

Appendix Vol I.28 Long Branch City

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

2,005 *Polices In-force*

1,347 *Total Losses*

\$52,208,476 *Total Payments*

69 *Number of RL Properties*

8 *Number Mitigated
RL Properties*

200 *RL - Total Losses*

\$8,800,686 *RL - Total Paid*

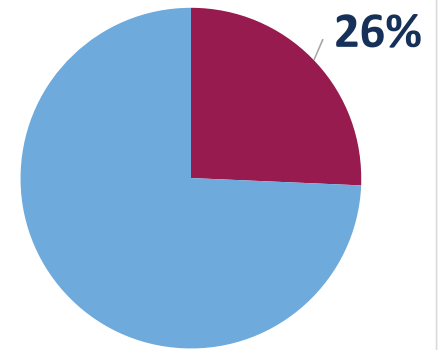


2 *Number of SRL Properties*

0 *Number Mitigated SRL
Properties*

15 *SRL - Total Losses*

\$447,330 *SRL - Total Paid*



Percent Land Area Within SFHA

18

*Total Mitigation
Actions*

0



Education and Awareness Programs

17



Structure and Infrastructure Projects

1



Local Plans and Regulations

0



Natural Systems Protection

Critical Facilities



44 *Critical Facilities*

2 *Critical Infrastructure*

99 *Historic & Cultural Resources*



820 *SV Population At Risk (2017)*

7,894 *Population at Risk (2017)*

Long Branch, City 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
28_01	Continue to Enforce Flood Ordinances	Update local ordinances to comply with FEMA's new preliminaries and possibly acquire reductions for residents in flood insurance premiums.	Administrative	Local Plans and Regulations	Flood, Wave Action, Coastal Erosion, Nor'easter, Hurricane and Tropical Storm, Storm Surge	Low	Low	City of Long Branch	Local Budget		1 year	Ongoing
28_02	Continue to Implement the City-Wide Drainage Master Plan	Installation of improved drainage and stormwater pipe to control flood waters and increase strategic locations to control flow.	Administrative	Structure and Infrastructure Project	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge	Low	Low	City of Long Branch	Local Budget	\$113,500.00	1 year	Ongoing
28_03	Upsize the Stormwater Pipe under the New Jersey Transit Rail Line	The stormwater pipe that needs to be upsized under the New Jersey Transit (NJT) Railroad. Replace the piping of the ditch from Morris Ave to the start of the underground piping.	Mitigation - Continuity of Fuctional Use	Structure and Infrastructure Project	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge	Medium	High	City of Long Branch	Local Budget, FEMA HMA	\$7,030,000.00	5 + years	Ongoing
28_04	Install Stormwater Control Devices at Lake Takanassee	Install an improved drainage system and stormwater control devices to regulate flood waters and increase strategic locations to control flow.	Mitigation - Risk Reduction	Structure and Infrastructure Project	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge	High	Medium	City of Long Branch	Local Budget, FEMA HMA	\$314,000.00	2 years	Ongoing
28_05	Install Improved Stormwater Pipe at the Elberon Trestle	Installation of improved drainage and stormwater pipe to control flood waters and increase strategic locations to control flow. Advanced warning systems to alert motorist of the conditions located overhead and will require significant coordination with New Jersey Transit.	Mitigation - Risk Reduction	Structure and Infrastructure Project	Flood, Hurricane and Tropical Storm, Storm Surge	High	High	City, Ocean Township, Borough of Deal	Local Budget, FEMA HMA	\$1,500,000.00	3 years	Ongoing
28_06	Install Duckbill Check Valves along the Shrewsbury River	Installation of duckbill check valves to control flood waters and increase strategic locations to control flow.	Mitigation - Risk Reduction	Structure and Infrastructure Project	Flood, Hurricane and Tropical Storm, Storm Surge	High	Medium	City of Long Branch	Local Budget, FEMA HMA	\$136,500.00	3 years	Ongoing
28_07	Construct a New Bulkhead at Bay Ave.	Improvements to existing Bay Avenue bulkhead that has proven to be inadequate after the changes in conditions following Superstorm Sandy.	Mitigation - Risk Reduction	Structure and Infrastructure Project	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge	High	Medium	City of Long Branch	FEMA HMA	\$20,000,000.00	3 years	Ongoing
28_08	Elevate Flood-prone Residential Properties Below the BFE, especially Repetitive Loss and Severe Repetitive Loss Properties	Project will consist of the elevation of approximately 150 flood-prone residential structures that are below the approved base flood elevations.	Mitigation - Risk Reduction	Structure and Infrastructure Project	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge	High	Medium	City of Long Branch Emergency Management	FEMA HMA	\$2,178,750.00	5 + years	Ongoing
28_09	Acquire and demolish/relocate buildings and infrastructure in flood prone areas, with a focus on Repetitive Loss (RL) and Severe Repetitive Loss (SRL) properties	The City will work with private property owners that are on FEMA's Repetitive Loss and Severe Repetitive Loss list on mitigation solutions, including available grants for home elevation or flood-proofing.	Mitigation - Risk Reduction	Structure and Infrastructure Project	Flood, Wave Action, Nor'easter, Storm Surge	High	Medium	City of Long Branch	FEMA HMA	\$2,178,750.00	3 years	Ongoing

Long Branch, City 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
28_10	Purchase and Install Portable Flood Diversions	Purchase a portable muscle wall that can is plastic and will lock together and go underground.	Mitigation - Risk Reduction	Structure and Infrastructure Project	Flood, Extreme Wind, Hurricane and Tropical Storm	High	Low	City of Long Branch	FEMA HMA		1 year	New
28_11	Target Harden Critical Facilities by Installing Surveillance Cameras, an Access Control System, Security Personnel, and/or Bulletproof Glass	Harden municipal buildings, schools, and public spaces when special events occur in the City.	Maintenance/Response/Recovery	Structure and Infrastructure Project	Terrorism	Medium	Low	City of Long Branch	Homeland Security grants	\$1,500,000.00	5 + years	New
28_12	Purchase and Install Back Up Servers at Polling Stations	Back up servers for polling stations.	Maintenance/Response/Recovery	Structure and Infrastructure Project	Cyber Attack	Medium	Low	City of Long Branch	Homeland Security grants	\$800,000.00	5 + years	New
28_13	Purchase Portable Traffic Lights	Portable synchronized traffic lights for evacuation routes, including Route 36, Route 71, and Ocean Ave.	Maintenance/Response/Recovery	Structure and Infrastructure Project	All Hazards	Medium	Low	City of Long Branch	Homeland Security grants	\$50,000.00	1 year	New
28_14	Relocate Police Station out of Flood Hazard Area	Relocate Police Station from Basement of 344 Broadway where flooding occurs during heavy rain, hurricane, high tide.	Mitigation - Continuity of Fuctional Use	Structure and Infrastructure Project	All Hazards	Medium	Medium	City of Long Branch	EMA HMA, Local Budget	\$7,000,000.00	5 + years	New
28_15	Purchase and Install Flood Warning Signs	Purchase flood warning signs and install at four locations: Long Branch Avenue, Elberon Trestle, Route 36 and Florence Ave, and the Atlantic Ave and Edwards Ave intersection.	Maintenance/Response/Recovery	Structure and Infrastructure Project	All Hazards	Medium	Low	City of Long Branch	Local Budget	\$160,000.00	3 years	New
28_16	Replace Bulk Head at Long Branch Promenade	Replace 50-year old bulkhead at Long Branch Promenade. Bulkhead is damaged and is approaching 50 years old.	Mitigation - Risk Reduction	Structure and Infrastructure Project	Flood, Wave Action, Nor'easter, Hurricane and Tropical Storm, Storm Surge	High	High	City of Long Branch	FEMA HMA		1 year	New
28_17	Create Water Retention Areas to Alleviate Flooding	Install retention areas around city where nuisance, riverine, and tidal flooding continue to occur.	Mitigation - Continuity of Fuctional Use	Structure and Infrastructure Project	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge	Medium	Medium	City of Long Branch	FEMA HMA		2 years	New
28_18	Install Flood Gate within Manahasset Creek	Install Flood gate within Manahasset Creek at Sands Point to alleviate the flooding from storm surge throughout Long Branch, Eastern side of Oceanport, and the Northern end of Monmouth Beach.	Mitigation - Risk Reduction	Structure and Infrastructure Project	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge	Medium	High	City of Long Branch	FEMA HMA		1 year	New

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
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Monmouth County Mitigation Action Worksheets

Community Action Number: 28_01

Long Branch, City of

Describing the Action

Action Name:	Continue to Enforce Flood Ordinances
Action Category:	Administrative
Action Type:	Local Plans and Regulations
HMA Eligible Activity:	Miscellaneous/Other
Action Description:	Update local ordinances to comply with FEMA's new preliminaries and possibly acquire reductions for residents in flood insurance premiums.

Evaluating the Action

Hazard(s) Addressed:	Flood, Wave Action, Coastal Erosion, Nor'easter, Hurricane and Tropical Storm, Storm Surge
Goals:	3, 4, 5 6
Risk Reduction:	Sea Level Rise and climate change will contribute to more frequent and severe flooding and surge events over a larger area.
Technical:	Technically feasible.
Political:	No apparent political issues.
Legal:	Homes must be elevated in compliance with the new FEMA flood maps once they are finalized.
Environmental:	Positively impacts the environment by increasing the permeable surface for each homeowner property.
Social:	Does not adversely affect any particular social group. Perceived by the public to be a good thing because of repetitive nature of flooding in the project area.
Administrative Capability:	Does not adversely affect any particular social group.
Local Champion:	No
Other Community Objectives:	
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	
Priority:	Low
Scale of Ease of Implementation:	Low
Responsible Party:	City of Long Branch
Local Planning Mechanism:	Codes
Likely Funding Source(s):	Local Budget
Timeline:	1 year
Action Status:	Ongoing
Notes:	Ongoing 2015 action; after Superstorm Sandy, the City created an ordinance for two feet of freeboard on new and subdivided properties and adopted all the models from NJDEP and FEMA.

Monmouth County Mitigation Action Worksheets

Community Action Number: 28_02

Long Branch, City of

Describing the Action

Action Name:	Continue to Implement the City-Wide Drainage Master Plan
Action Category:	Administrative
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Mitigation Reconstruction
Action Description:	Installation of improved drainage and stormwater pipe to control flood waters and increase strategic locations to control flow.

Evaluating the Action

Hazard(s) Addressed:	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge
Goals:	2, 3, 5
Risk Reduction:	Various locations throughout the City flood when local drainage cannot exit the system due to submerged outfalls and associated backflow.
Technical:	Technically feasible.
Political:	No apparent political issues.
Legal:	No apparent legal issues.
Environmental:	No adverse environmental impact anticipated.
Social:	Does not adversely affect any particular social group.
Administrative Capability:	Municipality has sufficient capacity and experience to administer this action.
Local Champion:	Public Works Director
Other Community Objectives:	
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	\$113,500.00
Priority:	Low
Scale of Ease of Implementation:	Low
Responsible Party:	City of Long Branch
Local Planning Mechanism:	City Wide Drainage Master Plan
Likely Funding Source(s):	Local Budget
Timeline:	1 year
Action Status:	Ongoing
Notes:	Ongoing 2015 action; The City created a City Wide Drainage Master Plan and have completed several projects since the last plan update.

Monmouth County Mitigation Action Worksheets

Community Action Number: 28_03

Long Branch, City of

Describing the Action

Action Name:	Upsize the Stormwater Pipe under the New Jersey Transit Rail Line
Action Category:	Mitigation - Continuity of Fuctional Use
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Mitigation Reconstruction
Action Description:	The stormwater pipe that needs to be upsized under the New Jersey Transit (NJT) Railroad. Replace the piping of the ditch from Morris Ave to the start of the underground piping.

Evaluating the Action

Hazard(s) Addressed:	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge
Goals:	2, 3, 5
Risk Reduction:	Areas surrounding City Hall from Broadway to Morris Avenue flood during periods of excess rainfall. The increase in stormwater pipe will help water flow out of the flooded areas.
Technical:	Technically feasible.
Political:	No apparent political issues.
Legal:	Must coordinate with New Jersey Transit.
Environmental:	No adverse environmental impact anticipated.
Social:	Does not adversely affect any particular social group.
Administrative Capability:	Municipality has sufficient capacity and experience to administer this action.
Local Champion:	Public Works Director
Other Community Objectives:	
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	\$7,030,000.00
Priority:	Medium
Scale of Ease of Implementation:	High
Responsible Party:	City of Long Branch
Local Planning Mechanism:	Hazard Mitigation Plan
Likely Funding Source(s):	Local Budget, FEMA HMA
Timeline:	5 + years
Action Status:	Ongoing
Notes:	Ongoing 2015 action; the City must wait until New Jersey Transit works on the railroad for any pipe reconstruction to occur.

Monmouth County Mitigation Action Worksheets

Community Action Number: 28_04

Long Branch, City of

Describing the Action

Action Name:	Install Stormwater Control Devices at Lake Takanassee
Action Category:	Mitigation - Risk Reduction
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Mitigation Reconstruction
Action Description:	Install an improved drainage system and stormwater control devices to regulate flood waters and increase strategic locations to control flow.

Evaluating the Action

Hazard(s) Addressed:	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge
Goals:	2, 3, 5
Risk Reduction:	Flooding and storm surge has historically been an issue in and around Lake Takanassee during severe storms; a lot of water inland drains to the lake.
Technical:	Technically feasible.
Political:	No apparent political issues.
Legal:	No apparent legal issues.
Environmental:	No adverse environmental impact anticipated.
Social:	Does not adversely affect any particular social group.
Administrative Capability:	Municipality has sufficient capacity and experience to administer this action.
Local Champion:	Public Works Director
Other Community Objectives:	
STAPLEE Evaluation:	10

Implementing the Action

Cost Estimate:	\$314,000.00
Priority:	High
Scale of Ease of Implementation:	Medium
Responsible Party:	City of Long Branch
Local Planning Mechanism:	Codes
Likely Funding Source(s):	Local Budget, FEMA HMA
Timeline:	2 years
Action Status:	Ongoing
Notes:	<p>The City replaced antiquated timber stops with new aluminum stops; now can lower the lake one ft during storms preventing the lake from overflow and flood. Drainage ongoing.</p> <p>The City was awarded \$495,481.50 of FEMA Funding 406 Public Assistance for Lake Takanassee Spillway</p> <p>The City was also awarded \$212,030 of HMGP for Flood Control Project post-Sandy (location not known).</p>

Monmouth County Mitigation Action Worksheets

Community Action Number: 28_05

Long Branch, City of

Describing the Action

Action Name:	Install Improved Stormwater Pipe at the Elberon Trestle
Action Category:	Mitigation - Risk Reduction
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Mitigation Reconstruction
Action Description:	Installation of improved drainage and stormwater pipe to control flood waters and increase strategic locations to control flow. Advanced warning systems to alert motorist of the conditions located overhead and will require significant coordination with New Jersey Transit.

Evaluating the Action

Hazard(s) Addressed:	Flood, Hurricane and Tropical Storm, Storm Surge
Goals:	2, 3, 5
Risk Reduction:	Flash Flooding occurs around the Elberon Trestle during rain events.
Technical:	Technically feasible.
Political:	No apparent political issues.
Legal:	Must coordinate with New Jersey Transit, Borough of Deal, Ocean Township, and private property owners.
Environmental:	No adverse environmental impact anticipated.
Social:	Does not adversely affect any particular social group.
Administrative Capability:	Municipality has sufficient capacity and experience to administer this action.
Local Champion:	Public Works Director
Other Community Objectives:	
STAPLEE Evaluation:	9

Implementing the Action

Cost Estimate:	\$1,500,000.00
Priority:	High
Scale of Ease of Implementation:	High
Responsible Party:	City, Ocean Township, Borough of Deal
Local Planning Mechanism:	Hazard Mitigation Plan
Likely Funding Source(s):	Local Budget, FEMA HMA
Timeline:	3 years
Action Status:	Ongoing
Notes:	Ongoing action from 2015; pipes have been cleaned out to Elberon and larger pipes installed however the pipe under the New Jersey Transit railroad needs to be larger.

Monmouth County Mitigation Action Worksheets

Community Action Number: 28_06

Long Branch, City of

Describing the Action

Action Name:	Install Duckbill Check Valves along the Shrewsbury River
Action Category:	Mitigation - Risk Reduction
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Mitigation Reconstruction
Action Description:	Installation of duckbill check valves to control flood waters and increase strategic locations to control flow.

Evaluating the Action

Hazard(s) Addressed:	Flood, Hurricane and Tropical Storm, Storm Surge
Goals:	2, 3, 5
Risk Reduction:	The northern and western areas of the city are susceptible to flooding. Most of North Long Branch was flooded during Superstorm Sandy, from both coastal flooding and backwater flooding from the Shrewsbury River and its tributaries. There was significant damage to public and private property and infrastructure.
Technical:	Technically feasible.
Political:	No apparent political issues.
Legal:	No apparent legal issues.
Environmental:	No adverse environmental impact anticipated.
Social:	Does not adversely affect any particular social group.
Administrative Capability:	Municipality has sufficient capacity and experience to administer this action.
Local Champion:	Public Works Director
Other Community Objectives:	
STAPLEE Evaluation:	10

Implementing the Action

Cost Estimate:	\$136,500.00
Priority:	High
Scale of Ease of Implementation:	Medium
Responsible Party:	City of Long Branch
Local Planning Mechanism:	Codes
Likely Funding Source(s):	Local Budget, FEMA HMA
Timeline:	3 years
Action Status:	Ongoing
Notes:	Ongoing action; the City deems this action necessary and is searching for potential funding.

Monmouth County Mitigation Action Worksheets

Community Action Number: 28_07

Long Branch, City of

Describing the Action

Action Name:	Construct a New Bulkhead at Bay Ave.
Action Category:	Mitigation - Risk Reduction
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Infrastructure Retrofit
Action Description:	Improvements to existing Bay Avenue bulkhead that has proven to be inadequate after the changes in conditions following Superstorm Sandy.

Evaluating the Action

Hazard(s) Addressed:	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge
Goals:	2, 3, 5, 6
Risk Reduction:	Areas in and around Manahasset Creek Park Complex are susceptible to flooding.
Technical:	Technically feasible.
Political:	No apparent political issues.
Legal:	Property is owned by the City.
Environmental:	No adverse environmental impact anticipated.
Social:	Does not adversely affect any particular social group.
Administrative Capability:	Municipality has sufficient capacity and experience to administer this action.
Local Champion:	Public Works Director
Other Community Objectives:	
STAPLEE Evaluation:	9

Implementing the Action

Cost Estimate:	\$20,000,000.00
Priority:	High
Scale of Ease of Implementation:	Medium
Responsible Party:	City of Long Branch
Local Planning Mechanism:	Hazard Mitigation Plan
Likely Funding Source(s):	FEMA HMA
Timeline:	3 years
Action Status:	Ongoing
Notes:	Ongoing 2015 action; the recreation center building at the Manahasset Creek Park Complex is destroyed and a new bulkhead is needed. All structures have been removed.

Monmouth County Mitigation Action Worksheets

Community Action Number: 28_08

Long Branch, City of

Describing the Action

Action Name:	Elevate Flood-prone Residential Properties Below the BFE, especially Repetitive Loss and Severe Repetitive Loss Properties
Action Category:	Mitigation - Risk Reduction
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Structure Elevation
Action Description:	Project will consist of the elevation of approximately 150 flood-prone residential structures that are below the approved base flood elevations.

Evaluating the Action

Hazard(s) Addressed:	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge
Goals:	2, 3, 5, 6
Risk Reduction:	Several residential structures throughout the community are prone to flooding, with their main floor elevations below current BFEs. Sea level rise and climate change will contribute to more frequent and severe flooding and surge events.
Technical:	Elevation of homes is technically feasible.
Political:	Residents realize the need to prevent flooding in this area. No group is opposed to this action. Political leadership supports this type project.
Legal:	No apparent legal issues.
Environmental:	Positively impacts the environment by increasing the permeable surface for each homeowner property.
Social:	Does not adversely affect any particular social group. Perceived by the public to be a good thing because of repetitive nature of flooding in the project area.
Administrative Capability:	City of Long Branch Office of Emergency Management will manage this project.
Local Champion:	OEM Deputy Coordinator
Other Community Objectives:	
STAPLEE Evaluation:	10

Implementing the Action

Cost Estimate:	\$2,178,750.00
Priority:	High
Scale of Ease of Implementation:	Medium
Responsible Party:	City of Long Branch Emergency Management
Local Planning Mechanism:	Hazard Mitigation Plan
Likely Funding Source(s):	FEMA HMA
Timeline:	5 + years
Action Status:	Ongoing
Notes:	Ongoing action; the City deems this action necessary and is searching for potential funding.

Monmouth County Mitigation Action Worksheets

Community Action Number: 28_09

Long Branch, City of

Describing the Action

Action Name:	Acquire and demolish/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:	The City will work with private property owners that are on FEMA's Repetitive Loss and Severe Repetitive Loss list on mitigation solutions, including available grants for home elevation or flood-proofing.

Evaluating the Action

Hazard(s) Addressed:	Flood, Wave Action, Nor'easter, Storm Surge
Goals:	2, 3, 5, 6
Risk Reduction:	Several residential structures throughout the community are prone to flooding, with their main floor elevations below current BFEs. Sea level rise and climate change will contribute to more frequent and severe flooding and surge events.
Technical:	Elevation and acquisition are both technically feasible project types.
Political:	Our political leadership supports this type of project.
Legal:	While the municipality does not own the structures in question, we fully support the homeowners in moving forward
Environmental:	No environmental impacts are anticipated at this time; this would be confirmed as specific homeowners come forward and their property details are reviewed. It is likely that environmental impacts would be positive, as household hazardous wastes are no longer introduced into floodwaters.
Social:	No particular social group in our community is likely to be disproportionately impacted by this project; this would be reevaluated as particular interested homeowners come forward.
Administrative Capability:	Municipality has the administrative capabilities to manage an elevation and/or acquisition project.
Local Champion:	affected homeowners, elected officials
Other Community Objectives:	Improve and protect lifestyles of residents; reduction of costly property damage; resiliency; floodplain management; capital improvements.
STAPLEE Evaluation:	11

Implementing the Action

Cost Estimate:	\$2,178,750.00
Priority:	High
Scale of Ease of Implementation:	Medium
Responsible Party:	City of Long Branch
Local Planning Mechanism:	Homeowners; Mayor; Council; Administrator; Engineer; local ordinance; Hazard Mitigation Plan
Likely Funding Source(s):	FEMA HMA
Timeline:	3 years
Action Status:	Ongoing
Notes:	Ongoing action; the City deems this action necessary and is searching for potential funding.

Monmouth County Mitigation Action Worksheets

Community Action Number: 28_10

Long Branch, City of

Describing the Action

Action Name:	Purchase and Install Portable Flood Diversions
Action Category:	Mitigation - Risk Reduction
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Localized Flood Risk Reduction Projects
Action Description:	Purchase a portable muscle wall that can is plastic and will lock together and go underground.

Evaluating the Action

Hazard(s) Addressed:	Flood, Extreme Wind, Hurricane and Tropical Storm
Goals:	2, 3, 5, 7
Risk Reduction:	Depending on the hazard, the flooded areas can change therefore a portable wall will mitigate flooding.
Technical:	Technically feasible.
Political:	No apparent political issues.
Legal:	No apparent legal issues.
Environmental:	No adverse environmental impact anticipated.
Social:	Does not adversely affect any particular social group.
Administrative Capability:	Municipality has the administrative capabilities to manage an elevation and/or acquisition project.
Local Champion:	Engineering, OEM
Other Community Objectives:	
STAPLEE Evaluation:	10

Implementing the Action

Cost Estimate:	
Priority:	High
Scale of Ease of Implementation:	Low
Responsible Party:	City of Long Branch
Local Planning Mechanism:	Hazard Mitigation Plan
Likely Funding Source(s):	FEMA HMA
Timeline:	1 year
Action Status:	New
Notes:	

Monmouth County Mitigation Action Worksheets

Community Action Number: 28_11

Long Branch, City of

Describing the Action

Action Name:	Target Harden Critical Facilities by Installing Surveillance Cameras, an Access Control System, Security Personnel, and/or Bulletproof Glass
Action Category:	Maintenance/Response/Recovery
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Miscellaneous/Other
Action Description:	Harden municipal buildings, schools, and public spaces when special events occur in the City.

Evaluating the Action

Hazard(s) Addressed:	Terrorism
Goals:	1, 2, 3, 5
Risk Reduction:	Long Branch is a resort community that hosts several large events, such as the 4th of July fireworks and the state marathon. Increasing security will reduce the risk of terrorism.
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.
Administrative Capability:	City has sufficient capacity and experience to administer this action.
Local Champion:	Police, OEM
Other Community Objectives:	
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	\$1,500,000.00
Priority:	Medium
Scale of Ease of Implementation:	Low
Responsible Party:	City of Long Branch
Local Planning Mechanism:	Hazard Mitigation Plan
Likely Funding Source(s):	Homeland Security grants
Timeline:	5 + years
Action Status:	New

Notes:

Monmouth County Mitigation Action Worksheets

Community Action Number: 28_12

Long Branch, City of

Describing the Action

Action Name: Purchase and Install Back Up Servers at Polling Stations

Action Category: Maintenance/Response/Recovery

Action Type: Structure and Infrastructure Project

HMA Eligible Activity: Miscellaneous/Other

Action Description: Back up servers for polling stations.

Evaluating the Action

Hazard(s) Addressed: Cyber Attack

Goals: 5, 6

Risk Reduction: The polling stations are vulnerable to cyber attacks.

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.

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

Local Champion: Police, OEM

Other Community Objectives:

STAPLEE Evaluation: N/A

Implementing the Action

Cost Estimate: \$800,000.00

Priority: Medium

Scale of Ease of Implementation: Low

Responsible Party: City of Long Branch

Local Planning Mechanism: Hazard Mitigation Plan

Likely Funding Source(s): Homeland Security grants

Timeline: 5 + years

Action Status: New

Notes: The City was awarded HMGP funding for Police Department/OEM Command Center Generator (\$45k) post-Sandy.

Monmouth County Mitigation Action Worksheets

Community Action Number: 28_13

Long Branch, City of

Describing the Action

Action Name:	Purchase Portable Traffic Lights
Action Category:	Maintenance/Response/Recovery
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Miscellaneous/Other
Action Description:	Portable synchronized traffic lights for evacuation routes, including Route 36, Route 71, and Ocean Ave.

Evaluating the Action

Hazard(s) Addressed:	All Hazards
Goals:	4
Risk Reduction:	During a power outage, there is a need for back-up power for traffic lights along evacuation routes to direct traffic. The backup traffic lights will lessen the emergency responder manpower required at intersections and they can focus on responding to other emergencies.
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.
Administrative Capability:	This action would require less administrative coordination during an emergency.
Local Champion:	Police, OEM
Other Community Objectives:	
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	\$50,000.00
Priority:	Medium
Scale of Ease of Implementation:	Low
Responsible Party:	City of Long Branch
Local Planning Mechanism:	Hazard Mitigation Plan
Likely Funding Source(s):	Homeland Security grants
Timeline:	1 year
Action Status:	New

Notes:

Monmouth County Mitigation Action Worksheets

Community Action Number: 28_14

Long Branch, City of

Describing the Action

Action Name:	Relocate Police Station out of Flood Hazard Area
Action Category:	Mitigation - Continuity of Fuctional Use
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Miscellaneous/Other
Action Description:	Relocate Police Station from Basement of 344 Broadway where flooding occurs during heavy rain, hurricane, high tide.

Evaluating the Action

Hazard(s) Addressed:	All Hazards
Goals:	2, 3, 7
Risk Reduction:	Sea level rise and climate change will contribute to more frequent and severe flooding and surge events.
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.
Administrative Capability:	This action would require less administrative coordination during an emergency.
Local Champion:	Police, OEM
Other Community Objectives:	
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	\$7,000,000.00
Priority:	Medium
Scale of Ease of Implementation:	Medium
Responsible Party:	City of Long Branch
Local Planning Mechanism:	Hazard Mitigation Plan
Likely Funding Source(s):	EMA HMA, Local Budget
Timeline:	5 + years
Action Status:	New
Notes:	The Police Station/OEM Command Center received a HMGP grant of \$50,000 for a generator.

Monmouth County Mitigation Action Worksheets

Community Action Number: 28_15

Long Branch, City of

Describing the Action

Action Name:	Purchase and Install Flood Warning Signs
Action Category:	Maintenance/Response/Recovery
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Miscellaneous/Other
Action Description:	Purchase flood warning signs and install at four locations: Long Branch Avenue, Elberon Trestle, Route 36 and Florence Ave, and the Atlantic Ave and Edwards Ave intersection.

Evaluating the Action

Hazard(s) Addressed:	All Hazards
Goals:	1, 3, 7
Risk Reduction:	Sea level rise and climate change will contribute to more frequent and severe flooding and surge events.
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.
Administrative Capability:	This action would require less administrative coordination during an emergency.
Local Champion:	Police, OEM
Other Community Objectives:	
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	\$160,000.00
Priority:	Medium
Scale of Ease of Implementation:	Low
Responsible Party:	City of Long Branch
Local Planning Mechanism:	Hazard Mitigation Plan
Likely Funding Source(s):	Local Budget
Timeline:	3 years
Action Status:	New

Notes:

Monmouth County Mitigation Action Worksheets

Community Action Number: 28_16

Long Branch, City of

Describing the Action

Action Name:	Replace Bulk Head at Long Branch Promenade
Action Category:	Mitigation - Risk Reduction
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Infrastructure Retrofit
Action Description:	Replace 50-year old bulkhead at Long Branch Promenade. Bulkhead is damaged and is approaching 50 years old.

Evaluating the Action

Hazard(s) Addressed:	Flood, Wave Action, Nor'easter, Hurricane and Tropical Storm, Storm Surge
Goals:	2, 3, 5, 7
Risk Reduction:	Sea level rise and climate change will contribute to more frequent and severe flooding and surge events.
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.
Administrative Capability:	This action would require less administrative coordination during an emergency.
Local Champion:	Police, OEM
Other Community Objectives:	
STAPLEE Evaluation:	10

Implementing the Action

Cost Estimate:	
Priority:	High
Scale of Ease of Implementation:	High
Responsible Party:	City of Long Branch
Local Planning Mechanism:	Hazard Mitigation Plan
Likely Funding Source(s):	FEMA HMA
Timeline:	1 year
Action Status:	New
Notes:	

Monmouth County Mitigation Action Worksheets

Community Action Number: 28_17

Long Branch, City of

Describing the Action

Action Name:	Create Water Retention Areas to Alleviate Flooding
Action Category:	Mitigation - Continuity of Fuctional Use
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Localized Flood Risk Reduction Projects
Action Description:	Install retention areas around city where nuisance, riverine, and tidal flooding continue to occur.

Evaluating the Action

Hazard(s) Addressed:	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge
Goals:	2, 3, 5
Risk Reduction:	Sea level rise and climate change will contribute to more frequent and severe flooding and surge events.
Technical:	Technically feasible.
Political:	No adverse political ramifications are expected.
Legal:	No legal impediments anticipated.
Environmental:	Environmental disruption to natural environment; may require additional permitting.
Social:	Does not adversely affect any particular social group.
Administrative Capability:	This action would require less administrative coordination during an emergency.
Local Champion:	Police, OEM

Other Community Objectives:

STAPLEE Evaluation: N/A

Implementing the Action

Cost Estimate:	
Priority:	Medium
Scale of Ease of Implementation:	Medium
Responsible Party:	City of Long Branch
Local Planning Mechanism:	Hazard Mitigation Plan
Likely Funding Source(s):	FEMA HMA
Timeline:	2 years
Action Status:	New

Notes:

Monmouth County Mitigation Action Worksheets

Community Action Number: 28_18

Long Branch, City of

Describing the Action

Action Name:	Install Flood Gate within Manahasset Creek
Action Category:	Mitigation - Risk Reduction
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Localized Flood Risk Reduction Projects
Action Description:	Install Flood gate within Manahasset Creek at Sands Point to alleviate the flooding from storm surge throughout Long Branch, Eastern side of Oceanport, and the Northern end of Monmouth Beach.

Evaluating the Action

Hazard(s) Addressed:	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge
Goals:	2, 3, 7
Risk Reduction:	Sea level rise and climate change will contribute to more frequent and severe flooding and surge events.
Technical:	Technically feasible.
Political:	No adverse political ramifications are expected.
Legal:	No legal impediments anticipated.
Environmental:	Environmental disruption to natural environment; may require additional permitting.
Social:	Does not adversely affect any particular social group.
Administrative Capability:	This action would require less administrative coordination during an emergency.
Local Champion:	Police, OEM
Other Community Objectives:	
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	
Priority:	Medium
Scale of Ease of Implementation:	High
Responsible Party:	City of Long Branch
Local Planning Mechanism:	Hazard Mitigation Plan
Likely Funding Source(s):	FEMA HMA
Timeline:	1 year
Action Status:	New
Notes:	

CAPABILITY ASSESSMENT WORKSHEET

Name: Charles F. Shirley Jr.

Title: Lieutenant

Jurisdiction: City of Long Branch

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	<ol style="list-style-type: none"> What is the date/year of the plan? Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions?
Comprehensive/Master Plan	Yes	<ol style="list-style-type: none"> Adopted March 16, 2010 Yes; Goal 11 of the Master Plan seeks to manage stormwater, reduce the potential for flood damage and profiles a study on Evacuation Routes. Yes, the Master Plan identified coastal evacuation route improvements as determined by the Monmouth County Coastal Evacuation Routes Study (2009)
Capital Improvements Plan	Yes	
Economic Development Plan	Yes	
Local Emergency Operations Plan	Yes	
Continuity of Operations Plan		
Post-Disaster Recovery Plan	No	
Transportation Plan		<ol style="list-style-type: none"> A Circulation Plan is included in the 2010 Master Plan
Stormwater Management Plan	Yes	<ol style="list-style-type: none"> Long Branch adopted a revised SWMP and stormwater management ordinance in 2009. Yes, one of its goals is to Reduce flood damage, including to life and property,



CAPABILITY ASSESSMENT WORKSHEET

		3.
Community Wildfire Protection Plan		
Other special plans (e.g., brownfields redevelopment, disaster recovery, coastal zone management, climate change adaptation)	Yes	<ul style="list-style-type: none"> • Beach Management Plan • City-wide Drainage Master Plan • NJ FRAMES
Building Code, Permitting, and Inspections	Yes/No	Are codes adequately enforced?
Building Code	No	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	Yes	Section 345-17 of the Municipal Code: Floodplain flood hazard area regulations Chapter 177 of the Municipal Code: Flood Damage Prevention
Natural hazard ordinance (stormwater, steep slope, wildfire)		
Flood Insurance Rate Maps	Yes	New Preliminary Flood Insurance Rate Maps released 1/31/14



CAPABILITY ASSESSMENT WORKSHEET

Acquisition of Land for Open Space and Public Recreation Uses	Yes	Section 35-2 of the Municipal Code grants the Environmental Commission the right to acquire land for open space.
Post-Disaster Recovery Ordinance	No	
Real Estate Disclose Ordinance	Yes	
Other (ie. Special Purposes Ordinance)	Yes	Special Purposes Ordinance
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	Yes	The City of Long Branch has a Department of Planning & Zoning, Planning Board, and Zoning Board.
Mitigation Planning Committee	Yes	Chapter 32 Emergency Management Council: establishes an Emergency Management Council and with a Chairman/Emergency Management Coordinator
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	Yes	Construction Official



CAPABILITY ASSESSMENT WORKSHEET

Floodplain Administrator	Yes	
Emergency Manager	Yes	
Community Planner	Yes	
Civil Engineer	Yes	
Surveyor	Yes	
GIS Coordinator	No	
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	Yes	
Hazus Analysis	No	
Other	Yes	
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	No	
Fees for Water, Sewer, Gas, or Electric Services	No	
Impact Fees for New Development	Yes	
Stormwater Utility Fee		
Incur Debt Through Private Activities	No	
Community Development Block Grant	Yes	
Other Federal Funding Programs	No	
State Funding Programs		
Other (e.g., withhold spending in hazard-prone areas)	Yes	Incur Debt through General Obligation Funds
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)	Yes	The City of Long Branch website has an Emergency Preparedness section with links to FEMA information and a Hurricane Survival Guide.
Natural Disaster or Safety Related School Programs		
StormReady Certification	No	
Firewise Communities Certification	No	
Public-Private Partnership Initiatives Addressing Disaster Related Issues		
Other		
How can these capabilities be expanded and improved to reduce risk?		





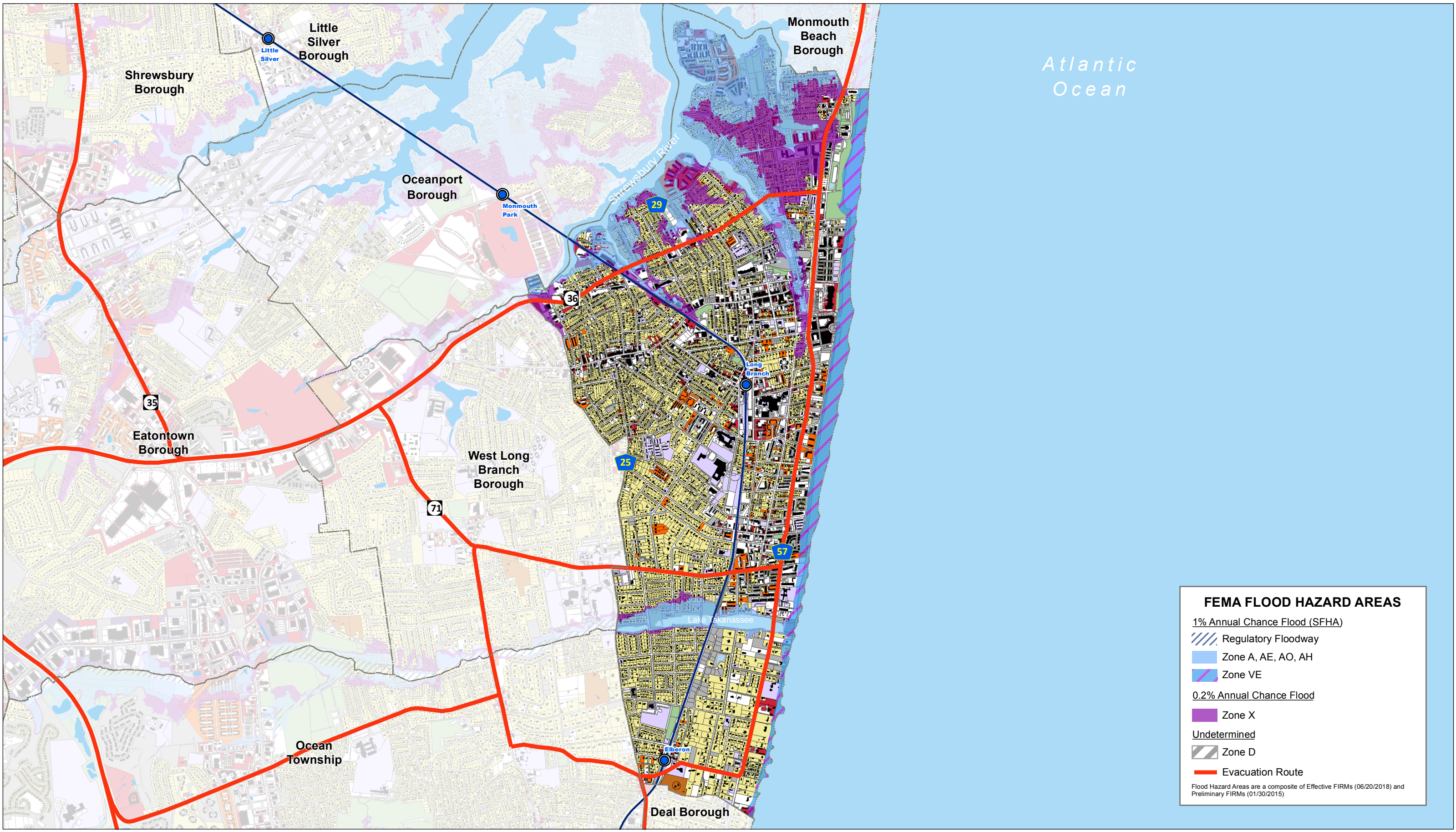
Parcel Classification

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

0 1,350 2,700 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.



- Parcel Classification
- Industrial

Commercial

Apartment

Residential (four families or less)

Farm

Vacant

Civic/Public (Tax Exempt)

Unclassified

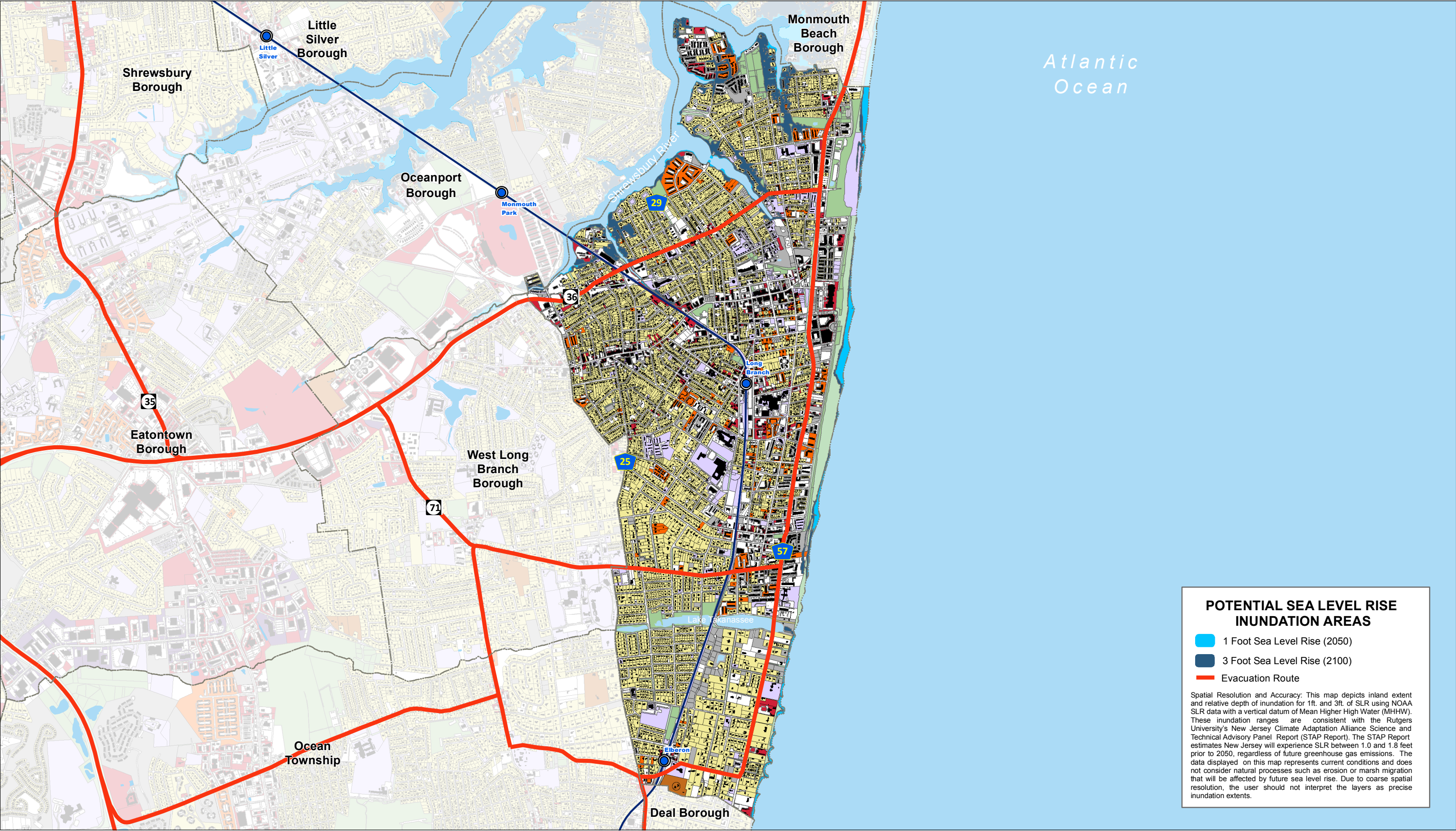
Open Space

01,3502,700

Feet

Source: 2014 Esri; Monmouth County; NJOIT-OGIS; NJGIN MODIV Parcel, FEMA

Projection: New Jersey State Plane, NAD 1983





MEETING NOTES

Topic: Long Branch- Monmouth County HMP Meeting

Date: July 2, 2019

Time: 12:00 PM- 1:00 PM

Location: Borough Office, 480 Prospect Ave., Little Silver

Attendees: Buzz Balanaza, DPW
Susan Catapano-Moore, CFM
Shirley Charles, OEM
Stanley Dziurma, OEM
George Jackson, Business Administrator
Stan Midose, Construction Official
Brittany Ashman, MB Planner
Paige Kaspar, MB Planner

Drafted by: Paige Kaspar

Introductions (Brittany):

- What is Hazard Mitigation?
- Matching actions with Goals
- New Hazards
- HMP Pamphlet
- Funding

Mitigation Actions

- Community Action 28_01-Update of Hazard Zoning Ordinances-ongoing
 - After SuperStorm Sandy, went with 2ft. of freeboard on new and subdivided properties
 - Adopted all the models from NJDEP and FEMA
 - Can send list of updated ordinances
 - Open to DEP and FEMA ordinances
 - Update language to be open to ordinances
- Community Action 28_02-Improve stormwater drainage system



- Throughout the city
 - There is an entire map of problems-City Wide Drainage Master Plan
 - Directly references map
 - Had engineer go out and identify trouble spots
 - Drainage issues-some paving, some drainage, some outfall
 - Reference map as a project-living document
 - Is there a report that goes with it?
- Community Action 28_03- Stormwater drainage system Improvement-Ongoing
 - City Hall from Broadway to Morris Ave
 - Pipe that needs to be upsized under the railroad
 - Lay it under the tracks of NJTransit?
 - Will let City in there the next time they completely rip it out
- Community Action 28_04-Stormwater drainage system improvements-completed
 - Lake Takanasee
 - Restoration to the outfall, spillway
 - In the spillway we replaced antiquated timber stops and put in new aluminum stops
 - Lake fills, everything drains to the lake, can lower the lake 1 ft during storms, and when everything drains into the lake it won't overflow and flood
 - Based on weather forecasts
- Community Action 28_05-Stormwater drainage system improvements-ongoing
 - Elberon Trestle
 - Another transit issue
 - Pipes cleaned out to Elron and larger pipes installed
 - When the flash flood happens, there is no way to prevent it
 - Water flows from Park Ave. South
 - Need pipes to be larger to go underneath the railroad
 - Have to negotiate with all these people to get the pipe in
 - Must work with Ocean Twp and Deal
 - Private property
 - Low chance of being completed
- Community Action 28_06-Improve stormwater drainage system
 - Shrewsbury River north of town
 - HMGP
 - Going to send list
- Community Action 28_07-Bulkheads-ongoing
 - Intersection of Manahasset Ave and Nannahasset Ave. (site 39 on map)
 - Due to Manahasset Creek
 - Money Issues
 - Building destroyed there-rec building
 - Up to admin to sell property
 - Bay Ave. Park Rec Building
 - Poor lack of maintenance



- Needs completely new bulkhead but will probably sell the property
 - \$20 million project, not \$1,5000
 - No property acquisition because its ours
- Community Action 28_08-Project Structures-**completed**
 - Elevating flood-prone residential properties that are below the base flood elevation
 - Approx. 150 homes
 - This was a Sandy issue
 - State-prevailing wage made it impossible for people to do it
 - In NJ, bid it with prevailing wage; doesn't work in NJ
 - Homeowner would get an allotment through the bank, but people won't accept because prevailing wage for contractors would make it too expensive
 - 80 some homes elevated or demolished/rebuilt-Private
 - Leads to bad things with residents
- Community Action 28_09-Protect Structures
 - RL/SRL
 - All the stuff around Lake Tack you can probably take off at this point

2020 Mitigation Actions (NEW)

- Portable flood diversion with muscle wall
 - Plastic and lock together and go underground
 - Depending on the hazard, could be different areas, so want it to be portable
 - Wind and water
- Target Hardening
 - Resort community-large events- 4th of July, NJ Marathon
 - More protection for municipal buildings
 - Shelters need generators-at schools
- Power failure-buying several portable generators with hook-ups to buildings
 - All of Housing Authorities are rebuilt and need generators (?) and if there were to be power failure during extreme heat or cold, can create hookups and move generators there
 - For Housing Authorities and other identified critical facilities, Fire Stations
- Polling Stations and Cyber Attacks
 - Back-ups
- Portable synchronized traffic lights for evacuation routes-36, 71 and Ocean Ave.

Capabilities

- Debris Management Site, Debris Management Site
- Secure the Shore grant for vehicle impact protection from State Homeland
- Power Failure-pretty good-HMP grant for municipal annex building-Permanent generator
- \$80 million plan for all the municipalities up by Sandy Hook for a floodgate
- NJFRAMES- part of it

Successes-

- From the city-wide Drainage Master Plan



- Improvements needed at the Conrail New York and Long Branch Railroad cannot be done until the railroad agrees
- Improvements at site 48 between Lane St., Washington St. NJ State Highway and Branchport Ave. in progress
- At the intersections of Branchport Ave. and Wardell St./Jay St., pipes were repaired (new drains) but still need to be cleaned (site 42)
- Blockage removed (no enlargement) at Ethel Pl. (Site 20)
- Bubble System Cleaned no Connection at Franklin Ave. and Third Ave (24)
- Only Cleaned, no new drains at Morris Ave. and Second Ave. (19)
- Replaced curb slots with catch basins along Second Ave. (18)
- Repaired system and added inlets at South Bath Ave. and Second Ave. (17)
- Only cleaned, no repair at Second & Eastborne (15)
- Added drain and pipes at Sairs Ave. & Avery Ave. (14)
- Removed bubbler and added inlets at Sairs Ave. (13)
- Reconstructed intersection, curb returned, and drainage at Brighton & Second (9)
- Reconstructed and clean drainage system and constructed drainage surcharge system between End Ct. and Brighton Ave. (49)
- Replaced washout, reconstructed curb and added catch basin along So. Lake Drive (8)
- School under construction drainage runs south, connects to Stratton pl.: System upgraded, cleaned system and replaced CMP along Eaton Terr. (Site 5)
- Takana Lake project partially completed
- Inlet Repair in progress along Westwood (site 10)
- In progress (site 11)
- Replaced 24 RCP and cleaned system along Dale St. and Westbourne Ave. (Site 25)
- Enlarged pipe and replaced curb slots at between Morrell St., Broadway, Morris Ave. and Division St. (Site 26)
- Removed utility crossing and cleaned between Morrell St., Broadway, Morris Ave. and Division St. (Site 27)
- Fixed broken pipe and inlets; cleaned debris and roots on Edwards Ave. and Coleman Ave. (Site 44)
- Cleaned pipes to culvert at Spruce St. (34) and Sixth Avenue (35)
- Added new pipe west to creek at Columbia Ave. (41)
- Replaced pipe outlet covered with silt at So. Broadway (21)
- Improvements completed at Reservoir but not on the headwall (43)
- Work along the City border with the Borough of Deal partially done



Monmouth County
Multi-Jurisdictional Hazard Mitigation Plan Update



Michael Baker
INTERNATIONAL

Meeting: Long Branch HMP Mtg

Date: 05-29-19

Initial	Last Name	First Name	Title	Organization	Email Address
BA	Ashman	Brittany	Planner	MB	Brittany.Ashman@mbakerintl.com
PK	Kaspar	Paige	Planner	MB	Paige.Kaspar@mbakerintl.com
SM	Midose	Stacy	Construction Official	City of LB	smidose@longbranch.org
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	Dziuba	Stanley	OEM	LB	sdziuba@longbranch.org
	Catapano Moore	Susan	CFM	LB	smoore@longbranch.org
MB	Baccanizza		PR	LB	mbaccanizza@longbranch.org
BJ	Jackson	George	Business Administrator	Long Branch	GJackson@longbranch.org