Utilities – Wastewater	Pump Stations / Lift Stations	JFK Boulevard, Millville		N/A	N	Low volume station, no generator required	
CF-34	Lowes Pump Station	Utilities – Wastewater	Pump Stations / Lift Stations	Route 47 / North 2nd Street, Millville		N/A	Y	Standby generator available	
CF-35	Manor Estates Pump Station	Utilities – Wastewater	Pump Stations / Lift Stations	East Broad Street, Millville		N/A	Y	Standby generator available	
CF-36	Mistletoe Lane Pump Station	Utilities – Wastewater	Pump Stations / Lift Stations	2508 Mistletoe Lane, Millville		N/A	Y	Bypass connection available, standby generator available	
CF-37	Reese Road Pump Station	Utilities – Wastewater	Pump Stations / Lift Stations	South Industrial Park, Millville		N/A	N	Portable generator required	
CF-38	Soccer Field Pump Station	Utilities – Wastewater	Pump Stations / Lift Stations	Sharp Street, Millville		N/A	N	Low volume station, no generator required	
CF-39	South Second Street Pump Station	Utilities – Wastewater	Pump Stations / Lift Stations	1609 South 2nd Street, Millville		N/A	Y	Bypass connection available, standby generator available	
CF-40	Starling Drive Pump Station	Utilities – Wastewater	Pump Stations / Lift Stations	1220 Starling Drive, Millville		N/A	N	Portable generator required	
CF-41	Sunset Drive Pump Station	Utilities – Wastewater	Pump Stations / Lift Stations	30 Sunset Drive, Millville		N/A	N	Portable generator required	
CF-42	Ware Avenue Pump Station	Utilities – Wastewater	Pump Stations / Lift Stations	101 Ware Avenue, Millville	CF-8	N/A	N	Low volume station, no generator required	

CF #	Name	Type	Sub-Type	Address	Co-located CF #	Shelter (Y/N)	Generator (Y/N)	Comments	Mitigation Measure #
CF-43	West Side Pump Station	Utilities – Wastewater	Pump Stations / Lift Stations	201 Riverside Drive, Millville		N/A	Y	Bypass connection available, standby generator available	
CF-44	The Hollow Pump Station	Utilities – Wastewater	Pump Stations / Lift Stations	453 South 2nd Street, Millville		N/A	N	Low volume station, no generator required	
CF-45	Mount Pleasant Elementary School	Schools	Public Schools	100 Carmel Road, Millville		N	N		
CF-46	Child Family Center	Schools	Public Schools	1100 Coombs Road, Millville		N	Y[18]		
CF-47	Lakeside Middle School	Schools	Public Schools	2 North Sharp Street, Millville		Y[19]	Y[18]		
CF-48	Millville Senior High School	Schools	Public Schools	200 Wade Blvd, Millville		Y[19]	Y		M-7
CF-49	Holly Heights Elementary School	Schools	Public Schools	2509 East Main Street, Millville		Y[19]	Y[18]		
CF-50	Silver Run Elementary School	Schools	Public Schools	301 Silver Run Road, Millville		Y[19]	Y[18]		
CF-51	Rieck Avenue Elementary School	Schools	Public Schools	339 Rieck Avenue, Millville		Y[19]	Y[18]		M-8
CF-52	Bacon Elementary School	Schools	Public Schools	501 South Third Street, Millville		Y[19]	N		
CF-53	Memorial High School	Schools	Public Schools	504 East Broad Street, Millville		Y[19]	Y[18]		
CF-54	PAL	Municipal	Administrative Offices	700 Archer Street, Millville		N	N		
CF-55	R.D. Wood Elementary School	Schools	Public Schools	700 Archer Street, Millville		N	N		

[18] Millville City school generators typically only operate a percentage of lights to allow egress and walk-in freezers and refrigerators
[19] Certified by the American Red Cross.

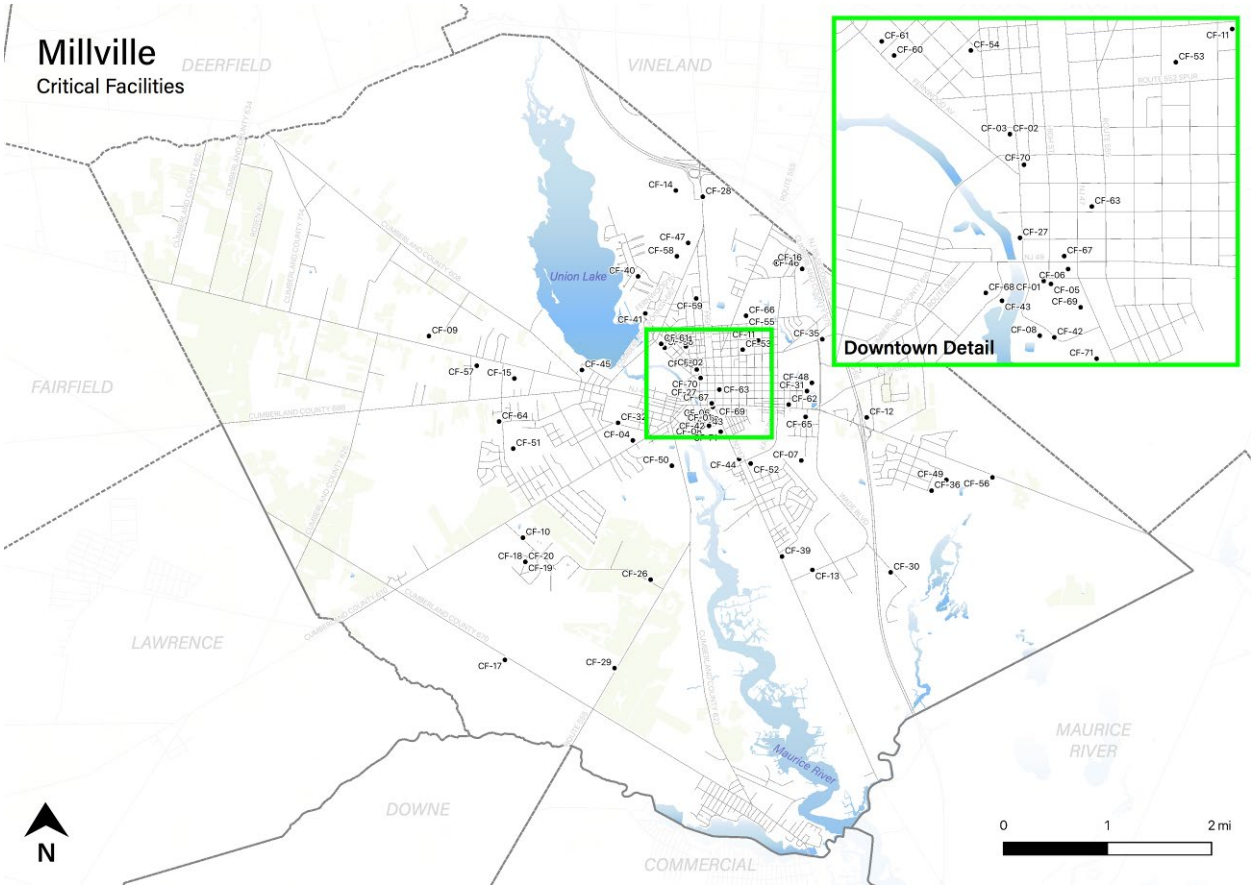
CF #	Name	Type	Sub-Type	Address	Co-located CF #	Shelter (Y/N)	Generator (Y/N)	Comments	Mitigation Measure #
CF-56	Millville Public Charter	Schools	Private Schools	1101 Wheaton Avenue, Suite 220, Millville		TBD	TBD		
CF-57	Open Bible Baptist Academy	Schools	Private Schools	2625 East Main Street, Millville		TBD	TBD		
CF-58	Maurice House	Vulnerable Populations Facilities	Private Assisted Living	1719 West Main Street, Millville		Y[20]	Y[21]		
CF-59	Genesis Elder Care	Vulnerable Populations Facilities	Private Nursing Home	54 North Sharp Street, Millville		Y[20]	Y		
CF-60	Hillcrest Manor Estates	Vulnerable Populations Facilities	Private Age-Restricted Housing	1200 North High Street, Millville		TBD	TBD		
CF-61	Millville Day Care Center	Vulnerable Populations Facilities	Private Child Day Care	911 Columbia Avenue, Millville		TBD	TBD		
CF-62	Millville Day Care West	Vulnerable Populations Facilities	Private Child Day Care	1001 Columbia Avenue, Millville		TBD	TBD		
CF-63	Corson Park Day Care and Nursery	Vulnerable Populations Facilities	Private Child Day Care	4 North 12th Street, Millville		TBD	TBD		
~~CF-64~~	~~First Methodist Church~~	~~Vulnerable Populations Facilities~~	~~Private Child Day Care~~	~~201 North 2nd Street, Millville~~				No Longer does Child Care	
~~CF-65~~	~~Rieck Avenue Country Day Care~~	~~Vulnerable Populations Facilities~~	~~Private Child Day Care~~	~~250 Rieck Avenue, Millville~~				No Longer in Operation	
~~CF-66~~	~~Mary's Little Lambs – Childcare Center~~	~~Vulnerable Populations Facilities~~	~~Private Child Day Care~~	~~1101 Wheaton Avenue, Suite 47, Millville~~				No Longer in Operation	

[20] Shelter-in-place.
[21] Limited to emergency lighting.

CF #	Name	Type	Sub-Type	Address	Co-located CF #	Shelter (Y/N)	Generator (Y/N)	Comments	Mitigation Measure #
CF-67	Jaycee Plaza	Vulnerable Populations Facilities	Public Housing	122 East Main Street, Millville		Y[20]	Y[22]	High-rise, managed by Millville Housing Authority (MHA), 90 units	
CF-68	Riverview West	Vulnerable Populations Facilities	Public Housing	100 Riverside Drive, Millville		Y[20]	Y[22]	High-rise, managed by MHA, 98 units	
CF-69	Riverside East	Vulnerable Populations Facilities	Public Housing	130 South 2nd Street, Millville		Y[20]	Y[22]	High-rise, managed by MHA, 110 units	
CF-70	Maurice View Plaza	Vulnerable Populations Facilities	Public Housing	1 East Vine Street, Millville		Y[20]	Y[22]	Mid-rise, managed by MHA, 29 units	
CF-71	Glasstown Residence at River Park	Vulnerable Populations Facilities	Private Age-Restricted Housing	224 South 2nd Street, Millville		TBD	TBD	Mid-rise, previously managed by MHA	

[22] Generator provides back-up emergency power for elevators and 1st floor common areas.

Figure 11-4: Millville City Critical Facilities



Part 3.4: Hazard Exposure Assessment

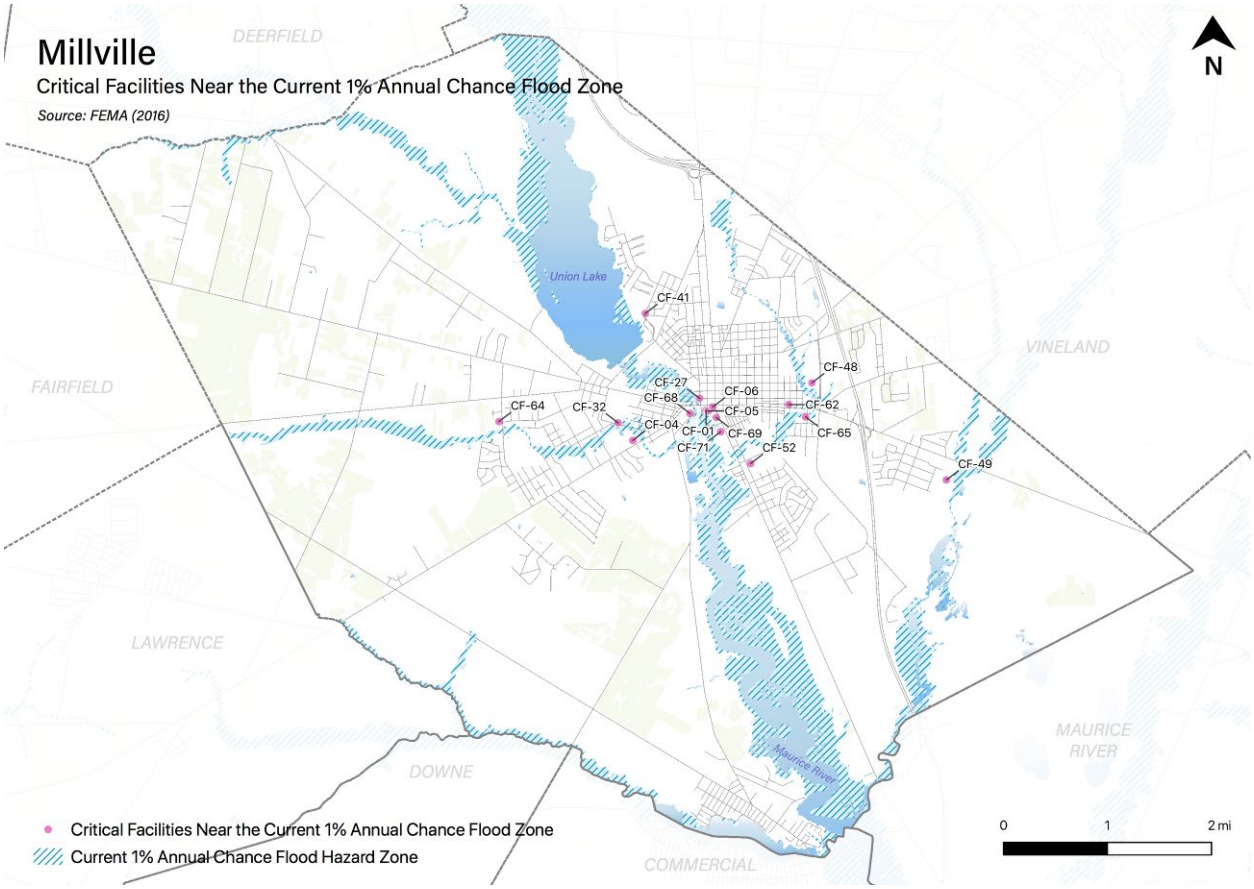
Hazard exposure assessments were completed for the eleven (11) natural hazards identified in the CC HMPU Base Plan[23].

Key results for Millville City are depicted in the following.

Mapping: Figure 11-5 is illustrative of the type of mapping available as a result of the hazard exposure assessment. This figure shows critical facilities that are located in or near (i.e., within 500 feet) the 1% annual flood zone on FEMA's Flood Insurance Rate Maps (FIRMs) or within a potential future 1% annual chance flood zone (i.e., within 1,000 feet).

[23] Hazard profiles are included for all eleven natural hazards in *Section 3: Hazard Identification and Risk Assessment* of the CC HMPU Base Plan.

Figure 11-5: Millville City Critical Facilities and 1% Annual Chance Flood Zone



Mapping results are available for general building stock and critical facilities for the following hazards:[24]

- Coastal Erosion & Sea Level Rise
- Earthquake
- Extreme High Temperature
- Flood - per FEMA FIRM mapping
- High Wind and Severe Weather (heavy summer rains and winter snow loads)
- Wildfire

Tabulations: Selected data culled from the hazard exposure assessment process is displayed in the following tables:

- Table 11-5 indicates hazard exposure for general building stock
- Table 11-6 indicates hazard exposure for critical facilities

[24] All mapping corresponding to results described in Parts 3.3 through 3.5 can be viewed in .pdf format at: https://www.dropbox.com/sh/8sosasl39bgdacj/AAAyawxpReWcU3z2s2uJcfTPa?dl=0.

Table 11-5: Millville City General Building Stock Hazard Exposure

Hazard	Number of Exposed Buildings	Percent of Total Buildings in the Jurisdiction	Value of Exposed Buildings	Percent of Total Value in the Jurisdiction
Coastal Erosion[25]	0	N/A	0	N/A
Sea Level Rise - 3 feet increase	27	0.23%	$733,284	-
Flood - Within 1 % Annual Chance Zone	224	2%	$30,319,368	2%
Flood - Near (within 500 feet) of 1% Annual Chance Zone	2,252	19%	$282,144,318	21%
Earthquake – Structure built before 1927[26]	2,392	23%	$219,306,857	17%
High Winds / Severe Weather – Structure built before 1975	7,240	70%	$778,996,500	60%
Wildfire – Composite score > 2.5[27]	343	2.92%	$24,115,650	1.74%

Table 11-6: Millville City Critical Facilities Hazard Exposure[28]

Hazard	Critical Facilities	CF #s
Coastal Erosion	None	N/A
Sea Level Rise	3	CF-08, CF-42, CF-43
Flood - Within 1 % Annual Chance Zone	5	CF-08, CF-31, CF-42, CF-43, CF-44
Flood - Near (within 500 feet) of 1% Annual Chance Zone	14	CF-01, CF-04, CF-05, CF-06, CF-27, CF-32, CF-41, CF-48, CF-49, CF-52, CF-62, CF-68, CF-69, CF-71
Flood – Future potential (within 1,000 feet) 1% Annual Chance Zone	15	CF-02, CF-03, CF-28, CF-35, CF-36, CF-40, CF-45, CF-50, CF-51, CF-55, CF-56, CF-60, CF-61, CF-67, CF-70
Wildfire	41	CF-02, CF-03, CF-04, CF-07, CF-09, CF-10, CF-12, CF-13, CF-14, CF-15, CF-16, CF-17, CF-28, CF-29, CF-30, CF-31, CF-32, CF-35, CF-36, CF-39, CF-40, CF-41, CF-44, CF-45, CF-46, CF-47, CF-48, CF-49, CF-51, CF-52, CF-54, CF-56, CF-57, CF-58, CF-59, CF-60, CF-61, CF-62, CF-69, CF-70, CF-71

In addition, all critical facilities in Cumberland County are exposed to the following hazards and potentially subject to power outages, and structural and/or contents damage:

- Earthquake
- Extreme Temperatures
- High Winds
- Severe Weather – Summer (including heavy rains)
- Severe Weather – Winter (including heavy snow loads)

[25] All supporting data for Coastal Erosion, Sea Level Rise (3-foot rise), Flood (all) can be viewed at https://docs.google.com/spreadsheets/d/1fcN5hL3Jz4X7mIdFyKs6wol6J6IAR9bSsvJPIgE_A0Q/edit?usp=sharing
[26] All supporting data for Earthquake, High Winds, and Severe Weather can be viewed at https://docs.google.com/spreadsheets/d/1Zx1LZwKQ8esgdv4c9hbbSZurtMjH4UITQWJY1LrZezc/edit?usp=sharing
[27] All supporting data for Wildfire can be viewed at https://docs.google.com/spreadsheets/d/1JAbfd3A-eCHI93pZFaPVuM_H2yvuUzeHCmoijv-oxsw/edit?usp=sharing
[28] All supporting data for critical facility hazard exposure can be viewed at https://docs.google.com/spreadsheets/d/1MPLiOANm7fHoyKuxyWqyanq26LTSPayTxJvLmK5IGPg/edit?usp=sharing

Information from the 2016 NJ4 HMP HIRA was also reviewed with the Working Group to determine the need for updates to hazard exposure results for Dam Failure and Levee Failure.

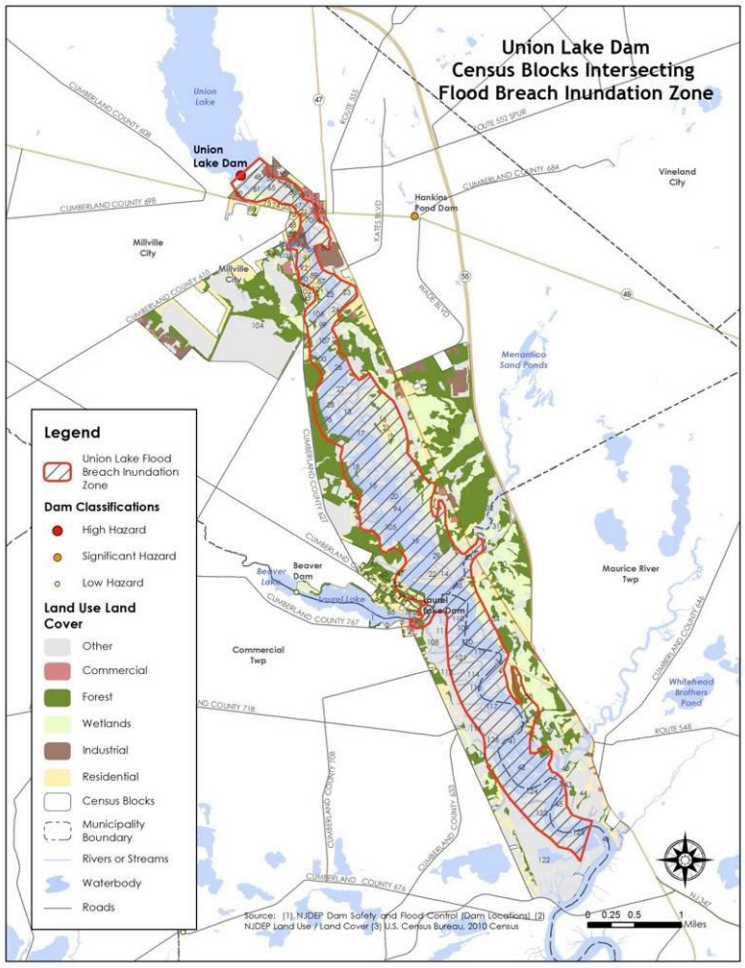
Dam Failure

Per the New Jersey Department of Environmental Protection (NJDEP) data[29]:

- There are two notable dams located in the City:
  - One (1) "High Hazard" dam, Union Lake Dam on the Maurice River
  - One (1) "Significant Hazard" dam, Hankins Pond Dam on a tributary of the Maurice River
- No (0) dam failure incidents had been recorded in the City as of 2014

Figure 11-6 depicts results from the 2016 NJ4 HMP HIRA showing land use within Census Blocks intersecting the Flood Breach Inundation Zone for the Union Lake dam. Over 1,800 housing units and more than 4,000 residents are potentially located downstream of the dam.

Figure 11-6: Union Lake Dam Land Use/Land Cover for Census Blocks Intersecting Flood (With Breach) Inundation Zone



[29] (1) NJDEP Dam Safety and Flood Control (Dam Locations); (2) NJDEP Land Use / Land Cover; (3) US Census Bureau 2010 Census

Levee Failure

Per the South Jersey Levee Inventory[30]:

- There is one levee on private property (NCRS #83) at the extreme southeast boundary of the City:
- No (0) levee failure incidents had been recorded in the City as of 2014

Working Group members were asked the following questions for Dam and Levee Failure:

- ✓ *Are these facilities still in operation?*
- ✓ *Are there updated Emergency Action Plans or inundation maps for these facilities?*
- ✓ *Have there been any other incidents of failure since the reported records?*

Per the Millville City Working Group, there were no changes to the NJ4 HMP HIRA Dam Failure and Levee Failure hazard exposure results.

National Flood Insurance Program Information

One additional metric discussed with the Working Group was statistical information from the National Flood Insurance Program (NFIP)[31]. The following are relevant numbers for Millville City as provided by the New Jersey Office of Emergency Management (NJOEM)[32]:

- Active Policies – sixty-seven (67) active NFIP flood insurance policies
- Claims History – thirty-six (36) claims made against the NFIP between 1979 and 2018
- Repetitive Loss Properties (RL) – four (4) properties designated as RL

For comparison relative to the number of active NFIP flood insurance policies, the following are the number of potentially exposed buildings (per Table 11-5), which are significantly higher than the number of active policies:

- Flood - Within 1 % Annual Chance Zone: 224 buildings ~ 2% of total buildings, with a value of $30,319,368 ~ 2% of the total building value in the City.
- Flood - Near (within 500 feet) of 1% Annual Chance Zone: 2,252 buildings ~ 19% of total buildings, with a value of $282,144,318 ~ 21% of the total building value in the City.

[30] US Department of Agriculture, National Resources Conservation Services (NRCS) South Jersey Levee Inventory, 2010.
[31] Information on the NFIP is described in *Section 3: Hazard Identification and Risk Assessment* of the CC HMPU Base Plan.
[32] Spreadsheets provided by NJOEM in October 2021.

Part 3.5: Demographic Considerations

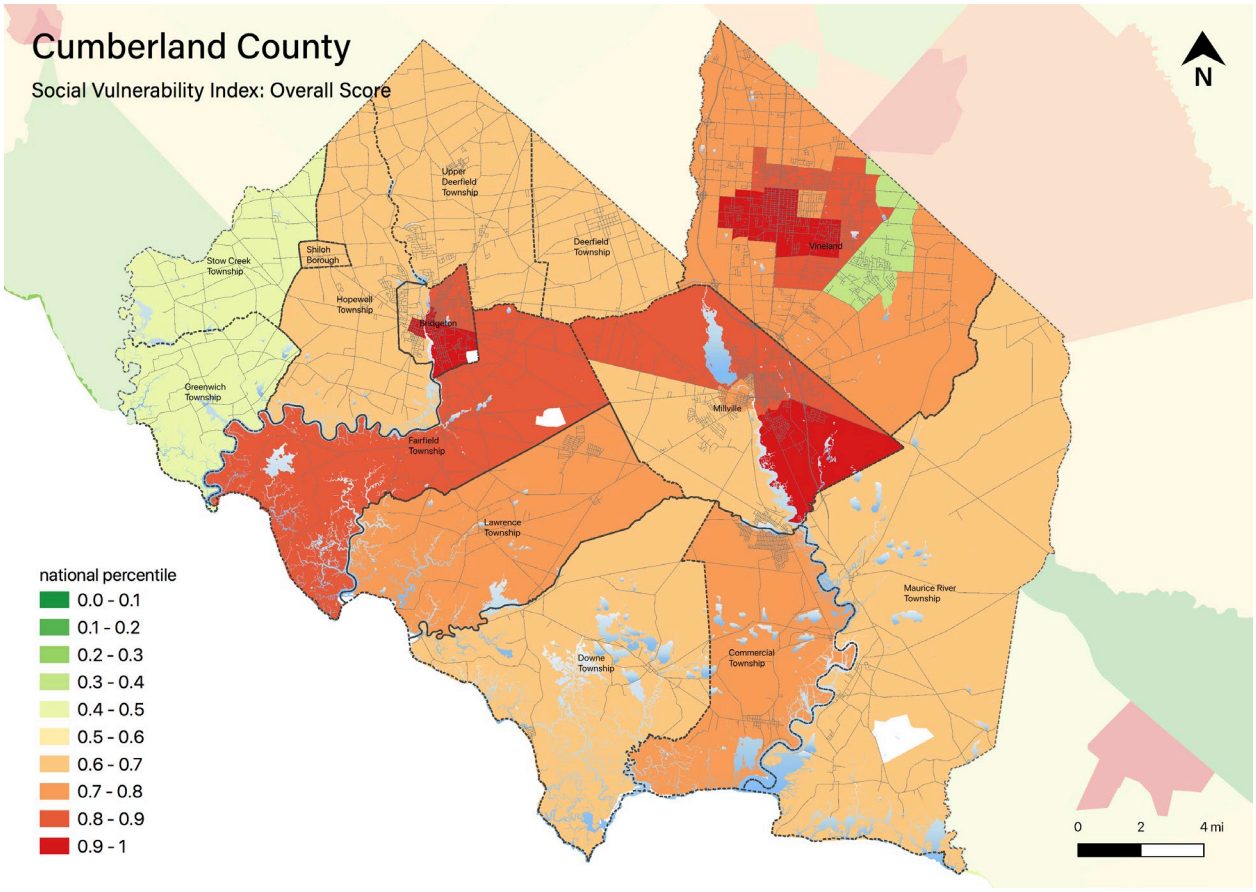
Demographic considerations include general population and land use factors. Table 11-7 includes current population estimates and changes since the previous US Census[33]:

Table 11-7: Millville City General Population Demographics

Metric	Current Estimates
2010 Population	28,400
2019 Population	27,721
Percent Population Change (2010-2019)	- 2.39%
Land Area	42.00 sq. miles
Population Density	660.0 / sq. mile

Demographic considerations also include differences in social vulnerability[34]. Figure 11-7 shows the overall Social Vulnerability (SVI) Index overall scores for Cumberland County.

Figure 11-7: Cumberland County Social Vulnerability Index: Overall Scores



[33] US Census, 2019 ACS 5 Year Estimates, Table ID DP5
[34] Social vulnerability considerations are described in *Section 3: Hazard Identification and Risk Assessment* of the CC HMPU Base Plan.

For Millville City, Table 11-8 includes selected metrics where social vulnerability considerations are noteworthy when compared with all national census tracts:

Table 11-8: Millville City Social Vulnerability Considerations[35]

Metric	Comparison with all National Census Tracts
Socioeconomic Status	Lower than 83%
Household Composition & Diversity	Lower than 92%
Minority Status & Language	Lower than 46%
Housing Type & Transportation	Lower than 65%

In addition, the percentage of residents earning below poverty level = 19.1% (compared with the average in New Jersey of 10.4%).

Part 3.6: Observations

- Outreach and guidance should be provided for residents, business owners, and property owners for:
  - Properties in or near sea level rise, flood zones, or wildfire hazard areas.
  - Older buildings to help evaluate potential risk of damage due to hazards such as Earthquake, High Winds, and Severe Winter Weather (i.e., heavy snow loads).
- All critical facilities are potentially vulnerable to Earthquake, High Winds, and Severe Weather (heavy rains in summer and snow loads in winter).
- Several critical facilities are potentially vulnerable to Sea Level Rise, Flood, and Wildfire and will be identified as priorities for follow-up critical facility field evaluations.
- Priority for follow-up should also be focused on critical facilities housing vulnerable populations related to Extreme Temperature and Severe Weather hazards. For example, determining and documenting (cross referencing EOP) how residents will be moved to facilities providing shelter including cooling and warming centers (all of which would need adequate back-up power and hardening).

[35] All supporting data for SVI can be viewed at

Part 3.7: Hazard Priorities

As a key step in the Hazard Identification and Risk Assessment (HIRA) process, the eleven (11) natural hazards identified in the CC HMPU Base Plan were discussed during the Municipal Working Group Work Sessions and the relative priority of these hazards was identified.

Based on their personal experience as well as the results of the HIRA, the Municipal Working Group rated the hazards as follows:

High Priority

- Dam Failure
- Flood
- High Wind

Moderate Priority

- Coastal Erosion & Sea Level Rise
- Extreme Temperature: Hot & Cold
- Severe Weather – Summer
- Severe Weather – Winter

Low Priority

- Drought
- Earthquake
- Wildfire

One additional hazard was considered but was not considered applicable to the municipality:

- Levee Failure

Part 4: Mitigation Measures

Part 4 includes six subparts:

- *Part 4.1: Mitigation Goals and Strategy*
- *Part 4.2: NJ4 HMP Mitigation Measures*
- *Part 4.3: Municipal Mitigation Measures – Identification*
- *Part 4.4: Municipal Mitigation Measures – Implementation*
- *Part 4.5: Multi-Jurisdictional Mitigation Measures*
- *Part 4.6: Authorities, Policies, Programs, Resources, and Plan Integration*

Part 4.1: Mitigation Goals and Strategy

Goals were originally established by the SDVR Hazard Mitigation Steering Committee and validated by the four County Hazard Mitigation Working Groups in response to risk and capability assessment results.

As part of the NJ4 HMP plan update process, these goals were reviewed and edited by the Municipal Working Groups for use in the Municipal Appendices. In addition, the Municipal Working Groups for the CC HMPU reviewed and reaffirmed these goals for continued use in the Appendices.

All mitigation measures in the Municipal Appendix are related to at least one of these four goal statements.

- Goal 1: **Improve education and outreach efforts** regarding potential risk of natural hazards and appropriate mitigation measures that can be used to reduce risk (including programs, activities, and projects)
- Goal 2: **Improve data collection, use, and sharing** to reduce the risk of natural hazards
- Goal 3: **Improve capabilities and coordination** at municipal, county, and state levels to plan and implement hazard mitigation measures
- Goal 4: **Plan and implement projects** to mitigate identified natural hazards, known problems, and areas of concern

Based on these goals, the results of the HIRA, and experience of participants in the plan update process, the Municipal Working Group identified an overarching strategy for mitigation:

- Identify and address known problems or areas of concern for critical facilities and vulnerable populations
- Provide opportunities for residents and property owners to access available information about risk reduction and mitigation measures, e.g., useful links added to municipal websites, in particular for Repetitive Flood Loss properties
- Institutionalize hazard mitigation into municipal activities and programs through regular interactions of the Municipal Working Group and integration of related regulatory programs and planning initiatives
- Stay informed regarding changing conditions and related improvements in hazard and risk data due to future natural hazard events and increasing understanding of the effects of climate change and use the information as part of periodic evaluations of and refinements or additions to the municipality's mitigation program

The mitigation measures described in Parts 4.3 through 4.5 of the Municipal Appendix reflect this strategy.

Part 4.2: NJ4 HMP Mitigation Measures

Known problems and areas of concern were the basis for mitigation measures identified in the NJ4 HMP. In cases where these problems and concerns still exist at the time of the CC HMPU, the related NJ4 HMP mitigation measures were candidates for inclusion in the Municipal Appendix.

Table 11-9 identifies the status of mitigation measures included in the NJ4 HMP. These entries were based on information provided by the Municipal Working Group. In some cases, the NJ4 HMP mitigation measures were carried over as part of the Municipal Appendix as indicated in the "Comments" column and the far right-hand column of Table 11-9.

Table 11-9: Status of Millville City NJ4 HMP Mitigation Measures

Mitigation Action, Program, or Project	Status	Comments	Mitigation Measure #[36][37]
M-1: Identify and pursue outreach and education opportunities to inform municipal residents, businesses, and property owners.	Work-in-progress	Work-in-progress included: Any major issues are listed in the alerts section on the city website.	Carried over as part of M-1
M-2: Prioritize critical facilities and complete site and facility surveys to identify vulnerabilities and potential mitigation measures.			
M-3: Prioritize recurrent drainage problem areas and initiate data collection to track unreimbursed damages and related response and recovery expenses.			
M-4: Conduct regular Municipal Working Group meetings.			
M-5: Upgrade back-up emergency power generator at City Hall (CF-1).	No progress, funding issues	There are also difficulties in where to physically place a generator.	Carried over as M-2
M-6: Install permanent back-up emergency power generator at Public Works Yard (CF-7).	No progress, funding issues		Carried over as M-3
M-7: Install permanent back-up emergency power generator at Airport Well #2A (CF-19).	No progress	No available funds for project	Carried over as M-4
M-8: Install permanent back-up emergency power generator at Airport Well #4 (CF-20).	No Progress	No available funds for permanent generator; however a portable generator is stationed at this well	Carried over as M-5
M-9: Address inflow and infiltration into sewer manholes and conveyance systems	Work-in-progress	Sewer Department has been addressing when time and budget allows	Carried over as M-6

[36] Detailed information for identification and implementation of municipal (M-#) mitigation measures is included in Tables 11-10 and 11-11.
[37] Detailed information for identification and implementation of multi-jurisdictional (MJ-#) mitigation measures is included in Table 11-12.

Mitigation Action, Program, or Project	Status	Comments	Mitigation Measure # 3637
M-10: Provide building retrofits against flood and high wind damage for Millville Senior High School (east side shelter) (CF-48).	Work-in-Progress	Going through extensive multi-year renovation, funded via State education funds, including replacement of more than ½ of the facility.	Carried over as M-7
M-11: Provide building retrofits against flood and high wind damage for Rieck Avenue School (west side shelter) (CF-51).	No progress	No known available funding.	Carried over as M-8
M-12: Address repetitive flooding in Maurice River Corridor due to cascading dam releases and potential failure as well as riverine flooding.	No progress, funding issues		Carried over as M-9
M-13: Address identified Repetitive Flood Loss Properties.	No Progress	The three properties identified are adjacent to a stream which is Maintained by the Cumberland County Public Works Department.	Carried over as M-10
M-14: Create safety zones around critical facilities in wildfire risk areas.	No progress, need for coordination with other agencies	City believes project needs to be coordinated with NJ State Forest Service	Carried over as multi-jurisdictional mitigation measure MJ-4
MJ-1: Address repetitive flooding in White Marsh Run Corridor.	Work-in-Progress	Drainage and interception measures completed in portions of the corridor. However, White Marsh Run was a natural waterway before development. Problem requires comprehensive solution(s) for larger intensity storms beyond jurisdiction and capabilities of the City.	Carried over as multi-jurisdictional mitigation measure MJ-1
MJ-2: Address repetitive flooding in Petticoat Stream Corridor including South 2nd Street / Maylin Street and roadways in Village Apartments vicinity.	Work-in-progress	State may be working in the South 2nd Street area. City has done stream maintenance in Petticoat Stream. However, Petticoat Stream was a natural waterway before development. Problem requires comprehensive solution(s) for larger intensity storms beyond jurisdiction and capabilities of the City.	Carried over as multi-jurisdictional mitigation measure MJ-2
MJ-3: Establish interconnection with Vineland City water system.	No Progress	At this time, the logistics of this project have not been able to be worked out to see if it is feasible	Carried over as multi-jurisdictional mitigation measure MJ-3

Part 4.3: Municipal Mitigation Measures – Identification

Table 11-10 includes the list of mitigation measures that are considered the responsibility of the municipality. These mitigation measures:

- Reflect the goals and strategy identified in Part 4.1
- Include projects carried over from NJ4 HMP as detailed in Part 4.2
- Include new projects, programs or activities identified by the Municipal Working Groups including measures to address known problems or areas of concern for critical facilities and vulnerable populations
- Address Repetitive Flood Loss (RL) and Severe Repetitive Flood Loss Properties (SRL)[38] if applicable

Table 11-10 includes:

- Brief description of the mitigation action, program, or project
- Hazard(s) addressed by the measure
- Relevant goal(s) addressed by the measure
- Whether the measure pertains to existing or new structures or both

Table 11-10: Millville City Municipal Mitigation Measures Identification

#	Mitigation Action, Program, or Project	Hazard(s)	Goal (s)	Existing or New Structures
M-1	Municipal Mitigation Program – including sustained efforts in cooperation with Cumberland County Office of Emergency Management (CC OEM) to: ▪ Conduct outreach and education for residents, businesses, and property owners ▪ Complete critical facility field evaluations to identify potential vulnerabilities and mitigation measures ▪ Compile relevant data regarding hazard impacts ▪ Support regular interactions of the Municipal Working Group ▪ Seek integration of hazard mitigation with other parallel planning initiatives	All	Goal #s 1, 2, and 3	All
M-2	Upgrade back-up emergency power generator at City Hall (CF-1).	Power outage due to multiple hazard types.	Goal #4	Existing
M-3	Install permanent back-up emergency power generator at Public Works Yard (CF-7).	Power outage due to multiple hazard types.	Goal #4	Existing

[38] *Section 3: Hazard Identification and Risk Assessment* of the CC HMPU Base Plan includes a description of RL and SRL properties.

#	Mitigation Action, Program, or Project	Hazard(s)	Goal (s)	Existing or New Structures
M-4	Install permanent back-up emergency power generator at Airport Well #2A (CF-19).	Power outage due to multiple hazard types.	Goal #4	Existing
M-5	Install permanent back-up emergency power generator at Airport Well #4 (CF-20).	Power outage due to multiple hazard types.	Goal #4	Existing
M-6	Address inflow and infiltration into sewer manholes and conveyance systems	Sea Level Rise / Flood	Goal #4	Existing
M-7	Provide building retrofits against flood and high wind damage for Millville Senior High School (east side shelter) (CF-48).	Sea Level Rise / Flood / High Wind	Goal #4	Existing
M-8	Provide building retrofits against flood and high wind damage for Rieck Avenue School (west side shelter) (CF-51).	Sea Level Rise / Flood / High Wind	Goal #4	Existing
M-9	Address repetitive flooding in Maurice River Corridor due to cascading dam releases and potential failure as well as riverine flooding.	Dam Failure / Flood	Goal #4	Existing
M-10	Address identified Repetitive Flood Loss Properties.	Sea Level Rise / Flood	Goal #4	Existing
M-11[39]	Upgrade/replace backup emergency generator at Police Building (CF-5)	Power Outage due to multiple hazard types	Goal #4	Existing
M-12[39]	Upgrade/replace backup emergency generator at Fire House / EOC (CF-2 and CF-3)	Power Outage due to multiple hazard types	Goal #4	Existing

Part 4.4: Municipal Mitigation Measures – Implementation

Table 11-11 includes information identified by the Municipal Working Group:

- Part(ies) responsible for following up with implementation of the measure
- Priority for implementation considering a range of criteria[40]
- Project Type to help determine funding options and implementation mechanisms at the municipal level[41]
- Estimated Cost, including estimates provided by the Municipal Working Group or approximate ranges for projects that are in early stages of development
- Target Date, indicating desired completion dates assuming availability of funding
- Next step(s) anticipated to implement the identified mitigation measures at the municipal level

[39] Mitigation Measures M-11 and M-12 are new mitigation measures identified by the Working Group.
[40] *Section 4: Mitigation Measures* of the CC HMPU Base Plan includes a description of evaluation criteria considered by the Municipal Working Group.
[41] *Section 4: Mitigation Measures* of the CC HMPU Base Plan includes a description of project types and related information regarding funding options and implementation mechanisms.

Table 11-11: Millville City Municipal Mitigation Measures Implementation

#	Mitigation Action, Program, or Project	Responsible Part(ies)	Priority	Project Type	Estimated Cost ($)	Target Date	Next Step(s)
M-1	Municipal Mitigation Program	Municipal OEM and Township Working Group	High	Program	Staff Time	On-going, sustained effort	▪ Identify outreach and education objectives and methods (working with CC OEM) ▪ Set priorities (if necessary) and conduct critical facility field evaluations ▪ Identify schedule for plan updates (including sustained public participation and plan integration efforts)
M-2	Upgrade back-up emergency power generator at City Hall (CF-1).	Municipal OEM	Moderate	Back-up Emergency Power Generator	< $100K	One to three years	▪ Conduct project scoping.[42] ▪ Identify funding source(s).
M-3	Install permanent back-up emergency power generator at Public Works Yard (CF-7).	City of Millville Public Works Department	Moderate	Back-up Emergency Power Generator	< $100K	One to three years	Same as M-2.
M-4	Install permanent back-up emergency power generator at Airport Well #2A (CF-19).	City of Millville Water and Sewer Department	Moderate	Back-up Emergency Power Generator	< $100K	One to three years	Same as M-2.
M-5	Install permanent back-up emergency power generator at Airport Well #4 (CF-20).	City of Millville Water and Sewer Department	Moderate	Back-up Emergency Power Generator	< $100K	One to three years	Same as M-2. Portable generator has been stationed there for temporary solution
M-6	Address inflow and infiltration into sewer manholes and conveyance systems	City of Millville Water and Sewer Department	Low	Public Property Flood Mitigation		On-going	Identify highest areas of inflow or infiltration.
M-7	Provide building retrofits against flood and high wind damage for Millville Senior High School (east side shelter) (CF-48).	Municipal OEM, City of Millville Board of Education	High	Building Retrofits	To be determined	One year	Conduct building surveys.
M-8	Provide building retrofits against flood and high wind damage for Rieck Avenue School (west side shelter) (CF-51).	Municipal OEM, City of Millville Board of Education	Low	Building Retrofits	To be determined	One to three years	Conduct building surveys.

[42] Project scoping for M-2 through M-5, M-11, and M-12 to include determining feasibility to install hookups and transfer switch for using portable generator(s) to accommodate need, at least as a temporary measure

#	Mitigation Action, Program, or Project	Responsible Part(ies)	Priority	Project Type	Estimated Cost ($)	Target Date	Next Step(s)
M-9	Address repetitive flooding in Maurice River Corridor due to cascading dam releases and potential failure as well as riverine flooding.	Municipal OEM, City Commission, Floodplain Administrator et al	Moderate	Private Property Flood Mitigation	To be determined	One to three years	Conduct watershed assessment to identify and evaluate mitigation measure options.
M-10	Address identified Repetitive Flood Loss Properties.	Floodplain Administrator	Moderate	Private Property Flood Mitigation	Staff time commitment	Six months	▪ Confirm properties are still valid RLs ▪ For any still-valid properties, prior to initiating landowner contacts, identify flood insurance implications and mitigation options including eligible activities per FEMA HMA programs.
M-11	Upgrade/replace backup emergency generator at Police Building	City of Millville Parks & Public Buildings	High	Back-up Emergency Power Generator	< $100K	One to three years	Same as M-2
M-12	Install permanent back-up emergency power generator at Airport Well #2A (CF-19).	City of Millville Parks & Public Buildings	High	Back-up Emergency Power Generator	< $100K	One to three years	Same as M-2

The following are additional notes regarding the implementation of Mitigation Measure M-1 (consistent with *Part 3.6: Observations*):

- Outreach and guidance should be provided for owners of :
  - Properties with valid Repetitive Loss designations
  - Buildings potentially exposed to Coastal Erosion, Sea Level Rise, Dam Failure, Levee Failure, and/or Wildfire.
  - Buildings in or near the 1% annual flood zone regarding potential risk and availability of NFIP flood insurance.
  - Older buildings to help evaluate potential risk of damage due to hazards such as Earthquake, High Winds, and Severe Weather (heavy rains in summer and heavy snow loads in winter).
- Considerations for prioritizing and conducting critical facility field evaluations should include:
  - All CFs are potentially vulnerable to Earthquake, High Winds, and Severe Weather (heavy rains in summer and heavy snow loads in winter).
  - In addition, some CFs are potentially vulnerable to Coastal Erosion, Sea Level Rise, Flood, and/or Wildfire and should also be considered as candidates for follow-up facility-level evaluations.
  - Priority for follow-up should also be focused on critical facilities housing vulnerable populations, e.g., group homes, related to Extreme Temperature and Severe Weather hazards. For example, determining and documenting (cross referencing the jurisdiction's Emergency Operations Plan) how residents will be moved to facilities providing shelter including cooling and warming centers (all of which would need adequate back-up power and hardening).
- Provisions for Plan Maintenance include :
  - Sustain public outreach and participation (including but not limited to targeted outreach and guidance efforts)

- Conduct regular interactions of the Working Group to keep the plan current (e.g., an annual plan review and amendment process at a minimum)
- Track and take advantage of plan integration opportunities including noting all upcoming plan updates as part of regular Working Group interactions

Part 4.5: Multi-Jurisdictional Mitigation Measures

During the Municipal Working Group Work Sessions, the Working Group identified some NJ4 HMP mitigation measures to be carried over, as well as adding new areas of concern, all of which were designated as multi-jurisdictional mitigation measures. Implementation of these measures, in the opinion of the Municipal Working Groups, requires participation or leadership from other levels of government, including county, state, and federal agencies. These multi-jurisdictional mitigation measures have been compiled in Table 11-12.

These measures have been referred to the County Working Group for consideration. As part of the implementation of the CC HMPU, the County Working Group will be working with the municipalities to:

- Confirm identified issues are valid multi-jurisdictional measures
- Identify specific responsibilities amongst different level(s) of government to address these problem areas
- Identify mitigation measures or related projects which may address the described problem areas that are already acknowledged as County responsibilities including identifying the appropriate County agency or department taking the lead role and status of implementing these mitigation measures
- Identify which, if any, additional mitigation measures the member agencies of the County Working Group will assume responsibility to implement

Table 11-12: Millville City Multi-Jurisdictional Mitigation Measures

#	Problem Description	Hazard(s) Addressed	Goal Addressed	Applies to Existing or New Structures	Potential Partners	Priority
MJ-1	Address repetitive flooding in White Marsh Run Corridor.	Coastal Erosion and Sea Level Rise / Flood	Goal #4	Both	Municipal OEM, City Commission, Floodplain Administrator, Cumberland County Road Department, NJ Department of Environmental Protection (NJDEP)	High
MJ-2	Address repetitive flooding in Petticoat Stream Corridor including South 2nd Street / Maylin Street and roadways in Village Apartments vicinity.	Coastal Erosion and Sea Level Rise / Flood	Goal #4	Both	Municipal OEM, City Commission, Floodplain Administrator, Cumberland County Road Department, NJDEP	Moderate
MJ-3	Establish interconnection with Vineland City water system.		Goal #4	Both	City of Millville Water / Sewer Department, City of Vineland Municipal Utilities.	Low
MJ-4	Create safety zones around critical facilities in wildfire risk areas.	Wildfire	Goal #4	Existing	Municipal Fire Department, NJ State Forest Service	Low

Part 4.6: Authorities, Policies, Programs, Resources, and Plan Integration

Part 4.6 includes three (3) subparts:

- Authorities, Policies, and Programs - Cross referencing relevant information and recommendations in the CC HMPU Base Plan regarding existing authorities, policies, and programs in the County and specific information about the Millville City's participation and continued compliance in the National Flood Insurance Program (NFIP)
- Resources - Cross referencing relevant information and recommendations in the CC HMPU Base Plan regarding improving capabilities and coordination at the County and municipal level and specific information about Millville City's available resources
- Plan Review and Integration – Identifying plans and programs included in the development of Plan Integration recommendations in the CC HMPU Base Plan

4.6.1: Authorities, Policies, and Programs

Section 4.6: Authorities, Policies, Programs, Resources, and Plan Integration of the CC HMPU Base Plan summarizes relevant authorities, policies, and programs related to hazard mitigation in Cumberland County including the NFIP.

Continuing participation in the NFIP as part of the implementation of the CC HMPU includes:

- Involvement of Floodplain Manager / Administrator during the CC HMPU implementation process
- Commitment to adopt updated FIRMs (if appropriate) and evaluate / update the municipality's Flood Damage Prevention Ordinance as appropriate per recommendations included in Section 4.6 of the CC HMPU Base Plan and under Part 4.6.3: Plan Review and Integration of this Appendix.

4.6.2: Resources

The update of the NJ4 HMP included reexamining participating jurisdictions' hazard mitigation and floodplain management capabilities; potential for improving capabilities and coordination within and between jurisdictions; and plan integration considerations, including:

- *Section 4: Mitigation Measures* of the CC HMPU Base Plan includes summary observations and recommendations concerning:
  - Capabilities for hazard mitigation planning and mitigation measure implementation and floodplain management for the participating jurisdictions
  - Coordination within municipal governments, between municipal governments and their communities, and between municipal, county, and state agencies responsible for hazard mitigation
- *Section 4.6: Authorities, Policies, Programs, Resources, and Plan Integration* of the CC HMPU Base Plan also includes summary statements regarding county and municipal resources and the impact of resource limitations on the overall approach to the CC HMPU mitigation strategies.

Table 11-13 compares the results of the Capability Assessment Survey for the County as a whole and Millville City.

Table 11-13: Millville City Capability Assessment Survey Results

Metric	Millville City Results (n=3)	Cumberland County "as a whole" Results (n=85)
Position Type: **Full-time**	33.33%	51.76%
Position Type: **Part-time**	66.67%	36.47%
Position Type: **Volunteer**	0.00%	11.76%
Time in Position: **Less than 1 year**	0.00%	12.94%
Time in Position: **1 to 2 years**	0.00%	8.24%
Time in Position: **2 to 5 years**	0.00%	23.53%
Time in Position: **More than 5 years**	100.00%	55.29%
Prior Experience: **None**	66.67%	57.65%
Prior Experience: **with hazard mitigation planning**	33.33%	31.76%
Prior Experience: **with HMA grant administration**	33.33%	12.94%
Prior Experience: **with floodplain management**	0.00%	7.06%
Training / Certifications: **None**	66.67%	75.29%
Training / Certifications: **for hazard mitigation planning and implementation**	33.33%	9.41%
Training / Certifications: **for floodplain management**	0.00%	15.29%

In general terms, when compared to the sampled individuals from across all the Working Groups, Millville City has:

- Lower percentage of full-time staff
- Higher average time in current positions
- Similar percentage of staff with experience in hazard mitigation planning
- Higher percentage of staff with experience in HMA grant administration
- Lower percentage of staff with experience in floodplain management
- Higher percentage of staff with training for hazard mitigation planning and implementation
- Lower percentage of staff with training for floodplain management

4.6.3: Plan Review and Integration

Section 4.6: Authorities, Policies, Programs, Resources, and Plan Integration of the CC HMPU Base Plan includes:

- Table BP.4-2 that identifies primary plans and documents collected from each of the participating municipalities.
- Includes results of reviewing primary plans and documents to determine the extent to which these documents reflect up-to-date hazard risk and mitigation.
- Includes recommendations for integrating the results of the CC HMPU, including hazard mitigation data, goals, measures, and/or recommendations with existing plans and programs at the municipal level that are relevant to all participating municipalities and incorporated by reference in each of the jurisdiction-specific Appendices

The plan maintenance process articulates and specifies a commitment to review and follow these recommendations during future scheduled updates of these various documents as considered appropriate by the Working Group and the governing body of the municipality.

Specific documents obtained during the plan update process from the Millville City Working Group include:

- Flood Damage Prevention Ordinance
- Emergency Operations Plan (2021)
- Zoning and Land Development Ordinances[43]
- Master Plan (2005)[44] and Reexamination Report (2012)[45]
- Zoning Map (2011)[46]
- GIS Viewer[47]
- 2014 Capital Improvement Budget and Capital Improvement Program
- Draft "Getting to Resilience" Recommendations Report[48], August 2014

In addition, the following is status regarding the status of the Flood Damage Prevention Ordinance::

- Current version was adopted in 2016 and is consistent with the most recent FDPO per NJDEP]
- The Construction Code Official is the responsible party for enforcement. The individual who currently holds that position is included on the Working Group and has completed the capability assessment survey.
- The document is accessible to the public via internet[49].

[43] http://ecode360.com/MI1908?needHash=true
[44] http://www.millvillenj.gov/DocumentCenter/Home/View/559
[45] http://www.millvillenj.gov/DocumentCenter/Home/View/577
[46] http://www.millvillenj.gov/DocumentCenter/View/561
[47] http://viewer.myidv.com/map/71332c32630bfb/Millville-City-Public
[48] Prepared by the Jacques Cousteau National Estuarine Research Reserve
[49] https://ecode360.com/6286283