Cumberland County Multi-Hazard Mitigation Plan Update
Participating Jurisdiction Appendices

Appendix 15
Vineland City, New Jersey

August 22, 2022

This page is intentionally blank.

Table of Contents **15-i**

Part 1 Overview **15-1**

1.1: Cumberland County Multi-Hazard Mitigation Plan Update 15-1
1.2: Vineland City Municipal Appendix 15-1

Part 2 Participation **15-2**

2.1: Municipal Working Group Participation 15-2
2.2: Public Participation 15-5

Part 3 Hazard Identification and Risk Assessment **15-7**

3.1: Profile 15-7
3.2: General Building Stock 15-9
3.3: Critical Facilities 15-10
3.4: Hazard Exposure Assessment 15-22
3.5: Demographic Considerations 15-26
3.6: Observations 15-27
3.7: Hazard Priorities 15-28

Part 4 Mitigation Measures **15-29**

4.1: Mitigation Goals and Strategy 15-29
4.2: NJ4 HMP Mitigation Measures 15-30
4.3: Municipal Mitigation Measures – Identification 15-33
4.4: Municipal Mitigation Measures – Implementation 15-35
4.5: Multi-Jurisdictional Mitigation Measures 15-38
4.6: Authorities, Policies, Programs, Resources, and Plan Integration 15-39

List of Figures

Figure 15-1: Vineland City Location Map 15-7
Figure 15-2: Vineland City Base Map 15-8
Figure 15-3: Vineland City Building Footprints 15-9
Figure 15-4: Vineland City Critical Facilities 15-22
Figure 15-5: Vineland City Critical Facilities and 1% Annual Chance Flood Zone 15-23
Figure 15-6: Cumberland County Social Vulnerability Index: Overall Scores 15-26

List of Tables

Table 15-1: Vineland City Working Group 15-2
Table 15-2: Public Participation 15-5
Table 15-3: Vineland City Buildings per Land Use Type 15-9
Table 15-4: Vineland City Critical Facilities Inventory 15-10
Table 15-5: Vineland City General Building Stock Hazard Exposure 15-24
Table 15-6: Vineland City Critical Facilities Hazard Exposure 15-24
Table 15-7: Vineland City General Population Demographics 15-26
Table 15-8: Vineland City Social Vulnerability Considerations 15-27
Table 15-9: Status of Vineland City NJ4 HMP Mitigation Measures 15-30
Table 15-10: Vineland City Municipal Mitigation Measures Identification 15-34
Table 15-11: Vineland City Municipal Mitigation Measures Implementation 15-35
Table 15-12: Vineland City Multi-Jurisdictional Mitigation Measures 15-38
Table 15-13: Vineland City Capability Assessment Survey Results 15-40

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: Vineland City Municipal Appendix

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

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

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 15-1 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: Seven 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 15-1: Vineland 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]
Luigi	Tramontana	Fire Department / Office of Emergency Management	Chief / OEM Coordinator	☑	☑	☑	
Paul	Shropshire	Fire Department / Office of Emergency Management	Deputy OEM Coordinator	☑	☑	☑	Organized Working Group and Work Sessions.
Amy	Holmes	OEM	Public Education and Training			☑	Organized and produced survey for residents.
Michael	Cifaloglio, Jr.	Fire Department /Office of Fire Prevention	Fire Marshal		☑	☑	

1 Project Kickoff Meeting was held on May 20, 2021.
2 Round 1 Work Session was held on August 4, 2021.
3 Round 2 Work Session was held on January 18, 2022.
4 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]	Round 1 Work Session[2]	Round 2 Work Session[3]	Contribution[4]
Robert	Dickenson	Department of Administration	Assistant Business Administrator				
Greg	Pacitto	Police Department	Lieutenant				
Christopher	Fulcher ✷	Police Department	Sergeant		☑		
Owen	Flores	Police Department	Sergeant				
Armando	Pineda	Fire Department / Emergency Medical Services	EMS Supervisor				
Kelly	Soracco	Fire Department / Emergency Medical Services	EMS Chief		☑	☑	
Derek	Leary	Department of Licenses and Inspections	Construction Official / Floodplain Administrator		☑		
David	Maillet ✷	Administration Department, Division of Engineering	City Engineer		☑	☑	
Rickie	Caudill	Administration Department, Division of Engineering	Supervising Engineer		☑		
Kathleen	Hicks ✷	Administration Department, Division of Planning	Supervising Planner		☑		
Ryan	Headley	Administration Department, Division of Planning	Supervising Engineer		☑		
James	Hares	Department of Public Works	Director				
Jeffrey	Bordley	Department of Public Works	Supervisor			☑	
Tom	Shelton	Department of Public Works	Road Supervisor		☑		
Tony	Quigley	Information Systems	Director			☑	
Michael	Lawler	Municipal Water Utility	Superintendent				
Dave	Ricci	Municipal Water Utility	Assistant Superintendent				

Part 2: Participation

First Name	Last Name	Department	Position	Project Kick-off Meeting[1]	Round 1 Work Session[2]	Round 2 Work Session[3]	Contribution[4]
John	Lillie	Municipal Utilities	Director				
Tom	Dunmore	Municipal Electric Utility	Chief Engineer		☑	☑	
John	Boyle ✷	Municipal Electric Utility	VMU. Distribution Operations, Superintendent		☑		
Steve	August	Municipal Electric Utility	VMU Assistant Superintendent Generation.		☑		
Diane	Amico ✷	Municipal Environmental Commission	Senior Environmental Health Specialist		☑	☑	
Dennis	Palmer	The Landis Sewerage Authority	Executive Director / Chief Engineer		☑	☑	
Anthony	Tobolski	The Landis Sewerage Authority	Field Engineer		☑	☑	
Macleod	Carre	Department of Health	Health Director		☑		
Robert	Dickinson	Department of Health	Health Officer		☑		
Radford	Garrison	Department of Safety and Security, Inspira. Health Network	Emergency Preparedness Manager				
Brett	McCormick	Department of Safety and Security, Inspira. Health Network	Emergency Preparedness		☑	☑	
Al'Asia	Powell	Inspira Life Vanguard	Director of Quality and Patient Safety				
Paul	Farinaccio	Vineland Public Schools	Executive Director of Facilities				
Robert	Pitocchi ✷	Vineland Board of Education (Maintenance Department)	Coordinator of Maintenance Services				
Jorge	Cardona	Vineland Public Schools	Coordinator of Maintenance		☑		
Dawn	Hunter ✷	Greater Vineland Chamber of Commerce	Executive Director				
Quincy	Jones	New Jersey Forest Fire Service	Section Warden C-4			☑	

The following lists candidate positions and organizations within the community 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.

- Elected and Appointed Officials
- Community / Faith-Based Organizations
- Environmental Organizations

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 15-2 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 15-2: Public Participation

Date	Type of Involvement	Location
September 8, 2021	Preliminary Draft Municipal Appendix available for public comment.	Project Website[5]
October 1, 2021	Request for Public Participation in Mayor's Newsletter enclosed with October's Electric Bill (contains link to Project Website).	All Electric Utility Users – City Wide
October 15, 2021 (perpetual)	Paper survey (English/Spanish) available to the public (contains link to Project Website).	City Hall Lobby and Vineland Public Library
October 15, 2021	Survey flyers posted promoting survey (contains link to Project Website).	City Hall, Vineland Public Library, Vineland OEM Annex Building, and Vineland EMS Building
October 15, 2021 through December 15, 2021	Social media campaign for online survey (English/Spanish) available to the public (contains link to Project Website).	Facebook, Instagram
October 17, 2021	Canvassing with survey and flyers.	Maurice River Parkway area
November 10, 2021	Survey flyers posted promoting survey (contains link to Project Website).	Local corner stores, faith-based organizations, and community-based organizations.
November 10, 2021	Tabling event to engage public to take survey, and promote flyer (contains link to Project Website)	Community Hubs location @ Downtown Deli (Corner Store)
November 17, 2021	Tabling event to engage public to take survey and promote flyer (contains link to Project Website).	Community Hubs location @ La Unica (Corner Store)
November 22, 2021	Tabling event to engage public to take survey and promote flyer (contains link to Project Website).	Community Hubs location @ Vasquez & Diaz Grocery (Corner Store)
April 4, 2022	Notice posted re: Public Review Draft Municipal Appendix review period with link to Project Website.	Vineland City Website – Municipal Notices[6]

[5] https://cchmpu21.com/
[6] https://www.vinelandcity.org/municipal-notices/

Date	Type of Involvement	Location
April 19, 2021	Public Review Draft Municipal Appendix available for public comment.	Project Website[5]

Public comments and input received for the survey as well as review of 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. This included the following natural hazard rankings (from highest to lowest concern) from 36 respondents (as of January 2022):

1. Flooding
2. High Winds
3. Wildfires
4. Severe Winter Weather

The respondents also indicated locations and addresses where they felt these hazards presented the most concern. The results were made available to the whole Working Group and will be used as part of outreach and education efforts in the implementation of the CC HMPU.

In addition, the Municipal Appendix was adopted as part of a regularly scheduled public meeting.

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]

[7] See Mitigation Measure M-1 in Part 4 of the Municipal Appendix.
[8] Public education and outreach is described in *Section 4: Mitigation Measures* of the CC HMPU Base Plan.

Part 3: Hazard Identification and Risk Assessment

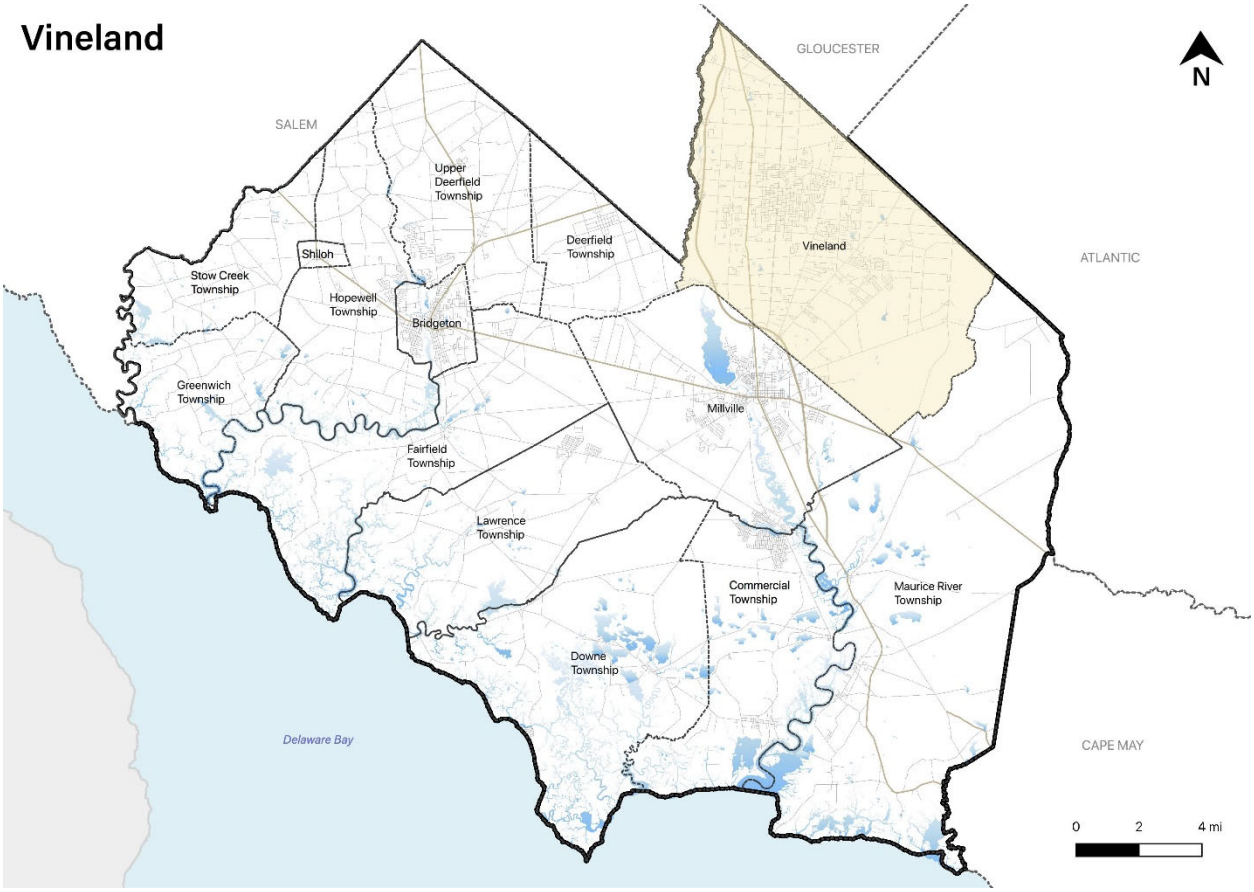
Part 3 includes seven subparts:

- *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

Vineland City is located in the northeast corner of Cumberland County (See Figure 15-1).

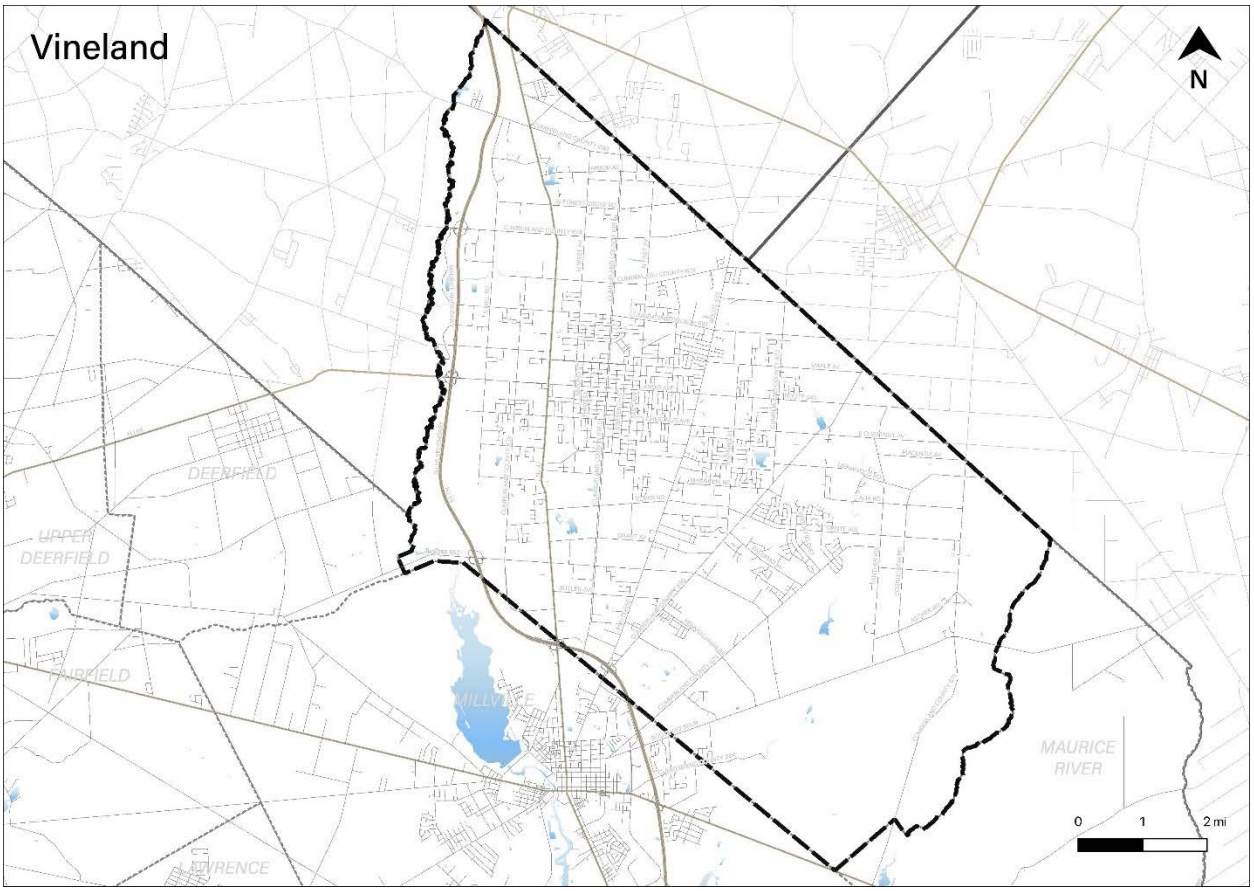
Figure 15-1: Vineland City Location Map



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

Per Figure 15-2, major water courses include Parvin Branch and Menantico Creek. Major transportation routes include State Highway Routes 47 and 55. The land is gently rolling.

Figure 15-2: Vineland City Base Map



Part 3.2: General Building Stock

As of 2015, there are 25,565 buildings in Vineland City with a total assessed value of improvements of $4,031,956,731. Figure 15-3 shows the footprints of these buildings.

Figure 15-3: Vineland City Building Footprints[9]

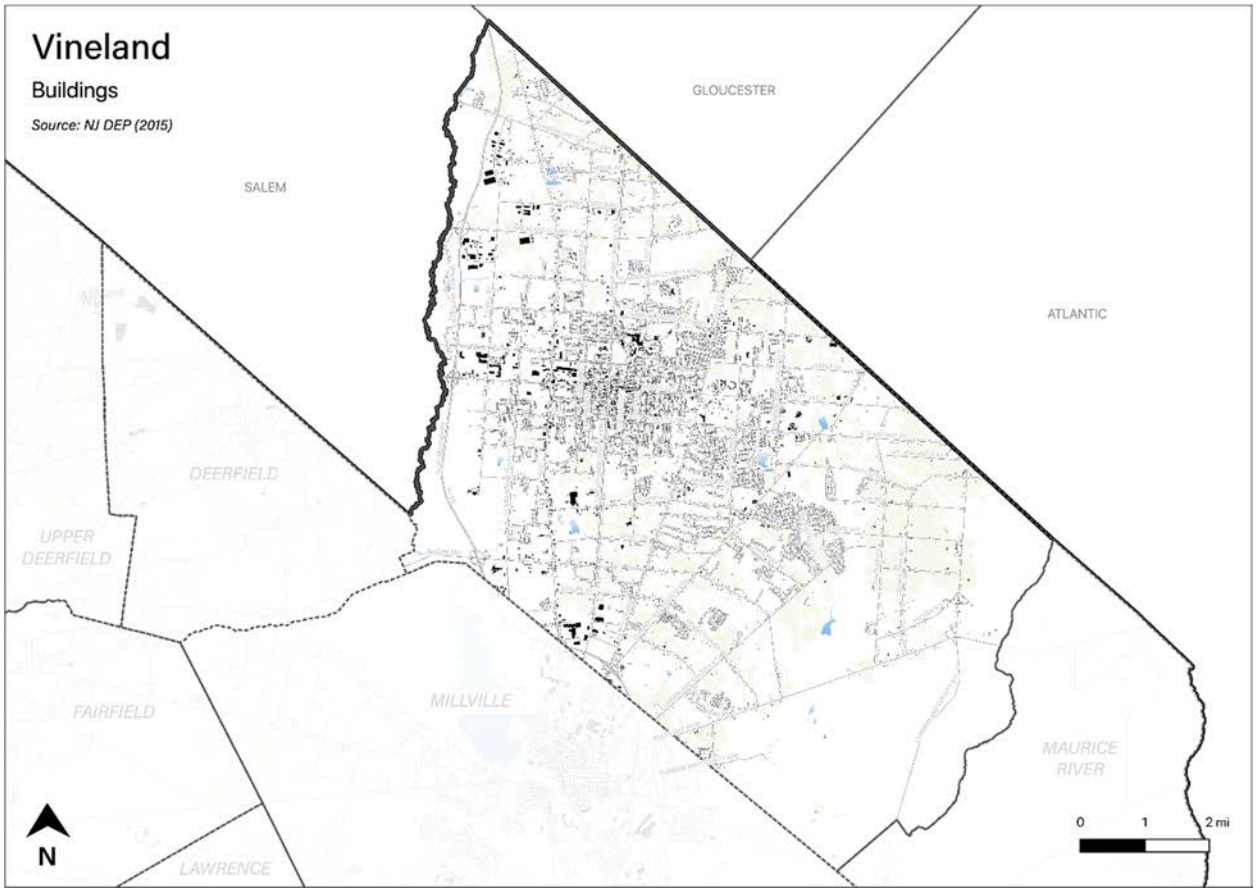


Table 15-3 shows the distribution of these structures according to land use distinctions.

Table 15-3: Vineland City Buildings per Land Use Type[10]

Land Use Type	Residential	Commercial	Industrial	Other
Number of Buildings	19,340	3265	263	1974
% of Total	78%	13%	1%	8%

[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 Vineland City Working Group identified 143 critical facilities in Vineland 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.

In addition, it is important to note the City Fire Department is in the process of determining how best to integrate this list with facility lists maintained for use in annual Fire Prevention surveys of more than 6,000 structures. The Fire Department is also in the process of determining how to incorporate field evaluations of basic natural hazard exposure and vulnerability into all annual surveys. For this update, the original list is preserved for the most part and the mitigation measures indicated in Part 4 of the Appendix are indicated in the far-right column.

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 15-4 includes current inventory information for municipal critical facilities and cross-references to related mitigation measures identified in Part 4 of the Municipal Appendix. Figure 15.4 shows the location of these critical facilities.

Table 15-4: Vineland 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	640 E. Wood Street, Vineland	CF-10, CF-18	N	Y[12]		M-2 and M-4
CF-2	City Hall Annex and Emergency Operations Center	EOC	Stand-alone Facility	625 Plum Street, Vineland		N	Y	New communications room has been added since 2016	M-3
CF-3	Fire Station 1	FireStations	Stations	810 East Chestnut Avenue, Vineland	CF-16	N	Y		
~~CF-4~~	~~Fire Station 1~~	~~FireStations~~	~~Stations~~	~~18 N. East Avenue, Vineland~~		~~N~~	~~Y~~	No longer in operation	
CF-5	Fire Station 2	FireStations	Stations	876 E. Sherman Avenue, Vineland	CF-11	N	Y		
CF-6	Fire Station 3	FireStations	Stations	185 W. Forest Grove Road, Vineland		N	Y		

[11] Critical facility definitions and considerations are described in *Section 3: Hazard Identification and Risk Assessment* of the CC HMPU Base Plan.
[12] Back-up emergency power generator only provides emergency lighting.

CF #	Name	Type	Sub-Type	Address	Co-located CF #	Shelter (Y/N)	Generator (Y/N)	Comments	Mitigation Measure #
CF-7	Fire Station 4	FireStations	Stations	1500 E. Oak Road, Vineland		N	Y		
CF-8	Fire Station 5	FireStations	Stations	4450 Italia Avenue, Vineland		N	Y		
CF-9	Fire Station 6	FireStations	Stations	110 N. 4th Street, Vineland		N	Y	Looking to replace because of age	
~~CF-10~~	~~Emergency Medical Services Station~~	~~EMS~~	~~Municipal Stations~~	~~640 E. Wood Street, Vineland~~	~~CF-1, CF-18~~	~~N~~	~~Y~~	No longer in operation	
CF-11	Emergency Medical Services Station	EMS	Municipal Stations	858 E. Sherman Avenue, Vineland	CF-5	N	Y	Updated address	
~~CF-12~~	~~Emergency Medical Services Station~~	~~EMS~~	~~Municipal Stations~~	~~1045 E. Butler Avenue, Vineland~~		~~N~~	~~N~~	No longer in operation	
~~CF-13~~	~~Emergency Medical Services Station~~	~~EMS~~	~~Municipal Stations~~	~~237 W. Chestnut Avenue, Suite B, Vineland~~		~~N~~	~~Y~~	No longer in operation	
CF-14	Emergency Medical Services Station	EMS	Municipal Stations	76 Howard Street, Vineland		N	Y	New Facility	
CF-15	Emergency Medical Services Station	EMS	Municipal Stations	1676 N. West Avenue, Vineland		N	N	Basement Flooding	M-5
CF-16	Police Station / 911 Communication / Dispatch Center	Communications	Co-located 911 Communications / Dispatch Centers	620 East Plum Street, Vineland	CF-3	N	Y		
CF-17	Vineland Public Library	Emergency Staging Areas	Cooling center only	1058 E Landis Ave, Vineland		Y	N	Cooling Center Only	M-6
CF-18	Public Health Facility	Health Care Facilities	Public Health Clinic / Treatment Centers	640 E. Wood Street, Vineland	CF-1, CF-10	N	Y[12]		
CF-19	Sabatier Annex Public Health and Education Center	Health Care Facilities	Public Health Clinic / Treatment Centers	610 E. Montrose Street, Vineland		N	N		M-13

CF #	Name	Type	Sub-Type	Address	Co-located CF #	Shelter (Y/N)	Generator (Y/N)	Comments	Mitigation Measure #
CF-20	Inspira Medical Center	Health Care Facilities		1505 W. Sherman Avenue, Vineland		N	Y		
CF-21	Encompass Health Rehabilitation Hospital of Vineland	Health Care Facilities	Rehabilitation Center	1237 W. Sherman Avenue, Vineland		N	Y		
CF-22	Public Works Facility	Public Works	Combined Administrative Office, Maintenance / Work Area, Equipment / Material Storage, and Fueling Station	1086 E. Walnut Road, Vineland		N	Y[13]		M-7
CF-23	Distribution Service Building	Utilities - Electric	Administrative Offices	415 N. West Avenue, Vineland	CF-24	N/A	N	Roof structure requires replacement	M-11
CF-24	Howard Down Generating Station	Utilities - Electric	Generating Station	415 N. West Avenue, Vineland	CF-23	N/A	N/A	Decommission Old Plant Building that is part of this complex.	
CF-25	West Combustion Station	Utilities - Electric	Combustion Station	1185 New Peach Street, Vineland		N/A	N/A		
CF-26	Clayville Combustion Station	Utilities - Electric	Combustion Station	4087 S. Lincoln Avenue, Vineland	CF-27	N/A	N/A		
CF-27	Clayville Substation	Utilities - Electric	Substations	4087 S. Lincoln Avenue, Vineland	CF-26	N/A	N/A		
CF-28	Butler Substation	Utilities - Electric	Substations	346 W. Butler Avenue, Vineland		N/A	N/A		
CF-29	Central Substation	Utilities - Electric	Substations	235 N. East Boulevard, Vineland		N/A	N/A		

[13] Generator for Vineland City Public Works Facility included in Cumberland County Energy Resiliency Program grant application to the Governor's Office of Recovery and Rebuilding

CF #	Name	Type	Sub-Type	Address	Co-located CF #	Shelter (Y/N)	Generator (Y/N)	Comments	Mitigation Measure #
CF-30	Central North Substation	Utilities - Electric	Substations	301 N. East Boulevard, Vineland		N/A	N/A		
CF-31	West Substation	Utilities - Electric	Substations	1185 New Peach Street, Vineland		N/A	N/A		
CF-32	Manaway Substation	Utilities - Electric	Substations	1543 Gallagher Drive, Vineland		N/A	N/A		
~~CF-33~~	~~Spring Substation~~	~~Utilities - Electric~~	~~Substations~~	~~425 N. Spring Road, Vineland~~		~~N/A~~	~~N/A~~	Decommission	
~~CF-34~~	~~Oak Substation~~	~~Utilities - Electric~~	~~Substations~~	~~810 W. Oak Road, Vineland~~		~~N/A~~	~~N/A~~	Decommission	
~~CF-35~~	~~Mill Substation~~	~~Utilities - Electric~~	~~Substations~~	~~423 N. Mill Road, Vineland~~		~~N/A~~	~~N/A~~	Decommission	
~~CF-36~~	~~Delsea Substation~~	~~Utilities - Electric~~	~~Substations~~	~~262 S. Delsea Drive, Vineland~~		~~N/A~~	~~N/A~~	Decommission	
~~CF-37~~	~~East Grant Substation~~	~~Utilities - Electric~~	~~Substations~~	~~678 E Grant Avenue, Vineland~~		~~N/A~~	~~N/A~~	Decommission	
~~CF-38~~	~~West Grant Substation~~	~~Utilities - Electric~~	~~Substations~~	~~W Grant Avenue, Vineland~~		~~N/A~~	~~N/A~~	Decommission	
CF-39	Circuit #s 170 and 172	Utilities - Electric	Priority Circuits[14]	346 W. Butler Ave., Vineland		N/A	N/A	South Jersey Hospital Main and Alternate Feed	
CF-40	Circuit #s 172 and 154	Utilities - Electric	Priority Circuits[14]	346 W. Butler Ave. & 1185 New Peach St., Vineland		N/A	N/A	LSA Main and Alternate Feed	
CF-41	Circuit #s 134 and 130	Utilities - Electric	Priority Circuits[14]	235 N. East Blvd. & 301 N. East Blvd., Vineland		N/A	N/A	NJ State Home and Elwynn Institute Main and Alternate Feed	

[14] Areas where localized power disruptions are more frequent due to vegetation or other natural hazard conditions. These areas are considered as priority circuits for line clearance and distribution system hardening including reconducting, automation, and pole / cross arm replacements.

CF #	Name	Type	Sub-Type	Address	Co-located CF #	Shelter (Y/N)	Generator (Y/N)	Comments	Mitigation Measure #
CF-42	Circuit #s 134 and 135	Utilities - Electric	Priority Circuits[14]	235 N. East Blvd., Vineland		N/A	N/A	City Hall and Vineland Police Department Main and Alternate Feed	
CF-43	City of Vineland Water-Sewer Utility Offices	Utilities - Water	Administrative Offices	330 E. Walnut Road, Vineland		N	Y		
CF-44	Forest Grove Road Tank	Utilities – Water	Water Towers	71 W. Forest Grove Road, Vineland		N/A	N/A		
CF-45	Oak Road Tank	Utilities – Water	Water Towers	1690 E. Oak Road, Vineland		N/A	N/A		
CF-46	Magnolia Road Tank	Utilities – Water	Water Towers	2245 Magnolia Road, Vineland		N/A	N/A		
CF-47	Mill Road Tank	Utilities – Water	Water Towers	640 N. Mill Road, Vineland		N/A	N/A		
CF-48	6th Street Tank	Utilities – Water	Water Towers	600 E. Pear Street, Vineland		N/A	N/A		
CF-49	Michigan Avenue Tank	Utilities – Water	Water Towers	912 Michigan Avenue, Vineland	C-52	N/A	N/A		
CF-50	S. East Avenue Tank	Utilities – Water	Water Towers	1939 S. East Avenue, Vineland		N/A	N/A		
CF-51	Butler Avenue Tank	Utilities – Water	Water Towers	382 W. Butler Avenue, Vineland		N/A	N/A		
CF-52	Well #s 2 and 3	Utilities - Water	Wellheads	311 N. West Avenue, Vineland		N/A	N[15]		
CF-53	Well #4	Utilities - Water	Wellheads	912 Michigan Avenue, Vineland	C-49	N/A	N[15]		
CF-54	Well #5	Utilities - Water	Wellheads	330 E. Walnut Road, Vineland		N/A	Y		
CF-55	Well #6	Utilities - Water	Wellheads	591 N. Valley Avenue, Vineland		N/A	N[15]		

[15] Wellheads without standby generators are not currently equipped with hook-ups for portable back-up emergency generators. In the event of a power disruption, the Vineland Water-Sewer Utility directly wires portable generator to the main power panel at the wellhead.

CF #	Name	Type	Sub-Type	Address	Co-located CF #	Shelter (Y/N)	Generator (Y/N)	Comments	Mitigation Measure #
CF-56	Well #7	Utilities - Water	Wellheads	423 N. Mill Road, Vineland		N/A	N[15]		
CF-57	Well #8	Utilities - Water	Wellheads	1633 Magnolia Road, Vineland		N/A	N[15]		
CF-58	Well #9	Utilities - Water	Wellheads	832 W. Walnut Road, Vineland		N/A	Y		
CF-59	Well #10	Utilities - Water	Wellheads	3353 N. Delsea Drive, Vineland		N/A	N[15]		
CF-60	Well #11	Utilities - Water	Wellheads	615 N. Brewster Road, Vineland		N/A	N[15]		
CF-61	Well #12	Utilities - Water	Wellheads	2180 Helen Avenue, Vineland		N/A	Y		
CF-62	Well #13	Utilities - Water	Wellheads	936 Magnolia Road, Vineland		N/A	Y		
CF-63	Well #14	Utilities - Water	Wellheads	2390 W. Weymouth Road		N/A	Y		
CF-64	Wastewater Treatment Plant	Utilities - Wastewater	Treatment Plants	1776 S Mill Rd, Vineland		N/A	Y	No history of flood problems.	
CF-65	Pump Station #1 (Brookhaven)	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Standby generator available.	
CF-66	Pump Station #2 (Industrial Park South)	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Standby generator available.	
CF-67	Pump Station #3 (Little Robin)	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Standby generator available.	
CF-68	Pump Station #4 (Fisher Gardens)	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Standby generator available.	
CF-69	Pump Station #5 (Anthony Court)	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Portable generator available.	
CF-70	Pump Station #6 (Sears)	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Standby generator available.	
CF-71	Pump Station #7 (Shirley Court)	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Portable generator available.	

[16] Landis Sewerage Authority maintains GPS coordinates for wastewater pumping stations.

CF #	Name	Type	Sub-Type	Address	Co-located CF #	Shelter (Y/N)	Generator (Y/N)	Comments	Mitigation Measure #
CF-72	Pump Station #8 (Oak Road)	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Standby generator available.	
CF-73	Pump Station #9 (North East Avenue)	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Portable generator available. Located next to a stream. Requires Vineland DPW periodic checks of bridge to determine if debris has accumulated.	
CF-74	Pump Station #10 (South East Avenue)	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Portable generator available.	
CF-75	Pump Station #11 (New Pear)	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Standby generator available.	
CF-76	Pump Station #12 (Ramada Inn)	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Standby generator available.	
CF-77	Pump Station #13 (Linwood)	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Standby generator available.	
CF-78	Pump Station #14 (Brewster Road)	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Standby generator available.	
CF-79	Pump Station #15 (East Landis Avenue)	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Portable generator available.	
CF-80	Pump Station #16 (Lincoln Avenue)	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Standby generator available. Located in a low-lying area and adjacent grass areas accumulate surface water.	
CF-81	Pump Station #17 (Plum Street)	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Portable generator available.	
CF-82	Pump Station #18 (Burnt Mill)	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Standby generator available.	

CF #	Name	Type	Sub-Type	Address	Co-located CF #	Shelter (Y/N)	Generator (Y/N)	Comments	Mitigation Measure #
CF-83	Pump Station #19 (Ramblewood)	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Portable generator available. Located in Flood Zone but no problems with flooding.	
CF-84	Pump Station #20 (Petticoat Drainage Basin)	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Standby generator available.	
CF-85	Pump Station #21 (Butler Avenue)	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Portable generator available.	
CF-86	Pump Station #22 (Pennsylvania Avenue)	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Standby generator available.	
CF-87	Pump Station #23 (South Jersey Hospital)	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Standby generator available.	
CF-88	Pump Station #24 (Blue Hole)	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Standby generator available.	
CF-89	Pump Station #25 (Spring Hollow)	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Portable generator available.	
CF-90	Pump Station #26 (Landis Pointe)	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Standby generator available.	
CF-91	Pump Station #27 (ShopRite)	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Standby generator available.	
CF-92	Pump Station #20A (Aunt Kitty (OCU))	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Portable generator available.	
CF-93	Pump Station #4A (Old North Industrial Park)	Utilities - Wastewater	Pump Stations	Per coordinates[16]		N/A	Y	Portable generator available.	
CF-94	Vineland Senior High School South	Schools	Public Schools	2880 E. Chestnut Avenue, Vineland		Y	Y	Area prone to flooding	
CF-95	Solve E. D'Ippolito Intermediate School	Schools	Public Schools	1578 N. Valley Avenue, Vineland		N	Y		

CF #	Name	Type	Sub-Type	Address	Co-located CF #	Shelter (Y/N)	Generator (Y/N)	Comments	Mitigation Measure #
CF-96	Landis Intermediate School	Schools	Public Schools	61 W. Landis Avenue, Vineland		N	Y		
CF-97	Anthony Rossi Intermediate School	Schools	Public Schools	2572 Palermo Avenue, Vineland		N	N		
CF-98	Veterans Memorial Intermediate School	Schools	Public Schools	424 S. Main Road, Vineland		N	Y		
CF-99	Thomas W. Wallace Jr. Middle School	Schools	Public Schools	688 N. Mill Road, Vineland		N	Y		
CF-100	Vineland Public Charter	Schools	Public Schools	610 E. Montrose Street, Vineland		N	Y	Grades K-7	
CF-101	Dane Barse Elementary School	Schools	Public Schools	240 S. Orchard Road, Vineland		N	Y		
CF-102	Cunningham Elementary School	Schools	Public Schools	315 S. East Avenue, Vineland		N	N		
CF-103	Marie Durand Elementary School	Schools	Public Schools	371 W. Forest Grove Road, Vineland		N	N		
CF-104	Johnstone Elementary School	Schools	Public Schools	165 S. Brewster Road, Vineland		N	Y		
CF-105	Max Leuchter Elementary School	Schools	Public Schools	519 N. West Avenue, Vineland		N	N		
CF-106	Dr. William Mennies Elementary School	Schools	Public Schools	361 E. Grant Avenue, Vineland		N	Y		
CF-107	Pauline J. Petway Elementary School	Schools	Public Schools	1115 S. Lincoln Avenue, Vineland		N	Y		
CF-108	Gloria M. Sabater Elementary School	Schools	Public Schools	301 S. East Boulevard, Vineland		N	Y		
CF-109	John H. Winslow Elementary School	Schools	Public Schools	1335 Magnolia Road, Vineland		N	Y		

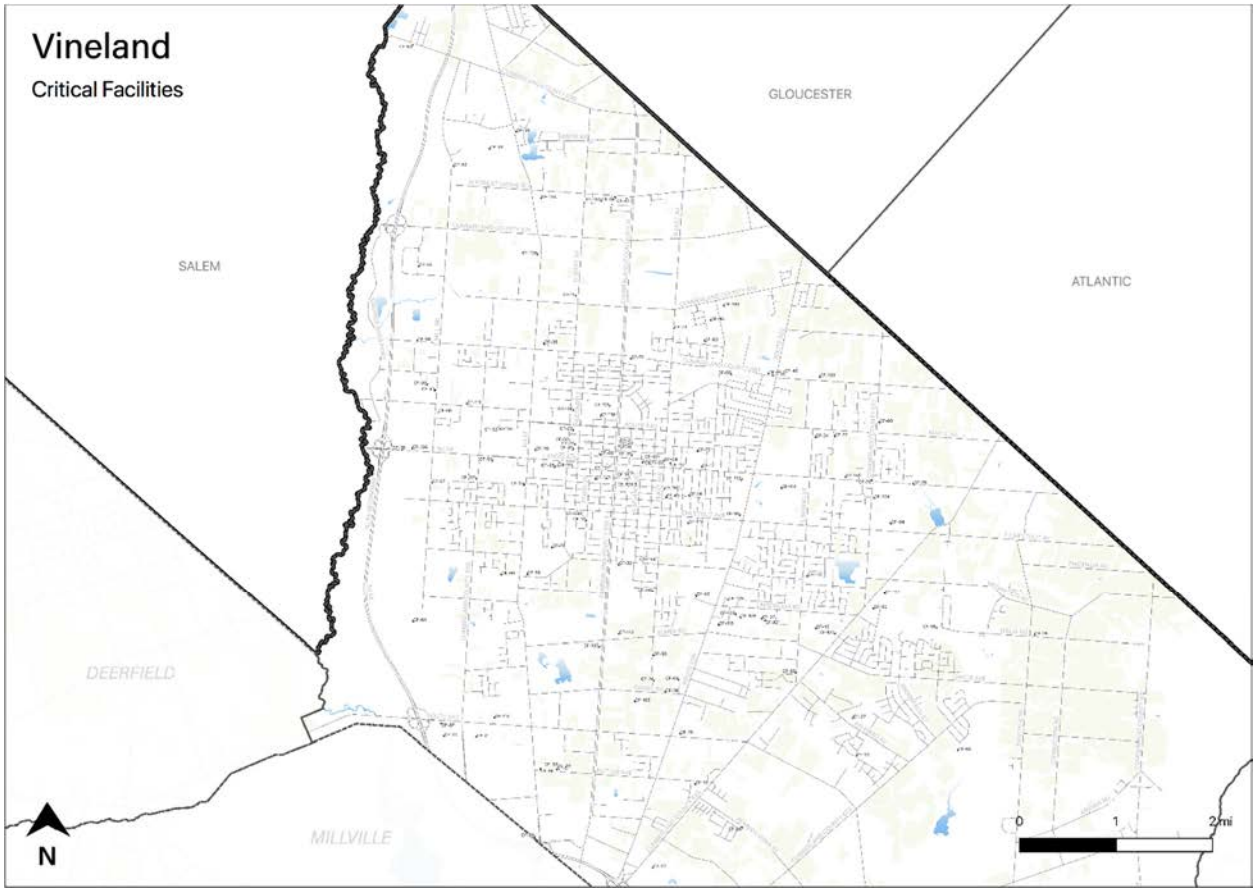
CF #	Name	Type	Sub-Type	Address	Co-located CF #	Shelter (Y/N)	Generator (Y/N)	Comments	Mitigation Measure #
CF-110	Casimer M. Dallago Early Learning Center	Schools	Public Schools	240 S. 6th Street, Vineland		N	Y		
CF-111	Almond Road Preschool Center	Schools	Public Schools	860 N. Orchard Road, Vineland		N	N	Leased building	
CF-112	Ellison School	Schools	Private Schools	1017 S. Spring Road, Vineland		N	N	Private Grades K-8	
CF-113	Cumberland Christian School	Schools	Private Schools	1100 W. Sherman Avenue, Vineland		N	N	Private Grades K-12	
CF-114	Creative Achievement Academy	Schools	Private Schools	1667 E. Landis Avenue, Vineland		N	N	Private Grades K-12	
CF-115	New Life Academy	Schools	Private Schools	69 W. Landis Avenue, Vineland		N	N	Private Grades K-12	
CF-116	Pinelands Learning Center	Schools	Private Schools	520 N. 4th St, Vineland		N	N	Private Grades K-12	
CF-117	Sacred Heart Regional Grammar School	Schools	Private Schools	922 E. Landis Avenue, Vineland		N	N	Private Grades K-8	
CF-118	Spring Oak Assisted Living	Vulnerable Populations Facilities	Private Nursing Homes	1611 S. Main Road, Vineland		Y[17]	Y[12]		
CF-119	Bishop McCarthy Residence	Vulnerable Populations Facilities	Private Nursing Homes	1045 E. Chestnut Avenue, Vineland		Y[17]	Y[12]		
CF-120	Lincoln Specialty Care Rehabilitation Center	Vulnerable Populations Facilities	Private Nursing Homes	1640 S. Lincoln Avenue, Vineland		Y[17]	Y[12]		
CF-121	Veterans Home	Vulnerable Populations Facilities	Private Nursing Homes	524 N. West Boulevard, Vineland		Y[17]	Y[12]		
CF-122	Municipal Courthouse	Municipal - Other	Courthouse	736 E. Landis Ave, Vineland		N	N		

[17] Shelter-in-place.

CF #	Name	Type	Sub-Type	Address	Co-located CF #	Shelter (Y/N)	Generator (Y/N)	Comments	Mitigation Measure #
CF-123	Senior Center	Vulnerable Populations Facilities	Senior Center	103 S. 6th Street		Y	N	Cooling Center	M-8
CF-124	Trinity Episcopal Church	Vulnerable Populations Facilities	Warming Center	800 East Wood Street, Vineland		Y	N	Warming Center	
CF-125	First Presbyterian Church	Vulnerable Populations Facilities	Warming Center	800 East Landis Avenue, Vineland		Y	N	Warming Center	
CF-126	First United Methodist Church	Vulnerable Populations Facilities	Warming Center	700 East Landis Avenue, Vineland		Y	N	Warming Center	
CF-127	ABC Learning Academy	Vulnerable Populations Facilities	Private Child Day-Care Center	321 West Grape Street		N	N	Ages 0-13	
CF-128	All Kids First, Inc.	Vulnerable Populations Facilities	Private Child Day-Care Center	1385 Magnolia Road, Vineland		N	N	Ages 0-6	
CF-129	All Kids First II, Inc.	Vulnerable Populations Facilities	Private Child Day-Care Center	1321 Stewart Street, Vineland		N	N	Ages 0-6	
CF-130	Bumble Bee Academy	Vulnerable Populations Facilities	Private Child Day-Care Center	1940 Southwest Boulevard, Vineland		N	N	Ages 0-13	
CF-131	Christ the Good Shepherd Preschool	Vulnerable Populations Facilities	Private Child Day-Care Center	1655 Magnolia Road, Vineland		N	N	Ages 2½-6	
CF-132	Cumberland Cape Atlantic YMCA	Vulnerable Populations Facilities	Private Child Day-Care Center	1159 East Landis Avenue, Vineland		N	N	Ages 0-13	
CF-133	DiBiase Infant Care Center	Vulnerable Populations Facilities	Private Child Day-Care Center	2040 East Oak Road, Vineland		N	N	Ages 0-13	
CF-134	Golan Learning Center	Vulnerable Populations Facilities	Private Child Day-Care Center	2725 North Delsea Drive, Vineland		N	N	Ages 2½-6	

CF #	Name	Type	Sub-Type	Address	Co-located CF #	Shelter (Y/N)	Generator (Y/N)	Comments	Mitigation Measure #
CF-135	Golden Gate Academy	Vulnerable Populations Facilities	Private Child Day-Care Center	2120 North Delsea Drive, Vineland		N	N	Ages 0-13	
CF-136	Greater Deliverance Learning Center	Vulnerable Populations Facilities	Private Child Day-Care Center	2106 West Landis Avenue, Vineland		N	N	Ages 0-13	
CF-137	King's Kids Child Care Center & Preschool	Vulnerable Populations Facilities	Private Child Day-Care Center	427 West Landis Avenue, Vineland		N	N	Ages 0-13	
CF-138	Linda Dechen Early Learning Center	Vulnerable Populations Facilities	Private Child Day-Care Center	237 West Chestnut Avenue, Vineland		N	N	Ages 0-13	
CF-139	Little Lamb Preschool-Keener Kids, Inc.	Vulnerable Populations Facilities	Private Child Day-Care Center	1005 East Wheat Road, Vineland		N	N	Ages 0-13	
CF-140	LML Compass Care	Vulnerable Populations Facilities	Private Child Day-Care Center	2384 East Landis Avenue, Vineland		N	N	Ages 6-13	
CF-141	The Courtyard School	Vulnerable Populations Facilities	Private Child Day-Care Center	1270 South East Avenue, Vineland		N	N	Ages 2½-13	
CF-142	Tiny Tots Pre-School & Child Care Center	Vulnerable Populations Facilities	Private Child Day-Care Center	158 East Elmer Road, Vineland		N	N	Ages 0-6	
CF-143	Vineland III HeadStart Center	Vulnerable Populations Facilities	Private Child Day-Care Center	116 Elmer Street, Vineland		N	N	Ages 2½-6	

Figure 15-4: Vineland City Critical Facilities



Part 3.4: Hazard Exposure Assessment

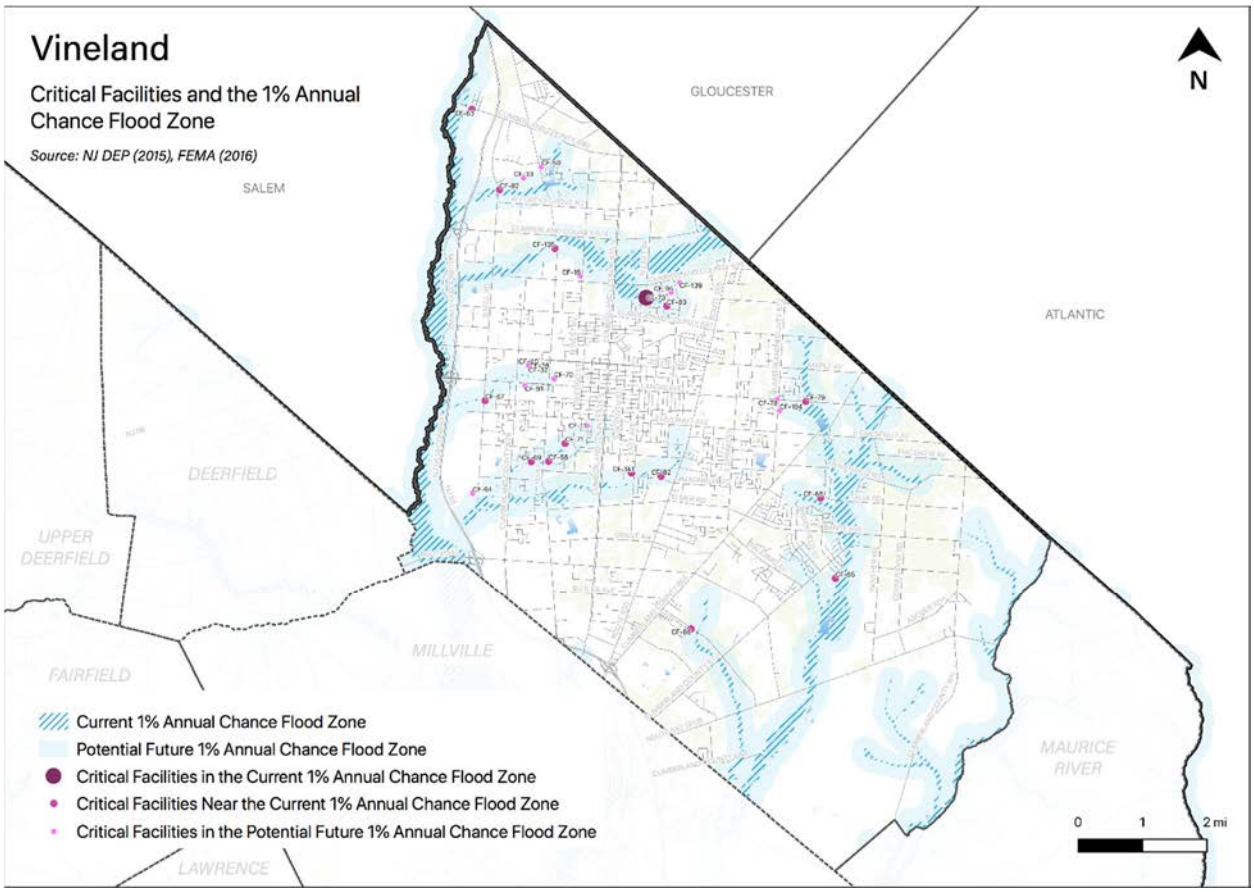
Hazard exposure assessments were completed for the eleven (11) natural hazards identified in the CC HMPU Base Plan[18].

Key results for Vineland City are depicted in the following.

Mapping: Figure 15-5 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).

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

Figure 15-5: Vineland City Critical Facilities and 1% Annual Chance Flood Zone



Mapping results are available for general building stock and critical facilities for the following hazards:[19]

- 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 15-5 indicates hazard exposure for general building stock
- Table 15-6 indicates hazard exposure for critical facilities

[19] 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/wo583u0at6gnmeo/AABPFwLpYLRwR6jXkYU322yta?dl=0.

Table 15-5: Vineland 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[20]	0	N/A	0	N/A
Sea Level Rise - 3 feet increase	0	N/A	0	N/A
Flood - Within 1 % Annual Chance Zone	241	1%	$19,076,356	-
Flood - Near (within 500 feet) of 1% Annual Chance Zone	2,539	10%	$388,628,595	10%
Earthquake – Structure built before 1927[21]	4,691	20%	$568,086,400	16%
High Winds / Severe Weather – Structure built before 1975	17,163	72%	$2,153,461,021	59%
Wildfire – Composite score > 2.5[22]	136	-	$12,016,277	0.30%

Table 15-6: Vineland City Critical Facilities Hazard Exposure[23]

Hazard	Number of Critical Facilities	CF #s
Coastal Erosion	None	N/A
Sea Level Rise	None	N/A
Flood - Within 1 % Annual Chance Zone	1	CF-73
Flood - Near (within 500 feet) of 1% Annual Chance Zone	15	CF-53, CF-58, CF-62, CF-63, CF-65, CF-67, CF-68, CF-69, CF-71, CF-79, CF-82, CF-83, CF-86, CF-135, CF-141
Flood – Future potential (within 1,000 feet) 1% Annual Chance Zone	13	CF-15, CF-26, CF-32, CF-40, CF-59, CF-64, CF-70, CF-73, CF-78, CF-91, CF-95, CF-104, CF-139
Wildfire	54	CF-8, CF-11, CF-21, CF-26, CF-27, CF-28, CF-29, CF-32, CF-39, CF-40, CF-44, CF-46, CF-47, CF-50, CF-51, CF-56, CF-58, CF-59, CF-60, CF-61, CF-62, CF-63, CF-65, CF-67, CF-69, CF-73, CF-77, CF-78, CF-79, CF-80, CF-82, CF-84, CF-85, CF-86, CF-87, CF-88, CF-89, CF-90, CF-91, CF-94, CF-97, CF-99, CF-101, CF-107, CF-109, CF-111, CF-113, CF-120, CF-128, CF-133, CF-134, CF-135, CF-139, CF-141

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)

[20] 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
[21] All supporting data for Earthquake, High Winds, and Severe Weather can be viewed at https://docs.google.com/spreadsheets/d/1Zx1LZwKQ8esgdv4c9hbbSZurtMjH4UITQWJY1LrZezc/edit?usp=sharing
[22] All supporting data for Wildfire can be viewed at https://docs.google.com/spreadsheets/d/1JAbfd3A-eCHI93pZFaPVuM_H2yvuUzeHCmoijv-oxsw/edit?usp=sharing
[23] 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.

Dam Failure

Per the New Jersey Department of Environmental Protection (NJDEP) data[24]:

- There are two (2) "Significant Hazard" dams located in the City:
  - Burnt Mill Pond Dam on Burnt Mill Branch
  - Memorial Park Dam on Cedar Branch
- One (1) dam failure incident has been recorded by NJDEP in the City at Burnt Mill Pond Dam in 2011, but no additional (0) dam failure incidents have been recorded in the City as of 2014

Working Group members were asked the following questions for Dam 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 Vineland City Working Group:

- Additional failure incidents since 2014 included Burnt Mill Pond Dam failure in 2016
- Repairs were completed as follows since 2014:
  - Memorial Park Pond Dam
  - Burnt Mill Pond Dam replaced in 2016

National Flood Insurance Program Information

One additional metric discussed with the Working Group was statistical information from the National Flood Insurance Program (NFIP)[25]. The following are relevant numbers for Vineland City as provided by the New Jersey Office of Emergency Management (NJOEM)[26]:

- Active Policies – seventy-two (72) active NFIP flood insurance policies
- Claims History – fifty-five (55) claims made against the NFIP between 1978 and 2017
- Repetitive Loss Properties (RL) – seven (7) 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 15-5), which are significantly higher than the number of active policies:

- Flood - Within 1 % Annual Chance Zone: 241 buildings ~ 1% of total buildings, with a value of $19,076,356 ~ <1% of the total building value in the City.
- Flood - Near (within 500 feet) of 1% Annual Chance Zone: 2,539 buildings ~ 10% of total buildings, with a value of $388,628,595~ 10% of the total building value in the City.

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

[25] Information on the NFIP is described in *Section 3: Hazard Identification and Risk Assessment* of the CC HMPU Base Plan.

[26] Spreadsheets provided by NJOEM in October 2021.

Part 3.5: Demographic Considerations

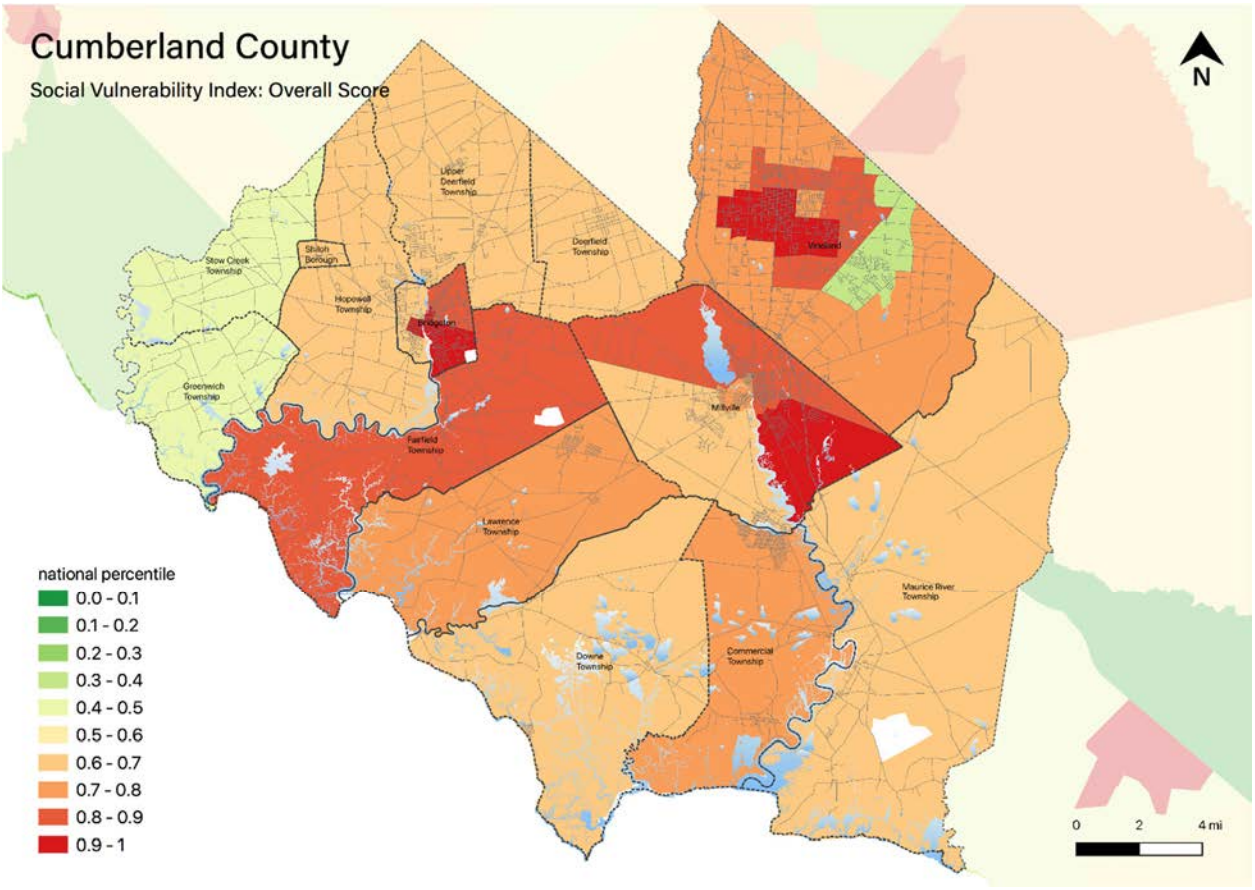
Demographic considerations include general population and land use factors. Table 15-7 includes current population estimates and changes since the previous US Census[27]:

Table 15-7: Vineland City General Population Demographics

Metric	Current Estimates
2010 Population	60,724
2019 Population	60,034
Percent Population Change (2010-2019)	- 0.01%
Land Area	68.42 sq. miles
Population Density	877.4 / sq. mile

Demographic considerations also include differences in social vulnerability[28]. Figure 15-6 shows the overall Social Vulnerability (SVI) Index overall scores for Cumberland County.

Figure 15-6: Cumberland County Social Vulnerability Index: Overall Scores



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

For Vineland City, Table 15-8 includes selected metrics where social vulnerability considerations are noteworthy when compared with all national census tracts:

Table 15-8: Vineland City Social Vulnerability Considerations[29]

Metric	Comparison with all National Census Tracts
Socioeconomic Status	Lower than 74%
Household Composition & Diversity	Lower than 84%
Minority Status & Language	Lower than 68%
Housing Type & Transportation	Lower than 70%

In addition, the percentage of residents earning below poverty level = 14.4% (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 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 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).

[29] All supporting data for SVI can be viewed at https://docs.google.com/spreadsheets/d/10zb_Qlg2CgGxb45_fcKiP46swaC16-fORxYTlOiAkP0/edit#gid=1481479799

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:

<u>High Priority</u>

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

<u>Moderate Priority</u>

- Dam Failure
- Drought
- Earthquake
- Flood[30]
- Severe Weather – Summer

<u>Low Priority</u>

- None

Two additional hazards were considered but were not considered applicable to the municipality:

- Coastal Erosion & Sea Level Rise
- Levee Failure

[30] The NJ4 HMP Municipal Working Group identified riverine flooding as a low priority but flooding due to drainage problems, including deferred maintenance of drainage channels, as a high priority.

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/edited] 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 15-9 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 15-9.

Table 15-9: Status of Vineland City NJ4 HMP Mitigation Measures

Mitigation Action, Program, or Project	Status	Comments	Mitigation Measure # [31][32]
M-1: Identify and pursue outreach and education opportunities to inform municipal residents, businesses, and property owners.	Work-in-progress	Work-in-progress included: ▪ Public outreach and education via Health Department Facebook and pop-up storefront efforts and post-event surveys. ▪ Annual fire prevention inspections by Fire Department. ▪ On-going investigations of recurrent drainage problem areas (Per Engineering Department).	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: Provide back-up emergency power to City Hall (CF-1) and City-wide computer network.	No progress, funding issues.	There is a need for two distinct projects in the updated mitigation measures related to this item: City Hall, located at 640 E. Wood Street (with co-located facilities for Public Health Clinic (CF-18)) houses the computer network hub for all systems. There is no generator at City Hall and back-up emergency power is only provided with battery back-up. The battery back-up system is recommended for replacement with a permanent back-up emergency power generator or sustainable power source. City Hall Annex, located at 625 Plum Street, houses an extension of the computer network from City Hall providing the main internet connection for the City. The Annex has an operational generator but the generator only serves the OEM section of the building.	Carried over as M-2 and M-3

[31] Detailed information for identification and implementation of municipal (M-#) mitigation measures is included in Tables 15-10 and 15-11.
[32] Detailed information for identification and implementation of multi-jurisdictional (MJ-#) mitigation measures is included in Table 15-12.

Mitigation Action, Program, or Project	Status	Comments	Mitigation Measure # [3132]
M-6: Provide offsite digital back-up of essential documents for City Hall and City-wide computer network.	Work-in-progress	▪ Portion is already on digital backup. ▪ Remaining work under the project is in planning stage for implementation by end of 2024. ▪ Proposed location is Police Shooting Range on Mays Landing Road. Funding to be provided by City's general funds.	Carried over as M-4
M-7: Provide back-up emergency power generator for EMS (CF-15).	Work-in-Progress	Funding allocated in City's 2021 Capital Improvement Program (CIP). Bids requested in 2021. Work is anticipated to be completed in 2022	Carried over as M-5
M-8: Provide back-up emergency power generator for Vineland Public Library (CF-17).	No progress, funding issues		Carried over as M-6
M-9: Provide back-up emergency power generator for Public Works Facility (CF-22).	Work-in-progress.	A permanent generator was installed in September 2018 using FEMA HMA grant funds (related to the Northeast Derecho) for use with existing fuel pumps and site features but not all essential office functions . An additional permanent back-up emergency power generator should be installed to maintain power to essential infrastructure such as networks and radio system in addition to the emergency lighting possible now.	Carried over as M-7
M-10: Provide back-up emergency power generator for Distribution Service Building (CF-23).	Completed	Installed 2017 using City utility revenue.	N/A
M-11: Provide back-up emergency power generator for Senior Center (cooling center) (CF-123).	No progress, funding issues		Carried over as M-8
M-12: Provide back-up emergency power generator for Trinity Episcopal Church (warming center) (CF-124).	No longer considered necessary.	These three sites are no longer planned for use by Vineland City OEM as warming centers. See Mitigation Measure M-14 in Tables 15-10 and 15-11 for actions related to proposed warming center.	N/A
M-13: Provide back-up emergency power generator for First Presbyterian Church (warming center) (CF-125).			
M-14: Provide back-up emergency power generator for First United Methodist Church (warming center) (CF-126).			
M-15: Dam replacement for Memorial Park Pond.	Work-in-Progress	Repairs were completed in 2013 using City general funds. However, dam requires additional upgrades and on-going maintenance.	Carried over as M-9
M-16: Dam replacement for Burnt Mill Pond.	Completed	Dam was replaced after total failure in 2016 using City funds.	N/A
M-17: Address basement flooding at EMS (CF-15).	Completed	Both sump pumps were replaced in May 2021 using CIP funds and issue appears to be resolved.	N/A

Mitigation Action, Program, or Project	Status	Comments	Mitigation Measure # [3132]
M-18: Address flooding at Vineland Senior High School South (shelter) (CF-94).	No longer considered an issue.	Per Public Schools Facility Director, flooding has not been an issue at South High School during his 30-year tenure.	N/A
M-19: Address identified Repetitive Flood Loss Properties.	No progress	As of April 2022, Vineland City officials have not been able to ascertain the status of designated Repetitive Flood Loss Properties. As part of implementing the CC HMPU, City Officials will undertake a review of the status of the listed properties and pursue landowner contacts as appropriate.	Carried over as M-10
M-20: Provide hardening against wind and flood damage for Police Department / 911 Center (CF-3 and CF-16).	Completed	Measures completed in 2020 using municipal bond funds included construction of new facility consistent with current building codes.	N/A
M-21: Provide hardening against wind damage to roof of Distribution Service Building (CF-23).	Work-in-Progress	Planned improvements include replacing 65-year-old pole barn in 2022 and replacement of Distribution Service Building roof in 2023. Specifications are currently being prepared and the project will be funded using City utility revenue.	Carried over as M-11
M-22: Conduct line clearing and/or distribution system hardening for Circuit #s 170 and 172 (CF-39).	Work-in-Progress	Historically, 80% of electric outages occur due to downed vegetation. Line clearing and hardening of various circuits has been completed system wide. On-going efforts include target of sustained 5-year cycle for tree trimming of all overhead feeder lines using City utility capital improvement funds. Alternatives such as considering underground placement in limited areas have been explored but rejected due to the lack of clear patterns of disruption.	Carried over as M-12
M-23: Conduct line clearing and/or distribution system hardening for Circuit #s 172 and 154 (CF-40).			
M-24: Conduct line clearing and/or distribution system hardening for Circuit #s 134 and 130 (CF-41).			
M-25: Conduct line clearing and/or distribution system hardening for Circuit #s 13 and 135 (CF-42).			
M-26: Decommission Howard Down Generating Station	Completed	Completion date: 2018	N/A
M-27: Decommission Spring Substation			
M-28: Decommission Oak Substation	No longer considered an issue.	Projects do very little to increase resiliency of the City's electric grid and are no longer considered a priority.	N/A
M-29: Decommission Mill, Delsea, East Grant, and West Grant Substations			
M-30: Consider use of Landis Sewerage Authority portable generators as possible interim source of back-up emergency power for municipal critical facilities assuming adequate wiring and hook-ups are available and if LSA is not otherwise using portable generators.	No longer considered practical.	As of April 2022, Vineland City officials have determined the proposed arrangement is not practical.	N/A

Mitigation Action, Program, or Project	Status	Comments	Mitigation Measure # [3132]
MJ-1: Dam replacement for Willow Grove Lake at Weymouth Road.	Completed	Dam was replaced by Cumberland County after total failure in 2015.	N/A
MJ-2: Alleviate flooding problems on Sherman Avenue (west of Route 55).	No progress	Maurice River leaves banks at this point. Solution may require raising Sherman Avenue a significant amount.	Carried over as Multi-Jurisdictional Mitigation Measure MJ-1
MJ-3: Alleviate flooding problems at Cedar Crest Village Trailer Park.	No progress	Meetings held following 2016 NJ4 HMP re: possible solutions but no evident results.	Carried over as Multi-Jurisdictional Mitigation Measure MJ-2

Part 4.3: Municipal Mitigation Measures – Identification

Table 15-10 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)[33] if applicable

Table 15-10 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

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

Table 15-10: Vineland 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 ▪ Include mitigation considerations in annual building inspections ▪ 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	Provide back-up emergency power to City Hall (CF-1).	Power outage due to multiple hazard types.	Goal #4	Existing
M-3	Provide back-up emergency power to City Hall Annex (CF-2)	Power outage due to multiple hazard types.	Goal #4	Existing
M-4	Provide offsite digital back-up of essential documents for City Hall and City-wide computer network.	Power outage due to multiple hazard types.	Goal #4	Existing
M-5	Provide back-up emergency power generator for EMS (CF-15).	Power outage due to multiple hazard types.	Goal #4	Existing
M-6	Provide back-up emergency power generator for Vineland Public Library (CF-17).	Power outage due to multiple hazard types.	Goal #4	Existing
M-7	Provide back-up emergency power generator for Public Works Facility (CF-22).	Power outage due to multiple hazard types.	Goal #4	Existing
M-8	Provide back-up emergency power generator for Senior Center (cooling center) (CF-123).	Power outage due to multiple hazard types.	Goal #4	Existing
M-9	Dam upgrades for Memorial Park Pond.	Dam Failure	Goal #4	Existing
M-10	Address identified Repetitive Flood Loss Properties.	Flood	Goal #4	Existing
M-11	Roof replacement for Distribution Service Building (CF-23).	High Winds	Goal #4	Existing

#	Mitigation Action, Program, or Project	Hazard(s)	Goal (s)	Existing or New Structures
M-12	Conduct system-wide line clearing and/or distribution system hardening	High Winds	Goal #4	Existing
M-13[34]	Provide back-up emergency power generator and related improvements to provide continuous support for essential services including vaccine storage at Health and Education Center (located at 610 E. Montrose Street, Vineland	Power outage due to multiple hazard types.	Goal #4	Existing

Part 4.4: Municipal Mitigation Measures – Implementation

Table 15-11 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[35]
- Project Type to help determine funding options and implementation mechanisms at the municipal level[36]
- 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 15-11: Vineland 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 Municipal 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)

[34] Mitigation Measure M-13 is a new mitigation measure identified by the Working Group.
[35] *Section 4: Mitigation Measures* of the CC HMPU Base Plan includes a description of evaluation criteria considered by the Municipal Working Group.
[36] *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.

#	Mitigation Action, Program, or Project	Responsible Part(ies)	Priority	Project Type	Estimated Cost ($)	Target Date	Next Step(s)
M-2	Provide back-up emergency power to City Hall.	Vineland Department of Business Administration, Division of Information Systems	High	Back-up Emergency Power Generator	$1.2 million	One year	▪ Conduct project scoping.[37] ▪ Identify funding source(s).
M-3	Provide back-up emergency power to City Hall Annex.	Vineland Department of Business Administration, Division of Information Systems	High	Back-up Emergency Power Generator	[insert cost estimate, if known]	One year	Same as M-2
M-4	Provide offsite digital back-up of essential documents for City Hall and City-wide computer network.	Vineland Department of Business Administration, Division of Information Systems	High	Data Management	To be determined.	One year	Conduct project scoping.
M-5	Provide back-up emergency power generator for EMS (CF-15).	Vineland Health Department, EMS Division	High	Back-up Emergency Power Generator	< $100K	One year	Complete bid process and installation.
M-6	Provide back-up emergency power generator for Vineland Public Library (CF-17).	Municipal OEM	High	Back-up Emergency Power Generator	< $100K	One to three years	Same as M-2
M-7	Provide back-up emergency power generator for Public Works Facility (CF-22).	Vineland Department of Public Works	High	Back-up Emergency Power Generator	< $100K	One to three years	Same as M-2
M-8	Provide back-up emergency power generator for Senior Center (cooling center) (CF-123).	Municipal OEM	High	Back-up Emergency Power Generator	< $100K	One to three years	Same as M-2
M-9	Dam upgrades for Memorial Park Pond.	Vineland Department of Public Works, Division of Engineering	High	Dam Rehabilitation	To be determined	To be determined	Conduct project scoping.
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.

[37] Project scoping for M-2, M-3, M-6 through M-8, and M-13 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-11	Roof replacement for Distribution Service Building (CF-23).	Vineland Municipal Electric Utility	Moderate	Building Retrofits	$1.5 million	One to two years	Solicit bids.
M-12	Conduct system-wide line clearing and/or distribution system hardening	Vineland Municipal Electric Utility	Moderate	Infrastructure Hardening	$2.0 million annual cost	On-going	On-going
M-13	Provide back-up emergency power generator and related improvements to provide continuous support for essential services including vaccine storage at Health and Education Center	Vineland Health Department	HIGH	Back-up Emergency Power Generator	[insert cost estimate, if known]	2023 to 2024]	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 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 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 15-12.

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 15-12: Vineland City Multi-Jurisdictional Mitigation Measures

#	Problem Description	Hazard(s) Addressed	Goal Addressed	Applies to Existing or New Structures	Potential Partners	Priority
MJ-1	Alleviate flooding problems on Sherman Avenue (west of Route 55).	Flood	Goal #4	Both	Municipal OEM, Cumberland County Public Works and Engineering	Moderate
MJ-2	Alleviate flooding problems at Cedar Crest Village Trailer Park (see notes below).[38]	Flood	Goal #4	Both	Municipal OEM, Cumberland County Engineering, Cedar Crest Village Trailer Park	High

[38] Per Engineering Department: Analysis from 2012 recommends replacement of Northwest and Northeast Boulevard Bridges and railroad bridge to 30 feet wide.

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 Vineland 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 Vineland 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 15-13 compares the results of the Capability Assessment Survey for the County as a whole and Vineland City.

Table 15-13: Vineland City Capability Assessment Survey Results

Metric	Vineland City Results (n=6)	Cumberland County "as a whole" Results (n=85)
Position Type: **Full-time**	83.33%	51.76%
Position Type: **Part-time**	16.67%	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**	66.67%	23.53%
Time in Position: **More than 5 years**	33.33%	55.29%
Prior Experience: **None**	50.00%	57.65%
Prior Experience: **with hazard mitigation planning**	33.33%	31.76%
Prior Experience: **with HMA grant administration**	0.00%	12.94%
Prior Experience: **with floodplain management**	33.33%	7.06%
Training / Certifications: **None**	83.33%	75.29%
Training / Certifications: **for hazard mitigation planning and implementation**	0.00%	9.41%
Training / Certifications: **for floodplain management**	16.67%	15.29%

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

- Higher percentage of full-time staff
- Similar average time in current positions
- Similar percentage of staff with experience in hazard mitigation planning
- Lower percentage of staff with experience in HMA grant administration
- Higher 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 Vineland City Working Group include:

- Flood Damage Prevention Ordinance
- Emergency Operations Plan (2021)
- Master Plan and Reexamination Report (2008)
- Zoning Map
- Environmental Resource Inventory (2010)
- GIS Viewer
- Dam Inundation Studies

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 City Engineer is the responsible party for enforcement. The Construction Official was designated by the Working Group to serve as the Floodplain Administrator. The individuals who currently hold both positions are included on the Working Group and have completed the capability assessment survey.
- The document is accessible to the public via internet[39].

[39] https://ecode360.com/12581498

This page is intentionally blank.