



SOMERSET COUNTY

HAZARD MITIGATION PLAN

SOMERSET COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

FINAL PLAN UPDATE
JULY 2019

www.co.somerset.nj.us/hmp

Section 9.14: Township of Montgomery Annex

*Prepared by the Somerset County
Mitigation Planning Committee*



9.14 Township of Montgomery

This section presents the jurisdictional annex for the Township of Montgomery (hereinafter referred to as Montgomery Township or Montgomery).

9.14.1 HAZARD MITIGATION PLAN POINTS OF CONTACT

| Hazard Mitigation Plan Points of Contact | | | | | |
|---|---------------|--|---|---|---------------------------------|
| Primary Point of Contact | | | Alternate Point of Contact | | |
| Name: Sean Devlin, Municipal Hazard Mitigation Officer Address: 2261 Van Horne Road - Route 206 North Belle Mead, New Jersey 08502 Phone Number: 908-359-8211 Fax Number: E-mail Address: sdevlin@police.montgomery.nj.us | | | Name: John Ferrara Address: 2261 Van Horne Road - Route 206 North Belle Mead, New Jersey 08502 Phone Number: 908-359-8211 Fax Number: E-mail Address: jferrara@police.montgomery.nj.us | | |
| Municipal HMP Committee Members | | | | | |
| Local Jurisdiction Role/Position | Name | Email | Phone | Date Notified About Mitigation Plan Development | Agreed to participate? (Yes/No) |
| Land Use/Community Planner | Lori Savron | slsacron@twp.montgomery.nj.us | (908) 359-8211 | 9/3/2017 | Yes |
| Emergency Manager | Sean Devlin | sdevlin@police.montgomery.nj.us | (908) 359-8211 | 9/3/2017 | Yes |
| Floodplain Manager/ Floodplain Administrator | Gail Smith | gsmith@twp.montgomery.nj.us | (908) 359-8211 | 9/3/2017 | Yes |
| Public Works Director / City Engineer | Art villano | avillano@twp.montgomery.nj.us | 908-359-8211 | 9/3/2017 | Yes |
| Building Code Official | | | | | |
| Fiscal/Budget Officer | Mike Pitts | mpitts@twp.montgomery.nj.us | 908-359-8211 | 9/3/2017 | Yes |
| Manager/Administrator | Donato Nieman | dnieman@twp.montgomery.nj.us | 908-359-8211 | 9/3/2017 | Yes |
| Elected Officials | Ed Trzaska | etrzaska@twp.montgomery.nj.us | 908-359-8211 | 9/3/2017 | Yes |
| Other 1: | Jack Ferrara | jferrara@police.montgomery.nj.us | 908-359-8211 | 9/3/2017 | Yes |

9.14.2 PROFILE

9.14.2.1 Population

The population of Montgomery Township is estimated to be 22,254, based on information gathered during the 2010 U.S. Census. Census population estimates as of July 2017 indicated a total population of 23,584.

9.14.2.2 Location

Montgomery Township is the most southern municipality within Somerset County. The Millstone River runs between Montgomery Township and Franklin Township at the eastern border, Mercer County borders to the south and west, and Hillsborough lies to the north.

9.14.2.3 Brief History

Established in 1702 by Dutch and English Settlers, Montgomery Township continues to combine a unique convenience of location with the lifestyle features sought by residents and businesses. Located in the

southern portion of Somerset County – six miles from Princeton University and roughly half way between New York City and Philadelphia – the Township is a 32 square mile community interspersed with historic sites. It has an agricultural heritage that can still be seen today, although much suburbanization has occurred.

Montgomery is a thriving community with a rich history, excellent schools, diverse recreation opportunities and a collective commitment to preserving open land and protecting natural resources. The community has successfully merged rural and suburban lifestyles in a cosmopolitan region.

9.14.2.4 GOVERNING Body Format

The governing body of Montgomery Township consists of a mayor, deputy mayor, and three council members. The Township also contains departments of administration, engineering, finance, health, planning/zoning/code, public safety, public works, and recreation.

9.14.2.5 GROWTH/Development Trends

The following table summarizes major residential/commercial development and major infrastructure development that are identified for the next five (5) years in the Township.

| Potential New Development by Jurisdiction | | | | | | |
|---|----------------------------------|----------------------|--------------|---|-------------------|--|
| Property Name | Type (Residential or Commercial) | Number of Structures | Address | Block and Lot | Known Hazard Zone | Description /Status |
| Western Pest | Commercial | Not provided | Not provided | 35002/9 | Not provided | Office - Estimated year for added assessment 2018; tear down existing and build new |
| Land Rover/Jaguar | Commercial | Not provided | Not provided | 34001/60,61, 62 | Not provided | Auto Dealership - Estimated year for added assessment 2018 |
| Madison Marquette's Montgomery Promenade | Commercial | Not provided | Not provided | 34001/45,56, 57,77,78,79, 80 | Not provided | Retail - Estimated year for added assessment 2020 |
| Goddard School | Commercial | Not provided | Not provided | 28006/67 | Not provided | Day Care Facility - Estimated year for added assessment 2020 |
| The Grove at Montgomery | Commercial | Not provided | Not provided | 6001/1 | Not provided | Retail - Estimated year for added assessment 2018 |
| Montgomery Place | Commercial | Not provided | Not provided | 5023/2 and a portion of former 206 bypass reservation | Not provided | Retail - Estimated year for added assessment: 2018- CVS, operations building, and 1 retail building; 2019-2020 remainder of retail |
| Continuing Care Community | Commercial | Not provided | Not provided | portion of 4001/33& 33.01 | Not provided | Continuing Care - Estimated year for added assessment post-2019; development map proposes change in land use |

| Potential New Development by Jurisdiction | | | | | | |
|---|----------------------------------|----------------------|--------------|-------------------|-------------------|---|
| Property Name | Type (Residential or Commercial) | Number of Structures | Address | Block and Lot | Known Hazard Zone | Description /Status |
| Village Walk at Montgomery | Commercial | Not provided | Not provided | 28005/65,66,68,68 | Not provided | Retail - Estimated year for added assessment 2020; tear down existing and build new |
| Audi Service Center | Commercial | Not provided | Not provided | 34001/34 | Not provided | Automobile Service Center - Estimated year for added assessment 2020 |
| Baker Chrysler | Commercial | Not provided | Not provided | 34001/57 | Not provided | Auto Dealership - Estimated year for added assessment 2020 |
| Research Park | Commercial | Not provided | Not provided | 35001/14 | Not provided | Office - Estimated year for added assessment post-2020; project on hold |
| Land Rover/Jaguar | Commercial | Not provided | Not provided | 35002/13 | Not provided | Auto Dealership - Estimated year for added assessment post-2020; project on hold |

The Township will enforce its flood-plain management ordinance and other local ordinances and regulations to protect new development and substantial improvements in the floodplain.

9.14.3 NATURAL HAZARD EVENT HISTORY SINCE 2014

Somerset County has a history of natural hazard events as detailed in Section 5.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The table below presents a summary of events that have occurred from since the 2014 HMP to indicate the range and impact of natural hazard events in the community. Information regarding specific damages is included if available based on reference material or local sources. For details of events prior to 2014, refer to Section 5.0 of this plan.

| Natural Hazard Event History (2014 to present) | | | | |
|--|---------------------------------|--------------------|-------------------------------|---|
| Type of Event | FEMA Disaster # (if applicable) | County Designated? | Date | Approximate Damage Assessment |
| Cold/Wind Chill | N/A | N/A | January 4, 2014 | No local damage reported |
| Strong Wind | N/A | N/A | January 6, 2014 | No local damage reported |
| Flood | N/A | N/A | January 6, 2014 | No local damage reported |
| Cold/Wind Chill | N/A | N/A | January 7, 2014 | No local damage reported |
| Cold/Wind Chill | N/A | N/A | January 22, 2014 | No local damage reported |
| Winter Storm | N/A | N/A | February 12, 2014 | No local damage reported |
| Flood | N/A | N/A | February 22, 2014 | No local damage reported |
| Strong Wind | N/A | N/A | March 12, 2014 | No local damage reported |
| Flood | N/A | N/A | March 30, 2014 | The runoff from waves of heavy precipitation caused minor to moderate flooding along the Millstone River that lasted through the night of the 31st and into the late afternoon of April 1st. The flooding forced the closure of sections of Millstone River Road in Montgomery Township. Event precipitation totals included 2.99 inches in Montgomery. |
| Flood | N/A | N/A | April 1, 2014 | The runoff from waves of heavy precipitation caused minor to moderate flooding along the Millstone River that lasted through the night of the 31st and into the late afternoon of April 1st. The flooding forced the closure of sections of Millstone River Road in Montgomery Township. Event precipitation totals included 2.99 inches in Montgomery. |
| Thunderstorm Wind | N/A | N/A | April 15, 2014 | No local damage reported |
| Flood | N/A | N/A | April 15, 2014 | No local damage reported |
| Flood | N/A | N/A | April 30, 2014 to May 1, 2014 | Very heavy rain caused considerable poor drainage flooding in Somerset County as well as major river flooding. Event precipitation totals included 4.52 inches in Montgomery Township. Two million dollars in damages were reported countywide. |
| Thunderstorm Wind | N/A | N/A | May 10, 2014 | No local damage reported |
| Earthquake, Magnitude 1.9, 6 km N of Boonton (Montville Twp) | N/A | N/A | May 31, 2014 | No local damage reported |

| Natural Hazard Event History (2014 to present) | | | | |
|---|---------------------------------|--------------------|-------------------|---|
| Type of Event | FEMA Disaster # (if applicable) | County Designated? | Date | Approximate Damage Assessment |
| Earthquake, Magnitude 1.0, 13 km SW of Ramblewood, NJ (Laurel Springs Boro) | N/A | N/A | June 19, 2014 | No local damage reported |
| Thunderstorm Wind | N/A | N/A | July 2, 2014 | No local damage reported |
| Heat | N/A | N/A | July 2, 2014 | No local damage reported |
| Thunderstorm Wind | N/A | N/A | July 3, 2014 | No local damage reported |
| Flash Flood | N/A | N/A | July 3, 2014 | Thunderstorms with very heavy rain caused flash flooding of roadways and smaller streams in central Somerset County. Event precipitation totals included 2.35 inches in Montgomery Township. |
| Thunderstorm Wind | N/A | N/A | July 8, 2014 | No local damage reported |
| Earthquake, Magnitude 1.6, 3 km W of Jersey City, NJ (Kearny Town) | N/A | N/A | July 8, 2014 | No local damage reported |
| Flood | N/A | N/A | July 16, 2014 | No local damage reported |
| Earthquake, Magnitude 1.2, 4 km SW of Ringwood, NJ (Ringwood Boro) | N/A | N/A | July 28, 2014 | No local damage reported |
| Flash Flood | N/A | N/A | August 21, 2014 | No local damage reported |
| Earthquake, Magnitude 1.3, 2 km S of Park Ridge, NJ (Woodcliff Lake Boro) | N/A | N/A | September 3, 2014 | No local damage reported |
| Flood | N/A | N/A | December 9, 2014 | The runoff from heavy rain, especially in the headwater region of the Millstone River caused minor flooding along the Millstone River at nearby Griggstown where the river crested at 11.76 feet. Event precipitation totals included 1.40 inches in Montgomery Township. |
| Earthquake, Magnitude 1.9, 13 km SE of Twin Rivers, NJ (Millstone Twp) | N/A | N/A | December 13, 2014 | No local damage reported |
| Earthquake, Magnitude 1.5, 2 km SW of Clifton, NJ (Bloomfield Twp) | N/A | N/A | December 28, 2014 | No local damage reported |
| Cold/Wind Chill | N/A | N/A | January 7, 2015 | No local damage reported |
| Flood | N/A | N/A | January 18, 2015 | Heavy rain caused poor drainage flooding as well as flooding along waterways in Somerset County. The Millstone River at nearby Griggstown had moderate flooding and crested at 12.91 feet. Event precipitation totals included 1.92 inches in Montgomery Township. |
| Strong Wind | N/A | N/A | February 2, 2015 | No local damage reported |
| Cold/Wind Chill | N/A | N/A | February 13, 2015 | No local damage reported |

| Natural Hazard Event History (2014 to present) | | | | |
|---|---------------------------------|--------------------|-----------------------------|---|
| Type of Event | FEMA Disaster # (if applicable) | County Designated? | Date | Approximate Damage Assessment |
| Strong Wind | N/A | N/A | February 15, 2015 | No local damage reported |
| Cold/Wind Chill | N/A | N/A | February 15, 2015 | No local damage reported |
| Cold/Wind Chill | N/A | N/A | February 16, 2015 | No local damage reported |
| Cold/Wind Chill | N/A | N/A | February 20, 2015 | No local damage reported |
| Cold/Wind Chill | N/A | N/A | February 24, 2015 | No local damage reported |
| Flood | N/A | N/A | March 11, 2015 | The combination of rain and snowmelt caused moderate flooding along the Millstone River from the morning of the 11th through the afternoon of the 13th. At nearby Griggstown, the Millstone crested at 12.45 feet. Event precipitation totals included 0.34 inches in Montgomery Township. |
| Flood | N/A | N/A | March 14, 2015 | Runoff from additional rainfall combined with snowmelt caused minor flooding along the Millstone River from the afternoon of the 14th through the morning of the 16th. Minor flooding occurred along the Millstone River at nearby Griggstown, which crested at 11.80 feet. Event precipitation totals included 0.93 inches in Montgomery Township. |
| Earthquake, Magnitude 1.2, 2 km SW of Clifton, NJ (Bloomfield Twp) | N/A | N/A | March 27, 2015 | No local damage reported |
| Strong Wind | N/A | N/A | April 4, 2015 | No local damage reported |
| Flash Flood | N/A | N/A | May 31, 2015 | No local damage reported |
| Earthquake, Magnitude 1.2, 2 km N of Wanaque, NJ (Ringwood Boro) | N/A | N/A | July 12, 2015 | No local damage reported |
| Heat | N/A | N/A | July 19, 2015 | No local damage reported |
| Earthquake, Magnitude 2.7, 3.5 km N of Bernardsville, NJ (Bernardsville Boro) | N/A | N/A | August 14, 2015 | No local damage reported |
| Flash Flood | N/A | N/A | August 19, 2015 | No local damage reported |
| Flood | N/A | N/A | August 19, 2015 | No local damage reported |
| Earthquake, Magnitude 1.4, 5 km WNW of Fairfield, NJ (Fairfield Twp) | N/A | N/A | August 22, 2015 | No local damage reported |
| Drought and Excessive Heat | N/A | N/A | April 2015 – September 2015 | No local damage reported |
| Combined effects of freeze, excessive heat, and drought | N/A | N/A | April 2016 – September 2016 | No local damage reported |
| Earthquake, Magnitude 2.1, 2.4 km NW of Ringwood, NJ (Ringwood Boro) | N/A | N/A | January 2, 2016 | No local damage reported |

| Natural Hazard Event History (2014 to present) | | | | |
|--|---------------------------------|--------------------|---------------------|--|
| Type of Event | FEMA Disaster # (if applicable) | County Designated? | Date | Approximate Damage Assessment |
| Severe Winter Storm and Snowstorm (Blizzard) | DR-4264 | Yes | January 22-24, 2016 | No local damage reported |
| Earthquake, Magnitude 1.1, 1.1 km NW of Butler, NJ (Bloomingdale Boro) | N/A | N/A | February 19, 2016 | No local damage reported |
| Flash Flood | N/A | N/A | February 24, 2016 | No local damage reported |
| Thunderstorm Wind | N/A | N/A | April 2, 2016 | No local damage reported |
| Earthquake, Magnitude 0.8, 4.4 km N of Butler, NJ (Bloomingdale Boro) | N/A | N/A | May 27, 2016 | No local damage reported |
| Lightning | N/A | N/A | June 8, 2016 | No local damage reported |
| Thunderstorm Wind | N/A | N/A | June 8, 2016 | No local damage reported |
| Lightning | N/A | N/A | June 28, 2016 | No local damage reported |
| Thunderstorm Wind | N/A | N/A | June 28, 2016 | No local damage reported |
| Earthquake, Magnitude 1.1, 1 km NW of Butler, NJ (Butler Boro) | N/A | N/A | July 4, 2016 | No local damage reported |
| Heavy Rain | N/A | N/A | July 8, 2016 | No local damage reported |
| Flood | N/A | N/A | July 8, 2016 | No local damage reported |
| Thunderstorm Wind | N/A | N/A | July 18, 2016 | No local damage reported |
| Thunderstorm Wind | N/A | N/A | July 25, 2016 | No local damage reported |
| Thunderstorm Wind | N/A | N/A | July 25, 2016 | No local damage reported |
| Thunderstorm Wind | N/A | N/A | July 25, 2016 | No local damage reported |
| Flood | N/A | N/A | July 25, 2016 | No local damage reported |
| Heavy Rain | N/A | N/A | July 30, 2016 | No local damage reported |
| Heavy Rain | N/A | N/A | July 31, 2016 | No local damage reported |
| Heavy Rain | N/A | N/A | July 31, 2016 | No local damage reported |
| Heavy Rain | N/A | N/A | July 31, 2016 | Stationary clusters of thunderstorms in the central part of the state caused heavy rain, severe flash flooding, and power outages. Heavy rain was reported in Belle Mead (in Montgomery Township). |
| Heavy Rain | N/A | N/A | July 31, 2016 | No local damage reported |
| Heavy Rain | N/A | N/A | July 31, 2016 | No local damage reported |
| Heavy Rain | N/A | N/A | July 31, 2016 | No local damage reported |
| Flash Flood | N/A | N/A | July 31, 2016 | No local damage reported |
| Earthquake, Magnitude 0.8, 2.2 km SW of Clifton, NJ (Bloomfield Twp) | N/A | N/A | July 31, 2016 | No local damage reported |
| Earthquake, Magnitude 1.0, 2 km N of Wanaque, NJ (Wanaque Boro) | N/A | N/A | August 9, 2016 | No local damage reported |

| Natural Hazard Event History (2014 to present) | | | | |
|---|---------------------------------|--------------------|--------------------|---|
| Type of Event | FEMA Disaster # (if applicable) | County Designated? | Date | Approximate Damage Assessment |
| Earthquake, Magnitude 0.5, 1 km N of Butler, NJ (Bloomingdale Boro) | N/A | N/A | August 9, 2016 | No local damage reported |
| Earthquake, Magnitude 0.6, 5 km NE of Wanaque, NJ (Ringwood Boro) | N/A | N/A | September 20, 2016 | No local damage reported |
| Earthquake, Magnitude 1.5, 2.6 km W of Bellmar, NJ (Westville Boro) | N/A | N/A | November 6, 2016 | No local damage reported |
| Earthquake, Magnitude 2.0, 16.3 km E of Highlands, NJ (Middletown Twp) | N/A | N/A | November 6, 2016 | No local damage reported |
| Earthquake, Magnitude 1.31, 1.4 km S Morris Plains, NJ (Morris Plains Boro) | N/A | N/A | March 25, 2017 | No local damage reported |
| Flood | N/A | N/A | March 31, 2017 | No local damage reported |
| Hail | N/A | N/A | May 14, 2017 | No local damage reported |
| Hail | N/A | N/A | May 31, 2017 | No local damage reported |
| Flood | N/A | N/A | June 24, 2017 | No local damage reported |
| Flood | N/A | N/A | July 22, 2017 | No local damage reported |
| Flood | N/A | N/A | August 22, 2017 | Severe thunderstorms caused minor street flooding in Belle Mead (in Montgomery Township). |
| Flood | N/A | N/A | August 22, 2017 | No local damage reported |
| Heavy Rain | N/A | N/A | August 23, 2017 | Severe thunderstorms formed ahead of a cold front. Almost two and half inches of rain fell in Belle Mead (in Montgomery Township). |
| Earthquake, Magnitude 1.71, 3.7 km SW of Morris Plains, NJ (Morris Twp) | N/A | N/A | September 25, 2017 | No local damage reported |
| Earthquake, Magnitude 0.98, 2.7 km SW of Morris Plains, NJ (Morris Twp) | N/A | N/A | September 30, 2017 | No local damage reported |
| Flood | N/A | N/A | October 29, 2017 | No local damage reported |
| Earthquake, Magnitude 1.38, 3.5 km NW of Keansburg, NJ (Keansburg Boro) | N/A | N/A | November 8, 2017 | No local damage reported |
| Severe Winter Storm and Snowstorm (Blizzard) | DR-4368 | Yes | March 6, 2018 | Although all portions of the county experienced significant snowfall from this event, the higher amounts (around one and one half feet) occurred in the eastern sections of the county closer to the off shore low pressure system. Thundersnow also occurred in a few locations. |

| Natural Hazard Event History (2014 to present) | | | | |
|---|---------------------------------|--------------------|-------------------------------|---|
| Type of Event | FEMA Disaster # (if applicable) | County Designated? | Date | Approximate Damage Assessment |
| Cold/Wind-Chill | N/A | N/A | January 4, 2014 | No local damage reported |
| Strong Wind | N/A | N/A | January 6, 2014 | No local damage reported |
| Flood | N/A | N/A | January 6, 2014 | No local damage reported |
| Cold/Wind-Chill | N/A | N/A | January 7, 2014 | No local damage reported |
| Cold/Wind-Chill | N/A | N/A | January 22, 2014 | No local damage reported |
| Winter Storm | N/A | N/A | February 12, 2014 | No local damage reported |
| Flood | N/A | N/A | February 22, 2014 | No local damage reported |
| Strong Wind | N/A | N/A | March 12, 2014 | No local damage reported |
| Flood | N/A | N/A | March 30, 2014 | The runoff from waves of heavy precipitation caused minor to moderate flooding along the Millstone River that lasted through the night of the 31st and into the late afternoon of April 1st. The flooding forced the closure of sections of Millstone River Road in Montgomery Township. Event precipitation totals included 2.99 inches in Montgomery. |
| Flood | N/A | N/A | April 1, 2014 | The runoff from waves of heavy precipitation caused minor to moderate flooding along the Millstone River that lasted through the night of the 31st and into the late afternoon of April 1st. The flooding forced the closure of sections of Millstone River Road in Montgomery Township. Event precipitation totals included 2.99 inches in Montgomery. |
| Thunderstorm Wind | N/A | N/A | April 15, 2014 | No local damage reported |
| Flood | N/A | N/A | April 15, 2014 | No local damage reported |
| Flood | N/A | N/A | April 30, 2014 to May 1, 2014 | Very heavy rain caused considerable poor drainage flooding in Somerset County as well as major river flooding. Event precipitation totals included 4.52 inches in Montgomery Township. Two million dollars in damages were reported countywide. |
| Thunderstorm Wind | N/A | N/A | May 10, 2014 | No local damage reported |
| Earthquake, Magnitude 1.9, 6 km N of Boonton (Montville Twp) | N/A | N/A | May 31, 2014 | No local damage reported |
| Earthquake, Magnitude 1.0, 13 km SW of Ramblewood, NJ (Laurel Springs Boro) | N/A | N/A | June 19, 2014 | No local damage reported |
| Thunderstorm Wind | N/A | N/A | July 2, 2014 | No local damage reported |
| Heat | N/A | N/A | July 2, 2014 | No local damage reported |
| Thunderstorm Wind | N/A | N/A | July 3, 2014 | No local damage reported |

Note:

DR = Major Disaster Declaration

EM = Emergency Declaration

N/A = Not applicable

9.14.4 NATURAL HAZARD RISK/VULNERABILITY RISK RANKING

The table below summarizes the vulnerability risk rankings of potential hazards of the Township of Montgomery (updated in 2018).

| Natural Hazard Risk/Vulnerability Risk Ranking | | | | |
|--|--|---------------------------|---|-----------------------------|
| Hazard type | Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard ^{a, c} | Probability of Occurrence | Risk Ranking Score (Probability x Impact) | Hazard Ranking ^b |
| Flood | 1% Annual Chance: \$29,600,000 0.2% Annual Chance: \$55,200,000 | Frequent | 18 | Medium |
| Severe Storm | 100-Year MRP: \$4,206,986 500-Year MRP: \$16,039,959 Annualized Loss: \$147,605 | Frequent | 39 | High |
| Severe Winter Storm | 1% of GBS: \$33,090,790 5% of GBS: \$165,453,950 | Frequent | 27 | Medium |
| Earthquake | 500-Year MRP: \$4,871,940 2,500-Year MRP: \$73,212,214 Annualized Loss: \$74,422 | Occasional | 12 | Low |
| Drought | Not available | Occasional | 20 | Medium |
| Extreme Temperature | Not available | Frequent | 18 | Medium |
| Wildfire | Not available | Occasional | 32 | High |

Note

- Building damage ratio estimates based on FEMA 386-2 (August 2001)
- The valuation of general building stock and loss estimates was based on custom inventory for Somerset County.
- High = Total hazard priority risk ranking score of 31 and above
Medium = Total hazard priority risk ranking of 15-30
Low = Total hazard risk ranking below 15
- Loss estimates for the severe storm and severe winter storm hazards are structural values only and do not include the value of contents.
- Loss estimates for the flood and earthquake hazards represent both structure and contents.
- The HAZUS-MH earthquake model results are reported by Census Tract.

9.14.5 CAPABILITY ASSESSMENT

This section describes the following capabilities of the local jurisdiction:

- Legal and regulatory capability;
- Administrative and technical capability;
- Fiscal capability;
- Community resiliency;
- Community political capability; and
- Community classification.

9.14.5.1 Legal and Regulatory Capability

The table below summarizes the regulatory tools that are available to the Township of Montgomery. The Township reviewed its responses from the 2014 HMP and has indicated that all prior feedback is still applicable.

| Legal and Regulatory Capability | | | |
|--|----------------------------------|--|--|
| Regulatory Tools (Codes, Ordinances, Plans) | Do you have this? (Y or N) | Enforcement Authority | Code Citation (Section, Paragraph, Page Number, Date of Adoption) |
| 1) Building Code | Y | Township Engineer & Construction Official | Township of Montgomery Code Chapter 16 International Building Code – New Jersey Edition, NJAC 5:24-3.14; 2/20/07 |
| 2) Zoning Ordinance | Y | Township Planner | Township of Montgomery Code Chapter 16 |
| 3) Subdivision Ordinance | Y | Township Planner | Township of Montgomery Code Chapter 16 |
| 4) NFIP Flood Damage Prevention Ordinance | Y | - | Township of Montgomery Code Chapter 16; Flood Damage Prevention Ordinance; 9/20/07 |
| 4a) Cumulative Substantial Damages | - | - | - |
| 4b) Freeboard | - | - | - |
| 5) Growth Management | Y | Township Planner | Township of Montgomery Code Chapter 16 |
| 6) Floodplain Management / Basin Plan | Y | Township Engineer & Planner | Township of Montgomery Code Chapter 16 |
| 7) Stormwater Management Plan/Ordinance | Y | Township Engineer & Planner | Municipal Stormwater Management Plan; 8/10/05 |
| 8) Comprehensive Plan / Master Plan/ General Plan | Y | Township Planner | Township of Montgomery Code Chapter 16 & Twp. Master Plan |
| 9) Capital Improvements Plan | Y | | 40.4 NJ State Statute |
| 10) Site Plan Review Requirements | Y | Township Engineer & Planner | Township of Montgomery Code Chapter 16 |
| 11) Open Space Plan | Y | Township Planner | Township of Montgomery Code |

| Legal and Regulatory Capability | | | |
|--|----------------------------------|--------------------------|---|
| Regulatory Tools (Codes, Ordinances, Plans) | Do you have this? (Y or N) | Enforcement Authority | Code Citation (Section, Paragraph, Page Number, Date of Adoption) |
| 12) Stream Corridor Management Plan | N | | |
| 13) Watershed Management or Protection Plan | N | - | - |
| 14) Economic Development Plan | Y | Township Planner | Township of Montgomery Code Chapter 2; 7/21/2005 |
| 15) Comprehensive Emergency Management Plan | Y | OEM | Township of Montgomery Code |
| 16) Emergency Response Plan | Y | OEM | Township of Montgomery Code Chapter 2; 7/21/2005 |
| 17) Post-Disaster Recovery Plan | Y | OEM | OEM plan |
| 18) Post-Disaster Recovery Ordinance | N | - | - |
| 19) Real Estate Disclosure Requirement | N | - | - |
| 20) Other (Special Purpose Ordinances such as critical or sensitive areas) | Y | - | N.J.S.A. 45:15-16.41(a) |

9.14.5.2 Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to Montgomery. The Township reviewed its responses from the 2014 HMP and has indicated that all prior feedback is still applicable.

| Administrative and Technical Capability | | |
|--|--------------------|---|
| Staff / Personnel Resources | Available (Y or N) | Department / Agency / Position |
| 1) Planner(s) or Engineer(s) with knowledge of land development and land management practices | Y | Township Engineer & Planner |
| 2) Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure | Y | Township Engineer & Construction Official |
| 3) Planners or engineers with an understanding of natural hazards | Y | Township Engineer & Planner |
| 4) NFIP Floodplain Administrator | Y | Gail Smith, Township Engineer |
| 5) Surveyor(s) | Y | Township Engineering Aides |
| 6) Personnel skilled or trained in GIS applications | Y | GIS Department |
| 7) Scientist familiar with natural hazards | N | |
| 8) Emergency Manager | Y | Township OEM Coordinator & Deputy OEM Coordinator |
| 9) Grant Writer(s) | Y | Township Planner |
| 10) Staff with expertise or training in benefit/cost analysis | Y | - |

9.14.5.3 Fiscal Capability

The table below summarizes financial resources available to Montgomery Township. The Township reviewed its responses from the 2014 HMP and has indicated that all prior feedback is still applicable.

| Fiscal Capability | |
|--|--|
| Financial Resources | Accessible or Eligible to use (Yes/No/Don't know) |
| 1) Community Development Block Grants (CDBG) | Y |
| 2) Capital Improvements Project Funding | Y |
| 3) Authority to levy taxes for specific purposes | Y |
| 4) User fees for water, sewer, gas or electric service | Y |
| 5) Impact fees for homebuyers or developers of new development/homes | N |
| 6) Incur debt through general obligation bonds | Y |
| 7) Incur debt through special tax bonds | Y |
| 8) Incur debt through private activity bonds | N |
| 9) Withhold public expenditures in hazard-prone areas | N |
| 10) State mitigation grant programs | Y |
| 11) Other | - |

9.14.5.4 Overall Capabilities

The Township of Montgomery's 2018 assessment of its overall capabilities to implement hazard mitigation strategies in each of the above categories, in addition to ~~its their local~~ assessment of how these capabilities could be expanded and/or improved to reduce risk, is presented in the table below.

| Overall legal and regulatory capability to implement hazard mitigation strategies | Overall technical capability to implement hazard mitigation strategies | Overall fiscal capability to implement hazard mitigation strategies | Overall administrative capability to implement hazard mitigation strategies | Community's willingness to enact policies and programs that reduce hazard vulnerabilities |
|---|--|---|---|---|
| High | High | High | High | High |
| How these capabilities can be expand and/or improved to reduce risk | | | | |
| Increase staff and funding resources. | | | | |

9.14.5.5 Community Classifications

The table below summarizes classifications for community programs available to Montgomery. The Township reviewed its responses from the 2014 HMP and has indicated that all prior feedback is still applicable.

| Community Classifications | | |
|--|----------------|-----------------|
| Program | Classification | Date Classified |
| Community Rating System (CRS) | NP | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | NP | - |
| Public Protection | NP | - |
| Storm Ready | NP | - |
| Firewise | NP | - |

Notes:

- = Unavailable

N/A = Not applicable

NP = Not participating

* CRS Ranking as of October 2017

The classifications listed above relate to the Township's ability to provide effective services to lessen its vulnerability to the natural hazards identified. These classifications can be viewed as a gauge of the community's capabilities in all phases of emergency management (preparedness, response, recovery and mitigation) and are used as an underwriting parameter for determining the costs of various forms of insurance. The CRS Class applies to flood insurance, while the BCEGS and Public Protection classifications apply to standard property insurance. CRS classifications range on a scale of 1 to 10 with Class 1 being the best possible classification, and Class 10 representing no classification benefit. Firewise classifications include a higher classification when the subject property is located beyond 1,000 feet of a creditable fire hydrant and is within 5 road miles of a recognized fire station.

Criteria for classification credits are outlined in the following documents:

- The Community Rating System Coordinators Manual
- The Building Code Effectiveness Grading Schedule
- The ISO Mitigation online ISO's Public Protection website at <http://www.isomitigation.com/ppc/0000/ppc0001.html>
- The National Weather Service Storm Ready website at <http://www.weather.gov/stormready/howto.htm>
- The National Firewise Communities website at <http://firewise.org/>

9.14.6 MITIGATION STRATEGY

This section discusses past mitigations actions and status, identifies hazard vulnerabilities, and describes proposed hazard mitigation initiatives.

9.14.6.1 Past Mitigation Actions/Status

The status of all 2014 HMP initiatives was evaluated by the Township of Montgomery in 2018 and is presented in the following table. The community has indicated that local priorities have not changed since the last version of the plan.

| 2014 HMP Initiative # | Mitigation Initiative Description | 2014 HMP Priority | Hazard(s) Mitigated | Lead and Support Agencies | Status | | | | Status Details | Relevance | | Relevance Details |
|-----------------------|---|-------------------|---------------------|--|-----------|-----------------------------|--------------------------|---------------|---|---|--|---|
| | | | | | Completed | Initiated but Not Completed | Ongoing Type of Activity | Not Initiated | | Still Relevant - Carry Forward to Updated Mitigation Strategy | No Longer Relevant - Omit from Updated Mitigation Strategy | |
| MG1 | Private Property Flood Mitigation: Conduct a study to identify potential. | High | Flood | Township Engineer; Traffic Police, DPW | X | | | | | | X | Study completed. Limited signage at key areas of concern |
| MG2 | Install FMP-proposed Electronic Warning Signage. | High | Flood | Township Engineer; Traffic Police, DPW | | X | | | Signage location as to prevent traffic from traveling into other flooded areas. Budget issues | X | | No changes from 2009 Plan |
| MG3 | Work with State of New Jersey to Enhance Route 206 as flood evacuation route. | High | Flood | OEM Coordinator | | | | X | New bridge is being constructed | X | | New bridge being constructed Rt. 206 at the Crusier Brook |
| MG4 | Revision of Flood Damage Prevention Ordinance to incorporate recommended changes in FMP Appendix and to give the Township for first option in the purchase of flood damaged property. | High | Flood | Township Engineer; Township Attorney | | X | | | Township Engineer consulting with Township Attorney to review the matter. | X | | No changes from 2009 Plan |
| MG5 | Identify the Bedens Brook Corridor as a "Potential Future Greenway" in the Township Master Plan Conservation Plan to encourage future open space acquisition in flood-prone areas. | High | Flood | Planning Director and Open Space Coordinator | X | | | | | | X | Project completed. |

| 2014 HMP Initiative # | Mitigation Initiative Description | 2014 HMP Priority | Hazard(s) Mitigated | Lead and Support Agencies | Status | | | | Status Details | Relevance | | Relevance Details |
|-----------------------|--|-------------------|---------------------|--|-----------|-----------------------------|--------------------------|---------------|--|---|--|----------------------------|
| | | | | | Completed | Initiated but Not Completed | Ongoing Type of Activity | Not Initiated | | Still Relevant - Carry Forward to Updated Mitigation Strategy | No Longer Relevant - Omit from Updated Mitigation Strategy | |
| MG6 | Identify and train responsible local officials for implementation of Flood Damage Prevention ordinance. | High | Flood | Construction Official | X | | | | | | X | Project completed. |
| MG7 | Identify and incorporate the FEMA Flood Insurance Study Flood Zone boundaries (and future amendments) as an overlay zone in the Township Zoning ordinance. | High | Flood | Township Engineer; Planning Director | X | | | | Activity in the Flood Zone and Stream Corridor is regulated. | | X | Project completed. |
| MG8 | Incorporate Disaster Mitigation Planning in Master Plan. | High | All | Planning Director | | X | | | Staffing availability needed to complete. | X | | No changes from 2009 Plan. |
| MG9 | Request that the State place Montgomery Township on its priority list for redevelopment of the hydrology and hydraulics (so as to reflect current conditions) so as to update the Township Flood Insurance Study | Medium | Flood | Township Engineer | | | | X | Staffing to address the matter. | X | | No change from prior Plan. |
| MG10 | Identification of funding sources for private property flood mitigation | High | Na | OEM Coordinator; Grants Coordinator; Planning Director | | | | X | Staffing needed to address the matter. | X | | No change from prior Plan. |

| 2014 HMP Initiative # | Mitigation Initiative Description | 2014 HMP Priority | Hazard(s) Mitigated | Lead and Support Agencies | Status | | | | Status Details | Relevance | | Relevance Details |
|-----------------------|--|-------------------|---------------------|---------------------------------------|-----------|-----------------------------|--------------------------|---------------|---|---|--|-----------------------------|
| | | | | | Completed | Initiated but Not Completed | Ongoing Type of Activity | Not Initiated | | Still Relevant - Carry Forward to Updated Mitigation Strategy | No Longer Relevant - Omit from Updated Mitigation Strategy | |
| MG11 | Conduct a property owner survey for private property flood mitigation | Medium | Na | Public Information Officer | | | | X | Staffing needed to address the matter. | X | | No change from prior Plan. |
| MG12 | Implement private property flood mitigation measures | High | Flood | Township Administrator | | | | X | Lack of residences affected. | | X | No interest in completing. |
| MG13 | Develop Property Owner Information Sheet for streambank erosion. | High | Flood | Township Engineer | | | | X | Limited resources (staff, time, funding); required focus on higher priority initiatives during the last plan maintenance cycle. | X | | No changes from prior Plan. |
| MG14 | Identify emergency funding sources for Flood events and incorporate into Township Emergency Response Plan. | High | All | OEM Coordinator Grants Coordinator | | | | X | Limited resources (staff, time, funding); required focus on higher priority initiatives during the last plan maintenance cycle. | X | | No changes from prior Plan. |
| MG15 | Apply for NJOEM funding to implement various facets of the Township FMP. | High | All | OEM Coordinator | | | | X | Limited resources (staff, time, funding); required focus on higher priority initiatives during the last plan maintenance cycle. | X | | No changes from prior Plan. |

| 2014 HMP Initiative # | Mitigation Initiative Description | 2014 HMP Priority | Hazard(s) Mitigated | Lead and Support Agencies | Status | | | | Status Details | Relevance | | Relevance Details |
|-----------------------|---|-------------------|---------------------|--|-----------|-----------------------------|--------------------------|---------------|---|---|--|--|
| | | | | | Completed | Initiated but Not Completed | Ongoing Type of Activity | Not Initiated | | Still Relevant - Carry Forward to Updated Mitigation Strategy | No Longer Relevant - Omit from Updated Mitigation Strategy | |
| MG16 | Pursue funding sources to educate public about flood hazards. | High | All | Grants Coordinator | | | | X | Staffing to address the matter. | | X | No interest in completing. |
| MG17 (MG2) | Coordinate annual follow-up for FMA plan. | High | Flood | Township Engineer | X | | | | | | X | Project Completed |
| MG18 (MG4) | Where appropriate, support retrofitting and/or purchasing structures located in hazard prone areas, including but not limited to the elevation the Stage II treatment plant on County Route 605, which is in need of flood proofing. The plant was severely damaged from Hurricane Irene. The buildings and equipment need to be elevated, relocated or retrofitted to prevent future damage. | High | Floods | TWP; Township Engineering, DPW, Emergency Management | | X | | | Have begun Engineering design for a Flood Wall at Stage II Sewer Treatment Plant. | X | | No changes from prior Plan. |
| MG19 (MG5) | Provide backup power as part of retrofits at vital critical facilities, including the Police, OEM, and Municipal government building, at the municipal complex. | High | All | Township Office Emergency Management | | | | X | Backup power will be provided at new Municipal Building. | | X | New Municipal Complex to be constructed. |

| 2014 HMP Initiative # | Mitigation Initiative Description | 2014 HMP Priority | Hazard(s) Mitigated | Lead and Support Agencies | Status | | | | Status Details | Relevance | | Relevance Details |
|-----------------------|---|-------------------|---------------------|--|-----------|-----------------------------|--------------------------|---------------|---|---|--|--|
| | | | | | Completed | Initiated but Not Completed | Ongoing Type of Activity | Not Initiated | | Still Relevant - Carry Forward to Updated Mitigation Strategy | No Longer Relevant - Omit from Updated Mitigation Strategy | |
| MG20 (MG8) | Endeavor to lower CRS Classification by pursuing CRS credit-eligible activities. | High | Flooding | TWP Administrator/ Floodplain Manager | | | | X | Joining CRS was investigated and determined to be Not cost effective for the three to five thousand dollar savings for only 29 policy holders (2016). | | X | Study Completed |
| MG21 | Conduct and facilitate community and public education and outreach for residents and businesses to include, but not be limited to, the following to promote and effect natural hazard risk reduction: Provide and maintain links to the HMP website, and regularly post notices on the County/municipal homepage(s) referencing the HMP webpages. Prepare and distribute informational letters to flood vulnerable property owners and neighborhood associations, explaining the availability of mitigation grant funding to mitigate their properties, and instructing them on how they can learn more and implement mitigation. Use email notification systems and newsletters to better educate the public on flood insurance, the availability of mitigation grant funding, and personal natural hazard risk reduction measures. Work with neighborhood associations, civic and business groups to disseminate information on flood insurance and the availability of mitigation grant funding. | High | All Hazards | Municipality with support from Planning Partners, County Planning, NJOEM, FEMA | | X | | | Staffing restrictions | X | | E-mail and newsletters have been used to educate the public. |

| 2014 HMP Initiative # | Mitigation Initiative Description | 2014 HMP Priority | Hazard(s) Mitigated | Lead and Support Agencies | Status | | | | Status Details | Relevance | | Relevance Details |
|-----------------------|---|-------------------|---------------------|---|-----------|-----------------------------|--------------------------|---------------|---|---|--|----------------------------|
| | | | | | Completed | Initiated but Not Completed | Ongoing Type of Activity | Not Initiated | | Still Relevant - Carry Forward to Updated Mitigation Strategy | No Longer Relevant - Omit from Updated Mitigation Strategy | |
| MG22 | Incorporate ordinances and/or zoning restrictions to control and mitigate future development in hazard areas, specifically as identified in Section 9.14.11. | Medium | All Hazards | Municipality with support from County, NJOEM and FEMA | X | | | | | | X | Project Completed |
| MG23 | Improve communication systems. | Medium | All Hazards | Municipality with support from County, NJOEM and FEMA | X | | | | | | X | Project Completed |
| MG24 | Develop programs/procedures to capture and archive loss data from events. Examples include: Record location and length of roadway closures; Develop a database of residential and commercial property damage, including permit history for such repairs; High water marks, perhaps painting phone poles with high water marks and or regulatory Base Flood Elevations (BFEs). | Medium | All Hazards | Municipality with support from County, NJOEM and FEMA | | X | | | High water markers in place along roadways. Limited resources (staff, time, funding). | X | | No changes from prior Plan |

| 2014 HMP Initiative # | Mitigation Initiative Description | 2014 HMP Priority | Hazard(s) Mitigated | Lead and Support Agencies | Status | | | | Status Details | Relevance | | Relevance Details |
|-----------------------|---|-------------------|---------------------|------------------------------------|-----------|-----------------------------|--------------------------|---------------|-----------------------------|---|--|-------------------|
| | | | | | Completed | Initiated but Not Completed | Ongoing Type of Activity | Not Initiated | | Still Relevant - Carry Forward to Updated Mitigation Strategy | No Longer Relevant - Omit from Updated Mitigation Strategy | |
| MG25 | Participate in local, county and/or state level projects and programs to develop improved structure and facility inventories and hazard datasets to support enhanced risk assessment efforts. Such programs may include developing a detailed inventory of critical facilities based upon FEMA's Comprehensive Data Management System (CDMS) which could be used for various planning and emergency management purposes including: Support the performance of enhanced risk and vulnerability assessments for hazards of concern. Support state, county and local planning efforts including mitigation (including updates to the State HMP), comprehensive emergency management, debris management, and land use. Improved structural and facility inventories could incorporate flood, wind and seismic-specific parameters (e.g. first floor elevations, roof types, structure types based on FEMA-154 "Rapid Visual Screening of Buildings for Potential Seismic Hazards" methodologies). It is recognized that these programs will need to be initiated and supported at the County and/or State level, and will require training, tools and funding provided at the county, state and/or federal level. | Medium | All Hazards | Hazard Mitigation Plan Coordinator | | | | X | Staffing resources limited. | X | No changes from prior Plan. | |

| 2014 HMP Initiative # | Mitigation Initiative Description | 2014 HMP Priority | Hazard(s) Mitigated | Lead and Support Agencies | Status | | | | Status Details | Relevance | | Relevance Details |
|-----------------------|--|-------------------|---------------------|--|-----------|-----------------------------|--------------------------|---------------|-----------------------------|---|--|-----------------------------|
| | | | | | Completed | Initiated but Not Completed | Ongoing Type of Activity | Not Initiated | | Still Relevant - Carry Forward to Updated Mitigation Strategy | No Longer Relevant - Omit from Updated Mitigation Strategy | |
| MG26 | Support ongoing updates of Comprehensive Emergency Management Plan, including participation in the Quadrennial rewrite of township Emergency Operations Plan. | High | All Hazards | Municipality with support from County Emergency Management | | X | | | Staffing limitations. | X | | No changes from prior Plan. |
| MG27 | Create/Enhance/Maintain Mutual Aid agreements with neighboring communities for continuity of operations. | High | All Hazards | Municipality with support from County, NJOEM, FEMA and surrounding communities | | X | | | Staffing resources limited. | X | | No changes from prior Plan. |
| MG28 | Identify and develop agreements with entities that can provide support with FEMA/NJOEM paperwork after disasters; qualified damage assessment personnel – Improve post-disaster capabilities – damage assessment; FEMA/NJOEM paperwork compilation, submissions, record-keeping. | Medium | All Hazards | Municipality with support from County, NJOEM and FEMA | | X | | | Staffing limitations. | X | | No changes from prior Plan. |
| MG29 | Work with regional agencies (i.e. County and NJOEM) to help develop damage assessment capabilities at the local level through such things as training programs, certification of qualified individuals (e.g. code officials, floodplain managers, engineers). | Medium | All Hazards | Municipality with support from County, NJOEM and FEMA | | X | | | Staffing limitations. | X | | No changes from prior Plan. |

| 2014 HMP Initiative # | Mitigation Initiative Description | 2014 HMP Priority | Hazard(s) Mitigated | Lead and Support Agencies | Status | | | | Status Details | Relevance | | Relevance Details |
|-----------------------|---|-------------------|---------------------|---|-----------|-----------------------------|--------------------------|---------------|---|---|--|-----------------------------|
| | | | | | Completed | Initiated but Not Completed | Ongoing Type of Activity | Not Initiated | | Still Relevant - Carry Forward to Updated Mitigation Strategy | No Longer Relevant - Omit from Updated Mitigation Strategy | |
| MG30 | Continue to support the implementation, monitoring, maintenance, and updating of this Plan (through participating in the 5 year Plan Update), as defined in Section 7.0 | High | All Hazards | Municipality with support from Planning Partners, | | | | | Staffing limitations | X | | No changes from prior Plan. |
| MG31 | Purchase, relocate, or elevate structures located in hazard-prone areas (in addition to those listed above) to protect structures from future damage, with repetitive loss and severe repetitive loss property as priority. Phase 1: Identify appropriate candidates based on cost-effectiveness. Phase 2: Where determined to be a viable option, work with property owners toward implementation of the determined action based on available funding from FEMA and local match availability | Medium | Flood, | Municipality (via Municipal Engineer/ NFIP Floodplain Administrator) with support from County Planning, NJOEM, FEMA | | X | | | Staffing and funding resources limited. | X | | No changes from prior Plan. |
| MG32 | Maintain compliance with and good-standing in the NFIP including adoption and enforcement of floodplain management requirements (e.g. regulating all new and substantially improved construction in Special Hazard Flood Areas), floodplain identification and mapping, and flood insurance outreach to the community. Further, continue to meet and/or exceed the minimum NFIP standards and criteria through the following NFIP-related continued compliance actions identified as Initiatives below. | High | Flood, Severe | Municipality (via Municipal Engineer/NFIP Floodplain Administrator) with support from NJOEM, FEMA | | | X | | | X | | No changes from prior Plan. |

| 2014 HMP Initiative # | Mitigation Initiative Description | 2014 HMP Priority | Hazard(s) Mitigated | Lead and Support Agencies | Status | | | | Status Details | Relevance | | Relevance Details |
|-----------------------|--|-------------------|---------------------|---|-----------|-----------------------------|--------------------------|---------------|--|---|--|-------------------|
| | | | | | Completed | Initiated but Not Completed | Ongoing Type of Activity | Not Initiated | | Still Relevant - Carry Forward to Updated Mitigation Strategy | No Longer Relevant - Omit from Updated Mitigation Strategy | |
| MG33 | Obtain and archive elevation certificates. | High | Flood, Severe Storm | NFIP Floodplain Administrator | X | | | | | X | Project Completed | |
| MG34 | Promote the participation of Floodplain Administrators within the planning process and other activities. | Medium | Flood | Municipality with support from County, NJOEM and FEMA | X | | | | | X | Project Completed | |
| MG35 | Enhance the County/community resilience to severe storms (incl. severe winter storms) by joining the NOAA "Storm Ready" program and supporting communities in joining the program. | Medium | Severe Storm | Municipality with support from County, NJOEM and FEMA | | | | X | Staff availability to implement the program. | X | Resources no longer offered. | |

9.14.6.2 Hazard Vulnerabilities Identified

Township officials have reported that the municipal-owned ~~Stagetown~~ ~~two~~ wastewater treatment facility (WWTF)-sewage treatment plant has been impacted by repetitive losses due to flooding, and the generator at the municipal complex is underpowered.

It is estimated that in Montgomery Township, 133 residents live within the 1% annual chance flood area (NFIP Special Flood Hazard Area). \$1,779,497,000 (32.9%) of the municipality's general building stock replacement cost value (structure and contents) is located within the 1% annual chance flood area.

There are 151 NFIP policies in the community and there are 22 policies located within the 1% annual chance flood area. FEMA has identified 7 Repetitive Loss (RL) properties including 2 Severe Repetitive Loss (SRL) properties in the municipality.

HAZUS-MH estimates that for a 1% annual chance flood, \$29,600,000 (0.55%) of the municipality's general building stock replacement cost value (structure and contents) will be damaged, 561 households may be displaced, 203 people may seek short-term sheltering, and an estimated 764 tons of debris could be generated.

Further information regarding the summary of the community's participation in the NFIP is provided in the table below.

| NFIP Summary | | | | | | | | |
|----------------|----------------|-----------------------|-------------------------|-----------------------|------------------------------|-------------------------------|-----------------------------------|--|
| Municipality | # Policies (1) | # Claims (Losses) (1) | Total Loss Payments (2) | # Rep. Loss Prop. (1) | # Severe Rep. Loss Prop. (1) | # Policies in 1% Boundary (3) | # Policies in 0.2% - Boundary (3) | # Policies Outside the 0.2% Flood Hazard (3) |
| Montgomery (T) | 135 | 100 | \$2,040,712 | 7 | 2 | 22 | 7 | 106 |

Source:

- (1) Policies, claims, repetitive loss and severe repetitive loss statistics provided by FEMA Region 2 via NJDEP in August 2017 and are current as of March 31, 2017. Please note the total number of repetitive loss properties includes the severe repetitive loss properties.
- (2) Information regarding total building and content losses was gathered from the claims file provided by FEMA Region 2 (current as of Township of Montgomery).
- (3) The policy locations used are based on the latitude and longitude provided by FEMA Region 2.

HAZUS-MH critical facility damage estimates for the Township of Montgomery are provided below.

| Critical Facility Damage Estimate | | | | | | | | | | |
|-----------------------------------|----------------|---------------|----------|------------|------------------------------------|------------------------|------------------------------------|--------------------------------------|------------------------|------------------------------------|
| Name | Municipality | Type | Exposure | | Potential Loss from 1% Flood Event | | | Potential Loss from 0.2% Flood Event | | |
| | | | 1% Event | 0.2% Event | Percent Structure Damage | Percent Content Damage | Days to 100-Percent ⁽¹⁾ | Percent Structure Damage | Percent Content Damage | Days to 100-Percent ⁽¹⁾ |
| Montgomery Well 1 | Montgomery (T) | Potable Water | x | x | - | - | - | - | - | - |
| 3M Well Number 4 | Montgomery (T) | Potable Water | | x | - | - | - | - | - | - |
| Stage II WWTP | Montgomery (T) | WW | x | x | - | - | - | - | - | - |
| Seminole Road | Montgomery (T) | WW | x | x | - | - | - | - | - | - |
| Stage II WWTP | Montgomery (T) | WW | x | x | - | - | - | - | - | - |

Source: HAZUS-MH 4.0

Notes:

- = No loss (calculated by HAZUS-MH 4.0)

X = Facility located within the DFIRM boundary.

DFIRM = Digital Flood Insurance Rate Map

NA = Not available

T = Township

WWTP = Wastewater Treatment Plant

WW = Wastewater

- (1) HAZUS-MH 4.0 provides a general indication of the maximum restoration time for 100% operations. Clearly, a great deal of effort is needed to quickly restore essential facilities to full functionality; therefore, this will be an indication of the maximum downtime (HAZUS-MH 4.0 User Manual).
- (2) Please note in some cases, a facility may be located in the DFIRM flood hazard boundary; however HAZUS did not calculate potential loss. This may be because the depth of flooding does not amount to any damages to the structure according to the depth damage function used in HAZUS for that facility type.

Please refer to the Hazard Profiles in Section 5 of this plan for additional vulnerability information relevant to this jurisdiction.

9.14.7 PROPOSED HAZARD MITIGATION INITIATIVES

The list below represents a summary of community mitigation initiatives developed in 2018 as part of the most recent plan update. The Township of Montgomery has carried forward all but one of its 2014 HMP initiatives, and has identified no changes in local priorities since the last version of the plan in 2014. Detailed Action Worksheets are included only for NEW Mitigation Actions/Projects. Some of the identified mitigation initiatives in the table below are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Please note that the Township has opted to carry forward legacy initiative numbers from the 2014 and 2009 plans, respectively, for internal municipal tracking purposes, formatted as: “2019# [2014# (2009#)]”.

| Proposed Hazard Mitigation Initiatives | | | | | | | | | | | | | | |
|--|---|---|-----------------------------------|--|---------------------|----------------|--|--------------------|----------------|--------------------|----------|----------|----------------------------|---|
| 2019 Initiative Number | Initiative Name | Initiative Description | New Initiative Or Carried Forward | Applies to New and/or Existing Structures* | Hazard(s) Mitigated | Objectives Met | Lead and Support Agencies | Estimated Benefits | Estimated Cost | Sources of Funding | Timeline | Priority | Mitigation Category | 2018 Action Status |
| MG1 [(MG2)] | Traffic Flow Study | Install FMP-proposed Electronic Warning Signage. | Carried Forward | New | Flood | 11 | Township Engineer; Traffic Police, DPW | Medium | Low | Municipal Budget | Short | High | Action/Project, PR, PE, ES | Initiated but not completed. Signage location as to prevent traffic from traveling into other flooded areas. Budget issues. |
| MG2 [(MG3)] | Flood Evacuation Route | Work with State of New Jersey to Enhance Route 206 as flood evacuation route. | Carried Forward | New | Flood | 8 | OEM Coordinator | Medium | Low | HMA | Short | High | Action/Project, PP | Not initiated; new bridge is being constructed. |
| MG3 [(MG4)] | Flood Damage Prevention Ordinance | Revision of Flood Damage Prevention Ordinance to incorporate recommended changes in FMP Appendix and to give the Township for first option in the purchase of flood damaged property. | Carried Forward | New | Flood | 8,9 | Township Engineer; Township Attorney | Medium | Low | Municipal Budget | Short | High | Capability, PR | Initiated but not completed. Township Engineer consulting with Township Attorney to review the matter. |
| MG4 [(MG8)] | Disaster Mitigation Planning | Incorporate Disaster Mitigation Planning in Master Plan. | Carried Forward | New | All | 8,9 | Planning Director | Medium | Low | Municipal Budget | Short | High | Capability, PR | Initiated but not completed. Staffing availability needed to complete. |
| MG5 [(MG9)] | State Priority List for Redevelopment of the Hydrology and Hydraulics | Request that the State place Montgomery Township on its priority list for redevelopment of the hydrology and hydraulics (so as to reflect current conditions) so as to update the Township Flood Insurance Study. | Carried Forward | New | Flood | 1 | Township Engineer | High | Low | NA | Short | Medium | Action/Project, PR | Not initiated; staffing to address the matter. |
| MG6 [(MG10)] | Private Property Flood Mitigation Funding Sources | Identification of funding sources for private property flood mitigation. | Carried Forward | New and Existing | Flood, Severe Storm | 4 | OEM Coordinator; Grants Coordinator; Planning Director | High | Low | Na | Short | High | Capability, PR | Not initiated; staffing to address the matter. |

| Proposed Hazard Mitigation Initiatives | | | | | | | | | | | | | | |
|--|---------------------------|---|-----------------------------------|--|---------------------|----------------|--|--------------------|----------------|--------------------|----------|----------|-----------------------|--|
| 2019 Initiative Number | Initiative Name | Initiative Description | New Initiative Or Carried Forward | Applies to New and/or Existing Structures* | Hazard(s) Mitigated | Objectives Met | Lead and Support Agencies | Estimated Benefits | Estimated Cost | Sources of Funding | Timeline | Priority | Mitigation Category | 2018 Action Status |
| MG7 [(MG11)] | Property Owner Survey | Conduct a property owner survey for private property flood mitigation. | Carried Forward | N/A | N/A | 5,13 | Public Information Officer | Low | low | Na | Short | Medium | Action/Project, PR | Not initiated; staffing to address the matter. |
| MG8 [(MG13)] | Stream Bank Erosion | Develop Property Owner Information Sheet for streambank erosion. | Carried Forward | N/A | Flood | 5,13 | Township Engineer | Medium | Low | Municipal Budget | Medium | High | Capability, PR PE | Not initiated; limited resources (staff, time funding); required focus on higher priority initiatives during the last plan maintenance cycle. |
| MG9 [(MG14)] | Emergency Funding Sources | Identify emergency funding sources for flood events and incorporate into Township Emergency Response Plan. | Carried Forward | New | All | All | OEM Coordinator Grants Coordinator | High | Low | Municipal Budget | Short | High | Action/Project, PR ES | Not initiated; limited resources (staff, time, funding); required focus on higher priority initiatives during the last plan maintenance cycle. |
| MG10 [(MG15)] | NJOEM Funding | Apply for NJOEM funding to implement various facets of the Township FMP. | Carried Forward | New | All | All | OEM Coordinator | High | Medium | Municipal Budget | Short | High | Capability, PR | Not initiated; limited resources (staff, time, funding); required focus on higher priority initiatives during the last plan maintenance cycle. |
| MG11 [MG18 (MG4)] | County Route 605 | Where appropriate, support retrofitting and/or purchasing structures located in hazard prone areas, including but not limited to the elevation the Stage II treatment plant on County Route 605, which is in need of flood proofing. The plant was severely damaged from Hurricane Irene. The buildings and equipment need to be elevated, relocated or retrofitted to prevent future damage. | Carried Forward | Existing | Floods | 4 | TWP; Township Engineering, DPW, Emergency Management | High | \$500,000 High | HMGP PDM FMA | DOF | High | Action/Project, PP | Initiated but not completed. Have begun Engineering design for a Flood Wall at Stage II Sewer Treatment Plant. |

| Proposed Hazard Mitigation Initiatives | | | | | | | | | | | | | | |
|--|-----------------------------------|---|-----------------------------------|--|---------------------|----------------|--|--------------------|----------------|---|------------|----------|---------------------|--|
| 2019 Initiative Number | Initiative Name | Initiative Description | New Initiative Or Carried Forward | Applies to New and/or Existing Structures* | Hazard(s) Mitigated | Objectives Met | Lead and Support Agencies | Estimated Benefits | Estimated Cost | Sources of Funding | Timeline | Priority | Mitigation Category | 2018 Action Status |
| MG12 [(MG21)] | Community and Public Education | Conduct and facilitate community and public education and outreach for residents and businesses to include, but not be limited to, the following to promote and effect natural hazard risk reduction: Provide and maintain links to the HMP website, and regularly post notices on the County/municipal homepage(s) referencing the HMP webpages. Prepare and distribute informational letters to flood vulnerable property owners and neighborhood associations, explaining the availability of mitigation grant funding to mitigate their properties, and instructing them on how they can learn more and implement mitigation. Use email notification systems and newsletters to better educate the public on flood insurance, the availability of mitigation grant funding, and personal natural hazard risk reduction measures. Work with neighborhood associations, civic and business groups to disseminate information on flood insurance and the availability of mitigation grant funding. | Carried Forward | N/A | All Hazards | 5, 13 | Municipality with support from Planning Partners, County Planning, NJOEM, FEMA | Medium | Medium | Municipal Budget, HMA programs with local or county match | Short Term | High | Capability, PE | Initiated but not completed; staffing restrictions. |
| MG13 [(MG24)] | Flood Mitigation Archive Database | Develop programs/procedures to capture and archive loss data from events. Examples include: Record location and length of roadway closures; Develop a database of residential and commercial property damage, including permit history for such repairs; High water marks, perhaps painting phone poles with high water marks and or regulatory Base Flood Elevations (BFEs). | Carried Forward | N/A | All Hazards | 1 | Municipality with support from County, NJOEM and FEMA | Medium | Medium | Municipal Budget | Short | Medium | Capability, PR | Initiated but not completed; high water markers in place along roadways. Limited resources (staff, time, funding). |

| Proposed Hazard Mitigation Initiatives | | | | | | | | | | | | | | |
|--|---|---|-----------------------------------|--|---------------------|----------------|--|--------------------|----------------|---|---------------|----------|---------------------|--|
| 2019 Initiative Number | Initiative Name | Initiative Description | New Initiative Or Carried Forward | Applies to New and/or Existing Structures* | Hazard(s) Mitigated | Objectives Met | Lead and Support Agencies | Estimated Benefits | Estimated Cost | Sources of Funding | Timeline | Priority | Mitigation Category | 2018 Action Status |
| MG14 [(MG25)] | Local/County/State Projects and Programs to develop improved structure and facility inventories | Participate in local, county and/or state level projects and programs to develop improved structure and facility inventories and hazard datasets to support enhanced risk assessment efforts. Such programs may include developing a detailed inventory of critical facilities based upon FEMA's Comprehensive Data Management System (CDMS) which could be used for various planning and emergency management purposes including: Support the performance of enhanced risk and vulnerability assessments for hazards of concern. Support state, county and local planning efforts including mitigation (including updates to the State HMP), comprehensive emergency management, debris management, and land use. Improved structural and facility inventories could incorporate flood, wind and seismic-specific parameters (e.g. first floor elevations, roof types, structure types based on FEMA-154 "Rapid Visual Screening of Buildings for Potential Seismic Hazards" methodologies). It is recognized that these programs will need to be initiated and supported at the County and/or State level, and will require training, tools and funding provided at the county, state and/or federal level. | Carried Forward | N/A | All Hazards | 1 | Hazard Mitigation Plan Coordinator | Medium-High | Medium-High | FEMA Mitigation Grant Programs with local match | Long Term DOF | Medium | Capability, PR | Not initiated; staffing resources limited. |
| MG15 [(MG26)] | Comprehensive Emergency Management Plan | Support ongoing updates of Comprehensive Emergency Management Plan, including participation in the Quadrennial rewrite of township Emergency Operations Plan. | Carried Forward | New and Existing | All Hazards | 8,9 | Municipality with support from County Emergency Management | Low | Low | Municipal Budget | On-going | High | Capability, PR | Initiated but not completed; staffing limitations. |

| Proposed Hazard Mitigation Initiatives | | | | | | | | | | | | | | |
|--|---|--|-----------------------------------|--|---------------------|----------------|--|--------------------|--------------------------------|---|---------------------|----------|---------------------|--|
| 2019 Initiative Number | Initiative Name | Initiative Description | New Initiative Or Carried Forward | Applies to New and/or Existing Structures* | Hazard(s) Mitigated | Objectives Met | Lead and Support Agencies | Estimated Benefits | Estimated Cost | Sources of Funding | Timeline | Priority | Mitigation Category | 2018 Action Status |
| MG16 [(MG27)] | Mutual Aid Agreements | Create/Enhance/Maintain Mutual Aid agreements with neighboring communities for continuity of operations. | Carried Forward | N/A | All Hazards | 3,7 | Municipality with support from County, NJOEM, FEMA and surrounding communities | Medium | Low | Municipal Budget | Short Term | High | Capability, PR, ES | Initiated but not completed; staffing resources limited. |
| MG17 [(MG28)] | Agreements to provide support with FEMA/NJOEM post disaster | Identify and develop agreements with entities that can provide support with FEMA/NJOEM paperwork after disasters; qualified damage assessment personnel – Improve post-disaster capabilities – damage assessment; FEMA/NJOEM paperwork compilation, submissions, record-keeping. | Carried Forward | N/A | All Hazards | 3,7 | Municipality with support from County, NJOEM and FEMA | Medium | Medium | Municipal Budget | Short Term | Medium | Capability, PR, ES | Initiated but not completed; staffing limitations. |
| MG18 [(MG29)] | Damage Assessment Capabilities | Work with regional agencies (i.e. County and NJOEM) to help develop damage assessment capabilities at the local level through such things as training programs, certification of qualified individuals (e.g. code officials, floodplain managers, engineers). | Carried Forward | N/A | All Hazards | 3 | Municipality with support from County, NJOEM and FEMA | Medium | Medium | Municipal Budget, FEMA HMA and HLS grant programs | Short-Long Term DOF | Medium | Capability, PR | Initiated but not completed; staffing limitations. |
| MG19 [(MG30)] | Plan Maintenance | Continue to support the implementation, monitoring, maintenance, and updating of this Plan (through participating in the 5 year Plan Update), as defined in Section 7.0. | Carried Forward | New and Existing | All Hazards | 8,9 | Municipality with support from Planning Partners, County Planning, NJOEM, FEMA | High | Low – High (for 5 year update) | Municipal Budget, FEMA planning grants | On-going | High | Capability, PR | Initiated but not completed; staffing limitations. |

| Proposed Hazard Mitigation Initiatives | | | | | | | | | | | | | | |
|--|------------------|---|-----------------------------------|--|---------------------|----------------|--|--------------------|----------------|------------------------|---------------|----------|---------------------|--|
| 2019 Initiative Number | Initiative Name | Initiative Description | New Initiative Or Carried Forward | Applies to New and/or Existing Structures* | Hazard(s) Mitigated | Objectives Met | Lead and Support Agencies | Estimated Benefits | Estimated Cost | Sources of Funding | Timeline | Priority | Mitigation Category | 2018 Action Status |
| MG20 [(MG31)] | Flood Mitigation | Purchase, relocate, or elevate structures located in hazard-prone areas (in addition to those listed above) to protect structures from future damage, with repetitive loss and severe repetitive loss property as priority. Phase 1: Identify appropriate candidates based on cost-effectiveness. Phase 2: Where determined to be a viable option, work with property owners toward implementation of the determined action based on available funding from FEMA and local match availability. | Carried Forward | Existing | Flood, Severe Storm | 4 | Municipality (via Municipal Engineer/NFIP Floodplain Administrator) with support from County Planning, NJOEM, FEMA | High | High | FEMA Mitigation Grants | Long Term DOF | Medium | Capability, PP | Initiated but not completed; staffing and funding resources limited. |
| MG21 [(MG32)] | NFIP Compliance | Maintain compliance with and good-standing in the NFIP including adoption and enforcement of floodplain management requirements (e.g. regulating all new and substantially improved construction in Special Hazard Flood Areas), floodplain identification and mapping, and flood insurance outreach to the community. Further, continue to meet and/or exceed the minimum NFIP standards and criteria through the following NFIP-related continued compliance actions identified as Initiatives below. | Carried Forward | N/A | Flood, Severe Storm | 4 | Municipality (via Municipal Engineer/NFIP Floodplain Administrator) with support from NJOEM, FEMA | High | Low-Medium | Municipal Budget | Ongoing | High | Capability, PR, PE | Ongoing type of activity. |

Notes:

- * Does this mitigation initiative reduce the effects of hazards on new and/or existing buildings and/or infrastructure? Not applicable (N/A) is inserted if this does not apply.

Potential FEMA HMA Funding Sources:

FMA = Flood Mitigation Assistance Grant Program
 HMGP = Hazard Mitigation Grant Program
 PDM = Pre-Disaster Mitigation Grant Program
 RFC = Repetitive Flood Claims Grant Program
 SRL = Severe Repetitive Loss Grant Program

Acronyms and Abbreviations:

ARC American Red Cross
 DPW Department of Public Works
 FEMA Federal Emergency Management Agency
 HMA Hazard Mitigation Assistance

Timeline:

| | |
|-------|---|
| HMP | Hazard Mitigation Proposal |
| N/A | Not applicable |
| NFIP | National Flood Insurance Program |
| NJOEM | New Jersey Office of Emergency Management |
| NOAA | National Oceanic and Atmospheric Administration |
| SCPD | Somerset County Planning Department |
| USACE | U.S Army Corp of Engineers |
| USGS | U.S. Geological Survey |

| | |
|-------------|----------------------|
| Short Term= | 1 to 5 years |
| Long Term = | 5 years or greater |
| OG = | On-going program |
| DOF = | Depending on funding |

Costs:

Where actual project costs have been reasonably estimated:

Low = < \$10,000

Medium = \$10,000 to \$100,000

High = > \$100,000

Where actual project costs cannot reasonably be established at this time:

Low = Possible to fund under existing budget. Project is part of, or can be part of an existing on-going program.

Medium = Could budget for under existing work plan, but would require a reapportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.

High = Would require an increase in revenue via an alternative source (i.e., bonds, grants, fee increases) to implement. Existing funding levels are not adequate to cover the costs of the proposed project.

Benefits:

Where possible, an estimate of project benefits (per FEMA's benefit calculation methodology) has been evaluated against the project costs, and is presented as:

Low = < \$10,000

Medium = \$10,000 to \$100,000

High = > \$100,000

Where numerical project benefits cannot reasonably be established at this time:

Low = Long-term benefits of the project are difficult to quantify in the short term.

Medium = Project will have a long-term impact on the reduction of risk exposure to life and property, or project will provide an immediate reduction in the risk exposure to property.

High = Project will have an immediate impact on the reduction of risk exposure to life and property.

Notes (for Mitigation Type):

1. PR = Prevention: Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
2. PP = Property Protection: These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
3. PE = Public Education and Awareness: Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
4. NR = Natural Resource Protection: Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
5. SP = Structural Projects: Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
6. ES = Emergency Services: Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.
7. Initiative= Initiatives are comprised of EVERYTHING your community wants to do or is doing in order to meet its mitigation goals. Initiatives include Capabilities, Actions and Projects.
8. Capability= Regulatory, administrative, technical, and fiscal staffing, tools and/or resources. Capabilities can be existing, or in need of further development/expansion.
8. Action/Project= Specific activities or projects that your community plans to undertake or is currently completing in order to achieve its long term mitigation goals. Actions/Projects can include, but are not limited to: structural projects, infrastructure projects, natural systems protection projects, or education and awareness programs.

9.14.8 PRIORITIZATION OF MITIGATION INITIATIVES

The table below summarizes the priority levels for each mitigation initiative, listed by number.

| Prioritization of Mitigation Initiatives | | | | | | | |
|--|---------------------|----------|-------|---|---|---|-------------------------------|
| Initiative # | # of Objectives Met | Benefits | Costs | Do benefits equal or exceed costs? (Yes or No) | Is project Grant eligible? (Yes or No) | Can project be funded under existing programs/budgets? (Yes or No) | Priority (High, Med., Low) |
| MG1 [(MG2)] | 1 | M | L | Y | N | Y | H |
| MG2 [(MG3)] | 1 | M | L | Y | Y | Y | H |
| MG3 [(MG4)] | 2 | M | L | Y | N | Y | H |
| MG4 [(MG8)] | 2 | M | L | Y | N | Y | H |
| MG5 [(MG9)] | 1 | H | L | Y | N | N/A | M |
| MG6 [(MG10)] | 1 | H | L | Y | N | N/A | H |
| MG7 [(MG11)] | 2 | L | L | Y | N | N/A | M |
| MG8 [(MG13)] | 2 | M | L | Y | N | Y | H |
| MG9 [(MG14)] | 13 | H | L | Y | N | Y | H |
| MG10 [(MG15)] | 13 | H | M | Y | N | Y | H |
| MG11 [MG18 (MG4)] | 4 | H | H | Y | Y | Y | H |
| MG12 [(MG21)] | 2 | M | M | Y | Y | Y | H |
| MG13 [(MG24)] | 1 | M | M | Y | N | Y | M |
| MG14 [(MG25)] | 1 | M | M | Y | N | Y | M |
| MG15 [(MG26)] | 2 | L | L | Y | N | Y | H |
| MG16 [(MG27)] | 2 | M | L | Y | N | Y | H |
| MG17 [(MG28)] | 2 | M | M | Y | N | Y | M |
| MG18 [(MG29)] | 1 | M | M | Y | N | Y | M |
| MG19 [(MG30)] | 2 | M | M | Y | N | Y | H |
| MG20 [(MG31)] | 1 | H | H | Y | Y | N | H |
| MG21 [(MG32)] | 1 | H | H | Y | Y | N | M |

Notes:

H = High

L = Low

M = Medium

N = No

Y = Yes

9.14.8.1 Explanation of Priorities

Explanations of priority classifications used to assess the mitigation initiatives described in this annex are presented below:

High Priority = A project that meets multiple objectives (i.e., multiple hazards), where potential benefits exceed the costs. High-priority projects have funding secured or are on-going projects that meet eligibility requirements for the Hazard Mitigation Grant Program (HMGP) or Pre-Disaster Mitigation (PDM) Grant Program. High-priority projects can be completed in the short term (1 to 5 years).

Medium Priority = A project that meets goals and objectives, where the potential benefits outweigh the costs. Funding for medium-priority projects has not been secured but these projects are eligible for grants under HMGP, PDM, or other grant programs. These projects can be completed in the short term, once funding is completed. Medium-priority projects will become high-priority projects once funding is secured.

Low Priority = A project that will mitigate the risk of a hazard, where the potential benefits do not exceed the costs or have benefits that are difficult to quantify. Funding for low-priority projects has not been secured and these projects are not eligible for HMGP or PDM grant funding. The timeline for completion is considered long term (1 to 10 years). Low-priority projects may be eligible other sources of grant funding from other programs. A low-priority project could become a high-priority project once funding is secured as long as it could be completed in the short term.

Was prioritization of initiatives based on the above definitions? Yes

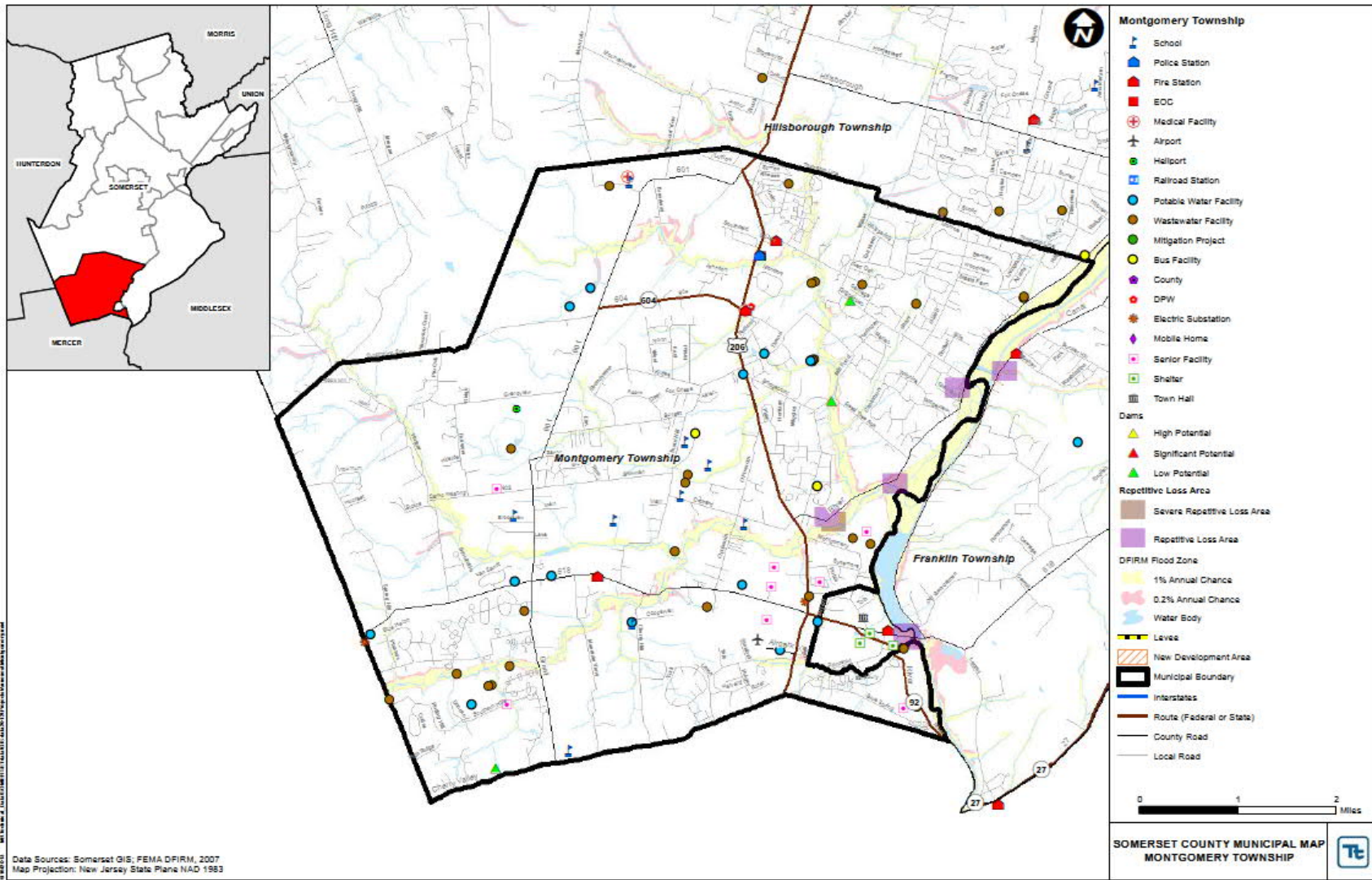
Was prioritization of initiatives based on parameters other than those stated above? Not applicable

9.14.9 FUTURE NEEDS TO BETTER UNDERSTAND RISK/VULNERABILITY

The Township of Montgomery has no additional risk vulnerabilities that need to be addressed at this time.

9.14.10 HAZARD AREA EXTENT AND LOCATION

A hazard area extent and location map illustrating the probable areas impacted within Montgomery Township is provided on the following page. This map is based on the best data available at the time of the preparation of this plan, and is considered to be adequate for planning purposes. Maps have only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the Township has significant exposure. The planning area maps are provided in the hazard profiles within Section 5.4 of this plan.



9.14.11 STATUS OF INCORPORATION OF MITIGATION PLANNING INTO EXISTING AND FUTURE PLANNING MECHANISMS

It is the intention of Montgomery Township to incorporate mitigation planning as an integral component of daily municipal operations. The following table contains a list of planning mechanisms that have been utilized during prior plan maintenance cycles, and those that will be incorporated into municipal procedures during the upcoming plan maintenance cycle (2019-2024).

| Status of Incorporation of Mitigation Planning into Existing and Future Planning Mechanisms | | | | |
|---|----------------------------------|---------------------------------|----------------------------------|---------------------------------|
| Planning Mechanisms | Reported Utilization (2009-2014) | Planned Utilization (2014-2019) | Reported Utilization (2014-2019) | Planned Utilization (2019-2024) |
| Operating Budget When constructing upcoming budgets, hazard mitigation actions will be funded as budget allows. Construction projects will be evaluated to see if they meet the hazard mitigation goals and objectives. | - | X | X | - |
| Capital Improvement Budget When constructing upcoming budgets, hazard mitigation actions will be funded as budget allows. Construction projects will be evaluated to see if they meet the hazard mitigation goals and objectives. | - | X | X | - |
| Human Resource Manual Employee job descriptions may contain hazard mitigation actions. | - | X | - | X |
| Building and Zoning Ordinances Prior to land use, zoning changes, or development permitting, the municipality will review the hazard mitigation plan and other hazard analyses to ensure consistent and compatible land use. | - | X | - | X |
| Comprehensive Land Use Plan When applicable, the municipality will incorporate hazard mitigation actions in the development and extent of the regulations. | - | X | - | X |
| Grant Applications Data and maps will be used as supporting documentation in grant applications. | - | X | X | - |
| Municipal Ordinances When updating municipal ordinances, hazard mitigation will be a priority. | - | X | - | X |
| Fire Plan The Hazard Mitigation Plan will be used as a resource for the development of future Fire Plans. | - | X | - | X |
| Capital Improvement Planning The municipality will establish a protocol to review current and future projects for hazard vulnerability. The municipality will incorporate hazard-resistant construction standards into the design and location of projects. | - | X | X | - |
| Day-to-Day Operations The municipality will incorporate hazard mitigation actions in daily operations and all projects. | - | X | X | - |

| Status of Incorporation of Mitigation Planning into Existing and Future Planning Mechanisms | | | | |
|---|----------------------------------|---------------------------------|----------------------------------|---------------------------------|
| Planning Mechanisms | Reported Utilization (2009-2014) | Planned Utilization (2014-2019) | Reported Utilization (2014-2019) | Planned Utilization (2019-2024) |
| Local School Service Projects The municipality will work closely with the local school district and assist with community service projects for the service organizations. Several of the municipality's hazard mitigation actions can be implemented as a joint project with the school district. | - | X | - | X |
| Municipal Budget Adopted annually, the municipality will look at mitigation actions when allocating funding. | - | X | - | X |
| Economic Development The local economic development group will take into account information regarding identified hazard areas when assisting new businesses in finding a location. | - | X | - | X |

9.14.12 ADDITIONAL COMMENTS

There are no additional comments at this time.

9.14.12 NFIP ADMINISTRATOR INPUT

| Adoption Date of your Current Floodplain Management Ordinance | Date of Entry into NFIP ¹ | Position or Title of Your Jurisdiction's Designated Floodplain Manager/Administrator (may also be called NFIP Coordinator) | | | Is this person a Certified Floodplain Manager? | Is floodplain management an auxiliary function? | Is your community in good standing with the NFIP? |
|--|--------------------------------------|--|---|---|--|--|--|
| 11-3-16 | 4-1-81 | Township Engineer | | | [X] Yes [] No | [X] Yes [] No | [X] Yes [] No |
| Provide an explanation of NFIP administration services (i.e., permit review, GIS, education or outreach, inspections, engineering capability, etc.): | | | | | | | |
| Permit review, GIS mapping, floodplain determinations | | | | | | | |
| Describe barriers to running an effective NFIP program in the community (if applicable): | | | | | | | |
| Education | | | | | | | |
| When was most recent FEMA Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?* | Is a CAV or CAC scheduled or needed? | Does the current floodplain management ordinance exceed FEMA or State minimum requirements? If so, describe how. | Is training of staff regarding NFIP issues planned? | Does your community intend to continue to enforce the floodplain management requirements including regulating new construction in Special Flood Hazard Areas (SFHAs)? | Does your community participate in the CRS? If so, state your Class. | Does your community intend to continue its participation in the CRS program? | If your community is not currently participating in the CRS program, are you intending to initiate the process during the next planning cycle? |
| Unknown | [] Yes [] No | [X] Yes [] No | [X] Yes [] No | [X] Yes [] No | [] Yes* [X] No * Class ____ | [] Yes [] No | [] Yes [X] No |
| *Describe any outstanding compliance issues (i.e., current violations): | | | | | | | |
| None | | | | | | | |

| MITIGATION PLAN | | | | | | | | |
|---|---|--|---|---|---|---|--|---|
| Provide an explanation of your local floodplain permitting process: | | | | | | | | |
| With limited exceptions, development is prohibited in the flood zone and all development applications are heard through zoning board or planning board. The limited exceptions must obtain a zoning permit. | | | | | | | | |
| Does your community intend to continue floodplain identification and mapping services including any local requests for map updates? | Does your community intend to initiate/continue the buyouts of repetitive loss properties? | Does your community intend to commit staff or resources to improve local mapping or code administration in the future? | Does your community intend to provide local outreach to promote the sale of flood insurance? | Does your community intend to participate in RiskMAP meetings and planning initiatives? | Does your community intend to continue to implement structural improvements to mitigate against flooding - culverts, drainage basins, etc.? | Does your community intend to continue to implement home improvement programs designed to minimize basement flooding? | Does your community intend to continue to implement roadway improvements to reduce damage from future flooding events? | Does your community intend to implement plans and programs in coordination with a local or regional drainage/sewer authority? |
| [x] Yes [] No | [] Yes [x] No | [x] Yes [] No | [] Yes [x] No | [] Yes [] No | [x] Yes [] No | [x] Yes [] No | [x] Yes [] No | [x] Yes [] No |
| Does your community intend to adopt the new FEMA Advisory Base Flood Elevations? | As Floodplain Manager, did you (or your predecessor at the time) actively participate in the development of the initial Hazard Mitigation Plan? | | As Floodplain Manager, are you actively participating in the development of this Hazard Mitigation Plan Update? | | Have there been any changes to your community's local floodplain management program since the last version of the plan in 2014? | | | |
| [x] Yes [] No | [x] Yes [] No | | [x] Yes [] No | | [x] Yes* [] No | | | |
| * If you answered "yes", that there have been changes to your local program since 2009, please describe: | | | | | | | | |
| Added a requirement for elevation certificates July 11, 2013 | | | | | | | | |
| Provide a description of your community assistance and monitoring activities: | | | | | | | | |
| Flood plain determinations are provided for a small fee, all maps are available through the Township GIS interactive map application | | | | | | | | |
| NFIP participating communities are required to update/revise their floodplain management ordinance to ensure that it complies with the latest FEMA regulations. Will your community continue to commit to this program requirement? | | | | NFIP participating communities are also required to update/revise their floodplain management ordinance to be consistent with the latest FIRMS. Will your community continue to commit to this program requirement? | | | | |
| [X] Yes [] No | | | | [X] Yes [] No | | | | |