

Appendix Vol I.48 Spring Lake Heights Borough

Please find below the following documents specific to this jurisdiction that have been included as part of the plan update process.

- Summary Sheet
- Mitigation Action Table
- Mitigation Action Worksheets
- Capability Assessment
- Flood Zone Map
- Sea Level Rise Vulnerability Map
- Meeting Material



NFIP Statistics

715 *Polices In-force*

506 *Total Losses*

\$16,170,896 *Total Payments*

5 *Number of RL Properties*

3 *Number Mitigated
RL Properties*

16 *RL - Total Losses*

\$560,116 *RL - Total Paid*



1 *Number of SRL Properties*

0 *Number Mitigated SRL
Properties*

4 *SRL - Total Losses*

\$164,188 *SRL - Total Paid*

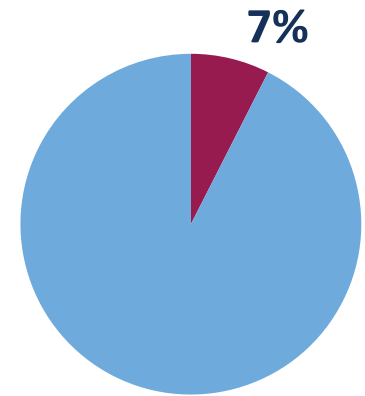
Critical Facilities



7 *Critical Facilities*

0 *Critical Infrastructure*

16 *Historic & Cultural Resources*



Percent Land Area Within SFHA

12

*Total Mitigation
Actions*

1



Education and Awareness Programs

7



Structure and Infrastructure Projects

2



Local Plans and Regulations

2



Natural Systems Protection



0 *SV Population At Risk (2017)*

348 *Population at Risk (2017)*

Spring Lake Heights, Borough of

Monmouth County HMP Mitigation Action Summary

Community Action #	Action Name	Action Description	Action Category	Action Type	Hazard(s) Addressed	Priority	Ease of Implementation	Responsible Party	Potential Funding Sources	Cost Estimate	Timeline	Action Status
48_01	Hazard Zoning & High-Risk Hazard Land Use Ordinances	Revise zoning ordinance to address development in hazardous areas and also implement changes in design requirements to develop structures that are flood resilient. Introduce and adopt development ordinances which require compliance with new base flood elevation, mandatory flood proofing and other similar measures.		Local Plans and Regulations	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge			The Borough Mayor and Council	Planning Grants	\$50,000.00		Completed
48_02	Increase Education and Risk Awareness	Public outreach includes discussion and handouts at Municipal Council meetings or other publicly supported events and meetings.		Education and Awareness Programs	All Hazards			The Borough Mayor and Council	Future Municipal Grants	\$75,000.00		Completed
48_03	Protection from Tidal Flooding	Continue to implement mitigation practices such as development regulations and enforcement of mitigation practices in flood prone areas. Enforce zoning ordinances which restrict development in hazardous areas and also implement changes in design requirements to develop structures that are flood resilient.		Local Plans and Regulations	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge			The Borough Mayor and Council	Future Municipal Grants	\$75,000.00		Completed
48_04	Elevate and Secure Pump Stations	The Black Creek Pump Station is located at the south end of Sixth Avenue along the northern bank of the North Branch of Wreck Pond. The elevation of this pump station does not meet the recommended freeboard. The Shore Road Pump Station is located along the north shore of Wreck Pond. The elevation of this pump station is below the 100-year flood elevation.	Mitigation - Continuity of Fuctional Use	Structure and Infrastructure Project	Flood, Nor'easter, Hurricane and Tropical Storm	High	Medium	The Borough Engineer	HMGP Grant	\$1,400,000.00	1 year	Ongoing
48_05	Acquire and demolish or relocate buildings and infrastructure in flood prone areas, with a focus on Repetitive Loss (RL) and Severe Repetitive Loss (SRL) properties	Acquisition of 11 flood-prone properties in the Borough.	Mitigation - Risk Reduction	Structure and Infrastructure Project	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge	High	Medium	Borough Mayor and Council	FEMA HMA	\$3,933,000.00	2 years	Ongoing
48_06	Elevate buildings and infrastructure in flood prone areas, with a focus on Repetitive Loss (RL) and Severe Repetitive Loss (SRL) properties	Elevation of 12 properties in the Borough previously located in the SFHA.	Mitigation - Risk Reduction	Structure and Infrastructure Project	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge	High	Medium	The Borough Mayor and Council	FEMA HMA	\$600,000.00	4 years	Ongoing
48_07	Elevation or Retrofit of Existing Utilities above the BFE	Raise existing utilities above expected flood levels to reduce flood damage. The utility improvements include the elevating of outdoor HVAC equipment, relocation of overhead electrical services to underground conduit and weather proofing of these services as required.		Structure and Infrastructure Project	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge			The Borough Mayor and Council	Future Municipal Grants	\$36,000.00		Completed
48_08	Desilt and De-snag the North Branch of Wreck Pond	Desilt and De-snag the North Branch of Wreck Pond to allow for more stormwater infiltration.	Maintenance/Respon se/Recovery	Natural Systems Protection	Flood, Nor'easter, Hurricane and Tropical Storm	Medium	Low	Borough Public Works	Municipal budget		1 year	New

Spring Lake Heights, Borough of

Monmouth County HMP Mitigation Action Summary

Community Action #	Action Name	Action Description	Action Category	Action Type	Hazard(s) Addressed	Priority	Ease of Implementation	Responsible Party	Potential Funding Sources	Cost Estimate	Timeline	Action Status
48_09	Upsize or Replace Stormwater Pipe under Route 71	Route 71 is constantly flooded in front of Spring Lake Heights Elementary School. This is due to NJDOT tying into the stormwater pipe and as a result, the pipe is over capacity.	Mitigation - Continuity of Fuctional Use	Structure and Infrastructure Project	Flood	High	Medium	NJDOT, Borough of Spring Lake Heights	NJDOT, Municipal funding, FEMA HMA		2 years	New
48_10	Upsize the Culvert under NJ Transit and De-snag and Clean Polly Pod Brook	Coordinate with Wall Township and Spring Lake on cleaning debris, such as fallen trees, from the Brook. Additionally, upsize the culvert under New Jersey Transit's railroad.	Maintenance/Response/Recovery	Natural Systems Protection	Flood, Nor'easter, Hurricane and Tropical Storm	Medium	High	Wall Township, Spring Lake, Spring Lake Heights, and New Jersey Transit	Municipal budget, NJ Transit, County budget		2 years	New
48_11	Increase Security at the Borough Water Tower	Install a surveillance camera system and more secure fencing around the water tower.	Maintenance/Response/Recovery	Structure and Infrastructure Project	Terrorism	Medium	Low	Borough Police, Public Works	Homeland Security grants		2 years	New
48_12	Purchase and Install Generator for Spring Lake Heights Elementary School	Spring Lake Heights Elementary School is very secure with a high-tech surveillance camera system, however if power goes down, so does the camera system. Therefore, the school needs backup power.	Maintenance/Response/Recovery	Structure and Infrastructure Project	All Hazards	Medium	Low	Borough Schools, OEM, Public Works	FEMA HMA	\$286,000.00	1 year	New

Monmouth County Mitigation Action Worksheets

Community Action Number: 48_01

Spring Lake Heights, Borough of

Describing the Action

Action Name:	Hazard Zoning & High-Risk Hazard Land Use Ordinances
Action Category:	
Action Type:	Local Plans and Regulations
HMA Eligible Activity:	Post-Disaster Code Enforcement
Action Description:	Revise zoning ordinance to address development in hazardous areas and also implement changes in design requirements to develop structures that are flood resilient. Introduce and adopt development ordinances which require compliance with new base flood elevation, mandatory flood proofing and other similar measures.

Evaluating the Action

Hazard(s) Addressed:	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge
Goals:	1, 2, 3, 5,
Risk Reduction:	Existing development in flood-prone areas and areas susceptible to storm surge has incurred first floor flooding, and damages to utility systems. While not on the immediate coast, much of Spring Lake Heights is in mapped surge hazard areas. However, during Hurricane Sandy, most flooding was observed within the first block of the Wreck Pond tributaries. Sea level rise and climate change will contribute to more frequent and severe flooding and surge events over a larger area. Climate change will contribute to more frequent and severe weather events. Spring Lake Heights is essentially built out; the majority of development is residential in nature and occurs as part of home additions and improvements.
Technical:	Planning Mechanisms are technically feasible.
Political:	These proposed planning changes have the support of the Mayor and Council.
Legal:	The Borough of Spring Lake Heights has the Authority to make these changes.
Environmental:	There are no environmental impacts associated with the proposed planning changes.
Social:	There are no social impacts or does this proposed improvement require the relocation of any resident of the Borough.
Administrative Capability:	The Borough attorney and planner are required to complete this project.
Local Champion:	The local Police Fire and Rescue Squad are in support of this implementation as well as the Borough's Environmental Commission.
Other Community Objectives:	This action specifically furthers the Borough's Community Objectives with regard to development.
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	\$50,000.00
Priority:	
Scale of Ease of Implementation:	
Responsible Party:	The Borough Mayor and Council
Local Planning Mechanism:	The Planning Board, the Zoning Board of Adjustment, the Building Department and the NJ Building Code
Likely Funding Source(s):	Planning Grants
Timeline:	
Action Status:	Completed
Notes:	Codes address forgiveness in height in flood zones for going above BFE

Monmouth County Mitigation Action Worksheets

Community Action Number: 48_02

Spring Lake Heights, Borough of

Describing the Action

Action Name:	Increase Education and Risk Awareness
Action Category:	
Action Type:	Education and Awareness Programs
HMA Eligible Activity:	Miscellaneous/Other
Action Description:	Public outreach includes discussion and handouts at Municipal Council meetings or other publicly supported events and meetings.

Evaluating the Action

Hazard(s) Addressed:	All Hazards
Goals:	3, 4, 5, 8
Risk Reduction:	The general public's understanding of natural hazards and mitigation possibilities could be improved. The community's overall level of disaster resistance would increase if a greater number of households undertook low-cost or no-cost, small scale mitigation activities.
Technical:	Outreach programs are technically feasible.
Political:	The implementation of flood mitigation practices has the support of the Mayor and Council.
Legal:	The Borough of Spring Lake Heights has the authority to conduct public outreach.
Environmental:	There is not an environmental impact associated with outreach measures.
Social:	There are no social impacts associated with outreach measures.
Administrative Capability:	The Borough has the administrative capability to conduct outreach programs measures.
Local Champion:	The local Police Fire and Rescue Squad are in support of this implementation of these measures.
Other Community Objectives:	This action specifically furthers the Borough's Community Objectives with regard the safety and welfare of its residents.
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	\$75,000.00
Priority:	
Scale of Ease of Implementation:	
Responsible Party:	The Borough Mayor and Council
Local Planning Mechanism:	Literature prepared and discussions presented by Borough Officials will be used to implement these actions.
Likely Funding Source(s):	Future Municipal Grants
Timeline:	
Action Status:	Completed
Notes:	Completed during hurricane season.

Monmouth County Mitigation Action Worksheets

Community Action Number: 48_03

Spring Lake Heights, Borough of

Describing the Action

Action Name:	Protection from Tidal Flooding
Action Category:	
Action Type:	Local Plans and Regulations
HMA Eligible Activity:	Localized Flood Risk Reduction Projects
Action Description:	Continue to implement mitigation practices such as development regulations and enforcement of mitigation practices in flood prone areas. Enforce zoning ordinances which restrict development in hazardous areas and also implement changes in design requirements to develop structures that are flood resilient.

Evaluating the Action

Hazard(s) Addressed:	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge
Goals:	2, 3, 5, 6
Risk Reduction:	Existing development in flood-prone areas and areas susceptible to storm surge has incurred first floor flooding, and damages to utility systems. Sea level rise and climate change will contribute to more frequent and severe flooding and surge events over a larger area. Climate change will contribute to more frequent and severe weather events.
Technical:	Planning and enforcement Mechanisms are technically feasible.
Political:	The implementation of flood mitigation practices has the support of the Mayor and Council.
Legal:	The Borough of Spring Lake Heights has the authority to implement these practices.
Environmental:	There is not an environmental impact associated with the implementation of the flood mitigation practices and all practices will comply with NJDEP regulations.
Social:	There are no social impacts or does this proposed implementation require the relocation of any resident of the Borough.
Administrative Capability:	The Borough Zoning Officer and Engineer will be required to implement these practices.
Local Champion:	The local Police Fire and Rescue Squad are in support of this implementation as well as the Borough's Environmental Commission.
Other Community Objectives:	This action specifically furthers the Borough's Community Objectives with regard to development.
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	\$75,000.00
Priority:	
Scale of Ease of Implementation:	
Responsible Party:	The Borough Mayor and Council
Local Planning Mechanism:	The Zoning and Code Officer, the Planning Board, the Zoning Board of Adjustment, the Building Department and the
Likely Funding Source(s):	Future Municipal Grants
Timeline:	
Action Status:	Completed
Notes:	

Monmouth County Mitigation Action Worksheets

Community Action Number: 48_04

Spring Lake Heights, Borough of

Describing the Action

Action Name:	Elevate and Secure Pump Stations
Action Category:	Mitigation - Continuity of Fuctional Use
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Structure Elevation
Action Description:	The Black Creek Pump Station is located at the south end of Sixth Avenue along the northern bank of the North Branch of Wreck Pond. The elevation of this pump station does not meet the recommended freeboard. The Shore Road Pump Station is located along the north shore of Wreck Pond. The elevation of this pump station is below the 100-year flood elevation.

Evaluating the Action

Hazard(s) Addressed:	Flood, Nor'easter, Hurricane and Tropical Storm
Goals:	2, 3, 5, 6, 7
Risk Reduction:	Wind Damage to building which can compromise equipment as well as result in electrical power loss to the station.
Technical:	Elevation of the pump station is the most technically feasible option available.
Political:	The proposed improvements have the support of the Mayor and Council.
Legal:	The Borough of Spring Lake Heights has the authority to make these improvements.
Environmental:	There are all Environmental impacts associated with the proposed improvements. All NJDEP permits will be obtained prior to construction.
Social:	There are no social impacts or does this proposed improvement require the relocation of any resident of the Borough.
Administrative Capability:	No outside help is required to complete this project.
Local Champion:	The South Monmouth Regional Sewage Authority is in support of this implementation as well as the Borough's Environmental Commission.
Other Community Objectives:	
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	\$1,400,000.00
Priority:	High
Scale of Ease of Implementation:	Medium
Responsible Party:	The Borough Engineer
Local Planning Mechanism:	The Building Department and the NJ building Code
Likely Funding Source(s):	HMGP Grant
Timeline:	1 year
Action Status:	Ongoing
Notes:	The Borough was awarded HMGP funding of \$585,000 for Pump and Generator Elevation/Upgrades. Construction started however the Borough needs more funding, as the project costs \$750,000 more than estimated in 2015. Additionally, the Borough would like to add security cameras to the pump stations.

Monmouth County Mitigation Action Worksheets

Community Action Number: 48_05

Spring Lake Heights, Borough of

Describing the Action

Action Name:	Acquire and demolish or relocate buildings and infrastructure in flood prone areas, with a focus on Repetitive Loss (RL) and Severe Repetitive Loss (SRL) properties
Action Category:	Mitigation - Risk Reduction
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Property Acquisition and Structure Demolition
Action Description:	Acquisition of 11 flood-prone properties in the Borough.

Evaluating the Action

Hazard(s) Addressed:	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge
Goals:	2, 3, 5
Risk Reduction:	Existing development in flood-prone areas and areas susceptible to storm surge has incurred first floor flooding, and damages to utility systems. Sea Level Rise and climate change will contribute to more frequent and severe flooding and surge events over a larger area. Climate change will contribute to more frequent and severe weather events.
Technical:	Acquisition is technically feasible.
Political:	Acquisition has the support of the Mayor and Council.
Legal:	Program is voluntary by the homeowner, so no legal issues are anticipated.
Environmental:	Positively impacts the environment by removing the home from the floodplain and increasing the permeable surface and restoring the natural floodplain.
Social:	There are no social impacts associated with these acquisitions.
Administrative Capability:	The Borough has the administrative capability to acquire property.
Local Champion:	The local residents as well as the Environmental Committee in support of this implementation of these measures.
Other Community Objectives:	This action specifically furthers the Borough's Community Objectives with regard to the safety and welfare of its residents.
STAPLEE Evaluation:	10

Implementing the Action

Cost Estimate:	\$3,933,000.00
Priority:	High
Scale of Ease of Implementation:	Medium
Responsible Party:	Borough Mayor and Council
Local Planning Mechanism:	Hazard Mitigation Plan
Likely Funding Source(s):	FEMA HMA
Timeline:	2 years
Action Status:	Ongoing
Notes:	Currently there are 4 RL/SRL properties and 2 of the 4 have been mitigated.

Monmouth County Mitigation Action Worksheets

Community Action Number: 48_06

Spring Lake Heights, Borough of

Describing the Action

Action Name:	Elevate buildings and infrastructure in flood prone areas, with a focus on Repetitive Loss (RL) and Severe Repetitive Loss (SRL) properties
Action Category:	Mitigation - Risk Reduction
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Structure Elevation
Action Description:	Elevation of 12 properties in the Borough previously located in the SFHA.

Evaluating the Action

Hazard(s) Addressed:	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge
Goals:	2, 3,
Risk Reduction:	Existing development in flood-prone areas and areas susceptible to storm surge has incurred first floor flooding, and damages to utility systems. Sea level rise and climate change will contribute to more frequent and severe flooding and surge events over a larger area. Climate change will contribute to more frequent and severe weather events.
Technical:	Elevation is technically feasible.
Political:	Elevation has the support of the Mayor and Council.
Legal:	The properties listed have expressed interest in being elevated.
Environmental:	Elevation of properties does not have Environmental impacts.
Social:	There are no social impacts associated with elevating these properties.
Administrative Capability:	The Borough has the administrative capability to acquire property.
Local Champion:	The local residents as well as the Environmental Committee in support of this implementation of these measures.
Other Community Objectives:	This action specifically furthers the Borough's Community Objectives with regard to the safety and welfare of its residents
STAPLEE Evaluation:	10

Implementing the Action

Cost Estimate:	\$600,000.00
Priority:	High
Scale of Ease of Implementation:	Medium
Responsible Party:	The Borough Mayor and Council
Local Planning Mechanism:	Hazard Mitigation Plan
Likely Funding Source(s):	FEMA HMA
Timeline:	4 years
Action Status:	Ongoing
Notes:	Currently there are 4 RL/SRL properties and 2 of the 4 have been mitigated.

Monmouth County Mitigation Action Worksheets

Community Action Number: 48_07

Spring Lake Heights, Borough of

Describing the Action

Action Name:	Elevation or Retrofit of Existing Utilities above the BFE
Action Category:	
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Infrastructure Retrofit
Action Description:	Raise existing utilities above expected flood levels to reduce flood damage. The utility improvements include the elevating of outdoor HVAC equipment, relocation of overhead electrical services to underground conduit and weather proofing of these services as required.

Evaluating the Action

Hazard(s) Addressed:	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge
Goals:	2, 3, 5, 7
Risk Reduction:	Existing development in flood-prone areas and areas susceptible to storm surge has incurred first floor flooding, and damages to utility systems.
Technical:	This is technically feasible.
Political:	These improvements have the support of the Mayor and Council.
Legal:	There are no are no legal issues.
Environmental:	No known adverse environmental impacts.
Social:	There are no social impacts associated with these improvements
Administrative Capability:	The Borough has the administrative capability to implement these improvements
Local Champion:	The local residents are in support of this implementation of these measures.
Other Community Objectives:	This action specifically furthers the Borough's Community Objectives with regard the safety and welfare of its residents
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	\$36,000.00
Priority:	
Scale of Ease of Implementation:	
Responsible Party:	The Borough Mayor and Council
Local Planning Mechanism:	Planning
Likely Funding Source(s):	Future Municipal Grants
Timeline:	
Action Status:	Completed
Notes:	Fairway Muse pump station is going up; generator is up; power generators elevated at pump station #4.

Monmouth County Mitigation Action Worksheets

Community Action Number: 48_08

Spring Lake Heights, Borough of

Describing the Action

Action Name:	Desilt and De-snag the North Branch of Wreck Pond
Action Category:	Maintenance/Response/Recovery
Action Type:	Natural Systems Protection
HMA Eligible Activity:	Floodplain and Stream Restoration
Action Description:	Desilt and De-snag the North Branch of Wreck Pond to allow for more stormwater infiltration.

Evaluating the Action

Hazard(s) Addressed:	Flood, Nor'easter, Hurricane and Tropical Storm
Goals:	2, 3, 5, 6
Risk Reduction:	The North Branch of Wreck Pond floods nearby properties causing the undermining the sidewalk due to debris and siltation in the pond.
Technical:	Technically feasible.
Political:	No political obstacles anticipated.
Legal:	No legal issues anticipated.
Environmental:	No adverse environmental effects anticipated
Social:	Does not adversely affect any particular social group. Perceived by the public to be beneficial as clean drainage will help to reduce the impact of flooding on residents.
Administrative Capability:	Borough has sufficient capacity and experience to administer this action
Local Champion:	OEM, Council
Other Community Objectives:	
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	
Priority:	Medium
Scale of Ease of Implementation:	Low
Responsible Party:	Borough Public Works
Local Planning Mechanism:	Hazard Mitigation Plan
Likely Funding Source(s):	Municipal budget
Timeline:	1 year
Action Status:	New
Notes:	

Monmouth County Mitigation Action Worksheets

Community Action Number: 48_09

Spring Lake Heights, Borough of

Describing the Action

Action Name:	Upsize or Replace Stormwater Pipe under Route 71
Action Category:	Mitigation - Continuity of Fuctional Use
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Localized Flood Risk Reduction Projects
Action Description:	Route 71 is constantly flooded in front of Spring Lake Heights Elementary School. This is due to NJDOT tying into the stormwater pipe and as a result, the pipe is over capacity.

Evaluating the Action

Hazard(s) Addressed:	Flood
Goals:	2, 3, 7
Risk Reduction:	Route 71 is an evacuation route and the route to Jersey Shore Medical. This road must stay clear of standing water.
Technical:	Technically feasible.
Political:	No political obstacles anticipated.
Legal:	Must work with NJDOT on mitigation solutions.
Environmental:	No adverse environmental effects anticipated.
Social:	Does not adversely affect any particular social group. Perceived by the public to be beneficial as better drainage will help to reduce the impact of flooding on Route 71.
Administrative Capability:	Borough has sufficient capacity and experience to administer this action
Local Champion:	OEM, Council
Other Community Objectives:	
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	
Priority:	High
Scale of Ease of Implementation:	Medium
Responsible Party:	NJDOT, Borough of Spring Lake Heights
Local Planning Mechanism:	Hazard Mitigation Plan
Likely Funding Source(s):	NJDOT, Municipal funding, FEMA HMA
Timeline:	2 years
Action Status:	New
Notes:	

Monmouth County Mitigation Action Worksheets

Community Action Number: 48_10

Spring Lake Heights, Borough of

Describing the Action

Action Name:	Upsize the Culvert under NJ Transit and De-snap and Clean Polly Pod Brook
Action Category:	Maintenance/Response/Recovery
Action Type:	Natural Systems Protection
HMA Eligible Activity:	Mitigation Reconstruction
Action Description:	Coordinate with Wall Township and Spring Lake on cleaning debris, such as fallen trees, from the Brook. Additionally, upsize the culvert under New Jersey Transit's railroad.

Evaluating the Action

Hazard(s) Addressed:	Flood, Nor'easter, Hurricane and Tropical Storm
Goals:	2, 3, 5, 6
Risk Reduction:	Properties in the Polly Pod Watershed flood due to fallen trees in the brook preventing the water from infiltrating to its full capacity. Additionally, the undersized culvert under the railroad causes flooding in this same area.
Technical:	Technically feasible.
Political:	Politically acceptable.
Legal:	Will need coordination with Wall Township, Spring Lake, and New Jersey Transit to mitigate the brook.
Environmental:	Environmental beneficial; will restore the brook.
Social:	Does not adversely affect any particular social group. Perceived by the public to be beneficial as this action will help to reduce the impact of flooding on residents.
Administrative Capability:	Borough has sufficient capacity and experience to administer this action
Local Champion:	OEM, Council
Other Community Objectives:	
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	
Priority:	Medium
Scale of Ease of Implementation:	High
Responsible Party:	Wall Township, Spring Lake, Spring Lake Heights, and New Jersey Transit
Local Planning Mechanism:	Hazard Mitigation Plan
Likely Funding Source(s):	Municipal budget, NJ Transit, County budget
Timeline:	2 years
Action Status:	New
Notes:	

Monmouth County Mitigation Action Worksheets

Community Action Number: 48_11

Spring Lake Heights, Borough of

Describing the Action

Action Name: Increase Security at the Borough Water Tower

Action Category: Maintenance/Response/Recovery

Action Type: Structure and Infrastructure Project

HMA Eligible Activity: Miscellaneous/Other

Action Description: Install a surveillance camera system and more secure fencing around the water tower.

Evaluating the Action

Hazard(s) Addressed: Terrorism

Goals: 3, 5, 7

Risk Reduction: The top of the water tower houses the Borough's communication, including fire, police, and the only cell site in the area. The communicate center and the water tower itself is vulnerable to a terrorist attack and needs to be more secure. Currently, there is only a chain-linked fence around the tower's perimeter.

Technical: Technically feasible.

Political: No political obstacles anticipated.

Legal: No legal issues anticipated.

Environmental: No adverse environmental effects anticipated.

Social: Does not adversely affect any particular social group. Perceived by the public to be beneficial because the water tower serves as a critical function for the community.

Administrative Capability: Borough has sufficient capacity and experience to administer this action

Local Champion: OEM, Council

Other Community Objectives:

STAPLEE Evaluation: N/A

Implementing the Action

Cost Estimate:

Priority: Medium

Scale of Ease of Implementation: Low

Responsible Party: Borough Police, Public Works

Local Planning Mechanism: Hazard Mitigation Plan

Likely Funding Source(s): Homeland Security grants

Timeline: 2 years

Action Status: New

Notes:

Monmouth County Mitigation Action Worksheets

Community Action Number: 48_12

Spring Lake Heights, Borough of

Describing the Action

Action Name:	Purchase and Install Generator for Spring Lake Heights Elementary School
Action Category:	Maintenance/Response/Recovery
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Generators
Action Description:	Spring Lake Heights Elementary School is very secure with a high-tech surveillance camera system, however if power goes down, so does the camera system. Therefore, the school needs backup power.

Evaluating the Action

Hazard(s) Addressed:	All Hazards
Goals:	
Risk Reduction:	There are 13 security cameras, several access swipes, and audio sensors in place at the school that will go down without power.
Technical:	Technically feasible.
Political:	No adverse political ramifications are expected.
Legal:	No legal impediments anticipated.
Environmental:	No adverse environmental impact anticipated
Social:	Does not adversely affect any particular social group. Perceived by the public to be beneficial because the school will be more secure with a backup generator.
Administrative Capability:	Borough has sufficient capacity and experience to administer this action
Local Champion:	OEM, Council, Police Chief
Other Community Objectives:	
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	\$286,000.00
Priority:	Medium
Scale of Ease of Implementation:	Low
Responsible Party:	Borough Schools, OEM, Public Works
Local Planning Mechanism:	Hazard Mitigation Plan
Likely Funding Source(s):	FEMA HMA
Timeline:	1 year
Action Status:	New
Notes:	

CAPABILITY ASSESSMENT WORKSHEET

Name: Chris Campion

Title: OEM Coordinator

Jurisdiction: Spring Lake Heights Borough

Organization:

Local Mitigation Capabilities are existing authorities, policies, programs, and resources that reduce hazard impacts or that could be used to implement hazard mitigation activities. Please complete the tables and questions in the worksheet as completely as possible.

Planning & Regulatory

Planning and Regulatory Capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Please indicate which of the following your jurisdiction currently has in place.

Plan	Yes/No	1. What is the date/year of the plan? 2. Does the plan address hazards? 3. Does the plan identify projects to include in the mitigation strategy? 4. Can the plan be used to implement mitigation actions?
Comprehensive/Master Plan	Yes	
Capital Improvements Plan	Yes	
Economic Development Plan	No	
Local Emergency Operations Plan	Yes	
Continuity of Operations Plan		
Post-Disaster Recovery Plan	No	
Transportation Plan		
Stormwater Management Plan		
Community Wildfire Protection Plan		



CAPABILITY ASSESSMENT WORKSHEET

Other special plans (e.g., brownfields redevelopment, disaster recovery, coastal zone management, climate change adaptation)		
Building Code, Permitting, and Inspections	Yes/No	Are codes adequately enforced?
Building Code	Yes	Version/Year:
Building Code Effectiveness Grading Schedule (BCEGS) Score		Score:
Fire Department ISO rating		Rating:
Site Plan Review Requirements	Yes	
Land Use Planning and Ordinances	Yes/No	Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced?
Zoning Ordinance	Yes	
Subdivision Ordinance	Yes	
Floodplain Ordinance		
Natural hazard ordinance (stormwater, steep slope, wildfire)		
Flood Insurance Rate Maps		
Acquisition of Land for Open Space and Public Recreation Uses		
Post-Disaster Recovery Ordinance	No	
Real Estate Disclose Ordinance	No	



CAPABILITY ASSESSMENT WORKSHEET

Other (ie. Special Purposes Ordinance)	No	
How can the above capabilities be expanded and improved to reduce risk?		

Administrative & Technical

Identify whether your community has the following administrative and technical capabilities. These include staff and their skills and tools that can be used for mitigation planning and to implement specific mitigation actions. For smaller jurisdictions without local staff resources, if there are public resources at the next higher-level government that can provide technical assistance, indicate so in your comments.

Administration	Yes/No	Describe capability Is coordination effective?
Planning Commission		
Mitigation Planning Committee		
Maintenance Programs to Reduce Risk (e.g., tree trimming, clearing drainage systems)		
Mutual Aid Agreements		
Staff	Yes/No FT/PT	Is the staff full time or part time? Is staffing adequate to enforce regulations? Is the staff trained on hazards and mitigation? Is coordination between agencies and staff effective?
Chief Building Official		
Floodplain Administrator	Yes	
Emergency Manager	Yes	
Community Planner	Yes	



CAPABILITY ASSESSMENT WORKSHEET

Civil Engineer	Yes	
Surveyor	Yes	
GIS Coordinator	Yes	
Scientists familiar with the hazards of the community	No	
Other		
Technical	Yes/No	Describe capability Has capability been used to access/mitigate risk in the past?
Warning Systems/Services (Reverse 911, outdoor warning signals)		
Hazard Data and Information		
Grant Writing	No	
Hazus Analysis	No	
Other		
How can the above capabilities be expanded and improved to reduce risk?		



CAPABILITY ASSESSMENT WORKSHEET

Financial

Identify whether your jurisdiction has access to or is eligible to use the following funding resources for hazard mitigation.

Funding Resource	Access / Eligibility (Yes/No)	Has the funding resource been used in the past and for what type of activities? Could the resource be used to fund future mitigation actions?
Capital Improvements Project Funding	Yes	
Authority to Levy Taxes for Specific Purposes	Yes	
Fees for Water, Sewer, Gas, or Electric Services	Yes	
Impact Fees for New Development	No	
Stormwater Utility Fee		
Incur Debt Through Private Activities	No	
Community Development Block Grant	Yes	
Other Federal Funding Programs	Yes	
State Funding Programs		
Other (e.g., withhold spending in hazard-prone areas)	Yes	Incur Debt through General Obligation Funds and Incur Debt through Special Tax and Revenue Bonds
How can these capabilities be expanded and improved to reduce risk?		



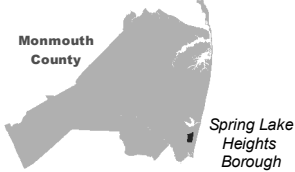
CAPABILITY ASSESSMENT WORKSHEET

Education and Outreach

Identify education and outreach programs and methods already in place that could be used to implement mitigation activities and communicate hazard-related information.

Program/Organization	Yes/No	Describe program/organization and how it relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities?
Local Citizen Groups or Non-Profit Organizations Focused on Environmental Protection, Emergency Preparedness, Access and Functional Needs Populations, etc.		
Ongoing Public Education or Information Programs (e.g., responsible water use, fire safety, household preparedness, environmental education)		
Natural Disaster or Safety Related School Programs		
StormReady Certification		
Firewise Communities Certification		
Public-Private Partnership Initiatives Addressing Disaster Related Issues		
Other		
How can these capabilities be expanded and improved to reduce risk?		





Building Classification

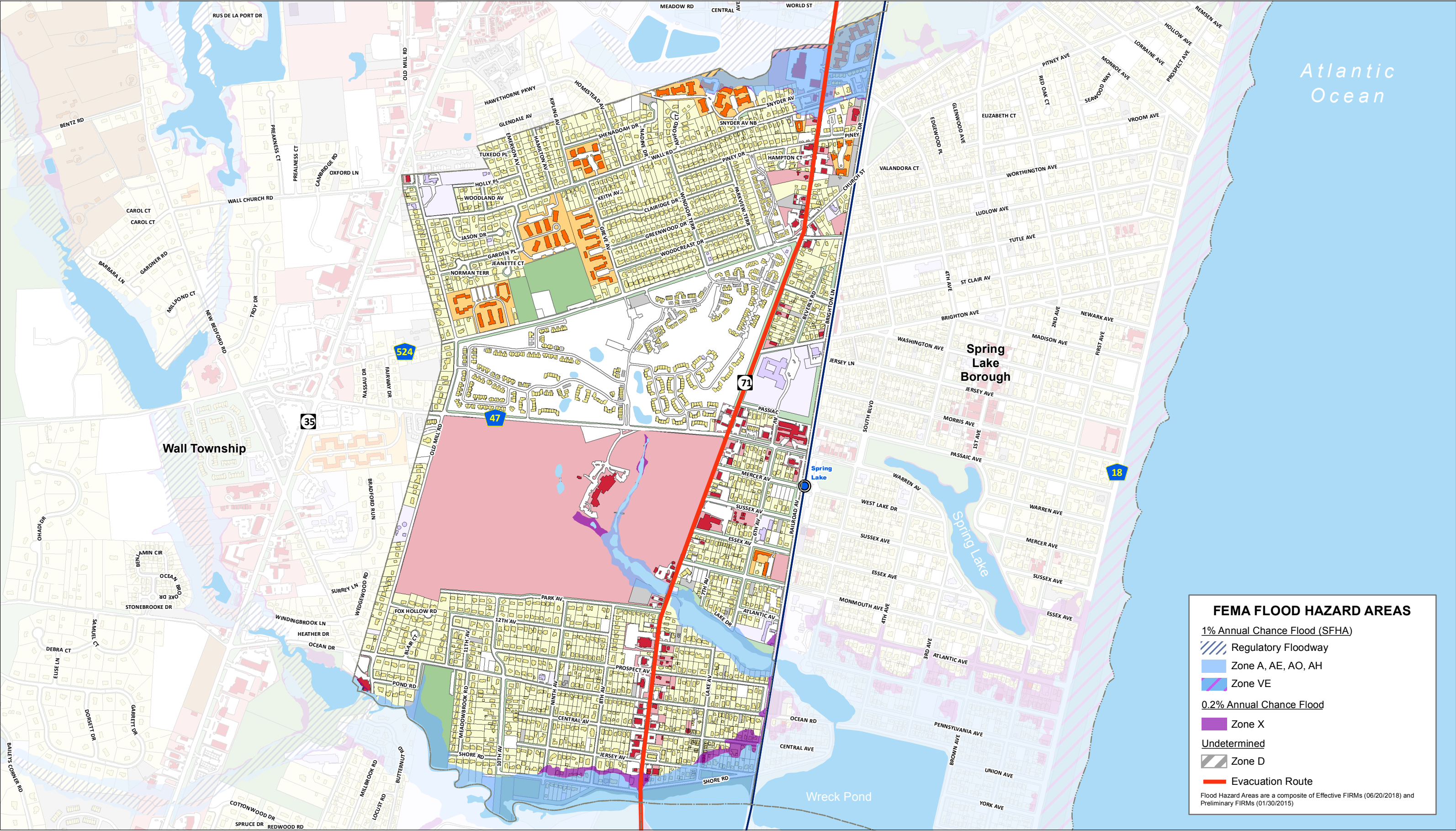
Industrial	Commercial	Apartment	Residential (four families or less)
Farm	Vacant	Civic/Public (Tax Exempt)	Unclassified

Parcel Classification

Industrial	Commercial	Apartment	Residential (four families or less)
Farm	Vacant	Civic/Public (Tax Exempt)	Unclassified
			Open Space

0 500 1,000 Feet

Source: 2014 Esri; Monmouth County; NJOIT-OGIS; NJGIN MODIV Parcel, FEMA
Projection: New Jersey State Plane, NAD 1983



FEMA FLOOD HAZARD AREAS

1% Annual Chance Flood (SFHA)

- Regulatory Floodway
- Zone A, AE, AO, AH
- Zone VE

0.2% Annual Chance Flood

- Zone X

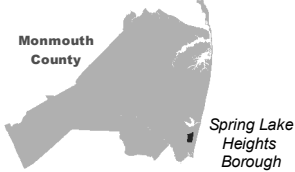
Undetermined

- Zone D

Evacuation Route

Flood Hazard Areas are a composite of Effective FIRMs (06/20/2018) and Preliminary FIRMs (01/30/2015)

This map was developed using the 10-04-18 statewide composite of parcel data published by the NJOIT-OGIS. The State of New Jersey makes great effort to provide secure, accurate, and complete data and metadata. However, portions of the data and metadata may be incorrect or not current. Any errors or omissions should be reported for investigation to OGIS.



Building Classification

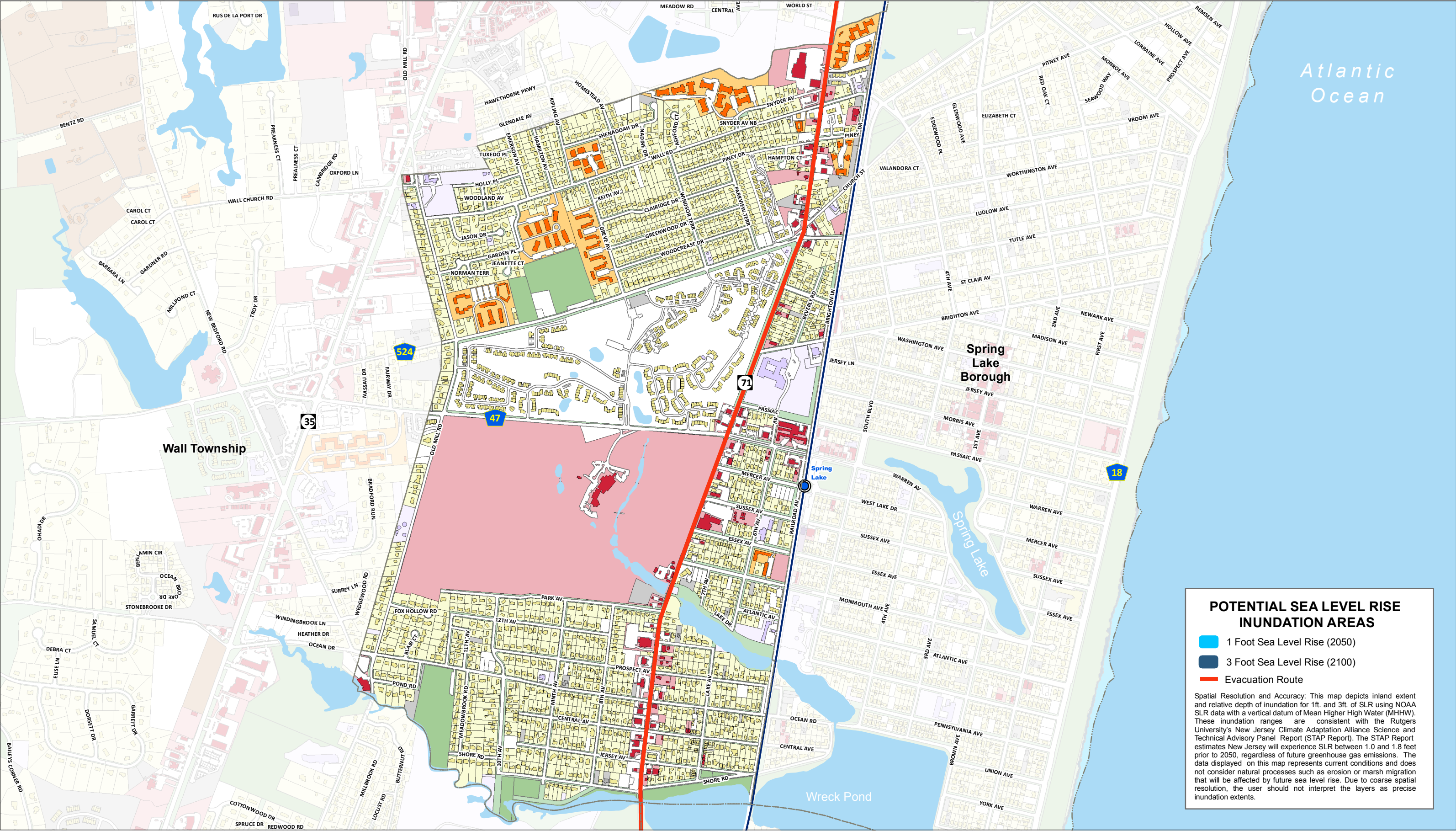
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POTENTIAL SEA LEVEL RISE INUNDATION AREAS

- 1 Foot Sea Level Rise (2050)
- 3 Foot Sea Level Rise (2100)
- Evacuation Route

Spatial Resolution and Accuracy: This map depicts inland extent and relative depth of inundation for 1ft. and 3ft. of SLR using NOAA SLR data with a vertical datum of Mean Higher High Water (MHHW). These inundation ranges are consistent with the Rutgers University's New Jersey Climate Adaptation Alliance Science and Technical Advisory Panel Report (STAP Report). The STAP Report estimates New Jersey will experience SLR between 1.0 and 1.8 feet prior to 2050, regardless of future greenhouse gas emissions. The data displayed on this map represents current conditions and does not consider natural processes such as erosion or marsh migration that will be affected by future sea level rise. Due to coarse spatial resolution, the user should not interpret the layers as precise inundation extents.



MEETING NOTES

Topic: Spring Lake Heights- Monmouth County HMP Update Meeting

Date: June 26, 2019

Time: 10:00 AM- 11:00 AM

Location: 555 Brighton Avenue Spring Lake, NJ 07762

Attendees:

Chris	Campion	Coordinator
Janine	Gillis	Clerk / Administrative Assistant
Joseph	May	Engineer / DPW Director
John	Spalthoff	Superintendent
Casey	Williams	DEP Coordinator

Drafted by: Paige Kaspar

Introductions (Paige):

- Goals and Hazards
- What is Mitigation Hazard Planning?
- Funding Available
 - HMA
- Mitigation Strategies

Critical Facilities List:

- Arbors Senior Center
- Shore road/ black creek pump station
- West Belmar sewage pump station
- will get updated list

Capabilities:

- Shared Uniform Construction code service with Spring Lake, Sea Grit, Spring Lake Heights and possibly Brielle? Unsuccessful would like to have separate services.



- Police has active shooter trainings
- Schools:
 - Lock down drills, active shooter training, 15 security cameras, access swipe at doors, audio sensors, shared 911 to be able to talk to teachers and police. Security vestibule has created a man trap, I check to see if anyone is a sex offender before working on the building or entering the building. Mapping of the building on shared 911 to know the zones of the school, night lock is a piece that goes into the bottom of the floor of each door in building, buttons under secretary and supervisor to alert the county, wave system/ radio broadcast.
- Emergency Plans for active shooter trainings.
- Fire sirens updated to a mass broadcast messaging system and reverse 911 and Facebook groups.
- In process to upgrade all municipal building cameras
- Rogers group assessment of the police department. Relocating servers, reinstalling phone systems and data, terminals and wiring all changed and redundant.
- Master Plan Update in process
- Community Shelter is Code Blue

2015 Mitigation Action:

- Mitigation 1: Completed. Have revised ordinance to allow to build up to 35ft. Done immediately after Hurricane Sandy. There is an actual ordinance DPW will get us the name of the Ordinance. Adopted preliminary FIRMs
- Mitigation 2: Completed → Capabilities
- Mitigation 3: Completed → Capabilities
- Mitigation 4: Ongoing and currently under construction
- Mitigation 5: Ongoing. Some properties mitigated.
- Mitigation 6: Ongoing. Some properties mitigated. Combine with mitigation action 5.
- Mitigation 7: Completed. Coincides with mitigation action 4. Emergency generators have been elevated. Fairway Mews pump station is going to be elevated in 2020 and generators have been elevated.

Accomplishments:

- Work with the state and DOT to improve railroad crossings drainage near Warren Ave and Ocean Rd.
- Bond to improve drainage and flood issues for Hamilton Rd., Emerson Rd., and Holly.

2020 Mitigation Actions:

- School generator. If electric goes down, then security becomes inaccessible. \$286,000
- Polypod brook choke/ flooding issue, Cleanout and maintenance and upsize of culvert along the Wall township boarder. On Transit property.



Monmouth County Multi-Jurisdictional Hazard Mitigation Plan Update



Michael Baker
INTERNATIONAL

- In front of elementary school flooding issue. DOT added piping into town pipe and doesn't have the capacity. Work with DOT.
- South neighborhood has flooding issues. ADA central area 1 contract
- Protection of the Water Tower that houses the communication for fire, police, and cell and water treatment plant. Want cameras firm fencing for more security.

Problems/ Questions:

- Power Outages with every storm
- Received hmgp funds for pump station and costs where more than expected can they apply for an additional grant before close out? \$650,000 → \$1.4 million
- Floods on 71



Monmouth County
Multi-Jurisdictional Hazard Mitigation Plan Update



Michael Baker
INTERNATIONAL

Meeting: Spring Lake Heights Borough

Date: 6/26/19

Initial	Last Name	First Name	Title	Organization	Email Address
	Campion	Chris	Coordinator	Borough of SLH	CCampion@SpringLakeHts.com
	Ashman	Brittany	Planner	MB	
	Kasper	Paige	Planner	MB	
	MAY	JOSEPH	Emergency/Prep Dir	SLH	JMAY@SPRINGLAKEHTS.COM
	Williams	Cathy	Dep Coord	SLH	cwillms@springlakehts.com
	Cillis	Janine	Clerk/Administrator	SLH	boroughclerk@springlakehts.com
	SpaHoff	John	Superintendent	SLH School	jspa1hoff@slheights.org