

Appendix Vol I.29 Manalapan 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

182 *Polices In-force*

85 *Total Losses*

\$1,267,282 *Total Payments*

7 *Number of RL Properties*

1 *Number Mitigated
RL Properties*

16 *RL - Total Losses*

\$319,360 *RL - Total Paid*

0 *Number of SRL Properties*

0 *Number Mitigated SRL
Properties*

0 *SRL - Total Losses*

\$0 *SRL - Total Paid*

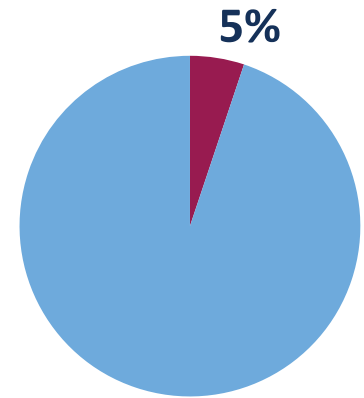


Critical Facilities

47 *Critical Facilities*

0 *Critical Infrastructure*

93 *Historic & Cultural Resources*



Percent Land Area Within SFHA

5

*Total Mitigation
Actions*

0



Education and Awareness Programs

4



Structure and Infrastructure Projects

1



Local Plans and Regulations

0



Natural Systems Protection



0 *SV Population At Risk (2017)*

2,058 *Population at Risk (2017)*

Manalapan, 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
29_01	Acquire Flood-prone Properties Along Birmingham Drive	Purchase properties along Birmingham Drive for the purposes of removing the structures which are located in Pine Brook Floodplain.	Mitigation - Risk Reduction	Structure and Infrastructure Project	Flood, Nor'easter, Hurricane and Tropical Storm	High	Medium	Township Administrator and Engineer	FEMA HMA		1 year	Ongoing
29_02	Active Shooter Training and Shelters	Implement an active shooter training at schools and municipal offices and create a shelter for children and staff to take refuge in a moment of crisis.	Maintenance/Response/Recovery	Local Plans and Regulations	Terrorism	Medium	Low	Township Administrator	Homeland Security grants		2 years	New
29_03	Target Harden Critical Facilities by Installing Surveillance Cameras, an Access Control System, Security Gates, and/or Bulletproof Glass	Purchase security gates, bulletproof glass, security cameras, and Access Control Systems to target harden against terrorist attack.	Maintenance/Response/Recovery	Structure and Infrastructure Project	Terrorism	Medium	Low	Township Administrator	Homeland Security grants		2 years	New
29_04	Acquire, elevate, or relocate buildings and infrastructure in flood prone areas, with a focus on Repetitive Loss (RL) and Severe Repetitive Loss (SRL) properties	Coordinate with residents to mitigate RL/SRL properties through structure elevation, demolition to open space, or other type of mitigation.	Mitigation - Risk Reduction	Structure and Infrastructure Project	Flood, Nor'easter, Hurricane and Tropical Storm	High	Medium	Township and Property Owners	FEMA HMA		5 + years	New
29_05	Repair, Remove, or Rehabilitate the Millhurst Lake Dam	Repair, remove, or rehabilitate the Millhurst Lake Dam along the Manalapan Brook.	Mitigation - Risk Reduction	Structure and Infrastructure Project	Dam Failure	High	High		Municipal budget, NJDEP Bureau of Dam Safety and Flood Control	\$0.00	3 years	New

Monmouth County Mitigation Action Worksheets

Community Action Number: 29_01

Manalapan, Township of

Describing the Action

Action Name:	Acquire Flood-prone Properties Along Birmingham Drive
Action Category:	Mitigation - Risk Reduction
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Property Acquisition and Structure Demolition
Action Description:	Purchase properties along Birmingham Drive for the purposes of removing the structures which are located in Pine Brook Floodplain.

Evaluating the Action

Hazard(s) Addressed:	Flood, Nor'easter, Hurricane and Tropical Storm
Goals:	1, 2, 3, 6
Risk Reduction:	The residential structures on Birmingham Drive are located in a Special Flood Hazard Area. Climate change will contribute to more frequent and severe weather events.
Technical:	The project is technically feasible.
Political:	The residents and governing body are supportive of the project.
Legal:	No legal impediments anticipated; property owners will be willing to sell their property to the Township.
Environmental:	The project would have a positive environmental impact in that it will eliminate obstructions in a flood hazard area.
Social:	The project will improve the quality of life of a specific group of residents along Birmingham Drive whose properties repetitively flood.
Administrative Capability:	Township Administration and Engineering are the lead agencies
Local Champion:	The residents of Birmingham Drive are leading the call for action.
Other Community Objectives:	Open Space Preservation
STAPLEE Evaluation:	12

Implementing the Action

Cost Estimate:	
Priority:	High
Scale of Ease of Implementation:	Medium
Responsible Party:	Township Administrator and Engineer
Local Planning Mechanism:	Open Space and Flood Plain Management
Likely Funding Source(s):	FEMA HMA
Timeline:	1 year
Action Status:	Ongoing
Notes:	Ongoing action; the Township deems this action necessary and is searching for potential funding.

Monmouth County Mitigation Action Worksheets

Community Action Number: 29_02

Manalapan, Township of

Describing the Action

Action Name:	Active Shooter Training and Shelters
Action Category:	Maintenance/Response/Recovery
Action Type:	Local Plans and Regulations
HMA Eligible Activity:	Miscellaneous/Other
Action Description:	Implement an active shooter training at schools and municipal offices and create a shelter for children and staff to take refuge in a moment of crisis.

Evaluating the Action

Hazard(s) Addressed:	Terrorism
Goals:	1, 7
Risk Reduction:	Increase frequency of terrorist attacks on schools and municipal offices. Staff, students, and residents should be prepared on what to do if such a hazard occurs.
Technical:	Technically feasible.
Political:	Politically acceptable and encouraged in order to better prepare residents.
Legal:	No legal issues anticipated.
Environmental:	No adverse environmental effects from planning and sheltering.
Social:	Does not adversely affect any particular social group. Perceived by the public to be beneficial because the heightened awareness and frequency of terrorist attacks are inspiring more citizens to seek training and preparation.
Administrative Capability:	Township has sufficient capacity and experience to administer this action.
Local Champion:	Police and OEM
Other Community Objectives:	Protects the life, safety, and general welfare of residents.
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	
Priority:	Medium
Scale of Ease of Implementation:	Low
Responsible Party:	Township Administrator
Local Planning Mechanism:	Hazard Mitigation Plan
Likely Funding Source(s):	Homeland Security grants
Timeline:	2 years
Action Status:	New
Notes:	

Monmouth County Mitigation Action Worksheets

Community Action Number: 29_03

Manalapan, Township of

Describing the Action

Action Name:	Target Harden Critical Facilities by Installing Surveillance Cameras, an Access Control System, Security Gates, and/or Bulletproof Glass
Action Category:	Maintenance/Response/Recovery
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Miscellaneous/Other
Action Description:	Purchase security gates, bulletproof glass, security cameras, and Access Control Systems to target harden against terrorist attack.

Evaluating the Action

Hazard(s) Addressed:	Terrorism
Goals:	1, 2, 7
Risk Reduction:	Township critical facilities are vulnerable to terrorism or vandalism. Increased security will lower the risk of such hazards.
Technical:	Technically feasible.
Political:	No adverse political ramifications are expected.
Legal:	No legal issues are anticipated.
Environmental:	Does not adversely affect the environment.
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:	Township has sufficient capacity and experience to administer this action
Local Champion:	OEM, Police
Other Community Objectives:	Protects the life, safety, and general welfare of residents.
STAPLEE Evaluation:	N/A

Implementing the Action

Cost Estimate:	
Priority:	Medium
Scale of Ease of Implementation:	Low
Responsible Party:	Township Administrator
Local Planning Mechanism:	Hazard Mitigation Plan
Likely Funding Source(s):	Homeland Security grants
Timeline:	2 years
Action Status:	New
Notes:	

Monmouth County Mitigation Action Worksheets

Community Action Number: 29_04

Manalapan, 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
Action Category:	Mitigation - Risk Reduction
Action Type:	Structure and Infrastructure Project
HMA Eligible Activity:	Structure Elevation
Action Description:	Coordinate with residents to mitigate RL/SRL properties through structure elevation, demolition to open space, or other type of mitigation.

Evaluating the Action

Hazard(s) Addressed:	Flood, Nor'easter, Hurricane and Tropical Storm
Goals:	1, 2, 3, 6
Risk Reduction:	Risk of future destruction and property loss in repetitive flooded areas.
Technical:	Technically feasible.
Political:	No adverse political ramifications are expected.
Legal:	If structures are elevated, they must be built in compliance with the FEMA flood maps.
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:	There is 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:	Medium
Responsible Party:	Township and Property Owners
Local Planning Mechanism:	Hazard Mitigation Plan
Likely Funding Source(s):	FEMA HMA
Timeline:	5 + years
Action Status:	New
Notes:	

Monmouth County Mitigation Action Worksheets

Community Action Number: 29_05

Manalapan, Township of

Describing the Action

Action Name:	Repair, Remove, or Rehabilitate the Millhurst Lake 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 Millhurst Lake Dam along the Manalapan Brook.

Evaluating the Action

Hazard(s) Addressed:	Dam Failure
Goals:	1, 2, 3
Risk Reduction:	NJDEP classifies both the Millhurst Lake 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:	\$0.00
Priority:	High
Scale of Ease of Implementation:	High
Responsible Party:	
Local Planning Mechanism:	Hazard Mitigation Plan
Likely Funding Source(s):	Municipal budget, NJDEP Bureau of Dam Safety and Flood Control
Timeline:	3 years
Action Status:	New
Notes:	FEMA has a National Dam Safety Program with funding available to High-Hazard Potential Dams, however, the Millhurst Lake Dam does not qualify for funding at the time of this plan update.

CAPABILITY ASSESSMENT WORKSHEET

Name: James Winckowski

Title: Senior Project Manager

Jurisdiction: Manalapan Township

Organization: CME Associates

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	1. Reexamination in 2009 (with additional amendments in 2012)
Capital Improvements Plan	Yes	
Economic Development Plan	No	
Local Emergency Operations Plan	Yes	
Continuity of Operations Plan		
Post-Disaster Recovery Plan	Yes	
Transportation Plan	Yes	1. As an element in the 2009 re-examination
Stormwater Management Plan	Yes	1. 2006
Community Wildfire Protection Plan		



CAPABILITY ASSESSMENT WORKSHEET

Other special plans (e.g., brownfields redevelopment, disaster recovery, coastal zone management, climate change adaptation)	Yes	Debris Management Plan
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	Yes	Flood Damage Prevention 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	Yes	
Real Estate Disclose Ordinance	Yes	



CAPABILITY ASSESSMENT WORKSHEET

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



CAPABILITY ASSESSMENT WORKSHEET

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



CAPABILITY ASSESSMENT WORKSHEET

Education and Outreach

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

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





- Parcel Classification
- Industrial

Commercial

Apartment

Residential (four families or less)

Farm

Vacant

Civic/Public (Tax Exempt)

Unclassified

Open Space

02,7505,500

Feet

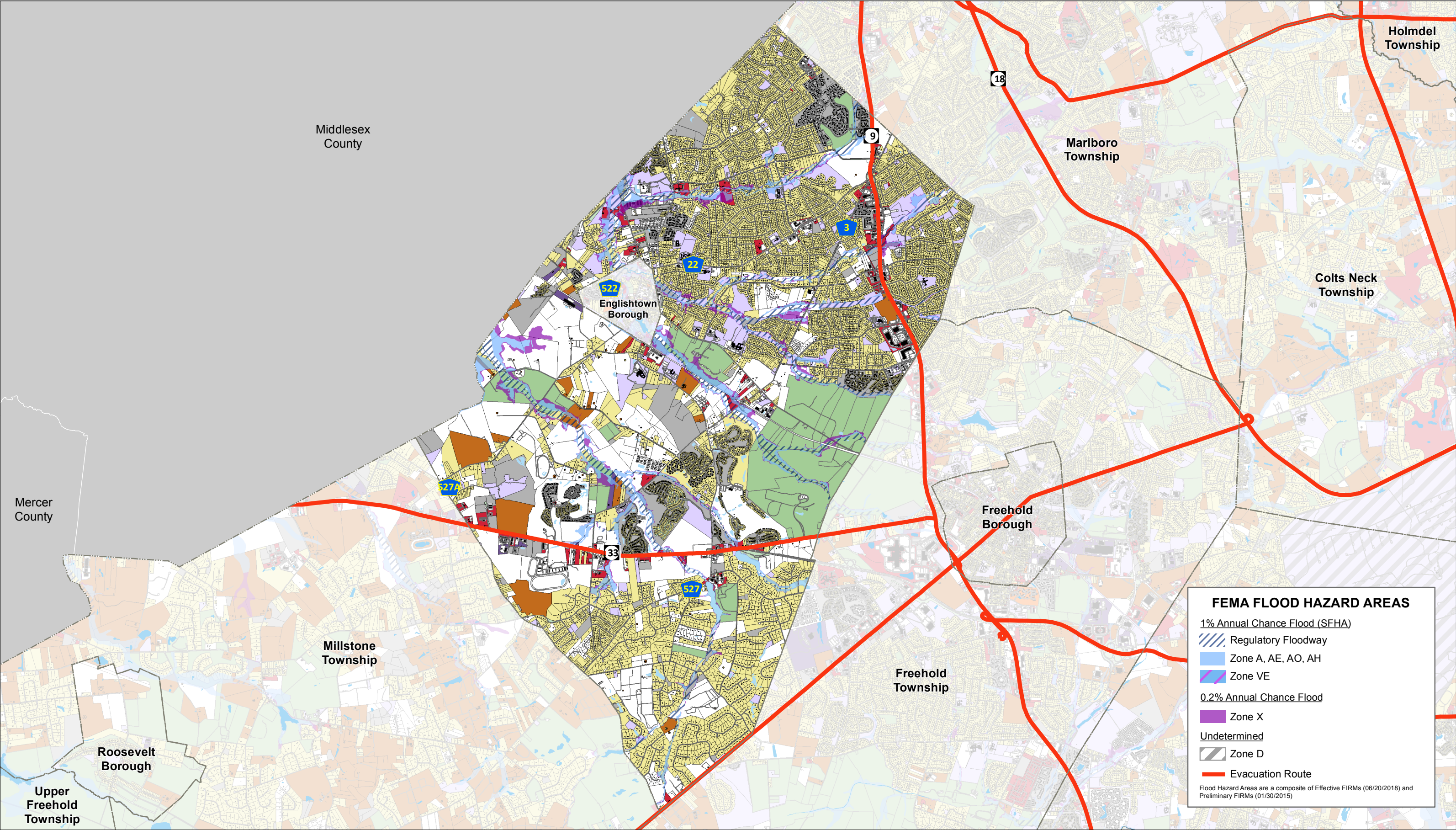
Source: 2014 Esri; Monmouth County; NJOIT-OGIS; NJGIN MODIV Parcel, FEMA

Projection: New Jersey State Plane, NAD 1983



Michael Baker

INTERNATIONAL



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

Farm

Commercial

Vacant

Apartment

Civic/Public (Tax Exempt)

Residential (four families or less)

Unclassified

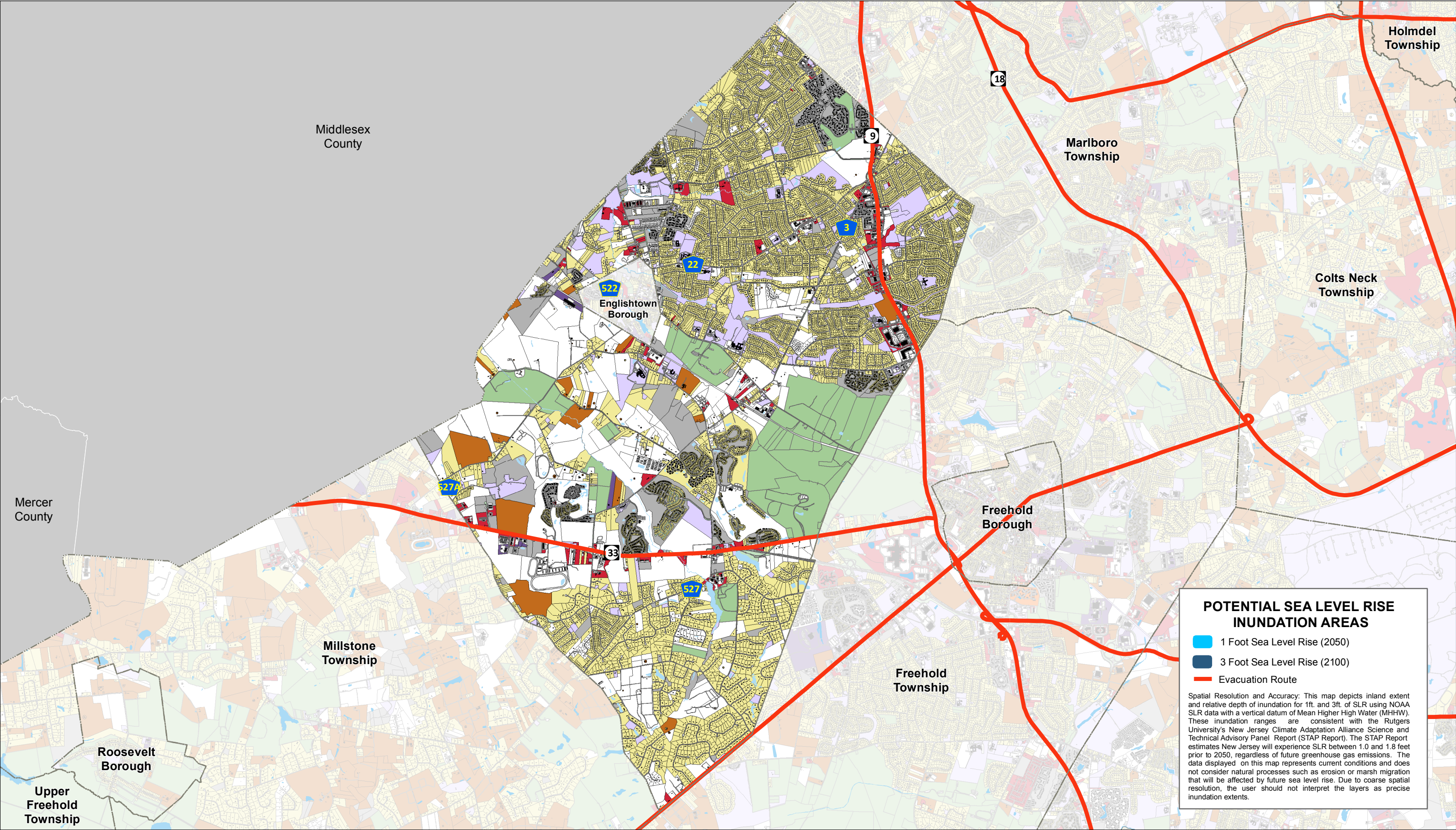
Open Space

02,7505,500

Feet

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.



MEETING NOTES

Topic: Manalapan- Monmouth County HMP Meeting

Date: June 18, 2019

Time: 4:00 PM 5:00 PM

Location: Follow up conference call

Attendees: Tara Lovrich, Township Administrator
Jim Winckowski, Senior Project Manager
Brittany Ashman, 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 29_01 Property Acquisition Ongoing

2020 Mitigation Actions (NEW):

- Target Hardening
- Active Shooter Training at municipal offices, schools, and security staff
- Shelter in place drill

Capabilities

- Debris management plan



Monmouth County Multi-Jurisdictional Hazard Mitigation Plan Update



Meeting: Manalapan HMP Date: 06-18-19

Initial	Last Name	First Name	Title	Organization	Email Address
	Ashman	Brittany	Planner	MB	Brittany.ashman_mbakerintl.com
	Yaffe	Michael	Senior Planner	MB	Michael.Yaffe_mbakerintl.com
	Winckowski	Jim	Senior Project Manager	CME Engineers	JWinckowski_cmeusa1.com
	Lovrich	Tara	Township Administrator	Manalapan Twp.	TLovrich_twp.manalapan.nj.us