

## *Appendix Vol I.8 Bradley Beach 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

**381** Policies In-force

**75** Total Losses

**\$2,726,739** Total Payments

**5** Number of RL Properties

**0** Number Mitigated  
RL Properties

**11** RL - Total Losses

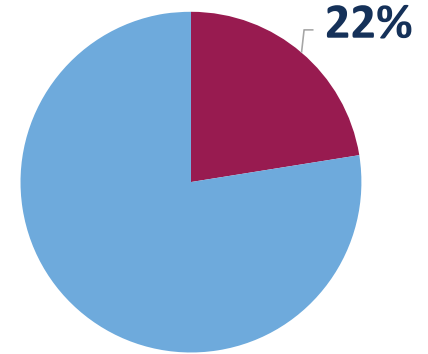
**\$216,502** RL - Total Paid

**0** Number of SRL Properties

**0** Number Mitigated SRL  
Properties

**0** SRL - Total Losses

**\$0** SRL - Total Paid



Percent Land Area Within SFHA

**11**

Total Mitigation  
Actions

**2**



Education and Awareness Programs

**9**



Structure and Infrastructure Projects

**0**



Local Plans and Regulations

**0**



Natural Systems Protection

## Critical Facilities

**8** Critical Facilities

**1** Critical Infrastructure

**24** Historic & Cultural Resources



**0** SV Population At Risk (2017)

**958** Population at Risk (2017)

Bradley Beach, 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
08_01	Sand Dune/Berm Construction	Install snow fencing in a zig-zag pattern and place fir trees inside thus allowing sand to accumulate naturally along entire beachfront for floodplain management		Structure and Infrastructure Project	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge			Supervisor of Public Works		\$50,000.00		Completed
08_02	Fletcher Lake Drainage System Improvements and Structural Control Techniques	Install new outfall pipes and gates (completed) and bulkhead (completed by Neptune and Bradley Beach) around Fletcher Lake as well as replacement of dunes along the entire beach front. The Fletcher Lake outfall pipes and gates have been replaced.		Structure and Infrastructure Project	Flood, Hurricane and Tropical Storm, Storm Surge			Mayor, Council, Borough Engineer and Fletcher Lake Commission		\$100,000.00		Completed
08_03	Install New Outfall Pipes and Bulkhead at Sylvan Lake	Install new outfall pipes and bulkhead around Sylvan Lake as well as replacement of dunes along the entire beachfront.	Mitigation - Risk Reduction	Structure and Infrastructure Project	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge	High	Medium	Mayor, Council, borough engineer, and Sylvan Lake Commission	Bonding, FEMA HMA	\$200,000.00	1 year	Ongoing
08_04	Floodproof Sewer Pump Station	Facility is located at the south end of the borough on the east side of Ocean Avenue. The facility requires complete renovation to include flood protection, elevation of critical components and replacement of all operational equipment. Rebuild facility to reduce flooding potential, relocate and elevate generator to an alternate location in facility (this requires replacement of foundation to support additional loads), repair/replace all electrical wiring and controls. Repair/replace choppers to improve processing capabilities.		Structure and Infrastructure Project	Flood, Extreme Wind, Hurricane and Tropical Storm, Storm Surge			Mayor, council and borough engineer		\$1,000,000.00		Completed
08_05	Improve the Borough's Communication and Notification System	The Borough is currently exploring the feasibility of networking with other municipalities in order to establish and implement contingency plans for communications continuity. The borough has recently implemented several methods of notification to the public to improve the emergency notification process.	Maintenance/Response/Recovery	Education and Awareness Programs	All Hazards	Low	Low	OEM	Municipal budget	\$300,000.00	1 year	Ongoing
08_06	Acquire, elevate, or relocate buildings and infrastructure in flood prone areas, with a focus on Repetitive Loss (RL) and Severe Repetitive Loss (SRL) properties	Mitigate 135 flood-prone structures with a particular focus on RL and SRL properties.	Mitigation - Risk Reduction	Structure and Infrastructure Project	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge	High	Medium	Mayor, Council, and Borough Engineer	FEMA HMA	\$16,200,000.00	5 + years	Ongoing
08_07	Strengthen Training of Emergency Response for Police, Fire, and First Aid	Ongoing training of team members to assist in emergencies in areas such as traffic control, medical assistance, and/or weather related matters.	Administrative	Education and Awareness Programs	All Hazards	Low	Medium	Mayor and Emergency Management Coordinator	Municipal budget		1 year	Ongoing
08_08	Dredge Sylvan Lake	Dredge the lake to remove debris and sand thus providing space for water to prevent and mitigate flooding in low lying areas.	Maintenance/Response/Recovery	Structure and Infrastructure Project	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge	Low	Low	OEM, Engineering	Municipal budget		1 year	New

Bradley Beach, 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
08_09	Purchase and Install Generators for Critical Facilities and Shelters	Purchase and maintain generators to continue critical community services during utility interruptions and storm events for Borough Hall, Department of Public Works yard, Fire Department, Elementary School, Library.	Maintenance/Response/Recovery	Structure and Infrastructure Project	All Hazards	Low	Low	OEM, Engineering	FEMA HMA	\$200,000.00	1 year	New
08_10	Target Harden the Municipal Building and Boardwalk with Surveillance Cameras	Purchase and install surveillance cameras at the municipal building and boardwalk.	Maintenance/Response/Recovery	Structure and Infrastructure Project	Terrorism	Low	Low	OEM, Engineering	Homeland Security grants, Municipal budget		1 year	New
08_11	Clean and Repair Outfall Pipe along Lareine Ave. which leads to Repetitive Flooding for Nearby Properties	Clean and repair 18-inch outfall pipe that flows under Lareine Ave into Fletcher Lake.	Maintenance/Response/Recovery	Structure and Infrastructure Project	Flood	Low	Medium	OEM, Engineering	Municipal budget		1 year	New

# Monmouth County Mitigation Action Worksheets

Community Action Number: 08\_01

Bradley Beach, Borough of

## Describing the Action

Action Name:	Sand Dune/Berm Construction
Action Category:	
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Sand Dune/Berm Construction
Action Description:	Install snow fencing in a zig-zag pattern and place fir trees inside thus allowing sand to accumulate naturally along entire beachfront for floodplain management

## Evaluating the Action

Hazard(s) Addressed:	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge
Goals:	
Risk Reduction:	Due to Superstorm Sandy, Bradley Beach incurred significant damages along its beachfront and dune system. There were also significant damages to the bulkhead system. The Borough experiences ocean and lake flooding during hurricanes and large storms. Virtually all of Bradley Beach is in mapped storm surge hazard areas. Climate change will contribute to more frequent and severe weather events. Sea level rise and climate change will contribute to more frequent and severe flooding and surge events over a larger area.
Technical:	Feasible and proven successful method used prior to Superstorm Sandy
Political:	Governing body and citizens favor this project
Legal:	Replaces former dunes, so there should be no legal issues
Environmental:	No anticipated impact since this project replaces a former existing dune network
Social:	No particular social group is likely to be disproportionately impacted by this project.
Administrative Capability:	Borough is fully capable to implement this project
Local Champion:	Mayor, Council and Local Office Of Emergency Management.
Other Community Objectives:	Protect borough roadways and structures from severe storm impact and remain in compliance with the borough Community Rating System (CRS)
STAPLEE Evaluation:	N/A

## Implementing the Action

Cost Estimate:	\$50,000.00
Priority:	
Scale of Ease of Implementation:	
Responsible Party:	Supervisor of Public Works
Local Planning Mechanism:	Borough Engineer, Borough Council and Public Works Department
Likely Funding Source(s):	
Timeline:	
Action Status:	Completed
Notes:	The Borough was awarded FEMA Funding 406 Public Assistance of \$1,196,157.17 for Dune Fencing, Bulkhead, Railings, Pavers, Benches, Beach Access Stairs, and Beach ADA Ramps

# Monmouth County Mitigation Action Worksheets

Community Action Number: 08\_02

Bradley Beach, Borough of

## Describing the Action

Action Name:	Fletcher Lake Drainage System Improvements and Structural Control Techniques
Action Category:	
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Drainage System Improvement
Action Description:	Install new outfall pipes and gates (completed) and bulkhead (completed by Neptune and Bradley Beach) around Fletcher Lake as well as replacement of dunes along the entire beach front. The Fletcher Lake outfall pipes and gates have been replaced.

## Evaluating the Action

Hazard(s) Addressed:	Flood, Hurricane and Tropical Storm, Storm Surge
Goals:	
Risk Reduction:	Fletcher Lake depth has been drastically reduced by sandy thus causing overflow during strong storms, hurricanes and coastal flooding. These lakes also act as retention basins for run off from adjoining municipal, county and state roadways.
Technical:	There are no major technical matters in this project, the method(s) to be utilized are well established procedures
Political:	The governing body and citizens favor this project
Legal:	Proper permitting as utilized in the past will be required.
Environmental:	Increasing lake depth will aid in replenishment of the fish & wildlife population that was drastically reduced by Sandy
Social:	No particular social group is likely to be disproportionately impacted by this project.
Administrative Capability:	Mayor, Council, Borough Engineer and Fletcher Lake Commission
Local Champion:	Mayor and council and local office of emergency management as well as environmental groups
Other Community Objectives:	Improve and protect lifestyles of residents residing along fletcher both lake and reduction of costly property damage and remain in compliance with the borough
STAPLEE Evaluation:	N/A

## Implementing the Action

Cost Estimate:	\$100,000.00
Priority:	
Scale of Ease of Implementation:	
Responsible Party:	Mayor, Council, Borough Engineer and Fletcher Lake Commission
Local Planning Mechanism:	Mayor, Council, Borough Engineer, Fletcher Lake Commission
Likely Funding Source(s):	
Timeline:	
Action Status:	Completed
Notes:	

# Monmouth County Mitigation Action Worksheets

Community Action Number: 08\_03

Bradley Beach, Borough of

## Describing the Action

Action Name:	Install New Outfall Pipes and Bulkhead at Sylvan Lake
Action Category:	Mitigation - Risk Reduction
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Localized Flood Risk Reduction Projects
Action Description:	Install new outfall pipes and bulkhead around Sylvan Lake as well as replacement of dunes along the entire beachfront.

## Evaluating the Action

Hazard(s) Addressed:	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge
Goals:	2, 4, 6
Risk Reduction:	Sylvan Lake depth has been drastically reduced by Superstorm Sandy thus causing overflow during strong storms, hurricanes, and coastal flooding. This lake also acts as retention basin for run off from adjoining municipal, county and state roadways.
Technical:	There are no major technical matters in this project, the method(s) to be utilized are well established procedures.
Political:	The governing body and citizens favor this project
Legal:	Proper permitting as utilized in the past will be required.
Environmental:	Increasing lake depth will aid in replenishment of the fish & wildlife population that was drastically reduced by Sandy
Social:	No particular social group is likely to be disproportionately impacted by this project.
Administrative Capability:	Mayor, Council, borough engineer and Sylvan Lake Commission
Local Champion:	Mayor and council and local office of emergency management as well as environmental groups
Other Community Objectives:	Improve and protect lifestyles of residents residing along sylvan lake and reduction of costly property damage and remain in compliance with the borough CRS
STAPLEE Evaluation:	12

## Implementing the Action

Cost Estimate:	\$200,000.00
Priority:	High
Scale of Ease of Implementation:	Medium
Responsible Party:	Mayor, Council, borough engineer, and Sylvan Lake Commission
Local Planning Mechanism:	Mayor, Council, borough engineer and Sylvan Lake Commission
Likely Funding Source(s):	Bonding, FEMA HMA
Timeline:	1 year
Action Status:	Ongoing
Notes:	Ongoing action; the Sylvan Lake valves (joint effort with Avon) and gates are in the process of being replaced (via a Open Space Grant). Issues remain with the bulkhead on the eastern side of the Lake. The Borough was awarded FEMA Funding 406 Public Assistance for the Sylvan Lake Gate Valve Structure.

# Monmouth County Mitigation Action Worksheets

Community Action Number: 08\_04

Bradley Beach, Borough of

## Describing the Action

Action Name:	Floodproof Sewer Pump Station
Action Category:	
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Floodproofing Sewer Pump Station
Action Description:	Facility is located at the south end of the borough on the east side of Ocean Avenue. The facility requires complete renovation to include flood protection, elevation of critical components and replacement of all operational equipment. Rebuild facility to reduce flooding potential, relocate and elevate generator to an alternate location in facility (this requires replacement of foundation to support additional loads), repair/replace all electrical wiring and controls. Repair/replace choppers to improve processing capabilities.

## Evaluating the Action

Hazard(s) Addressed:	Flood, Extreme Wind, Hurricane and Tropical Storm, Storm Surge
Goals:	
Risk Reduction:	The Borough sewer plant is identified as susceptible to storm flooding. Sewer pump station susceptible to flooding during severe coastal storms.
Technical:	Measures to implement this project to include engineering design and funding have been taken.
Political:	The governing body and citizens favor this project
Legal:	Proper permitting, inspections and approvals required
Environmental:	This action is necessary for the protection of the community health and environment
Social:	No particular social group is likely to be disproportionately impacted by this project.
Administrative Capability:	The Borough is fully capable to implement this project
Local Champion:	Mayor, Council, and local office of emergency management
Other Community Objectives:	Protect the health, wellbeing of the citizens and the environment
STAPLEE Evaluation:	N/A

## Implementing the Action

Cost Estimate:	\$1,000,000.00
Priority:	
Scale of Ease of Implementation:	
Responsible Party:	Mayor, council and borough engineer
Local Planning Mechanism:	Mayor, council and borough engineer
Likely Funding Source(s):	
Timeline:	
Action Status:	Completed
Notes:	The Borough was awarded FEMA Funding 406 Public Assistance of \$620,401.96



# Monmouth County Mitigation Action Worksheets

Community Action Number: 08\_05

Bradley Beach, Borough of

## Describing the Action

Action Name:	Improve the Borough's Communication and Notification System
Action Category:	Maintenance/Response/Recovery
Action Type:	Education and Awareness Programs
HMA Eligible Activity:	Miscellaneous/Other/NA
Action Description:	The Borough is currently exploring the feasibility of networking with other municipalities in order to establish and implement contingency plans for communications continuity. The borough has recently implemented several methods of notification to the public to improve the emergency notification process.

## Evaluating the Action

Hazard(s) Addressed:	All Hazards
Goals:	7
Risk Reduction:	Deficiencies were identified with local and inter agency communication as well as community notifications during past emergencies.
Technical:	These mitigation actions are technically feasible. The notification upgrades have already been implemented
Political:	Local government and public support these mitigation actions.
Legal:	No legal issues anticipated.
Environmental:	No negative impact
Social:	No particular social group is likely to be disproportionately impacted by this project.
Administrative Capability:	The borough is fully capable of implementing and maintaining these actions once the initial funding mechanism has been put in place for the purchase of required communications equipment.
Local Champion:	Mayor, council, police department and local office of emergency management
Other Community Objectives:	Dispense notifications as required for any emergencies or events that arise.
STAPLEE Evaluation:	N/A

## Implementing the Action

Cost Estimate:	\$300,000.00
Priority:	Low
Scale of Ease of Implementation:	Low
Responsible Party:	OEM
Local Planning Mechanism:	These upgrades will be incorporated in the local emergency plans
Likely Funding Source(s):	Municipal budget
Timeline:	1 year
Action Status:	Ongoing
Notes:	Ongoing action; this item is on the Borough's wish list.

# Monmouth County Mitigation Action Worksheets

Community Action Number: 08\_06

Bradley Beach, Borough of

## Describing the Action

Action Name:	Acquire, elevate, 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:	Structure Elevation
Action Description:	Mitigate 135 flood-prone structures with a particular focus on RL and SRL properties.

## Evaluating the Action

Hazard(s) Addressed:	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge
Goals:	1, 2, 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 is technically feasible
Political:	The Governing Body and citizens support this project
Legal:	Proper permitting as utilized in the past will be required.
Environmental:	No environmental impacts are anticipated as a result of elevating the homes.
Social:	No particular social group is likely to be disproportionately impacted by this project.
Administrative Capability:	Borough has the administrative capabilities to manage an elevation project.
Local Champion:	Affected homeowners, Mayor and Council, OEM and Environmental groups.
Other Community Objectives:	Improve and protect lifestyles of residents residing along Fletcher and Sylvan Lakes as well as reduction of costly property damage.
STAPLEE Evaluation:	11

## Implementing the Action

Cost Estimate:	\$16,200,000.00
Priority:	High
Scale of Ease of Implementation:	Medium
Responsible Party:	Mayor, Council, and Borough Engineer
Local Planning Mechanism:	Mayor, Council, & Borough Engineer.
Likely Funding Source(s):	FEMA HMA
Timeline:	5 + years
Action Status:	Ongoing
Notes:	

# Monmouth County Mitigation Action Worksheets

Community Action Number: 08\_07

Bradley Beach, Borough of

## Describing the Action

Action Name:	Strengthen Training of Emergency Response for Police, Fire, and First Aid
Action Category:	Administrative
Action Type:	Education and Awareness Programs
HMA Eligible Activity:	Miscellaneous/Other/NA
Action Description:	Ongoing training of team members to assist in emergencies in areas such as traffic control, medical assistance, and/or weather related matters.

## Evaluating the Action

Hazard(s) Addressed:	All Hazards
Goals:	7
Risk Reduction:	During Community Emergencies (Fire, Storms, etc) the team provides emergency assistance as required
Technical:	Feasible and proven successful
Political:	No political obstacles anticipated.
Legal:	No legal issues anticipated.
Environmental:	No environmental impact.
Social:	No particular social group is likely to be disproportionately impacted by this project.
Administrative Capability:	Borough is fully capable to continue this project
Local Champion:	Office of Emergency Management and Public Works
Other Community Objectives:	Continue to provide assistance through local community involvement
STAPLEE Evaluation:	N/A

## Implementing the Action

Cost Estimate:	
Priority:	Low
Scale of Ease of Implementation:	Medium
Responsible Party:	Mayor and Emergency Management Coordinator
Local Planning Mechanism:	Police Department, Mayor and Council, Office of Emergency Management
Likely Funding Source(s):	Municipal budget
Timeline:	1 year
Action Status:	Ongoing
Notes:	Ongoing action; this item is on the Borough's wish list.

# Monmouth County Mitigation Action Worksheets

Community Action Number: 08\_08

Bradley Beach, Borough of

## Describing the Action

Action Name:	Dredge Sylvan Lake
Action Category:	Maintenance/Response/Recovery
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Miscellaneous/Other/NA
Action Description:	Dredge the lake to remove debris and sand thus providing space for water to prevent and mitigate flooding in low lying areas.

## Evaluating the Action

Hazard(s) Addressed:	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge
Goals:	5
Risk Reduction:	Sylvan Lake is very shallow and causes flooding during coastal storms.
Technical:	This action is technically feasible.
Political:	Politically acceptable and encouraged in order to reduce the risk of future flood events.
Legal:	May require NJDEP permitting.
Environmental:	Dredging may negatively affect the local ecosystem.
Social:	Does not adversely affect any particular social group. Generally perceived by the public to be beneficial however, some people are opposed to dredging due to environmental impacts.
Administrative Capability:	Borough has the administrative capabilities to dredge lake
Local Champion:	Office of Emergency Management
Other Community Objectives:	
STAPLEE Evaluation:	N/A

## Implementing the Action

Cost Estimate:	
Priority:	Low
Scale of Ease of Implementation:	Low
Responsible Party:	OEM, Engineering
Local Planning Mechanism:	Police Department, Office of Emergency Management, Public Works, Administrator
Likely Funding Source(s):	Municipal budget
Timeline:	1 year
Action Status:	New
Notes:	

# Monmouth County Mitigation Action Worksheets

Community Action Number: 08\_09

Bradley Beach, Borough of

## Describing the Action

Action Name:	Purchase and Install Generators for Critical Facilities and Shelters
Action Category:	Maintenance/Response/Recovery
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Generators
Action Description:	Purchase and maintain generators to continue critical community services during utility interruptions and storm events for Borough Hall, Department of Public Works yard, Fire Department, Elementary School, Library.

## Evaluating the Action

Hazard(s) Addressed:	All Hazards
Goals:	7
Risk Reduction:	Community is susceptible to flooding from coastal storms which can lead to power outages.
Technical:	This action is technically feasible.
Political:	No political obstacles anticipated.
Legal:	No legal issues anticipated.
Environmental:	No environmental impact
Social:	No particular social group is likely to be disproportionately impacted by this project.
Administrative Capability:	Borough has the administrative capabilities to install generators
Local Champion:	Office of Emergency Management and Public Works
Other Community Objectives:	
STAPLEE Evaluation:	N/A

## Implementing the Action

Cost Estimate:	\$200,000.00
Priority:	Low
Scale of Ease of Implementation:	Low
Responsible Party:	OEM, Engineering
Local Planning Mechanism:	Police Department, Office of Emergency Management, Public Works, Administrator
Likely Funding Source(s):	FEMA HMA
Timeline:	1 year
Action Status:	New
Notes:	

# Monmouth County Mitigation Action Worksheets

Community Action Number: 08\_10

Bradley Beach, Borough of

## Describing the Action

Action Name: Target Harden the Municipal Building and Boardwalk with Surveillance Cameras

Action Category: Maintenance/Response/Recovery

Action Type: Structure and Infrastructure Project

HMA Eligible Activity: Miscellaneous/Other

Action Description: Purchase and install surveillance cameras at the municipal building and boardwalk.

## Evaluating the Action

Hazard(s) Addressed: Terrorism

Goals: 1, 2, 3, 7

Risk Reduction: Municipal buildings and the boardwalk are vulnerable to terrorism, especially during the summer months when visitor population is higher.

Technical: This action is technically feasible.

Political: No political obstacles anticipated.

Legal: No legal issues

Environmental: No environmental impact

Social: No particular social group is likely to be disproportionately impacted by this project.

Administrative Capability: Borough has the administrative capabilities to harden infrastructure

Local Champion: Emergency Management and Police

Other Community Objectives:

STAPLEE Evaluation: N/A

## Implementing the Action

Cost Estimate:

Priority: Low

Scale of Ease of Implementation: Low

Responsible Party: OEM, Engineering

Local Planning Mechanism: Police Department, Office of Emergency Management, Public Works, Administrator

Likely Funding Source(s): Homeland Security grants, Municipal budget

Timeline: 1 year

Action Status: New

Notes:

# Monmouth County Mitigation Action Worksheets

Community Action Number: 08\_11

Bradley Beach, Borough of

## Describing the Action

Action Name: Clean and Repair Outfall Pipe along Lareine Ave. which leads to Repetitive Flooding for Nearby Properties

Action Category: Maintenance/Response/Recovery

Action Type: Structure and Infrastructure Project

HMA Eligible Activity: Miscellaneous/Other/NA

Action Description: Clean and repair 18-inch outfall pipe that flows under Lareine Ave into Fletcher Lake.

## Evaluating the Action

Hazard(s) Addressed: Flood

Goals: 2, 6, 7

Risk Reduction: There is repetitive flooding that occurs along Lareine Ave due to poor stormwater drainage.

Technical: There is no engineering solution at this time.

Political: Governing body favors this project

Legal: Would require working with private properties.

Environmental: No adverse environmental impacts; area is already developed.

Social: Does not adversely affect any particular social group. Perceived by the public to be a good thing because it reduces risk for residents.

Administrative Capability: Borough has the administrative capabilities to resolve this issue.

Local Champion: Police Department, Office of Emergency Management, Public Works, Administrator

Other Community Objectives:

STAPLEE Evaluation: N/A

## Implementing the Action

Cost Estimate:

Priority: Low

Scale of Ease of Implementation: Medium

Responsible Party: OEM, Engineering

Local Planning Mechanism: Hazard Mitigation Plan

Likely Funding Source(s): Municipal budget

Timeline: 1 year

Action Status: New

Notes:

# CAPABILITY ASSESSMENT WORKSHEET

Name: Leonard Guida

Title: Chief of Police/OEM Coordinator

Jurisdiction: Bradley Beach 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	<ol style="list-style-type: none"> <li>What is the date/year of the plan?</li> <li>Does the plan address hazards?</li> <li>Does the plan identify projects to include in the mitigation strategy?</li> <li>Can the plan be used to implement mitigation actions?</li> </ol>
Comprehensive/Master Plan	Yes	<ol style="list-style-type: none"> <li>2/2014; re-exam 6/2018;</li> <li>Yes;</li> <li>3&amp;4 no</li> </ol>
Capital Improvements Plan	Yes	See Master Plan
Economic Development Plan	No	
Local Emergency Operations Plan	Yes	<ol style="list-style-type: none"> <li>10/2015;</li> <li>2. Yes;</li> <li>3. Hazmit plan update underway</li> <li>4. yes</li> </ol>
Continuity of Operations Plan	Yes	Part of ops plan
Post-Disaster Recovery Plan	Yes	Part of ops plan
Transportation Plan	Yes	Part of ops plan
Stormwater Management Plan	Yes	Part of ops plan
Community Wildfire Protection Plan	N/A	





## CAPABILITY ASSESSMENT WORKSHEET

Other special plans (e.g., brownfields redevelopment, disaster recovery, coastal zone management, climate change adaptation)	Yes	Maritime Forest created North East corner of Borough
<b>Building Code, Permitting, and Inspections</b>	<b>Yes/No</b>	<b>Are codes adequately enforced?</b>
Building Code	Yes	Version/Year: 2015 NJ Editions IRC/Residential BC/Building
Building Code Effectiveness Grading Schedule (BCEGS) Score	Yes	Score: Commercial 4; Residential 3
Fire Department ISO rating		Rating: 5
Site Plan Review Requirements	Yes	By Zoning and/or Planning Boards
<b>Land Use Planning and Ordinances</b>	<b>Yes/No</b>	<b>Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced?</b>
Zoning Ordinance	Yes	
Subdivision Ordinance	Yes	
Floodplain Ordinance	Yes	9/8/2009
Natural hazard ordinance (stormwater, steep slope, wildfire)	No	
Flood Insurance Rate Maps	No	
Acquisition of Land for Open Space and Public Recreation Uses	No	
Post-Disaster Recovery Ordinance	Yes	
Real Estate Disclose Ordinance	No	



## CAPABILITY ASSESSMENT WORKSHEET

Other (ie. Special Purposes Ordinance)	Yes	Special Purposes Ordinance
<b>How can the above capabilities be expanded and improved to reduce risk?</b>		
These issues/matters are a constant work in process		

### 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	Yes	OEM Jurisdiction
Maintenance Programs to Reduce Risk (e.g., tree trimming, clearing drainage systems)	Yes	Department of Public Works
Mutual Aid Agreements	Yes	Shared resources with Avon & Neptune
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	PT
Floodplain Administrator	Yes	PT
Emergency Manager	Yes	FT, Chief of Police
Community Planner	Yes	PT



## CAPABILITY ASSESSMENT WORKSHEET

Civil Engineer	Yes	PT
Surveyor	No	
GIS Coordinator	No	
Scientists familiar with the hazards of the community	No	
Other	No	
<b>Technical</b>	<b>Yes/No</b>	<b>Describe capability Has capability been used to access/mitigate risk in the past?</b>
Warning Systems/Services (Reverse 911, outdoor warning signals)	Yes	Managed by Chief of Ploice. Yes
Hazard Data and Information	Yes	Provided by Office of Emergency Management
Grant Writing	No	
Hazus Analysis	No	
Other		
<b>How can the above capabilities be expanded and improved to reduce risk?</b>		
<p><b>Ongoing work in process</b></p>		





## 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	Yes	
Stormwater Utility Fee	No	
Incur Debt Through Private Activities	No	
Community Development Block Grant	Yes	
Other Federal Funding Programs	No	
State Funding Programs	No	
Other (e.g., withhold spending in hazard-prone areas)	Yes	Incur Debt through General Obligation Funds, and Incur Debt through Special Tax and Revenue Bond
<b>How can these capabilities be expanded and improved to reduce risk?</b>		



## CAPABILITY ASSESSMENT WORKSHEET

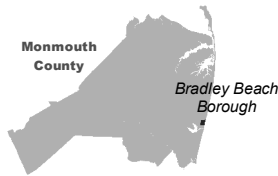
### Education and Outreach

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.	Yes	Active Environmental Commission
Ongoing Public Education or Information Programs (e.g., responsible water use, fire safety, household preparedness, environmental education)	Yes	
Natural Disaster or Safety Related School Programs	Yes	
StormReady Certification		
Firewise Communities Certification		
Public-Private Partnership Initiatives Addressing Disaster Related Issues		
Other		
<b>How can these capabilities be expanded and improved to reduce risk?</b>		







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

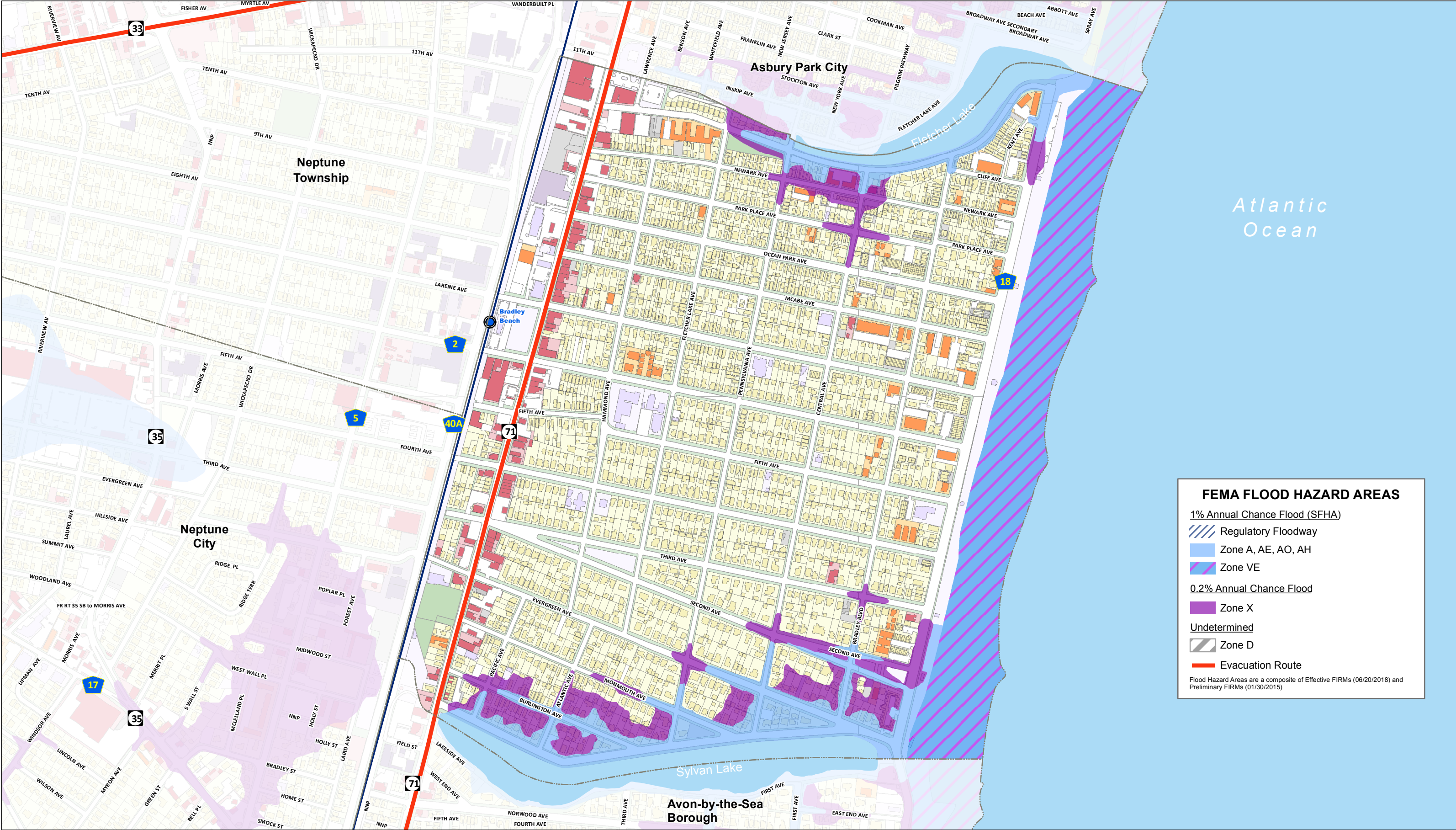
Open Space

0300600

Feet

N

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

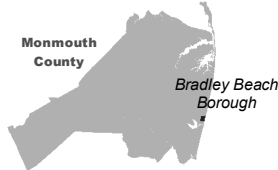
Zone D

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.





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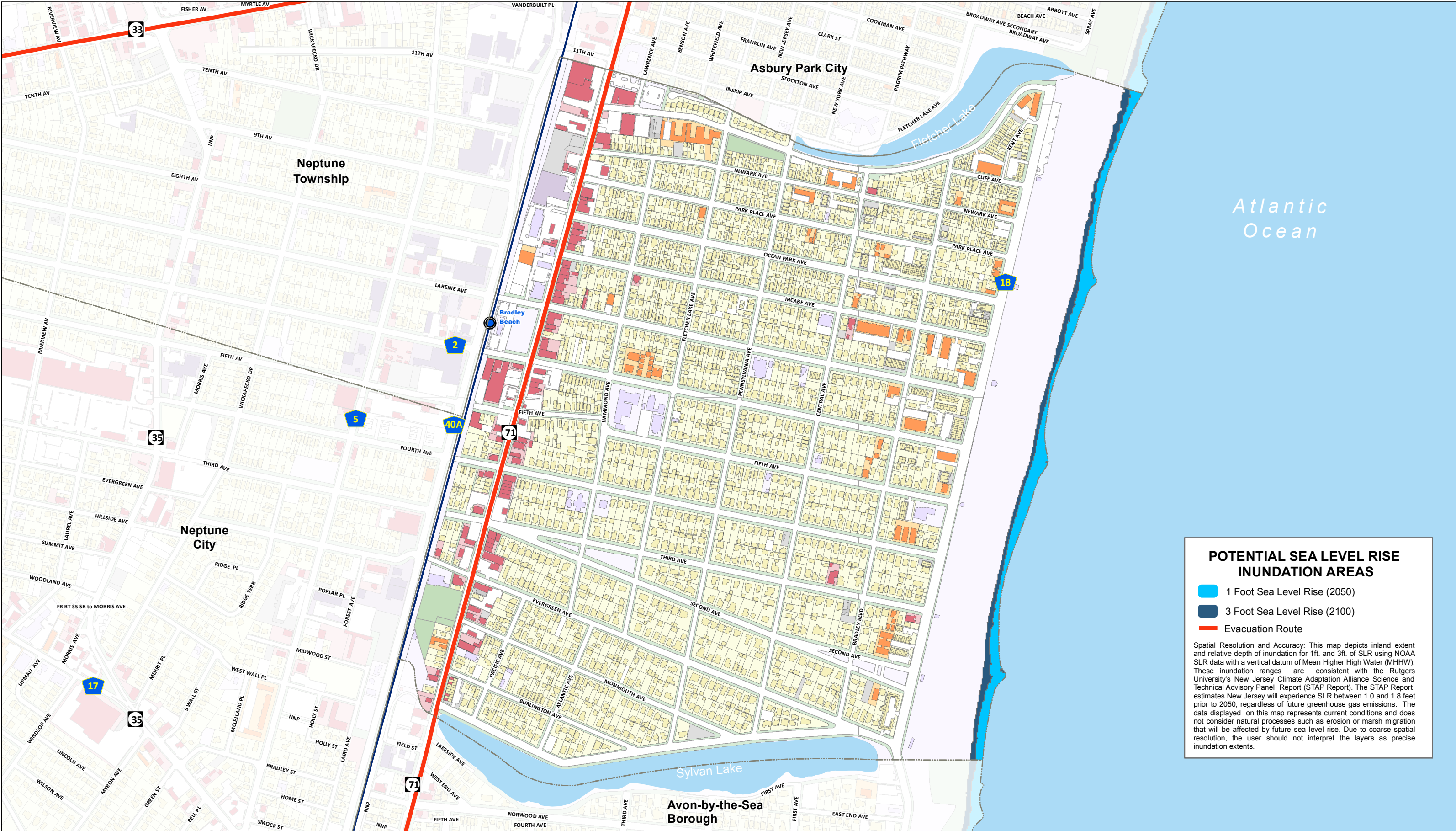
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## MEETING NOTES

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**Topic:** Bradley Beach- Monmouth County HMP Meeting

**Date:** May 1, 2019

**Time:** 10:00 AM- 11:00 AM

**Location:** Borough Hall; Bradley Beach Meeting Room; 701 Main Street

**Attendees:** George Bachar, OEM Coordinator  
Kelly Barrett, Borough Administrator/Clerk  
Biagio Cofone, Superintendent of DPW  
Leonard Guida, Chief of Police  
Gail Krzyzczuk, CFO  
Terry Wright, OEM Coordinator  
Brittany Ashman, MB Planner

**Drafted by:** Paige Kaspar

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### Introductions (Brittany):

- What is Hazard Mitigation?
- Matching actions with Goals
- New Hazards
- HMP Pamphlet
- Funding
- Level of flooding similar to FEMA flood maps

### **Repetitive Loss Properties:**

- **Five repetitive loss properties**

### **Mitigation Actions:**

- Sand Dune/Berm Construction→ completed
- Drainage System Improvements and Structural Control Techniques→ Fletcher Lake outfall pipe is complete; bulkheads
- Drainage System Improvements→ Sylvan Lake has gate issues with bulkheads; still issues





between Madison Ave and; replacing gate and valve: phase 1 Open Space grant that had to match; joint effort with Avon; Lake needs to be dredged

- Floodproofing Sewer Pump Station → complete
- Communication and Notification System Improvements → ongoing Communications: in progress; reverse 911; email blasts, website,
- Elevation of 135 Residential Structures → 135 residential is along the lakes, eastern side of the town along the lakes;
- Emergency Support for Police, Fire, and First Aid → ongoing capability

#### 2020 Mitigation Actions (NEW):

- Always could use more generators, new ones would preferred to be dual hookup
  - for shelters
  - municipal building
  - 705 Evergreen
  - Fire Department
  - Elementary school and library could use a backup generator;
- Terrorism: target hardening for critical facilities: harden municipal complex; more cameras along boardwalk;

#### Successes

- Dune grass plantings
- maritime forest
- eastern living shorelines along Sylvan Lake;

#### Issues

- 301 Larine 18 outfall pipe into Fletcher Lake gets clogged- don't know how to mitigate this problem.
- Residential properties are over a million dollars; probably not willing to sell out;
- Bollars not of interest because borough trucks get on there to work
- NJ infrastructure Bank is a private bank all water;
- high tide flooding of lake from Avon

#### Capability:

- Mutual Aid Avon, Neptune City equipment, staffing,
- Working on stormwater management plan
- CRS Classification: joined the program and hope to improve the classification
- Add Jersey Central to critical facility list: next door to the Fire house 901 Main St; 107 Neptune Ave isn't an address; Sylvan Lake, add boardwalk, add synagogue, M HS is no longer a school but it is a congregation now; 5<sup>th</sup> and Ocean another synagogue; 4<sup>th</sup> and Hammon church; Jehovah witness is 27 Main St; rec center needs to be added, places of worship could serve



Monmouth County  
Multi-Jurisdictional Hazard Mitigation Plan Update



Michael Baker  
INTERNATIONAL

Meeting: Bradley Beach HMP

Date: 05-01-19

Initial	Last Name	First Name	Title	Organization	Email Address
	Bachan	George	CEM Coordinator	CEM/Bradley Beach	Gbachan@bradleybeachnj.gov
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KB	BARRETT	Kelly	Boro Administrator	Bradley Beach	KBarrett@bradleybeach.nj.gov
GL	KRYZORUK	Carol	CFO	" "	CAIK@bradleybeach.nj.gov
LG	GUIDA	Leonard	Chief of Police	" Police	LGuida@bradleybeach.nj.gov
	Cotrone	Biagio	Super DPW	" "	BCotrone@bradleybeach.nj.gov
	Ashman	Brittany	Planner	MB	
	Yaffe	Michael	Planner	MB	