



Appendix 16: Township of Springfield

This appendix is part of the 2015 Union County Hazard Mitigation Plan (HMP) update, and includes only jurisdiction-specific information about the Township of Springfield, which is one of the twenty (20) municipalities within Union County that is participating in the plan update. Union County led the planning process and outreach for this update. For a detailed description of the planning process and the public outreach efforts for this update, see Section 2 of the 2015 HMP.

1. Planning Process and Participation

The County formed a Steering Committee, which was responsible for key decisions during the plan update. This committee sent a letter to the Mayor of each municipality within the County. The Mayors and local officials selected a single individual to represent the town in the broader process. This person was the point of contact for the plan update, but worked with other municipal employees, consultants, volunteers, and other stakeholders throughout the planning process. This collection of participants, considered the local planning committee, is listed below. The committee was responsible for various decisions that informed the development of this appendix, including: prioritizing the natural hazards that can affect the community, reviewing and prioritizing the mitigation actions that are included in Table 16-1, and informing community leaders about the status of the County mitigation plan update, including this appendix

The Township of Springfield Planning Committee evaluated and identified the hazards of concern, completed the request for information (RFI), reviewed the plan documents and vulnerability assessment, identified local stakeholders for outreach, and worked collectively to update the mitigation strategy. In order to complete the update process, the Township attended the kickoff meeting held by Princeton Hydro in May 2014. To further the plan development, the Township Planning Committee met with Princeton Hydro to review the plan documents and revise the mitigation strategy in a workshop format on July 24th, 2014. Local ordinances, site plan requirements, emergency procedures and response plans, and stormwater management plans were reviewed for integration into this plan update. As the plan was developed, the Planning Committee reviewed all of the drafts and provided input on this individual appendix.

Table 16-1
Local Planning Committee (Source: Township of Springfield)

Name	Title	Organization
Scott Seidel	OEM Coordinator	Township of Springfield
Wally Schultz	OEM Deputy Coordinator	Township of Springfield
Gina Corcione	OEM Deputy Coordinator	Township of Springfield



2. Community Profile

The Township of Springfield has a total area of 5.2 square miles and is located along the northern border of Union County, New Jersey. Major thoroughfares include Interstate 78, Route 28 and Route 22.

As of 2010, the population was estimated at 15,817. This is a 9.5 percent increase from the 2000 population, which was estimated at 14,429. Figure 16-1 is a map of the Township of Springfield. See Section 3 of the 2015 Plan update for a map of Union County.

The history of Springfield predates the revolutionary war. The earliest settlers arrived in 1717. Farms, mills, and lumbering were the primary sources of livelihood for residents. The Battle of Springfield was fought on June 23rd, 1780 during the Revolutionary War. In a turning point in the war, British forces were defeated, but not before they burned most of Springfield.

The Township of Springfield was formed on April 14th, 1794. It became incorporated as one of New Jersey's first 104 townships by the New Jersey Legislature on February 21, 1798.¹ On March 19th, 1957 it became part of the newly formed Union County. The Township is governed by a five-member Township Committee that is elected by staggered partisan elections after three year terms. The Township Mayor and Deputy Mayor are selected by the committee at the committee's annual reorganization meeting each January. Both the Mayor and Deputy Mayor serve a twelve month term.

2.1 Land Use and Development

Springfield is a community of mixed use development, with 73.55 percent of its 5.16 square miles of land area classified as urban/developed. Over 88 percent of the parcels within Springfield are classified as residential, based on tax assessment data. Between 2004 and 2012, 801 building permits were issued for residential homes within the Township. This is 9.74 percent of the total building permits issued for Union County during this time period. Just over 31 percent of these permits were for 1- and 2-family homes. Springfield has a population density of 3065 people per square mile. The 2010 census estimates that 31.6 percent of the housing within the Township was renter-occupied, similar to the County average of 30.5 percent renter-occupied properties.

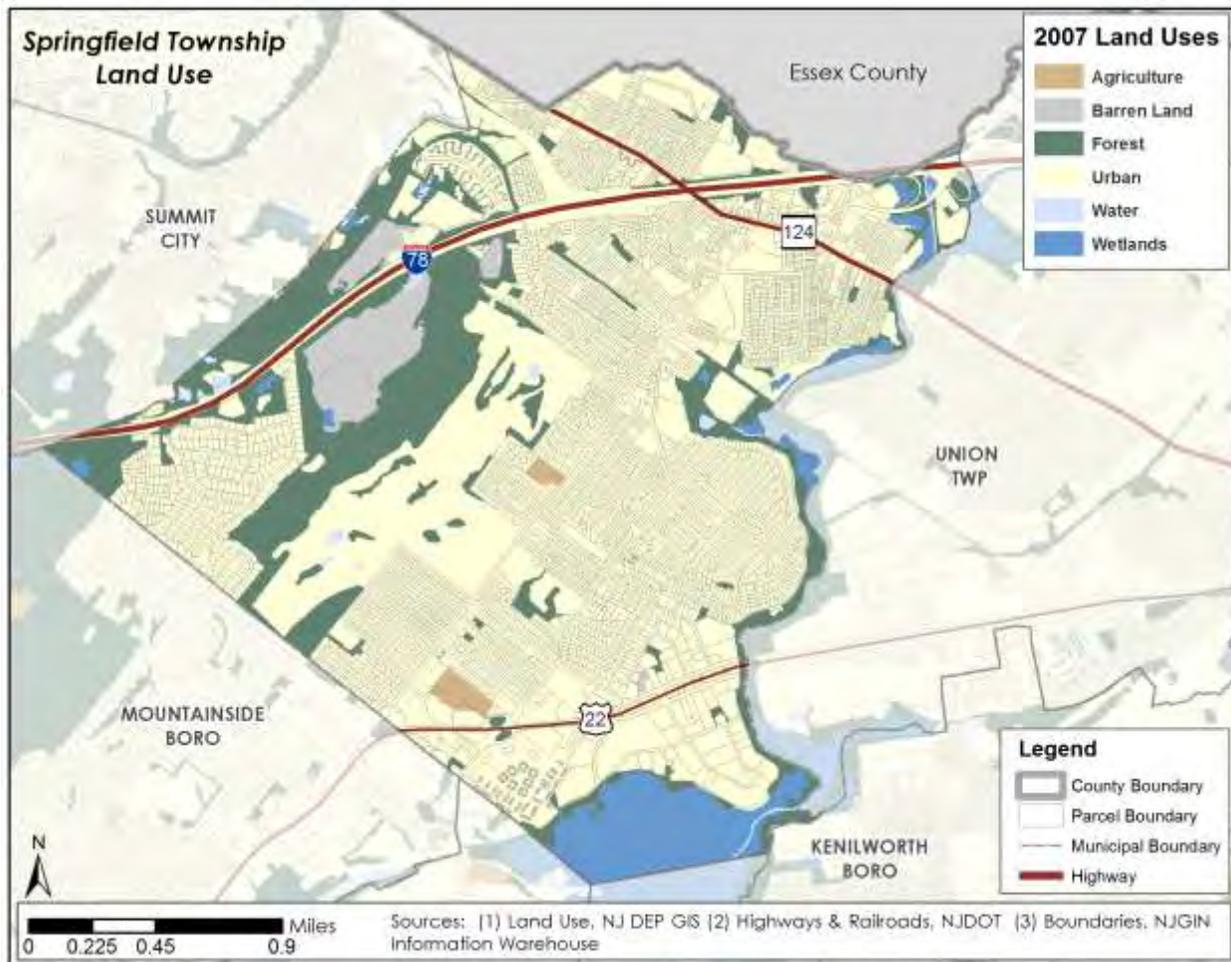
¹ Township of Springfield, NJ. "Springfield Township Today". <http://springfield-nj.us/about-springfield/>



Table 16-2
Land Use/Land Cover Trends (NJDEP GIS, 2007)

Land Cover Class	2002 (acres)	2007 (acres)	Percent Change	Percent of Total Land ²
Agriculture	18.66	18.66	0.00%	0.56%
Barren Land	107.50	108.46	0.90%	3.28%
Forest	572.26	554.74	-3.06%	16.77%
Urban	2416.38	2432.94	0.69%	73.55%
Water	25.60	25.60	0.00%	0.77%
Wetlands	167.49	167.49	0.00%	5.06%

Figure 16-1
Land Use/Land Cover Map Township of Springfield





3. Hazard Identification and Risk Assessment

This section of the Township of Springfield mitigation plan appendix describes the natural hazards and risks that can affect the community. It should be noted that -- in accordance with FEMA requirements -- only the hazards with aspects that are unique to the community are included in detail in this appendix.

3.1 Background and Hazard Rankings

Like all the other jurisdictions in Union County, the Township of Springfield is potentially subject to the effects of all the hazards that are considered in this mitigation plan. FEMA mitigation planning guidance requires that County mitigation plans include a risk assessment section that “assess[es] each jurisdiction’s risks where there vary from the risks facing the entire planning area” (44CFR 201.6 (c) (2) (iii)). Because the Union County HMP update includes separate appendices for each jurisdiction, this requirement is met in the appendices, while risks that affect the entire County uniformly are discussed in the County part of the HMP.

One of the first steps in developing jurisdictional appendices was for participating municipalities to review and prioritize the hazards that can affect them. This was done based on how often a hazard has occurred, how significant effects have been in the past, the difficulty and cost of recovering from such events. Jurisdictions ranked the list of hazards as either high, medium, low, or no concern.

Table 16-3 shows Springfield’s hazard rankings. The level of discussion and detail about specific hazards in this section are based on these rankings. Hazards that are ranked *high* include the most detail, and to the extent possible include probabilistic assessments of risk, i.e. likely future damages in the community based on the likelihood of occurrence. Hazards that are ranked *medium* have less detail and may in some cases refer to the main part of the county mitigation plan; they usually do not have probabilistic risk assessments, although potential future losses are discussed based on best available data. Hazards ranked *low* and *none* are not addressed in this appendix because they are discussed in Section 4, and there are no significant differences in risk between the County and the municipality.

Table 16-3
Township of Springfield Hazard
Identification and Prioritization

Hazard	Priority
Flood	H
Extreme Temperature – Cold	M
Ice Storm	M
Severe Storm – Winter Weather	M
Dam Failure	L
Drought	L
Earthquake / Geological	L
Extreme Temperature – Heat	L
Hail	L
Hazmats - Fixed Site	L
Hazmats - Transportation	L
High Wind – Straight-line Winds	L
High Wind – Tornado	L
Severe Storm – Lightning	L
Wildfire	L
Erosion	N
Landslide (non-seismic)	N
Storm Surge	N

**Only the hazards ranked high and medium are analyzed in this appendix*



3.2 Flood Hazard

3.2.1 Type, Location and Extent

Flooding in Springfield Township most often occurs during extreme rain events. These can be simply intense inland storms, tropical cyclones (including hurricanes and their remnants), and sometimes nor'easters. The Rahway River comprises the much of the eastern boundary of this jurisdiction, and much of the floodplain in Springfield is around this flood source, although (as depicted in Figure X-X) a tributary to the Rahway that merges with the River at Meisel Avenue Park also creates a relatively wide floodplain in the northeastern part of the jurisdiction, roughly parallel with the Rahway.

One of the best resources for determining flood risk in a jurisdiction is Flood Insurance Rate Maps (FIRMs), which are produced by FEMA. The FIRM is the official map of a community on which FEMA has delineated both the special flood hazard areas (1% annual chance of flooding) and the risk premium zones applicable to the jurisdiction. The effective FIRM date for Union County is September 20th, 2006. The FIRM is shown in Figure 16-2.

Current FEMA guidance uses the term extent as analogous to potential severity. The extent of the flood hazard in Springfield Township is relatively minor. The areas discussed above have experienced fairly shallow and low-velocity flooding at various times in the past, and in this case this is the best indicator of extent in the future. The most flood-prone areas of the jurisdiction can expect to experience flooding of a foot or two maximum (occasionally), with more frequent rain events causing a few inches of inundation at low spots, and those adjacent to culverts and stream channels. The current engineering design standard for the jurisdiction is a 25-year event (i.e. one with a 4% annual chance of occurring), so events more significant than that have the potential to inundate specific areas.

Table 16-4 shows the number of parcels in Springfield Township with at least 60% of their area in the 100-year (1% annual) and 500-year (0.2% annual) floodplain. Although these figures offer some insight into the flood hazard in this jurisdiction, they are not particularly reliable as a risk indicator because in many cases structures and infrastructure (where the risk-producing impacts occur) are not located in the specific areas that are in the floodplain.

Table 16-4
: Flood-prone Properties

Flood hazard area	Number of Parcels
100-year (1%) floodplain	439
500-year (0.2%) floodplain	398

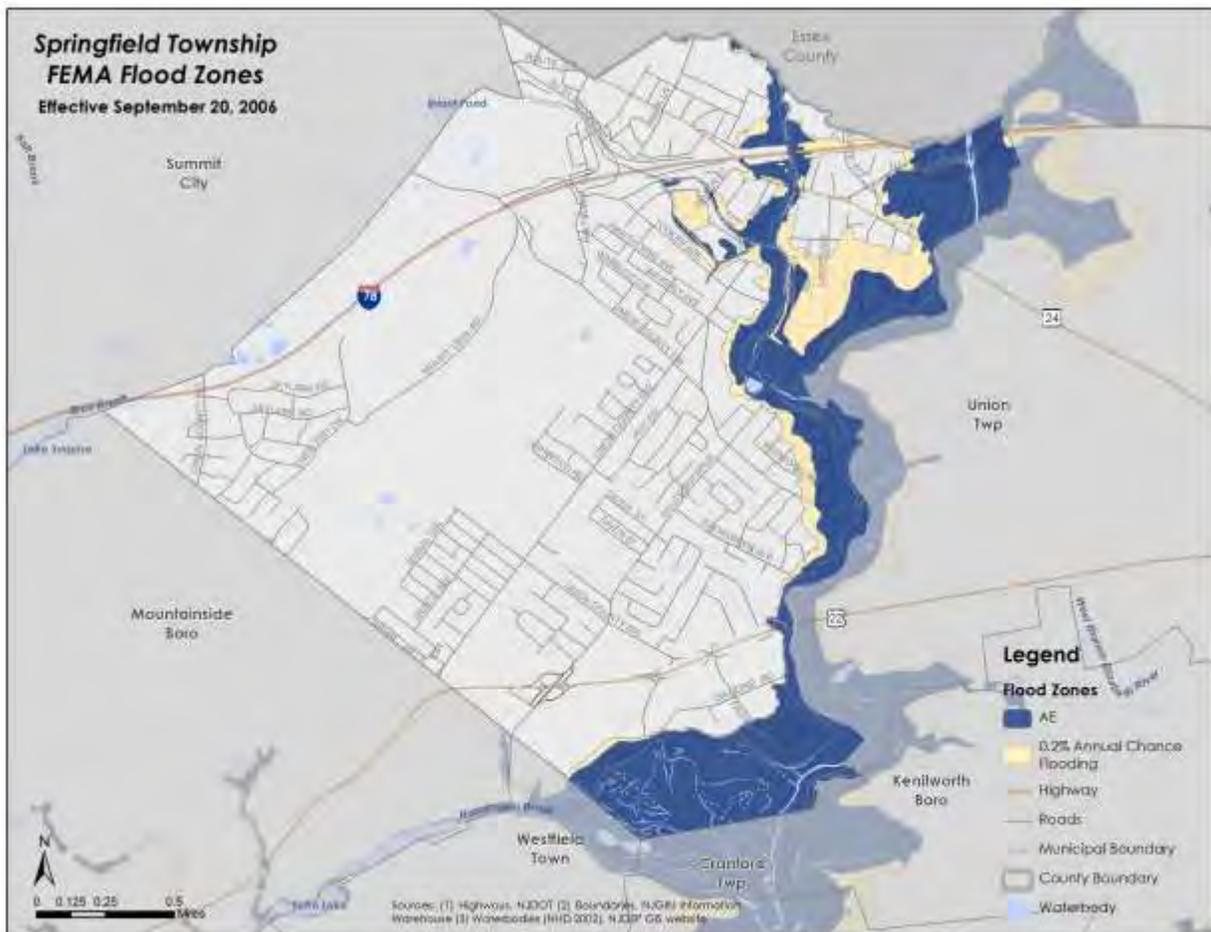


3.2.2 Previous Occurrences and the Probability of Future Floods

Minor flooding occurs in Springfield Township at least annually, although the severity of these frequent events is usually minimal. As discussed in the main (County) section of the mitigation plan, more significant events like tropical cyclones and nor'easters occur every few years (section citation to main plan), and can result in significant flooding.

Notwithstanding the potential effects of climate change on weather patterns, the Township can probably expect to experience some level of flooding every year or two, with more significant events happening every five to ten years on average. The main (County) part of this HMP discusses past occurrences in detail, and that history and statistics are generally the same as for Springfield.

Figure 16-2
Effective FIRM Township of Springfield



3.2.3 Flood Impacts and Vulnerability to Flooding

As discussed elsewhere, flood impacts in Springfield Township are historically moderate based on various metrics such as NFIP claims, FEMA PA Program Project Worksheets, and the known history of



Table 16-5
NFIP Policies and Claims

Number of Parcels:

Springfield:	5394
Union County:	199,489

Number of Policies In-Force:

Springfield:	339
Union County:	6,055

Number of Claims:

Springfield:	322
Union County:	5,560

Total Paid Claims

Springfield:	\$5,533,387
Union County:	\$96,782,279

Repetitive Loss Properties:

Springfield:	17
Union County:	729

Total Building

Springfield:	\$781,971
Union County:	\$46,560,646

Total Contents

Springfield:	\$175,840
Union County:	\$46,560,646

Number of Claims

Springfield:	52
Union County:	2,115

Average Claim

Springfield:	\$18,419
Union County:	\$18,759,126

flooding. There is no significant history of flood damage to critical facilities or populations in the jurisdiction. The most vulnerable parts of the community are those that are in or adjacent to the floodplains of the Rahway and the tributary mentioned above.

Although the large majority of flood insurance claims in this community are not categorized as repetitive losses, there are nevertheless a significant number of claims on properties south of Route 124 and west of the Rahway, and in the Rahway floodplain in the area around Laurel Drive in the southeast part of the jurisdiction. As shown in Table 16-5, the jurisdiction has 322 NFIP claims since 1978, a relatively high number compared to other jurisdictions in Union County. The average amount of claims is also relatively high at \$17,184, although this suggests that a single very significant event may be responsible.

3.2.4 National Flood Insurance Program and Repetitive Loss Properties

To provide a sense of the flood risk in a community it is also beneficial to summarize the policies in force and claims statistics from the National Flood Insurance Program (NFIP). The U.S. Congress established the NFIP with the passage of the National Flood Insurance Act of 1968. The NFIP is a Federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for State and community floodplain management regulations that reduce future flood damages. Participation in the NFIP is based on an agreement between communities and the Federal Government. If a community adopts and enforces a floodplain management ordinance to reduce future flood risk to new construction in floodplains, the federal government will make flood insurance available within the community as a financial protection against flood losses. Springfield Township has been a member of the NFIP since 1971.

FEMA NFIP statistics indicate that as of February 2014, federal flood insurance policies were in-force on 339 properties in the Springfield Township. This represents a dollar value of property and contents coverage totaling \$87,483,200. Between 1978 and 2014, there have been a total of 322 NFIP insurance claims in the Springfield Township with a total claims value of \$5,533,387. Table 16-5 compares the number of policies in-force and paid claims in the jurisdiction. The Table shows that the Springfield Township comprises 5.6% of the NFIP policies in-force in Union County.



Springfield Township’s “Green Team” is currently in the process of applying to become a member of the Community Rating System (CRS), a voluntary program for communities participating in the NFIP. The CRS is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. For CRS participating communities, flood insurance premium rates are discounted in increments of 5% based on creditable activities. CRS communities are ranked between 1 and 10, with Class 1 communities receiving a 45% premium discount. Springfield anticipates joining the CRS program sometime the next two years.

It should be noted that NFIP claims are not a direct or completely accurate proxy for flood risk in a community. The data does not include flood damages to structures that had no flood insurance. Also, in some cases, structures or contents may have been underinsured. The NFIP claims data also does not include any damages to public facilities, which may be insured via other means (such as self-insurance or non-FEMA policies); such damages may also be addressed through other federal programs such as FEMA’s Public Assistance Program. Figure 16-3 shows all NFIP claims in the Springfield Township between 1978 and 2014.

FEMA requires a discussion of NFIP Repetitive Loss and Severe Repetitive flood loss statistics in hazard mitigation plans. The NFIP defines repetitive loss properties as those with two or more claims of more than \$1,000 each during any rolling ten-year period.

The flood risk assessment method is based on analysis of NFIP data on repetitive flood loss properties. The NFIP defines repetitive loss (RL) properties as those that have received at least two NFIP insurance payments of more than \$1,000 each in any rolling ten-year period. As of February 2014, Union County had 707 such properties based on a query of the FEMA BureauNet NFIP interface. Of this total, 17 properties were located within Springfield; this comprises 2.4% of the County total. Table 16-5 provides a comparison of the residential repetitive loss claims for Union County and Springfield Township. The tables below include the number of repetitive loss properties, building and contents damages, the total number of claims, and the average claim amounts. Springfield Township has properties, and the total of claims on them is relatively small, as shown in Table 16-5. These properties are also shown in Figure 16-3.

The RL claims can be broken down by focusing on specific areas in the jurisdiction where flood losses are concentrated. Table 16-6 provides a summary of the street with the most cumulative repetitive loss flood insurance claims in Springfield. The table includes the building, contents, and total claims data for the properties. Address data about individual sites is omitted for reasons of confidentiality.

Table 16-6
: Repetitive Loss Areas

Street Name	Building	Contents	Total	# Claims	Average
Laurel Drive	\$551,499	\$148,544	\$957,811	18	\$38,891



3.2.5 Flood Risk to Repetitive Loss Properties in Springfield

Residential flood risk is calculated by a simple methodology that uses the FEMA default present-value coefficients from the benefit-cost analysis software modules. To perform this calculation, the flood insurance claims data were reviewed to determine an approximate period over which the claims occurred. This method should be used only for very general estimates of flood risk because the NFIP data represents only part of the flood losses in any jurisdiction. This is because there are always properties that are uninsured or under-insured. Most of the flood claims in the most recent query occurred between 1992 and 2011, a period of 20 years.

As shown in Table 16-7, there have been 18 flood insurance claims in the 20-year period, for an average number of claims per year of slightly less than one. Based on a 100-year horizon and a present value coefficient of 14.27 (the coefficient for 100 years using the mandatory OMB discount rate of 7.0 percent), the projected flood risk to these properties is \$759,335. It must be understood that individuals can obtain and cancel flood insurance policies, and the flood hazard depends on many variables, including the weather, so this projection is simply an estimate of potential damages. Nevertheless, it offers a useful metric that can be used in assessing the potential cost effectiveness of mitigation actions, although in this case, site-specific loss estimates are fairly small, meaning that the amount of grant funds that could be expended on projects will probably be limited.

3.2.6 Flood Risk to Severe Repetitive Loss Properties in Springfield

The definition of Severe Repetitive Flood Loss is included in the County portion of this mitigation plan. As of February 2014, Springfield Township had one NFIP severe repetitive flood loss property. The property had four NFIP claims totaling \$186,526 from 1979 to 2011. This represents an annual claims amount of \$5,329 and a projected risk over a 100-year horizon of \$76,049.

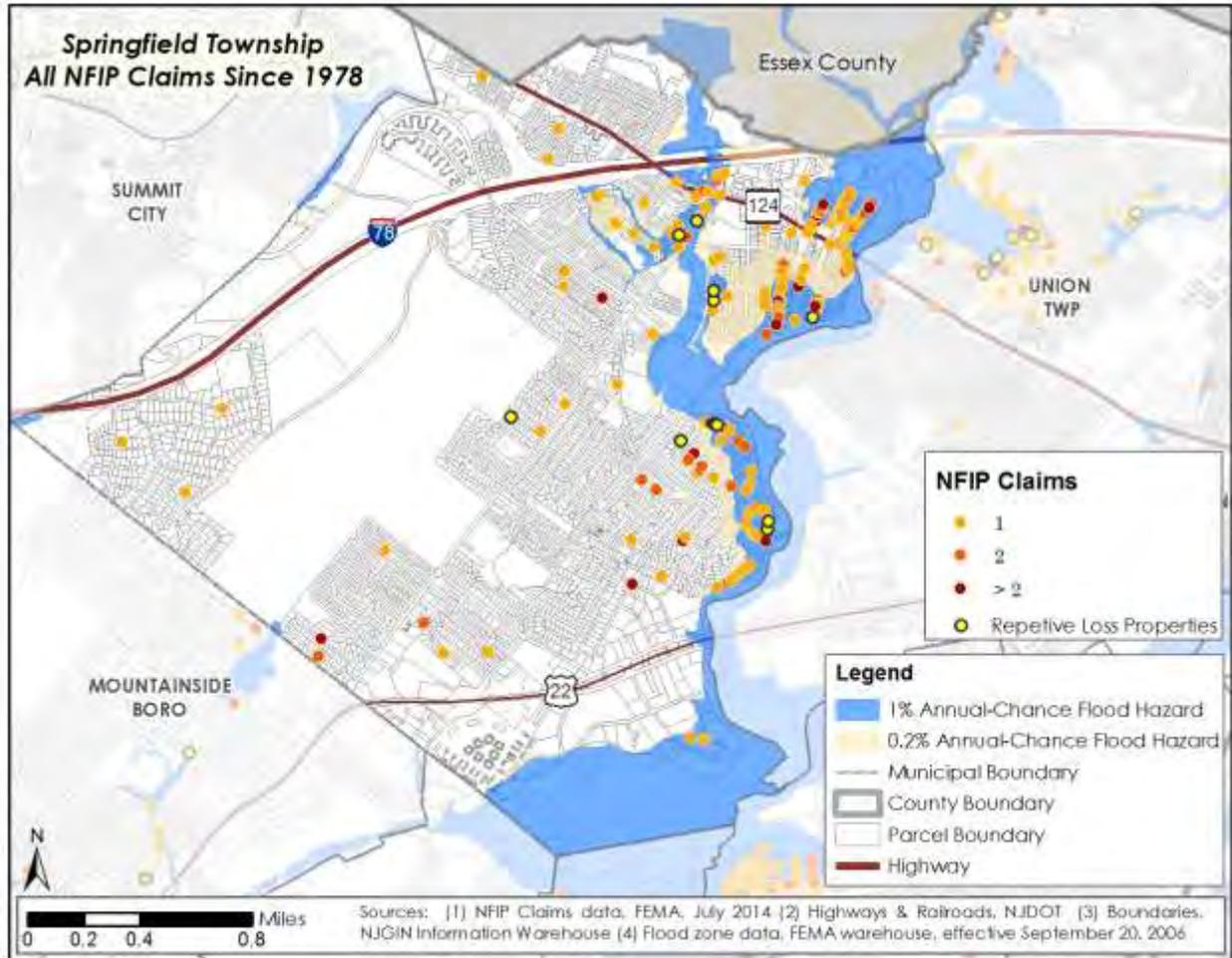
Table 16-7: Projected 100-year Flood, Based on Past Flood Insurance Claims

Data	Value
Period in years	20
Number of claims	18
Average claims per year	0.9
Total value of claims	\$957,811
Average value of claims per year	\$53,212
Projected risk, 100-year horizon	

(Source: FEMA NFIP query February, 2014)



Map 16-3
NFIP Claims in Springfield Township





3.3 Straight Line Wind Hazard

3.3.1 Type, Location and Extent

The high wind – straight-line wind hazard (including type, location and extent) is uniform across Union County, and is discussed in detail in the County portion of this mitigation plan (see Section 4). For reasons of brevity these details are not repeated here. There are no wind hazards that are unique to the Springfield Township.

3.3.2 Previous Occurrences and the Probability of Future Occurrences

Previously occurrences and the probability of future events are the same for Springfield Township as for Union County. Refer to Section 4 for that information at a County level.

3.3.3 Straight Line Wind Impacts and Vulnerabilities to the Hazard

The Township of Springfield is a typical residential community, predominated by balloon-frame and unreinforced masonry residential structures, the majority of which have gable or hip roofs. As discussed in the County part of the plan, wind profiles in this area of the country indicate a relatively low potential for severe events, and adequate construction techniques and building codes have generally sufficed to keep risks low. There are two main sources of potential wind damage in such communities: (1) structural damage to residential and non-residential buildings, and (2) power losses, mainly due to trees falling on above-ground lines. There are established methodologies for completing general risk assessments for these hazards. These are explained in detail in the County portion of the plan (see Section 4). Table 16-8 below summarizes annual straight-line wind risks and cumulative risks over 50- and 100-year planning horizons in The Springfield Township. Risks are in seven discreet categories: building damages, contents damages, inventory loss, relocation costs, business income lost, rental income lost and wages lost.

**Table 16-8: Straight-line Wind Risks for Range of Loss Types,
Township of Springfield
Annualized and 50- and 100-year Planning Horizons**

Occupancy Class	Total SF	Total Annualized Damages	50-year Risk	100-year Risk
Residential	\$8,222,572	\$186,085	\$2,568,158	\$2,655,246
Commercial	\$3,585,815	\$35,677	\$492,373	\$509,070
Industrial	\$933,080	\$8,992	\$124,092	\$128,300
Agricultural	\$28,649	\$297	\$4,105	\$4,245
Religious	\$195,391	\$2,106	\$29,064	\$30,050
Government	\$46,747	\$440	\$6,071	\$6,277
Education	\$237,515	\$2,061	\$28,442	\$29,406
Total	\$13,249,770	\$235,657	\$3,252,305	\$3,362,593



The next table shows power loss risks in Springfield Township, again annualized and for 50- and 100-year planning horizons. The methodology for these calculations (and additional jurisdiction-level data) can be found in Section 4 of the County plan.

Table 16-9: Horizons

Period	Risk Value
Annual	\$145,337
50-year planning horizon	\$2,005,759
100-year planning horizon	\$2,073,850

3.4 Winter Weather Hazard in the Community

3.4.1 Type, Location and Extent

Because the hazards severe storm – winter weather, ice storms and extreme temperatures – cold are closely related, they are combined in this subsection of the appendix. Severe storms and winter weather risks are discussed in detail in Section 4 of the County portion of this mitigation plan. There are no significant differences in the type, location or extent of this hazard between the County and Springfield, and there are no aspects of the hazard that are unique to this jurisdiction.

3.4.2 Previous Occurrences and the Probability of Future Occurrences

Previous occurrences of the severe storm-winter weather/ice storm/extreme temperature - cold hazards are discussed in detail in the County portion of this hazard mitigation plan (see Section 4), and for reasons of brevity are not repeated here. There are no meaningful differences between the County as a whole versus Springfield with regard to occurrences or the future probability of these hazards.

3.4.2 Severe Storm – Winter Weather Impacts and Vulnerabilities to the Hazard

The impacts from these three hazards in Springfield are substantially similar to the County as a whole, and include lost productivity, traffic accidents, downed trees (and related power losses), medical events (such as heart attacks), and hypothermia (which rarely causes any significant or long-term problems). The community has no unique or pronounced vulnerabilities to these hazards. Like most established communities, over time Springfield has adapted its systems and infrastructure to minimize the effects of cold weather and associated meteorological effects. In rare cases, buildings may experience structural problems due to snow loads, and public or private infrastructure may fail due to freezing. However, these problems are usually minor and are addressed by private citizens (through their own work, or via insurance proceeds) or by the government in the case of infrastructure.

Perhaps the most significant potential impacts of winter weather are traffic accidents (with related injuries and fatalities), and power losses from ice and downed trees. For the most part, damage to



vehicles is addressed via private insurance, records of which are proprietary. However, there are national statistics regarding injuries and deaths related to such weather. Local values for injuries and deaths can be deduced from national statistics. Figures for Springfield are displayed in the table below. Refer to the County portion of this mitigation plan for source citations and an explanation of the methodology.

**Table 16-10: Winter Storm-related Risks
(traffic injuries and fatalities),
Springfield Township 50- and 100-year Planning Horizons**

	Injuries (combined)	Deaths
Snow/sleet	\$2,172,398	\$246,701
Icy pavement	\$1,690,142	\$186,068
Snow/slush	\$1,629,102	\$163,932
Total annual risk (all hazards)	\$5,491,642	\$596,701
50-year risk	\$75,784,663	\$8,234,473
100-year risk	\$78,365,734	\$8,514,922



3.5 Critical Facilities

Facility Name	Street Address	Square Footage	Replacement Value	Year Built	In SFHA?
F.M. Gaudineer School	South Springfield Avenue	88,994	\$4,309,500		
Public Library	66 Mountain Avenue	21,284	\$1,663,500		Yes
J. Dayton High School	Mountain Avenue	85,628	\$6,047,300		
St. James School	41 S. Springfield Street	14,342	\$3,459,900		
T. L. Sandmeier School	666 S. Springfield Avenue.	35,677	\$2,175,800		
E.V. Walton School	601 Mountain Avenue	34,066	\$92,600		
Municipal Building & Police H.Q.	100 Mountain Avenue	9,765	\$1,975,900		Yes
J. Caldwell School	36 Caldwell Place	16,437	\$2,347,200		
Fire Station Headquarters	200 Mountain Avenue	26,000	\$4,500,000		
Chisholm Building	200 South Springfield Avenue		\$3,500,000		
Building Department Annex	200 North Trivett		\$400,000		
DPW Garage	50-58 Center Street		\$300,000		
DPW Hershey Building	24 Mountain Avenue		\$500,000		
Pumping Stations (6 total)		-	\$1,200,000		
DPW Municipal Pool	54 Morrison Road		\$400,000		



4. Township of Springfield Mitigation Strategy

This section contains hazard mitigation goals, objectives, and action items for the Township of Springfield. The goals are similar to the goals outlined in the County plan, but the objectives are adjusted for the jurisdiction. The definitions for these terms can be found in Section 6 of the Union County Plan Update.

4.1 Goals

- Goal 1: Improve **LOCAL KNOWLEDGE** about the potential impacts of hazards, and the identification of specific measures that can be taken to reduce their impacts
- Goal 2: Improve **DATA COLLECTION, USE, AND SHARING** to reduce the impacts of hazards
- Goal 3: Improve **CAPABILITIES, COORDINATION, AND OPPORTUNITIES** to plan and implement risk reduction projects, programs, and activities
- Goal 4: Pursue a range of **MITIGATION OPPORTUNITIES**, including addressing NFIP repetitive and severe repetitive loss properties, and reducing risk to public properties and infrastructure

4.2 Objectives

- Objective 1.A: Increase risk awareness among officials and citizens.
- Objective 1.B: Maintain and improve jurisdiction-level awareness regarding funding opportunities for mitigation, including that provided by FEMA and other federal and State agencies.
- Objective 2.A: Improve the availability and accuracy of risk- and mitigation-related data at the local level, as the basis for planning and development of risk-reduction activities.
- Objective 2.B: Ensure that government officials and local practitioners have accurate and current information about best practices for hazard mitigation planning, project identification, and implementation.
- Objective 2.C: Develop and maintain detailed data about critical facilities, as the basis for risk assessment and development of mitigation options.
- Objective 3.A: Continue support of hazard mitigation planning, project identification, and implementation at the municipal level.
- Objective 3.B: Continue close coordination with the County in a range of risk-related areas, such as FEMA programs, mitigation planning, development of hazard mitigation projects, etc.
- Objective 3.C: Increase property owner participation in the National Flood Insurance Program.
- Objective 3.D: Implement activities to improve the community's CRS rating.
- Objective 3.E: Work towards increasing the integration of mitigation principles and activities in a range of local regulations, plans, ordinances and activities.
- Objective 3.F: Maintain and improve coordination with surrounding communities with regard to understanding and reducing risks.
- Objective 4.A: Facilitate development and timely submittal of project applications meeting state and federal guidelines for funding (1) for RL and SRL properties and (2) for hardening/retrofitting infrastructure that is at the highest risk.
- Objective 4.B: Maintain and enhance local planning and regulatory standards related to future development and investments.



4.3 Mitigation Strategy

The tables below list prioritized mitigation projects and actions identified by the Township of Springfield.

4.3.1 Existing Mitigation Actions

Actions that are no longer being pursued have been marked with a ~~strickthrough~~.

Mitigation Action, Program, or Project	Hazard	Priority	Implementation Mechanism	Responsible Party	Target Start Date	Project Duration	Estimated Cost	Current Status
Storm-water management system upgrade and improvement along Laurel Drive, Meisel Avenue, Cypress Drive, Hemlock Road	Flood	High		Springfield Engineering	2016	1-Year	\$350,000	
Dredge Rahway River	Flood	Low		Union County/NJDEP		1-2 Years	\$120,000	
Flood proofing of the Municipal Building which includes the Police Department	Flood	High		Engineering		1-Year	\$150,000	<i>Complete</i>
Flood proofing of the first aid squad	Flood	High		Springfield/First Aid Squad		1-Year	\$125,000	
Storm-water management system upgrade and improvement for the Department of Public Works	Flood	High		Springfield DPW	2016	1-Year	\$250,000	
Flood proofing of the Hersey Building, Department of Public Works	Flood	High		Springfield DPW	2017	1-Year	\$150,000	



Mitigation Action, Program, or Project	Hazard	Priority	Implementation Mechanism	Responsible Party	Target Start Date	Project Duration	Estimated Cost	Current Status
Flood proofing of the Hall Annex/Data Storage	Flood	High		Springfield Engineering		2-5 Years	\$100,000	No longer active mitigation project. Have relocated critical infrastructure and equipment out of flood area.
Backup generator for Independence Way	Extreme Weather/ Flood	High		Senior Citizens Inc.		2-5 Years	\$100,000	
Elevation/acquisition of 1 Repetitive Loss property on Janet Lane.	Flooding	High				1-2 years	\$400,000	
Elevation/acquisition of 3 Repetitive Loss properties and 1 Severe repetitive Loss property on Laurel Drive	Flooding	High				1-2 years	\$1.2 million	
Elevation/acquisition of 1 Repetitive Loss property on South Maple Street.	Flooding	High				1-2 years	\$350,000	
Elevation/acquisition of 1 Repetitive Loss property on Milltown Road.	Flooding	High		OEM Coordinator		1-2 years	\$400,000	
Elevation/acquisition of 1 Repetitive Loss property on Redwood Road.	Flooding	High		OEM Coordinator		1-2 years	\$400,000	
Conduct all-hazards public education and outreach program for hazard mitigation and preparedness.	All	High		OEM Coordinator and Engineering		One Year	Staff Time	



4.3.2 Existing Mitigation Actions

Mitigation Action, Program, or Project	Hazard	Priority	Implementation Mechanism	Responsible Party	Target Start Date	Project Duration	Estimated Cost
Install generator at 41 Hillside Avenue	All-Hazards						
Install generator at gas station	All-Hazards						

Draft



4.4 Capability Assessment

4.4.1 Planning and Regulatory

Tool	Township Has (y/n)
Zoning Ordinance	Y
Subdivision Ordinance	Y
Flood Damage Prevention Ordinance (per NFIP)	Y
Special Purpose Ordinances (e.g. wetlands, critical or sensitive areas)	Y
Stormwater Management Plan/Ordinance	Y
Comprehensive Plan / Master Plan	Y
Capital Improvements Plan	N
Site Plan Review Requirements	Y
Habitat Conservation Plan	N
Economic Development Plan	N
Local EOP	Y-
Continuity of Operations Plan	Y
Post Disaster Recovery Plan or Ordinance	Y
Wildfire Protection Plan	N/A
Real Estate Disclosure req.	Y – State requirement
Other (e.g. steep slope ordinance, local waterfront revitalization plan)	N
Freeboard	N
Cumulative Substantial Damages	N
Shoreline Management Plan	N/A

4.4.2 Communication and Emergency Response

	Does the Township have this (y/n)
Outdoor warning system	N
Nixle	Y
Auto-Dialer/Reverse 911/Emailer	Y
Social Media	Y
Website Updates	Y
Other Emergency Communications	Y – UC First Alert & Code Red
Mutual Aid Agreements	Y
Emergency Operations Center	Y
Evacuation Vehicles	Y
Swift-water rescue	N
Shallow water boats	Y



4.4.4 Staff/Personnel

	Does this Township have this expertise on staff?
Staff with expertise or training in benefit/cost analysis	Y
Grant Writer(s)	N
Emergency Manager	EM Coordinator
Professionals trained in conducting damage assessments	Y
Scientist familiar with natural hazards in the municipality.	N
Personnel skilled or trained in "GIS" applications	N
Surveyor(s)	Y
NFIP Floodplain Administrator	Y
Planner(s) or Engineer(s) with knowledge of land development and land management practices	Y
Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Y

4.4.5 Fiscal Capabilities

Fiscal Mechanism	Does the Township have this capability?
Community development Block Grants (CDBG)	Y
Capital Improvements Project Funding	Y
Authority to Levy Taxes for specific purposes	Y
User fees for water, sewer, gas or electric service	Y
Impact Fees for homebuyers or developers of new development/homes	N
Incur debt through general obligation bonds	Y
Incur debt through special tax bonds	N
Incur debt through private activity bonds	N
Withhold public expenditures in hazard-prone areas	N



5. Plan Maintenance and Adoption

5.1 Plan Maintenance

The Township of Springfield will review this Appendix of the County's hazard mitigation plan appendix each year and give the County's HMP Coordinator an annual progress report. The Emergency Management Coordinator is responsible for convening the LPC, initiating the plan review, and submitting the annual progress report. The LPC may use worksheets #1 and #3 in the FEMA 386-4 guidance document, to facilitate the review and progress report. FEMA guidance worksheets are provided in Appendix G. Local progress reports shall be provided to the County HMP Coordinator at least two weeks prior to the annual plan review meeting.

Additionally, the LPC will convene and review the plan when major hazard events impact the jurisdiction, potentially yielding opportunities for mitigation grant funding, or when new information suggests that plan elements do not accurately reflect the community's risk or its mitigation priorities.

If necessary, the Emergency Management Coordinator will convene a meeting of the LPC to review and approve all changes. The Township retains the discretion to implement minor changes to the document without formal procedures involving the Township Council subject to local policies and regulations.

In addition to the annual progress report, the Township of Springfield will provide Union County with a copy of the written notice of any changes to the jurisdictional appendix at the time such changes are implemented.

The LPC shall document, as needed and appropriate:

- Hazard events and losses in Linden and the effects that mitigation actions have had on impacts and losses,
- Progress on the implementation of mitigation actions, including efforts to obtain outside funding for projects,
- Any obstacles or impediments to the implementation of actions,
- Additional mitigation actions believed to be appropriate and feasible,
- All public and stakeholder input and comment on the Plan that has been received by the Township.
- Copies of any grant applications filed on behalf of the Township

5.1.2 Continued Public Input

The Township of Springfield is committed to incorporating public input into its ongoing hazard mitigation planning. The public will have an opportunity to comment on the Plan prior to any changes and during the 5-year plan update. The annual progress reports will be posted on the County mitigation website in addition to the adopted Plan.



All public comments and input on the plan will be recorded and addressed, as appropriate. Opportunity to comment on the plan will be provided directly through the County's website. Public comments can also be submitted in writing to the County's HMP Coordinator. All public comments shall be addressed to: Union County Office of Emergency Management c/o All Hazards Pre-disaster Mitigation Plan Coordinator 300 North Ave East, Westfield, NJ 07090.

The Township of Springfield's LPC shall ensure that:

- Copies of the latest approved Plan are available for review at Town Hall along with instructions to facilitate public input and comment on the Plan.
- Public notices are made as appropriate to inform the public of the availability of the Plan, particularly during Plan update cycles.
- For minor changes to this appendix, the Township of Springfield will post a notice on the Township's website and invite the public to review and comment.
- For major changes involving Town Council approval, the Town will use its standard public notice procedures inviting the public to review the document and provide feedback.

5.2 Plan Adoption

On [insert date] Union County submitted the initial draft of the 2015 Plan Update to NJOEM for review and comment. After addressing NJOEM comments in the document, the HMP was resubmitted for final consideration and approval by NJOEM and FEMA. FEMA approved the plan on [insert date], and the Plan update was forwarded to the Union County Board of Chosen Freeholders for adoption, which occurred on [insert date].

The Township Council approved the plan on [insert date]. The Township's resolution for adoption and the County's adoption resolution are provided as Appendix E of the 2015 HMP update. Following adoption, the plan update was resubmitted to FEMA for final approval, which occurred on [insert date]. The FEMA approval letter is included as Appendix D.