

Appendix Vol I.21 Howell Township

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

179 *Polices In-force*

46 *Total Losses*

\$537,187 *Total Payments*

4 *Number of RL Properties*

2 *Number Mitigated
RL Properties*

12 *RL - Total Losses*

\$148,441 *RL - Total Paid*



0 *Number of SRL Properties*

0 *Number Mitigated SRL
Properties*

0 *SRL - Total Losses*

\$0 *SRL - Total Paid*

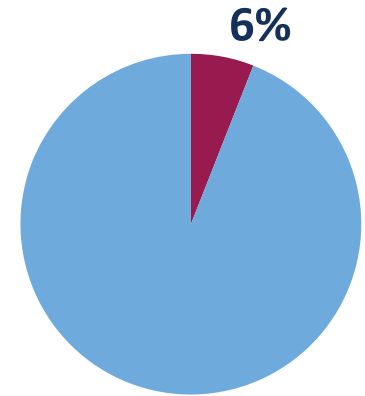
Critical Facilities



70 *Critical Facilities*

0 *Critical Infrastructure*

100 *Historic & Cultural Resources*



Percent Land Area Within SFHA

12

*Total Mitigation
Actions*

2



Education and Awareness Programs

7



Structure and Infrastructure Projects

3



Local Plans and Regulations

0



Natural Systems Protection



1 *SV Population At Risk (2017)*

3,108 *Population at Risk (2017)*

Howell, Township 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
21_01	Increase Hazard Education and Risk Awareness for Residents	Mass mailing to all residents to obtain contact info of all residents (email list) for constant contact, updates, and education of Township operations regarding emergencies.	Administrative	Education and Awareness Programs	All Hazards	Medium	Low	OEM Coordinator	Local budget	\$15,000.00	1 year	Ongoing
21_02	Protect Critical Facilities Used for Sheltering from Wind Damage and Flooding	Physically harden shelters by shielding windows, adding sand bags, adding embankments. Internally will add communication capabilities, add additional emergency supplies (first aid, water, cots, MREs,ec). Added element of this action is for backup generator for the Senior Centers.	Mitigation - Risk Reduction	Structure and Infrastructure Project	All Hazards	Medium	Low	HTOEM	POMP, FMAP, EMPG, HLS, FEMA HMA	\$120,000.00	1 year	Ongoing
21_03	Acquire, elevate, or relocate buildings and infrastructure in flood prone areas, with a focus on Repetitive Loss (RL) and Severe Repetitive Loss (SRL) properties in the Mariners Cove Neighborhood	Elevate structures to current FEMA FIRMS, specifically RL/SRL properties.	Mitigation - Risk Reduction	Structure and Infrastructure Project	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge	High	Medium	HTOEM	FEMA HMA	\$3,000,000.00	1 year	Ongoing
21_04	Improve Communication for Critical Facilities	Improve communications of EOC and Dispatch. EOC needs communication equipment including all office equipment, and the Redundant Dispatch system needs to be upgraded.	Administrative	Structure and Infrastructure Project	All Hazards	Medium	Low	HTOEM, HTPD	Municipal budget	\$750,000.00	1 year	Ongoing
21_05	Purchase and Install Generators for Critical Facilities to Continue Emergency Services During Storms	Power for essential equipment to sustain Continuity of Operations during hazards that cause loss of power.	Maintenance/Response/Recovery	Structure and Infrastructure Project	All Hazards	Medium	Low	HTOEM, HTPD, HTDPW	FEMA HMA	\$100,000.00	1 year	Ongoing
21_06	Continue to Provide Safe Drinking Water to Residents During Power Outages	During outages, contaminated water needs to be purified and potable to disseminate to residents in shelters and all other needed areas so backup systems are needed to sustain purified water.	Maintenance/Response/Recovery	Structure and Infrastructure Project	All Hazards	Medium	Low	HTOEM, Health	Municipal budget	\$100,000.00	1 year	Ongoing
21_07	Develop a Study on the Need for Transportation of Vulnerable Populations during Emergencies	Develop a study that assesses if there is a need for transportation of elderly populations during emergencies.	Administrative	Local Plans and Regulations	All Hazards	Medium	Low	HTOEM, HTPD	DCA		1 year	New
21_08	Develop a Wildfire and Trail Maintenance Plan	Proper burning of underbrush and the removal of fallen trees along park trails will reduce the risk of wildfire.	Administrative	Local Plans and Regulations	Wildfire	Medium	Low	HTOEM, HTPD	FEMA HMA, Municipal budget		1 year	New

Howell, Township 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
21_09	Coordinate with NWS Earle on Emergency Response Protocol	NWS Earle is the largest hazard and there is no coordination or training for emergency response.	Maintenance/Response/Recovery	Education and Awareness Programs	All Hazards	Medium	Low	HTOEM, HTPD	Homeland Security funding, County funding, Municipal funding		1 year	New
21_10	Install Backup Batteries Capabilities for Intersections along Route 9	There have been four backup batteries installed for lights at intersections along Route 9 but seven more lights at intersections need the backup battery.	Maintenance/Response/Recovery	Structure and Infrastructure Project	All Hazards	High	Low	HTOEM, HTPD	FEMA HMA, DOT, Homeland Security	\$100,000.00	1 year	New
21_11	Conduct Routine Debris Removal and Develop a Floodplain Management Plan for Stream Corridors	There needs to be a Debris Removal and Floodplain Management Plan conducted to assess how to mitigate flooding along stream corridors.	Maintenance/Response/Recovery	Local Plans and Regulations	Flood, Nor'easter, Hurricane and Tropical Storm	High	Low	HTOEM, HTPD	Municipal budget		1 year	New
21_12	Repair, Remove, or Rehabilitate the Echo Lake Dam, Lake Louise Dam, and Manasquan Reservoir Dam	Repair, remove, or rehabilitate the Echo Lake Dam, Lake Louise Dam, and Manasquan Reservoir Dam--all High-Hazard Potential Dams.	Mitigation - Risk Reduction	Structure and Infrastructure Project	Dam Failure	High	High	New Jersey Water Supply Authority, Howell Township	Lake Louise Dam is eligible FEMA's National Dam Safety Program		2 years	New
21_13	Create a Plan to Manage Development in Landslide Hazard Areas	Create a plan to implement reinforcement measures in high-risk areas.	Administrative	Local Plans and Regulations	Landslide	Low	Low	Township	Municipal funding		3 years	New

Monmouth County Mitigation Action Worksheets

Community Action Number: 21_01

Howell, Township of

Describing the Action

Action Name:	Increase Hazard Education and Risk Awareness for Residents
Action Category:	Administrative
Action Type:	Education and Awareness Programs
HMA Eligible Activity:	Miscellaneous/Other
Action Description:	Mass mailing to all residents to obtain contact info of all residents (email list) for constant contact, updates, and education of Township operations regarding emergencies.

Evaluating the Action

Hazard(s) Addressed:	All Hazards
Goals:	3, 4, 5
Risk Reduction:	The general public's understanding of natural hazards and mitigation possibilities could be improved. The community's overall level disaster resistance would increase if a greater number of households undertook low-cost or no-cost, small-scale mitigation activities and were better able to shelter in place.
Technical:	Technically feasible.
Political:	No adverse political ramifications are expected.
Legal:	No legal impediments anticipated.
Environmental:	No environmental impacts are anticipated at this time.
Social:	This action helps all social groups.
Administrative Capability:	Borough has sufficient capacity and experience to administer this action.
Local Champion:	OEM
Other Community Objectives:	Improves overall Communications from the Government to the community
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	\$15,000.00
Priority:	Medium
Scale of Ease of Implementation:	Low
Responsible Party:	OEM Coordinator
Local Planning Mechanism:	EOP communication annex.
Likely Funding Source(s):	Local budget
Timeline:	1 year
Action Status:	Ongoing
Notes:	Ongoing action; the Township is still interested in this action and once funds are available, will implement.

Monmouth County Mitigation Action Worksheets

Community Action Number: 21_02

Howell, Township of

Describing the Action

Action Name:	Protect Critical Facilities Used for Sheltering from Wind Damage and Flooding
Action Category:	Mitigation - Risk Reduction
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Structural Retrofitting of Existing Buildings
Action Description:	Physically harden shelters by shielding windows, adding sand bags, adding embankments. Internally will add communication capabilities, add additional emergency supplies (first aid, water, cots, MREs,ec). Added element of this action is for backup generator for the Senior Centers.

Evaluating the Action

Hazard(s) Addressed:	All Hazards
Goals:	1, 3, 5, 6, 7
Risk Reduction:	Existing shelters are not designed to withstand hazards to which they are exposed during severe storm events. In order to best serve the community during natural disasters, identified pre-existing shelters must be hardened to improve safety and resiliency during and after the event.
Technical:	Technically feasible.
Political:	No adverse political ramifications are expected.
Legal:	No legal impediments anticipated.
Environmental:	No environmental impacts are anticipated at this time.
Social:	Does not adversely affect any particular social group.
Administrative Capability:	Borough has sufficient capacity and experience to administer this action.
Local Champion:	OEM
Other Community Objectives:	Improves faith and piece of mind for all residents in township emergency operations.
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	\$120,000.00
Priority:	Medium
Scale of Ease of Implementation:	Low
Responsible Party:	HTOEM
Local Planning Mechanism:	EOP Shelter Annex
Likely Funding Source(s):	POMP, FMAP, EMPG, HLS, FEMA HMA
Timeline:	1 year
Action Status:	Ongoing
Notes:	Ongoing action; the Township is still interested in this action and once funds are available, will implement.

Monmouth County Mitigation Action Worksheets

Community Action Number: 21_03

Howell, Township 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 in the Mariners Cove Neighborhood
Action Category:	Mitigation - Risk Reduction
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Structure Elevation
Action Description:	Elevate structures to current FEMA FIRMS, specifically RL/SRL properties.

Evaluating the Action

Hazard(s) Addressed:	Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge
Goals:	1, 2, 3, 6, 7
Risk Reduction:	Areas of Township are prone to severe river flooding, including normal rainfall. While Howell is not located along the coast, some of its streams are susceptible to storm surge flooding.
Technical:	Technically feasible.
Political:	No adverse political ramifications are expected.
Legal:	No legal impediments anticipated.
Environmental:	No environmental impacts are anticipated at this time.
Social:	Does not adversely affect any particular social group.
Administrative Capability:	Borough has sufficient capacity and experience to administer this action.
Local Champion:	OEM

Other Community Objectives:

STAPLEE Evaluation: 11

Implementing the Action

Cost Estimate:	\$3,000,000.00
Priority:	High
Scale of Ease of Implementation:	Medium
Responsible Party:	HTOEM
Local Planning Mechanism:	Town Master Plan
Likely Funding Source(s):	FEMA HMA
Timeline:	1 year
Action Status:	Ongoing

Notes: Ongoing action from 2015; four of the five Repetitive Loss Properties have been elevated or torn down. A total of 15 properties on Mariners Cove have been acquired and demolished- funded by HMGP funding. There is one more RL property that needs to be mitigated.
The Township was awarded HMGP funding of \$901,813 for acquisition and demo of building and \$852,750 for another acquisition and demo of building.

Monmouth County Mitigation Action Worksheets

Community Action Number: 21_04

Howell, Township of

Describing the Action

Action Name:	Improve Communication for Critical Facilities
Action Category:	Administrative
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Miscellaneous/Other/NA
Action Description:	Improve communications of EOC and Dispatch. EOC needs communication equipment including all office equipment, and the Redundant Dispatch system needs to be upgraded.

Evaluating the Action

Hazard(s) Addressed:	All Hazards
Goals:	1, 3, 5, 7
Risk Reduction:	Emergency operations center lacks redundant systems (power and communication) to maintain critical functions before, during and after a disaster.
Technical:	Technically feasible.
Political:	No adverse political ramifications are expected.
Legal:	No legal impediments anticipated.
Environmental:	No environmental impacts are anticipated at this time.
Social:	Does not adversely affect any particular social group.
Administrative Capability:	Borough has sufficient capacity and experience to administer this action.
Local Champion:	OEM
Other Community Objectives:	
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	\$750,000.00
Priority:	Medium
Scale of Ease of Implementation:	Low
Responsible Party:	HTOEM, HTPD
Local Planning Mechanism:	EOP - EOC and Communications Annexes
Likely Funding Source(s):	Municipal budget
Timeline:	1 year
Action Status:	Ongoing
Notes:	Ongoing action from 2015; the Township added redundancy communications since 2015 however there is a need for a second consult for police because they are redundant systems.

Monmouth County Mitigation Action Worksheets

Community Action Number: 21_05

Howell, Township of

Describing the Action

Action Name:	Purchase and Install Generators for Critical Facilities to Continue Emergency Services During Storms
Action Category:	Maintenance/Response/Recovery
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Generators
Action Description:	Power for essential equipment to sustain Continuity of Operations during hazards that cause loss of power.

Evaluating the Action

Hazard(s) Addressed:	All Hazards
Goals:	1, 3, 5, 7
Risk Reduction:	Downed trees on power lines contribute to power outages during severe storms with high winds such as nor'easters, hurricanes, and tropical storms, etc. Power outages have impacted emergency services, water purification systems, and shelters that lack secondary power sources.
Technical:	Technically feasible.
Political:	No adverse political ramifications are expected.
Legal:	No legal impediments anticipated.
Environmental:	No environmental impacts are anticipated at this time.
Social:	Does not adversely affect any particular social group.
Administrative Capability:	Borough has sufficient capacity and experience to administer this action.
Local Champion:	OEM
Other Community Objectives:	Improved Communications and Response.
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	\$100,000.00
Priority:	Medium
Scale of Ease of Implementation:	Low
Responsible Party:	HTOEM, HTPD, HTDPW
Local Planning Mechanism:	EOP - Emergency Response Annex
Likely Funding Source(s):	FEMA HMA
Timeline:	1 year
Action Status:	Ongoing
Notes:	Ongoing action; the Township Police Department received HMGP grants for \$186,995.

Monmouth County Mitigation Action Worksheets

Community Action Number: 21_06

Howell, Township of

Describing the Action

Action Name:	Continue to Provide Safe Drinking Water to Residents During Power Outages
Action Category:	Maintenance/Response/Recovery
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Miscellaneous/Other
Action Description:	During outages, contaminated water needs to be purified and potable to disseminate to residents in shelters and all other needed areas so backup systems are needed to sustain purified water.

Evaluating the Action

Hazard(s) Addressed:	All Hazards
Goals:	1, 3, 5, 7
Risk Reduction:	Power outages have impacted emergency services, water purification systems, and shelters that lack secondary power sources. Power outages for water purification systems results in contaminated Water during hazards.
Technical:	Technically feasible.
Political:	No adverse political ramifications are expected.
Legal:	No legal impediments anticipated.
Environmental:	No environmental impacts are anticipated at this time.
Social:	Does not adversely affect any particular social group.
Administrative Capability:	Borough has sufficient capacity and experience to administer this action.
Local Champion:	OEM
Other Community Objectives:	Public Health
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	\$100,000.00
Priority:	Medium
Scale of Ease of Implementation:	Low
Responsible Party:	HTOEM, Health
Local Planning Mechanism:	EOP -Shelter & Public Health Annex
Likely Funding Source(s):	Municipal budget
Timeline:	1 year
Action Status:	Ongoing
Notes:	Ongoing action; the Township is still interested in this action and once funds are available, will implement.

Monmouth County Mitigation Action Worksheets

Community Action Number: 21_07

Howell, Township of

Describing the Action

Action Name:	Develop a Study on the Need for Transportation of Vulnerable Populations during Emergencies
Action Category:	Administrative
Action Type:	Local Plans and Regulations
HMA Eligible Activity:	Miscellaneous/Other
Action Description:	Develop a study that assesses if there is a need for transportation of elderly populations during emergencies.

Evaluating the Action

Hazard(s) Addressed:	All Hazards
Goals:	1, 3, 4, 5, 7
Risk Reduction:	Howell's vulnerable population is at risk of becoming stranded during emergencies.
Technical:	Technically feasible.
Political:	No adverse political ramifications are expected.
Legal:	No legal impediments anticipated.
Environmental:	No environmental impacts are anticipated at this time.
Social:	Does not adversely affect any particular social group.
Administrative Capability:	Borough has sufficient capacity and experience to administer this action.
Local Champion:	OEM
Other Community Objectives:	
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	
Priority:	Medium
Scale of Ease of Implementation:	Low
Responsible Party:	HTOEM, HTPD
Local Planning Mechanism:	Hazard Mitigation Plan
Likely Funding Source(s):	DCA
Timeline:	1 year
Action Status:	New
Notes:	

Monmouth County Mitigation Action Worksheets

Community Action Number: 21_08

Howell, Township of

Describing the Action

Action Name:	Develop a Wildfire and Trail Maintenance Plan
Action Category:	Administrative
Action Type:	Local Plans and Regulations
HMA Eligible Activity:	Wildfire Mitigation
Action Description:	Proper burning of underbrush and the removal of fallen trees along park trails will reduce the risk of wildfire.

Evaluating the Action

Hazard(s) Addressed:	Wildfire
Goals:	1, 2, 3, 5, 6
Risk Reduction:	Underbrush and fallen trees that are not cleared or maintained raise a threat to the Township of wildfire.
Technical:	Technically feasible.
Political:	No adverse political ramifications are expected.
Legal:	No legal impediments anticipated.
Environmental:	No environmental impacts are anticipated at this time.
Social:	Does not adversely affect any particular social group.
Administrative Capability:	Borough has sufficient capacity and experience to administer this action.
Local Champion:	OEM
Other Community Objectives:	
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	
Priority:	Medium
Scale of Ease of Implementation:	Low
Responsible Party:	HTOEM, HTPD
Local Planning Mechanism:	Community Wildfire Protection Plan (2014-2019)
Likely Funding Source(s):	FEMA HMA, Municipal budget
Timeline:	1 year
Action Status:	New
Notes:	

Monmouth County Mitigation Action Worksheets

Community Action Number: 21_09

Howell, Township of

Describing the Action

Action Name:	Coordinate with NWS Earle on Emergency Response Protocol
Action Category:	Maintenance/Response/Recovery
Action Type:	Education and Awareness Programs
HMA Eligible Activity:	Miscellaneous/Other
Action Description:	NWS Earle is the largest hazard and there is no coordination or training for emergency response.

Evaluating the Action

Hazard(s) Addressed:	All Hazards
Goals:	1, 2, 3, 4, 5, 6, 7
Risk Reduction:	There is the risk of overturned vehicles transporting hazardous materials to and from Naval Weapons Station Earle.
Technical:	Technically feasible.
Political:	No adverse political ramifications are expected.
Legal:	No legal impediments anticipated.
Environmental:	No environmental impacts are anticipated at this time.
Social:	Does not adversely affect any particular social group.
Administrative Capability:	Borough has sufficient capacity and experience to administer this action.
Local Champion:	OEM
Other Community Objectives:	
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	
Priority:	Medium
Scale of Ease of Implementation:	Low
Responsible Party:	HTOEM, HTPD
Local Planning Mechanism:	NWS Earle Joint Land Use Study
Likely Funding Source(s):	Homeland Security funding, County funding, Municipal funding
Timeline:	1 year
Action Status:	New
Notes:	

Monmouth County Mitigation Action Worksheets

Community Action Number: 21_10

Howell, Township of

Describing the Action

Action Name:	Install Backup Batteries Capabilities for Intersections along Route 9
Action Category:	Maintenance/Response/Recovery
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Non-structural Retrofitting of Existing Buildings and Facilities
Action Description:	There have been four backup batteries installed for lights at intersections along Route 9 but seven more lights at intersections need the backup battery.

Evaluating the Action

Hazard(s) Addressed:	All Hazards
Goals:	1, 3, 5, 6, 7
Risk Reduction:	Traffic accidents along Route 9 when power failure occurs due to any hazard.
Technical:	Technically feasible.
Political:	No adverse political ramifications are expected.
Legal:	No legal impediments anticipated.
Environmental:	No environmental impacts are anticipated at this time.
Social:	Does not adversely affect any particular social group.
Administrative Capability:	Borough has sufficient capacity and experience to administer this action.
Local Champion:	OEM
Other Community Objectives:	
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	\$100,000.00
Priority:	High
Scale of Ease of Implementation:	Low
Responsible Party:	HTOEM, HTPD
Local Planning Mechanism:	NJ Transit Route 9 Study
Likely Funding Source(s):	FEMA HMA, DOT, Homeland Security
Timeline:	1 year
Action Status:	New
Notes:	

Monmouth County Mitigation Action Worksheets

Community Action Number: 21_11

Howell, Township of

Describing the Action

Action Name:	Conduct Routine Debris Removal and Develop a Floodplain Management Plan for Stream Corridors
Action Category:	Maintenance/Response/Recovery
Action Type:	Local Plans and Regulations
HMA Eligible Activity:	Miscellaneous/Other/NA
Action Description:	There needs to be a Debris Removal and Floodplain Management Plan conducted to assess how to mitigate flooding along stream corridors.

Evaluating the Action

Hazard(s) Addressed:	Flood, Nor'easter, Hurricane and Tropical Storm
Goals:	2, 3, 5, 6
Risk Reduction:	Extra siltation and downed trees lead to flooding issues.
Technical:	Technically feasible.
Political:	Need to coordinate with DEP on jurisdiction.
Legal:	No legal impediments anticipated.
Environmental:	No environmental impacts are anticipated at this time.
Social:	Does not adversely affect any particular social group.
Administrative Capability:	Borough has sufficient capacity and experience to administer this action.
Local Champion:	OEM
Other Community Objectives:	
STAPLEE Evaluation:	N/A

Implementing the Action

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

Monmouth County Mitigation Action Worksheets

Community Action Number: 21_12

Howell, Township of

Describing the Action

Action Name:	Repair, Remove, or Rehabilitate the Echo Lake Dam, Lake Louise Dam, and Manasquan Reservoir Dam
Action Category:	Mitigation - Risk Reduction
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Localized Flood Risk Reduction Projects
Action Description:	Repair, remove, or rehabilitate the Echo Lake Dam, Lake Louise Dam, and Manasquan Reservoir Dam--all High-Hazard Potential Dams.

Evaluating the Action

Hazard(s) Addressed:	Dam Failure
Goals:	1, 2, 3
Risk Reduction:	NJDEP classifies both the Echo Lake Dam, Lake Louise Dam, and Manasquan Reservoir Dam to be a High-Hazard Potential, meaning failure of the dam may result in probable loss of life and/or extensive property damage.
Technical:	Technically feasible.
Political:	There are no anticipated political implications.
Legal:	May require coordination with NJDEP.
Environmental:	Minor environmental impacts expected.
Social:	No adverse social impact anticipated.
Administrative Capability:	Township has sufficient capacity and experience to administer this action.
Local Champion:	OEM
Other Community Objectives:	
STAPLEE Evaluation:	10

Implementing the Action

Cost Estimate:	
Priority:	High
Scale of Ease of Implementation:	High
Responsible Party:	New Jersey Water Supply Authority, Howell Township
Local Planning Mechanism:	Hazard Mitigation Plan
Likely Funding Source(s):	Lake Louise Dam is eligible FEMA's National Dam Safety Program
Timeline:	2 years
Action Status:	New
Notes:	

Monmouth County Mitigation Action Worksheets

Community Action Number: 21_13

Howell, Township of

Describing the Action

Action Name:	Create a Plan to Manage Development in Landslide Hazard Areas
Action Category:	Administrative
Action Type:	Local Plans and Regulations
HMA Eligible Activity:	Miscellaneous/Other/NA
Action Description:	Create a plan to implement reinforcement measures in high-risk areas.

Evaluating the Action

Hazard(s) Addressed:	Landslide
Goals:	1, 3, 5
Risk Reduction:	Howell Township is in the USGS landslide hazard maps as "high landslide incidence."
Technical:	Technically feasible.
Political:	There are no anticipated political implications.
Legal:	No legal impediments anticipated.
Environmental:	No environmental impacts are anticipated at this time.
Social:	Does not adversely affect any particular social group.
Administrative Capability:	Township has sufficient capacity and experience to administer this action.
Local Champion:	OEM
Other Community Objectives:	
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	
Priority:	Low
Scale of Ease of Implementation:	Low
Responsible Party:	Township
Local Planning Mechanism:	Hazard Mitigation Plan
Likely Funding Source(s):	Municipal funding
Timeline:	3 years
Action Status:	New
Notes:	

CAPABILITY ASSESSMENT WORKSHEET

Name: Robert Lewis

Title: Fire Chief

Jurisdiction: Howell Township

Organization: Howell Township

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	
Capital Improvements Plan	Yes	
Economic Development Plan	Yes	
Local Emergency Operations Plan	Yes	
Continuity of Operations Plan		
Post-Disaster Recovery Plan	Yes	
Transportation Plan	Yes	DOT
Stormwater Management Plan	Yes	
Community Wildfire Protection Plan	Yes	<ol style="list-style-type: none"> Monmouth County Community Wildfire Protection Plan (2014-2019) Yes Yes



CAPABILITY ASSESSMENT WORKSHEET

		Yes
Other special plans (e.g., brownfields redevelopment, disaster recovery, coastal zone management, climate change adaptation)	Yes	<ul style="list-style-type: none"> Joint Land Use Study (2017) NJ Transit Route 9 Study
Building Code, Permitting, and Inspections	Yes/No	Are codes adequately enforced?
Building Code	Yes	Version/Year:
Building Code Effectiveness Grading Schedule (BCEGS) Score		Score:
Fire Department ISO rating		Rating:
Site Plan Review Requirements	Yes	
Land Use Planning and Ordinances	Yes/No	Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced?
Zoning Ordinance	Yes	
Subdivision Ordinance	Yes	
Floodplain Ordinance		
Natural hazard ordinance (stormwater, steep slope, wildfire)		
Flood Insurance Rate Maps		
Acquisition of Land for Open Space and Public Recreation Uses		
Post-Disaster Recovery Ordinance	No	



CAPABILITY ASSESSMENT WORKSHEET

Real Estate Disclose Ordinance	Yes	
Other (ie. Special Purposes Ordinance)	Yes	Special Purposes Ordinance and Growth Management 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		
Mitigation Planning Committee		
Maintenance Programs to Reduce Risk (e.g., tree trimming, clearing drainage systems)	Yes	Controlled burning of underbrush
Mutual Aid Agreements	Yes	Water and Sewer operations are shared; Earle NWS Fire Department
Staff	Yes/No FT/PT	Is the staff full time or part time? Is staffing adequate to enforce regulations? Is the staff trained on hazards and mitigation? Is coordination between agencies and staff effective?
Chief Building Official		
Floodplain Administrator	Yes	
Emergency Manager	Yes	



CAPABILITY ASSESSMENT WORKSHEET

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



CAPABILITY ASSESSMENT WORKSHEET

Financial

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

Funding Resource	Access / Eligibility (Yes/No)	Has the funding resource been used in the past and for what type of activities? Could the resource be used to fund future mitigation actions?
Capital Improvements Project Funding	Yes	
Authority to Levy Taxes for Specific Purposes	Yes	
Fees for Water, Sewer, Gas, or Electric Services	Yes	
Impact Fees for New Development	No	
Stormwater Utility Fee		
Incur Debt Through Private Activities	No	
Community Development Block Grant	Yes	
Other Federal Funding Programs	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

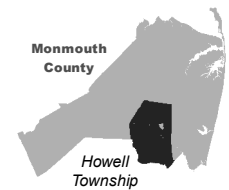
Education and Outreach

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)		
Natural Disaster or Safety Related School Programs		
StormReady Certification		
Firewise Communities Certification		
Public-Private Partnership Initiatives Addressing Disaster Related Issues		
Other		
How can these capabilities be expanded and improved to reduce risk?		



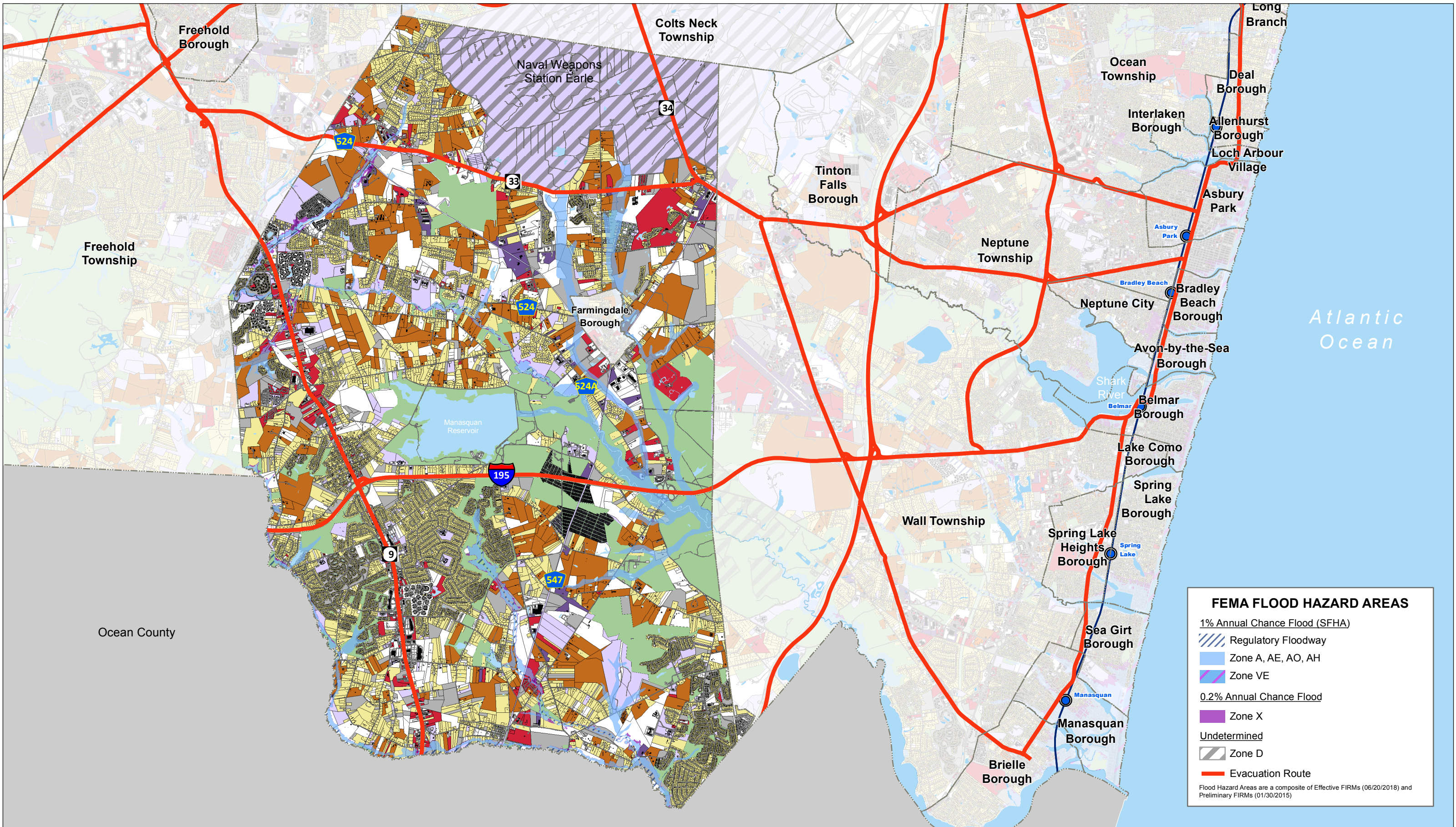
 **HOWELL TOWNSHIP
FLOOD VULNERABILITY**
MONMOUTH COUNTY HAZARD MITIGATION PLAN



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

0 3,250 6,500 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.



HOWELL TOWNSHIP FLOOD VULNERABILITY

MONMOUTH COUNTY HAZARD MITIGATION PLAN



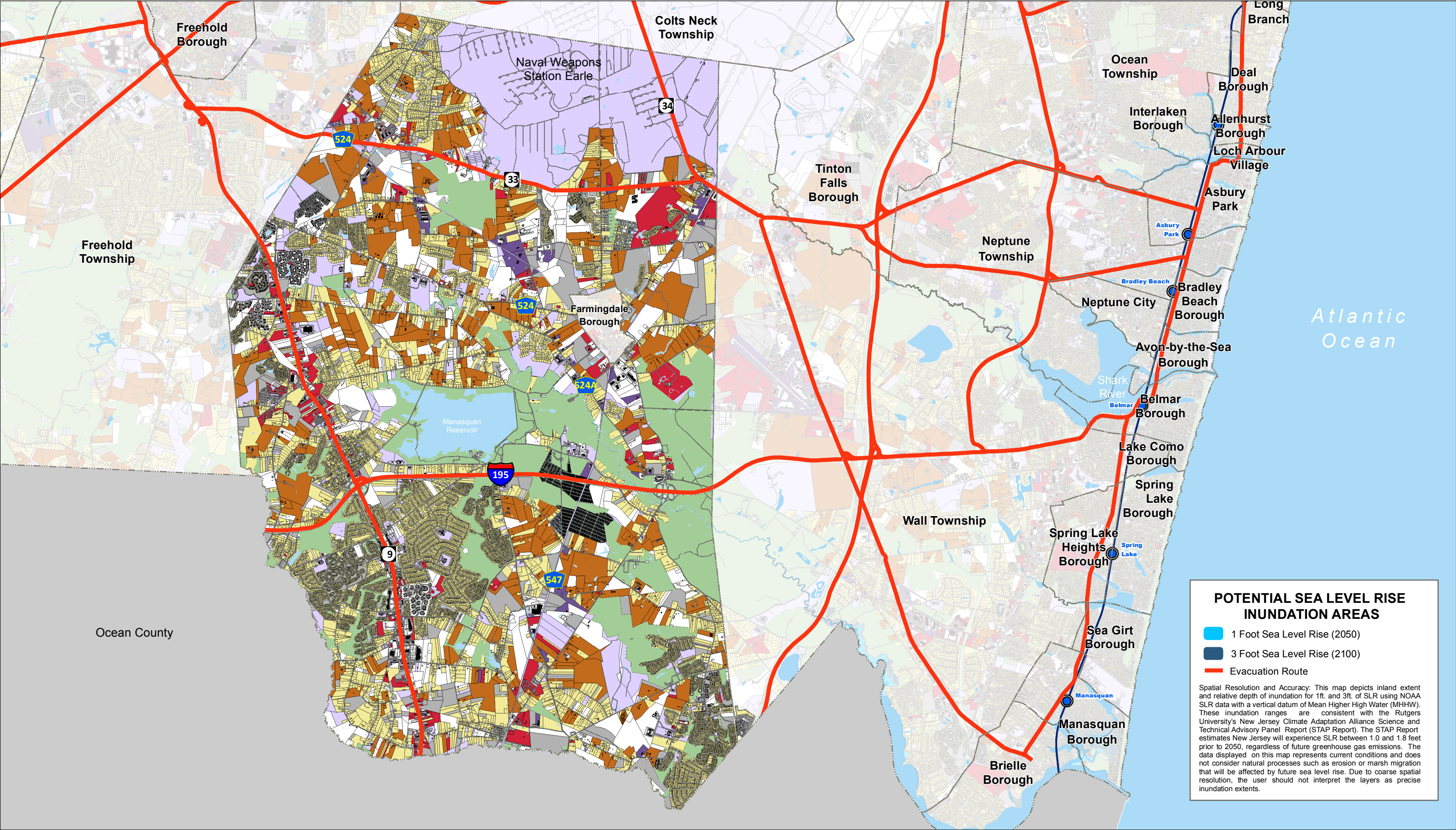
- Parcel Classification
- | | | | | |
|------------|------------|---------------------------|-------------------------------------|------------|
| Industrial | Commercial | Apartment | Residential (four families or less) | |
| Farm | Vacant | Civic/Public (Tax Exempt) | Unclassified | Open Space |

03,2506,500

Feet

N

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



POTENTIAL SEA LEVEL RISE INUNDATION AREAS

1 Foot Sea Level Rise (2050)

3 Foot Sea Level Rise (2100)

Evacuation Route

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

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.



MEETING NOTES

Topic: Howell- Monmouth County HMP Meeting

Date: May 8, 2019

Time: 10:00 AM- 11:00 AM

Location: 4567 Route 9 North, Howell, NJ 07731

Attendees: Shawn Brennan, Deputy Coordinator
Victor Cook, OEM Coordinator
Jon Cordell, Deputy OEM Coordinator
Alison Gee, Admin
Brian Geoghegan, Township Manager
Brian Greenfield, Deputy Director DPW
Jim Herrman, Deputy Manager/Director of Community Development
Matthew Howard, Director of Land Use & Planning
Robert Lewis, Fire Bureau Chief
Paul Novello, Director Public Works
Paul Orlando, Construction Official
Mark Pilecki, Captain
John Storrow, Police Captain
Justin Yost, Deputy Director of Community Development
Brittany Ashman, MB Planner

Drafted by: Paige Kaspar



Introductions (Brittany):

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

2015 Mitigation Actions:

Increase Hazard Education and Risk Awareness: ongoing, Nexel is in place

1. Protect critical facilities used for sheltering: ongoing added generators, but need generators for Senior Center
2. Elevate structures: ongoing; one more RL property needs to be elevated or torn down in the Mariners Cove neighborhood
3. Protect critical facilities (Communication): added redundancy communications, can use a second consult for police because they are redundant
4. Protect critical facilities (Power)
5. Protect critical facilities (Water)

2020 Mitigation Actions (NEW):

1. Develop a Study on the Need for Transportation of Vulnerable Populations during emergencies
2. Message signs during emergencies?
3. Develop a Wildfire and Trail Maintenance Plan
4. Training and Coordination with Earle NWS on Emergency Response
5. Finish the seven backup batteries for intersections along Route 9; this would allow OEM to help with other emergencies instead of helping with traffic
6. Debris Removal and Floodplain Management Plan for stream corridors; need communication with DEP, and private easements

Repetitive Loss Properties:

- 4 out of 5 properties have been torn down Transportation of elderly populations

Problems:

- Drainage problem around Police Department; need new drainage system to alleviate PD
- Elevator in Township Hall breaks
- Dam around Manasquan Reservoir has potential to cause issues to the south of the area; the Township wants us to meet with the Reservoir; EOP
- NWS Earle is the largest hazard and there is no coordination; risk of trailer crashes; no training. There is the risk of overturned vehicles transporting hazardous materials to and from Naval Weapons Station Earle.



Monmouth County Multi-Jurisdictional Hazard Mitigation Plan Update



Michael Baker
INTERNATIONAL

- Wildfire control burning for NWS Earle
- Flooding along stream corridors: extra siltation and downed trees lead to flooding issues; problem with easements which lead to RL properties

Successes:

- 4 intersections have back up power but need 7 generators for intersections along Route 9 corridor

Vulnerable Populations:

- Transportation and feeding for emergencies: Brandy Wine, Friendship Gardens, Crosswalks,
- Senior Center needs backup generator

Notes:

- Add sewer pump stations, water treatment plants to CF, Howell Reservoir,
- Drinking water comes from NJ American Water and Brick Township Utility Authority
- MERSA is their sewage authority



Monmouth County
Multi-Jurisdictional Hazard Mitigation Plan Update



Michael Baker
INTERNATIONAL

Meeting: Howell Twp. HMP Mtg

Date: 05-08-19

Initial	Last Name	First Name	Title	Organization	Email Address
Al	Gee	Alison	Admin.	Manager's Office is OEM	Alisongee725@gmail.com
VC	COOK	Victor	OEM COORDINATOR	Howell OEM	VCook@Twp.Howell.NJ.US
SC	CORDELL	Jon	DEPUTY OEM COORDINATOR	Howell OEM	SCORDELL@TWP.HOWELL.NJ.US
RL	BL Lewis	Robert	Fire Bureau Chief	Fire Bureau	blewis@twp.howell.nj.us
BG	GREENFIELD	Brian	Dep'ty Director DPW	DPW	Bgreenfield@Twp.howell.nj.us
PN	NOVELLO	Paul	DIRECTOR PUBLIC WORKS	DPW	PNOVELLO@Twp.Howell.NJ.US
BG	GEOGHEGAN	Brian	Twp Manager	Twp	BGEOGHEGAN@TWP.HOWELL.NJ.US
JS	STORROW	John	Police CAPTAIN	HTPD	JSTORROW@HowellPolice.org
JY	Yost	Justin	Community Development	Engineering	jyost@twp.howell.nj.us
MH	Howard	Matthew	Land Use	Comm. Dev	mhoward@twp.howell.nj.us



Monmouth County
Multi-Jurisdictional Hazard Mitigation Plan Update



Michael Baker
INTERNATIONAL

Meeting: Howell HMP Mtg.

Date: 05-08-19

Initial	Last Name	First Name	Title	Organization	Email Address
PO	ORLANDO	PAUL	Construction Officer	Howell Twp	PORLANDO@TWP.HOWELL.NJ.US
JH	HERMAN	JIM	DEPUTY MANAGER DIRECTOR COM. DEV.	" "	JHERMAN@TWP.HOWELL.NJ.US
B	BARNES	JOE	ASTDm. Risk Planning	MCRB	JOE.SARNES@CO.PARSONS.NJ.US
SAB	BRENNAN	SHAWN	Deputy Coordinator	Howell OEM	Sbrennan@TWP.HOWELL.NJ.US
MP	PILECKI	MARK	CAPTAIN	Howell PD	MPilecki@HowellPolice.ORG