



Cumberland County Multi-Hazard Mitigation Plan Update
Participating Jurisdiction Appendices

Appendix 12
Shiloh Borough, New Jersey

DRAFT

May 13, 2022

Draft

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Part 1: Overview

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: Shiloh Borough Municipal Appendix

This Municipal Appendix is focused on Shiloh Borough in Cumberland County, New Jersey.

The Shiloh Borough Municipal Working Group **[will recommend]** the Shiloh Borough Municipal Appendix for adoption to the Shiloh Borough Council.

The Shiloh Borough Council **[will adopt]** the Municipal Appendix by resolution (see Attachment B: Adoption Resolution).

Region II of the Federal Emergency Management Agency **[will approve]** the Municipal Appendix (see Attachment C: Approval Letter).

Part 2: Participation

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 12-1 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 will review the Preliminary Draft, Public Review Draft, and Final 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: Twelve 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 12-1: Shiloh Borough Working Group

First Name	Last Name	Department	Position	Project Kick-off Meeting ¹	Working Group Meeting ²	Round 1 Work Session ³	Round 2 Work Session ⁴	Contribution ⁵
Gary	VanMeter, Sr. *	Shiloh Borough OEM	OEM Coordinator	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Organized Working Group and Work Sessions.
Donna	VanMeter *	Shiloh Borough OEM	Volunteer			<input checked="" type="checkbox"/>		
Brad	Campbell *	Shiloh Borough Administration	Councilman / Mayor		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Dallus	Bruso *	Shiloh Borough Administration	Council President		<input checked="" type="checkbox"/>			
Hillary	Barille	Shiloh Borough Administration	Councilwoman		<input checked="" type="checkbox"/>			

¹ Project Kickoff Meeting was held on May 20, 2021.

² Working Group Meeting was held on June 7, 2021.

³ Round 1 Work Session was held on July 27, 2021.

⁴ Round 2 Work Session was held on November 16, 2021.

⁵ Additional or unusual contributions are noted in the far-right hand column.

Part 2: Participation

First Name	Last Name	Department	Position	Project Kick-off Meeting ¹	Working Group Meeting ²	Round 1 Work Session ³	Round 2 Work Session ⁴	Contribution ⁵
Carman	Daddario *	Shiloh Borough Administration	Councilman		<input checked="" type="checkbox"/>			
Matt	Hunzer	Shiloh Borough Administration	Councilman		<input checked="" type="checkbox"/>			
Jeff	Knerr	Shiloh Borough Administration	Councilman		<input checked="" type="checkbox"/>			
Glenn	Newkirk *	Shiloh Borough Administration	Councilman					
Medeia	Willis *	Shiloh Borough Administration	Councilwoman		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Ronald L.	Campbell, Sr. *	Shiloh Borough Administration	Municipal Clerk		<input checked="" type="checkbox"/>			
Teresa	Warburton	Shiloh Borough	Construction Official / Housing Inspector ⁶			<input checked="" type="checkbox"/>		
Kenny	Mayhew	Hopewell-Stow Creek Fire Department	Chief			<input checked="" type="checkbox"/>		
Rebecca	Bertram *	Shiloh Borough Resident	Solicitor		<input checked="" type="checkbox"/>			
Blair	Bakker *	Shiloh Borough Major Employers / Businesses	Agricultural Business					
Sarah	Bakker *	Shiloh Borough Major Employers / Businesses	Agricultural Business					
Don	Chrowger *	Shiloh Borough Community / Faith-Based Organizations	Pastor of Seventh Day Baptist Church of Shiloh					

⁶ Housing Inspector is a shared position with Upper Deerfield Township.

Part 2: Participation

The following lists candidate positions and organizations within the community that were extended invitations but could not 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.⁷

- [to be completed pending Working Group participation throughout the plan update process]

The following lists positions and organizations that are generally recommended for consideration as members of the Municipal Working Groups by FEMA but do not currently exist within the community. An invitation to participate will be extended if positions are created or filled and as organizations are formed.

- Floodplain Administrator / Manager (Shiloh Borough is not a participating community under the National Flood Insurance Program)
- Land Use / Economic Development Planner
- GIS / IT Specialist
- Engineering
- Public Works
- Transportation Department Directors / Supervisors
- Police
- Business Associations
- Environmental Organizations
- Non-Governmental Organizations
- Critical Infrastructure and Key Resources
- Healthcare Institutions
- School Board

⁷ Plan implementation and maintenance activities are described in *Section 4: Mitigation Measures* of the CC HMPU Base Plan.

Part 2: Participation

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 12-2 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 12-2: Public Participation

Date	Type of Involvement	Location
September 8, 2021	Preliminary Draft Municipal Appendix available for public comment.	Project Website ⁸
September 13, 2021	Public meeting conducted with presentation and open discussion.	Borough Hall
September 13, 2021	Notice posted re: Preliminary Draft Municipal Appendix review period with link to Project Website.	Borough Website ⁹
April 4, 2022	Notice posted re: Public Review Draft Municipal Appendix review period with link to Project Website.	Borough Website ⁹
April 19, 2022	Public Review Draft Municipal Appendix available for public comment.	Project Website ⁸
[date to be determined]	Public hearing [will be] conducted regarding the Final Draft Municipal Appendix providing for open discussion and public comment prior to formal adoption.	[insert location]

Public comments and input received for the Preliminary Draft, Public Review Draft, and Final Draft versions of the Municipal Appendix [will be]:

- Considered by the Municipal Working Group and [will be] incorporated into the Municipal Appendix where appropriate.
- Included in Attachment A to the Municipal Appendix along with a brief explanation of if and how the comments were addressed in the Municipal Appendix.

In addition, the Municipal Appendix [will be] 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.¹⁰ In addition, public participation will continue to be encouraged during subsequent plan implementation and maintenance activities.¹¹

⁸ <https://cchmpu21.com/documents>

⁹ www.shilohborough.com

¹⁰ See Mitigation Measure M-1 in Part 4 of the Municipal Appendix.

¹¹ 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: Hazard Identification and Risk Assessment

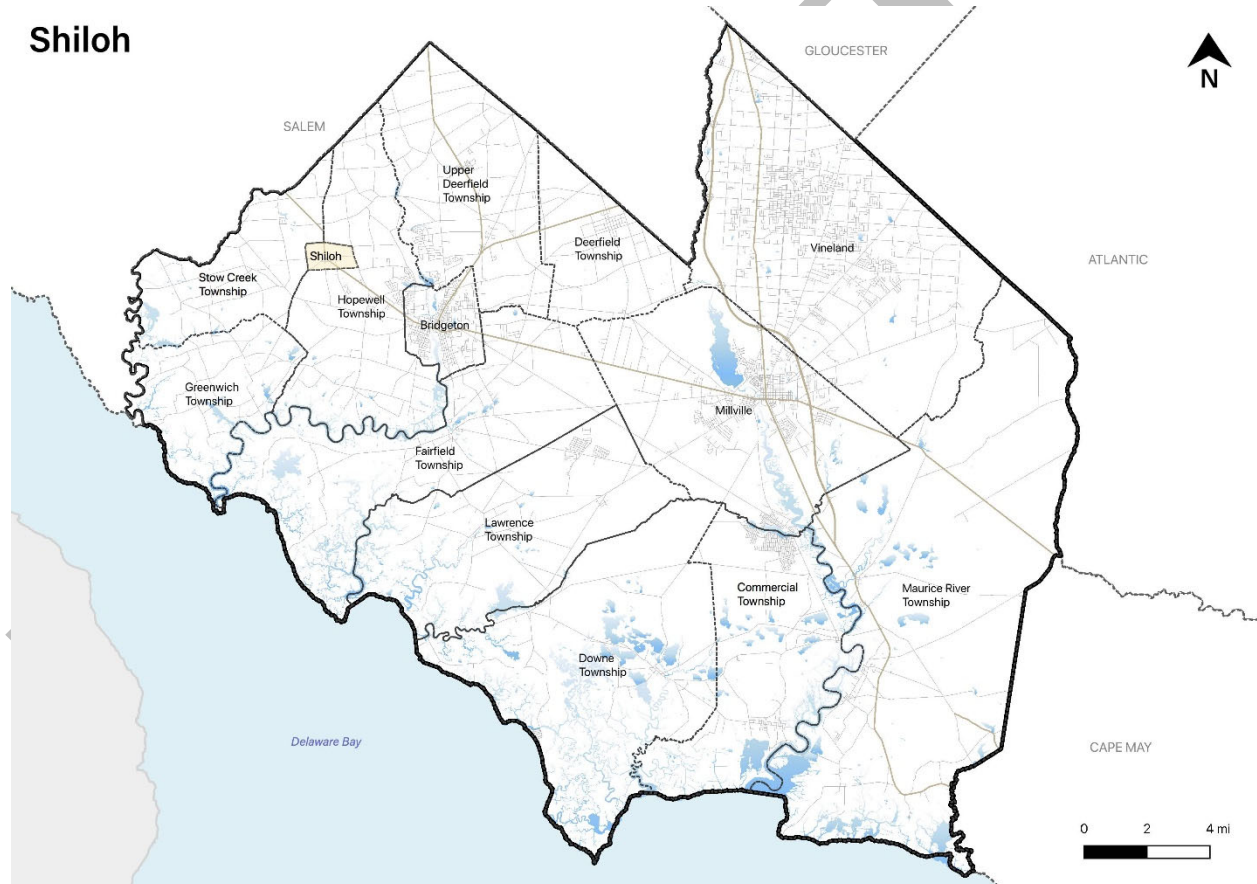
Part 3 includes seven subparts:

- *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: Municipal Profile

Shiloh Borough is located in the northwestern portion of Cumberland County (See Figure 12-1).

Figure 12-1: Shiloh Borough Location Map

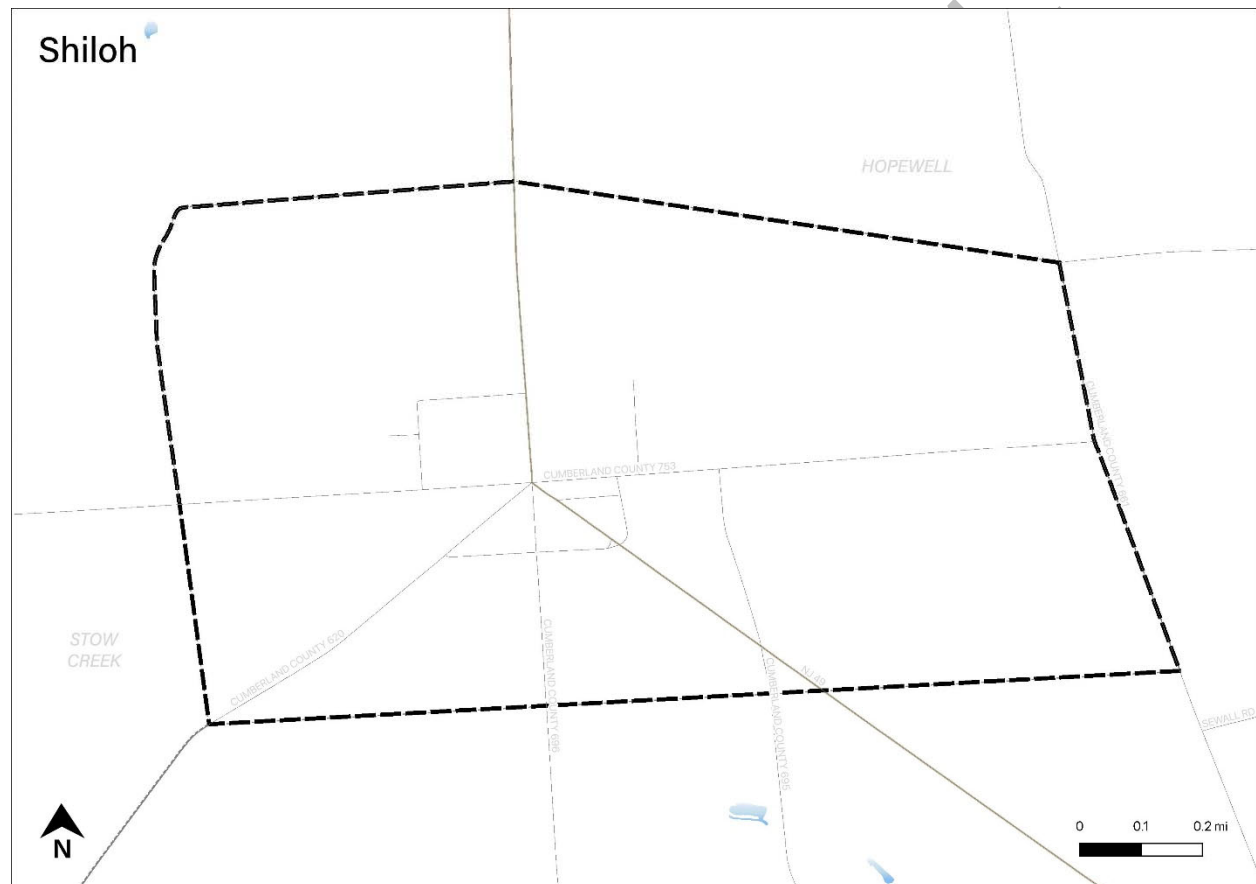


Part 3: Hazard Identification and Risk Assessment

Shiloh Borough is a small rural community with a rich natural, religious, and historic heritage. A large portion of the community is reserved for agricultural uses. The resulting open lands also provide seasonal stopping points for a selection of migratory animals.

Per Figure 12-2, the major water course in the municipality is Shaw Branch. Major transportation routes include State Highway Route 49 and Cumberland County 753. The land is predominantly flat.

Figure 12-2: Shiloh Borough Base Map



Part 3: Hazard Identification and Risk Assessment

Part 3.2: General Building Stock

As of 2015, there are 325 buildings in Shiloh Borough with a total assessed value of improvements of \$36,424,300. Figure 12-3 shows the footprints of these buildings.

Figure 12-3: Shiloh Borough Building Footprints¹²



Table 12-3 shows the distribution of these structures according to land use distinctions.

Table 12-3: Shiloh Borough Buildings per Land Use Type¹³

Land Use Type	Residential	Commercial	Industrial	Other
Number of Buildings	259	11	0	46
% of Total	82%	3%	0%	15%

¹² 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.

¹³ Land use types were isolated from MOD-IV Parcels and Tax Assessor data composite (2021) per <https://njgis-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: Hazard Identification and Risk Assessment

Part 3.3: Critical Facilities¹⁴

As of April 2022, there are three (3) critical facilities in Shiloh Borough.

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 12-4 includes current inventory information for municipal critical facilities and cross-references to related mitigation measures identified in Part 4 of the Municipal Appendix. Figure 12.4 shows the location of these critical facilities.

Table 12-4: Shiloh Borough Critical Facilities Inventory

CF #	Name	Type	Sub-Type	Address	Co-located CF #	Shelter (Y/N)	Generator (Y/N)	Comments	Mitigation Measure #
CF-1	Borough Hall	Municipal	Administrative Office	900 Main Street, Shiloh		N	Y	Generator needs replacement	M-3
CF-2	Seventh Day Baptist Church of Shiloh	Emergency Staging Areas	Equipment Mobilization	116 East Avenue / P.O. Box 145, Shiloh		Y	N	Generator needs replacement. Facility has potential as congregate shelter, and cooling / heating station.	M-2
CF-3	Cumberland Mutual Insurance Corporate Headquarters	Emergency Staging Areas	Private Corporate Headquarters	633 Shiloh Pike, Bridgeton		N	Y	50,000 SF facility; designed to withstand Category 3 hurricane winds (Same as Hopewell Township CF-18)	

¹⁴ Critical facility definitions and considerations are described in *Section 3: Hazard Identification and Risk Assessment* of the CC HMPU Base Plan.

Figure 12-4: Shiloh Borough 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 Plan¹⁵.

Key results for Shiloh Borough are depicted in the following.

Mapping: Figure 12-5 is illustrative of the type of mapping available as a result of the hazard exposure assessment. This figure shows critical facilities that are located near wildfire hazard zones.

¹⁵ Hazard profiles are included for all eleven natural hazards in *Section 3: Hazard Identification and Risk Assessment* of the CC HMPU Base Plan.

Part 3: Hazard Identification and Risk Assessment

Figure 12-5: Shiloh Borough Critical Facilities and Wildfire Hazard Zones



Mapping results are available for general building stock and critical facilities for the following hazards:¹⁶

- Earthquake
- Extreme High Temperature
- 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 12-5 indicates hazard exposure for general building stock
- Table 12-6 indicates hazard exposure for critical facilities

¹⁶ 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/u34fg5qw0m20jbk/AABXdG9-Kxbl8vGoiKQJqv9La?dl=0>.

Part 3: Hazard Identification and Risk Assessment

Table 12-5: Shiloh Borough 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 ¹⁷	0	N/A	0	N/A
Sea Level Rise - 3 feet increase	0	N/A	0	N/A
Flood - Within 1 % Annual Chance Zone	0	N/A	0	N/A
Flood - Near (within 500 feet) of 1% Annual Chance Zone	0	N/A	0	N/A
Earthquake – Structure built before 1927 ¹⁸	136	50%	\$16,650,700	48%
High Winds / Severe Weather – Structure built before 1975	239	89%	\$28,311,500	81%
Wildfire – Composite score > 2.5 ¹⁹	0	N/A	0	N/A

Table 12-6: Shiloh Borough Critical Facilities Hazard Exposure²⁰

Hazard	Number of Critical Facilities	CF #s
Coastal Erosion	None	N/A
Sea Level Rise	None	N/A
Flood - Within 1 % Annual Chance Zone	None	N/A
Flood - Near (within 500 feet) of 1% Annual Chance Zone	None	N/A
Flood – Future potential (within 1,000 feet) 1% Annual Chance Zone	None	N/A
Wildfire	None	N/A

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)

¹⁷ All supporting data for Coastal Erosion, Sea Level Rise (3-foot rise), Flood (all) can be viewed at https://docs.google.com/spreadsheets/d/1fcN5hL3Jz4X7mldFyKs6wol6J6IAR9bSsvJPiqE_A0Q/edit?usp=sharing

¹⁸ All supporting data for Earthquake, High Winds, and Severe Weather can be viewed at <https://docs.google.com/spreadsheets/d/1Zx1LZwKQ8esqdv4c9hbbSZurtMjH4UITQWJY1LrZezc/edit?usp=sharing>

¹⁹ All supporting data for Wildfire can be viewed at https://docs.google.com/spreadsheets/d/1JAbfd3A-eCHI93pZFaPVuM_H2yvuUzeHCmoijv-oxsw/edit?usp=sharing

²⁰ All supporting data for critical facility hazard exposure can be viewed at <https://docs.google.com/spreadsheets/d/1MPLiOANm7fHoyKuxyWqyang26LTSPayTxJvLmK5IGPg/edit?usp=sharing>

Part 3: Hazard Identification and Risk Assessment

Part 3.5: Demographic Considerations

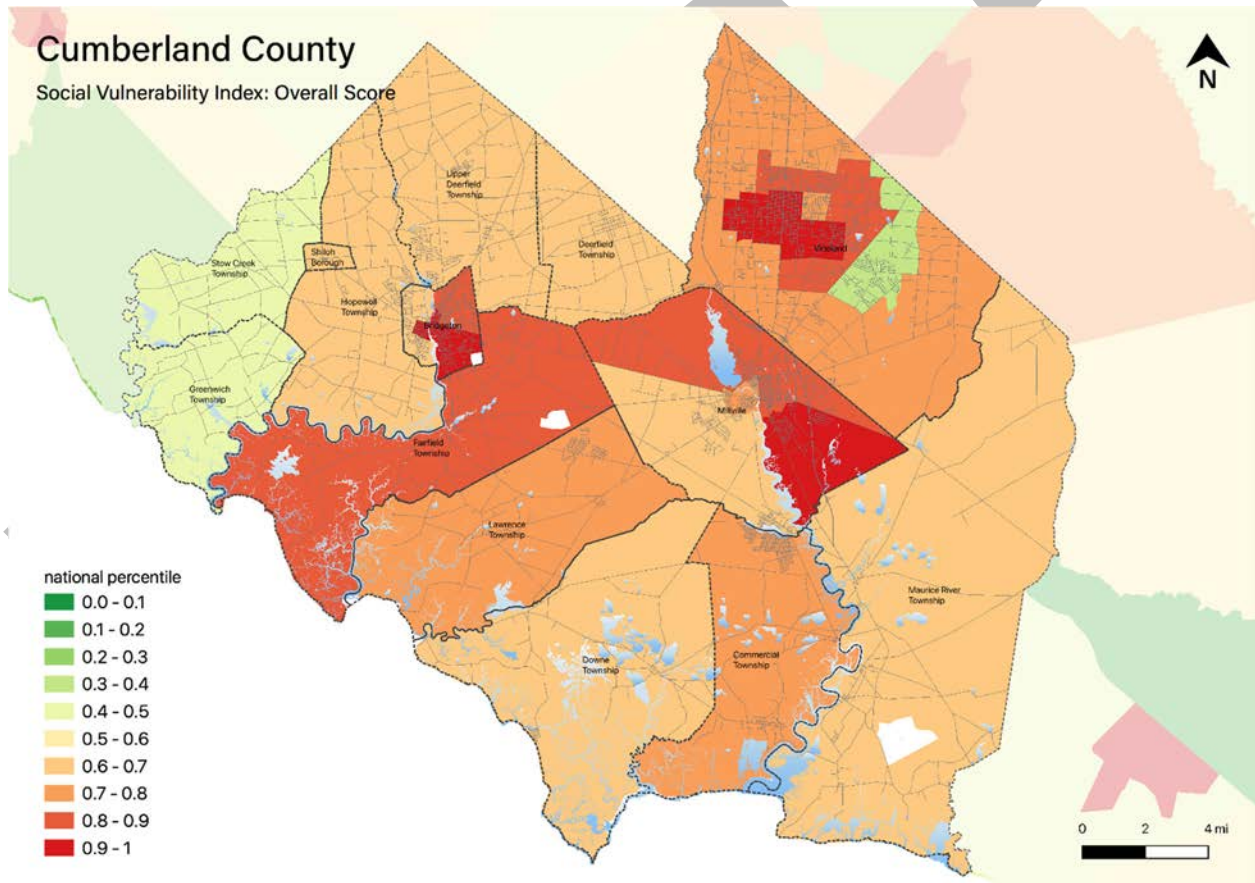
Demographic considerations include general population and land use factors. Table 12-7 includes current population estimates and changes since the previous US Census²¹:

Table 12-7: Shiloh Borough General Population Demographics

Metric	Percentile
Percentage of persons: Living in group quarters	93 rd
Percentage of persons: Living in mobile homes	90 th
Percentage of persons: Older than 65 years of age	89 th
Percentage of persons: With a disability	80 th

Demographic considerations also include differences in social vulnerability²². Figure 12-6 shows the overall Social Vulnerability (SVI) Index overall scores for Cumberland County.

Figure 12-6: Cumberland County Social Vulnerability Index: Overall Scores



²¹ US Census, 2019 ACS 5 Year Estimates, Table ID DP5

²² Social vulnerability considerations are described in *Section 3: Hazard Identification and Risk Assessment* of the CC HMPU Base Plan.

Part 3: Hazard Identification and Risk Assessment

For Shiloh Borough, Table 12-8 includes selected metrics where social vulnerability considerations are noteworthy when compared with all national census tracts:

Table 12-8: Shiloh Borough Social Vulnerability Considerations²³

Metric	Comparison with all National Census Tracts
Percentage of persons: Older than 65 years of age	Higher than 89%
Percentage of persons: With a disability	Higher than 80%
Percentage of persons: Living in mobile homes	Higher than 90%
Percentage of persons: Living in group quarters	Higher than 93%

In addition, the percentage of residents earning below poverty level = 7.3% (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:
 - 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).
- 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).

²³ All supporting data for SVI can be viewed at https://docs.google.com/spreadsheets/d/10zb_Qlg2CgGxb45_fcKiP46swaC16-fORxYTIOiAKP0/edit#gid=1481479799

Part 3: Hazard Identification and Risk Assessment

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

- None

Moderate Priority

- Extreme Temperature: Cold & Hot
- High Wind
- Severe Weather – Summer
- Severe Storm – Winter Weather

Low Priority

- Drought
- Earthquake
- Flood
- Wildfire

Three additional hazards were identified but were not considered applicable to the municipality:

- Coastal Erosion and Sea Level Rise
- Dam Failure
- Levee Failure

Part 4: Mitigation Measures

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
- 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: Mitigation Measures

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 12-9 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 12-9.

Table 12-9: Status of Shiloh Borough NJ4 HMP Mitigation Measures

Mitigation Action, Program, or Project	Status	Comments	Mitigation Measure # ²⁴
M-1: Identify and pursue outreach and education opportunities to inform municipal residents, businesses, and property owners.	Work-in-progress	Work-in-progress included the Borough website has provided links for the NJ4 HMP and the current CC HMPU planning process.	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: Conduct regular Municipal Working Group meetings.			
M-4: Install permanent backup emergency power generator at Seventh Day Baptist Church of Shiloh (primary Shiloh Borough shelter) (CF-2).	Not completed, not funded		Carried over as M-2
M-5: Install permanent backup emergency power generator at Public Works facility.	Not completed, no longer considered valid	Critical facility is no longer in operation	N/A
M-6: Risk assessment of wellhead at former Shiloh Borough School to determine possibility of wellhead failure due to several natural hazards resulting in potentially damaging flooding at the Municipal Building (EOC).	Not completed, no longer considered valid	School sold and under renovation by private owner. Building well head is now separate from municipal building.	N/A
M-7: Retrofit / harden municipal building include new roof and windows (CF-1).	Not completed, not funded	Building has two windows and a door that are not wind resistant.	Carried over as M-3

²⁴ Detailed information for identification and implementation of municipal (M-#) mitigation measures is included in Tables 12-10 and 12-11.

Part 4: Mitigation Measures

Part 4.3: Municipal Mitigation Measures – Identification

Table 12-10 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)²⁵ if applicable

Table 12-10 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 12-10: Shiloh Borough Municipal Mitigation Measures Identification

#	Mitigation Action, Program, or Project	Hazard(s)	Goal (s)	Existing or New Structures
M-1	<p><u>Borough Mitigation Program</u> – including sustained efforts in cooperation with Cumberland County Office of Emergency Management (CC OEM) to:</p> <ul style="list-style-type: none"> ▪ 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 Borough Working Group ▪ Seek integration of hazard mitigation with other parallel planning initiatives 	All	Goal #s 1, 2, and 3	All
M-2	Install permanent backup emergency power generator at Seventh Day Baptist Church of Shiloh (primary Shiloh Borough shelter) (CF-2).	Power outage due to multiple hazard types.	Goal #4	Existing
M-3	Retrofit / harden municipal building include new roof and windows (CF-1).	High Wind / Severe Winter Weather	Goal #4	Existing

²⁵ Section 3: Hazard Identification and Risk Assessment of the CC HMPU Base Plan includes a description of RL and SRL properties.

Part 4: Mitigation Measures

Part 4.4: Municipal Mitigation Measures – Implementation

Table 12-11 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 criteria²⁶
- Project Type to help determine funding options and implementation mechanisms at the municipal level²⁷
- 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

Table 12-11: Shiloh Borough Municipal Mitigation Measures Implementation

#	Mitigation Action, Program, or Project	Responsible Part(ies)	Priority	Project Type	Estimated Cost (\$)	Target Date	Next Step(s)
M-1	Township Mitigation Program	Township OEM and Township Working Group	High	Program	Staff Time	On-going, sustained effort	<ul style="list-style-type: none"> ▪ 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	Install permanent backup emergency power generator at Seventh Day Baptist Church of Shiloh (primary Shiloh Borough shelter) (CF-2).	Borough OEM and Borough Working Group	High	Back-up Emergency Power Generator	< \$100K	One to three years	<ul style="list-style-type: none"> ▪ Conduct project scoping.²⁸ ▪ Identify funding source(s).
M-3	Retrofit / harden municipal building include new roof and windows (CF-1).	Borough OEM and Borough Working Group	Moderate	Building Retrofit	\$100K - \$500K	Three to five years	<ul style="list-style-type: none"> • Conduct project scoping.

²⁶ Section 4: Mitigation Measures of the CC HMPU Base Plan includes a description of evaluation criteria considered by the Municipal Working Group.

²⁷ 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.

²⁸ Project scoping for M-3 to include determining feasibility to install hookups and transfer switch for using portable generator(s) to accommodate need, at least as a temporary measure

Part 4: Mitigation Measures

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 :
 - 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).
 - 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 Groups had the opportunity to identify multi-jurisdictional mitigation measures. Implementation of these measures, in the opinion of the Municipal Working Groups would require participation or leadership from other levels of government, including county, state, and federal agencies.

Shiloh Borough did not identify any issues that required participation from other levels of government and therefore, the Borough's Appendix does not include any multi-jurisdictional mitigation measures.

Part 4: Mitigation Measures

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
- 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 Shiloh Borough'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.

Note: Shiloh Borough does not participate in the NFIP.

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 12-12 compares the results of the Capability Assessment Survey for the County as a whole and Shiloh Borough.

Part 4: Mitigation Measures

Table 12-12: Shiloh Borough Capability Assessment Survey Results

Metric	Shiloh Borough Results (n=5)	Cumberland County "as a whole" Results (n=85)
Position Type: Full-time	20.00%	51.76%
Position Type: Part-time	40.00%	36.47%
Position Type: Volunteer	40.00%	11.76%
Time in Position:		
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	20.00%	23.53%
Time in Position: More than 5 years	80.00%	55.29%
Prior Experience:		
Prior Experience: None	0.00%	57.65%
Prior Experience: with hazard mitigation planning	80.00%	31.76%
Prior Experience: with HMA grant administration	20.00%	12.94%
Prior Experience: with floodplain management	0.00%	7.06%
Training / Certifications:		
Training / Certifications: None	80.00%	75.29%
Training / Certifications: for hazard mitigation planning and implementation	0.00%	9.41%
Training / Certifications: for floodplain management	20.00%	15.29%

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

- Lower percentage of full-time staff
- Higher average time in current positions
- Higher percentage of staff with experience in hazard mitigation planning and HMA grant administration
- Lower percentage of staff with experience in floodplain management
- Lower percentage of staff with training for hazard mitigation planning and implementation
- Higher 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 Shiloh Borough Working Group include:

- Hopewell Township Emergency Operations Plan (2019)
- Master Plan (1989)
- Municipal Stormwater Management Plan (2021)
- Development Ordinance of 1979 as Amended June 1, 1999
- Capital Improvement Budget (2021)

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Attachment A: Public Review Comments

Public review comments [will be] recorded during the public review of the Shiloh Borough Preliminary Draft, Public Review Draft, and Final Draft versions of the Municipal Appendix on [dates to be determined]:

Table 12.A-1: Public Review Comments

Comment Date and Time	Comment	Response

Note: As of May 13, 2022, no public comments have been received.

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Attachment B: Adoption Resolution

Following this page [will be] the Adoption Resolution for the Shiloh Borough Municipal Appendix as approved by the Shiloh Borough Committee.

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Attachment C: Approval Letter

Following this page [will be] the Approval Letter for the Shiloh Borough Municipal Appendix.

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